ARRANGER WORKSTATION

and a state of the second second

学達を導入症

and the second second

Ne statistic

文明中的历史之外

and the second states of the second

物。這個利益是非是的

Owner's Manual

(gazz)[<u>12</u>] codited





Alexandra (Maria)



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

WARNING - When using electric products, basic precautions should always be followed, including the following:

- 1. Read all the instructions before using the product.
- Do not use this product near water for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
- 3. This product should be used only with a cart or stand that is recommended by the manufacturer.
- 4. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
- 5. The product should be located so that its location or position does not interfere with its proper ventilation.
- The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
- The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.

- 8. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
- Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
- 10. The product should be serviced by qualified service personnel when:
 - A. The power-supply cord or the plug has been damaged; or
 - B. Objects have fallen, or liquid has been spilled onto the product; or
 - C. The product has been exposed to rain; or
 - D. The product does not appear to operate normally or exhibits a marked change in performance; or
 - E. The product has been dropped, or the enclosure damaged.
- 11.Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

—For the USA –

For Canada -

This product may be equipped with a polarized line plug (one blade wider than the other). This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your obsolete outlet. Do not defeat the safety purpose of the plug.

For Polarized Line Plug

CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT. **ATTENTION:** POUR ÉVITER LES CHOCS ÉLECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU' AU FOND.

- For the U.K. --

IMPORTANT: THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK. The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.

Roland



G-600

ARRANGER WORKSTATION

Owner's Manual

Thank you for purchasing the Roland G-600 Arranger Workstation. Ever since the introduction of its Intelligent Synthesizer keyboard line, the name Roland has come to be associated with the best sounding and certainly most musical "keyboards" available.

The G-600 is the professional continuation of the famous Roland G series Arranger Wokstations, and as such designed to provide everything the entertaining artist and serious amateur musician needs on stage, in the studio, or at home.

The G-600 manual comprises two sections: the Player's Guide and the Reference Guide. The Player's Guide explains how to set up, switch on, and use the G-600. This is probably the part you will read first.

Later on, you can refer to the Reference Guide for full details about all the G-600's parameters and functions.

Note: You will find a general alphabetical index at the end of this manual that will help you locate information quickly.

Note: To avoid confusion, let us agree to use the word "button" for all keys (except the function keys) on the front panel, and only use "key" when referring to the G-600's keyboard.

Copyright ® 1997 ROLAND EUROPE. All rights reserved. No part of this publication may be reproduced in any form without the written permission of Roland Europe.

Main features of your G-600

128 High-definition Music Styles

Your G-600 comes loaded with an impressive 128 high-definition Music Styles covering every musical genre you need. Each Style comprises four versions (Basic, Advanced, Original, and Variation), two Intros, two Endings, and various other elements that actually add up to far more than 128 accompaniments.

B User Style memories with power backup

The G-600 allows you to have 8 User Styles in RAM at any given time. The User Style memories can be used to load your own Styles or any eight Styles from existing MSA, MSD, and MSE Style Library disks (available from Roland and thirdparty suppliers). When creating your own Styles, you can edit existing Styles or program your own accompaniments from scratch, and then save them to floppy disk. The contents of the User Style memories are preserved when you switch off the G-600.

□ 192 Performance Memories

Apart from allowing you to customize existing Styles quickly, the Performance Memories are also used to save all panel settings. If you need more than 192 memories, you can save the contents of the Performances to floppy disk and load them whenever necessary.

If you do not wish to program Styles, or if you are too busy to delve into this matter, you can personalize existing Styles by modifying the instrument assignments to any given Arranger part (bass, drums, chord backing, etc.), and then save these changes to one of the 192 Performance Memories in RAM.

Truly intelligent

Your G-600 is intelligent in that it adapts Style playback to the chords you play. The Arranger of your G-600 is so fast and accurate that you could even play different chords for every eighth note (quaver) of a bar and still benefit from a professional sounding accompaniment.

Furthermore, you only need to play root notes in order to have the Arranger play major chords, or press a mere two or three keys to sound even the most complex chords you can think of (Chord Intelligence).

Refined chord recognition

Thanks to one of the most refined chord recognition systems to date, your G-600 can handle virtually any chord you play. Feel free to add the odd 9/13 or "+" to your chords whenever the song you are playing requires it.

Three trigger modes

The Music Styles of your G-600 can be triggered in one of three modes: Standard, Intelligent or Piano Style. In Standard mode, the chord recognition of the Arranger works the way you would expect an Intelligent Synthesizer to operate.

In Intelligent mode, you do not have to play complete chords in order to hear them. Pressing one, two, or three keys will produce even the most complex chords you can think of.

The Piano Mode, finally, is provided for those with a "pianistic" background.

Dynamic Arranger

In Dynamic Arranger mode the level of certain parts played by the Arranger respond to velocity changes. Combined with a few clever programming tricks, this allows you to mute or sound any given part of the automatic accompaniment simply by varying the force with which you strike the keys (a kind of velocity switch effect applied to accompaniment parts rather than sounds).

High-resolution Music Styles

All Music Styles were programmed at a 120CPT/ resolution and contain modulation and pitch bend messages that add that little "something" one invariably associates with a musical performance (slides, vibrato, etc.).

□ 689 top-notch sounds

Your G-600 comes with 654 sounds and 35 JV series Variations, most of which are derived from Roland's professional synthesizers and samplers. No matter which style you want to play, there will always be a few sounds to choose from.

Sound editing

True to the Roland tradition, the G-600 allows you to customize your sounds (or Tones, as we call them) by editing the available Part parameters. These changes may be saved to any one of the 192 Performance memories along with the Arranger settings, etc.

3 effects and two-band equalizer

Apart from the Chorus and Reverb effects, the G-600 is also equipped with a fully programmable Delay effect and a two-band equalizer.

Generation State S

The sound source of your G-600 is 64-voice polyphonic with dynamic voice allocation, giving you all the musical freedom you need to sound great on stage or at home. If used as sound module, your G-600 can play back as many as 16 MIDI parts at a time for full-fledged orchestral arrangements.

G1-note keyboard with weighted synthesizer action

You will feel right at home on the 61-note keyboard. Thanks to its moderately weighted action, its touch is simply superb.

Three-zone splits plus Arranger zone

The keyboard can be split into three Realtime zones, while the keyboard zone of the Arranger can be set independently of any possible split combination. The G-600 also allows you to layer the Upper 1/2 and Lower/M. Bass sounds.

□ Five "Realtime" parts

Even while using the Arranger, you can play two solo parts (Upper 1 and Upper 2) as well as a lefthand part (called Lower), and a Manual Bass (M. Bass) part. The fifth Realtime part (Manual Drums) assigns different percussion sounds to every key of the G-600's keyboard.

The Realtime parts remain active during playback of Standard MIDI or Roland "i"- files so that you are free to add whichever part you like to recorded music.

The Upper 2 part can be used in Layer, Split, or Melody Intelligence mode, the latter being a learned name for harmonies that the Arranger will add automatically depending on the chords you play in the selected chord recognition area.

Intuitive user interface

The large 240 x 64 pixel display keeps you posted about the status of the G-600 and allows you to access various functions via the function key pad. Depending on the display page, the five pairs of buttons below the display can be used to set the volume, pan, Chorus/Reverb/Delay send level, to select Tones and Styles, or to change parameter values. Several of these functions are duplicated by dedicated buttons on the G-600's front panel.

Multitasking

Your G-600 can perform several actions at a time, allowing you to format or save to a disk while playing or editing settings.

Chord Sequencer

The Chord Sequencer allows you to record the "changes" of an entire song before playing it, keeping your left hand free for pitch bend and modulation effects during actual performance.

Not only does the Chord Sequencer allow you to record the chord changes, it also stores all actions related to Music Style selection and Arranger trigger changes.

MIDI File Player/Recorder

Thanks to the advanced Chord Sequencer and the MIDI File Player/Recorder, the G-600 gives you enough flexibility to make professional sounding recordings. True to the Roland tradition, everything the Arranger plays can be recorded so that you can play back Standard MIDI Files recorded with the Recorder on any SMF compatible sequencer, using any GM/GS compatible sound source, and still benefit from the magnificent accompaniment you used during the recording.

Unpacking Your G-600

Your G-600 comes with the following items. Please check the contents of the cardboard box and report any problems to the Roland dealer you purchased the G-600 from.

- This manual.
- · The Demo and Music Style disk.
- A Metal Music Stand
- A Power Cable

Useful options

□ FC-7 Foot Controller

The FC-7 Foot Controller allows you to perform various Style selection functions (Fill In To Original/To Variation, Start/Stop, etc.) by foot. Connect it to the FC-7 connector at the back of your G-600.

Note: The FC-7 cannot be used as MIDI pedal board. Please note that it sends pulses rather than MIDI messages. Do not try to connect it to the MIDI IN jack of your G-600, or any other instrument.

EV-5 or FV-300L Expression pedal

An optional EV-5 or BOSS FV-300L expression pedal can be used to perform various tasks, such as master volume changes.

DP-2, DP-6, or FS-5U Foot Switch

You will probably need a DP-2 (DP-6 or Boss FS-5U) connected to the SUSTAIN FOOTSWITCH connector to function as Hold pedal.

□ MSA, MSD, and MSE series Style Disks

The MSA, MSD, and MSE series Music Style disks contain new Styles for you to load into the 8 User Style memories of your G-600. The MSE Music Style series is a new series specially developed for the G-600/G-800/RA-800. Note that you cannot share MSE Styles with colleagues that own an older E series or RA series instrument because the MSE series Styles take advantage of the G-600's sound source. You will have no trouble reading MSA and MSD series Style disks on your G-600 (upward compatibility).

Amplification

Your G-600 deserves a decent amplification system with a built-in or external effects device for your vocals. As you're probably a professional or very serious amateur, you may already own a small, powered mixer driven, sound system. See your dealer for the available Roland sound reinforcement units.

Compatibility with other instruments/formats

Once you have come to grips with the functions of your G-600, do take the time to read the section about "Compatibility" on page 140.

Precautions

In addition to the items listed under Safety Precautions inside the front cover, please read and observe the following:

Power Supply

- Before connecting the G-600 to other devices, turn off the power to all units; this will help prevent damage or malfunction.
- Do not use the G-600 on the same power circuit with any device that will generate line noise; an electric motor or variable lighting system for example.

Placement

- Using the G-600 near power amplifiers (or other equipment containing large power transformers) may induce hum.
- The G-600 may interfere with radio and television reception. Do not use it in the vicinity of such receivers.
- Do not expose the G-600 to temperature extremes or install it near devices that radiate heat. Direct sunlight in an enclosed vehicle can deform or discolor the G-600.

Maintenance

- For everyday cleaning wipe the G-600 with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a mild, non-abrasive detergent. Afterwards, be sure to wipe the instrument thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Additional precautions

- Protect the G-600 from strong impact.
- · Never strike or apply strong pressure to the display.
- · Before using the G-600 in a foreign country, consult with qualified service personnel.
- · A small amount of noise may be heard from the display during normal operation.

Memory backup

• The G-600 contains a battery which powers the unit's memory circuits while the main (AC) power is off. The expected life of this battery is 5 years or more. However, to avoid the untimely loss of memory data, it is strongly recommended that you change the battery every 5 years. Please be aware that the actual life of the battery will depend upon the physical environment –especially the temperature– in which the unit is used. When it is time to change the battery, consult with qualified service personnel.

• Please be aware that the contents of memory may at times be lost; when the G-600 is sent for repairs or when by some chance a malfunction has occurred. Important data should be saved to disk. During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data.

Contents

Main features of your G-600	4
Precautions	7
1. Setting up 1.1. Connections	. 14
1.2. Demo songs	. 14
2. Panel Descriptions	
2.1. Front panel	
3. User interface	
3.1. [F5] Exit	
3.2. Master page	
3.3. Navigating through the display pages Function keys and [SHIFT] button	
Other buttons	
Reversed/positive value display	. 24
[PAGE] $\blacktriangle \nabla$ and Part Select buttons	
3.4. Realtime display	. 26
4. Realtime parts	. 27
4.1. What are Parts?	. 27
4.2. Selecting Realtime parts for playing	
Layering and selecting Upper2	. 28
Selecting the Lower and M.Bass Parts	
Split and split point	
4.3. Selecting Tones for the Realtime parts	
Selecting Tones using the TONE buttons	
Selecting Tones using the $\mathbf{A} \nabla$ buttons	
4.4. Selecting Drum Sets for the M.Drums Part	
4.5. Who selects the Tones? – Tone Change	
4.6. General notes	
4.7. Realtime Performance functions	
Pitch Bend and Modulation	
Transpose and Octave Up/Down	
Sustain pedal (Hold)	. 39
Expression pedal	
Master Tune	
5. Playing with accompaniment – Arranger .	
5.1. Arranger and Music Styles	
5.2. Selecting the chord recognition area	
5.3. Selecting the Arranger Chord mode	
Standard	
Piano Style	
Intelligent	
5.4. Bass Inversion and Arr Hold	. 44

Bass Inversion
Arr Hold
5.5. Music Style functions
Starting a Music Style
Stopping a Music Style 45
Selecting another Style division
Realtime changes of the drum accompaniment 48 Other useful Style playback functions 49
5.6. Selecting Music Styles
Using external (User) Styles
5.7. Style Tempo
Tempo buttons and indicators
Тар Тетро 53
5.8. Customizing Music Styles
Assigning other Tones to the Arranger Parts 54
Tone Change
5.9. Working with User Style Sets
Compiling and saving your own Style Sets
- ·
6. Registrations – Performance Memories 58
6.1. Writing your settings to a Performance
Memory
Memory Protect
Performance name
6.2. Selecting a Performance Memory
Selecting 00 FreePanl
Resume
Selecting a Performance Memory (Group, Bank,
Number)
Selecting a Performance Memory using the
Selecting a Performance Memory using the [<down] [up=""]="" buttons<="" th=""></down]>
Selecting a Performance Memory using the [◀DOWN] [UP►] buttons
Selecting a Performance Memory using the [◀DOWN] [UP▶] buttons
Selecting a Performance Memory using the [
Selecting a Performance Memory using the [▲DOWN] [UP▶] buttons Selectively loading Performance Memory settings (Performance Memory Hold) 7. Chord Sequencer 65 7.1. Recording the accompaniment of an entire
Selecting a Performance Memory using the [▲DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons Selectively loading Performance Memory settings (Performance Memory Hold) 63 7. Chord Sequencer 65 7.1. Recording the accompaniment of an entire song
Selecting a Performance Memory using the [◄DOWN] [UP►] buttons Selectively loading Performance Memory settings (Performance Memory Hold) 63 7. Chord Sequencer 65 7.1. Recording the accompaniment of an entire song
Selecting a Performance Memory using the [◄DOWN] [UP►] buttons Selectively loading Performance Memory settings (Performance Memory Hold) 63 7. Chord Sequencer 65 7.1. Recording the accompaniment of an entire song 57.2. Two Chord Sequencer modes 57.2. Two Chord Sequencer modes 66 7.3. "Realtime" chord sequencing 67 7.4. Playing back a Chord Sequence 67 8. Recorder (GM/GS mode) 68 8.1. How to record a song 68 8.2. Before recording
Selecting a Performance Memory using the [< DOWN] [UP>] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons
Selecting a Performance Memory using the [◄DOWN] [UP▶] buttons

G-600

Owner's Manual

Markers and playback loops
8.6. Live performance with Standard MIDI File back-
ing (Minus One)73
Changing the song tempo
Soloing and muting parts on disk
Overriding song settings 75
9. Easy Editing 77
9.1. Part Balance (Volume)
Grouped and bus faders Grouped and bus faders
Mixer mode: modifying the volume of the
bus members
Panpot (stereo position)
9.2. Effects and Equalizer
Applying Reverb, Chorus, or Delay to a part 81
Effect settings
Equalizer
9.3. Source: your settings or those of the
Arranger/Song?84
40 D 4 11/1 0C
10. Part editing
10.1. Editing the Part parameters
Modulation (Vibrato)
Timbre (Filter)
Envelope
10.2. Another Source switch: Tone Edit
10.3. Upper2 settings
Tuning Upper2: Coarse and Fine 89 Intelligent melodies played by Upper2 91
-
11. Advanced features
11.1. Settings relating to the Arranger
Major, minor or seventh accompaniment? – Chord Family Assign, Alteratn
Musical Style playback: Wrap
Dynamic Arranger: velocity sensitivity of the
Arranger parts
11.2. Settings relating to the Realtime parts94
Velocity sensitivity and velocity switching94
Roll resolution for the M.Drums part
Monophonic/polyphonic, with or without
portamento (Upper1 and Upper2)
Expression pedal: blending effects or just
plain volume
Playing in other scales: Keyboard Scale
11.3. Source switches
11.4. Song Sets 100
Compiling a Song Set
Playing back a Song Set 101
12. Programming User Styles
12.1. Concept
Patterns
Tracks
Tracks 102 Looped vs one-shot 103 12.2. Recording User Styles from scratch 105

Selecting the track, the Mode, the Type and the	
Division	
Record mode	
Specifying the key 107	
Quantize	
Time signature	
Length: specifying the pattern length	
Tempo	
Recording 110	
Playback, and then keep or redo?	
Saving your Style to disk	
Programming other parts and divisions	
Muting parts while recording others (Status) 112	
Remarks 112	
12.3. Copying existing Styles	
Copying entire Style divisions using Load (all tracks,	
several divisions) 113	
Copying individual User Style tracks	
12.4. Editing User Styles 116	_
Editing on the fly by recording	
12.5. Programming User Styles via MIDI 118	
Data that can be recorded	
Connection and synchronization	
Preparation of your sequence	\$
Preparation on the G-600)
Recording using external controllers	,
12.6. Where to go from here –	
Editing User Styles (2)	
User Style Edit mode	t
Editing in Micro mode	
12.7. Example: recording in Step time	
Specifying the pattern length	
Step time record	1
12.8. Deleting a User Style from a	
User Style memory	5
13. MIDI 127	
13.1. MIDI in general 127	7
Requirements for receiving and transmitting	
MIDI data	7
MIDI on your G-600 120	
13.2. MIDI connections	
Receiving MIDI data from external instruments 12 Sending MIDI data to external instruments or	8
computers	0
13.3. Receiving MIDI data	2 0
	1
13.4. Transmit (TX) channels and transmit	1
switches	
13.5. Other MIDI settings	
Switching Off MIDI reception/ transmission 13	1
MIDI receive/transmit filters	1
Local function	
13.6. Yet other MIDI settings	Ĵ
Rx Velo, TX Velo	
13.7. MIDI synchronization	
15.7. WHD1 synchronization	+

and the second second
-
L • F
_
1.1
n

13.8. MIDI Sets 135 Writing a MIDI Set 135 Selecting a MIDI Set 135 Saving MIDI Sets to disk 135 Loading a MIDI Set from disk 136 14. Housekeeping 137 14.1. General remarks 137 14.2. Disk copy (backups) 137 14.3. Renaming files on disk 138
14.5. Initializing your G-600 (Load Factory Setup) 13914.6. Compatibility140

Reference Guide

1. Before you start 142 Master page 142 CM/CS much Master 142
GM/GS mode Master page143Lyrics function (only available in GM/GS mode)143Part Select buttons143
G-600 modes 143
2. Volume pages and Volume mode 144
Volume control (fader assignments) 144 Global Volume 144 Volume pages in Song mode 144
3. Tone pages and Tone mode
Tone selection
Tone Edit (Part parameters)145
Tone Change
Tone Edit (Source switch)
4. Mixer mode
Mixer\RTime and Mixer\Arrng pages147
Mixer\Song page148
Mixer\Effect pages 148
Reverb page
Chorus page
Delay page
Equalizer page151 Source pages152
5. Parameter mode
Parameter\Glbal\1 page
Memory locked/unlocked
Cursor Character
Parameter\Global\2 page 154
Parameter\Global\2 page
Split (C3~C6) 154
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Chord Family Assign 155
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Param\Glbal\4 page 155 Param\Glbal\4 page 155 Param\Glbal\4 page 155
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Chord Family Assign 155 Param\Tune\1 page 156 Master Tune (415.3Hz~466.2Hz) 156
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Param\Tune\1 page 156 Master Tune (415.3Hz~466.2Hz) 156 Transpose Mode 156
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Param\Glbal\4 page 155 Param\Glbal\4 page 155 Param\Tune\1 page 156 Master Tune (415.3Hz~466.2Hz) 156 Transpose Mode 156 (Transpose) Value (-11~-1, 1~11) 156
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Param\Tune\1 page 156 Master Tune (415.3Hz~466.2Hz) 156 Transpose Mode 156
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Param\Tune\1 page 156 Master Tune (415.3Hz~466.2Hz) 156 (Transpose Mode 156 (Transpose) Value (-11~-1, 1~11) 156 Param\Tune\2 page 156 Coarse (-24~24) (Upper2 part) 156 Fine (-99~99) (Upper2 part) 157
Split (C3~C6) 154 UP2Split (C#3~C#6) 154 Roll (Resolution) 154 Stl Change 154 Param\Glbal\3 page 154 Acc Wrap: Part and Range 154 Song Set Play 155 Param\Glbal\4 page 155 Param\Tune\1 page 156 Master Tune (415.3Hz~466.2Hz) 156 Transpose Mode 156 (Transpose) Value (-11~-1, 1~11) 156 Param\Tune\2 page 156 Coarse (-24~24) (Upper2 part) 156

Owner's Manual

Param\Cntrl\1 page 158	
Part (UP1, UP2, LWR, MBS, MDR)	
Sensitivity (Low, Med, High)	
Min and Max (1~127)	
Param\Cntrl\2 page 158	
Dynamic Arranger	
Melody Intell Voices (1, 2)	
Param\Cntrl\3 page	
Pitch Bender (Realtime parts)	
Param\Cntrl\4 page: Expression pedal	
Part	
$Up \ (0 \sim 127) \ \dots \ 160$	
Down (0~127)	
Source\Tune page	
Source switches	
Source/Cntrl page	
Source/Cniff page	
6. User Style mode 162	
UsrStl\Rec\1 pages 162	
Track	
User Style memory and name	
Тетро	
Style pattern selection	
Style (1~8) 163	
UsrStl\Rec\2 page163	
(Record) Mode (Erase, Merge)	
Key (C, C#, D, Eb, F, F#, G, Ab, A, Bb, B) 164	
(Metron) Mode 164	
(Quantize) Value 164	
UsrStl\Rec\3 page164	
UsrStl\Rec\4 page165	
REC/PLAY switches 165	
Express (0~127) 165	
Panpot (Rnd, 0~64~127) 165	
Reverb (0~127) 165	
Chorus (0~127) 165	
Tone/Drum Set 165	
UsrStl\Rec\5 page 166	
Pitch (-64~64)	
Cloning and edit functions and possible warnings (Shared)	
(Sharea)	•
TSign page (time signature)	
Track Copy	,
User Stl\Copy\ From 1 page 169	
User Stl\Copy\ From 2 page)
User Stl\Copy\ To 1 page)
User Stl\Copy\ To 2 page	'
User Style Edit mode 171	
Edit/Erase/1 page 17	1
Edit\Erase\2 page	?
Edit\Erase\3 page 17.	2
Edit\Dlete\1 page 17.) 2
Edit\Dlete\2 page	, ,
Edit\Insrt\1 page	, 4
Edit\Insrt\2 page	4
Edit\Trnsp\1 page	5
Edit\Trnsp\3 page17	5

Edit\Velo\1 page	
176	
Edit/Velo/2 page	
Edit/Veio/S page	
Edit\Quant\2 page	
Edit\GateT\1 page	
Edit/GateT/2 page	
Edit/Shift/1 page	
Edit\Shift\2 page	
7. User Style Microscope mode	
Track Microscope Edit	
Change	
Erase	
Insert	
Move	
Сору 183	
Style Name	
User Style Delete	
Select, All, Mark 184	
185	
8. MIDI mode	
SMF, General MIDI, and General Standard 185	
MIDI messages used by the G-600	
MIDI on your G-600 189	
MIDI\RTime RX, MIDI\Arrng RX, and	
MIDI\Song RX pages	
MIDI\RTime TX, MIDI\Arrng TX, and	
MIDI\Song TX pages 191 MIDI\NTA page (Note to Arranger	
receive channels)	
receive chaminers)	
Basic Channel RX and TX pages	
Basic Channel RX and TX pages	
Style Channel RX and TX pages	
Style Channel RX and TX pages	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX194	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 I load User Style/Copy ROM Style 197	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load Performance Set 198	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load MIDI Set 198	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load MIDI Set 198 Load Chord Sequence 198	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load MIDI Set 198 Load Chord Sequence 198 Disk Save (saving data to disk) 199	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load MIDI Set 198 Load Chord Sequence 198 Disk Save (saving data to disk) 199 Save User Style 199	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load AMDI Set 198 Load Chord Sequence 198 Disk Save (saving data to disk) 199 Save User Style 199 Save Performance Memory Set 199	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load Alion Set 198 Load Chord Sequence 198 Disk Save (saving data to disk) 199 Save User Style 199 Save Performance Memory Set 199 Save MIDI Set 199	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX1949. Disk mode197Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load Performance Set198Load Chord Sequence198Disk Save (saving data to disk)199Save MIDI Set199Save MIDI Set199Save MIDI Set199Save MIDI Set199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence200	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX194 9. Disk mode197 Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load Performance Set198Load Chord Sequence198Disk Save (saving data to disk)199Save User Style199Save MIDI Set199Save MIDI Set199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence200Rename200	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX1949. Disk mode197Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load Performance Set198Load Chord Sequence198Disk Save (saving data to disk)199Save User Style199Save MIDI Set199Save MIDI Set199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence200Delete202	
Style Channel RX and TX pages 193 Filter (only on the RX page) 193 MIDI parameters (Param) 193 MIDI Sync RX/TX 194 9. Disk mode 197 Disk Load (loading data from disk) 197 Load User Style/Copy ROM Style 197 Load Style Set 197 Load Performance Set 198 Load Chord Sequence 198 Disk Save (saving data to disk) 199 Save Derformance Memory Set 199 Save Chord Sequence 200 Rename 200 Delete 202	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX194 9. Disk mode197 Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load MIDI Set198Load Chord Sequence198Disk Save (saving data to disk)199Save Performance Memory Set199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence190Save Chord Sequence200Rename200Delete202Style Set202Song Set203	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX194 9. Disk mode197 Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load MIDI Set198Load Chord Sequence198Disk Save (saving data to disk)199Save Performance Memory Set199Save Chord Sequence199Save Chord Sequence200Rename200Delete202Style Set203Copy functions203	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX194 9. Disk mode197 Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load MIDI Set198Load Chord Sequence198Disk Save (saving data to disk)199Save Discr Style199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence199Save Chord Sequence190Save Chord Sequence200Rename200Delete202Style Set203Copy functions203Song Copy203	
Style Channel RX and TX pages193Filter (only on the RX page)193MIDI parameters (Param)193MIDI Sync RX/TX194 9. Disk mode197 Disk Load (loading data from disk)197Load User Style/Copy ROM Style197Load Style Set197Load MIDI Set198Load Chord Sequence198Disk Save (saving data to disk)199Save Performance Memory Set199Save Chord Sequence199Save Chord Sequence200Rename200Delete202Style Set203Copy functions203	

10. Display messages)6
Messages relating to the Recorder or Disk functions	14
Messages relating to the User Style function	
General messages 20)8
11. Music Style chart20)9
12. MIDI Implementation Charts	0
13. Tone lists21	2
14. Specifications21	8
Index	9
Roland Service Stations	21

1. Setting up

1.1. Connections



Connect your G-600 and other components as follows:

1.2. Demo songs

The G-600 is shipped with 4 Tone and 1 Style demonstration songs on a floppy disk to give you an accurate impression of the versatility of your G-600. Here is how to listen to the demo songs:

- (1) Connect the G-600 to your sound system, or connect a pair of headphones to the PHONES jack, and power on your G-600.
- (3) Insert the demo disk into the disk drive.



- (4) Allow a few seconds for the G-600 to locate the data on the floppy disk. At first, nothing in the display tells you that you have just inserted the demo disk into the drive.
- (5) Turn down the [VOLUME] slider.
- (6) To listen to all songs, press the [PLAY►/STOP ■] button in the RECORDER section.

1	Perf	ormi	/=	83 *	A11	Son ₉	*	MASTER
	A11		iano M+SP			23. 7/8	4	1Mixer 2Param 3Midi
.WF	<u>8 A72</u>	23 h	larm	Str i		Midi Set	1	4L9rcs 5Disk
JN	G 04	HStr	aisł	nt to	MА	heart		.GS HODE.

(7) Adjust the [VOLUME] slider to a comfortable level.

In *All Song* mode, the G-600 will play all demo songs consecutively. Note that playback doesn't stop automatically. You have to press the [PLAY \triangleright /STOP \blacksquare] button to stop playback. But now is probably the time to listen to all your G-600 can do.

All demosongs © 1997 by Roland Europe in collaboration with Luigi Bruti and Roberto Lanciotti. All rights reserved.

If you'd rather listen to a specific demo song, see "Playback of a specific song on disk" on page 71. The name of the song you select will appear both on the bottom line and in the right hand corner of the display ("1st Demosong").

When you start playback or select another song with Song Select [NEXT \blacktriangleright], the G-600 activates the GM/GS mode and the display shows the song tempo and time signature.



Demo song number Demo song name

(8) To stop playback of the demo songs, press [PLAY ►/STOP ■].

Don't press [PLAY►/STOP ■] just yet. Leave the demo performance running while you turn to the next chapter.

Note: The demo songs are based on the preset Music Styles and Tones of your G-600 but have been recorded in Standard MIDI File format. If you own a floppy disk with GM/GS compatible Standard MIDI Files, you can play them back right away by going back to step (3).

2. Panel Descriptions

2.1. Front panel



(1) VOLUME slider

This slider controls the master volume of your G-600, i.e. the volume of the signals present at the STEREO OUTPUT R, L/MONO jacks and the PHONES jack.

(2) **RECORDER section**

The buttons of this section allow you to operate the on-board Recorder/Standard MIDI File Player. See "Recorder (GM/GS mode)" on page 68.

(3) CHORD SEQUENCER section

These buttons are used to operate the powerful on-board Chord Sequencer that allows you to record and playback entire accompaniments including the chord changes. See "Chord Sequencer" on page 65.

(4) MUSIC STYLE/MIDI SET section

The Music Style section buttons are used to select Music Styles – i.e. automatic accompaniments (see "Selecting Music Styles" on page 50). When the USER indicator lights, the eight number buttons allow you to select User Styles (see page 51). When the indicator of the [MIDI SET] button lights up, you can use the eight number buttons to select a MIDI Set (see "MIDI Sets" on page 135).



(5) DISPLAY and navigation section

The 240 x 64 pixel display shows all the information you need in a given situation. The function keys to the right of the display allow you to select one of the five displayed Menu options.

The $\blacktriangle \nabla$ buttons are assigned to the function displayed on the bottom line of the display, and allow you to modify the corresponding setting.

The Part Select buttons ([M.DRUMS], [M.BASS], [LOWER], [UPPER2], and [UPPER1]) allow you to select the Realtime part you wish to assign a Tone to but may also serve to execute a display function.

(6) ARR CHORD button

Press this button to access the Arranger Chord parameters.

(7) SHIFT button

In certain modes, the function menu comprises more than five functions. In that case, you need to hold down the [SHIFT] button while pressing a function key to access the desired "hidden" function.



(8) KEYBOARD MODE section

Use the buttons of this section to select the Realtime parts you wish to play. See "Selecting Realtime parts for playing" on page 28.

(9) TONE/PERFORMANCE MEMORY section

These buttons are used to select Tones (or sounds) for the Realtime part you selected with the Part Select buttons below the display (see page 25). Note that the TONE/PERFORMANCE

MEMORY section buttons remain active at all times, so that you can select Tones on virtually any display page. Furthermore, these buttons allow you to select Performance Memories. See "Registrations – Performance Memories" on page 58. The [SELECT] button allows you to select the TONE or PERFORMANCE MEMORY level.



(10) PERFORMANCE MEMORY section

These buttons also allow you to select Performance Memories. Performance Memories contain all settings you can make on the front panel (Keyboard Mode, Arranger setting, Style selection, tempo etc.) and in the Volume, Mixer, and Parameter modes. MIDI settings must be saved to MIDI Sets. The three HOLD buttons allow you to select the parameters that should not be updated while loading Performance Memories. See "Selectively loading Performance Memory settings (Performance Memory Hold)" on page 63.

(11) TEMPO buttons

Use the TEMPO [+][-] buttons to set the Arranger or Recorder playback tempo.

(12) [TRANSPOSE], OCTAVE [UP]/[DOWN] buttons

Use these buttons whenever you want to sound in different key (Transpose) or octave than the one you are playing in (see page 37).

(13) ONE TOUCH button

Press this button to activate the One Touch function (see page 49).



(14) [GM/GS MODE] button

Press this button to activate (indicator lights) or switch off the G-600's GM/GS mode. The GM/GS mode is automatically selected whenever you playback a Recorder song. You cannot use the Arranger while the GM/GS mode is active.

(15) [BASS INVERSION] button

Press this button to activate or deactivate the Bass Inversion mode. See "Bass Inversion" on page 44.

(16) [MELODY INTELLIGENCE] button

Press this button (indicator) to add an automatic harmony (second and third voice) to your solos or melodies.

(17) Arranger Control section

These buttons are used to select Music Style patterns (Intro, Ending, Fill-Ins etc.). See "Music Style functions" on page 45. Since all Music Style functions can be selected in realtime, these buttons are conveniently located above the keyboard.

(18) RESET/TAP TEMPO button

The [RESET/TAP TEMPO] button allows you to specify the Arranger or Recorder playback tempo. First stop Arranger or Recorder playback and then press this button repeatedly at the speed you wish to set the playback tempo to. If you press this button during playback, the Arranger will return to the first beat of the accompaniment pattern.

(19) BENDER/MODULATION lever

Use this lever to bend the notes of the Realtime part you are playing or to add some vibrato. See "Pitch Bend and Modulation" on page 37.

(20) Disk drive

The disk drive is used to record and playback Recorder songs and to save or load User Styles, Performance Memories, MIDI Sets, and Chord Sequences. You may use 2DD or 2HD disks.

2.2. Rear panel



(21) MIDI connectors

These connectors allow you to use your G-600 along with other MIDI instruments. See "MIDI" on page 127.

(22) SUSTAIN FOOTSWITCH connector

Connect an optional DP-2 or DP-6 to this jack to sustain the notes of the Realtime section you are playing after releasing the key(s) you pressed.

(23) EXPRESSION PEDAL

Connect an optional EV-5 expression pedal to this jack to control the volume of one or several parts by foot. See "Expression pedal" on page 39.

(24) LCD CONTRAST knob

Use this knob to set the contrast whenever you are having problems reading what is written on the display. Turn it to the right to make the characters darker or to the left to make the characters lighter.

(25) PHONES jack

This is where you can connect a pair of stereo headphones that carries the same signal as the one sent to the STEREO OUTPUT R, L/MONO jacks. Connecting a pair of headphones to the PHONES jack does not turn off signal output to the STEREO OUTPUT R, L/MONO jacks.

(26) STEREO OUTPUT R, L/MONO jacks

Connect these jacks to the inputs of your stereo amplifier or mixer. If you wish to use your G-600 in mono, only connect the L/MONO jack.

(27) AC connector

This is where you connect the supplied power cable.

(28) POWER switch

Press this switch to power on your G-600. Press it a second time to power off your G-600.

(29) FC-7 PEDAL connector

This is where you can connect an optional FC-7 footswitch unit that allows you to start, stop, and select Style divisions by foot.

3. User interface

Your G-600 has been designed to provide everything you may need on stage or at home, and to allow you to access all functions and parameters as quickly as possible. That is why most actions can be performed using the display and the commands related to it.

3.1. [F5] Exit

The Exit function is usually assigned to the [F5] function key. Pressing [F5] once or twice always takes you back to the Master page.

3.2. Master page

The Master display page is what you see after powering on your the G-600. Let's agree to call it the Master page since the menu heading clearly says MASTER here:



(1) Performance Memory address and name

This where the address (Group, Bank, and Number) and the name of the currently selected Performance Memory appear (see page 58).

(2) Tempo window

The tempo window indicates the playback tempo for the currently selected Music Style (see page 50) or Standard MIDI File. Feel free to override the preset tempo using the TEMPO section buttons.

(3) Music Style or song address and name

This part of the display shows the address (Group, Bank, and Number) and name of the currently selected Music Style, or the number and name of the selected or song.

(4) Function menu

The function menu tells you what the five function keys ([F1]~[F5]) allow you to do. The function menu on the Master page allows you to select one of five G-600 modes (Mixer, Param, MIDI, UsrStl, or Disk). Pressing a function key will take you to the corresponding mode menu, where the function keys are used to select options related to that mode. Sometimes, you need to hold down the [SHIFT] button while pressing a function key to access the desired function.

Abbreviation	Mode	Explanation				
Mixer	Mixer	The Mixer mode allows you to modify the volume balance, effect send levels and various other functions related to the way the G-600 produces sound.				
Param	Parameter	The Parameter mode is used to edit general parameters, effects parameters and various other functions.				
Midi	MIDI	This is where you can find the MIDI functions (channel settings and MIDI filters) of your G-600.				
UsrSt1	User Style	Select this mode when you want to create your own accompaniments.				
Disk	Disk	The Disk mode is used to save data to and load data from disk. It also allows you to format disks and to make backups of your disks.				

The G-600	modes	are a	as fol	lows:
-----------	-------	-------	--------	-------

There are three other modes you can access via dedicated buttons: the Arranger Chord mode (press [ARR CHORD] at the lower left of the display), the Tone mode (press [TONE]), and the Volume mode (press [VOLUME], next to the [TONE] button).

(5) Page scroll bar

The two arrows are actually a graphic representation of the [PAGE] $\blacktriangle \forall$ buttons. Since the display can only show three parts at any given time, you have to use the [PAGE] $\blacktriangle \forall$ buttons to call up information on the currently invisible parts.

Note: The black cursor (currently on UP1) shows which part is selected for Tone selection. It is perfectly possible to scroll to a currently invisible part without selecting it. To select a part, you must use the leftmost $\blacktriangle \nabla$ pair below the display (called [DRUMS/PART]) or the Part Select buttons.

(6) Part Information window

This window keeps you posted about the Tones that are currently assigned to the G-600 parts. The display format is as follows:



The Variation number is not always displayed. As you can see on the illustration on page 21, the Tone assigned to Upper1 (UP1) is a "normal" one (called Capital). The reason why your G-600 also uses the Variation format is that it contains far more sounds than the MIDI standard can handle. A Variation is usually just another kind of sound within a given group (hence the name Variation). The St. FM EP Tone assigned to Upper2, for example, is another kind of electronic piano sound, which is why it is not considered a Capital by the G-600.

(7) Graphic Chord display

This display shows which keys you pressed in the chord recognition area. The chord information is used to "feed" the Arranger (see "Selecting the chord recognition area" on page 42).

(8) Chord Symbol window

This window indicates the name of the last chord you played. The information displayed here may be helpful for the guitarist of your band.

This display can be invaluable when you start improvising and then find the changes you played were so nice that you would like to turn them into a song. Your G-600 is equipped with a function that helps you remember the changes. We suggest you activate the Chord Sequencer (see page 65) whenever you start improvising. That way, you can play back the changes and write them down by copying the information that appears in the Chord Symbol window.

(9) Style/Song Information window

This window either displays the current Style division and time signature or the current bar/beat and time signature of the Recorder song you are playing back.

(10) MIDI Set window

This window displays the number of the currently selected MIDI Set.

3.3. Navigating through the display pages

Function keys and [SHIFT] button

Every function key is assigned to a specific line of the function menu. The function itself may vary, but the second item on the menu can always be accessed using [F2]. Certain menus are too large to fit on one display page. In that case, the lower right of the function menu will look like this:



This symbol means that you have to "turn the page" in order to access the remaining menu items.



- (1) To do so, press and hold down [SHIFT]...
- (2) ... and press the function key that is assigned to the item you need. But let's get back to the Master page.
- (3) Press [F5] (Exit) until the Master page reappears:

A11.Factory	1 J=120 B154	BigBand	MASTER 1Mixer
▲ UP1) A11 UP2 A153 ▼ LWR A723	Piano 1 St.FM EP Warm Strings	Or 9-BSC 4/4 MidiSet . 1	2Param 3Midi 4UsrSt
	5Disk		

Other buttons

As stated above, the G-600 has seven levels, five of which can be accessed via the function keys. Three levels can be selected via dedicated buttons:

Pressing	Allows you to use the ▲▼ buttons to
ARR CHORD	access functions related to the G-600's Arranger. See "Selecting the Arranger Chord mode" on page 43 for details.
TONE	access the Tone select page. Here, the ▲▼ buttons below the display allow you to select a, Part, Tone group (A~D), Bank (1~8), Number (1~8), and Variation. To leave this level, either press TONE again or [F5] (EXIT).
VOLUME	call up the mixer, where you can set the balance of all G-600 parts (both Real- time and Arranger parts). Note, however that only the Realtime parts can be selected via dedicated buttons (see below). Press [VOLUME] or [F5] (Exit) to exit this level.

The $\blacktriangle \lor$ buttons below the display are always assigned to an item that appears on the display. They usually work from left to right, i.e. the leftmost $\bigstar \lor$ pair controls the leftmost item in the display, etc.

Note: If you did not select any specific function level nor press the [TONE] button, pressing one of the $\blacktriangle \forall$ buttons will take you to the Volume page (without changing the volume of the slider in question):

MDR ADR	ACC	MBS	abs	1wr	UP2	UP1	VOLUME
120 130	84	:00	8	48	:88	35	
	上	宁		L	9		3 4Glbal
.	Τ.		L	T		P	sExit

The indicator of the [VOLUME] button starts flashing, to signal that this page will disappear again after a few seconds. Pressing the same $\blacktriangle \forall$ button again, or another $\blacktriangle \forall$ button, will modify the setting of the corresponding volume slider on the display.

To quickly increase the setting of one of the displayed sliders, hold down \blacktriangle and press the corresponding \triangledown button. The same system can also be used for setting lower values (hold down \checkmark and press \bigstar).

Reversed/positive value display

You will find that there is a reason why certain values appear on a blue background, while others appear on a light background. The G-600 contains a series of switches for selecting which volume, pan, etc. parameter values to use in a given situation:

Display	Meaning
Reversed	(White on blue) The part in question uses your own settings or the ones written to the active Performance Memory.
Positive	(Blue on white) The part in question uses the Music Style or Song settings.

The system of white-on-blue characters is used consistently to point out that a certain part uses either your settings or those of the selected Music Style or SMF.

[PAGE] ▲▼ and Part Select buttons

On the Master page, the [PAGE] ▲▼ buttons are used to cycle through the G-600's parts. That way, you can quickly check which Tones are assigned to the Realtime Parts.

A11.Factory	1 J=120 B154	BigBand	MASTER 1Mixer
▲UP1)A11 UP2 A153 ▼LWR A723	Piano 1 St.FM EP Warm Strings	Or 9-BSC 4/4 MidiSet • 1	
	min7,9/Eb		5DiSk

Cycling through the parts with the [PAGE] $\blacktriangle \nabla$ buttons does not mean that the part on the top line of the Part Information window is automatically selected. That explains why the black cursor and right arrow are not always visible.

Usually, only one part will be highlighted at any one time. That part is active for Tone selection and other edit operations. Note that the indicator of the Part Select [UPPER1] button is currently lit. It duplicates the cursor function in the Part Information window to indicate that the Upper1 Part is currently selected.



Pressing another Part Select button will do three things:

- Activate the indicator of the button you pressed.
- Place the cursor (and the right arrow) on the corresponding Part in the Part Information window.
- Place the selected part on the first line of the Part Information window.

Instead of using the [PAGE] $\blacktriangle \nabla$ buttons to check the Tone assignment, you can also press the Part Select button that corresponds to the Part whose assignment you wish to check. That has the advantage that the part in question is automatically activated for editing, which is not the case when cycling with the [PAGE] $\blacktriangle \nabla$ buttons.

In Mixer mode, the Part Select buttons, located below the display, function as On/Off switches. For instance, on the following display page, Part Select [UPPER1] allows you to turn the equalizer on or off.



Whenever one of the Part Select buttons functions as On/Off switch, you can no longer select parts using these buttons. In that case, part selection has to be carried out using the [PAGE]
▲▼ buttons. That explains why the page scroll bar then specifies the name of a part (Upper1 here).

Note: On the Master page, you can press Part Select [UPPER1] and Part Select [UPPER2] simultaneously, to activate both parts (Upper1 and Upper2). Tone selection using the TONE buttons will then affect both Upper Parts. Any differences of the Tone parameter settings (such as Detune etc.), however, will be maintained. This technique allows you to select the same Tone for Upper1 and Upper2 without resetting the Detune, Pan etc. values of either Part. Whenever you press Part Select [UPPER1] and Part Select [UPPER2] simultaneously, the G-600 automatically assigns the currently active Upper1 sound to the Upper2 part, so that both parts use the same Tone.

3.4. Realtime display

You will soon notice that most display controls (i.e. the sliders and buttons that appear on the display) change whenever the corresponding part receives a volume, pan, effect send, etc. message from the Arranger (in Arranger mode) or the Standard MIDI File (in GM/GS mode). In other words, the position of the display controls faithfully reflects the current settings.

Note: If a certain slider etc. does not seem to move when you expect it to, there is an easy way to find out why that is the case. See "Reversed/positive value display" on p. 24.

4. Realtime parts

4.1. What are Parts?

Your G-600 is a multitimbral instrument, which means that it can play several sounds simultaneously. There are two main sections:

Q Realtime section

The Realtime section encompasses the parts you yourself can play. A part is the "voice", such as the melody, the solo, etc. you play. The following Realtime parts are available on your G-600:

Part	Explanation
Upper1	Though there are only slight differences between Upper1 and Upper2, Upper1 is normally the main solo part. In other words, select this part to play the melody or solo line.
Upper2	Upper2 can either be used as second solo part or as additional sound to be lay- ered with the Upper1 part. Furthermore, Upper2 can be triggered by the Arranger to play an automatic counter-melody (a function called Melody Intelli- gence).
Lower	The Lower part allows you to play chords with your left hand. Use it whenever you want to add an accompaniment such as strings to your right-hand melody. It goes without saying that you only need to select the Lower part when you want to play the chords with another sound than the one you chose for the Upper part(s).
M. Bass	The Manual Bass (or M. Bass) part is used to play bass lines. Select this part whenever you want to play the bass accompaniment yourself.
M. Drums	The Manual Drums (or M.Drums) part is somewhat different from the other Real- time parts in that you can only select Drum Sets for this part. Select this part whenever you feel like drumming on the keyboard.

Your G-600 can assign different sounds (or Tones) to each of these parts. Note, however, that you can only assign Drum Sets to the M.Drums part, and that it is impossible to assign Drum Sets to the other Realtime parts (Upper1, Upper2, Lower, M. Bass).

Arranger section

The Arranger section (see page 40 for full details) encompasses all parts that will be played by the G-600.

4.2. Selecting Realtime parts for playing

When you power on your G-600, the Upper1 part is automatically selected and assigned to the entire keyboard. The Tone assigned to Upper1 is called A11 Piano 1.

The indicator of the Part Select [UPPER1] button lights, as does the indicator of the [WHOLE RIGHT] button.



You can turn off Upper1 by pressing the [UPPER1] button (indicator goes off). Since no other Realtime part is currently active, you hear nothing when you play on the keyboard. Turn Upper1 back on again.

Layering and selecting Upper2

Let's select the Upper2 part now:

Press RIGHT [UPPER2] to activate the Upper2 Part.

This does not turn off (or on) the Upper1 part, so that Upper1 and Upper2 are now layered. If you only want to hear the Upper2 part, press [UPPER1] to turn off that part. Again play a few notes on the keyboard to hear the Tone assigned to Upper2. The display will tell you that this sound is called A16₂ St. FM EP.

Selecting the Lower and M.Bass Parts

The buttons of the ASSIGN section (which is part of the Keyboard Mode section) allow you to choose the area on the keyboard where the Realtime parts can be played.

Assign: Whole Right

When you press the [WHOLE RIGHT] button, can play the Upper1 and/or Upper2 Parts on the entire keyboard. Remember that it is perfectly possible to play Upper1 and Upper2 simultaneously.

Whole Left

Whole Left means that either the Lower or M.Bass Part will be assigned to the entire keyboard. Press [WHOLE LEFT] now and play a few notes. In fact, you don't hear what you play because neither the Lower nor the M.Bass Part is currently active.



The indicator(s) of the activated UPPER Part(s) start(s) flashing, meaning that Upper1 and/or Upper2 are active but will not sound because the keyboard now directs note information to a Left part (Lower and/or M.Bass).

To hear the Lower part, you have to press theKeyboard Mode [LOWER] button (indicator lights). If you like, you can switch back to your latest Upper setting simply by pressing [WHOLE RIGHT], in which case the indicator of theKeyboard Mode [LOWER] button starts flashing, while the indicator of [UPPER1] and/or [UPPER2] lights steadily.

Press [WHOLE LEFT] again, followed by Keyboard Mode [M.BASS] to select the Manual Bass Part. Again, selecting this part does not turn off the Lower part. Play a few notes on the keyboard. You will hear the strings sound assigned to the Lower part and the bass sound assigned to the M.Bass Part.

Note: When both the Lower and the M.Bass Parts are active, the Manual Bass Part is monophonic. In this case, the M.Bass Part will only sound the lowest note of the chord you play. You could, however press the [BASS INVERSION] button (indicator goes dark) so that the Manual Bass part plays the root note of your chords. If only the Manual Bass Part is active, it is polyphonic, which means that you can play chords with the Tone assigned to M.Bass.

Split and split point

The [SPLIT] button allows you to split the keyboard, thereby assigning the Lower and/or M. Bass Part to the lower half (left) of the keyboard, while the Upper1/2 parts are assigned to the upper half (right). Press this button now and play with both hands.



Lower and/or M(anual) Bass

Upper 1 and/or Upper 2

The split point is currently located at the C right in front of you (C4). This note is the lowest note of the Right (Upper1 + Upper2) section.

Setting the split point on the keyboard

The easiest way to change the split setting is to hold down the [SPLIT] button, wait until its indicator starts flashing, and press a key on the keyboard. Release the [SPLIT] button.

That note now becomes the lowest note of the Right section. Your are free to set the Split point anywhere within the C3~C6 range. This may look like a limitation, but it is actually a clever way to avoid that either the Left or Right section doesn't sound if the Split point is set too low or too high.

Feel free to use Layers (Lower + M.Bass and Upper1 + Upper2) to the left and right of the split point.

Upper2 Split

But the G-600 does not stop there. You can indeed program a second split between Upper1 and Upper2. To do so, press [UP2SPLIT]. The default split point is located at the G5 (lowest note of the Upper1 part).



Lower and/or M(anual) Bass Upper 2 Upper1 In effect, the G-600 allows you to play three sounds assigned to three separate keyboard areas. On top of that, you can select the Arranger's chord recognition area, i.e. the notes that feed the Arranger (see page 42).

Setting the UP2 split point works the same as setting the main split point: hold the [UP2 SPLIT] button, wait until the indicator starts flashing, and press a key on the keyboard. Next, release the [UP2 SPLIT] button.

Note: When you press [UP2 SPLIT], the [UPPER2] indicator goes dark. That doesn't mean, however, that you no longer hear the Upper2 Part.

Note: Upper2 Split only works if the Upper1 Part is active. If you turn off Upper1, you will neither hear the Tone assigned to Upper1 nor the one assigned to Upper2. In other words, it is impossible to program an Upper split without using the Upper1 sound. That is why the [UP2 SPLIT] indicator starts flashing as soon as you switch off the Upper1 part while the UP2 SPLIT mode is active.

Setting the split points with the display functions

If you'd rather see which note becomes the split point, you can set the main and Upper2 split points using a display function:

- (1) On the Master page, press [F2] (Param) to select the Parameter menu.
- (2) You probably do not need to press [F1] (Glbal) at this point. Remember, though, that the G-600 has a page memory function, so that it is a good idea to press [F1] anyway.
- (3) Press [PAGE] ▼ to select the second Global page:



- (4) Using the [DRUMS/PART] ▲▼ pair, specify the main Split point (the one between the Left and Right zones). Use the [ACCOMP/GROUP] ▲▼ buttons to specify the UP2 Split point (the one between Upper2 and Upper1).
- (5) Press [F5] (Exit) to return to the Master page.

Note: The UP2 Split can be set anywhere between the C#3 and the C#6. In ASSIGN Split mode, the lowest setting depends on the main Split point setting, however. If you set a lower value than a semi-tone above the main split point, the main split value also changes. In other words, the lowest possible value of the UP2 split point is always one semi-tone to the right of the main split point.

Note: You can also program a split between Upper 2 and Upper1 in ASSIGN Whole Right mode.

Note: If you are satisfied with your split points, you should save them to a Performance Memory (see page 58).

Keyboard Mode Hold

The G-600 is an instrument that allows you to change many settings in realtime. Because you can trigger the Lower part and the Arranger simultaneously, selecting another Music Style division usually means that you have to lift your left hand from the keyboard. If the Keyboard Mode Hold function is not active in Whole Left or Split mode, the Lower part stops sounding as soon as you release all keys in the Left area. If you press [HOLD], however, (indicator lights), the notes of the Lower part go on sounding until you play other notes in the Left keyboard area. It is probably a good idea to leave Hold on at all times.



If both the Lower and M.Bass parts are active, the Hold function sustains both the Lower and M.Bass notes.

Selecting the Manual Drums part

Press the Keyboard Mode [M.DRUMS] button to assign a series of drum and percussion sounds (called Drum Set) to the entire keyboard, thereby overriding any Keyboard Mode setting you may have made beforehand. In other words, whenever you activate the M.Drums part, the other Realtime parts (Upper1, Upper2, Lower, and M.Bass) cannot be played. This is indicated by a flashing indicator of any part button you may have pressed (or that was activated) before selecting the M. Drums Part.

The M.Drums part differs from the other Realtime parts in that it assigns different sounds to every key. If you press the C2 (leftmost C), you trigger a bass drum sound. Press the D2 key (the D to the right of the C2) to trigger a snare drum sound, and so on. Consequently, you won't be able to play melodies in Manual Drums mode. Consider the following illustration:



Roll

The Roll function allows you to play perfect drum rolls. Press the [ROLL] button now and hold any key depressed for about five seconds to see what we mean. You can change the resolution of the Roll function (see page 96). Rolls will always be played in time with the tempo displayed in the Tempo window. Try this out by changing the tempo using the [TEMPO] buttons. Using the Modulation axis of the BENDER/MODULATION lever (press the lever away from you), you can modify the volume of the drum roll. Try this out now.

4.3. Selecting Tones for the Realtime parts

Your G-600 is shipped with 689 sounds, or Tones, to choose from. These Tones are divided in the following way:

Groups	Meaning (A~D) The highest ranking unit. Each Group contains all of the following ele- ments.
Banks	(1~8) Banks are "instrument families" (such a Brass, Chromatic Percussion, etc.). Each Bank contains the following elements.
Numbers	(1~8) Numbers are instruments of a given family (i.e. trumpet, trombone, etc. of the Brass bank).
Variations	(1~) Variations are usually other or related sounds of a given instrument (i.e. muted trumpet).

Note: The difference between A/B, and C/D is that groups A and B contain the G-600 sounds, while the C and D groups actually contain SC-55, MT-32/CM-64 sounds. There are two versions of practically every Tone: an old one (SC-55, C/D), and a new one (G-600, A/B).

Selecting Tones using the TONE buttons

By way of example, let us assign another Tone to the Upper1 part.

(1) Press Part Select [UPPER1] to select the Upper1 part for Tone selection.

	CONTRACTOR	C ACCOM GROUP	BASS BANK	COWER NUMBER	CUPPER VARIATION
ARR CHORD	M DRUMS	M BASS	LOWER	UPPER 2	

- (2) If necessary, press the [SELECT] button to make the TONE indicator light. Use this button to select whether the TONE/PERFORMANCE MEMORY buttons are used to select Tones or Performance Memories.
- (3) Press the GROUP button to select the B group (indicator lights).

UP1 <u>B</u> **	Piano	1	CC-00: 0 CC-32: 2 PC : 1	TONE I Bank
▲ 1 REED B 2 PIPE B 3 SYNTH ■ 4 SYNTH		5678	SYNT FX ETHNIC MISC PERCUSSIVE SFX	2Numb 3VarQ 4Edit 5Exitp

Note that the Tone name next to B** is still the old one, i.e. Piano 1. There is no piano sound in Group B, Bank 1. The Tones in the information window, however, are those of Group B, Bank 1 (Soprano Sax, Alto Sax, etc.).

(4) Press the [5] button in the TONE/PERFORMANCE section (the indicator of this button lights) to select a bank.

LP1 B5* Piano	CC-00: 0 CC-32: 2 PC : 1	TONE 1Bank
10JCe Rain	5 Brightness	aNumb
20JSoundtrack	60Goblin	3VarQ
30JCrystall	70Echo Drops	4Edit
40JAtmosphere	80Star Theme	5Exitp

You have just selected the SYNTH FX bank. Bank 5 of Group B is now active but you still hear the piano sound.

(5) Press the [2] button to select the Soundtrack Tone.

In fact, the G-600 does not select the Soundtrack Tone but rather a Variation of that Tone (Ancestral). There is a reason for this: whenever you select a Tone using the TONE/PERFOR-MANCE MEMORY section, the G-600 calls up the best sound of the Tone family you specify. That is why the number 2 is displayed white-on-blue to indicate that you haven't selected the Soundtrack Tone but rather a Variation of that family.

The display returns to the Master page and the [TONE] indicator at the lower left of the display goes out shortly after you specified a Tone number.

If you'd rather select the Soundtrack Tone instead of the Variation, you have to press VARI-ATION \triangleleft once.



This takes you back to the Number display and shows you the Tone you selected by pressing the VARIATION ◀ button.

Ų	P1 B52	Sound	track	CC-00: CC-32: PC	93 93	TONE 1 Bank
F	ASOUNDT		4			2NUM5
	2Prolog		5			4Edit
E	зRave		7			SExit

The D means that the Soundtrack Tone is the Capital of this Tone family.

Note: If you'd rather the display didn't return to the Master page at this point, press [TONE] to the left of the display (indicator lights). In that case, the only way to return to the Master page will be to press [TONE] again (indicator off).

Tone selection for other Parts

To select Tones for the other Realtime parts (Upper2, Lower, M.Bass), first press the corresponding Part Select button and then go back to step (3). If you still hear the Upper1 Part when you play on the keyboard, see "Selecting Realtime parts for playing" on page 28.

Note: Feel free to select whichever Tone you like for the above Parts (Upper1, Upper2, Lower, M.Bass). That is also true of the M.Bass sound. Remember, however, that the M.Bass part is monophonic when layered with the Lower Part.

Note: To select another Tone within the same group, enter its Bank and Number. Selecting the Group is only necessary if the new Tone resides in another Group.

Note: See "Effects and Equalizer" on page 81 for how to apply effects to the selected Tones.

Display symbols

Here is what the symbols next to the Tone names mean:

Symbol	Explanation (1 I Piano 1) There are a few Variations for this Tone. Press VARIATION I to select one. In the Variation window, this symbol means that the Tone in question is the Capital.
w	1 "Piano 1) (Only in groups C and D). This Tone is an SC-55 Sound Canvas sound.
+	(1 + Trumpet) (Only in groups C and D). This Tone is a sampled version of an MT-32 or CM-64 sound.

Selecting Tones using the $\blacktriangle \nabla$ buttons

Let us now select a Tone using the $\blacktriangle \nabla$ buttons.

- (1) Press [TONE] at the lower left of the display (indicator lights).
- (2) Select the part you wish to assign a Tone to.

You can either use the Part Select buttons or the [DRUMS/PART] $\blacktriangle \forall$ buttons. Be careful, however, not to select an Arranger part (ADR, ABS, AC1~AC6) when using the $\blacktriangle \forall$ buttons. We'll leave that for later.

(3) Use the [ACCOMP/GROUP] ▲▼ buttons to select a Group.

Note: This time, the sound selection is carried out immediately. Pressing the [ACCOMP/GROUP] $\blacktriangle \lor$ buttons thus takes you to the Tone of the same Bank and Number within the newly selected Group. When selecting Tones with the TONE/PERFORMANCE MEMORY section buttons, the G-600 always waits until you specify a Tone number before selecting that Tone (or its "best" Variation).

(4) Use the [BASS/BANK] ▲♥ buttons to switch to another Bank.

(5) Use the [LOWER/NUMBER] ▲▼ buttons to select another number.

Note: Selecting a number with these buttons always calls up the Capital of that Tone family. In other words, here the "best of" method is not active.

(6) Use the [UPPER/VARIATION] ▲▼ buttons to select another Variation.

Note: You can only select Variations for Tones that are preceded by a "page" icon. For other Tones, nothing happens when you press the [UPPER/VARIATION] ▲▼ buttons.

Note: You can also use any combination of these two methods (using the TONE section and the ▲▼ buttons below the display) to select Tones.

(7) Press [TONE] again to return to the Master page.

Note: Tone selection can be automated using the Performance Memory (see page 58) feature.

4.4. Selecting Drum Sets for the M.Drums Part

Here is how to select Drum Sets for the M.Drums part:

- (1) Press the Keyboard Mode [M.DRUMS] button to assign the M.Drums part to the keyboard.
- (2) Press Part Select [M.DRUMS] to select the M.Drums part for editing.

- (3) Press the [SELECT] button to make the TONE indicator light.
- (4) Press the [GROUP] button to select a Group (A, C or D).

Group A contains the G-600 Drum Sets, group C contains the SC-55/MT-32 Stes, and group D contains a CM-64 Drum Set.

MD	R**	Stan	dard	2	CC-00: CC-32: PC :	NN0	
A 1 2	STANDA ROOM	RD	5	JAZZ			2NUM5
АĞ	POWER		Ŷ	ORCH	ESTRA		4Edit
. 4	ELECTR	ONIC	8	SFX			SEXit

(5) Press a number button to select a bank (press 2, for example).

MDR A2*	Standard2	CC-00: CC-32: PC :	TONE
1 ROOM	5		ZNUMB
2	6		зVaru
3	7		4Edit
4	8		sExit

(6) As you see, there is only one Drum Set in this bank. So press 1 to select the corresponding Drum Set.

Note: The G-600 is clever enough to ignore any erroneous choice you might make at this stage. So even pressing 8 here will select the Room Set (even though the display will indicate that you selected the 8th memory of the active bank).

Note: Groups B contains no Drum Sets so there is little point in selecting it.

Note: Tone and Drum Set selection (along with a lot of other settings) can be written to a Performance Memory. After assigning other Tones to the Realtime parts you should save these settings to a Performance Memory (see page 58).

4.5. Who selects the Tones? - Tone Change

Tone selection will be carried out automatically in response to messages received from Recorder song data (for Realtime parts), the Music Style you are using (for Arranger parts), or the Performance Memory you select. In other words, all parts of the G-600 will others Tones whenever they is instructed to do so by one of the G-600's sections or a Standard MIDI File.

That may not always be to your liking. In such a case, you should set the Tone Change switch to Prf so that Tone selection can only be carried out by selecting Performance Memories or by yourself.

Option	Meaning
Prf	Tone selection remains in effect until you select another Tone or Performance Memory.
Sng	In this case, the Realtime Tone assignments are affected by program change mes- sages included in the Standard MIDI File you are playing back. When set to Sng, the program change switch is set to respond to program change messages on disk

Note that there is little difference between Prf and Sng as long as you don't play back a Standard MIDI File. **Note:** The Tone Change switch only applies to "internal" messages. Program changes received via MIDI IN will always be executed, no matter how you set the Tone Change switches.

Here is how to set the Tone Change parameter:

- (1) Press [TONE] to select the Tone mode.
- (2) Hold down [SHIFT] and press [F1] (RTime) to select the Realtime part page.
- (3) Use the [PAGE] ▲▼ buttons to select the Part whose Tone Change setting you wish to modify.



The name of the Part you select appears in the scroll bar.

- (4) Using the [DRUMS/PART] ▲▼ buttons, set the Tone Change switch to Prf or Sng.
- (5) Press [F5] (Exit) to return to the Master page.

4.6. General notes

Before turning to the realtime performance functions of your G-600, there are three remarks we would like to make:

Tone selection using the Tone section buttons is possible at all times.

In other words, it doesn't matter which display function you select or what you are currently doing, you can always select other Tones for the part whose Part Select button you pressed last.

□ Music Style selection is possible at all times.

Again, you are free to select another Music Style (see page 50) whenever you like. The display may not always jump to the Tone or Style selection pages but the G-600 will nevertheless carry out any action related to Tone and/or Style selection.
4.7. Realtime Performance functions

Your G-600 also provides performance controllers and functions to add expression to what you are playing.

Pitch Bend and Modulation



Turn the BENDER/MODULATION lever towards the right to bend the notes you are playing upwards, or to the left to lower the pitch. Release the lever to return to the standard pitch. Push the lever away from you to add vibrato to the notes you are playing. Release the lever to remove the vibrato.

Transpose and Octave Up/Down



Transpose

If you are used to playing a song in a particular key, the Transpose function will help you to go on playing in that key while sounding in another one. That way, you can accompany a singer or instrument that prefers to sing or play in another key than the one you are used to playing that particular song in.

Note: Transposition applies to all parts except the MDR (Manual Drums) and ADR (Accompaniment Drums) parts.

Setting the transposition interval in realtime

To set the transposition interval in realtime, press and hold the [TRANSPOSE] button (indicator lights) and press OCTAVE [UP] to raise the pitch, or OCTAVE [DOWN] to lower the pitch. Each press corresponds to one semitone. To transpose to the key of G, hold down [TRANSPOSE] and press OCTAVE [UP] six times (or OCTAVE [DOWN] five times). You may wonder why you have to press [UP] six times rather than seven (7 semitones equal a perfect fifth). That is because the factory setting of the transpose interval is "+1". The Transpose function does not allow you to specify "0" (i.e. C, or no transposition), so that, when transposing down, you jump from "1" to "-1", which is why the G key must be selected by pressing [DOWN] only five times).

Pressing the [TRANSPOSE] button allows you to switch back and forth between the new key ([TRANSPOSE] indicator lights) and normal key ([TRANSPOSE] indicator goes off).

Setting the transposition interval via the display

If you prefer to set the transposition interval the "learned" way, here is how to:

37

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F2] (Tune).
- (3) If necessary, use the [PAGE] ▲▼ buttons to select the first Param\Tune page.



(4) Use the [UPPER/VARIATION] $\blacktriangle \forall$ buttons to set the transposition interval (-11~11).

Note: You cannot select the transpose value "0" because setting that interval (no transposition) has no purpose. To return to the normal key, press the [TRANSPOSE] button so that its indicator goes out.

You could also select another Transpose Mode using the [BASS/BANK] ▲▼ buttons:

Transpose mode	Explanation
Int	If the [TRANSPOSE] indicator lights, only the Realtime and Arranger parts will be transposed.
Song	Only the Recorder song parts will be transposed.
MIDI	If the [TRANSPOSE] indicator lights, only the notes received via MIDI IN will be transposed. In a way, this is the same as the Rx Shift parameter in the MIDI mode.
Int+Song	If the [TRANSPOSE] indicator lights, the Realtime and Arranger parts as well as the Recorder song parts will be transposed.
Int+MIDI	If the [TRANSPOSE] indicator lights, the Realtime and Arranger parts as well as a notes received via MIDI will be transposed.
Song+MIDI	If the [TRANSPOSE] indicator lights, the Recorder song parts as well as all notes received via MIDI will be transposed.
All	All parts and received notes will be transposed.

As you see, the Transpose function is extremely flexible. The Int+Song and All options are probably the ones you will select most of the time. "Int" could be useful to transpose only the Realtime parts so that you can play to a Recorder song in "your" key but sound in the song's key.

Note: The MDR and ADR parts are never transposed because it makes no sense. After all, every key of the MDR/ADR part is assigned to a different percussion sound and transposing it would mean that you would have to press other keys to trigger the sounds you need.

(5) Press [F5] (Exit) to return to the Master page.

Octave Up/Down

The OCTAVE [UP] and [DOWN] buttons allow you to transpose the Realtime parts one octave up or down. Before being able to apply a positive (Up) or negative (Down) octave shift to a Realtime part, you have to select it on the Master page using its Part Select button.

To transpose the Lower part one octave down, for example, first press Part Select [LOWER] (indicator lights) and then OCTAVE [DOWN] (indicator lights).

After doing so, you can press other Part Select buttons to apply the same or a different octave shift. In other words: the selected octave will be maintained even if you select another Realtime part after activating Octave Up or Down for a part.

Note: The MDR part cannot be shifted.

The selected Octave mode remains in effect when you assign another Tone to a given Realtime part. If you do not wish to apply the same shift to the new Tone, you must turn off Octave Up or Down for the part in question.

Sustain pedal (Hold)

The Hold function can be used for the following parts in isolation or in combination: Upper1, Upper2, Lower, and M.Bass part, on condition that you select the WHOLE LEFT or WHOLE RIGHT keyboard mode. In SPLIT mode, the sustain pedal Hold function only works for the rightmost part. That is to say, when Upper1 and 2 are layered, the Hold effect will work for both of them. In UP2 Split mode, however, the Hold effect will only be active for the Upper1 part.

Expression pedal

An optional EV-5 or EV-10 pedal connected to the EXPRESSION PEDAL jack allows you to control the volume of all parts by foot. You can reverse the expression pedal's effect and specify that certain parts are not to be controlled by the expression pedal (see page 98).

Master Tune

This is not really a performance function, but it allows you to tune your G-600 to acoustic instruments that cannot be tuned.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F2] (Tune).
- (3) Use the [PAGE] ▲▼ buttons to select the first Param\Tune page.



 (4) Use the [DRUMS/PART] ▲▼ buttons to tune your G-600 to the acoustic instrument. The displayed value (440.0Hz) is the standard pitch for the A4 note.

Note: The Master setting can be saved to a Performance Memory along with the other panel settings, so that you can instantly return to your "recorder" tuning.

(5) Press [F5] (Exit) to return to the Master page.

5. Playing with accompaniment – Arranger

Before showing you how to select Music Styles, let's briefly look at how they are organized.

5.1. Arranger and Music Styles

Think of the Arranger's Music Styles as your backing band. The following illustration shows that this suggestion is not as preposterous as it may sound because your G-600 is capable of playing several "variations" (called divisions) of a given accompaniment. All you have to do is make up your mind about the kind of music you want to play: is it going to be salsa, rhumba, pop-rock, or big band?

You are the band leader, which means that you have to tell the members of your band what to play. In other words, you must explain how many bars there are to each song part and how the melody and/or solo should be accompanied.



(Grey lines: Use of Intros and Endings is optional. Press [ADVANCED] to select the desired level)

Every white square in the above illustration is called a division. Though you may not need the word here, it will help you understand how to program your own Styles. A division is one version of the selected accompaniment (or Music Style). As you see, there are two main modes: Basic and Advanced, each consisting of two divisions called Original and Variation.

As its name implies, Basic is the "normal" accompaniment level, with only the basic ingredients of a professional sounding accompaniment. The Advanced level, on the other hand, may contain another version of the selected Music Style or just a more elaborate one. On either level (Basic and Advanced) you can choose between the Original accompaniment or an alternative (called Variation). The latter usually adds one or two parts to the current accompaniment, for example power trumpets instead of muted ones.

As the leader of your band, you have to tell the musicians what to play and when to play it. If you want the accompaniment to become more complex as the song evolves, here is a useful sequence: Typical song structure

1st Verse	2nd Verse	1st Chorus	3rd Verse	2nd Chorus
Basic Original	Basic/ Variation	Advanced/ Original	Basic/ Variation	Advanced/ Variation

Other elements help you refine the accompaniment. Instead of abruptly changing to Advanced/Original, you may want to play a short transition to announce a new part of the song. That is what Fill In [TO VARIATION] and [TO ORIGINAL] are for:

Typical song structure					
1st Verse (bars 1~7)	V1 (bar 8)	2nd Verse	1st Chorus	3rd Verse	2nd Chorus
Basic Original		Basic/ Variation	Advanced/ Original	Basic/ Variation	Advanced/ Variation

See "Music Style functions" on page 45 for other Music Style divisions and functions you can use to create a professional sounding accompaniment.

Arranger parts

Each accompaniment (or Music Style) can consist of up to eight parts:

Part	Explanation
A. Drums	Accompaniment Drums. This part takes care of the rhythm. It triggers the drum and percussion sounds of the Drum Set assigned to the ADR part.
A. Bass	Accompaniment Bass. This part plays the bass line of the Music Style you selected.
Ac1~Ac6	These are the melodic accompaniment parts. Depending on the Music Style you selected, only a few of them actually play something, which can be anything from a piano line, a guitar line, an organ line to a synth pad line. Not all Accompaniment parts play chords.

The A. Bass and Ac parts rely on the chord or note information you play in the chord recognition area, i.e. the keyboard zone you have assigned to the Arranger using the Assign LEFT and RIGHT options.

If you start the Arranger without playing a chord in the Assign area, you will only hear the drums of the selected Music Style. In most cases, however, the G-600 has already memorized a chord, so that you will hear the full accompaniment.

5.2. Selecting the chord recognition area

The G-600's Arranger is interactive. It is in fact a processor that uses a short "pattern" (the selected Music Style division) that is transposed in realtime according to the notes you play in the chord recognition area (see below), so that the accompaniment always sounds in the key you specify.

All Style Divisions of the Arranger are programmed to play in whichever key you choose by pressing the corresponding keys in the chord recognition area of the keyboard.



You must also tell the G-600 which half of the keyboard it is to scan for usable chords. Though ARR CHRD LEFT is probably the mode you will usually use, you could select RIGHT to have the Arranger scan the right half of the keyboard. You could also select WHOLE to feed the Arranger anywhere on the keyboard.



The range of the Left of Right keyboard areas can be set using the Keyboard Mode Split parameter (see page 30). In other words, the split point you set for the Realtime parts will also act as split point between the Left and Right chord recognition (Arranger Chord) areas.

Here is how to select the chord recognition area:

(1) Press [ARR CHORD].

The display now looks like this:



(2) Press [F1] to select Left, [F2] to select Right, or [F3] to select Whole.

You can also press [F4] to select Off. Doing so does not turn off the Arranger, though. It only means that the Arranger no longer scans the keyboard for usable chords. Select this mode when you wish to feed the Arranger with chords received via MIDI (see also "NTA channel" on page 129).

(3) Press [F5] (Exit) to return to the Master page.

5.3. Selecting the Arranger Chord mode

Before using a Music Style, there are a few choices you have to make. The most important is how you want to go about it to send note information to the Arranger so that it plays the Music Style in the right key.

- (1) Press [ARR CHORD] to select the ARR CHRD page (see above).
- (2) Use the [DRUMS/PART] ▲▼ buttons to select the desired "Arr Chord" mode.
- (3) **Press** [F5] (Exit) when you're done. There are three modes to choose from:

Standard

Standard means that you select the normal chord recognition mode. In Standard mode, the melodic accompaniment plays the chords you play in the selected recognition area of the keyboard (see above). If you play only one note in that area, the accompaniment plays only that note, i.e. it assumes that you deliberately chose to omit the third and the fifth of your "chord".

To have the Music Style sound a major, minor or seventh chord, you can suffice to play three notes, by the way. Other, more complex, chords require that you press four keys.

Piano Style

Select *PianoStl* to change the chord recognition method. Piano Style means that you can play on your G-600 as you would on a piano. In this mode, it is probably a good idea to activate only the Upper1 part (Whole Right mode) so that you can play one Realtime part on the entire keyboard.

The Piano Style mode works as follows: the Arranger decodes every chord you play – no matter where you play it. Causing the Arranger to play another chord requires that you play at least a triad (i.e. the three notes that make up a chord). You are free to play more than three chord notes but remember that two notes won't cause the Arranger to play another chord. Feel free to select ARR CHRD [F3] Whole for a piano-style control of the Arranger.



Intelligent

Select *Intellig* whenever you would like the Arranger to add the missing notes of the chord you want to play. The G-600 can handle virtually any chord you can think of – and playing them requires no more than three (for minor and seventh chords only two, and for major chords only one) finger(s)! This is probably the mode you will select most of the time.

5.4. Bass Inversion and Arr Hold

Bass Inversion

Press the [BASS INVERSION] button (indicator lights) below the MUSIC STYLE/MIDI SET pad to change the way the Arranger reads the chords you play. If the indicator does not light, the A.Bass part plays the root of the chords that feed the Arranger, while the chords of the Accompaniment 1~6 parts are voiced in such a way as to avoid semitone intervals (for complex chords) that invariably produce enharmonic clusters (cacophony).

Activating Bass Inversion gives you more artistic license in that you specify the note played by the A.Bass part. Switch on Bass Inversion for songs that rely on bass rather than on chord patterns (for example $C - C/B - C/B_b$, etc.).

Arr Hold

Activate *Arr Hold* to keep the Arranger playing. As soon as you play another chord, the accompaniment changes, but as long as you play no other chords, the melodic accompaniment keeps playing the previously specified chord. If you do not activate the Hold function, the melodic accompaniment stops as soon as you release the note(s) that feed the Arranger.

- (1) Press [ARR CHORD] to select the Arranger Chord page.
- (2) Use the [BASS/BANK] ▲▼ buttons to switch the Arr Hold function on or off.
- (3) Press [F5] (Exit) to return to the Master page.

5.5. Music Style functions



Player's Guide

Starting a Music Style

Music Styles can be started in several ways:

- (1) Press the [START/STOP] button (indicator lights) to start the Arranger right away. OR:
- (2) Stop playback of the current Style (see below) and press the [INTRO] button (indicator lights) to start Style playback with a musical introduction.

The length of the Intro depends on the Style you selected. At the end of the Intro, the Arranger starts playing the Music Style division you select while the Intro is being played. In other words, you can select whichever division (Basic, Original, etc.) you like to be played upon completion of the Intro.

OR:

(3) Press Synchro [START] (indicator flashes) and play a chord (or just one note in Intelligent mode, see page 44). The Arranger starts as soon as you play a note in the chord recognition area (see page 42).

Note: Do not play chord changes while the Intro is running. Unlike the "normal" accompaniments (Basic, Advanced, Original, Variation), Intro patterns usually contain chord changes. Chord recognition is not deactivated during Intro playback, so that the beginning of a song may jump from one key to another.

Stopping a Music Style

There are two ways to stop Style playback:

- (1) Press [START/STOP] to stop playback right away.
- (2) Press [ENDING] (indicator flashes) to activate the Ending function. The Ending (or coda) pattern will start at the beginning of the next measure (next downbeat).

Note: Do not play chord changes while the Ending is running. Unlike the "normal" accompaniments (Basic, Advanced, Original, Variation), Ending patterns usually contain chord changes. Chord recognition is not deactivated during Intro or Ending playback, so that the ending of a song may jump from one key to another.

There is no need to restart Style playback manually if you also activate Sync Start (indicator lights)

Another way to end a song would be to use the Fade Out function (see page 49).

Selecting another Style division

As stated above, you can "professionalize" your performance with the Arranger by selecting different accompaniment patterns. The levels and divisions you can select are:

Basic and Advanced



Press the [ADVANCED] button (indicator must go off) to select the Basic version of the Music Style (see page 40 for more information about Basic and Advanced). Press it again (indicator lights) to select the advanced accompaniment level.

Press the [VARIATION] button (indicator must go off) to select the "normal" Basic Music Style accompaniment. As stated above, Basic/Original is the simplest of the four possible accompaniment patterns. The second accompaniment level can be selected by pressing [VARI-ATION] again (indicator must light) while Basic mode is active. The same system also applies to the Advanced level, giving you a total of four accompaniments per Music Style (multiplied by three, see the next paragraph).

Major, minor, seventh

This is an "invisible" Style division function of your G-600. In time you will notice that the Intro and Ending patterns of a Music Style change according to the type of chord you play. There are three possibilities:

Before going any further, select GROUP B, Number 4, Number 5 (B45 Musette Style, see page 50 for full details about Style selection). Press [INTRO] and Synchro [START]. The corresponding indicators must light. (You will have to press [INTRO] before trying out each of the following.)

Major (M)	Calls up the first (major chord) accompaniment level.
Minor (m)	Calls up the second accompaniment level. Try this out by playing a C major chord, press [INTRO] again and play a C minor chord.
Seventh (7)	Whenever you play a seventh chord, you activate yet another accompaniment level. Try this out by first playing a major and then a seventh chord.

In other words, the number of certain divisions (such as the Intros and Endings) is in fact multiplied by three!

Note: The G-600 is equipped with a function that allows you to freely assign various chord types (7/5, dim etc.) to one of these levels (see page 92).

Fills: To Original and To Variation



Activate Arranger Hold (see page 44). Start playback of the current Style by pressing [START/STOP].

Fill In [TO ORIGINAL] and [TO VARIATION] are two fills (or transitions) you can use at the end of a musical phrase (verse, chorus, bridge). These two buttons do two things at a time:

G-600

	Original : [VARIATION] O	Variation: (VARIATION)	
TO ORIGINAL	Original Fill	Original Fill → [VARIATION] O	
TO VARIATION	Variation Fill	Variation Fill	

Press these buttons now. Start with [TO VARIATION], next press [TO ORIGINAL].

Think of a Fill as the moment in a song when the drummer is allowed to play a roll and the bassist and keyboard players vary their accompaniment by adding a few notes here and there.

Fill-Ins last one bar, but you can produce shorter fills by proceeding as follows: press [TO VARIATION] or [TO ORIGINAL] on the first through the penultimate beat of a bar (i.e. the 1st, 2nd or 3rd beat of a 4/4 bar, or the 1st or 2nd beat of a 3/4 bar) to start the fill right away. It will then last until the end of the current bar. If you press the [TO VARIATION] or [TO ORIGINAL] button on the last beat of the current bar, the fill will start on the following downbeat and last an entire bar.

Note: You can also start Style playback with either the [TO ORIGINAL] or [TO VARIATION] button. Again, the Arranger will select the level (Original or Variation) the fill is headed for.

The Intro and Ending of the currently selected Style can also be used as "fills". See "Intro and Ending" for more information.

Do not stop Style playback.

Fill In Half Bar

Certain pop songs in 4/4 contain bars that only last two beats. The usual place for such a bar is between the first and the second verse. Another favorite position of "halved" bars is at the end of a chorus or the bridge. Your G-600 allows you to faithfully reproduce these "anomalies". Press Fill In [HALF BAR] (indicator lights) to activate the Half Bar function. This does not change Style playback right away. Only when you press [TO ORIGINAL] or [TO VARIATION] will the Half Bar function be active and play half the number of beats of the fill you selected.



Switch Fill In [HALF BAR] off again, and stop Style playback.

Intro and Ending

While the selected Style is stopped, press the [INTRO] button (indicator lights) to cause Style playback to start with a musical introduction. Do not forget to press [START/STOP] (or activate Synchro [START]) to start Style playback.

The length of the introduction depends on the Style you selected. Some Intros are two measures long, others eight, and so on. It is also possible to use the Intro function along with Sync Start (see below). **Note:** You can also press [INTRO] in the middle of a song. In that case, the indicator will flash until the end of the current bar and then light on the next downbeat to indicate that the Arranger is playing the introductory pattern.

The Intro is "renewable", i.e. you can press the [INTRO] button again while the Intro is playing. Doing so on the fourth beat of the first Intro bar, for instance, will retrigger the beginning of the Intro in the second bar.

If you press [ENDING] during Style playback, its indicator will flash until the end of the current bar and then light on the next downbeat to indicate that the Arranger is playing the Ending pattern. The Ending function supplies a musical ending for your songs. Again, the length of the Ending pattern depends on the Style you selected.

Style playback will be stopped at the end of the Ending pattern.

The Intro and Ending of the currently selected Style can also be used as "fills". Likewise, you could begin a song with the Ending pattern and end with the Intro. Remember, however, that the length of the Intros and Endings varies from Style to Style. So before using this feature in a real life situation, you should probably try it out and count the number of bars. Furthermore, Style playback will be stopped at the end of the Ending pattern, which is something you have to bear in mind when using the Ending as intro.

Realtime changes of the drum accompaniment

Your G-600 allows you to "modify" the drum accompaniment in realtime. Selecting a Drum Variation level indeed removes (or adds) drum and percussion instruments. The changes (i.e. the sounds that are added or removed) are preset.



Press the [DRUM VARIATION] button to select the desired Drum Variation.

Selecting DRUM VARIATION "4" will call up all drum and percussion parts of the active Style. If you select DRUM VARIATION "3", you will notice that one or two percussion sounds (the congas, for example) disappear. Select DRUM VARIATION "1" to select the simplest drum accompaniment of the current Style, or "2" for a slightly more stuffed drum part.

Other useful Style playback functions

One Touch

You may find yourself using the One Touch function at regular intervals because it automates quite a few tasks:



Press [ONE TOUCH] (far right of the G-600) to activate the One Touch function. The display responds with placing an arrow (◄) next to the Style name (e.g. Al1◀ HardRock). If you select a Music Style while One Touch is active, the G-600 automatically selects the following:

- · Arranger Chord "Standard" and Arr Hold "On".
- · Preset Style tempo
- Synchro [START] (lit)
- A Tone for Upper1 and Upper2 that are suitable for the selected Style
- Keyboard Mode [SPLIT]
- Suitable Reverb, Chorus, and Delay settings for Upper1 and Upper2.

One Touch is useful for situations where you have to respond to song requests, knowing that none of your Performance Memories contains suitable settings. For your own "repertoire", using Performance Memories (see page 58) is more efficient.

Note: The One Touch function will be cancelled as soon as you select a Performance Memory.

Melody Intelligence

The Arranger of your G-600 can not only play chords but also a counter-melody based on the chords you play in the chord recognition area. This counter-melody will be played by the Upper2 part and added to the Upper1 part. As soon as you press [MELODY INTELLIGENCE] (indicator lights), the Upper2 part will be activated (but the indicator of the Keyboard Mode [UPPER2] button goes off). You can assign whichever Tone you like to the Upper2 part.

Fade Out

Fade Outs are extremely popular in pop music, and the G-600 allows you to end a song just like the original. To do so, press [FADE OUT] (indicator flashes). The volume then gradually decreases until it reaches zero (indicator lights steadily).

To reset the master volume after a Fade Out, press [FADE OUT] once more. Style playback will be stopped automatically at the end of a Fade Out.

To avoid volume glitches when resetting the master volume you should first press the [START/STOP] button, wait a moment and then press [FADE OUT].

Reset

As a performing artist, you know there is always someone in the audience who, at some point, wants you to accompany him while he sings his favourite song. Accompanying such a person can be a real challenge because most amateur singers (no offence), no matter how well they sing, have one serious problem: timing.

Enter the [RESET] function. Press this button whenever you are hopelessly out of sync with the singer (or vice versa). Pressing [RESET] (located to the right of the [ENDING] button) will immediately restart Style playback on the first beat.

Dynamic Arranger

Use the Dynamic Arranger function whenever you want to control the volume of the Arranger parts via the way you strike the keys in the chord recognition area (velocity). If the velocity sensitivity of one or several Arranger parts is not to your liking, you can edit it (see page 94).

(1) Press [ARR CHORD].



(2) Press [UPPER/VARIATION] ▲ to switch On "Dynamic Arr".

The velocity sensitivity of the Arranger parts can be programmed in such a way that certain parts are inaudible while others sound, and vice versa, so that you can "change" the Music Style's character in realtime.

(3) Press [F5] (Exit) to return to the Master page.

5.6. Selecting Music Styles

The G-600's Music Styles are divided into two Groups: A and B. Each Group contains 8 banks of 8 Styles. At power-up, the G-600 automatically selects the A21 Progress Style. Here is how to select another style:



(1) Press [GROUP] button in the MUSIC STYLE section to select Group A or B. Select GROUP B, for example.

STL B**	HardRock	CC-00: CC-32: PC	151	STYLE Bank
1 LATIN 1 2 LATIN 2 3 VARIETY 4 FOLK 1	5 6 7 8	FOLK 2 WORLD 1 WORLD 2 AMERICAN	5	Exit

By now, this display page should look familiar. It shows a list of all Styles banks of the Group you selected. The control change (CC) and program change (PC) numbers refer to the Style's MIDI address. In other words, you can also select Music Styles via MIDI (on the Style Select channel, see page 130). The control change numbers define the Style, whereas the Program

Change number defines the division (Intro, Ending, etc.). You can check this by selecting another division (press [TO VARIATION], for example), and watching the PC number.

(2) Press a Number button to select a Music Style bank.

Press button number 8, for example.

STL B8*	HardRock	CC-00: CC-32: PC :	15 15 1 Numb
1 GOSPel 2 C'Ball 3 C'West 4 C'Swin	adi 6 rn 7	C'Boogie Country Cajun B'Grass	sExit

(3) Finally, to select a Style number of this Bank, press another or the same number button. Press 5, for example, to select the C'Boogie Style. The display now returns to the Master page and the tempo and name of the new Style appear on the top line:

All.Perform	1 J=182 B85 (2'Boo9ie	MASTER 1Mixer
▲ UP1) A11 UP2 A153 ▼ LWR A723	Piano 1 FM+SA EP Warm Strings	4/4	3Midi 4UsrSt
	min7,9/Eb		sDisk

Note: There is no way to select another Music Style Group without specifying the subsequent entries (Bank, Number or Number). Conversely, you only need to specify the Group when the desired Style resides in the other Style Group. Otherwise, specifying the Bank and Number will do. The Style selection can be saved to a Performance Memory, so that calling that Performance Memory will also select the Music Style you need.

Using external (User) Styles

Apart from the internal Music Styles in ROM, you can also work with Styles coming from a Style disk. Your G-600 is shipped with Demo/ Style Disk that also contains new Styles. Other MSA, MSD, and MSE Style disks are available from your Roland dealer.

You can also program and load your own Styles (see page 102). Let's call all Styles that do not reside in the internal Style memory User Styles.

The G-600 can hold 8 User Styles at any one time. These Styles must be loaded from a Style disk, which means that a copy will be transferred to the RAM User Style memory. Note that this is a memory with power backup, so that the User Styles will be preserved when you switch off your G-600.

Loading User Styles

Note: Loading User Styles from disk may mean that you overwrite User Styles already present in the G-600's internal memory. If you haven't saved those Styles yet, see "Saving a User Style Set" on page 56.

Here is how to load User Styles:

- (1) Insert the supplied Demo/Style disk into the disk drive.
- (2) On the Master page, press [F5] (Disk) to select the Disk mode.
- (3) If the 1 Load option is not highlighted, press [F1] (Load) to select it. The message in the scroll bar (left-hand side) should read USR STL. If that is not the case...

(4) .Press [PAGE] ▲▼ until the scroll bar reads USR STL.



(5) Using the [DRUMS/PART] ▲▼ buttons, select Dsk for the Source parameter. Failure to do so will result in an internal Style being copied to the selected User Style memory. That is only necessary if you want to edit the Style in question – but not what we want to do now.

The Music Style info window displays a list of Styles on the floppy. The last message in this window indicates the free User Style memory area.

- (6) Use the [ACCOMP/GROUP] ▲▼ buttons to scroll through the list of available Styles. The highlighted (white-on-blue) Style will be loaded. Next, you have to decide which elements of the Style you want to load. (These elements, as you know, are called divisions: Original, Basic, Ending, Intro, etc.)
- (7) Use the [LOWER/NUMBER] ▲▼ buttons to select the Style division you need.
 Here, we just want to load a Style and use it like an internal Style, so select ALL (all divisions).
- (8) Use the [UPPER/VARIATION] ▲▼ buttons to select the User Style memory you want to copy the Style to (to User). Let's select User Style memory 1.

Note: Be careful not to load User Styles to a User Style memory that already contains a Style. The G-600 will not warn you that you are overwriting the Style in the memory you select here!

(9) Press Part Select [UPPER1] (Execute) to load the Style.



(10) Press [F5] (Exit) to return to the Master page.

You have now loaded one User Style to the first User Style memory. (See "Working with User Style Sets" on page 56 to load 8 Styles at a time.) The next step is to use the Style you have just loaded. Here is how to:

Selecting User Styles

- (1) Press MUSIC STYLE/MIDI SET [GROUP] until the USER indicator lights.
- (2) Press a number button to select the corresponding User Style memory.

Note: Press [GROUP] again to select A or B if you want to select internal Styles after selecting a User Style.

Note: Style selection is one of the elements that can be saved to a Performance Memory (see page 58).

G-600

5.7. Style Tempo

Tempo buttons and indicators

Every Music Style contains a preset tempo that you are free to override using the [TEMPO] buttons. If you think the tempo of the selected Style is too fast or too slow, you can change it right away. Again, the tempo value you specify manually will be saved to a Performance Memory.



The TEMPO indicators will flash at the speed of the selected tempo. The first indicator flashes red to indicate the downbeat (the beginning) of a new bar. For time signatures like 6/8, etc. the fourth indicator flashes repeatedly to supply the "missing" beats.

There are a few things to remember about Style tempo:

- Every Style has a preset tempo that will be set every time you select that Style unless you saved another tempo to a Performance Memory and select that Performance Memory.
- When you select another Music Style while the Arranger is playing, the new Style will be played at the same tempo as the preceding one. If that is not to your liking, simultaneously press TEMPO [+] and [-] to select the Style's default tempo.

To return to the preset tempo, simultaneously press TEMPO [+] and [-].

There are, in fact, two preset tempos: the one saved along with the preset and User Styles, and the one written to a Performance Memory. If you select a Style by recalling a Performance Memory, pressing TEMPO [+] and [-] will return you to the tempo written to the Performance Memory – i.e. not the tempo setting of the selected Style. If you selected the Style using the MUSIC STYLE/MIDI SET buttons, simultaneously pressing TEMPO [+] and [-] will once again select the tempo setting of the Style.

(To be able to select the Style's preset tempo after recalling a Performance Memory, first press PERFORMANCE MEMORY [◀DOWN] + [UP▶], then press TEMPO [+] and [-].)

Tap Tempo

Tap Tempo is a musical way of specifying the playback tempo: Stop Arranger playback press the [RESET/TAP TEMPO] button the way a drummer would do when counting in.



After the second tap, the tempo display already indicates a new tempo value. In other words, you could suffice to press this button only twice. Most of the time, however, you will press it four times for a 4/4 bar, three times for a 3/4 bar, and so on.

5.8. Customizing Music Styles

Assigning other Tones to the Arranger Parts

You can select other Tones for the Arranger parts of the currently selected Music Style. Assigning another Drum Set to the A. Drums part may already dramatically change the Music Style's character. Likewise, replacing the acoustic piano by an electric one is an easy way of adapting a preset Music Style to your specific needs.

Tone selection for the Arranger Parts works the same as Tone selection for the Realtime Parts, except that you cannot call up the Arranger parts using the Part Select buttons below the display. You have to select the desired Part using the [DRUMS/PART] $\blacktriangle \forall$ buttons in Tone mode. See "Selecting Tones using the $\blacktriangle \forall$ buttons" on page 34 for how to select Tones.

Note: Stop Arranger playback before assigning other Tones to the Arranger parts. See also the next paragraph.

Tone Change

Its is up to you to decide whether the G-600 should remember which Tones you assigned to the Arranger parts. If you do not modify the Tone Change setting, you will notice that after a while, the Music Style returns to the original, preset, Tones.

Thanks to the Tone Change switch, however, you can ensure that the preset Tone selection will be overridden by your own choices. See "Who selects the Tones? – Tone Change" on page 35 for more information about the Tone Change parameter.

Message	Meaning
Prf	Tone selection remains in effect until you select another Tone or another Perfor-
	mance Memory.
Arr	Your own Tone selection for the Arranger parts is modified by the settings con-
	tained in the Music Styles.

Note: The Tone Change switch only applies to "internal" messages. Program changes received via MIDI IN will always be executed, no matter how you set the Tone Change switches.

Here is how to set the Tone Change parameter:

- (1) Press [TONE] to select the Tone mode.
- (2) Hold down [SHIFT] and press [F2] (Arrng) to select the Arranger page.
- (3) Use the [PAGE] ▲▼ buttons to select the Part whose Tone Change setting you wish to modify.



The name of the Part you select appears in the scroll bar.

- (4) Using the [DRUMS/PART] ▲▼ buttons, set the Tone Change switch to Prf or Arr.
- (5) Press [F5] (Exit) to return to the Master page.

Note: Style and Tone selection (along with a lot of other settings) can be saved to a Performance Memory. After assigning other Tones to the Arranger parts and changing the Tone Change settings, you should save these settings to a Performance Memory (see page 58).

5.9. Working with User Style Sets

Compiling and saving your own Style Sets

- Working with User Style Sets is the most efficient way to prepare all the User Styles you need in a given situation. We strongly advise you to take advantage of the User Style Set feature even though preparing Style Sets may take some time. It has indeed the advantage that you can use Styles from different disks (but saved to one disk) and thus have eight accompaniments you need, ready to be loaded as a Set.
- Load eight Styles into the G-600's User Style memories (see steps (2)~(9) on page 51 and repeat steps (5)~(9) until all eight User Style memories contain Music Styles). Do not forget to change disks if your Style Set is to contain Styles from different disks.

Note: Do not press [F5] (Exit) when you're done.

Style Sets are in fact containers that refer to existing files on disk. That is why we now have to save the eight Styles in the G-600's memory to a new disk:

Saving User Styles to disk

- (2) Insert a new 2DD or 2HD disk into the drive. If it is not formatted, you are given the opportunity to do so now. If it is IBM PC formatted, you can proceed right away.
- (3) Press [F2] (Save) on the Disk page.
- (4) Using the [PAGE] ▲▼ buttons, select the following display page:



- (5) Use the [DRUMS/PART] ▲▼ buttons to select User Style memory 1.
- (6) You probably do not want to change the name, so we'll skip that part here.
 If you do want to change the Style's name, however, use the [LOWER/NUMBER] ▲▼ buttons to select the character you want to change, and enter the new character using the [UPPER/VARIATION] ▲▼ buttons.
- (7) Press Part Select [M.BASS] (Execute) to save the Style to disk.



(8) Repeat steps (5)~(7) to save the Styles 2~8 to disk.Of course, in step (5) you will have to select "2", "3", ... "8".

Saving a User Style Set

Now that you have eight Styles on disk, you can combine them to a Style Set. It goes without saying that you can save a lot more User Styles to the same disk and combine them to other Style Sets.

Here is how to compile and save a Style Set:

(9) Assuming that you are still in Disk mode, hold down [SHIFT] and press [F1] (StlSt).



Obviously, the Style Set window on this display page does not look like the one on your G-600 since your disk does not yet contain User Style Sets. But let us go through the motions:

- (10) Press Part Select [M.DRUMS] (New) to create a new Style Set.
- (11) Use the [BASS/BANK] ▲▼ buttons to select a Style Position.

The Position represents the User Style memory the Style will be copied to when you load the User Style Set. In other words, "1" means that the User Style you assign to this Position will be copied to User Style memory 1, and so on.

(12) Use the [LOWER/NUMBER] ▲▼ buttons to assign a disk Style to the position you have just selected.

The Disk Style window shows all Styles that are available on the disk in the drive.

(13) Repeat steps (11) and (12) to complete your Style Set.

Note: You can also select *** for a Position, which means that the corresponding User Style memory will not be overwritten when you load this Style Set. You could use this feature to keep the corresponding User Style memory free for direct Performance Memory access.

(14) Pressing Part Select [UPPER1] (Save) will take you to the following display page:



The Style Set window tells you everything you want to know about the Style Size (in bytes) and the Free Disk area (also in bytes).

The name of the Style Set you are about to save will be STLST followed by a number (in your case probably "001"), unless you change it now.

Use the [LOWER/NUMBER] ▲▼ buttons to select a character position and the [UPPER/VARIATION] ▲▼ buttons to assign the character of your choice to that position. When the name is complete...

(15) ... press Part Select [M.BASS] (Execute) to save the Style Set to disk. The display will respond with:



Since your G-600 is multitasking, you can press [F5] (Exit) and do something else while the G-600 saves your Style Set to disk.

When the User Style Set is saved, the OK Function Complete message will be displayed.

Loading User Style Sets

Instead of loading User Styles one at a time, you can also load User Style Sets containing 8 Styles. Not only will this speed up the loading process, it also allows you to compile Sets of all the User Styles you need in a given situation. To see how the User Style Sets work, let us load the Set you have just compiled:

- (1) Insert your disk into the disk drive.
- (2) On the Master page, press [F5] (Disk) to select the Disk mode:
- (3) If the 1 Load menu option is not highlighted, press [F1] or [SHIFT]+[F1] (Load) to select the Load page.

The message in the scroll bar (left-hand side) should read STL SET. If that is not the case...

(4) ... press [PAGE] ▲♥.

	Music Style Set size	destination	DISK
5 15	11 STLSET01 270 12 STLSET02 241		1Load 2Save
S	13 STLSET03 240 14 STLSET04 280		3Rname 4D1ete
SET	*FREE AREA 300*	EXECUTE	5Exit
	▼SELECT		

(5) Use the [ACCOMP/GROUP] ▲▼ buttons (Select) to scroll through the list of available Style Sets and select one.

The right information window (Destination) indicates which User Style memories the Set will overwrite. A dash ("–") means that the Style Set contains no data for the corresponding memory. The first line in the above Destination window means that the currently selected Style Set contains no data for User Style memories 1 and 4. Consequently, those internal memories will not be overwritten.

- (6) Press Part Select [UPPER1] (Execute) to load the Style Set.
- (7) Press [F5] (Exit) to return to the Master page.

While the load operation is in progress, the message LOADING appears in the upper right corner of the Master page:



6. Registrations – Performance Memories

The G-600 is equipped with 192 Performance Memories that allow you to store almost all settings (or registrations) you make on the front panel. So far, we have only discussed the easy part of changing the preset settings. Later on, you will discover that you can also carry out a lot of in-depth work. Those settings can also be saved to a Performance Memory. Before taking a closer look at the G-600's Performance Memories, there is one thing we have to point out, though. All settings relating to MIDI must be written to a MIDI Set (see page 135).

MIDI settings are not saved to a Performance Memory. The reason for this is simple: You probably need a lot more memories for your performance settings than you do for your MIDI settings. Saving the MIDI settings to the Performance Memories would slow down the loading process.

We would like to draw your attention to the fact that your G-600 also memorizes the name of the User Style you use in a given situation. If, at the time you load such a Performance Memory, that Style does not reside in the internal User Style memory, the display will respond with:



See "Automated User Style access" on page 62 for what to do in that case.

6.1. Writing your settings to a Performance Memory

It is a good idea to write your settings frequently even if you still need to do some editing afterwards. Those intermediary saves allow you to return to the previous stage whenever you do not like your last modifications. In other words, you could (and probably should) use the Performance Memories as "recall buffers" to be able to return to the previously edited settings, discarding only the latest modifications.

Try to save your settings after...

- ...selecting Tones for the Realtime parts.
- · ... selecting a Style, the first division, and after setting the tempo.
- · ... assigning other Tones to the Arranger parts.
- ... modifying the volume balance and the effect settings.
- ... editing the Source settings.

In short, every time you like the settings you just made. That way, every subsequent modification can be undone by loading the "provisional" Performance Memory settings you do not want to lose.

G-600

Memory Protect

Your G-600 is equipped with a Memory Protect function that is activated every time you power on your instrument. Memory Protect does what its name implies: it protects your Performance Memories and MIDI Sets from accidental erasure.

You will be given the opportunity to turn off Memory Protect before saving your settings to a Performance Memory. If the G-600's memories are protected when you press the [WRITE] button (see below), the display will respond with:



Press Part Select [UPPER1] (Yes) to turn off the Memory Protect function.

If you do not want to turn off the Memory Protect function press Part Select [M.DRUMS] (No) instead.

There is another way of turning off Memory Protect, which you might use after powering on your G-600:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F1] (Glbal) to select the Global mode.
- (3) Press [PAGE] ▲▼ to select the first Global page:



- (4) Press the [DRUMS/PART] ▲ button to "unlock" the G-600's memory.
- (5) Press [F5] (Exit) to return to the Master page.

At a later stage, you could return to this display page to turn the Memory Protect function back on.

Performance name

One final step before saving your settings to a Performance Memory is to assign a name to your settings. Note that you only have to do this the first time you save new settings to a Performance Memory, and that you can also name your Performance after saving it. If you do it now, you do not have to worry about renaming your Performance at a later stage.

Use a name that somehow summarizes the memory's content. The name of the song you will use these settings for is probably the most explicit name you can think of.

Here is how to name your performance settings:

(1) If necessary, select the Parameter\Global 1 page (see steps (1)~(3) above).



- (2) Use the [LOWER/NUMBER] ▲▼ buttons to select the character position you want to change, and enter the new character using the [UPPER/VARIATION] ▲▼ buttons.
- (3) Repeat step (2) to complete the name.
- (4) Press [F5] (Exit) to return to the Master page.

Writing a Performance Memory

It is perfectly possible to program several Performance Memories for one song. Selecting a Performance Memory is a lot faster than calling up one of the G-600's menu pages, modifying the settings, etc., while playing. In other words, you could program one Performance Memory for the first part of a song, another one for the bridge, and a third one for the closing section. Doing so allows you to "play" with the effect settings of the Realtime and/or Arranger parts, for example.

(1) Press and hold down the [WRITE] button.

The display asks you whether you are sure want to write your settings to a Performance Memory. If you are, go on. Otherwise, release the [WRITE] button.



You may wonder why you have to keep [WRITE] depressed. We did that so that it is impossible to accidentally overwrite an existing Performance Memory. After all, you may very well hit the wrong button while performing, and the last thing you want to do is overwrite the settings you took so much time to program.

- (2) Press the TONE/PERFORMANCE MEMORY [SELECT] button to select PRF MEM.
- (3) Press the [GROUP] button to select a Group (A, B, or C; indicator lights). Group D is only available for Tone selection.
- (4) Press a number button (1~8) to specify the bank number.
- (5) Press a number button to select a memory within the selected Bank. The display briefly confirms that your settings have been written to the memory you selected:



(6) Release the [WRITE] button.

G-600

6.2. Selecting a Performance Memory

Selecting 00 FreePanl

Loading a "real" Performance Memory may sometimes lead to confusion as to why a Realtime part does respond to program changes transmitted by a Standard MIDI File, for example, even though you are absolutely positive about having deactivated the corresponding Tone Change switch.

Furthermore, selecting Free Pnl is the only way of being able to reset a Music Style's "real" preset tempo after selecting a Style by recalling a Performance Memory (see page 50 for details).

For Recorder song playback, you should always select the factory Performance Memory 00 FreePnl that contains the default settings of your G-600, unless you modified them. You may remember that is what we did before listening to the demo songs.

Simultaneously press Performance Memory [◄DOWN] and [UP►] (Cancel) to select the 00 FreePnl settings.

Note: This Performance Memory is read-only. You cannot write data to this memory.

Resume

The Resume function recalls the factory-set 00 FreePnl settings and erases any modifications you may have made since powering up your G-600. Resume also allows you to specify which settings of the factory set Performance Memory 00 are to be loaded:

Settings to be lo	aded Meaning
Tone	Only Tone selection and the Source Tone Change settings of Performance Memo- ry 00 will be loaded. (See pages 32 and 35.)
Mixer	Only the Mixer settings of Performance Memory 00 will be loaded. (See page 79.)
Parameter	Only the settings of the Parameter mode will be loaded. (See page 86.)
All	All settings of Performance Memory 00 will be loaded.

Here is how to load Performance Memory 00 using the Resume function:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F1] (Glbal) to select the Global mode.
- (3) Press [PAGE] ▲▼ to select the first Global page:



- (4) Use the [ACCOMP/GROUP] ▲▼ buttons to select the settings you want to load (see the table above).
- (5) When you are ready to load these settings, press [M.BASS] (Execute) to load them.
- (6) Press [F5] (Exit) to return to the Master page.

Note: You can also load the 00 FreePanl settings by powering off your G-600 and turning it back on again. This is the same as selecting All.

Selecting a Performance Memory (Group, Bank, Number)

(1) Press the [SELECT] button of the TONE/PERFORMANCE MEMORY pad (PRF MEM indicator must light).



- (2) Press the [GROUP] button to select a group (A~C).
- (3) Press a number button to select a bank number.

Note: You can perform these steps a little ahead of the song part where you want the new settings to take effect. Only when you specify the Performance Memory number will the corresponding settings be loaded.

(4) Press a number button to select a memory.

The settings of the selected Performance Memory will be recalled.

Note: You do not need to load all Performance Memory settings. See "Selectively loading Performance Memory settings (Performance Memory Hold)" on page 63 for more information.

Automated User Style access

Note: Whenever you select a Performance Memory programmed to select a User Style, the G-600 scans the User Style memory whose number was saved to the Performance Memory. If the Style in that User Style memory has a different name than the one the G-600 expects, the display will respond with a message similar to the following:



The Style name and User Style memory number may vary, of course, but you can now press Part Select [M.DRUMS] to load the missing Style to the specified memory. If the disk in the disk drive contains the Style the G-600 is looking for, it will be loaded. If not, the display responds with:



Here, you can either select Retry if you are certain the Style in question is on the disk you inserted into the drive, or insert another disk and press Retry. Alternatively, you can Exit (Part Select [UPPER2]) to ignore the warning and return to the previous display page.

Note: On the previous display page you can also press Part Select [UPPER2] if you do not want to load the missing Style.

Selecting a Performance Memory using the [◄DOWN] [UP►] buttons

The following method is especially useful if you programmed two or more Performance Memories for a song or if the Performance Memory sequence corresponds exactly to the song sequence you are about to play (i.e. settings of the first song or song part in memory A11, settings of the second song or song part in A12, etc.). Pressing [◀DOWN] or [UP▶] immediately selects the preceding or following Performance Memory so that you don't have to worry about pressing the [GROUP] and number buttons.

Button	Meaning
[UP▶]	Selects the following Performance Memory (for example A13 if you selected A12 before pressing this button).
[<down]< th=""><th>Selects the preceding Performance Memory (for example A11 if you selected A12 before pressing this button).</th></down]<>	Selects the preceding Performance Memory (for example A11 if you selected A12 before pressing this button).

Note: If you press [UP▶] after selecting A88, your G-600 will call up B11. Like wise, if you press [*◄*DOWN] after selecting B11, your G-600 will call up A88, and so on.

Selectively loading Performance Memory settings (Performance Memory Hold)



The G-600 is equipped with a function that works more or less the same way as Resume for Performance Memory 00 (see above). This function is called *Performance Memory Hold* and applies to the "regular" (i.e. programmable) Performance Memories.

Performance Memory Hold allows you to keep certain settings of the previous Performance Memory while selecting another Performance Memory. Selectively loading Performance Memory settings allows you to quickly assign other Tones to the Realtime and/or Arranger parts *without* loading the Style parameters contained in the new Performance Memory, for example.

Let's have a look at the possibilities. The desired Performance Memory Hold mode can be set using dedicated buttons on the front panel.

Button	Meaning	
[STYLE]	Press this button (indicator lights) to load all Performance Memory settings except those related to the Arranger (Style and Division).	
[TONES]	Press this button (indicator lights) to load all Performance Memory settings except Tone selection for the Realtime, Arranger, and Song parts.	
[KBD MODE]	Press this button (indicator lights) to load all settings except the ASSIGN (Whole Left, Split, Whole Right, etc.) and ARR CHORD settings (Standard, Piano Style, Left, Right, etc.).	

Pressing a Performance Memory Hold button without selecting a Performance Memory afterwards has no effect. Only when you select another Performance Memory will the selected data filter (because that is what Performance Memory Hold is) start working.

In this case, Hold is thus taken to mean "keep the settings of the previously selected Performance Memory". To load all settings of the new Performance Memory, press the Performance Memory Hold button whose indicator lights (i.e. all indicators must be off).

7. Chord Sequencer

The Chord Sequencer of your G-600 is a very powerful tool that allows you to record a chord sequence to be repeated several times while you concentrate on the melody or solo, or to prepare the accompaniment of an entire song before recording it with the Recorder (see page 68).

A Chord Sequence is a series of instructions telling the Arranger when to play other chords. Some musicians refer to a chord sequence as "the changes" of a song.

7.1. Recording the accompaniment of an entire song

The G-600's Chord Sequencer allows you to record the accompaniment of an entire song from start to finish. You could (and probably should) use this technique to prepare a recording using the Recorder (see p. 68). That way, you don't have to worry about selecting Styles, divisions, and so on while playing the melody.

- (1) Select the Style, the division, and the level (Advanced or Basic) of the Music Style you want to use (see page 46). (Alternatively, you can call up a Performance Memory, see page 61.)
- (2) Set the tempo if you do not want to use the preset Style tempo. The tempo value you set here will also be recorded.
- (3) Activate the Sync Start function if that is how you want to launch Style playback.
- (4) Press Chord Sequencer [RECO/STOPI] (indicator flashes).
- (5) Play the first chord in the chord recognition area (see page 42) or press the [START/STOP] button to manually start Music Style playback and do everything you would do during a normal performance involving Music Styles.
- (6) At the end of the song, press [START/STOP] (Arranger section). There is no need to press [START/STOP] if you end the song with the Ending or Fade Out function.
- (7) Press the Chord Sequencer [PLAY ►/STOP] button (indicator flashes).
- (8) Playback of the Chord sequence can be started in the same ways as playback of a Music Style. See "Starting a Music Style" on page 45.

7.2. Two Chord Sequencer modes

The G-600 is equipped with a function that allows you to choose what should be recorded by the Chord Sequencer. First, you should understand the concept Note To Arranger.

NTA (Note To Arranger)

The Arranger responds to note and chord changes you perform in the chord recognition area of the keyboard (see the illustration on page 42). The notes that cause the Arranger to switch to another chord are called *Note To Arranger* (or NOTEs used TO feed the ARRANGER).

The Note To Arranger notes are the notes the Arranger "reads" to decide which chord should be played next. Any chord change will cause all Arranger parts (except the drum part) to play in another key.

The advantage of the NTA (or Note to Arranger) system is that it is easy on the memory of the Chord Sequencer or an external sequencer because the accompaniment patterns themselves

and all the notes and instructions that go with them are not recorded. Using this feature, however, requires that you select exactly the same Style settings as the ones that were active at the time you recorded the NTA notes – and above all that the NTA notes be sent to an instrument equipped with an Intelligent Arranger.

Note: The G-600's Recorder (see p. 68) does not record NTA notes. Instead, it records the entire Style and realtime performance. Playback of a Standard MIDI File recorded with the G-600's Recorder thus only requires a GM/GS compatible sound module and a regular sequencer.

Style Change

The G-600 is equipped with a function that allows you to specify what exactly the Chord Sequencer should record. This function is called Style Change (or *Stl Change* for short). Here is what that function does and how to set it:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Next press [F1] (Glbal) to go to the Global page.
- (3) Press [PAGE] ▼ as many times as necessary to call up the following page:



(4) Use the [UPPER/VARIATION] ▲▼ buttons to select On or Off.

Off	In this case, the Chord Sequencer records only the NTA notes. That way, you are free to choose another Music Style etc. when playing back the Chord Sequence.	
	NTA notes	
	 All Performance Memory settings relating to the Arranger. 	
	Arranger function)	
	 Playback volume of the Accompaniment parts (controlled by the Dynamic 	
	 Tempo settings and changes 	
	 Division changes (i.e. whenever your press [ENDING], [VARIATION], etc.) 	
	Style selection	
	includes:	
On	All actions relating to the Arranger are recorded by the Chord Sequencer. That	
Stl Change	Means	

In most cases, you will probably use the On setting to ensure that everything relating to the Arranger is recorded by the Chord Sequencer. That is why On is the default setting. If you only want to record the NTA information, select Off.

(5) Press F5 (Exit) to return to the Master page.

Use the Chord Sequencer function as "backing track" for your recordings using the actual Recorder, so that you only need to play the melody at that time.

7.3. "Realtime" chord sequencing

Recording and playing back in realtime means that the Arranger is already running when you start recording your Chord Sequence. But this also requires that you set Stl Change to Off.

- (1) Start playback of the Arranger (see page 45).
- (2) Press Chord Sequencer [REC●/STOP■] a little (one or two beats) ahead of the bar where the G-600 is to start recording.

The indicator of the [REC@/STOP] button will flash until the next downbeat and then light steadily to indicate that the Chord Sequencer is recording.

(3) At the end of the chord pattern press Chord Sequencer [PLAY►/STOP■]. At the next downbeat, the Chord Sequencer returns to the beginning of the pattern and plays it back again and again until you press the [PLAY►/STOP■] button again to stop playback.

Note: The realtime record feature and Chord Sequencer loop functions are only available in Stl Change Off mode.

If you do not want to play back the Chord Sequence right after recording it, press the Chord Sequencer [PLAY >/STOP] button.

Note: The last Chord Sequence you record before switching off your G-600 will remain in memory until you record another Chord Sequence.

Chord Sequences can be saved to and loaded from disk. Before recording another Chord Sequence you could save the current one to disk and load it some other time.

7.4. Playing back a Chord Sequence

To play back a Chord Sequence, you have to press the Chord Sequencer [PLAY►/ STOP■] button (indicator lights) and start Music Style playback in one of the possible ways (see page 45).

Press Chord Sequencer [PLAY►/STOP■] again to stop playing back the Chord Sequence. Note that this does not stop the Arranger. See page 45 for ways of stopping the Arranger.

G-600

8. Recorder (GM/GS mode)

The Recorder of your G-600 is a Standard MIDI File player/recorder, which means that all songs are directly recorded to disk and on one track (SMF format 0). The advantage of having a Standard MIDI File player/recorder rather than a full-fledged sequencer is that you can play back Standard MIDI files without having to (convert-)load them into the internal memory.

Furthermore, the Chord Sequencer allows you to prepare the accompaniment to such an extent that you can concentrate on the solo parts without having to worry about pressing buttons and selecting Styles. See "Chord Sequencer" on page 65.

The G-600's Recorder reads GM/GS compatible Standard MIDI files and "i", files. "i", is a proprietary Roland song format with set part-to-track assignments for educational purposes.

Note: You may be confused by the words "song" and "Standard MIDI File" we use in this chapter. There is absolutely no difference because the Recorder songs are saved to disk as GM/GS compatible Standard MIDI Files. Thus, all playback functions explained below also apply to commercially available Standard MIDI Files.

8.1. How to record a song

Formatting a disk

Before using the G-600's Recorder, you need to prepare a floppy disk because the songs are directly written to disk. You are free to use 2DD or 2HD disks. Please do not use the cheapest disks available unless you are absolutely sure that they are reliable. It would be a pity to lose a great recording because the disk you recorded it to has become unreadable.

If the floppy you are about to use is IBM PC formatted, there is no need to format it, though disk access is faster with G-600 formatted disks. Otherwise proceed as follows:

(1) Insert the disk into the disk drive. If it is not yet formatted or formatted for a computer or sequencer other than the G-600 (or an IBM PC or compatible computer), the display will respond with one of the following messages:



In the first case (Unformatted Disk) you are given two options: you can either press the Part Select [M.DRUMS] button to format the disk or hit the Part Select button that functions as Exit button to leave this display page without formatting the disk.

In the second case (Unknown Disk Format) you can only leave this display page (Exit). Remove the disk from the drive and insert another one. If, however, you are sure that the "Unknown" disk contains no material you want to keep, you can format it using the Format function: press [F5] (Midi) on the Master page, hold down [SHIFT] while pressing [F4] (Format), and follow the instructions that appear on the display.

For now, we'll assume that your disk is not formatted (Unformatted Disk).

(2) Press Part Select [M.DRUMS] to format the disk. The G-600 will start formatting the disk and the display will read:



You can exit this display page without interrupting the formatting process by pressing [F5] (Exit). That allows you to do something else while the G-600 is formatting. While the G-600 is formatting in the background, the message FORMATTING will appear in the right-hand corner of the display page you exit to.

8.2. Before recording

Though you can record without using the Arranger, that is probably not what you want to do. Here are a few things you should do before starting to record:

- (1) First record the Chord Sequence if you'd rather not control the Arranger in Realtime (see page 65).
- (2) Stop playback of the current Style.
- (3) Assign the desired Tones to the Realtime parts you want to use for recording.
- (4) Select the desired keyboard ASSIGN mode (pages 28~29).
- (5) Select the desired ARR CHORD mode (see page 43). Steps (4) and (5) are only necessary if you do not want to use your Chord Sequence as backing track.
- (6) Select the Style, the division etc. you want to use. OR:

Hit the[PLAY►/STOP■] button of the Chord Sequencer (indicator flashes).

(7) Press SYNCHRO [START] (indicator lights).

Note: Instead of going through all these steps (except for hitting the [PLAY >/STOP]] button of the Chord Sequencer), you can also select the Performance Memory that contains all the settings you need for the song you are about to record (see page 61).

8.3. You're on...

- (8) Press the [REC•] button of the Recorder section.
- (9) Press the [START/STOP] button (Arranger section) or play one note in the chord recognition area (Assign) of the keyboard (if you activated the Synchro START function).
- (10) Start playing.
- (11) At the end of the song, press [START/STOP] again to stop recording. The display now asks you whether, and under which name, you want to save your song:



Note: If you did not like your recording, press the Part Select [UPPER1] button to exit without saving and go back to step (8).

(12) Let's assume that your are pleased with what you recorded and now want to save it to disk. The wisest would be to specify the name of the song before saving it.

Song name

You could save this song with the current default name (SONG_001). A proper name, though, will help you identify the song file at all times. We therefore suggest you take the time to specify a meaningful name.

- (13) Use the [ACCOMP/GROUP] ▲▼ buttons to move the cursor.
- (14) Using the [BASS/BANK] ▲▼ buttons select a character for the position indicated by the cursor.
- (15) Move the cursor to the second position, specify a character, and so on.

For MS-DOS® compatibility reasons, only the first eight characters will be saved to disk. In other words, the song names *ANDILOVE!IER* and ANDILOVERHERSO will both be converted to *ANDILOVE*. You cannot use the same name twice on the same disk, though, which is why you should try to use meaningful abbreviations.

(16) Press Part Select [M.DRUMS] to save your song to disk. The display will respond with:



Again, you do not have to wait until the file is saved to disk. Just hit [F5] (Exit) to jump to the Master page. The G-600 will go on saving the file in the background (indicated by the SAVING message in the right hand corner of the page you jump to).

8.4. Song playback

Playing back a standard MIDI File song requires that you insert a disk containing song files into the disk drive. Though the drive will spin up, the display does not automatically show you the contents of the disk you inserted. We did this to allow you to change disks while playing on the G-600 using the Arranger. Recorder song playback indeed transforms the G-600 into a GM/GS sound module, thereby deactivating the Arranger section of your instrument. To avoid accidental mode changes while you are performing on stage, the GM/GS mode will only be selected when you start playback or press the [GM/GS MODE] button. Just remember that the Recorder is ready to play back the songs on disk as soon as you want it to.

The Realtime parts remain active in Recorder mode and you can mute any part of the song you are playing back. That way, you can also use Standard MIDI Files as backing tracks.

(1) Simultaneously press Performance Memory [◄DOWN][UP►] (Cancel) to select the factory Performance Memory (FreePnl).

G-600

The 00 Free Pnl Performance Memory contains the default settings for all parts and is the only guarantee that the songs on disk will sound exactly the way the recording artist wanted them to.

Note, however, that the G-600 allows you to modify the way Standard MIDI Files are played back and to save these modifications to a Performance Memory. Doing so allows you to "customize" Standard MIDI File playback so that, instead of using the Arranger, you can perform with an accompaniment coming from a Standard MIDI File. We'll tell you how in a minute. Let us first look at how to start song playback.

There are two ways to start song playback:

All Song playback

(2) Press the Recorder [PLAY ►/STOP] button.

Doing so means that the G-600 will select the *All Song* playback mode, so that all songs on disk will be played back in sequence, and that playback will not stop automatically.

A11 Perform1 J= 83 * A1	l Song * mesmes
▲UP1►A11 Piano 1 UP2 A153 FM+SA EP ▼LWR A723 Warm Strings	23. 9 zParam 7/8 3Midi
SONG 04 Straight to my	E Dick

Note: As soon as you hit the Recorder [PLAY \triangleright /STOP \blacksquare] button, the indicator of the [GM/GS MODE] button will light to signal that the Arranger can no longer be used and that the G-600 now works as a GM/GS compatible sound module.

- (3) To stop playback, press the Recorder [PLAY►/STOP■] button again.
- (4) Press [GM/GS MODE] to exit the GM/GS mode and return to the Arranger mode.

Playback of a specific song on disk

Press the [GM/GS MODE] button (indicator lights and all indicators related to the Arranger go off) to select the GM/GS sound module mode.



Note: GM/GS selection is an exception to the multitasking rule. Pressing [GM/GS MODE] will have no effect as long as the Arranger is running. You have to stop the Arranger before being able to select the GM/GS mode. Likewise, you cannot start Arranger playback when the [GM/GS MODE] indicator lights.

The display now shows the complete name of the first (or any other) song on disk on the bottom line and the MS-DOS[®] (i.e. the actual file) name in the "Music Style or song address and name" window.

- (2) If necessary, press the [SONG SELECT] button (indicator must light).
- (3) Use the [◀◀REW] (Previous) and [FF►►] (Next) buttons to select the song you want to play back.

The GM/GS mode will be selected automatically, so there is no real need to activate it using the [GM/GS MODE] button.

(4) Press the Recorder [PLAY ►/STOP] button to start playback of that song.
 Playback will continue until the end of that song and then stop. You can stop the Recorder before the end of the song by pressing the [PLAY ►/STOP] button again.

Note: The G-600 also allows you to program song chains. See the Reference Guide for details.

(5) Select another song using the [◄PREVIOUS] and [NEXT►] buttons, or press [GM/GS MODE] to return to the Arranger mode.

8.5. Useful Recorder playback functions

Lyrics function

After selecting the GM/GS mode, the fourth option on the Master page no longer reads UsrSt but [F4] Lyrcs. This function was provided to allow you to read the lyrics of the song the Recorder is playing back in a karaoke fashion: the words to sing will be highlighted at the right time. Note that this function is only available for Standard MIDI Files that contain lyrics. Ask your Roland dealer for details.

"I'LL PROTECT YOU ALL DON'T WORRY I'LL
BE FATHER TO YOU ALL/ I'LL SAVE TWO OF EVERY ANIMAL, NO MATTER
HOW SMALL/
BUT I'LL NEED SOME ASSISTANTS TO LOOK
AFTER THE ZOO/
SONG 04 :Rock Steady SExit

To return to the Master page, press [F5] (Exit).

Fast Forward, Rewind, and Reset

To fast forward or rewind within the current song, first press Recorder [PLAY >/STOP] and then [FF >] to fast forward, or [$\blacktriangleleft \lhd REW$] to rewind. You may have to press [SONG SELECT] to make its indicator go dark. Pressing [FF >] takes you to the next measure of the current song, while [$\blacktriangleleft \lhd REW$] takes you to the measure before the current one. You can hold down either button to accelerate the fast forward or rewind process. The display will help you locate the measure you need:

A11 Fac	tory1 J= 83	04 4_STRAIG	MASTER 1Mixer
UP2 A	11 Piano 1 11 Piano 1 11 Píano 1	>>23. 3 4/4 MidiSet 1	2Param 3Midi 4L9rcs
SONG 0	4 : <mark>Straight t</mark>	o my heart	SDiSk •60 H00E•

Press [| <RESET] to jump back to the first measure of the song. Again, you need to stop playback before being able to use the [| <RESET] button.

Note: These buttons only work in GM/GS mode. You cannot use them while the Arranger mode is active. In other words, you have to press the [GM/GS MODE] button before you can fast, forward, rewind, or reset.

Note: Allow some time for the Recorder to locate the desired measure when fast forwarding. The data have to be read from disk, which takes some time.
G-600

Markers and playback loops

The G-600 also provides a marker and loop function for you to practice difficult solos or to repeat a given song part. You can program playback loop during playback or while the Recorder is stopped.

(1) Press [MARKER $A \leftrightarrow B$] where you want the loop to begin (indicator flashes).



(2) Fast forward to the measure where you want the loop to end and press [MARKER A↔B] again (indicator goes off).



As stated earlier, you can also program loops on the fly. Remember, however, that the Recorder always memorizes the beginning (downbeat) of the next measure.

(3) To play back the loop you have just programmed, hold down Recorder [| ◄RESET] and press [PLAY ►/STOP■].

At the end of the B measure, the Recorder immediately jumps back to the beginning of measure A.

(4) To stop playback, press the Recorder [PLAY ►/STOP■] button.

8.6. Live performance with Standard MIDI File backing (Minus One)

Your G-600 allows you to mute any given part of the song you are currently playing back. You could use this feature to mute the solo part on disk so that you can play it yourself. This is called Minus One playback (because one part of the original song will not be played back).

But your G-600 can do more than that: you can solo whichever part you like and mute several parts if you think the song arrangement is a little over the top or wish to play two parts (i.e. the solo and the chord backing).

All Realtime parts remain active in Recorder (or, should we say, GM/GS) mode. In other words, you are free to use the Upper1, Upper2, Lower, and Manual Bass parts in whichever split or layer combination (see p. 28) you like. The Manual Drums part is also available but you may remember that selecting the M.Drums part means that the other four Realtime parts are temporarily deactivated.

Note: Whenever you start playing back a new song or return to the beginning of the current song (using [| ◀RESET]), all Realtime parts, except Upper1, will be switched off and the G-600 will select the Whole Right keyboard mode.

Note: Do not select the 00 Free Pnl Performance Memory if you wish to be in control of the Keyboard Mode and Tone selection. Select any other Performance Memory, set the Realtime parts the way you want to use them and write the settings to a Performance Memory beforehand.

Tone selection works exactly the same as in Arranger (normal G-600) mode. See "Selecting Tones for the Realtime parts" on p. 32. There is, however a function that allows you to link

Tone selection and the parameter settings of the song parts, so that the Realtime parts you use during a Minus One performance will sound exactly the same as the original part on disk (see "Tone Change: Old and New" on page 76).

Changing the song tempo

You can change the (programmed) song tempo with the [TEMPO] buttons. Doing so, however, means that the tempo will still change if the song you are playing back contains tempo change messages. Furthermore, every time you jump back to the beginning of the song using [[<RESET], the preset song tempo will be set.



Soloing and muting parts on disk

Before deciding which part you want to mute, you have to know which part (MIDI channel/track) plays the part you do not want to hear. Unfortunately, the Standard MIDI File format, specific though it may be about certain aspects, still leaves a considerable amount of "artistic license" for programmers. Finding the part you want to mute is not always easy, though the G-600 can help you find it.

Generally speaking, the part/MIDI channel assignment of Standard MIDI Files looks like this:

Standard MIDI File part	MIDI channel	G-600 Realtime part
Drums	10	Manual Drums
Piano	1	
Bass	2	Manual Bass
Chord Backing	3	Lower
Solo/melody	4	Upper1
Counter-melody (harmony)	6	Upper2

Complex songs, however, may use all 16 MIDI channels. In such cases, the Solo function may be of invaluable help:

Soloing parts

To find out which part is assigned to which MIDI channel, you can use the solo function. This function mutes all other parts except the current one. Here is how to solo a part:

- (1) On the Master page, press [F1] (Mixer). You can do this while the Recorder is playing back.
- (2) Press [F3] (Song) to go to the following display page:



G-600

(3) Press the Part Select [UPPER1] button to solo Sng Part (Track) 1.

By doing so, you mute all other Song Parts – and you may end up hearing nothing at all. Be patient, though, play the song once trough and listen. If you hear nothing, that track is not being used. Sometimes, a track starts halfway into the song, which is why you'd better wait before deciding that the current part is not being used.

(4) Using the [DRUMS/PART] ▲▼ buttons, select Song Part 2.

(5) Again, press Part Select [UPPER1] to solo that track.

This time, you will most probably hear the bass line. If you return to the previous track using $[DRUMS/PART] \blacktriangle \nabla$, you will notice that it is still in solo mode and that you hear the piano line (if available) instead of the bass. Going back to the second Song Part will solo the bass again. In other words, you can solo all parts and then scroll through them using the $[DRUMS/PART] \blacktriangle \nabla$ buttons.

Note: If you return to the Master page after soloing one or more song parts, you will only hear the song part you selected last. It is not possible to solo two or more tracks.

- (6) Go back to step (4) to select and solo the remaining Song Parts.
- (7) Finally, exit the Mixer\Song page by pressing [F5].

Muting Song parts (Status)

The Mixer/Song page also allows you to *mute* Song parts. Obviously, muted Song Parts do not sound during playback.

- (1) Select the Mixer\Song page (see "Soloing parts").
- (2) Select the song part you wish to mute using the [DRUMS/PART] ▲▼ buttons.
- (3) Mute that part using the [UPPER/VARIATION] ▲ button . Select MuteNt or MuteAl. MuteNt means that only the notes are muted. Program Changes, modulation messages, etc., of the muted track are still used, though. If you select MuteAl, everything of the selected track will be muted.

Note: The Solo status takes precedence over the Mute status. To mute a soloed part, you must turn off the Solo function (Solo-Off).

(4) Exit the Mixer\Song page by pressing [F5] (Exit), or go on the next chapter.

Overriding song settings

On the Mixer/Song page (see above), there are two other settings you can change. These settings apply to the song part you select with the $[DRUMS/PART] \blacktriangle V$ buttons.

Song part Volume

This parameter is a relative volume value, allowing you to either increase (positive values) or decrease (negative value) the playback volume of the selected Song part. Relative means that the volume value you set here is added to (or subtracted from) the volume value of that particular track (set by MIDI control change CC7).

Press [BASS/BANK] ▼ to decrease the song part volume (negative values), or ▲ to increase it (positive values).

The balance of Standard MIDI File parts is usually ok. You could use this Volume parameter for practising purposes, however. Decrease the volume of the part you wish to practise and play it yourself using one of the Realtime parts. Once you have mastered the melody line, etc., you can mute the original part.

Song volume

Whenever you are experiencing problems with the Realtime part volume settings with respect to the Standard MIDI file, there is a useful feature you can use to address those problems. It sometimes happens that the Upper1 (or any other Realtime) part is still too soft when you set its volume to 127. In that case, try reducing the overall song volume. Here is how to:

(1) On the Master page in GM/GS mode, press [VOLUME] to select the Volume mode.

MDR	SNG	MBS	lwr	UPZ	UPI	WOLLIME
	-62-0	100	<u> </u>	108	33	$1 \cdot \cdot$
. T .		P		.T		3
	山	<u> </u>	J	. <u> </u>		5Exit

- (2) Use the [ACCOMP/GROUP] ▲▼ buttons to set a value between -1 and -127 to reduce the overall song volume. (Set a positive value if the song is way too soft.)
- (3) Press [F5] to return to the Master page.

Tone Change: Old and New

The Tone Change parameter allows you to specify which Tone (or sound) level can be selected by the currently active Standard MIDI File part. You probably remember (see page 32) that the G-600 has four Tone Groups: A, B, C, and D, two of which contain new Tones (groups A and B), while groups C and D contain Roland SC-55 sounds (E-70 sounds). Groups C and D are called Old here, while the sounds of Groups A and B are referred to as New.

The reason why the Tone level is selectable is that, starting with the SC-88 Sound Canvas module, Roland's GM/GS MIDI bank selection has been revamped to include two control change numbers: CC00 and CC32. True to the SC-55 standard, however, quite a few Standard MIDI Files only contain CC00 bank select messages. The second bank select message (CC32) is used to choose between the new (CC32= 2) and "old" G-600 Tones (CC32= 1). Whenever CC32 is set to 0 or missing, the G-600 assumes that you do not wish to leave the current Tone level (A/B or C/D) and thus selects the Tone that corresponds to the program change and bank select CC00 messages of the current level.



The Tone Change parameter on the Mixer\Song page allows you to override this default setting and to specify that the G-600 should select its own Tones (New) or the SC-55 Tone level (Old).

Note: This only works if the Standard MIDI File you play back using the Recorder contains no CC32 message or a CC32 message whose value is set to 0. The CC32= 0 prompt should therefore be taken to mean "what do I (= G-600) do when control change #32 is set to 0 or missing?"

Press the [LOWER/NUMBER] $\mathbf{\nabla}$ to select Old, or \mathbf{A} to select New.

G-600

9. Easy Editing

Editing is a term used to describe any action that changes the settings that are currently in effect. Selecting other Tones for the Realtime parts (see page 32) is already a form of editing. The settings of all parameters in this chapter can be saved to a Performance Memory and loaded whenever you need them (see "Registrations – Performance Memories" on page 58).

9.1. Part Balance (Volume)

Part balance is the single most important editing operation because the volume of the parts you play determines the sound mix. If a part is too soft, you don't hear it, if it is too loud, the sound image will seem out of balance.

Note: We strongly recommend that you first assign the Tones you need to the parts you intend to play because the character of the sounds you use affects the balance. Thus, a trumpet sound will be perceived louder than a flute because the former contains more harmonics (overtones).

There are two ways to select the G-600's Volume page:

Press any \blacktriangle **button below the display while on the Master page.** OR:

Press the [VOLUME] button to the lower left of the display. In either case the display now looks like this (in Arranger mode):

MDR ADR	ACC M	85 abs)	TwrYupz	UP1	WOLUME
158 158	88 8	38 🗖 8	48 108	33	
	╘	₱ .	上門		3 - 4G1ba1
[[. I I .]	[. .] .	니스	. T. I. I.	。中	sExit

Note that when called up using any of the $\blacktriangle \lor$ buttons, the Volume page will disappear after a few seconds of inaction. For now, it is probably wiser to press the [VOLUME] button.

Grouped and bus faders

What you see is an eight-channel mixer, which is more than there are Realtime parts and not enough to cover all Realtime and Arranger parts. That is because the ACC fader represents a group of six parts (ACC1~ACC6). Let's agree to call all display controls that affect several elements bus controls. That way, we can use the term group for something else without confusing you.

Note: Bus faders or buttons always indicate the setting of the highest value of that bus. If the volume of five ACC parts is set to 60, while the remaining ACC part is set to 79, the ACC bus slider on the Volume page will indicate the value 79. In other words, even though it is a bus master fader, it cannot be set to 127 without setting at least one part of that bus to 127 (unlike on a mixing console).

Let us now modify the volume of the Upper1 Part:

(1) Press [UPPER/VARIATION] ▲▼ and watch the display.

As you see, the volume of the Upper2 part changes by the same amount. If the volume of Upper1 is set to 127, while Upper2 is set to 90 (default) and you then set the Upper1 volume to 90, the volume of Upper2 will drop to 53.

That is because the Upper1 & 2 faders are grouped:

ſ	MDR	ADR	ACC	MBS	abs	1wr	UP2	UP1	VOLUME
	:58	:50	84	:88	8	48	:88	38	
		T					中		3
I	· ·	· · ·	T		Τ.	P		4	4G16al sExit
I	· · ·			· · · ·			·		, <u> </u>

The same is true of the MDR (Manual Drums) and ADR (Accompaniment Drums), and MBS (Manual Bass) and ABS (Accompaniment Bass) faders. You could press the [DRUMS/PART] or [BASS/BANK] ▲▼ buttons to check this.

Let us briefly summarize the fader functions on this page:

Fader type	Means	▲▼ pair/Fader
Individual	Controls the volume of one Part.	Lower/LWR
Grouped	In ▼▼ mode (see below), one ▲▼ button modifies the setting of two faders.	Upper/UP1 & UP2 Bass/MBS & ABS Drums/MDR & ADR
Buss	Controls the volume of several faders.	Accomp/ACC

Note: The relative balance between two grouped faders is only maintained as long as you do not decrease (or increase) the volume of the parts in question once either fader has reached the value 0 (or 127). If you increase the volume of a grouped pair beyond the point where one of them has reached 127, only the volume of the part whose volume hasn't yet reached 127 will change. The same is true when you decrease the volume of a grouped pair after one part has reached the value 0. There is no way to restore the relative balance that was in effect before you destroyed it.

There is a way of selecting only one fader of a group:

Press F2 ($_$ **V**) to activate only the right fader of a group. The display now looks like this:



Pressing the $\blacktriangle \forall$ buttons below the display will only modify the volume of the Upper1, Accompaniment Bass, and Accompaniment Drums parts without affecting the setting of the other fader of that group. Note that the left faders of all groups are now greyed. [F2] (and also [F3]) allows you to ungroup faders.

Press F3 ($\mathbf{V}_{}$) to activate only the left fader of a group.

120 54 100 0 48 100 32 1 ↓	UME
	•
	Ě
	bal it

Now the ▲▼ buttons only bear on the Upper2, Manual Bass, and Manual Drums parts.

Section balance

The G-600 provides two master (display) knobs that allow you to modify the global volume of the Realtime and Arranger sections. Use this feature when you like the part balance you have set but think that either the Realtime or Arranger section is too loud as a whole.

Note that obtaining the right balance is not always a matter of increasing the volume of one section. In many instances decreasing the volume of the part or section that is too loud with respect to the others, is more effective.

- (1) Return to the Master page by pressing [F5] (Exit).
- (2) Press [VOLUME] to the lower left of the display (indicator lights).
- (3) Press [F4] (Glbal) to call up the following page:



Note: Global is not available in GM/GS mode.

Here, you can modify the volume of the Realtime (Upper1, Upper2, Lower, M.Bass, M.Drums) and Arranger (A.Bass, A.Drums, Accompaniment 1~6) sections.

(4) Use the [ACCOMP/GROUP] ▲▼ buttons to modify the volume of the Arranger section, or the [LOWER/NUMBER] ▲▼ buttons to modify the volume of the Realtime (RTime) section.

Note: Again, the relative balance of the individual parts that make up a section will change when you decrease the Global volume once one of the parts of that section has reached the value 0. The same is true when you continue increasing the volume once one of the parts reaches 127. We strongly advise you to stick to the graphic volume button to avoid rotating it beyond the point where it reaches the minimum (0) or maximum (127) value. Though perfectly possible, doing so changes the balance of the affected section.

Mixer mode: modifying the volume of the bus members

Let's assume that you selected the B11 Bossa1 Style (just press [GROUP] to select B, 1, and 1 again) and find that the nylon string guitar of the Basic/Original division is a bit too prominent in this style. Start playback of the B11 Bossa1 Style and play a chord in the chord recognition area.

- (1) On the Master page, press [F1] (Mixer) to select the Mixer mode.
- (2) Press [F2] (Arrng) to select the Arranger Mixer page.

Volume	Panpot	Reverb	Chorus		MIXER
A 150	84	115	35		1RTime 2865599
B	-8-	- 6-	- 6-		350n9 4Effct
				EQ-ON	SExit

- (3) Press the [PAGE] ▲▼ buttons until the page scroll bar on the left reads ACC1.
- (4) Press [DRUMS/PART] ▼ (assigned to Volume) to decrease the volume of the guitar.
 In the same way, you could now modify the volume of the other ACC parts: select them with the [PAGE] ▲▼ buttons and use the [DRUMS/PART] ▲▼ buttons to modify the volume setting.

Muting parts

On the Mixer page you can press Part Select [M.DRUMS] to mute the selected part, in which case the On prompt below the display knob will read Off, while the part name in the scroll bar will be displayed in lower case letters (e.g. acc1).

(1) Press [F1] (RTime) or [F2] (Arrng), depending on whether you wish to mute a Realtime or Arranger part.

Let's mute the Upper1 part here, so press [F1] to call up the following page:



(2) If necessary, use the [PAGE] ▲▼ buttons to select the display page corresponding to the part you wish to mute.
 Select the UP1 page.

beleet the of i page.

- (3) Press the Part Select [M.DRUMS] button to select Off.
- (4) Press [F5] (Exit) to return to the Master page.

Panpot (stereo position)

The G-600 allows you to specify the pan setting of every part individually. One sensible way of using the Panpot parameter could be to move the Upper1 part to the left output, while the Upper2 part is moved to right output. If you then layer Upper1 and Upper2 (by pressing either [SPLIT] or [WHOLE RIGHT], as well as [UPPER1] and [UPPER2]), the Upper1 sound will come from the left speaker, while that of the Upper2 part will come from the right speaker.

Here is how to specify the Panpot setting of a part:

- (1) On the Master page, press [F1] (Mixer) to call up the Mixer page.
- (2) Select the part group (Realtime or Arranger) by pressing either [F1] (RTime) or [F2] (Arrng).
- (3) Select the part whose Pan setting you wish to change by pressing [PAGE] ▲▼.



(4) Use the [ACCOMP/GROUP] ▲▼ buttons to set the desired Pan position.

Set a value between 1 and 63 to move the part further to the left, or 65~127 to move the part further to the right. Note that you can also select Rnd (random), which means that the part will alternate between the left and right channels in a random way. To do so, keep holding the [ACCOMP/GROUP] ▼ button until the Panpot value reads "Rnd".

Note: As always, you can hold the button that corresponds to the desired change (\blacktriangle or ∇) while pressing the "other" button (∇ or \blacktriangle) to jump from Pan 1 to Pan 127.

(5) Do not exit the Mixer page because we need it for the following:

9.2. Effects and Equalizer

The G-600 is equipped with three programmable effects: Reverb, Chorus, and Delay. There is also a parametric two-band equalizer you can use.

Note: Any changes to the effects programs apply to all parts as there is only one Reverb, one Chorus, one Delay, and one Equalizer (EQ). What can be specified for every part individually, though, is the amount of effect to be applied (effect depth).

Applying Reverb, Chorus, or Delay to a part

(1) On the Mixer page -see "Panpot (stereo position)", steps (1)~(3)- select the part group and part whose effect send setting you wish to change.

The effect send settings on the Mixer page specify the part volume for the signal that is fed to the Reverb, Chorus, and Delay effect respectively. Setting high Reverb, Chorus, and Delay values on this page means that you effectively increase the effect volume.

It works much the same way as a cathedral: the louder you sing, the more Reverb you hear. In the case of the cathedral, singing louder means that you increase the effect send level, i.e. the level of the signal (your voice) that will be processed by the acoustic environment.

(2) Use the [BASS/BANK] ▲▼ buttons to modify the Reverb send level (Reverb).



- (3) Use the [LOWER/NUMBER] ▲▼ buttons to modify the Chorus send level.
- (4) Use the [UPPER/VARIATION] ▲▼ buttons to modify the Delay send level.
 Note: Delay is only available for the Realtime parts.

Effect settings

The G-600's effects are editable, thus allowing you to tailor them to your needs. For instance, you may think that the currently selected Reverb type is not quite what you had in mind for the song you are about to play, or that the Chorus effect is not strong enough.

(1) On the Master page, press [F1] (Mixer).

(2) Press [F4] (Effct) to select the effects pages.

Note: You may have noticed that upon selecting the Mixer mode, the G-600's display jumps to the Mixer page you selected last (probably the 2 Arrng page). This page memory function was included to allow you to jump back and forth between display pages of different modes.



This is the first of a series of four effects pages (notice the "1" on the scroll bar).

(3) Press [PAGE] ▲▼ to call the display page of the effect you wish to edit. The sequence is as follows:

Display page	Effect	
1	Reverb parameters	
2	Chorus parameters	
3	Delay parameters	
4	Equalizer (EQ) parameters	

On the first three of these pages (Reverb, Chorus, and Delay), the leftmost ▲▼ pair ([DRUMS/PART]) allows you to choose an effect type. Different types are available for every effect. Thus, the "Chorus" effect also provides a Flanger, for example. The [BASS/BANK] ▲▼ buttons are used to select a parameter whose value can be edited with the [UPPER/VARIA-TION] ▲▼ buttons. See the Reference Guide for details.

(4) Press [DRUMS/PART] $\blacktriangle \nabla$ to select the type of effect you need.

Note: Every time you select another effect type, the effect parameters (see below) are reset to their default values. In other words, returning to a previously selected effect type after realizing that the first type was probably the best will not restore any effect parameter values you may have edited.

(5) Use [BASS/BANK] $\blacktriangle \nabla$ to select an effect parameter.

See in the Reference Manual for details about the effect parameters.

(6) Press [UPPER/VARIATION] ▲▼ to set the value of the parameter you selected in step (5).

Note: Please bear in mind that any changes you make here apply to all parts that use the effect. Therefore always check what the settings sound like when you play other parts.

The G-600 has a dedicated Delay effect, so do not to choose a similar type for either the Reverb or Chorus effect (Delay, Pan-Delay or SDelay, SDelayFb). That way, you can program globally usable Reverb and Chorus settings, while the Delay can be assigned to the part that you wish to process with an echo effect.

Equalizer

(1) Press [PAGE] \forall to call up the following display page.



This is where you can program the two-band equalizer. This equalizer works the same way as the Treble and Bass knobs on an amplifier. It allows you to boost or cut the high and/or low frequencies of the Tones. By boost we mean that the volume of a certain frequency band is increased, while cut means that the volume is decreased. The Low and High frequencies to be boosted or cut are selectable.

- (2) Press [DRUMS/PART] ▲▼ to select the low frequency (L-Freq) to be boosted or cut.
- (3) Using the [ACCOMP/GROUP] ▲▼ buttons, enter a positive (boost) or negative value (cut) for the L-Gain parameter.
- (4) Repeat these steps for the high frequency band using the [BASS/BANK] (H-Freq) and [LOWER/NUMBER] (H-Gain) ▲▼ buttons.

Choosing the parts to be processed by the equalizer

When you power on the G-600, all parts are set to be processed by the equalizer, so that you can use the equalizer as master tone control that modifies the bass and treble response of your instrument.

An equalizer is usually only effective when used to correct the frequency response of one sound that is in the way of other sounds. Therefore, we now need to switch the equalizer off for all parts that don't require tone correction.

- (1) On the Master page, press [F1] (Mixer). Let us first switch off the equalizer of the Realtime parts.
- (2) Press [F1] (RTime) to jump to the Mixer\RTime page.



- (3) Select the part whose equalizer status you wish to change using the [PAGE] ▲♥ buttons.
- (4) Press Part Select [UPPER1] below the display to select EQ-ON or EQ-OFF.
- (5) Go back to step (3), select the other parts, and specify their equalizer status.
- (6) Press F5 (Exit) to leave Mixer mode and return to the Master page.

G-600

9.3. Source: your settings or those of the Arranger/Song?

One final aspect to cover in this chapter is the Source function. It allows you to choose whether what you have just edited will be used or not.

Here is how to select the Source pages:

- (1) On the Master page press [F1] (Mixer) to select the Mixer mode.
- (2) Hold down [SHIFT] while pressing [F1] (RTime), [F2] (Arrng), or [F4] (Effct).



Realtime (RTime) Source

The options on the first page (RTime) are Prf and Sng. Here is what they mean:

Prf	The settings you make for the following parameters (see below) remain in effect until you change them again or until you select another Performance Memory. (<i>Prf</i> is short for Performance Memory).
Sng	In this case, the Realtime part settings are affected by control changes included in the Standard MIDI File you are playing back. In other words, when set to Sng, the Panpot setting of the Upper1 part will change as soon as the Standard MIDI File sends a CC10 (Pan) message on MIDI channel 4.

Note that there is little difference between Prf and Sng as long as you don't play back a Standard MIDI File.

Note: Selecting Prf does not mean that your settings will be automatically saved to the current Performance Memory. To do so, you must use the Write function (see page 58) before selecting another Performance Memory or before powering off your G-600.

Note: The Source Delay parameter does not appear on the MDR page.

Use the $\blacktriangle \forall$ buttons below the display to modify the Source settings.

The Source parameter of the Realtime parts can be set for the following parameters: *Volume*, *Panpot*, *Reverb* (Send), *Chorus* (Send), and *Delay* (Send). You could, for instance specify that the volume of a part may change in response to MIDI messages coming from a Standard

MIDI File (select Volume= Sng), while the other settings must not change (select Prf) in response to the settings coming from the Standard MIDI File.

When you select Sng for one of the above parameters, the Source message of that parameter changes from Prf (white-on-blue) to Sng (blue-on-white). This visual help is consistently used on all display pages.

Set the Volume Source parameter to Sng.

Let us now check whether the G-600 really is consistent. Hold down [SHIFT] while pressing [F1] to jump to the Mixer\RTime page and use [PAGE] $\blacktriangle \nabla$ to select the UP1 page. The Volume value appears blue-on-white.

You can still edit blue-on-white values, but don't be surprised if they suddenly change during Song playback. In such a case, remember the Source function.

Hold down [SHIFT] and press [F2] (Arrng).

Arranger (Arrng) Source

Music Styles not only contain notes (i.e. the drum, bass and accompaniment parts) but also a series of setting that specify how the parts are to be played back. These settings include program change messages, Panpot, volume, etc. Music Styles are accompaniment patterns that are repeated every so often (usually after four bars). The non-note information is located at the beginning of a pattern, so that, when you select Arr, the Mixer page settings of the Arranger parts will be reset as soon as the pattern restarts from bar 1 or whenever you select another division (for example "Fill-In To Variation").

If you do not want your changes to be overwritten by the information contained in a Music Style, select Prf using the $\blacktriangle \forall$ buttons. The options are:

Prf	The settings you make for the following parameters on this page remain in effect until you change them again or until you select another Performance Memory. (<i>Prf</i> is short for Performance Memory).
Arr	The settings contained in the Music Styles will override your own settings or those of the Performance Memory you selected.

Effect Source

This Source page allows you to specify whether or not the effect parameters are to change in response to MIDI messages coming from the Standard MIDI Files you play back using the internal Recorder.

Prf	The effect settings will be the ones you set or the ones of the Performance Mem- ory you load.
Sng	The effect settings (Macro and Parameter, see page 82) change in response to MIDI messages contained in the Standard MIDI File you are playing back.

Note: The Source parameter settings on all three pages (RTime, Arrng, and Effct) have no effect on the reception of MIDI messages via the G-600's MIDI IN port. In other words, when you set the Source parameters to Prf, the volume, pan, effect, etc. parameters can still be changed via MIDI. However, the G-600 is also equipped with MIDI filters that allow you filter out certain messages received via MIDI IN.

10. Part editing

Your G-600 allows you to edit certain parameters that affect the way a part sounds when you play it. These parameters will help you "customize" the parts by adjusting their brilliance, their modulation speed (Vibrato Rate), and so on.

Please bear in mind that the parameters discussed in this chapter always apply to *parts* (Upper1, Upper2, Lower, etc.). Assigning another Tone to a part does not reset the part parameters discussed below. In other words, if you modify the envelope of the piano sound assigned to the Upper1 part, you might be inclined to think that you have changed the envelope of the piano *Tone* and that selecting another Tone for Upper1 will load other envelope settings. Though that is partly correct, the part parameter settings are added to the settings of the Tone you assign to a part.

Parts are in fact containers in which you can "put" a Tone and whose sound can be modified using the parameters described below. That is why the parameters discussed below are called *Part* parameters rather than Tone parameters.

Note: All Part parameters are relative parameters that will be added to or subtracted from the preset Tone parameter values. That is why you can specify both positive ("more") and negative ("less") values.

10.1. Editing the Part parameters

Like most other parameters, you can edit the Part parameters via the display using the display controls:

- (1) On the Master page, press the [TONE] button at the lower left of the display.
- (2) Press [F4] (Edit) to select the Tone\Edit page.



(3) Use the [DRUMS/PART] ▲▼ buttons to select the part you wish to edit.

Note: You can only edit the following Realtime parts: Upper1, Upper2, Lower, Manual Bass.

- (4) Use the [ACCOMP/GROUP] ▲▼ buttons (Parameter) to select the parameter (see below) whose value you want to modify.
- (5) Use the ▲▼ buttons assigned to VALUE to specify the value of the selected parameter.
- (6) Continue with step (3) to select another Part for editing.

Here are the Part parameters you can edit:

Modulation (Vibrato)

Vibrato is an effect created by modulating the pitch. Applying vibrato makes the sound more expressive. Pitch modulation adds a pleasant "wobble" to the notes you play. Use the following

three parameters if you think the part in question has too much (or could use a little more) vibrato.

Vibrato Rate [-64~+63]

This parameter adjusts the speed of the pitch modulation. Positive (+) settings make the preset pitch modulation faster, and negative (-) settings make it slower.

Vibrato Depth [-64~+63]

This parameter adjusts the intensity of the pitch modulation. Positive (+) settings mean that the "wobble" becomes more prominent, while negative (–) settings make it shallower.

Vibrato Delay [-64~+63]

This parameter adjusts the time required for the vibrato effect to begin. Positive (+) settings increase the time before vibrato will begin, and negative settings shorten the time.

Timbre (Filter)

By modifying the filter settings, you can control the timbre (tone) of the sound. The G-600 uses Low Pass Filters (LPF) that allow only frequencies lower than the specified frequency to pass. The frequency where the filter starts "cutting off" harmonics (or overtones) is called the Cutoff Frequency. By modifying the setting of the Cutoff Frequency you can make the sound brighter or darker. The Cutoff Frequency can change over time, controlled by the "envelope". By adjusting the filter and envelope settings, you can create sounds that have movement and expression.

TVF Cutoff [-64~+63]

Positive Cutoff Freq settings mean that more overtones will be allowed to pass, so that the sound becomes brighter. The further this value is set in the negative direction, the fewer overtones will be allowed to pass, and softer (darker) the sound will become.



Note: For some sounds, positive (+) Cutoff Freq settings will cause no noticeable change because the preprogrammed frequency is already set to its maximum value.

TVF Resonance [-64~+63]

This is a parameter one invariably associates with a synthesizer. When the Resonance value is increased, the overtones in the area of the cutoff frequency will be emphasized, creating a sound with a strong character.

The Resonance parameter can be used to reduce the volume of a sound's low frequency content, effectively duplicating the Bass control of an amplifier. This only works, however, when the Cutoff Freq is relatively high (to avoid an unnatural boost of middle frequencies) and for values between +1 and +15. Higher values lead to a noticeable Resonance effect.

Note: For some sounds, negative (-) Resonance settings will cause no noticeable change in the sound.

Envelope

The volume of an instrument changes with time, from the moment the note begins to sound to when it disappears. This change can be indicated on a graph as shown in the following diagram. The envelope shape is unique to each instrument, and is an important element in how we tell sounds apart. The envelopes of musical instrument sounds can change depending on how the instrument is played. For example if a trumpet is played sharply and strongly, the attack will be quick and the sound will be sharp. But if a trumpet is played lightly and softly, the attack will be softer. In order to adjust the attack of a sound, you can modify the Attack Time of the envelope. By modifying the values of the envelope you can simulate the characteristics of many different instruments.

The envelope parameters affect both the volume (or amplitude) and the filter. If the cutoff frequency has been lowered, it will rise as the envelope rises, and will fall as the envelope falls.



Env Attack [-64~+63]

This parameter adjusts the onset of the sound. Negative values speed up the attack, so that the sound becomes more aggressive.

Env Decay [-64 ~+63]

This parameter adjusts the time over which the sound will fall from the highest point of the attack down to the sustain level.

Note: Percussive sounds usually have a sustain level of 0. Piano and guitar sounds are in this category. Holding the keys for a long time will thus have little effect on the duration of the notes your are playing.

Env Release [-64~+63]

This parameter adjusts the time over which the sound will decay after the note is released until it is no longer heard. The cutoff frequency will also fall according to this setting.

10.2. Another Source switch: Tone Edit

The Tone Edit switch of each part is yet another Source switch that allows you to protect your Part Parameter settings from any parameter (NRPN) changes contained in a Standard MIDI File (for the Realtime parts). Just like for the other Source switches (see, for example, "Who selects the Tones? – Tone Change" on page 35), you can select one of two possibilities:

Prf	The Part parameter settings remain in effect until you select another Performance Memory (or until you change them).
Sng	In this case, the Realtime Part Parameters are affected by the settings included in the Standard MIDI File you are playing back. In other words, when you select Sng, Part Parameter settings will change if the Standard MIDI File contains other settings. Note that there is little difference between Prf and Sng as long as you don't play back a Standard MIDI File.

Before showing you how to set the Tone Edit parameter, let us briefly summarize all the Source switches discussed so far. This summary will allow you to locate the relevant sections in this manual – and also give you a clearer idea of the parameters you can protect from "accidental" modification.

- Tone Change (see pages 35 and 54).
- Volume, Panpot, Reverb, Chorus, Delay (see page 80) for the Realtime parts, and Panpot, Reverb, Chorus for the Arranger Parts (see page 80).
- Effect settings (see page 81).
- Master Tune (see page 39), Upper2 Tune (see below), Scale, Upper1/2 Portamento (see page 96).
- Pitch Bender Range (see page 97).

At first, these switches may seem confusing because their number is rather impressive. You will find, however, that they allow you to spend less time fine-tuning your Performance Memories, because you only need to program those parameters that should *not* be changed by the Standard MIDI File or Music Style you are playing back. Select Sng or Arr for parameters that *are* to change and don't bother programming them.

Here is how to set the Tone Edit switches:

- (1) Press [TONE] to select the Tone mode.
- (2) Hold down [SHIFT] and press [F4] (Edit) to select the Source\Edit page.
- (3) Use the [PAGE] ▲▼ buttons to select the Part whose Tone Edit setting you wish to modify.



The name of the part you select appears in the scroll bar.

- (4) Using the leftmost ▲▼ pair, set the Tone Edit switch to Prf or Sng (or Arr).
- (5) Press [F5] (Exit) twice to return to the Master page.

10.3. Upper2 settings

Tuning Upper2: Coarse and Fine

The Upper2 part can be used as full-fledged solo or melody sound, as "intelligent countermelody", or to "fatten" the sound of Upper1. Note that the latter only works when you layer Upper2 and Upper1. By *layering* we mean that every time you press a key in the right half of the keyboard (assuming that you selected the Assign Split mode, page 29) or anywhere on the keyboard (Whole Right mode), you trigger two Tones: the one assigned to Upper1 part and the one assigned to Upper2. See also "Layering and selecting Upper2" on page 28.

The following parameters allow you to transpose (Coarse) or to detune (Fine) the Upper2 part relative to the Upper1 part.

You could use Coarse to program an interval of a fifth (7 semitones) for Upper2, which is especially effective for brass sounds and guitar power chords. Do not forget to activate both the Upper1 and Upper2 parts when you want to take advantage of the Upper2 Coarse and Fine parameters. If only the Upper2 part is active, the solos you play either sound off (oops, wrong key) or flat.

The *Fine* parameter works well when you assign the same or similar Tones to Upper1 and Upper2. In those cases, Fine creates a kind of natural chorus effect that you could enhance by panning Upper1 to the left and Upper2 to the right (or vice versa, see page 80).

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F2] (Tune).
- (3) Use [PAGE] ▲▼ to select the second Tune page:



- (4) Use [DRUMS/PART] ▲▼ to specify the Coarse interval for Upper2.
- (5) Use [ACCOMP/GROUP] ▲▼ to specify the Fine tune value for Upper2.

Note: If you wish to set the Upper2 Tune Source switch right away, you do not need to exit the Param\Tune page. Otherwise...

(6) ... press [F5] (Exit) to return to the Master page.

Upper2 Tune Source

After specifying the Coarse interval and/or Fine tune value for Upper2, you should ensure that these settings cannot be changed by the Standard MIDI File you play back. See page 84 for more information about the Source switches.

Here is how to set the Source switch for the Upper2 Coarse and Tune parameters:

(1) On the Master page, press [F2] (Param) to select the Parameter mode.

This is only necessary if you decide to set this switch after quitting the second Param\Tune page (see above).

(2) Hold down [SHIFT] and press [F2] (Tune).



- (3) Use the [ACCOMP/GROUP] ▲▼ buttons to select Prf or Sng for UP2Tune. Select Prf if you want to protect your Upper2 Tune settings (Coarse and Fine) from any modification caused by the data of the Standard MIDI File your are playing back
- (4) Press [F5] (Exit) to return to the Master page.

Intelligent melodies played by Upper2

You probably remember that the Upper2 part can be used either as Realtime part (in layer or split mode) or as automatic harmony. In the latter case, you have to press [MELODY INTEL-LIGENCE] so that the Arranger can add a counter-melody to what you are playing using the Upper1 part. As stated on page 49, the harmony (or intelligent melody) is based on the chords you play in the chord recognition area of the keyboard.

The G-600 is equipped with a parameter that allows you to specify how many harmony voices (1 or 2) should be added when you activate the [MELODY INTELLIGENCE] function. Here is how to select the number of voices:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F3] (Cntrl).
- (3) Use [PAGE] ▲▼ to select the second Cntrl page:



(4) Use [LOWER/NUMBER] ▲▼ to specify the number of voices (1 or 2) to be added by the Melody Intelligence function. These voices will be played by the Upper2 part.

(5) Press [F5] (Exit) to return to the Master page.

Note: The Melody Intelligence function only works in Arranger mode. You cannot use it in GM/GS mode.

11. Advanced features

This chapter covers parameters that are related to other parameters or functions but whose link may not always be obvious. These are settings you may want to edit once you know how the G-600 works – and only if you need to fine-tune the factory settings.

The settings of all parameters in this chapter can be saved to a Performance Memory and loaded whenever you need them (see "Registrations – Performance Memories" on page 58).

11.1. Settings relating to the Arranger

Major, minor or seventh accompaniment? – Chord Family Assign, Alteratn

On page 46, we told you about there being three complete sets of Style divisions: one for major, one for minor, and one for seventh chords. If you listen very carefully to the internal Styles of your G-600, you will notice that the accompaniment for minor chords sometimes differs from that for major and seventh chords. That is because these accompaniments can be programmed separately.

The Chord Family Assign function allows you to specify which mode (major, minor or seventh) should be used for the chords you play. For instance, if you'd rather the Arranger used the minor accompaniment for "6" chords, you should use the Chord Family Assign function to assign the "6" chord family (for instance C6, Am6 etc.) to the minor accompaniment level.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F1] (Glbal).
- (3) Use the [PAGE] ▲▼ buttons to select the fourth Param\Global page.



(4) Start by selecting one of the 8 available Chord memories by pressing the [DRUMS/PART]
 ▲▼ buttons.

If you haven't yet programmed any assignments, Chord memory 1 will be selected. If all memories have already been assigned (which is indicated by the chord name to the right of the memory number), you can erase an existing assignment by pressing Part Select [M.DRUMS] (Cancel).

- (5) Play the chord you want to assign to another Family. The name of that chord appears to the right of the chord memory number.
- (6) Use [LOWER/NUMBER] ▲▼ to select the Family –Major (M), Minor (m), or Seventh (7)– for the chord you have just played.

Now suppose you like the *accompaniment* you assigned your chord to, but you find that the Intro and Ending sound odd when you start a song with that chord (for instance C4). Consider the following example: you assigned the C4 chord to the major family and the Intro of the Style you are using contains the following progression:

 $C \rightarrow Am \rightarrow F \rightarrow G$

Starting the Intro with the C4 chord memorized would transform this progression into the following:

 $C4\rightarrow Am7\rightarrow F\rightarrow G7$

Note that the outcome is not really predictable. That is precisely why you can turn the Alteration function off. Doing so allows you to memorize the C4 chord but have the Intro or Ending play the normal progression (e.g. C, Am, F, G), and cause the Arranger to switch to the C4 chord when the Intro/Ending is finished.

- (7) Use [UPPER/VARIATION] ▲▼ to activate (On) or turn off (Off) the Alteration (Alteratn) function.
- (8) Press [F5] (Exit) to return to the Master page.

Musical Style playback: Wrap

The Wrap function is used to specify how the bass line and accompaniment parts should be played. If the bass, for instance, is programmed to play ascending scales, some notes may be too high or too low to sound natural in a given situation. Though perfectly possible for the built-in tone generator, playing the scales the way they were programmed affects the quality of your accompaniments.

So far, you may not have noticed the difference because the default setting for the Wrap function is "natural", meaning that all parts are played in their natural range. If set to Natural, the Wrap function transposes all accompaniment notes that are too low (for piccolo etc. sounds) or too high (for bass sounds etc.) one octave up or down. The Wrap point is preset for each Tone and cannot be changed.

The Acc Wrap parameter allows you to activate (Natural) or cut (Full) the Wrap function. In most cases, *Natural* is probably a sensible setting for Styles. *Full* is a good choice for recording songs using the User Style function.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F1] (Glbal).
- (3) Use the [PAGE] ▲▼ buttons to select the third Param\Glbal page.



- (4) Use [DRUMS/PART] ▲▼ to select the accompaniment part (ABS, Acc1~Acc6) whose Wrap setting you want to change.
- (5) Use [ACCOMP/GROUP] ▲▼ to specify Natural or Full.

Natural	All notes played by the corresponding part will sound in a "natural" range for the selected Tone, i.e. neither too low nor too high.
Full	All notes of the corresponding part will be played the way they were pro- grammed. Select Full if the chord progression you are playing requires ascending or descending lines or consistent chord voicing (such as when the User Style func- tion is used for sequencing).

(6) Press [F5] (Exit) to return to the Master page.

Dynamic Arranger: velocity sensitivity of the Arranger parts

As stated on page 50, the Dynamic Arranger function allows you to vary the volume of the accompaniment parts via the force with which you strike the keys in the chord recognition area. Use the Dynamic Arranger parameter on the Param\Cntrl page to specify the velocity sensitivity of the Arranger parts.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F3] (Cntrl).
- (3) Use the [PAGE] ▲▼ buttons to select the second Param\Cntrl page.



(4) Select the Arranger part whose velocity sensitivity you wish to change with the [DRUMS/PART] ▲▼ buttons.

(5) Specify the velocity sensitivity Value with the [ACCOMP/GROUP] ▲▼ buttons.

You can specify positive and negative sensitivity values. Positive values mean that the volume of the part in question increases when you strike the chord recognition area keys harder, while negative values mean that the volume of the part in question increases as your velocity becomes softer.

You could use extreme positive/negative accompaniment pairs (i.e. Value +127 and -127) to alternate between those two lines simply by varying your velocity. One part would then only be audible when you strike the keys softly, while the other would only be audible at high velocity values.

Subtler settings (i.e. +20 and -20 for a pair) can also be effective, of course. Set the Value to 0 for those parts whose volume should not be affected by your velocity values.

Note: The Status parameter on this page duplicates the Dynamic Arr parameter on the ARR CHORD page.

(6) Press [F5] (Exit) to return to the Master page.

11.2. Settings relating to the Realtime parts

Velocity sensitivity and velocity switching

The following velocity settings are only available for the Realtime parts (Upper1, Upper2, Lower, M.Bass, M.Drums). They are used to specify the velocity sensitivity and the velocity range of the selected part. (See above for the velocity sensitivity of the Arranger parts.)

Velocity sensitivity

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F3] (Cntrl).
- (3) Use the [PAGE] ▲▼ buttons to select the first Param\Cntrl page.

G-600



(4) Start by selecting the Realtime part whose velocity settings you wish to change ([DRUMS/PART] ▲▼).

Select UP1.

(5) Use the [ACCOMP/GROUP] ▲▼ buttons to select a velocity curve (called *Sensitivity* here).

Sensitivity	Explanation
High	Select this setting for maximum expressiveness: even small variations of the force with which you strike a key produce audible changes. The trade off is, however, that you have to strike the keys forcefully to achieve the maximum volume. Nevertheless, this is the default setting.
Med	Medium velocity sensitivity. The part still responds well to velocity changes, but the maximum volume can be obtained easier than with High.
Low	Select this setting if you are used to playing on an electronic organ or if you do not want velocity changes to bring about major volume changes.

Velocity switching (Min and Max)

(6) The [LOWER/NUMBER] and [UPPER/VARIATION] ▲▼ buttons allow you to specify the smallest (Min) and highest (Max) velocity value with which you can trigger the selected part.

This is probably only useful when applied to the Upper1 and Upper2 parts in Layer mode. *Do not change these values if you have no intention to use a "complementary" part* because otherwise, you may start wondering why the Lower part, for instance, only sounds at high or low velocity values. Min and Max can be used effectively for the Upper1 and Upper2 parts, though, provided you layer these parts. Consider the following example:

Part	Min	Мах	Sound
Upper1	1	85	Mute trumpet
Upper2	86	127	Trumpet

Both parts must be on. The above settings allow you to trigger the Mute Trumpet sound with velocity values between 1 and 85 (low to medium velocity), while any velocity value above 86 will only trigger the Tone assigned to Upper2. In other words, the above settings mean that only one Upper Tone will be audible at any one time.

You do not need to select different sounds. You could assign the same sound to both Upper1 and Upper2 and only vary the cutoff frequency (see page 87), so that Upper1 is darker, while Upper2 is considerably brighter. This should work well with solo synthesizer sounds.

(7) Press [F5] (Exit) to return to the Master page.

Roll resolution for the M.Drums part

The Roll parameter specifies the note value of the automatic Roll function (see page 31) that only applies to the Manual Drums (or M.Drums) part.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F1] (Glbal).
- (3) Use the [PAGE] ▲▼ buttons to select the second Param\Glbal page.



(4) Specify the value of the notes to be played by the Roll function using the [LOWER/NUM-BER] ▲▼ buttons.

Note: The speed of the Roll notes depends on the tempo that is currently displayed in the Tempo window. So "1/32" is probably not a good choice for high tempo values.

(5) Press [F5] (Exit) to return to the Master page.

Monophonic/polyphonic, with or without portamento (Upper1 and Upper2)

Mono/Poly

The G-600 also allows you to set the Upper1 and Upper2 parts to mono(phonic) mode. Monophonic means that you can only play one note at a time. You could select the Mono mode to play a trumpet or woodwind part in a more natural way. Poly, on the other hand, means that you can play chords using the selected part.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F2] (Tune) to select the Parameter\Tune page.
- (3) Use the [PAGE] $\blacktriangle \nabla$ buttons to select the third Tune page.



(4) Use the [DRUMS/PART] or [BASS/BANK] ▲▼ buttons to select the Upper1 or Upper2 mode.

Portamento time

Portamento is a realtime effect that produces smoother transitions between the notes you play:

G-600



Instead of jumping in semitone steps (as you would expect), the pitch glides from one note to the next whenever the portamento time is higher than 0. The higher the value you set, the slower the glide. This effect is particularly useful for synthesizer or gypsy violin parts.

- (5) To specify the portamento time, use the [ACCOMP/GROUP] ▲▼ buttons (for Upper1) or the [LOWER/NUMBER] ▲▼ buttons (Upper2).
- (6) Press [F5] (Exit) to return to the Master page.

Pitch Bender Range

The pitch bend range can be set for each Realtime part individually. In most cases, the factory setting (two semitones) is probably the best choice, but feel free to change the range for bigger or smaller intervals. A fretless bass sound, for instance, may sound more natural with a semitone interval (Range= 1) because that allows you to introduce pitch fluctuations that are small enough to create a pleasant sensation and big enough to simulate smooth glides whenever you need them.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F3] (Cntrl) to call up the Param\Cntrl page.
- (3) Select the third page using the [PAGE] ▲▼ buttons:



- (4) Before setting the pitch bend range for a part, you have to select it using the [DRUMS/PART] ▲▼ buttons.
- (5) Specify the interval (Range) using the [ACCOMP/GROUP] ▲▼ buttons. To select an interval of a fifth, set the value "7" (seven semitones). Set Range to "12" for an octave. The Range value applies to both upward and downward bends.

Note: Be sure to specify the same Range for Upper1 and Upper2 if you intend to layer them.

(6) Press [F5] (Exit) to return to the Master page.

Note: Use the Resume function (see page 61) to reset all parameters to their default values.

Expression pedal: blending effects or just plain volume

If you connect an expression pedal (EV-5 or EV-10) to the EXPRESSION PEDAL jack of your G-600, you can change the volume of the selected (Status= On) parts by foot. The default setting of your instrument is that all parts are affected by the position of the optional expression pedal.

The expression pedal can also be used for some clever effects. Instead of alternating between Upper1 and Upper2 by varying your velocity (see page 94), which requires a considerable amount of "striking precision", you could invert Upper2's response to the expression pedal, so that Upper1 does not sound when Upper2 does and vice versa:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F3] (Cntrl).
- (3) Use the [PAGE] ▲▼ buttons to select the fourth Param\Cntrl page.



- (4) Select the part whose expression settings you wish to change using the [DRUMS/PART] ▲▼ buttons.
- (5) Use the [ACCOMP/GROUP] ▲▼ buttons to specify whether (Status On) or not (Status Off) that part is to respond to expression messages.
 Solve t "Off" for all parts that should not respond to the expression pedal.

Select "Off" for all parts that should not respond to the expression pedal.

(6) Using the [LOWER/NUMBER] and [UPPER/VARIATION] ▲▼ buttons, specify the volume to be obtained when the expression pedal is depressed (Down) or closed (Up). You do not need to specify "0" for the Up position. Selecting any other value will reduce the volume of that part up to the "Up" value. Likewise, you do not need to specify "127" as maximum value.

Note: The Down and Up values represent MIDI Expression (CC11) values.

(7) Press [F5] (Exit) to return to the Master page.

Playing in other scales: Keyboard Scale

The following parameter allows you to modify the temperament of several or all parts to another tuning, so that you could play Arabic scales etc.

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Press [F2] (Tune) to select the Parameter\Tune page.
- (3) Press [PAGE] ▲▼ to select the second Param\Tune page.



The first Kbd Scale parameter, *Assign*, allows you to activate (UP1-2, All) or deactivate (Off) the alternative tuning.

(4) Use [BASS/BANK] ▲▼ to select UP1-2, All, or Off for the Assign parameter.

If you want to set the tuning now, select UP1-2 (only Upper1 and Upper2) or All (all Realtime and Arranger parts) because otherwise you won't hear the changes you make.

Note: When you select an Upper part for the Scale tune function, the E and B notes are automatically set to "-50" to accommodate oriental music. Do not forget to change these values if they are not to your liking.

(5) Use the [LOWER/NUMBER] ▲▼ buttons to select the note whose tuning you are about to change.

You will notice that every note can only be selected once. That is because the Value you specify for the note you select (see below) applies to all notes of the same name. In other words, if you change the tuning of the C, that value will be added to or subtracted from all Cs (C1, C2, C3, etc.).

(6) Use the [UPPER/VARIATION] ▲▼ buttons to specify the tuning Value. The value "0" represents the original (equal) tuning.

Negative values mean that the note in question will be lower than for equal temperament, while positive values raise the note's pitch. The value range is -128 + 128 cent. Since 100 cent equal one semitone, you can lower or raise the pitch up to a little more than a semitone.

- (7) Repeat steps (5) and (6) to tune the other notes of the scale (C#, D, D#, E, etc.).
- (8) Press [F5] (Exit) to return to the Master page.

11.3. Source switches

After setting all or some of the parameters described in this chapter, you may want to modify the setting of the respective Source switch. See "Another Source switch: Tone Edit" on page 88 for more information about Source switches and how to set them.

Here is how to select the Source\Tune page:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Hold down [SHIFT] and press [F2] (Tune).
- (3) Set the Source switches as required using the corresponding ▲▼ buttons.



See "Master Tune" on page 39.

To select the Source\Cntrl page:

- (1) On the Master page, press [F2] (Param) to select the Parameter mode.
- (2) Hold down [SHIFT] and press [F3].



(3) Press [F5] (Exit) to return to the Master page.

11.4. Song Sets

Song sets are another useful feature for performing artists because they allow you to take a break without leaving the audience without music. Song Sets are in fact little sequences that specify the order in which the Standard MIDI Files on a given disk are to be played back. Since you already know what User Style Sets are, you will have little difficulty understanding how to program Song Sets.

Song Sets can either produce continuous playback of up to 99 songs on disk (*Auto*) or be programmed to stop at the end of each song (*Manual*), which means that you have to start playback of next song manually.

The Pause function is used to program the blanks between two songs.

- (1) On the Master page, press [F2] (Param).
- (2) Press [F1] (Glbal).
- (3) Use the [PAGE] ▲▼ buttons to select the third Global page.



- (4) Set the Mode and Pause parameters using [LOWER/NUMBER] and [UPPER/VARIATION]
 ▲▼ buttons.
- (5) Press [F5] (Exit) to return to the Master page.

Compiling a Song Set

(1) Insert the disk that contains the songs you wish to combine to a Set into the drive.

Note: Do not use commercial Standard MIDI File disks. You may want to use the Song Copy or Disk Copy function before proceeding (see page 137).

- (2) On the Master page, press [F5] (Disk).
- (3) Hold down [SHIFT] and press [F2] (SngSt).



The SngSt window displays the number of Song Sets already available on disk. The Position window allows you to program the song sequence, i.e. the order in which the songs are to be played back.

- (4) Press Part Select [M.DRUMS] to create a new Song Set.
- (5) Use the [BASS/BANK] ▲▼ buttons to select the song on disk that is to be played first (assigned to Position 1).
- (6) Use the [ACCOMP/GROUP] ▲▼ buttons to select Position 2.

- (7) Assign a song to this position using the [BASS/BANK] ▲▼ buttons.
- (8) Repeat steps (6) and (7) to compile your Song Set.Select End as last entry. All songs after the End marker will not be included in your Song Set.
- (9) Press Part Select [UPPER1] to save your Song Set.Your Song Set will be saved under the first available number. You cannot name your Song Sets.
- (10) Wait until the OK Save Complete message is displayed and press [F5] (Exit) to return to the Master page.

Playing back a Song Set

- (1) Insert the disk into the drive.
- (2) Press [SONG SELECT] (indicator lights).
- (3) Use the [◄PREVIOUS] and [NEXT►] buttons to select a Song Set (Song Set01~Song Setxx).
- (4) Press Recorder [PLAY►/STOP■] to start playback of your Song Set.

Before going on to the next chapter, power off your G-600 and switch it back on again.

12. Programming User Styles

You can program your own accompaniments, or Styles as we have come to call them, on the G-600. Styles you program do not reside in ROM, which is why we call them *User Styles*, or Styles created by a user (either you or someone else). After trying all Styles in ROM and possibly also on MSA, MSD, and MSE disks, you may find that no existing accompaniment is suited for the song you want to play and therefore decide to program one yourself.

12.1. Concept

There are two ways to create new Styles:

- By creating new accompaniments from scratch (see page 105).
- By editing existing Styles, which requires that you copy them to a User Style memory and then alter the settings or notes you do not like (see page 116).

The latter is much faster than the former because you only need to substitute those parts that, in one way or another, do not "work" for the song you want to play. Nevertheless, programming Styles from scratch is a lot faster than you may think because the G-600 is equipped with a number of functions that allow you to cut down programming time to the absolute minimum.

Patterns

User Styles and internal Styles are short sequences or *patterns* (usually only four, sometimes eight measures long) you can select in realtime. That is precisely what we showed you in the chapter "Playing with accompaniment – Arranger" on page 40. If you have ever worked with a rhythm programmer (the Roland R-8MkII, for example), the pattern concept may sound familiar. You program a pattern only once and then use it at several points in a song. In other words, one short musical phrase can go a long way.

Pattern-based accompaniments usually consist of the following elements:

• The basic groove, i.e. the rhythm that is the backbone of the song

- Several alternatives for the basic groove that keep the accompaniment interesting and suggest some kind of "evolution" or "variation"
- · Fill-Ins to announce the beginning of new parts
- The beginning and ending of a song

As a rule, programming four to eight drum patterns for a three-minute song is enough. Just use them in the right order to make them suitable for your song, and you're ready to play. In fact, what is called a "song" on a drum machine, is a Music Style on the G-600. Drum machine songs have to be programmed beforehand, while the Music Style patterns can be selected on the fly by pressing the Arranger buttons.

The G-600 allows you to program 36 different patterns (or divisions) per Style, some of which are selectable via dedicated buttons ([VARIATION], [ADVANCED], etc.), while others are selected on the basis of the chords you play in the chord recognition area of the keyboard (major, minor, seventh).

Tracks

Contrary to a drum machine, a Style not only contains the rhythm part (drums & percussion) but also a melodic accompaniment consisting of two to three musical parts, such as piano, guitar, bass, and strings. That is why the G-600's divisions work with *tracks* – eight to be precise:

Track	Part	Explanation
1	ADR	Accompaniment drums. The drum and percussion line of an accompaniment.
2	ABS	Accompaniment bass. The bass line of the accompani- ment.
3	ACC1	Accompaniment 1. First melodic accompaniment.
::	::	
8	ACC6	Accompaniment 6. Sixth melodic accompaniment.

The part-to-track assignment is fixed. In other words, you cannot assign the ADR part to track 6, for example.

The reason why the ADR part is assigned to track 1 and the ABS part to track 2 is that most programmers and recording artists start by laying down the rhythm section of a song. The rhythm section (drums and bass) is indeed the rhythmic foundation that provides right "feel" for recording the other parts.

There are exceptions to this rule, however, so feel free to start with any other part if that is easier for the Style you are programming. If you feel more comfortable starting with the piano, go ahead.

Note: Though there are six ACC parts, most Styles only contain two or three melodic accompaniment lines. In most cases, less means more, i.e. do not program six melodic accompaniments just because the G-600 provides that facility; too many accompaniment lines tend to blur the arrangement. If you listen very carefully to a pop record, you will discover (perhaps to your surprise) that it is not the number of instruments you use that makes a song sound "big" but rather the right notes at the right time.

Looped vs one-shot

Let us call the G-600's patterns *divisions*. There are two kinds of divisions on the G-600: looped divisions and one-shot divisions.



Looped divisions

Looped divisions are accompaniments that are repeated for as long as you do not select another division or press [START/STOP] to stop Arranger playback. The G-600 provides four looped divisions with three variations each. Let us agree to call the variations *modes*:

Division	Mode	Explanation
Basic/Original	Major Minor Seventh	As the name implies, this is the simplest accompaniment.
Basic/Variation	Major Minor Seventh	Basic/Variation is an alternative for the Basic accompaniment
Advanced/Original	Major Minor Seventh	An alternative for the Basic level. Usually contains more instruments but could also be another kind of accompaniment for a given Style.
Advanced/Variation	Major Minor Seventh	Variation of the Advanced/Original accompaniment.

Looped divisions do not select other divisions when they are finished: they keep playing until you select another division by hand (or by foot with an optional FC-7).

One-shot divisions

One-shot divisions are accompaniments that are only played once and then select a looped division or stop the Arranger.

Division	Modes	Explanation
Intro (Basic or Advanced)	Major Minor Seventh	Introduction. Automatically goes to the Original division of the level you selected (Basic or Advanced).
Ending (Basic or Advanced)	Major Minor Seventh	Ending (or coda). As soon as the Ending is finished, the Arranger stops.
Fill-In To Original	Major Minor Seventh	A musical transition that selects the Original division of the currently active level.
Fill-In To Variation	Major Minor Seventh	A musical transition that selects the Variation division of the currently active level.

The type of division (looped or one-shot) affects the way in which the respective tracks are played back. Look at the following illustration:



The Arranger will insert the required number of rests for any one-shot track that is shorter than the longest one.

Any track of a looped pattern that is shorter than the longest track, however, will be repeated until the longest track is finished. In other words, a repetitive phrase of a looped division needs to be recorded only once because it will automatically be repeated until the longest track is finished, after which the entire division (including the "sub-loops") will be repeated. For instance, if the ADR part is only four measures long, while the ABS line is eight measures in length, the ADR will be repeated once while the Arranger plays measures 5~8 of the bass line.

12.2. Recording User Styles from scratch

Note: The following sections also contain comments on what we are doing and possible options. If all you want to do is program a Style, just read everything that appears in bold. You can come back to the related explanations whenever there is something you do not understand. See also the Reference Guide for more information.

Note: If the selected User Style memory already contains a Style, you may want to delete it first. See page 126 for details.

Selecting the User Style mode

- (1) On the Master page, in Arranger mode, press [F4] (UsrSt) to activate the User Style mode.
- (2) Press [F1] (Rec) if the 1Rec menu option is not selected.
- (3) Press [PAGE] ▲▼ to select the first User Style\Rec page.



Note: Let us call this page "the first User Style\Rec page" because, depending on the function you activate, the message in the lefthand corner can be User Style, Play, Record Erase, or Record Merge. The highlighted menu function, on the other hand, clearly reads Rec.

The message in the lefthand corner currently reads User Style, meaning that the G-600 is waiting for you to launch playback or recording.

Selecting the track, the Mode, the Type and the Division

To keep things easy, let's start with the drums of the Basic/Original pattern.

- (4) Use the [DRUMS/PART] ▲▼ buttons to select IADR (first track, accompaniment drums). Now select a division. Start with the Basic/Original division.
- (5) Use the [LOWER/NUMBER] ▲▼ button to select Or for the Division parameter.

Working with clones

On this page, you can activate three clone functions that allow you to record one part and copy it to up to three divisions and three modes each – at the same time. Here is how it works:

Display function	Options	Explanation	
Mode	М	Record only the major pattern.	
	M=m	Record the major pattern and copy it to the minor pattern.	
	M=m=7	Record the major pattern and copy it to the minor and seventh pattern.	
	Other options: m, m=M, m=7, m=M=7, 7, 7=M, 7=m, 7=M=m		
	Bsc	Record only the Basic division.	
	Adv	Record only the Advanced division.	
Туре	B=A	Record the Basic division and copy it to the Advanced division.	
	Other options: A=B		
	Or	Record only the Original division.	
	Va	Record only the Variation division.	
	Fo	Record only the Fill-In to Original.	
Division	Fv	Record only the Fill-In to Variation.	
	In	Record only the Intro.	
	Ed	Record only the Ending.	
	Other options: Or=Va, Va=Or, Fo=Fv, Fv=Fo, In=Ed, Ed=In		

(6) Use the [ACCOMP/GROUP] ▲▼ buttons to select the mode(s), and the [BASS/BANK] ▲▼ buttons to select the type(s).

Let us use the above display settings (see step (4)), which mean "record the Basic/Original/ Major pattern and copy it to all looped divisions". Thus, by programming one pattern, you will obtain 3 (M, m, 7) x 2 (Bsc, Adv) x 2 (Or, Va) = 12 identical drum patterns!

Note: You can only clone five parts for one-shot divisions because there is no Original/Variation level for Intro, Ending, To Original, or To Variation: only Basic and Advanced levels (see the illustration on page 104).

Record mode

(7) Press [PAGE] ▼ to select the second User Style Rec page:



The first parameter (Mode) allows you to select the Record mode. Depending on the mode you select here, the first User Style\Rec page will look like this...



...or like this...



... when you press the Recorder's [REC•/STOP]] button.

Record Erase means that everything you record will replace the data on the selected track. This mode is automatically selected when you activate the Record function for a track that does not yet contain data. If you select a track that already contains data, the message in the lefthand corner will read Record Merge.

Record Merge means that the music or data you are going to record will be added to the existing data of the selected track.

(8) Use the [DRUMS/PART] ▲▼ buttons to select Erase or Merge.

Specifying the key

If you want to use the accompaniment in a musically meaningful way (see "Remarks" on page 112), you have to tell the G-600 what key you are recording in. That way, everything you play will be automatically transposed to C during Arranger playback, so that when you play a C (major, minor, or seventh) chord in the chord recognition area of the keyboard, you hear a C chord rather than a D chord, for instance:

If this is what you play while "Key" is set to C, you will hear a D chord (or D=F#=A) when you play a C chord in the chord recognition area during normal Arranger playback.



If this is what you play while "Key" is set to D, you will hear a C chord (or C-E-G) when you play a C chord in the chord recognition area during normal Arranger playback.



The G-600 allows you to play in the original (or your favorite) key of the song. But do set the Key parameter to the right value before recording.

(9) Use the [ACCOMP/GROUP] ▲▼ buttons to set the Key. If you want to play in F#, set this value to F#; to play in A, you must set this value to A, etc. Note: There is no need to specify the key for the ADR part since that part is never transposed.

Quantize

Quantize is a function that corrects minor timing problems.



Quantize shifts the notes whose timing is not exactly right to the nearest "correct" unit. In the above example, we selected a 1/4 (\downarrow) resolution. The G-600 provides the following resolution values: 1/16, 1/16t, 1/32, 1/32t, 1/64, and Off.

With a 1/16 resolution, our above example would have looked like this after quantizing:



Though the timing of the quantized notes is mathematically correct, the result is not what you expected. It is therefore necessary to select a resolution value that is fine enough to accept all note values you play, yet not finer than the shortest note. If the shortest notes of your accompaniment are 1/16th note triplets, set the Quantize value to 1/16t.

Here is how to set the Quantize function:



(10) Use the [LOWER/NUMBER] ▲▼ buttons to specify the quantize Value.

The preset value, 1/16, is ok for most situations. If you do not want quantize your music while recording, set this parameter to Off.

Off is a good choice here because you can also quantize the part after recording it (see page 123). If you quantize all parts, your User Style may sound too perfect. Remember that music is all about tiny imperfections, one of which is a somewhat "loose" timing.

Let us skip the User Style\Rec\3 page because it allows you to mute parts that have already been recorded, which is not the case here. See "Muting parts while recording others (Status)" on page 112 for more information on how to mute parts in User Style mode.

(11) Press [PAGE] ▼ twice to select the following display page:

Tone selection

Another important aspect is Tone selection because the address (Group, Bank, Number, Variation) of the Tones and Drum Set you select is recorded at the beginning of every division.



We are about to program the drums using the ADR part. The ADR part works the same way as the MDR part, so we now have to select a *Drum Set* rather than a Tone.

There are two ways to select Drum Sets (and Tones):

Use the buttons of the TONE section to select a Drum Set for the ADR part. Or:

Use the [UPPER/VARIATION] ▲▼ buttons on this display page to select a Drum Set (or Tone). It is a good idea to play a few notes on the key-

board to check whether the sounds of the selected Drum Set are suitable for the accompaniment you are going to record. Try other Drum Sets until you find the one that sounds "right".

Note: Just ignore the Expression, Panpot, Reverb, and Chorus settings for now. We will come back to them later (see page 117).

Time signature

Before you start recording, you must specify the time signature of your accompaniment. Select 4/4 for 8- or 16-beat patterns, 3/4 for waltzes, 2/4 for polkas and 6/8 (or 4/4) for marches. Note that it is also possible to select 5/4, 7/4 etc. time signatures and that the G-600's Arranger even accepts polyrhythmic accompaniments.

(12) Press [F3] (TSign).

(13) Press [F2] (Change).



As you see in the leftmost window, 4/4 is already selected, so there is probably no need to change it. To specify another time signature, use the [DRUMS/PART] $\blacktriangle \nabla$ buttons.

(14) If the division you need (Basic) is not yet selected, use the [BASS/BANK] and [ACCOMP/ GROUP] ▲▼ buttons to select it.
G-600

Since you are going to clone 11 patterns while recording, you could select Bsc/Adv and Or/Va here to specify the time signature for the four looped divisions. But even Bsc and Or do the trick because your material will be copied anyway.

On this page, the [LOWER/NUMBER] $\blacktriangle \forall$ buttons allow you to select another User Style memory for programming, but that is not what we want to do.

(15) Confirm the (new) time signature by pressing Part Select [UPPER1] (Execute).

Note: If you do not want to specify the length of the pattern you are about to record, you can press [F4] at this point to jump back to the first User StyleRec page. But let us go through the motions.

Length: specifying the pattern length

User Styles are *patterns*, i.e. short musical phrases, some of which will be continuously repeated during Arranger playback. Every pattern must therefore have a set length. A 5-bar Intro, for instance, is no good for a song that has only four introductory bars. Setting the length now will help you avoid a lot of confusion once you start recording.

The reason why we suggest you specify the length now rather than cutting the pattern to size after recording it (using the same Length function) is that the Arranger tends to add blank bars at the end of a track, which is usually due to the fact that you stopped the recording a little late (i.e. after the last bar you played). In such a case, the Arranger adds a blank measure, so that you actually "record" five measures instead of 4:



Furthermore, in User Style Record mode, all patterns are *looped*, so that the G-600 keeps playing them back until you press the [START/STOP] button. A wrong number of measures (5 instead of 4, for example) is very likely to put you off, so do take the time to set the pattern length before you start recording. (16) Press [F2] (Lengt). To select a Length page from another page, hold down the [SHIFT] button and press [F2]. The display now looks like this:



It is perfectly possible to specify a different length value (and time signature) for each track and division. Remember, however, that the Basic and Advanced (Original and Variation) tracks are looped during "real-life" use, so that a 64CPT phrase will be repeated for as long as another track of the current division contains data.

Note: Even one-shot patterns are looped in User Style mode. That is not the case, however, during Arranger playback (i.e. everyday use of the Styles).

(17) Use [PAGE] ▲▼ to select the length page corresponding to the division whose length you wish to set. The second Length page contains the Length values of the Intros and Endings. The third Length page contains the Length parameters of the fill-ins.

The other options on this page are [F1] (Share) and [F2] (Singl). The former allows you to select all patterns that are being shared, i.e. patterns that have been or will be "cloned" during recording using the M=m=7, B=A etc. options (see page 106). Single, on the other hand, allows you to treat all divisions as if they were independent patterns – and select only those whose length you wish to change after recording them. But that is for later. Back to our accompaniment.

(18) Start by selecting the Track whose length you wish to set (using [DRUMS/PART] ▲▼).
Holding down ▼ will call up the ALL option.

Select ALL to set the length for all tracks (1~8).

(19) Use [UPPER/VARIATION] (All) to select all Style divisions.

Note: Selecting All using [UPPER/VARIATION] ▲▼ means that you can specify the length of all divisions that appear on this page.

To specify the length of only one pattern, move the Select cursor to that pattern using the [ACCOMP/GROUP] ▲▼ buttons. To specify the length of several patterns in one pass, select them using [ACCOMP/GROUP] and press [F3] (Mark) for every pattern whose length you wish to set. Selected patterns will be indicated by an asterisk (*). (20) Use the [BASS/BANK] (Bar) ▲▼ buttons to specify the number of bars. Our pattern should be 4 measures long, so enter the value "4".

Note: You could also specify a CPT value using [LOWER/NUMBER]. That CPT value ($\downarrow =$ 120CPT) will be added to the Bar length. Though possible, length values like 4 (bars): 96 (CPT) are probably not what you want to use every day.

(21) Press Part Select [M.DRUMS] (Execute) to confirm the length you specified.

The display now reads:



Next, the OK Function Complete message is displayed to signal that the Length value has been successfully set.

The name of the ladr track now appears in uppercase letters (IADR) because that track contains data (i.e. the length setting, or, more specifically, the equivalent number of rests).

(22) Press [F4] to jump back to the first User StyleRec page if you like.

This is not really necessary because you can start recording on any User Style page.

Tempo

(23) The tempo (currently set to \$\]=120) is probably a bit fast for recording, so change it using the TEMPO [+][-] buttons.

The tempo value you set here will be recorded and regarded as preset tempo. You can change the preset tempo at any stage in User Style mode, so start by selecting a tempo that allows you to record the music the way you want it to sound. When all tracks and divisions are programmed, you can record the desired tempo value.

Recording

(24) Return to the first User Style\Rec page by pressing [F4] and press the Recorder [REC●] button (indicator lights).

Note that, when you return to the first User Style\Rec page, the message in the lefthand corner looks like this:



 (25) Press [START/STOP] (Arranger section) or [PLAY ►/STOP] (Recorder section). The metronome counts in one measure (4 beats if you selected the 4/4 time signature), and recording starts on the next downbeat.

You could start by playing only the bassdrum part. If you specified the track length (see above) before recording, the Arranger jumps back to the beginning of the pattern after four measures. The second time around you could add the snare drum, the third time the HiHat, and so on. – But you can also play the drum part in one go, of course.

When recording another part (ABS~AC6), do everything you would do during a live performance. Feel free to add modulation and pitch bend and use the hold pedal connected to the SUSTAIN FOOTSWITCH jack.

Note: Do not forget to set the Length parameter for all subsequent parts you record (see page 109). Note: You may notice a short delay before the Arranger jumps back to the beginning of the pattern. That delay is due to the fact that the data you record are "being processed". During playback, the loop will be perfect, however.

(26) Press [START/STOP] or [PLAY►/STOP] again to stop recording.

If the above Mode, Type, and Division settings you selected for recording do not include all the patterns you wanted to clone, set the Mode, Type, and Division parameters to the desired values to supply the missing drum lines. Next, press [REC•] and [START/STOP] or Recorder [PLAY•/STOP•] to start recording. Stop recording after the first or second beat (wait until the count-in is finished before you start counting). Note that this function only adds clones. It does not allow you to erase existing patterns.

Playback, and then keep or redo?

 Press the [START/STOP] or Recorder
 [PLAY►/STOP■] button again to listen to your performance. The first User Style\Rec page looks like this (if selected):

G-600



If you like your drum part, continue with "Saving your Style to disk". If not, you probably want to give it another try.

(2) Press [F4] (Edit) and then [F1] (Erase).



We'll use Track Erase to erase the data because that way, the Length settings do not change. See "Track Erase ([F1])" on page 122 for more information about this function. The IADR Track is already selected, as is the pattern that is used for cloning other tracks.

- (3) Press Part Select [M.DRUMS] (Execute) to erase the pattern.
- (4) Press Part Select [UPPER1] to jump back to the first User Style\Rec page.
- (5) Continue with step (25).

Saving your Style to disk

If you are serious about programming your own Styles, make it a habit to save them as frequently as possible. Even though your Styles are preserved when you switch off the G-600, you may decide to load another Style from disk and thus overwrite the accompaniment you took so much time to program.

Do yourself a favour and save your data after every part you add to a Style. That disk can also serve as backup whenever you erase or change something you actually wanted to keep.

Naming your User Styles

(1) Hold down [SHIFT] and press [F3] (Name).



Before saving a Style to disk, you should name it. Choose a name that tells you something about the nature of the Style. Use the [ACCOMP/GROUP] ▲▼ buttons to select the character position and the [BASS/BANK] ▲▼ buttons to assign a character to the selected position.

Saving your Style

(2) Press Part Select [M.DRUMS] to jump to the Save User Style page:



You have just specified the Style name, so there is no need to do so on this page.

(3) Use [DRUMS/PART] ▲▼ to select the Style you wish to save.

Your Style is already selected, so there is no need to do so here.

- (4) Insert a floppy disk into the drive and press Part Select [M.BASS] (Execute) to save your Style to disk.
 Remember that your G-600 is multitasking, so that you can leave this page as soon as the G-600 starts saving the Style to disk:
- (5) Press Part Select [LOWER] to return to the User Style mode.
- (6) Press [SHIFT]+[F1] to jump to the first User Style\Rec page.

Programming other parts and divisions

You can now record the second part – probably the bass. If you'd like to do the guided tour again, go back to page 105. Do not forget to set the key for the bass part (see page 107).

You probably know how to record other parts (ACC1~ACC6), so we'll leave you to it (see "Recording User Styles from scratch" on page 94).

Once the first division is finished, you can record other divisions. Use the clone function (see page 106) to record several patterns in one go. Do not forget to record the fills and the Ending(s) to complete your User Style.

Note: The ABS part is monophonic. You will not be able to program two-note patterns.

Muting parts while recording others (Status)

After programming a few tracks, you may find that certain tracks tend to confuse you. Playing a steady organ part while listening to a previously recorded syncopated part may indeed be difficult. That is why the G-600 allows you to mute those parts that you do not want to hear during *recording*.

Note: The Status function only applies to the User Style mode. In normal Arranger playback mode, all tracks will be played. In other words, this is a help function. To mute a part in Arranger mode, see page 80.

Here is how to mute tracks in User Style mode:

 On the User Style\Rec page, press [PAGE] ▼ until the following display page appears:



- (2) Select the track/part you wish to mute using the [DRUMS/PART] ▲▼ buttons.
- (3) Use the [ACCOMP/GROUP] ▲▼ buttons to set the Status to On or Off (mute).

Remarks

Working from top to bottom – programming hints

If you listen carefully to the factory Styles, you will notice that most divisions are very similar to one another and that the element of "evolution" or "amplification" between the Original/Variation and Basic/Advanced levels is usually derived from adding instruments to otherwise identical parts. The Advanced/Original division may for instance add an electric guitar to the drums, bass, and organ lines of the Basic level, but the drum, bass, and organ lines of the Advanced level are usually identical to those of the Basic level. In other words, why not start at the top and edit your way down to the bottom? Starting by recording the most complex accompaniment while cloning all other looped divisions (see page 106) will at first leave you with identical accompaniments, all containing that frantic distorted guitar, the brass section, and other bells and whistles. But if you then move to the Advanced/Original level and delete the bells and whistles (see page 112), that division is already simpler than "the works".

The next step would then be to select the Basic/Original pattern and delete both the bells and whistles and the distorted guitar. Working this way has the distinct advantage that you can program the Style while your creative juices are flowing, leaving the editing for later.

Metronome

In User Style mode, the metronome sounds during recording. If you also need the metronome when listening to what you have just recorded, select another metronome mode. Here is how to:

(1) On the first User StyleRec page, press [PAGE] ▼.



(2) Use the [BASS/BANK] ▲▼ to set the Mode parameter to one of the following values:

Record	The metronome only sounds during User Style recording.
Play	The metronome only sounds during User Style playback in User Style mode.
Rec&Ply	The metronome sounds both during record- ing and playback.
Always	The metronome even sounds while the User Style is not playing.

Empty tracks

After recording a few accompaniment parts, you may not remember which tracks already contain data. There is an easy way to find out: for tracks that contain data, the corresponding part name will appear in uppercase letters (e.g. ADR). For tracks that don't contain data, the corresponding part name will appear in lowercase letters (e.g. adr). Furthermore, if a track already contains data, the User Style function will switch to Record Merge (see page 107) whenever you press the Recorder's [REC●/STOP■] button – unless you explicitly select Erase on the second Rec page.

Playback in Arranger mode

As stated on page 102, the Arranger of your G-600 is very similar to a drum machine, except for one thing: you do not need to program the pattern sequence beforehand. Just select the division you need while playing and feed the Arranger with the right chords so that all the lines you programmed sound in the right key. In short: use your own Styles the way you use the internal Styles.

Note: If, during playback in Arranger mode (i.e. normal G-600 mode), the Arranger stops unexpectedly, try different chord modes. Chances are that you only programmed the major division, so that the Arranger selects an empty pattern when you play a minor or seventh chord. Remember to always set the Mode parameter to M=m=7 until you have come to grips with the impressive number of possibilities of the G-600's Arranger. That way, those three patterns will sound alike, but at least you are sure that the Arranger does not stop when you play a minor or seventh chord.

12.3. Copying existing Styles

Another way of programming User Styles is to use parts from internal Styles in ROM or User Styles on disk. The G-600 allows you to:

- · Copy entire Styles to a User Style memory
- Copy the selected division of one or all tracks to a User Style memory
- Copy just a few notes of an existing part to a User Style memory
- Copy tracks or notes between divisions of the current User Style
- Create new Styles by using tracks from different existing Styles (the drums of Style B34, the bass of User Style 8, etc.)

Note: You cannot copy an ADR (drum) track to another track (ABS~ACC6). Likewise, the bass part (ABS) can only be copied to an ABS track. As far as the ACC tracks are concerned, you are free to copy them to whichever ACC track you like. Note: If the User Style memory you wish to copy to already contains data, save it to disk before copying. The G-600 has no Undo function. Saving a Style to disk before copying will allow you to load the previous version in case something goes wrong. See "Saving your Style to disk" on page 111.

Copying entire Style divisions using Load (all tracks, several divisions)

- (1) Press [F5] (Exit) to return to the Master page.
- (2) Press [F5] (Disk) to select the Disk mode.
- (3) If the 1 Load option is not highlighted, press [F1] (Load) to select it.

The message in the scroll bar (left-hand side) should read USR STL. If that is not the case...

(4) ... press [PAGE] ▲▼ until the scroll bar reads USR STL.



(5) Using the [DRUMS/PART] ▲▼ buttons, select Int for the Source parameter.

This allows you to select any internal Music Style (A11~B88) to be copied. If you wish to copy a User Style, insert the disk that contains it, and set Source to Dsk.

The Music Style info window displays a list of Styles in the internal memory (Int) or on the floppy (Dsk). The last message in this window indicates the free memory of the User Style area.

- Note: Dsk can only be selected if you insert a disk containing User Styles into the drive.
- (6) Use [ACCOMP/GROUP] ▲▼ to scroll through the list of available Styles. The highlighted (white-on-blue) Style will be loaded.

Next, you have to decide which elements of the Style you want to load (or copy). (These elements, as you know, are called divisions: Original, Basic, Ending, Intro, etc.)

- (7) Use [LOWER/NUMBER] ▲▼ to select the Style division you need. You can also select ALL (all divisions).
- (8) Use the [UPPER/VARIATION] ▲▼ buttons to select the User Style memory you want to copy the Style to (to User). Let's select User Style memory 2.

Note: Be careful not to load Styles to a User Style memory that already contains data. The G-600 will not warn you that you are overwriting the Style in the memory you select here!

(9) Press Part Select [UPPER1] (Execute) to load the Style (or Style excerpt).



(10) Press [F5] (Exit) to return to the Master page.

You have now loaded one User Style to the second User Style memory, which comes down to copying it.

(11) Press [F4] (UsrStl) to return to the User Style mode.

Copying individual User Style tracks

While the previous function allows you to copy entire Styles or Style divisions, the Track Copy function can be used to copy individual tracks, modes, types, and divisions. Use the above function to make comprehensive copies and the current one to copy one track of an existing Style to the selected User Style memory.

 On the first User Style\Rec page, hold down [SHIFT] and press [F1] (Copy).



- (2) Use the [DRUMS/PART] ▲♥ to select the track to be copied.
- (3) Use the [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to select the Mode (Maj, Min, 7th), the Type (Bsc, Adv), and the Division (Or, Va, Fo, Fv, In, Ed).
- (4) Next, select the Style that contains the track(s) to be copied using the [UPPER/VARIATION] ▲▼ buttons. Note: You can also use the MUSIC STYLE/MIDI SET buttons to select the Style to be copied. Note: You also copy User Style tracks.
- (5) Press Part Select [M.DRUMS] (Listen) to listen to the excerpt you are about to copy.
- (6) Press [PAGE] ▼ to select the From 2 page:



From

Start by specifying the position of the first event (or note) of the source track to be copied.

(7) Activate the From level. Select it by pressing
 [DRUMS/PART] ▼.

The word From and the related values (upper line) must be displayed white-on-blue.

(8) Use the [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to set the Bar, Beat and CPT units respectively.

By default, the From parameters are set to the following values:

Bar= 1, Beat= 1, CPT= 0

Before experimenting with the Beat and CPT values, it is probably a good idea to try copying entire bars. Remember, however that you can also choose to copy only those notes that you need, in which case, the Beat and CPT parameters will help you select a starting point that lies behind the first beat of the track you wish to copy.

То

(9) Press the [DRUMS/PART] ▲ button to select the To level (second line).

The To position indicates the end of the excerpt to be copied. By default, the To values are set to include the entire track.

(10) Use the [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to set last Bar, Beat and CPT units respectively.

If you wish to copy an entire bar, select the Bar-Beat-CPT "0" value of the next bar, i.e. to copy bars 1~4 specify "From 1-1-0/To 5-1-0".

(11) Press Part Select [M.DRUMS] (Listen) to listen to the excerpt again.

Copy mode

Copying can be carried out in one of two modes:

c	.61	າດ
U	-01	10

Copy mode	Explanation
Replace	The data in the selected range will be copied to the destination track and over- write all data of the destination track in the selected source track range.
Mix	The data in the selected range will be added to any existing data on the destina- tion track.

In either case, the length of the destination track may change to include all data of the source track. In other words, you may find that the destination track is longer after executing the copy function. Therefore...

Note: If the User Style memory you wish to copy to already contains data, save it to disk before copying. The G-600 has no Undo function. Saving a Style to disk before copying will allow you to load the previous version in case something goes wrong. See "Saving your Style to disk" on page 111.

(12) Use the [UPPER/VARIATION] ▲▼ buttons to select the copy mode (Replace or Mix).

Destination (To 1)

(13) Press [PAGE] ▼ to select the To 1 page:



This page looks similar to the From 1 page (see above). Here, however, you start specifying the place the selected data will be copied to, i.e. the destination.

(14) Use the [DRUMS/PART] ▲▼ buttons to select the track you wish to copy the data to.

Note: It is impossible to copy ADR data to other tracks than ADR tracks. Likewise, you cannot copy ABS data to other tracks than ABS tracks. Therefore, the options for selecting the destination track are somewhat limited. Feel free to copy AC data to any AC track (yet they cannot be copied to ADR or ABS tracks).

(15) Use the [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to select the Mode (Maj, Min, 7th), the Type (Bsc, Adv), and the Division (Or, Va, Fo, Fv, In, Ed). Note: It is impossible to copy between looped and one-shot divisions. See "Looped vs one-shot" on page 103 for more information about these two division types.

- (16) Next, select the User Style you wish to copy the data to using the [UPPER/VARIATION] ▲▼ buttons.
 Note: You can only select User Style memories here.
- (17) Press Part Select [M.DRUMS] (Listen) to listen to the track you are about to copy to.
- (18) Press [PAGE]▼ to select the To 2 page:



The *Into* position indicates the beginning of the excerpt you are about to copy. If you wish to copy the source data to the beginning of the selected track, select Bar= 1, Beat= 1, and CPT= 0.

- (19) Use the [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to set the Bar, Beat and CPT units respectively.
- (20) Press Part Select [UPPER1] (Listen) to listen to the destination track again.
- (21) Use the [UPPER/VARIATION] ▲▼ buttons to specify the number of copies (Times) to be made. Select "1" if the excerpt is to be copied only once.
 Before copying the data, check whether all settings are correct. Use the [PAGE] ▲▼ buttons to select other Copy pages. Then return to this page.
- (22) Press Part Select [M.DRUMS] (Execute) to copy the data.

The display now responds with the following message:



When the data are copied, the display will tell you:



You can press Part Select [UPPER1] to listen to the new data on the destination track (and the selected division).

12.4. Editing User Styles

Editing on the fly by recording

Adding notes in realtime

To add notes to an existing part, select Record Merge (2nd User Style page), select the part, and start recording by pressing [REC●] (Recorder section) and [START/STOP] (Arranger section) or [PLAY►/STOP■] (Recorder section). Play the notes where you want them to sound.

Note: Do not forget to select the right Division, Mode, and Type (see page 105).

Adding controller data in realtime

To add controller data (modulation, pitch bend, Hold, expression) to an existing part, select Record Merge (2nd User Style page), select the part and division, and start recording by pressing [REC●] (Recorder section) and [START/STOP] (Arranger section) or [PLAY►/STOP] (Recorder section). Operate the controller (pitch bend lever, modulation lever, optional DP-2, DP-6, or FS-5U foot switch for Hold data, optional EV-5 or EV-10 foot controller for expression data) where needed.

Note: Do not forget to select the right division, mode, and type (see page 105).

Adding or changing settings to/of existing parts

The following operations require that you record in Record Merge mode without touching the keyboard or controllers. Select the track and division whose settings you wish to change, activate Record Merge, and start recording. Unless you wish to program continuous value changes (Panpot data, for example), you can stop recording after the first beat. Static settings are always written at the beginning of the track in question, so there is no need to record an entire cycle.



Tone/Drum Set selection

After programming a Style or division, you may find that the bass sound you selected for the ABS part, for instance, doesn't quite match the Tones assigned to the other parts, or that, all things considered, an acoustic piano works better than an electronic one. To select another Tone or Drum Set for an existing User Style part, proceed as follows:

- On the first User Style\Rec page, select the Track you wish to assign another Tone or Drum Set to using the [DRUMS/PART] ▲▼ buttons.
- (2) Select the division whose settings you wish to change, and possibly also all clones (see page 106).
- (3) Press [PAGE] ▼ to select the following page:



- (4) Use the [DRUMS/PART] ▲▼ buttons to set Mode to Merge. (Let us assume that your part already contains data, though the following works the same for empty tracks.)
- (5) Press [PAGE]▼ until the following display page appears:



Look at the display before selecting another Tone. The Expression, Panpot, and Chorus values in the above illustration are reversed. As you see in the bottom row of the display, the corresponding Play/Record switches are set to REC, meaning that these values will be recorded next time around. The Reverb and Tone values, on the other hand, are displayed blue-on-white. If you look at the corresponding Play/Record switches, you will see that they are set to PLAY, meaning that the corresponding settings will not be recorded.

The abbreviation 3AC1 appears in uppercase, which means that the track in question already contains data.

- (6) Press the Part Select [M.DRUMS], Part Select
 [M.BASS], Part Select [LOWER], and Part Select
 [UPPER2] buttons to set the Play/Record switches of all settings you do not wish to record to PLAY.
- (7) Press Part Select [UPPER1] to set the Tone Play/Record switch to REC.

- (8) Select the new Tone to be assigned to the currently selected track and division using either the
 [UPPER/VARIATION] ▲▼ buttons or the TONE section buttons.
- (9) Press the Recorder [REC●] button.
- (10) Press [START/STOP] or Recorder [PLAY►/ STOP■] to start recording.
- (11) Press [START/STOP] again after the first or second beat (but wait until the one-bar count-in is finished). This completes Tone selection. The new Tone address (Group, Bank, Number, Variation) automatically replaces the old one.

You could use different Tones for every division of a User Style. Thus, the 3AC1 Basic/Original track may contain an electronic piano line that is played by an acoustic piano in the Basic/Variation division etc. Beware of too much "artistic license", though. Using another ACC track for the acoustic piano will avoid a lot of confusion.

Customizing drum sounds - Drum Set Note Pitch

The fifth User Style\Rec page allows you to modify the pitch of certain sounds of the selected Drum Set. The eligible sounds and corresponding note numbers are:

Note	Sound
C#2/37	Side Stick
D2/38	Snare Drum 1
E2/40	Snare Drum 2
F2/41	Low Tom 2
E3/52	Chinese Cymbal
G#3/56	Cowbell
A3/57	Crash Cymbal 2
F4/65	High Timbale

Note: The User Style\Rec\5 *display page only appears if you select the 1ADR track before calling up this function.*

- (1) On the first User Style\Rec page, select the 1ADR track.
- Select the division whose settings you wish to change, and possibly also all clones (see page 106).
- (3) Press [PAGE] ▼ to select the following page:



- (4) Use [DRUMS/PART] ▲▼ to set Mode to Merge. (Let's assume that your part already contains data, though the following also works for empty tracks.)
- (5) Press [PAGE]▼ repeatedly until the following display page appears:



- (6) Use [DRUMS/PART] ▲▼ to select the drum sound whose pitch you wish to change.
- (7) Use [UPPER/VARIATION] ▲▼ to set the desired pitch (-64~+63).
 You can play on the keyboard to listen to the result.
- (8) Press Part Select [UPPER1] to set the Play/Record switch to REC.
- (9) Press the Recorder [REC●] button.
- (10) Press [START/STOP] or Recorder [PLAY►/ STOP■] to start recording.
- (11) Press [START/STOP] again after the first or second beat.

Expression, Panpot, Reverb, Chorus

Setting or modifying the Expression, Panpot, Reverb (Send), and Chorus (Send) parameters is similar to selecting another Tone for existing tracks. See "Tone/Drum Set selection" on page 116 for details.

The Reverb and Chorus settings represent *send* values (see page 81). The effect settings (Type, Time, etc.) can only be saved to a Performance Memory. In other words, a Music Style's character may change depending on the Performance Memory you select.

Expression (control change #11) is a subsidiary volume message that works relative to the volume (control change #7) message. Whenever you set Expression to "127" the resulting part volume will be equal to the value specified for Volume (CC7).

All other Expression values mean "less than the Volume (CC7) value":

Owner's Manual



(Note that the above values are only guesses, but at least they help you understand why the settings [Volume= 0/Expression= 127] mean that the corresponding part does not sound.)

The Volume values of the Arranger parts can be set in Mixer (see page 79) or Volume (see page 77) modes. The advantage of working with Expression rather than Volume in User Style mode is that it allows you to work with two values that interact:

Control change

CC7 (Volume)Can be set in Volume and Mixer modes (specifies the upper limit)

CC11 (Expression) Can be set in User Style mode (specifies a percentage of the Volume value, whereby "127"= 100%)

Enough of this MIDIese, though. Just remember that Expression is a relative volume value that works the same way as the G-600's Part parameters in that it allows you to override (or rather correct) a given setting. But while the Part parameters work in two directions ("more" and "less"), Expression only works in one: "127" means "equal", and all other Expression values mean "less".

Use the [DRUMS/PART], [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to set the value you wish to record.

You can create interesting panning effects by slowly shifting the selected track from left to right (or vice versa) in the course of a pattern. This is especially effective for synthesizer or guitar riffs. Continuous changes mean that you have to keep recording until the end of the pattern.

Setting the preset tempo

The preset tempo is the tempo the Arranger selects in One Touch mode. By now, you know that the [TEMPO] buttons allow you to override the preset Style tempo and save the new tempo value to a Performance Memory. Setting the right preset tempo is useful for those occasions where you wish to use One Touch Program (see page 49). To program another preset tempo, set it using the TEMPO [+][-] buttons, select any part on the first User Style\Rec page, activate Record Merge mode and record one or two beats.

Do not play on the keyboard or use any controllers connected to the G-600, though!

Note: The last tempo value you record automatically becomes the Style's preset tempo. You should therefore program the preset tempo after recording all parts.

12.5. Programming User Styles via MIDI

A third way of programming User Styles is to use an external sequencer (computer with sequencer software or an MC-50MkII) and transmit the MIDI data in realtime while the Arranger is recording. Using an external sequencer has two advantages:

- You can program your music in Step time before turning it into an interactive Style.
- You can use existing lines from Standard MIDI Files or songs you recorded before purchasing the G-600. And, of course, you can copy Styles of older Intelligent Arranger models that are not equipped with a disk drive.

Note: If you use commercially available Standard MIDI Files as a starting point for your User Styles, remember that the material is copyright protected. You are free to copy the tracks of a Standard MIDI File for your own personal use but under no circumstances may you sell User Styles based on commercially available files nor give copies of your "borrowed" User Styles to your friends and/or colleagues. Note: Delete the GM System On or GS Reset message of the GM or GS Standard MIDI File you intend to use before sending MIDI data to your G-600. These two messages are SysEx messages (System Exclusive) found at the beginning of a sequence that cause the G-600 to switch to GM/GS mode, thereby deactivating the Arranger. See your sequencer's manual for how to delete MIDI messages.

Data that can be recorded

Apart from note on/off and velocity data, the G-600's Arranger also accepts the following MIDI messages:

MIDI message	Nümber	Name
Control Change	0	Bank Select MSB
Control Change	1	Modulation
Control Change	6	Data Entry
Control Change	7	Volume
Control Change	10	Pan
Control Change	11	Expression
Control Change	32	Bank Select LSB
Control Change	64	Hold
Control Change	91	Reverb Depth
Control Change	93	Chorus Depth
PC		Program Change
PB		Pitch Bend
Control Change	98	NRPN MSB
Control Change	99	NRPN LSB

(*) Hold on/off messages will be converted to the equivalent note duration values. The Arranger tracks never contain Hold messages but the duration of the affected notes will be set in accordance with the length obtained by using the Hold pedal

Unless the sequences you use are GM/GS compatible, we recommend you filter out all data except modulation (CC1), Pitch Bend, and Hold (CC64). Specify the other settings manually on the G-600 (see "Editing User Styles" on page 116). Though they may work in most cases, bank select and program change messages should also be specified manually. After all, the G-600 contains lots of new sounds that you should take advantage of to enhance your Styles.

Connection and synchronization

- (1) Connect the MIDI OUT port of your sequencer or computer to the MIDI IN connector of your G-600. The next step is to synchronize the G-600 to your sequencer - or the sequencer to your G-600. The former means that the G-600 will be slaved to the sequencer's tempo, while the latter means that the G-600 will act as tempo master. Let us use the G-600 as slave here. Doing so allows you to transmit data and MIDI clock messages to the G-600 using only one MIDI cable.
- (2) On the G-600's Master page, press [F3] (Midi) to select the MIDI mode.
- (3) Hold down [SHIFT] and press [F4] (Sync).
- (4) If necessary, press [PAGE]▼ until the following display page appears:



Player's Guide

G-600

- (5) Use [DRUMS/PART] ▲▼ to set the Style parameter to Auto1: Play Arrng, Rec Song.
- (6) Press [F5] (Exit) to return to the Master page.

Preparation of your sequence

(7) Isolate the measures you wish to record. This usually means that you have to copy the required number of bars to a new song.

For instance, if the User Style division is to be 4 measures long, you have to reduce the sequence (or rather a copy of it) to the four measures you wish to record. These measures have to be copied to the very beginning of the new song.

(8) Check the track-to-MIDI channel assignment of all sequencer parts against the following table and modify the MIDI channels of your sequence accordingly.

MIDI channels

Every Arranger part/track is assigned to a MIDI channel. The factory settings are as follows:

User Style track	Part	MIDI channel
1	ADR (drums)	10
2	ABS (bass)	2
3	ACC1(melodic accompaniment)	1
4	ACC2	3
5	ACC3	5
6	ACC4	7
7	ACC5	8
8	ACC6	9

Preparation on the G-600

- (9) Press [F4] (UserStl) to call up the User Style mode.
- (10) Press [F1] (Rec) if the 1Rec menu option is not selected.
- (11) Set the following parameters for the part you are about to record:

Part selection, page 105 Select a Tone or Drum Set (*), page 108 Division selection, page 105

Specify the time signature, page 108 Specify the key of the tracks that require it (ABS, ACC1~ACC6), page 107 Specify the pattern length, page 109 Set Quantize to Off (**), page 107

(*)This is only necessary if you do not record the original bank select and program change messages. As stated above, it is always a good idea to find out whether the G600 has better sounds than the ones that would be selected via MIDI.

(**) Though the MIDI data may be recorded with a short delay, it is wiser to use the Shift function (see page 123) to correct timing problems than to quantize a track that sounded more natural without quantization.

Recording

- (12) Solo the first part to be recorded on your sequencer or computer (or mute the other parts).
- (13) Press the [REC●] button in the G-600's Recorder section.
- (14) Start playback on your sequencer or computer.
- (15) Wait until the pattern is finished and then stop playback on your sequencer.
- (16) Return to step (11) to record the other parts of the current division.
- (17) To record other divisions, return to step (7).
- (18) When you are finished, press [F5] (Exit) to return to the Master page and set the Style Sync parameter back to AUTO1 or INTERNAL (see page 134).
 Note: Do not forget to save your Style to disk at regular intervals (see page 111).
 Note: If your User Style needs some touching up, see "Editing User Styles" on page 116.

Recording using external controllers

Most of the aspects covered in the "Programming User Styles via MIDI" section also apply to programming User Styles using external controllers – except synchronization, of course.

- You could ask a drummer to play the drum tracks of your Styles using a TD-10, TD-7, TD-5, SPD-11, or PAD-80 (Octapad II), i.e. a device fitted with a trigger-to-MIDI convertor.
- If you know a guitarist who owns a GR-30, GR-1, or GR-09 Guitar Synthesizer or a GI-10 pitch-to-

MIDI convertor, you should ask him to play the guitar and bass parts.

• The GI-10 also allows you to use a microphone and sing a line that is too difficult to play on a keyboard. The GI-10 can indeed convert your singing (pitch) to MIDI note messages.

Using "specialists" for recording your User Styles will add to the realism of your accompaniments. In fact, most of the G-600's Styles have been recorded by "real" musicians that played on the above instruments, which is why they sound so convincing.

The only thing to worry about when recording User Styles using external MIDI controllers is the MIDI channel of your external controller:

Note: Set the guitar-to-MIDI controller so that it sends MIDI messages on one channel rather than six.

Connect the MIDI OUT connector of the external controller to the MIDI IN connector of your G-600 and you are ready to go. See "Recording User Styles from scratch" on page 105 for how to record User Styles.

12.6. Where to go from here – Editing User Styles (2)

User Style Edit mode

User Style Edit mode provides eight functions: Erase, Delete, Insert, Quantize, Transpose, Change Velo, Change Gate Time, and Track Shift. See the Reference Guide for a detailed description of the available parameters and their setting ranges. Here is how to select these Edit functions:

- (1) Select the User Style mode by pressing [F4] (UsrStl) on the Master page.
- (2) Press [F4] (Edit) to select the User Style Edit mode.
- (3) Use the [SHIFT] and function keys to select the desired User Style Edit mode:

Edit mode Ho	w to select it
Erase [F1]] (Erase) (or [SHIFT] + [F1])
Delete	[F2] (Dite) (or [SHIFT] + [F2])
Insert	[F3] (Insrt) (or [SHIFT] + [F3])
Transpose	[F4] (Trnsp) (or [SHIFT] + [F4])
Change Velocity	[SHIFT] + [F1] (Velo) (or [F1])
Quantize	[SHIFT] + [F2] (Quant) (or [F2])
Change Gate Tim	ie[SHIFT] + [F3] (GateT) (or [F3])
Track Shift	[SHIFT] + [F4] (Shift) (or [F4])

If, after selecting one of these functions, you decide not to execute the transformation, press Part Select [UPPER1] (Rec) or [F5] (Exit) before pressing Part Select [M.DRUMS] (Execute).

The Edit functions' parameters are located on two or three display pages you select using the [PAGE] ▲▼ buttons. Entering the right values to achieve the desired result may at first take some time. Here are a few guidelines:

- Always start by selecting the User Style you wish to edit. You can do so on the first User Style\Rec page or on the first page of the selected edit function.
- Next, select the track(s) you wish to modify (1-ADR, 2-ABS, 3-AC1~8-AC6, or All). Do not for get to specify the pattern you wish to correct. Remember that you specify a pattern by entering the Mode (M, m, 7), the Type (B, A), and the Division (Or, Va, In, Ed, Fo, Fv or All).
- Select the range (From Bar, Beat, CPT~To Bar, Beat, CPT) for the edit operation.

- Enter what should be changed and how it should be changed.
- Execute the operation by pressing Part Select [M.DRUMS] (Execute).

Example: using Erase to remove Panpot settings

Note: Save your User Style to disk before continuing if you wish to keep the original Style. See "Saving your Style to disk" on page 111.

 Press [F1] (Erase) (or [SHIFT]+[F1]) on any User Style Edit page to select the Erase function.



- (2) Use the [DRUMS/PART] ▲▼ buttons to select the track whose data you wish to delete.
 The default setting is the last track you selected.
 Let's select 3AC1 (the first accompaniment track).
- (3) Use the [ACCOMP/GROUP], [BASS/BANK], and [LOWER/NUMBER] ▲▼ buttons to select the Mode (M, m, 7), the Type (B, A), and Division (Or, Va, Fo, Fv, In, Ed).
- (4) If you haven't yet selected the User Style to edit, you can do so now using the [UPPER/VARIATION] ▲▼ buttons.

Select User Style 1.

(5) Press [PAGE]▼ to select the Edit\Erase\2 page.



- (6) Press [DRUMS/PART] ▼ to select the From level, and specify the position where the G-600 is to start erasing ([ACCOMP/GROUP] Bar, [BASS/BANK] Beat, and [LOWER/NUMBER] CPT).
 Leave the default values (From 1-1-0 to end of track) as is to erase the data of the entire track.
- (7) Use the [UPPER/VARIATION] ▲▼ buttons to select the Data Type to be erased. Set Data Type to PanPt.
- (8) Press Part Select [M.DRUMS] (Execute) to erase the selected data.

Track Erase ([F1])

Track Erase allows you to remove notes and/or other MIDI events (Note, Modul, PanPt, Expre, Revrb, Chorus, PChang, PBend, NRPN) from the selected track without removing the measures themselves:



You can use Erase to remove just one type of data (for instance the continuous Panpot settings you recorded in realtime on page 117), while keeping all other data you recorded. In other words, Erase is a "selective" delete function.

Note: This function is duplicated by the Micro\Erase function.

Track Delete ([F2])

Though similar to Erase, the Delete function also removes the selected measures. You cannot select the data type to be deleted because Delete removes everything.



At first sight, Delete may appear to duplicate the Length function (see page 109), but Delete is more flexible: whereas Length always leaves the beginning of a pattern intact, you can set the Delete From/To pointers in such a way that only the first bar of a pattern will be erased, for instance.

Delete means "delete all measures within the specified range" (for example bars 1 and 2 of a pattern, so that bar 3 becomes bar 1).

Track Insert ([F3])

Insert allows you to make an existing pattern longer by adding rests at the specified position. This will make room for new data and shift data that lie behind the From position further to the right. New data can either be added in realtime (do select Record Merge, though), by copying them to the specified position (see page 114), or in Microscope mode (see page 123).

Note: The Insert function does not provide a To pointer. Instead, you have to specify the length of the insert using the For value. "For 2 Bars, 2 Beats, 240 CPT" thus means "insert 2 bars, 2 beats and 2 beats" (because $120CPT = \frac{1}{2}$).

Note: This function is duplicated by the Micro\Insert function.

Track Transpose ([F4])

Transpose allows you to change the key of what has already been recorded. It can be invaluable for tricky Intro/Ending patterns that you prefer to play only once. Copy the excerpt and transpose it in accordance with the harmonies of the other tracks.

Track Velocity Change ([SHIFT]+[F1])

Velocity Change allows you to boost (positive values) or reduce (negative values) the velocity of what you recorded. Use this function to make a part (or an excerpt) louder or softer.

Track Quantize ([SHIFT]+[F2])

Use this function if you chose not to quantize your music during recording and then realize that the timing is not quite what you expected it to be. Quantizing after recording has the advantage that you can first listen to the original and then correct only those notes whose timing is definitely off.

Quantizing during recording, on the other hand, will correct the timing of *all* notes, which tends to make a track sound robot-like.

Track Change Gate Time ([SHIFT]+[F3])

As stated earlier, Hold messages (CC64) sent by an optional DP-2, DP-6, or FS-5U foot switch are converted into the equivalent duration. Gate Time allows you to correct erroneous "Hold messages" by reducing the duration of the corresponding notes.

You can also use Gate Time to make existing notes longer (or shorter). That may be necessary if you recorded a track using a Tone with a long release, and then decide to use a Tone with a shorter release (or vice versa).

Track Shift ([SHIFT]+[F4])

Shift allows you to move notes you have already recorded. This function is useful when you record User Styles based on sequences (see "Programming User Styles via MID1" on page 118) and then notice that all parts were recorded with a short delay. It is also useful for Tones with a slow attack. (Shift allows you to position all notes of such parts a little ahead of the mathematically "correct" clock). Again, Shift is applied to the selected To/From range.

Note: This function is similar to the Micro\Move function.

Editing in Micro mode

The G-600's Micro mode is identical to the Microscope mode of a Roland MC series sequencer or the Grid Edit (or whatever it may be called) mode of a sequencer program. It allows you to edit events (notes, modulation data, program change, bank select, etc.) on a step-by-step basis.

A typical Micro page looks like this:



Most Micro pages feature a PLAY parameter (press the corresponding Part Select button) that allows you to audition the selected note (bank select messages, etc., obviously cannot be auditioned but will change subsequent notes). Notes will also be played back when you scroll through the events using the [PAGE] \blacktriangle buttons.

As its name implies, the Micro mode is far more precise than the Edit functions – but also more time-consuming. Choose whichever mode is more convenient for you to modify existing data.

Here is how to select the Micro mode:

- (1) Press [F4] (UsrStl) to call up the Micro mode.
- On any User Style\Rec page, hold down [SHIFT] and press [F2] (Micro).



- (3) Select the track and pattern (Mode, Type, Division) you wish to edit in Micro mode.
- (4) Press Part Select [M.DRUMS] (Proceed) to continue or Part Select [UPPER1] to listen to the selected pattern.



(5) Select the edit function you need by pressing the corresponding function key.

Micro function	How to select it
Change	[F1] (Chnge)
Erase	[F2] (Erase) (or [SHIFT] + [F2])
Insert	<pre>[F3] (Insrt) (or [SHIFT] + [F3]) - Insert event [SHIFT] + [F1] (Insrt) - specify the type and value of the inserted event</pre>
Move	[SHIFT] + [F1] (Velo) (or [F1]) – Select the event to be moved [SHIFT] + [F1] (Velo) – Specify the new posi- tion of the selected event
Сору	[SHIFT] + [F2] (Copy) (or [F2]) – Select the event to be copied [SHIFT] + [F1] (Copy)– Specify the destina- tion

See the Reference Guide for details about these functions. On the whole, they are pretty straightforward and sufficiently flexible to grant you a considerable amount of liberty.

Note: If you are interested in a guided tour about inserting events, see "Example: recording in Step time" on page 124.

Note: Every time you leave a Micro page (to select another function) or the Micro mode (by pressing [F5] (Exit), the display responds with an Executing message to indicate that your changes are being processed. There is no way to leave the Micro mode without confirming your latest settings (which might act as Undo). In other words, even if you do not Execute a function, it will nevertheless be carried out as soon as you leave the Micro mode. In Micro mode, you can press [F4] to return to the first Micro page (see above).

12.7. Example: recording in Step time

You can also record in Step time using the User Style Micro function. Let's program the following drum pattern (one bar):



It is a simple groove consisting of a bassdrum (C2 or MIDI note number 36), a snare (D2 or note number 38), and a HiHat (F#2 or note number 41).

Let's assume that the User Style memories are empty. If that isn't the case, see page 126 for how to delete User Styles.

The first thing we have to do is create an empty measure using the Length function.

Specifying the pattern length

- (1) On the Master page press [F4] (UsrStl).
- (2) Press [F2] (Length).
- (3) Use [PAGE]▼ to select the In/Ed Length page.



- (4) Use [DRUMS/PART] ▲▼ to select All (all tracks) or IADR.
- (5) Use the [ACCOMP/GROUP] ▲▼ buttons to place the cursor (the black line) on the M-B line of the In column.
- (6) Press [BASS/BANK] ▲ to enter the value 1. Our pattern will indeed be 1 bar long.
- (7) Press Part Select [M.DRUMS] (Execute) to confirm the length you specified.Wait until the OK Function Complete message has disappeared.

(8) Press [F4] to jump back to the first User Style page.

Step time record

(9) Hold down [SHIFT] while pressing [F2] to select the User Style\Micro mode.



(10) Select the 1ADR track and set Mode=Maj, Typ= Bsc, and Division= In.

The name of the ADR track must appear in uppercase letters.

(11) Press Part Select [M.DRUMS] (Proceed) to select the next Micro page.

(12) Press [F3] (Insert).

Since there is no "create event" function, we have to look for another way to create events. Inserting events actually comes down to creating new ones.

BAR BEAT CPT	STATUS		GATETIME	
\$998.01.000	<cc 00=""></cc>		(Bnk) (Bnk)	MICRO 1Chn9e
	PC	33	1.01.067	<u>zErase</u>
8998.01.001	C#2: 37	127	65536	44MiCr
TEAR TEA	T TCPT	Ē	ROCEED	SEXIT

Let us start with the bassdrum.

- (13) Use the [DRUMS/PART] ▲▼ buttons to set Bar= 1.
 - The Beat and CPT values are already set to "1" and "0" respectively, so there is no need to change them here.
- (14) Press Part Select [UPPER1] (Proceed).

BAR BEAT OPT	STATUS	VELO	GATETIME	
* 8998.01.000		=		MICRO
	1			Insert
	1			34Insr
1	1			44MiCr
EXECUTE STATUS	DATA-1	DATA-2	DATA-3	sExit
	₩.	¥ .	★ 1	

You have just inserted an event that is now selected but still empty. Let us define the event:

(15) Press the C2 key on your keyboard.

If you hear a bassdrum sound, you hit the right C. You could also select the note using the [BASS/ BANK] ▲▼ buttons but that takes more time..

(16) Use the [LOWER/NUMBER] ▲▼ buttons to correct the velocity value if necessary (127 would be a good choice). If you specify the note via the keyboard, the G-600 also reads the velocity value and inserts it.

(17) Use the [UPPER/VARIATION] ▲▼ buttons to set the GateTime value (duration) to 1.

Since one quarter note equals 120 CPT, the duration of the note will be extremely short. However, for melodic parts, specify the right Gate Time (see the table below):

Note	СРТ	Note	СРТ
o	480	♪₃	90
6	240	٦ ا	60
٦	120	۶	30

- (18) Press Part Select [M.DRUMS] (Execute) to confirm your settings.
- (19) Enter the values Bar= 1, Beat= 1, CPT= 60 using the [DRUMS/PART], [ACCOMP/GROUP], and [BASS/BANK] ▲▼ buttons respectively. You just specified the second quaver (eighth note) of the first beat.
- (20) Press Part Select [UPPER1] to insert an empty event and jump to the second Insert page.
- (21) Press the C2 key on your keyboard.
- (22) Use [LOWER/NUMBER] ▲▼ to set the velocity value to 90.
- (23) Use the [UPPER/VARIATION] s t buttons to set the GateTime value (duration) to 1.
- (24) Press Part Select [M.DRUMS] (Execute) to confirm your settings.
- (25) Now insert the remaining notes.
 - For your reference, here are the positions to specify and the keys to press:

N	1-2-60	90	(2, (26)
Bassdrum	1-3-0	127	C2 (36)
	1-2-0	120	03 (38)
Snare	1-4-0	127	D2 (38)
	1-1-0	127	
	1-1-60	100	
	1-2-0	115	
HiHat	1-2-60	100	F#2
	1-3-0	120	F#2
	1-3-60	100	
	1-4-0	115	
	1-4-60	100	

As you see, it is perfectly possible to program sequences in Step time.

- (26) Press [F4] (Micro) to return to the Track Microscope edit page.
- (27) Press [SHIFT]+[F1] to return to the User Style\Rec page.
- (28) Press [START/STOP] or Recorder [PLAY ►/STOP] to listen to your pattern.

Note: If you want to scroll through the events, use the [PAGE] $\blacktriangle \forall$ buttons.

12.8. Deleting a User Style from a User Style memory

Delete is a function that allows you to remove a User Style from the G-600's internal memory. Before even thinking about selecting Delete, save the Style you are about to sacrifice to disk unless you are totally and utterly sure that you will never need it again.

Alright, we warned you... So here is how to delete one or several Styles:

 In User Style mode, hold down [SHIFT] and press [F4]
 (Dlete) (or just press [F4] if the 4 Dlete function is "on the menu").



- (2) Use the [ACCOMP/GROUP] ▲▼ buttons to place the cursor on the User Style you wish to delete, or use [UPPER/VARIATION] ▲▼ to select the first four Styles (1~4), the next four (5~8) or all Styles. You can also select Style 1, 5, and 8 to be deleted. To do so, select them and press [F3] (Mark) to mark them (*).
- (3) After selecting the Styles to be deleted (do yourself a favour and double-check this), press Part Select
 [M.DRUMS] (Execute) to delete the Style(s). The display will respond with:



The Styles will be deleted, after which the display tells you:



The display now returns to the first User Style\Rec page.

13. MIDI

MIDI is short for *Musical Instrument Digital Interface*. The word refers to many things, the most obvious being a connector type that is used by musical instruments and effects devices to exchange messages relating to the act of making music. Every time you play on the G-600's keyboard or you start the Arranger, your instrument will send MIDI data to its MIDI OUT port. If you connect that port to the MIDI IN port of another instrument, that instrument may play the same notes as one of the G-600's parts.

MIDI is a language that translates every action relating to music into binary digits that can be transferred via a MIDI cable. It is a universal standard, which means that musical data can be sent to and received by instruments of different types and manufacturers. Furthermore, MIDI allows you to connect your G-600 to a computer or hardware sequencer.

13.1. MIDI in general

Requirements for receiving and transmitting MIDI data

MIDI connectors

MIDI messages are transmitted and received using three connectors and special MIDI cables:

Connector Function				
MIDI IN	This connector receives messages from oth- er MIDI devices.			
MIDI OUT	This connector transmits MIDI messages generated on your G-600			
MIDI THRU	This connector "echoes back" all MIDI mes- sages received via MIDI IN			

Explaining MIDI in great detail lies beyond the scope of this Player's Guide. There is a booklet called *MIDI Guidebook* available from your Roland dealer that tells you the ins and outs of MIDI.

Channels

MIDI can simultaneously transmit and receive messages on 16 channels, so that up to 16 instruments can be controlled. Nowadays, most instruments –like your G-600– are multitimbral, which means that they can play several musical parts with different sounds.

That concept is not difficult to understand. Just think of your G-600: it is equipped with an Arranger capable of playing the drums, the bass, and up to six accompaniment part, while at the same time allowing you to play up to four Realtime parts (Upper1, Upper2, Lower, and Manual Bass). The capacity to play all those parts using different Tones or sounds is called multitimbral. The same is true of sound modules such as the Sound Canvas series, the JV-2080, and indeed the XP series synthesizers.

MIDI data

The most important aspect of the MIDI standard is that it allows one instrument to tell another when to play a note, for how long, and how strongly it should be played. These messages are called note-on, note-off, and velocity messages.

Other aspects of a musical performance include modulation (vibrato), Pitch Bend (bending), volume, panpot, etc. See the MIDI Implementation Chart for the MIDI data that your G-600 receives and transmits.

Yet another group of MIDI messages is used to tell the receiver when to select another sound and which sound to select. These messages are called bank select, and program change. In fact, these are the messages that are automatically recorded at the beginning of each Style division or saved to a Performance Memory so that you can recall the Tone selection for all available parts pressing just a few buttons. Program change and bank select messages also allow you to select Performance Memories, Styles, and Drum Sets (for the MDR and ADR parts).

Still other MIDI data allow you to synchronize two MIDI instruments so that they start and stop at the same time and run at the same tempo. You may remember that is what we did while programming User Styles via MIDI (see page 118). Finally, MIDI also allows to transmit parameter values. 1.

MIDI on your G-600

Again, this introduction does not cover everything that could be said about MIDI. It is merely intended to give you an idea of what you can do and to encourage you to explore the countless possibilities of MIDI.

MIDI channels & RX parts

Before showing you the factory assignment of the G-600's parts to the MIDI channels, there is something else you have to know. Your Arranger Workstation is equipped with three parts that can only be played via MIDI. Though they work the same as the G-600's Realtime parts, you cannot select them on your G-600 or play them via the keyboard. You could take advantage of those RX parts when using a computer or hardware sequencer for sequencing. Another way to use these parts would be to connect the MIDI OUT of a MIDI master keyboard (such as an A-33 or A-90) to the G-600's MIDI IN port, split the master keyboard and control two of the G-600's RX parts by playing on the master keyboard.

In other words, if, at one stage or another, you think about expanding your system, consider a MIDI master keyboard because the G-600's tone generator still has room for three more parts.

Here are the MIDI channel assignments:

Part	MIDI channel	Part	MIDI channel
Upper1	4	A.Drums	10
Upper 2	6	A. Bass	2
Lower	11	Ac1	1
M.Bass	12	Ac2	3
M.Drums	16	Ac3	5
RX1	13	Ac4	7
RX2	14	Ac5	8
RX3	15	Ac6	9
Style Select	10'		
Basic Channel	13 (Off)**		

* This is possible because the Drum Sets are assigned to CC0= 0 numbers, while the Style Select messages are always assigned to CC0 \neq 0 numbers.

** On in TX mode

These factory assignments are the same for sending (TX) and receiving (RX) MIDI data but can be set individually. Unless you have a very good reason, we recommend that you do not change them. Setting another MIDI receive or transmit channel may, however, be necessary for compatibility reasons with older Roland Intelligent Arrangers or sequences you recorded before purchasing the G-600.

13.2. MIDI connections

Receiving MIDI data from external instruments

To take advantage of the G-600's sounds while playing on an external keyboard or using a computer or sequencer, you must make the following connections:



Other controllers that can be used include triggerto-MIDI instruments (TD-10, TD-7, TD-5, SPD-11, Octapad II), guitar-to-MIDI instruments (GR-30, GR-1, GR-09, GI-10) as well as any other kind of "to MIDI" controller (wind, MCR-8 fader unit).

Note: All G-600 parts (except the Basic Channel and RX1~RX3) are set to receive MIDI messages. If they do not seem to respond to the messages you send from the external controller, you should check whether the channel settings match.

Sending MIDI data to external instruments or computers

To have another instrument sound in response to the notes you play using a given G-600 part, or to have a computer or sequencer record what you are playing, you must make the following connections:



If you want an external module to sound in response to the data sent by the Upper1 part, connect the module's MIDI INput to the G-600's MIDI OUT port.

Note: All G-600 parts (except RX1~RX3 that are only available for reception) are set to send MIDI messages. If your external module docs not seem to respond to the messages you send, you should check whether the channel settings match.

13.3. Receiving MIDI data

As stated above, changing the factory set MIDI channel assignments is probably not a very good idea. It may be necessary, though, to address certain problems related to the other MIDI instruments you use.

These assignments can be saved to a MIDI Set and recalled whenever you need them (see page 135). That also means that any changes you make in MIDI mode are not automatically saved when you power off your G-600 – nor are they saved to a Performance Memory.

Receive channels (RX)

Realtime sections (RTime)

Let us set the Upper1's MIDI receive channel to 16:

(1) On the Master page, press [F3] (Midi).



- (2) Press [F1] (RTime) to select the Realtime level. The RX page is already selected, otherwise use the [PAGE] ▲▼ buttons to select it. (RX is short for M1DI reception.)
- (3) Use the [DRUMS/PART] ▲▼ buttons to select the Upper1 (UP1) part.
- (4) Use the [ACCOMP/GROUP] ▲▼ buttons to set Channel = 16.
- (5) Press [F5] (Exit) to return to the Master page.

Arranger section (Arrang)

Assigning other MIDI receive (RX) channels to the Arranger (ADR, ABS, AC1~AC6) parts is similar to assigning a receive channel to a Realtime, except that in step (2), you have to press [F2] (Arrang). Note: Apart from the Realtime parts, you can also select the three RX parts (1, 2, and 3) on the Arrang page, i.e. the Realtime parts that can only be played via MIDI.

NTA channel

You may remember (see "NTA (Note To Arranger)" on page 65) that NTA is short for Note to Arranger, or the notes you play in the chord recognition area. These notes can also be received via MIDI. If you want the Arranger to use these notes, you must send them on the MIDI channels assigned to the NTA function.

You probably noticed the plural in "channels". There are indeed two NTA receive channels so that you could use the G-600 as realtime arranger module for a MIDI accordion or any other MIDI instrument capable of transmitting on two channels. (MIDI accordions send their chord and bass notes on different MIDI channels, which should be no problem for your G-600.)

You could also take advantage of these two NTA channels to control the Arranger from two external master keyboards or a PK-5 MIDI bass pedal unit.

- (1) On the Master page, press [F3] (Midi).
- (2) Press [F4] (NTA) to select the NTA level.



Note that there is no need to select the RX page because there is no TX page for the NTA level. The notes you play on the G-600's keyboard are indeed transmitted to the Arranger, from there to the Arranger parts, and used to play the accompaniment in the right key. Since all Arranger notes are transmitted via MIDI, there is no need to send the NTA notes via MIDI.

Before setting the (or just one) NTA receive channel, see the manual of your external MIDI controller to find out which channel(s) it transmits on.

- (3) Use the [DRUMS/PART] ▲▼ buttons to set the first NTA receive channel (1'rx Ch) and [ACCOMP/GROUP] ▲▼ to set the second NTA receive channel (2'rx Ch).
- (4) Press [F5] (Exit) to return to the Master page.

Basic channel

The Basic Channel is the MIDI channel used for receiving and transmitting program change and bank select messages relating to the selection of Performance Memories. In other words, every time you select a Performance Memory on your G-600, it will transmit a series of MIDI messages on the MIDI channel you select on the TX page.

Likewise, if the G-600 receives a series of messages (bank select and program change) on the Basic channel, it will select the Performance Memory that is assigned to the numbers contained in the received MIDI messages.

Just like the Realtime and Arranger parts, the Basic channel's receive (RX) and transmit (TX) channels do not need to have the same numbers. It is perfectly possible to select Basic RX=10 and Basic TX=4, for example. Doing so, however, tends to be confusing. As a rule, you should make up your mind about which section should receive and transmit on which MIDI channels and stick to it at all times.

Here is how to set the Basic receive channel:

(1) On the Master page, press [F3] (Midi).

(2) Hold down [SHIFT] while pressing [F1] (Basic).



If the RX page is not selected, press [PAGE] ▲▼ to select it. The TX page allows you to specify the Basic transmit channel.

- (3) Use the [ACCOMP/GROUP] ▲▼ buttons to set the Basic receive channel.
- (4) Press [F5] (Exit) to return to the Master page. To specify the Basic transmit channel, press
 [PAGE] ▲▼ to select the Basic TX page.

Style Select channel

As its name implies, the Style Select channel is used to receive and transmit program changes that cause the G-600 or the receiver to select another Music Style. Note that the User Style memories can also be selected via MIDI.

Let us set the Style Select transmit (TX) channel to 1:

- (1) On the Master page, press [F3] (Midi).
- (2) Hold down [SHIFT] while pressing [F2] (Style).
- (3) Press [PAGE]▼ to call up the MIDI\Style\TX page:



- (4) Use the [ACCOMP/GROUP] ▲▼ buttons to set Channel to 1.
- (5) Press [F5] (Exit) to return to the Master page.

13.4. Transmit (TX) channels and transmit switches

The transmit channels of the Realtime and Arranger sections as well as of the Basic, and Style Select channels are the MIDI channels on which the respective parts or functions send their data. Setting them is similar to setting the receive channels, except that you have to select the TX page. A typical TX page looks like this:



If you do not want a part to select MIDI messages, set the Channel switch to Off.

13.5. Other MIDI settings

Switching Off MIDI reception/ transmission

As stated above, the G-600's parts are set to send and receive MIDI data. In some cases, however, you may not want a certain part to respond to MIDI messages received from an external controller. Likewise, you can play a G-600 part without it sending MIDI messages to the receiver. In those cases you have to set MIDI reception or transmission to *Off* using the On/Off switch located below the selected part's MIDI channel.

Suppose that you do not want the ADR part to send MIDI data to an external module. Here is how to switch off MIDI transmission:

- (1) On the Master page, press [F3] (Midi).
- (2) Press [F2] (Arrang) to select the Arranger level.
- (3) Press [PAGE] ▼ to call up the MIDI\Arrang\TX page:



- (4) Select the ADR part using the [DRUMS/PART] ▲▼ buttons.
- (5) Press the Part Select [M.BASS] button to set the Channel switch to Off.

The ADR part will no longer transmit MIDI data (channel 10).

(6) Press [F5] (Exit) to return to the Master page.

MIDI receive/transmit filters

Turning off MIDI reception by pressing the Part Select [M.BASS] button of the selected part on the MIDI\...\RX or MIDI\...\TX page means that the part in question no longer responds to or sends MIDI data. It is also possible, however, to specify just one or a few types of messages that should not be received or transmitted rather than turning off MIDI reception altogether.

Thus, if you want the Upper2 part to play the *notes* received via MIDI without selecting another Tone in response to incoming bank select and program change messages, you must activate MIDI reception but switch off reception of MIDI program change/bank select data. That is what the Filter parameter on the RX pages is for.

The messages that can be filtered are: PChng (program change), PBend (pitch bend), Modul (modulation), Volum (volume), PanPt (pan), Expre (Expression), Hold, Sost (Sostenuto), Soft, Revrb (reverb), Chors (chorus), Delay, RPN (registered parameter number), NRPN (non registered parameter number), SysEx (system exclusive), CC32=0 (reception only).

Let us activate the bank select/program change filter for the Upper1 part so that it doesn't select other Tones in response to MIDI messages received from an external controller:

- (1) On the Master page, press [F3] (Midi).
- (2) Press [F1] (RTime) to select the Realtime level.
- (3) Press [PAGE] ▲▼ to call up the MIDI\RTime\RX page:



- (4) Use the [DRUMS/PART] ▲▼ buttons to select UP1 (Upper1).
- (5) If necessary, press [LOWER/NUMBER] ▲▼ to select Filter= PChng.
- (6) Press Part Select [UPPER2] to set the Filter switch to Off.

If you want to filter other MIDI messages, select them using the [LOWER/NUMBER] ▲▼ buttons

and press Part Select [UPPER2] to switch off reception.

To activate reception of one of these message types, press Part Select [UPPER2] to select On again.

Note: The above setting (PChng) also means that the Upper1 part does not respond to bank select messages.

One switch, CC32=0, only allows you to select Old or New. You may remember this switch from the Recorder mode (see page 76): it specifies whether to select an A/B (New) or C/D (Old) Tone whenever the CC32 bank select message is missing or equals 0. That allows you to take advantage of the G-600 sounds without editing the sequence that your are playing back.

(7) Press [F5] (Exit) to return to the Master page.

Shift and TX Octave

The Shift function on the RX and TX pages allows your to transpose MIDI note messages in semitone steps before sending them to the G-600's tone generator (RX) or to the MIDI OUTput:



You could play in the key of D, but send the corresponding MIDI note numbers in the key of A by setting the TX Shift parameter of the part in question to +7. The same is true of the notes received via MIDI IN: you can transpose the notes sent by the external MIDI master keyboard or sequencer before sending them to the G-600's tone generator, so that a melody in the key of A will be played back by the G-600 in the key of C#, for example.

- (1) On the Master page, press [F3] (Midi).
- (2) Hold down [SHIFT] while pressing [F3] (Param).



The TX Octave parameter can be set to *Absolute* or *Relative*. It applies to Tone selection. You may have

noticed that whenever you assign a bass sound to the Upper1 part in Split Keyboard Mode, the notes are transposed in such a way that you can play a meaningful bass line using the Upper1 part. Relative means that this internal (and automatic) transposition is translated into note numbers, so that playing a C4 (note number 60) may actually result in note number 36 being played and sent to the MIDI OUT port. This, of course, depends on the Tone you assign to the Upper1 part.

In Absolute mode, however, the MIDI note number sent to the MIDI OUT port will be the one assigned to the key you press (e.g. note number 60). The advantage of being able to choose between Absolute and Relative is that you can play a bass line using the G-600's Upper1 part and double it with a trumpet of an external instrument.

Note: If you decide not to use the TX or RX Shift values, you can set the corresponding switch to Off. That is quicker than setting all Shift values back to "0".

If the [TRANSPOSE] indicator lights, all parts are transposed before being processed by the TX Shift parameter. In other words, that conversion takes place before reaching the TX Shift stage.[TRANS-POSE] has the advantage that it applies to all Realtime and Arranger parts simultaneously, while TX Shift has to be set for each part individually.

Zones (Low/High Limits)

All Realtime and Arranger MIDI\RX pages as well as the MIDI\NTA page feature two Limit parameters, allowing you to "narrow" the MIDI note range to be received by the respective parts.



As you see, the switch below the Limit knob currently reads High, meaning that you can use the [UPPER/VARIATION] ▲▼ buttons to set the upper note limit. The value in the above illustration means that the highest note the ADR part will play is C#6. Sending a D6 on MIDI channel 10 will not cause the ADR part to sound.

Press the Part Select [UPPER1] button to select Low. Now you can set the lower limit of the ADR part. If you set it to C4, for example, the notes B3~C-1 no longer cause the ADR part to sound.

Set the Low Limit using the [UPPER/VARIATION] ▲▼ buttons.

The greatest advantage of the Limit parameters is that they allow you to program splits applied to MIDI data. If you use a digital piano without split function as master keyboard, you could split the Upper1, Upper2, and Lower parts as follows:

- (1) Select the same receive channel for Upper1, Upper2, and Lower (see page 129).
- (2) On the MIDI\RTime\RX page, set the following Limit values:

Part	Limit High	Limit Low
Upper1	G8	C#5
Upper2	C5	C4
Lower	B3	C-1

You now have three zones on the piano keyboard. Note that you could refine your splits by defining another range for the Manual Bass part, while still keeping one octave for the Arranger (NTA)!

Local function

The Local parameter on all Realtime and Arranger MIDI\TX pages allows you to establish or remove the connection between the G-600's keyboard and the internal tone generator.



When set to On (factory setting), playing on the G-600's keyboard will cause the corresponding notes to sound. If you select Off, the MIDI data of the corresponding part are no longer sent to the

internal tone generator. Local doesn't, however, interfere with the transmission of the corresponding MIDI data to MIDI OUT.



Use the [UPPER/VARIATION] ▲▼ buttons to set Local to Off if you do not want the G-600 to sound in response to the notes you play using the part in question.

You may want to use the Off setting for songs where the Upper1 part triggers an external synthesizer (such as the JP-8000) or sampler, while all other G-600 parts trigger the internal sound source. Local Off would allow you to play the Upper1 melody or solo on the G-600's keyboard while using the sound of an external instrument.

Local Off is also useful if you wish to use sampled grooves or backing vocals to be played back by a Roland DJ-70MkII or JS-30 Sampling Workstation. Activating Upper1 or Upper2 and setting its Local function to Off allows you to control playback of the sampled material to enhance your live performance.

13.6. Yet other MIDI settings

Rx Velo, TX Velo

The MIDI\Param page allows you to specify whether or not to receive and transmit MIDI velocity values, and if not, what fixed velocity value to substitute for the actual velocity values.

- (1) On the Master page, press [F3] (Midi).
- (2) Hold down [SHIFT] while pressing [F3] (Param) to call up the following page:



(3) Use the Part Select [M.BASS] or Part Select [LOWER] buttons to select On (receive or transmit velocity values) for rxVelo and txVelo respectively. If you select Off, you must specify the fixed velocity value to be used instead of the continuously changing velocity values that are actually received or transmitted.

(4) Use the [ACCOMP/GROUP] or [BASS/BANK] ▲▼ buttons to specify the fixed velocity values to be received or transmitted.

You could use this parameter to correct the fixed velocity values sent by a MIDIfied organ etc. If the values sent by that instrument are too high to produce the right timbre of the selected Tone, set the rxVelo value to 90, for example – and set the corresponding switch to Off (reception of MIDI velocity data Off). Older drum machines and velocity "unsensitive" instruments send fixed velocity values of "64", which may be too low to achieve the right timbre and volume of a Tone. In that case, try higher fixed velocity values.

Soft Thru (for digital pianos)

This function is particularly useful if you own a digital piano. When you set Soft Thru to On, all notes received on an NTA channel (see page 129) beyond the NTA's High and Low Limits are re-transmitted to the MIDI OUTput. In other words, if you set the NTA Limits to Low= C2/High=C4, all notes to the left of the C2 and to the right of the C4 will be sent to the MIDI OUTput and can be used to sound other notes on an external MIDI instrument.

This setting is in fact similar to the splits we talked about when discussing the use of the Limit parameters (see page 132): use the Soft Thru feature for a digital piano or other keyboard instrument that doesn't have a split function. Doing so allows you to play the piano's sounds with your right hand, while G-600's Arranger is triggered by the keys you press in the zone you specify using the NTA's Limit parameters.

Here is how it works:

- (1) Connect the digital piano's MIDI OUT to the G-600's MIDI INput.
- (2) Connect the G-600's MIDI OUTput to the MIDI INput of your digital piano.
- (3) Use the [UPPER/VARIATION] ▲▼ buttons to set Soft Thru to On.

The G-600 now sends a Local message (CC122) with a value "0" to the digital piano, which means that the piano's sound source no longer responds to the notes you play on its keyboard. Seeing that the G-600 echoes back all notes that are not used

to trigger the Arranger, however (the notes outside the Low/High Limit range), you hear what you play on the piano – except in the zone set apart for the Arranger.

When you set Soft Thru back to Off, the G-600 sends a Local message with a value "127", thereby switching the piano's Local function back on.

13.7. MIDI synchronization

We already discussed Arranger synchronization via MIDI because we needed that function for recording User Styles via MIDI. See "Connection and synchronization" on p. 119.



Note that the Recorder also sends and receives Song Position Pointer messages.

On the Master page, press [F3] (Midi), then hold down [SHIFT] and press [F4] (Sync) to select a Sync page. [PAGE] ▲▼ allow you to select the RX or TX pages. Select RMTE1 if the G-600's Arranger is only to receive MIDI Start/Stop messages without locking to the MIDI Clock messages.

Note: If you select MID11 or MID12 (RX), you can no longer start Arranger or Song playback on the G-600. Instead, you have to start the external MID1 clock source.

13.8. MIDI Sets

MIDI Sets are in fact performance memories for the settings you make in MIDI mode. The G-600 has eight MIDI Set memories on board that you can use to change your MIDI configuration. You can also save your MIDI Sets to disk and load them whenever necessary.

Writing a MIDI Set

Memory Protect

The Memory Protect function is activated every time you switch on your instrument. Memory Protect does what its name implies: it protects your Performance Memories and MIDI Sets from accidental erasure. See page 59 for details.

Writing your settings to a MIDI Set

(1) Press and hold down the [WRITE] button (the [MIDI SET] indicator lights).

The display asks you whether you are sure you want to write your settings to a MIDI Set. If you are, go on. Otherwise, release the [WRITE] button.



You may wonder why you have to keep [WRITE] depressed. We did that so that it is impossible to accidentally overwrite an existing MIDI Set. After all, you may very well hit the wrong button while performing, and the last thing you want to do is overwrite the settings you took so much time to program.

(2) Press a MUSIC STYE/MIDI SET number button to save your MIDI settings to the corresponding MIDI Set.

The display briefly confirms that your settings have been written to the memory you selected:



(3) Release the [WRITE] button.

Selecting a MIDI Set

- (1) Press the [MIDI SET] button (Music Style section) so that its indicator lights.
- (2) Press a Music Style number button to select the corresponding MIDI Set.

Saving MIDI Sets to disk

After programming 8 MIDI Sets, you may find that you need a few more and that you have to make room for the new MIDI Sets. To do so without losing the previously written MIDI Sets, you must save the "old" set to disk. Even if you do not program more than 8 MIDI Sets, it is a good idea to make a backup copy of your MIDI Sets in case someone else starts fiddling around with your settings.

- (1) On the Master page, press [F5] (Disk).
- (2) Press [F2] (Save) to select the Disk\Save level.
- (3) Use the [PAGE] ▲▼ buttons to select the Save\MDI Set page:



Before saving a MIDI Set to disk, you should name it. Choose a name that tells you something about the contents. Use the [LOWER/NUMBER] $\blacktriangle \nabla$ buttons to select the character position and the [UPPER/VARIATION] $\bigstar \nabla$ buttons to assign a character to the selected position.

(4) Insert a formatted floppy disk into the drive and press Part Select [M.BASS] (Execute) to save your MIDI Set to disk.

Remember that your G-600 is multitasking, so that you can leave this page as soon as the G-600 starts saving the MIDI Set to disk.

(5) Press [F5] (Exit) to return to the Master page. Note: When saving, the term Set is used to refer to all 8 MIDI Set memories. In others words, when you write "a" MIDI Set to disk, you save in fact the contents of all eight MIDI Set memories. Loading, on the other hand can be carried out selectively:

Loading a MIDI Set from disk

As stated in the above note, you are free to load just one MIDI Set container of a given MIDI Set on the disk you inserted into the G-600's drive. Feel free to only load MIDI Set container 3 from a given MIDI Set if you do not need the other 7 settings of that Set.

- (1) On the Master page, press [F5] (Disk).
- (2) Press [F1] (Load) to select the Disk\Load level.
- (3) Use the [PAGE] ▲▼ buttons to select the Load\MDI set page:



- (4) Insert the floppy disk that contains the MIDI Set data to load into the disk drive.
- (5) Use the [ACCOMP/GROUP] ▲▼ buttons to select the MIDI Set (group) if your floppy contains more than one MIDI Set.
- (6) Use the [LOWER/NUMBER] ▲▼ buttons to select the MIDI Set container you wish to load.
 You can also select ALL, which means that all eight containers of the selected MIDI Set will be loaded. In that case, you cannot select the destination memory (see below).
- (7) Use the [UPPER/VARIATION] ▲▼ buttons to select the internal MIDI Set memory you wish to load the selected settings to.
 You can select Int= 1, =2, =3..., =8.
- (8) Press Part Select [UPPER1] (Execute) to load the MIDI Set data.
- (9) Press [F5] (Exit) to return to the Master page. The possibility to selectively load MIDI Set containers allows you to compile "Best Of" MIDI settings by loading them to different internal MIDI Set memories. After loading your 8 favorite MIDI settings, use the Save function to save the "Best Of" MIDI Set-set to disk.

14. Housekeeping

14.1. General remarks

Backups

A very important aspect of working with an instrument like the G-600 is to make backup copies of all important data. You may never need them but for a professional like yourself nothing is more embarrassing than to perform on stage (or in the studio), and suddenly find that the User Styles you took such great care to program can no longer be loaded from disk because the disk has become unreadable.

No musician in their right minds would ever dream of going on the road without at least one copy of every cartridge or floppy he or she needs to perform. Therefore, do take the time to backup all your data. See "Disk copy (backups)".

Do not forget to save all your settings in RAMbacked memory (Performance Memories, MIDI Sets, and Chord Sequence) before hitting the road. There is absolutely no excuse for not being able to perform because you forgot to save your internal settings to disk. After backing up your internal settings to disk, you should make a backup of that floppy.

See to it that you have all settings you need on at least two floppy disks that are stored in different locations. If one of these disks becomes corrupted, immediately back up the other one.

Sorry for being so patronizing but we have been there... A glass of beer, a helping hand that put the one-and-only floppy too close to a speaker... In a way, the data on disk are your capital and as such deserve to be protected.

Disk management

There are no hard-and-fast rules for which data to save to which floppy but we recommend that you work with at least two disk sets: one for your Recorder songs and another one for all the settings (Performance Memories, MIDI Sets, User Styles, Chord Sequences).

14.2. Disk copy (backups)

WARNING: The Disk Copy function takes advantage of the User Style RAM memory and erases all User Styles that reside in the G-600's internal memory. Before using Disk Copy, save all User Styles to disk if you haven't already done so (see page 111). Disk Copy copies *all* files of the Source disk (see below) to the Destination disk.

- (1) On the Master page, press [F5] (Disk).
- (2) Hold down [SHIFT] while pressing [F3] (Copy).
- (3) Press [PAGE]▼ to select the Disk level.



Note: The G-600 also provides a Song Copy function that allows you to copy Standard MIDI Files or Recorder songs to another disk. To copy songs, select the Disk\Song\Copy level.

As stated above, you will lose all User Styles that are currently in the internal memory.

(4) Press Part Select [UPPER2] (Proceed) to select the following page:



This message asks you to insert the original (or Source) disk into the drive. Before doing so, you should write-protect it.

- (5) Insert the original (Source) disk into the drive.
- (6) Press Part Select [LOWER] to load the first data block from the Source disk.

If you change your mind about copying disks, press Part Select [UPPER1] (Abort) instead. If you press Part Select [LOWER], the display now looks like this:



In other words, the G-600 is loading the first part of the data. Depending on the number of files on disk, you may encounter this message several times.

When the first part is loaded, the display switches to:



The message asks you to insert a blank disk into the disk drive. That disk will contain a copy of the original data and is therefore called Destination Disk. If the disk isn't formatted, you are given the opportunity to do so now.

Note: Always use a blank Destination disk because all data on the Destination disk will be erased.

- (7) Remove the Source disk from the drive and insert the Destination disk.
- (8) Press Part Select [LOWER] (Execute) to copy the data to the Destination disk.

If you change your mind about copying disks, press Part Select [UPPER1] (Abort) instead. If you press Part Select [LOWER], the display now looks like this:



As stated above, the Insert Source Disk message may be displayed again. If so...

(9) Remove the Destination disk from the drive and proceed with step (5) until the display tells you:



The display now returns to the Disk\Copy level.

(10) Press [F5] (Exit) to return to the Master page.

Note: You can go on playing while the Disk Copy function is in progress.

14.3. Renaming files on disk

The G-600 provides a Rename function that allows you to change the name of a User Style, User Style Set, MIDI Set, or Song you have already saved to disk. That may be necessary if you find that the current name doesn't tell you anything about the file's contents, or to make room for another file that has the same name but different data.

(1) Insert the floppy disk containing the file you wish to rename into the drive.

If the copy protect tab is set to PROTECT, set it to the WRITE position.

- (2) On the Master page, press [F5] (Disk).
- (3) Press [F3] (Rname).

played white-on-blue.

- (4) Use the [PAGE] ▲▼ buttons to select the file type to be renamed: User Style, User Style Set, Performance Set, MIDI Set, Chord Sequence, Song, or Song Set.
- (5) Use the [ACCOMP/GROUP] ▲▼ buttons to select the file you wish to rename. Place the cursor on the file's name so that it is dis-

If you select a Music Style or a Song for renaming, you must press Part Select [UPPER2] (Proceed) after selecting it before being able to change its name.

- (6) Use the [LOWER/NUMBER] ▲▼ buttons to select a character position and the [UPPER/VARIATION] ▲▼ buttons to select a character for that position. For User Styles and Songs, you can specify two names: the Style/Song Name, and the File Name. The File Name is the one that you will see if you use the dir function on an MS-DOS® computer (all G-600 disks are MS-DOS® compatible), while the Style/Song Name is the name that you will see on the respective display pages. The latter are called "meta-text events" that can only be read by the G-600. The File Name is more important than the Style/Song Name because the File Name is the one that is written to disk but it can only be 8 characters in length.
- (7) Press Part Select [M.DRUMS] (Execute) to rename the selected file or set.

If the new name already exists on disk, the display will warn you:



You can keep your name but doing so means that the file on of the same name will be erased. If that is what you wish to do, press Part Select [M.DRUMS] (Replace). Otherwise, press Part Select [UPPER2] (Exit) to specify a different name. If the name doesn't yet exist on the current disk, the display will execute the Rename function:



(8) As always, you can press [F5] (Exit) to return to the Master page while the G-600 completes the Rename operation.

14.4. Deleting files on disk

Deleting disk files means that they will no longer be on that disk. You should exercise great caution when using this function because there is no Undo or Recall function. Deleting files on disk can, however, be useful to make room for new files. Be sure to have at least one backup of the file or set you are about to delete because you never know ...

(1) Insert the floppy disk containing the file you wish to delete into the drive. If the disk's copy protect tab is set to PROTECT,

set it to the WRITE position.

- (2) On the Master page, press [F5] (Disk).
- (3) Press [F4] (Dlete).



- (4) Use the [PAGE] ▲▼ buttons to select the file type to be deleted: User Style, User Style Set, Performance Set, MIDI Set, Chord Sequence, Song or Song Set.
- (5) Use the [ACCOMP/GROUP] ▲▼ buttons to select the file you wish to delete.

Place the cursor on the file's name so that it is displayed white-on-blue.

(6) Press Part Select [LOWER] (Execute) to delete the selected file or set:





Player's Guide

(7) As always, you can press [F5] (Exit) to return to the Master page while the G-600 completes the Delete operation.

14.5. Initializing your G-600 (Load Factory Setup)

After working extensively with your G-600, you may want to recall the original factory settings. This is not indispensable because you could work with the factory Performance Memory (00 FreePnl) instead (see page 61). Initializing your G-600 means that all Performance Memory, Chord Sequence, MIDI Set, and User Style settings will be replaced with the original settings - except for the User Style memories that will be empty after initializing your G-600.

Here is how to initialize your G-600:

- (1) Power off your G-600.
- (2) Hold down the [WRITE] button while turning your G-600 back on again.

After loading the original factory settings, the display will read:

Original FACTORY SETUP has been LOADED !!

14.6. Compatibility

The G-600 is an Arranger Workstation featuring 689 sounds and 25 Drum Sets that can be freely selected and are used by the 128 on-board Music Styles.

The G-600 was designed to be compatible with earlier models, so that it can read all music data related to Roland Style disks: MSA (Atelier and KR series), MSD (E-96, E-86, E-66, and RA-95), and MSE (G-800, RA-800, G-600, and subsequent models). It also reads both format 0 and format 1 Standard MIDI Files.

Seeing that the G-600 contains sounds (or Tones) that are not supported by the GM or GS formats, certain songs recorded with the G-600 may not sound the way you expect them to when played back using an external sequencer and GM/GS compatible sound module. Therefore, if you wish to share your Standard MIDI Files with colleagues and/or friends, be sure to only select Tones supported by the GM standard or GS format. That is also true of the Tones the Arranger parts use. In some cases, they may indeed select a G-600 Tone, so that the selection messages for those Tones cannot be carried out by another GM or GS compatible sound module. See the Tone List at the end of this manual for the "compatible" Tones you can select.

As you know by now, your G-600 can read and write the following data types: Song data, Style data, Performance Memory (User Programs) data, MIDI Set data, Song Set data, Style Set data, and Chord Sequencer data. Your G-600 also accepts Lyrics data in Karaoke Type 0 format (used by Tune 1000 for example), and even Harmony data (MIDI data used to control devices that add harmony voices to what you are singing).

The G-600 data formats are 100% compatible with the following models: G-800 and RA-800. It can also read data generated on an E-96, E-86, and E-68, as well as Standard MIDI Files.

Creating GM/GS-compatible Standard MIDI Files

Here is what you should bear in mind when using the Recorder to write GM compatible Standard MIDI Files. Failure to do so will result in Standard MIDI Files that will not be played back as expected on a GM module. Therefore use only the following: If you wish to record your song as GS compatible Standard MIDI File, use the above media and disk format but only select GS Tones.

Disk Type

Format:

Tones

DOS

Only DD

Only GM sounds (see the Tone Chart)

Note: If a G-600 Style is used as backing during recording, this Style must only use Tones that are included in the GM/GS sound tables. Since the G-600 also contains Tones that are not part of the GM or GS formats (the 35 additional sounds), you should replace those Tones with equivalent or similar GM/GS Tones before recording. See "Assigning other Tones to the Arranger Parts" on page 54 for details.

User Styles that can be loaded

Disk Type:	DD/HD
Format:	DOS/Atari

Style Format: MSA (KR, Atelier), MSD (E-86, E-66, RA-95), MSE (RA-800, G-800, G-600)

G-600 Style format

Disk Type:	DD/HD
Format:	DOS
Style Format:	MSE (G-800, RA-800, G-600), cannot be
	loaded with older models

So much for the Player's Guide. We do hope you now have an idea about what your G-600 is capable of. Use the index to locate the functions you want to know more about, and be sure to read the explanations in the Reference Guide for full details about the G-600's functions. Have fun!

Roland



G-600

ARRANGER WORKSTATION

Part II: Reference Guide

Welcome to the Reference Guide of your G-600. Before telling you what to expect from this part, here are a few points that are not covered: Tone, Performance Memory, MIDI Set, Music Style, and User Style selection. See the Player's Guide for hands-on operations (such as how to record Songs, write your settings to a Performance Memory, use the Chord Sequencer, etc.)

As its name implies, this part is only for your reference: it explains the available parameters and their setting ranges, and gives you some hints about the way certain parameters are related to one another. That is why it may seem far more "technical" than the Player's Guide. The Reference Guide is typically a document you turn to whenever you come across a parameter you'd like to know more about – or to discover what else the G-600 can do for you.

One last thing: we chose to indicate the addresses of the various display pages using backslashes (\). You probably know that symbol is used by computer users to indicate the hierarchy of various directories (or folders). The leftmost entry is always the most important one – and in the case of your G-600 designates the mode.

Copyright ® 1997 ROLAND EUROPE. All rights reserved. No part of this publication may be reproduced in any form without the written permission of Roland Europe.

1. Before you start

Master page

The main mode of your G-600 is the Arranger Mode. The G-600 automatically selects this mode each time you power on the instrument.

When the Arranger mode is selected, you can play melody and accompaniment parts in realtime while controlling a backing section with the chords played in the chord recognition area.

The G-600 contains 128 internal Music Styles. Up to 8 User Styles can be loaded from disk or created – and selected and used in the same way as the "ROM Styles".

While in Arranger mode, you can scroll through different pages by pressing the Function keys located to the right of the display.

The Master page is the page that appears after powering on your G-600. While this page is displayed, you can select Music Style using the MUSIC STYLE/MIDI SET buttons on the front panel.



Style number and name

The number and name of the currently selected Style or song appear in the top line of the display. The G-600 contains 128 Styles that are divided into 2 Groups [A-B]. Each group contains 8 Banks [1-8], and each bank has 8 Styles (1-8). When the USER indicator of the [GROUP] button lights, you can select User Styles.

Use the Style selection buttons to choose the desired Style. See "Selecting Music Styles" on page 50 of the Player's Guide for details about selecting Styles.

Performance Memories [A11~C88]

The number and name in the upper left-hand corner show the currently selected Performance Memory Number and name. The G-800 provides 192 Performance Memories. A Performance Memory contains all panel settings and Part parameter values that were active at the time you saved them.

Using these Performance Memories, you can easily store and recall a complete registration with the dedicated Performance Memory buttons.

Tempo (20~250)

Using the TEMPO [-][+] buttons, you can easily set the right tempo for the Style accompaniments. The value can be set from 20 to 250. The display always indicates the currently set (and thus active) tempo.

Realtime Parts Tones

The fields located in this part of the display show the tones assigned to each one of the Real Time Parts. See "What are Parts?" on page 27 and "Selecting Tones for the Realtime parts" on page 32 in the Player's Guide for details. The available Realtime parts are: Upper1, Upper2, Lower, M.Bass, and M.Drums.

Graphic Chord Display, Recognised Chord

These areas of the display show a graphic representation of the keys pressed in the chord recognition area. The field next to the Graphic Chord display shows the name of the recognized chord. If the Bass Inversion function (see page 44 in the Player's Guide) is active, the chord names are shown with the leftmost note played indicated after a slash, e.g. C Maj /G. This means C major chord with "G" as leftmost note.

MIDI Set (1~8)

This field shows the MIDI set currently selected. As you know, the G-600's memory can hold 8 MIDI Sets. MIDI Sets contain all the MIDI settings (because the MIDI parameter settings are not saved to a Performance Memory).

Current division, time signature

This window indicates the currently selected Style division and time signature of the current style. The information in this window always reflects your actions on the front panel (or using an optional FC-7) and the values assigned to the new-ly selected division.

GM/GS mode Master page

In GM/GS mode, the Master page looks slightly different. The fourth option, [F4] UsrStl, is replaced by the Lyrics function. Note also the GS MODE message in the lower right-hand corner:

A11 Factory1 J= 83 04 4	I_STRAIG	MASTER 1Mixer
UP2 A11 Piano 1 UP2 A153 St.FM EP VLWR A723 Warm Strings		zParam 3Midi 4Lyrcs
SONG 04 :Straight to my	heart	5DiSk

Lyrics function (only available in GM/GS mode)

Press [F4] (Lyrics) whenever you wish to follow the on-screen, Karaoke type of lyrics display. This function is only available for Standard MIDI Files containing lyrics data. If you press [F4] during playback of a Standard MIDI File containing Lyrics data, the display will look similar to the following illustration:

"I'LL PROTECT YOU ALL DON'T WO	RRY I'LL
BE FATHER TO YOU ALL/ I'LL SAVE TWO OF EVERY ANIMAL,	NO MATTER
HOW SMALL/	
AFTER THE ZOO/	10 2001
SONG 04 :Rock Steady	5Exit

Press [F5] (Exit) to return to the GM/GS mode Master page.

Part Select buttons

These buttons are used to select the Realtime part you want to assign another Tone to. Remember that using the [PAGE] $\blacktriangle \nabla$ buttons may place a part on the top line without activating it for Tone selection.



G-600 modes

The G-600 interface is provided with different environments, each one related to a specific group of functions.

The Function keys [F1]~[F5] allow you to switch between different modes.

[F1]	Mixer (see page 147)
[F2]	Param (see page 153)
[F3]	Midi (see page 185)
[F4]	UserStl (see page 162) or Lyrics (see page 143)
[F5]	Disk (see page 197)

There are three other modes that can be selected using dedicated buttons: Arranger Chord, Volume, and Tone. The Volume mode (see page 144) allows you to set the volume of all G-600 parts, while Tone (see page 145) is a useful mode when you wish to assign other Tones to a part without having a clear-cut idea about the kind of Tone you need, or to assign other Tones to the Arranger parts, which may be necessary for GM/GS compatibility reasons.

The Arranger Chord mode allows you to fine-tune the Arranger's response to your playing and to select the chord recognition area.



G-600

2. Volume pages and Volume mode

⊃ Master page: [VOLUME]

Or use the \blacktriangle buttons below the display On the Master page, the 5 \bigstar pairs are assigned to the volume of the Real Time parts [Up 1 - Up 2 - Lower - M. Bass - M. Drum]. Whenever you press a \bigstar button, the Volume page will be selected (and the [VOLUME] indicator starts flashing).

MDR ADR	ACC	MBS	abs	1wr	upz	UP1	WOLUME
153 153	83		8	48	188	33	
.T. T.	中	19					3 4G16ā1
$\left \begin{bmatrix} \mathbf{I} & \mathbf{I} \end{bmatrix} \right $	<u>. </u>	[. <u> </u> .	<u> </u>			<u> </u>	sExit

Press the same \blacktriangle button one more time to change the volume of the part assigned to that button. The Volume page will disappear after a few seconds of inaction. If, however, you press the [VOLUME] button (indicator lights steadily), the Volume page will be displayed until you press the [VOLUME] button once more.

On this page, the Part Select buttons can be used to mute (lowercase part names) or activate (uppercase) parts.

Volume control (fader assignments)

The ▲▼ buttons located below each section allows you to control the level of the corresponding part. When you press [F1], certain faders are grouped, which means that they control two sections (MDR & ADR, MBS & ABS, UP1&UP2).

Using the function keys $[F1] \sim [F4]$, you can change the $\blacktriangle \nabla$ /part assignments, thereby enabling individual control of the Volume parameters.

[F2] (Only the right faders)



[F3] (Only the left faders)



Global Volume

Press [F4] to select the Global Volume page. This page allows you to set the balance between the Arranger parts [Acc1, Acc2, Acc3, Acc4, Acc5, Acc6, Acc Drum, Acc Bass] and the Realtime parts [Upp1, Upp2, Lower, MBass, MDrum]. In other words, this is a master volume (i.e. balance) page.



Volume pages in Song mode

If you select the Volume mode while the [GM/GS MODE] indicator is lit (which means that the G-600 is in GM/GS mode), the volume pages look as follows:



The setting range and group features are the same as in Arranger mode, but the ADR, ABS, etc. parameters are replaced by a SNG parameter that allows you to set the overall volume of the Standard MIDI File you are playing back or going to play back using the G-600's Recorder.
G-600

3. Tone pages and Tone mode

Tone selection

⊃ Master page: TONE buttons

Or [TONE] + $\blacktriangle \forall$ buttons below the display The Tone mode is similar to the Volume mode in that the selecting a Tone for a Realtime part automatically calls up a Tone mode page. The indicator of the [TONE] button starts flashing, and the Tone page disappears after a few seconds of inaction.

Pressing the [TONE] button, on the other hand, activates the Tone mode (indicator lights), which you then have to leave manually by pressing [TONE] again.

Whenever you press the [GROUP] button to select Group A, B, C, D, if you select this page by pressing [F1] after selecting the Tone mode, or if you press the [ACCOMP/GROUP] $\blacktriangle \forall$ buttons while the Tone mode page is displayed, the display responds with a list of the Banks that can be selected in that Group:

UP1 B**	Piano	1	CC-00: 0 CC-32: 2 PC : 1	TONE
	LEAD PAD	5678	SYNT FX ETHNIC MISC PERCUSSIVE SFX	2Numb 3Var0 4Edit 5Exitp

You could now check the contents of the banks of the other groups by pressing $[PAGE] \lor$ or $[PAGE] \blacktriangle$. Doing so does not activate the Group, whose name appears in the scroll bar, for selection, which is indicated by a positive Group name display:

UPI B5310 Choral		TONE 1Bank
▲ 1 PIANO	5 BASS	2NUMb
A 2 CHROM PERCUS	6 ORCHESTRA	3VarQ
3 ORGAN	7 ENSEMBLE	4Edit
↓ 4 GUITAR	8 BRASS	sExitr

Also note the "MIDI address" of the currently active Tone or Variation (B5310 Choral Bells): To select the above Tone via MIDI, you must transmit control change CC0 "16", CC32 "2", and program change "99" (in that order) to the G-600 (either via MIDI or from a Standard MIDI File). These values will also be transmitted or recorded whenever you select a Tone on the G-600.

See the Player's Guide for details about Tone selection and the pages that are displayed.

Tone Edit (Part parameters)

In the Tone mode, pressing [F4] (Edit) selects the Part edit page, where you can set the values of the G-600's Part parameters.

All Part parameters are "NRPN'able", meaning that you can assign them to a control change number and edit them using other control change messages. See page 187 for details about NRPN messages.

The values of these parameters can be positive (+) or negative (-) because they are relative parameters that change the preset values of the Tone assigned to the currently active part.

Note: Selecting another Tone after editig the Part parameters does not reset the Part parameters.



See page 86 for details.

Tone Change



The Tone Change switch on this page allows you to specify which program change and bank select messages should be executed. There is one page for the Realtime part Tone Change switches (press [SHIFT]+[F1]) and another one for the Arranger part Tone Change switches (press [SHIFT]+[F2] or just [F2]).

Select the part using the [PAGE] ▲▼ buttons and select Prf or Sng (for Realtime parts), or Prf or Arr (for Arranger parts).

Prf	Tone selection remains in effect until you select another Tone or Performance Memo- ry.
Sng	In this case, the Realtime Tone assignments are affected by program change messages included in the Standard MIDI File you are playing back. When set to Sng, the pro- gram change switch is set to respond to program change messages on disk.

Note that, as far as the Realtime parts are concerned, there is little difference between Prf and Sng as long as you don't play back a Standard MIDI File.

Arr	In this case, the Arranger Tone assignments
	are affected by program change messages
	included in the Music Style you are playing
	back.

Tone Edit (Source switch)

⊃ Master page: [TONE]→ [SHIFT] + [F4]



The Tone Edit switch on this page allows you to protect your settings from modifications due to settings included in the Standard MIDI File you are playing back (for the Realtime parts).

Select the part using the [PAGE] ▲▼ buttons and select Prf or Sng.

Prf	The Part parameter settings remain in effect until you select another Performance Mem- ory (or until you change them).
Sng	In this case, the Realtime Part Parameters are affected by NRPN messages included in the Standard MIDI File you are playing back In other words, when set to Sng, Part Para- meter settings will change if the Standard MIDI File contains other settings.

Note that there is little difference between Prf and Sng as long as you don't play back a Standard MIDI File.

G-600

4. Mixer mode

While on the Master page, you can access to the Mixer mode by pressing [F1]. Doing so will call up a page similar to the following:



(Seeing that the G-600 is equipped with a page memory function, it may jump to another page when you select the Mixer mode.) The function keys [F1], [F2], and [F3] allow you to select the section of parts to be edited. After selecting the section (RTime, Arrng, or Song), choose the part you want to edit using the [PAGE] ▲▼ buttons.

Using the $\blacktriangle \forall$ buttons below the desired parameter, you can easily change the values of the selected part.

Selectable parts: (Realtime parts) Upper 1, Upper 2, Lower, M. Bass, M. Drum, (Arranger parts) A.Drum, A.Bass, Acc1~Acc6, (Song parts) Sng1~Sng16.

Mixer\RTime and Mixer\Arrng pages

D Master page: [F1] (Mixer)→ [F1] (RTime) or [F2] (Arrng) Part selection: [PAGE] ▲▼

Volume (0~127)

Use the [DRUMS/PART] $\blacktriangle \forall$ buttons to set the volume of the selected part. The value "0" means that the part in question will not be audible, while "127" is the maximum volume.

Note: Though polyphony is no problem on the G-600, bear in mind that the value "0" does not mean that the part does not use the required number of voices. If you do not need a part in a given situation, mute it using the ON/OFF switch.

On/Off (part mute)

Use the Part Select [M.DRUMS] button to activate (On), or mute (Off) the selected part. This mute switch is similar to the Local switch (see page 191) in the MIDI mode because the On setting means that the part in question does not sound but still sends MIDI messages to the selected MIDI OUTput if the Part Switch parameter (see page 194) is set to Int. The Mute setting of a part can be saved to a Performance Memory.

When a part is on, its name, shown in the scroll bar, appears in uppercase letters (e.g. UP1). If the part is Off, its name is displayed in lowercase letters (e.g. up1).

Note: The MIDI\Param Part Switch parameter (see page 194) allows you to specify whether muting a part also means that it no longer sends MIDI data.

Panpot (0~64~127, Rnd)

Allows you to set the stereo position (pan) of the selected part. The value "0" means that the part will be panned hard left, "64" is the center position (same volume for the left and right channels), while "127" means that the part will be panned hard right. Select "Rnd" if the part in question is to "jump around" the stereo image in a random (unpredictable) way.

Reverb (0~127)

The Reverb send level is assigned to the [BASS/BANK] ▲♥ buttons. You can set a different value for each part. The value "0" means that the part in question will not be processed by the Reverb effect, while the value "127" represents the maximum Reverb level. This parameter has the same function as an AUX Send control on a mixing desk.

Chorus (0~127)

The Chorus send level is assigned to the [LOW-ER/NUMBER] $\blacktriangle \forall$ buttons. You can set a different value for each part.

Delay (0~127)

The Delay send level can only be set for Realtime parts. The MDR and Arranger parts cannot be processed by the Delay effect.

Equalizer (On/Off)

Use the Part Select [UPPER1] button to switch the equalizer On or Off for the selected part. Select Off if you do not want the selected part to be processed by the two-band equalizer.

Mixer\Song page

While in the Mixer mode, press [F3] to call up the following page:



Here you can set different parameters for the Song parts played by the Recorder. Note that these parameters supplement or modify the settings contained in the Standard MIDI File. Unlike on the RTime and Arrng pages, these parameters are control parameters rather than absolute settings.

Sng Part (1~16)

Start by selecting the desired Song part with the [DRUMS/PART] $\blacktriangle \forall$ buttons before modifying the other parameters on this page.

Volume (-127~+127)

The [BASS/BANK] ▲▼ buttons allows you to modify the volume of the selected part by adding or subtracting the value you set here to the volume value contained in the Standard MIDI File. This is what we call a *relative* setting because it does not replace the original volume setting – it corrects it.

Tone Change (Old, New)

The [LOWER/NUMBER] $\blacktriangle \forall$ buttons are used to select Old or New Tones. You may remember (see page 32 in the Player's Guide) that the G-600 provides two Tone levels: *New*, i.e. the new G-600 Tones, and *Old*, the SC-55 Tone level. Note that the setting you specify here is only taken into account if the value for CC32 (Bank Select) contained in the Standard MIDI File equals "0" or is missing. If you also own an SC-88 Sound Canvas, this concept is easy to grasp. CC32= 0 means "do not leave the current level" (which may be either A/B= New, or C/D= Old).

Status (On/Off) (Minus One)

The Status parameter allows to set the current track status (Mute or On). When set to Mute, the selected Song part no longer sounds. Selecting Mute is tantamount to activating the Minus One playback feature on other instruments. Set Status to On for all Song parts that should be played back.

Solo On/Off

Use the Part Select [UPPER1] button to activate (Solo On) or deactivate (Solo Off) the Solo mode for the selected part. Solo On means that only the part whose name currently appears in the scroll bar will be audible. You can solo several parts, but bear in mind that only the part whose name appears in the page scroll bar on the Mixer\Song page will be soloed when you leave the Mixer mode.

Mixer\Effect pages

The Effect level has four pages: 1 Reverb, 2 Chorus, 3 Delay, and 4 Equalizer, that can be selected using the [PAGE] $\blacktriangle \forall$ buttons.

There is one Reverb, one Chorus, one Delay, and one Equalizer whose settings apply to all parts assigned to them using the Reverb Send, Chorus Send and Delay Send (if available) parameters, or the Equalizer On/Off switches (see page 151).

Reverb page

⊃ Master page: [F1] (Mixer)→ [F4] (Effct) Effect: [PAGE] ▲▼ (select page 1)



Only one parameter can be set at a time. That doesn't mean, however, that the invisible parameter values are no longer valid when you select another parameter. Beware of selecting Macros after tailoring the parameters to your needs, because selecting another Macro means that all Parameter values will be reset to their default values.

Macro

Room1~3	These Reverbs simulate the Reverberation of a room. They provide a well-defined spa- cious Reverberation.
Hall1, Hall2	These Reverbs simulate the Reverberation of a concert hall. They provide a deeper Reverberation than the Room Reverbs.
Plate	This effect type simulates a plate Reverb (a studio device using a metal plate to simulate natural Reverb).
Delay	This is a conventional Delay that produces echo effects.
Panning Delay	This is a special Delay in which the Delayed sounds move left and right. It is effective when you are listening in stereo.

Macro allows you to select one of the effects (called *Character*) of the above table as well as suitable (but preset) values for all Reverb parameters (Pre-LPF~RevPreDlyT). The difference between Macro and Character (see below) is that the former does what its name implies: it calls up a program Macro that includes Character selection and Parameter settings for the selected Character (or type).

Note: Seeing that Delay usually only works for one part, use the dedicated Delay for echo effects. That way, the Reverb effect can be used to "deepen" the sound field.

Reverb parameters

Character [0~7]

This parameter allows you to select a Reverb effect. Confused? Character only specifies the Reverb type you need. It does not load preset values for the Pre-LPF~RevPreDlyT parameters. As a matter of fact, Character (i.e. the choice of the Reverb type) is itself a Macro parameter. That explains why you can select the Room 2 Macro and set Delay for Character. Selecting another Character thus does not reset the other Parameter values to their factory settings. A Macro, on the other hand, calls up a Reverb type and suitable settings for that effect.

Pre-LPF (0~7)

A low pass filter can be applied to the Tone signal sent to the Reverb to cut the high frequency range. Higher values will cut more of the high frequencies, resulting in a mellower Reverberation. Note that this parameter only applies to the signal that is sent to the Reverb effect. If you want to cut high frequencies of the direct Tone signals, use the Equalizer instead (see page 151).

Rev Level (0~127)

This parameter sets the volume of the Reverb effect (or the Master AUX Return signal if you are used to thinking in mixing console terms). Higher values result in louder Reverberation.

Rev Time (0~127)

This parameter sets the time over which the Reverberation will continue. Higher values result in longer Reverberation.

Rev Delay Fb (0~127)

This parameter is only available when you select Rev Charac 6 Delay, or 7 Panning Delay. It sets the way in which Delays repeat. Higher values result in more repeats.

RevPreDlyT (0ms~127ms)

This parameter sets the time interval between the original ("dry") signal and the onset of the selected Reverb effect. Higher values result in a longer pre-Delay time, simulating a larger Reverberant space.

Value

Use the [UPPER/VARIATION] ▲♥ buttons to specify a value for the selected Parameter. For reasons of simplicity, we put the parameter range next to the respective parameters (see above).

G-600

Chorus page

D Master page: [F1] (Mixer)→ [F4] (Effct) Effect: [PAGE] ▲▼ (select page 2)



Macro

Chorus broadens the spatial image of the sound, adding richness. You can choose from 8 types of Chorus.

Chorus1-4	These are conventional Chorus effects that add spaciousness and depth to the sound.						
Feedback Cho	orus This is a Chorus with a Flanger-like effect and a soft sound.						
Flanger	This is an effect sounding somewhat like a jet aeroplane taking off and landing.						
Short Delay	This is a Delay with a short Delay time.						
Short Delay (FB)This is a short Delay with many repeats.							

Note: Seeing that Delay usually only works for one part, use the dedicated Delay for echo effects. That way, the Chorus effect can be used to fatten the stereo image.

Chorus parameters

Cho Pre-LPF (0~7)

A low pass filter can be applied to the sound sent to the Chorus to cut the high frequency range. Higher values will cut more of the high frequencies, resulting in a mellower Chorus sound.

Cho Level (0~127)

This parameter sets the overall volume of the Chorus effect. If only one Tone contains too much Chorus, reduce its Chorus Send value (see page 147) rather than the Cho Level value.

ChoFeedback (0~127)

This parameter sets the level at which the Chorus sound is re-input (fed back) into the Chorus. By using feedback, a denser Chorus sound can be created. Higher values result in a greater feedback level.

Cho Delay (0~127)

This parameter sets the Delay time of the Chorus effect. Higher values will cause greater deviation in pitch of the Chorus sound.

Cho Rate (0~127)

This parameter sets the speed (frequency) at which the Chorus sound is modulated. Higher values result in faster modulation.

Cho Depth (0~127)

This parameter sets the depth at which the Chorus sound is modulated. Higher values result in deeper modulation.

Cho→Reverb (0~127)

This parameter sets the amount of Chorus sound that will be sent to the Reverb. Higher values result in more sound being sent. The value "127" effectively allows you to connect the Chorus and Reverb effects in series (Chorus before Reverb). If you do not wish the Chorus signal to be processed by the Reverb effect, set this value to "0".

Cho→Dly (0~127)

This parameter sets the amount of Chorus sound that will be sent to the Delay. Higher values result in more sound being sent. The value "127" effectively allows you to connect the Chorus and Delay effects in series (Chorus before Delay). If you do not wish the Chorus signal to be processed by the Delay effect, set this value to "0".

Use this parameter whenever you want to process an Arranger part using the Delay effect (see below). If all you are interested in is Delay, set the Chor Delay, Cho Rate and Cho Depth parameters to 0. Bear in mind, though, that doing so means that a "proper" Chorus effect is no longer available.

Value

Use the [UPPER/VARIATION] st buttons to specify a value for the selected Parameter. For reasons of simplicity, we put the parameter range next to the respective parameters (see above).

Delay page

⊃ Master page: [F1] (Mixer)→ [F4] (Effct) Effect: [PAGE] ▲▼ (select page 3)



Macro

Delay creates echoes. It is also possible to give depth and width to a sound by adding a short Delay to the original sound (a technique often used for rock-'n'-roll songs and in Karaoke bars). You can choose among 10 types of Delay.

Delay1~3	These are conventional Delays. 1, 2 and 3 have progressively longer Delay times.
Delay4	This is a Delay with a rather short Delay time (kind of "slap back" effect).
Pan Delay1~3	The Delay sound moves between left and right. This is effective when listening in stereo. 1, 2 and 3 have progressively longer Delay times.
Pan Delay4	This is a rather short Delay with the Delayed sound moving between left and right. It is effective when listening in stereo (kind of stereo "slap back" effect).
Dly To Rev	Reverb is added to the Delay sound which moves between left and right. It is effective when listening in stereo.
PanRepeat	The Delay sound moves between the left and right channels, but the pan position is different from the effects listed above. It is effective when listening in stereo.

Delay parameters

Dly Pre-LPF (0~7)

A low pass filter can be applied to the sound coming into the Delay to cut the high frequency range. Higher values will cut more of the high frequencies, resulting in a mellower Delay sound.

Dly Time C (0.1ms~1.0s)

The Delay effect of the G-600 allows you to set three Delay times that are only useful when listening in stereo: center (C), left (L), and right (R). Delay Time Center sets the Delay time of the Delay located at the center.

DlyTRatioL/R (4%~500%)

This parameter sets the Delay time of the Delay located at the left or right as a percentage of the central Delay. The value "100%" means that the left or right Delay repeats at the same speed as the center Delay.

Dly Level C/L/R (0~127)

These parameters set the volume of the central, left, and right Delays. Higher values result in a louder Delay.

Dly Level (0~127)

This parameter sets the overall volume of the three Delays (center, left and right). Higher values result in a louder overall Delay.

Dly Fback (-64~ 0 ~+63)

This parameter specifies the number of times the Delay will repeat. With a value of "0", the Delay will not repeat. With higher values there will be more repeats. With negative (--) values, the center Delay will be fed back with inverted phase. Negative values are effective with short Delay times.

Dly→Rev (0~127)

This parameter sets the amount of Delay sound that is sent to the Reverb. Higher values mean that the Reverb portion will be more prominent in the Delay signal. Be careful not to overdo this effect because it tends to blur the sound image.

Equalizer page

⊃ Master page: [F1] (Mixer)→ [F4] (Effct) Effect: [PAGE] ▲▼ (select page 4)



This Effect page contains the EQ settings that will be applied to all parts whose EQ switch (see page 148) is set to On. Just like for the other effects (Reverb, Chorus, and Delay), there is only one equalizer whose settings are shared by all G-600 parts.

L-Freq (200Hz, 400Hz)

L-Freq sets the low frequency range that can be cut or boosted using the L-Gain parameter. This is a shelving-type filter that will also affect frequencies lower than the one you set here.

L-Gain (-12~0~12dB)

This parameter allows you to boost (positive) or cut (negative values) the L-frequency (and all frequencies below the L-Freq value). Set L-Gain to "0" if you do not want to change the lower frequencies.

Note: Reducing the low frequency content may sometimes affect the volume of the Tones being processed by the equalizer. Always check the balance after setting the L-Gain value, and correct it if necessary (see "Volume control (fader assignments)" on page 144).

H-Freq (3kHz, 6kHz)

H-Freq sets the high frequency range that can be cut or boosted using the H-Gain parameter. This is a shelving-type filter that will also affect frequencies above the value you set here.

H-Gain (-12~0~12dB)

This parameter allows you to boost (positive) or cut (negative values) the H-frequency (and all frequencies above the H-Freq value). Set H-Gain to "0" if you do not want to change the higher frequencies.

Source pages

The Source pages of the Realtime, Arranger, and Song parts contain a number of parameter value switches that allow you to specify whether the part selected using [PAGE] ▲▼ is to use your own/the Performance Memory settings, or the settings of the Music Style or Standard MIDI File you are playing back.

Selecting Prf means that the G-600 will use the settings you have just made, or the ones contained in the Performance Memory you selected last. Arr and Sng, on the other hand, mean that the selected part will change in response to the data contained in the Music Style or Song you are playing back. Note: You cannot select Arr for Realtime parts or effect parameters. That setting is only available for Arranger parts. Likewise, you cannot select Sng for Arranger parts as there is no internal link between the G-600's Recorder and Arranger.

⊃ Master page: [F1] (Mixer)→ [SHIFT] + [F1] (RTime), [F2] (Arrng) or [F4] Effct)



The available switches vary according to the Source page you select. Not all parameters can be protected from being modified by the Music Style or Song you are playing back.

Seeing that the parameters are pretty self-explanatory, we will not discuss them in great detail here. Save for the effect Source switches, they are all covered in the Player's Guide. There are a few things to bear in mind, though:

- Reverb, Chorus, and Delay refer to the respective send levels of the selected part. They are no effect on/off switches but rather switches allowing you to specify whether or not the effect send level is to change in response to Arranger or Song data.
- (2) Since the Arranger parts cannot be processed by the Delay (at least not in a direct way), there is no Delay Send Source switch on the Arrng Source page.
- (3) The Type settings on the effects Source page refer to the Macros.
- (4) The Source switch settings can be saved to a Performance Memory.

G-600

5. Parameter mode

As stated in the Player's Guide, the parameter mode contains parameters that apply to different aspects of your G-600:

- (1) Global parameters Master Tune, Memory Protect, etc.
- (2) Arranger parameters Chord Family Assign, Part Range, etc.
- (3) Realtime parts Upper 2 Tune, Upper 1 & 2 Portamento, etc.
- (4) Controller parameters Expression Pedal assignment, etc.
- (5) **Performance Memory parameters** Resume, Performance name.
- (6) Source switches for some of these parameters

Parameter\Glbal\1 page

⊃ Master page: [F2] (Param)→ [F1] (Glbal) [PAGE] ▲♥ (select page 1)



Memory locked/unlocked (Global parameter)

This parameter allows you to activate (lock) or deactivate (unlock) the Memory Protect function. At power on, the G-600 always turns on its Memory protection to avoid accidental erasure of data. Note that is next to impossible to accidentally overwrite a Performance Memory or MIDI Set because you have to keep the [WRITE] button depressed while specifying the memory number. Furthermore, you are give the opportunity to turn off Memory protection before writing data to one of the G-600's memories.

Note: This parameter does not protect the User Style memories.

Resume (Performance Memory parameter) .

The Resume function allows you to specify which settings of the Performance Memory 00 are to be loaded. Performance Memory 00 FreePnl contains a number of default settings and, more importantly, Source switch settings that allow a Standard MIDI File or Music Style to change the affected parameters in accordance with the settings it contains.

You do not need to load all settings of Performance Memory 00 if there are parameter values you do not wish to overwrite.

Settings to	be loaded Meaning
Tone	Only Tone selection of Performance Memo- ry 00 will be loaded.
Mixer	Only the Mixer settings of Performance Memory 00 will be loaded.
Parameter	Only the settings of the Parameter level will be loaded.
All	All settings of Performance Memory 00 will be loaded.

Cursor Character (Performance Memory parameter)

These two "parameters" are used to name or rename the currently selected Performance Memory. The available characters are:

									0	1	2	3	4	5	6	7	8	9								
							!	n	#	\$	Z	Ş.,	?	¢)	*	+	,	-							
(A	в	С	Ð	Ε	F	G	н	1	J	К	L	М	Ν	0	Ρ	Q	R	S	Т	Ų	Ų	Ņ,	Х	¥	Z
											E	\sim	1	^	_	`										
	э	ь	¢	đ	e	f	g	h	i	đ	k	1	m	n	o	P	9	r	s	t	u	Ų	121	х	¥	z

Parameter\Global\2 page

⊃ Master page: [F2] (Param)→ [F1] (Glbal) [PAGE] ▲▼ (select page 2)



Split (C3~C6) (Realtime parts, Arranger parameter)

This parameter specifies the split point between the Right and Left sections of the Arranger and the Split Keyboard Mode. It can be set from C3 to C6. Default value is C4.

UP2Split (C#3~C#6) (Realtime parts)

This parameter specifies the split point between the Upper1 and Upper2 sections. It only takes effect when the indicator of the [UPPER2 SPLIT] button lights. The Upper2 split point can be set anywhere between C#3 and C#6. Default value is G5.

Roll (Resolution) (Manual Drums part)

This parameter specifies the resolution of the Roll function. It can be set to:

1/16	Sixteenth
1/32	Thirty-second
1/16t	Sixteenth triplet
1/32t	Thirty-second triplet
1/16s	Sixteenth swing
1/32s	Thirty-second swing

The default value is 1/16. As stated in the Player's Guide, selecting 1/32 or even shorter values may result in machine-gun type rolls at high tempo values. Always specify the resolution after setting the Style or Song playback tempo, or change it to a more usable value if your setting turns out to be too optimistic to produce natural rolls.

Stl Change (Chord Sequencer parameter)

This parameter allows you to specify what should be recorded by the Chord Sequencer (see page 65 in the Player's Guide). Select On if you want the Chord Sequencer to record all settings relating to the Arranger (Style changes, Arranger part volume changes, tempo changes, etc.), and Off if the Chord Sequencer is to record only the NTA notes.

Setting	What is recorded
On	Chord changes, Style Changes, Division
	Changes (Fills, Intro, Ending, Variation/Origi- nal, Basic/Advanced), Volume Changes for all Accomp Parts.
Off	Only chord changes (NTA notes).

Note: See "Style Change" on page 66 (Player's Guide) for full details about NTA.

Param\Glbal\3 page

⊃ Master page: [F2] (Param)→ [F1] (Glbal) [PAGE] ▲▼ (select page 3)



Acc Wrap: Part and Range

As explained in the Player's Guide, the Wrap parameter is used to change playback of the selected music Style so that all notes of a given bass line, etc. sound in a natural range. In *Natural* mode, the Arranger transposes all notes that are too low or too high for the (usually automatically) selected sound one octave up or down. Though useful in most situations, that may result in accompaniment patterns that suddenly jump to another octave when you go from G to F7, for example.

Part (ABS, AC1~AC6) (Arranger parameter)

Use the Part parameter to select the part whose Range setting you wish to change.

Range

Range	Meaning
Natural	The Arranger sounds all notes of the part in question in a range that is natural for the Tone assigned to that part. Notes that are too high or too low are transposed down or up.
Full	In this case, the notes of the accompani- ment track are played the way they were programmed. That may be useful when you use the User Style function for sequencing purposes.

Song Set Play

The Song Set Play functions allow you to specify how the selected Song Set (see page 203) should be played back.

Mode (Auto, Manual)

Select Auto if playback of the next Song in line is to start automatically after the Pause time has elapsed (see below). Select Manual if you wish to be in control of when the next Song is played back.

Pause (0~99 seconds)

The Pause value specifies the blanks between two Songs of a Song Chain. Note that the Pause value is only used when you set Mode to Auto.

Param\Glbal\4 page

⊃ Master page: [F2] (Param)→ [F1] (Glbal) [PAGE] ▲▼ (select page 4)



Chord Family Assign (Arranger parameter)

The fourth Param\Glbal page is entirely devoted to the assignment of more "elaborate" chords to one of the three modes (major, minor, seventh) of the G-600's Arranger. If the current Performance Memory or the currently active registration does not contain any assignment, you can only assign Chord memory 1. Only after assigning a chord to Chord memory I can you select memory 2 etc. (and also 1 by going backwards).

Chord

Allows you to select a Chord memory. Play a chord in the chord recognition area, whose name is then displayed to the right of the memory number.

Family

After specifying the chord, you must use the Family parameter to assign it to one of the three Modes: select Maj (major), min (minor) or 7th (seventh). Whenever you play the newly assigned chord in the chord recognition area of the keyboard, the accompaniment pattern corresponding to the mode you select here will be triggered. Use this parameter to assign "6", "7/11" etc. chords to a particular Mode.

You may remember that Modes are in fact "invisible" divisions that cannot be selected on the front panel – while others, such as Basic/Original, Advanced/Variation, etc., are selectable either manually or via an optional FC-7.

Alteratn

The Alteration parameter allows you to specify whether your "elaborate" chords should be played during playback of an Intro (In) or Ending (Ed). When set to On, playing a complex chord at the onset of an Intro or Ending may change the chord sequence of the entire Intro or Ending pattern to a degree that you may have your doubts about the "sanity" of your G-600.

In most cases, you will probably select Off, so that your favorite G7,5 etc. chord only takes effect after the Intro is finished (or does not influence the chord sequence of the Ending pattern).

Param\Tune\1 page

⊃ Master page: [F2] (Param)→ [F2] (Tune) [PAGE] ▲▼ (select page 1)



Master Tune (415.3Hz~466.2Hz) (Global parameter)

The Master Tune setting affects the pitch of the entire G-600. Use this parameter to tune your G-600 to acoustic instruments that cannot be tuned. In all other cases, set this parameter to 440.0Hz which is the standard pitch for most electronic instruments.

The Master Tune setting can be saved to a Performance Memory, which means that you could use 192 different tunings with your G-600 – at least in theory.

Transpose Mode (Global parameter)

The Transpose Mode parameter allows you to select which sections of your G-600 will be transposed when you press the [TRANSPOSE] button (indicator lights) on the front panel.

Transpose r	node Explanation
Int	If the [TRANSPOSE] indicator lights, only the Realtime and Arranger parts will be trans- posed.
Song	Only the Recorder song parts will be transposed.
MIDI	If the [TRANSPOSE] indicator lights, only the notes received via MIDI IN will be trans- posed. In a way, this is the same as the Rx Shift parameter in the MIDI mode.
Int+Song	If the [TRANSPOSE] indicator lights, the Realtime and Arranger parts as well as the Recorder song parts will be transposed.
Int+MIDI	If the [TRANSPOSE] indicator lights, the Realtime parts as well as all notes received via MIDI will be transposed.
Song+MIDI	If the [TRANSPOSE] indicator lights, the Recorder song parts as well as all notes received via MIDI will be transposed.
All	All parts and received notes will be trans- posed.

(Transpose) Value (-11--1, 1-11) (Global parameter)

Use this parameter to specify the transposition interval to be used whenever the indicator of the [TRANSPOSE] button lights. Note that you cannot set the value "0" because that would effectively turn off the transpose function. Since that can be achieved by pressing the [TRANSPOSE] button (indicator must go off), there is little point in providing a "0" setting.

Param\Tune\2 page

⊃ Master page: [F2] (Param)→ [F2] (Tune) [PAGE] ▲▼ (select page 2)



Coarse (-24-24) (Upper2 part)

The Coarse parameter allows you to tune the Upper2 part in semitone steps, which comes down to transposing the Upper2 part relative to the Upper1 part. As explained in the Player's Guide, Upper2 Coarse (and also Fine, see below) are only useful in situations where both the Upper1 and Upper2 parts are used. Set this value to "-12" to transpose the Upper2 part one octave down, and to "7" to tune it up one fifth. Quite a few users like to assign piano Tones to both Upper parts and then transpose Upper2 one octave up ("12").

The maximum range of this parameter is two octaves down ("-24") or two octaves up ("24").

Fine (-99-99) (Upper2 part)

The Fine parameter is used to detune the Upper2 part relative to the Upper1 part. Since 100 cent equal one semitone, this parameter effectively allows you to program a semitone interval between Upper1 and Upper2. More realistic settings would be "+10" or "-10", though.

Kbd Scale

Use the Kbd Scale parameters whenever you need other tunings than equal temperament. Equal temperament means that the intervals between any two semitones are the same, which is not the case in oriental music, for example, or in baroque music. To untrained ears, tunings that provide varying intervals between semitones may sound flat. But then again, equal temperament sounds strange to other musicians.

Assign (Off, UP1-2, All) (Global parameter)

This parameter allows you to specify which parts should be assigned a different tuning. Off means that the Value settings (see below) have no effect on the equal temperament of the G-600's parts. If you select UP1-2, only the two Upper parts will be processed by your Value settings. Selecting All means that all Realtime, Song, and Arranger parts will be tuned the way you specify with the Value parameter. This probably only works for a few factory Styles. But then again, the G-600 allows you to program your own Styles that could take advantage of the Kbd Scale function. Besides, you can also load User Styles.

Note: As soon as you select a setting different from Off, the E and B are automatically set to -50,

Note (C~B) (Global parameter)

This is not really a settable parameter. Note allows you to select the note whose tuning you want to change. Every note (from C, C#, D, D# etc. to B) can be selected only once, so that the Value setting applies to all notes of the same name, which makes sense, of course.

Value (-128-+128) (Global parameter)

This is where you set the tuning of the selected Note. Since this is a relative parameter, i.e. a parameter that specifies a deviation from the preset equal temperament, the Value can be either positive or negative. Selecting "0" means that the Note's pitch corresponds to the equal temperament value. Seeing that 100 cent equal one semitone you have considerable freedom for programming scales.

Param\Tune\3 page

⊃ Master page: [F2] (Param)→ [F2] (Tune)
[PAGE] ▲▼ (select page 3)



Portamento and Mode (Realtime parts)

Mode UP1 and UP2 (Poly, Mono)

The Mode parameters are used to set the corresponding Upper part to Poly (polyphonic) or Mono (monophonic). Poly means that the Upper part in question can play several notes at a time, so that you can play chords.

Mono, on the other hand, means that only one note can sound at any one time. The G-600's Mono modes work according the "last note priority" principle, which means that, whenever you play two or more notes, only the one you whose key you pressed last sounds. Select Mono for instrument sounds that cannot play chords (woodwind, solo brass instruments, etc.).

Time (0~127)

Time specifies the Portamento speed. You may remember from the Player's Guide that the Portamento effect produces smoother transitions between the notes you play. Setting high values is effective for synthesizer sounds, especially when you play large intervals (e.g. C1 and then C6). The value "0" means that the Portamento effect is not active.

Param\Cntrl\1 page (Realtime parts)

⊃ Master page: [F2] (Param)→ [F3] (Cntrl) [PAGE] ▲▼ (select page 1)



This page is entirely devoted to the velocity sensitivity settings of the Realtime parts. See the "Param\Cntrl\2 page" for the velocity sensitivity settings of the Arranger parts.

Part (UP1, UP2, LWR, MBS, MDR)

This parameter allows you to select the Realtime part whose settings you wish to change.

Sensitivity (Low, Med, High)

High, i.e. the strongest velocity sensitivity, is the preset value. Med is an intermediary value that still leaves room for volume and timbre changes according to the force with which you strike the keys, while Low represents the minimum velocity sensitivity. Though selecting Low does not mean that the part in question does not respond to your velocity, this is probably the setting you need for organ Tones, although that is not always a good solution.

Quite a few organ Tones are indeed velocityswitched Tones that require a rather high velocity value to sound the "Tone with a fast rotary effect", while smaller velocity values trigger the same sound "with a slow rotary effect". Since the timbre and volume of such organ Tones hardly change at all, there is no need to set Sensitivity to Low.

Min and Max (1~127)

Min is used to set the smallest velocity value with which the Realtime part in question can be triggered. Except in cases where the part is used to complement another one (usually Upper2 or Upper1), you should leave this value at "1". The value "0", by the way, cannot be selected since that value is taken by most MIDI instruments to signal the end of a note (note-off). The Min value cannot be higher than the Max value.

Max, on the other hand, represents the highest velocity value with which you can trigger the part in question. See "Velocity switching (Min and Max)" on page 95 in the Player's Guide for an example of a useful velocity switching pair. Again, the Max setting cannot be smaller than the Min setting.

Param\Cntrl\2 page

⊃ Master page: [F2] (Param)→ [F3] (Cntrl) [PAGE] ▲▼ (select page 2)



Dynamic Arranger (Arranger parameters)

Part (ADR, ABS, AC1~AC6)

This parameter allows you to select the Arranger part whose velocity sensitivity you wish to change. As explained in the Player's Guide, you can use this parameter to alternate between two accompaniment parts by varying the force witch which you strike the keys in the chord recognition area of the keyboard.

Value (-127~+127)

Set this value to "0" if the Arranger part in question must not respond to the force with which you strike the keys in the chord recognition area. The higher the positive value you set here, the more force is required to have the part in question sound at its maximum value. Negative settings, on the other hand, mean that the volume decreases as your velocity increases.

Note: The velocity Value you specify here will only be used when you set Status to On.

Status

This parameter allows you to activate (On) or deactivate (Off) the Dynamic Arranger function. It duplicates the Dynamic Arr parameter that is displayed when you press the [ARR CHORD] button. Switching off Dynamic Arr will also turn off Status, and vice versa. The reason why there are two parameters doing the same thing is that pressing [ARR CHORD] and modifying Dynamic Arr is faster than selecting the Param\Cntr\2 page.

Melody Intell Voices (1, 2) (Arranger parameter)

Though played by the Upper2 part, the intelligent melody is controlled by the Arranger. Using it requires that you press the [MELODY INTELLI-GENCE] button on the front panel (indicator must light). If, at that time, the Upper2 part is activated, the indicator of the [UPPER2] goes dark to signal that the Upper2 part is now being controlled by the Arranger. Tone selection for the Upper2 part, however, is still possible.

The Melody Intelligence function adds a second (and third) voice to the melody you play using the Upper1 part. As you know, the intelligent melody is based on the chords you play in the chord recognition area of the keyboard.

Use the Voices parameter to select either 1 or 2 intelligent harmonies.

Param\Cntrl\3 page

⊃ Master page: [F2] (Param)→ [F3] (Cntrl) [PAGE] ▲▼ (select page 3)



Pitch Bender (Realtime parts)

Part (UP1, UP2, LWR, MBS, MDR)

This parameter allows you to select the Realtime part whose Pitch Bend range you wish to set. Surprising though it may be, you can also specify a Pitch Bend range for the Manual Drums part. Selecting values between "2" and "7" allows you to achieve interesting effects that work well for timpani sounds, for example.

Range (0~24)

This parameter is used to specify the maximum pitch shift that can be achieved by turning the Bender lever fully to the left or right. Since there is only one Range parameter, it applies to both upward and downward bends.

Note: The Range value you set here will only be effective when you tun the Bender lever fully to the left (downward bends) or to the right (upward bends). Intermediary positions of the lever produce the resulting intermediary bend value.

Param\Cntrl\4 page: Expression pedal

⊃ Master page: [F2] (Param)→ [F3] (Cntrl) [PAGE] ▲▼ (select page 4)



Part

The first parameter on this page is used to select the Realtime (UP1, UP2, LWR, MBD, or MDR) or Arranger part (ADR, ABS, AC1~AC6) whose Expression settings you wish to edit.

Note: There is no need to set these parameters if you don't have an EV-5 or EV-10 Expression pedal connected to the EXPRESSION PEDAL jack.

Status (Realtime part & Arranger parameter)

Select On if you wish to control the selected part's volume by foot, or Off if you don't want the selected part's volume to change whenever you use the Expression pedal.

Up (0~127)

The value you set here is the Expression volume (CC11) value that the selected part will have whenever the Expression pedal is closed (minimum setting). In fact, this parameter duplicates the function of the knob at the left side of an EV-5, for example.

Down (0~127)

The value you set here represents the maximum volume you can achieve for that part by fully depressing the Expression pedal (maximum setting).

Note: It is perfectly possible to set the Up value to "127" and the Down value to "0", so that the corresponding part will only sound when the Expression pedal is up (closed).

Source\Tune page

⊃ Master page: [F2] (Param)→ [SHIFT] + [F2] (Tune)



As explained in the Player's Guide, the Source switches allow you to protect your Param settings from data coming from the Standard MIDI File you are playing back using the G-600's Recorder. The fact that only Prf and Sng are selectable is a clear indication that all Source switches, except the MTune switch, only apply to the Realtime parts.

Source switches

Seeing that all Source switches on this page work the same, we will discuss them together. Select Prf if the respective parameters must not change in response to MIDI messages of that type contained in the Standard MIDI File you are playing back with the internal Recorder. Prf means that either your own settings or the settings of the selected Performance Memory will be used.

Sng means that the respective MIDI messages contained in the Standard MIDI File may change the parameter(s) in question.

Source	Meaning
MTune	The Master Tune setting (see page 156).
UP2Tune	The Coarse and Fine settings of the Upper2 part (see page 156).
Scale	Tuning values of the Kbd Scale function (see page 157),
UP1Port	The Portamento Time value for the Upper1 part (see page 157).
UP2Port	The Portamento Time value for the Upper2 part (see page 157).

Source\Cntrl page

The Source switch on this page only applies to the Realtime parts. Use [PAGE] $\blacktriangle \nabla$ to select the part whose source setting you wish to modify (its name appears in the scroll bar).

⊃ Master page: [F2] (Param)→ [SHIFT] + [F3] (Cntrl)



See "Source switches" on page 160 for an explanation of the Source switch options. The switch on this page allows you to specify which Pitch Bend range value should be used by the selected part.

6. User Style mode

The User Style mode allows you to program your own accompaniments (called User Styles). Programming User Styles does not necessarily mean that you record everything from scratch because the G-600 also allows you to copy tracks (or even entire chunks) from preset Music Styles (in ROM) or other User Styles. Choose whichever is more convenient for your application.

When programming User Styles, bear in mind that you are only recording the accompaniment. If you also record the melody or an accompaniment line that characterizes a particular song, the User Style in question will not work for other songs. In other words, try to think in terms of "style" when programming User Styles (dance, rave, samba, polka, etc.) if you want a Style to be "universally" usable (for a given type of music).

Furthermore, though possible, programming chord changes for the Basic/Original, Basic/Variation, Advanced/Original, and Advanced/Variation patterns is not a very good idea. After all, the chord changes can be performed in realtime by playing them in the chord recognition area of the keyboard or using the Chord Sequencer. Though this warning may sound obvious, you will find that working on a pattern basis rather than along song part lines requires a lot of thinking and discipline. – But then again, the User Style functions are so easy to use that programming Styles on a song-bysong basis is not as time-consuming as it may at first look.

Note: Let's agree to use the word pattern to refer to any possible Mode/Type/Division combination. Example: "Basic/Original, M" is one possible accompaniment pattern (as is "Advanced, Fill-In-to Original".)

Note: The User Style mode can only be selected in the G-600's Arranger (i.e. normal) mode. If the function assigned to [F4] reads "Lyrics", press the [GM/GS MODE] button (indicator must go off).

UsrStl\Rec\1 pages

⊃ Master page: [F4] (UsrStI)→ [F1] (Rec)
[PAGE] ▲▼ (select page 1)



Track (1ADR, 2ABS, 3AC1, 4AC2, 5AC3, 6AC4, 7AC5, 8AC6)

Use this parameter to select a track of the currently active pattern (see Mode, Type, and Division). If the name of that track is displayed in lowercase characters (e.g. 3ac1), that track is still empty. Note that a track whose Length has been specified (see page 167) is no longer considered empty (and is therefore displayed in uppercase, e.g. 3AC1) because it already contains the number of rests equivalent to the Length you set.

User Style memory and name

This is where the number of the selected User Style memory and the User Style's name appear. If you haven't yet specified a name, it will be USERSTL followed by the number of the selected memory.

Tempo

The same window also displays the current playback and recording tempo. Feel free to change the tempo with the [TEMPO] buttons but remember that the current tempo value will be recorded next time around and regarded as preset tempo for your User Style.

G-600

Style pattern selection

Mode

Use this parameter to select the major, minor, and/or seventh level. All settings involving one or two "=" symbols mean that the first (white-onblue) pattern you record will be automatically copied to the other (blue-on-white) Mode(s). This is what we called cloning in the Player's Guide.

The available options are:

Display function	Options	Explanation		
Mode	м	Record unly the major pattern.		
	M≂m	Record the major pattern and copy it to the minor pattern.		
	M=n=7	Record the major pattern and copy it to the minor and seventh pattern.		
	Other option	s.m. m=M, m=7, m=M=7, 7, 7=M, 7∞m, 7=M+m		

Туре

Use this parameter to select the Type, as it is called here. Think of a Type as the degree of complexity of a Style, whereby *Basic* represents the "easy" level, while *Advanced* usually contains more elaborate accompaniments (unless programmed otherwise). You may remember from the Player's Guide that there are two looped versions per Type: Original and Variation.

Display function	n Options Explanation		
	Bsc	Record only the Basic division	
Түре	Adv	Record only the Advanced division	
	B=A	Record the Basic division and copy it to the Advanced division	
	Other option	s: A=B	

Division

A Division is a specific accompaniment type, such as the Intro, a Fill, the Ending of the current accompaniment pattern.

Display function	Options	Explanation	
	Or	Record only the Original division	
	Va	Record only the Variation division.	
	Fu	Record only the Fill-to to Original	
Devision	Fv	Record only the Fill in to Variation.	
	lu l	Rectirul only the Intro	
	fa	Record only the Ending	
	Other uptions	s: Or+Va, Va=Ur Fo=Fv, Fv=Fo, In=Ed, Ed-In	

Note: The order in which you select the Mode, Type, and Division is of no importance.

It is also possible to clone other patterns *after* recording the first one. To do so, select the required "=" options for the Mode, Type, and Division, and start recording. Wait until the count-in is finished and stop recording after the first or second beat (by pressing either Recorder [PLAY►/ STOP■] or [START/STOP]). Don't play anything on the keyboard. The rest of the "original pattern" will automatically be copied to the selected "clone patterns".

Note: The clone function always operates in Erase mode, even though you may have selected Merge for the "original pattern". Thus, before cloning other patterns, make sure the clone destinations contain no data you wish to keep.

Note: Since the clone function automatically transforms major chords and scales into minor and/or seventh equivalents to meet the requirements of the minor and seventh modes, nothing should stop you from using it. That is also true of automatic transformations of major patterns that are being cloned during the recording of a seventh pattern, for example.

Style (1~8)

The ▲▼ buttons assigned to the Style parameter ([UPPER/VARIATION]) allow you to select the User Style Memory you wish to program.

UsrStl\Rec\2 page

⊃ Master page: [F4] (UsrStl)→ [F1] (Rec) [PAGE] ▲▼ (select page 2)



(Record) Mode (Erase, Merge)

This is where you select the record mode, i.e. what is going to happen to the data of the currently selected pattern. In Erase mode, all data of the selected track (see page 162) are replaced by the new data you record. Erase is automatically selected for empty tracks.

Merge means that the new data you record will be added to the existing data on that track. Select Merge to add a few notes here and there, to "memorize" the address of another Tone or Drum Set, or to modify the settings on page 4 (see below).

Key (C, C#, D, Eb, F, F#, G, Ab, A, Bb, B)

This parameter allows you to tell your G-600 what key you are going to record the track in. Specifying the right key before recording is crucial for realtime use of that track or pattern. The chord recognition system of the Arranger is indeed based on the assumption that all patterns are in the key of C.

Thus, whenever you play a C (in Arranger Intelligent mode) or C chord in the chord recognition area, the Arranger will use the original notes of thc pattern you recorded (no realtime transposition). If you recorded that pattern in F# without telling the G-600, F# is what you will hear when you play a C or C chord in the Arranger mode.

Therefore, if you wish to record in D, select D. Failure to do so may go unnoticed in User Style mode, but once you are back in the Arranger mode, you will soon notice "there is a problem".

Note: There is no need to specify the key for 1ADR tracks.

(Metron) Mode

The default setting of this parameter is *Record*, so that the User Style metronome is only audible whenever you record a new track. During playback of that track, the metronome remains silent. Here are the other metronome modes:

Record	The metronome only sounds during User Style recording.
Play	The metronome only sounds during User Style playback in User Style mode.
Rec&Ply	The metronome sounds both during record- ing and playback.
Always	The metronome even sounds while the User Style is not playing.

(Quantize) Value

This parameter allows you to set the Quantize value to be used during User Style recording. As explained in the Player's Guide, you may set this parameter to Off and only quantize those tracks whose timing is definitely too loose using the Track Quantize function (see page 177).

In any case, the available values for automatic quantization during recording are:

1/8	Eighth note (quaver)	2
1/8t	Eighth note triplet (1/12)	h_{a}
1/16	Sixteenth note (semiquaver)	A
1/161	Sixteenth note triplet (1/24)	A3
1/32	Thirty-second note	A
1/32t	Thirty-second note triplet (1/48)	A3
1/64	Sixty-fourth note	
Off	No quantization	

Note: Be sure to always select the value that equals the shortest note you are going to record. Otherwise, your recording no longer sounds the way you played it.

UsrStl\Rec\3 page

⊃ Master page: [F4] (UsrStI)→ [F1] (Rec) [PAGE] ▲▼ (select page 3)



The parameters on this page are in fact playback parameters that allow you to mute the tracks you do not want to hear while recording. Muting User Style tracks is only necessary for tracks that already contain data.

Note: This mute function only applies to the User Style mode. Tracks you mute here still sound in the Arranger mode. If you do not need a certain part, delete it (see page 173).

Track (1ADR~8AC6)

Use this parameter to select the track to be muted.

Status

Select Off for the tracks you wish to mute. To turn them back on again, select On.

G-600

UsrStl\Rec\4 page

⊃ Master page: [F4] (UsrStl)→ [F1] (Rec) [PAGE] ▲▼ (select page 4)



User Style patterns not only contain note and Pitch Bend/Modulation data but also a number of other settings, such as the volume, the stereo position (pan), the Reverb and Chorus send values. The parameters on this page allow you to set and modify those non-note data.

The first time you record something on a track, the default values of these parameters are recorded along with the notes you play.

REC/PLAY switches

The switches below each parameter are used to specify whether or not the corresponding Expression, Panpot, etc. value should be recorded. The first time you select a track for recording, all these switches are automatically set to REC.

The second and all subsequent times you record to this track (in Merge mode), all switches will be set to PLAY, meaning that the changes you make will not be recorded. Thus, the values of the corresponding parameters will jump back to their recorded positions.

Select REC whenever one of the parameters on this page is to be assigned another value permanently. The corresponding parameter value is then displayed white-on-blue. (In PLAY mode, it is displayed blue-on-white.)

Express (0~127)

Use the Expres(sion) parameter to change the volume of the track whose name appears in the righthand corner. The track has to be selected on the UsrStl\Rec\1 page.

This track is currently selected

As stated in the Player's Guide, setting this parameter is only meaningful after recording a few tracks. It allows you to establish the right balance between tracks.

Panpot (Rnd. 0~64~127)

Use the Panpot parameter to position the selected track in the stereo sound field. Values between "0" and "63" shift the part further to the left, while values between "65" and "127" shift it further to the right. "64" is the dead center (default value). You could also select Rnd to obtain random jumps between the left and right channels. Since the jumps are not predictable, Rnd is probably only useful for "gimmick" kind of counter-melodies.

Reverb (0~127)

This parameter sets the Reverb send level for the selected track. "0" means that the part in question is not processed by the Reverb effect, while "127" represents the maximum effect depth.

Chorus (0-127)

This parameter sets the Chorus send level for the selected track. "0" means that the part in question is not processed by the Chorus effect, while "127" represents the maximum effect depth.

Tone/Drum Set

Depending on the track you selected, the message between the track name and the Tone or Drum Set address will read Tone or Drum Set. By now, you know that you can only select Drum Sets for the 1ADR track/part. For all other tracks, the Tone message will be displayed.

You can select Tones and Drum Sets using either the TONE selection keys on the front panel or the [UPPER/VARIATION] $\blacktriangle \forall$ buttons.

General remark

The default settings for these parameters are as follows:

	1ADR 2ABS 3AC1 4AC2 5AC3 6AC4 7AC5	8AC6
Expression	127	
Pan	64	
Reverb	100	
Chorus	0	
Tone/Drum Set	A11	

These values will be automatically recorded the first time you select a track for recording. Note that you can select other Tones/Drum Sets on almost any UsrStl\Rec page (but only with the TONE buttons). Selecting the right Tone or Drum Set before you start will help you "get in the mood". Leave the other settings for later, when you have a clearer idea about the sound image.

UsrStl\Rec\5 page

⊃ Master page: [F4] (UsrStl)→ [F1] (Rec) [PAGE] ▲▼ (select page 5)



This page is entirely devoted to the 1ADR (Accompaniment Drums) track. It allows you to modify the pitch of certain drum and percussion sounds (see below).

Note: The UsrStl\Rec\5 display page only appears if you selected the IADR track before calling up this function.

Note name-number-sound name

Use the [DRUMS/PART] ▲▼ buttons to select the drum or percussion sound whose pitch you wish to change.

Note C#2/37	Sound the design of the same state of the second state of the seco
D2/38	Snare Drum 1
E2/40	Snare Drum 2
F2/41	Low Tom 2
E3/52	Chinese Cymbal
G#3/56	Cowbell
A3/57	Crash Cymbal 2
F4/65	High Tirnbale

Pitch (-64~64)

This parameter allows you to set the pitch of the selected drum or percussion sound. Select "0" if you need original pitch of the sound in question. Positive values raise the pitch, while negative values lower it.

Cloning and edit functions and possible warnings (Shared)

When re-recording or editing just one pattern of a clone group, the following warning may be displayed:

The TRACK is SHARED		M-Bsc-Va
Press: -SINGLE to individually modify it -ALL to globally modify them	M-BSC-Or 7-BSC-Or M-Adv-Or 7-Adv-Or	
SINGLE ALL ABORT		

It means that you are about to do something that will disrupt the uniformity of the patterns you have chosen to be identical (by cloning them).

Note that this page only appears if, after cloning several patterns, you decide to only redo or edit the M/Bsc/Or (or Or-M-Bsc) pattern, for example. Since the G-600 "knows" which tracks are clones, it will warn you that you are about to record or edit a version without copying it to the "shared" patterns. For your reference, the names of the shared patterns appear in two windows (one for Original, and one for Variation patterns).

That should allow you to make up your mind whether to modify the selected pattern without

changing the clones or apply the changes to all clones (or shared patterns).

Press Part Select [M.DRUMS] (Single) to edit the selected pattern without changing the clones.

Press Part Select [M.BASS] (All) if the clones (or shared patterns) are to change according to the modifications of the pattern you are re-recording or editing. Press Part Select [LOWER] to leave this page without changing anything.

Length pages

⊃ Master page: [F4] (UsrStI)→ [F2] (Lengt) [PAGE] ▲▼ (select Or/Va, In/Ed, or Fo/Fv pages)



The Length function allows you to modify the length (number of bars, beats, and clocks) both before or after recording. If used after recording, the data that lie beyond the specified end will be discarded.

Note: There is no way of recalling discarded data, so think twice before executing the length function. Let us briefly look at the information that appears on these pages:



Track (1ADR~8AC6, All)

Allows you to select the track whose length setting you wish to change. If the length does not have to be the same for all tracks (which goes unnoticed for looped divisions, see "Looped divisions" on page 103 in the Player's Guide), try to use only integer multiples or fractions for longer or shorter tracks (i.e. 4 bars for one track, while the others are 8 bars in length; 3-bar patterns don't loop well over 4- or 8-bar tracks).

[F1] Share

Press [F1] to be able to select all shared patterns in one pass. Doing so ensures that clones are always identical to the original.

[F2] Singl

Press [F2] if you want to select only one pattern of a clone group. Changing the length of a "shared" pattern needs to be confirmed (see "Cloning and edit functions and possible warnings (Shared)").

[F3] Mark *

The Mark function allows you to select several patterns that are not connected to each other. To select a pattern, use the [ACCOMP/GROUP] ▲▼ buttons, then press [F3]. Select another pattern on this page and press [F3] again.

$\textbf{[F4]} \rightarrow \textbf{Rec}$

Pressing this button will take you back to the UsrStl\Rec level (see page 162).

[F5] Exit

Press this button to return to the Master page.

Select

The Select function, assigned to the [ACCOMP/GROUP] ▲▼ buttons, allows you to position the cursor on the pattern whose length you wish to change.

Bar

The [BASS/BANK] \blacktriangle buttons allow you to set the length of the selected pattern(s) in steps of one bar. Note that it is perfectly possible to make an existing track longer by specifying a Bar value that lies beyond the last notes (or current end).

CPT

This is another length value that allows you to "fine tune" the length. In most cases, you will probably work with multiples of \downarrow notes (i.e.

120CPT) because 120CPT represent one beat of an X/4 bar (1/4, 2/4, 3/4, 4/4, etc.). All intermediary steps are selectable, though the musical functionality of "x-bars-and-a-bit" patterns is questionable, to say the least.

All

Use the All function ([UPPER/VARIATION] ▲▼ buttons) to select all patterns on the current display page (i.e. all Original/Variation, Intro/Ending, or Fill-In To Original/To Variation patterns).

Execute

Press Part Select [M.DRUMS] to apply the new length value to all selected patterns on this page.

TSign page (time signature)

⊃ Master page: [F4] (UsrStl)→ [F3] (TSign) [F1] (View) or [F2] (Chnge)



The TSign page allows you to check and set the time signature of certain patterns. As you will discover on the View page (see below), the time signature of the major (M), minor (m), and seventh (7) patterns must always be the same. This security system helps you avoid switching to another time signature simply by playing a major, minor, or seventh chord in the chord recognition area of the keyboard.

Value (time signature)

Use this parameter to specify the time signature of the selected pattern (Division, see below). The most commonly used time signatures are: 2/4, 3/4, 4/4, 6/8, and 12/8. Other values (such as 7/4, 13/8, etc.) are also possible.

Note: When you change the time signature of an already recorded pattern, its notes and events are "reshuffled" according to the new time signature, so that you may end up with incomplete measures. However, none of your data are deleted.

Division (Basc/Adv, Basic, Advanced; Or, Var)

The [ACCOMP/GROUP] and [BASS/BANK] ▲▼ buttons allow you to select the pattern(s) you wish to edit. Whatever your choice, it will always bear on the major, minor, and seventh modes.

Style

This parameter is used to select the User Style whose time signature you wish to change.

[F1] (View)

Press [F1] to have a look at the time signature values of the various patterns.

12/8	In-Bsc	12/8	In-Adv	TSIGN
4/4	Ed-Bsc	4/4	Ed-Adv	1View
4/4	Or-Bsc	3/4	Or-Adv	2Chnse
3/8	Va-Bsc	5/4	Va-Adv	3
4/4	Fo-Bsc	32/32	Fo-Adv	44Rec
12/8	FV-BSC	6/8	FV-Adv	SExit

[F2] (Chnge)

Press [F2] to select the page that allows you to modify the time signature settings. The first page (see above) only allows you to view the settings.

$[F4] \rightarrow Rec$

Pressing this button will take you back to the UsrStl\Rec level (see page 162).

Execute

Press Part Select [UPPER1] to confirm the new time signature and resize the selected pattern(s).

Track Copy

User Stl\Copy\ From 1 page

⊃ Master page: [F4] (UsrStl)→ [SHIFT] + [F1] (Copy) [PAGE] ▲▼ (select From 1)



The Track Copy function allows you to copy tracks of a Style pattern (A11~B88, U1~U8) to the selected User Style pattern. You can only copy one track at a time (hence the name *Track* Copy). See "Load User Style/Copy ROM Style" on page 197 for how to copy entire Style patterns from disk or the internal ROM Style memory.

Track (1ADR~8AC6)

Allows you to select the track whose data you wish to copy (the source pattern). Do not forget to select the right Style (if it isn't already selected). Again, we would like to point out that you can only select one track at a time.

Mode

Allows you to specify one third of the source pattern's address: Maj (major), min (minor) or 7 (seventh).

Туре

Allows you to specify the type of the source pattern: Bsc (Basic), or Adv (Advanced).

Division

This parameter is used to select the Division of the source pattern you wish to copy: Or (Original) or Var (Variation).

Style (A11~B88, U1~U8)

Use this parameter to select the ROM or User Style that contains the source pattern. The name of that Style is displayed in the second line.

Listen

Press Part Select [UPPER1] to listen to the pattern you have selected for copying. Listen always plays back the entire pattern.

User Stl\Copy\ From 2 page

⊃ Master page: [F4] (UsrStI) → [SHIFT] + [F1] (Copy) [PAGE] ▲▼ (select From 2)



From/To

Use the [DRUMS/PART] ▲▼ buttons to select the To or From level. From refers to the position where the edit operation is to begin. That position is specified in a Bar-Beat-CPT format. To designates the position where the edit operation is to end (Bar-Beat-CPT value). Always check whether you have selected the right level (From or To) before setting the following parameters.

Bar (1~9999)

This is where you specify the bar position. By default, the From and To values are set to the beginning and end of the selected track(s). Note that the To value always refers to the end of the longest track.

Beat (1~[number of beats per bar])

This is where you specify the beat position. The number of selectable beats obviously depends on the time signature of the selected pattern.

СРТ

This is where you specify the CPT position of the beginning and end of the pattern to be copied. Unless you do not need all notes within the last bar, you should leave the default setting.

Mode (Replace, Merge)

Selects the Copy mode:

Replace	The data in the selected range will be copied to the destination track and over- write all data (of the destination track) in the selected source track range.
Mix	The data in the selected range will be added to any existing data on the destina- tion track.

In either case, the length of the destination track may change to include all data of the source track. In other words, you may find that the destination track is longer after executing the copy function. Therefore...

Note: If the User Style memory you wish to copy to already contains data, save it to disk before copying. The G-600 has no Undo function. Saving a Style to disk before copying will allow you to load the previous version in case something goes wrong.

User Stl\Copy\ To 1 page

⊃ Master page: [F4] (UsrStI)→ [SHIFT] + [F1] (Copy) [PAGE] ▲♥ (select To 1)



This page allows you to select the address the selected source pattern is to be copied to (the destination pattern). Please be aware of the following restrictions:

- (1) 1ADR patterns can only be copied to 1ADR tracks.
- (2) 2ABS patterns can only be copied to 2ABS tracks.
- (3) AC track (e.g. 3AC1~8AC6) can be copied to any AC track but never to a 1ADR or 2ABS track.
- (4) Looped patterns cannot be copied to one-shot patterns.
- (5) Intros can only be copied to Intros, Endings only to Endings, and Fill-Ins only to Fill-Ins.
- (6) If the destination track or pattern Division is set to a "forbidden" value, the G-600 automatically selects the corresponding source value.

For example: if you selected a 1ADR track as source and the 3AC1 track as destination, the G-600 automatically selects "3AC1" as source track.

Track, Mode, Type, Division

See page 169 for details.

Style

Selects the destination User Style memory. Only User Style memories can be selected here.

Execute

Press Part Select [M.DRUMS] to copy the selected source data if you only wish to make one copy. Otherwise, go on to the next display page.

Listen

Press Part Select [UPPER1] to listen to the destination pattern you are about to overwrite. Listen always plays back the entire pattern.

User Stl\Copy\ To 2 page

⊃ Master page: [F4] (UsrStl)→ [SHIFT] + [F1] (Copy) [PAGE] ▲▼ (select To 2)



This page allows you to set the Into position, i.e. the bar, beat and CPT value the first data of the source pattern will be copied to.

Bar, Beat, CPT

See page 169 for details.

Times (1~99)

Sets the number of copies you wish to make. Note that the value "3" means that you will end up with 3 contiguous copies, whereby the second copy is placed immediately after the first, etc.

Execute

Press Part Select [M.DRUMS] to copy the selected source data.

User Style Edit mode

Most display pages of the User Style Edit mode feature a ¹⁹⁵⁰ function that allows you to jump back to the first User Style\Rec page. Use it after editing a track (or all tracks) to record new material straight away.

Before discussing the various User Style Edit functions, we would like to remind you of the following: certain functions allow you to select the data type to be edited. Whenever that is the case, you can select one of the following options. Let us call these the *Data types*.

Parameter	Meaning
All	All editable parameters listed below.
Note	Only note messages.
Modul	Only modulation messages (CC01 in MIDlese).
PanPt	Only pan (or Panpot) messages (CC10).
Expre	Only Expression messages (CC11).
Revrb	Only Reverb send messages (CC91).
Chrus	Only Chorus send messages (CC93).
PChng	Program change messages
PBend	The Pitch Bend Range (i.e. the pitch change that can be obtained by turning the Bender lever fully to the left or right).
NRPN	Non registered parameter number (see page 187 for more information about NRPN).

Edit\Erase\1 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F1] (Erase) [PAGE] ▲▼ (select page 1)

Track Erase allows you to selectively delete data either within a specified range of the pattern(s), or from the entire track(s). In All mode, Erase will substitute the required number of rests for the data you delete, so that you end up with the equivalent number of blank measures. If you also want to eliminate the measures themselves, use Track Delete (see page 173).

Track (1ADR~8AC6, All)

Allows you to select the track you wish to edit. Don't forget to select the right User Style memory if it isn't already selected (see below). You can also select All here, in which case the operation applies to all tracks of the selected pattern.

Mode

Allows you to select the mode of the pattern to be edited: Maj (major), min (minor) or 7 (seventh).

Туре

Allows you to select the pattern type to be edited: Bsc (Basic), or Adv (Advanced).

Division

This parameter is used to select the Division of the pattern: Or (Original) or Var (Variation).

Style (U1~U8)

Use this parameter to select the Style that contains the pattern to be edited. The name of that Style (either the default setting, USERSTL X, or the name you or someone else programmed) is displayed in the second line.

Execute

Press Part Select [M.DRUMS] to edit the data right away. The following parameters allow you to narrow down the scope of the edit operation. If you wish to edit the entire pattern, there is no need to fine-tune your settings. Just confirm the command by pressing Part Select [M.DRUMS].

Edit\Erase\2 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F1] (Erase) [PAGE] ▲▼ (select page 2)

From/To

Use the [DRUMS/PART] ▲▼ buttons to select the To or From level. From refers to the position where the edit operation is to begin. That position is specified in a Bar-Beat-CPT format. To designates the position where the edit operation is to end (Bar-Beat-CPT value). Always check whether you have selected the right level (From or To) before setting the following parameters.

Bar (1~9999)

This is where you specify the bar position. By default, the From and To values are set to the beginning and end of the selected track(s). Note that the To value always refers to the end of the longest track.

Beat (1~[number of beats per bar])

This is where you specify the beat position. The number of selectable beats obviously depends on the time signature of the selected pattern.

CPT

This is where you specify the CPT position of the beginning and end. Unless you do not need to edit all the selected data within the last bar, you should keep the default setting. Note that the Micro mode allows you to edit the data on an event basis, which is more precise because there you see the events to be edited, which is not the case here. If you only wish to edit one event (or message), you should definitely do so in the Microscope mode (see page 180).

Data Type

Allows you to select the data to be edited. See the table on page 171 for a list of the editable data types.

Execute

Press Part Select [M.DRUMS] to edit the data right away. The following parameters allow you to narrow down the scope of the edit operation. If you wish to edit the entire pattern, there is no need to fine-tune your settings. Just confirm the command by pressing Part Select [M.DRUMS].

Edit\Erase\3 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [F1] (Erase) [PAGE] ▲▼ (select page 3)

You only need to set the parameters on this page if the selected Data Type (see above) is Note. In all other cases, there is little point in setting the values on this page because you can only set a range (From/To) for notes. That is why this page is only displayed when the selected Data Type is Note.

From Note (C-1~G9)

This parameter allows you to set the lower limit of the note range to be modified within the specified From/To time range (see the second display page). If you wish to edit only one note, set the same value for From Note and To Note.

Note: If you select Octave= Multiple, you only need to set the correct From Note/To Note range without having to worry about the octave (you can set the $C-1\sim G-1$ range, for example to edit these notes in all octaves).

Note: The above settings (37 C#4) are only examples. The correct note name for note number 37 is, of course, C#2.

To Note (C-1~G9)

This parameter allows you to select the upper limit of the note range you wish to edit. Select the correct value if not all notes are to be edited. See also the two notes under "From Note $(C-1\sim G9)$ ".

Octave (Multiple, Single)

If the selected note range should be edited in all octaves, select Multiple. If the edit operation must

only bear on the notes within the selected range, set this parameter to Single.

Execute

Press Part Select [M.DRUMS] to confirm your settings and edit the data.

Edit\Dlete\1 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F2] (Diete) [PAGE] ▲▼ (select page 1)

Contrary to the Erase function, Track Delete also erases the measures, so that all measures that lie behind the To position will be shifted towards the beginning of the track(s). Since Delete also disposes of the measures, you cannot choose the data type to be erased.

Track (1ADR~8AC6, All)

Allows you to select the track you wish to edit. Don't forget to select the right User Style memory if it isn't already selected (see below). You can also select All here, in which case the operation applies to all tracks of the selected pattern.

Mode

Allows you to select the mode of the pattern to be edited: Maj (major), min (minor) or 7 (seventh).

Туре

Allows you to select the pattern type to be edited: Bsc (Basic), or Adv (Advanced).

Division

This parameter is used to select the Division of the pattern: Or (Original) or Var (Variation).

Style (U1~U8)

See page 171.

Execute

See page 171.

Edit\Dlete\2 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F2] (Dlete) [PAGE] ▲▼ (select page 2)

From/To

See page 172.

Bar (1~9999)

See page 172.

Beat (1~[number of beats per bar])

This is where you specify the beat position. The number of selectable beats obviously depends on the time signature of the selected pattern.

CPT

See page 172.

Execute

Press Part Select [M.DRUMS] to confirm your settings and edit the data.

Edit\Insrt\1 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F3] (Insrt) [PAGE] ▲▼ (select page 1)

The Insert function allows you to insert spaces in an existing pattern. That means that all data lying behind the position calculated by the For parameter (see the second page) are shifted further towards the end of the pattern, effectively making the pattern longer. You can only insert blank measures here.

Track (1ADR~8AC6, All)

See page 171.

Mode

See page 171.

Туре

Allows you to select the pattern type to be edited: Bsc (Basic), or Adv (Advanced).

Division

This parameter is used to select the Division of the pattern: Or (Original) or Var (Variation).

Style (U1~U8)

See page 171.

Execute

See page 171.

Edit\Insrt\2 page



D Master page: [F4] (UsrStI)→ [F4] (Edit)→ [F3] (Insrt) [PAGE] ▲▼ (select page 2)

From/For

Use the [DRUMS/PART] ▲▼ buttons to select either the From or the To level. The From level allows you to specify the position where the selected number of bars, beats, and clocks is to be inserted.

For, on the other hand, specifies how many bars, beats, and CPTs are to be inserted. In other words, this function does not follow the From/To rule of the other User Style Edit functions.

Track Insert works more or less like Length (see page 167) when it comes to making a pattern longer. There is one major difference, though: Track Insert allows you to make room at the beginning or in the middle of a pattern, while Length can only add blank measures, beats, and CPTs at the end of a pattern. (Apart from that, Length also allows you to shorten a pattern, of course.) Note: The Microscope mode also features an Insert function (see page 182) that allows you to add events without shifting the subsequent events towards the end. If you need to make room for new data, Edit Track Insert, is thus the only option you have.

Bar (1~9999)

See page 172.

Beat (1~[number of beats per bar])

See page 172.

CPT

This is where you specify the CPT value of the insert position (To) or the length of the insert (For). In most cases, you will probably work with entire bars because doing otherwise is highly confusing and probably not very musical.

Execute

Press Part Select [M.DRUMS] to confirm your settings and insert the requested number of bars, beats and CPTs.

Edit\Trnsp\1 page



D Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F4] (Trnsp) [PAGE] ▲▼ (select page 1)

Track Transpose is used to transpose the notes of the selected pattern (non-note data obviously cannot be transposed). Use this function with great caution because the Key value (see page 164) is not updated – even if you transpose entire track(s). We therefore suggest you only use it for parts of an Intro or Ending pattern – for example a difficult phrase you have recorded only once and then copied using Track Copy (see page 169). In other words, never transpose an entire pattern as that will invariably lead to a lot of confusion in Arranger mode.

Track (1ADR~8AC6, All)

Allows you to select the track you wish to edit. Don't forget to select the right User Style memory if it isn't already selected (see below). You can also select All here, in which case the operation applies to all tracks of the selected pattern. When combined with From Note and To Note (see below), Track Transpose is also useful for the 1ADR track. It allows you to select another snare or kick sound, for example. Most Drum Sets provide two snares, one assigned to note number 38 (D2), and a second assigned to note number 40 (E2). By selecting From Note= 38 (D2), To Note= 38 (D2) and setting the transpose Value "+2", you can change your D2 snare to the E2 snare.

Mode

See page 169.

Туре

Allows you to select the pattern type to be edited: Bsc (Basic), or Adv (Advanced).

Division

This parameter is used to select the Division of the pattern: Or (Original) or Var (Variation).

Style (U1~U8)

See page 169.

Execute

Press Part Select [M.DRUMS] to edit the data right away. Chances are, however, that you will not obtain the desired transposition. Just ignore Execute here and go on to the next display page.

Edit\Trnsp\2 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [F4] (Trnsp) [PAGE] ▲▼ (select page 2)

From/To

See page 169.

Bar (1~9999)

See page 169.

Beat (1~[number of beats per bar]) See page 169.

See page 10

CPT

See page 169.

Value (-24~+24)

This parameter is used to set the transposition interval in semi-tone steps. If you wish to transpose a C pattern to D, enter the Value +2.

Note: Be careful when applying Track Transpose to the 1ADR part. After all, transposing all notes of this track would mean that the drum part changes dramatically.

Execute

Press Part Select [M.DRUMS] to confirm your settings and edit the data or go to the next page if you do not wish to transpose all notes.

Edit\Trnsp\3 page



⊃ Master page: [F4] (UsrStI) \rightarrow [F4] (Edit) \rightarrow [F4] (Trnsp) [PAGE] ▲▼ (select page 3)

From Note (C-1~G9)

See page 172.

Note: If you select Octave= Multiple, you only need to set the correct From Note/To Note range without having to worry about the octave (you can set the C- $1\sim G$ -1 range, for example to edit these notes in all octaves).

To Note (C-1~G9)

This parameter allows you to select the upper limit of the note range you wish to edit. Select the correct value if not all notes are to be edited.

Octave (Multiple, Single)

See page 172.

Execute

Press Part Select [M.DRUMS] to confirm your settings and edit the data.

Edit\Velo\1 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F1] (Velo)

[PAGE] ▲▼ (select page 1)

The Velocity Change function allows you to modify the dynamics (called velocity) of a track or excerpt. Increasing the velocity values means that the notes in question will be louder and brighter than before, while reducing the velocity values means the opposite. Use this function when you are happy with the timing of the notes but would like the sound to be brighter/louder or rounder/softer. Executing this function means that the velocity values will change proportionally:



Track (1ADR~8AC6, All)

See page 171.

Mode

See page 171.

Туре

Allows you to select the pattern type to be edited: Bsc (Basic), or Adv (Advanced).

Division

This parameter is used to select the Division of the pattern: Or (Original) or Var (Variation).

Style (U1~U8)

See page 171.

Execute

Press Part Select [M.DRUMS] to edit the data right away.

Edit\Velo\2 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F1] (Velo) [PAGE] ▲▼ (select page 2)

From/To

See page 172.

Bar (1~9999)

See page 172.

Beat (1~[number of beats per bar])

See page 172.

CPT

See page 172.

Value (-99~+99)

The Value parameter allows you to set the velocity change level. Select a positive value to increase the velocity of the selected track(s), or a negative value to decrease the velocity values. This Value parameter can be particularly useful for velocity switched sounds (most organ Tones, for example): slightly reducing or increasing the overall velocity, allows you to "shift" all notes to the "other" sound.

Note: Even the highest positive or negative Value doesn't allow you to go beyond "1" or "127". There is a reason why "0" is impossible: that value is used to signal the end of a note (note-off). "127", on the other hand, is the highest velocity value the MIDI standard can muster. Selecting a high positive velocity value may thus lead to all notes being played at "127", which may not be what you had in mind in the first place...

Execute

Press Part Select [M.DRUMS] to confirm your settings and edit the data or go to the next page if you do not wish to change all notes.

Edit\Velo\3 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F1] (Velo) [PAGE] ▲▼ (select page 3)

From Note (C-1~G9)

See page 172.

Note: If you select Octave= Multiple, you only need to set the correct From Note/To Note range without having to worry about the octave (you can set the C- $1\sim G-1$ range, for example to edit these notes in all octaves).

Note: The above settings (37 C#4) are only examples. The correct note name for note number 37 is, of course, C#2.

To Note (C-1~G9)

See page 172.

Octave (Multiple, Single)

If the selected note range should be edited in all octaves, select Multiple. If the edit operation must

only bear on the notes within the selected range, set this parameter to Single.

Execute

Press Part Select [M.DRUMS] to confirm your settings and edit the data.

Edit\Quant\1 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F2] (Quant) [PAGE] ▲▼ (select page 1)

The Track Quantize function can be used *after* recording a part if you don't feel comfortable with the timing of what you played. If only certain notes in a given time range need to be quantized, you should narrow down the edit range using the From/To parameters on the second page. Use quantization as sparingly as possible to program "natural" Styles.

Using this function after recording a part has the advantage that you don't ruin the musicality of what you played. If, however, you prefer to quantize your parts while recording, use (Quantize) Value (see page 164) to select the resolution of the "automatic" quantization function.

Track, Mode, Type, Division, Style, Execute

See page 169 for an explanation of these parameters.

Edit\Quant\2 page



⊃ Master page: [F4] (UsrStl)→ [F4] (Edit)→ [SHIFT] + [F2] (Quant) [PAGE] ▲▼ (select page 2)

From, To, Bar, Beat, CPT, Execute

See page 169 for an explanation of these parameters.

Value

This parameter sets the resolution of the Quantize function. The available values are:

1/8	Eighth note (quaver)	7
1/8t	Eighth note triplet (1/12)	$\mathcal{I}_{\mathbf{s}}$
1/16	Sixteenth note (semiquaver)	A
1/16t	Sixteenth note triplet (1/24)	\mathbb{A}_3
1/32	Thirty-second note	A
1/32t	Thirty-second note triplet (1/48)	A,
1/64	Sixty-fourth note	

Note: Be sure to always select the value that equals the shortest note you recorded. Otherwise, your part no longer sounds the way you played it.

Edit\GateT\1 page



⊃ Master page: [F4] (UsrStI) \rightarrow [F4] (Edit) \rightarrow [SHIFT] + [F3] (GateT)

[PAGE] ▲▼ (select page 1)

The Gate Time Change function allows you to modify the duration of the notes in the selected time (From/To) range. We recommend you use this function exclusively to shorten notes that are being perceived as too long due to the Tone you assigned to the track in question. On these two pages, there is indeed no way to view the duration of the notes, which makes editing the data "en bloc" a little bit hazardous. Use the "Change" function (see page 180) to modify the duration of specific notes.

After selecting a Tone with a slow release (i.e. a sound that lingers on after all notes have been released), however, Track Gate Time Shift will help you cut the notes down to size and thus avoid overlaps (and possible dissonance, also known as cacophony). Even though your release timing may have been right for the original Tone, you should use Track Gate Time Shift to shorten all notes to such a degree that they no longer overlap.

Track, Mode, Type, Division, Style, Execute

See page 169 for an explanation of these parameters.

Edit\GateT\2 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F3] (GateT) [PAGE] ▲▼ (select page 2)

From, To, Bar, Beat, CPT, Execute

See page 169 for an explanation of these parameters.

Value (-9999~+9999)

This parameter sets the amount by which the duration (or gate time) of the selected notes is to be changed. The shortest possible Gate Time value is "1" (used for all notes of the 1ADR track), so that selecting "-1000" for notes with a Gate Time of "1" in the specified time range still leaves you with the same value. Allowing the value "0" would effectively erase the notes, which can only be achieved with Track Erase (see page 171).You cannot use Track Change Gate Time to erase notes.

Edit\Shift\1 page



⊃ Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F4] (Shift)

[PAGE] ▲▼ (select page 1) Track Shift allows you to shift the notes within the selected From/To range (second page). It can be used for two things:

 To correct "slow" notes due to a slow(er) attack. You may want to use Track Shift after assigning a Tone to a track that has a considerably slower attack than the Tone you used for recording the part in question. This technique is frequently used in pop music to "time" 1/16-note string arpeggios played with a "slow" pad sound. Rather than have the notes begin at the mathematically correct time (e.g. 2-1-0), you could shift them to the left (e.g. to 1-4-110) of the previous measure, so that the peak volume of the attack is reached on the next downbeat:



(2) To correct the timing of notes recorded via MIDI without quantizing them.

As explained in the Player's Guide, you could use sequences, etc., as raw material for your User Styles. Recording such excerpts via MIDI may cause a slight delay (e.g. 5 CPT). If that is not acceptable, use Track Shift to "push" all notes to the left (select "–5"). That allows you to tidy up the timing and still keep any irregularities (music!) the original may contain because it was not quantized.

Note: Before selecting a Shift value, you should have a look at one track in the Microscope mode (see page 180) to determine which negative value to use. If the first note of a track starts on 1-1-6, for example, set Track Shift to "-6". Be sure to apply the same Shift to all tracks to maintain the timing of the original!

Track, Mode, Type, Division, Style, Execute

See page 169 for an explanation of these parameters.

Edit\Shift\2 page



D Master page: [F4] (UsrStI)→ [F4] (Edit)→ [SHIFT] + [F4] (Shift) [PAGE] ▲▼ (select page 2)

From, To, Bar, Beat, CPT, Execute

See page 169 for an explanation of these parameters.

Value (-9999~+9999)

This parameter sets the amount by which the notes are shifted. The Value refers to CPT units (one CPT= $1/120 \downarrow$).

Note: Notes on the first beat of the first bar cannot be shifted further to the left (that would mean shifting them to the "0" measure, which doesn't exist).

7. User Style Microscope mode

The User Style Microscope mode is similar to the Microscope mode found on Roland MC series sequencers. Select this mode whenever you need to change just one aspect of an otherwise perfect User Style (or copied ROM Style).

In this chapter, we will use the word *event* for any kind of message (identical to MIDI messages that cause the Arranger to play or set something). An event is thus a command (or instruction) for the Arranger.

As the name of the first display page (Track Microscope Edit) implies, you can only view and edit one track at a time. In other words, do not forget to select the right track and pattern before you select a Micro function.

Track Microscope Edit



⊃ Master page: [F4] (UsrStI)→ [SHIFT] + [F2] (Micro) This page again contains the familiar selection criteria that help you choose the track and pattern. As stated above, you first need to choose a pattern before you can edit it. There is no way to view all data of a given pattern in Microscope mode. This is also the page you will return to after leaving the selected Micro Edit function.

Track, Mode, Type, Division, Style

See page 169 for an explanation of these parameters.

Proceed

Press Part Select [M.DRUMS] to jump to the Microscope Edit page.

Listen

The Listen function allows you to audition the track of the selected pattern.

Change



D Master page: [F4] (UsrStI)→ [SHIFT] + [F2] (Micro) Part Select [M.DRUMS] (Proceed)→ [F1] (Chnge) The Microscope Change function is used to modify existing events, which may be anything from transforming a C#2 into a D2, velocity value "35" into "70", or control change CC1 into control change CC10.

Event selection: Bar-Beat-CPT

Allows you to scroll through the events. You can only select Bar-Beat-CPT positions that already contain data. Note that using the [PAGE] ▲▼ buttons also allows you to scroll through the events. It has the advantage of being more precise because it works on a step-by-step basis – and that every note event is sounded.

Status column

This column contains all the message types you can assign to an event:

Status CC1	Meaning Modulation data
PC	Program changes (usually found at the beginning of a pattern)
CC6	Data entry (required for NRPN messages).
РВ	Pitch Bend message
CC10	Pan message
CC91	Effect 1 Send depth (Reverb)
CC11	Expression message (volume)
CC93	Effect Send 2 (Chorus)
CC0	Bank select (MSB)
CC98/99	NRPN
CC32	Bank select (to select the Old or New level)
Note: NRPN messages only apply to the A.Drums part (CC99= 24), and only to note numbers (CC98=) 37, 38, 40, 41, 52, 56, 57, 65. See page 166 for the sounds these note numbers correspond to. Note: Don't look for CC64 (Hold or Sustain) events because you won't find any. As explained in the Player's Guide, the use of the pedal connected to the SUS-TAIN FOOTSWITCH jack is converted into the equivalent Gate Time values. To change such converted "Hold messages", you thus have to modify the Gate Time values of the affected notes.

Velo

Don't let the name of this column fool you. It does indeed display the velocity value of notes, but it also contains the values assigned to a control change number, a program change, or Pitch Bend event.

Use the [LOWER/NUMBER] $\blacktriangle \forall$ buttons to change the value of the selected event.

Gate Time

The values in this column, on the other hand always represent the duration (or Gate Time) of note events. That is why all other events have no Gate Time values (consider the PC-33 event in the above illustration, for example).

Note: The Gate Time value of drum note events is always "1". The sounds being triggered are indeed one-shot samples that stop automatically. Setting a longer Gate Time value for drum notes (1ADR track) does not make them longer.

[PLAY] (Part Select [M.BASS])

The Play function allows you to sound the selected event (if it is a note). You could use this function to check the new velocity (Velo) value, and change it again if necessary until the note sounds right.

You can now select another function on the menu (Erase or Insert) or press [F4] to return to the opening Microscope page in order to select another track or pattern for editing or further exit to the Master page. As soon as you do, the display will tell you that the new settings are being processed:

EXECUTING... please Wait

In other words, there is no need to confirm your settings: all modifications will take effect as soon as you return to the opening Microscope page. (That also means, however, that settings you do not really wish to keep will be processed, so be careful with what you do in the Microscope mode.)

Erase



⊃ Master page: [F4] (UsrStI)→ [SHIFT] + [F2] (Micro) Part Select [M.DRUMS] (Proceed)→ [F2] (Erase) The Erase function allows you to dispose of unwanted events. Erasing an event on this page does not mean that all subsequent events will be shifted to the left to fill up the "gap". As a matter of fact, "spaces" between events are not considered as gaps by the Microscope function.

Event selection: Bar-Beat-CPT

See page 180 for details. Use this function to choose the event you wish to delete.

[PLAY]

See left column.

Execute

The Erase command needs to be confirmed. If you are sure you selected the right event, press this button now to get rid of it.

Insert



⊃ Master page: [F4] (UsrStl)→ [SHIFT] + [F2] (Micro) Part Select [M.DRUMS] (Proceed)→ [F3] (Insrt) This Insert function is used to add events to an existing track – or to program a part in step time. See the Player's Guide for an example of step time programming using the Microscope Insert function.

The Insert function consists of two pages: the first page is used to add an event at the selected position (using Bar, Beat and CPT), while the second page allows you to define the Status (note, control change, etc.) and values of that event.

Note: It is perfectly possible to insert an event at a position that already contains one. This allows you to add the missing note of a chord, for example. Be sure, however, not to assign two control changes of the same number (e.g. Pan, CC10) and with different values to the same position.

Bar (1~9999) [DRUMS/PART]

Allows you to specify the bar where the event should be inserted.

Beat (1~[number of beats per bar]) [ACCOMP/GROUP]

Allows you to specify the beat within the selected bar (see above).

CPT [BANK]

This parameter sets the CPT value of the new event. Here is a table of the most commonly used notes and their CPT values:

Note	СРТ	Note	СРТ
0	480	\mathcal{I}_3	90
9	240	۲.	60
J	120	A	30

Proceed (Part Select [UPPER1])

After specifying the position of the new event, press Part Select [UPPER1] to select the second Insert page, where you can assign a function (Status) and value(s) to the new event:

BAR BEAT CPT	STATUS	YELO	GATETIME	
A 8998.01.000		-)		MICRO
				Insert
				34Insr
V				44Micr
EXECUTE STATUS	DATA-1	DATA-2	DATA-3	5Exit
EVECOLE SU	*		—	

Look at the above display illustration: this time, the Status, Value and Gate Time dashes are inverted (while on the previous page, only the position is inverted) to signal that the G-600 is now waiting for instructions regarding the newly inserted event.

Status

Use the [ACCOMP/GROUP] \blacktriangle buttons to select the Status of the new event (note, control change, etc., see the table on page 180). To insert a note event, you can also press the corresponding key on the G-600's keyboard. That will also assign a velocity value to that event. If the velocity value is not the one you need, either press the same key again (harder or softer) or use the [BASS/BANK] \bigstar buttons to set it.

Note: You can only program one note at a time. Playing a chord will only enter the last note you.

Data-1

This function can only be used to set the "note name: note number" (e.g. C#2:37) of note events. If you select another event using the Status $\blacktriangle \lor$ buttons (see above), [BASS/BANK] $\bigstar \lor$ cannot be used.

Velo (Data 2)

As stated above, the Velo value does not necessarily refer to a velocity value. It is also used to indicate and (on this page) set the value assigned to the control change, etc. in question – which is why the function of the [LOWER/NUMBER] $\blacktriangle \forall$ buttons is called *Data-2* rather than Velo.

Gate Time (Data-3)

The Gate Time value can only be set for note events. Use it to specify the duration of the new note. Remember that Gate Time value "1" is enough for 1ADR note events. *Note: Press* [F3] to jump back to the first insert page if you need to change something.

Execute

Press Part Select [M.DRUMS] to confirm your settings and assign them to the event.

Move

BAR BEAT CPT	STATUS		GATETIME	
▲ 8998.01.000			(Bnk)	MICRO
	<cc 32=""></cc>	_2	<bnk></bnk>	1Move
	PC	33		2COP9
8998.01.001	PB	-127		3
→ 8998.01.001	C#Z: 37	127		44Micr
FROM TO		3	BOCEED	5Exit
L • •				

⊃ Master page: [F4] (UsrStI)→ [SHIFT] + [F2] (Micro) Part Select [M.DRUMS] (Proceed)→ [SHIFT] + [F1] (Move)

The Move function allows you move the selected event (or events) to another position. This is the same as using the Track Shift function (see page 179) but it applies only to one or a few events at a time.

From

Use the [DRUMS/PART] ▲▼ buttons to select to first event to be moved. If you only wish to move one event, press [PROCEED]. Otherwise, set the last event to be moved:

То

Allows you to select the last event to be moved. While pressing the [ACCOMP/GROUP] ▲▼ buttons, you will notice that all events you scroll through are inverted. Stop at the last event you wish to move.

Proceed

Now that the range of events to be moved is selected, press Part Select [UPPER1] to go to the second Move page:

BAR BEAT CPT	STATUS		ETIME
▲ 8998.01.000	<cc 00=""> <cc 32=""> PC</cc></cc>		nk) <u>MICRO</u> nk) Move
8998.01.001 - 8998.01.003	PB	-127	34Move 44Micr
₩BAR ₩BEA	T TCPT	EXEC	UTE SExit

The parameters on this page are used to specify the new position (Into) of the first event you selected on the previous display page. All subsequent events will be positioned relative to the first event (i.e. the distance between the moved events remains the same).

Bar, Beat, CPT

Use these parameters to specify the position the selected event(s) is (are) to be moved to. Just for your information, the Move function is automatically set to Mix, which means that the act of moving events does not overwrite events that may be present at the selected destination.

Execute

Press Part Select [UPPER1] to confirm your settings and move the selected events to the new position.

You could now press [F3] to jump to the Copy function, or [F4] to return to the opening Microscope page.

Сору



⊃ Master page: [F4] (UsrStI)→ [SHIFT] + [F2] (Micro) Part Select [M.DRUMS] (Proceed)→ [SHIFT] + [F2] (Copy)

The Copy function allows you to copy the selected events to another position. In a way, it is like moving events without erasing the events at their original position.

From, To

See left column for details. After selecting the events to be copied, press Part Select [UPPER1] (Proceed) to jump to the second Copy page:



By now, you probably know that the Into position is the Bar/Beat/CPT the first event of the selected range will be copied to. Set the desired position using the [DRUMS/PART], [ACCOMP/GROUP], and [BASS/BANK] ▲▼ buttons. Also note the Copy Mix message on the function menu. Like on the second Move page, this message is used to signal that copying the selected events will not erase events that may already exist at the selected position.

Style Name



⊃ Master page: [F4] (UsrStl)→ [F3] (Name) After editing a User Style, you may want to name it. That is what the Style name page allows you to do. First select the User Style memory that contains the Style whose name you wish to change (or program). As always, select the cursor position using the [ACCOMP/GROUP] ▲▼ buttons and enter the desired character with [BASS/BANK] ▲▼.

After entering the name, do take advantage of the Save jump function to save your User Style to disk. Saving your Style is the only safeguard against losing a precious accompaniment. Remember that all User Styles are erased when you power off your G-600.

Pressing Part Select [M.DRUMS] will take you right to the Save Disk page that allows you to save User Styles. In other words, you won't have to "push" your way to the desired Disk menu page.

User Style Delete



⊃ Master page: [F4] (UsrStl)→ [F4] (Dlete) Unlike "Track Delete" on page 173, the User Style Delete function is used to clear the selected User Style memory (or memories). If you are sure you no longer need a given Style, delete it using this function.

Select, All, Mark

Use the [ACCOMP/GROUP] $\blacktriangle \forall$ buttons to place the cursor on the User Style you wish to delete, or [UPPER/VARIATION] $\blacktriangle \forall$ to select the first four Styles (1~4), the next four (5~8), or all Styles.

You can also select Styles 1, 5, and 8, for example, to be deleted. To do so, select them and press [F3] (Mark) to mark them (*).

After selecting the Styles to be deleted, press Part Select [M.DRUMS] (Execute) to delete the Style(s).

The display will respond with:



The Styles will be deleted, after which the display tells you:



The display now returns to the first User Style\Rec page.

8. MIDI mode

SMF, General MIDI, and General Standard

Before exploring the MIDI parameters of your G-600, there is something you need to know. Your G-600 is GM (General MIDI) and GS (General Standard) compatible, the most important advantage being that it allows you to playback (and record) Standard MIDI Files using the Recorder that can be played back on any GM or GS compatible instrument (like your G-600). You may think that is nothing special, but before the advent of GS (and GM), there was no way of predicting what a sequence would sound like when played back on another module or synthesizer because memory 1 on instrument A contained a synth pad sound, while the same memory on instrument B contained a grand piano sound.

Standard MIDI Files

In fact, there used to be a time when you could not even load your sequences into a sequencer of another brand because there were as many formats (i.e. ways of data-encoding) as there were sequencer manufacturers. That is why several manufacturers decided to develop a format that could be read by all sequencers. Think of the Standard MIDI File format as the TXT format of popular personal computers: the level that all programs can understand.

Contrary to TXT format, however, the Standard MIDI File (SMF for short) format is amazingly elaborate: even System exclusive (SysEx) messages, the most intricate kind of MIDI data, travel well, so that the "format" (comparable to the lay-out of printed text) remains intact when a sequence is converted to SMF.

In fact, the SMF format is so elaborate that some sequencers no longer rely on their manufacturers' system for recording and playing back data – which is the case of the G-600's Recorder.

The Standard MIDI File format (i.e. the fact that any sequencer can read the data) is a prerequisite for the following two formats (i.e. the fact that sound selection, amongst other things, remains the same).

GM System

The GM (General MIDI) system is a set of recommendations which seek to provide a way to go beyond the limitations of proprietary designs, and standardize the MIDI capabilities of sound generating devices. Sound generating devices and sound data that meet the GM standard bear the GM logo. Song data bearing the GM logo can be played back using any GM sound generating unit to produce essentially the same musical performance.

GS format 🌮

The GS format is Roland's unified set of specifications to standardize the MIDI capabilities of sound generating devices. Song data bearing the GS logo can be played back using any GS sound generating unit. The G-600 supports both GM and GS, and can be used to playback song data carrying either of these logos.

Note: See "Compatibility" on page 140 of the Player's Guide for aspects to consider in order to keep your G-600 Recorder songs GM/GS compatible.

MIDI messages used by the G-600

The way a device responds when it receives MIDI messages (i.e. how it produces sound, etc.) depends on the specifications of that device. This means that if the receiving device is not able to perform the function specified by the incoming message, the musical result will not be what you expected. What it comes down to is this: there are several levels of MIDI compatibility, and not all MIDI compatible instruments understand (i.e. receive) all existing MIDI messages.

Note: MIDI messages for which reception capability is required by the GM system (level 1) are marked by a * sign.

Note messages *

These messages convey notes played on the keyboard. They include the following information:

Note number	A number describing the note correspond- ing to the key you pressed or released.
Note-on	A messages signalling that you pressed a key (i.e. "start playing now").
Note-off	A message signalling that a key was released.
Velocity	A value describing how strongly you pressed a key.

Note: On many instruments (such as your G-600), a note-on message with the velocity value "0" is used to signal the end of a note (i.e. velocity value "0" effectively functions as note-off message).

Pitch Bend *

This message conveys the position of the Bender lever (or pitch bend wheel). The pitch will change when this message is received.

Bank Select (Control Change numbers 0 and 32) & Program Change *

On the G-600, these messages will select Tones, Styles, and Performance Memories. By using Bank Select messages (which are a type of control change message), an even wider variety of memory locations can be selected. Control change messages were added when it became clear that the maximum number of sounds selectable using program change messages (128) was no longer sufficient to access all sounds of a given instrument.

Note: Do not forget to send a Program Change message after a Bank Select message because sending only Bank Select messages does nothing whatsoever. The right order for sending these messages is (pay attention to the CPT values):

1.1.0 Bank Select CC0 + value1.1.1 Bank Select CC32 + value (0, 1, or 2)1.1.2 Program Change

Note: On the G-600, CC32 messages are used to select the Tone mode: "0" (don't leave current Tone mode), "1" (Old, e.g. SC-55 mode, Groups C and D), and "2" (New, e.g. G-600 Tone mode, Groups A and B).

Control change messages

These messages control parameters such as modulation and pan. The function of a message is determined by its control change (e.g. ID) number.

Modulation (control change number 1) *

This message controls vibrato.

Volume (CC07) *

This message controls the volume of a part. When this message is received, the volume of the part receiving on that MIDI channel will change.

Expression (CC11) *

This message conveys volume changes. It can be used to add expression. The volume of a Part will be affected both by Volume messages (control change 7) and Expression messages (control change 11). If a value of "0" is received for either of these messages, the part volume will be 0 and will not rise even if the other message is sent with a higher value. Be awarc of this.

Pan(pot) (CC 10) *

This message controls the stereo position of a part.

Hold (1) (CC64) *

This message conveys the up/down movements of the Damper (Sustain, Hold) pedal, causing the currently sounding notes to be sustained. When a Hold On message is received, notes will be sustained. In the case of decay-type instruments such as a piano, the sound will decay gradually until a Hold Off message is received. In the case of sustain-type instruments such as an organ, the sound will continue sustaining until a Hold Off message is received.

Sostenuto (CC66)

The Sostenuto pedal on a piano sustains only the notes that were already sounding at the moment

the pedal was pressed. The Sostenuto message conveys the movement of this pedal. When Sostenuto On is received, only the notes which were already on at that moment will be sustained.

Soft (CC67)

The Soft pedal on a piano softens the tone during the time the pedal is pressed. The Soft message conveys the movement of this pedal. When Soft On is received, the cutoff frequency will be lowered, causing a softer sound. When Soft Off is received, the previous sound will return.

Reverb Send Level (CC91)

This message adds a Reverb effect to the part.

Chorus Send Level (CC93)

This message adds a chorus effect to the part.

Delay Send Level (CC94)

This message adds a delay effect to the part. Delay is not available for the Drums (ADR and MDR) parts.

Portamento (CC65) Portamento Time (CC05) Portamento Control (CC84)

Portamento is an effect that creates a smooth change in pitch between the previously played note and the new note. When a Portamento message is received, the Portamento effect will be turned on or off. Portamento Time controls the speed of the pitch change. Portamento Control specifies the source note number (the previously played note).

RPN LSB, MSB (CC100/101) * Data Entry (CC06/38) *

Since the function of RPN (Registered Parameter Number) messages is defined in the MIDI specification, this message can be used between devices of different types. The RPN MSB and LSB messages specify the parameter which is to be modified, and then Data Entry messages can be used to modify the value of that parameter. RPN can be used to adjust Pitch Bend Sensitivity, Master Coarse Tune, and Master Fine Tunc.

Note: The values modified using RPN messages will not be initialized even if program change messages etc. are received to select other sounds.

NRPN LSB, MSB (CC98/99) Data Entry (CC06/38)

NRPN (Non-registered Parameter Number) messages can be used to modify the values of sound parameters unique to a particular device. The NRPN MSB and LSB messages specify the parameter which is to be modified, and the Data Entry messages can be used to modify the value of that parameter.

Since the GS format defines the function of several NRPN messages, GS compatible application programs can use NRPN messages to modify sound data parameters for Vibrato, Cutoff Frequency, Resonance, and Envelope values.

Note: The values modified using NRPN messages will not be initialized even if program change messages etc. are received to select other sounds. Note: With the factory settings, the G-600 will ignore NRPN messages. After a GS Reset message is received (or when you press the [GM/GS MODE] button), NRPN messages will be received. You can also manually turn on Rx NRPN (NRPN Receive Switch), so that NRPN messages will be received.

Aftertouch (Channel Aft. only *)

Aftertouch is a message that conveys the pressure applied to the keyboard after playing a note, so that this information can be used to control various aspects of the sound. There are two types of Aftertouch message: Polyphonic Key Pressure which is transmitted separately for each note, and Channel Key Pressure which is transmitted as one value that affects all notes on the specified MIDI channel. (The G-600 only receives Aftertouch messages.)

All Sound Off

This message turns off all currently-sounding notes.

All Note Off *

This message causes a note-off message to be sent to each note of the specified channel that is currently on. However, if Hold 1 or Sostenuto are on, the sound will continue until these are turned off.

Reset All Controllers *

This message returns controller values (modulation, pitch bend, etc.) to their initial settings. The following controller values for the specified channel will be reset to their initial values.

Controller	Initial value
Pitch Bend	0 (center)
Polyphonic Key Pressure (Aftertouch)	0 (minimum)
Channel Pressure (Aftertouch)	0 (minimum)
Modulation	0 (minimum)
Expression	127 (maximum)
Hold	0 (off)
Portamento	0 (off)
Soft	0 (off)
Sostenuto	0 (off)
RPN	number unset
NRPN	number unset

Note: Parameter values that were modified using RPN or NRPN will not change even when a Reset All Controller message is received.

Active Sensing

This message is used to check for broken MIDI connections, such as MIDI cables that have been disconnected, or MIDI cables that have been broken. The G-600 transmits Active Sensing messages at set intervals. Once an Active Sensing message is received via MIDI IN, Active Sensing monitoring will begin, and if an Active Sensing message fails to arrive for more than 420ms, it is assumed that the cable has been disconnected. If this happens, all currently sounding notes will be turned off, the same procedure will be executed as if a Reset All Controller message was received, and Active Sensing monitoring will stop.

System Exclusive messages

Exclusive messages are used to control functions which are unique to specific devices. Although Universal System Exclusive messages can be used even between devices of different manufacturers, most exclusive messages only apply to one type of instrument.

In order to recognize the device for which the data are intended, Roland exclusive messages contain a manufacturer ID, device ID and model ID. **Note:** Be aware that if the appropriate ID number is not used, data will not be transferred. The G-600 also receives and transmits SysEx data with ID number 41H for Lyrics data.

GM System On * (Universal System Exclusive)

When a GM System On message is received, the G-600 will be set to the basic GM settings. Also, NRPN and Bank Select messages will no longer be received once GM System On is received. The beginning of song data bearing the GM logo contains a GM System On message. This means that if you playback the data from the beginning, the sound generator will be automatically initialized to the basic settings.

GS Reset (GS Format System Exclusive)

When GS Reset is received, the G-600 will be set to the basic GS settings. The beginning of song data bearing the GS logo contains a GS System Reset message. This means that if you play back the data from the beginning, the sound generator device will be automatically initialized to the basic settings.

Master Volume (Universal System Exclusive)

This is an exclusive message common to all newer MIDI devices that controls the master volume of the entire G-600.

Other System exclusive (SysEx) messages

The G-600 can receive GS format exclusive messages (model ID 42H) that are common to all GS tone generators. The G-600 can also use exclusive messages (model ID 45H) that are especially for the SC-88.

About MIDI implementation charts

MIDI allows many different types of instruments to be connected, but some types of message cannot be conveyed meaningfully. For example if you wish to use keyboard Aftertouch of an external instrument to control the sound, while the sound generator connected to the keyboard does not receive Aftertouch messages, you will not get the musical result you intend. In this way, only messages that are used by both devices will actually be executed.

The MIDI specification requires that the owner's manual for each MIDI device include a "MIDI Implementation Chart" that shows the types of MIDI messages which are actually transmitted and received by a device. Put the *Transmitted* column of the transmitting device's implementation chart side by side with the *Received* column of the receiving device's implementation chart. Messages which are marked as "O" in both charts can be conveyed successfully. If either chart shows a "X" for a certain type of message, that message cannot be conveyed.

MIDI on your G-600

Your G-600 features an impressive number of MIDI parameters, some of which are used to set the MIDI receive (RX) or MIDI transmit (TX) channels, while most of them are related to enabling or disabling reception or transmission of certain MIDI messages. As stated in the Player's Guide, do not change the MIDI parameter settings unless you know what you are doing, in order to maintain the highest possible degree of compatibility with other MIDI devices.

After setting your MIDI parameters, you may wish to save them to a MIDI Set, so that they can be recalled when required. Selecting another MIDI Set may have a drastic effect on the way your G-600 behaves in a MIDI setup.

MIDI\RTime RX, MIDI\Arrng RX, and MIDI\Song RX pages

D Master page: [F3] (MIDI)→ [F1] (RTime), [F2](Arrng)
 [PAGE] ▲▼ (select the RX page)



Seeing that these three pages feature the same parameters, we will discuss them together. Just remember to press [F1] to select the Realtime (RTime) level or [F2] to select the Arranger (Arrng) level.

Part

This parameter allows you to select the part whose MIDI RX settings you wish to change. The selectable parts are:

Function ke	y Selectable parts
[F1] (RTime)	UP1, UP2, LOW, MBS, MDR
[F2] (Arrng)	ADR, ABS, AC1~AC6

The number next to the part name indicates the factory MIDI receive/transmit channel assignment.

G-600

Channel (1~16)

Allows you to assign a MIDI receive channel (i.e. the channel number used to receive MIDI data coming from external instruments, sequencers, or computers) to the selected part. By default, all Realtime and Arranger parts are set to receive and transmit MIDI messages.

Note: As long as the Arranger does not play (you may have to set the Style Sync parameter (see page 194) so that the Arranger does not start playing in response to a Start message), you can use the Arranger parts the way you would use the parts of a multitimbral tone generator.

Press the Part Select [M.BASS] button to prevent the selected part (Off) from receiving any MIDI messages at all. Otherwise, choose On.

Shift (-48~48)

This parameter allows you to transpose the received note messages before sending them to the G-600's tone generator. You could change the pitch of the received MIDI note messages, which may be useful if you are used to playing a song (that is being received via MIDI) in another key than the one the data were programmed in. The maximum possible transposition is four octaves up (48) or down (-48), each step representing a semitone.

Use the Part Select [LOWER] button to specify whether the Shift interval should be applied (On) or not (Off).

Filter

This parameter allows you to select several MIDI messages and to specify for each of them (i.e. for each selectable parameter) whether (On) or not (Off) the selected message should be received. Use the Part Select [UPPER2] button to select On or Off. The MIDI messages you can filter are:

PChng	Program change messages (including Bank Select)
PBend	Pitch Bend messages
Modul	Modulation messages (CC1)
Volum	Volume messages (CC7)
PanPt	Pan(pot) messages (CC10)
Expre	Expression messages (CC11)
Hold	Hold (Sustain, Damper) messages (CC64)
Sostn	Sostenuto messages (CC66)
Soft	Soft messages (CC67)
Revrb	Reverb Send messages (CC91)
Chrus	Chorus Send messages (CC93)
Delay	Delay Send messages (CC94)
RPN	Registered parameter number (CC100/101
NRPN	Non-registered parameter number (CC98/99)
SysEx	SysEx messages (system exclusive)
C32= 0	What to do when the received CC32 mes- sages equals 0 or is missing. Note: For this parameter, you can only select Old or New, i.e. you cannot filter this Bank Select message. (This filter only applies to reception.)

Note: See "MIDI messages used by the G-600" on page 185 for details about these MIDI messages.

Limit (High, Low: C-1~G9)

These parameters (High and Low) allow you to set the note range to be received. If not all note messages on the selected MIDI channel should be received by the selected part, set the range to the desired values.

To set the upper limit (High), first press Part Select [UPPER1] until the message below the on-screen knob reads High. To set the lower limit, press Part Select [UPPER1] to select Low before setting the value with the [UPPER/VARIATION] ▲▼ buttons.

Note: The Low Limit cannot be set to a higher value than the High Limit (and vice versa). Once the Low Limit equals the High Limit, setting a higher Low value will also increase the High value. Note: Some instruments start at C-2 and end at G8 (instead of C-1 and G9). You may have to "add an octave" to the value you see on the screen of your computer or external sequencer.

MIDI\RTime TX and MIDI\Arrng TX pages



⊃ Master page: [F3] (MIDI)→ [F1] (RTime) or [F2](Arrng) [PAGE] ▲▼ (select the TX page)

Part, Channel, Shift, Filter

Except for the fact that these parameters apply to the transmission of MIDI messages (i.e. messages sent whenever you play on the G-600, select Tones, etc.), these parameters are identical to the RX parameters. See page 189.

Note: Unless you have a very good reason to do otherwise, we suggest you always select the same TX (transmit) and receive (RX) channel numbers for a part. That will help you spot the problem whenever the part in question does not receive MIDI messages or whenever it sends MIDI data on the "wrong" channel.

Note: On the Arrng RX page, you will also find the three RX Parts. See the Player's Guide for details.

Local (On, Off)

Set Local to On (default setting) whenever you want the G-600 respond to the notes you play on the keyboard. Setting Local to Off, on the other hand, means that the part in question no longer controls the internal tone generator. When working with a sequencer equipped with a Soft Thru (MIDI echo) function – and *only* if (i) you connect the G-600's MIDI IN and OUT connectors to the external sequencer or computer, and (ii) use the G-600 as MIDI master keyboard for sequencing – you may have to set this parameter to Off to avoid that each note is sounded twice (producing an unpleasant sound called MIDI loop). In all other cases, select On. Note: A setting tantamount to Local Off can be achieved by muting a part (see page 147) and setting Part Switch (see page 194) to Int.

MIDI\NTA page (Note to Arranger receive channels)



⊃ Master page: [F3] (MIDI)→ [F4] (NTA) As explained in the Player's Guide, there is only one NTA page because the NTA notes are only meaningful to the G-600 when received from an external MIDI instrument. Whatever you play in the chord recognition area of the keyboard to feed the Arranger is automatically converted to the corresponding MIDI note numbers. Contrary to similar instruments of other manufacturers, your G-600 is blessed with the capability of sending the note numbers of all Arranger parts, so that you could use the internal or your own Styles to quickly record a Song using an external sequencer. Consequently, there is no need to transmit the note messages used to feed the Arranger (the NTA notes).

1'rx Ch, 2'rx Ch (1~16)

The NTA notes can be sent on two MIDI channels, so that you could control the G-600's Arranger using a MIDIfied accordion or any other instrument capable of sending accompaniment data (or data used to control the accompaniment) on two channels (such as organs with bass pedals, for example).

Note: You cannot assign the same MIDI channel to 1'rxCh and 2'rxCh.

Shift (-48~48)

This parameter allows you to transpose the received note messages before sending them to the G-600's tone generator. You could change the pitch of the received MIDI note messages, which may be useful if you are used to playing a song (that is being received via MIDI) in another key than the one the data were programmed in. The maximum possible transposition is four octaves up (48) or down (-48), each step representing a semitone.

The Shift parameter applies to both NTA channels.

Use the Part Select [LOWER] button to specify whether the Shift interval should be applied (On) or not (Off).

1'ch Limit, 2'ch Limit (C-1~G9)

High and Low allow you to set the note range to be received. If not all note messages on the selected MIDI channel should be received by the NTA "part", set the range to the desired values.

To set the upper limit (High), first press Part Select [UPPER1] until the message below the on-screen knob reads High. To set the lower limit, press Part Select [UPPER1] to select Low before setting the value with the [UPPER/VARIATION] ▲▼ buttons.

Note: The Low Limit cannot be set to a higher value than the High Limit (and vice versa). Once the Low Limit equals the High Limit, setting a higher Low value will also increase the High value.

Note: Some instruments start at C-2 and end at G8 (instead of C-1 and G9). You may have to "add an octave" to the value you see on the screen of your computer or external sequencer.

Basic Channel RX and TX pages



D Master page: [F3] (MIDI)→ [SHIFT] + [F1] (Basic)
 [PAGE] ▲▼ (select RX or TX page)
 The Basic Channel is used for several things: to

The Basic Channel is used for several things: to receive and transmit program change and bank select messages for selecting Performance Memories, as well as for the reception and transmission of other kinds of messages that are not directly related to a specific MIDI channel but may affect the G-600's parts (such as the Part Switch function, for example). That doesn't mean that the MIDI channel assigned to the Basic Channel function is of no importance. Only, the messages received on that channel may also apply to other aspects of your G-600.

Channel (1~16)

Use this parameter to assign an RX (receive) or transmit (TX) channel to the Basic Channel function. If you do not want the Basic Channel messages to be received (or transmitted), use the [ACCOMP/GROUP] ▲▼ buttons to select Off.

Filter

This parameter allows you to select three functions and specify whether (On) or not (Off) the corresponding MIDI messages should be received (or transmitted):

Filter	Meaning
PartSwtc	Whenever you mute or un-mute a part on the Volume pages, your G-600 sends an NRPN message that describes your action. The G-600 allows you to keep it from send- ing that message (or to respond to it when- ever it is received from an external instru- ment). Especially filtering these messages on the TX page may be useful to keep your external sequencer from recording them – or the receiving GS module from muting the part assigned to that channel.
PrfMemPC	This parameter is used to filter the transmis- sion or reception of program change and bank select messages relative to Perfor- mance Memory selection.
MstVolum*	This parameter allows you to enable or dis- able the reception of Master Volume mes- sages (see page 188) that would change the volume of the entire G-600.
Lyrics**	The Lyrics function of your G-600 is in fact a new kind of MIDI message used to trans- mit the words (or lyrics) contained in a Standard MIDI File (as meta-text events). Playing back Standard MIDI Files that con- tain lyrics data causes the G-600 to send these data on the Basic Channel – unless you set the corresponding filter to Off.

(*) Only on the Basic Channel RX page.

(**)Only on the Basic Channel TX page

Style Channel RX and TX pages



⊃ Master page: [F3] (MIDI)→ [SHIFT] + [F2] (Style) [PAGE] ▲▼ (select RX or TX page) The Style Channel is a MIDI channel used for receiving and transmitting program change and bank select messages allowing you to select Styles

via MID1, and volume messages that change the volume of a Style. Note that these two message types can only be filtered on the RX page (i.e. you can select whether or not to receive them).

Style selection via MIDI

Before delving into this matter, there is something we have to tell about the way Music Styles can be selected via MIDI. The following illustration will help you understand what this is all about:

	MI	DI address of the	selected Style
STL B**	HardRock	CC-00: CC-32: PC :	15 1 1 Bank
1 LATIN 1 2 LATIN 2	5	FOLK 2	
3 VARIETY	ົ້	WORLD 1 WORLD 2	
4 FOLK 1	8	RMERICAN	5Exit

As you see, the MIDI address of a Music Style consists of three elements: a program change number ("1" here), a CC00 number ("1"), and a CC32 number ("15"). CC0 and CC32 are bank select messages. The values assigned to CC0 and CC32 define the Style, whereas the program change number defines the pattern (Intro, Ending, etc.). In other words, sending only a program change number will select another pattern of the currently active Style. Only when the program change number is preceded by two values (for CC00 and CC32) will the G-600 select another Music Style.

Note: Every time you select another Style on your G-600, it will send a CCO-CC32-PC cluster to the MIDI OUTput. See the Style chart at the end of this manual for a complete list of all available Styles and their addresses.

Channel (1~16)

Allows you to assign a MIDI channel to the Style select feature (transmit channel on the TX page and receive channel on the RX page). If you don't want the Style Channel messages to be received (or transmitted), use the [M.BASS] button to select Off.

Filter (only on the RX page)

As stated above, you can filter two types of messages:

Style Filte	r Meaning
StlVolum	Volume messages relating to the Music Styles. Select Off if the G-600 must not receive them.
StylePC	Program change and bank select messages for Style selection. Select Off if the G-600 must not select other Styles or patterns in response to these incoming messages.

MIDI parameters (Param)



⊃ Master page: [F3] (MIDI)→ [SHIFT] + [F3] (Param) This page contains several parameters that are not related to each other (contrary to the other MIDI pages that always concentrate on one aspect).

Tx Octave (Absolute, Relative)

Absolute	The parts send the MIDI note numbers cor- responding to the keys you pressed.
Relative	The internal (and automatic) transposition related to the assignment of certain Tones to certain parts is translated into note num- bers, so that playing a C4 (note number 60 may actually result in note number 36 being played and sent to the corresponding MIDI OUT port. This, of course, depends on the Tone you assign to a part. See the Play- er's Guide for an example.

rxVelo, txVelo, On/Off switches

Your G-600 is equipped with a velocity-sensitive keyboard and a tone generator capable of responding to velocity messages. Velocity messages are an important element for musical expression because the way you strike a key results in a loud/bright or soft/round note, telling the listener something about your feelings.

In some cases, however, it may be wiser not to convey the velocity aspect of music making to emulate instruments that are not velocity sensitive (such as organs, for example). The G-600 allows you to activate or deactivate the transmission and/or reception of velocity messages. Use the Part Select [M.BASS] and Part Select [LOWER] buttons to switch the reception (RX) or transmission (TX) of velocity messages on or off.

If you select the Off position, you have to tell your G-600 which velocity value to use instead of the continuous flux normally received (in this case, the word receive applies to both incoming MIDI data and the messages received from the G-600's keyboard). That is what rxVelo and txVelo are for. The value you set using the [ACCOMP/GROUP] or [BASS/BANK] ▲▼ buttons will be used for all notes received via MIDI (RX) or sent to MIDI OUT (TX) – but only when the corresponding velocity filter is set to Off.

PartSwtc

The Part Switch parameter on this display page allows you determine what happens when you mute a part on the first Realtime or Arranger Mixer page (see "On/Off (part mute)" on page 147). One thing you *know* will happen is that the part in question no longer sounds when you play on the keyboard – even though its Keyboard Mode indicator lights, or even though the Arranger is playing. What you do not see, however, is whether a muted part still sends MIDI data. PartSwtc allows you to specify whether or not a muted part should go on sending MIDI messages:

Part Switc Int	A muted part can no longer be played via the G-600's keyboard or Arranger but con- tinues to send MIDI messages.
Int+Mid	A muted part can no longer be played via the G-600's keyboard or Arranger and no longer sends MIDI messages.

Selecting Int and muting a part thus has the same effect as selecting Local Off (see page 191). Choose whichever is more convenient in a given situation: part mute can be saved to a Performance Memory, while Local and Part Switch can only be saved to a MIDI Set.

Soft Thru (On, Off)

This function actually overrides the MIDI specifications, according to which the MIDI OUTput of an instrument only sends messages generated on the instrument itself (e.g. your G-600). When you set Soft Thru to On, all notes received on the NTA channel beyond the NTA's High and Low Limits are re-transmitted to the MIDI OUTput. Use the Soft Thru feature for a digital piano or other keyboard instrument without split function.

When you set Soft Thru to On, The G-600 sends a Local message (CC122) with a value "0" to the digital piano, so that the piano's sound source no longer responds to the notes you play on its keyboard. Seeing that the G-600 echoes back all notes that are not used to trigger the Arranger, you hear what you play on the piano – except in the zone set apart for the Arranger.

When you set Soft Thru back to Off, the G-600 sends a Local message with a value "127", thereby switching the piano's Local function back on.

MIDI Sync RX/TX

⊃ Master page: [F3] (MIDI)→ [SHIFT] + [F4] (Sync) [PAGE] ▲▼ (select the RX or TX page)



Style Sync (RX)

The Style Sync parameter on the RX page allows you to specify whether and how the Arranger or Recorder should be synchronized to external sequencers or drum machines. The available options are:

Option	Meaning
Internal	In this case, the G-600 is not synchronized with other MIDI devices. It is thus impossible to start/stop it via MIDI.
MIDI1: Play Arrng, Rec Song	This synchronization mode does two things at a time: it synchronizes both Arranger playback and the Recorder during recording in response to Start/Stop and MIDI Clock messages. In fact, after pressing the [REC@/STOPII] button, you have to start the external device to cause the Recorder to start. At the same, Arranger playback will be started, making this mode ideal for recordings involving both the Arranger (or Chord Sequencer) and the G-600's Recorder. Note: In MIDI1 mode, you can neither start the Arranger nor the Recorder with the G-600's front panel buttons. Recorder playback, however, can still be launched on the G-600 and will not sync to MIDI Clock messages.
MIDI2: Play Song, Rec Song	In this case, only the Recorder will be synchronized. This synchronization mode bears on Recorder playback and recording, meaning that the Recorder can only be started with MIDI Clock messages.
Auto1: Play Arrng Rec Song	This mode is similar to the MIDI1 mode, the only difference being that Arranger playback and Song recording are only synchronized if the G-600 receives a MIDI Start and MIDI Clock messages. Both Arranger playback and Song recording can still be launched on the G-600 itself. Thus, the G-600 "knows" when to synchronize to external MIDI Clock messages and when to follow its own tempo.
Auto1: Play Song Rec Song	This mode is similar to the MID12 mode, the only difference being that Song recording and playback are only synchronized if the G-600 receives a MID1 Start and MID1 Clock messages. As long as no MID1 Clock messages are received, the Recorder will follow its own (or your) tempo.
Remote1: Play Arrng Rec Song	The Arranger or Recorder waits for a start message to start playback or recording at its own tempo. As soon as the G-600 receives a stop message, Arranger playback and/or Song recording will stop.
Remote2: Play Song Rec Song	This is the same as Remote1, except that it applies to Song playback and recording. The Arranger is not affected by Start/Stop messages received via MIDI.

On/Off

Use these switches to allow (On) or prohibit (Off) reception of MIDI synchronization messages.

Style (Sync) TX

The Style Sync parameter on the TX page allows you to specify whether or not the G-600 should send MIDI realtime messages whenever you start the Arranger. Sending MIDI realtime (start, stop, clock) messages has the advantage that you can synchronize external instruments or computers with your G-600.

Option	Meaning
Start/Stop	If you select this option, the G-600 will only send start or stop messages whenever you start (or stop) Arranger or Recorder playback.
Clock	This option means that the Arranger sends Clock messages.

Note: Use [M.BASS] to switch on the reception options you need (these entries can be switched on/off individually).

Song (Sync) TX

There are several options for sending MIDI realtime messages whenever you play back a Song using the G-600's Recorder:

Option Start/Stop/Continue	Meaning If you select this option, the G-600's Recorder sends only Start/ Stop and Continue messages. Continue, by the way, is a message used to signal that playback is not started from the beginning of a Song.				
Clock	This option means that the Recorder sends Clock messages.				
Song Position Pointer	In this case, the Recorder sends Song Position Pointer (SPP) messages. These messages are used to indicate the current play back position, so that the slaved (synchronized) drum machine, sequencer, etc. automatically jumps to the correct position upon receiving a Song Position Pointer message.				
Song Select	In this case, the Recorder sends Song Select messages. Song Select messages specify which song memory to select.				

Note: Use [UPPER2] to switch on all transmission options you need (all of the above entries can be switched on/off individually).

Note: See your sequencer's etc. manual to see whether it accepts Song Position Pointer or Song Select messages.

After setting all these parameters, you may wish to save them to a MIDI Set. See the Player's Guide for details.

9. Disk mode

The Disk mode contains all functions and parameters relating to saving, loading, deleting files, and to formatting new disks or disks previously used on other instruments or devices.

The G-600 allows you to use both 2DD (double density) and 2HD (high density) disks. The capacity of the latter is twice that of the former.

Note: Though your G-600 has no problem reading MS-DOS® formatted disks, we recommend you format all your G-600 disks on the instrument itself because that will speed up the disk operations.

Disk Load (loading data from disk)

Load User Style/Copy ROM Style



⊃ Master page: [F5] (Disk)→ [F1] (Load) [PAGE] ▲▼ (select USR STL)

The first Load page allows you to load User Styles from disk or to copy a ROM Style to a User Style memory.

Source (Int, Dsk)

Source allows you to select the internal memory (ROM Styles) or the floppy (Dsk) inserted into the disk drive. Select Int when you want to copy a ROM Style (i.e. one of the 128 factory Styles) to a User Style memory. Select Dsk to load a Style from disk.

Select

Allows you to position the cursor on the Style you wish to load (or copy).

Division

Allows you to select which pattern (Division) of the selected (ROM or User) Style to load: All (all patterns), Int (Intro), End (Ending), Fo (Fill-In To Original), Fv (Fill-In To Variation), Bsc (Basic), Adv (Advanced), Or (Original), Var (Variation) or other possible combinations.

To User (1~8)

Use this parameter to select the destination User Style memory (i.e. the memory the selected Style pattern(s) should be copied to).

Execute

Press Part Select [UPPER1] (Execute) to confirm your settings and load the data.

Load Style Set



⊃ Master page: [F5] (Disk)→ [F1] (Load) [PAGE] ▲▼ (select STL SET)

As explained in the Player's Guide, User Style Sets help you save a lot of time because they allow you to load eight User Styles in one pass. User Style Sets can only be saved to disk and may only contain User Styles of that disk.

Select

Allows you to position the cursor on the User Style Set you wish to load.

Destination

This is an information window that tells you which User Style memories will be overwritten when you load the selected User Style Set. A dash (–) means that the corresponding User Style memory will not be overwritten.

Execute

Press Part Select [UPPER1] (Execute) to confirm your settings and load the data.

Load Performance Set



 D Master page: [F5] (Disk)→ [F1] (Load)
 [PAGE] ▲▼ (select PRF MEM)
 Loading Performance Memory Sets from disk can be selective, i.e. feel free to load only one Performance Memory, or comprehensive (the contents of all 192 Performance Memories).

Select

Allows you to position the cursor on the Performance Memory Set you wish to load.

Disk (1~192, All)

Use this parameter to select a specific Performance Memory from the Performance Memory Set on disk, or select All to load all Performance Memories.

To Int (1~192, All)

This parameter allows you to specify the Performance Memory number the selected data are to be copied to. If you select All for Disk, All is the only option here. Furthermore, All cannot be selected when you selected a specific Performance Memory for Disk.

Execute

Press Part Select [UPPER1] (Execute) to confirm your settings and load the data.

Load MIDI Set



 D Master page: [F5] (Disk)→ [F1] (Load) [PAGE] ▲▼ (select MDI SET) Loading MIDI Sets from disk can be selective, i.e. feel free to load only one MIDI Set of a "MIDI Set-Set" (consisting of eight MIDI Sets).

Select

Allows you to position the cursor on the MIDI Set you wish to load.

Disk (1~8, All)

Use this parameter to select a specific MIDI Set from the "MIDI Set-Set" on disk, or select all to load all eight MIDI Sets.

To Int (1~8, All)

This parameter allows you to specify the internal MIDI Set number the selected data are to be copied to. If you select All for Disk, All is the only option here. Furthermore, All cannot be selected when you selected a specific disk MIDI Set.

Execute

Press Part Select [UPPER1] (Execute) to confirm your settings and load the data.

Load Chord Sequence



 D Master page: [F5] (Disk)→ [F1] (Load) [PAGE] ▲▼ (select CHR SEQ) This function allows you to load a Chord Sequence from disk, thereby overwriting the Chord Sequence in the internal memory.

Note: The last Chord Sequence you record or load will be retained in memory when you power off your *G*-600.

G-600

Disk Save (saving data to disk)

In the Player's Guide and while designing the G-600, we tried to make a clear distinction between *saving* and *writing* data. The term *write* is only used to describe actions that cause certain settings to be saved to an internal memory. *Save*, on the other hand refers to the act of copying internal memory settings to a floppy disk.

Save User Style



⊃ Master page: [F5] (Disk)→ [F2] (Save) [PAGE] ▲▼ (select USR STL)

Use this function to save a newly programmed or edited User Style to disk. As explained all along in the Player's Guide, you should do so as frequently as possible. In fact, we decided to include a jump function on the User Style pages, allowing you to call up the above page whenever you feel it is time to save your User Style data. That explains the presence of the "jump User" function here: it allows you to return to the User Style mode without first leaving the Disk mode, then select the User Style mode, etc.

Number (1~8)

Allows you to select the internal User Style memory whose data you wish to save to disk.

Cursor/Character

Use these two on-screen knobs to select a character position (Cursor) and to assign a character to that position respectively. The available characters are:

```
0123456789
!"##$%&'()#+,-.
ABCDEFGHIJKLMNOPORSTUUWXYZ
[\]^_`
abcdef9hijklmnop⊴rstuvwxyz
```

Execute

Press Part Select [M.BASS] to confirm your settings and save the data to disk.

Save Performance Memory Set



⊃ Master page: [F5] (Disk)→ [F2] (Save) [PAGE] ▲▼ (select PRF MEM)

This function allows you to save all 192 Performance Memories as a set. The Size value indicates the capacity required to save the Performance Set to disk, while Free Disk tells you something about the remaining disk capacity.

Cursor/Character

See the left column for details.

Execute

Press Part Select [M.BASS] to confirm your settings and save the data to disk.

Save MIDI Set



⊃ Master page: [F5] (Disk)→ [F2] (Save) [PAGE] ▲▼ (select MDI SET)

This function allows you to save all 8 MIDI Sets as a set. The Size value indicates the capacity required to save the "MIDI Set-Set" to disk, while Free Disk tells you something about the remaining disk capacity.

Note: Saving a MIDI Set means that the contents of all eight MIDI Sets is saved to disk.

Cursor/Character

See the left column for details.

Execute

Press Part Select [M.BASS] to confirm your settings and save the data to disk.

Save Chord Sequence



 D Master page: [F5] (Disk)→ [F2] (Save) [PAGE] ▲▼ (select CHR SEQ) This function allows you to save the Chord Sequence in the internal memory to disk. The Size

value indicates the capacity required to save the Chord Sequence to disk, while Free Disk tells you something about the remaining disk capacity.

Cursor/Character

See page 199 for details.

Execute

Press Part Select [M.BASS] to confirm your settings and save the data to disk.

Rename

The Rename functions allow you to modify the name of a file on the disk you inserted into the G-600's disk drive. Please be aware that the selected file cannot be assigned the same name as that of another file on the same disk.

If you try to assign an already existing name to another file on the same disk, the display will respond with a message telling you that is impossible:



Press Part Select [M.DRUMS] to overwrite the other file, or Part Select [UPPER2] (Exit) if you wish to assign another name to the currently selected file.

Rename User Style

Â	_ Music Style _	DISK
ទ្	11 Rock1	1Load
Y	12 Rock2 13 8Beat1	2Save 3Rname
Ē	14 SBeat2	4Dlete
<u>.</u>	SELECT PROCEED	

⊃ Master page: [F5] (Disk)→ [F3] (Rname) [PAGE] ▲▼ (select STYLE)

The first Rename User Style page is used to select the disk User Style you wish to rename. After selecting it, press Part Select [UPPER2] (Proceed) to jump to the second page.



Style Name vs. File Name

The Style Name is the name used "internally" by the G-600. It is not the "official" name of the Style in question (i.e. not the one that will be used to identify the file on disk). The Style Name is actually just another User Style parameter located on this display page. On any display page with a Style name window, the name you set here (Style Name) will appear, e.g.:

		BigBand	MASTER 1Mixer
▲UP1)A11 UP2 A153 ▼LWR A723	Piano 1 St.FM EP Warm Strings	4/4	2Param 3Midi 4UsrSt
	min7,9/Eb		sDisk

What's the difference? The File Name is an MS-DOS® parameter, which means that you can only use uppercase letters. That, however, may be difficult to read in a given situation. Since the *Style Name* is part of the User Style parameters, you can also use lowercase letters. So do take the time to enter both names.

Note: Though possible, you should never assign different names to the Style Name and File Name parameters because that may cause confusion.

Cursor/Character

See page 199 for details.

Execute

Press Part Select [M.DRUMS] to save the new names to disk.

Rename Music Style Set



D Master page: [F5] (Disk)→ [F3] (Rname)
 [PAGE] ▲▼ (select STL SET)
 Use this page to rename a User Style Set on disk.

Select

Allows you to select the file you wish to rename.

Cursor/Character

See page 199 for details.

Execute

Press Part Select [M.DRUMS] to save the new name to disk.

Rename Performance Set, MIDI Set, Chord Sequence



⊃ Master page: [F5] (Disk)→ [F3] (Rname) [PAGE] ▲▼

Save for the fact that the following functions apply to different file types, they are identical, which is why we shall deal with all three of them. Be sure to select the right page using the [PAGE] ▲▼ buttons: PRF MEM (Performance Memory Sets), MDI SET (MIDI Set), or CHR SEQ (Chord Sequence).

Use this page to rename one of these file types on disk.

Select

Allows you to select the file you wish to rename.

Cursor/Character

See page 199 for details.

Execute

Press Part Select [M.DRUMS] to save the new name to disk.

Rename Song



D Master page: [F5] (Disk)→ [F3] (Rname)
 [PAGE] ▲▼ (select SONG)
 The following two pages allow you to assign a dif-

ferent name to a Song on disk.

Select

Allows you to select the file you wish to rename.

Proceed

After selecting the file you wish to rename, you must press Part Select [UPPER2] to jump to the second page:



Again, you can set two names. See page 200 for details about the difference. Unlike the File Name of a User Style, a Song's File Name does appear on the display.

Cursor/Character

See page 199 for details.

Execute

Press Part Select [M.DRUMS] to save the new name to disk.

Delete

	Performance Set	
Jucu	11 PRFMEM01 12 PRFMEM02	1Load 2Save
ME	13 PRFMEM03	3Rname
M	SELECT EXECUTE	5Exitp

⊃ Master page: [F5] (Disk)→ [F4] (Dlete) [PAGE] ▲▼

The Delete function allows you to erase the selected file from the disk you inserted into the drive. Be careful to select the right file type using [PAGE] ▲▼ and file before pressing Execute:

File Type	Explanation
STYLE	User Style
STL SET	User Style Set
PRF MEM	Performance Memory Set (192 Performance Memories!)
MDI SET	MIDI Set (eight MIDI Sets!)
CHRD SEQ	Chord Sequence
SONG	Recorder Song (Standard MIDI File)
SNG SET	Song Set

Style Set

The Style Set function is used to compile Sets consisting of eight Styles that can be loaded in one pass. A Style Set as such is only a file containing a number of User Style names to be loaded. In other words, a User Style Set does not *contain* the Styles it will copy to the internal memory when you load it.

User Style Sets can only access Styles on the same disk. It is not possible to assign User Styles of other disks to a Style Set.



⊃ Master page: [F5] (Disk)→ [SHIFT] + [F1] (StISt)

Style Set

Allows you to select an existing Style Set that can then be edited by assigning other Styles to a given Position (see below).

New

Press Part Select [M.DRUMS] (New) to create a new Style Set. It will be temporarily called ***New***, but you can change the name on the second page.

Position (1~8)

The Position refers to the User Style memory the Style in question will be copied to when you load this User Style Set. In other words, Position 1= User Style Memory 1, 2= 2 (etc.).

Disk Style (only Styles on the current disk)

Allows you to assign a User Style to the currently selected Position. If you do not wish to overwrite a User Style memory when loading this User Style Set, select ******** (no assignment to that Position).

Save

Press Part Select [UPPER1] to jump to the Style Set Save page:



Cursor/Character

See page 199 for details.

Execute

Press Part Select [M.BASS] to save the style Set to disk.

Song Set

Songs Sets are similar to User Style Sets in that they, too, only consist of references to Songs on the same disk. Song Sets allow you to program the playback sequence of a programmable number of Songs. Combined with "Song Set Play" on page 155, Song Sets can either be used to entertain the audience while you are taking a break, or to assist you while performing with Standard MIDI File backing.



⊃ Master page: [F5] (Disk)→ [SHIFT] + [F2] (SngSt)

Sng Set

This parameter allows you to select an existing Song Set for editing (c.g. to add Songs, change their order, or shorten the Song Set).

New

Press Part Select [M.DRUMS] to create a new Song Set.

Position

Use this parameter to select the place in the chain you wish to assign a Song to. For new Song Sets, you cannot select the Position. Instead, assign a Song to the first Position.

Disk Song

Allows you to assign one of the Songs on disk to the inverted Position. When you assign a Song to a Position, the ***End*** event automatically jumps to the next Position in line (i.e. a new Position is inserted). Again assign a Song to the "End" event, etc. To shorten an existing Song Set, select ***End*** instead of a Song name for the Position following the Song that is to become the last one of your Song Set.

Save

Press Part Select [UPPER1] to save the Song Set to disk.

Note: You cannot name Song Sets, so be sure to remember their numbers.

Copy functions

Song Copy

⊃ Master page: [F5] (Disk)→ [SHIFT] + [F3] (Copy) [PAGE] ▲▼ (select SONG)

Whenever you select the Copy function, the G-600 tells you something you already know but may tend to forget at times:

Improper use of copy infringes Copyright !! FOR PERSONAL BACK-UP USE ONLY ! IStist Songst USER STYLES will be ERASED and ARRANGER will STOP FROCEED

Copying Songs from commercially available Standard MIDI Files is OK as long as you keep the copy (as safeguard against possible disk errors). Under no circumstances, however, may you give copies of copyright-protected material to your friends.

Another important message on this page tells you that the Song Copy function needs the available RAM memory – i.e. the memory set aside for the User Styles.

Be aware that really selecting the Song Copy function (which you haven't done so far), erases all User Styles in the internal memory. Save them to disk before proceeding (see page 199).

Press Part Select [UPPER2] to proceed:



Song Name Select

This function allows you to select the Song (on disk) that you wish to copy to another disk. If you do not find the Song you wish to copy, check whether you have inserted the right disk.

Note: In order to allow to you to locate the Song you are after, the names are displayed in the Song Name rather than in the File Name format. See page 200 for the difference between these two formats.

Execute

Press Part Select [LOWER] to confirm your choice and go on to the next page.



The G-600 now starts copying the selected Song file to its internal memory. Press Part Select [UPPER1] (Abort) if you changed your mind about copying the Song.

Once the first part of the Song data (or the entire Song) has been copied, the display will prompt you to insert the disk you wish to copy the Song to (the Destination Disk):



Press Part Select [LOWER] after inserting the disk. Just to inform you that everything is going well, the display responds with:

 Song Name	
	DISK
14 The sirl from Ipanema	
00%	Sona
	COPY
READING SONG FILE 🔨	
ABORT	

If the G-600 was unable to load the entire Song the first time around, it will now prompt you to insert the Source disk (i.e. the disk containing the Song you are copying) once again into the drive:



Follow the on-screen instructions until the following message appears to tell you that the file has been successfully copied:



Disk Copy

⊃ Master page: [F5] (Disk)→ [SHIFT] + [F3] (Copy) [PAGE] ▲▼ (select DISK)

The Disk Copy function is similar to the Song Copy function. This time, however, you are given the opportunity to copy an entire disk (possibly containing User Styles, Performance Memory Sets, etc.). The introductory copyright warning is the same as for Song Copy – and again, the internal RAM memory will be erased to function as buffer memory.



Except for the fact that copying an entire disk takes a little longer than copying just one Song, the operations are the same as for Song Copy (see above).

Disk Format

ALL DISK CONTENTS WILL BE ERASED !! Press EXECUTE <u>EXECUTE</u> DISK

15t15t 25n95t 3C0P4

4Formt SExit

⊃ Master page: [F5] (Disk)→ [SHIFT] + [F4] (Formt) This function allows you to format the disk that is currently in the G-600's disk drive. Note that you hardly ever need this function because whenever you insert a disk cannot read, the display tells you so and suggests formatting it (or else remove the disk from the drive).

Formatting new disks while taking a break, however, may be useful for those moments where your creative juices suddenly start flowing and when you want to start recording right away without first formatting a disk.

Here is how to prepare a bunch of disks for those special moments: first select the Format function, then look at the above message (it means that all data that may be on the disk you are about to format will be erased in this process; have a look at the floppy to make sure it doesn't contain valuable data), and finally press Part Select [LOWER].

During the Format operation, the following message will be displayed:



When your disk is ready for use, the display briefly tells you the Format operation is completed:



10. Display messages

Sometimes, you may come across a display message you do not understand. For your reference, here are all the messages you are likely to see at certain points.

Messages relating to the Recorder or Disk functions



This display page appears when you press the [PLAY ►/STOP] button after recording a Recorder Song. If you wish to keep what you have just recorded, assign a name to your Song and press Part Select [M.DRUMS] (Save) to save it to disk. Otherwise, press Part Select [UPPER2] (Exit).



The Standard MIDI File contains more than 17 tracks, which is not acceptable for Format 1 Standard MIDI Files. The Recorder cannot play it back.



The disk you inserted into the drive does not contain Song files. Remove it and insert a disk that does contain Recorder Song files.



You are trying to start Recorder playback without having inserted a disk into the drive. Insert a disk containing Song files and press [PLAY►/STOP■].



The disk you insert into the drive cannot be read or does not allow to save data. Remove it from the drive and insert another one.



You are trying to use the Recorder or a Disk function while the disk drive is empty. Insert a disk into the drive.



You are trying to save data to or format a disk whose protection tab is set to the PROTECT position. Remove the disk from the drive, disable its write protection and press Part Select [M.DRUMS] (Retry). If you don't want to save data to this disk, press Part Select [UPPER2] (Abort).



This message means the same as the previous one. Only, this time, it will disappear automatically. That is why there is no Retry or Abort function.

Source Disk UNPROTECED INSERT Protected Source Disk please !!

The disk you are about to copy data from is not write protected. Remove the disk from the drive, enable its write protection and press Part Select [M.DRUMS] (Retry). If you don't want to load data from this disk, press Part Select [UPPER2] (Abort).



The disk you have inserted into the drive is not formatted. If you want to format it now, press Part Select [M.DRUMS] (Format). Otherwise, press Part Select [UPPER2] (Exit).



The disk you have inserted into the drive is formatted, yet the G-600 cannot read this format. Press Part Select [UPPER2] (Exit), and remove the disk from the drive. If you are positive that you no longer need the data on this disk, format it using the Format function (see page 205).



You are trying to execute a Disk function while the Recorder is playing back (or vice versa). That is impossible.



Both messages mean that you can't save data to this disk. The first message means that the remaining disk capacity is not enough to hold the file you are about to save, while the second tells you that the maximum number of files accepted by the MS-DOS® (and G-600) disk operating system would be exceeded by saving the current file to this disk. In either case, press Part Select [UPPER2] (Exit).



The name you have assigned to the file you wish to save or rename already exists on that disk. If possible (first display message), press Part Select [M.DRUMS] to overwrite the file of the same name, or Part Select [UPPER2] (Exit) to assign another name to the current file. In the second case, the message will disappear after a few seconds.



The disk you inserted after removing the destination disk (during Song or Disk Copy) is not the one you inserted the first time. Insert the proper disk.



The disk you inserted after removing the source disk (during Song or Disk Copy) is not the one you inserted at the first Insert Destination Disk prompt. Insert the proper disk.

Messages relating to the User Style function



The User Style you are trying to load is not an MSA, MSD or MSE User Style and therefore cannot be loaded.



The Performance Memory you selected did not to find the User Style, whose name appears in the upper line, in the indicated User Style memory. Press Part Select [M.DRUMS] to load the Style in question now. If you do not need that User Style, press Part Select [UPPER2] (Exit).

If you pressed Part Select [M.DRUMS] (Load), the following message may appear to signal that the current disk in the disk drive does not contain that User Style:



Press Part Select [M.DRUMS] to retry reading the disk, or Part Select [UPPER2] (Exit).



This message appears whenever you select an empty User Style memory. Wait for the message to disappear and continue.



The User Style file you are trying to load is damaged. Try again using your backup disk and save the User Style to another disk to avoid using your backup disk.



You are trying to load a User Style to the above memory, while the Style in that memory is being used. That is impossible.

General messages

Original FACTORY SETUP has been LOADED !!

This message appears whenever you initialize your G-600: hold down the [WRITE] button while powering on your G-600.

Note: Doing so will clear all Performance Memories, MIDI Sets, User Styles, and the Chord Sequence.



The lithium battery that powers the unit's memory circuits (User Styles, Performance Memories, MIDI Sets, and Chord Sequence) is almost depleted. Have it replaced by your Roland dealer.

11. Music Style chart

A		Tempo	TSign			Tempo	TSign			Tempo	TSign
A 11	HardRock	90	4/4	A 71	Sh Bald1	88	4/4	B 51	ArgTango	120	4/4
A 12	HardEdge	97	4/4	A 72	Sh Bald2	110	4/4	B 52	EurTango	120	4/4
A 13	BritRock	120	4/4	A 73	Sh Bald3	114	4/4	B 53	Polka	130	4/4
A 14	Rock1	128	4/4	A 74	Blues	60	4/4	B 54	Quadrgl	135	4/4
A 15	Rock2	140	4/4	A 75	BlueBeat	110	4/4	B 55	Tarantel	135	4/4
A 16	Sh Rock1	100	4/4	A 76	R&B	114	4/4	B 56	SIFoxtrt	120	4/4
A 17	Sh Rock2	113	4/4	A 77	BigBand	135	4/4	B 57	Foxtrot	185	4/4
A 18	Sh Rock3	127	4/4	A 78	Shuffle	180	4/4	B 58	March	115	4/4
A 21	Progress	134	4/4	A 81	SISwing1	56	4/4	B 61	DiscoFox	120	4/4
A 22	Undergrd	126	4/4	A 82	SISwing2	60	4/4	B 62	Schlagr1	112	6/8
A 23	Techno	130	4/4	A 83	SISwing3	100	4/4	B 63	Schlagr2	120	4/4
A 24	Dance1	105	4/4	A 84	MedSwing	110	4/4	B 64	Schlagr3	136	4/4
A 25	Dance 2	123	4/4	A 85	Swing1	130	4/4	B 65	DWalzer	180	3/4
A 26	PopRap	84	4/4	A 86	Swing2	150	4/4	B 66	DMarsch1	170	6/8
A 27	Rap	92	4/4	A 87	CoolJazz	160	4/4	B 67	DMarsch2	115	2/4
A 28	AcidJazz	100	4/4	A 88	SwCombo	184	4/4	B 68	VlkMusik	123	4/4
					5110011120		- +F-	B 71	Balle	171	4/4
A 31	Funk1	102	4/4	В	•••••••••			B 72	RumSalsa	99	4/4
A 32	Funk2	110	4/4	B 11	Bossa1	63	2/4	B 73	Jota	210	3/4
A 33	CoolGrv1	116	4/4	B 12	Bossa2	75	2/4	B 74	Habanera	106	3/4 4/4
A 34	CoolGrv2	130	4/4	B 13	LatinRk	84	4/4	B 75	SCountry	86	4/4
A 35	CoolGrv2	95	4/4	B 13	Latin	84 92	4/4	в 75 В 76	S Waltz	171	3/4
A 36	CoolGrv4	120	4/4	B 14	SambaRio	130	4/4	В 78 В 77	S Ballad	1/1	5/4 4/4
A 37	Contemp1	120	4/4	B 16	MdnSamba			в 77 В 78			
A 38		98	4/4 4/4			114	4/4	B /ð	S Boogie	160	4/4
0C A	Contemp2	30	4/4	B 17	DscSamba	125	4/4	0.04	6		
A 44	00 D++1		A / A	B 18	Calypso	155	4/4	B 81	Gospel	60	6/8
A 41	88 Pop1	60	4/4	0.04		470	A / A	B 82	C'Ballad	82	4/4
A 42	8B Pop2	70	4/4	B 21	Mambo1	120	4/4	B 83	C'Westrn	130	4/4
A 43	8B Pop3	75	4/4	B 22	Mambo2	100	4/4	B 84	C'Swing	160	4/4
A 44	8B Pop4	84	4/4	B 23	Mereng1	122	4/4	B 85	C'Boogie	182	4/4
A 45	8B Pop5	85	4/4	B 24	Mereng2	120	4/4	B 86	Country	129	4/4
A 46	8B Pop6	92	4/4	B 25	Salsa1	90	4/4	B 87	Cajun	114	4/4
A 47	8B Pop7	96	4/4	B 26	Salsa2	95	4/4	B 88	B'Grass	152	4/4
A 48	88 Pop8S	75	4/4	B 27	ChaCha1	125	4/4				
				B 28	ChaCha2	126	4/4				
A 51	16B Pop1	65	4/4								
A 52	Bld Rock	75	4/4	B 31	Reggae1	145	4/4				
A 53	16B Pop2	85	4/4	B 32	Reggae2	132	4/4				
4 54	16B Pop3	100	4/4	B 33	PopRock	132	4/4				
A 55	16B Pop4	100	4/4	B 34	Rhumba	110	4/4				
4 56	16B Pop5	120	4/4	B 35	Bolero	109	4/4				
4 57	Bld RckS	78	4/4	B 36	Beguine	105	4/4				
A 58	16B PopS	100	4/4	B 37	Dixie	180	4/4				
••••		••••••		B 38	Charlest	212	4/4				
A 61	Boogie	165	4/4								
A 62	Rock'N1	125	4/4	B 41	SlWaltz1	85	3/4				
A 63	Rock'N2	185	4/4	B 42	SIWaltz2	90	3/4				
A 64	Twist	164	4/4	B 43	JazzWltz	150	3/4				
A 65	SIRock1	58	6/8	B 44	Waltz	180	3/4				
A 66	SIRock2	75	6/8	B 45	Musette	180	3/4				
A 67	SIRock3	70	4/4	B 46	FrWaltz	205	6/8				
A 68	SIRock4	83	4/4	B 40 B 47	Mazurka	155	3/4				
	#1110CNT	U U	דיר	17 0	Baroque	1.00	J, 4				

E CO
P
0
(n)
C and a second
1

12. MIDI Implementation Charts

[ARRANGER WORKSTATION] (Arranger) Model: G-600

Date: February 1997 Version: 1.00

	Function	Transmitted		Recognized		Remarks
Basic Channel	Default Changed				1 = Acc1 / 2 = A Bass. 3 = Acc2. 4 = Upper 5 = Acc3. 6 = Upper2. 7 = Acc4. 8 = Acc5. 9 = Acc5. 10 = A Drums/SI PG. 11 = Low 12 = Man Bass. 13 = Art. / Basic MiDi ch 14 = Fx2 / NTA1. 15 = Fx 3 / NTA2. 16 = M Drum	
Mode	Default Message Altered	Mode 3 Mode 3, 4 (M=1)	- <u></u>	Mode 3 Mode 3, 4 (M=1)		•2
Note Number	True Voice	0~127 *****		0~127 0~127	*1	
Velocity	Note ON Note OFF	O X	*1	O X	*1	
After Touch	Key's Ch's	x x		0 0	*1 *1	
Pitch Bend		0	*1	0	*1	
Control Change	0,32 1 5 6, 38 7 10 11 64 65 66 67 84 91 93 94 98, 99 100, 101 120 121	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	*1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Bank Select Modulation Portamento Time Data Entry Volume Panpot Expression Hold 1 Portamento Sostenuto Soft Portamento Control Effect 1 Depth Effect 3 Depth Effect 3 Depth Effect 4 Depth NRPN LSB, MSB RPN LSB, MSB All Sound Off Reset All Controllers
Program Change	True #	×	*1	O 0~127	*1	Program Number 1~128
System Exclu	usive	0		0		
System Common	Song Pos Song Sel Tune	x x x		x x x		
System Real Time	Clock Commands	0 0	*1 *1	0 0	*1 *1	MIDI File Record/Play
Aux Messages	Local On/Off All Notes Off Active Sense Reset	O X O X	*1	O O (123-125) O X		
Notes		*1 O X is selectabl *2 Recognized as		n if M≠1		
	NI ON, POLY NI OFF, POLY		Mode 2: OMNI ON, MONO Mode 4: OMNI OFF, MONO			O: Yes X: No

[ARRANGER WORKSTATION] (Sound Module, Keyboard Section, SMF Player) Model: G-600

Date: February 1997 Version: 1.00

	Function	Transmitted		Recognized		Remarks
Basic Channel	Default Changed	4, 6, 11, 12, 16 1~16, Off		1~16 1~16, Off		4= Upper1, 6= Upper2 11= Lower, 12= Man. Bass 16= Man. Drums
Mode	Default Message Altered	Mode 3 Mode 3, 4 (M=1)		Mode 3 Mode 3, 4 (M=1)		*2
Note Number	True Voice	0~127	*1	0~127 0~127		
Velocity	Note ON Note OFF	O X	*1	o x		
After Touch	Key's Ch's	X X		0 0	*1 *1	
Pitch Bend		0	*1	0	*1	
Control Change Program	0,32 1 5 6, 38 7 10 11 64 65 66 67 84 91 93 94 98, 99 100, 101 120 121		*1 *1 *1 *1 *1 *1 *1 *1 *1 *1	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	*1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1 *1	Bank Select Modulation Portamento Time Data Entry Volume Panpot Expression Hold 1 Portamento Sostenuto Soft Portamento Control Effect 1 Depth Effect 3 Depth Effect 3 Depth Effect 4 Depth NRPN LSB, MSB RPN LSB, MSB All Sound Off Reset All Controllers
Change	True #	*****	-1	0~127	-1	Program Number 1~128
System Excl		0		0		
System Common	Song Pos Song Sel Tune	0 0 X	•1 •1	o o X	*1 *1	
System Real Time	Clock Commands	0 0	*1 *1	0 0	*1 *1	MIDI File Record/Play
Aux Messages	Local On/Off All Notes Off Active Sense Reset	O X O X	*1	O O (123-125) O X		
Notes		*1 O X is selectable *2 Recognized as M		n if M≠1		
	NI ON, POLY NI OFF, POLY	Mode 2: OMNI ON, Mode 4: OMNI OFF)		O:Yes X:No

13. Tone lists

G-600 Tone Map (Banks A & B)

Off Drin Pane J I CDS According 2 C.G.R.ASRC-GOD Old Other March I Constraint Constraint<	PC Piane	CC00	Instrument	Voices	Remark		CC00 024	Instrument Accordion 1	2	G-/RA-800/G-600	Strin	CC00 gs / orches			Remark
				I							041				
COL 1000 Prime 3 I ISB 0000 Col III Col IIII Col III Col IIII Col IIII Col IIII Col III Col III Col III Col III Col III Col IIII Col IIII Col IIII Col III Col IIII Col IIIII Col IIII Col IIII Col IIIII Col IIIII Col IIIII Col IIIIIIIIII			Piano Lw	1		023	000			G-/RA-800/G-600				-	
Dial Dial <thdial< th=""> Dial Dial <thd< td=""><td></td><td>016</td><td>Piano I d</td><td>1</td><td></td><td></td><td>001</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></thd<></thdial<>		016	Piano I d	1			001								
001 Demon Acc2 2 G.R.A.800(-5.00) 115 0.00 Termshorts 1 001 G.R.A.Rode 1 2 G.R.A.800(-5.00) 1 100 Sinte Termshorts 1 001 G.R.A.Rode 1 2 G.R.A.800(-5.00) 1 100 Termshorts 1 001 G.R.A.800(-5.00) 1 100 Termshorts 1 1 100 Termshorts 1 001 G.R.A.800(-5.00) 1 100 Termshorts 1 1 100 Termshorts 1 001 G.R.A.800(-5.00) 2 G.R.A.800(-5.00) 1 100 Strings 1 1 1 100 Strings 1 1 1 1 1 1 1 1 1 1 1 1 1 </td <td>002</td> <td>000</td> <td>Piano 2</td> <td>1</td> <td></td> <td>024</td> <td>000</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td>	002	000	Piano 2	1		024	000							•	
DD3 DD3 <thd3< th=""> <thd3< th=""> <thd3< th=""></thd3<></thd3<></thd3<>		608	Piano 2w	1											
Bit of the second sec	003	000	Piano 3	1			017	Detuned Acc2	2	G-/RA-800/G-600	045				
mice Parta Solution Viscon Column Viscon Column <td></td> <td>001</td> <td>EG+Rhodes 1</td> <td>2</td> <td></td>		001	EG+Rhodes 1	2											
Obj Obj <td></td> <td>002</td> <td>EG+Rhodes 2</td> <td>2</td> <td></td>		002	EG+Rhodes 2	2											
DB DD DD <thdd< th=""> DD DD DD<!--</td--><td></td><td>008</td><td>Piano 3w</td><td>1</td><td></td><td>025</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>-</td><td></td></thdd<>		008	Piano 3w	1		025								-	
005 007 02 008 South Erman 2 003 South Erman 2 033 South Erman 2 034 South Erman 2 034 South Erman 2 034 South Erman 2 034 035 035 035 035 035 035 035 035 035 036 035 036 035 036 035 036 035 036 035 036	004	000	Honky-tonk												
		008	Old Upright								048	0.00	1 mpan	,	
	005	(XX)								V-SW	F	mbla			
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		608											Sections	1	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $		009	SA E. Piano		G-/RA-800/G-600						049			-	
		016				026									
					G-/RA-800/G-600										
														-	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		025	Hard Rhodes							C					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$		026													
Inf Control of the second		027			G-/RA-800/G-600					(i-/RA-800/(i-600)					
	006	000							-						GARASHINGAN
						027				-	0.60				C. Harman C. Mar
											0,0				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	007	()()()				028			•						
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$														5	
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										G-/KA-800/G-000	051				
Olis Bord Chromatic participant Construction One of the second secon										17 /D A 900//2 600	0.01				
	008	000	Clav.	1						0-/KA-600/0-000					
						029					057				
										C ID & VINIC AN					
				-						G-/KA-M/0/G-1847	(1.5.5				
										VEW					
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$										v-aw					
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	012										054				
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$						031									
											0.5.5			•	
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	013	000		1							1156				
				1							0.00				
017 Darafon 2 1 Only Power Gr. 2 2 010 Daulke Hit 2 014 000 Xylophone 1 017 Power Gr. 2 2 016 Lo Fi Rave 2 000 Chubtar-bell 1 0125 Rock Rhythm 2 Bass 007 Trumpet 1 009 Carillon 1 0120 Rock Rhythm 2 Bass 017 000 Trumpet 1 001 Santur 1 0120 000 Chifamonics 1 001 Trumpet 1 008 Santur 2 016 Ac.Gi Hamonics 1 001 Trumpet 1 017 000 Organ 1 033 000 Acoustic Bs. 2 059 000 Trumber 2 2 017 000 Organ 1 1 010 Acoustic Bs. 1 001 Trumber 2 2 017 000 Organ 1 017 0000				1											
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				1											
Init with Applying 1 Ora Reck Riving 2 Brass 008 Church Bell 1 012 Rock Riving 2 Brass 009 Carillon 1 013 000 Church Bell 1 014 016 000 Santur 1 001 Church Bell 1 014 016 000 Santur 2 016 Ac.Gt.Harmonis 1 001 Trumpt 2 1 017 000 Cimhalom 2 016 Ac.Gt.Harmonis 1 023 Warm Tp. 2 017 000 Organ 1 033 000 Acoustic Bs. 001 Trumbone 1 017 000 Organ 1 1 034 000 Fright Bs. 001 Trumbone 2 1 0 0 1 1 0 1 1 0 1 0 1 0 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1				I											
0100 Church Bell 1 125 Rock Rhythm2 2 Brass 0090 Carillon 1 003 000 Gi, Hamonics 1 005 001 Trompet 1 106 000 Santur 2 016 Ac.Gi, Hamonics 1 008 Fluggel Hom 1 106 With Santur 2 2 016 Ac.Gi, Hamonics 1 001 Trompet 1 108 Cimbalcon 2 016 Ac.Oit, Hamonics 1 003 000 Flaggel Hom 1 024 Birght Tp. 2 007 001 Organ 1 034 000 Fingered Bs. 1 001 Trombore 2 059 000 Trombore 2 0 0 0 1 001 Trombore 1 0 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 0 1 0 1 0 1 0 1 1				1								010	LO FI Kave	-	
000 Carillon 1 003 000 GLHam/mics 1 057 000 Trumpet 1 016 000 Santur 1 008 GLHam/mics 1 001 000 Frumpet 1 016 Wam Cimbalon 2 016 A.C.G.Ham/mix 1 001 008 Fluggl Hom 1 017 000 Organ 1 0140 Off 601 Trombole 2 017 000 Organ 1 0140 Off Flaggerd Bs. 1 001 Trombole 2 010 Organ 101 2 002 Jazz Bass 1 001 Trombole 2 016 607 Organ 1 0001 Friegred Bs. 1 001 Mue PickBs. 1 001 Friedres Bs. 1 001 <td>015</td> <td></td> <td></td> <td>1</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>Brok</td> <td></td> <td></td> <td></td> <td></td>	015			1							Brok				
009 Carllon 1 00.2 00.6 Carllon 1 00.7 Transpit 2 1 001 Santur 1 00.6 Carllon 0 0 Figure 1 0 0 0 0 0 0 Figure 1 0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>2 2</td> <td></td> <td></td> <td></td> <td>Tournat</td> <td>,</td> <td></td>									2 2				Tournat	,	
000 Santu 2 2 006 Ac.Gi. Harmax, 1 008 Flugel Hom, 1 008 Cimbalon 2 024 Bright Tp. 2 007 000 Organ 1 033 000 Acoustic Bs. 2 050 024 Bright Tp. 2 017 000 Organ 1 1 034 000 Fingered Bs. 1 001 Trombone 1 001 Organ 101 2 002 Jazz Bass 1 001 Trombone 2 008 Detuned 0r.1 2 002 Jazz Bass 1 060 000 Fredes Bs. 001 Tuba 2 1 016 605 Organ 3 1 002 Fredes Bs. 2 016 Hom Orch 2 018 605 Organ 3 1 002 Fredes Bs.3 2 016 Hom Orch 2 033 Even Bar 2 004 Syn Fredes Bs.4 2 068 Brass 2 2 040 Organ 4 1 005 Mr.5mooth 2 <						032			1		057				
001 French Homs 1 VSW 017 605 Organ 1 002 Fretess Bs3<2	016														
Organ 025 Warm Tp. 2 Organ 033<000							016	Ac.Gt.Hamin							
Organ 013 000 Acoustic Bs. 2 058 000 Trumbone 1 017 000 Organ 101 2 001 Fingered Bs. 1 001 Trumbone 2 001 Organ 101 2 002 Jazz Bass 1 001 Tuba 1 009 Organ 109 2 002 Jazz Bass 1 006 0001 Tuba 1 016 6ffs Organ 1 0036 000 Fretces Bs. 1 001 Brass Fall 1 1 1 0 1		008	Cimbalom	2			-								
Organ I 1 0.04 000 Fingered Bs. 1 001 Trombone 2 2 017 000 Detuned Or.1 2 001 Fingered Bs. 1 059 000 Tuba 1 009 Detuned Or.1 2 002 Jazz Bass 1 061 Mute 7 1 001 Tuba 1 009 Organ 109 2 035 000 Pricked Bass 1 061 060 000 Mute PickBs. 001 French Horns V-SW 016 60's Organ 3 1 003 000 Fretless Bs.3 2 016 Horn Orch 2 018 00's Organ 4 1 003 Fretless Bs.4 2 062 000 Brass 2 2 016 Horn Orch 2 033 Seven Bar 1 003 Mute PickBs 2 062 000 Brass 2 2 0016 Brass 2 2 040 Organ 3 1 0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>4</td><td>-</td><td></td><td>059</td><td></td><td></td><td></td><td></td></t<>								4	-		059				
017 000 Organ 101 2 001 Fingered Bs2 2 059 001 Tuba 1 008 Detuned Or.1 2 002 Jazz Bass 1 001 Tuba 1 009 Organ 109 2 035 000 Pricked Bass 1 061 000 French Homs 1 VSW 017 60's Organ 1 036 000 Fretless Bs.1 001 Fretless Bs.2 001 Fretless Ds.3 2 016 Hom Orch 2 032 Organ 4 1 003 Fretless Bs.3 2 062 000 Brass 1 1 033 VSW 033 Even Bar 2 0014 Fretless Bs3 2 062 0000 Brass 2 2 016 Hom Orch 2 2 040 Organ Ass 1 003 Fretless Bs3 2 063 000 Brass C1 2 G/A&4006- 018 000 Organ 2 6/RA-4006-600 037 000 Sign Bass 1 1 024 Brass 2 </td <td></td> <td>0,10</td> <td></td> <td></td> <td></td> <td></td>											0,10				
001 012 012 132 002 132 003 011 $Tuba 2$ 1 009 $0rgan 109$ 2 035 000 $Pickel Bass 1$ 060 000 $Mute Trumpet$ 1 016 6476 $0rgan 12$ 1 003 000 $Frethers Bs. 1$ 061 000 $Frethers 10$ VSW 017 $60's$ $0rgan 3$ 1 003 000 $Fretless Bs. 2$ 001 $Frethern 2$ 2 018 $00's$ $0rgan 4$ 1 003 $Fretless Bs. 2$ 016 $Horn Orch$ 2 033 $Even Bar$ 2 004 $Syn Fretless Bs. 4$ 2 0662 000 $Brass 1$ 1 033 $Even Bar$ 2 004 $Syn Fretless Bs. 1$ 024 $Brass Oct$ 2 $GRA + 8006$ 048 $0rgan 2$ 004 $Syn Fretless Bs. 1$ 024 $Brass Cct$ 2 $GRA + 8006$ 001 $0rgan 2$ 0035 $Mr Smooth$ 2	017					0.54					050				
ONR Definite Or 2 035 000 Picked Bass 1 060 001 Mute Trumpet 1 016 607s Organ 1 1 006 000 Freiless Bs. 1 061 000 Freich Hors 1 VSW 017 60's Organ 2 1 036 000 Freiless Bs. 001 Freiless Bs. 001 Freiless Bs. 001 Freiless Bs. 001 Hord Note 1 VSW 032 Organ 4 1 002 Freiless Bs. 2 016 Horn Orch 2 1 036 WO Brass 1 1 033 Even Bar 2 016 Brass 2 2 016 Horn Orch 2 0 048 Organ 0/61 2 0.48 Organ 0/61 2 0.48 Organ 0/61 2 0.78.48006 037 000 Stap Bass 1 1 024 Brass 0/61 2 6.78.48006 030 000 Synth Barss 1 2 0.016 Bra											1.13			i	
0.00 0.01 0.01 France 0.01 France 0.01 France 0.01 France 0.01 France 1 VSW 017 60's Organ 1 0.03 0.00 Fretless Bs. 1 0.01 Fretless Ds. 1 0.01 Fretless Ds. 1 0.01 Fretless Ds. 2 0.01 Fretless Ds. 1 0.01 Fretless Ds. 3 0.01 Hom Orch 2 0.01<						025					060				
$ \begin{array}{c c c c c c c c c c c c c c c c c c c $				2		055									V-SW
017 005 Organ 1 000 Fretless Bs2 2 008 Fr.Hom Solo 1 024 Cheese Organ 1 0001 Fretless Bs3 2 016 Hom Orch 2 032 Organ 4 1 003 Fretless Bs4 2 016 Hom Orch 2 033 Even Bar 2 004 Syn Fretless 2 062 008 Brass 1 1 033 Even Bar 2 004 Syn Fretless 2 016 Brass 2 2 040 Organ 0ct 1 2 6.78A.4007-600 037 000 Sing Bass 1 024 Brass Oct 2 6.78A.4007-600 037 000 Sing Bass 1 024 Brass Oct 2 6.78A.4007-600 037 000 Sing Bass 1 024 Brass Oct 2 6.78A.4007-600 037 000 Sing Bass 1 024 Brass Oct 2 6.78A.4007-600 037 000 Sing Bass 1 024 Brass Oct 2 6.78A.4007-600 037 000 Sing Bass 1 010 001 Poly Brass 2 2 0001 Sing Bass 1 001				1		1141			•		(1)				
010 0010 Gram 3 1 002 Fredless Bs3 2 016 Horn Orch 2 032 Organ 4 1 003 Fredless Bs4 2 062 000 Brass 1 1 033 Even Bar 2 004 Syn Fredless Bs4 2 062 000 Brass 1 1 040 Organ Bass 1 003 Fredless Bs3 2 016 Brass 2 2 040 Organ Bass 1 003 Krismooth 2 016 Brass Cet 2 <i>G</i> .RA.400G 044 Organ Oct 1 2 G.RA.400G 037 000 Slap Bass 1 1 024 Brass Oct 2 <i>G</i> .RA.400G 018 000 Organ 2 1 008 Recso Slap 1 063 000 Synth Brass 2 078 2 039 000 Synth Bass 101 1 040 News 2 2 078 2 032 07gan 5 2 001 Synth Bass 101 1 040 040 040 040 040				1		0.50									
0.24 Organ 4 1 003 Fretless Bs4 2 062 000 Brass 1 1 0.33 Even Bar 2 004 Syn Fretless Bs4 2 062 000 Brass 1 1 0.40 Organ Bass 1 005 Mr.Smooth 2 016 Brass 2 2 0.40 Organ Oct 1 2 G.RA.400,6-60 037 000 Slap Bass 1 1 024 Brass 2 2 G.RA.400,6-00 0.41 Organ Oct 1 2 G.RA.400,6-600 037 000 Slap Bass 1 1 024 Brass 1 2 G.RA.400,6-00 016 Mr.Bass 1 2 G.RA.400,6-00 016 Mr.Bass 1 2 G.RA.400,6-00 Synth Brass 2 2 G.RA.400,6-00 Synth Brass 1 2 G.RA.400,6-00 Synth Brass 2 2															
0.32 $0.920 + 1$ 0.04 Syn Fretless 2 0.08 Brass 2 2 0.40 $0.07gan Bass$ 1 0.04 Syn Fretless 2 0.16 Brass 2 2 0.40 $0.07gan 0ct 1$ 2 $6.7R.4806-600$ 0.07 000 Siap Bass 1 1 0.24 Brass Cel 2 $6.7R.4806-600$ 0.18 0.00 $0.7gan 2$ 1 0.08 Reso Siap 1 0.24 Brass 2 2 0.01 $0.7gan 2$ 1 0.08 Reso Siap 1 0.63 0.00 Synth Brass 2 0.01 $0.7gan 2$ 2 0.38 0.00 Synth Brass 2 00.1 PolyBrass 2 0.032 $0.07gan 3$ 2 * 0.01 Synth Brass 1 0.06 Rotary 0rg. 1 $V-SW$ 0.09 TB 30.3 Bass 1 0.16 Octarve Brass 2 0.01 Synth Brass 2 0.01 Synth Brass 2 0.01 Synth Brass 2 0.016 Ro				1							(16.7				
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$				1							001				
Organ Dict 2 G-RA-800G-600 037 000 Slap Bass 1 1 024 Brass Oct 2 G-RA-800G-600 018 000 Organ 2 1 000 Slap Bass 1 063 000 Synth Brass 1 2 G-RA-800G-600 Synth Brass 2 2 G-RA-800G-600 Synth Brass 3 2 G-RA-800G-600 G-RA-800G-600 Synth Brass 1 2 G-RA-800G-600 G-RA-800G-600 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>															
018 000 Organ 2 1 0008 Reso Slap 1 063 000 Synth Brass1 2 010 007gan 201 2 038 000 Slap Bass 2 001 Poly Brass 2 003 Detuned 07,2 2 039 000 Synth Bass 1 2 001 Poly Brass 2 032 Organ 5 2 001 Synth Bass 1 008 Acid Bass 1 006 0049 Quack Brass 2 032 Organ 5 2 001 Synth Bass 1 006 0049 Quack Brass 2 008 Rotary Org. 1 V-SW 009 TB303 Bass 1 0164 0040 Synth Brass2 2 016 Rotary Org.F 1 010 Tekno Bass 2 001 Synth Brass 2 2 024 Rotary Org.F 1 040 0002 Modular Bass 2 017 Velo Brass 2 2 020 W07 Organ 2 2 001 Synth Brass 2 2 016 Velo Brass 2 2 020<						077									G-/RA-800/G-600
000 07gan 201 2 038<000					u-/KA-8(N/U-b(l)	057					062				
Oof Organ 201 2 Obs 000 Synth Bass 1 2 OOR Synth Bass 3 2 032 Organ 5 2 001 Synth Bass 10 1 009 Quack Brass 2 2 019 000 Organ 3 2 * 008 Acid Bass 1 016 Octave Brass 2 2 019 000 Organ 3 2 * 008 Acid Bass 1 016 Octave Brass 2 2 016 Rotary Org. 1 V-SW 009 TB303 Bass 1 064 004 Synth Brass 2 2 016 Rotary Org. F 1 010 Tekro Bass 2 001 Soft Brass 2 2 024 Rotary Org. F 1 040 000 Synth Bass 2 2 016 Velo Brass 1 2 020 OC Church Org.1 1 040 000 Synth Bass 2 2 017 Velo Brass 2 2 008 Church Org.3 2 Ool1 Synth Bass 2 <td>018</td> <td></td> <td></td> <td></td> <td></td> <td>010</td> <td></td> <td></td> <td></td> <td></td> <td>1.11.1</td> <td></td> <td></td> <td></td> <td></td>	018					010					1.11.1				
0.00 Definite Vn.2 2 0.05 0.07															
032 032 033 2 033 5 primitive 016 Octave Brass 2 019 008 Rotary Org. 1 V-SW 009 TB303 Bass 1 064 004 Synth Brass2 2 016 Rotary Org.S 1 V-SW 009 TB303 Bass 1 064 004 Synth Brass2 2 016 Rotary Org.F 1 010 Tekno Bass 2 001 Soft Brass 2 024 Rotary Org.F 1 016 Reco SH Bass 008 Synth Brass4 1 020 000 Church Org.1 1 040 000 Synth Bass20 016 Velo Brass 1 2 008 Church Org.2 2 001 Synth Bass20 2 017 Velo Brass 2 2 009 Organ Oct 2 2 6/7A-\$800G400 002 Modular Bass 2 065 000 Soprano Sax 1 024 Organ Flute <						0.19									
(10) (0) Organ 3 2 * (0) (0) Other Unitss - (0) Rotary Org. 1 V-SW (0) Tekno Bass 1 (0) Synth Brass 2 (0) Synth Brass <td></td> <td></td> <td><u> </u></td> <td>2</td> <td></td>			<u> </u>	2											
One Rotary Org. 5 1 Off Tekno Bass 2 Off Soft Brass 2 024 Rotary Org. 5 1 010 Tekno Bass 2 001 Synth Brass 2 024 Rotary Org. 7 1 016 Reso SH Bass 008 Synth Brass 1 020 W0 Church Org. 1 040 0000 Synth Bass 2 016 Velo Brass 2 009 Organ Oct 2 2 G-RA-800G-400 002 Modular Bass 2 017 Velo Brass 2 2 019 Organ Oct 2 2 G-RA-800G-400 002 Modular Bass 2 017 Velo Brass 2 2 016 Church Org. 3 2 G-RA-800G-400 003 Seq Bass 2 Reed 010 Soft Bass 2 016 Netor Norg. 3 1 017 Soft Bass 1 017 Soft Bass 1 017 Soft Bass 1 017 Soft Bass 1 <	019			2	-				,		041			-	
Old Rotary Org.F I Old Reso SH Bass I OU8 Symth Brass4 I 020 Rotary Org.F I 040 000 Synth Bass 2 016 Velo Brass I 2 008 Church Org.2 2 001 Synth Bass 20 016 Velo Brass I 2 009 Organ Oct 2 2 GRA-800G 640 002 Modular Bass 2 017 Velo Brass I 2 016 Church Org.3 2 003 Seq Bass 2 Heed 1 018 Seq Bass 2 Heed 1					v-SW						(4)4				
020 (Nair) Grg.1 (H0 000 Synth Bass 2 2 016 Velo Brass 1 2 0.00 Church Org.1 1 (H0 000 Synth Bass 2 2 016 Velo Brass 1 2 0.08 Church Org.2 2 001 Synth Bass 201 2 017 Velo Brass 2 2 0.09 Organ Oct 2 2 64.800G400 002 Modular Bass 2 017 Velo Brass 2 2 016 Church Org.3 2 003 Seq Bass 2 Reed 1 024 Organ Flute 1 009 X Wire Bass 2 065 000 Soprano Sax 1 021 003 Reed Organ 1 4 016 Ruber Bass 2 065 000 Alto Sax 1 021 000 Accordin Fr 1 017 SH101 Bass 2 048 Hyper Alto 1 V-SW 022 000 Accordin Fr 1															
Oto Oto Oto Openation						p.40									
ONA Organ Oct 2 2 G-RA-800G-60 OO2 Modular Bass 2 016 Church Org.3 2 003 Seq Bass 2 Reed 024 Organ Flute 1 008 Beerl FM Bass 2 065 000 Soprano Sax 1 032 Trem.Flute 2 009 X Wire Bass 2 066 000 Alto Sax 1 021 000 Accordion Fr 1 016 Ruber Bass 2 006 000 Alto Sax 1 021 000 Accordion Fr 1 017 SH101 Bass 2 008 Hyper Alto 1 V-SW 028 Accordion It 2 018 SH101 Bass 2 009 Alto Sax 2 1 G-RA-800G	020					040									
016 Church Org.3 2 003 Seq Bass 2 Reed 024 Organ Flute 1 008 Beef FM Bass 2 065 000 Soprano Sax 1 032 Trem.Flute 2 009 X Wire Bass 2 066 000 Alto Sax 1 021 000 Reed Organ 1 016 Ruber Bass 2 048 Hyper Alto 1 V-SW 021 000 Accordion Fr 1 017 SH101 Bass 1 049 Alto Sax 1 G/AAR00G 008 Accordion It 2 018 SH101 Bass 1 049 Alto Sax 1 G/AAR00G					d b 4 main 100							017	vero prass 2	-	
010 Organ Plute 1 008 Beef FM Bass 2 065 000 Soprano Sax 1 032 Trem,Flute 2 009 X Wire Bass 2 066 000 Alto Sax 1 031 WK Reed Organ 1 016 Rubber Bass 2 066 000 Alto Sax 1 021 000 Accordion Fr 1 016 Rubber Bass 2 008 Hyper Alto 1 V-SW 028 Accordion Fr 1 017 SH101 Bass 1 009 Alto Sax 2 1 Gr&A-RUMG 008 Accordion It 2 018 SH101 Bass 2 1 <					G-/RA-SRVG-600						De	art			
0.2% 0.2% <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>Sonrano See</td><td>1</td><td></td></th<>													Sonrano See	1	
0.1 0.10 Rend Organ 1 016 Rubber Bass 2 008 Hyper Alto 1 V-SW 022 000 Accordion Fr 1 017 SH101 Bass 1 009 Alto Sax 2 1 G/RA-8006 008 Accordion It 2 018 SH101 Bass 1 009 Alto Sax 2 1 G/RA-8006															
021 000 Accordion Fr 1 017 SH101 Bass 1 009 Alto Sax 2 1 G/RA-R006 008 Accordion It 2 018 SH101 Bass 2 1 009 Alto Sax 2 1 G/RA-R006											000				V.5W
002 000 Accordin 1 010 S11101 Bass 2 1					•										v-aw G-/RA-800/G-600 V-SW
	022											(11)7	/100 34X 2	,	CONCISCIONAL LOD
016 Defuned Acc 2 G/KA-800G-600 019 SERIOLB bass 2					0.00.00000.000										
		016	Defuned Acc	2	G-/KA-800/G-600		014	Smooth Bass	2						

*: Same sound as in SC-55 map. **: Percussive sound which cannot be played melodically, use a note near C4 (note number 60).

Reference Guide

	CC00 (XX)	Instrument Tenor Sax	2		PC	CC00	Instrument Harmo Rain	2	Remark	PC	CC00 011	Instrument St.Gamelan	Voices 2	Rem
	001	Tenor Sax 2	1	G-/RA-800 V SW		002	African wood	2			016	RAMA Cymb	al I	
	008	BreathyTenor				008	Clavi Pad	2		114	000	Agogo	1	
	000	Baritone Sax	1		098	000	Soundtrack	2			008	Alarigane	I	
	()(X)	Oboe	1			001	Ancestral	2		115	()()()	Steel Drums	E	
	000	English Horn	1			002	Prologue	2		116	660	Woodblock	1	
	000	Bassoon	1			(8)8	Rave	2			008	Castanets	1	
1/2	(XK)	Clarinet	1		099	()()()	Crystal	2		117	000	Taiko	1	
	(K)S	Bs Clarinet	I			001	Syn Mallet	1			008	Concert BD	t	
						002	Soft Crystal	2		118	(XX)	Meio, Tom 1	1	
Pipe						003	Round Glock	2			001	Real Tom	2	
173	(XX)	Piecolo	I			004	Loud Glock	2			008	Melo, Tom 2	J	
	008	Nay	I I	G-/RA-800		005	GlockenChime	2			009	Rock Tom	2	
	(X)9	Nay Oct	2	G-/RA-800		006	Clear Bells	2		119	000	Synth Drum	1	
74	()()()	Flute	1			007	ChristmasBel	2			008	808 Tom	2	
75	000	Recorder	1			008	Vibra Bells	2			009	Elec Perc	ĩ	
76	000	Pan Flute	2			009	Digi Bells	2		120	000	Reverse Cym.	i	
	008	Kawala	2			016	Choral Bells	2			001	Reverse Cym2		
	009	Kawala 2	ī	G-/RA-800		017	Air Bells	2			008	Rev.Snare 1	÷	
	010	Kawala Oct	2	G-/RA-800		018	Bell Harp	2			(109	Rev.Snare 2	÷	
77	000	Bottle Blow	2	0-7877-000		019	Gamelimba	2				Rev.Snare 2 Rev.Kick 1	-	
	000	Shakuhachi	2		100						016		1	
	000	Whistle	ĩ		100	000	Atmosphere	2			£17	Rev.ConBD	1	
	URX)	Ocarina	1			001	Warm Atmos	2			024	Rev.Tom 1	1	
	(84)	Ocarina	1			002	Nylon Harp	2			025	Rev.Tom 2	1	
	blood					003	Harpvox	2						
	h Lead	C.u.m. Dia	,			(104	HollowReleas	2		SFX				
	(88)	Square Wave	2			005	Nylon+Rhodes			124	000	Gt.FretNoise	1	
	001	Square	1			006	Ambient Pad	2			001	Gt.Cut Noise	1	
	002	Hollow Mini	1		101	(NN)	Brightness	2			002	String Slap	1	
	1803	Mellow FM	2		102	0(8)	Goblin	2			003	Gt.CutNoise2	1	
	004	CC Solo	2			001	Goblinson	2			004	Dist.CutNoiz	1	
	005	Shnwog	2			002	50's Sci-Fi	2			005	Bass Slide	1	
	005	LM Square	2		103	(K)()	Echo Drops	1			006	Pick Scrape	1	
	008	Sine Wave	1			001	Echo Bell	2		122	000	Breath Noise	1	
2	000	Saw Wave	2			002	Echo Pan	2			001	Fl.Key Click	i	
	001	Saw	1			003	Echo Pan 2	2		123	000	Scashore	1.	
	002	Pulse Saw	2			004	Big Panner	2			001	Rain	1	
	003	Feline GR	2			005	Reso Panner	2			002	Thunder	í	
	004	Big Lead	2			006	Water Piano	2			003	Wind		
	005	Velo Lead	2		104	(ЮЯ)	Star Theme	2					1	
	005	GR-300	2		104			2			(104	Stream	2	
		LA Saw				001	Star Theme 2	2			005	Bubble	2	
	007		1		-					124	()()()	Bird	2	***
	008	Doctor Solo	2			ic. etc.					001	Dog	1	***
	016	Waspy Synth	2		105		Sitar	1			002	Horse-Gallop	1	***
	000	Syn.Calliope	2			001	Sitar 2	2			003	Bird 2	1	***
	001	Vent Synth	2			002	Detune Sitar	2			(X)4	Kitty	1	**
	002	Pure PanLead	2			008	Tambra	1			005	Growl	1	**
	000	Chiffer Lead	2			016	Tamboura	2		125	000	Telephone 1	1	***
	600	Charang	2		106	000	Banjo	1			001	Telephone 2	1	***
	008	Dist.Lead	2			001	Muted Banjo	1			002	DoorCreaking	1	***
6	600	Solo Vox	2			008	Rabab	2			003	Door	I	***
7	000	5th Saw Wave	2			016	Gopichant	2			004	Scratch	1	***
	001	Big Fives	2			024	Oud	5			005	Wind Chimes	2	***
	000	Bass & Lead	2			025	Oud 2		G-/RA-800		(K)7	Scratch 2	ī	**
	001	Big & Raw	2			026	Oud Tremolo		G-/RA-800	126			•	***
	002	Fat & Perky	2			020				120		Helicopter	!	***
		Tar of PCIKY	-				Oud V-Switch		G-/RA-800		001	Car-Engine	1	***
	Dad					028	Oud & Strings		G-/RA-800		002	Car-Stop	1	
	h Pad, eti		~			000	Shamisco	1			003	Car-Pass	1	***
	000	Fantasia	2			001	Tsugaru	2			(8)4	Car-Crash	2	***
	(0)	Fantasia 2	2		108		Koto	1			005	Siren	1	***
	000	Warm Pad	1			008	Taisho Koto	1			006	Train	I I	***
	001	Thick Pad	2			016	Kanoon	2			007	Jetplane	2	***
	002	Horn Pad	2			017	Kanoon 2		G-/RA-800		008	Starship	2	***
	003	Rotary String	2			018	Kanoon Oct	2	G-/RA-800		009	Burst Noise	2	***
	004	Soft Pad	2			019	Kanoon & Choir		G-/RA-8(X)	127		Applause	2	***
1	000	Polysynth	2		1(19)	(ЮС)	Kalimba	1			001	Laughing		***
	001	80's PolySyn	2		110		Bagpipe	i			002	Screaming		***
	(XX)	Space Voice	1			008	Mizmar		G-/RA-800		003	Punch	•	***
	001	Heaven II	2			(8)9	Mizmar Oct	2			(10)4	Heart Beat	i	•
	(XX)	Bowed Glass	ž			010	Mizmar Dual	2 1	G-/RA-800		(0)5	Footsteps	1	***
	000	Metal Pad	2			000	Fiddle	ī	- /1./3-000		006	Applause 2	•	**
	001	Tine Pad	2			008	Rababa		G-/RA-8(X)	128			~	***
	002	Panner Pad	2		112		Shanai	1 1	0-/N/1-0(A/			Gun Shot	!	***
	000	Halo Pad	2								001	Machine Gun		
	(XX)					001	Shanai 2		V-SW		002	Lasergun	•	***
		Sweep Pad	I.			008	Pungi	1			003	Explosion	2	***
	(0)1	Polar Pad	1			016	Hichiriki	2						
	(X)8	Converge	1		_									
	(1(1))	Shwimmer	2			ussive								
1	010	Celestial Pd	2		113	000	Tinkle Bell	1						
						008	Bonang	1						
oth	SFX					(8)9	Gender	i i						
nu i														

*: Same sound as in SC-55 map. **: Percussive sound which cannot be played melodically, use a note near C4 (note number 60).

SC-55 Tone Map (Banks C & D)

	CC00	Instrument		Remark	PC	CC00 016	Instrument Rubber Bass	Voices 2	Remark	Syn	CC00 h SFX	Instrument		Remark
KO 1	()()()	Piano I	1							097		Ice Rain	2	
	008	Piano I w	1			gs / Orch				098	000	Soundtrack	2	
	016	Piano Id	1		041		Violin	1		099	000	Crystal	2	
102	000	Piano 2	1			008	Slow Violin	1			001	Syn Mallet	1	
	008	Piano 2w	1		042		Viola	1		100	000	Atmosphere	2	
Ю3	000	Piano 3	1			000	Cello	I		101	000	Brightness	2	
	008	Piano 3w	1		044	000	Contrabass	ı		102	000	Goblin	2	
04	000	Honky-tonk	2		045	000	Tremolo Str	1		103	000	Echo Drops	1	
	008	HonkyTonk w	2		046	000	Pizzicato	1			001	Echo Bell	2	
05	000	E.Piano 1	1		047	000	Harp	1			002	Echo Pan	2	
-	008	Detuned EP1	2		048	000	Timpani	1		104	000	Star Theme	2	
	016	E.Piano Iv	2				•							
	024	60s E.Piano	ī		Ense	emble				Ethr	nic, etc.			
806		E.Piano 2	i			()()()	Strings	1		105	000	Sitar	1	
~~			2			008	Orchestra	2			001	Sitar 2	2	
	008	Detuned EP2	2		050		SlowStrings	ĩ		106	000	Banjo	1	
	016	E.Piano 2v			051		SynStrings1	i		107	000	Shamisen	i	
107	000	Harpsichord	1		0.51		SynStrings3	2		108	000	Koto	i	
	008	Coupled Hps	2		041	008		2		100	008	Taisho Koto	2	
	016	Harpsi.w	1		052		SynStrings2			100	000	Kalimba	ī	
	024	Harpsi.o	2		053		Choir Aah	1		109			1	
808	600	Clav.	I			032	Choir Aahs2	1		110	000	Bagpipe	•	
						000	Voice Oohs	1		111	000	Fiddle	1	
Chro	matic pe	rcussion			055	000	SynVox	1		112	000	Shanai	1	
	000	Celesta	1		056	000	Orchest.Hit	2						
010	000	Glockenspl	1							Pet	cussive			
	000	Music Box	1		Bras	5					000	Tinkle Bell	1	
	000	Vibraphone	1		057		Trumpet	1		113	000	Agogo	i	
•••	008	Vib.w	i			(XX)	Trombone	1		114	000	Steel Drums	1	
112	000	Marimba	i			001	Trombone 2	2					1	
	008	Marimba w	÷		059	000	Tuba	ĩ		116		Woodblock		
11.4	008	Xylophone	i		060	000	MuteTrumpet	i			008	Castanets	-	
					061	000	French Horn	2		117	000	Taiko	1	
лэ	000	Tubularbell	1		001		Fr.Hom 2	2			008	Concert BD	1	
	008	Church Bell	1			001		Ť		118		Melo, Tom 1	1	
	009	Carillon	L		062	000	Brass I				008	Melo, Tom 2	1	
316	000	Santur	I			008	Brass 2	2		119	(RXI	Synth Drum	1	
					063	000	Syn.Brass 1	2			008	808 Tom	1	
Orga	in					008	Syn.Brass 3	2			009	Elec Perc	1	
317	000	Organ 1	1			016	Analog Brs1	2		120	000	Reverse Cym	1	
	008	Detuned Or I	2		064	000	Syn.Brass 2	2						
	016	60's Organ1	1			008	Syn.Brass 4	1		SF)	<i>,</i>			
	032	Organ 4	2			016	Analog Brs2	2		121		Gt.FretNoiz	1	
118	000	Organ 2	1				-			1	003	GLCutNoise	i	
	008	Detuned Or2	2		Ree	d					002		1	
	032	Organ 5	2		065		Soprano Sax	1				String Slap	1	
119	000	Organ 3	2			000	Alto Sax	i		122		BreathNoise	-	
	000	Church Org I	Ĩ		067	000	Tenor Sax	i			001	Fl.KeyClick	1	
)20			2		068	000	BaritoneSax	i		123		Seashore	1	
	008	Church Org2			()69	000	Oboe	ì			001	Rain	1	
	016	Church Org3	2		070	000	EnglishHom	1			(H)2	Thunder	1	
	000	Reed Organ	1					1			003	Wind	1	
)22	000	Accordion F	2		071	000	Bassoon	-			004	Stream	2	
	008	Accordion I	2		072	(8)()	Clarinet	1			005	Bubble	2	
023	000	Harmonica	t							124	000	Bird	2	
124	000	Bandoneon	2		Pipe						001	Dog	1	
					073	000	Piccolo	1			002	HorseGallop	1	
Guit	ar				074	000	Flute	1			003	Bird 2	ı	
	000	Nylon Gt.	1		075	000	Recorder	1		125		Telephone 1	i	
	008	Ukulele	i			000	Pan Flute	1		140	001	Telephone 2	1	
	016	Nylon GLO	2		077	000	Bottle Blow	2					1	
	032	Nyion GL2	ī			000	Shakuhachi	2			002	Creaking		
ne	000	Steel Gt.	i		079	000	Whistle	ĩ			003	Door	1	
040			2		080	000	Ocarina	i i			004	Scratch	1	
	008	12-str.Gt			060	5.77	() can ma	•			005	Wind Chimes		
	016	Mandolin	1		0	th local				126		Helicopter	1	
027	000	Jazz Gt.	1			th lead	6	-			001	Car-Engine	1	
	008	Hawaiian Gt	1		081	000	Square Wave	2			002	Car-Stop	1	
1)28	600	Clean Gt.	1			001	Square	1			003	Car-Pass	1	
	008	Chorus Gt.	2			008	Sine Wave	I			004	Car-Crash	2	
	000	Muted Gt.	1		082	000	Saw Wave	2			005	Siren	ī	
029	008	Funk Gt.	1			001	Saw	1			006	Train	i	
029		Funk Gt.2	i			008	Doctor Solo	2			007	Jetplane	2	
029	016		1		083	000	SynCalliope	2			007	Starship	2	
	016	OverdriveGt				000	ChifferLead	2				Burst Noise	2	
030	016 (XX)	OverdriveGt Dist.Gt.	i		110+4	000	Charang	2			009	Applause	2	
	016 000 000	Dist.Gt.	-		084			2		127	000	Applause	<u> </u>	
030 031	016 000 000 008	Dist.Gt. Feedback Gt	2		085									
030 031	016 000 000 008 008	Dist.Gt. Feedback Gt Gt.Harmonix	2		085 086	000	Solo Vox				001	Laughing	1	
030 031	016 000 000 008	Dist.Gt. Feedback Gt	2		085 086 087	000 000	Solo Vox 5th Saw	2			001 002	Laughing Screaming	1	
030 031 032	016 000 000 008 008 008	Dist.Gt. Feedback Gt Gt.Harmonix	2		085 086 087	000	Solo Vox				001 002 003	Laughing Screaming Punch	1	
030 031 032 <i>Bas</i>	016 000 000 008 000 008 000	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback	2 1 1		085 086 087 088	000 000 000	Solo Vox 5th Saw Bass & Lead	2			001 002 003 004	Laughing Screaming Punch Heart Beat	1	
030 031 032 <i>Bas</i> 033	016 000 000 008 000 008 000 5 000	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs	2 1 1 1		085 086 087 088 <i>Syn</i>	000 000 000 th Pad, e	Solo Vox 5th Saw Bass & Lead	2 2			001 002 003	Laughing Screaming Punch Heart Beat Footsteps	1	
030 031 032 <i>Bas</i> 033 034	016 000 008 000 008 000 008 s 000 000	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs	2 1 1 1		085 086 087 088 <i>Syn</i> 089	000 000 000 th Pad, e 000	Solo Vox 5th Saw Bass & Lead tc. Fantasia	2 2 2		128	001 002 003 004 005	Laughing Screaming Punch Heart Beat	1	
030 031 032 <i>Bas</i> 033 034 035	016 000 008 000 008 000 008 5 000 000 000	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass	2 1 1 1		085 086 087 088 <i>Syn</i> 089 090	000 000 000 th Pad, e 000 000	Solo Vox 5th Saw Bass & Lead tc. Fantasia Warm Pad	2 2 2			001 002 003 004 005	Laughing Screaming Punch Heart Beat Footsteps	1 1 1	
030 031 032 <i>Bas</i> 033 034 035	016 000 008 000 008 000 008 s 000 000	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs	2 1 1 1		085 086 087 088 <i>Syn</i> 089 090 091	000 000 000 000 000 000 000	Solo Vox 5th Saw Bass & Lead tc. Fantasia Warm Pad Polysynth	2 2 2 1 2			001 002 003 004 005 000 001	Laughing Screaming Punch Heart Beat Footsteps Gun Shot	1 1 1	
030 031 032 <i>Bas</i> 033 034 035 036	016 000 008 000 008 000 008 5 000 000 000	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		085 086 087 088 <i>Syn</i> 089 090	000 000 000 th Pad, e 000 000	Solo Vox 5th Saw Bass & Lead tc. Fantasia Warm Pad	2 2 1 2 1			001 002 003 004 005 000 001 002	Laughing Screaming Punch Heart Beat Footsteps Gun Shot Machine Gon Lasergun	1 1 1 1 1	
030 031 032 033 033 034 035 036 037	016 000 000 008 000 008 000 008 5 000 000 0	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass Fretless Bs Slap Bass 1	2 1 1		085 086 087 088 <i>Syn</i> 089 090 091	000 000 000 000 000 000 000	Solo Vox 5th Saw Bass & Lead tc. Fantasia Warm Pad Polysynth	2 2 2 1 2			001 002 003 004 005 000 001	Laughing Screaming Punch Heart Beat Footsteps Gun Shot Machine Gon	1 1 1 1	
030 031 032 033 033 034 035 036 037 038	016 000 000 008 000 008 000 008 s 000 000 0	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass Fretless Bs Slap Bass 1 Slap Bass 2	2 1 1		085 086 087 088 5yn 089 090 091 092	000 000 000 th Pad, e 000 000 000 000 000 000	Solo Vox 5th Saw Bass & Lead tc. Fantasia Warm Pad Polysynth Space Voice	2 2 1 2 1			001 002 003 004 005 000 001 002	Laughing Screaming Punch Heart Beat Footsteps Gun Shot Machine Gon Lasergun	1 1 1 1 1	
030 031 032 033 033 034 035 036 037 038	016 000 000 008 000 008 000 008 5 000 000 0	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass Fretless Bs Slap Bass 1 Slap Bass 1			085 086 087 088 089 090 091 092 093 094	000 000 000 000 000 000 000 000 000 00	Solo Vox Sth Saw Bass & Lead tc. Fantasia Warm Pad Polysynth Space Voice Bowed Glass Metal Pad	2 2 1 2 1 2 2 2			001 002 003 004 005 000 001 002	Laughing Screaming Punch Heart Beat Footsteps Gun Shot Machine Gon Lasergun	1 1 1 1 1	
030 031 032 033 033 034 035 036 037 038	016 000 008 008 000 008 000 008 5 000 000 0	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass Fretless Bs Slap Bass 1 Slap Bass 2 Syn.Bass 10			085 086 087 088 590 089 090 091 092 093 093 094 095	000 000 000 000 000 000 000 000 000 00	Solo Vox 5th Saw Bass & Lead tc. Fantasia Warm Pad Polysynth Space Voice Bowed Glass Metal Pad Halo Pad	2 2 1 2 1 2 2 2 2			001 002 003 004 005 000 001 002	Laughing Screaming Punch Heart Beat Footsteps Gun Shot Machine Gon Lasergun	1 1 1 1 1	
030 031 032 033 034 035 036 037 038 039	016 000 000 008 000 008 000 008 5 000 000 0	Dist.Gt. Feedback Gt Gt.Harmonix Gt.Feedback Acoustic Bs Fingered Bs Picked Bass Fretless Bs Slap Bass 1 Slap Bass 1			085 086 087 088 590 089 090 091 092 093 093 094 095	000 000 000 000 000 000 000 000 000 00	Solo Vox Sth Saw Bass & Lead tc. Fantasia Warm Pad Polysynth Space Voice Bowed Glass Metal Pad	2 2 1 2 1 2 2 2			001 002 003 004 005 000 001 002	Laughing Screaming Punch Heart Beat Footsteps Gun Shot Machine Gon Lasergun	1 1 1 1 1	

SC-55 Map (CM-64 Tones)

PC	CC00	Instrument	Voices	Remark	PC	CC00	Instrument	Voices	Remark	PC	CC00	Instrument	Voices Remark
001	126	Piano 2	1		023	127	Celesta I	1		111	127	Bottlehlow	2
	126	Piano 2	1		024	127	Ceiesta 2	1 I		112	127	Breathpipe	1
003	126	Piano 2	1		025	127	Syn Brass 1	2		113	127	Timpani	1
	126	Honky-tonk	2		026	127	Syn Brass 2	2			127	Melodic Tom	1
	126	Piano I	ĩ		027	127	Syn Brass 3	2			127	Deep Snare	1
			i					2			127	Elec Perc 1	1
	126	Piano 2 Disens 2				127	Syn Brass 4					Elec Perc 2	
	126	Piano 2	!			127	Syn Bass 1	1		117	127		1
	126	E.Piano I	1			127	Syn Bass 2	2			127	Taiko	1
	126	Detuned EP1	2		031	127	Syn Bass 3	2			127	Taiko Rim	1
010	126	E.Piano 2	I		032	127	Syn Bass 4	1		120	127	Cymbai	1
011	126	Steel Gt.	1		033	127	Fantasy	2		121	127	Castanets	1
012	126	Steel Gt.	1		034	127	Harmo Pan	2		122	127	Triangle	1
	126	12-str.Gt	2		035	127	Chorale	1		123	127	Orche Hit	t.
	126	Funk GL	ī		036	127	Glasses	2			127	Telephone	i
	126	Muted Gt.	i		037	127	Soundtrack	2			127	Bird Tweet	i
					038	127		2			127	OneNote Jam	l
	126	Slap Bass 1	1				Atmosphere				127		
	126	Slap Bass 1	1		039	127	Warm Bell	2				Water Bell	2
	126	Slap Bass 1	1		040	127	Funny Vox	1		1.28	127	Jungle Tune	2
	126	Stap Bass 1	I.		041	127	Echo Bell	2					
	126	Slap Bass 2	I.		642	127	Ice Rain	2					
021	126	Slap Bass 2	1		043	127	Obue 2001	2		G-6	00 Drum S	Set program c	hange map
022	126	Slap Bass 2	ł		()44	127	Echo Pan	2		1	STANDAI	RD I	
023	126	Slap Bass 2	1		045	127	Doctor Solo	2		2	STANDA	RD 2	
024		Fingered Bs	1		046	127	School Daze	1		9	ROOM		
025		Fingered Bs	i		047	127	Bellsinger	i		17	POWER		
026		Picked Bass	i		048	127	Square Wave	2		25	ELECTRO	NIC	
027		Picked Bass	i			127	Str Sect 1	ĩ		26	TR-808/90		
			-			127		i		27	DANCE	,	
	126	Fretless Bs	1				Str Sect 2						
	126	Acoustic Bs	1		051	127	Str Sect 3	1		33	JAZZ		
	126	Choir Aahs	1		052	127	Pizzicato			41	BRUSH		
	126	Choir Aahs	1		053	127	Violin I	1		49	ORCHEST	FRA	
032	126	Choir Aahs	1		054	127	Violin 2	1		50	ETHNIC		
033	126	Choir Aahs	1		055	127	Ceilo I	1		51	KICK & S	NARE	
034	126	SlowStrings	1		056	127	Cello 2	1		52	ORIENTA	L	
	126	Strings	i i		057	127	Contrabass	1		57	SFX		
	126	SynStrings3	2		058	127	Harp I	1		58	RHYTHM	FX	
	126	SynStrings3	2		059	127	Harp 2	i					
			ĩ		060	127	Guitar I	i		SC-	55 Drum S	et program c	hanne man
	126	Organ 1	1					1					nange map
	126	Organ I			061	127	Guitar 2			I	STANDAI	ND .	
	126	Organ 1	1		062	127	Elec Gtr 1	1		9	ROOM		
()41	126	Organ 2	1			127	Elec Gtr 2	1		17	POWER		
042	126	Organ 1	1		064	127	Sitar	2		25	ELECTRO	DNIC	
043	126	Organ 1	1		065	127	Acou Bass 1	1		26	TR-808		
044	126	Organ 2	1		066	127	Acou Bass 2	1		33	JAZZ		
045	126	Organ 2	1		067	127	Elec Bass 1	1		41	BRUSH		
	126	Organ 2	1		068	127	Elec Bass 2	i		49	ORCHEST	TRA	
	126	Trumpet	i		069	127	Slap Bass 1	i		57	SFX		
	126	Trumpet	i		070	127	Slap Bass 2	i		128	CM-64/32	r	
	126	Trombone	i		071	127	Fretless 1	i		140	CH1-0-1, 52		
								1					
	126	Trombone	1		072	127	Fretless 2						
	126	Trombone	1		073	127	Flute I	1					
	126	Trombone	3		074	127	Flute 2	1					
	126	Trombone	1		075	127	Piccolo 1	1					
054	126	Trombone	1		076	127	Piccolo 2	2					
055	126	Alto Sax	1		077	127	Recorder	1					
056	126	Tenor Sax	ł		078	127	Pan Pipes	1					
057	126	BaritoneSax	T		079	127	Sax 1	1					
058	126	Aito Sax	1		080	127	Sax 2	1					
	126	Brass 1	i		081	127	Sax 3	1					
	126	Brass 1	i			127	Sax 4	i					
	126	Brass 2	2			127	Clarinet 1	÷					
	126	Brass 2 Brass 2	2			127	Clarinet 2	i					
		Brass 2 Brass 1						1					
	126		1			127	Oboe East Use						
064	126	Orchest.Hit	2		086	127	Engl Horn	1					
					087	127	Bassoon	1					
					088	127	Harmonica	1					
001		Acou Piano I	1		089	127	Trumpet 1	1					
002	127	Acou Piano2	1		090	127	Trumpet 2	1					
003	127	Acou Piano3	1		091	127	Trombone 1	2					
004	127	Elec Pianol	L		092	127	Trombone 2	2					
	127	Elec Piano2	1			127	Fr Horn I	2					
	127	Elec Piano3	i		094	127	Fr Horn 2	2					
	127	Elec Piano4	i		095	127	Tuba						
	127	Honkytonk	2		095	127	Brs Sect 1	1					
							Brs Sect 7 Brs Sect 2						
	127	Elec Org 1	1		097	127		2					
010		Elec Org 2	2			127	Vibe 1	1					
011		Elec Org 3	1			127	Vihe 2	1					
012		Elec Org 4	1		100		Syn Mailei	1					
013		Pipe Org 1	2		101		Windbell	2					
014		Pipe Org 2	2		102		Glock	1					
015		Pipe Org 3	2		103	127	Tube Bell	1					
016		Accordion	2		104		Xylophone	i					
017		Harpsi I	ĩ			127	Marimba	i					
	127	Harpsi 2	2			127	Kolo	1					
019		Harpsi 2 Harpsi 3	Î		107	127	Sho	2					
		Clavi I	i			127	Shakuhachi	2					
020													
021		Clavi 2				127	Whistle I	2					
022	127	Clavi 3	I.		110	127	Whistle 2	1					

GM Tones

TONES and VARIATIONS / DRUM	TONES and VARIATIONS /	DRUM	SETS
-----------------------------	------------------------	------	------

Tone #	Pg#	CC0#	Tone Name
A11	1	00	Plano 1
A12	2	00	Piano 2
A13	3	00	Piano 3
A14	4	00	Honky-tonk
A15	5	00	E.Plano 1
A16	6	00	E.Plano 2
A17	7	00	Harpsichord
A18	6	00	Clav.

Chr	Pe	rc.	
Tona #	Pgs	CC8#	Tone Name
A21	9	00	Celests
A22	10	00	Glockenspiel
A23	11	00	Music Box
A24	12	00	Vibraphone
A25	13	00	Marimbo
A26	14	00	Xylophone
A27	15	00	Tubular-bell
A28	16	00	Santur

Org	an		
fone #	Pg#	CCOR	Toria Name
31	17	00	Organ 1
132	18	00	Organ 2
33	19	00	Organ 3
A34	20	80	Church Org.1
A35	21	00	Read Organ
A36	22	00	Accordion Fr
A37	23	00	Harmonica
838	24	DO	Bandoneoti
Gui			
Gui		CCOR	Tone Name
Gui	tar		
	tar Pg#	CCO#	Tone Name
Gui	tar Pg#	CC0#	Tone Name Nylon-str.Gl
	25 26	CCO# 00 00	Tone Name Nylon-str.Gl Steal-str.Gt
Gui Ione #	25 25 26 27	CCO# 00 00 00	Tone Name Nylott-str.Gt Steel-str.Gt Jazz Gt.
Gui Ione #	25 26 27 28	CCO# 00 00 00 00	Tone Name Nylon-str.Gl Sizel-str.Gl Jazz Gl. Clean Gl
Gui one #	25 26 27 28 29	CC0# 00 00 00 00 00 00 00	Tone Name Nylott-str.Gt Steal-str.Gt Jazz Gt. Clean Gt Muted Gl.

Bas	S		
lane #	Pg#	CC0#	Tone Name
A51	33	00	Acoustic Bs.
A52	34	00	Fingered Bs.
A53	35	80	Picked Bs.
A54	36	90	Freiless Bs.
A55	37	00	Slep Bass 1
A56	38	00	Siep Bass 2
A57	39	00	Synth Bass 1
A58	40	00	Synth Bass 2
Stri			Synth Base 2
Stri			Synth Base 2 Tone Name
	ngs		
Stri	ngs	CCD#	Tone Name
Stri Tone #	ngs	CCD#	Tone Name Victin
Stri Tome 4 A61 A62	ngs Pg#	CC0#	Tone Name Vicila Vicila
Stri Torne #	ngs Pg# 41 42 43	CC0# 00 00	Tone Name Violin Viola Celio
	ngs Pg# 41 42 43 44	CC0# 00 00 00 00	Tone Name Vicilin Vicia Celio Contrabass
Strii Tome # A61 A62 A63 A64 A65	A1 41 42 43 44 45	CC0# 00 00 00 00 00	Tone Name Violin Viola Cello Contrabess Tremolo Str

Tone# = Group / Bank / Number / Variation

Tone #	Pos	CC0#	Tone Name
Ione #	-91		FUND PLAND
A71	49	00	Strings
A72	50	00	Slow Strings
A73	51	80	Syn.Strings1
A74	52	00	Syn.Strings2
A75	53	80	Choir Ashs
A76	54	00	Voice Oohs
A77	55	00	SynVox
A78	56	00	OrchestraHit

			-
Tone #	Pg#	CC04	Tone Name
A81	57	00	Trumpet
A82	58	00	Trombone
A83	59	60	Tube
AB4	60	60	MuledTrumpe
A85	61	00	French Horn
A86	62	00	Brass 1
A87	63	00	Synth Brasst
A68	64	00	Synth Brass2

Tone Name Soprano Sax
Soprano Sax
Alto Sax
Tenor Sax
Baritone Sau
Oboe
English Horr
Basacon
Clarinet
Tone Name
Piccolo
Finde
Recorder
Pan Flute
Pan Flute Bottle Blow
Pan Flute

Tone #	Pg#	CC0#	Tone Name
831	81	00	Square Wave
832	82	00	Saw Wave
833	83	00	Syn.Calliope
834	84	00	Chilfer Lead
835	85	00	Charang
835	96	00	Solo Vox
837	87	90	5th Saw Wave
838	88	00	Bass & Leed
· · · ·			
Syn	th F	Pad cco#	Tone Name
· · · ·			Tone Name Fanisela
Tone # B41	Pg#	CC0#	
Tone #	Pg# 89	CC0#	Fantasia
Tone # B41 B42 B43	Pg# 89 90	CC0# 08 00	Fantasia Warm Pad
Tone # 841 842	Pg# 89 90 91	00 00 00	Fantasia Werm Pad Polysynth
Tone # B41 B42 B43 B44	Pg# 89 90 91 92	CC0# 00 00 00 00	Fantasia Warm Pad Polysynth Space Voice
Tone # B41 B42 B43 B44 B44 B45	Pg# 89 90 91 92 93	CC0# 00 00 00 00 00	Fantasia Werm Pad Polysynth Space Volce Bowed Glass

	Pas	Sfx	Tone Name
Tone #	Pilla	CCU	Tone name
851	97	00	Ice Rain
852	98	00	Soundtrack
853	99	00	Crystal
854	100	00	Atmosphere
855	101	00	Brightness
856	102	00	Gobiin
B\$7	103	00	Echo Dropa
858	104	00	Star Theme

fone#	Pg#	CC0#	Tone Name
861	105	00	Sitar
B62	106	90	Banjo
863	107	00	Shamisen
B64	108	00	Kolo
B65	109	00	Kalimba
866	118	00	Bag Pipe
867	111	00	Fiddle
869	112	60	Shanai

Tone #	ទពួរ	CCOP	Tone Name
871	113	00	Tinkie Belt
872	114	60	Agogo
B73	115	96	Steel Drums
874	115	00	Woodblock
B75	117	80	Taiko
876	119	00	Melo. Tom t
B77	119	00	Synth Drum
B78	120	00	Reverse Cym.

Sfx

Tone #	Pg#	CCDA	Tone Name
881	121	06	GL.FretNoise
882	122	00	Breath Noise
883	123	00	Seashore
884	124	80	Bird
B85	125	00	Telephone 1
886	126	90	Helicopter
887	127	00	Applause
B68	128	00	Gun Shot

Drum Set#	Po#	CCO#	Set Name
1	1	00	Standard
2	9	66	Room
3	17	00	Power
4	25	00	Electronic
5	26	00	TR-808
6	41	00	Brush
7	49	00	Orchestra
8	57	00	SFX
9	33	00	Jazz

CC0#= MIDI Control Change 0, value (0~127)
GS Tones

Dian	20			Bas	S			Pipe	<u> </u>			Perc	119	sive	
Mar Tome#				Tone #				Tone #				Tone #	Pgi	000	Tone Name
				A51	33	00	Acoustic Bs.	B21	73	00	Piccolo	671	113	00	Tinkie Bell
A11 A111	1	00 08	Plano 1 Plano 1w	A52	34	00	Fingered Bs.	822	74	00	Flute	872	114	õõ	Agogo
A112		16	Plane 1d	A53	25	00	Picked Ba	823	75	00	Recorder	B73	115	00	Steel Drums
A12	2	00	Piano 2	A54 A35	36 37	00 00	Fretiesa Ba. Siap Bass 1	B24	76	00	Pan Flute	874	116	00	Woodblock
A121		80	Piana 2w	A55	37 38	00	Step Bass 1 Step Bass 2	B25	77	00	Bottle Blow	8741 875	117	08 00	Castanets Talko
A13	3	00	Piano 3	A57	39	00	Synth Bass 1	826 827	78 79	00 00	Shakuhachi Whister	8751	117	08	Concert BD
A131 A14	4	00 00	Piano 3w Honky-tenk	A571		01	SynthBass101	828	80	00	Ocarine	675	118	80	Melo. Tom 1
A141	•	00	Honky-tonk w	A572		08	Synth Bass 3	L				8761		08	Melo. Tom 2
A15	5	00	E.Plano 1	A58	40	00	Synth Bass 2					877	119	00	Synth Drum
A151		96	Detuned EP 1	A582 A583		08 16	Synth Bass 4 Rubber Bass					8771		08	808 Tom
A152		16	E.Piano 1v		·		11000, 0035					8772 878	120	09 60	Elec Perc Reverse Cym
A154		24	60's E.Piano												nete ac opin
A16 A161	6	00 08	E.Plano 2 Detuned EP 2					Syn	(n L	_eaa		i i			
A162		16	E.Pieno 2v					Tone #	Po#	CC0#	Tone Name	0.			
A17	7	00	Harpsichord	Stri	nas			831	81	00	Square Wave	Sfx			
A171		08	Coupled Hps	Tone #	Pg#	CCO#	Tone Name	B311		01	Square	Tone #	Pg#	CC0#	Tone Name
A172		16	Harpsi.w					B312		08	Sine Wave	BBI			GLFretholse
A173 A16	8	24 00	Harpsio Clav	A61	41	00	Violin	832	82	00	Saw Wave	8811	121	00 01	GLFFEINOISE GLCut Noise
- 10	•			A611		OB	Stew Vielin	B321		01	Saw	6612		62	String Stap
				A62 A63	42 43	00 00	Viola Cello	8322		08	Doctor Solo	882	122	00	Breath Noise
				A6J	43	00	Contrabars	833 834	83 64	90 90	Syn.Caillope Chiffer Leed	8821		01	FI.Key Click
Chr	Per	rc.		A65	45	00	Tremolo Sir	835	85	80	Charang	BB3	123	00	Seashore
Tone #	Pat	CCDF	Tone Name	A65	46	00	PizzicatoStr	B35	85	00	Solo Vax	8831 9832		01	Rain Thunder
, one i	rge		IONE NAME	A67	47	00	Harp	B37	87	00	5th Saw Wave	8832 B833		02	Wind
A21	9	00	Celesta	A58	48	00	Timpani	838	68	00	Bass & Lead	B834		05	Bubble
A22	10	00	Glockenspiel	1				L				884	124	00	Bird
A23	11	00	Music Box	1								B841		Q1	Dog
A24 A241	12	00 08	Vibraphone Vib.w	E		ble						BB42 BB43		62	Horse-Gallop Bird 2
A291 A25	13	00	Marimba	Ens								1 B85	125	03 60	Bird 2 Telephone 1
A251		08	Marimba w	Tone #	*g#	CCO#	Tons Name	0		N		8851	143	00	Telephone 2
A26	14	00	Xylophone	A71	49	00	Strings	Syn	IN P			B852		02	DoorCreaking
A27	15	90	Tubular-bell	A711	-9	08	Orchestra	Tone #	Pg#	CC0#	Tone Name	8853		03	Door
A271		08	Church Self	A72	50	00	Slow Strings	B41			Fantasia	B854		64	Scratch
A272 A28	16	09 86	Cariton Santur	A73	51	00	Syn_Strings1	842	89 90	00 00	Verm Ped	896	126	00	Helicopter
A25	76	00	Santur	A731		08	Syn Strings3	843	91	00	Polysynth	B851 B852		02	Car-Engine Car-Stop
				A74	52	00	Syn.Strings2	B44	92	00	Space Voice	8863		02	Car Pass
Ora-				A75	53	90 32	Choir Ashs Choir Ashs 2	B45	93	00	Bowed Glass	8864		04	Car Crath
Orga	dII			A751	54	32	Voice Cohs	B46	94	00	Metal Pad	8865		05	Siron
Tone #	Pg#	CC0#	Tone Name	A77	55		SynVox	947 848	95	00	Halo Ped	E866		06	Train
A31	17	00	Organ 1	A78	56	00	OrchestraHil	848	96	00	Sweep Pad	B867		07	Jetplane
A311		OB	Detuned Or.1	L				L				B868 B869		08 09	Starship Burst Noise
A312		16	60's Digan 1									B87	127	00	Applause
A313		32	Organ 4									B871		02	Screaming
A32	18	00	Organ 2									B872		03	Punch
A321 A322		08 32	Defuned Org.2 Organ 5	0								8873		04	Heart Beat
A322	19	00	Organ 3	Bra				0	*** (26.4		B674		05	Footsteps
A34	20	00	Church Org.1	Tone #	Pg#	CC0#	Tone Name	Syn				888 16881	128	00 01	Gun Shot Machine Gun
A341		08	Church Org.2	ABI		00	Termos	Tone #	Pgs	CC0#	Tone Name	6882		07	Laseroun
A342		16	Church Org.3	AB1 A82	57 58	00 00	Trumpet Trombone	B51	\$7	00	lce Rain	5863		02	Explosion
A35	21	00	Reed Organ	A82 A821	30	01	Trombone 2	851	97	00	ice Hain Soundtrack				
A36 A361	22	00 08	Accordion Fr Accordion It	A83	59	00	Tube	852	99	00	Crystal	1			
N361 N37	23	00	Ascoroion II Harmonica	AB4	60	00	MutedTrumpet	B531		01	Syn Maitei				
138	24	00	Bandoneon	A85	61	00	French Horn	B54	100	00	Atmosphere	1			
				A851		01	French Hom 2	855	101	00	Brightness	1			
-				A86 A861	62	00 08	Bress 1 Bress 2	856	102	00	Goblin	1			
Guit	tar			A861 A87	63	08	Brass 2 Synih Brass f	857 8571	103	DO 01	Echo Drops Echo Bell				
Tone #	Po#	CCOF	Tone Name	A871	6.5	08	Synth Brass3	B572		01	Echo Pan				
				- A872		16	AnalogBrass1	B58	104	02	Star Theme				
A41	25	00	Nylon-str.Gt	ABB	64	00	Synth Brass2					J			
A411		05	Ukuleic	ABEI		66	Synth Brass4								
A412 A414		16 32	Nylon Git a Nylon Git 2												
414 442	26	32	Nylon GI 2 Steel-str.GI	1				r							-
421		06	12-51/ GI					Ethe	nic	Misc		DRL	JM :	SET	5
4423		16	Mandolin	1				1				Drum Set		CC0#	Set Name
A43	27	00	Jazz Gt.					Tone #	Pg#	CCOF	Tone Name				
A431		08	Hawaian Gil.	Ree	d			851	105	00	Sitar	1	1	00	Standard
R44	28	00	Clean Gt	Tone #	Pg#	CC0#	Tone Name	BG11		01	Silar 2	2	9	00	Abom
A441	•-	08	Charus GL					862	106	00	Banjo	3	17	00	Power
A45	29	00	Muted GL	B11	65	00	Soprano Sax	863	107	00	Shamisen	4	25 26	00 00	Electronic TR-908
4451		08 16	Funk Gt Funk Gt 2	B12	65	00	Atto Ser	864	108	00	Kolo	5	26 41	00	19-308 Brush
	30	00	Overdrive Gt1	B13 B14	67	00 00	Tenor Sax Baritone Sax	8641		08	Taisno Koto	7	49	00	Orchestra
A452			DistortionGI1	814	68 69	00 00	Baritone Sex Obse	865 856	109 110	00 00	Kalimba Bag Pipe	e e	57	00	SFX
A452 A46 A47	31	00													
A452 A45 A47 A471	31	08	Freedback Gt	816	70	00	English Horn				Ciddle	9.	33	00	Jazz
A452 A46 A47								857	111	00 00	Fiddle	9 *		00	Jazz

TONES and VARIATIONS / DRUM SETS

Tone# = Group / Bank / Number / Variation Bold: Cepital Tones Pg# = MIDI Program Change Number (1-128)

(Only via MIDI) CC0#= MIDI Control Change 0 , value (0-127)

14. Specifications

Arranger Workstation	and the second state of the second state of the second state of the second s								
Keyboard:	61 keys, velocity sensitive, weighted synthesizer-type action								
Sound Source:	Newly developed sound source with TVF (GM/GS format)								
Maximum polyphony:	64 voices								
Tones:	689 enhanced variation Tones + 25 Drum Sets								
Macro Editing:	Vib Rate, Vib Depth, Vib Delay, Cutoff Freq, Resonance, Attack Time, Decay Time Release Time								
Built-in Music Styles:	128 at high definition (120 CPT/J including Pitch Bender, Control Changes etc., a polyphonic tracks for each division								
User Styles:	8, completely programmable (8 tracks per Style), with power backup (Save: MSE format, Load: MSA, MSD, MSE formats)								
Performance Memories:	192								
MIDI Sets:	8								
Recorder:	Direct-to-disk								
Built-in effects:	Digital Reverb, Chorus, Delay (Realtime parts), Equalizer								
HD floppy disk drive:	SMF playback without loading. User Style, User Style Set, Performance Memorie MIDI Set, Chord Sequences [Load/Save]								
Display:	Graphic 240 x 64 pixels, backlit LCD with software window management								
Rear Panel:	Phones, Output L(Mono)/R, Sustain Footswitch, Expression Pedal, External Multi switch pedal (FC7), MIDI (In, Out, Thru), LCD Contrast, AC In socket, Power On/Off switch								
Dimensions:	1150 (W) x 410 (D) x 140(H) mm								
Weight:	12kg								
Display controls:	[PAGE] ▲▼, Alpha ▲▼ buttons (x5), Function keys ([F1]~[F5]), Tone/Performance memory select, Volume select, Shift, Write, Part Select (MDrums, MBass, Lower, Up2, Up1)								
Specifications and appear	rance subject to change without prior notice.								

Index

Α

A. Bass 41 A. Drums 41 Abort 204 Absolute 132, 193 AC(companiment) 41 Acc Wrap 93, 154 Accompaniment 41 Active Sensing 188 Add Controller data 119 Notes 116 Advanced 46 All 38, 61, 157 All Song 15, 71 Alterat(io)n 92, 155 Always 164 Arabic scales 98 Arr 54, 85, 146 ARR CHORD 43 Arranger 40 Chord mode 43 Hold 44 Note To 65 Settings 92 Tone selection 54 Velocity 94 Assign Left/Right 28 Asterisk 109 Attack 88 Auto1/2 134, 195

В

Backup 137 Balance 77 Section 79 Bank 32, 50 Bank Select 76, 148, 186 Basic 46 Basic Channel, 130 192 Bass Inversion 44 Blending effect 98

С

Cancel 70 Chain (Songs) 203 Change Gate Time 178 Style 66 Velocity 176 Character 199 Chord Family Assign 92, 155 Recognition area 42 Sequencer 65 Chord Sequence Load 198 Save 200 Chorus 82, 117, 147, 165 Clones 106, 166 Cntrl 158 Coarse 89, 156 Compatibility 140 Connections 14 Continue (MIDI) 196 Contrast 19 Control Change 180 Controller Data 116 **Controllers 37** Copy 203 Existing Styles 113 Microscope 183 Mode 115, 169 Song 203 Style 197 Track 169 CPT 169 Curve (velocity) 158 Cutoff Freq 87

D

Damper (Hold) 190 Data 182 Type 172 Decay 88 Delay 81, 151 Send 148 Delete 126, 173, 184, 202 Demo songs 14 Digital pianos (Soft Thru)134 Disk Copy 137 Delete files 139 Format 68 Inserting 14 Mode 197 Display symbols 34 Division 40, 105 Dly 151 DP-2, DP-6 6 Drum Set 34, 165 Variation 48 Note pitch 117, 166 Dsk 113

Dynamic Arranger 50, 94, 158

Ε

Edit Parts 86 Tone 145 User Style 171 Effect 81, 148 Settings 82 Ending 47 Env(elope) 88 Equalizer 83, 151 On/Off (for parts) 83 Erase 121, 122, 171, 181 Record 107 Exit 21 Expre 171 Express 165 Expression 98, 117, 160 External Controller 120

F

Factory Setup 139, 208 Fade Out 49 Faders 78, 144 Family 92, 155 FF (Fast Forward) 72 FC-7 6 Feedback 151 File name 200 Fill In 46 Half Bar 47 Filter 87, 131, 192 Fine 89, 157 Flanger 150 For 174 Format (Disk) 68, 205 FreePnl 61 From 174 Full 93, 154 Function keys 23

G

Gain (EQ) 152 Gate Time 122, 178, 181 GM 185 GM/GS mode 68, 143

Η

Half Bar 47

High 95, 158 High Limit 132 Hold Arranger 44 Keyboard Mode 31 Pedal (Sustain) 39 Performance Memory 63

I

Initialize 139, 208 Initialize disk 205 Insert 122, 124, 173, 182 Int 38, 113, 156, 194 Int+Mid 194 Intelligent 44 Internal 195 Into 115, 170, 183 Intro 47 Inversion 44

К

Kbd Scale 157 Key 107, 164 Keyboard Mode Hold 31 Scale 157

L

Layer 28 LCD Contrast 19 Length 109, 167 Limit 190, 192 Listen 169 Live perf. with SMF 73 I.oad Chord Sequence 198 Factory Setup 139 MIDI Set 136, 198 Performance Set 198 Style Set 197 User Style 197 Local 133, 191 Loop 73 Low 95, 158 Low Limit 132 Lower 27 Lyrics 72, 143

Μ

M.Bass 27 M.Drums 27, 31 G-600

219

Macro 149, 150, 151 Major 46 Mark 167 Markers 73 Master Tune 39, 156 Max 95, 158 Med 95, 158 Melody Intelligence 49, 91, 159 Memory Protect 59, 153 Merge 107, 163 Metronome 112, 164 Microscope 180 MIDI 127, 185 Basic Channel 130, 192 Channels 119, 190 Data for User Stl 119 Filter 131, 191, 192 Messages 185 NTA 129, 191 Parameters 193 Receive channels 129 Set 135 Shift 132 Style Select 130, 193 Switch (TX/RX) 131 Sync(hronization) 119, 134, 194 Transmit channels 131 Transpose 38, 156, 190 Zone 132 Min 94 Minor 46 Minus One 73 Modul 190 Modulation 37,86 Mono(phonic) 96, 157 Move 183 Multiple 172 Music Style 40 Select 45 Mute 75, 147 User Style parts 112

Ν

Natural 93, 154 New (Tone Change) 76 Note To Arranger 65, 129 NTA 65, 129, 191

0

00 FreePnl 61 Octave 38, 132, 172, 177 Old 76, 132, 148 One Touch 49, 118 One-shot 104, 170

P Pan 80.

Pan 80, 85, 131, 147, 151, 171 Panpot 80, 116, 121, 147, 171 PanPt 121, 131, 171, 190 Param 30, 153 Part Balance 77 Edit 145 Parameters 86, 145 Select 17, 143 Switch 194 PartSwtc 192 Pattern 42 Pause 100, 155 PBend 122, 131, 171, 190 PChng 131, 171, 190 Performance Memory 58 Hold 63, 198 Piano Style 43 Pitch 37, 166 Pitch Bend 27, 159, 186 Range 97, 159 Poly 96, 157 Portamento 96, 157, 187 Preset tempo 53, 118, 162 Prf 35, 84, 90, 145, 160, 201 PrfMcmPC 192 Proceed 123, 180 Program Change 127, 131, 171, 190

Q

Quantize 107, 122, 164, 177

R

Range 97, 159 Rate 87, 150, 218 Rec&Ply 112, 164 Receive channel 129, 190, 193 Record 65, 68, 107, 163 Erase 105, 163 Merge 107 Mode 107, 163 Recorder 38, 68, 144 **Registrations 58** Relative 132, 193 Release 88 Rename 138, 200 Replace 115, 169 Reset 49 Resonance 87 Resume 61, 153 Retry 62, 206 Rev 149 Reverb 81, 117, 147

Rewind 72 Rnd 81 147, 165 Roll 31, 154 Resolution 96, 154 RPN 131, 187 RX Channel 191 Parts 128, 191 Velo 133

S

Save 56, 135, 199 SC-88 76, 148 Scale 98, 157, 160 Section balance 79 Sensitivity 94, 158 Set 142, 197 Seventh 46, 92, 155 Share 109, 167 Shift 38, 121, 132, 178, 191 Singl 109, 167 Single 177 SMF 185 Soft 131, 134, 187 Thru 134, 194 Solo 75, 148 Song Copy 203 Position Pointer 134, 196 Sostenuto 131, 186, 190 Source 52, 84, 146, 152 Split 29, 133, 154 Standard 43 Standard MIDI File 73 Status 98, 148, 160 Step time 124 Stereo position 80, 147 Stl Change 66, 154 StlVolum 193 StylePC 193 Synchronization 119, 134, 195 SysEx 118, 131, 190 System Exclusive 118, 131

Т

Tap Tempo 53 Tempo 21, 49, 142, 162 Time Shift 121, 178 Signature 108, 168 To Original 46 To Variation 46 Tone Change 35, 145, 148 Track Change Gate Time 122, 178 Copy 114, 169 Delete 122, 173 Erase 111, 171 Transmit channel 128, 193 Transpose 37, 132, 156, 175 TSign 108, 168 Tune 39, 90, 156, 160 TVF 87 тх Channel 130, 192 Octave 132, 193 Velo 133 2'ch Limit 192 2'rxCh 191

U

Universal System Exclusive 188 UP1-2 99, 157 UP2Split 29, 154 Upper2 Split 29, 154 User Style 51, 105, 162

V

Variation, 33, 41 Velocity Change 122, 176 Vibrato 86 View 168 Voices 91, 159 Volume 24, 75, 144, 148, 186, 188 Whole 28 Wrap 93, 154

Ζ

00 FreePanl 61 Zone 134

Information

When you need repair service, call your local Roland Service Station or the authorized Roland distributor in your country as shown below.

ARGENTINA Instrumentos Musicales S.A. Florida 638 (1005) Buenos Aires ARGENTINA TEL: (01) 394 4029

BRAZIL Roland Brasil Ltda. R. Coronel Octaviano da Silveira 203 05522-010 Sao Paulo BRAZIL TEL: (011) 843 9377

CANADA Roland Canada Music Ltd. (Head Office) 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (0604) 270 6626

Roland Canada Music Ltd. (Toronto Office) Unit 2, 109 Woodbine Downs Blvd, Etobicoke, ON M9W 6Y1 CANADA TEL: (0416) 213 9707

MEXICO Casa Veerkamp, s.a. de c.v. Av. Toluca No. 323 Col. Olivar de los Padros 01780 Mexico D.F. MEXICO TEL: (525) 668 04 80

La Casa Wagner de Guadalajara s.a. de c.v. Av. Corona No. 202 S.J. Guadalajara, Jalisco Mexico C.P.44100 MEXICO TEL: (03 613 1414

PANAMA Productos Superiores, S.A. Apartado 655 - Panama I REP. DE FANAMA TEL: 26 3322

U. S. A. Roland Corporation U.S. 7200 Dominion Circle Los Angeles, CA. 90040-3696, U.S. A. TEL: (0213) 685 5141

VENEZUELA Musicland Digital C.A. Av. Francisco de Miranda, Centro Parque de Cristal, Nivel C2 Local 20 Caracas VENEZUELA TEL: (02) 285 9218

AUSTRALIA Roland Corporation Australia Pty. Ltd. 38 Campbell Avenue Dee Why West. NSW 2099 AUSTRALIA TEL: (02) 982 8266

NEW ZEALAND Roland Corporation (NZ) Ltd. 97 ML Eden Road, ML Eden, Auckland 3, NEW ZEALAND TEL: (09) 3098 715

CHINA Beijing Xinghai Musical Instruments Co., Ltd. 2 Huangmuchang Chao Yang District, Beijing, CHINA TEL: (110) 6774 7491

HONG KONG Tom Lee Music Co., Ltd. Service Division 22-32 Pun Shan Street, Tsuen Wan, New Territories, HONG KONG TEL: 2415 0911 INDONESIA PT Galestra Inti Kumpleks Perkantoran Duta Merlin Blok E No.6–7 J. Gajah Mada No.3–5, Jakarta 10130, INDONESIA TEL: (021) 6335416

KOREA Cosmos Corporation Service Station 261 2nd Fluor Nak-Won Arcade Jong-Ro ku, Sevul, KOREA TEL: (02) 742 8844

MALAYSIA Bentley Music SDN BHD No. 142, Jalan Bukit Bintang 55100 Kuala Lumpur, MALAYSIA TEL: (03) 2443333

PHILIPPINES G.A. Yupangco & Co. Inc. 339 Cil J. Puyat Avenue Makati Metro Manila 1200, PHILIPPINES TEL: (02) 899 9801

SINGAPORE Swee Lee Company BLOCK 231, Bain Street #03-23 Bras Basah Complex, SINGAPORE 0718 TEL: 3367886

Cristofori Music Pte Ltd. 335, Joo Chiat Road SINGAPORE 1542 TEL: 3450435

TAIWAN Siruba Enterprise (Taiwan) Co., LTD. Room. 5, 91. No. 112 Chung Shan N.Road Sec.2 Taipei, TAIWAN, R.O.C. TEL: (02) 561 3339

THAILAND Theera Music Co., Ltd. 330 Verug Nakorn Kasern, Soi 2, Bangkok 10100, THAILAND TEL: (02) 2248821

BAHRAIN Moon Stores Bad Al Bahrain Road, P.O.Box 20077 State of BAHRAIN TEL: 211 005

IRAN TARADIS Mir Emad Ave. No. 15, 10th street P. O. Box 15875 4171 Teheran, IRAN TEL: (021) 875 6524

ISRAEL Halilit P. Greenspoon & Sons Ltd. 8 Retzif Ha'aliya Hashnya St. Tel-Aviv-Yafo ISRAEL TEL: (03) 6823666

JORDAN Amman Trading Agency Prince Mohammed St. P. O. Box 825 Amman 11118 JORDAN TEL: (06) 641200 KUWAIT Easa Husain Al-Yousifi P.O. Box 125 Safat 13002 KUWAIT

LEBANON A. Chahine & Fils P.O. Box 16-5857 Gergi Zeidan St. Chahine Building, Achrafieh Beirut, LEBANON TEL: (01) 335799

TEL: 571949

OMAN OHI Electronics & Trading Co. LLC P. O. Bux 889 Muscat Sultanate of OMAN TEL: 706 010

QATAR Badie Studio & Stores P.O.Bux 62, DOHA QATAR TEL: 423554

SAUDI ARABIA Abdul Latif S. Al-Ghamdi Trading Establishment Middle East Commercial Center Al-Khobar Dharan Highway W /hamood st. P. O. Box 3631 Al-Khober 31952 SAUDIARABIA TEL. (03) 896 2332

SYRIA Technical Light & Sound Center Khaled Ebn Al Walid St. P.O.Box 13520 Damascus - SYRIA TEL: (011) 2235 384

TURKEY Barkat Sanayi ve Ticaret Siraselvier Cad. Guney Ishani No. 86/6 Taksim. Istanbui TURKEY TEL: (0212) 2499324

U.A.E Zak Electronics & Musical Instruments Co. Zabeel Road, Al Sherooq Bidg.. No. 14, Grand Floor DUBAI U.A.E. P.O. Box 8050 DUBAI, U.A.E FL: (04) 30715

EGYPT Al Fanny Trading Office 9. Ebn Hagar Ai Askalany Street, Ard El Golf, Heliopolis, Cairo. 11341 EGYPT TEL: (02) 4171828 (02) 4185531

KENYA Musik Land Limited P.O Box 12183 Moi Avenue Nairobi Republic of KENYA TEL: (2) 338 346

MAURITIOUS Philanne Music Center 4th. Floor Noll, Happy World House Sir William Newton Street Port Luis MAURITIOUS TEL: 242 2986

REUNION FO - YAM Marcel 25 Rue Jules MermanZL. Chaudron - BP79 97491 Ste Clotilde REUNION TEL: 28 29 16

SOUTH AFRICA That Other Music Shop (PTY) Ltd. 1) Melle Street (Cnr Melle and Juta Street) Braamfontein 2001 Republic of SOUTH AFRICA TEL: (011) 403 4105

Paul Bothner (PTY) Ltd. 17 Werdmuller Centre Claremont 7700 Republic of SOUTH AFRICA TEL: (021) 64 4030

AUSTRIA E. Dematte &Co. Neu-Rum Siemens-Strasse 4 P.O.Box 83 A-6040 Innsbruck AUSTRIA TEL: (0512) 26 44 260 BELGIUM/HOLLAND/ LUXEMBOURG Roland Benelux N. V. Houtstraat 1 B-3260 Oevel-Westerlo BELGIUM TEL: (014) 575811

BELORUSSIA Tushe UL. Rabkorovskaya 17 220001 MINSK TEL: (0172) 764-911

CYPRUS Radex Sound Equipment Ltd. 17 Diagorou St., P.O.Box 2046, Nicosia CYPRUS TEL: (02) 453 426 (02) 466 423

DENMARK Roland Scandinavia A/S Langebrogade 6 Post Box 1937 DK-1023 Copenhagen K. DENMARK TEL: 32 95 3111

FRANCE MUSIKENGRO Zac de Folliouses 01706 Les Echets Miribel FRANCE TEL: 472 26 2700

FINLAND Roland Scandinavia As, Filial Finland Lauttasarentic 54 B Fin-00201 Helsinki, FINLAND P. O. Box No. 109 TEL: (0) 682 4020

GERMANY Roland Elektronische Musikinstrumente Handelsgesellschaft mbH. Oxtstrasse 96, 22844 Norderstedt, GERMANY TEL: (040) 52 60090

GREECE V. Dimitriadis & Co. Ltd. 20, Alexandras 5t & Bouboulinas 54 St. 106 82 Athens, GREECE TEL: (01) 8232415

TEL: (01) 8232415 HUNGARY Intermusica Ltd. Warehouse Area 'DEPO' Pf.83

Warehouse Area 'DEPO' Pf.83 H-2046 Torokbalint, HUNGARY TEL: (23) 338 041 IRELAND The Dublin Service Centre

Audio Maintenance Limited 11 Brunswick Place Dublin 2 Republic of IRELAND TEL: (01) 677322

ITALY Roland Italy S. p. A. Viale delle Industrie, 8 20020 Arese Milano, ITALY TEL: (02) 93581311

NORWAY Roland Scandinavia Avd. Kontor Norge Lilleakerveien 2 Postboks 95 Lilleaker N-0216 Oslo NORWAY TEL: 273 0074

POLAND P. P. H. Brzostowicz Marian UL. Blokowa 32, 03624 Warszawa POLAND TEL: (022) 679 44 19

PORTUGAL Caius - Tecnologias Audio e Musica , Lda. Rue de Calarina 131 4000 Porto, PORTUGAL TEL: (02) 38 4456 RUSSIA Petroshop Ltd. 11 Sayanskaya Street Moscow 11531, RUSSIA TEL: 095.307 4892

Slami Music Company Sadojava-Triumfahaja st., 16 103006 Moscow, RUSSIA TEL: 095 209 2193

SPAIN Roland Electronics de España, S. A. Calle Bolivia 239 08020 Barcelona, SPAIN TEL: (93) 308 1000

SWEDEN Roland Scandinavia A/S Danvik Center 28 A, 2 tr. 5-131 30 Nacka SWEDEN TEL: (08) 702 0020

SWITZERLAND Roland (Switzerland) AG Musitronic AG Gerberstrasse 5, CH-4410 Liestal, SWITZERLAND TEL: (061) 921 1615

UKRAINE TIC-TAC Mira Str. 19/108 P.O.Box 180 295400 Munkachevo, UKRAINE TEL: (03131) 414-40

UNITED KINGDOM Roland (U.K.) Ltd., Swansea Office

Atlantic Close, Swansea Enterprise Park SWANSEA West Glamorgan SA7 9FJ, UNITED KINGDOM TEL: (01792) 702701

As of October, 28, 1996

-For Nordic Countries -

Apparatus containing Lithium batteries

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering. Udskiftning må kun ske med batteri af samme fabrikat og type. Levér det brugte batteri tilbage til leverandøren.

ADVARSEL!

Lithiumbatteri - Eksplosjonsfare. Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten. Brukt batteri returneres apparatleverandøren.

VARNING!

Explosionsfara vid felaktigt batteribyte. Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren. Kassera använt batteri enligt fabrikantens instruktion.

VAROITUS!

Paristo voi räjähtää, jos se on virheellisesti asennettu. Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

This product complies with EC directives

- LOW VOLTAGE 73/23

- EMC 89/336*

Dieses instrument entspricht folgenden EG-Verordnungen: - NIEDRIGE SPANNUNG 73/23

- EMC 89/336"

Cet instrument est conforme aux directives CE suivantes:

- BASSE TENSION 73/23
- EMC 89/336*

BASSÀ TENSIONE 73/23
 EMC 89/336*
Dit instrument beantwoordt aan de volgende EG richtlijnen:
 LAGE SPANNING 73/23
 EMC 89/336*

- EMC 89/336" Este producto cumple con las siguientes directrices de la CE - BAJO VOLTAJE 73/23

Questo prodotto é conforme alle seguenti direttive CEE

- EMC 89/336*

-For the USA —

For E.C. Countries

FEDERAL COMMUNICATIONS COMMISSION RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment. This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

CLASS B This digital apparatus does not exceed the Class B limits for radio noise emissions set out in the Radio Interference Regulations of the Canadian Department of Communications.

CLASSE B

AVIS

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites par le ministère canadien des Communications.





Roland