

E-600



INTELLIGENT KEYBOARD



Roland
E-600
INTELLIGENT KEYBOARD
DIGITAL PIANO

MODU

BENDER

| | | |
|---|---|---|
|  | CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN |  |
| ATTENTION: RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR | | |
| 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.
2. 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.
6. The product should be located away from heat sources such as radiators, heat registers, or other products that produce heat.
7. 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.
9. 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

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 Canada

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



E-600

INTELLIGENT KEYBOARD 64-VOICE POLYPHONY

Owner's Manual

Thank you for choosing a Roland E-600 Intelligent Keyboard. The E-600 is in many respects a breakthrough for arranger-type instruments. Its touch screen sets the E-600 apart from all other arranger keyboards you may know, while the Harmonist and Voice Transformer functions are useful additions for your vocal performances. The E-600 features a microphone input with settable echo effect.

Furthermore, the E-600 comes with 499 sounds (called "Tones") that include the finest piano sounds ever heard in a keyboard. A host of practical and easy-to-grasp functions allow you to take advantage of the E-600's sophisticated features.

To get the most out of the E-600 and to ensure many years of trouble-free service, we urge you to read through this Owner's Manual thoroughly.

To avoid confusion, let's agree to use the word "button" for all keys on the front panel, and only use "key" when referring to the E-600's keyboard.

Before using this instrument, carefully read the sections entitled "IMPORTANT SAFETY INSTRUCTIONS", "USING THE UNIT SAFELY", and "IMPORTANT NOTES". These sections provide important information concerning the proper operation of the E-600. Be sure to keep this manual in a safe place for future reference.

Your E-600 in a nutshell

Carry Out a Wide Variety of Actions Just by Touching the Screen

The large display and built-in Touch Screen let you carry out a wide variety of operations just by touching the screen.

One-button Setup for Performances

You can make the optimal settings for a piano or organ performance just by pressing a One Touch button.

Add Lively Orchestra and Band Accompaniments to Your Performances Automatically

Thanks to the automatic accompaniment function (the "Arranger") and a rich array of built-in Music Styles, you can enjoy ensemble performances even when you're playing solo.

Play with a Wide Variety of Instrument Sounds

You can choose your favorites from among 499 types of instrument sounds for your performances.

Enjoy Authentic Piano Performances

The E-600 features high-quality concert-piano sounds, so you can enjoy realistic piano performance.

Simple Operation Makes It Easy to Record Your Own Performances

Five Track buttons can be used like a tape recorder to record what you play.

Create Your Own Songs

You can use a variety of recording and editing features to compose your own songs or record your versions of existing music. The multitrack feature of the E-600's Composer allows you to record entire arrangements all by yourself.

Make Use of Commercially Available Music Files for Listening or Lessons

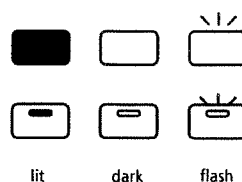
You can use the built-in disk drive to listen to commercial music-file songs and save recorded tunes on floppy disk.

Microphone input with echo effect

You can hook up a microphone to use the E-600 like a Karaoke machine. You can also apply a variety of effects to vocals.

Conventions Used in This Manual

- Button names are enclosed in square brackets ("`[]`"), as in `[Demo]` button.
- On-screen text is enclosed in angled brackets ("`< >`") as in `<Clear>`.
- The act of lightly contacting the Touch Screen with your finger is called "touching."
- Whether a button light is illuminated, dark, or blinking is illustrated as shown below.



1. Important notes

In addition to the items listed under “IMPORTANT SAFETY INSTRUCTIONS” and “USING THE UNIT SAFELY”, please read and observe the following:

Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this instrument to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the instrument near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This instrument may interfere with radio and television reception. Do not use it in the vicinity of such receivers.
- Observe the precautions listed under “Before Using Floppy Disks” when using the unit’s floppy disk drive.
- Do not place the instrument near devices that produce a strong magnetic field (e.g., loudspeakers).
- Install the instrument on a solid, level surface.
- Do not move the instrument or subject it to vibration while the drive is operating.
- Do not expose the instrument to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, avoid using the E-600 in the vicinity of lighting devices or powerful spotlights. Excessive heat can deform or discolor the instrument.
- Do not put anything that contains water (e.g., flower vases) on the instrument. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the instrument using a dry, soft cloth.

Maintenance

- To clean the instrument, use a dry, soft cloth, or one that is slightly dampened. Rubbing too hard in the same area can damage the finish.
- Never use benzene, thinner, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data Additional Precautions

- Pressing hard, or using a hard object can damage the Touch Screen. Be careful not to press too hard, and be sure to use only your fingers to operate the Touch Screen.
- In some rare cases, it may be impossible to retrieve the data that was stored on a floppy disk once it has been lost. Roland Corporation assumes no liability concerning such loss of data.

- Use a reasonable amount of care when using the instruments’s buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- A small amount of noise may be heard from the display during normal operation.
- When connecting/disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cables internal elements.
- A small amount of heat will radiate from the instrument during normal operation.
- To avoid disturbing your neighbors, try to keep the instrument’s volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the instrument, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

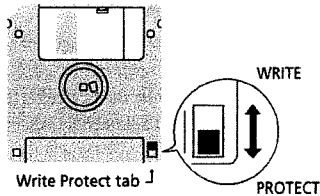
Before Using Floppy Disks

Handling the Floppy Disk Drive

- Install the instrument on a solid, level surface in an area free from vibration.
- Avoid using the instrument immediately after it has been moved to a location with a level of humidity that is greatly different than its former location. Rapid changes in the environment can cause condensation to form inside the drive, which will adversely affect the operation of the drive and/or damage floppy disks. When the unit has been moved, allow it to become accustomed to the new environment (allow a few hours) before operating it.
- To insert a disk, push it gently but firmly into the drive—it will click into place. To remove a disk, press the EJECT button firmly. Do not use excessive force to remove a disk which is lodged in the drive.
- The indicator light for the disk drive lights up at full brightness when reading or writing data, and lights up at half brightness at other times. Don’t try to eject the disk while reading or writing is in progress (that is, when the indicator light is lit up at full brightness). Attempting to do so may damage the magnetic surface of the disk, rendering it unusable.
- Remove any disk from the drive before powering up or down.
- To prevent damage to the disk drive’s heads, always try to hold the floppy disk in a level position (not tilted in any direction) while inserting it into the drive. Push it in firmly, but gently. Never use excessive force.

Handling Floppy Disks

- Floppy disks contain a plastic disk with a thin coating of magnetic storage medium. Microscopic precision is required to enable storage of large amounts of data on such a small surface area. To preserve their integrity, please observe the following when handling floppy disks:
 - Never touch the magnetic medium inside the disk.
 - Do not use or store floppy disks in dirty or dusty areas.
 - Do not subject floppy disks to temperature extremes (e.g., direct sunlight in an enclosed vehicle). Recommended temperature range: 10° to 50°C (50 to 122°F).
 - Do not expose floppy disks to strong magnetic fields, such as those generated by loudspeakers.
- Floppy disks have a “write protect” tab which can protect the disk from accidental erasure. It is recommended that the tab be kept in the Protect position, and moved to the Write position only when you wish to write new data onto the disk.



- The identification label should be firmly affixed to the disk. Should the label come loose while the disk is in the drive, it may be difficult to remove the disk.
- Put the disk back into its case for storage.
- Disks containing performance data for this instrument should always be locked (have their write protect tab slid to the “Protect” position) before you insert them into the drive on some other unit (except the PR-300, or a product in the HP-G, MT, KR, or Atelier families), or into a computer’s drive. Otherwise (if the write protect tab remains in the “Write” position), when you perform any disk operations using the other device’s disk drive (such as checking the contents of the disk, or loading data), you risk rendering the disk unreadable by this unit’s disk drive.

Note: GS (GS) is a registered trademark of Roland Corporation.

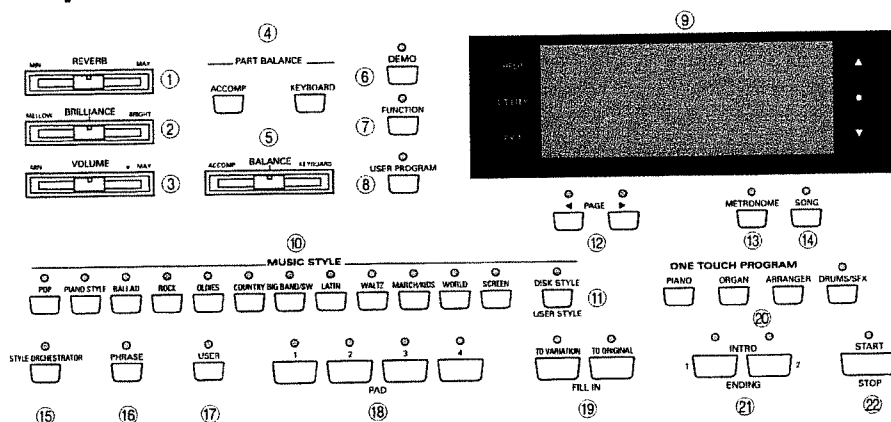
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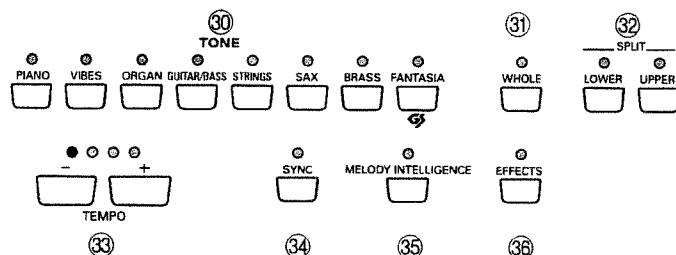
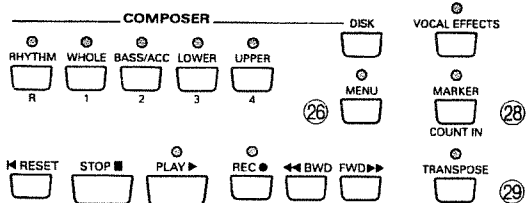
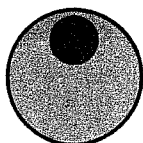
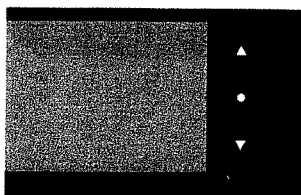
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2. Panel descriptions

2.1 Front panel



- ① **[Reverb] slider**
Used to adjust the amount of Reverb (see page 29).
- ② **[Brilliance] slider**
This adjusts the sound's brightness (see page 14).
- ③ **[Volume] slider**
Adjusts the overall volume. For optimum sound quality, set the control to the level indicated by the dot.
- ④ **Part Balance buttons**
Press the [Accomp] button to adjust the balance of the Arranger parts, and [Keyboard] to adjust the volume of the parts you can play yourself (see page 56).
- ⑤ **[Balance] slider**
This changes the volume balance for sounds played with the keyboard and for songs and accompaniments (see page 21).
- ⑥ **[Demo] button**
This plays a demo of the E-600's built-in Tones and Music Styles.
- ⑦ **[Function] button**
This selects a variety of global functions.
- ⑧ **[User Program] button**
This allows you to store the front-panel and parameter settings for convenient recall at a later stage (see page 62).
- ⑨ **Touch Screen**
This lets you perform a variety of operations just by touching the screen.
- ⑩ **Music Style buttons**
They're used to select built-in Music Styles.
- ⑪ **[Disk Style/User Style] button**
This selects a Music Style disk or a User Style that you've created yourself.
- ⑫ **Page [◀] and [▶] buttons**
These take you to the previous/next screen page. The light comes on when there is another page available in the direction of one of the arrows.
- ⑬ **[Metronome] button**
Activates the built-in metronome (see page 18).
- ⑭ **[Song] button**
This is used to select a song.
- ⑮ **[Style Orchestrator] button**
This is used to change the arrangement type with the Pad buttons (see page 35).
- ⑯ **[Phrase] button**
This is used to play a short phrase with the Pad buttons.
- ⑰ **[User] button**
This is used to assign a variety of functions to the Pad buttons.
- ⑱ **Pad buttons**
These buttons can perform a variety of functions (see page 60).
- ⑲ **Fill In buttons**
[To Variation] and [To Original] insert a fill-in in an automatic accompaniment and change to the Variation or Original accompaniment pattern.
- ⑳ **One Touch Program buttons**
These buttons allow you to select the desired keyboard mode: Piano, Organ, Arranger, or Drums/SFX. There is a fifth keyboard mode called "Whole Upper".
- ㉑ **Intro/Ending [1] and [2] buttons**
These play an Intro or Ending of the automatic accompaniment.
- ㉒ **[Start/Stop] button**
This starts and stops automatic accompaniment.



23 Dial

You can use this to change on-screen values or select various items.

24 Composer buttons

These buttons are used to operate the on-board digital recorder function (also known as *Composer*).

There are five Track buttons (1/Rhythm~5/Upper). These are used to play back individual instrument parts of a song, or to record your own performances.

25 [Disk] button

This can be used to make settings for the disk drive, such as saving a recorded tune on floppy disk.

26 [Menu] button

You can use this to choose recording and editing functions.

27 [Vocal Effects] button

Applies a variety of effects to vocals from the microphone (see page 27).

28 [Marker/Count In] button

This allows you to memorize a given position within a song where you would like to start playback. You can also use it to sound an audible count before playing back a song.

29 [Transpose] button

Used to transpose the keyboard or a song.

30 Tone buttons

These eight buttons are used to choose the kinds of sounds (Tone Groups) played via the keyboard.

31 [Whole] button

Allows you to set the E-600 in such a way that you can play one Tone/Part via the entire keyboard.

32 Split buttons

These divide the keyboard into a right-hand section and a left-hand section. Press Split [Lower] to choose the sounds you play with the lower section, and Split [Upper] to choose the sounds you play with the upper section.

33 Tempo [-] and [+] buttons

These adjust the tempo. Press the [-] and [+] buttons at the same time to return to the basic tempo.

34 [Sync] button

When this button's indicator lights, the Arranger (automatic accompaniment) starts as soon as you play a note or chord in the left-hand section of the keyboard.

35 [Melody Intelligence] button

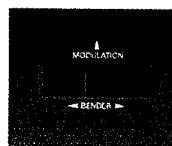
Adds harmony to the sounds played with the keyboard.

36 [Effects] button

Used to apply various effects to the sounds played via the keyboard.

37 BENDER/MODULATION lever

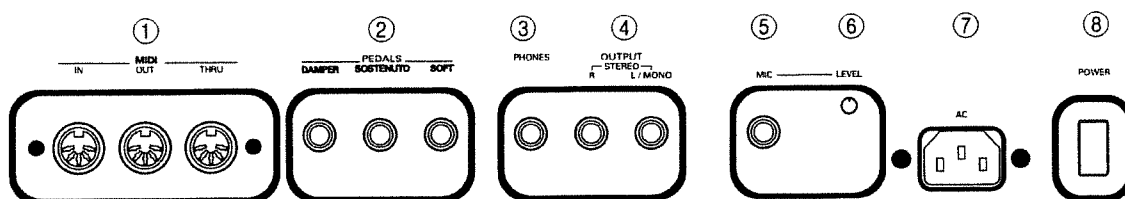
This lever allows you to temporarily change the pitch ("Pitch Bend") in a slide guitar/trombone fashion, and/or add vibrato to the notes you are playing.



38 Disk drive (to the right of the keyboard)

This is where you insert 2HD or 2DD floppy disks. You can save and play back Songs, load and save Music Styles, etc.

2.2. Rear panel



① MIDI IN/OUT/THRU connectors

Connect the MIDI OUT jack to the MIDI IN jack of your computer (or sound card) to transfer MIDI data from the E-600 to the computer or any other MIDI instrument. Connect the MIDI IN jack of the E-600 to the computer's MIDI OUT jack to receive data from the computer. Use the MIDI THRU port to transmit the MIDI messages received via MIDI IN to other MIDI instruments.

② PEDALS connectors

This is where you can connect optional DP-2, DP-6, or BOSS FS-5U footswitches that perform the following functions:

Damper—This pedal is used to add reverberations to the sound. While the damper pedal is depressed, played notes are held for a long time, even after you release the corresponding keys on the keyboard.

Sostenuto—When this pedal is depressed, only the notes whose keys you are pressing at that time are sustained. Subsequently played notes are not sustained.

Soft—This pedal is used to make the sound softer. Playing the keyboard while the soft pedal is depressed makes the sound softer than when played normally with the same force.

Note: The Soft and Sostenuto pedal functions are available for piano sounds and only after the One Touch Program [Piano] button has been pressed. If you select some other Tone, the Soft and Sostenuto pedals will perform other functions. For more information, see "Assigning functions to buttons and footswitches" on page 60.

③ PHONES jack

This is where you can connect optional stereo headphones (e.g. the Roland RH-120). By connecting headphones you switch off the E-600's speakers.

④ OUTPUT R, L/Mono jacks

Connect these jacks to the inputs of an amplifier or mixing console. For live performance, you might consider using a pair of Roland KC series keyboard amplifiers.

Note: For some HiFi amplifiers, you will need special adapter cables (phone jack→RCA/phono jack). In that case, consider using a pair of Roland PJ-1M cables.

Note: If your amplifier, etc., is mono, use the E-600's OUTPUT L/Mono jack.

⑤ MIC jack

This is where you can connect an optional microphone (e.g. a Roland DR-10 or DR-20) in order to amplify your singing along with the music you play on your E-600. For additional convenience, you can add an echo effect to your singing (see page 27).

Other possibilities include the use of the Harmonist and Voice Transformer functions.

⑥ LEVEL control

Use this control to set the microphone level. This may be necessary when your singing is too soft with respect to the E-600's sounds. You may also need this control to avoid feedback ("howling").

⑦ AC connector

This is where you need to connect the supplied power cable.

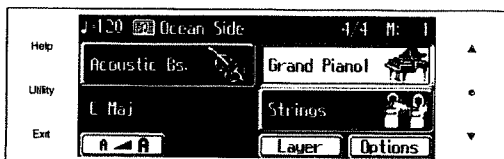
⑧ POWER switch

Press this button to switch the E-600 on or off.

3. Getting started

3.1 About the Touch Screen

The E-600 provides a Touch Screen (i.e., a touch-sensitive display). This lets you carry out a wide variety of actions just by touching the screen.



The Touch Screen is operated by touching it lightly with your finger. Pressing hard, or using a hard object can damage the Touch Screen. Be careful not to press too hard, and be sure to use only your fingers to operate the Touch Screen.

The on-screen graphics that appear three dimensional work like buttons. These are called "Icons."

The <Help>, <Utility>, and <Exit> as well as the <▲>, <●>, and <▼> symbols on the left and right areas of the screen can also be activated by touching the Touch Screen.

| Display | Function |
|---------|--|
| Help | This displays on-screen explanations of various features (see page 15). |
| Utility | This lets you play the ear-training games or make use of a wide variety of handy features. |
| Exit | Returns you to the previous screen or leaves the selected function. |
| ▲/▼ | These are used to change the value of a selected on-screen item. |
| ● | If you've changed a value with <▲> or <▼>, this returns it to its initial value. |

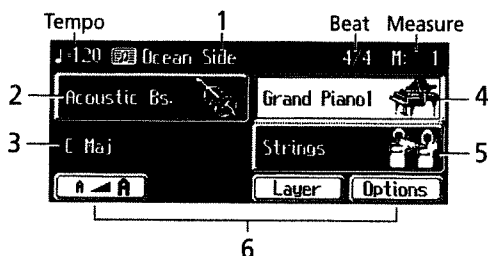
The positions of the active areas on the Touch Screen may shift with respect to the icons and on-screen buttons you see. If this happens, you need to recalibrate the display (see page 70).

3.2 About the display

When you turn on the power, the Piano screen appears.

Basic screen

The following screen is called *basic screen*. You can usually select this screen by touching <Exit> several times. If touching <Exit> doesn't display this screen, follow either of the procedures described below to display it.



- Press the One Touch Program [Arranger] button to select the Arranger keyboard mode (where you can use the E-600's automatic accompaniment function).
—or—

- Press the One Touch Program [Piano] or the One Touch Program [Organ] button, followed by one of the Tone buttons, and then touch <Exit>.

1. This is where the name of the selected song or Music Style is displayed.
2. Left-hand Tone, or chord fingering
When the keyboard is set up so that the right and left hands play different sounds (*Split*, see page 30), the Tone name for the left-hand part is displayed here. At other times, when you're playing with an automatic accompaniment, this displays the chord fingering.
3. Recognized chord
When you're playing with an automatic accompaniment, this is where the name of the chord you play with your left hand is displayed.
4. (Right-hand) keyboard Tone
When the keyboard can be used to play one sound, the Tone name is displayed. When the keyboard is split into right- and left-hand sections, which play different sounds (*Split*), this shows the Tone name for the right-hand part. When set up to layer the sounds of two instruments (see page 29), the name of the Tone played up to then is displayed.
5. Layer Tone
When you layer the sounds of two instruments, the name of the added ("layered") Tone is displayed here.

6. Here's what the different icons do:

| Display | Function |
|---------|--|
| | Tone names and the like are displayed in large text. |
| Layer | Layers (combines) two sounds (see page 29). |
| Options | You can change the settings for automatic accompaniment. |

Touching displays a screen like the one shown below.



- The name of the Tone, Song, or Music Style appears on the screen.
- The tempo, beat, measure number are displayed in large text.

Touching returns you to the Basic screen.

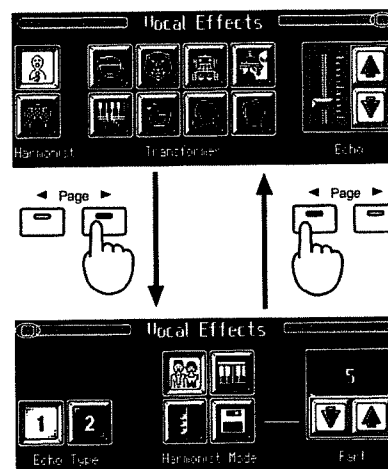
Note: You can adjust the contrast of the screen. See page 70.

The explanations in this manual include illustrations that depict what is typically shown in the display. Note, however, that your E-600 may incorporate a newer, enhanced version of the system (newer sounds, etc.), so what you actually see in the display may not always match what appears in the manual.

About the Page buttons

Some screens are spread over two or more pages. When such screens are displayed, press the Page [◀] or [▶] button to switch to another page. The Page buttons' indicators come on when there is another page available in the direction of the arrows.

For example, the Vocal Effect screen (see page 27) consists of two pages.



Touch <Exit> to go back to the screen that was displayed before you selected the Vocal Effect screen.

4. First steps

4.1 Using headphones

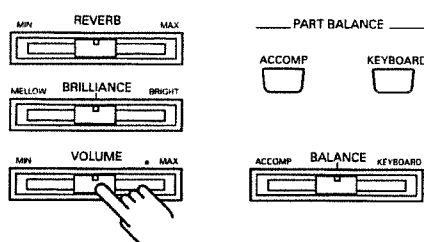
The E-600 provides one PHONES jack (rear panel).

This is great for playing at night or when other people are around.

1. Plug the headphones into the PHONES jack on the E-600's rear panel.

This switches off the E-600's speakers.

2. Use the [Volume] slider to adjust the volume of the headphones.



Note: Feel free to use stereo headphones such as the Roland RH-120 (sold separately).

Notes on using headphones

- To prevent damage to the cord, handle the headphones only by the headset or the plug.
- The headphones may be damaged if the volume is too high when they are plugged in. Lower the volume on the E-600 before plugging in the headphones.
- To prevent possible hearing damage, loss of hearing, or damage to the headphones, the headphones should not be used at an excessively high volume.

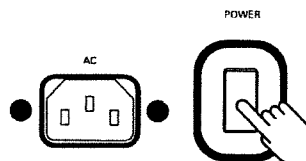
4.2 Switching the power on and off

Be sure to follow the steps below when turning the power on or off. If this is not done in the correct sequence, you risk causing a malfunction, or even blowing your speakers.

Turning On the Power

1. Before you switch on the power, turn the volume down by moving the [Volume] slider all the way to the left.
2. Connect the included power cord to the AC inlet on the rear panel.
3. Plug the power cord into an AC outlet.

4. Press the [Power] switch.



After a few seconds, the E-600 becomes operable and playing the keyboard produces sound.

Note: The E-600 is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before it will operate normally.

Note: Be sure to use only the power cord supplied with the E-600.

Turning off the power

1. Before you switch off the power, turn the volume down by moving the [Volume] slider all the way to the left.
2. Press the [Power] switch.

4.3 Adjusting the sound volume and brilliance

1. Use the [Brilliance] slider to adjust the overall brilliance.

The sound becomes brighter as you move the slider to the right, and more subdued as you move it to the left.

2. Use the [Volume] slider to adjust the overall volume level.

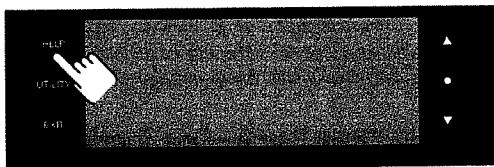
Move the slider to the right to increase the volume, or to the left to lower it.

Note: For optimum sound quality, set the control to the level indicated by the white dot.

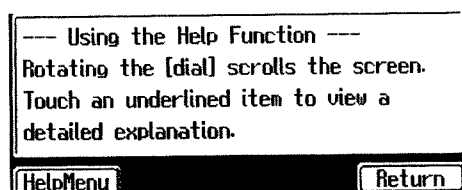
4.4 The Help function

The E-600 can display an explanation of its functions on screen.

1. Touch <Help> at the left side of the screen.



A screen like the one shown below appears.



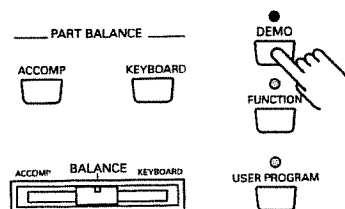
2. Touch an underlined word or phrase to view an explanation in greater detail.
3. Touch <Help Menu> at the bottom of the screen to display the index.
4. Touch <Return> at the bottom of the screen to go back to the previous passage.
5. Touch <Exit> to leave the Help function.

Note: The Help function is available in several languages. See page 70 for how to select another language.

4.5 Introduction to the sounds and Styles —Demo Play

Perform the simple steps below to listen to demonstrations of the E-600's built-in instrument sounds and Music Styles (accompaniment patterns).

1. Press the [Demo] button and confirm that its indicator lights.



2. Touch the screen to choose an item.
3. Touch <Play> to start the demonstration.
4. Touch <Next> or <Previous> to select another song.
5. Press the [Demo] button again to end the demonstration.

Note: For information on the Music Styles, see the "Music Style List" at the end of this manual.

4.6 Ear-training games

1. Touch <Utility> at the left side of the screen. A Utility screen like the one shown below appears.



Touch <Exit> to go back to the previous screen.

2. Touch <Games>.
3. Touch the screen to choose the type of game. The E-600 offers the three games described below.

| Display | Description |
|----------------|---|
| Guess Note | You'll hear a single piano note. Try to play the same note on the keyboard. |
| Guess Chord | You'll hear a chord. Try to play the same chord on the keyboard. |
| Chord Practice | The name of a chord is displayed. Try to play the chord on the keyboard. |

When you've selected the type of game, touch <Next>.

4. Next, touch the screen to choose the game level. Each game has three levels.

5. Touch <Start> in the lower part of the screen. First, the E-600 plays a C (if you select <Guess Note>) or a basic chord, then the game starts.

The quicker you guess right, the higher your score is. You can guess as many times as you like until you run out of time. Each game consists of ten tries. A perfect score is 100 points.

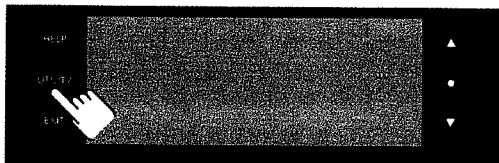
6. When the game finishes, touch <Upgrade> (up to a higher level), <Again> (play again at the current Level) or <Exit> (stop playing).

4.7 Basic functions

Interactive help for setting up

The E-600 has a feature that lets you make changes in settings simply by answering a few questions.

1. Touch <Utility> at the left side of the screen.



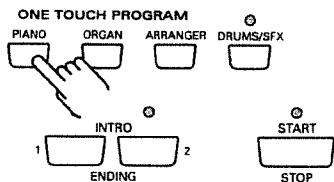
2. Touch <Easy Play>.
3. Touch the screen and use the dial to answer the questions that appear on the screen.
4. Touch <Next> to display the next question.
5. When you've answered the last of the questions, try fingering the keyboard.

Depending on how you answer the questions, you can enjoy a wide variety performances.

Playing the keyboard like a piano—One Touch Piano

By pressing a single button, you can make your E-600 behave like a digital piano.

Press the One Touch Program [Piano] button.



A Piano screen like the one shown below appears.



- If the keyboard has been split into right- and left-hand sections (see page 30), this returns the keyboard to a single section.
- When the functions of the pedals has been changed (see page 61), this returns the pedals to their usual functions (Damper, Soft, Sostenuto).

Note: The pedal functions are only available if you connect optional DP-2, DP-6, or BOSS FS-5U footswitches to the appropriate jacks on the rear panel.

Changing the piano sound

1. Use the on-screen ↑ ↓ buttons to change the opening of the lid and the timbre of the piano sound.

Note: You can also change the opening of the piano's lid by pressing the [Effects] button.

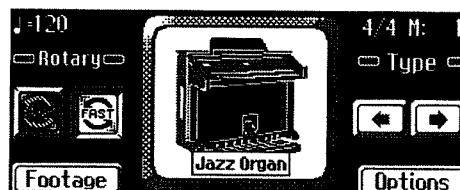
Note: You can change settings related to the piano performance by touching <Customize> at the bottom of the screen. See "One-Touch Piano settings" on page 64

Playing organ music—One Touch Organ

Here's what you need to do in order to play organ music.

1. Press the One Touch Program [Organ] button.

An Organ screen like the one shown below appears.



2. Touch <Type> ↔ to choose the organ type.

You can select any of three types of organ: Jazz organ, Church organ, Theater organ.

Choosing "Jazz Organ" divides the keyboard into right- and left-hand sections and allows you to play different tones via these two sections. This division of the keyboard into a right-hand section and a left-hand section is called a *Split*.

Note: See also "Playing two sounds simultaneously —Layer" on page 29 and "Different Tones for the left and right hands—Split" on page 30.

Changing the Rotary effect

The "Jazz Organ" sound has a Rotary effect added to it. Applying a rotary effect to the organ sound gives the same undulations you get with rotating speakers.

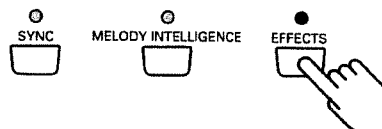
You can vary the speed with which the speakers rotate.

Touch <Slow> or <Fast>.

Touching <Slow> selects the slow modulation speed.

Touching <Fast> increases the modulation speed.

You can also switch between Slow and Fast by pressing the [Effects] button.

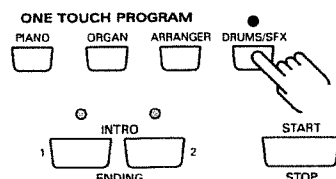


You can change the organ settings by touching <Options> at the bottom of the screen. Also, when you've selected Jazz Organ, you can touch <Footage> to create the sound you want. For more information, take a look at "One-Touch Organ settings" on page 66.

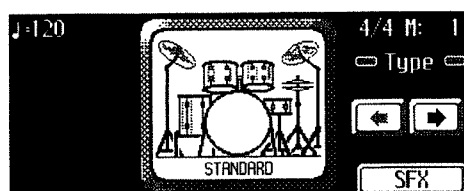
Drumming on the keyboard

You can use the keyboard to play percussion sounds or effects, such as sirens and animal sounds.

1. Press the [Drums/SFX] button and confirm that its indicator lights.



Each key now plays a different percussion-instrument sound.



2. Touch <Type> ◀▶ to select another Drum Set. The name and icon of that Set appear in the middle of the screen.

Sets of percussion sounds assigned to the keyboard, such as “STANDARD”, are called “Drum Sets”. Each Drum Set contains a wide variety of percussive instrument sounds.

The combination of sounds assigned to the keyboard varies according to the Drum Set. See “Drum Sets/EFX Set” at the end of this manual.

3. Press the [Drums/SFX] button again to make the button’s indicator go dark.

The E-600 now returns to the previously selected One Touch Program (e.g. Piano, Organ, or Arranger) or Whole mode.

Playing sound effects

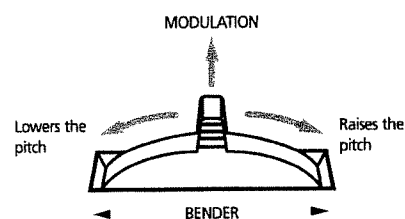
The E-600 provides yet another Set of sounds you can assign to the keyboard. Like the Drum Sets, it contains different sounds for each key. Though you will not be able to use them for drumming, you will no doubt have a lot of fun triggering these sound effects (like helicopters, footsteps, shouts, etc.).

1. Press the [Drums/SFX] button to make the button’s indicator light up.
2. Touch <SFX> at the bottom of the screen. A set of effect sounds is called an “SFX Set”.
3. Touch <Drums> at the bottom of the screen to return to the last Drum Set you selected.
4. Press [Drums/SFX] again to leave this One Touch Program mode (indicator goes dark again).

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.



Note: The Pitch Bend function can also be assigned to an optional footswitch. See page 61 for details.

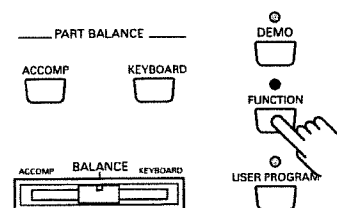
Changing the Bend Range

The effect of smoothly raising or lowering the pitch of a played note is called Pitch Bend.

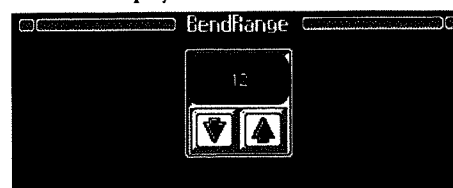
On the E-600, you can achieve this effect by moving the BENDER/MODULATION lever to the left (bend down) and right (bend up). You can also assign the Bender function to an optional footswitch, then apply the Bender effect by depressing and releasing the footswitch (see page 61).

The Bend Range allows you to specify the maximum Pitch Bend interval that a) is used when you slide the BENDER lever fully to the left or right, or b) is set instantly when you press a thus assigned footswitch.

1. Press the [Function] button (indicator lights).



2. Use the Page [◀] and [▶] buttons to switch screens and display the screen shown below.



3. Touch the ↑ ↓ to set the Bend Range.

You can set this to any value within a range of 1 to 12 (in half-tone steps, up to one octave).

Touch <Exit> to go back to the previous screen.

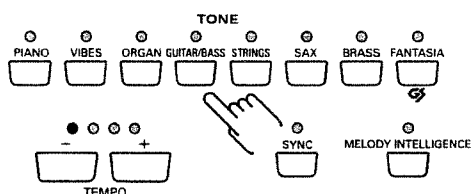
4.8 Selecting Tones

The E-600 comes with a large number of built-in instrument sounds and effects. This lets you enjoy performances with sounds matched to a wide range of musical genres.

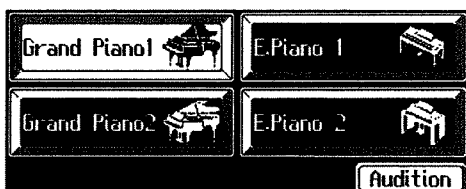
The various types of built-in sounds are called "Tones". These Tones are divided into eight Tone Groups.

Note: Tones are only available when the indicator of the [Drums/SFX] button does not light.

1. Press one of the Tone buttons to choose the Tone Group.



The screen shows four of the Tones included in the chosen Tone Group.



2. Use the Page [◀] and [▶] buttons to switch screens, and touch the screen to choose one of the available Tones.

This Tone is now assigned to the keyboard and will be automatically selected next time you press the corresponding Tone button.

3. Touch <Exit> to end selecting the Tone.

Note: You can listen to a typical phrase for the Tone by touching <Audition> at the bottom right of the screen.

Changing Tones with the dial

You can also use the dial to select Tones. When you use the dial, the pages are switched automatically as and when necessary.

1. Press one of the Tone buttons to choose the Tone Group.

2. Turn the dial to choose a Tone.

The indicator for the corresponding Tone button blinks.

3. Play a few notes on the keyboard or press the blinking Tone button to confirm your selection. The Tone button's indicator lights up steadily.

This Tone is now assigned to the keyboard and will be automatically selected next time you press the corresponding Tone button.

4. Touch <Exit> to end selecting the Tone.

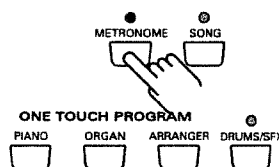
Note: For more about the names of Tones, see "Tone list" on at the end of this manual.

4.9 Using the metronome

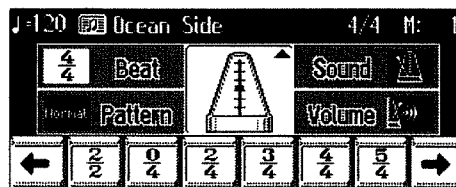
The E-600 has a built-in Metronome function.

You can start or stop the metronome sound with just a single press of the [Metronome] button. During playback of a song, or when performing with automatic accompaniment, the sound of the metronome keeps time with the beat of the tune or accompaniment.

1. Press the [Metronome] button to start the metronome.



The indicator of the [Metronome] button lights up, and a Metronome screen like the one below appears.



2. Press the [Metronome] button again to stop the metronome's sound.

The [Metronome] button's indicator goes dark.

3. Touch <Exit> to go back to the previous screen.

Changing the tempo of the metronome

1. Use the Tempo [-] and [+] buttons to adjust the tempo.

The setting is at "120" when the E-600 is powered up.

You can also use the dial to adjust the tempo. Turn it clockwise for a faster tempo or counterclockwise for a slower tempo.

Note: The tempo changes automatically if you use an automatic accompaniment or play back a song.

Changing the metronome's time signature

- At the Metronome screen, touch <Beat>. The available choices for the beat appear at the bottom of the screen.
- Choose the desired beat by touching your choice. You can scroll the display to one side or the other to call up other options for the beat by touching \leftrightarrow .

| Display | Description |
|---------|----------------------------|
| | 2/2 time |
| | Sounded only on the upbeat |
| | 2/4 beat |
| | 3/4 beat |
| | 4/4 beat |
| | 5/4 beat |
| | 6/4 beat |
| | 7/4 beat |
| | 3/8 beat |
| | 6/8 beat |
| | 9/8 beat |
| | 12/8 beat |

Changing the metronome pattern

- At the Metronome screen, touch <Pattern>. The available choices for the metronome pattern appear at the bottom of the screen.
- Choose a pattern from among the selections by touching your choice. You can scroll the display to one side or the other and show other choices for the pattern by touching \leftrightarrow .

| Display | Description |
|---------|---|
| Normal | The metronome sounds in the ordinary way. |
| | Counting starts at the beginning of the measure, in intervals of dotted half-note upbeats. |
| | Counting starts at the beginning of the measure, in intervals of half-note upbeats. |
| | Counting starts at the beginning of the measure, in intervals of dotted quarter-note upbeats. |
| | Counting starts at the beginning of the measure, in intervals of quarter-note upbeats. |
| | Counting starts at the beginning of the measure, in intervals of dotted eighth-note upbeats. |
| | Counting starts at the beginning of the measure, in intervals of eighth-note upbeats. |
| | Counting starts at the beginning of the measure, in intervals of sixteenth-note upbeats. |
| +Doub1 | The metronome plays with a backbeat added to each beat. |
| +Tripl | Counting triplets for each beat. |
| +Shuf1 | The added sounds are shuffled. |

Note: With a triplet beat (6/8, 9/8, or 12/8), added notes are sounded as triplets.

Changing the metronome's volume

- At the Metronome screen, touch <Volume>. The available choices for the volume level appear at the bottom of the screen. Choosing sets the volume to the lowest level, while sets it to the highest level. Choose to mute the metronome.
- Select a volume level by touching an icon.

Selecting another metronome sound

- At the Metronome screen, touch <Sound>. The available choices for the type of sound appear at the bottom of the screen.
- Select a sound type by touching an icon.

| Display | Description |
|---------|--|
| | Ordinary metronome sound |
| | Electronic metronome sound |
| | A voice counting "1, 2, 3" in Japanese |
| | A voice counting "1, 2, 3" in English |
| | Dog and cat sounds |
| | Woodblock sound |
| | Triangle and castanet sounds |
| | Clapping |

Changing the animation

A metronome graphic that moves along with the tempo usually is displayed at the center of the Metronome screen. You can change this to an animated bouncing ball (a ball that moves along in time with the tempo) or the other animation by touching the picture.

4.10 Playing with an automatic accompaniment—One Touch Arranger

About the Arranger

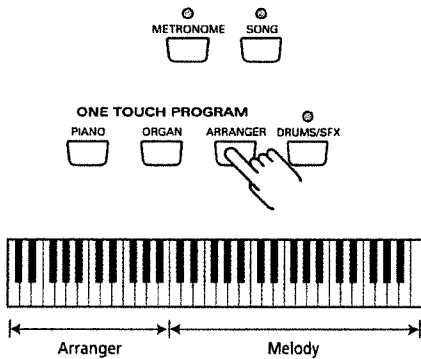
The E-600's automatic accompaniment function is called *Arranger*. This Arranger uses prerecorded musical phrases (called "Divisions") that play accompaniment lines for a given musical genre. The name *Music Style* refers to a collection of such accompaniment Divisions. Each Division consists of the following elements:

- A drum part (A.Drum)
- A bass part (A.Bass)
- Up to three melodic accompaniment lines (chords, riffs, etc.) (Accomp)

Example: "When the Saints Go Marching In"

To give you an idea how the E-600's Arranger works, here is a little example. The song you are going to play is called "When The Saints", a classic you probably know.

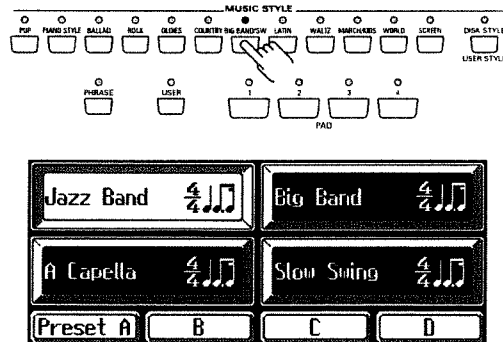
1. Press the One Touch Program [Arranger] button. The keyboard is split into left- and right-hand sections at the C4 key.



The C4 key is part of the right-hand section of the keyboard.

Note: Pressing the One Touch Program[Piano] button cancels the automatic accompaniment.

2. Press the [Big Band/SW] Music Style button.

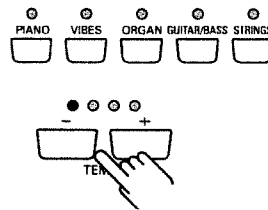


3. Use the Page [◀] and [▶] buttons to switch pages, then touch the screen to choose <Dixieland>. The Music Style changes to "Dixieland".

By selecting another Music Style, you also call up a suitable sound for the melody you will play with your right hand (that is what "One Touch" is all about).

You can also use the dial to choose the Music Style. When you use the dial, the pages are switched automatically.

4. Touch <Exit> to go back to the Basic screen.
5. Use the Tempo [-] and [+] buttons to adjust the tempo of the accompaniment.



Press the Tempo [-] and [+] buttons simultaneously to return to the basic tempo.

The score for "When the Saints Go Marching In"

American Traditional

The score is written in treble clef with a 3/4 time signature. It consists of five systems of music. Each system has a right-hand part (melody) and a left-hand part (chords).
 System 1: Right hand starts with a triplet of eighth notes (C, E, F), followed by G, C, E, F. Left hand plays a single C chord.
 System 2: Right hand plays G, C, E, F, G, E, C, E. Left hand plays G.
 System 3: Right hand plays D, E, E, D, C, C, E, G. Left hand plays G.
 System 4: Right hand plays G, F, E, F, G, E, C, G. Left hand plays F, F.
 System 5: Right hand has two endings. Ending 1: C, C, E, F, C, C. Ending 2: C, C. Below the score are two buttons: "[To Variation]" and "[Intro/Ending]".

6. Play a C to the left of the split point (see the illustration above).

First a four-bar Intro is played, follow the instructions on the score for the right-hand part and the left-hand part to play the tune.

Play the C, G, and F keys on the keyboard with the timing indicated for "C", "G", and "F" on the score for the left-hand part. There's no need to hold down the keys, so you can get ready to finger the next one.

With the E-600, you can specify a chord by playing only one or two notes. This function is called "Chord Intelligence."

7. Press the [To Variation] button with the timing for "To Variation" on the score.

The Accompaniment Pattern changes. Pressing the [To Original] button returns to the original accompaniment pattern.

Once you've familiarized yourself with the performance, try varying the accompaniment pattern by changing between the Original and Variation patterns.

8. Press the Intro/Ending [1] button with the timing for "Intro/Ending" on the score.

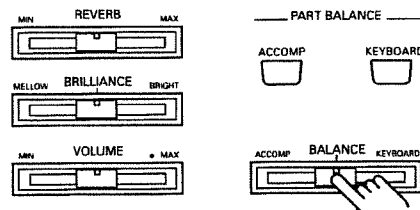
At the end of this closing section (the "Ending pattern"), the Arranger stops.

Pressing the Intro/Ending [2] button plays a simple ending.

Balance of the accompaniment and the keyboard

You can change the volume balance for the melody and the notes played by the Arranger.

Use the [Balance] slider to change the volume balance.



Moving the slider all the way to the left ("Accomp") means you won't hear your right-hand melody ("Keyboard") anymore. Most of the time, you can leave the slider in its central position, or slightly move it to the right in order to increase the melody's volume.

Note: You can adjust the volume level for each Part of an automatic accompaniment. For example, you can raise the rhythm volume while lowering the bass volume. See "Balance settings" on page 56.

4.11 Recording a performance

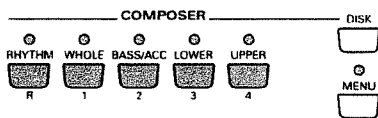
With the E-600, you can use the five Track buttons to record a performance easily, or use recording functions like the 16-track Sequencer to create full-fledged ensemble songs.

For an explanation of how to create an ensemble song, take a look at "16-track Sequencer" on page 45.

Recording with automatic accompaniment

In this section, we'll record "When the Saints Go Marching In" (see also page 21).

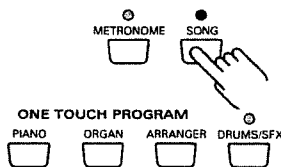
A recorded performance is automatically assigned to a Track button. Five tracks can be accessed via the front-panel:



| Track button | Performance recorded |
|----------------|--|
| [Rhythm] | The rhythm part of an automatic accompaniment is recorded here. This track also allows you to record your own drum parts using the [Drums/SFX] function (see page 17). |
| [Whole] | When the Piano Style Arranger is active (see page 36), your performance is recorded here. |
| [Bass/ Accomp] | The bass and accompaniment parts of the selected Music Style are recorded here. |
| [Lower] | When the indicator of the Split [Lower] button lights, your performance in the left-hand section of the keyboard is recorded here. |
| [Upper] | Your performance in the right-hand section of the keyboard is recorded here. |

A Music Style is made up of five Parts. See "About the Arranger" on page 20.

1. Press the [Song] button.



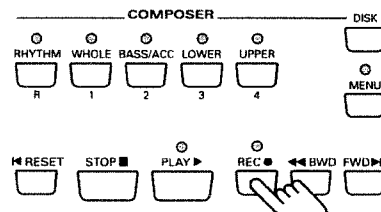
2. Touch <0:New Song>.



If <0:New Song> doesn't appear on screen, use the Page [◀] and [▶] buttons to switch screens.

You can also use the dial to choose a tune. When you use the dial, the pages are switched automatically.

3. Press the Rec [●] button.



The E-600 enters standby for recording. To stop recording, press the Stop [■] button.

4. Press the One Touch Program [Arranger] button.

5. Press the [Big Band/SW] Style button.

6. Use the Page [◀] and [▶] buttons to switch pages, then touch the screen to choose <Dixieland>. Touch <Exit> to return to the Basic screen.

7. Use the Tempo [-] and [+] buttons to adjust the tempo of the accompaniment.

Note: If you like, you can select a slower tempo than the one to be used for playback. The E-600 indeed provides a function that allows you to change the preset tempo of a song (see page 55).

8. Play a C key in the left-hand section of the keyboard.

The automatic accompaniment starts, and recording is started at the same time.

9. Press the Intro/Ending [1] button.

An ending is played, then the automatic accompaniment stops and recording stops at the same time.

Note: You can change how recording is stopped when recording a performance with Automatic Accompaniment. Check out "Changing how recording stops" on page 49.

Listen to the recorded performance

10. Press the Reset [◀] button.

Now you can play back the song from the beginning.

11. Press the Play [▶] button.

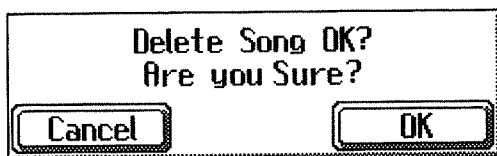
The recorded performance is played back.

WARNING—The song in the E-600's internal memory is deleted when the power to the E-600 is turned off. If you don't want to lose your recorded performance, save it to a floppy disk. For information on how to save your song, see page 25.

Note: Before being able to listen to other songs, you must first erase the one that currently resides in the E-600's internal memory (or switch the E-600 off and back on again). See page 24 for how to erase songs.

If the following message appears

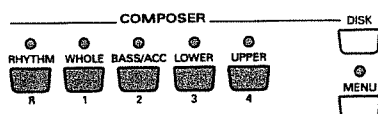
If you've recorded a song or changed its settings (see page 51), the following message appears is displayed you try to choose another song.



- If you don't want to erase the song, touch <Cancel>. Save the tune on a floppy disk.
- To erase the song, touch <OK>.

Recording a performance without using automatic accompaniment

Any song you record without taking advantage of the Arranger is recorded to the track assigned to the [Whole] button. Feel free, however to select another track by pressing its button:



Note that if you are recording with Split the or Layer function, the track assignments are as follows. Percussion and effect sounds (using a Drum Set or the SFX Set) are recorded on the [Rhythm] track.

Recording in Layer mode—All data are recorded onto the [Whole] track.

Recording in Split mode—What you play with the left hand is recorded to the [Lower] track, while your right hand is recorded to the [Upper] track.

Recording in Layer + Split mode—What you play with the left hand is recorded on the [Lower] track, while the Layer performance that you play with the right hand (a combination of two sounds) is recorded on the [Upper] track.

1. Press the [Song] button and choose <0:New Song>.
2. Press the Rec [●] button.
The E-600 enters standby for recording. To stop recording, press the Stop [■] button.
3. Press the Play [▶] button.
A two-bar count sound plays, then recording starts.
4. Press the Stop [■] button to stop recording.

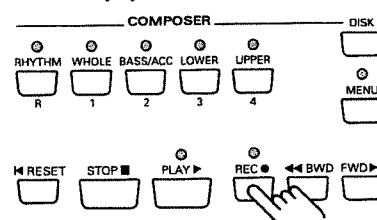
Redoing a recording

Redoing a recording involves specifying a track by pressing the corresponding button and then recording a new version. This may be necessary if you are not happy with the first version.

When you select a track and record over the material that has already been recorded, the newly recorded performance replaces (and thus erases) all original data between the location where you start recording to where you stop recording.

Note: You can also erase the entire track before recording over it. See "Erasing just one track".

1. Press the Rec [●] button.



The E-600 enters recording standby. To cancel recording, press the Stop [■] button.

2. Press the button for the track you want to record over.

The indicator of the selected Track button blinks. See page 22 for more information about the track buttons.

Note: It is impossible to start recording without first selecting a track.

3. Press the Bwd [◀◀] button or Fwd [▶▶] button to move the location where you want to start recording.

4. Press the Play [▶] button to start recording.

If you redo a recording *with* automatic accompaniment, play a chord in the left-hand section of the keyboard, or press the [Start/Stop] button.

5. Press the Stop [■] button to stop recording.

You can also stop recording with an Ending, by pressing the Intro/Ending [1] or [2] button. In that case, recording and Arranger playback stop as soon as the Ending is finished.

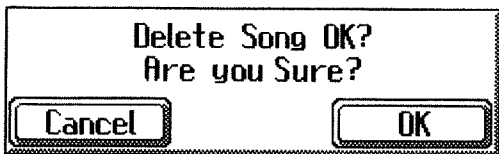
Note: If your recording contains just a few mistakes, you can correct those without re-recording the entire excerpt, thus avoiding the risk of making other mistakes. See "Step edit functions" on page 54 for details.

Erasing a song

You can erase a song that's been recorded.

1. Hold down the [Song] button and press the Rec [●] button.

The following message appears on the screen.



2. Touch <OK> to erase the recorded song. If you touch <Cancel>, the song is not erased.

Erasing just one track

You can erase the data recorded to an individual Track button.

1. While holding down the Track button assigned to the part want to erase, press the Rec [●] button. The Track button's indicator goes dark, and the recorded sound is erased.

Note: You can't erase or change the settings for a song's basic tempo or beat.

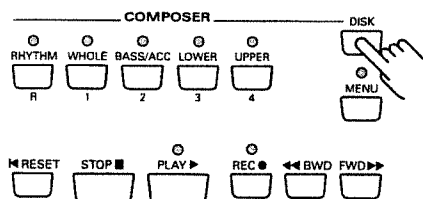
Formatting a floppy disk

The floppy disks that you use to save data on need to be formatted first.

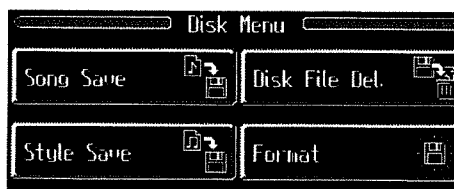
Formatting a floppy disk erases all information stored on the disk, and prepares it for the device in which it will be used. If a floppy disk is in a format that doesn't match the format of this unit, you won't be able to use that floppy disk.

Note: Formatting a disk destroys all data previously stored on the disk. If you're formatting a used floppy disk for reuse, be sure to check first to make sure the disk doesn't contain any data you don't want to lose.

1. Press the [Disk] button.



A Disk screen like the one below appears.



2. Touch <Format> on the screen. The following screen appears.



3. Make sure the write-protect tab on the floppy disk is positioned at "Write". See also page 6.
4. Hold the floppy disk face up, and insert it in the disk drive until it clicks into place.
5. Touch <OK> to start formatting.

When formatting finishes, the disk screen reappears.

Note: Never try to remove the floppy disk from the disk drive until the formatting process is finished.

Note: If "Error" (e.g. E.00) appears on screen, take a look at "Display messages" on page 77.

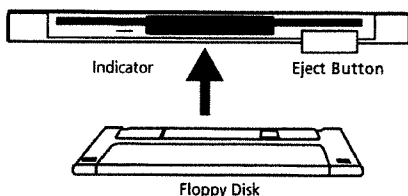
4.12 Using the disk drive

Here's where you need to know to use the built-in disk drive to save a recorded tune on floppy disk, or listen to commercially available music files.

Inserting and ejecting a floppy disk

If this is the first time you are using a disk drive, be sure to read the important notes on page 5.

1. Hold the floppy disk face up, and push it into the disk drive until it clicks into place. The disk drive is on the right-hand side of the instrument, next to the keyboard.



Don't try to eject the disk while reading or writing is in progress (that is, when the indicator light is lit up at full brightness). Attempting to do so may damage the magnetic surface of the disk, rendering it unusable.

2. Press the Eject button. The end of the floppy disk comes out of the slot. Gently grasp the end of the floppy disk and pull it out.

Saving your songs to floppy disk

The song in the E-600's internal memory is discarded when you switch off the power, or choose another tune. It's a good idea to store important songs on floppy disk.

Note: If this is the first time you are using a disk drive, be sure to read the important notes on page 5.

Note: Some commercially available music files may copy-right-protected and therefore cannot be saved.

Note: When using a brand-new floppy disk, you first have to format it. See "Formatting a floppy disk".

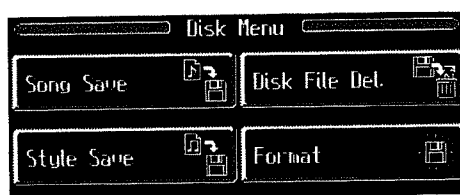
Note: We recommend saving your songs on two different floppy disks. That way, you will always have a backup copy to fall back on in case the other floppy becomes unreadable.

1. Make sure the write-protect tab on the floppy disk is set to "Write".

2. Hold the floppy disk face up, and insert it in the disk drive until it clicks into place.

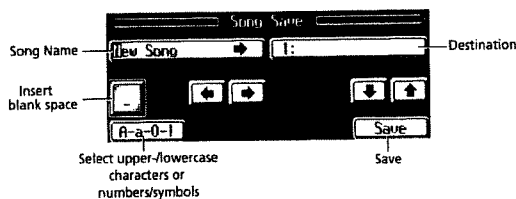
3. Press the [Disk] button.

The Disk screen appears.



4. Touch <Song Save>.

The following screen appears.



5. Touch ◀▶ to scroll the cursor sideways, and enter the name of the song by using <▲> and <▼> or the dial to choose the letters.

Touch <A-a-0-!> at the bottom of the screen to change the type of characters.

Touching <A-a-0-!> cycles the type of characters through "Upper case", "Lower case", numerals, symbols, then back to "Upper case".

Touching <_> inserts a blank space at the cursor location.

6. After entering the name of the tune, touch ▲ ▼ to choose a song number.

If you choose a song number where another song is already saved, the previously saved song is erased, and then the new song is saved. If you don't want to erase a previously saved song, choose a number where no song name appears in the destination column.

7. Touch <Save> to start saving.

This saves the song as a SMF (Standard MIDI File). Songs saved in this SMF format can be played back on all instruments that can play SMF music files.

When the saving process is finished, the disk screen appears.

Note: Some commercial music files (Standard MIDI Files) contain a copy protection routine so that you cannot save them to other floppy disks (and thus copy them).

Note: Never take the floppy disk out of the disk drive before the saving process is finished.

A tune saved to a floppy disk can be erased at a later time. Take a look at "Deleting a song or User Style on floppy disk" on page 60.

It's a good idea to return write-protect tab on the floppy disk to the "Protect" position when you've finished saving your data.

Keeping the tab at "Protect" prevents operations that could erase your songs by mistake.

Note: Inserting a floppy disk containing saved songs into the disk drive on another device (such as a computer) while the floppy's write-protect tab remains placed at "Write" may make it impossible to play back the songs on the E-600 afterward.

Listening to music files

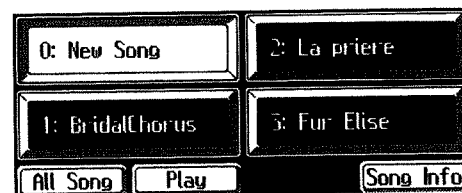
You can use the built-in disk drive to listen to the tunes you've saved on floppy disk, or play commercially available music files.

Note: If this is the first time you are using a disk drive, be sure to read the important notes on page 5.

1. Insert the floppy disk into the disk drive.

2. Press the [Song] button.

The following screen appears.

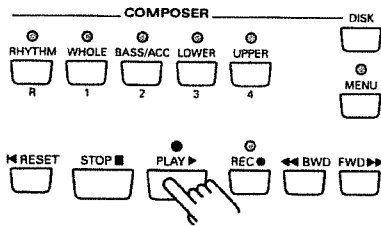


3. Press the Page [◀] and [▶] buttons to switch screens, and Touch the screen to choose a song.

You can also use the dial for selecting songs. When you use the dial, the pages are switched automatically.

You can view some information about the selected song by touching <Song Information>.

4. Press the Play [▶] button or touch <Play> on the screen to play back the song.



The on-screen <Play> changes to <Stop>.

5. Press the Stop [■] button or touch <Stop> on screen to stop playback.

If you let the selected song play to the end, playback stops automatically.

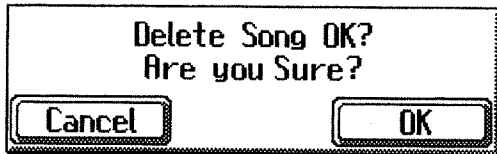
The on-screen <Stop> icon changes to <Play>.

6. Press the Reset [◀] button to go back to the beginning of the song.

When you play a song with an upbeat (in other words, a song that starts before the first beat), the screen shows PU, 1, 2, and so on as the measure numbers.

If the following message appears

If you've recorded a song (see page 22) or changed a song's settings (see page 51), the following message appears on the screen when you try to choose a song.



See page 23 for what to do in that case.

Listening to all songs on disk

You can continuously repeat playback of all songs on a floppy disk. This function is called "All Song Play".

1. Press the [Song] button.

2. Touch <All Song> on the screen.

All songs are played back in sequence. When playback of the last song finishes, it starts over again from the first song.

The on-screen <Play> icon changes to <Stop>.

3. Press the Stop [■] button or touch <Stop> on screen to stop playback of the songs.

Changing the order of songs on floppy disk

Here's how you can change the order of songs saved on a floppy disk.

1. Prepare another (formatted) floppy disk.

2. Insert the floppy disk containing the original songs into the disk drive.

3. Press the [Song] button to choose the song you want to make song number 1.

Once you've selected the song, touch <Exit> several times, until the screen that shows the measure number in the top-right area of the screen appears.

4. Press the Play [▶] button.

The measure number on the screen appears in reverse video while the E-600 reads the song data from floppy disk. Don't take the floppy disk out of the drive until the display returns to its original state.

5. When the measure number display returns to its original appearance, press the Stop [■] button.

6. Take the floppy disk out of the disk drive.

7. Insert the blank floppy disk.

8. Save the song in the usual way (page 25).

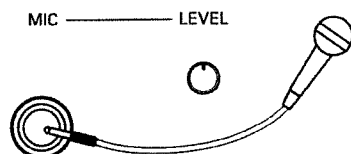
Repeat these steps to save the tune you want to have song number 2, the tune you want to have song number 3, and so on, to the blank floppy disk in the desired song sequence.

4.13 Using the E-600 as a Karaoke machine

You can connect a microphone to the MIC jack, and enjoy Karaoke with the E-600.

Connecting a microphone

1. Connect a microphone to the MIC jack on the rear panel of the instrument.



2. Use the LEVEL knob next to the MIC jack to adjust the volume level for the microphone.

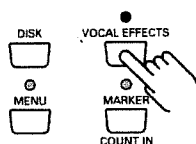
Note: You can use a microphone such as the Roland DR-10/20 (sold separately). When purchasing a microphone, please consult the vendor where you bought the E-600.

Some notes on using a microphone

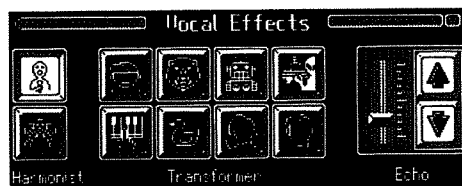
- To avoid disturbing others, be careful with the volume level when playing late at night or very early in the morning.
- When connecting a microphone to the E-600, be sure to lower the volume. If the LEVEL control is set too high when the microphone is plugged in, noise may be produced by the speakers.
 - Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:
 - Changing the orientation of the microphone.
 - Relocating microphone at a greater distance from speakers.
 - Lowering the E-600's output volume.
 - Connecting headphones

Adjusting the echo

1. Press the [Vocal Effects] button.



The Vocal Effects screen appears.



There are two pages (the one above and the one below). If necessary, press the Page [◀] and [▶] buttons to switch screens.

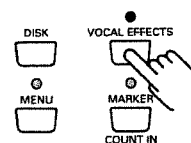


2. Touch <Echo> to adjust the amount of echo applied.
3. Touch Echo Type <1> or <2> to change the type of echo.
 - <1>—Adds clear reverberations.
 - <2>—Adds reverberations like a Karaoke-type echo.

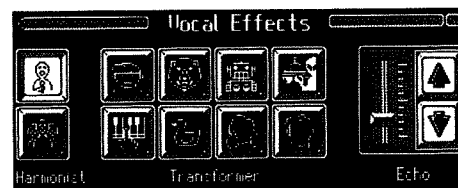
Transforming your voice

The Voice Transformer function allows you to do all sorts of funny things to your voice, some useful, others just plain fun. Here is how to use this exciting function:

1. Press the [Vocal Effects] button.



The Vocal Effects screen appears.



2. Touch one of the eight icons for <Transformer> on the first page to change your voice.

| Display | Description |
|---------|--|
| | Makes your voice sound like that of a child |
| | Makes your voice sound like a big animal. |
| | Makes your voice sound like a robot. |
| | Makes your voice sound like an alien. |
| | Plays the keyboard notes with a voice scale. |
| | Makes your voice sound like a duck's. |
| | Makes a man's voice sound like a woman's. |
| | Makes a woman's voice sound like a man's. |

3. Sing through the microphone.

Your voice is transformed according to the item you selected.


4. Touch the icon you chose in step 2 again to cancel the Voice Transformer function.

When you use the Voice Transformer function, the Resonance parameter for the piano (see page 65) may sometimes be reset.

Adding harmonies





The Harmonist function supplies automatic harmonies to your singing, thereby transforming your voice into a choir.


1. Press the [Vocal Effects] button to select the Vocal Effects screen.

2. Touch .

Now you can use the Harmonist function.

3. Touch one of the four icons for <Harmonist> on the second page to choose how to apply the harmony.

| Display | Description |
|---|--|
|  | This adds a voice modified by the Voice Transformer to your own voice. If you don't use the Voice Transformer function, this lets you sing with a voice one octave higher. |
|  | The Harmony voice is controlled by your right-hand playing. |
|  | The Harmony voice is controlled by the chords you play. |
|  | When you play back a song, the Harmony voice can be controlled by a part of your choice. Use <Part> ↑ ↓ to select it (e.g. melody, bass line, etc.). |

4. Touch  to cancel the Harmonist function.

Note: When you use the Harmonist function, the resonance setting for the piano (see page 65) may sometimes change, and the effects to the notes are canceled.

Note: The Harmonist and Voice Transformer cannot be used simultaneously.

Note: When you use the Harmonist function, effects applied to the notes you play on the keyboard may be canceled.

3. Press the [Song] button.

4. Touch the screen or use the dial to choose a song.

5. If necessary, use the Tempo [-] and [+] buttons to adjust the tempo.

6. If necessary, change the key of the song (see page 41).

7. Press the Play [▶] button to play the song accompaniment.

Start singing! When you play back a music file with lyrics, the lyrics appear on screen.

8. Press the Stop [■] button to stop playback of the song.

Note: You can hide the lyrics, if you like. See "Hiding the on-screen Lyrics" on page 69.

Enjoying Karaoke performances

If you're using the disk drive for the first time, be sure to read the important notes on page 5.

Note: Karaoke music files must be purchased separately. Please consult the vendor where you bought the E-600.

1. Connect the microphone and adjust the volume and echo (page 27).

You can also use the Voice Transformer or Harmonist function (see above).

2. Insert a floppy disk containing music files into the disk drive.

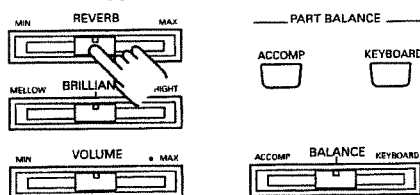
5. Other useful functions

5.1 Using effects

Adding Reverb to a sound

The E-600 can apply a Reverb effect to the notes you play on the keyboard. Reverb adds pleasant reverberations to what you play, almost as if you were playing in a concert hall.

Use the [Reverb] slider to adjust the amount of Reverb effect applied.



Moving the slider to the right applies a deeper Reverb, and moving it to the left applies less Reverb.

Note: You can change the type of Reverb that's applied. See "Reverb Type" on page 69.

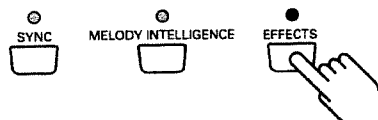
Other effects

You can apply a wide range of different effects to the notes you play on the keyboard.

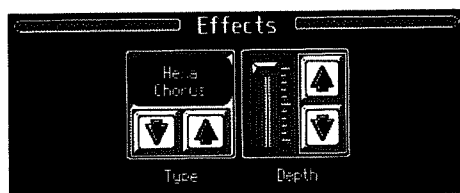
1. Press one of the Tone buttons to choose a Tone to which you want to apply an Effect.

Note: After pressing the One Touch Program [Piano] or [Organ] button, you cannot change the type of effects.

2. Press the [Effects] button and confirm that its indicator lights.



The Effect screen appears and the optimal effect for the keyboard sound is applied.



3. Touch <Type> ↑ ↓ to choose the type of effect. At power-up, all Tones already use an appropriate effect when you select them. But feel free to try out other effects.

Note: For more information on the different types of effects, take a look at the "Effect list" at the end of this manual.

4. Touch <Depth> ↑ ↓ to adjust the amount of effect.

5. Pressing the [Effects] button a second to cancel the effect.

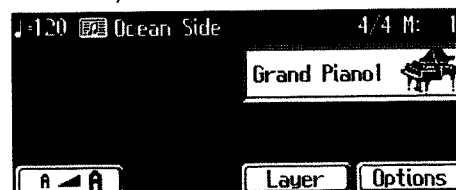
When you've chosen "Rotary" as the effect type, pressing the [Effects] button changes the speed of rotation of the rotary speakers. To cancel the effect, choose another effect, then press the [Effects] button.

Note: The Effects may not be available when you use the Harmonist function (see page 28). Also, in Layer or Split modes, you can only apply the effects to the notes displayed at the bottom-right on the screen.

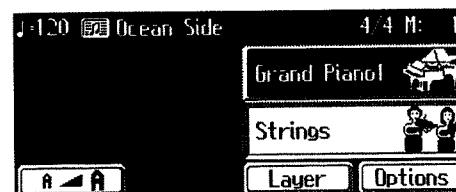
5.2 Playing two sounds simultaneously —Layer

If you like, you can assign two Tones to the keyboard and play them simultaneously. For instance, it's possible to play piano and strings in combination.

1. Choose one of the two Tones you need (see page 18).
2. Touch <Exit> to display the Basic screen (see page 12).
3. Touch <Layer> at the bottom of the screen.



The screen changes as shown below.



The sound you chose in step 1 is combined with the sound displayed at the bottom-right area of the screen.

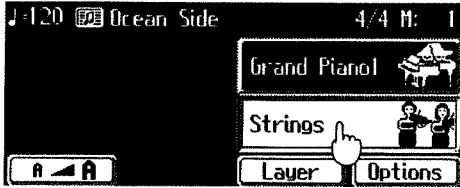
4. Touch <Layer> a second time to cancel the Layer function.

Now only the sound displayed at the upper-right area of the screen is played.

Note: You can change the volume level of the Tones. See "Balance settings" on page 56.

Selecting other Tones for the Layer Parts

1. On the Touch Screen, touch the name of the Tone you want to change.



2. Press one of the Tone buttons. The Tone Selection screen appears.
3. Press the Page [◀] and [▶] buttons to switch screens, and touch the screen to choose a Tone. You can also use the dial to choose a Tone. When you use the dial, the pages are switched automatically.
4. Touch <Exit> to end selecting the Tone. Play a few notes on the keyboard to check whether the newly selected Tone goes well with the other Layer Tone.

When you change the Tone displayed in the bottom-right area of the screen, <Octave -> and <Octave +> appear at the bottom of the Tone Selection screen. Touching these transposes the pitch of the keyboard by octaves. See "Octave Shift" on page 62 for details.

5.3 Different Tones for the left and right hands—Split

It is also possible to split the keyboard, so that you can play two different sounds with your left and right hand, e.g. a bass sound and a piano sound. The key (or note) where the keyboard is divided is called the split point. You are free to choose another split point, but do remember that the E-600 automatically selects C4 whenever you switch it off. Just for your information: the key that acts as split point is the highest note of the Layer part.

Note: You can change the split point. See "Changing the Organ Split Point" on page 66.

1. Press the Split [Lower] button. The indicator for the Split [Upper] and Split [Lower] buttons light up, and the keyboard is divided into right-hand and left-hand sections.



The right-hand section (Upper Part) of the keyboard plays the same sound it did before you divided the keyboard.

The left-hand section (Lower Part) of the keyboard plays a the sound which is displayed in the upper left corner of the Basic screen (see page 12).

Note: If you split the keyboard after activating the Layer function (see page 29), the two layered sounds are assigned to the Upper Part of the keyboard.

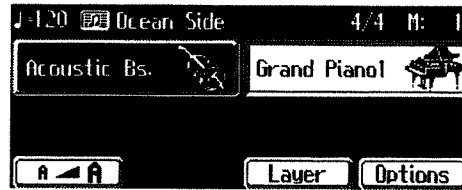
2. Press the [Whole] button to leave the Split mode. The Split [Upper] and Split [Lower] buttons go dark. The entire keyboard now plays the sound that was assigned to the right-hand section.

Note: You can adjust the volume levels of the upper and lower sections of the keyboard. See "Balance settings" on page 56.

Note: In Split mode, the damper pedal only applies to the Upper section. If you also want to sustain the notes of the Lower section, see "Assigning functions to buttons and footswitches" on page 60.

Selecting Tones

1. On the Touch Screen, touch the name of the Tone you want to change.



You can also choose the Tone that you want to change by pressing the Split [Upper] or Split [Lower] button.

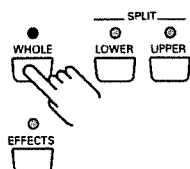
2. Press one of the Tone buttons. The Tone select screen appears.
3. Use the Page [◀] and [▶] buttons to switch the screens, and select a tone on the screen. *Note: You can also use the dial to choose a Tone. When you use the dial, the pages are switched automatically.*
4. Touch <Exit> to end selecting the Tone. Play the keyboard to hear the Tone you selected. *Note: In Split mode, <Octave-> and <Octave +> appear at the bottom of the Tone Selection screen. These are used to transpose the pitch of the keyboard by octaves. See "Octave Shift" on page 62 for details.*

5.4 Playing the entire keyboard as a single instrument (Whole)

After exploring the Layer and Split functions, you may perhaps wonder whether you can also play one Tone over the entire keyboard. Of course you can. This, by the way, is called “Whole” (whole keyboard).

If you select the Whole mode after working with the Layer function, both Tones used for the melody will be assigned to the entire keyboard.

1. Press the [Whole] button.



The entire keyboard now plays with the sound that was assigned to the right-hand section.

A similar effect can be obtained by pressing the One Touch Program [Piano] button. In that case, however, the Grand Piano 1 Tone is automatically assigned to the keyboard.

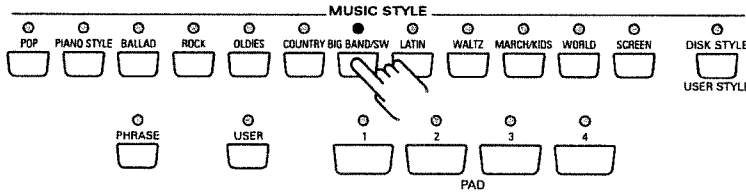
Pressing the [Whole] button while the Arranger is running activates the “Piano Style Arranger”. See page 36.

6. Using automatic accompaniments

On the E-600, all you need to do in order to take advantage of its high-quality accompaniments is to press the One Touch Program [Arranger] button.

For basic instructions on how to play using automatic accompaniment, please refer to “Playing with an automatic accompaniment—One Touch Arranger” on page 20.

6.1 Choosing a Music Style



The built-in accompaniment patterns in various musical genres are called “Music Styles.”

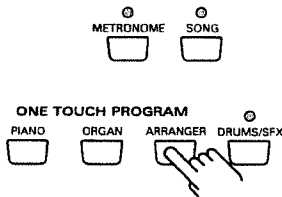
A Music Style is made up of a set of six patterns called “Divisions”: Intro, Original, Variation, Fill In to Original, Fill In to Variation and Ending. In addition, E-600 has two types of Intros and endings.

Each Music Style contains five performance parts: Rhythm, Bass, Accompaniment 1, Accompaniment 2, and Accompaniment 3.

A short transitional phrase inserted at the bar line (the junction between one song part and another) is called a “Fill In.”

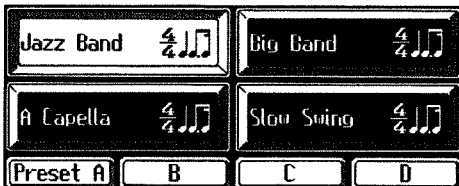
Note: For more information about the types of Music Styles, take a look at the “Music Style list” at the end of this manual.

1. Press the One Touch Program [Arranger] button.



2. Press a Style button to choose a Music Style group.
3. Press the Page [◀] and [▶] buttons and the Touch Screen or the dial to choose a Music Style.

When you use the dial, the pages are switched automatically.



When you change the Music Style, the tempo and Tone change to match the Music Style you've chosen.

If you don't want to change the tempo and Tone, see “Arranger settings” on page 67.

4. To change the Music Style's tempo, the Tone of the right-hand part, and the like, touch <Preset A>, , <C>, or <D> at the bottom of the screen.

By varying the tempo or by using other Tones, you can enjoy performances with a totally different atmosphere, even when the Music Style is the same.

5. Specify the key of the accompaniment by playing a chord in the left half of the keyboard.

The Music Style you choose plays automatically with the specified chord.

6. Press the Intro/Ending [1] or [2] button to play an ending and stop performance of the accompaniment. There are two types of Intros and endings. Pressing the Intro/Ending [2] button plays a simpler accompaniment than the Intro/Ending [1] button. Press the [Start/Stop] button to stop the accompaniment without ending.

Searching for a suitable Music Style: Style Finder

You can search a large number of styles for the Style that best matches the mood of a particular song.

1. Touch <Utility> at the left side of the screen.



2. Touch <Style Finder>.
3. Follow the on-screen message to choose one that suits the song's mood and characteristics.
4. Touch <Exit> to end this function.

Playing just the rhythm pattern

A Music Style can be made to sound only the Rhythm Pattern. This depends on the One Touch Program mode you select. In other cases, you could, however, turn down the volume of the Bass and the three Accompaniment parts.

1. Press the One Touch Program [Piano] button, then press the [Start/Stop] button.

Only the Rhythm pattern of the selected Music Style is played.

Note: Some Music Styles don't contain a drum/percussion accompaniment.

6.2 Using a Music Style disk

You can play Music Styles on the Music Style disk included with the E-600 or User Styles saved on a floppy disk.

1. Insert a floppy disk into the disk drive (see page 24).
2. Press the [Disk/User Style] button.
3. Press the Page [◀] and [▶] buttons and use the Touch Screen or the dial to choose a Music Style. When you use the dial, the pages are switched automatically.

Press the Page [◀] button several times to display the Music Styles stored in E-600's internal memory.

4. Press the One Touch Program [Arranger] button, then play a chord in the left-hand section of the keyboard.

The Music Style you've chosen is sounded.

Note: The Music Style you've selected from the floppy disk remains in memory until you switch off the power. It can be selected any time by pressing the [Disk/User Style] button – even if you've taken the floppy disk out of the disk drive.

6.3 Choosing how the Arranger starts and stops

Pressing the One Touch Program [Arranger] button activates Sync Start for the accompaniment (which starts the accompaniment when you play something on the left-hand section of the keyboard), and makes the setting for automatically playing an appropriate Intro for the accompaniment. Feel free to select another way of starting Music Style playback, however.

Starting playback by playing a chord — Sync Start

1. Press the One Touch Program [Arranger] button. The indicator for the [Sync] button lights up, and the Intro/Ending [1] button's indicator blinks.

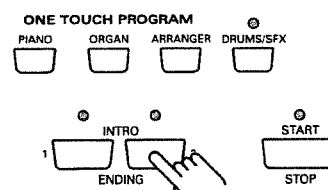
2. Specify a chord by playing it on the left-hand keyboard section.

The Intro is played and the automatic accompaniment starts.

Note: Usually, the bass part plays the root notes of your chords. If you want the bass to play the lowest notes of your chords, assign the Leading Bass function to a Pad button or optional footswitch. See "Leading Bass" on page 60 for details.

Before starting automatic accompaniment, you can follow the steps shown below to change or silence the Intro.

Starting without an Intro—Press the Intro/Ending [1] button to make the indicator go dark, then start the automatic accompaniment.



Starting with a simple Intro—Press the Intro/Ending [2] button to make the indicator blink, then start the automatic accompaniment.

Starting at the press of a button

1. Press the One Touch Program [Arranger] button. The indicator for the [Sync] button lights up and the Intro/Ending [1] button's indicator blinks.

2. Press the [Sync] button to make the indicator go dark. The indicator for the Intro/Ending [1] button also goes dark.

3. Specify a chord by playing it on the left-hand keyboard section.

Playing a key in the left-hand section of the keyboard while the [Sync] button's indicator is dark causes a

chord to be sounded that is played by the “Chord Tone”, while the root of the chord is played by the “Bass Tone”.

Note: You can change the sound of the Chord Tone and Bass Tone. See “Selecting Chord and Bass Tones” on page 68.

4. Press the Intro/Ending [1] or [2] button, or the [Start/Stop] button.

Pressing the [Start/Stop] button starts the automatic accompaniment without an Intro. Pressing the Intro/Ending [2] button plays a simple Intro.

Note: You can also start playback with a Fade-In. This function must be assigned to a Pad button or an optional footswitch. See “Fade In/Out” on page 61.

Stopping the automatic accompaniment

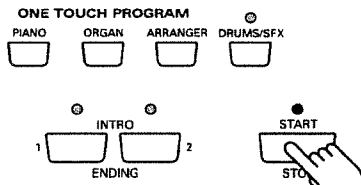
Stopping with an Ending

Press the Intro/Ending [1] button or Intro/Ending [2] button.

An ending is played, then the automatic accompaniment stops. Pressing the Intro/Ending [2] button plays a simple ending.

Stopping at the press of a button

Press the [Start/Stop] button.



The automatic accompaniment stops as soon as you press the button.

Note: You can also stop playback with a Fade-Out. This function must be assigned to a Pad button or an optional footswitch. See “Fade In/Out” on page 61.

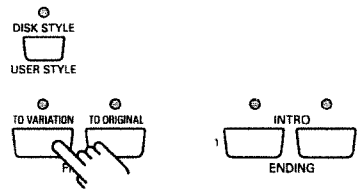
6.4 Varying an accompaniment

The E-600 provides several functions that allow you to vary the accompaniment. That should allow you to clearly mark the choruses and verses of your songs.

There are two basic accompaniment patterns: Original and Variation. It can be effective to use the quieter Original pattern for the first half of the song, and the Variation pattern for the second half.

1. Press the [To Variation] button to select the Variation pattern.

2. Press the [To Original] button to select the Original pattern.



Also, pressing either of these buttons during a performance inserts a fill-in. This is a short transition of up to one bar that “announces” the next song part.

You can also directly switch from Original to Variation. This requires that you assign the corresponding function to a Pad button or optional footswitch. See “Original/Variation” on page 60 for details.

Adding a Fill-in without changing the accompaniment pattern

You can play a fill-in without changing the accompaniment pattern by pressing whichever of the [To Original] and [To Variation] buttons whose indicator lights while a performance is in progress.

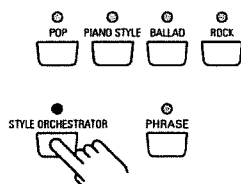
For live performances, it is probably safer to assign the Fill In function to a Pad button or optional footswitch. See page 60 for details.

Note: There are two additional Fill-In functions you may want to take advantage of for certain songs: “Half Fill In Variation” and “Half Fill In Original” on page 60. These need to be assigned to a Pad button or optional footswitch.

Changing the arrangement of the accompaniment: Style Orchestrator

You can change the arrangement of an accompaniment during the performance of automatic accompaniment or while it is stopped. This function is called “Style Orchestrator.”

1. Press the [Style Orchestrator] button to make the indicator light.



2. Press the Pad buttons to change the arrangement of the accompaniment.

The Pad [1] button produces the simplest arrangement, and the Pad [4] button produces the most complex one.

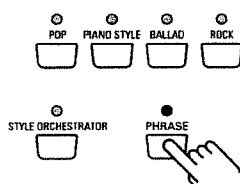
Note: Some Music Styles may not provide alternate arrangements.

3. Press the [Phrase] or [User] button to switch off the indicator of the last Pad you pressed.

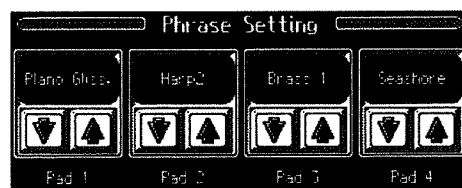
6.5 Playing short automatic phrases

The Phrase function allows you to add short phrases (“licks”) to your melodies and the automatic accompaniment.

1. Press the [Phrase] button to make the indicator light.



Now you can use the Pad buttons to play a short phrase. A screen like the one shown below appears.



2. Touch ↑ ↓ to choose the type of phrase.
3. Press the Pad button to play (“trigger”) the phrase. Some phrases may keep playing. If this happens, just press the Pad button a second time. Also, some phrases cause the Arranger to pause while they are playing.

In such cases, the automatic accompaniment starts again as soon as the phrase ends.

Note: Playing a phrase while playing percussion-instrument sounds on the keyboard (see page 17) may cause the Drum Set to change.

6.6 Simple ways of playing chords — Chord Intelligence

“Chord Intelligence” is a feature that intelligently decides on accompaniment chords the moment you play a key in the left half of the keyboard.

To play a C chord, for example, you usually have to press the keys C, E, and G—but with Chord Intelligence, you only have to press the C key to initiate a C chord accompaniment.

Note: For more information about chord fingering, see the “Chord Fingering list” at the end of this manual.

Note: You can cancel the Chord Intelligence function. For more information, see “Arranger settings” on page 67.

Displaying the chord fingering on screen

The E-600 even provides a function that shows you how to play the chords you need:

1. Touch <Utility> at the left side of the screen.



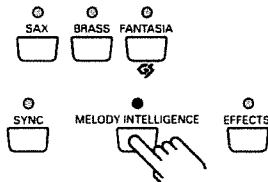
2. On the screen, touch <Chord Finder>.
3. Touch the screen to specify the root of the chord you want to check out. The chord fingering appears on screen.
4. Touch <Exit> to leave this function.

6.7 Melody Intelligence

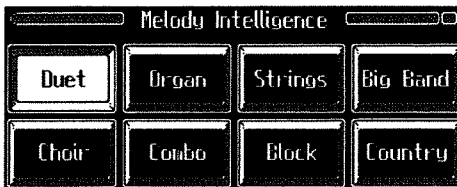
You can add a harmony to the melody notes. When the keyboard has been split into a right-hand and left-hand section while an automatic accompaniment is playing, a harmony matched to the chord you designate in the left-hand section of the keyboard is automatically added to the notes you play in the right-hand section.

This function is called "Melody Intelligence."

1. Press the [Melody Intelligence] button.



Play a few notes on the keyboard and listen to the automatic harmonies that are added to your notes. A Melody Intelligence screen like the one following appears.



2. Press the Page [◀] and [▶] buttons and use the Touch Screen or the dial to choose a harmony type. Again play a few notes to audition the selected harmony type.

Note: Touch <Exit> to go back to the previous screen with the Melody Intelligence function still in effect.

3. Press the [Melody Intelligence] button again to make the indicator light go dark and cancel Melody Intelligence.

Some harmony types use another Tone than the one you selected for your melody. Also, in some cases, only one note of your two- or three-voice melodies actually sounds (to leave room for the Melody Intelligence function).

6.8 Piano Style Arranger

Usually, with an automatic accompaniment performance, the accompaniment is transposed by the chords you specify in the left-hand section of the keyboard, with the melody played on the right-hand section. If you like, however, you can make the E-600 recognize chords from the entire keyboard, and perform without splitting the keyboard. This function is called the "Piano Style Arranger".

Note: If you use this method to perform with automatic accompaniment, the Chord Intelligence function (see page 35) is not available. You have to press all the keys to specify the chord.

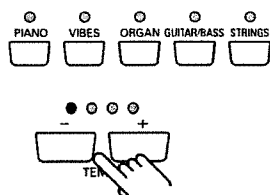
1. Press the One Touch Program [Arranger] button.
2. Press the [Whole] button.
3. Choose a Music Style (see page 32).
4. Start playing.
The accompaniment starts as soon as you play a chord.

7. Miscellaneous

7.1 Tempo and Count-Ins

You can change a song's tempo. Changing the tempo has no effect on the pitch of the notes. You can even change the tempo during playback.

Tempo [-] and [+] buttons



Each press of the [+] button makes the tempo faster. Holding down the button makes the tempo change (speed up) continuously.

Each press of the [-] button slows down the tempo. Holding down the button makes the tempo change (slow down) continuously.

Press [-] and [+] simultaneously to return to the original tempo.

Using <▲> and <▼>/the dial to adjust the tempo

When the tempo is displayed at the upper-left area of the screen, you can use <▲> and <▼> or the dial to adjust the tempo.

- Turn the dial clockwise or touch <▲> to speed up the tempo.
- Turn the dial counterclockwise or touch <▼> to make the tempo slower.
- Touch <●> to go back to the basic tempo.

Tapping the tempo with a Pad button

You can determine the tempo by the timing with which you press a Pad button. This feature is called "Tap Tempo". In order to use Tap Tempo you need to change the function of the Pad buttons. For more information, take a look at "Assigning functions to buttons and footswitches" on page 60.

1. Press the [User] button.
2. Assign "Tap Tempo".
3. Tap the Pad button four times.

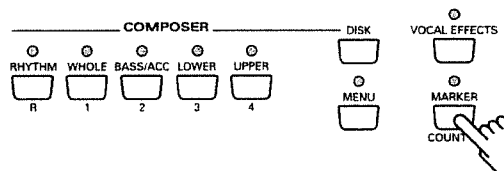
The tempo is set according to the timing with which you tap the button.

Note: See also "Playback without tempo changes" for yet another tempo function available for song playback.

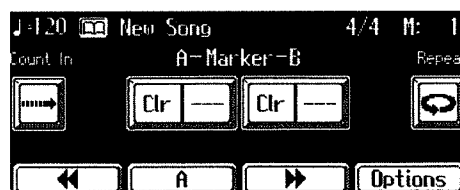
Counting in before a performance starts

When you're playing along with a song, you can make sure that your playing is in time with the tune by sounding a count before the song starts playing.

1. Press the [Marker/Count In] button.



A Marker screen like the one shown below appears.



2. Touch the <Count In> icon. That icon appears in reverse video. With this setting, two measures are counted down before song playback starts.
3. Touch the <Count In> icon again to switch off the count-in sound.
4. Touch <Exit> to go back to the previous screen.

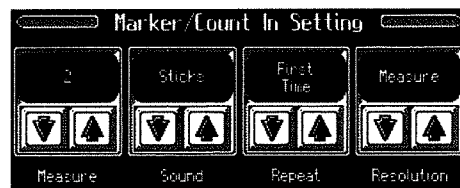
Count-In settings

You can change the number of measures that are counted, as well as the type of counting sound.

1. Press the [Marker/Count In] button. The Marker screen appears (see above).

2. Touch <Options>.

A Marker Option screen like the one shown below appears.



3. Use <Measure> ↑ ↓ and <Sound> ↑ ↓ to choose the number of Count-In measures (Measure= 1 or 2).

Count-In Sound

| Display | Description |
|-------------------|--|
| Sticks | Sound of tapping with a stick |
| Click | A bell and a clicking sound |
| Electronic | Electronic sound |
| Voice(JP) | A voice counting "1, 2..." in Japanese |
| Voice(ENG) | A voice counting "1, 2..." in English |
| Wood Block | Wood Block |
| Triangle/Castanet | Triangle and castanet sound |
| Handclap | Clapping |
| Animal | Animal Voice |

Touch <Exit> to go back to the Marker screen.

Playing the Count-In sound at each repetition

You can choose whether the Count-In is sounded at every repetition when you repeat playback of a song or a particular passage.

1. Press the [Marker/Count In] button.

The Marker screen appears.

2. Touch <Options>.

The Marker Option screen (see above) appears.

3. Touch <Repeat> ↑ ↓ to choose either <First Time> or <Every Time>.

First Time—The count is sounded only before the first playback.

Every Time—Playing the Count Sound at Each Repetition

Touch <Exit> to go back to the Marker screen.

7.2 Functions for song playback

Playback without tempo changes

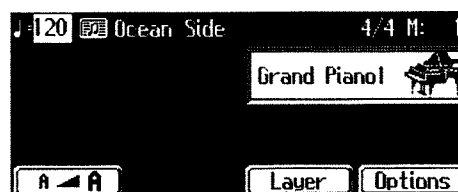
If a song contains difficult tempo changes, it may be wiser to practice it at a fixed tempo. This is only necessary when you play to a Standard MIDI File or one of your own songs. The tempo of the Music Styles does not change.

Playback of a song at a steady tempo that doesn't change is called "Tempo Muting".

1. Hold down the Stop [■] button and press either the Tempo [-] or [+] button.

Now, songs are played back at an unchanging tempo.

When tempo muting is in effect, the tempo display appears in reverse video.



2. Again hold down the Stop [■] button and press either the Tempo [-] or [+] button to cancel tempo muting.

Tempo muting is also canceled if you select another song.

Navigation

Moving to the passage you want to hear

During song or Standard MIDI File playback, you can move to a certain measure or beat within a song, and play back the tune from that location.

1. Press the Bwd [◀◀] and Fwd [▶▶] buttons to move to the bar you want to hear.

Pressing the button once moves your position by one measure. Hold down the button to move forward or backward continuously.

Note: The measure number appears in the top-right area of the Basic screen.

2. Press the Play [▶] button to play back the song from the measure you moved to.

Returning to the beginning of the song

Press the Reset [◀] button.

Moving to the end of the song

Hold down the Stop [■] button and press the Fwd [▶▶] button.

If you've used markers to designate a passage for repeating (see below), you can only move forward and backward within the range specified by the A and B markers.

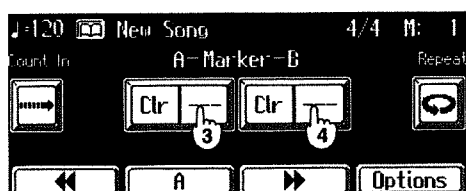
Note: When you start playback of Music Data, the measure number on the Basic screen appears in reverse video. While this is in reverse video, the E-600 is reading data from the floppy disk, so wait a few moments until it finishes.

Placing Markers

Placing markers within a song is a handy way to start playback at the same place as many times as you like.

There are two Markers, A and B. You can add Markers or move to a Marker even while playback is in progress.

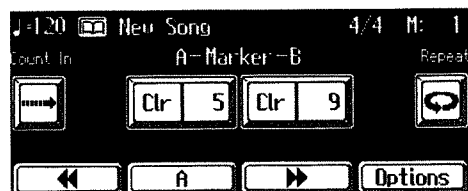
1. Press the [Marker/Count In] button.
The Marker screen appears.



2. Use the Bwd [◀◀] and Fwd [▶▶] buttons to move to where you want to place a marker.
The measure number appears in the top-right area of the screen.

3. Touch <- - -> for <Marker A>.
Marker A is placed at the beginning of the bar you moved to.

4. In the same way, move a position and touch <- - -> for <Marker B> to place marker B.
When you've placed a marker, the number of the measure with the marker appears on screen.



After placing the markers, touching the measure number with the marker moves the playback position to the corresponding marker.

5. Touch <Exit> to go back to the previous screen.
Note: You can't place markers A and B at the same location. Also, you can't place marker B at a position earlier than marker A.

Note: The markers are normally placed at the beginning of a bar, but you can also place a marker at a position partway through a measure. See "Placing a Marker in the middle of a measure (Resolution)".

Moving a Marker

1. Touch <A> at the bottom of the screen and select the marker you want to move.

The display cycles through <A>, , and <A-B>.

| Display | Description |
|---------|---|
| A | Move the position of marker A. |
| B | Move the position of marker B. |
| A-B | Move markers A and B at the same time. (See "Moving a repeated passage".) |

2. Touch <<<<> or <>>>> at the bottom of the screen to move the marker in the direction indicated by the arrows.

Erasing a Marker

Touch <Clr> for the marker you want to erase.
The marker disappears and the on-screen display changes to <- - ->.

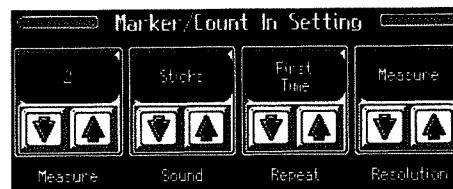
Placing a Marker in the middle of a measure (Resolution)

Markers are usually placed at the start of the selected measure, but you can also place them on the desired beat of a measure.

1. Press the [Marker/Count In] button to display the Marker Screen.

The Marker Screen (see above) appears.

2. Touch <Options>.
The Marker Option screen appears.



3. Touch <Resolution> ↑ ↓ to change the display from <Measure> to <Beat>.

Touch <Exit> to go back to the Marker screen.

The unit for applying markers changes from "Measure" to "Beat".

4. Play back the song, and place the Markers during playback.

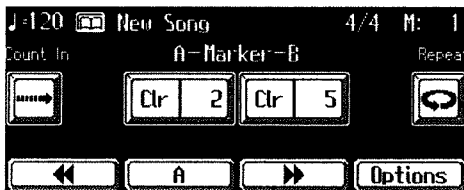
Repeating excerpts

You can play back a given passage repeatedly. This is convenient when you want to practise the same location over and over.

1. Press the [Marker/Count In] button to display the Marker Screen.
2. Place markers A and B to enclose the passage you want to repeat (see page 39).



For instance, suppose you want to play back the passage from the second through fourth measures over and over. You should place marker A at the beginning of the second bar and marker B at the beginning of the fifth bar.



3. Touch the <Repeat> icon.
The setting is made for repeated playback of the passage from marker A to marker B.
 4. Press the Play [▶] button.
The passage from marker A to marker B is played repeatedly.
- If you don't place any markers, playback repeats from the beginning to the end of the song.
 - If you only place marker A, playback repeats from marker A to the end of the song.
 - If you only place marker B, playback repeats from the beginning of the song to marker B.
5. Press the Stop [■] button to stop playback of the song.
 6. Touch the <Repeat> icon again to cancel the setting for repeated playback.

Moving a repeated passage

You can shift the entire repeated passage forward or backward.

1. Touch <A> at the lower portion of the Marker screen several times until <A-B> appears.
2. Touch <<◀◀> or <▶▶> at the bottom of the screen to move the marker.

As an example, let's suppose that marker A is at the start of the fifth measure and marker B is at the start of the ninth measure.

- Touch <▶▶> to shift marker A to the beginning of the ninth measure and marker B to the beginning of the thirteenth measure.
- Touch <◀◀> to shift marker A to the beginning of the first measure and marker B to the beginning of the fifth measure.

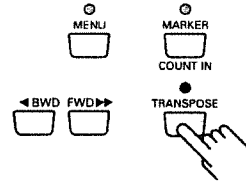
7.3 Playing in an easier key (Transpose)

You can transpose the key of a performance without having to shift the position of your fingers on the keyboard.

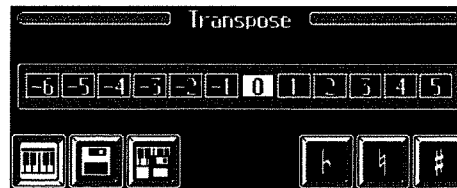
This lets you take a song in a difficult key with lots of sharps (#) and flats (b) and play it in a key with a fingering that's easier for you. For instance, you can play a tune in the key of E major with the keyboard fingering for the key of C major.

Example: Playing a song in E major with the keyboard fingering for C major

1. Press the [Transpose] button.



A Transpose screen like the one below appears.

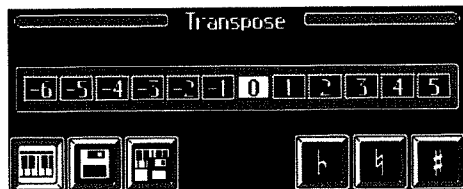


2. Touch [0].
3. Choose the transposition interval by touching a numeral on screen (-6~5) or by touching [♯] or [♭].
Note: You can also use the dial to change the transposition value.
The setting range is from -6 to 0 to +5. In this example, we'll consider the C note in the key of C major to be the basic note ("0"). From the C note to the note that corresponds to E in the key of E major there are four keys on the keyboard, counting the black ones, so set the value at "+4".
4. Touch [C] to return the keyboard to the original key.
5. Touch <Exit> to go back to the previous screen.
Note: The transposition setting returns to its original value ("0") when you switch off the power or choose another song.

Transposing a song

You can also transpose a song for playback.

1. Press the [Transpose] button.
The Transpose screen appears.



2. Touch the disk icon.
3. Choose the value for transposition (see page 40).
Note: You can also use the dial to change the transposition value.
You can transpose the song within a range of -24 to +24 semitones.
4. Touch to return the song to the original key.

Transposing both the keyboard and the song

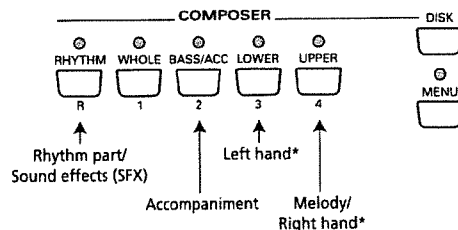
- In step 2 above, touch .
- The setting range at this time is from -6 to 0 to +5.
Note: The transposition setting returns to its original value ("0") when you switch off the power or choose another song.

7.4 Playing along with a song

With commercially available music files, you can mute one part of the song (Standard MIDI File) and play it yourself.

You can even use the songs you create yourself. All you need to do is switch off one of the Track buttons.

1. Press the [Song] button to choose the song.
2. Press any one of the Track buttons to make the button's indicator light go dark.



(*) Not always available

When you play back the song, the sounds for the illuminated Track buttons are played, but no notes are played for the Track button that is dark.

This process of temporarily silencing a Track button by pressing it to make its light go dark is called "Muting".

3. Press the dark Track button again to make the indicator light come back on.

Note: If a track includes more than one instrument, and you want to mute out just one of those instruments, see "Changing the song settings for individual tracks" on page 46.

Note: You can change the volume balance for the keyboard and the song. See "Balance of the accompaniment and the keyboard" on page 21.

7.5 Monitoring your skill on screen: Piano Partner

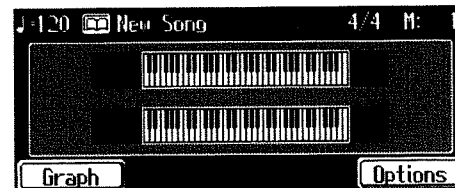
You can compare the notes you play yourself with a model song on screen.

1. Touch <Utility> on the left side of the screen.

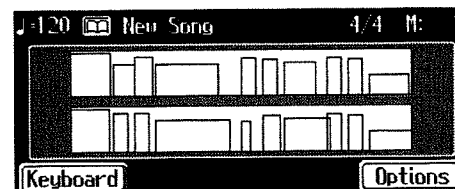


2. Touch <Piano Partner>.

A Keyboard screen or Graph screen like the one shown below is displayed.



When the Keyboard screen is visible, you can check the pitch. The key for the note being played appears in reverse video.



When the Graph screen is visible, you can check a note's velocity and length.

The height shows the note's velocity, and the width shows the note's length.

You can switch between the two screens by touching <Graph> or <Keyboard>.

On each screen, the upper portion shows the performance of the model song and the lower portion shows what's played on the keyboard.

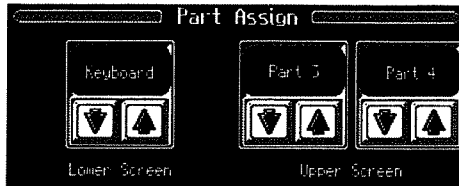
3. Play back the song, and try playing along with it yourself.

4. Touch <Exit> to go back to the previous screen.

Changing the displayed part

You can display a different part of the model song.

1. At the Keyboard or Graph screen, touch <Options>.



2. Touch ↑ ↓ to select another part.

You can display two parts on the Upper Screen, so it might be a good idea to choose the right-hand part and the left-hand part. Also, when <Keyboard> is selected in the Lower Screen, the keyboard performance appears, but choosing a recorded Part lets you confirm it again after the performance ends.

3. Touch <Exit> to go back to the previous screen.

Note: For more information about the Parts, take look at "16-track Sequencer" on page 45.

8. Recording functions

The E-600 has a wide variety of built-in recording functions in addition to the basic recording methods described in the procedures for “Recording a performance” on page 22. You can use the 16-track sequencer (see page 45) in combination with a range of recording methods to compose ensemble songs.

Usually, when you record something new, you record over an older recording, erasing it. However, you can choose any of the recording methods described below.

Mix recording—New notes are added to previously recorded notes.

Loop recording—A specified passage is recorded repeatedly, with new notes being combined with the existing ones.

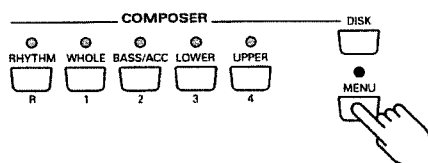
Punch-in Recording (see page 44)—Only a specified passage is re-recorded while you listen to the other tracks.

8.1 Selecting the recording mode

Normal recording (Replace)

Recording where you erase previously recorded material as you record something new is called “Replace Recording”. This setting is in effect when you turn on the power.

1. Press the [Menu] button and confirm that its indicator lights.



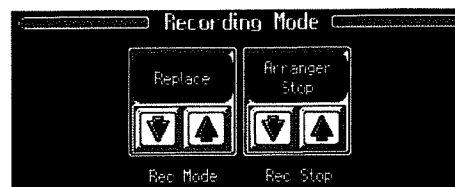
A Menu screen like the one shown below appears.



If <Rec Mode> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Rec Mode>.

A screen like the one shown below appears.



3. Touch <Rec Mode> ↑ ↓, to choose “Replace”. The E-600 enters standby for normal recording.

4. Touch <Exit> twice to go back to the screen that was displayed before you pressed the [Menu] button.

Mix recording

You can record additional notes over a previously recorded performance. This method is called “Mix Recording”.

1. Press the [Menu] button and confirm that its indicator lights.

The Menu screen appears.

If <Rec Mode> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Rec Mode>.

3. Use <Rec Mode> ↑ ↓, to select “Mix”.

The recording method changes to “Mix Recording”.

4. Touch <Exit> twice to go back to the screen that was displayed before you pressed the [Menu] button. When you’re finished with mix recording, go back to “Replace” because you may not want to add new notes to existing ones on other tracks.

Loop recording

You can record a given passage as many times as you like. This method is called “Loop Recording”. In this mode, everything you play will be added to what has already been recorded, which may be handy when recording a Rhythm part.

1. Place A and B markers at the beginning and end of the passage you want to record (see page 39).

If you haven’t recorded anything yet, record a number of blank measures. This is necessary to specify the length of your new song (because the E-600 records the equivalent number of rests). You do not need to play anything, and the length of your “provisional” song is of little importance.

1. Hold down the Rec [●] button and press the Play [▶] button.

The indicators of these buttons light up, and recording starts.

2. Without actually playing anything, record the necessary number of measures, then press the Stop [■] button.

The indicators for the Rec [●] and Play [▶] buttons go dark, and recording stops.

3. At the Marker screen (see page 39), touch the <Repeat> icon.

The recording method changes to loop recording.

4. When you're finished with Loop recording, touch the <Repeat> icon again to go back to the Replace recording method.

Another way to select loop recording

You can also use the method described below to make the setting for Loop Recording.

1. Place A and B markers at the beginning and end of the passage you want to record (see page 39).

You may have to record a few blank measures before being able to insert Markers.

2. Press the [Menu] button and confirm that its indicator lights.

The Menu screen appears.

If <Rec Mode> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

3. Touch <Rec Mode>.

4. Use <Rec Mode> ↑ ↓ to select "Loop".

5. Touch <Exit> twice to go back to the screen that was displayed before you pressed the [Menu] button. When you're finished with Loop recording, select "Replace" again. See "Normal recording (Replace)" on page 43.

Re-recording a specific passage (Punch In)

Re-recording a particular passage as you play back a recorded performance is called "Punch-In Recording".

There are three punch-in recording methods.

Recording a passage between Markers A and B

Before you start recording, place markers A and B to define the passage you want to record over. Make the setting for Punch-In recording, and carry out recording. You can re-record just the passage between markers A and B.

Note: For more information about placing markers, see page 39.

Starting recording with a footswitch

You can play back the song and press the pedal at the desired place to start recording. Pressing the pedal a second time cancels recording and returns you to playback.

This requires that you assign the Punch In/Out function to the footswitch in question (see page 60).

Starting recording by pressing a (Pad) button

You can play back a song and press the Rec [●] button or a Pad button at the desired place to start recording. Pressing the same button a second time cancels recording and returns you to playback.

This requires that you assign the Punch In/Out function to a Pad button (see page 60).

1. Press the [Menu] button and confirm that its indicator lights.

The Menu screen appears.

If <Rec Mode> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Rec Mode>.

3. Use <Rec Mode> ↑ ↓ to select "Auto Punch In/Out" or "Manual Punch In/Out".

The recording method changes to Punch-In recording.

Auto Punch In/Out—The passage specified by markers A and B is recorded. Recording is activated and switched off automatically.

Manual Punch In/Out—Recording starts at the place where you press the pedal, the Rec [●] button or the Pad button.

4. Touch <Exit> twice to go back to the screen that was displayed before you pressed the [Menu] button. When you're finished with punch-in recording, go back to Replace recording method.

8.2 16-track Sequencer

In this section, we'll take a look at the basic steps for creating ensemble songs using the 16-track sequencer.

What's the 16-track sequencer?

The 16-track sequencer is a device that lets you record 16 individual Parts. For instance, you can create a composition by recording the melody on the first track, then the bass part on the second track, then the next part on the third track, etc. until you've finished the song.

The Parts of the 16-track sequencer are arranged in five groups and assigned to the Track buttons as follows:

| Track button | Part/MIDI channel |
|---------------|-------------------|
| [Rhythm] | D (10), S (11) |
| [Whole] | 1 |
| [Bass/Accomp] | 2, 5-9, 12-16 |
| [Lower] | 3 |
| [Upper] | 4 |

Track S (11) of commercially available Roland SMF music files sometimes resides on the [Bass/Accomp] track.

The 16-track sequencer allows you to record one part per track (there are 16 tracks). It is therefore impossible to use the Layer or Split function for recording in this mode. However, you could use the Copy function (see page 52) to copy the desired part to another track and assign a different Tone to that track (see page 46).

This "one track/one Tone" system also means that you cannot use the Arranger as backing band.

Note: Though on the edit pages (see page 51 and following), the display makes a distinction between Track buttons (Tr) and "Parts" (Pt), let us agree to use the word "track" throughout. The reason why "Pt" is being used that there are no physical tracks. The distinction is based on MIDI channels. You may remember that some Track buttons control several tracks (MIDI channels), which is why distinguishing between "Tr" and "Pt" is actually useful.

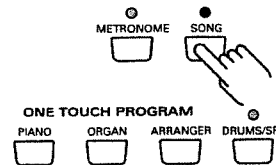
When you create a 16-track song, you start by deciding on the basic concept of the song, such as which Tones are played with which parts. Then you record each part in sequence: the rhythm part, the bass part, the chord part, the melody part, and so on.

Tips for multitrack recording

- When recording your ensemble song, start by recording the rhythm part to track D(10). Loop Recording (see page 43) can be handy when you record the rhythm part.
- For the rhythm part, you can use a built-in Rhythm Pattern to simplify recording. For more information, see "Working with rhythm patterns" on page 47 and "Copying rhythm patterns" on page 52.

- You can use the editing functions to edit and correct the song you've recorded. See "Editing songs" on page 51.

1. Press the [Song] button.



2. Choose <0:New Song>.

If <0:New Song> doesn't appear on screen, use the Page [◀] and [▶] buttons to switch screens. When you use the dial, the pages are switched automatically. *Note: If you have recorded a song or changed a song's settings, the message "Delete Song OK?" appears on the screen when you touch <0:New Song>. For more information, see page 23.*

3. Press the [Metronome] button and choose the beat (see page 19).

Note: If you don't need the metronome sound, press the [Metronome] button a second time.

4. Press the Tempo [-] and [+] buttons to adjust the tempo.

Note: You can't change a song's time signature once it's been recorded. You can, however, insert time signature changes (see page 48).

5. If necessary, choose a recording method.

See "Selecting the recording mode" on page 43.

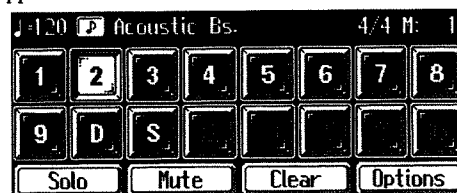
6. Press the [Menu] button.

The Menu screen (see page 43) appears.

If <16trk Sequencer> doesn't appear on screen, use the Page [◀] and [▶] buttons to switch screens.

7. Touch <16trk Sequencer>.

A 16-track Sequencer screen like the one shown below appears.



8. Touch the number for the track you want to record.

This number appears in reverse video ("2" in the above example).

Note: Drum or effect sounds can only be recorded to track D(10) or S(11) respectively.

9. Press one of the Tone buttons and choose a Tone (see page 18).

To select a Drum Set or the SFX Set, press the [Drums/SFX] button (see page 17).

10. Touch <Exit> to display the 16-track Sequencer screen.
11. Press the Reset [] button.
This is only necessary if you want to start recording at the beginning of the song.
12. Press the Rec [] button (indicator flashes).
The E-600 enters standby for recording.
13. Press the Play [] button.
A two-bar count-in sounds, then recording starts.
14. Press the Stop [] button.
Recording stops.

If your performance is not as expected

You can erase the selected track by touching <Clear> at the bottom of the screen.

Recording a different track

You can now add other tracks to the ones you have already recorded. Do this as many times as your song contains parts. Go back to step (6) on page 45.

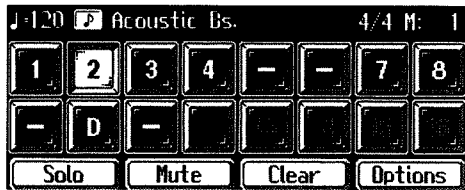
Note: Steps (1)~(5) are only necessary when you start recording a new song.

Note: The song you've recorded disappears when you switch off the power. Don't forget to save it to disk. See "Saving your songs to floppy disk" on page 25.

Changing the song settings for individual tracks

After recording a song with the 16-track sequencer, you can change the volume level, Tone, or other settings for each individual Part, or mute the tracks you don't need.

1. Press the [Song] button, and touch the screen to choose the song.
2. Press the [Menu] button, and touch <16 track Sequencer>.



| Display | Description |
|---------|-------------------------------------|
| | This track is played back |
| | This track is not played back |
| | This track doesn't yet contain data |

3. Touch the screen to choose the track whose settings you want to change.
4. Touch <Solo> or <Mute> at the bottom of the screen to select whether the chosen Part is played.

You can also touch <Clear> to erase the track. The corresponding functions are shown below.

| Display | Function |
|---------|--|
| Solo | Only the selected track is played back. |
| Mute | This toggles playback of the selected track on or off. |
| Clear | This erases the selected track. |

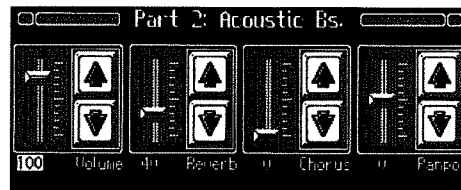
The <Clear> command must be confirmed. To erase the data, touch <OK>. If you don't want to erase the data, touch <Cancel>.

Note: Once a track has been erased, it can't be restored.

Muting only one track is called "Minus One". This is useful for those times where you want to play to a Standard MIDI File or one of your own songs.

5. You can make detailed settings for the selected Part by touching <Options>.

A screen like the one shown below appears.



- Volume**—This changes the volume level.
- Reverb**—This changes the depth of the Reverb effect.
- Chorus**—This changes the amount of chorus applied.
- Panpot**—This shifts the position of the track (Tone) in the stereo field.

Pressing a [Tone] button while this screen is displayed allows you to assign another Tone to this track.

What's Panpot?

Panpot is the control that determines the placement of the sound in the stereo sound field between the left and right speakers. Some sounds (like the bass, for example) should be left in the center of the sound field ("0").

6. Touch for the corresponding item to change the setting.

For <Panpot>, touch to shift the sound you hear to the right, or to shift it to the left.

7. Press the Play [] button to play back the song with the changed settings.

Check the track whose settings you've changed.

8. Press the Stop [] button to stop playback of the song.

9. If necessary, change the settings for other tracks as well.

Press the Page [] and [] buttons to select the track you want to change ("edit").

10. Hold down the Rec [] button and press the Reset [] button.

This operation allows you to save your edited song to a floppy disk.

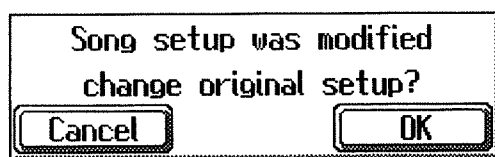
If you don't want to lose the song whose settings for individual Parts you've changed, you should save it on a floppy disk (see page 25).

Note: The Mute setting can't be saved to floppy disk.

Note: Because commercially available Roland SMF music files are also made up of 16 tracks (MIDI channels), you can change the settings for the individual tracks and play them back in the same way.

If the following message appears

If you try to display another screen after changing the song's settings for one or several tracks, a message like the one below may appear.



Touch <OK> to change the song's settings. Touch <Cancel> to discard the changes in settings.

8.3 Working with rhythm patterns

The E-600 has a large number of built-in rhythm patterns. You can use these patterns to create a rhythm part with ease. For more information about the kind of Rhythm Patterns, please refer to "Rhythm pattern list" at the end of this manual.

Note: Rhythm patterns can only be recorded to track D(10) (the [Rhythm] button).

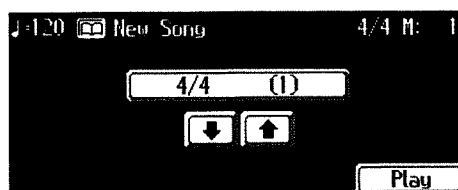
1. Press the [Menu] button.

The Menu screen (see page 43) appears.

Note: If <Rhythm Pattern> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Rhythm Pattern>.

A screen like the one shown below appears.



3. Touch ↑ ↓ to choose a rhythm pattern.

Rhythm patterns are shown in the format "name (number of bars)."

4. Touch <Play> on screen to hear the rhythm pattern.

Note: To stop the rhythm pattern, touch <Stop> on the screen.

5. Press the Rec [●] button (indicator must light).

The E-600 enters recording standby.

Note: If you forgot to stop the rhythm pattern you auditioned, it will stop now.

Note: If the [Rhythm] button's indicator doesn't blink, press the [Rhythm] button.

6. Press the Play [▶] button or touch <Play> on screen.

The rhythm pattern begins to play, and at the same time, recording starts.

7. Press the Stop [■] button.

The rhythm pattern stops and recording ends.

Note: Touching <Stop> on the screen stops only the rhythm pattern, while recording continues.

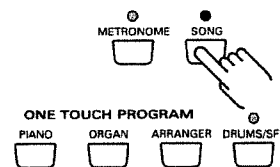
8. Touch <Exit> to go back to the Menu screen.

Note: You can also paste a rhythm pattern into a song without recording anything. See "Copying rhythm patterns" on page 52.

8.4 Recording a song with a pickup (PU)

With the E-600, you can record a song with an upbeat (pick-up). This is a learned word for songs that do not start on the first beat of a bar.

1. Press the [Song] button, and choose <0:New Song>.

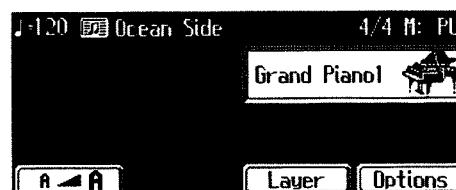


2. Press the Rec [●] button and confirm that its indicator lights.

The E-600 enters recording standby.

3. Press the Bwd [◀◀] button once.

The measure number at the top-right area of the screen changes to "PU" (pickup).



4. Press the Play [▶] button to start recording.



8.5 Recording tempo changes

You can add ritardandos and other tempo changes to a recorded composition.

You can't record music data while you're in the Tempo Recording mode. When you're finished with tempo recording, go back to "Normal recording (Replace)" on page 43.

Note: The E-600 also provides a function that allows you to change the preset (i.e. initial) tempo of a song (see page 55).

Adjusting the tempo while listening to a song

1. Press the [Menu] button.

The Menu screen (see page 43) appears.

Note: If <Rec Mode> is not displayed use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Rec Mode>.

3. Touch <Rec Mode> ↑ ↓, and choose <Tempo>. Touch <Exit> twice to go back to the screen that was displayed before you press the [Menu] button.

4. Use the Bwd [◀◀] and Fwd [▶▶] buttons to move to a place a little earlier than the bar where you want to change the tempo.

The measure number appears in the top-right area of the Basic screen.

5. Press the Rec [●] button and confirm that its indicator flashes.

The E-600 enters recording standby.

6. Press the Play [▶] button to start recording.

7. When you get to the place where you want to change the tempo, use the Tempo [-] and [+] buttons or the dial to vary the tempo as desired.

8. Press the Stop [■] button to stop recording.

Entering precise tempo changes

You can move to a particular measure and change the song's tempo from the start of that bar. This is probably safer for instant tempo changes, because you can a) specify the measure where the change should occur, and b) enter exactly the desired tempo value. Working with the Tempo buttons requires that you increase/decrease the tempo – and all intermediate steps are recorded.

1. Select Tempo Recording.

The steps are the same as for "Adjusting the tempo while listening to a song".

2. Use the Bwd [◀◀] and Fwd [▶▶] buttons to move to the bar where you want to change the tempo. The measure number appears in the top-right area of the Basic screen.

3. Press the Rec [●] button and confirm that its indicator flashes.

The E-600 enters recording standby.

4. Use the Tempo [-] and [+] buttons or the dial to adjust the tempo.

5. Press the Rec [●] button.

The song's tempo changes starting with the measure where you moved to.

6. Press the Stop [■] button to end recording.

Note: You can also enter the Tempo Recording mode by holding down the Tempo [-] or [+] button and pressing the Rec [●] button. In this case, stopping recording also means that you leave the tempo recording function.

If you want to restore the previous tempo, delete the tempo data at the place where the tempo was recorded. For an explanation of how to delete tempo settings, refer to "Erase" on page 53.

8.6 Inserting time signature changes (Beat Map)

You can create songs whose beat changes during the course of the tune.

Note: You can't change a song's beat once it's been recorded. The following must therefore be carried out before you start recording your first track.

1. Press the [Menu] button.

The Menu screen (see page 43) appears.

If <Beat Map> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Beat Map>.

A screen like the one shown below appears.



3. Use the Bwd [◀◀] and Fwd [▶▶] buttons to move to the bar where you want the time signature to change.

The measure number appears in the top-right area of the screen.

4. Touch ↑ ↓ to choose the beat, and touch <Execute>.

5. Touch <Exit> twice to go back to the screen that was displayed before you pressed the [Menu] button.

6. Press the Reset [◀] button to return the measure number to "1."

7. Start recording your song.

8.7 Changing how recording stops

You can change how recording is stopped when recording with the Arranger (see page 22).

1. Press the [Menu] button.

The Menu screen (see page 43) appears.

If <Rec Mode> is not displayed, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Recording Mode>.

3. Use <Rec Stop> ↑ ↓ to select “Arranger Stop” or “Composer Stop”.

Arranger Stop—When the Arranger stops, recording also stops at the same time. Choose this setting if you want to end your song with an Ending pattern.

Composer Stop—Recording doesn't stop when the Arranger does. Press the Stop [■] button to stop recording.

4. Touch <Exit> twice to go back to the screen that was displayed before you pressed the [Menu] button.

8.8 Chord Sequencer

Before performing a song, you can enter its chord progression, the places where the accompaniment pattern changes, and so on, to create a truly “automatic” accompaniment for the song. This feature is called “Chord Sequencer”.

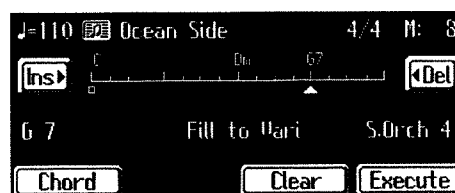
1. Press the [Menu] button.

The Menu screen (see page 43) appears.

If <Chord Sequencer> doesn't appear on screen, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Chord Sequencer>.

A Chord Sequencer screen like the one shown below appears.



3. Use the Style buttons to choose a Music Style (see page 32).

4. After choosing a style, touch <Exit>.

The E-600 returns to the Chord Sequencer screen.

5. Use the dial to move the cursor to where you want to make an insertion.

Use the Bwd [◀◀] and Fwd [▶▶] buttons to move the cursor a bar at a time.

6. Enter the chord progression and the changes in the accompaniment pattern (“Divisions”) and arrangement (see page 35).

You can proceed exactly as when using the Arranger. There are other entry methods, too. See “Entry Methods”.

7. Touching <Ins> once inserts a measure after the bar where the cursor is located. Conversely, touching deletes the measure containing the cursor and moves the cursor to the next bar.

Repeat the procedure from (5) to (7) to finish the accompaniment for the song.

Making corrections

If you've made a mistake in an entry, move to the entry and touch <Clr> to delete it.

8. Press the Play [▶] button to play back the accompaniment.

9. Press the Stop [■] button to stop playback.

10. When you're done making all the settings, check to make sure the settings are correct, then touch <Execute>.

The accompaniment you've composed is transferred to the “0:New Song” memory.

Press the Play [▶] button and play the melody while the accompaniment you've composed is played back.

Note: Don't forget to save your song to disk if you want to keep it (see page 25).

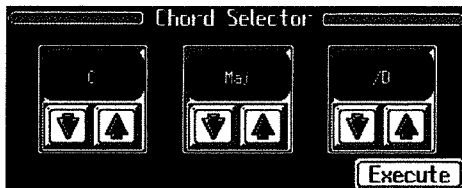
Note: With a Pad button or optional footswitch, you can insert a break in the middle of a song. See "Assigning functions to buttons and footswitches" on page 60

Entry Methods

Entering chords

You can enter a chord by playing it in the left-hand section of the keyboard. You can also enter chords using the methods described below.

1. At the Chord Sequencer screen, touch <Chord>. A screen like the one shown below appears.



2. Touch ↑ ↓ to specify a chord.

3. Touch <Execute> to enter the chord.

Note: To insert fractional chords such as Fm/C, assign the Leading Bass function to a Pad button or a pedal. See "Assigning functions to buttons and footswitches" on page 60

Selecting Divisions

1. Press one of the buttons described below to insert a Division.

| Button | Division |
|------------------------|--|
| [To Variation] | Fill-in to Variation |
| [To Original] | Fill-in to Original |
| Intro/Ending [1] & [2] | Inserts an Intro at the start of the song, or and ending at the end of the song. |

Pressing the [To Variation] button or the [To Original] button adds a fill-in at the cursor position and a Variation or Original Division at the measure after the fill-in. If you want to enter a Variation or Original Division without inserting a fill-in, you need to assign the function to a Pad button. See "Assigning functions to buttons and footswitches" on page 60.

Note: You can only insert an Intro at the beginning of a song. When you add an Intro, the number of bars corresponding to the length of the Intro is inserted automatically.

Changing the arrangement of the accompaniment

1. Press the [Style Orchestrator] button.
2. Press one of the Pad buttons.

The arrangement type appears in the bottom-right area of the screen. The smaller the number, the simpler the arrangement.

9. Editing songs

Choosing an editing function

You can use a wide variety of methods to edit a song you've recorded with the E-600.

1. Press the [Menu] button.

The Menu screen (see page 43) appears.

If <Song Edit> isn't currently visible, use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Song Edit>.

An Edit screen like the one shown below appears.



Use the Page [◀] and [▶] buttons to switch screens and display other editing functions.

| Display | Description |
|---------------|--|
| Undo | Cancels an editing operation. |
| Copy | Copies a measure or internal rhythm pattern (page 52). |
| Quantize | Corrects the timing of your music. |
| Delete | Deletes measures (see page 53). |
| Insert | Adds blank measures (see page 53). |
| Erase | Erases the data of the selected area and thus creates the equivalent amount of blank measures (see page 53). |
| Transpose | Transposes a track (see page 54). |
| Part Exchange | Exchanges (swaps) the notes of two tracks (see page 54). |
| Note Edit | Used to correct individual notes one at a time (see page 54). |
| PC Edit | Used to correct changes in Tones during the course of a song. |

Note: "PC" is an abbreviation for "Program Change", which is a command that means "select another Tone." If you want a given track to use various sounds ("Tones"), select these Tones with "PC" messages.

3. Use the Page [◀] and [▶] buttons to switch screens and choose an editing function.

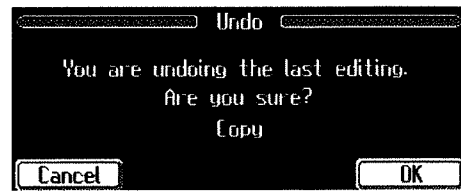
Note: Some edits cannot be undone. We recommend saving your song on a floppy disk before editing it. See page 25.

9.1 Canceling an edit operation

If the last change you made doesn't seem to produce the desired result, you can undo it. But beware: some edits can't be restored to their previous state.

1. Follow the steps "Choosing an editing function" to choose <Undo>.

Editing functions that can be undone appear on screen.



2. Touch <OK> to cancel the editing function shown on screen ("Copy" in the above example).

Touching <Cancel> takes you back to the Edit screen without undoing the operation.

9.2 Quantize

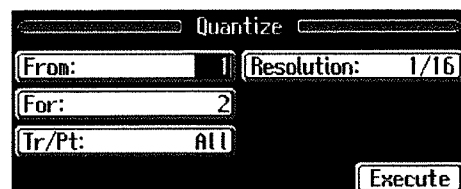
Quantize allows you to correct the timing of your notes by shifting them to the (usually) correct position. Use Quantize whenever you think the timing of a given track is a little shaky. Note that you don't need to quantize entire tracks, because you can also specify the area to be corrected.

Note: As a rule, you should never quantize all tracks of your songs because that would make them sound too mechanical.

As an example, let's say that the timing of certain quarter-notes is a little off. In this case, you can quantize the performance with quarter-note timing.

1. Follow the steps in "Choosing an editing function" to choose <Quantize>.

A screen like the one shown below appears.



From—The first measure of the excerpt you want to quantize.

For—The number of measures you want to quantize.

Tr/Pt—Track button or track number to quantize.

Resolution—The shortest notes that will remain in the quantized version.

Note: Choosing "All" for <Tr/Pt> quantizes all tracks (within the selected area).

2. Touch the screen to choose the item you want to make the setting for.

3. Use the dial or touch <▲> and <▼> to make the setting for the item.

Note: If you want to cancel quantizing, touch <Exit>. In that case, the setting is canceled and the E-600 returns to the Edit screen.

4. When you're done making all the settings, touch <Execute>.

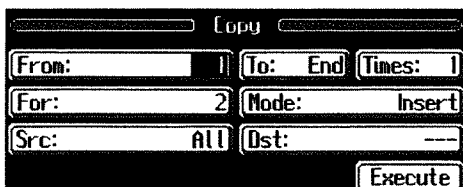
Quantizing starts. When the quantization is finished, the E-600 returns to the Edit screen.

9.3 Copy

You can copy a portion of a track to a different bar of the same or another track. This is handy for songs that contain identical phrases (such as choruses, verses, etc.) in different places.

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Copy>.

A screen like the one shown below appears.



From—The first measure you want to copy.

For—The number of measures to copy.

Src—Track button or track whose data you want to copy ("Source").

Note: Choosing "All" for <Src> copies all tracks. When you select this option, <Dst> changes to " - - -".

Note: If you choose a Track button for <Src>, you can only copy to the selected Track button. At this time, <Dst> changes to " - - -".

Note: Choosing "R.Pattern" for <Src> copies the E-600's built-in Rhythm Patterns. See "Copying rhythm patterns".

To—The measure number of the copy destination. Choose "End" to copy the data to the end of the song.

Times—The number of times to copy.

Dst—Track button or track you want to copy the data to.

Mode—Copy type:

| Display | Description |
|---------|--|
| Replace | If the selected "Dst" area already contains data, it is deleted and replaced with the copied passage. |
| Mix | If the selected "Dst" area already contains data, the newly copied passage is mixed with the previous recording. If the Tones of the copy source and destination are different, the Tone of the destination is used. |
| Insert | If the selected "Dst" area already contains data, the newly copied passage is inserted without deleting the previous recording. This makes the song longer by an amount equal to the number of inserted measures. |

2. Touch the screen to choose the item you want to make the setting for.

3. Touch <▲> and <▼> or use the dial to make the setting for the item.

To cancel copying, touch <Exit>.

4. When you're done making all the settings, touch <Execute>.

Copying starts. When copying is done, the E-600 returns to the Edit screen.

Copying rhythm patterns

The E-600 has a large number of built-in rhythm patterns. You can copy these rhythm patterns to create a rhythm part. For more information about the kind of Rhythm Patterns, please refer to the "Rhythm pattern list" at the end of this manual.

Rhythm patterns can only be copied to track D(10) (the [Rhythm] button).

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Copy>.

2. Touch <Src>, and use the dial to choose "R.Pattern".

The <From> column displays the Rhythm Pattern's name and number of bars.

<Dst> is fixed at "Part D(10)", and can't be changed.

Note: Switching <Src> to something other than "R.Pattern" is the same as copying tracks (see above).

3. Touch the screen to choose the item you want to make the setting for.

4. Touch <▲> and <▼> or use the dial to make the setting for the item.

To cancel copying, touch <Exit>.

5. Press the Play [▶] button to audition the rhythm pattern.

Press the Stop [■] button to stop playing the rhythm pattern.

6. When you're done, touch <Execute>.

Copying starts. When copying is done, the E-600 returns to the Edit screen.

Note: You can also record the rhythm pattern. See "Working with rhythm patterns" on page 47.

9.4 Delete

The Delete function allows you to get rid of measures (and the data they contain) you no longer need. When a portion of a track is deleted, the rest of the performance is shifted up to fill the gap.

Note: Once a measure has been erased, it can't be restored.

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Delete>.

A screen like the one shown below appears.

From—The first measure you want to delete.

For—The number of measures to delete.

Tr/Pt—Track button or track to delete.

Note: Choosing "All" for <Tr/Pt> deletes the same passage from all tracks.

2. Touch the screen to choose the item you want to make the setting for.
3. Touch <▲> and <▼> or use the dial to make the setting for the item.

To cancel deletion of the measure, touch <Exit>.

4. When you're done making all the settings, touch <Execute>.

The deletion process starts. When the deletion is finished, the E-600 returns to the Edit screen.

9.5 Insert

You can add blank measures if it turns out you forgot to record a song part. Note that if that area should contain material that is already available, you can also set the Copy function to *Insert* and copy the material to the desired position (see page 52).

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Insert>.

A screen like the one shown below appears.

From—Location of the first measure you want to insert.

For—The number of measures to insert

Tr/Pt—Track button or track where you want to insert blank measures.

Note: Choosing "All" for <Tr/Pt> means that the selected number of measures will be inserted into all tracks.

2. Touch the screen to choose the item you want to make the setting for.

3. Touch <▲> and <▼> or use the dial to make the setting for the item.

To cancel deletion of the measure, touch <Exit>.

4. When you're done making all the settings, touch <Execute>.

When insertion is finished, the E-600 returns to the Edit screen.

9.6 Erase

Erase is a function that gets rid of the data contained in the specified measures without deleting the measures themselves. If you want to shorten your song, use "Delete". Unlike Delete, the Erase function also allows you to select the type of data to erase. You thus do not need to erase all data contained in the selected measures.

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Erase>.

A screen like the one shown below appears.

From—The first measure in the passage you want to blank out.

For—The number of measures to erase.

Tr/Pt—Track button or track number to blank out.

Note: Choosing "All" for <Tr/Pt> blanks out the same place in all tracks.

Event

Events (MIDI data) to erase.

All—Erases all performance information, such as the notes, tempo, program changes, and volume-level changes.

Tempo—Erases tempo information. By erasing the tempo information for all bars, you can change a song with tempo variations to one with a uniform tempo. In this case, please choose "All" for <Tr/Pt>.

Program change—Erases program change information (see page 46).

Note—Erases only note messages.

Except Note—Erases performance information for everything but notes.

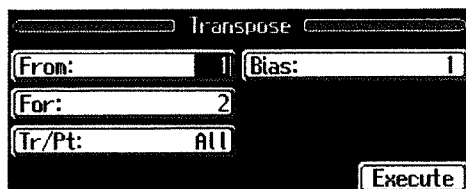
Expression—Erases Expression (volume change, CC11) information.

2. Touch the screen to choose the item you want to make the setting for.
3. Touch <▲> and <▼> or the dial to make the setting for the item.
To cancel the erase operation, touch <Exit>. The E-600 goes back to the Edit screen.
4. When you're done making all the settings, touch <Execute>.
The selected data is erased. When erasing is finished, the E-600 returns to the Edit screen.

9.7 Transposing tracks

You can transpose individual tracks, which means that the pitch of all notes within the selected range changes. This can be put to good use for the last choruses of your songs: copy them several times (see page 52) and transpose every chorus section by "+2" (this is called a *modulation*).

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Transpose>.
A screen like the one shown below appears.



From—The first measure you want to transpose.
For—The number of measures to transpose.
Tr/Pt—Track button or track number to transpose
Value—The transposition interval. You can choose a value between -24 (two octaves lower) to +24 (two octaves higher), in semitone increments.

Note: Choosing "All" for <Tr/Pt> transposes the same passage of all tracks (except the drums).

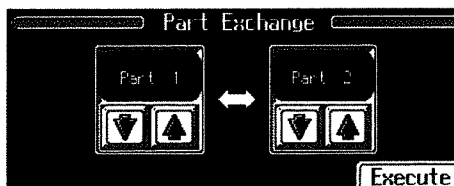
2. Touch the screen to choose the item you want to make the setting for.
3. Touch <▲> and <▼> or the dial to make the setting for the item.
To cancel transposition, touch <Exit>.
4. When you're done making all the settings, touch <Execute>.
The selected measures and track(s) are transposed. When transposition is finished, the E-600 returns to the Edit screen.

9.8 Part Exchange

You can exchange the notes recorded for a particular track with the notes recorded for another track.

Note: As stated earlier, the display makes a distinction between Track buttons (Tr) and "Parts" (Pt). The reason why "Pt" is being used that there are no physical tracks. The distinction is based on MIDI channels.

1. Follow the steps in "Choosing an editing function" on page 51 to choose <Part Exchange>.
A screen like the one shown below appears.



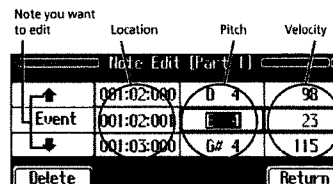
2. Use the ↑ ↓ buttons to select the tracks you want to exchange.
If you want to cancel the Part Exchange, touch <Exit>.
3. When you're done making all the settings, touch <Execute>.
When the part-exchanging process is finished, the E-600 returns to the Edit screen.

9.9 Step edit functions

Note Edit

You can make corrections in a recorded performance one note at a time. You can make the corrections described below.

- Delete notes that should not have been recorded in the first place.
 - Change the pitch of a single note
 - Change the key velocity of a single note
1. Follow the steps in "Choosing an editing function" on page 51 to choose <Note Edit>.
A screen like the one shown below appears.



The display uses the "Measure : Beat : Clock" format. A Clock is a unit of time that's shorter than a beat.

2. Use the Page [◀] and [▶] buttons to choose the track that contains the note you want to change.
The track (Part) number appears at the top of the screen.

3. Use the Bwd [◀◀] and Fwd [▶▶] buttons or ↑ ↓ on the screen to find the event you want to correct.

You can also touch <Event> and use the dial to select the note you want to edit.

4. When you've found the note you want to correct, touch <Pitch> or <Velocity> for the note.

5. Use the dial to correct the pitch or velocity. If you want to delete the note, touch <Delete>.

6. When you're done making all the settings, touch <Execute>.

The E-600 returns to the Edit screen.

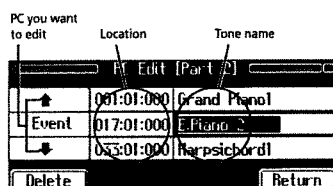
PC Edit

Sometimes, a track is shared by two instrumental parts, which means that the sounds (or Tones) in question need to be selected automatically. There is a MIDI message that allows you to do just that. It is called "program change" (or "PC" for short).

On the following page, you can replace existing program changes with other numbers (so as to use other Tones than the ones originally selected), or delete program changes you do not need after all. For your convenience, the display use the Tone names rather than the actual (MIDI) program change numbers.

1. Follow the steps in "Choosing an editing function" on page 51 to choose <PC Edit>.

A screen like the one shown below appears.



The display uses the "Measure : Beat : Clock" format. A Clock is a unit of time that's shorter than a beat.

2. Press the Page [◀] and [▶] buttons to choose the track that contains the program change you want to change or delete.

The track (Part) number appears at the top of the screen.

3. Use the Bwd [◀◀] and Fwd [▶▶] buttons or ↑ ↓ on the screen to find the note you want to correct.

You can also touch <Event> and use the dial to select the "PC" you want to edit.

4. When you've found the Program Change you want to modify, touch <Tone Name> on the screen.

5. If you want to delete the Program Change, touch <Delete>. —Otherwise—

6. Press the Tone buttons, or rotate the dial to choose a Tone.

7. When you're done making all the settings, touch <Return>.

The E-600 returns to the Edit screen.

9.10 Changing a song's initial (preset) tempo

You can change the basic tempo of a composition.

The basic tempo is the value that will be automatically set when you start playback of the song in question. Every song (or Standard MIDI File) contains a preset tempo value. Here is how to change it, which may be necessary if you deliberately chose a slower tempo for recording your material (e.g. ♩ = 60) but would like the song to be played back at e.g. ♩ = 130.

1. Press the Tempo [-] and [+] buttons to choose a tempo.

2. Press and hold the Rec [●] button and press the Reset [◀] button.

The song's basic tempo changes. Save the song on a floppy disk.

Note: The changed setting for the basic tempo is discarded when you turn off the power or choose a different song.

Note: If the song you're working contains tempo changes, press the Reset [◀] button to go back to the beginning of the song before you carry out this operation. Changing the tempo without returning to the start of the song causes the proportion by which the tempo is altered at the location of the tempo change to affect the overall tempo of the composition.

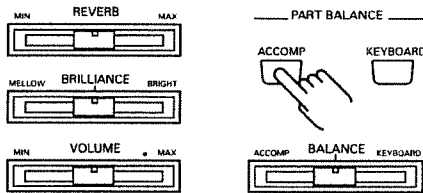
10. Other functions

10.1 Balance settings

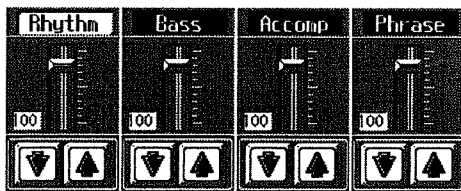
We already showed you how to change the balance between the Arranger (Music Styles) and the parts you play on the keyboard. See "Balance of the accompaniment and the keyboard" on page 21.

Balancing the Arranger parts

1. Press the [Accomp] button.



A screen like the one shown below appears.



| Display | Arranger part |
|---------|---|
| Rhythm | Rhythm |
| Bass | Bass, Bass Tone |
| Accomp | Accompaniment 1~3 |
| Phrase | A short phrase that is played when a Pad button is pressed (see page 35). |

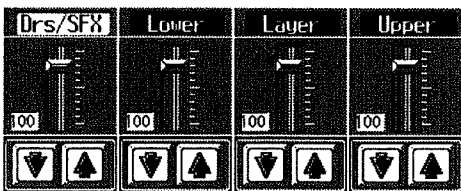
2. Touch \uparrow \downarrow to adjust the volume of the respective Parts.
Touch <Exit> to go back to the previous screen.

Balancing the "Keyboard" parts

The following page allows you to set the volume of all parts you can play "live" (on other Roland instruments, these are called the *Realtime Parts*).

1. Press the [Keyboard] button.

A screen like the one shown below appears.



| Display | Description |
|---------|--|
| Drs/SFX | Volume of percussion instruments/effects played via the keyboard (see page 17). |
| Lower | Volume level of the Tone displayed in the upper-left area of the Basic screen (see page 30). |
| Layer | Volume level of the Tone displayed in the bottom-right area of the Basic screen (see page 29). |
| Upper | Volume level of the Tone displayed at the upper-right area of the Basic screen. |

2. Touch \uparrow \downarrow to adjust the volume of the respective Parts.
Touch <Exit> to go back to the previous screen.

10.2 Style Converter

You can take a song you've composed yourself and extract the portions you need to create your own original Music Style. This function is called the "Style Converter". Also, a Music Style you've created yourself is called a "User Style".

The Style Converter has an "Auto Mode" for creating Music Style simply from a performance with a single chord, and a "Manual Mode" for creating a Music Style from a performance of three chords (major, minor, and diminished seventh).

Creating a Style in Auto Mode

1. Use the 16-track sequencer to record the song for making a Music Style (see page 45).
- Use major, minor, or diminished seventh chords in your song, preferably diminished seventh chords to compose the song.
 - Also work on the introduction and ending of your song. These can be turned into Intro and Ending patterns.
 - A Music Style is made up of five parts. The parts correspond to 16-track sequencer tracks as shown below.

| | |
|-----------------|------------------------|
| Rhythm | Pt ^a D (10) |
| Bass | Pt 2 |
| Accompaniment 1 | Pt 7 |
| Accompaniment 2 | Pt 8 |
| Accompaniment 3 | Pt 9 |

a. The numbers correspond to the MIDI channel

Note: If you want to extract the data of a part other than Pt 2, 7, 8, 9, or D, see "Selecting the tracks to be converted (Part Assign)" on page 58.

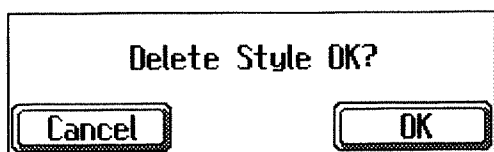
2. Press the [Menu] button.



If <Style Converter> isn't currently visible, use the Page [◀] and [▶] buttons to switch screens.

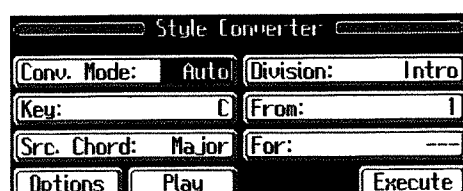
3. Touch <Style Converter>.

If the internal memory already contains a User Style, a message like the one shown below appears.



- Touch <Cancel> to display the Menu screen, then save the User Style on a floppy disk or in the internal memory (see page 59).
- Touch <OK> to erase the previous User Style and store the new one.

A screen like the one shown below appears.



Conv. Mode—Changes the Style Converter Mode (Auto/Manual)

Key—The basic key of the song. This information is extremely important to ensure that your new User Style sounds the way you want it to (i.e. E major when you specify an E major chord, A minor, when you play that chord, etc.). Not specifying the key means that the key of your Music Style will most likely be wrong in a “real life” situation.

Src. Chord—The chord played by the excerpt you want to convert.

Division—The pattern you want to create using the selected excerpt:

| Display | Music Style division |
|-------------|---------------------------------|
| Intro | Intro |
| Original | Original accompaniment pattern |
| Fill to Var | Fill-in to Variation |
| Variation | Variation accompaniment pattern |
| Fill to Org | Fill-in to Original |
| Ending | Ending |

Note: If you select “Fill to Var” (Fill-in to Variation) or “Fill to Org” (Fill-in to Original) as the Division, you can only extract one measure. The number of measures may be limited for other Divisions as well.

From—The first measure to be converted.

For—The number of measures to convert.

Note: Touch <Exit> to go back to the Menu screen.

4. Touch <Conv. Mode>, then use <▲> and <▼> or the dial to switch to “Auto”.

This makes the setting for the Auto mode.

5. Touch <Key> and <Src. Chord>, then use <▲> and <▼> or the dial to enter the basic key and chord for the recorded song.

6. Touch <Division> and use <▲> and <▼> or the dial to choose a division.

7. Touch <From> and <For>, and use <▲> and <▼> or the dial to choose the measures you want to extract.

Touch <Play> at the bottom of the screen to audition the excerpt you are about to convert.

8. Repeat steps 6 and 7 to make the settings for all Divisions.

Note: If no setting is made for a Division, it uses a simple drum pattern. This means you will never end up with “empty” Divisions.

9. When you're done making all the Division settings, touch <Execute>.

The new User Style is transferred to the [Disk/User Style] memory.

Note: If you turn off the power or record a new User Style, the current User Style is lost. If you don't want to lose it, you should save it on a floppy disk (see page 59).

A Music Style contains the data described below. If a song includes data other than this, the results you get might not be what was intended.

- Note messages
- Amount of Reverb
- Amount of Chorus

Creating a Style in Manual Mode

When you create a Music Style in the Manual mode, you can clearly point up the differences in accompaniment for each individual chord.

1. Use the 16-track sequencer to record the song for making a Music Style (see page 45).

Note: When creating a Music Style in the Manual mode, be sure to record passages that contain the three chord types of diminished seventh, major, and minor.

It can be convenient to use the 16 tracks as follows:

| Chords | Rhythm | Bass | Accomp1 | Accomp2 | Accomp3 |
|---------|--------|------|---------|---------|---------|
| Major | D(10) | 3 | 4 | 5 | 6 |
| Seventh | - | 2 | 7 | 8 | 9 |
| Minor | - | 12 | 13 | 14 | 15 |

There is no need to record several versions of the drum part because it does not change when you play major/minor/seventh chords

Note: If you want to use the data of other tracks, see "Selecting the tracks to be converted (Part Assign)".

2. Press the [Menu] button and choose <Style Converter>.

3. Touch <Conv. Mode>, then use <▲> and <▼> or the dial to switch to "Manual."

This makes the setting for the Manual mode.

4. After that, the steps are the same as for "Creating a Style in Auto Mode" on page 56.

Note: Touch <Play> at the bottom of the screen to audition the excerpt you are about to convert.

Selecting the tracks to be converted (Part Assign)

1. Press the [Menu] button and choose <Style Converter>.

2. Touch <Options> at the bottom of the screen. A screen like the one shown below appears.



| Display | Description |
|------------|----------------------|
| Rhythm ch | Rhythm part |
| Bass ch | Bass part |
| Accomp 1ch | Accompaniment 1 part |
| Accomp 2ch | Accompaniment 2 part |
| Accomp 3ch | Accompaniment 3 part |

Note: "Ch" refers to the MIDI channel and thus the track of the 16-track sequencer you want to use.

3. Choose the part you want to change, and press <▲> and <▼> or use the dial to assign the desired tracks to the Arranger (Division) parts.

Note: In the Manual Mode, the type of chords appear at the bottom of the screen. Set the tracks for all chords.

4. Touch <Return> to go back to the previous screen.

10.3 Style Composer

You can create a new User Style by selecting the Rhythm, Bass, and Accompaniment 1~3 parts from different styles. This function is called the "Style Composer".

Note: You can only combine the built-in styles.

1. Press the [Menu] button.

The Menu screen (see page 43) appears.

Note: If <Style Composer> is not displayed use the Page [◀] and [▶] buttons to switch screens.

2. Touch <Style Composer>.

If the internal memory already contains a User Style, a message like the one shown below appears.



See page 57 for what to do in that case.

| Display | Part |
|---------|-----------------|
| R | Rhythm |
| B | Bass |
| A1 | Accompaniment 1 |
| A2 | Accompaniment 2 |
| A3 | Accompaniment 3 |

Touch <Exit> to go back to the Menu screen.

3. Touch the screen to choose the Part whose style you want to change.

The Part you choose appears in reverse video.

4. Press a Style Group button and touch the screen or use the dial to choose a style.

5. After choosing a Style, touch <Exit> to display the Style Composer screen.

6. Repeat steps 3, 4, and 5 to determine the style for each Part.

Note: You can mute the selected Part by touching <Clear>. You can also mute out the whole Division by touching <Mute>. For more information, see "Muting parts".

Note: You can adjust the volume of the Parts by touching <Options>. See "Changing the settings of the Arranger parts".

7. When you're done creating the new User Style, touch <Execute>.

The new User Style is transferred to the [Disk/User Style] memory.

Note: Don't forget to save your User Style to disk. See "Storing a User Style (Memorize/Save)" on page 59.

Muting parts

It is also possible to mute a given Arranger part.

1. Touch the screen to choose the part you want to mute.
2. Switch to the Division that should be affected by the Mute setting.
3. Touch <Mute>.

The Part you choose is only muted for the Division you selected.

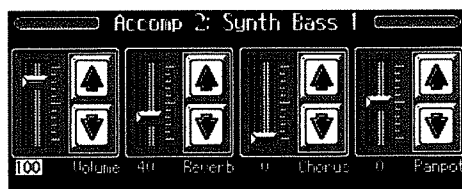
Note: Touch <Mute> to once again activate the muted part.

Note: To set the Mute function for a Division that is played only once (and therefore changes after a few seconds), touch <Mute> immediately after switching to that Division.

Changing the settings of the Arranger parts

The following functions allow you to customize existing Styles prior to "composing" (assembling) them.

1. At the Style Composer screen, touch <Options>. A screen like the one shown below appears.



| Display | Description |
|---------|---|
| Volume | Adjusts the volume level. |
| Reverb | Adjusts the amount of Reverb. |
| Chorus | Adjusts the amount of Chorus. |
| Panpot | Adjusts the stereo position of the sound. |

2. Press the Page [◀] and [▶] buttons to choose the Part you want to edit.

The Part number appears at the top of the screen.

3. Touch the corresponding ↑ ↓ to change the settings for each item.

Use the [Tone] buttons to change the Tone for the selected Part.

4. When you're done changing the settings, touch <Exit>.

The Style Composer screen appears.

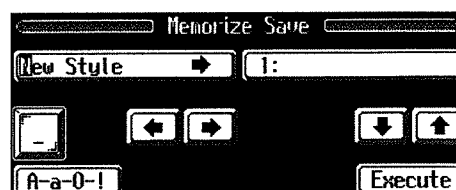
Storing a User Style (Memorize/Save)

You can save a User Style you've created yourself on a floppy disk or in the internal memory.

1. To save it to disk, insert a floppy disk in the disk drive (see page 25).
2. Press the [Disk/User Style] button.
3. At the bottom of the screen, touch <Memorize> or <Save>.

Touching <Memorize> stores a User Style in the internal memory. Touching <Save> stores a User Style on a floppy disk.

When you touch <Memorize>, the screen changes as shown below.



Note: If you touched <Save>, "Save" is displayed instead of <Execute> at the bottom of the screen.

Note: Alternatively, instead of carrying out steps 2 and 3, you can also display this screen by pressing the [Disk] button, then touching <Style Save>. The User Style is saved on the floppy disk at that time.

4. Touch ← → to scroll the cursor sideways, and enter the name of the style by using <▲> and <▼> or the dial to choose the letters.

Touch <A-a-0-!> at the bottom of the screen to change the "character set".

Each touch of <A-a-0-!> cycles the type of characters through "Upper case", "Lower case", "numerals", "symbols," then back to "Upper case".

To delete the character indicated by the cursor, touch <_>.

5. After entering the style name, use ↑ ↓ to choose the destination for saving it.

Note: If you select a location where a User Style has already been saved, the previously saved User Style is erased and the new one is saved. If you don't want to erase a previously saved tune, choose a number where no name appears in the destination column.

Note: If you want to cancel saving the User Style, touch <Exit>.

6. Touch <Execute> or <Save> at the bottom right of the screen.

The saving process starts.

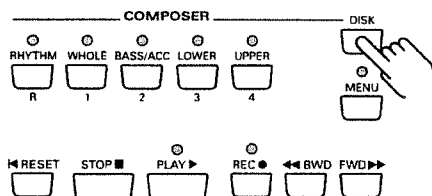
Note: Attempting to store a User Style containing a lot of data in the internal memory may cause another User Style to be erased.

Note: Never try to switch off the power while the E-600 is saving a User Style in its internal memory. Doing so may damage the internal memory, making it impossible to use this instrument.

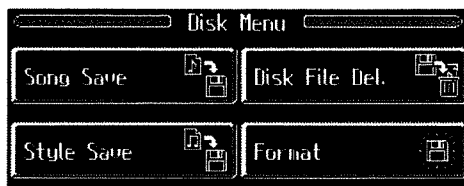
10.4 Deleting a song or User Style on floppy disk

You can erase a song, User Style, or User Program (see page 62) on a floppy disk.

1. Insert the floppy disk into the disk drive.
2. Press the [Disk] button.



The Disk Menu screen appears.

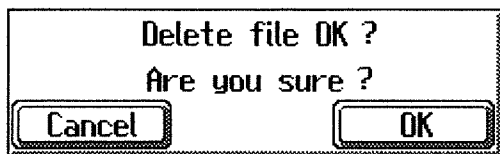


3. Touch <Disk File Del.>.

A screen like the one shown below appears.



4. Use ↑ ↓ or the dial to choose the Song, User Style or User Program which you want to delete.
5. Touch <Execute> to display a message like the one shown below.



6. Touch <OK>.
- The selected file is deleted.

Note: Touching <Cancel> cancels the operation.

10.5 Assigning functions to buttons and footswitches

You can assign a variety of different functions to the Pad buttons and the optional footswitches connected to the SOFT and/or SOSTENUTO jack(s). (The Damper function is fixed.)

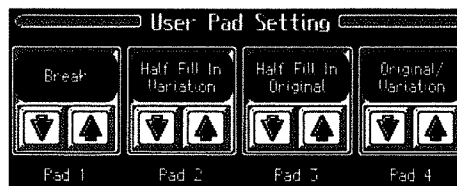
You can then call up the assigned feature simply by pressing the corresponding pedal or button.

Assigning a function to a Pad button (User Pad Setting)

1. Press the [User] button (indicator must light).



A screen like the one shown below appears.



2. Touch ↑ ↓ to assign the function to the desired Pad button.
Touch <Exit> to go back to the previous screen.

Assignable functions

Leading Bass—Toggles the Leading Bass function on or off. When on, this function causes the Arranger bass part to play the lowest note of your chords, which is not necessarily the root note of those chords.

Break—During a performance with automatic accompaniment, you can stop the accompaniment for exactly one measure.

Fill In to Variation—This does the same as the [To Variation] button.

Fill In to Original—This does the same as the [To Original] button.

Fill In—A fill-in is inserted, but the accompaniment pattern after that doesn't change.

Half Fill In Variation—This plays a fill-in half a measure long, then switches to the Variation accompaniment pattern. In the case of a 4/4 time signature, the Fill-In measure thus only lasts 2 beats (2/4). This is sometimes used in pop music.

Half Fill In Original—This plays a fill-in half a measure long, then switches to the Original accompaniment pattern.

Original/Variation—This changes the accompaniment pattern without inserting a fill-in.

Arranger Reset—This function may come in handy when you need to accompany a singer or musician. It allows you to return to the first bar/beat of the current Music Style pattern if it turns out that the E-600's and the singer's/musician's timing no longer match.

Intro 1/Ending 1—This does the same thing as the Intro/Ending [1] button.

Intro 2/Ending 2—This does the same thing as the Intro/Ending [2] button.

Arranger Start/Stop—This does the same thing as the [Start/Stop] button.

Orchestrator Up—This changes the automatic accompaniment to a more elaborate arrangement.

Orchestrator Down—This changes the automatic accompaniment to a simpler arrangement.

Melody Intelligence—This toggles the Melody Intelligence function on and off.

Fade In/Out—This starts the automatic accompaniment with a fade-in (where the volume gets progressively louder), or ends it with a fade-out (where the volume gets progressively softer).

Rotary Slow/Fast—This switches the speed of the rotary effect.

Glide—The note's pitch momentarily drops, then gradually returns to its original pitch. This can be effective for simulating instruments like a Hawaiian guitar.

Composer Play/Stop—This does the same thing as the Play [▶] button and the Stop [■] button.

Punch In/Out—During Punch-in recording, this starts and stops recording (see page 44).

Tap Tempo—This sets the tempo according to the timing with which you tap the button.

Note: The functions you assign to the Pad buttons/footswitches are not available after pressing the [Style Orchestrator] button or the [Phrase] button.

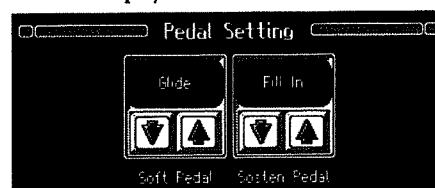
Note: Turning off the power to the E-600 cancels any assignments of functions to the Pad buttons. You can, however, save your assignments to a User Program (see page 62).

Assigning a function to an optional footswitch

An optional DP-2, DP-6, or BOSS FS-5U footswitch connected to the E-600's SOFT or SOSTENUTO jack can perform two functions: a) you can use it as Soft or Sostenuto pedal or b) for performing other useful functions.

1. Touch <Options> on the Organ (see page 16) or the Basic screen (see page 12).

2. Use the Page [◀] and [▶] buttons to switch screens and display the screen shown below.



3. Touch ↑ ↓ to assign the function to the desired pedal.

Touch <Exit> to go back to the previous screen. In addition to the functions you can assign to the Pad buttons, the following functions are available.

Functions assignable only to footswitches

Upper Soft—This causes the footswitch connected to the SOFT jack to act as Soft pedal. See "PEDALS connectors" on page 11 for details.

Upper Sostenuto—This causes the footswitch connected to the SOSTENUTO jack to act as Sostenuto pedal.

Lower Damper—Damper function for the Lower part (the left half of the keyboard in Split mode).

Bend Up—This raises the pitch of the notes you play on the keyboard ("Pitch Bend").

Bend Down—This lowers the pitch of notes you play on the keyboard.

Note: If you've assigned "Leading Bass" to a pedal, the Leading Bass function is active when the footswitch is down (pressed). In other words, the footswitch does not function as on/off switch.

Note: You can vary the maximum range of the pitch change when you've selected "Bend Up" or "Bend Down". See "Changing the Bend Range" on page 17.

10.6 Octave Shift

In Split (see page 29) and Layer modes (see page 30), you can transpose the pitch of the notes you play in one-octave steps. This function is called "Octave Shift".

For instance, you can make the pitch of the keyboard's left-hand part match the pitch of the right-hand part.

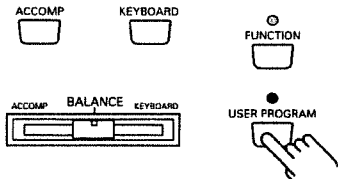
Note: This function is not available in Piano or Whole mode.

1. Press the Tone button for the Tone you want to play to display the Tone Selection screen.
2. Touch <Octave -> and <Octave +> to adjust the pitch of the sound.
<Octave +> raises the pitch one octave. <Octave -> lowers the pitch one octave.
The settings range is 2 octaves up/down. The selected octave is displayed at the bottom of the screen.

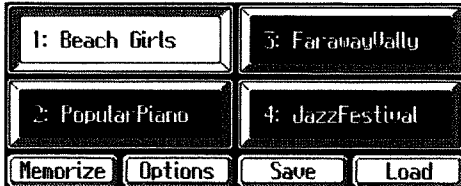
10.7 User Programs

All front-panel and function settings (including the selection of a Music Style, Tones for the Realtime parts, etc.) can be saved as "User Programs" and recalled whenever you need them. This allows you to reconfigure your E-600 at the press of a button – sorry: Touch Screen area...

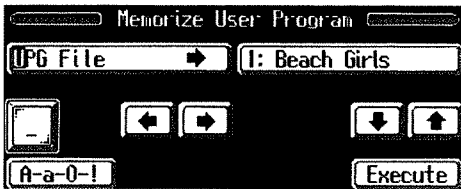
1. Press the [User Program] button.



A screen like the one shown below appears.



2. Touch <Memorize>.
The screen changes as shown below.



3. Touch <<> to move the cursor, and enter the name of the button with the <▲> and <▼> or the dial to choose the letters.

Touch <A-a-0-!> at the bottom of the screen to change the type of script. See also page 59.

4. After entering the name, touch ↑ ↓ to choose a destination for saving the button settings.
If you want to cancel storing, touch <Exit>.

5. Touch <Execute> to store the button settings in the E-600.

Note: You can restore a User Program to its factory default setting. See "Restoring the factory settings" on page 71.

Selecting a User Program

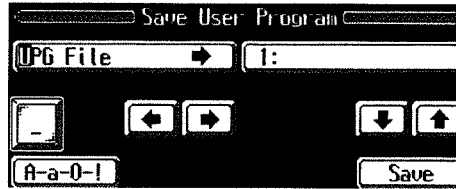
1. Press the [User Program] button.
2. Press the Page [◀] and [▶] buttons and the Touch Screen to select the User Program you want to call up.

Note: Ordinarily, all setting changes when you touch the Touch Screen. You can, however, delay or suppress the selection of the Music Style contained in your User Programs. See "Dissociating the Arranger parameters from the other User Program settings" on page 68.

Saving User Programs on floppy disk

User Programs stored in the E-600's internal memory can be saved on floppy disk as a single set (that is, all User Programs in one go).

1. Insert a floppy disk in the disk drive.
2. Press the [User Program] button.
3. Touch <Save> at the bottom of the screen.
A screen like the one shown below appears.



4. Enter a name for your User Program Set. See page 59.

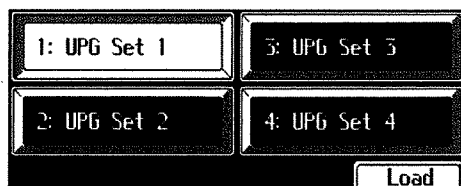
5. After you've entered a name, touch ↑ ↓ to choose a destination for saving the User Program Set.
Note: If you save a User Program Set at a place where another User Program Set has already been saved, the old Set is overwritten (and thus erased). Most of the time, it is wiser to select a location that has no name.

If you want to cancel saving your User Program Set, touch <Exit>.

6. Touch <Execute> to start saving.
Note: You can erase User Program Sets you no longer need. Be careful though: a deleted User Program Set cannot be restored. See "Deleting a song or User Style on floppy disk" on page 60.

Loading a User Program Set from disk

1. Insert the floppy disk into the disk drive.
 2. Press the [User Program] button.
 3. Touch <Load> at the bottom of the screen.
- A screen like the one shown below appears.



Touch <Exit> to go back the previous screen.

4. Touch the screen to select the User Program Set you want to load.
5. Touch <Load> at the bottom of the screen.

Note: Loading a User Program Set from a floppy disk erases all User Programs stored in the E-600's internal memory.

10.8 Panel Lock: disabling all buttons

You can disable all of the buttons. This feature is called "Panel Lock". This can keep children or others from altering the settings by accidentally pressing the buttons.

Note: When the panel is locked, only the Grand Piano 1 sound is played.

1. Lower the volume all the way, then turn off the power.
2. While holding down the [Function] button, switch on the power.

This disables all buttons.

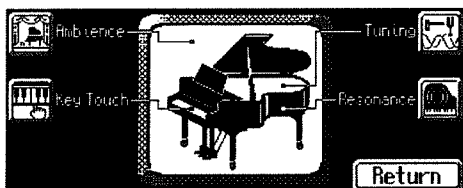
Playing the keyboard now produces a Grand Piano 1 sound.

Switching the power off and back on again cancels Panel Lock and returns the E-600 to its usual state.

11. Changing various settings

11.1 One-Touch Piano settings

At the Piano screen (see page 16), touch <Customize> to display the screen shown below.



This is called the Piano Customize screen.

| Display | Description |
|-----------|--|
| Ambience | Allows you to select the (imaginary) location where you are playing the piano. |
| Key Touch | This adjusts the keyboard's touch sensitivity. |
| Tuning | This changes the tuning of the piano. |
| Resonance | This adjusts the sympathetic resonance. |

What's Sympathetic Resonance?

When you press the damper pedal on an acoustic piano, the sound of the strings that were struck resonates with other strings, adding rich reverberations and broadness to the sound. This resonance is called "Sympathetic Resonance".

You can make the settings for an item by touching the corresponding icon.

Touch <Return> to go back to the Piano screen.

Ambience

You can simulate the acoustic environment of a concert hall, a studio, or other venue.

1. At the Piano Customize screen, select "Ambience". A screen like the one shown below appears.



| Display | Description |
|-----------|------------------------|
| Ground | On a large open ground |
| Room | In a small room |
| Lounge | A large room |
| Studio | A recording studio |
| Gymnasium | In a gymnasium |
| Hall | Concert hall |
| Dome | A dome ballpark |
| Cave | A cavern |

2. Touch \uparrow \downarrow to choose the type of performance space.

3. Touch <Wide> to add a further sense of expansion to the performance space you've chosen.



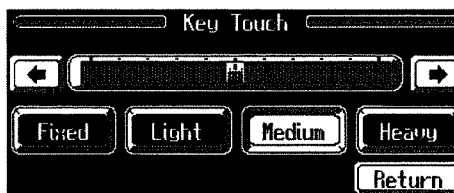
Touch <Std> to return it to its original value.

Touch <Return> to go back to the Piano Customize screen.

Key Touch

It is also possible to change the response to your playing strength, which may be necessary for children.

1. At the Piano Customize screen, select "Key Touch". A screen like the one shown below appears.



| Display | Description |
|---------|--|
| Fixed | Notes are sounded at a constant volume level, regardless of how lightly or forcefully you strike the keys. |
| Light | This sets the keyboard to a light touch. |
| Medium | This sets the keyboard to the standard touch. |
| Heavy | This sets the keyboard to a heavy touch. |

2. Touch <Fixed>, <Light>, <Medium>, or <Heavy> to make the setting for keyboard touch.

3. To make fine adjustments, touch \leftarrow \rightarrow .

The on-screen bar graph shows the keyboard touch.

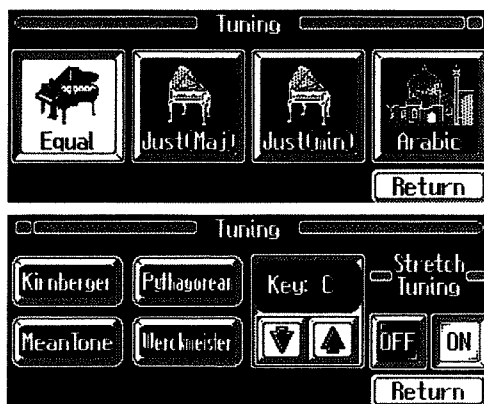
Touch <Return> to go back to the Piano Customize screen.

Adjusting the tuning

Choosing the tuning

You can play classical music such as baroque pieces using their original tuning. Most modern songs are composed and played with the assumption that equal temperament (the most common tuning in use today) will be used, but when classical music was composed there were a wide variety of other tuning systems (scales) in existence. Playing a composition with its original tuning lets you enjoy the sonorities of the chords that the composer originally intended.

1. At the Piano Customize screen, select “Tuning”. One of the screens shown below appears.



2. Use the Page [◀] and [▶] buttons and the Touch Screen to select the tuning system.

You can choose from among the eight tunings described below.

Equal (equal temperament)—This tuning divides an octave into 12 equal parts. Every interval produces about the same amount of slight impurity. This setting is in effect when you turn on the power.

Pythagorean (Pythagorean scale)—This scale devised by the philosopher Pythagoras eliminates dissonance in fourths and fifths. Dissonance is produced by third-interval chords, but melodies are euphonious.

Just Major—This scale eliminates dissonance in fifths and thirds. It is unsuited to playing melodies and cannot be transposed, but produces beautiful chords.

Just Minor—The scales of the major and minor just intonations are different. You can get the same effect with the minor scale as with the major scale.

Mean Tone—This scale makes some compromises in just intonation, enabling transposition to other keys.

Werckmeister—This is a combination of the mean tone and Pythagorean scales. Performances are possible in all keys (first technique, III).

Kirnberger—This scale is a modification of the Meantone and just intonations that permits greater freedom in transposition to other keys. Performances are possible in all keys (III).

Arabic—Arabic scale (quarter tones).

3. Touch ↑ ↓ to choose the tonic/fundamental. When playing with tuning other than equal temperament, you need to specify the tonic (fundamental, root) according to the key of the song to be performed (that is, the note that corresponds to “C” for a major key or to “A” for a minor key).

Note: If you choose Equal there's no need to select a note.

Changing the tuning curve (Stretch Tuning)

A piano is generally tuned to a pitch with a lower bass range and a higher treble range than equal temperament. This special tuning method for pianos is called “Stretch Tuning”

A graph that shows the tuning is called a “tuning curve”. Changing the tuning curve produces a warmer sound.

1. Touch <ON> or <OFF> in the Stretch Tuning field.

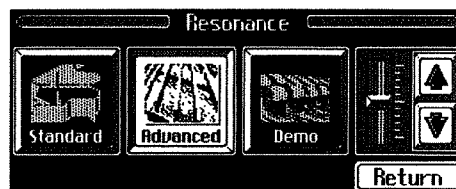
ON—This tuning curve expands the bass and treble ends somewhat. This is especially suited for piano solos. This setting is in effect when you turn on the power.

OFF—This is the standard tuning curve. It's suited for Layer Play and ensemble performances with other instruments.

Touch <Return> to go back to the Piano Customize screen.

(Sympathetic) Resonance

1. At the Piano Customize screen, select “Resonance”. A screen like the one shown below appears.



Standard—This replicates the resonance inside a piano.

Advanced—This simulates the vibrations imparted to other free strings when a key is played, thus providing the same warmth as the reverberations of an acoustic piano.

Demo—In addition to the effects of Advanced, this also replicates the noise when you depress the pedal.

2. Touch <Standard>, <Advanced>, or <Demo> to choose the type of resonant sound.
3. Touch ↑ ↓ on the right side of the screen to adjust the amount of Resonance.

Touch <Return> to go back to the Piano Customize screen.

Note: If you use the Voice Transformer or the Harmonist (see page 28), the resonant sound may sometimes be reset to its original value.

Note: When you've chosen <Demo>, touching <Return> changes the setting for resonant notes to <Advanced>.

11.2 One-Touch Organ settings

Adjusting the Footage

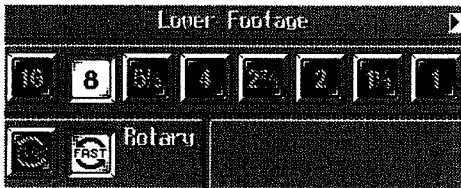
When you've selected Jazz Organ, you can adjust the footage.

What's Footage?

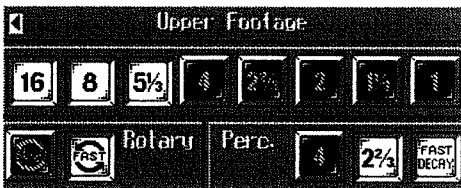
A device for combining different frequencies to create the sound you want is called "Footage". The on-screen values represent the lengths of the pipes on a pipe organ. Reducing the pipe length by half produces a note an octave higher, and doubling the length produces a sound an octave lower. This means that with <8> as the basic value, <16> produces a note one octave lower, and <2> produces a note two octaves higher.

1. Touch <Footage> at the bottom-left of the Organ screen (see page 16).

A screen like the one shown below appears.



On the above screen, you can change the Tone of the left-hand section of the keyboard.



Here you can change the Tone of the right-hand section of the keyboard.

Use the Page [◀] and [▶] buttons to switch between these two screens.

2. Try experimenting by touching different icons to change the Tone for the left-hand section of the keyboard.

The frequency components of "light" icons are played.

Note: When the icons are dark, no sound is heard when you finger the keyboard.

3. You can also use the icons in the <Perc.> column to add accents to the onset of the note (the percussive component).

You can use Perc. <4> or Perc. <2 2/3> to change the percussive sound. You can't set both to "On" at the same time.

makes the percussive portion shorter.

Touch <Exit> to go back to the Organ screen.

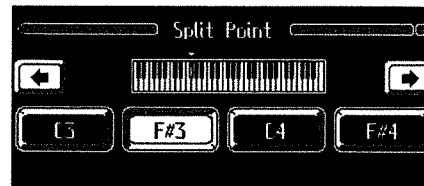
Note: For more about Rotary, see "Changing the Rotary effect" on page 16.

Changing the Organ split point

When you've selected Jazz Organ, the right- and left-hand sections of the keyboard play different Tones. You can change the location where the keyboard is divided (the split point).

1. At the Organ screen, touch <Options> at the bottom right of the screen.

2. Use the Page [◀] and [▶] buttons to display a screen like the one shown below.



3. Touch <C3>, <F#3>, <C4> or <F#4>.

The key you choose becomes the split point. The default at power-on is "C4".

Note: The key you choose as split point belongs to the right-hand section of the keyboard.

4. Use ◀▶ to select another key than the predefined ones as split point.

You can set the split point within a range of C3 to C5.

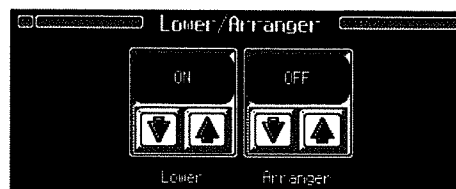
Touch <Exit> to go back to the Organ screen.

Using the Arranger in Organ mode (Arranger on/off)

Usually, only the Rhythm part of the Arranger is active in Organ mode, which is probably what you need most of the time. It means that the Arranger acts as "rhythm/beat box" for your "organ". There may be times, however, when you also want to use the Arranger's melodic accompaniments. And that's what this page is for.

1. At the Organ screen, touch <Options> at the bottom right of the screen.

2. Use the Page [◀] and [▶] buttons to display a screen like the one shown below.



3. Touch <Arranger> ↑ ↓ to select "ON" or "OFF".

When Arranger is set to “ON”, you can use the automatic accompaniment. When set to “OFF”, you hear only the rhythm pattern.

Note: The Arranger can be started and stopped in the usual ways (see page 33).

Touch <Exit> to go back to the Organ screen.

Note: If you’ve selected something other than Jazz Organ, you can’t use Chord Intelligence (see page 35).

Switching off the Lower part (Lower on/off)

After switching on the Arranger (see above) you may no longer need a second organ Tone for your left hand. In that case, switch it off:

1. At the Organ screen, touch <Options> at the bottom right of the screen.
2. Use the Page [◀] and [▶] buttons to select the “Lower/Arranger” page (see above).
3. Touch <Lower> ↑ ↓ to select “ON” (Lower part on) or “OFF” (Lower part off).

Note: If the Lower part is off, the Chord and Bass Tones (see page 68) take over whenever you start playing with your left hand without starting the Arranger.

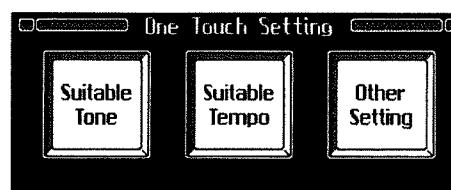
Touch <Exit> to go back to the Organ screen.

11.3 Arranger settings

One Touch Setting (filters)

When you turn on the power and choose another Style, the tempo and Tone that you play via the right-hand section of the keyboard are selected automatically to match the Music Style (that is what “One Touch” is all about). If you like, you can filter the tempo or Tone messages (or both) contained in every Music Style, so that selecting another Music Style no longer changes the tempo or selects another Tone for your right hand.

1. At the Basic screen, touch <Options> at the bottom right of the screen.
2. Use the Page [◀] and [▶] buttons to display a screen like the one shown below.



Suitable Tone—A suitable Tone for a Music Style will be selected automatically.

Suitable Tempo—The suitable tempo for a Music Style will be selected automatically.

Other Setting—The other settings will be suited for a Music Style.

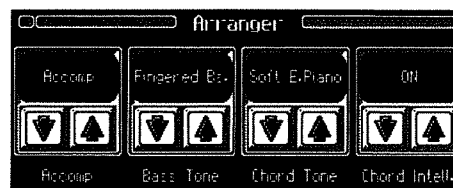
Note: All items are selected when you turn on the power.

3. Touch an icon to change the setting.
Touch <Exit> to go back to the Basic screen.

Music Style “orchestration”

Maybe you do not always need all Arranger parts. In that case, you can switch off these parts, thereby activating the Chord and Bass Tone(s).

1. At the Basic screen, touch <Options> at the bottom right of the screen.
2. Use the Page [◀] and [▶] buttons to display a screen like the one shown below.



3. Touch the <Accomp> ↑ ↓ to switch between “Accomp” and “Chord&Bs.”

Choosing <Accomp> sounds the Music Style. This is the usual setting. Choosing <Chord&Bs> sounds the Music Style’s rhythm part, and adds the Chord and Bass Tones.

Touch <Exit> to go back to the Basic screen.

Selecting Chord and Bass Tones

When automatic accompaniment is stopped and the [Sync] indicator is dark, playing a note or chord in the left half of the keyboard causes a chord to be sounded. This is called the “Chord Tone”. The root of the chord that is played at the same time is called the “Bass Tone”. The E-600 allows to select the desired Tones (i.e. sounds) for these two parts.

1. At the Basic screen, touch <Options> at the bottom right of the screen.
2. Use the Page [◀] and [▶] buttons to display the “Arranger” page (see left).
3. Touch ↑ ↓ of <Bass Tone> to select a Bass Tone, and ↑ ↓ <Chord Tone> to select a Chord Tone. Touch <Exit> to go back to the Basic screen.

Canceling Chord Intelligence

Chord Intelligence is the E-600's function that allows you to specify the desired chords (for the Arranger) by playing just one note for major chords, two for minor chords, and three (or four) for all other chords. If you're used to playing “full” chords, you may welcome the possibility to switch this function off. By default, Chord Intelligence is on.

1. Use the Page [◀] and [▶] buttons to display the “Arranger” page (see left).
2. Touch the <Chord Intell.> ↑ ↓ to select “ON” or “OFF”.

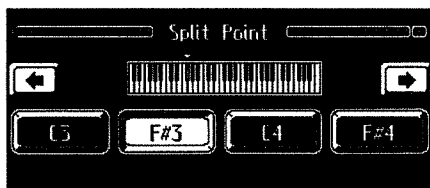
When set to “OFF”, you can't use Chord Intelligence, in which case you need to play full chords. Playing only one or two notes in the left half of the keyboard causes the Arranger's melodic parts to sound incomplete harmonies – which may be exactly what you're looking for.

Touch <Exit> to go back to the Basic screen.

Changing the Arranger's split point

You can change the location where the keyboard is divided (the split point).

1. At the Basic screen, touch <Options> at the bottom right of the screen.
2. Use the Page [◀] and [▶] buttons to display the screen shown below.



See “Changing the Organ split point” on page 66 but bear in mind that this function specifies the split point for the One Touch Arranger mode.

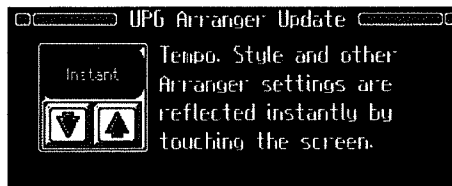
Dissociating the Arranger parameters from the other User Program settings

The UPG Arranger Update function allows you to dissociate the Arranger parameters from the remaining User Program settings. Briefly selecting a User Program thus only loads those settings that are not related to the Arranger (Music Style selection, tempo, etc., are not loaded). That allows you to reconfigure the E-600 without automatically selecting the Music Style, etc., stored for the User Program in question.

After activating this “delay function”, you need to hold the Touch Screen area in question at least two seconds in order to also load the Arranger settings.

1. Press the [User Program] button.
2. Touch <Options> at the bottom right of the screen.

A screen like the one shown below appears.



3. Touch ↑ ↓ to toggle between “Instant” and “Delayed”.

Instant—The settings related to the Arranger are also switched right away when you select a User Program.

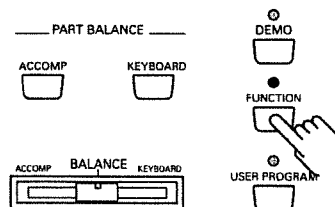
Delayed—To change the settings related to the Arranger, touch and hold the Touch Screen for a short while.

Touch <Exit> to go back to the previous screen.

11.4 Changing the standard pitch—Master Tuning

The standard pitch refers to the pitch of the middle A key (A4). If you're performing in an ensemble with other instruments, what you play together won't sound good if the standard pitches of the instruments aren't in tune with each other. The process of putting the standard pitches in tune with each other is called “Master Tuning”.

1. Press the [Function] button and confirm that its indicator lights.



- Use the Page [◀] and [▶] buttons to display the screen shown below.



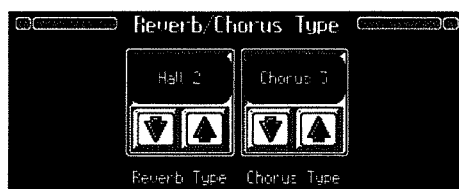
- Touch ↑ ↓ to change the standard pitch. The setting is at “440.0 Hz” when the E-600 is powered up. Press the [Function] button again to make the button’s indicator go dark and go back to the previous screen.

11.5 Effect settings

Reverb Type

This parameter allows you to specify the kind of Reverb effect (called “Type”) that will be used when you switch the Reverb processor on. Choose the one that best matches the atmosphere of the song you want to play.

- Press the [Function] button and confirm that its indicator lights.
- Use the Page [◀] and [▶] buttons to display the screen shown below.



- Touch <Reverb Type> ↑ ↓ to change the type of Reverb.

| Type | Description |
|---------------|---|
| Room 1 | Simulates the Reverb of a conference room |
| Room 2 | Simulates the Reverb of a performance lounge |
| Room 3 | Simulates the Reverb of a large, open room |
| Hall 1 | Simulates the Reverb of a large concert hall |
| Hall 2 | Simulates the Reverb of a small concert hall |
| Plate | Applies a bright, metallic Reverb |
| Delay | Repeats the sound many times, like an echo |
| Panning Delay | Makes the sound jump back and forth between the left and right speakers |

Press the [Function] button again to make the button’s indicator go dark and go back to the previous screen.

Note: Changing the type of Reverb effect may also change the setting for “Ambience” on page 64.

Chorus Type

You can change the type of Chorus that’s applied when you press the [Effects] button.

- Press the [Function] button and confirm that its indicator lights.
- Use the Page [◀] and [▶] buttons to select the “Reverb/Chorus Type” page (see above).
- Touch <Chorus Type> ↑ ↓ to change the type of chorus effect.

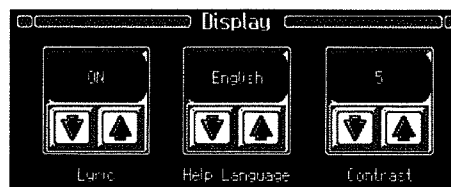
| Type | Description |
|------------------------|--|
| Chorus 1 | Light chorus effect with slow undulations |
| Chorus 2 | Light chorus effect with quick undulations |
| Chorus 3 | Deep chorus effect with slow undulations |
| Chorus 4 | Deep chorus effect with quick undulations |
| Flanger | An effect that sounds like a jet plane taking off or landing |
| Feedback Chorus | A soft sound with a Flanger effect |
| Short Delay | A short echo effect |
| Short Delay (Feedback) | A short echo with many repetitions |

Press the [Function] button again to make the button’s indicator go dark and go back to the previous screen.

11.6 Display settings

Some Karaoke music files show lyrics on screen, which may not always be practical. (Besides, these Lyrics messages are transmitted to the E-600’s MIDI OUT connector. This allows you to use a Roland LVC-1 to display the lyrics using a TV set, etc.). Furthermore, you can select the language for the Help function (see page 16) and set the contrast of the screen.

- Press the [Function] button and confirm that its indicator lights.
- Use the Page [◀] and [▶] buttons to display the screen shown below.



Press the [Function] button again to make the button’s indicator go dark and go back to the previous screen.

Hiding the on-screen Lyrics

- Touch <Lyric> ↑ ↓ to select “ON” or “OFF”. The setting is at “ON” when the E-600 is powered up.

Changing the language of the Help function

4. Touch <Help Language> ↑ ↓ to choose the language for the Help Function.

You can select <English>, <Japanese>, <German>, <Spanish>, or <French>.

Note: If you choose Japanese, the screen messages in other screens besides Help function may be displayed in Japanese as well. In other case, they are displayed in English.

Adjusting the screen contrast

5. Touch <Contrast> ↑ ↓ to adjust the contrast of the screen.

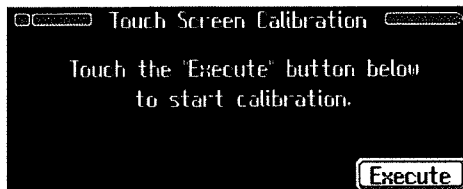
You can select a contrast level from 1 to 10.

11.7 Calibrating the Touch Screen

If you've been using the Touch Screen for some time, the on-screen icons may shift with respect to the physically active areas of the screen. You can correct this displacement when necessary by performing calibration (repositioning).

1. Press the [Function] button and confirm that its indicator lights.

2. Use the Page [◀] and [▶] buttons to display the screen shown below.



3. Touch <Execute> on the screen.

4. Touch the points indicated on the touch screen. Do this carefully, because touching a location that's different from the one indicated by the pointer may make the displacement even worse.

5. Follow the steps under "Memory Backup" to store the calibration setting.

Press the [Function] button again to make the button's indicator go dark and go back to the previous screen.

Note: If you turn the power off before doing step 5, the calibration setting will be canceled.

11.8 Changing the power-up screen (Opening Message)

This function allows you to program a message that is displayed every time you switch on the E-600 ("Hello, Maestro", or the like).

1. Press the [Function] button and confirm that its indicator lights.

2. Use the Page [◀] and [▶] buttons to display the screen shown below.



3. See page 59 for how to enter the welcome message.

4. When you're done entering the text, touch <Execute>.

Press the [Function] button again to make the button's indicator go dark and go back to the previous screen.

Note: Touching <All Clear> at the bottom of the screen to clear all of your message. Then, touching <Execute> to store the blank "message".

Note: Never switch off the power while this operation is in progress. Doing so may damage the internal memory, making it impossible to use this instrument.

11.9 Memory Backup

Ordinarily, when you turn of the power, settings return to their default values. However, some settings can be stored so that they don't disappear when you turn off the power.

This function is called "Memory Backup".

1. Press the [Function] button and confirm that its indicator lights.

2. Use the Page [◀] and [▶] buttons to display the screen shown below.



3. Touch <Execute> on the screen.

A confirmation message appears on screen.

4. Touch <OK> to store the settings in memory.

Touch <Cancel> to make the message disappear without storing the settings.

Press the [Function] button to make the button's indicator go dark and go back to the previous screen.

Note: Some settings are not included in the Memory Backup process.

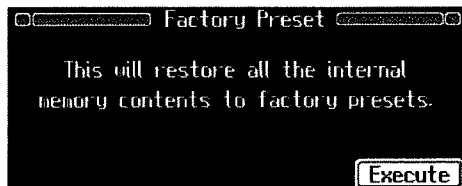
Note: Never switch off the power while this operation is in progress. Doing so may damage the internal memory, making it impossible to use this instrument.

Restoring the factory settings

The Factory Preset function allows you to cancel the settings that are memorized when Memory Backup (see above) is on. Doing so means that the E-600 returns to the preset (i.e. "Factory") settings.

Note: When you perform a Factory Preset, all settings that have been stored in memory up to then are erased and reset to their factory defaults.

1. Press the [Function] button and confirm that its indicator lights.
2. Use the Page [◀] and [▶] buttons to display the screen shown below.



3. Touch <Execute> on the screen.
A confirmation message appears on screen.
4. Touch <OK> to restore the settings to their factory defaults.
Touch <Cancel> to make the message disappear without restoring the settings.
Press the [Function] button again to make the button's indicator go dark and go back to the previous screen.

Note: Never switch off the power while this operation is in progress. Doing so may damage the internal memory, making it impossible to use this instrument.

12. Using 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 other devices to exchange messages relating to the act of making music. Every time you play on the E-600's keyboard or you start the Arranger, your instrument will send MIDI data to its MIDI OUT port. If you connect this port to the MIDI IN port of another instrument, that instrument may play the same notes as one of the E-600's parts.

MIDI 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 E-600 to a computer or hardware sequencer.

A separate publication titled "MIDI Implementation" is also available. It provides complete details concerning the way MIDI has been implemented on this instrument.

About MIDI connectors

The E-600 has three MIDI connectors. Connecting these to the MIDI connectors on a MIDI instrument makes it possible for the two instruments to control each other.

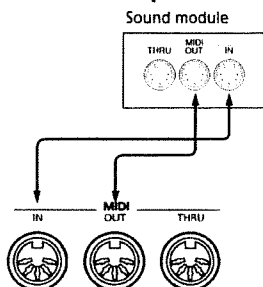
For instance, you can cause the other instrument to play the same notes as the E-600, or switch Tones on the other instrument.

MIDI OUT connector—Transmits the MIDI messages generated by the E-600 to the outside world.

MIDI IN connector—Is used to receive MIDI messages from an external instrument, sequencer, or computer. These incoming messages may instruct the receiving MIDI instrument to play notes or switch Tones.

MIDI THRU connector—Allows you to connect a third instrument. This port retransmits all MIDI messages received via MIDI IN.

Connection example



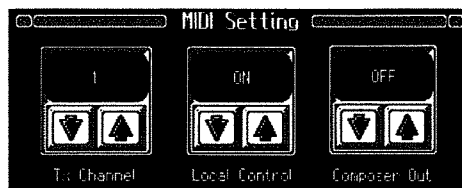
12.2 MIDI settings

Sending a recorded performance to a MIDI instrument

You can send a performance recorded on the E-600 to a connected MIDI instrument or computer.

Data is sent when set to "ON". Data is not sent when set to "OFF". The setting is at "OFF" when the E-600 is powered up.

1. Perform recording on the E-600.
2. Press the [Function] button and confirm that its indicator lights.
3. Use the Page [◀] and [▶] to select the following screen:



4. Change the <Composer Out> parameter to "ON".
5. Start recording on the connected MIDI instrument (sequencer, etc.).

Note: If you are using a sequencer, do not forget to synchronize it to the E-600 (MIDI Clock= EXT, or something to that effect).

6. Start song playback on the E-600.

12.1 Connecting the E-600 to a MIDI Instrument

1. Turn off the E-600.
2. Use MIDI cables (MSC-15, -25, or -50, sold separately) to connect the MIDI connectors on the external instrument to the MIDI connectors on the E-600.
3. You should also set the MIDI send channel and switch Local Control on or off as needed (see below).

Setting the MIDI transmit channel (TX)

MIDI has something called “Channels,” which are numbered from 1 to 16. If you hook up two devices with a MIDI cable, you won’t be able to play notes or switch tones unless both devices are set to the same MIDI channel.

The E-600 automatically selects the MIDI channel for sending. The channel setting is at “1” when the E-600 is powered up.

1. Press the [Function] button and confirm that its indicator lights.
2. Use the Page [◀] and [▶] to select the above screen.
3. Use <Tx Channel> ↑ ↓ to set the MIDI transmit channel.

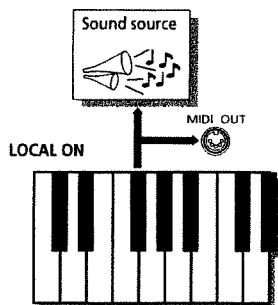
Note: If the keyboard has been split into right-hand and left-hand sections, information from the left-hand section is not transmitted.

Note: The E-600 receives information on all channels from 1 through 16.

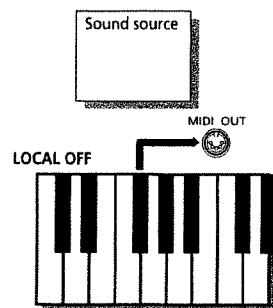
Switching Local Control on or off

The Local parameter allows you to establish or remove the connection between the E-600’s keyboard/Composer and the internal tone generator.

When set to *On* (factory setting), playing on the E-600’s keyboard or playing back a song will cause the corresponding notes to sound. If you select *Off*, the corresponding MIDI messages are no longer sent to the internal tone generator. Local doesn’t, however, interfere with the transmission of the corresponding MIDI data to the MIDI OUTput.



Setting Local to *Off*, on the other hand, means that neither the keyboard nor the Composer control the internal tone generator.



When working with a sequencer equipped with a Soft Thru (MIDI echo) function – and only if (i) you connect the E-600’s MIDI IN and OUT connectors to the external sequencer or computer, and (ii) use the E-600 as MIDI master keyboard for sequencing – you may have to set this parameter to *Off* to keep the notes from sounding twice (producing an unpleasant sound called *MIDI loop*). In all other cases, select *On*.

1. Press the [Function] button and confirm that its indicator lights.
2. Use the Page [◀] and [▶] to select the above screen.
3. Use <Local Control> ↑ ↓ to set the Local function.

Note: The setting of this parameter is not memorized when you switch the E-600 off.

Note: A MIDI sequencer is an instrument that’s used to record and play back a performance as MIDI information. Products from Roland include the Roland MT series, which integrates a sequencer and a sound generator in a single unit, and the MC series (MC-50MKII, MC-80, MC-80EX).

Note: The setting for Local Control can also be changed with a MIDI Local Control message. When an instrument in the Roland MT series is connected, a Local Control “off” message is transmitted when the MT-series instrument is powered up. When you switch on first the E-600, then the MT-series instrument, the E-600 automatically turns off Local Control.

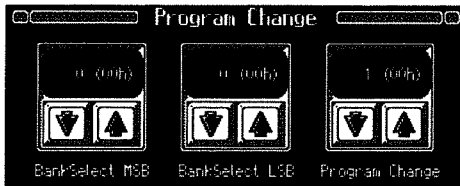
Sending Program Change messages

You can switch tones on a MIDI instrument connected to the E-600. This is a practical function for remotely controlling sound selection on the receiving instrument (connected to the E-600’s MIDI OUTput). As there is a separate screen for generating and transmitting these messages, you don’t even have to select other Tones on the E-600 itself in order to cause the external instrument to select other sounds.

When set up to send Program Change messages in the usual way, the Tone to send is selected from among 128 Tones. However, some MIDI instruments have more than 128 Tones. With such devices, the Tone is selected through a combination of Program Change messages and Bank Select messages. Bank Select messages consist of two parts: the MSB (CC00, value 0–127), and the LSB (CC32, value 0–127).

Note: Some MIDI instruments can't handle Bank Select messages. Also, there are some that do handle Bank Select messages, but don't recognize the LSB.

1. Press the [Function] button and confirm that its indicator lights.
2. Use the Page [◀] and [▶] to select the following screen:



3. Use the three ↑ ↓ pairs to set the Bank Select and Program change numbers.

Note: See the manual of the instrument you are controlling for the correspondence between its sounds and Bank Select/Program Change numbers.

13. Troubleshooting

If you think there's a problem, read this first.

The power doesn't come on.

Is the power cord connected and plugged in correctly?

The buttons don't work.

Is the panel locked (see page 63)? Turn the power off, then back on.

No sound is heard.

Has the [Volume] slider been moved all the way to the left?

Are headphones plugged in?

Has the [Balance] slider been moved all the way to the right or left?

Has the volume been set to "0" using the [Accomp] or [Keyboard] buttons (see page 56)?

Has the footage been adjusted so that no frequency components are sounded (see page 66)?

No sound is heard (when a MIDI instrument is connected).

Have all devices been switched on?

No sound is heard when the keyboard is played.

Has Local Control been set to "off" (see page 73)?

Sounds are heard twice (doubled) when the keyboard is played.

Did you switch on the Layer function (see page 29)?

When the E-600 is connected to an external sequencer, set it to the Local OFF mode. Alternatively, the sequencer could be set so its Soft Thru feature is OFF (see page 73).

Not all played notes are sounded.

The maximum number of notes that the E-600 can play simultaneously is 64. Frequent use of the footswitch connected to the DAMPER jack during automatic accompaniment or when playing along with a song on floppy disk may result in too many notes, causing some notes to drop out.

The tuning or pitch of the keyboard or song is off.

Has the setting for transposition been made (see page 40)?

Are the settings for the Temperament and tuning curve correct (see page 65)?

Is the setting for Master Tuning correct (see page 68)?

Effects cannot be applied to Tones.

It's not possible to apply more than one effect at the same time, so when a performance has been recorded on multiple tracks or when playing along with a song, the desired effect may not be available.

Can't hear the automatic accompaniment.

Has the [Balance] slider been moved all the way to the right?

Did you press the One Touch Program [Arranger] button? If the One Touch Program [Arranger] button has not been pressed, only the rhythm pattern is played.

Is the 16-track Sequencer screen displayed (see page 45)?

Certain instruments are not heard while playing a song.

Did you change the track settings (see page 46)?

Is the indicator of the Track button dark? If the button light is out, the music on that track is not heard. Press the track button.

Impossible to select a Tone or Music Style.

Has the [Demo] button been pressed? Press the button again, then choose the Tone or Music Style.

There is a slight delay before playback of a song on floppy disk starts.

There are two types of SMF music data: format 0 and format 1. If the song uses SMF format 1 data, there will be a slight delay until playback starts. Refer to the booklet that came with the music data you're using to determine the format type.

When song playback starts, the on-screen measure number reads "PU" (pickup).

If the song starts in the middle of a measure, the display shows "PU" (pickup) at the beginning of the song. After that, the measure number is displayed.

The Bwd [◀◀] and Fwd [▶▶] buttons don't work.

The fast-forward and rewind buttons are ignored while music data is being read in. Wait until processing finishes.

Pressing the Reset [◀] button doesn't return to the beginning of the song.

Some music data may contain settings that stop play at a point partway through the song. When playing such songs, pressing the Reset [◀] button moves the song to the point that has been set. Press the button several times more to return to the beginning of the tune.

The Tone has changed.

During automatic accompaniment, changing the Music Style automatically changes the Tones and tempo of the upper part of the keyboard to match the new Music Style. If you want to change only the Music Style without also altering the tempo and Tone,

see “Dissociating the Arranger parameters from the other User Program settings” on page 68.

Standard MIDI Files you play back (or use as backing) may also contain Program Changes for Track buttons [1], [3] and [4].

Chord Intelligence can't be used.

Has Chord Intelligence been switched off (see page 68)?

Is the setting for “Piano Style Arranger” active (see page 36)?

A note doesn't stop playing

Have the Chord Tone and Bass Tone been changed (see page 68)? Some Chord Tone and Bass Tone notes may be sounded continuously.

Have the Phrases been changed (see page 35)? Some phrases may be sounded continuously. Press the Pad button a second time.

Recording is not possible.

Did you press a Track button?

Has the setting for “Punch-in Recording” or “Tempo Recording” been made? Go back to the usual recording method (see page 43).

The recorded performance has disappeared.

Any performance that has been recorded is deleted when the power to the E-600 is turned off or a song is selected.

A performance cannot be restored once it's been deleted, so be sure to save it on a floppy disk before you turn off the power.

Nothing appears on screen.

The E-600 uses a liquid-crystal screen, so text may not be displayed when the ambient temperature is below zero.

Lyrics are not indicated properly in the display.

With some music files, the lyrics cannot be displayed correctly.

Lyrics data can not be saved on a floppy disk.

If you press a button while the lyrics are being shown in the display, the lyrics will disappear. To recall them, press the Play [▶] button.

The Touch Screen doesn't respond correctly.

The positioning of the Touch Screen may become displaced if some time has passed since it was last used. See “Calibrating the Touch Screen” on page 70.

Depressing a footswitch has no effect, or the effect doesn't stop.

Is the pedal connected correctly? Be sure to insert the plug all the way into the corresponding jack.

Has a different function been assigned to the pedal? See “Assigning functions to buttons and footswitches” on page 60.

Normal pedal operation is automatically enabled when the One Touch Program [Piano] button is pressed.

14. Display messages

PU

When a song with a pickup (a song that does not start on the first beat) is played back, the measure numbers will be indicated in the display as PU, 1, 2, and so forth.

Error. 00

To protect the copyright, this music file cannot be saved to disk.

Error. 01

You can only read the music file or Music Style. It cannot be saved on a floppy disk or in the internal memory.

Error. 02

The protect tab on the floppy disk is set to the Protect position. Change it to the Write position. Repeat the procedure.

Error. 03

This floppy disk cannot store the format or save any data. Insert a different disk and repeat the procedure.

Error. 04

The data cannot be saved onto this floppy disk because the format is different. Use the floppy disk in the same format. Also, you can't save User Styles and songs on the same floppy disk.

Error. 05

A new song cannot be written on this song. Select a different song number or use a different floppy disk, and repeat the procedure.

Error. 10

You forgot to insert a disk into the disk drive. Insert the disk correctly, and repeat the procedure.

Error. 11

There is not sufficient space left on the floppy disk for the data to be saved. Save the data onto a different floppy disk.

Error. 12

The floppy disk inserted into the disk drive can't be read. Be sure you're using Roland SMF Music Files. Also, if you want to save your work on floppy disk, you need to format the floppy disk first (see page 24).

Error. 13

The floppy disk was removed from the disk drive while reading or writing was in progress. Insert the floppy disk and repeat the procedure.

Error. 14

This floppy disk is damaged and cannot be used. Insert a different disk and repeat the procedure.

Error. 15

This song or music style cannot be read. Be sure you're using Roland SMF Music Files or other music

files compatible with Roland digital pianos. Also, you can only use User Programs that have been saved with the E-600 (see page 62).

Error. 16

The E-600 cannot read the floppy disk quickly enough. Press the Stop [■] button, then press the Reset [◀] button and Play [▶] button to play the song.

Error. 17

The music files cannot be edited on the E-600. Please use these music files only for playback.

Error. 30

The internal memory capacity of the E-600 is exhausted. Save the song or Music Style data on a floppy disk to delete the song data or the User Style stored on the E-600's memory.

Error. 40

The E-600 is receiving more MIDI data than it can handle in one go. Reduce the amount of MIDI data sent to the E-600.

Error. 41

A MIDI cable has been disconnected. Connect it properly and securely.

Error. 42

An excessive amount of performance data has been sent to E-600 in one go and therefore could not be recorded. Reduce the tempo and try again.

Error. 51

There is something wrong with the system. Repeat the procedure from the beginning.

Note: If the problem is not solved after you have tried several times, contact the Roland service center.

15. Specifications

E-600, Intelligent Keyboard

Keyboard—61 keys

Touch Sensitivity—Preset: 3 levels, User: 100 levels

Keyboard Modes—Whole, Split (adjustable split point), Layer, Arranger, Piano Style Arranger, Manual Drum/SFX

Sound Source—Conforms to GM/GS

Max. Polyphony—64 Voices

Tones—8 groups, 499 variations

12 Drum Sets + 1 SFX Set

Temperaments—8 types, selectable tonic, Stretched Tuning (2 types)

Master Tuning—415.3Hz ~ 466.2Hz (0.1Hz steps)

Transpose—Keyboard: -6~+5 semitones,
Playback: -24~+24 semitones

Effects—Reverb (8 types, continuously adjustable), Chorus (8 types), Sympathetic Resonance, Rotary and 40 other types

Arranger Music Styles—Internal: 12 groups, 133 styles x 4 types (Style Orchestrator), 22 Pianist Styles, Music Style Disk

Programmable Music Styles—Style Converter, Style Composer

Melody Intelligence—24 types

User Programs—Internal: 32, Floppy Disk: Max. 99 sets

Controls—Start/Stop, Intro/Ending (2 types for each style), Sync. Start, Fill In (Variation/Original), Melody Intelligence, Break, Leading Bass, Half Fill In (Variation/Original)

Metronome—Beat: 2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8, Volume: 10 levels, Metronome patterns: 11, Sounds: 6 types, Graphic: 3 types

Tracks—5/16 tracks

Song—1 song, Note Storage: ±30,000 notes, Tempo: ♩ = 20~250, Resolution: 120 ticks/♩

Recording Methods: Realtime (Replace, Mix, Auto Punch In, Manual, Punch In, Loop, Tempo), Step (On Chord Sequence mode), Beat Map

Edit: Copy, Quantize, Delete, Insert, Erase, Transpose, Part Exchange, Note Edit, PC Edit.

Rhythm Patterns: 30 types

Composer Controls—Song Select, Reset, Stop, Play, Rec, Bwd, Fwd, All Song Play, Track Select, Count In, Playback, Balance, Marker Set, Repeat, Tempo Mute

Disk Drive—3.5 inch Micro Floppy Disk drive

Disk Format: 720 K bytes (2DD) / 1.44 M bytes (2HD)

Songs: Max. 99 songs

Note Storage: ±120,000 notes (2DD), ±240,000 notes (2HD)

Playable formats: Standard MIDI Files (Format 0/1), Roland Original Format (i format)

Saving format: Standard MIDI Files (Format 0)

Rated Power Output—10 x 2 Watts

Speakers—10cm x 2 (Woofer - Bass Reflex), 3 cm x 2 (Tweeter)

Display—Graphic 320 x 128 dot backlit LCD, Touch Screen

Help Languages—English/German/French/Spanish/Japanese

Lyrics: Yes (Built-in Display, MIDI Out)

Controllers—Volume slider, Brilliance slider, Balance slider, Reverb slider, MIC Level, Alpha dial, Pitch Bender & Modulation Lever

One Touch Play—One Touch Piano, One Touch Organ, One Touch Arranger

Short Phrases—71 types

Pads—4 assignable buttons

Vocal effects—Voice Transformer, Harmonist

Other functions—Games, on-screen help, Audition, Panel Lock

Connectors—Output jacks (L/Mono, R), Damper, Sostenuuto, Soft jacks, Microphone jack (with echo), Headphone jack, MIDI In, Out, Thru

Power supply—Universal Switching Power Supply

Dimensions—1150 (W) x 410 (D) x 140 (H) mm

Weight—14 kg

Accessories—Owner's manual, Power Cord, Music Style Disk

Note: Specifications subject to change without prior notice.

16. Appendix

16.1 Music Style list

| | | | | |
|----------------------------|----------------------------|---------------------------|-----------------------|-------------------------|
| [Pop] group | Chapel | [Latin] group | [Screen] group | Music Style Disk |
| Ocean Side | Strings | Bossa Nova | Balloon Trip | Happy Pop 1 |
| MorningLight | Crystal | Habanera | Raindrops | Happy Pop 2 |
| Rock'n Pop | | Mambo | Little Steps | Sevilla |
| Rollin' | [Rock] group | Salsa | Cinema | Polka 2 |
| 8Beat Pop | 80's Rock | Samba | Broadway | S Country |
| 16Beat Pop | Rock 1 | Rhumba | WesternMovie | Tango 2 |
| Swing Pop | Rock 2 | Tango | SFX Movie | Tango 3 |
| Pop'n Roll | Mersey Beat | Beguine | Black&White | Merengue |
| Light Fusion | AcousticRck1 | Chacha | Screen 1 | Calypso |
| 70's Disco | AcousticRck2 | Slow Bossa | Screen 2 | Torch Song* |
| Power 8Beat | Early Rock | NewBossaNova | Festival | Dixieland 1* |
| Acoustic Pop | 16Beat Rock | | Summer Days | CountrySwing* |
| | | [Waltz] group | | CntryBallad |
| [Piano Style] group | [Oldies] group | StringsWaltz | | CntryWaltz 2* |
| Soft Ballad | Beach Sound | Slow Waltz | | CountryRock1* |
| Pf Concerto | Rock'n'Roll | Last Dance | | Train Beat |
| PianoBoogie1 | 60's R&B | DeutschWalzer | | BigBndBalld1* |
| PianoBoogie2 | 50's R&B | Jazz Waltz | | Big Band 1* |
| PianoClasic1 | Dreamin' | Waltzing | | Medium Swing* |
| PianoClasic2 | Rock'n'Night | Vienna Waltz | | Slow Swing |
| StridePiano | Twist | Musette | | Shuffle |
| PianoBallad | Cute Pop | Simple Waltz | | Brush Swing |
| ClassicPolka | 50's Pop 1 | | | Fusion |
| Club Piano | 50's Pop 2 | [March/Kids] group | | Jungle |
| P.Classic 1 | Slow Dance | Fanfare | | House |
| P.Slow Waltz | | Kids Dance | | Techno |
| P.Pop | [Country] group | March | | Ne JackSwing |
| P.Gospel | CountryRoads | Kids Pop | | Hip-Hop |
| P.Country | Western | Kids Shuffle | | Dance Pop 1 |
| P.Bossa Nova | CtrySerenade | Polka | | Dance Pop 2 |
| P.Ragtime | CountryPiano | Foxtrot | | |
| P.Stride | Easy Country | Kids 4/4 | | |
| P.Concerto 1 | Twostep | Lullaby 4/4 | | |
| P.Classic 2 | Hoedown | Music Box | | |
| P.Ballad 1 | New Country | Kids 6/8 | | |
| P.Ballad 2 | Bluegrass | SimpleMarch1 | | |
| P.Swing Pop | CountryBlues | SimpleMarch2 | | |
| P.Rock'nRoll | Country Folk | | | |
| P.Concerto 2 | Country Rock | [World] group | | |
| P.Concerto 3 | CountryWaltz | Gospel Piano | | |
| P.Swing | Rock'n Cntry | Gospel Pop | | |
| P.Shuffle | Outlaw | Ireland | | |
| P.Boogie | | Hawaiian | | |
| P.Slow Swing | [Big Band/SW] group | Gospel | | |
| P.Slow Rock | Jazz Band | Scotland | | |
| P.Latin | A Capella | Schlager | | |
| | Big Band | Japan | | |
| [Ballad] group | Slow Swing | Asian Pop | | |
| MediumBallad | Fast BigBand | Gt.Arpeggio | | |
| Torch Song | BigBandSwing | Asian Rhumba | | |
| 60's Ballad | Blues | | | |
| Swayin' | BigBndBallad | | | |
| Love Romance | Dixieland | | | |
| Contemporary | Charleston | | | |
| 16BeatBallad | Combo | | | |





























































A Music Style indicated by "" has the same name as a built-in Music Style, but its contents are different.

16.2. Chord Fingering

● symbol : Indicates the constituent note of chords.

★ symbol : Chord shown with an “★” can be played by pressing just the key marked with the “★”.

| | | | | | |
|----------|-----------|----------|-------------------|----------|----------|
| C | C# | D | E \flat | E | F |
| CM7 | C#M7 | DM7 | E \flat M7 | EM7 | FM7 |
| C7 | C#7 | D7 | E \flat 7 | E7 | F7 |
| Cm | C#m | Dm | E \flat m | Em | Fm |
| Cm7 | C#m7 | Dm7 | E \flat m7 | Em7 | Fm7 |
| Cdim | C#dim | Ddim | E \flat dim | Edim | Fdim |
| Cm7 (b5) | C#m7 (b5) | Dm7 (b5) | E \flat m7 (b5) | Em7 (b5) | Fm7 (b5) |
| Caug | C#aug | Daug | E \flat aug | Eaug | Faug |
| Csus4 | C#sus4 | Dsus4 | E \flat sus4 | Esus4 | Fsus4 |
| C7sus4 | C#7sus4 | D7sus4 | E \flat 7sus4 | E7sus4 | F7sus4 |

| | | | | | |
|---|---|---|--|---|---|
| F# | G | A \flat | A | B \flat | B |
|  |  |  |  |  |  |
| F#M7 | GM7 | A \flat M7 | AM7 | B \flat M7 | BM7 |
|  |  |  |  |  |  |
| F#7 | G7 | A \flat 7 | A7 | B \flat 7 | B7 |
|  |  |  |  |  |  |
| F#m | Gm | A \flat m | Am | B \flat m | Bm |
|  |  |  |  |  |  |
| F#m7 | Gm7 | A \flat m7 | Am7 | B \flat m7 | Bm7 |
|  |  |  |  |  |  |
| F#dim | Gdim | A \flat dim | Adim | B \flat dim | Bdim |
|  |  |  |  |  |  |
| F#m7 (b5) | Gm7 (b5) | A \flat m7 (b5) | Am7 (b5) | B \flat m7 (b5) | Bm7 (b5) |
|  |  |  |  |  |  |
| F#aug | Gaug | A \flat aug | Aaug | B \flat aug | Baug |
|  |  |  |  |  |  |
| F#sus4 | Gsus4 | A \flat sus4 | Asus4 | B \flat sus4 | Bsus4 |
|  |  |  |  |  |  |
| F#7sus4 | G7sus4 | A \flat 7sus4 | A7sus4 | B \flat 7sus4 | B7sus4 |
|  |  |  |  |  |  |

16.3 Tone list

| | | | | |
|----------------------|----------------------------|------------------------|-------------------------|--------------|
| [Piano] Group | Jazz Organ 3 | SH101 Bass | Dat Accent | Glockenspiel |
| Grand Piano1 | Jazz Organ 4 | | Bop Accent | GS Music Box |
| Grand Piano2 | Full Organ 3 | [Strings] Group | | GS Vibe |
| E.Piano 1 | Full Organ 4 | Strings | [Sax] Group | Vibe.w |
| E.Piano 2 | Organ 1 | Slow Strings | Blow Sax | GS Marimba |
| Harpsichord1 | Organ 2 | Rich Choir | Tenor Sax | Marimba |
| Harpsichord2 | Pop Organ | Jazz Voices | Baritone Sax | Xylophone |
| UprightPiano | VS Organ | Doos Voice | Soprano Sax | Tubular-bell |
| Rock Piano | Rock Organ 1 | Violin | Alto Sax | Church Bell |
| Honky-tonk 1 | Rock Organ 2 | Slow Violin | Oboe | Carillon |
| Honky-tonk 2 | Rotary Org.S | Cello | English Horn | GS Santur |
| MIDI Piano1 | Rotary Org.F | Contrabass | Bassoon | Organ 1 |
| MIDI Piano2 | Metalic Org. | Tremolo Str | Clarinet | Detuned Or.1 |
| Piano 1 | Digi Church | PizzicatoStr | Piccolo | Pop Organ 1 |
| Piano 2 | Theater Org. | Harp | Flute | Full Organ 4 |
| Piano 3 | Trem.Flute | Timpani | Recorder | Organ 2 |
| E.Piano 3 | Pipe Org. Bs | Warm Strings | Pan Flute | Detuned Or.2 |
| EG+Rhodes 1 | Organ Bass | Orchestra | Blow Pipe | Jazz Organ 1 |
| EG+Rhodes 2 | Accordion | Choir Str. | Shakuhachi | Rock Organ 2 |
| Hard Rhodes | Harmonica | Choir | Ocarina | Church Org.1 |
| Soft E.Piano | | Pop Voice | | Church Org.2 |
| Detuned EP 1 | [Guitar/Bass] Group | SynVox | [Brass] Group | Church Org.3 |
| Detuned EP 2 | Nylon Guitar | Choir Oohs | Trumpet | Reed Organ |
| FM+SA EP | Gut Guitar | OrchestraHit | Trombone | Accordion Fr |
| St.FM EP | Steel Guitar | Warm Pad | Fr.Horn Solo | Accordion It |
| 60's E.Piano | 12str Guitar | Syn.Strings1 | Brass 1 | GS Harmonica |
| Hard E.Piano | Acoustic Bs. | Syn.Strings2 | Trombone 2 | Bandoneon |
| GS E.Piano1 | Fingered Bs. | Harpvox | Tuba | GS Nylon Gt. |
| GS E.Piano2 | Picked Bs. | CC Solo | MutedTrumpet | Ukulele |
| E.Piano 1v | Fretless Bs. | Syn.Square | French Horn | Nylon Gt.o |
| E.Piano 2v | Jazz Guitar | JP8 Square | Brass 2 | Nylon Guitar |
| Hard FM EP | JC E.Guitar | FM Lead 1 | Synth Brass1 | Steel-str.Gt |
| Harpsichord | Nylon Gt.o | FM Lead 2 | Synth Brass2 | 12-str.Gt |
| Coupled Hps. | Nylon+Steel | Mg Lead | Soft Brass | GS Mandolin |
| Harpsi.o | Mandolin | P5 Saw Lead | | Jazz Guitar |
| Clav. | Ukulele | Rhythmic Saw | [Fantasia] Group | GS Hawaiian |
| Analog Clav. | Banjo | Waspy Synth | Fantasia | Clean Gt. |
| | Mellow Gt. | JP8 Pulse | Brightness | Chorus Gt. |
| [Vibes] Group | Hawaiian Gt. | Cheese Saw | Crystal | Muted Gt. |
| Vibraphone | Muted Gt. | Reso Saw | Piano 1 | Funk Gt. |
| Celesta | Overdrive Gt | RAVE Vox | Piano 1w | Funk Gt.2 |
| Marimba | Muted Dis.Gt | Fat & Perky | Piano 1d | Overdrive Gt |
| Barafon | DistortionGt | Fantasia 2 | Piano 2 | GS Dist.Gt |
| Xylophone | Dazed Guitar | Soft Pad | Piano 2w | Feedback Gt. |
| Glockenspiel | Rock Rhythm | P5 Poly | Piano 3 | Gt.Harmonics |
| Music Box | Rock Rhythm2 | Heaven II | Piano 3w | Gt. Feedback |
| Tubular-bell | Feedback Gt. | JP8 Sqr Pad | Honky-tonk | GS Ac.Bass |
| Carillon | Feedback Gt2 | Sweep Pad 2 | Honky-tonk 2 | GS Fing.Bass |
| Santur | Power Guitar | Converge | GS E.Piano1 | GS Picked Bs |
| Steel Drums | Power Gt.2 | Vibra Bells | Detuned EP 1 | Fretless Bs. |
| Kalimba | 5th Dist. | Clear Bells | E.Piano 1v | Slap Bass 1 |
| | Gt.Harmonics | Soft Crystal | 60's E.Piano | Slap Bass 2 |
| [Organ] Group | Shamisen | Digi Bells | GS E.Piano2 | Synth Bass 1 |
| Jazz Organ 1 | Koto | Nylon Harp | Detuned EP 2 | SynthBass101 |
| Jazz Organ 2 | A.Bass+Cymb1 | Nylon+Rhodes | E.Piano 2v | Synth Bass 3 |
| Full Organ 1 | Mute PickBs. | Big Panner | Harpsichord | Synth Bass 2 |
| Full Organ 2 | Mr.Smooth | Ai-yai-a | Coupled Hps. | Synth Bass 4 |
| Lower Organ1 | Slap Bass 1 | Echo Pan 2 | Harpsi.w | Rubber Bass |
| Lower Organ2 | Synth Bass 1 | Falling Down | Harpsi.o | GS Violin |
| Church Organ | SynthBass101 | Thum Voice | Clav. | Slow Violin |
| Organ Flute | Reso SH Bass | Doot Accent | Celesta | Viola |

| | | | | |
|--------------|--------------|--------------|--------------|--------------|
| GS Cello | Polysynth | Car-Stop | Violin* | Syn Mallet* |
| Contrabass | Space Voice | Car-Pass | Viola* | Atmosphere* |
| Tremolo Str | Bowed Glass | Car-Crash | Cello* | Brightness* |
| PizzicatoStr | Metal Pad | Siren | Contrabass* | Goblin* |
| GS Harp | Halo Pad | Train | Tremolo Str* | Echo Drops* |
| Timpani | Sweep Pad | Jetplane | Pizzicato* | Star Theme* |
| GS Strings | Ice Rain | Starship | Harp* | Sitar* |
| Orchestra | Soundtrack | Burst Noise | Timpani* | Banjo* |
| GS Sl.Str | Syn Mallet | Applause | Strings* | Shamisen* |
| Syn.Strings1 | Atmosphere | Laughing | SlowStrings* | Koto* |
| Syn.Strings3 | Goblin | Screaming | Syn.Str 1* | Kalimba* |
| Syn.Strings2 | Echo Drops | Punch | Syn.Str 2* | Bagpipe* |
| Choir Aahs | Echo Bell | Heart Beat | Choir Aahs* | Fiddle* |
| Choir | Echo Pan | Footsteps | Pop Voice* | Shanai* |
| Pop Voice | Star Theme | Gun Shot | SynVox* | Tinkle Bell* |
| SynVox | Sitar | Machine Gun | Orche.Hit* | Agogo* |
| OrchestraHit | Sitar 2 | Lasergun | Trumpet* | Steel Drums* |
| GS Trumpet | Banjo | Explosion | Trombone* | Woodblock* |
| GS Trombone | GS Shamisen | Piano 1* | Tuba* | Taiko* |
| Trombone 2 | Koto | Piano 2* | M.Trumpet* | Melo.Tom 1* |
| Tuba | Taisho Koto | Piano 3* | FrenchHorns* | Synth Drum* |
| MutedTrumpet | Kalimba | Honky-tonk* | Brass 1* | ReverseCym.* |
| French Horn | Bagpipe | E.Piano 1* | SynthBrass1* | Fret Noise* |
| Fr.Horn 2 | Fiddle | E.Piano 2* | A.Brass 1* | BreathNoise* |
| Brass 1 | Shanai | Harpsichord* | SynthBrass2* | Seashore* |
| Brass 2 | Tinkle Bell | Clav.* | Soprano Sax* | Bird* |
| Synth Brass1 | Agogo | Celesta* | Alto Sax* | Telephone 1* |
| Synth Brass3 | Steel Drums | Glocken* | Tenor Sax* | Helicopter* |
| AnalogBrass1 | Woodblock | Music Box* | BaritoneSax* | Applause* |
| Synth Brass2 | Castanets | Vibraphone* | Oboe* | Gun Shot* |
| Synth Brass4 | Taiko | Marimba* | EnglishHorn* | |
| AnalogBrass2 | Concert BD | Xylophone* | Bassoon* | |
| GS Sop.Sax | Melo. Tom 1 | Tubularbell* | Clarinet* | |
| Alto Sax | Melo. Tom 2 | Santur* | Piccolo* | |
| Tenor Sax | Synth Drum | Organ 1* | Flute* | |
| Baritone Sax | 808 Tom | Pop Organ 1* | Recorder* | |
| GS Oboe | Elec Perc. | Organ 2* | Pan Flute* | |
| English Horn | Reverse Cym. | Rock Organ2* | Bottle Blow* | |
| Bassoon | Gt.FretNoise | ChurchOrg.1* | Shakuhachi* | |
| Clarinet | Gt.Cut Noise | Reed Organ* | Whistle* | |
| Piccolo | String Slap | AccordionFr* | Ocarina* | |
| GS Flute | Breath Noise | Harmonica* | Square Wave* | |
| Recorder | Fl.Key Click | Bandoneon* | Saw Wave* | |
| Pan Flute | Seashore | Nylon-strGt* | Doctor Solo* | |
| Bottle Blow | Rain | Steel-strGt* | SynCalliope* | |
| Shakuhachi | Thunder | Jazz Guitar* | ChifferLead* | |
| Whistle | Wind | Clean Gt.* | Charang* | |
| Ocarina | Stream | Muted Gt.* | Solo Vox* | |
| Square Wave | Bubble | Funk Gt.* | 5th SawWave* | |
| Square | Bird | OverdriveGt* | Bass & Lead* | |
| Sine Wave | Dog | Dist.Guitar* | Fantasia* | |
| Saw Wave | Horse-Gallop | Gt.Harmo* | Warm Pad* | |
| Saw | Bird 2 | Acoustic Bs* | Polysynth* | |
| Doctor Solo | Telephone 1 | Fingered Bs* | Space Voice* | |
| Syn.Calliope | Telephone 2 | Picked Bs.* | Bowed Glass* | |
| Chiffer Lead | DoorCreaking | Fretless Bs* | Metal Pad* | |
| Charang | Door | Slap Bass 1* | Halo Pad* | |
| Solo Vox | Scratch | Slap Bass 2* | Sweep Pad* | |
| 5th Saw Wave | Windchime | Synth Bass1* | Ice Rain* | |
| Bass & Lead | Helicopter | Synth Bass2* | Soundtrack* | |
| Warm Pad | Car-Engine | Rubber Bass* | Crystal* | |

Tones with a "" may not play back satisfactorily on other GS tone generators.

16.4. Drum Sets/EFX Set

| | 1:STANDARD* | 3:ROOM* | 4:POWER | 5:ELECTRONIC |
|-------|-------------------------|-------------------------|-------------------------|-------------------------|
| 24 | Bar Chime | Bar Chime | Bar Chime | Bar Chime |
| 25 | Snare Roll | Snare Roll | Snare Roll | Snare Roll |
| 26 | Finger Snap | Finger Snap | Finger Snap | Finger Snap |
| 27 | High Q | High Q | High Q | High Q |
| 28 | Slap | Slap | Slap | Slap |
| 29 | Scratch Push [EXC7] | Scratch Push [EXC7] | Scratch Push [EXC7] | Scratch Push [EXC7] |
| 30 | Scratch Pull [EXC7] | Scratch Pull [EXC7] | Scratch Pull [EXC7] | Scratch Pull [EXC7] |
| 31 | Sticks | Sticks | Sticks | Sticks |
| 32 | Square Click | Square Click | Square Click | Square Click |
| 33 | Metronome Click | Metronome Click | Metronome Click | Metronome Click |
| 34 | Metronome Bell | Metronome Bell | Metronome Bell | Metronome Bell |
| 35 | Std Kick 2' | Kick1 | Std Kick 2' | Std Kick 2' |
| C2 36 | Kick 1 | Room Kick | MONDO Kick | Elec BD |
| 37 | Side Stick | Side Stick | Side Stick | Side Stick |
| 38 | Std Snr 1 | Room Snr 1 | Gated SD | Elec SD |
| 39 | Hand Clap | Hand Clap | Hand Clap | Hand Clap |
| 40 | Std Snr 2 | Std Snr 1 | Snare Drum 2 | Gated SD |
| 41 | Low Tom 2 | Room Low Tom 2' | Room Low Tom 2 | Elec Low Tom 2 |
| 42 | Closed Hi-hat 1' [EXC1] | Closed Hi-hat 1' [EXC1] | Closed Hi-hat 1 [EXC1] | Closed Hi-hat 1 [EXC1] |
| 43 | Low Tom 1 | Room Low Tom 1' | Room Low Tom 1 | Elec Low Tom 1 |
| 44 | Pedal Hi-hat 1' [EXC1] | Pedal Hi-hat 1' [EXC1] | Pedal Hi-hat 1 [EXC1] | Pedal Hi-hat 1 [EXC1] |
| 45 | Mid Tom 2 | Room Mid Tom 2' | Room Mid Tom 2 | Elec Mid Tom 2 |
| 46 | Open Hi-hat 1' [EXC1] | Open Hi-hat 1' [EXC1] | Open Hi-hat 1 [EXC1] | Open Hi-hat 1 [EXC1] |
| 47 | Mid Tom 1 | Room Mid Tom 1' | Room Mid Tom 1 | Elec Mid Tom 1 |
| C3 48 | High Tom 2 | Room Hi Tom 2' | Room Hi Tom 2 | Elec Hi Tom 2 |
| 49 | Crash Cymbal 1 | Crash Cymbal 1 | Crash Cymbal 1 | Crash Cymbal 1 |
| 50 | High Tom 1 | Room Hi Tom 1' | Room Hi Tom 1 | Elec Hi Tom 1 |
| 51 | Ride Cymbal 1 | Ride Cymbal 1 | Ride Cymbal 1 | Ride Cymbal 1 |
| 52 | Chinese Cymbal | Chinese Cymbal | Chinese Cymbal | Reverse Cymbal |
| 53 | Ride Bell | Ride Bell | Ride Bell | Ride Bell |
| 54 | Tambourine | Tambourine | Tambourine | Tambourine |
| 55 | Splash Cymbal | Splash Cymbal | Splash Cymbal | Splash Cymbal |
| 56 | Cowbell | Cowbell | Cowbell | Cowbell |
| 57 | Crash Cymbal 2 | Crash Cymbal 2 | Crash Cymbal 2 | Crash Cymbal 2 |
| 58 | Vibra-slap | Vibra-slap | Vibra-slap | Vibra-slap |
| 59 | Ride Cymbal 2 | Ride Cymbal 2 | Ride Cymbal 2 | Ride Cymbal 2 |
| C4 60 | High Bongo | High Bongo | High Bongo | High Bongo |
| 61 | Low Bongo | Low Bongo | Low Bongo | Low Bongo |
| 62 | Mute High Conga | Mute High Conga | Mute High Conga | Mute High Conga |
| 63 | Open High Conga | Open High Conga | Open High Conga | Open High Conga |
| 64 | Low Conga | Low Conga | Low Conga | Low Conga |
| 65 | High Timbale | High Timbale | High Timbale | High Timbale |
| 66 | Low Timbale | Low Timbale | Low Timbale | Low Timbale |
| 67 | High Agogo | High Agogo | High Agogo | High Agogo |
| 68 | Low Agogo | Low Agogo | Low Agogo | Low Agogo |
| 69 | Cabasa | Cabasa | Cabasa | Cabasa |
| 70 | Maracas | Maracas | Maracas | Maracas |
| 71 | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] |
| C5 72 | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] |
| 73 | Short Guiro [EXC3] | Short Guiro [EXC3] | Short Guiro [EXC3] | Short Guiro [EXC3] |
| 74 | Long Guiro [EXC3] | Long Guiro [EXC3] | Long Guiro [EXC3] | Long Guiro [EXC3] |
| 75 | Claves | Claves | Claves | Claves |
| 76 | High Wood Block | High Wood Block | High Wood Block | High Wood Block |
| 77 | Low Wood Block | Low Wood Block | Low Wood Block | Low Wood Block |
| 78 | Mute Cuica [EXC4] | Mute Cuica [EXC4] | Mute Cuica [EXC4] | Mute Cuica [EXC4] |
| 79 | Open Cuica [EXC4] | Open Cuica [EXC4] | Open Cuica [EXC4] | Open Cuica [EXC4] |
| 80 | Mute Triangle [EXC5] | Mute Triangle [EXC5] | Mute Triangle [EXC5] | Mute Triangle [EXC5] |
| 81 | Open Triangle [EXC5] | Open Triangle [EXC5] | Open Triangle [EXC5] | Open Triangle [EXC5] |
| 82 | Shaker | Shaker | Shaker | Shaker |
| 83 | Jingle Bell | Jingle Bell | Jingle Bell | Jingle Bell |
| C6 84 | Bell Tree | Bell Tree | Bell Tree | Bell Tree |
| 85 | Castanets | Castanets | Castanets | Castanets |
| 86 | Mute Surdo [EXC6] | Mute Surdo [EXC6] | Mute Surdo [EXC6] | Mute Surdo [EXC6] |
| 87 | Open Surdo [EXC6] | Open Surdo [EXC6] | Open Surdo [EXC6] | Open Surdo [EXC6] |
| 88 | ---- | ---- | ---- | ---- |

| | 6:TR-808 | 7:DANCE | 8:JAZZ 11:GS STANDARD | 9:BRUSH |
|-------|-------------------------|-------------------------|--------------------------|-------------------------|
| 24 | Bar Chime | Bar Chime | Bar Chime | Bar Chime |
| 25 | Snare Roll | Snare Roll | Snare Roll | Snare Roll |
| 26 | Finger Snap | Finger Snap | Finger Snap | Finger Snap |
| 27 | High Q | High Q | High Q | High Q |
| 28 | Slap | Slap | Slap | Slap |
| 29 | Scratch Push [EXC7] | Scratch Push [EXC7] | Scratch Push [EXC7] | Scratch Push [EXC7] |
| 30 | Scratch Pull [EXC7] | Scratch Pull [EXC7] | Scratch Pull [EXC7] | Scratch Pull [EXC7] |
| 31 | Sticks | Dance Snr 1 | Sticks | Sticks |
| 32 | Square Click | Square Click | Square Click | Square Click |
| 33 | Metronome Click | Metronome Click | Metronome Click | Metronome Click |
| 34 | Metronome Bell | Metronome Bell | Metronome Bell | Metronome Bell |
| 35 | Std Kick 2 | Kick 1 | Std Kick 2 | Kick 2 |
| C2 36 | 808 Bass Drum 1 | 808 Bass Drum 2 | Std Kick 1 | Kick 1 |
| 37 | 808 Rim Shot | 808 Rim Shot | Side Stick | Side Stick |
| 38 | 808 Snare Drum | TR-909 Snr | Snare Drum 1 | Brush Tap |
| 39 | Hand Clap | Hand Clap | Hand Clap | Brush Slap |
| 40 | Snare Drum 2 | Dance Snr 2 | Snare Drum 2 | Brush Swirl |
| 41 | 808 Low Tom 2 | 808 Low Tom 2 | Low Tom 2 | Brush Low Tom 2 |
| 42 | 808 CHH [EXC1] | 808 CHH [EXC1] | Closed Hi-hat 1 [EXC1] | Closed Hi-hat 2 [EXC1] |
| 43 | 808 Low Tom 1 | 808 Low Tom 1 | Low Tom 1 | Brush Low Tom 1 |
| 44 | 808 CHH [EXC1] | 808 CHH [EXC1] | Pedal Hi-hat 1 [EXC1] | Pedal Hi-hat 2 [EXC1] |
| 45 | 808 Mid Tom 2 | 808 Mid Tom 2 | Mid Tom 2 | Brush Mid Tom 2 |
| 46 | 808 OHH [EXC1] | 808 OHH [EXC1] | Open Hi-hat 1 [EXC1] | Open Hi-hat 2 [EXC1] |
| 47 | 808 Mid Tom 1 | 808 Mid Tom 1 | Mid Tom 1 | Brush Mid Tom 1 |
| C3 48 | 808 Hi Tom 2 | 808 Hi Tom 2 | High Tom 2 | Brush Hi Tom 2 |
| 49 | 808 Cymbal | 808 Cymbal | Crash Cymbal 1 | Crash Cymbal 1 |
| 50 | 808 Hi Tom 1 | 808 Hi Tom 1 | High Tom 1 | Brush Hi Tom 1 |
| 51 | Ride Cymbal 1 | Ride Cymbal 1 | Ride Cymbal 1 | Ride Cymbal 1 |
| 52 | Chinese Cymbal | Chinese Cymbal | Chinese Cymbal | Chinese Cymbal |
| 53 | Ride Bell | Ride Bell | Ride Bell | Ride Bell |
| 54 | Tambourine | Tambourine | Tambourine | Tambourine |
| 55 | Splash Cymbal | Splash Cymbal | Splash Cymbal | Splash Cymbal |
| 56 | 808 Cowbell | 808 Cowbell | Cowbell | Cowbell |
| 57 | Crash Cymbal 2 | Crash Cymbal 2 | Crash Cymbal 2 | Crash Cymbal 2 |
| 58 | Vibra-slap | Vibra-slap | Vibra-slap | Vibra-slap |
| 59 | Ride Cymbal 2 | Ride Cymbal 2 | Ride Cymbal 2 | Ride Cymbal 2 |
| C4 60 | High Bongo | High Bongo | High Bongo | High Bongo |
| 61 | Low Bongo | Low Bongo | Low Bongo | Low Bongo |
| 62 | 808 High Conga | 808 High Conga | Mute High Conga | Mute High Conga |
| 63 | 808 Mid Conga | 808 Mid Conga | Open High Conga | Open High Conga |
| 64 | 808 Low Conga | 808 Low Conga | Low Conga | Low Conga |
| 65 | High Timbale | High Timbale | High Timbale | High Timbale |
| 66 | Low Timbale | Low Timbale | Low Timbale | Low Timbale |
| 67 | High Agogo | High Agogo | High Agogo | High Agogo |
| 68 | Low Agogo | Low Agogo | Low Agogo | Low Agogo |
| 69 | Cabasa | Cabasa | Cabasa | Cabasa |
| 70 | 808 Maracas | 808 Maracas | Maracas | Maracas |
| 71 | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] |
| C5 72 | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] |
| 73 | Short Guiro [EXC3] | Short Guiro [EXC3] | Short Guiro [EXC3] | Short Guiro [EXC3] |
| 74 | Long Guiro [EXC3] | Long Guiro [EXC3] | Long Guiro [EXC3] | Long Guiro [EXC3] |
| 75 | 808 Claves | 808 Claves | Claves | Claves |
| 76 | High Wood Block | High Wood Block | High Wood Block | High Wood Block |
| 77 | Low Wood Block | Low Wood Block | Low Wood Block | Low Wood Block |
| 78 | Mute Cuica [EXC4] | Mute Cuica [EXC4] | Mute Cuica [EXC4] | Mute Cuica [EXC4] |
| 79 | Open Cuica [EXC4] | Open Cuica [EXC4] | Open Cuica [EXC4] | Open Cuica [EXC4] |
| 80 | Mute Triangle [EXC5] | Mute Triangle [EXC5] | Mute Triangle [EXC5] | Mute Triangle [EXC5] |
| 81 | Open Triangle [EXC5] | Open Triangle [EXC5] | Open Triangle [EXC5] | Open Triangle [EXC5] |
| 82 | Shaker | Shaker | Shaker | Shaker |
| 83 | Jingle Bell | Jingle Bell | Jingle Bell | Jingle Bell |
| C6 84 | Bell Tree | Bell Tree | Bell Tree | Bell Tree |
| 85 | Castanets | Castanets | Castanets | Castanets |
| 86 | Mute Surdo [EXC6] | Mute Surdo [EXC6] | Mute Surdo [EXC6] | Mute Surdo [EXC6] |
| 87 | Open Surdo [EXC6] | Open Surdo [EXC6] | Open Surdo [EXC6] | Open Surdo [EXC6] |
| 88 | ---- | ---- | ---- | ---- |

| | 10:ORCHESTRA | 12:GS ROOM | 13:GS BRUSH |
|-------|-------------------------|-------------------------|-------------------------|
| 24 | Bar Chime | Bar Chime | Bar Chime |
| 25 | Snare Roll | Snare Roll | Snare Roll |
| 26 | Finger Snap | Finger Snap | Finger Snap |
| 27 | Close Hi-hat [EXC1] | High Q | High Q |
| 28 | Pedal Hi-hat [EXC1] | Slap | Slap |
| 29 | Open Hi-hat [EXC1] | Scratch Push [EXC7] | Scratch Push [EXC7] |
| 30 | Ride Cymbal | Scratch Pull [EXC7] | Scratch Pull [EXC7] |
| 31 | Sticks | Sticks | Sticks |
| 32 | Square Click | Square Click | Square Click |
| 33 | Metronome Click | Metronome Click | Metronome Click |
| 34 | Metronome Bell | Metronome Bell | Metronome Bell |
| 35 | Concert BD 2 | Std Kick 2 | Std Kick 2 |
| C2 36 | Concert BD 1 | Std Kick 1 | Std Kick 1 |
| 37 | Side Stick | Side Stick | Side Stick |
| 38 | Concert SD | Snare Drum 1 | Brush Tap |
| 39 | Castanets | Hand Clap | Brush Slap |
| 40 | Concert SD | Snare Drum 2 | Brush Swirl |
| 41 | Timpani F | Room Low Tom 2 | Low Tom 2 |
| 42 | Timpani F# | Closed Hi-hat 1 [EXC1] | Closed Hi-hat 1 [EXC1] |
| 43 | Timpani G | Room Low Tom 1 | Low Tom 1 |
| 44 | Timpani G# | Pedal Hi-hat 1 [EXC1] | Pedal Hi-hat 1 [EXC1] |
| 45 | Timpani A | Room Mid Tom 2 | Mid Tom 2 |
| 46 | Timpani A# | Open Hi-hat 1 [EXC1] | Open Hi-hat 1 [EXC1] |
| 47 | Timpani B | Room Mid Tom 1 | Mid Tom 1 |
| C3 48 | Timpani c | Room Hi Tom 2 | High Tom 2 |
| 49 | Timpani c# | Crash Cymbal 1 | Crash Cymbal 1 |
| 50 | Timpani d | Room Hi Tom 1 | High Tom 1 |
| 51 | Timpani d# | Ride Cymbal 1 | Ride Cymbal 1 |
| 52 | Timpani e | Chinese Cymbal | Chinese Cymbal |
| 53 | Timpani f | Ride Bell | Ride Bell |
| 54 | Tambourine | Tambourine | Tambourine |
| 55 | Splash Cymbal | Splash Cymbal | Splash Cymbal |
| 56 | Cowbell | Cowbell | Cowbell |
| 57 | Concert Cymbal 2 | Crash Cymbal 2 | Crash Cymbal 2 |
| 58 | Vibra-slap | Vibra-slap | Vibra-slap |
| 59 | Concert Cymbal 1 | Ride Cymbal 2 | Ride Cymbal 2 |
| C4 60 | High Bongo | High Bongo | High Bongo |
| 61 | Low Bongo | Low Bongo | Low Bongo |
| 62 | Mute High Conga | Mute High Conga | Mute High Conga |
| 63 | Open High Conga | Open High Conga | Open High Conga |
| 64 | Low Conga | Low Conga | Low Conga |
| 65 | High Timbale | High Timbale | High Timbale |
| 66 | Low Timbale | Low Timbale | Low Timbale |
| 67 | High Agogo | High Agogo | High Agogo |
| 68 | Low Agogo | Low Agogo | Low Agogo |
| 69 | Cabasa | Cabasa | Cabasa |
| 70 | Maracas | Maracas | Maracas |
| 71 | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] | Short Hi Whistle [EXC2] |
| C5 72 | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] | Long Low Whistle [EXC2] |
| 73 | Short Guiro [EXC3] | Short Guiro [EXC3] | Short Guiro [EXC3] |
| 74 | Long Guiro [EXC3] | Long Guiro [EXC3] | Long Guiro [EXC3] |
| 75 | Claves | Claves | Claves |
| 76 | High Wood Block | High Wood Block | High Wood Block |
| 77 | Low Wood Block | Low Wood Block | Low Wood Block |
| 78 | Mute Cuica [EXC4] | Mute Cuica [EXC4] | Mute Cuica [EXC4] |
| 79 | Open Cuica [EXC4] | Open Cuica [EXC4] | Open Cuica [EXC4] |
| 80 | Mute Triangle [EXC5] | Mute Triangle [EXC5] | Mute Triangle [EXC5] |
| 81 | Open Triangle [EXC5] | Open Triangle [EXC5] | Open Triangle [EXC5] |
| 82 | Shaker | Shaker | Shaker |
| 83 | Jingle Bell | Jingle Bell | Jingle Bell |
| C6 84 | Bell Tree | Bell Tree | Bell Tree |
| 85 | Castanets | Castanets | Castanets |
| 86 | Mute Surdo [EXC6] | Mute Surdo [EXC6] | Mute Surdo [EXC6] |
| 87 | Open Surdo [EXC6] | Open Surdo [EXC6] | Open Surdo [EXC6] |
| 88 | Applause | ---- | ---- |

16.5 Rhythm pattern list

| 2:SOUND EFFECT | |
|----------------|------------------------------|
| | |
| | |
| 40 | 39 High Q |
| | Slap |
| 41 | Scratch Push [EXC7] |
| | Scratch Pull [EXC7] |
| 43 | 42 Sticks |
| | Square Click |
| 45 | 44 Metronome Click |
| | Metronome Bell |
| 47 | 46 Guitar sliding Finger |
| | Guitar cutting noise (down) |
| C3 48 | 49 Guitar cutting noise (up) |
| | String slap of double bass |
| 50 | 51 Fl.Key Click |
| 52 | Laughing |
| | Screaming |
| 53 | 54 Punch |
| | Heart Beat |
| 55 | 56 Footsteps1 |
| | Footsteps2 |
| 57 | 58 Applause |
| 59 | Door Creaking |
| | Door |
| C4 60 | 61 Scratch |
| | Wind Chimes |
| 62 | 63 Car-Engine |
| | Car-Stop |
| 64 | Car-Pass |
| | Car-Crash |
| 65 | 66 Siren |
| | Train |
| 67 | 68 Jetplane |
| | Helicopter |
| 69 | 70 Starship |
| 71 | |
| | Gun Shot |
| C5 72 | 73 Machine Gun |
| | Lasergun |
| 74 | 75 Explosion |
| | Dog |
| 76 | Horse-Gallop |
| | Birds |
| 77 | 78 Rain |
| | Thunder |
| 79 | 80 Wind |
| | Seashore |
| 81 | 82 Stream |
| | Bubble |
| 83 | |
| C6 84 | 85 Cat |
| | |

----- : No sound.
 [EXC]: will not sound simultaneously
 with other percussion
 instruments of the same number.

| No. | Rhythm Pattern (Measure) |
|-----|--------------------------|
| R-1 | 4/4 (1) |
| R-2 | 3/4 (1) |
| R-3 | 6/8 (1) |
| R-4 | 8Beat (1) |
| R-5 | 16Beat (1) |
| R-6 | Rock (1) |
| R-7 | Ballad (1) |
| R-8 | Disco (1) |
| R-9 | R&B 1 (1) |
| R10 | R&B 2 (1) |
| R11 | Skip Beat (1) |
| R12 | Shuffle (1) |
| R13 | Triplet (1) |
| R14 | March (1) |
| R15 | Waltz (1) |
| R16 | Swing (1) |
| R17 | BossaNova (2) |
| R18 | Samba (1) |
| R19 | Rhumba (2) |
| R20 | Mambo (2) |
| R21 | Tango (2) |
| R22 | Beguine (2) |
| R23 | CountIn 1 (2) |
| R24 | CountIn 2 (2) |
| R25 | C.InSwing (1) |
| R26 | Ending 1 (1) |
| R27 | Ending 2 (1) |
| R28 | Sticks4/4 (1) |
| R29 | Sticks3/4 (1) |
| R30 | Sticks6/8 (1) |

16.6. Effects

| Display | Description |
|-----------------------|---|
| Chorus | Makes sounds broader and fatter. |
| Stereo.Chorus | A stereo chorus. |
| Hexa Chorus | A multilayer chorus. |
| Tremolo Chorus | A chorus with a tremolo effect (tremolo chorus). |
| Space D | A clear chorus. |
| Rotary | Adds a rotary-speaker effect. |
| Stereo Delay | Delays the sound with a stereo effect. |
| Modulation.Delay | Adds a wavering effect to the delayed sound (modulation delay). |
| Triple Tap Delay | A three-way delay (triple tap delay). |
| Quadruple Tap Delay | A four-way delay (quadruple tap delay). |
| Phaser | Adds undulations to the sound. |
| Stereo Flanger | Adds metallic reverberations (stereo flanger). |
| Step Flanger | A flanger that varies the pitch in a stepwise fashion. |
| Enhancer | Adds modulation to the sound. |
| Overdrive | Applies soft distortion to the sound. |
| Distortion | Applies hard distortion to the sound. |
| Auto Wah | Changes the tone in a cyclical manner. |
| Compressor | Suppresses fluctuations in volume. |
| Gate Reverb | Cuts off the reverberations before they fade away completely. |
| 2-V Pitch Shifter | Adds two pitch-shifted sounds to the original sound (two-voice pitch shifter). |
| FB Pitch Shifter | Adds a single pitch-shifted sound to the original sound (feedback pitch shifter). |
| Enhancer-Chorus | Applies both enhancer and chorus effects. |
| Enhancer-Flanger | Applies both enhancer and flanger effects. |
| Enhancer-Delay | Applies both enhancer and delay effects. |
| Chorus-Delay | Applies both chorus and delay effects. |
| Flanger-Delay | Applies both flanger and delay effects. |
| Overdrive-Chorus | Applies both overdrive and chorus effects. |
| Overdrive-Flanger | Applies both overdrive and flanger effects. |
| Overdrive-Delay | Applies both overdrive and delay effects. |
| Distortion-Chorus | Applies both distortion and chorus effects. |
| Distortion-Flanger | Applies both distortion and flanger effects. |
| Distortion-Delay | Applies both distortion and delay effects. |
| Sympathetic Resonance | Applies a resonance effect when the damper pedal is depressed. |
| Wave Chorus | Produces a chorus with strong undulations. |
| 2 Band Chorus | Applies different chorus effects in the treble and bass bands. |
| Space Chorus | A chorus with extremely small undulations. |
| Chorus-Flanger | Applies both chorus and flanger effects. |
| Rhodes Multi | the optimal effect for an electric piano. |
| Clean Guitar Multi | Applies an effect that combines compressor, chorus, and delay. |
| Tremolo | Produces cyclical changes in volume. |
| Auto Pan | Makes the sonic position of the sound move to the left or right. |

17. MIDI Implementation Chart

Intelligent Keyboard
Model E-600

MIDI Implementation Chart

Date : Apr. 1999
Version : 1.00

| Function... | | Transmitted | Recognized | Remarks | |
|--------------------|---|---|--|-------------------------------|--------------------|
| Basic Channel | Default Changed | 1 1-16 | 1-16 1-16 | | |
| Mode | Default Messages Altered | Mode 3 x ***** | Mode 3 Mode 3, 4(M=1) | * 2 | |
| Note Number : | True Voice | 15-113 ***** | 0-127 0-127 | | |
| Velocity | Note ON Note OFF | O x 8n v=64 | O x | | |
| After Touch | Key's Ch's | x x | O O | *1 *1 | |
| Pitch Bend | | O | O | | |
| Control Change | 0, 32 | O | O | *1 | Bank select |
| | 1 | O | O | *1 | Modulation |
| | 5 | O | O | *1 | Portamento time |
| | 6, 38 | O | O | *1 | Data entry |
| | 7 | O | O | *1 | Volume |
| | 10 | O | O | *1 | Panpot |
| | 11 | O | O | *1 | Expression |
| | 64 | O | O | *1 | Hold 1 |
| | 65 | O | O | *1 | Portamento |
| | 66 | O | O | *1 | Sostenuto |
| | 67 | O | O | *1 | Soft |
| | 84 | O | O | *1 | Portamento control |
| | 91 | O | O (Reverb) | *1 | Effect1 depth |
| | 93 | O | O (Chorus) | *1 | Effect3 depth |
| 98, 99 100, 101 | O O | O O | *1 *1 | NRPN LSB, MSB RPN LSB, MSB | |
| Prog Change | : True # | O 0-127 ***** | O 0-127 | Program number 1-128 | |
| System Exclusive | | O | O | | |
| System Common | : Song Pos : Song Sel : Tune | x x x | x x x | | |
| System Real Time | : Clock : Commands | O x | x x | | |
| Aux Message | : All sound off : Reset all controllers : Local Control : All Notes OFF : Active Sense : Reset | x x x x O x | O (120, 126, 127) O O O (123-125) O x | | |
| Notes | | * 1 O x is selectable by SysEx. * 2 Recognized as M=1 even if M≠1. | | | |

Mode 1 : OMNI ON, POLY Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO

O : Yes
X : No

For E.C. Countries

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"



Questo prodotto é conforme alle seguenti direttive CEE

- BASSA TENSIONE 73/23
- EMC 89/336"

Dit instrument beantwoordt aan de volgende EG richtlijnen:

- LAGE SPANNING 73/23
- EMC 89/336"

Este producto cumple con las siguientes directrices de la CE

- BAJO VOLTAJE 73/23
- EMC 89/336"

For the USA

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.

AVIS

CLASSE B 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.

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