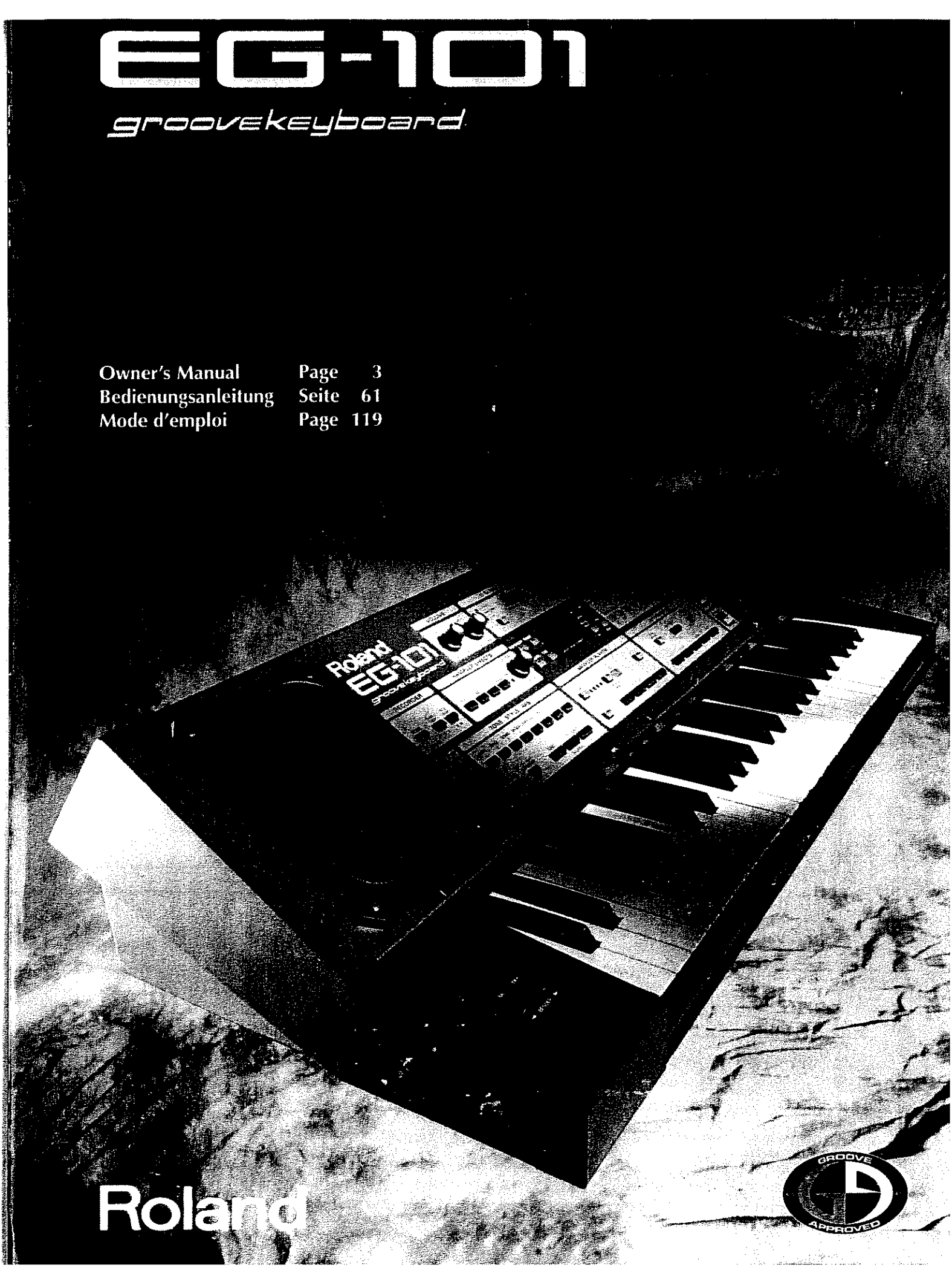
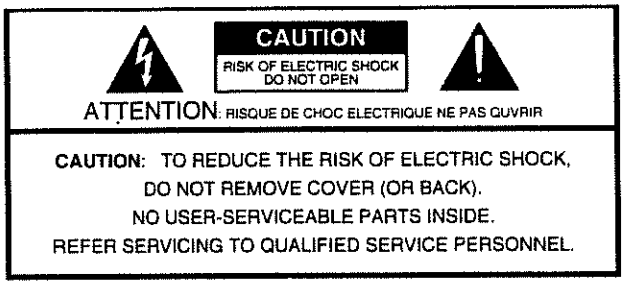
EG-101

groovekeyboard



Roland

GROOVE APPROVED



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

EG-101

groovekeyboard

Owner's Manual

Thank
you for choosing the EG-101
GrooveKeyboard. The EG-101 was designed
to have fun with Dance/Techno/House music,
whether this is your first instrument ever, or are in
search of a keyboard capable of providing those cooking
Techno, Dance, Jungle, etc. grooves to juice up your musical
ideas. The EG-101 comes with 448 cutting-edge sounds (called
Tones), a Remix function (called "RPS"), an interactive sampler, and an
intelligent Arranger that plays accompaniments/grooves
based on your chord information.

Please take the time to read through this manual in order to come to grips
with the various functions of your EG-101 and
to ensure years of trouble-free service.

Now buckle up and get ready to...

1. So what is the EG-101?

Your EG-101 is three instruments in one:

- The EG-101 is a *keyboard instrument*. You can use it to play your favorite melodies, just like a synthesizer. (If you promise not to tell anyone, here's a secret: your EG-101 *is* in fact a synthesizer. It's just as professional and high-quality but a lot easier to use.)
- It is an instrument equipped with an *automatic accompaniment* function (called Arranger). Select one of the 64 "Styles", play the chords these Styles should use with your left hand, and add the melody with your right hand. Several accompaniments are available for each Style (Intro, Ending, Variation, Advanced, etc.) for enhanced versatility.
- It is a *sampler* of the same quality as the acclaimed BOSS SP-202 Dr. Sample. You can record your favorite shouts, loops, etc., and process them with effects, slow them down, speed them up, etc. You can even replace the Drum part of a Style with a sampled groove. In that case, the Arranger is synchronized to the Sample Player.

RPS (Realtime Phrase Sequencer)

Your EG-101 provides a "playback sequencer" that allows you to start the desired phrases by pressing just one key. This function is called *Realtime Phrase Sequencer*. Though similar to the Arranger, the RPS function can be used to start each phrase (drums, bass, chord riffs, etc.) at your own discretion.

D Beam Controller

The EG-101's D Beam Controller allows you to control a parameter of your choice by moving your hand over an (invisible) infrared light beam. There are 36 D Beam functions to choose from. All you need to do is start playback of one of the EG-101's cool grooves and move your hand over this beam in order to achieve some extraordinary effects that sound as good as you'll look in front of an audience: ALIVE and KICKING!

Sturdy construction & almost self-explanatory

The EG-101 is a far cry from any other instrument in its price range: it features a metal front panel. Its front-panel layout is as straightforward as that of the classic Roland TB-303, TR-909, etc. groove tools.

Arpeggiator

Another useful function is the Arpeggiator. Play two notes (or a chord) to have the Arpeggiator sound accompaniment lines based on those notes. The tempo of these arpeggios ("broken chords") is always synchronized to the tempo value you set.

Audio inputs

The EG-101 features two kinds of audio inputs: INPUT L/R (for connecting CD players, cassette decks, etc.) and a MIC connector (for a microphone). These inputs can be used to record new material using the on-board sampler, or to mix the signals from your microphone, CD player, etc. with RPS, and Arranger playback. You can even use some of the Sampler's effects for the incoming signals.

448 Tones and 12 Drum Sets (all "Groove Approved")

The EG-101 features the hottest sounds currently available on the Dance scene. At Roland, we have come to call these sounds *Tones*. Furthermore, there are 12 Drum Sets. These are complete sets of drum and percussion sounds, each of which is assigned to one key of the EG-101's keyboard. The Drum Sets include everything you need for your music (TR-909, TR-808, etc.).

64 preset Styles, 64 preloaded Style User Programs

Styles are accompaniments you can use right away. 64 of the hottest Dance, Techno, etc., Grooves are built into your EG-101. Using the EG-101's advanced PART EFFECTS and PART MANIPULATOR functions, you can change the way in which these Styles are played back. Such "edits" can be saved to one of the 64 Style User Programs. These memories already contain settings when the EG-101 is shipped.

2. Precautions

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 instrument on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting the EG-101 to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.
- Be sure to only use the supplied adapter (ACJ model). The use of other adapters may damage the EG-101 and is a potential fire hazard.

Placement

- Using the EG-101 near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this instrument; 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.
- Do not expose the EG-101 to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the instrument.

Maintenance

- For everyday cleaning wipe the EG-101 with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a mild, non-abrasive detergent. Afterwards, be sure to wipe the instrument thoroughly with a soft, dry cloth.
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and data

- Please be aware that all data contained in the instrument's memory may be lost when it is sent for repairs. Important data should always be saved via MIDI (see page 57). In certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data. Roland assumes no liability concerning such loss of data.

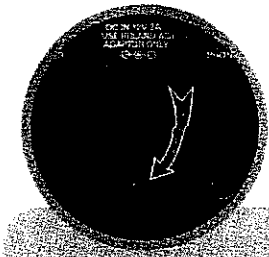
Additional precautions

- Please be aware that the memory contents can be irretrievably lost as a result of a malfunction, or the improper operation of the instrument. To protect yourself against the risk of losing important data, we recommend that you periodically make a backup copy of important data via MIDI.
- Use a reasonable amount of care when using the instrument's buttons, other controls, and jacks/connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- 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 cable's internal elements.
- A small amount of heat will radiate from the instrument during operation. This is perfectly normal.
- 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. Otherwise, you will need to use equivalent packaging materials, or a flightcase.

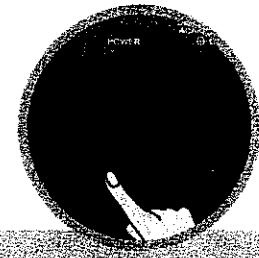
Contents

3. The fun starts here

Connecting the EG-101 to a power outlet

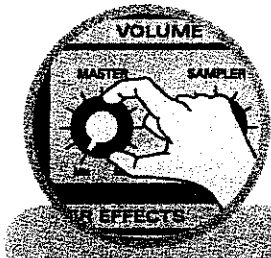


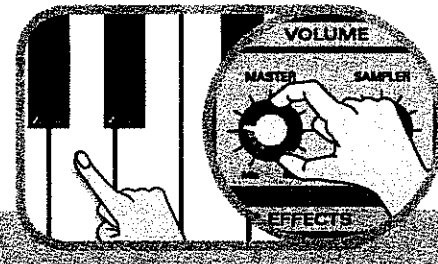
Be sure to only use the supplied ACJ adapter. Other adapters may damage your EG-101.



1. *Connect the small plug of the supplied adapter to the EG-101's [DC IN] jack (rear panel).*
2. *Connect the other end of the adapter to a suitable wall outlet (see the adapter's nameplate).*
3. *Press the [POWER] switch to switch on your EG-101.*

Adjusting the volume

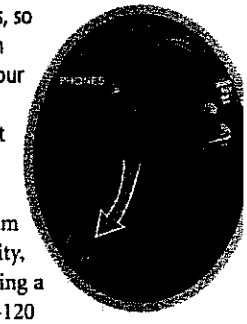




1. *Set the VOLUME [MASTER] knob all the way to the "Min" position.*
2. *Play a few notes on the keyboard while gradually increasing the volume with the VOLUME [MASTER] knob.*
   Be careful not to set too loud a volume.

Connecting headphones

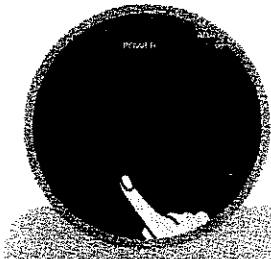
If you want to play late at night (or early in the morning), connect a pair of headphones to the EG-101 PHONES jack. This will switch off the speakers, so that you can groove to your heart's content without disturbing anybody.

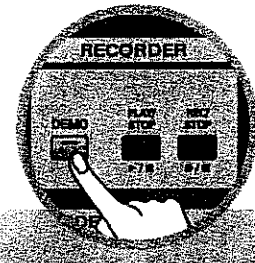


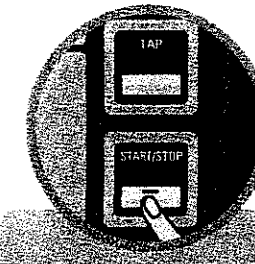
For optimum sound quality, consider using a pair of RH-120 headphones (an option available at the shop where you purchased the EG-101).

Listening to the demo songs

Your EG-101 comes with 8 demo songs that give you an idea what you can do with your GrooveKeyboard. Here's what you need to do:







1. *Switch on the EG-101 by pressing the [POWER] switch (rear panel).*
2. *Press the [DEMO] button (indicator must light).*
   The dEM message appears on the display.
3. *Select a demo song by pressing a number button.*
   Playback of the selected demo song starts right away. To listen to all songs, press the [START/STOP] button.
4. *Press the [START/STOP] button to stop playback again.*
   By doing so, you do not leave the Demo mode. You have to press [DEMO] again to leave the Demo mode.

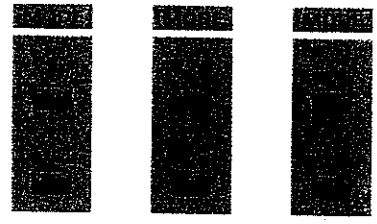
▷ *You can also start and stop demo song playback of all songs by moving your hand over the D Beam Controller. If the demo is running, this will stop it. If it is stopped, the D Beam allows you to start playback of all 8 demo songs.*

Playing on the entire keyboard (Whole Upper)

The sound you hear when you play on the keyboard, is called a Tone. In some cases, the Tone you can play on the keyboard is only assigned to the right half of the keyboard. That is why it is called Upper Tone. The EG-101 provides 448 different Tones for you to choose from. After powering on the EG-101, the A64₁ ("Bright Piano") Tone is automatically selected and assigned to all 49 keys of the keyboard. Play a few notes to hear what it sounds like.

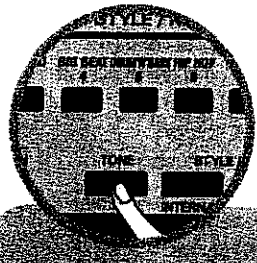
The current state of your EG-101 is called a *Mode*. The EG-101 provides three modes. As the sound you hear after powering on the EG-101 is assigned to all keys, this mode is called the WHOLE UPPER mode (Upper Tone assigned to all keys). The Whole Upper mode is active when neither the RPS nor the ARRANGER indicator lights (see the illustration).

Let us now select another Tone.

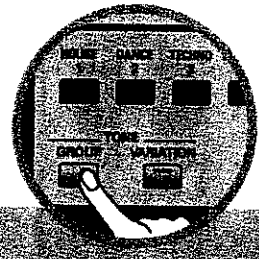


Whole Upper mode | RPS mode | ARRANGER mode

Selecting other Upper Tones

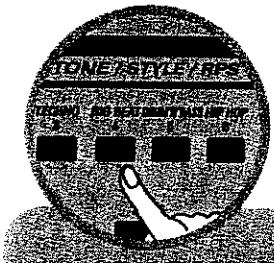


1. *Press the [TONE] button.*
This tells the EG-101 that you are about to select a new Tone. The EG-101's Tones are divided into two Groups, "A" and "b". (See the list on page 176 for quickly finding the desired Tone.)

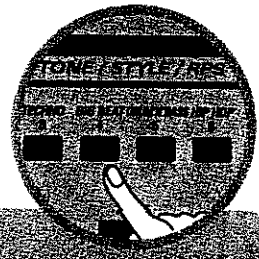


2. *Press the [GROUP] button to select Group "A" or "b".*
The letter of the selected Group appears in the leftmost position in the display. Be careful not to select dr (Drum Set) or SnP (sampler).

The EG-101 immediately selects the Tone that has the same number as the one in the previous Group. Example: if the "Lead TB 1" Tone (A11) is currently selected, the EG-101 will switch to b11 (Brass 1) as soon as you press the [GROUP] button once.



3. *Press a number button in the TONE/STYLE/RPS section.*
This selects a Tone Bank. That is why the display now also contains a number (the flashing dash means that you still need to select a memory within this bank). The EG-101 provides 8 banks per Group. As there are two groups ("A" and "b"), there are thus 16 Tone banks.



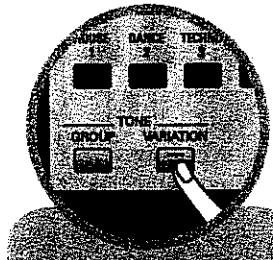
4. *Press another (or the same) number button to select a Tone within the Bank you have just chosen.*

If you select Group "b", Bank "2", and Tone "3", the display now looks like this:

▷ *If you change your mind about selecting another Tone, press [EXIT] or one of the following buttons before pressing a second number button (see step 4): [GROUP], [VARIATION], [INTERNAL], [USER], [DEMO], [RPS MODE], [MIDI].*

▷ *In some cases, the EG-101 does not load the exact Tone you select but an alternative that sounds even better. These alternatives are called Variations. (The "best choices" are indicated in italics in the list starting on page 176.)*

Variations are Tones that are similar to the sounds you can select using the Group/Bank/Number method. If you consider that the EG-101 provides 448 Tones, while you can only select 2 (Groups) x 8 (Banks) x 8 (Numbers)= 128 Tones directly, there has to be a way of accessing the remaining Tones. And that is precisely what the [VARIATION] button is for.



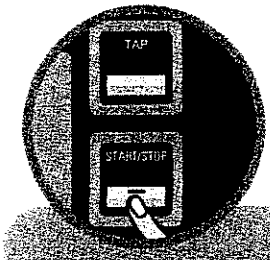
5. Press the [VARIATION] button to select the desired Tone Variation (see the box).

In some cases, you may have to press it repeatedly to select the desired Variation. To return to the "main" Tone, press [VARIATION] several times until its indicator goes dark again. While the VARIATION indicator lights, you can directly select the desired Variation by pressing a number button.

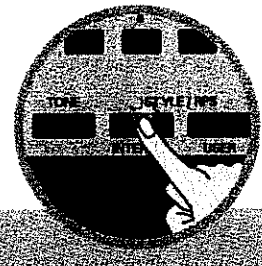
If you want to play music with your left and right hands (without using the RPS or Arranger function), make sure the RPS and ARRANGER indicators in the MODE section are off.

Playing to a drum accompaniment

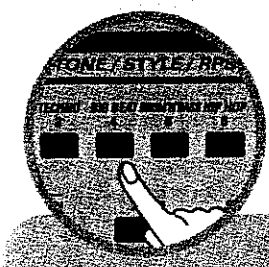
While improvising in Whole Upper mode, you can spark your imagination by adding a drum accompaniment to your left & right hand playing. This drum accompaniment will be supplied by the EG-101's *Arranger*.



1. Press the [START/STOP] button to start the drum accompaniment and start playing on the keyboard.
If this is not the right drum accompaniment for your music, select another one.

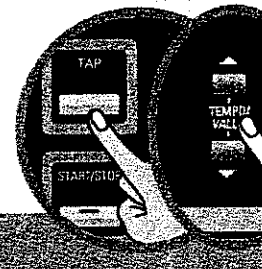


2. Press the [INTERNAL] button.
The indicator of this button lights, while the number in the display (probably 1 0) refers to the currently selected Style.

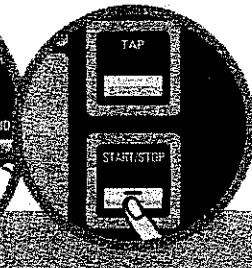


3. Select a Style bank (see the names above the number buttons).

4. Select a Style from this bank by pressing another or the same number button.



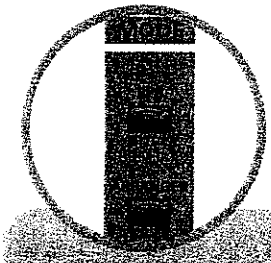
5. Use the [TAP] or [TEMPO/VALUE] buttons to change the tempo.



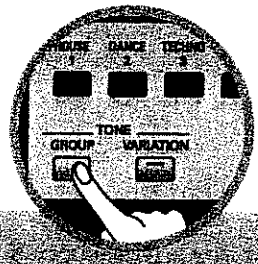
6. Press the [START/STOP] button to stop the drum accompaniment.

Drumming with the EG-101

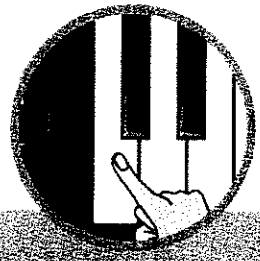
The EG-101's keyboard can also be used for drumming. In that case, the keys no longer allow you to play melodies. Instead, every key triggers a different drum sound. Check it out!



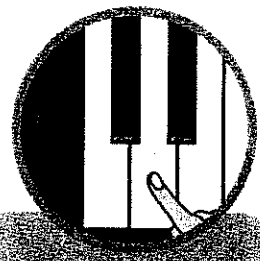
1. *Select the Whole Upper mode. This means you have to switch off the [RPS] or [ARRANGER] button if its indicator currently lights.*



2. *Press the [GROUP] button until dr1 appears on the display.*



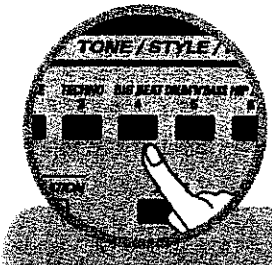
3. *Press the above key to hear a bass drum (also called "Kick").*



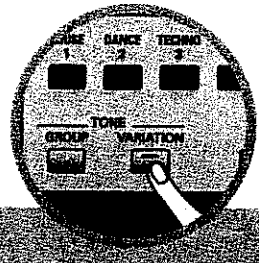
4. *Press the above key to play a snare drum. Then press other keys to play other drum sounds. With a little bit of practice, you'll be a world-class "keyboard drummer"!*

Selecting Drum Sets

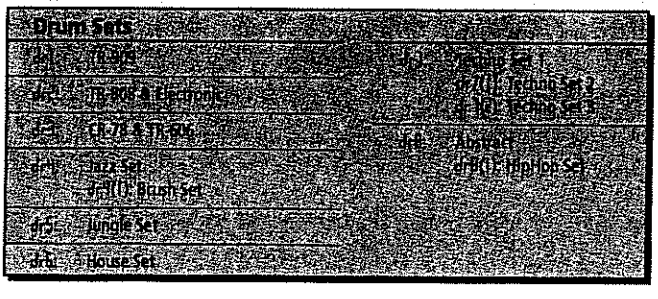
All drum sounds you have played so far belong to the Drum Set called "TR-909" (dr1). Drum Sets are a bit like Tones, except that there are 12 (rather than 448) of them and that every key triggers a different drum/percussion sound. Here's how to select another collection of drum sounds (another "Drum Set"):



1. *With the display still showing dr1, press a number button to select another Drum Set.*
   This provides access to the eight Drum Sets with a single number (1–8).



2. *Press the [VARIATION] button to select one of the Variation Drum Sets.*
   The [VARIATION] button only works after you have selected dr4, dr7, or dr8. If you select a Variation Drum Set, the indicator of the [VARIATION] button lights.



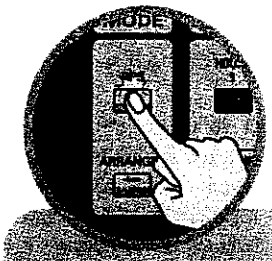
▷ *See page 179 for a list of the available drum/percussion sounds for each Drum Set.*

▷ *The "b" Tone bank also contains drum sounds (and sometimes even small "Sets") so that you may not have to select the Drum mode (dr).*

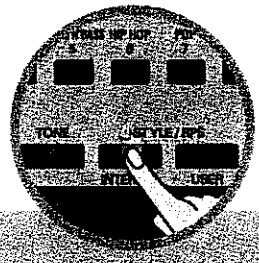
4. DJ/Remix function (RPS)

Another clever feature of the EG-101 is the possibility to create your own Dance tracks in realtime. To this end, the EG-101 provides 64 collections of ready-made grooves ("RPS Sets") with every part (drums, bass, chords, etc.) assigned to separate keys of the keyboard. Starting and stopping these parts is thus a matter of pressing a few keys.

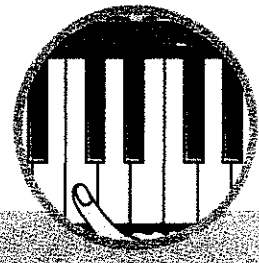
By the way: "RPS" is short for *Realtime Phrase Sequencer*. Phrases are short sequences of 2–8 measures in length that can be started ("triggered") by pressing a key.



1. Press the [RPS] button (indicator must light) to select the RPS mode.



2. Press the [INTERNAL] button (indicator must light). Let's start with the drums:



3. Press the above key with your right hand to start the first drum loop.

4. Press the key to its right to play another drum loop.

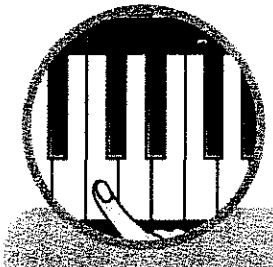
You can now release the first key, press it again, etc., to remove or add the first drum groove as and when necessary. Of course, you can do the same with the second drum groove.

5. Press other keys in the [RPS] section of the keyboard to start yet another drum groove, a bass line, chord patterns, etc.

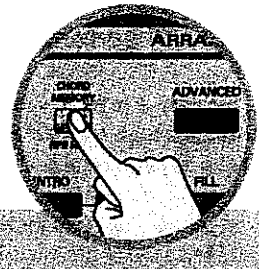
See! Being a DJ/Remix artist is not that complicated. All you need is a feel for when to bring in new phrases and switch off phrases that are already running. Up to 8 RPS patterns can be used simultaneously.

RPS Hold

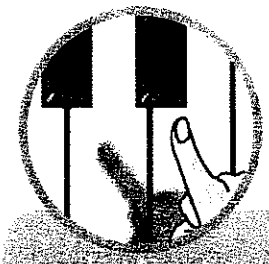
You may have noticed that an RPS phrase only plays as long as you hold the corresponding key. You can "lock" RPS phrases so that they go on playing after you release their keys. This what we call the *RPS Hold* function.

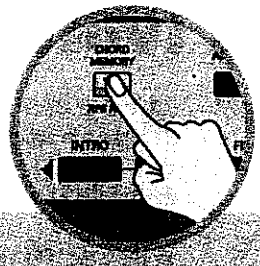


1. Press and hold the key assigned to the desired RPS phrase.



2. Keep holding that key while pressing the [CHORD MEMORY/ RPS HOLD] button (indicator must light).





3. Release the key you have been holding.
The RPS phrase keeps playing. The Hold function can also be activated for several RPS phrases simultaneously. Simply hold down the keys of all phrases you want to "hold".

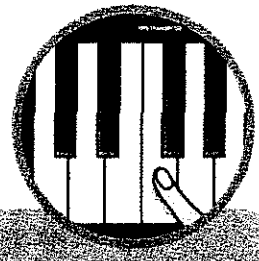
4. Switch the RPS Hold function off again.

▷ To switch off the Hold function for *one* RPS phrase, hold down the corresponding key in the | RPS | section and press the [CHORD MEMORY/RPS HOLD] button.

▷ To switch off the Hold function for *all* RPS phrases, simply press the [CHORD MEMORY/RPS HOLD] button (without holding down a key on the keyboard).

Pitch (key) of the "melodic" phrases (RPS Transpose)

You can also specify the pitch (or "key") of all phrases that play notes rather than drum sounds (bass, synthesizer riffs, etc.). Here's how to:



1. Start a melodic phrase by pressing its | RPS | key (see above). Use the bass, for example.

2. Hold down the "bass" key with your right hand (or activate the RPS Hold function), while pressing the above key with your left hand.
This changes the key of the bass line (and of all other melodic patterns of the currently selected RPS memory).

3. Now press another key in the | RPS TRANSPOSE | section.
The bass plays in another key. (By the way, you don't need to hold the key in the [RPS TRANSPOSE] section. Pressing it for a second, or so, is enough.) This key change does not apply to the drums.

Adding a melody line to your RPS performance

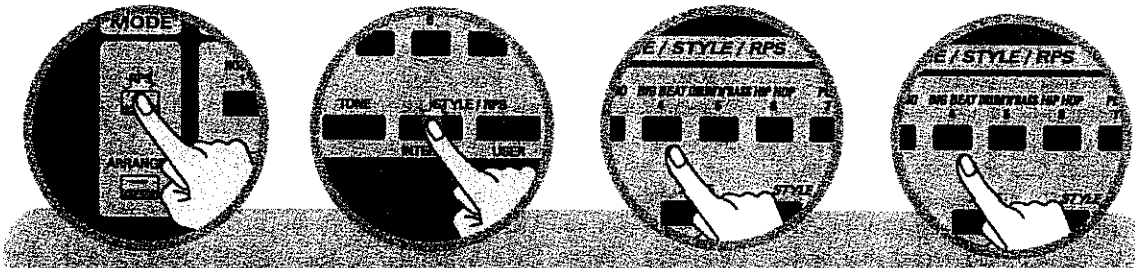
You can also play a melody with your right hand while controlling the RPS function with your left. That is possible because the RPS function is only assigned to one half of the keyboard (the left, to be precise). All keys to the right of the rightmost | RPS | section key (the white key below the [USER] button) are assigned to the **Upper Tone**.

1. *Start an RPS phrase and play a few notes in the right half of the keyboard.*
2. *See "Selecting other Upper Tones" on page 8 if you do not agree with the currently selected Upper Tone.*
   You can also compile your own RPS phrase Sets. See page 47 for details.

Selecting other RPS Sets

The RPS Set you have been using so far (r11) is only one of 64 possible RPS Sets. By "Set" we mean an assignment of 12 phrases (one for every key in the RPS section of the keyboard). Here's how to select another set of RPS phrases:

Selecting internal RPS Sets



1. *Press the [RPS] button (indicator must light) to select the RPS mode.*
2. *Press the [INTERNAL] button (indicator lights).*
3. *Select a bank (1–8).*
4. *Select a number (1–8).*
5. *Press the keys in the RPS section of the keyboard and... have fun!*

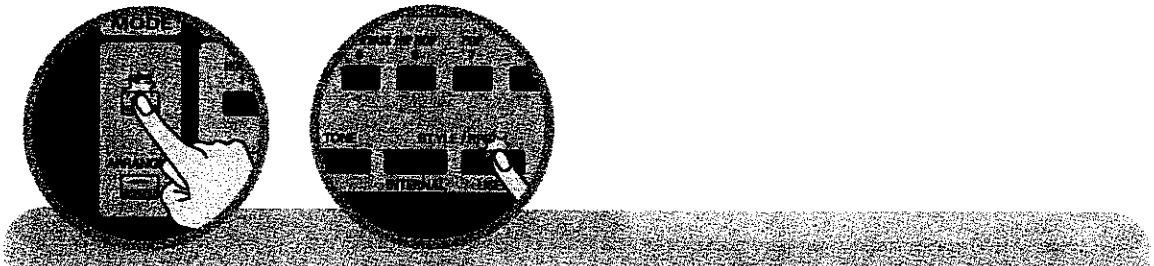
▷ *The RPS Sets use the patterns of the corresponding Style numbers (RPS Set 11 corresponds to Style 11, etc.). Example: if you want to "play" with the patterns of Style 48, select RPS Set "r48".*

If you change your mind about selecting another RPS Set, press [EXIT] or one of the following buttons: [TONE], [USER], [DEMO], [ARRANGER] or [MIDI].

Example: here, RPS Set "45" has been selected.

Selecting User RPS Sets

The EG-101 contains 64 additional RPS Sets called "User RPS Sets". These already contain data and settings and can thus be selected right away. See page 47 for how to program your own RPS Sets.



1. *Press the [RPS] button (indicator must light) to select the RPS mode.*
2. *Press the [USER] button (indicator lights).*
3. *Select a bank (1–8).*
4. *Select a number (1–8).*

User RPS Sets are indicated by a lower-case "u". The message "u48" thus means that you have selected User RPS Set "48".

5. Recording and using audio (Sample Player)

The EG-101's sampler is a smart audio recording and playback function that allows you to use drum grooves, shouts, hits, etc., taken from your favorite CDs, vinyl records, cassettes, MDs, etc. You can also connect a microphone (Roland DR-10 or DR-20) to the MIC input, record your own original raps, shouts, and vocals, and play them back.

Why work with samples?

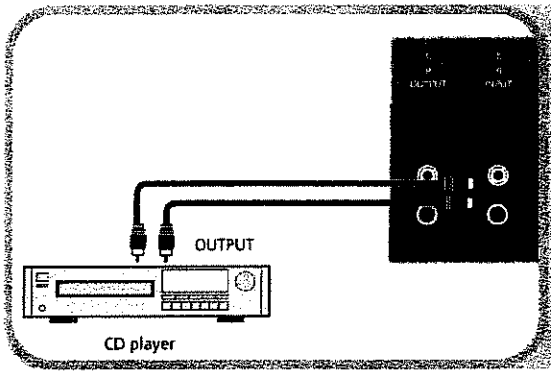
There are several reasons for working with samples. One: it is far more convenient to start and stop audio excerpts by pressing one button than to search for the CD, put it on the tray, start playback, skip to the desired track, and fast forward to the excerpt you want to hear. (And imagine the nightmare if you were to work with a cassette deck...) If you wanted to use several audio bits from different sources simultaneously (which you can with the EG-101's Sample Player), you'd need as many playback devices (CD players, MD recorders, etc.) and operators/assistants to prepare the excerpts and start them at the right moment.

Two is linked to the first reason but nevertheless important in its own right: you can keep all audio bits handy (right inside your EG-101).

Three: playing with samples is plain and simple fun. You can start a sample, stop it again after a few seconds, then start it again from the beginning. This allows you to use the first bit of a longer phrase for rhythmic accents/emphasis ("Hey-he-he-hey") and the entire phrase in other places ("Hey, my man, what's happenin'").

Four: the EG-101's sampler provides some nifty functions that allow you to add effects to your samples, and to speed them up/slow them down. You can also replace selected drum instruments of the currently selected Style or RPS phrase with drum sounds you sampled yourself.

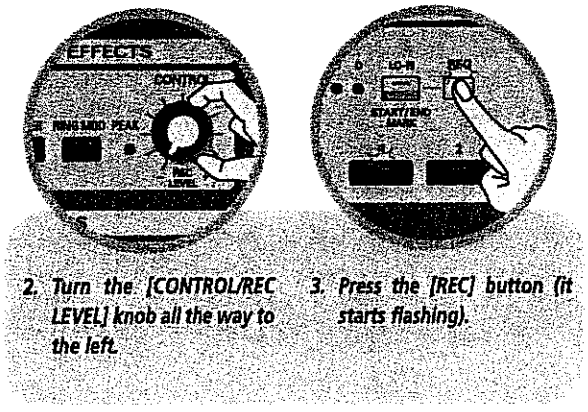
Recording a sample



1. Connect your CD or MD player's (analog) outputs to the EG-101's INPUT L/R jacks. This requires the use of a phono/RCA/cinch cable.

You could also connect a dynamic microphone to the MIC jack.

▷ *Avoid using both the LINE inputs and the MIC input. The EG-101 automatically sets the correct input sensitivity (called "gain"). So try to stick to one input source per sample to avoid distortion. (You can, however, use the MIC input for recording a second sample.)*



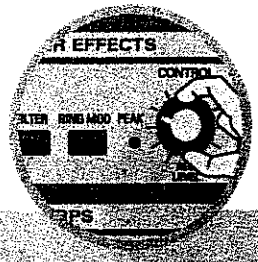
2. Turn the [CONTROL/REC LEVEL] knob all the way to the left.

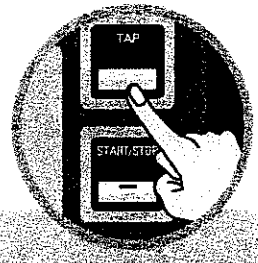
3. Press the [REC] button (it starts flashing).

One indicator of the [1]~[4] pads starts flashing to indicate the memory that will be used for recording (the EG-101 has 4 memories and 4 banks, for a total of 16 memories). If all memories in the currently selected bank are full, the EG-101 automatically selects another bank.

▷ *There are two parameters you can take advantage of for fine-tuning the settings to be used during recording. We'll skip them here. See "Refined sampler settings" on page 41 for details.*

▷ *To quit without sampling, press the [MIDI/EXIT] button to the right of the display.*



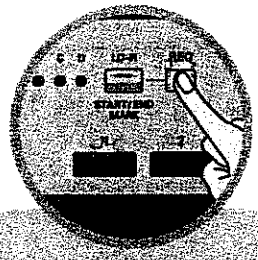


4. *Start playback on your CD player.*

5. *Gently increase the [REC LEVEL] knob to a level where the PEAK indicator briefly lights for exceptionally loud signals.*
As a rule, the PEAK indicator should only briefly flash when the music gets very loud.

6. *Press the [TAP] button in the beat of the music to enter the BPM value.*

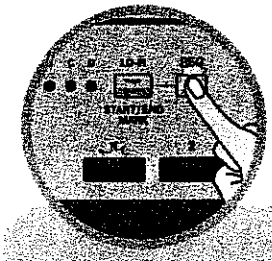
This is only necessary if you wish to use the Sample as a substitute for the Arranger's Drum part. If you do not set the BPM value, the EG-101 calculates one automatically – and chances are that this won't be the correct one. As stated above, this may be of little importance for side-by-side use of the Arranger and Sample Player.

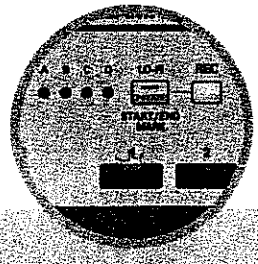


7. *Rewind the CD player, etc, to a position that lies a little ahead of the excerpt you want to sample.*

8. *Wait until the excerpt begins, and then press [REC] again (indicator lights) to start sampling.*

The display now shows "—-" to signal that the Sample Player is recording.



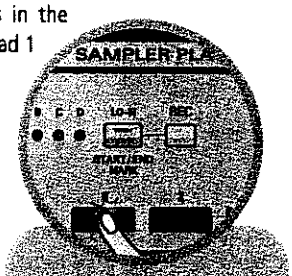


9. *To stop sampling, press [REC] again.*

The indicator corresponding to the selected sample memory lights steadily to signal that memory now contains audio data.

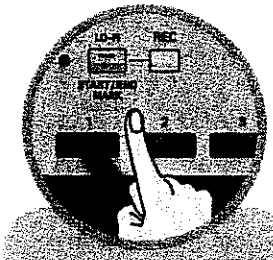
Playing back your sample using the pads

The audio phrase you have just sampled resides in the (automatically) selected sample memory (Bank 1, Pad 1 in our case) and is ready for playback.

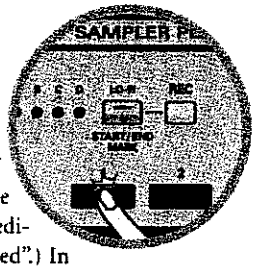


1. Press the [1] pad. Playback of your sample starts.

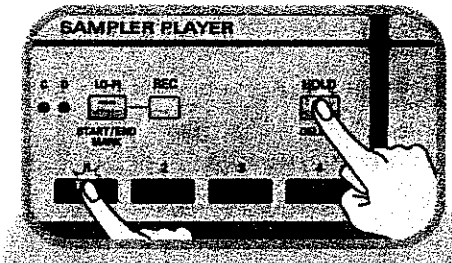
Let us use the word "pad" for the [1]~[4] buttons in the SAMPLE PLAYER section because they are start/stop switches (that work like the pads on a drum machine).



2. Release the [1] pad. Playback of the sample stops.

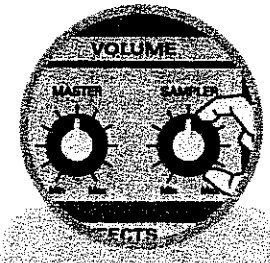


Repeat the above steps ad lib, taking care to vary the time during which you keep the pad depressed. If you hold down the pad long enough, the Sample Player will reach the end of your sample, and immediately return to the beginning (all samples are "looped".) In fact, the Sample Player behaves a lot like the RPS function covered earlier.



3. Hold down the [1] pad while pressing the [HOLD] button (indicator lights).

By doing so, you activate the Hold function that keeps repeating your sample. Releasing the pad (and the [HOLD] button) thus no longer stops the sample. This becomes really meaningful after you've sampled several phrases. So go back to "Recording a sample" on page 14. Up to 4 samples can be played back simultaneously.



4. If necessary, use the VOLUME [SAMPLER] knob to adjust the playback volume of the Sample Player.

5. Switch off the Hold function (in one of the following ways):

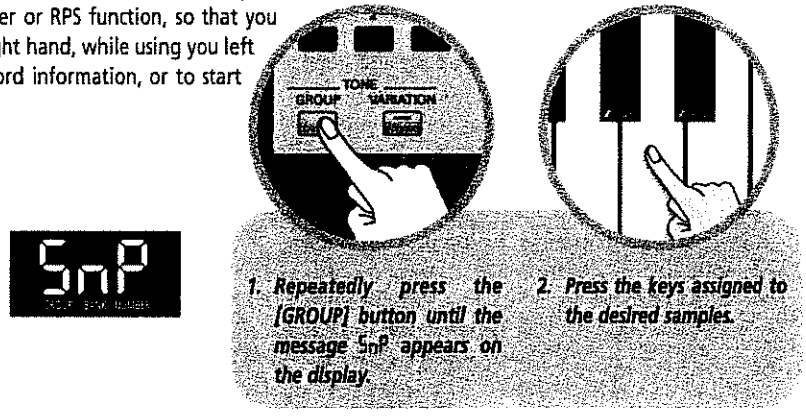
a) Press the pad of the sample that is currently being held (indicator goes dark) to switch it off. This will deactivate the Hold function for that sample only. — OR —

b) Press the [HOLD] button (indicator goes dark). This will switch off the Hold function for all sample memories currently being "held".

▷ *Up to four samples can be played back simultaneously. See "Other important considerations for choosing Lo-Fi/Hi-Fi and Ste/Mno" on page 42 for additional information, though.*

Playing back samples via the keyboard

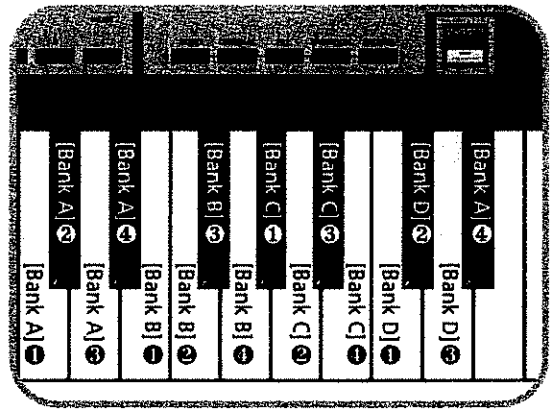
You can also use the keyboard to start and stop your samples. In that case, however, the Upper Tone is no longer available. This "key triggering" can be combined with the EG-101's Arranger or RPS function, so that you can trigger the samples with your right hand, while using you left hand to feed the Arranger with chord information, or to start and stop RPS phrases.



1. Repeatedly press the [GROUP] button until the message SnP appears on the display.

2. Press the keys assigned to the desired samples.

The assignment of the Sample Player's memories to the keyboard starts at the "C" key in the middle (between the [2] and [3] pads) and looks as follows:



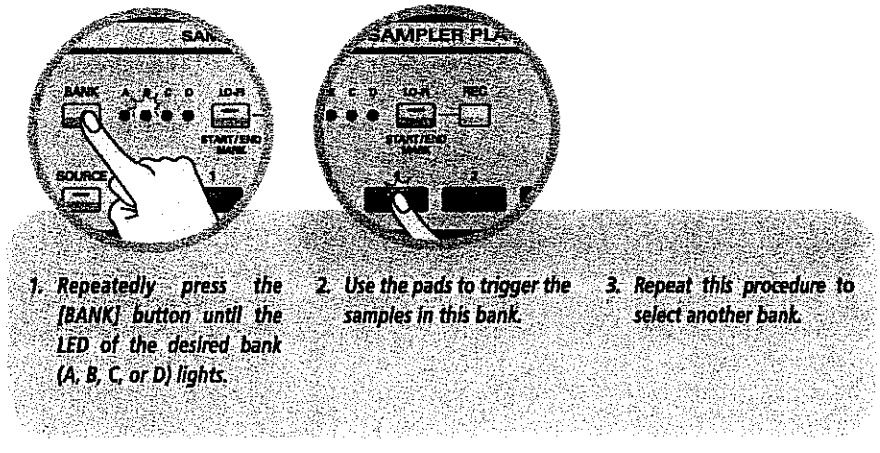
As you will discover in a moment, triggering the samples via the keyboard can be a convenient alternative because it saves you the hassle of switching banks (see below). The "drawback" of this approach is that you are no longer able to play the Upper Tone. So choose whichever is more convenient in a given situation.

▷ *If a given sample memory doesn't contain audio data, pressing its key (or pad) will have no effect.*

▷ *Up to four samples can be played back simultaneously. See "Other important considerations for choosing Lo-Fi/Hi-Fi and Ste/Mno" on page 42 for additional information, though.*

Selecting other sample Banks

The EG-101's Sample Player provides four Banks (A–D) with four memories each, for a total of 16 sample memories. Only one Bank can be assigned to the pads at any one time. If the sample you need is in another bank, here is how to select that bank:



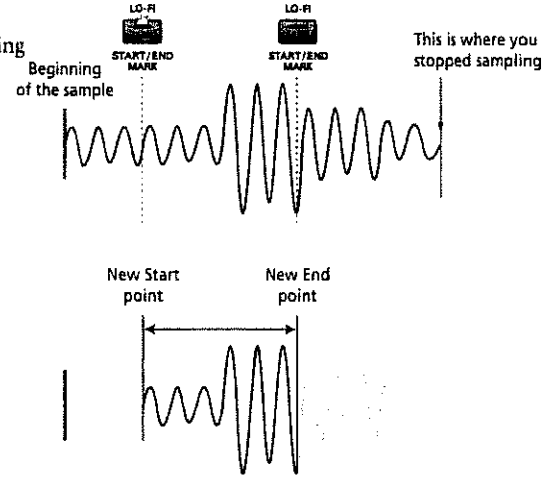
1. Repeatedly press the [BANK] button until the LED of the desired bank (A, B, C or D) lights.

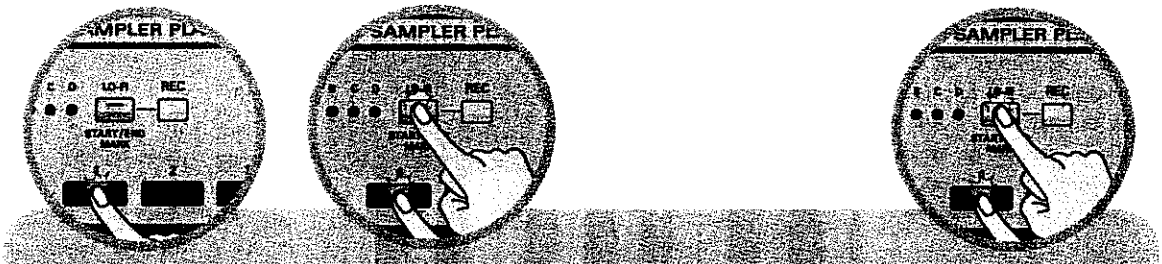
2. Use the pads to trigger the samples in this bank.

3. Repeat this procedure to select another bank.

Cutting your samples down to size

The EG-101's Sample Player provides a function for shortening your samples. This may be necessary when a sample contains more audio than the desired excerpt (perhaps because you started the sampling process a little early and stopped it a little late), or when you decide not to use the entire sample. In that case, you can redefine such a sample's Start and End points. After doing so, pressing the pad in question (or the assigned key) will cause playback of that sample to start at the newly defined Start and End points (the black portion in the second illustration).

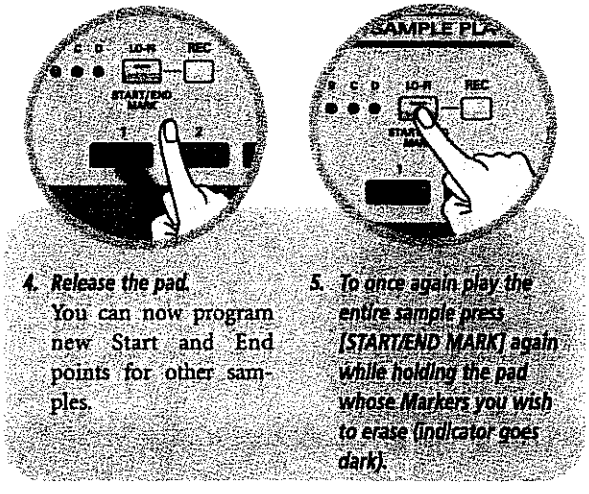




1. *Press and hold the pad (or key) of the sample whose length you wish to change.*

2. *Press [START/END MARK] where you want the sample to start sounding next time around.*
The indicator of this button now flashes.

3. *Press [START/END MARK] again where you want the sample to end.*
The indicator of this button now lights steadily.



4. *Release the pad.*
You can now program new Start and End points for other samples.

5. *To once again play the entire sample press [START/END MARK] again while holding the pad whose Markers you wish to erase (indicator goes dark).*

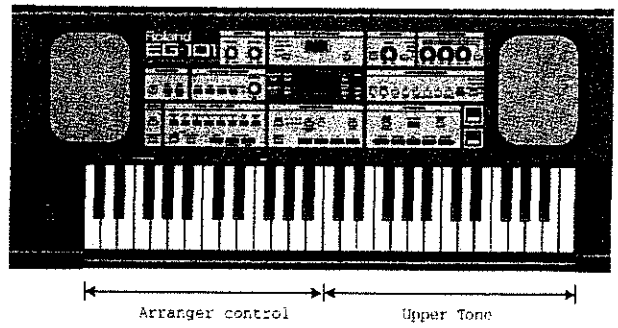
This will erase the Start and End settings for that sample, so that you need to redefine them if you want to return to the "short" version.

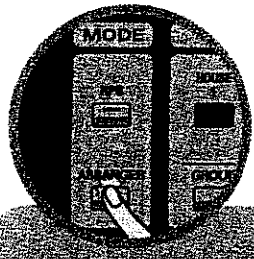
6. Working with the EG-101's Styles

The third EG-101 mode is called the **Arranger** mode. This is where you can use the EG-101's **Styles**. These Styles are divided into the following groups:

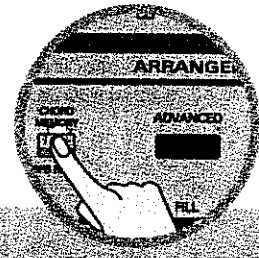
- 64 Styles in ROM (that cannot be changed)
- 64 Style User Programs (customized versions of existing Styles)

In Arranger mode, the EG-101 is divided into two halves (a function called "split"). The left half of the keyboard can be used to transpose the Arranger (see below), while the right half is assigned to the Upper Tone.

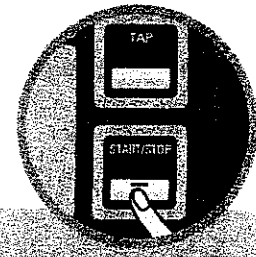




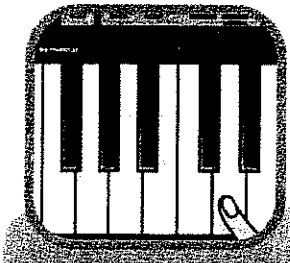
1. Press the MODE [ARRANGER] button (indicator must light).
After powering on, the House 1 Style (A11) is automatically selected, so let's start with that one.



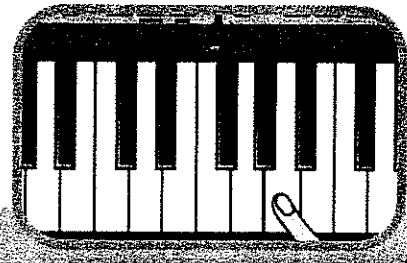
2. Press the [CHORD MEMORY/RPS HOLD] button (indicator must light).
The Chord Memory function is a special memory where the last note or chord you played is stored until you play another note or chord.



3. Press the [START/STOP] button (indicator lights).
If necessary, adjust the volume with the VOLUME [MASTER] knob.



1. Play a D by pressing the above key to the left of the white line ("1") below the [2] button.



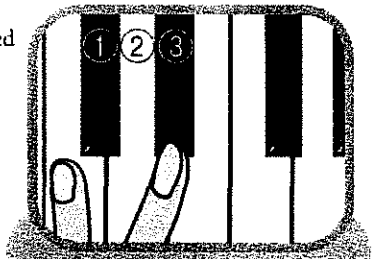
2. Now play an A.
The pattern changes to play in the key you specify by pressing different keys in the left half of the keyboard. The basic ingredients of the pattern, however, remain the same; only the pitch of certain instruments (in fact all, except the drums) changes.

3. Try other notes in the left half of the keyboard.

So far, you have only played chords that sound happy (they're called "major" chords). – Wait a minute: why do we say *chords* here? After all, chords are groups of notes that are played simultaneously, and we've only played one note at a time...?!

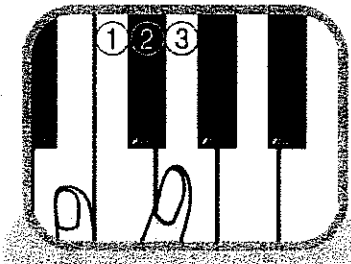
That is because the EG-101 contains an invisible function called **Chord Intelligence**. If you only play one note in the left half of the keyboard, the EG-101 assumes that you mean a major chord.

You can also play sad chords (called "minor" chords). Here's one:



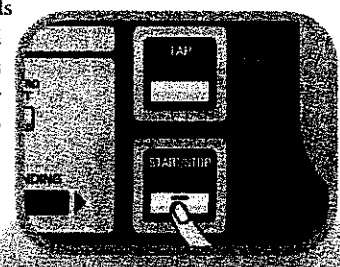
4. Press the above keys to play a minor chord (this one's called "C minor", or "Cm" for short).

Playing minor chords is easy: press the key of the note that corresponds to the desired basic pitch ("root", usually the note played by the bass), and the one that lies three keys to the right of the root.



5. Press the above keys to play an E minor chord.

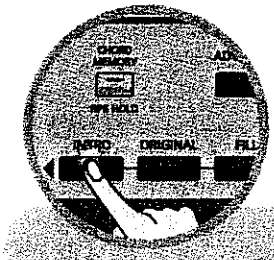
The EG-101 can also play other chords (seventh, diminished, augmented, etc.). If you already know how to play chords on a keyboard instrument, you'll be glad to learn that the EG-101 also recognizes complete chords. It is thus not necessary to use the "intelligent" method if you're used to the complete fingering system.



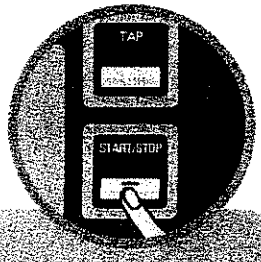
6. Press [START/STOP] again to stop playback.

Other patterns

If you want to add some variation to a Style, here is how to:



1. Press the [INTRO] button (indicator lights, while the ORIGINAL indicator flashes).



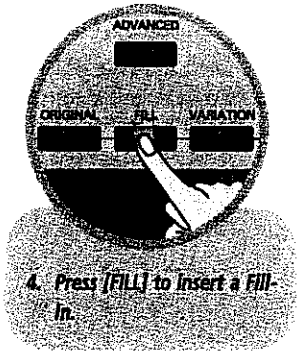
2. Press [START/STOP] to start Arranger playback and listen.

You will first hear an introduction whose length depends on the currently selected Style. See also "Automatically starting Arranger playback" on page 21 for another way of starting the Arranger. While the INTRO indicator flashes (during Intro playback), you can select the pattern to use next:

3. Use [ORIGINAL], [VARIATION], and [ADVANCED] to select the accompaniment to be played upon completion of the Intro.

ORIGINAL:	Basic accompaniment pattern.
VARIATION:	Other version of the basic accompaniment pattern (with more instruments, or different notes for some instruments).
ADVANCED (off):	First accompaniment level with two possibilities (Original & Advanced).
ADVANCED (on):	Second accompaniment level with two additional possibilities (Original & Advanced).

There are thus four different patterns for every Style that are repeated over and over until you select another pattern or stop Arranger playback.



4. Press [FILL] to insert a Fill-In.

Fill-Ins are short patterns (1 bar) that can be used at the end of a phrase (e.g. the first verse or chorus) or simply to add some variation. Fill-Ins are played only once, while Original, Variation, etc. are repeated until you select another pattern or stop the Arranger.

If the ORIGINAL indicator lights when you press [FILL]

➥ the EG-101 plays a Fill-In and then switches to the VARIATION pattern (the VARIATION indicator flashes).

If the VARIATION indicator lights when you press [FILL]

➥the EG-101 plays another Fill-In and then switches to the ORIGINAL pattern (ORIGINAL indicator flashes).

If you press [FILL] while the Arranger is stopped, you select the Fill that will call up the currently selected basic pattern (Original or Variation).

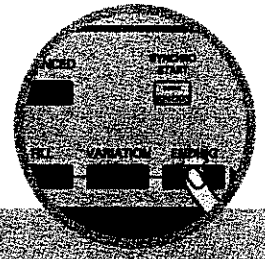
▷ *The length of the Fills also depends on when you press this button. When pressed in the first half of a bar, the Fill starts rights away and lasts until the end of the current bar. Otherwise, the Fill starts on the first beat of the next bar and lasts an entire bar.*

A note about the EG-101's Styles

Every Style contains 12 patterns that belong to several categories. There are two main categories that can be selected via the [ADVANCED] button. If its indicator lights, you have access to patterns that belong to the "Advanced" level. If the ADVANCED indicator does not light, you can select the patterns of the "Basic" level.

ADVANCED BASIC	ADVANCED ADVANCED
Intro (Basic)	Intro (Advanced)
Ending (Basic)	Ending (Advanced)
Original	Original
Fill-In To Variation	Fill-In To Variation
Variation	Variation
Fill-In To Original	Fill-In To Original

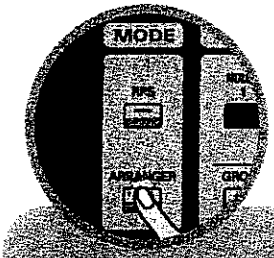
As you see (and may remember from step (4) above), there also two sub-categories for the Fills because there is only one [FILL] button. The Fill-In to be played next indeed depends on which indicator is currently lit: VARIATION or ORIGINAL.



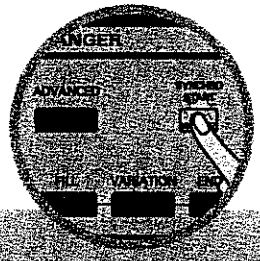
5. Press [ENDING] to select the ending pattern.
At the beginning of the next bar, the EG-101 starts playing an Ending phrase and stops as soon as the phrase is finished.

Automatically starting Arranger playback

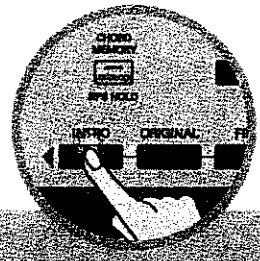
One way of starting Arranger playback is by pressing the [START/STOP] button (see above). Another is to use the Synchro Start function. Playback then starts as soon as you press one or several keys to the left of the "I" split point (below pad [2]).



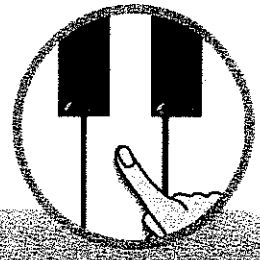
1. Select the Arranger mode by pressing the MODE [ARRANGER] button (indicator must light).



2. Press the [SYNCHRO START] button (indicator must light).



3. Select the first Arranger pattern to be used (Intro, Original, etc.).

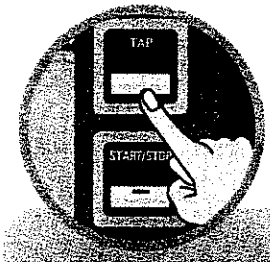


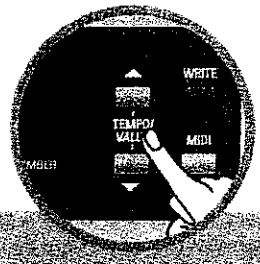
4. Play one or several notes to the left of the split point.

The Arranger starts as soon as you play the first chord.

Changing the tempo (BPM)

Every Style contains a preprogrammed ("preset") tempo that is automatically set every time you select this Style *while the Arranger is stopped*. (If you select a Style while the Arranger is playing back another one, the new Style will continue at the same tempo as the previously selected Style.) If you do not agree with the preset tempo, here's how to change it. This can be done either before or during playback.



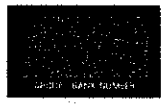


1. ***Press the [TAP] button at the desired speed.***
   You need to press this button at least twice. It is probably safer, however, to press it four times, or like any musician would: by counting "1-2-3-4, 1-2-3-4". Alternatively...

2. ***...use the [TEMPO/VALUE] buttons to increase or decrease the tempo.***
   You can hold down one button while pressing the other to quickly jump to a significantly higher or lower tempo value.

When you start the Arranger (or the RPS function), the display briefly indicates the tempo and the beat the EG-101's is currently playing. This is done by means of three dots in the display (for reasons of simplicity, we omitted the alphanumeric information in the following illustrations):


"One...

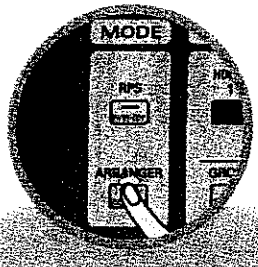

...two...

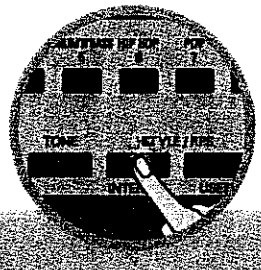

...three...


...four."

Selecting other Styles

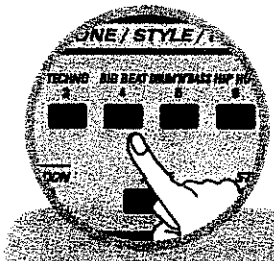
The EG-101 comes with 64 preset Styles (called *Internal*). Every single one of them provides several accompaniment patterns (see also "A note about the EG-101's Styles" on page 21).





1. ***Select the Arranger mode by pressing the MODE [ARRANGER] button (indicator must light).***
   Feel free to select Styles during Arranger playback or while it is stopped.

2. ***Press the [INTERNAL] button.***
   The EG-101 is now aware that you want to select a Style from its internal memory.



3. Select a Style Bank (see the names above the number buttons).
The display shows the number of the Bank you have just selected (first digit). If you pressed the [DANCE/2] button, the display now looks like this:

As there are only 8 number buttons, you cannot select Style "10", for example. The last Style of Bank 1 (and all other banks) is "8". So there is no Style "29", "39", etc.

4. Select a Style from this bank by pressing another or the same number button.
If you press the [6] to select the Dance 6 Style, the display now looks like this:

To cancel Style selection at any stage, press the [EXIT] button.

Changing the Split point

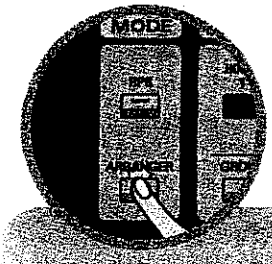
You may wonder why the keyboard is split into two halves. We already told you that the left half can be used to change the key of the Styles. The right half, on the other hand, can be used to add a live melody to the pre-programmed Style.
When you power on the EG-101, the Split point is located between the B and C keys in the middle (see the white line below the Sample Player [2] button). If this setting does not allow you to play all the notes you want with your right hand, proceed as follows:

Selecting other Tones for the right hand

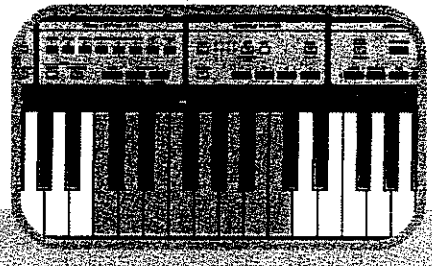
When you select a Style, the EG-101 not only recalls the patterns in question but also a suitable Tone for the right half (the **Upper Tone**). If you do not agree with this automatic Tone selection, see "Selecting other Upper Tones" on page 8.

Be sure to press the [TONE] button in the TONE/STYLE/ RPS section before selecting another Tone.

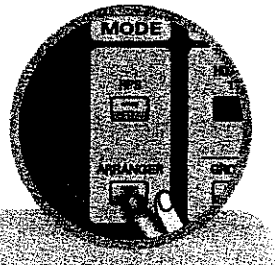
To select another Style after calling up a Tone, press the [INTERNAL] or [USER] button.



1. Press and hold the MODE [ARRANGER] button until its indicator starts flashing.



2. Press a key in the above zone to select the desired lowest note of the Upper section.
The setting range is C3–C4 (white key below [TONE] to white key below Sample Player [3]).



3. Release the MODE [ARRANGER] button.

▷ *The Split point can only be set in Arranger mode (when the ARRANGER indicator lights).*

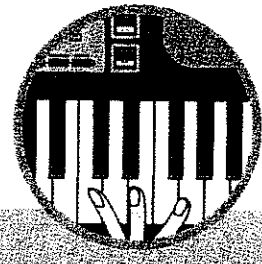
▷ *You can save your settings to a Style User Program, see page 40.*

7. Functions for realtime fun

Arpeggio

The Arpeggio function uses the notes you play in the Upper section of the keyboard (the right half in Arranger or RPS mode, anywhere on the keyboard in Whole Upper mode) and turns them into riffs whose tempo is synchronized with the BPM of the Arranger or the RPS function. Arpeggios work best when you play at least two, preferably even three, notes. (The Arpeggio function recognizes up to five notes.)

1. Press the [ON/OFF] button (indicator must light).

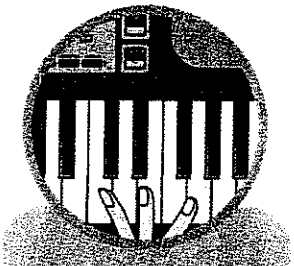


2. Simultaneously play the above notes in the Upper section of the keyboard.
Notice how your chord is broken into individual notes that keep going up.

3. Keep holding those notes while you change the setting of the [DECAY] knob.
The further you turn this control to the right, the longer the notes become. Turn it to the left to obtain shorter notes ("staccato").

Creating a "broader" Arpeggio effect (Range)

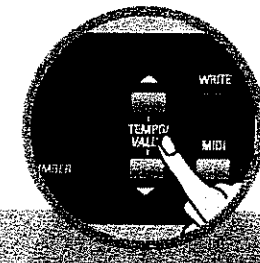
Even though the basic Arpeggio settings are already impressive, you can make the effect even cooler. Instead of having the Arpeggiator play the notes in 1 octave, you can double, or even triple, the note range. Here is how to:



1. Keep holding the above notes on the keyboard.

If you connect an optional Roland DP-2/DP-6 or BOSS FS-5U footswitch to the EG-101's SUSTAIN FOOTSWITCH jack, you can press it to hold the notes. While the footswitch is pressed, you don't need to keep holding the keys in the Upper section of the keyboard.

2. Press the [ARPEGGIO] button until the RANGE indicator lights.



3. While holding the [ARPEGGIO] button, use the [TEMPO/VALUE] buttons to select 0E1, 0E2, or 0E3.

Arpeggiator Range= 1

Arpeggiator Range= 2

Arpeggiator Range= 3

More/fewer Arpeggio notes per bar (Grid)

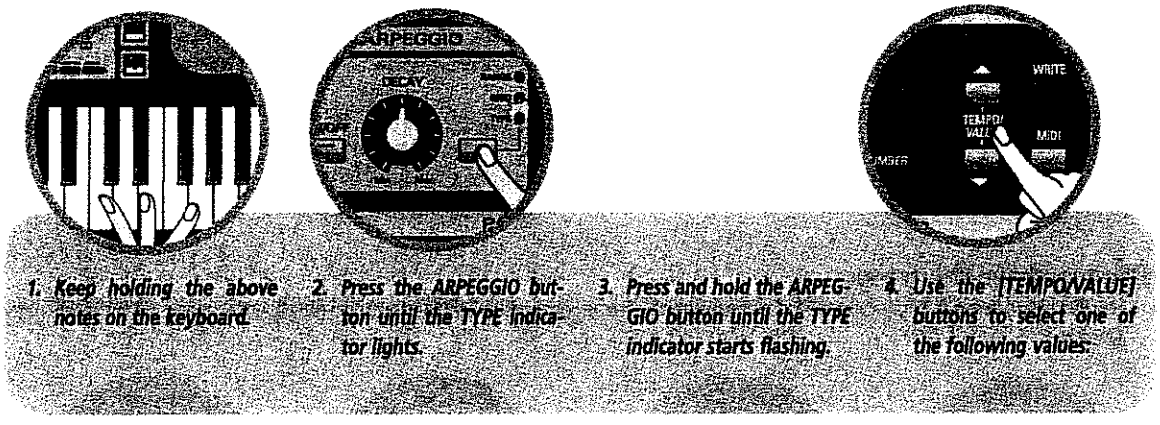
If you want the Arpeggiator to play faster with respect to the tempo value, you must change the GRID value:

1. *Keep holding the above notes on the keyboard.*
2. *Press the ARPEGGIO button until the GRID indicator lights.*
3. *Press and hold the ARPEGGIO button until the GRID indicator starts flashing.*
4. *Use the [TEMPO/VALUE] buttons to select one of the following values:*

G1	twice the number of Arpeggio notes with respect to the tempo (1/8th or ♪).
G2	three evenly divided notes per beat that seem to hover over the music (1/8th triplet or ♪³).
G3	twice the number of Arpeggio notes with respect to the tempo. Every second note is delayed to create a "jumping" feel (1/8th Swing).
G4	four Arpeggio notes for every beat (1/16th or ♬)
G5	six evenly divided notes per beat (1/16th triplet or ♬³)
G6	1/16th Swing rhythm.

Selecting the direction of the Arpeggio notes (Type)

Yet another setting you can make for the Arpeggio function is the order in which the notes are played. There are four possibilities.



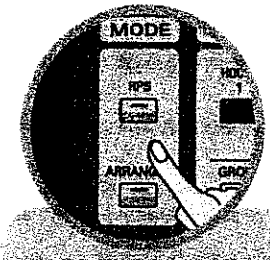
1. *Keep holding the above notes on the keyboard.*
2. *Press the ARPEGGIO button until the TYPE indicator lights.*
3. *Press and hold the ARPEGGIO button until the TYPE indicator starts flashing.*
4. *Use the [TEMPO/VALUE] buttons to select one of the following values:*

UP	(Up) The Arpeggio starts out with the lowest note you play and works its way up to your highest note. This cycle is then repeated.
dn	(Down) The Arpeggio starts out with the highest note you play and works its way down to your lowest note. This cycle is then repeated.
U-d	(Up & Down) The Arpeggio starts out with the lowest note you play and works its way up to your highest note. It then works its way down again.
rnd	(Random) The Arpeggio starts out with one of the notes you play, then plays another one, etc. The order is unpredictable (hence the name "Random").

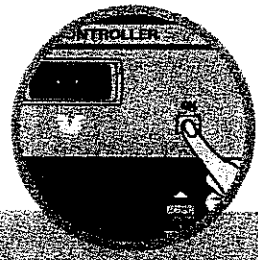
Move: The D Beam Controller

The D Beam Controller allows you to control various aspects of your performance by moving your hand, head, etc., in the air. You only need to make sure that you do so over the two "eyes" and within a 30cm (±11") range. Your movements are then translated into musical expression.

Filtering effects



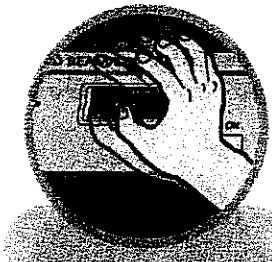
1. ***Return to the Whole Upper mode by switching off the RPS or ARRANGER indicator in the MODE field.***
   You can also use the D Beam Controller in RPS or Arranger mode. To see how it works, however, it is probably easier to select the Whole Upper mode.



2. ***Press the [ON] button to make it light.***
   The CUT + RESO indicator lights, indicating that you can use the D Beam Controller to change the filter settings (very important for Dance music). This is the default setting when you switch on the EG-101.

3. ***Press and hold a key with one hand.***

If you connect an optional Roland DP-2/DP-6 or BOSS FS-5U footswitch to the EG-101's SUSTAIN FOOTSWITCH jack, you can press it to hold the notes.

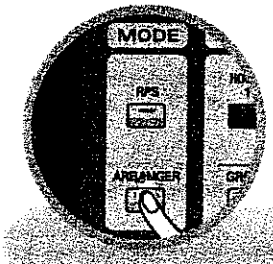


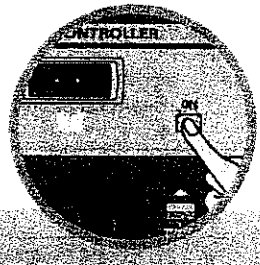
4. ***Move your other hand over the D Beam Controller.***

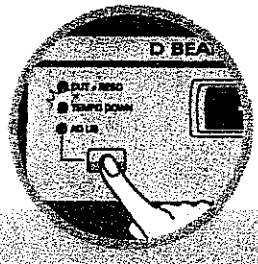
Notice how the sound becomes brighter and more "synthetic" as your hand moves closer to the D Beam Controller. Try some continuous up/down movements to cause a constant change of the sound's brightness.

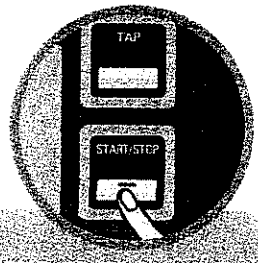
Slowing down the tempo

You can also use the D Beam Controller for changing the Arranger's or RPS function's tempo (BPM). Let's try this with the EG-101's Arranger:

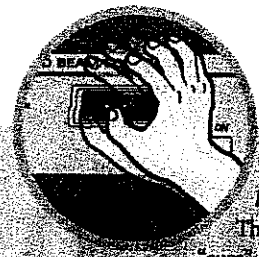








1. ***Press the MODE [ARRANGER] button (indicator lights).***
   If you want to try this with the RPS function, press the MODE [RPS] button.
2. ***Press the [ON] button to make it light.***
3. ***Press the D BEAM CONTROLLER button several times until the TEMPO DOWN indicator lights.***
4. ***Press the [START/STOP] button to start Arranger playback.***

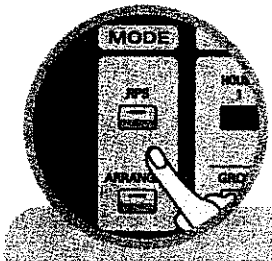


You can select another Style if you like. See page 22. (Press a key in the RPS section of the keyboard to start the corresponding RPS phrase.)

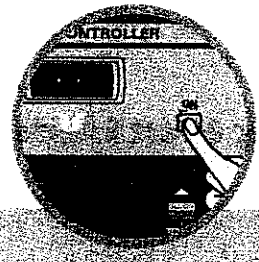
5. Move your hand over the D Beam Controller.
The closer your hand comes to the "eyes" of the D Beam Controller, the more Arranger (or RPS) playback slows down.

Playing "scales in the air"

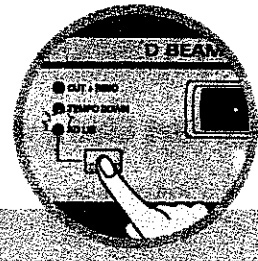
An even more amazing way of using the D Beam Controller is to play notes by moving your hand in the air.



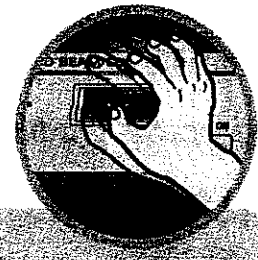
1. Select the Whole Upper mode (RPS and ARRANGER must be off).



2. Press the [ON] button to make it light.



3. Press the D Beam Controller button to make the AD LIB indicator light.



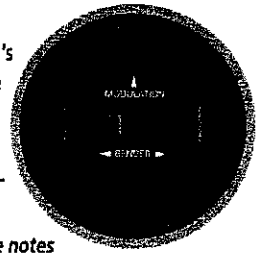
4. Move your hand over the D Beam Controller.

See? You don't even need a keyboard to play melodies.

▷ *You can also assign other functions to the D Beam Controller. See "Selecting other D Beam functions" on page 53 for details.*

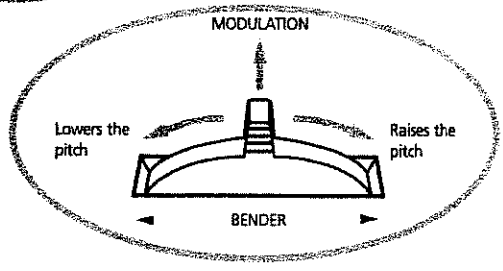
Pitch Bend, Modulation, and Sustain

Bender/Modulation lever



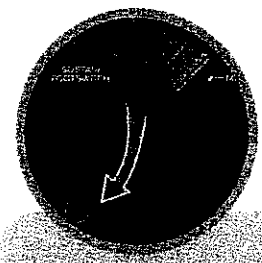
The BENDER/MODULATION lever to the left of the EG-101's keyboard can be used to add two kinds of effects to the Upper Tone notes. You can even use these effects simultaneously if you like.

1. *Press the lever towards the rear of the EG-101 to add a vibrato effect ("wobble") to the notes you are playing.*
2. *Turn the lever to the left to temporarily lower the pitch of the notes you are playing. Turn it to the right to raise the pitch of your notes.*
3. *In either case, you can release the lever if you no longer need the effect.*

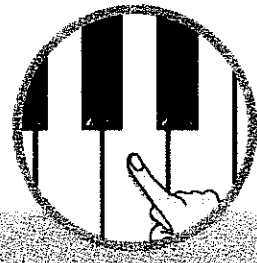


Sustain Footswitch

You can connect an optional DP-2, DP-6, or BOSS FS-5U footswitch to the SUSTAIN FOOTSWITCH jack in order to hold the Upper Tone notes even after releasing the keys. You might consider purchasing one if you want to make extensive use of the EG-101's Arpeggio function, because doing so frees up your right hand. Here's how it works.



1. *Connect a DP-2, DP-6, or BOSS FS-5U footswitch to the EG-101's SUSTAIN FOOTSWITCH jack.*

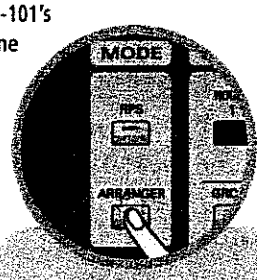


2. *Play a note with your right hand (to the right of the Split point, if applicable).*
3. *Press the footswitch.*
4. *Release the key.*
   The note(s) you played keep on sounding after you release the corresponding keys.
5. *To stop the note(s) from sounding, release the footswitch.*

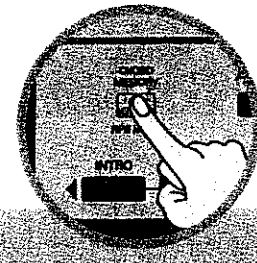
Live music production: Part Manipulator & Part Effects

Here are some other great music production tools you can use on the spot (in "Realtime"). With Part Manipulator & Part Effects, you go one step further than a DJ or Remix artist: you become the producer, i.e. the person who decides how the music will sound.

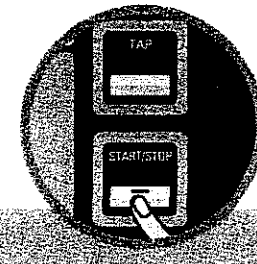
Most functions apply to the EG-101's Upper Tone and Arranger. Some are also available in RPS mode (see page 11 for how to select it). For reasons of simplicity, we will use the Arranger to showcase the following because that frees up your left hand. Just remember that Part Manipulator and Part Effects are also available for RPS phrases. (Functions not available in a given mode will be indicated as such.)



1. *Press MODE [ARRANGER] (indicator lights).*



2. *Press the [CHORD MEMORY] button (indicator lights) and press a key in the left half of the keyboard.*
   You can release it right away.

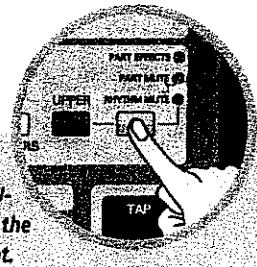


3. *Press [START/STOP] to start Arranger playback and leave it running.*

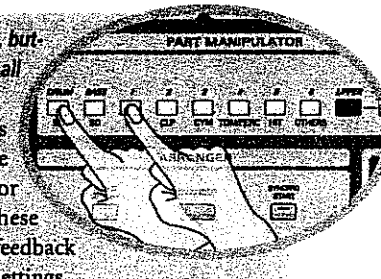
Muting drum/percussion instruments (Rhythm Mute)

The PART MANIPULATOR can be used to switch drum and percussion sounds on and off. This allows you to start out with the bass drum and to add the HiHat, Snare, percussion, etc., as you go, or to thin out the drum accompaniment in the course of a song.

▷ *The Rhythm Mute function also works for RPS phrases.*



1. *Press the gray PART MANIPULATOR button to make the RHYTHM MUTE indicator light.*

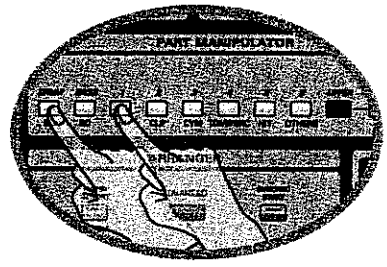


2. *Use the BD, SD, HH, CLP etc., buttons (8 in all) to switch off all drum instruments.*
   If one of these buttons lights, you should be able to hear the instrument or section in question. These buttons provide visual feedback about the current on/off settings.

To quickly switch off all drum/percussion parts, slide your finger over the eight buttons.
The correspondence between the buttons and the drum/percussion sounds is as follows:

▷ *See also the lists on page 179 to find out more about which drum/percussion sounds are muted by which button.*

BD	Bass drum (also called "kick")
SD	Snare drum.
CLP	Claps
HH	HiHat
CYM	Cymbals
TOM/PERC:	Toms and percussion (congas, bongos, shaker, etc.)
HIT:	Brass, orchestral, and synthesizer hits, shouts, raps, etc.
OTHERS:	Everything "else", mostly sound effects (also called SFX).

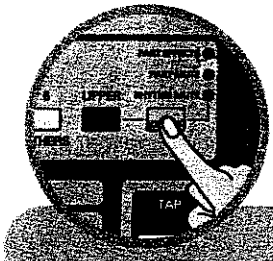


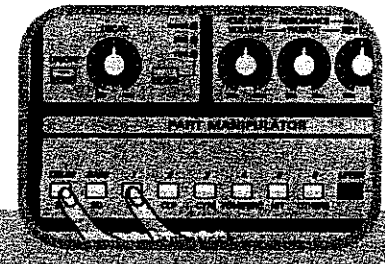
3. Switch all Rhythm instruments back on again.

Muting Arranger parts (Part Mute)

The PART MANIPULATOR can also be used to switch off Arranger parts, i.e. all drum/percussion instruments, the bass, the chords, etc.
You can even mute and "unmute" the Upper part (the Tone you can play with your right hand). Please note that not all eight Arranger tracks play something at all times, which is why muting and switching on track 8, for example, may have no effect at all. The number of parts used depends on the currently selected Style.

▷ *This function is not available in RPS mode because there, you can switch the phrases on/off by pressing the corresponding keys.*



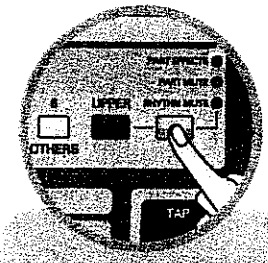


1. Leave the Arranger running and press the gray PART MANIPULATOR button to make the PART MUTE indicator light.

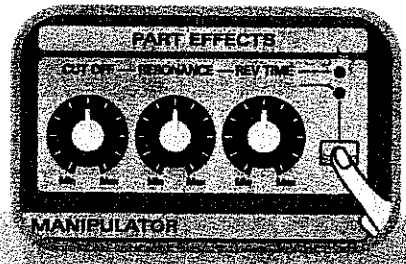
2. Use the [DRUM], [BASS], [1]-[6] buttons to mute the corresponding Arranger part.
To mute the Upper part (the melody you are playing with your right hand), press the [UPPER] button.

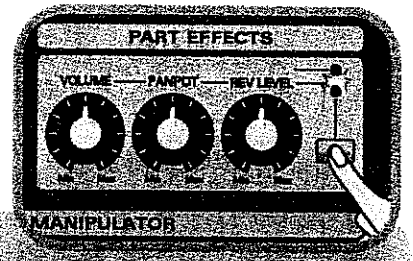
Changing the sound of individual parts (Part Effects)

As a producer, you can also specify the character of the sounds being used on your dance track. All of the following functions can be changed continuously, which would allow you to create some cool filter or panning effects, to fade in and out given parts, etc. Let's do it:



1. *Leave the Arranger running and press the gray PART MANIPULATOR button to make the PART EFFECTS indicator light.*



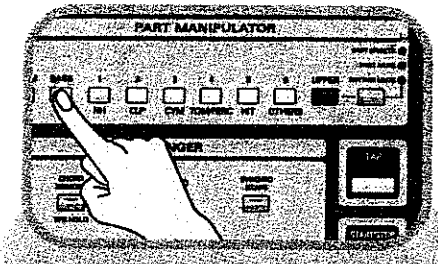


2. *Now choose what you want to change using the PART EFFECTS button.*
Double-check whether the indicator of the desired parameter row lights. Otherwise, you'll end up changing the wrong setting.
The first two knobs from the left (CUT OFF/VOLUME & RESONANCE/PANPOT) and the REV LEVEL function apply to the selected part (see step (3)). The REV TIME function of the third knob applies to the Reverb effect that is shared by all parts and thus to all parts simultaneously.

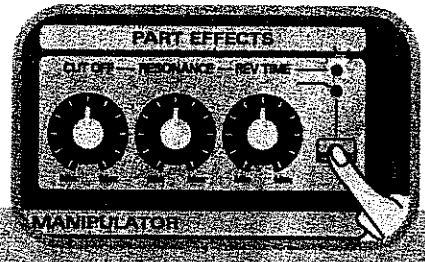
Here's an example:

Changing the filter setting of the bass (CUT OFF)

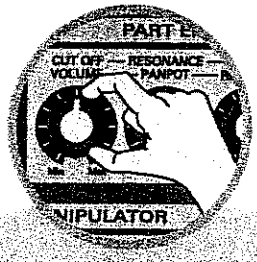
Suppose you want to add a dynamic filter effect to the bass line. In that case, proceed as follows (with the Arranger still running):



3. *Select the part whose character you want to change by pressing a [DRUM], [BASS], [1]-[6], or the [UPPER] button.*
Press the Part Manipulator [BASS] button (indicator lights).

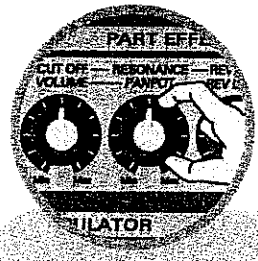


4. *Press the PART EFFECTS button to make the upper-row indicator light.*
The CUT OFF parameter takes care of the filter setting. So we need to have access to it. Its name appears in the upper row, so the upper indicator must light.



5. *Use the leftmost knob to change the filter setting of the bass line.*

Turn it to the left to obtain a rounder sound, or to right to make the sound brighter.



6. *Try out the Resonance parameter by using the knob in the middle.*

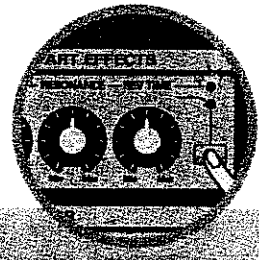
The available parameters for changing the sound of a part are:

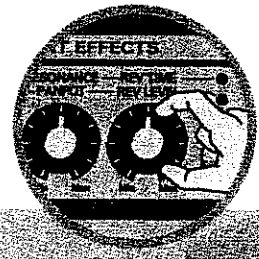
CUT OFF:	Filter setting (see above).
RESONANCE:	Volume of the selected filter frequency (see Cut Off). This makes the sound more synthesizer-like. If turned all the way to the right, this adds a distinctive tone ("self-oscillation").
VOLUME:	Allows you to set the volume of the selected part.
PANPOT:	Allows you to move the sound of the selected part between the left and right speakers ("stereo position").

Reverb parameters

The EG-101 comes with an on-board digital Reverb effect to add a finishing touch to the sound. Reverb creates the impression that your are playing in a room, a church, a concert hall, or a long tunnel. Every Style and RPS Set contains suitable (preset) Reverb settings. You can modify two aspects of the Reverb effect in realtime, e.g. to make the tunnel longer, the room smaller, etc., and change the amount of Reverb used by each part.

Changing the length of the Reverb effect (REV TIME)





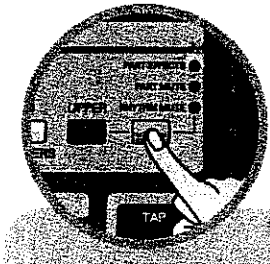
▷ *The REV TIME parameter applies to all musical parts that are currently audible, no matter which PART MANIPULATOR part button currently lights.*

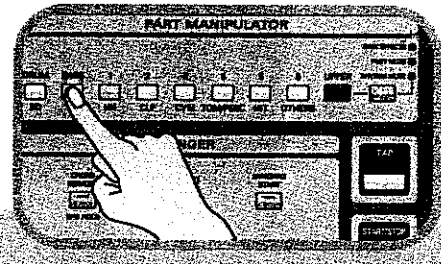
1. *Select the REV TIME parameter by pressing the PART EFFECTS button until the upper indicator lights.*

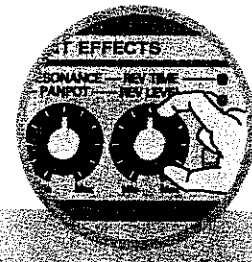
2. *Use the rightmost PART EFFECTS knob to set the Reverb Time (REV TIME) parameter.*

REV TIME: If the upper indicator lights, you can make the Reverb effect longer (more like a cathedral) by turning the knob to the right. Turn it to the left to make the Reverb effect shorter. This applies to all sections of your EG-101.

Changing the amount of Reverb for a Part







1. *Press the gray PART MANIPULATOR button to make the PART EFFECTS indicator light.*

2. *Press a PART MANIPULATOR button to select the part whose Reverb intensity (called "depth") you want to change.*
   Example: press the [BASS] button to make it light.

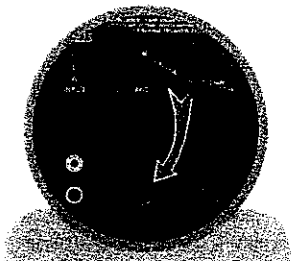
3. *Select the lower PART EFFECTS row by pressing the gray PART EFFECTS button until the lower indicator lights.*

4. *Use the rightmost PART EFFECTS knob to set the Reverb Level (REV LEVEL) parameter.*

Karaoke/rap: singing live to the EG-101's grooves

Your EG-101 also provides a Karaoke function, so that you can sing and rap to your music.

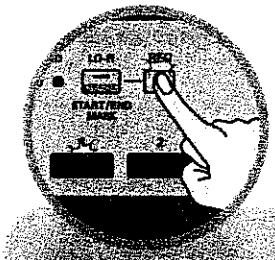
Plain singing (no effects)



1. *Connect a microphone to the EG-101's MIC input (rear panel).*

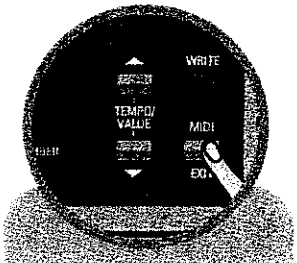
Consider using an optional Roland DR-10 or DR-20 Dynamic Microphone.

CAUTION: Be careful to set up the microphone in such a way as to avoid feedback ("howling"). As a rule, the microphone should never be directed towards the EG-101's speakers. In some instances, it may be necessary to reduce the EG-101's volume using the VOLUME [MASTER] knob.

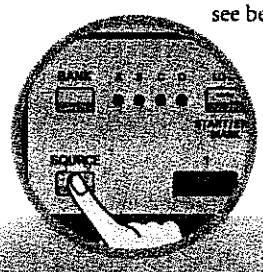


2. *Press [REC] button (indicator flashes).* This is necessary in order to set the input level (we're not going to record anything here).

3. *Set the microphone volume (your voice) using the [REC LEVEL] knob.* Set it to a level that the PEAK indicator briefly lights when you sing at the top of your voice. The EG-101 provides much cooler effects than (usually undesirable) distortion. So be sure to set an acceptable input level (and see below for the effects).

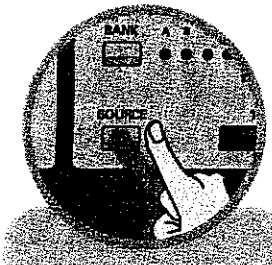


4. *Press the [MIDI/EXIT] button (so that the REC indicator goes dark).*



5. *Hold down the [SOURCE] button in the SAMPLER PLAYER section (indicator lights).*

6. *Start playback and/or playing on your EG-101 and sing (or rap) to the music!*



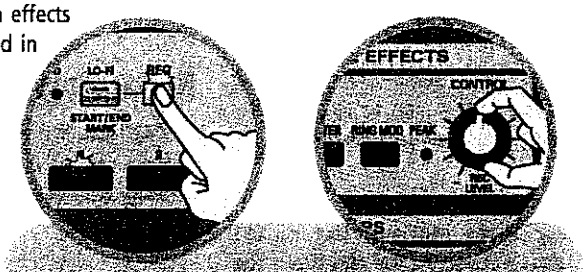
7. *When you're done, release the [SOURCE] button (indicator goes dark).*

The [SOURCE] button can also be used for adding music from a CD, MD, a cassette deck, etc. to what you're playing on the EG-101. Yet another application of this function would be to connect the audio outputs of another instrument to the LINE inputs. That way, you can amplify it via the EG-101's speakers.

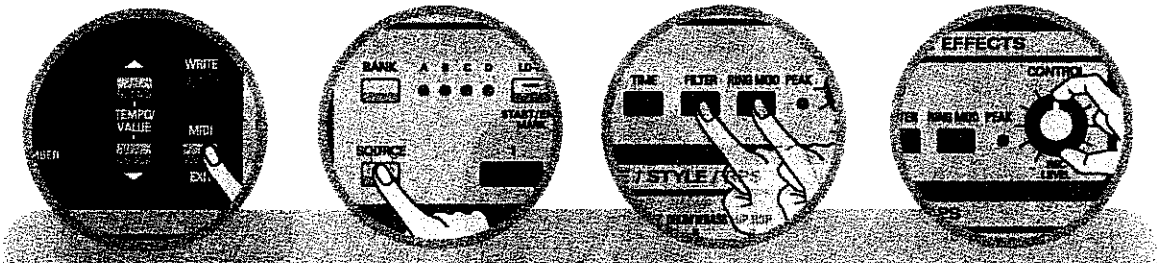
Whoops... is that you? (vocal effects)

The EG-101 provides two effects for changing your voice or any other audio signal present at the INPUT connectors. These effects are guaranteed to impress your audience. Like most other "tweaking" functions, both effects available for the EG-101's SOURCE function can be changed in realtime – i.e. while you're doing your vocal thing!

▷ *Avoid using both the LINE inputs and the MIC input. The EG-101 automatically sets the correct input sensitivity (called "gain"). So try to stick to one input source to avoid distortion.*



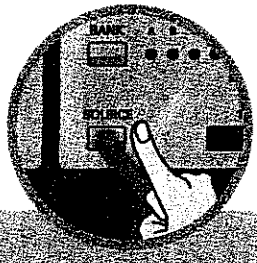
1. Press [REC] button (indicator flashes).
2. Set the microphone volume (your voice) using the [REC LEVEL] knob.



3. Press the [MIDI/EXIT] button (so that the REC indicator goes dark).
4. Press and hold the [SOURCE] button (indicator lights).
5. Press the [FILTER] or the [RING MOD] button.
6. Use the [CONTROL] knob to change the setting of the selected effect (Filter or Ring Modulation).

Filter:	This adds a Resonance effect to your voice, making it sound as if somebody squeezes your cheeks while you are singing or talking.
Ring Mod:	This adds a complex synthesizer effect which is perfect for ultimate voice deformations ranging from robot-like sounds to metal bar effects (we'll spare you the technical details, but remember that the full name of this effect is *Ring Modulation*).

Feel free to make continuous changes.



7. Sing and rap to your heart's content.
8. Release the [SOURCE] button (indicator goes dark) when you're done.

8. All together now: the Recorder

The EG-101 also provides a Recorder that allows you to record everything you do on your EG-101.

Remark

For some sections, the EG-101 does not record the result but the actions that lead to the result in question (the "events"). Here's what this means:

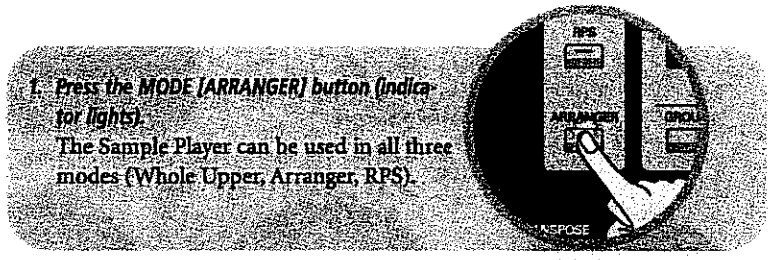
- ARRANGER: The EG-101 does not record the notes of the selected Style but only the notes or chords you play to change the key and the selection of Style patterns (VARIATION, FILL, ADVANCED, etc.). The reason is simple: since the data are available, copying them to the Recorder would take up a large chunk of the Recorder's memory capacity, which is unnecessary.
- RPS: The same is true of the RPS function. Because it relies on computer commands ("MIDI events"), the notes of the phrases you trigger are not recorded. Only the instructions are ("switch on key C3 now", "switch off key G#3", etc.).
- SAMPLE PLAYER: The audio material you start and stop during recording is not recorded (the Recorder cannot record audio material). Again, only the actions of pressing the pads (or the keys) and using the SAMPLER EFFECTS section (see page 44) are recorded.

Why do you need to know this?

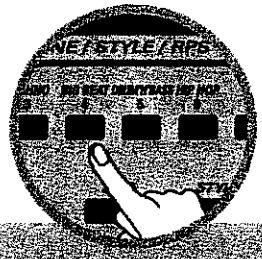
The EG-101 is fitted with Style User Programs (for the Arranger, see page 40) and User RPS memories (page 47). Furthermore, *you* record the audio material for the Sample Player. If you change the contents of one of those memories after recording, your song will not sound the same next time you play it back. Please be aware of this.

Recording a song with Arranger backing

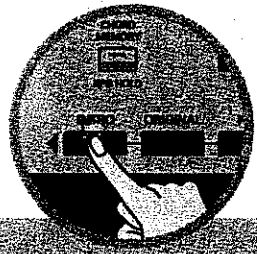
CAUTION: When you start recording a new song, you erase the song that was previously stored in the EG-101's Recorder memory. You can, however, save the current song to an external device. See page 57 for details.



1. Press the MODE [ARRANGER] button (indicator lights).
The Sample Player can be used in all three modes (Whole Upper, Arranger, RPS).

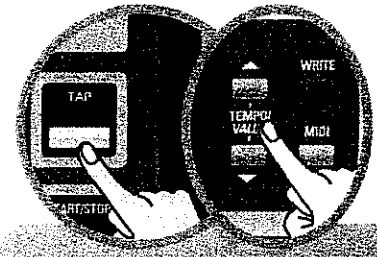


2. Select the Style you want to use (see "Selecting other Styles" on page 22).

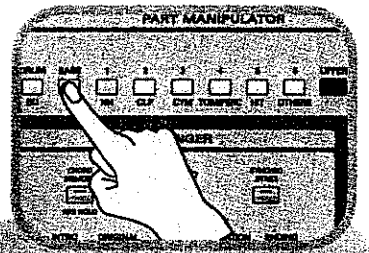


3. Select the Style pattern you want to start with.

You can select other patterns during recording. In fact, you can proceed in exactly the same way as you have so far.

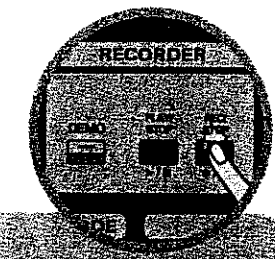


4. If necessary, set the desired tempo using the [TAP] or the [TEMPO/VALUE] buttons.



5. Use the PART MANIPULATOR section to mute (or unmute) the desired drum and/or Style parts.

See also "Live music production: Part Manipulator & Part Effects" on page 28.



6. *If you want to use the D Beam Controller, select the desired function and press its [ON] button.*

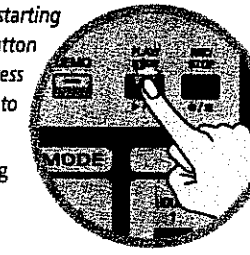
There are a lot more options for the D Beam Controller than we have covered so far (see "Selecting other D Beam functions" on page 53).

7. *Press the [REC/STOP] button (indicator lights).*

8. *Start the recording process.*

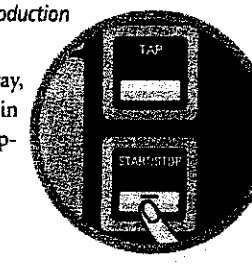
a) *If you want to play a few notes before starting the Arranger, press the [PLAY/STOP] button and play the notes. Then press [START/STOP] when the Arranger is to start.*

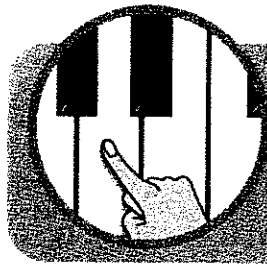
(Careful: if you start recording using this method, don't wait too long, because the Recorder also records "silence".)



b) *If you want to start together with the Arranger (or have it play an introduction before you begin), press the [START/STOP] button.*

You could also press [SYNCHRO START] (indicator lights). That way, you can start recording (and Arranger playback) by playing a chord in the left half of the keyboard. You can stop the Arranger without stopping the recording process. Press [START/STOP] to do so.





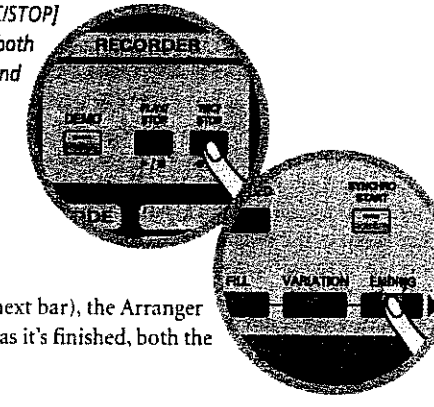
9. *Play your music and perform all desired actions to enhance your song.*

Feel free to start and stop samples, to mute/unmute parts, and so use the Part Effects. You can also use the Bender/Modulation lever, the D Beam Controller, the PART MANIPULATION section, and the Arpeggio function during recording. (It is automatically synchronized to the current tempo value.)

10. *Stop recording.*

Here, again, there are two options:

a) *Press the [REC/STOP] button to stop both the Arranger and the Recorder.*



b) *Press the [ENDING] button.*

On the next downbeat (beginning of the next bar), the Arranger starts playing the Ending pattern. As soon as it's finished, both the Arranger and the Recorder stop.

About the Recorder's memory capacity

- If the Recorder memory is almost full, the REC/STOP indicator in the Recorder section starts flashing.
- As soon as the maximum number of events has been recorded, the REC/STOP indicator goes out and recording is stopped automatically.

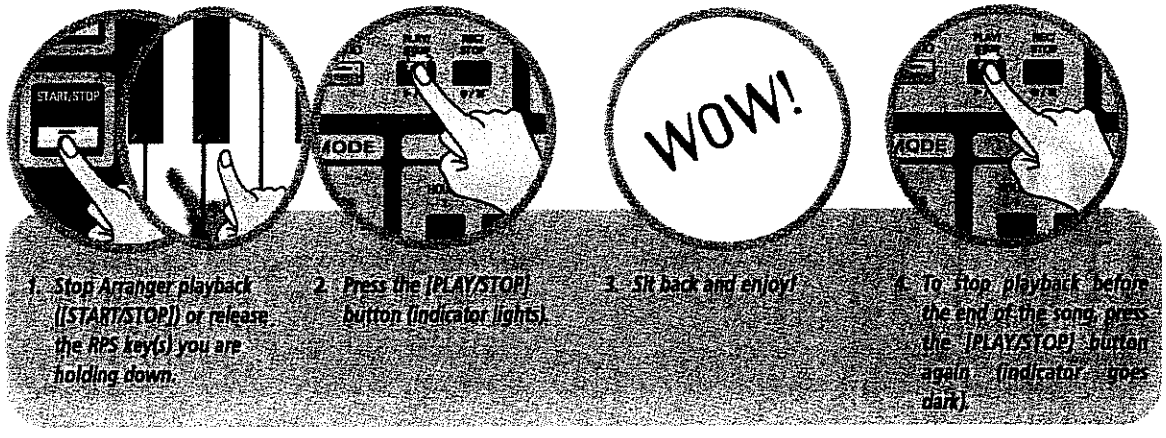
Recording with the RPS function

Recording with the RPS function is similar to recording with the Arranger, except that the accompaniment must now be "compiled" in realtime by pressing the desired keys in the | RPS | section of the keyboard. Feel free to use your own User RPS sets for your recordings (see "Programming your own RPS Sets" on page 47).

1. ***Press the MODE [RPS] button (indicator lights).***
2. ***Select the RPS set you want to use (see "Selecting other RPS Sets" on page 13).***
3. ***If necessary, set the desired tempo using the [TAP] or the [TEMPO/ VALUE] buttons.***
4. ***Use the PART MANIPULATOR section to mute (or unmute) the desired RPS Drum parts.***
   See also "Live music production: Part Manipulator & Part Effects" on page 28.
5. ***If you want to use the D Beam Controller, select the desired function and press its [ON] button.***
   There are a lot more options for the D Beam Controller than we have covered so far (see "Selecting other D Beam functions" on page 53).
6. ***Press the [REC/STOP] button (indicator lights).***
7. ***Press [PLAY/STOP] to start the recording process.***
8. ***Play your music and perform all desired actions to enhance your song.***
9. ***Press the [REC/STOP] button to stop the Recorder.***

Playing back your song

Here's what you need to do to listen to your song:

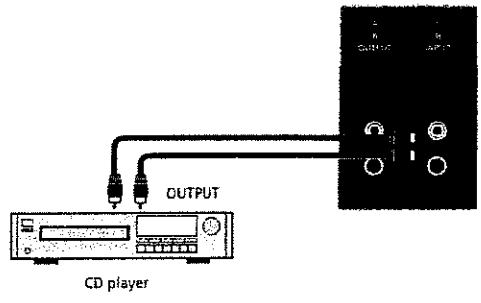


1. *Stop Arranger playback ([START/STOP]) or release the RPS key(s) you are holding down.*
2. *Press the [PLAY/STOP] button (indicator lights).*
3. *Sit back and enjoy!*
4. *To stop playback before the end of the song, press the [PLAY/STOP] button again (indicator goes dark).*

Recording to a cassette, MD, etc. or using an external amplifier

If you like, you can also record your performance (or the Recorder song) to cassette, MD, etc. To this end, you need to connect the EG-101's OUTPUT L/R jacks to the external device's REC IN jacks. Use a standard phono/RCA cable for doing so. Another use for these outputs is to connect the EG-101 to your HiFi or a keyboard amplifier (such as the Roland KC-500/300/100). Using a keyboard amplifier or mixing console requires the use of an adaptor plug (phono/RCA→ 1/4" jack). If you like, you can also purchase two Roland PJ-1M cables.

▷ *By connecting the OUTPUT jacks, you do not switch off the EG-101's amplification system.*



9. Beyond the basics

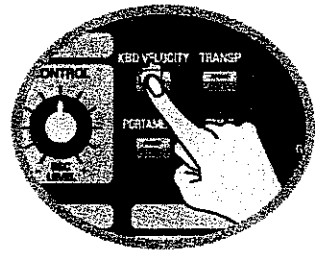
9.1 Functions for the Upper Tone

Velocity sensitivity (KBD VELOCITY)

The [KBD VELOCITY] button allows you to select whether or not the Upper Tone should be velocity sensitive. The term "velocity sensitivity" refers to the fact that the volume and timbre of a note change in response to the force (or speed) with which you strike a key. All acoustic instruments (piano, violin, flute, drums, etc.) are velocity sensitive. The harder you play, the louder and brighter the resulting notes will be, which creates a perfectly natural effect. (That explains why the KBD VELOCITY function is on every time you power on the EG-101.)

If the EG-101 is your first musical instrument ever, you may feel distracted by the volume and timbre variations of the notes you play in the Upper section. That is why we've included a button that allows you to switch off the EG-101's velocity sensitivity.

Press the [KBD VELOCITY] button to switch off the EG-101's velocity sensitivity (indicator goes dark).



Press it again to once again activate the KBD VELOCITY function.

Apart from the "distraction factor", you could take advantage of this function for playing organ parts (using the Tones in the A1 Group/Bank). Organs are not velocity sensitive, so that switching off KBD VELOCITY provides a more natural "feel". However, our Roland engineers *knew* that organs are not velocity sensitive when they created these Tones. The EG-101's velocity sensitivity is therefore used for alternating between a "mellower" and a more "aggressive" sound (a function called *velocity switching*).

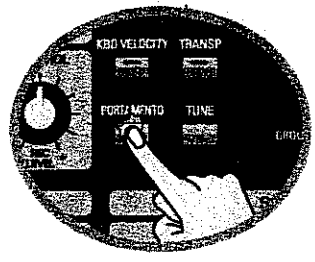
This allows you to simulate several actions an organ player performs in realtime – simply by varying the force with which you strike the keys. For instance: organ players sometimes speed up (or slow down) the speed of the speaker rotation, or change the drawbar settings. You can achieve comparable effects simply by playing harder and softer.

In short, once you've overcome the initial intricacies of a velocity sensitive keyboard, you should leave KBD VELOCITY on at all times.

Portamento for the Upper part

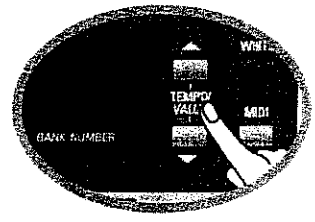
Portamento is a realtime effect that produces smoother transitions between the notes you play. Instead of jumping in semitone steps (as you would expect), the pitch glides from one note to the next whenever the Portamento time is higher than 0. The higher the value you set, the slower the glide. This effect is particularly useful for synthesizer or gypsy violin parts.

1. ***Press the [PORTAMENTO] button to switch on the effect (indicator lights).***



2. ***Play a few notes in the Upper section of the keyboard.***
   If neither the MODE [RPS] nor the [ARRANGER] indicator lights, you can play anywhere on the keyboard. Otherwise, play in the right half. The Upper Tone is now monophonic, which means that you will only hear one note at a time.
3. ***Hold down the [PORTAMENTO] button until its indicator starts flashing.***

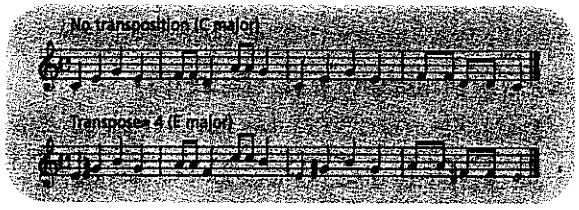
   The display now shows the currently set Portamento Time value (30).
4. ***Use the [TEMPO/VALUE] buttons to change the value.***



   Press ▲ to increase the Portamento Time. This slows down the transitions between the notes. Press ▼ to lower the value and speed up the transitions. The setting range is 0~127.
5. ***Press the [PORTAMENTO] button again to switch off the Portamento function (indicator goes dark).***

9.2 Transpose

The Transpose function changes the pitch of the notes and chords you play. This is particularly useful if you've practised a song in a different key than the one you are asked to play it in when you accompany a singer whose voice is too high or too low for "your" way of performing the song. Instead of figuring out what other keys you need to press in order to accommodate the singer, you can set the required Transpose value and go on playing the song the way you practised it while sounding in a different key. See the example to the right.

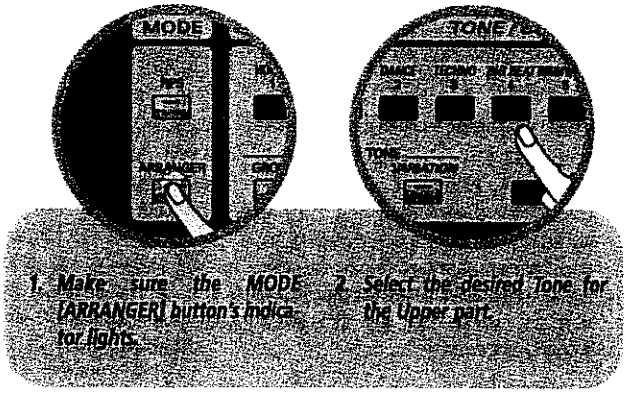


The above is useful for playing melodies and feeding the Arranger with chords, which is why Transpose only applies to the Upper Tone and the Arranger.

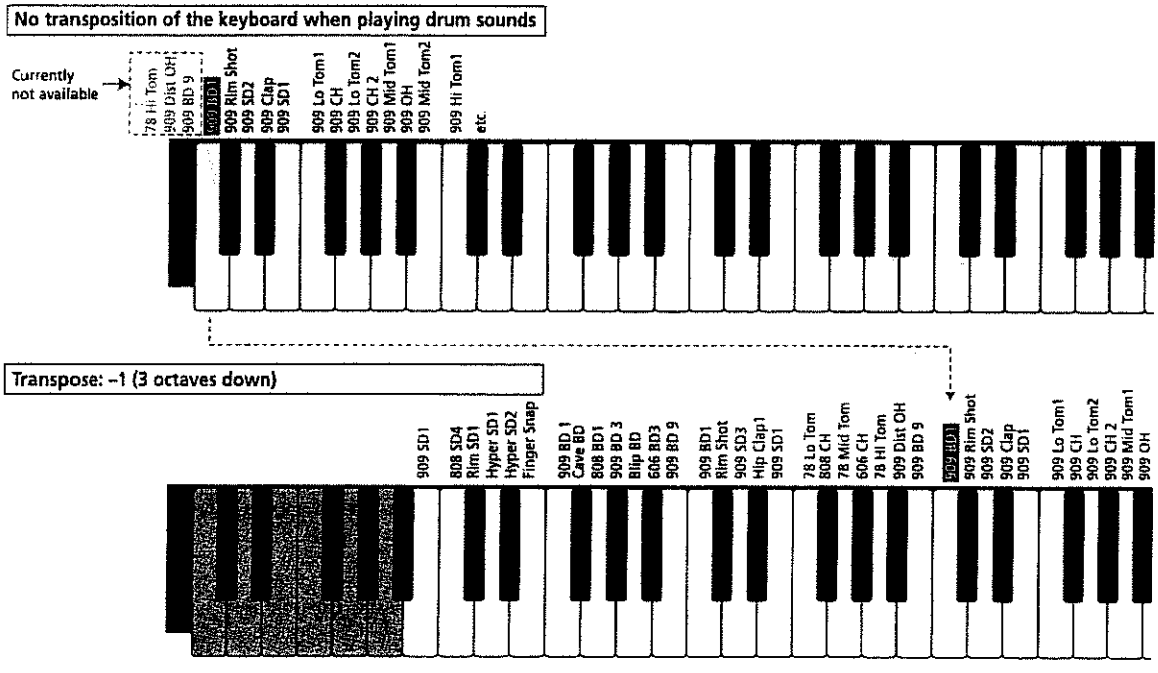
Another use for this function is when you drum on the EG-101's keyboard (see "Drumming with the EG-101" on page 10). The Drum Sets provide a lot more sounds than can be triggered via the 49 keys. By activating the Transpose function (after selecting a Drum Set), you literally shift the keyboard towards the left or the right so that the keys trigger other drum sounds. See the example below.

The same applies to a positive transposition of the drums, but in the opposite direction. That is, the 909 Bass Drum sound (white on black) is shifted to the left and can no longer be played via the keyboard. In return, other sounds are available.

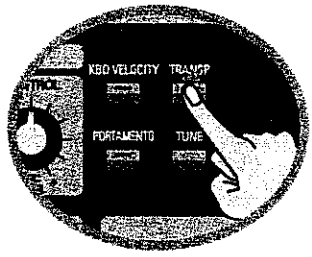
Transposition for the Upper part and the Arranger



This is not really necessary. Be sure to select GROUP A or b, however (neither dr nor SnP).

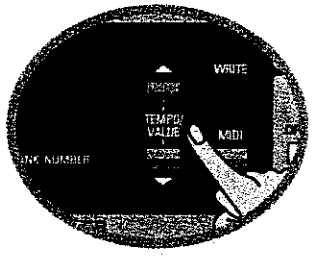


3. ***Press the [TRANSP] button (indicator lights).***



The keyboard is now transposed one semitone up (↑).

4. ***Press and hold the [TRANSP] button until its indicator starts flashing.***
5. ***Use the [TEMPO/VALUE] buttons to select another transposition interval.***

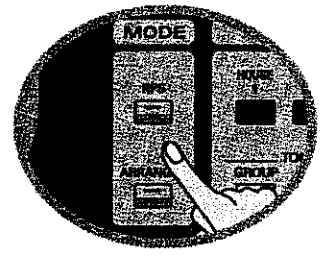


The setting range is "–12" (twelve semitones/one octave down) to "12" (twelve semitones up). If you select "6", for example, you will hear an "F#" (F sharp) every time you play a "C". Here's a hint for everyday use: if the singer has trouble reaching the highest notes, select a negative value (–1—12). If the lowest notes are too much for the singer, select a positive value (1–12). The value "0" is not available because it wouldn't make any sense.

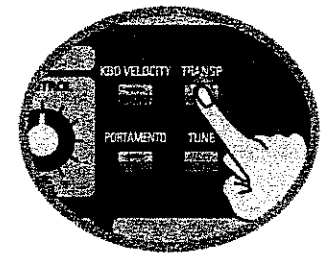
6. ***Press the [TRANSP] button to cancel the transposition (indicator goes dark), and again (indicator lights) to return to the transposition interval you have just set.*** The last value you set is retained in memory until you select another transposition interval or until you switch off the EG-101.

Transposing the drums (3-octave shifts)

1. ***Make sure the MODE [ARRANGER] button's indicator is off (Whole Upper mode).***



2. ***Select a Drum Set for the Upper part (Group dr, see also "Drumming with the EG-101" on page 10).***
3. ***Press the [TRANSP] button (indicator lights).***



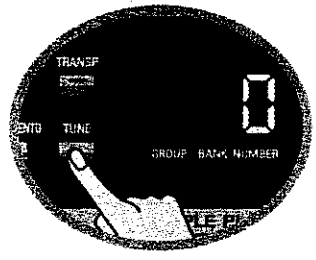
4. ***Press and hold the [TRANSP] button until its indicator starts flashing.***
5. ***Use the [TEMPO/VALUE] buttons to select another transposition interval.*** The setting range is "–1" (three octaves down, see also the above illustration) and "1" (three octaves up). In other words: here, the value "1" does not refer to semitones but 3-octave shifts. This is useful to provide access to all sounds of the currently selected Drum Set.

▷ *See page 179 for a list of Drum Sets and the sounds that are assigned to the keyboard as well as those accessible via the Transpose function.*

9.3 (Master) Tune

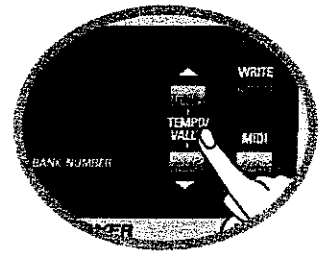
The Tune function allows you to change the tuning of the entire EG-101 (except for the Sample Player). This may be necessary when you connect your cassette deck to the INPUT L/R connectors (see also "Karaoke/rap: singing live to the EG-101's grooves" on page 32 for additional information) and then discover that the EG-101 (or rather the tape) is flat.

1. ***Press and hold the [TUNE] button until the value "0" appears on the display.***



This means that the EG-101's tuning is normal (so that the A4 has a frequency of 440Hz).

2. ***Use the [TEMPO/VALUE] buttons to change the value.***



"Normal" (positive) values mean that the pitch is raised, by choosing a negative value you lower the EG-101's tuning.

The setting range is -99 (Cent) to 99. The Tune value disappears from the display as soon as you release the button.

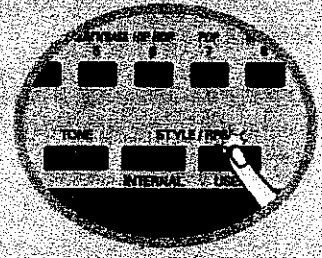
▷ *When you power on the EG-101, the Master Tune value is automatically set to "0".*

9.4 Programming your own Style settings

Selecting Style User Programs

"Style User Programs" are memories where you can store your own versions of existing Styles. By "versions" we mean that you use the same basic ingredients (preprogrammed Styles) but with settings that differ from the factory-set values. When the EG-101 is shipped, these memories already contain useful settings. Here is how to select them:

1. ***Select the Arranger mode by pressing the MODE [ARRANGER] button (indicator must light).***
2. ***Press the [USER] button (indicator must light).***



The display now shows the number of the selected Style User Program preceded by a U for easy identification. (Example: U46 means that you have selected Style User Program "46".) If you haven't yet selected a Style User Program since switching on the EG-101, pressing the [USER] button selects Style User Program U11.

3. ***Select a Bank.***
4. ***Select a Style from this bank by pressing another or the same number button.***

You can select other Style User Programs simply by entering the Bank and Number. To select another Style (i.e. accompaniment), press the [INTERNAL] button again (indicator lights) and proceed.

Creating your own Style User Programs

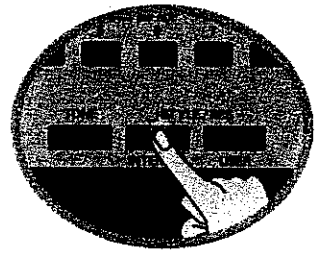
Here is what will be written to a Style User Program when you press [WRITE] for the second time (see below):

Number of the selected internal Style [page 22]
The current tempo value (not necessarily the preset tempo of the selected Style). Note that this value will not be used if you select another Style User Program while the Arranger is playing.
Current [ADVANCED] (on or off) and [ORIGINAL] (or [VARIATION]) settings. [page 20]
Status of the Synchro Start function (on or off) [page 21].
Current Split point setting [page 23]
Part Mute settings [page 29] for all 12 accompaniment patterns (even the ones that are not currently selected). One application for this could be to "strip" a Fill pattern of all melodic instruments, so that, when selected, the Fill in question only plays the drums. (The EG-101 provides four Fills per Style; see page 21.)
Rhythm Mute settings [page 28], again for all 12 accompaniment patterns. The drum/percussion accompaniment of a Style can be customized after setting the PART MANIPULATOR button to "RHYTHM MUTE" and switching off (or on) the drum/percussion.
Sample Player memory that replaces the Arranger or RPS drums. (This does not include the sampled phrase, only the pad/memory address.) [page 49].
Sample used instead of a given Arranger or RPS drum sound. (Up to four assignments. Again only the memory numbers, not the sample data.) [page 51]
Selected Tone (and Variation) for the Upper part [page 8].
Current (static) PART EFFECTS settings for the Upper part: Cutoff, Resonance, Volume, Panpot, Reverb Level. [page 30].

See also "A note about the EG-101's Styles" on page 21 for information about the number and structure of the EG-101's Styles. Style User Programs are "snapshots" of all EG-101 settings that apply to the Arranger mode (when the MODE [ARRANGER] button's indicator lights). Most of these settings have already been covered (see "Live music production: Part Manipulator & Part Effects" on page 28), others will be explained later. These memories could thus be used to reconfigure the EG-101 simply by selecting another Style User Program.

1. ***Select the Arranger mode by pressing the MODE [ARRANGER] button (indicator must light).***
2. ***Press [INTERNAL] (indicator lights) and select the Style to be used by your Style User Program.***

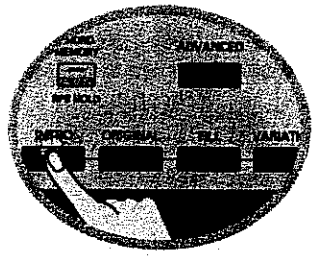
See "Selecting other Styles" on page 22.



3. ***Select the Upper Tone to be used if you do not agree with the EG-101's automatic Upper Tone selection.***
4. ***Set all above parameters to your liking.***

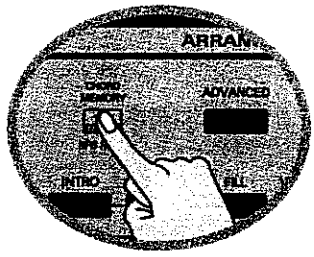
Bear in mind that you can also set the PART MUTE parameters of other Arranger patterns. Select them using the [ADVANCED], [INTRO], etc. buttons.

5. ***Use the ARRANGER buttons to select the first Arranger pattern to be used when you recall your Style User Program.***



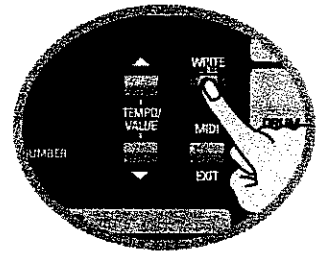
6. ***If you like, you can now replace the entire Drum pattern or just a few instruments of this part with samples. See pages 49 and 51.***

7. ***Switch on (or off) the [CHORD MEMORY] and/or [SYNCHRO START] buttons.***



8. ***Use [TAP] button or the [TEMPO/VALUE] buttons to specify the tempo value to be saved.***

9. ***Press the [WRITE] button (indicator flashes).***



The USER indicator in the TONE/STYLE/RPS section lights and the display shows the message U--.

10. ***Use the number buttons in the TONE/STYLE/RPS section to specify the bank (1~8) and number (1~8) where you wish to save your settings.***

11. ***Press [WRITE] again to save your settings to the selected memory (indicator goes dark).***
The settings in the selected memory will be overwritten by your new Style User Program. The new Style User Program is automatically selected and ready for playing. To select a different Style (accompaniment) afterwards, press the [INTERNAL] button.

▷ *If you change your mind about writing your settings to a Style User Program, press [EXIT] before pressing [WRITE] for the second time.*

9.5 Refined sampler settings

As explained under "Recording and using audio (Sample Player)" on page 41, the EG-101's Sample Player provides a number of advanced functions you can use to perfect your samples to be (or already) recorded. All of the following functions must be selected and set after pressing the [REC] button the first time (indicator flashes) but before pressing it the second time to start the sampling process.

Choosing the sampling quality

The EG-101's Sample Player provides two sample modes:

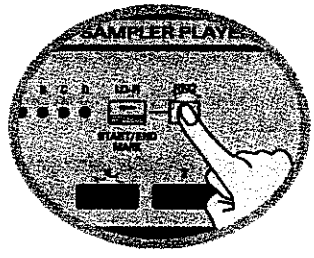
HI-FI:	(LO-FI indicator off) High sound quality (31.25kHz). Choose this setting for near-CD-quality samples.
LO-FI:	(LO-FI indicator lights) Excellent setting for a deliberately poor recording quality (7.81kHz). This technique is often used by Dance producers to make a crisp CD recording sound "dirtier" so as to remind you of samples taken from old vinyl records.

"HI-FI" samples take up a lot more memory than "LO-FI" samples (almost four times as much). The total sampling time (available for all 16 sample memories) is 2 minutes and 10 seconds (2'10") in LO-FI mode, and 32 seconds (32") in HI-FI mode. Thus, if you don't need professional-quality samples, choose LO-FI because that means you can make longer samples.

▷ *See also "Checking the remaining memory capacity (Remain)" on page 43.*

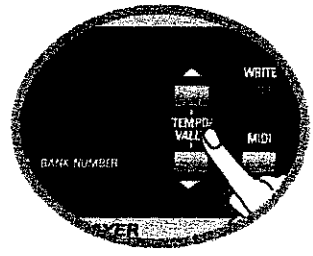
1. ***Connect the sound source (CD player, MD player, etc.) to the EG-101's INPUT jacks.***

2. ***Press the [REC] button (indicator flashes), start playback of the sound source and set the recording level with the [CONTROL/REC LEVEL] knob.***



3. ***Use the [LO-FI] button to specify the quality of the sample you are about to record.***
If its indicator lights, the recording quality is LO-FI. If it is dark, the recording quality is HI-FI.

4. ***Press and hold the [LO-FI] button until the display reads StE or Fno. Then use the [TEMPO/VALUE] buttons to select the desired recording mode:***



StE:	(Stereo) The sample will be recorded in stereo. This option makes little sense when you use a microphone for recording. Furthermore, for bass lines, guitar riffs, etc., this option would be a waste of precious memory space.
Fno	(Mono) The sample will be recorded in mono. See the explanation above. Please bear in mind that stereo samples use twice as much memory as mono samples. Only choose StE when you think the result sounds a lot better in stereo. As a rule, there are very few occasions where working with stereo samples is indispensable.

▷ *If you intend to use the Time effect (see page 44), be sure to select Fno here.*

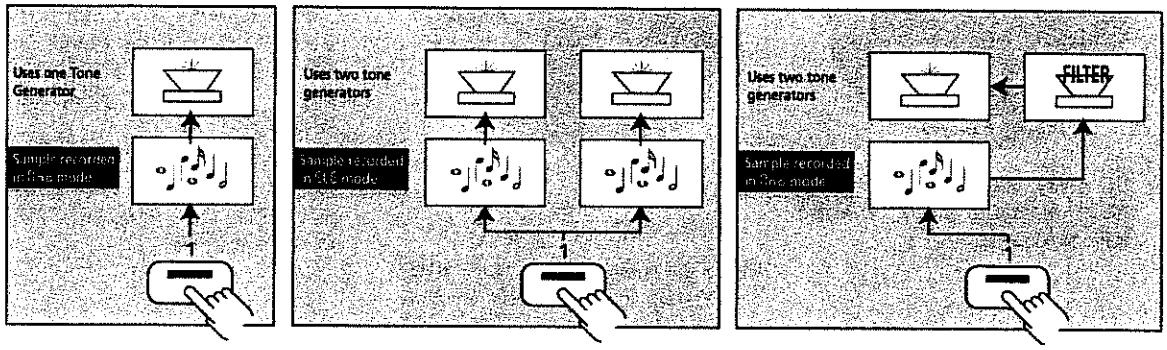
5. ***Press [REC] again to start manual or automatic (see below) sampling.***

6. ***Press [REC] yet again to stop sampling.***

Other important considerations for choosing Lo-Fi/Hi-Fi and Stereo/Mono

Elsewhere, we told you that up to four samples can be played back simultaneously. That, however, is not always possible. To understand this, we need to talk about polyphony and tone generation.

Filter effect produced by a Tone Generator. The same applies to Ring Mod.



The EG-101's sampler provides 4 tone generators. During playback, mono Lo-Fi samples use one tone generator, while stereo Lo-Fi samples use two tone generators. Certain Sampler Effects require the use of a tone generator for producing the desired effect. Thus, mono Lo-Fi-samples use two tone generators for the FILTER or RING MOD effect, and three for TIME (see the table). And, of course, stereo samples use twice the number of tone generators, so that it will be impossible to use the TIME effect for stereo Lo-Fi samples because that would require 2 (channels) x 3 (effects)= 6 tone generators, while the Sample Player has only 4 of them.

Number of tone generators used for playback.

	LO-FI		HI-FI	
Effect	Mno	StE	Mno	StE
(Playback)	1	2	1	2
Time	3	—	3	—
Filter	2	4	3	—
Ring Mod	2	4	3	—

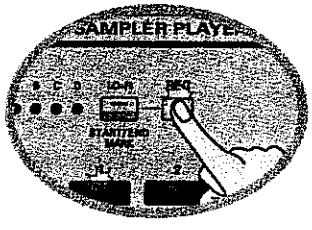
For Hi-Fi samples, the FILTER and RING MOD effects use two tone generators that are added to the sound-producing tone generator (for a total of 3). This means that the number of options is even more restricted. If you combine two effects, the number of simultaneously usable samples is reduced even further.

In short: think carefully how the samples will be used before setting the Lo-Fi/Hi-Fi and Ste/Mno parameters. If you don't need stereo playback, just forget it. And if HI-FI is not absolutely necessary, select LO-FI. By the way: the number of tone generators of an electronic musical instrument is referred to as the *polyphony*, while the tone generators are usually called *voices* in this context. In other words: the Sample Player is 4-voice polyphonic.

Selecting another sample memory

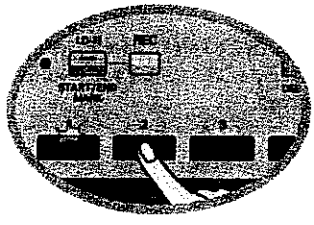
You may remember from our hands-on session that the EG-101 automatically selects the first empty Sample Player memory for recording new samples. If you disagree with that selection, here is how to choose another memory. You can only select Sample Player memories that are *empty*. See 46 for how to erase one or all memories.

1. ***Connect the sound source (CD player, MD player, etc.) to the EG-101's INPUT jacks.***
2. ***Press the [REC] button (indicator flashes), start playback of the sound source and set the recording level with the [CONTROL/REC LEVEL] knob.***



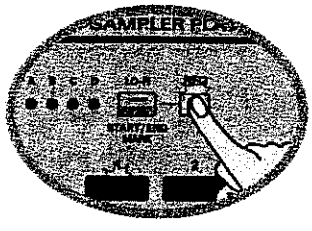
The pad indicator of the first empty memory now flashes to signal that your sample will be stored in that memory.

3. ***Press a pad (possibly after selecting another bank using the [BANK] button).***



If its indicator does not flash, the memory already contains a sample and cannot be overwritten (you can only select memories that do not yet contain data).

4. ***Press [REC] again to start recording.***

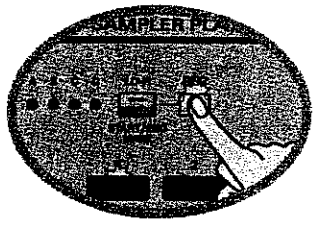


5. ***Press it yet again to stop the sampling process.***

Starting the sampling process automatically (Trigger Level)

The Sample Player's Trigger Level function is derived from Roland's stand-alone samplers. It allows you to automate the sampling process by specifying the level the incoming audio signals must have in order to start the sampling process (the *Threshold*). This is useful for situations where you are interested in a loud excerpt that is preceded by a softer one. In that case, choose a Trigger Level setting that allows the Sample Player to ignore softer signals and to start recording as soon as the signal becomes louder.

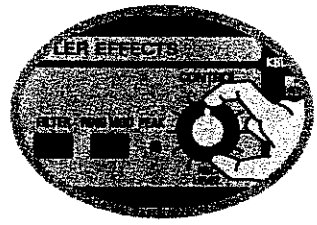
1. ***Connect the sound source (CD player, MD player, etc.) to the EG-101's INPUT jacks.***
2. ***Press the [REC] button (indicator flashes)***
3. ***Press and hold the [REC] button until its indicator flashes.***



The display now shows the currently selected Trigger Level. The value -0- means that the Trigger function is off and that you have to start recording manually (by pressing [REC] again). This is the setting we have been using until now.

All other values (-1-~-8-) represent the threshold (i.e. the level the incoming audio must have in order to trigger the sampling process).

4. ***Use the [CONTROL] knob to set the desired value.***



Remember that "–0–" means that you have to start recording manually. In most instances, you should probably select "–3–" or an even higher value. Otherwise, the sampling process starts too soon.

5. ***Release the [REC] button (indicator goes off).***
6. ***Press the [REC] button (indicator flashes), start playback of the sound source and set the recording level with the [CONTROL/REC LEVEL] knob.***
7. ***Press [REC] again (indicator lights).***
   The EG-101 now waits for a signal.
8. ***Rewind your audio source and start playback a little ahead of the excerpt you wish to sample.***
   As soon as the audio material's level reaches the Threshold you specified, the display indicates "---" to signal that the recording process has started.
9. ***Press [REC] again to stop the sampling process.***

▷ *If it turns out your Trigger Level setting was too low (or too high), delete the sample (see "Deleting one or all samples" on page 46) and repeat the above.*

Checking the remaining memory capacity (Remain)

After sampling extensively, you may perhaps wonder how much time you have left for new samples.

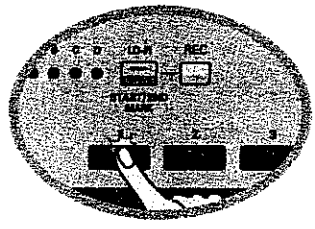
Let us briefly return to the meaning of the settings you can make with the [LO-FI] button (see also "Choosing the sample quality") because they affect the total recording time available for your samples. The memory capacity of the EG-101's is as shown in the table.

Of course, these are only examples, but they help you understand that the total recording time depends on the selected quality (HI-FI or LO-FI) and on the recording mode (stereo or mono). The recording time is allocated dynamically, however. That is, if the A1 sample (Bank A, pad 1) is only 2 seconds long, you can use the remaining seconds for all other pads. If the first pad already uses up the entire recording time, you cannot record any other samples.

The LO-FI/HI-FI and Stereo/Mono parameters can be set for each sample individually. Memory A1 may thus contain a HI-FI stereo sample, while A2 uses a LO-FI mono sample, etc.

	HI-FI quality, LO-FI, START/END MARK		LO-FI quality, LO-FI, START/END MARK	
Stereo (StE) (16 sec.)	1x 16-second sample —OR— 2x 8-second samples —OR— 4x 4-second samples (etc.)		Stereo (StE) (1 min., 5sec.)	1x 1'05" sample —OR— 2x 32.5-second samples —OR— 4x 16.25-second samples (etc.)
Mono (fine) (32 sec.)	1x 32-second sample —OR— 2x 16-second samples —OR— 4x 8-second samples —OR— 8x 4-second samples (etc.)		Mono (fine) (2 min., 10 sec.)	1x 2'10" sample —OR— 2x 1'05" samples —OR— 4x 32.5-second samples —OR— 8x 16.25-second samples (etc.)

1. ***Press the [REC] button (indicator flashes).***
2. ***Press and hold the pad whose indicator flashes.***



The display now shows the remaining recording capacity in memory blocks (there are 32 blocks in all). Example: 16 means that you have about half the sample memory left.

3. ***Press [MIDI/EXIT] to the right of the display to leave the Sample REC mode.***

▷ *You can also take advantage of this function before launching the sampling process by pressing [REC] a second time.*

Using the Sample Player effects (Sampler Effects)

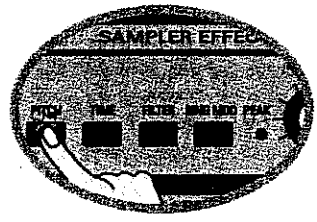
Your EG-101 provides four effects that allow you to alter the way in which the samples are played back. Though there are some "loopholes", it is probably wiser to think in terms of processing one sample/pad at any one time. There are indeed a number of restrictions (see below). Some of the effects can be used simultaneously with other effects, others can only be used in isolation. Furthermore, TIME, FILTER, and RING MOD apply only to a given sample, while PITCH is valid for all samples.

Changing the pitch of a sample (PITCH)

The Pitch effect allows you to tune a sample up or down. Like on a tape recorder, this is done by reducing (or increasing) playback speed, so that the tempo also changes. The latter is important to know for sampled grooves and phrases.

▷ *Pitch applies to all samples simultaneously. I.e. if you change the Pitch setting, all samples will be slowed down or sped up.*

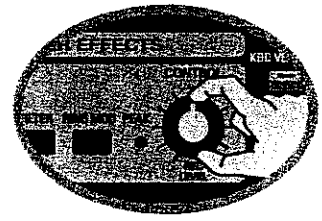
1. ***Press the Sampler Effects [PITCH] button (indicator lights).***



2. ***Start playback of a sample by pressing its pad (or the assigned key). Consider activating the Hold function.***

See also "Playing back your sample using the pads" and "Playing back samples via the keyboard".

3. ***Set the desired Pitch using the [CONTROL/REC LEVEL] knob.***



The setting range is "-20" to "10". These values indicate the percentage of pitch/speed change.

4. ***Press the Sampler Effects [PITCH] button again to defeat the Pitch change (indicator goes dark).***
If you press it again, the Sample Player once again uses the pitch you have just set.

General considerations

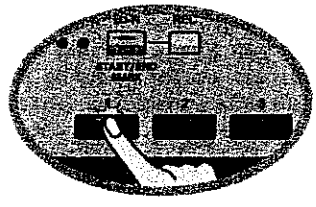
- For LO-FI samples, PITCH can be used simultaneously with one of the other effects (FILTER, TIME, or RING MOD).
- HI-FI samples can only be processed by one effect. TIME, FILTER and RING MOD are not available for stereo HI-FI samples. Furthermore, starting playback of a HI-FI sample that uses an effect will stop playback of all other samples that use an effect. In other words: playback of HI-FI samples allows for the use of one effect altogether and the HI-FI sample's effect will be given priority.
- Think of every effect (except PITCH) as a computer that can perform one calculation at a time. If you start playback of a sample that uses the same effect as a sample that is already running, the "older" sample will be turned off so as to allow the "computer" to devote its attention to the newly started sample. In other words: even if the polyphony allows it, it won't be possible to play back two LO-FI samples that use the FILTER effect.

"Stretching" or "shrinking" a sample (TIME)

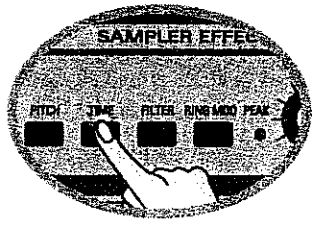
The Time effect allows you to make a sample longer or shorter without altering its pitch. This does *not* change the amount of audio data that are played back (i.e. you don't "lose" any notes). It only redistributes the audio data in such a way as to "fit into" the newly defined time slot. That is why this function is also called "Time Stretch". Time, too, changes the tempo of your samples – but it doesn't alter the pitch. Use this function if a sampled grooved sounds OK as is but is too slow or too fast for your application.

▷ *Time is only available for mono samples (see also "Choosing the sample quality" on page 41) and requires two voices (for a total of three including the sample itself). You can thus only add one more mono sample without effect to a "stretched" sample without disrupting playback.*

1. ***Start playback of the sample to be stretched by pressing its pad (or the assigned key). Consider activating the Hold function.***



2. ***Press the Sampler Effects [TIME] button.***



3. ***Set the desired Time value using the [CONTROL/REC LEVEL] knob.***
By turning the [CONTROL/REC LEVEL] knob fully to the left, you can set the value "–50%", which will halve the speed.

4. ***Press the Sampler Effects [TIME] button again to defeat the Time change (indicator goes dark) for the currently sounding sample.***
If you press it again, the Sample Player once again uses the Time value you have just set.

▷ *This setting also affects the BPM value stored along with the audio data of each sample.*

▷ *The on/off status of the button as well as the last Time setting are memorized for each sample individually. That is why the TIME indicator may alternate between lit and dark as you start other samples.*

▷ *When used in combination with PITCH, TIME allows you to change the pitch of a sample without altering the tempo. Here's how it works: PITCH alters the pitch and the tempo. If you use TIME to compensate for the change in tempo, the sample sounds lower (or higher) but plays at the original tempo.*

Filter

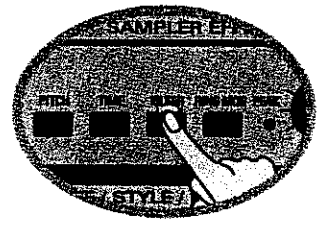
This parameter allows you change the timbre of the currently selected sample. It modifies the filter Resonance, thus creating a more "synthesizer-like" effect. Consider using this effect in realtime (during sample playback) to create dynamic filter sweeps and WahWah effects. Remember that such sweeps can be recorded using the Recorder.

▷ *Filter can be set for each Pad (sample) individually.*

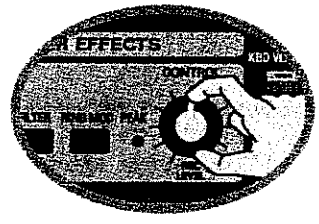
▷ *Filtered Lo-Fi samples use twice the number of polyphony voices (2 for mono and 4 for stereo samples), while filtered Hi-Fi samples use 3 voices, so that this effect is only available for mono Hi-Fi samples. See also "Other important considerations for choosing Lo-Fi/Hi-Fi and Ste/Mno" on page 42.*

1. ***Start playback of the sample to be filtered by pressing its pad (or the assigned key). Consider activating the Hold function.***
See also "Playing back your sample using the pads" and "Playing back samples via the keyboard".

2. ***Press the Sampler Effects [FILTER] button.***



3. ***Set the desired Filter value using the [CONTROL/REC LEVEL] knob.***



Turning the knob fully to the left means that no filtering is applied. For WahWah effects, turn it left and right during sample playback.

4. ***Press the Sampler Effects [FILTER] button again to defeat the Filter change (indicator goes dark) for the currently sounding sample.***
If you press it again, the Sample Player once again uses the Filter value you have just set.

▷ *The on/off status of the button as well as the last filter setting are memorized for each sample individually. That is why the FILTER indicator may alternate between lit and dark as you start other samples.*

Using a robot effect (RING MOD)

RING MOD is an effect that uses the audio information contained in the sample to change the frequency characteristics. This is called modulation. The RING MOD effect allows you to create robot-like and other bizarre sounds that somehow remind you of a metal bar. Though you could use it as a static effect (set it once and not change it again), RING MOD –like FILTER– is even more impressive when changed in realtime ("dynamically").

1. ***Start playback of the sample to be modulated by pressing its pad (or the assigned key). Consider activating the Hold function.***

2. ***Press the Sampler Effects [RING MOD] button.***

3. ***Set the desired Ring Modulation value using the [CONTROL/REC LEVEL] knob.***
Turning the knob fully to the left means that no modulation is applied. Turn it to the right to increase the Ring Modulation. As stated above, turning the knob in the rhythm of the music can create some unique accents.

4. ***Press the Sampler Effects [RING MOD] button again to defeat the Ring Modulation (indicator goes dark) for the currently sounding sample.***
If you press it again, the Sample Player once again uses the last RING MOD value you set.

▷ *The on/off status of the button as well as the last Ring Modulation setting are memorized for each sample individually. That is why the RING MOD indicator may alternate between lit and dark as you start other samples.*

Deleting one or all samples

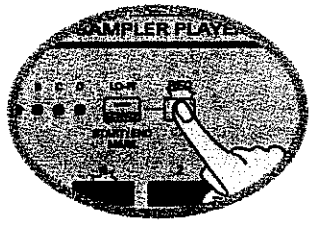
Here is how to delete samples you no longer need. This may be necessary when you discover that there is not enough memory left for a new sample you wish to record, or if a sample wasn't recorded as expected (e.g. due to a wrong Trigger Level setting (see also page 43).

▷ *Before actually deleting samples, you may want to save the current Sample Player contents externally. See page 57 for details.*

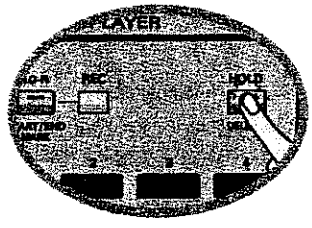
Deleting one sample

The following operation allows you to clear one sample memory. All other samples remain intact.

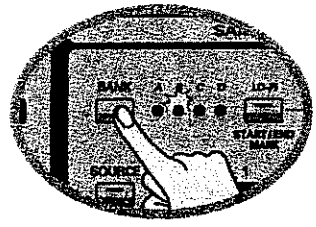
1. ***Press the Sample Player [REC] button (indicator flashes).***



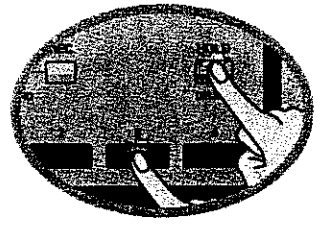
2. ***Press the [HOLD/DELETE] button (indicator lights).***



3. ***Press [BANK] to select the sample Bank that contains the sample to be deleted.***



4. ***Press and hold the pad of the sample memory (1–4) you wish to delete.***



Wait until the display shows a moving "○" sign before releasing the pad. This sample is now gone.

▷ *If you decide not to delete the sample after all, press [EXIT] before step (4).*

5. ***Press [EXIT] or [HOLD/DELETE] again to leave the record Sample Player's standby mode (the REC indicator goes dark).***

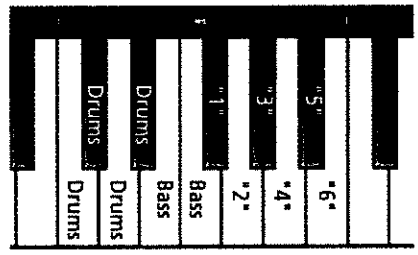
Deleting all samples

The following operation allows you to clear all sample memories, so that the Sample Player becomes empty.

1. ***Press the Sample Player [REC] button (indicator flashes).***
2. ***Press the [HOLD/DELETE] button (indicator lights).***
3. ***Press and hold the [BANK] button.***
   Wait until the display shows a moving "○" sign before releasing the [BANK] button. All samples are now deleted, and the Sample Player returns to the normal operating mode.

9.6 Programming your own RPS Sets

As stated earlier, you can also program your own RPS sets by assigning the desired phrases to the desired keys in the | RPS | section. This involves borrowing RPS phrases from other Sets and assigning them to the desired keys. Let us briefly look at the system the Roland engineers used.



As you see, there are four keys for drum grooves, two for bass lines, and six for other melodic riffs. These are only suggestions, however. Feel free to assign drum grooves to all twelve keys, or to program an RPS set that only contains bass lines if you like. Furthermore, every User RPS Set also contains a number of settings (see "Additional User RPS settings" for details) that allow you to refine your RPS Sets.

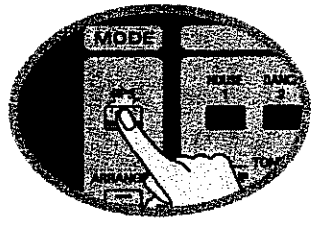
The EG-101 provides 64 User RPS memories that already contain settings and assignments. The contents of these memories can be overwritten. See "Selecting User RPS Sets" on page 13 for how to select them.

By the way: the RPS Sets use the patterns of the corresponding Style numbers. (RPS Set 11= Style 11, etc.)

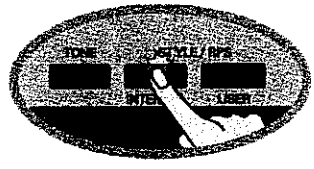
Assigning other phrases to a User RPS Set

The EG-101 contains an impressive number of RPS phrases (64 x 12 to be precise). Only one RPS Set can be selected at a time. This may lead to situations where you would like to use the second drum phrase of RPS set r13, the first bass line of RPS Set r62, etc., which may seem impossible. But it isn't, because you can compile your own RPS Sets by copying phrases from various Sets. Every User RPS Set can contain 12 "custom" phrase assignments to the keys in the | RPS | section.

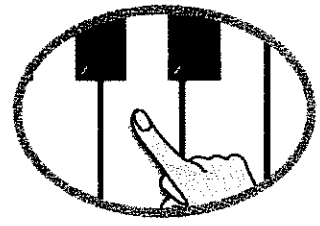
1. ***Press the [RPS] button (indicator must light) to select the RPS mode.***



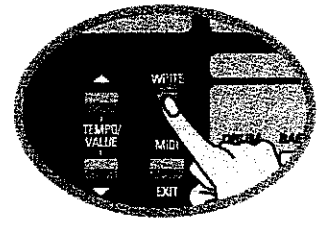
2. ***Press the [INTERNAL] button.***



3. ***Select the internal RPS Set that contains the first phrase you wish to copy by specifying a bank and a memory number.***
4. ***Press and hold the key assigned to the phrase you wish to copy to a User RPS Set.***

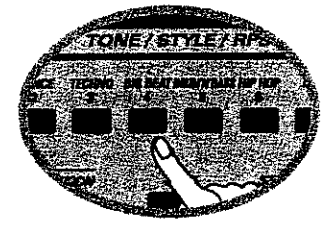


5. ***While holding that key, press the [WRITE] button (indicator flashes).***



The USER indicator lights to signal that you can now select a User RPS Set.

6. ***Release the key assigned to the copied phrase.***
7. ***Specify the User RPS Set number you wish to copy the phrase to by pressing the number buttons (once for the bank, a second time for the number).***



Be sure to remember the number of this User RPS memory if you wish to assign other RPS phrases to other keys of this User RPS Set.

8. ***Press and hold the key in the | RPS | section you wish to assign the copied phrase to.***
9. ***While holding that key, press [WRITE] again (indicator lights).***
   As soon as the WRITE indicator goes dark, the copy operation is finished.
10. ***Repeat steps (3)-(9) to assign other RPS phrases to the remaining keys.***

Saving your User RPS Set

Before showing you how to further refine your User Set, let us first look at how to save it to a User RPS memory. That way you can rest assured that you won't lose your settings by inadvertently switching off your EG-101 or by selecting another (internal or User) RPS Set.

▷ *Your new User RPS Set overwrites the contents of the selected User RPS memory. So be sure to select a User memory that contains data you no longer need. Otherwise, save your data externally before proceeding (see page 52).*

1. ***With the RPS mode still selected, press the [WRITE] button (indicator flashes).***
   The USER indicator lights, and the following message starts flashing in the display "U".
2. ***Select a User RPS bank by pressing a number button in the TONE/STYLE/RPS section.***
   If you select Bank "1", the following message starts flashing in the display: "U1".
3. ***Select a User RPS memory number within that bank.***
   If you select number 8, the following message starts flashing in the display: "U18".
4. ***Press [WRITE] again to save the User RPS Set.***
   The WRITE indicator goes dark to indicate that your User RPS Set has been saved.

▷ *If you change your mind about saving your User RPS Set, press [EXIT] before pressing [WRITE] for the second time.*

Additional User RPS settings

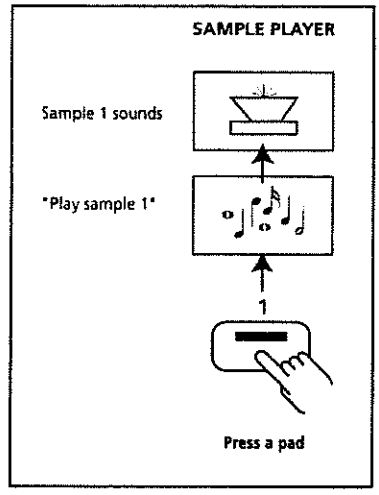
User RPS Sets not only contain phrase-to-key assignments but also the following settings:

- Current tempo setting (page 22)
- Rhythm Mute settings (page 28)
- Substitution of one drum part ("one Drum key") by a sampled groove (page 49), or of up to four Drum instruments by samples (page 51).
- Selection of the Upper Tone (page 8), including the Variation (where applicable)
- Part Effects settings for the Upper part (page 30)

These assignments will be saved when you use the WRITE procedure described above. Note that it is perfectly possible to save your settings several times (and even to different User RPS memories), so that you do not have to set everything before saving your settings for the frst time. Intermediary "saves" are even a lot safer because they allow you to return the previously saved state in case you don't like your last changes.

9.7 Using "audio drums" instead of "MIDI drums"

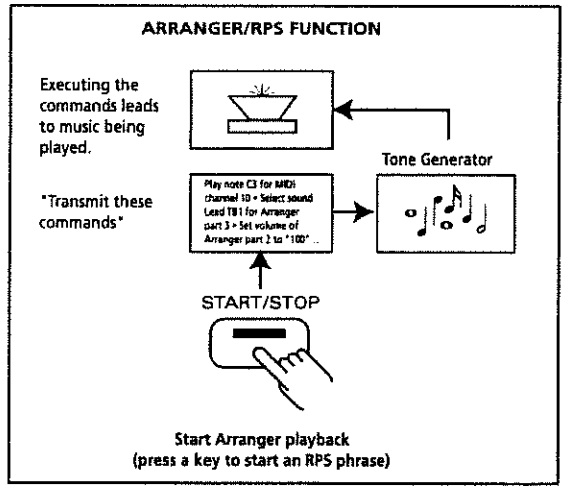
As stated earlier, your EG-101 is in fact a clever combination of two sound producing methods. On the one hand, there is a "regular" multitimbral tone generator that is controlled via MIDI messages (Arranger and RPS). MIDI messages are much easier on the memory, which is why there are 64 Music Styles (with 12 patterns each) and 64 different RPS sets, but only 16 sample memories (and only a limited amount of recording time). On the other hand, there is the Sample Player that plays back the audio material you recorded.



To put it another way: the Arranger and RPS function are connected to one and the same device that can perform a wide range of functions and use a variety of sounds for doing so, while every sample is a completely independent "device" that can only play back what you recorded. You cannot assign other sounds to the drums, change the balance, mute the HiHat, or modify the Reverb Level of the various sampled instruments. You can only play back the sample. This is like playing back a CD or a cassette, with the convenience that the Sample Player provides an "effects rack" that allows you to change the way a sample will sound as a whole (similar to an equalizer you connect to your stereo system).

The Arranger and the RPS function, however, allow for such changes. That explains why the Part Effects and Part Manipulator functions are available for the Arranger, the RPS function and the Upper part – but not for the Sample Player.

The clever thing about this "dual system" is that some instructions for the Arranger or RPS drums can be routed to a sample. So instead of performing the instructions for the drums (MIDI channel 10), the Arranger or RPS function starts playback of the selected sample. (In which case, it can not be modified using the Part Effects and Part Manipulator functions.)



There are, in fact, two possibilities:

1. ***You can replace the entire drum part by a sample.***
2. ***You can select up to four drum instruments to be replaced by audio samples.***

Using a sampled groove instead of the Arranger or RPS drum part

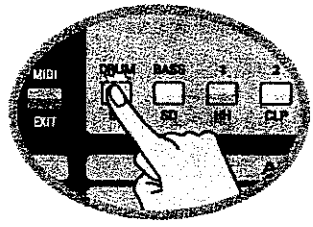
The following substitution requires the use of a sample that contains a drum part of at least one entire measure ("boom-boom-tcha-boo-boom-boom-tcha-boom") rather than one sound in isolation ("boom" or "tcha").

1. ***If you haven't already done so, sample a groove (see "Sampling and memorizing the correct BPM value" below).***
2. ***Select the desired mode by pressing MODE [ARRANGER] or [RPS] (indicator must light).***
3. ***Select the desired Music Style (page 22) or RPS set (page 13).***
   You can also select a Style User Program (page 40) or User RPS set (page 13).
4. ***Press the gray PART MANIPULATOR button until the PART MUTE indicator lights.***

To replace an RPS drum part:

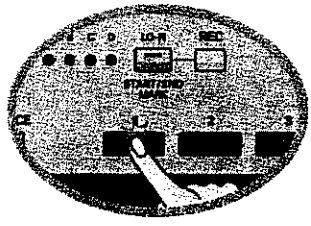
4a) *Press the key whose drum part should be replaced by your sampled groove.*
As stated under "Programming your own RPS Sets" on page 47, this can be any key you have assigned a drum part for User RPS sets. For internal RPS sets, this will be a key between the C2 (white key below the [TONE] button) and the E2 (white key below the [USER] button).

5. ***Press and hold the Part Manipulator [DRUM] button until the Sample Player pad indicators start flashing.***



Only the pads corresponding to memories that contain sample data will start flashing.

6. ***Select the Bank that contains the desired groove by pressing Sample Player [BANK] until the desired indicator (A, B, C, or D) starts flashing.***
7. ***Press the pad corresponding to the sample you wish to use in lieu of the MIDI drum data.***



Its indicator lights steadily, while the remaining pad indicators keep flashing.

8. ***Release the [DRUM] button.***
The Arranger's or RPS Set's drum track is now muted and replaced with the selected groove. That is why only the indicator of the selected pad lights (all other pad indicators go off).

▷ *The Sample Player can no longer be used as stand-alone unit. As long as the Arranger or RPS function controls the sampler, you cannot record new samples or play back other samples via the pads or via the keyboard; and the SOURCE function cannot be used either.*

▷ *The Part Effect settings you may have made for the Drum Part do not apply to the substituted sample.*

9. ***Press [START/STOP] (or an RPS key) to start playback of the Style (or RPS phrase).***

▷ *Do not select other Styles or RPS Sets because doing so will cancel your assignment.*

▷ *If you wish to return to this assignment at a later stage (after using other Styles or RPS sets), save it to a Style User Program (page 41) or a User RPS Set (page 48).*

What happens next

The Arranger or RPS Set is now automatically synchronized to the BPM value of the selected Sample (see also below).

Depending on the kind of Sample you assign to the Arranger's or RPS function's Drum part, it may be possible to change the playback tempo:

1. If you assign a stereo (StE) Sample, its BPM value cannot be changed.
2. If you assign a mono (mno) Sample, the indicator of the [TIME] button lights to signal that you can change the BPM value of the Sample (and the Arranger/RPS function) between –20 and 20% using [TEMPO/ VALUE] ▲▼.
3. If the sample contains two complete measures, you can hold down the lit Pad to halve the Arranger/RPS tempo with respect to the Sample's BPM.

Synchronization of the Arranger or RPS tempo

The Arranger or RPS function is automatically synchronized to the BPM value of the sample (minus or plus the TIME change, see above). The question then is: what is synchronization, and how does the Sample Player know what tempo the sampled groove uses?

- Synchronization is a learned term for the fact that one device (or function) is set to start and stop at the same time as another device (or function), and to run at the same tempo (BPM).
- The EG-101 does not analyze the audio material. But it provides a function for specifying the tempo value of the samples manually. It is thus of prime importance to enter the correct BPM value *before recording a sample* if you want to use that sample as a substitute for the Arranger or RPS drums. After all, if a "♩=123" sample is stored with a BPM value of "♩= 147", synchronizing the Arranger or RPS function to the Sample Player does not work out as expected.

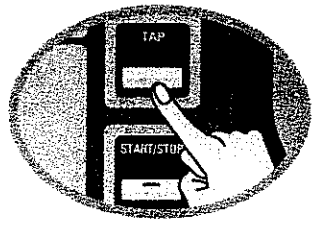
Why is synchronization important? Because you want the sampled groove to run at the same tempo as the Arranger or RPS notes. Both the Arranger and the RPS function can adapt their tempo to the BPM value of the selected sample (see above). If that value is wrong, the drums will play at a different rhythm than the bass, the chords, etc.

Sampling and memorizing the correct BPM value

The EG-101's [TAP] button is a very convenient way of specifying the tempo because all you need to do is press the [TAP] button in the rhythm of the music you are about to sample.

In order to achieve a predictable result, it is probably a good idea to start the sampling process manually (select the -0- setting). Once you've become a sampling expert, you can experiment with Threshold settings (-1-~-8-, see also "Starting the sampling process automatically (Trigger Level)").

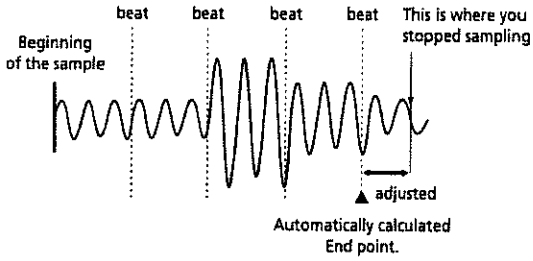
1. ***Connect the sound source (CD player, MD player, etc.) to the EG-101's INPUT jacks.***
2. ***Press the [REC] button (indicator flashes), start playback of the sound source and set the recording level with the [CONTROL/REC LEVEL] knob.***
3. ***Leave the sound source running and press the [TAP] button in the rhythm of the music.***



(You could also use the [TEMPO/VALUE] ▲▼ buttons to set the tempo. But [TAP] is far more convenient.)

The display now indicates the calculated BPM value (example: ! 32). The setting range is 20–250 BPM (beats per minute).

4. ***Rewind your audio source and start playback a little ahead the excerpt you wish to sample.***
5. ***Press [REC] again to start sampling.***
6. ***Press [REC] yet again at the end of the audio phrase to stop the sampling process.***
   The [LO-FI] button now lights, signalling that the end of the sample (the "End point") has been set automatically to coincide with a beat of the tempo (BPM) you specified. So even if you stop the sampling process between two beats, your sample will be shortened so as to end precisely *on* a beat.



Cancelling the sample assignment to the Drum part

Here is how to cancel the assignment of the sampled groove to the Style's or RPS Set's Drum part. Note that you do not really need to perform these steps because selecting another Style or RPS Set has the same effect.

1. *Press the gray PART MANIPULATOR button until the PART MUTE indicator lights.*
2. *Press and hold the Part Manipulator [DRUM] button until the indicators of all Sample Player pads that contain sample data start flashing.*
   The pad indicator of the assigned sample lights and all other pad indicators go dark.
3. *Press the pad whose indicator lights.*
   The pad indicators of other sample memories containing data come on again and the assignment is cancelled.

Replacing specific drum sounds with samples

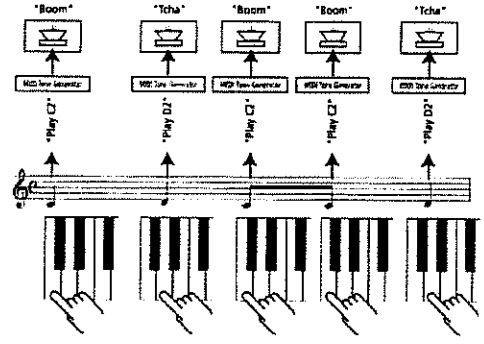
You can also replace specific drum sounds (kick, snare, HiHat, etc.) with your own samples. Up to four "MIDI" sounds can be replaced with "audio" samples, so that you could use a kick, a snare, and two HiHat sounds you recorded yourself.

It goes without saying that this is only meaningful when you use short samples (a "boom" or "tcha" mentioned earlier). Though you could experiment with grooves, the result will probably not be very convincing. You may want to shorten such "replacement" samples before assigning them to the drum instruments. See "Cutting your samples down to size" on page 18.

Background

You may wonder why it is possible to replace specific MIDI sounds with audio samples. That is because the Arranger and RPS Drum parts are based on MIDI instructions. They don't play sounds: they only tell someone else to do so. This "someone else" is what we call a "MIDI tone generator". As explained earlier, a sample can be considered a tone generator in its own right that can execute "start playing/stop playing" commands. In fact, these commands are transmitted every time you press a pad (or a key). And as these commands are identical to the commands issued by the Arranger (or RPS function), you can "divert" the Arranger's (or RPS function's) "Play/Stop" commands to a sample.

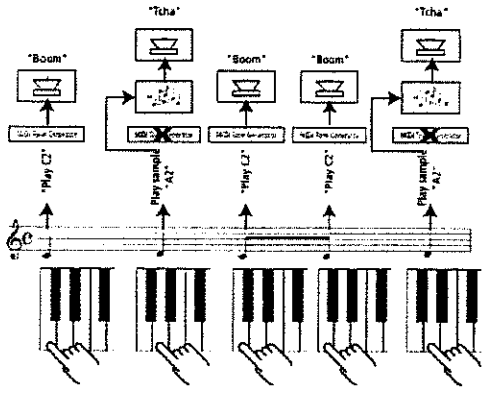
To understand this, let us briefly return to the possibility to drum on the EG-101's keyboard (see also "Drumming with the EG-101" on page 10). You may remember that every key triggers a different drum/percussion sound. Example:



What happens is that, by pressing a key, you issue a command ("play C2" or "play D2"). This command is transmitted to the MIDI tone generator. The MIDI tone generator checks which Drum Set is currently selected (see "Selecting Drum Sets" on page 10) and sends a "play now" command to the sound assigned to the "C2" (or the "D2") key. The result is that –in our example– you hear a kick and a snare.

With the "divert" function you can tell the EG-101 to redirect 4 of these commands to the Sample Player, so that the MIDI tone generator does not play them any more.

"Start" and "stop" are commands that the Sample Player understands (they mean the same as pressing and releasing a pad). And since it makes no difference whether you actually press a key or use a previously stored instruction (contained in the selected Style or RPS phrase), the snare, for instance, can be played by a sample.

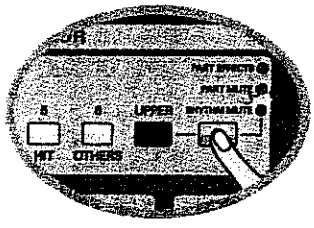


With this diversion, you thus change the instruction "play D2" to "play sample A2". (Caution: if you delete the sample in the A2 memory and replace it with another one, that new sample will sound every time you press the D2 key.)

One final note: there is actually no big difference between your own samples and the drum/percussion sounds of a Drum Set. Both are samples. But unlike the Sample Player, the MIDI tone generator does not allow you to record your audio material. Beware, though: to keep it simple, we have been talking about individual instruments until now (kick, snare, etc.) The substitution function, however affects Rhythm groups. You may remember (see "Muting drum/percussion instruments (Rhythm Mute)" on page 28) that all drum/percussion instruments are assigned to one of eight Rhythm groups.

Substitution

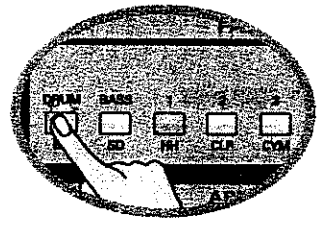
1. ***If you haven't already done so, sample the desired sounds.***
2. ***Use the MARK function to reduce playback time of the samples you wish to use to the portion you want to hear (see page 18).***
3. ***Select the desired mode by pressing MODE [ARRANGER] or [RPS] (indicator must light).***
4. ***Select the desired Music Style (page 22) or RPS set (page 13).***
5. ***Press the gray PART MANIPULATOR button until the RHYTHM MUTE indicator lights.***



If you want to replace the drum instrument of an RPS drum part:

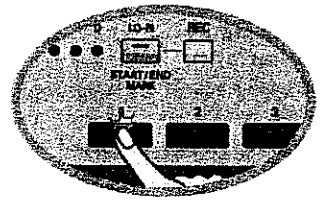
5a) Press the key whose drum part should be replaced by your sample.

6. ***Press and hold the Part Manipulator button of the Rhythm Group to be replaced until the Sample Player pad indicators start flashing.***



Press [BD], [SD], [HH], etc. Only the pads corresponding to memories that contain sample data will start flashing.

7. ***Select the Bank that contains the desired sample by pressing Sample Player [BANK] until the desired indicator (A, B, C or D) starts flashing.***
8. ***Press the pad corresponding to the sample you wish to use in lieu of the MIDI tone generator sound.***



Its indicator lights, as does the TIME indicator. The remaining pad indicators keep flashing.

9. ***Repeat steps (6)-(8) to assign other samples to other Drum parts.***
   Up to four Rhythm groups can be replaced with samples.
10. ***Release the Part Manipulator button you have been holding.***
    If you want to check which sample memories have been assigned, press the [BANK] button. Only the indicators of assigned Pads/Sample Player memories will light.

▷ *The Sample Player can now no longer be used as stand-alone unit. As long as the Arranger or RPS function controls the sampler, you cannot record new samples or play back other samples via the pads or via the keyboard; and the SOURCE function cannot be used either.*

Canceling one or all instrument assignments

To cancel the assignment of one or all Rhythm groups to a sample, proceed as follows:

1. ***Press the gray PART MANIPULATOR button until the RHYTHM MUTE indicator lights.***
2. ***Press and hold the Part Manipulator button whose sample assignment you wish to cancel.***
   Wait until the indicator of the assigned pad button in the Sample Player section lights.
3. ***Press the Sample Player pad whose indicator lights to cancel the assignment.***
   The indicator of this pad goes dark, while the indicators of the remaining pads start flashing.

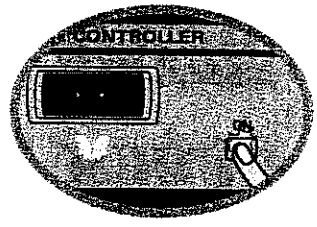
9.8 Selecting other D Beam functions

Under "Move: The D Beam Controller" on page 26, we told you there are quite a few other functions that can be assigned to the D Beam Controller. In fact, you can assign three other functions to the D Beam Controller: one for every indicator (CUT + RESO, TEMPO DOWN, AD LIB). This allows you to override the factory-set functions, and select the newly assigned functions in the same way as would select CUT + RESO, etc.

▷ *Changing the assignment to one of these indicators means that the function printed on the front-panel is no longer available. You can, however, recall it by selecting the assignment number in question (see below).*

Here is how to select another D BEAM function:

1. ***Press the D BEAM [ON] button (indicator lights).***

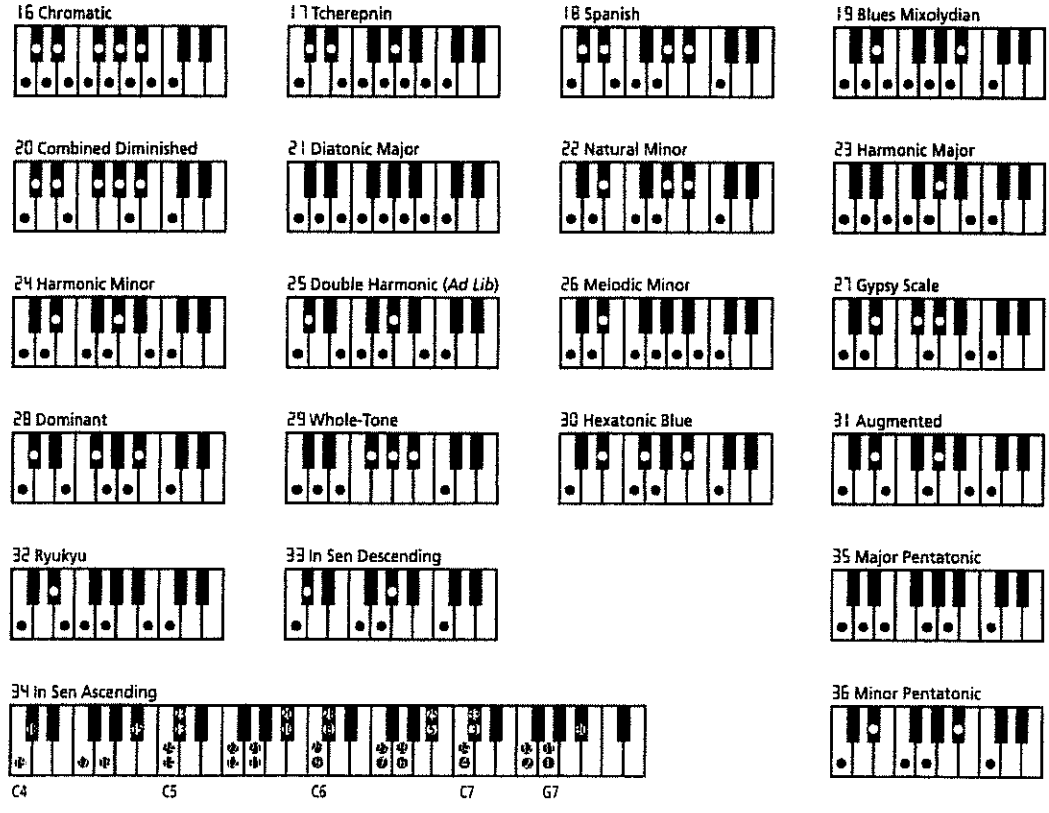


2. ***Use the gray button to select the level (indicator) you wish to "reprogram".***
   Select CUT + RESO, TEMPO DOWN, or AD LIB.
3. ***Press and hold the gray button until the display indicates the number of the currently assigned function.***
4. ***Use the [TEMPO/VALUE] buttons to select one of the following functions:***

	Function	Explanation
1	Modulation	The D Beam Controller performs the same function as the BENDER/MODULATION lever when you push it towards the rear of the instrument. (Only available for the Upper part.)
2	Pitch Bend Down	By moving your hand over the D Beam, you can generate a value between "64" (no Pitch Bend) and "0" (maximum downward bend). As soon as you move your hand outside the D Beam's reach, the value returns to "64" (no Pitch Bend). (Only available for the Upper part.)
3	Pitch Bend Up	By moving your hand over the D Beam, you can generate a value between "64" (no Pitch Bend) and "127" (maximum upward bend). As soon as you move your hand outside the D Beam's reach (higher than ±30cm above the "eyes", or further to the left or right), the value returns to "64" (no Pitch Bend). (Only available for the Upper part.)
4	Filter Up	(max. Resonance) By moving your hand over the D Beam, you can vary the Cutoff frequency (filter setting) between "0" (no change) and "+63" (maximum increase). When you move your hand outside the D Beam's range, both Resonance and TVF Cutoff return to their original values ("0"= no change). (Only available for the Upper part.)
5	Filter Down	(max. Resonance) Original function that can be selected via the CUT + RESO indicator. See "Filtering effects" on page 26.
6	Tempo Up	Allows you to speed up the Arranger/RPS/Recorder tempo by moving your hand (or body) closer to the D Beam's "eyes".
7	Tempo Down	Original function that can be selected via the TEMPO DOWN button indicator. See "Slowing down the tempo" on page 26.
8	Arranger Start/Stop	Depending on the current condition of the Arranger (running or stopped), one move inside the D Beam's range stops (or starts) it. A second movement will start (or stop) it again.
9	Fill To Variation/Original	Here, too, the D Beam performs two functions that depend on the currently selected basic Style pattern (Original or Variation). The first time the D Beam senses your hand, it activates the Fill-In TO VARIATION function. Upon completion of that Fill, the Arranger switches to the Variation pattern. The second time, the Fill-In TO ORIGINAL is activated. See also "A note about the EG-101's Styles" on page 21.

Function	Explanation
10 Drums on/off	This setting allows you to switch the Arranger/RPS drums on and off using the D Beam Controller. There are also combined on/off options (see below). In fact, this is more or less the same as selecting Part Manipulator PART MUTE and switching the DRUM button on/off.
11 Bass on/off	This setting allows you to switch the Arranger/RPS bass part on and off using the D Beam Controller. There are also combined on/off options (see below). In fact, this is more or less the same as selecting Part Manipulator PART MUTE and switching the BASS button on/off.
12 [1-6] on/off	This setting allows you to switch the Arranger/RPS 1-6 parts on and off using the D Beam Controller, leaving you with only the bass and drums of the currently selected Style or RPS set. There are also combined on/off options (see below).
13 Drums & Bass on/off	Combined on/off function for the Arranger/RPS drum and bass parts. See above.
14 [1-6] & Bass on/off	Combined on/off function for the Arranger/RPS bass and 1-6 parts. See above.
15 [1-6] & Drums on/off	Combined on/off function for the Arranger/RPS drum and 1-6 parts. See above.
16 Chromatic Scale	Allows you to play notes using the Tone assigned to the Upper part. See the illustration below for the notes in question. The first note of the scale depends on the chord you play in the left half of the keyboard (Arranger mode) or on the RPS TRANSPOSE key you press.
17 Tcherepnin's Scale	Same as above, but with other notes.
18 Spanish Scale	Same as 16 but with different notes.
19-24 Blues Mixolydian Scale– Harmonic Minor Scale:	Same as 16 but with different notes.
25 Double Harmonic Scale	Same as 16 but with different notes. (Notes used by the AD LIB setting.)
26-36 Melodic Minor Scale– Minor Pentatonic Scale	Same as 16 but with different notes. See also the note there.

D BEAM CHORDS (when the Arranger chord/RPS Transpose note equals "C", otherwise the corresponding transposed version)



▷ *As stated above, the first note of the selected scale depends on the chord you play in the left half of the keyboard (or the RPS TRANSPOSE key you press in RPS mode).*

9.9 MIDI functions

In the course of this manual, we have already come across several (internal) MIDI functions of your EG-101. You may remember that the Arranger and RPS function are based on instructions that cause the tone generator to play, while the Sample Player can be started and stopped with these commands (see "Background" on page 51).

MIDI is the acronym of *Musical Instrument Digital Interface*. The most important aspect of the MIDI standard is that it allows one instrument to tell another when to play a note, for how long, and how strongly it should be played. Other aspects of a musical performance include modulation (vibrato), Pitch Bend (bending), volume, panpot, etc.

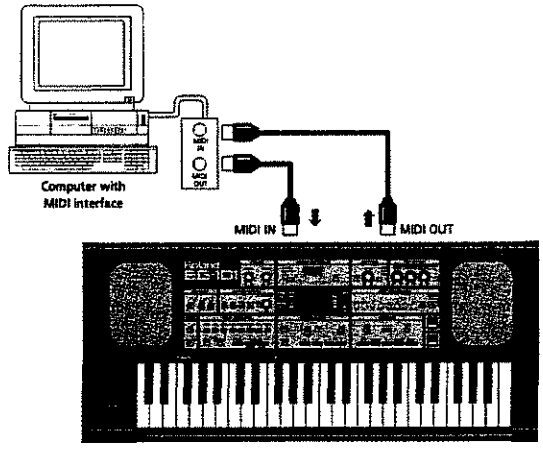
Yet another group of MIDI messages is used to tell the receiver when to select another sound and which sound to select. These messages are called *Bank Select*, and *program change*. Still other MIDI data allow you to synchronize two MIDI instruments so that they start and stop at the same time and run at the same tempo.

If you want to know more about MIDI, see the *MIDI Guidebook* that came with your EG-101.

Your EG-101 can be used as stand-alone instrument, which is why you probably don't need other instruments right away. Expanding your system, however, opens up new possibilities and dramatically widens your musical scope.

You probably also own a computer. If it is equipped with a MIDI interface (or a sound card with MIDI connectors), you should take advantage of that facility. Doing so allows you to use the EG-101 as sophisticated sound module you can use for playing back your sequences (recorded with a sequencer program).

Here's how to connect the EG-101 to your computer:



The EG-101's MIDI OUT connector transmits the EG-101's messages to the outside world, while the MIDI IN connector is used to receive MIDI data from the computer (or any other instrument capable of transmitting MIDI data).

MIDI channels used by the EG-101

Sample Player:

MIDI channel 11, MIDI notes: see table

Pad (note/note number)	A1* (C4/60)	B1 (E4/64)	C1 (G#4/68)	D1 (C5/72)	SOURCE (B3/59)
Pad (note/note number)	A2 (C#4/61)	B2 (F4/65)	C2 (A4/69)	D2 (C#5/73)	
Pad (note/note number)	A3 (D4/62)	B3 (F#4/66)	C3 (A#4/70)	D3 (D5/74)	
Pad (note/note number)	A4 (D#4/63)	B4 (G4/67)	C4 (B4/71)	D4 (D#5/75)	

(*) The letter (A–D) refers to the BANK.

Arranger/RPS function:

Drums	MIDI Channel 10	"3"	MIDI Channel 5
Bass	MIDI Channel 2	"4"	MIDI Channel 7
"1"	MIDI Channel 1	"5"	MIDI Channel 8
"2"	MIDI Channel 3	"6"	MIDI Channel 9

Upper part (right half or entire keyboard):

When you assign a Tone to the Upper part, it transmits and receives on **MIDI channel 4**.

When you assign a **Drum Set** to the Upper part, it transmits and receives on **MIDI channel 16**.

Style channel

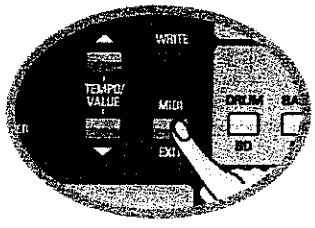
This MIDI channel (10) allows you to select EG-101 Styles from your computer or other MIDI instrument (remote control). The format of the Bank Select and program change messages is indicated on page 60.

Synchronization with external MIDI gear

From "Synchronization of the Arranger or RPS tempo" on page 50 you already know that synchronization is sometimes necessary to ensure that all functions or instruments run at the same tempo and start/stop at the exact same time. MIDI synchronization is the same but it applies only to MIDI (not to audio). Without synchronization, your EG-101 and the external device are like two watches lying side by side. No matter how hard you try to set them to the exact same time, you will notice that after a while, one is a little ahead of the other. This is not acceptable for recording MIDI data because it means that after a while, a note supposed to fall on the first beat of a bar will actually be located on the second beat. That is why MIDI instruments provide a function that allows you to select which of the two (or more) instruments is to be used as timing (clock) source. In that case, only one "watch" actually runs independently while, at the same time, sending signals to the other "watches" that inform the receivers about the position where they are supposed to be.

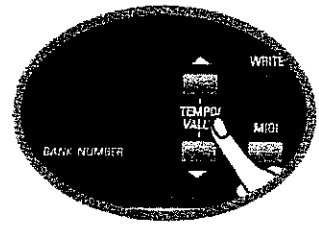
Note that the EG-101 always transmits MIDI clock messages, so that you could also synchronize your computer to the EG-101. If you prefer to work the other way around (synchronization of the EG-101 to your computer), here is how to select the option that best matches your application.

1. ***Connect the computer's MIDI OUT port to the MIDI IN of your EG-101 (see the illustration on page 55).***
2. ***Press the [MIDI/EXIT] button.***

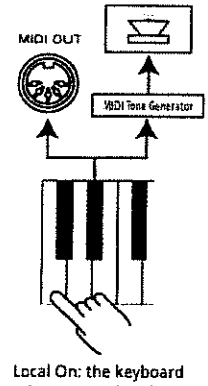


The display now reads Md2 to indicate that this option is currently selected.

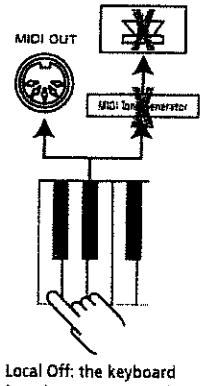
3. ***Hold down [MIDI/EXIT] and use the [TEMPO/VALUE] buttons to select the desired option:***



Md1:	No synchronization with external instruments.
Md2:	The Arranger is automatically synchronized. That is: every time the EG-101 receives a usable MIDI Clock signal via its MIDI IN connector, it follows the external clock rather than its own. As long as no MIDI Clock signals are received, it uses its own tempo (Clock).
Md3:	The Recorder is automatically synchronized. See above but bear in mind that this time, only the Recorder responds to MIDI Clock signals.
Md4:	No synchronization. Furthermore, the keyboard can no longer be used to play the Upper part or to control the Arranger/RPS function (*Local Off*). The notes you play on the keyboard will still be transmitted to the EG-101's MIDI OUT connector, though. This setting is only meaningful if you use the EG-101 for recording notes with an external sequencer. By breaking the link between the EG-101's keyboard and tone generator, you can play the sounds of an external instrument in isolation. That is: you will not hear the Upper (or any other) part alongside the external instrument.



Local On: the keyboard is connected to the tone generator.



Local Off: the keyboard is no longer connected to the tone generator.

Md5:	The Arranger is automatically synchronized (see also "Md2"), while the keyboard no longer triggers the EG-101's internal tone generator (*Local Off*). See also "Md4".
Md6:	The Recorder is automatically synchronized (see also "Md3"), while the connection between the EG-101's keyboard and tone no longer exists (*Local Off*). See also "Md4".

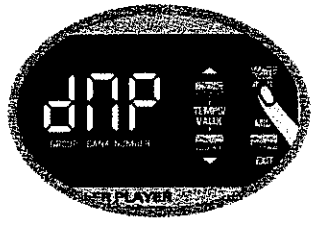
4. ***Release [MIDI/EXIT] to leave the MIDI mode.***

External storage of your settings

The EG-101 allows you to transmit the contents of the internal memory to a PC. Use a computer with MIDI sequencing software for doing so (*). This allows you to record the MIDI data just like you would record a melody. Only this time, you record settings. These can be played back. They won't sound, but they will replace the memory contents of you EG-101.

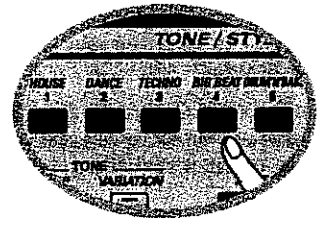
Use this procedure to make an external backup of your precious settings. That way, you can program new Style User Programs, User RPS Sets and Samples – and return to your previous settings whenever necessary.

1. ***Switch off the EG-101.***
   You may want to save your last changes to a Style User Program (page 40) or User RPS Set (page 48) before doing so.
2. ***Connect the EG-101's MIDI OUT port to the MIDI INput of your computer.***
3. ***Hold down the EG-101's [MIDI/EXIT] button while switching it back on again.***



The display now flashes the message dMP. Wait until it lights steadily before proceeding.

4. ***Start recording with the external sequencer.***
   See the manual of the software for details. Be sure to wait until the count-in is finished.
5. ***Press one of the following TONE/STYLE/RPS buttons to select the data you wish to save externally.***



[1] PrG Program. Choose this option if you want to back up the system. Quite a few Roland distributors release new system versions via the Internet as they become available. Before "updating" your EG-101, it is always a good idea to make a backup of your previous system version. That is what this option is for.

[2] StL Arranger Styles. Some of the EG-101's Style memories can be replaced with other data. Whether or not this is available depends on the local Roland distributors. Ask your Roland dealer for details.

[3] USt Style User Programs. The contents of all 64 Style User Program memories (i.e. your customized Style settings, page 40).

[4] urP All 64 User RPS Sets (your own phrase-to-key assignments and additional RPS settings, page 47).

[5] SMP The samples. Their number depends on the number of samples you have recorded. The contents of all 16 memories can be transmitted, though.

[6] SnG The Recorder song that currently resides in the EG-101's internal memory.

6. ***Wait until the display once again reads dMP, then stop recording of your your sequencer program.***
7. ***Save the external sequencer song to disk.***
   See the software's manual for details. Try to give this file a meaningful name, such as "EG USP 2/10/98" (User Style Programs saved on 2 October 1998), etc.

▷ *It would be a good idea to save your "setting songs" as Standard MIDI Files. After all, you may start working with another sequencer program and erase the old one. If your settings were saved as "proprietary" files, you may have trouble opening them with the new sequencer program.*

(*)Our engineers have tested these operations with "Cubase" and "Logic". Other sequencer software may not support these data transfer operations.

▷ *Cubase is a registered trademark of Steinberg Soft- und Hardware GmbH, while Logic is a registered trademark of Emagic Soft- und Hardware GmbH.*

8. ***Switch the EG-101 off and on again.***

Sending the data back to the EG-101/Updating the operating system

There are several procedures for sending archived settings back to the EG-101.

Style User Programs/User RPS Sets/Recorder Songs

For Style User Programs, User RPS Sets and Recorder Song, all you need to do is:

1. ***Connect the computer's MIDI OUTput to the EG-101's MIDI INput.***
2. ***Start your sequencer program (Cubase or Logic) and load the file with the settings you wish to transfer to the EG-101.***
3. ***Set the sequence program so that it transmits MIDI Clock signals (see its owner's manual).***
4. ***Start playback of the "setting song". Careful, though: this will erase the current settings of the selected type in the EG-101's internal memory.***
   Wait until the SYS message disappears. Then try out the freshly loaded Style User Programs/User RPS Sets/Recorder Song.

Samples

▷ *To be on the safe side, we strongly recommend that you save your Style User Programs, User RPS Sets, and your Song externally (see above) before proceeding.*

▷ *Transferring archived samples back to the EG-101's internal memory will overwrite the internal samples. Save them externally (see above) before proceeding.*

1. ***Switch off the EG-101.***
2. ***Connect the computer's MIDI OUTput to the EG-101's MIDI INput.***

3. *Set the sequence program so that it transmits MIDI Clock signals (F8, see its owner's manual).*
4. *Start your sequencer program and load the file with the Sample file you wish to transfer to the EG-101.*
5. *Hold down the SAMPLER PLAYER [REC] button while switching the EG-101 back on again.*

6. *Start playback of this "sample song".*

▷ *Be careful to "play back" only "songs" that contain sample data. If you "transfer" a normal music data Standard MIDI File to the EG-101 at this stage, the internal Style User Program and User RPS Set memories may become corrupted. (That is why we suggested backing up your settings before transferring sample data to the EG-101.)*

The display now reads S 1, S 2... S32 to signal that the sample data are being received. When the transfer is finished, the message UPd once again appears.

▷ *If the message Er9 appears during the transfer procedure, stop playback of your program, change the playback tempo to the minimum value (probably 30 BPM), and repeat the above procedure.*

7. *Wait a few seconds, then switch the EG-101 off and back on again.*

Updating the operating system

As stated above, new versions of the EG-101's operating system may become available. Seeing that you can update your EG-101 yourself, these update files may be available on the Internet. Here's what you need to do to update your Groove-Keyboard:

1. *Ask your Roland dealer for the address where you can obtain an update or to copy the latest operating system to a floppy disk.*
2. *Make a backup of your Song, Style User Programs, and User RPS Sets.*
   To be on the safe side, your samples and the current operating system should be archived, too. See "External storage of your settings" on page 57 for details.
3. *See steps 2–4 above.*
4. *Switch off your EG-101 and hold down the RECORDER [PLAY/STOP] and [REC/STOP] buttons while switching it back on again.*

5. *Start playback of this "Program song".*
   The display now reads u 1u, u2u... ubu to signal that the sample data are being received. When the transfer is finished, the message UPd once again appears.
6. *Wait a few seconds, then switch off the EG-101.*
7. *Hold down the [WRITE] button while switching the EG-101 back on again.*
   The display now contains the FCt message to signal that the Style User Programs and User RPS Sets are being initialized to the factory settings.

Loading other Styles

It is also possible to transfer new Styles to the EG-101. Whether or not such Styles are available depends on your local Roland distributor. See your Roland dealer for details.

If you can lay your hands on a new Style file, you can transfer it to the EG-101. Before doing so, save the Styles in the internal memory externally as described under "External storage of your settings" on page 57.

The procedure is exactly the same as for "Updating the operating system". Please see above. This time, however, the display shows the messages u 1u~u0u. Wait until the UPd message appears, then initialize your EG-101 (see step 7 above).

9.10 Initializing the EG-101

The EG-101 also provides a function for initializing the Style User Programs and User RPS Sets to their factory settings. Though this may be convenient at times (and indispensable after updating the operating system or the EG-101's Styles), you should bear in mind that this operation **will erase your own Style User Programs and User RPS Sets.** It may therefore be a good idea to archive them via MIDI before you take advantage of this function (see page 57).

1. *Switch off the EG-101.*
2. *Hold down the [WRITE] button while you switch the EG-101 back on again.*
   The message FCt now appears to signal that the Style User Programs and User RPS Sets are being initialized, after which the EG-101 selects Style "11".

9.11 Specifications

GENERAL
49-note velocity-sensitive keyboard
3 x 7-segment display
Separate Sampler Volume control
2 x 15 W musical output power
Two-way Bass Reflex System
Operating system in Flash ROM

TONE GENERATION & SOUNDS
24-voice polyphony
11 multitimbral Parts
448 Tones, 12 Drum Kits

CONTROLLERS
D-Beam™
Pitch Bender/Modulation Lever
7 knobs
TAP Tempo

D-BEAM Quick Parameters
CUT-OFF + RESONANCE
TEMPO DOWN
AD LIB
(36 possibilities)

STYLES
64 Styles in ROM (16 are Flash ROM)
Divisions: Intro, Original, Fill, Variation, Ending, Basic/Advanced
64 Style User Programs
Effects assignable to Parts
Realtime mute of Parts and Drum instruments
Drum track substitution with sampled phrase
Drum instrument substitution with sample

RPS
64 RPS Sets of 12 phrases each
64 User RPS Sets
Auto-Sync with sampled Loops
Effects assignable to last selected Phrase
Realtime mute of drum instruments
Quick RPS Transpose

SAMPLE PLAYER
R-DAC Sampling Technology (Roland Digital Audio Coding)
4 Pads X 4 Banks (16 locations), direct triggering via keyboard or pads
4 Mbit Flash ROM
Up to 32 sec. (128 sec. in LO-FI grade)
Auto Sync with Styles and RPS
Sampler effects: Pitch Shift, Time Stretch, Ring Mod *, Filter *
(* Effects also available on Line-IN or Mic-IN)
HOLD CONTROL
MIC-IN + Effects

REALTIME TONE/TRACK/EFFECT EDIT FUNCTIONS
Cut-Off, Resonance, Panpot, Part Volume, Reverb Time, Reverb Level

ARPEGGIO
Range (Octave)
Grid (Quantize)
Type (Up - Down - Up/Down - Random)
Realtime Control of Decay
Always synchronized to general tempo

PORTAMENTO
Monophonic with Rate Control

RECORDER

CONNECTIONS
Output (L/mono - R): RCA x2
Input (L - R): RCA x2
Foot Switch
Headphones
MIDI IN-OUT
DC IN (12 V - 2 A)

DIMENSIONS
835 (W) x 377 (D) x 192 (H) mm

WEIGHT
11.1kg

Specifications subject to change without prior notice.

Style chart

HOUSE

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
11 House1	128	4/4	2	40
12 House2	126	4/4	2	41
13 House3	125	4/4	2	42
14 House4	125	4/4	2	43
15 House5	127	4/4	2	44
16 House6	127	4/4	2	45
17 House7	127	4/4	2	46
18 House8	126	4/4	2	47

DANCE

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
21 Dance1	127	4/4	2	48
22 Dance2	136	4/4	2	49
23 Dance3	135	4/4	2	50
24 Dance4	138	4/4	2	51
25 Dance5	132	4/4	2	52
26 Dance6	129	4/4	2	53
27 Dance7	130	4/4	2	54
28 Dance8	125	4/4	2	55

TECHNO

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
31 Techno 1	134	4/4	2	56
32 Techno 2	138	4/4	2	57
33 Techno 3	132	4/4	2	58
34 Techno 4	138	4/4	2	59
35 Techno 5	145	4/4	2	60
36 Techno 6	138	4/4	2	61
37 Techno 7	140	4/4	2	62
38 Techno 8	150	4/4	2	63

BIG BEAT

41 BigBeat1	112	4/4	1	23
42 BigBeat2	130	4/4	1	24
43 BigBeat3	132	4/4	1	25
44 BigBeat4	136	4/4	1	26
45 BigBeat5	130	4/4	1	27
46 BigBeat6	138	4/4	1	28
47 BigBeat7	124	4/4	1	29
48 BigBeat8	140	4/4	1	30

DRUM 'N' BASS

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
51 Jungle1	133	4/4	2	64
52 Jungle2	160	4/4	2	65
53 Drum 'n' Bass1	167	4/4	2	66
54 Drum 'n' Bass2	163	4/4	2	67
55 Drum 'n' Bass3	167	4/4	2	68
56 Trip Hop1	102	4/4	2	69
57 Trip Hop2	90	4/4	2	70
58 Trip Hop3	93	4/4	2	71

HIP HOP

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
61 Hip Hop1	103	4/4	3	15
62 Hip Hop2	94	4/4	3	16
63 Hip Hop3	110	4/4	3	17
64 Hip Hop4	92	4/4	3	18
65 Funk1	107	4/4	3	19
66 Funk2	95	4/4	3	20
67 Funk3	107	4/4	3	21
68 Funk4	110	4/4	3	22

POP

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
71 Pop1	130	4/4	7	41
72 Pop2	124	4/4	7	42
73 Pop3	124	4/4	7	43
74 Pop4	130	4/4	7	44
75 Pop5	104	4/4	7	45
76 Pop6	130	4/4	7	46
77 Pop7	115	4/4	7	47
78 Pop8	138	4/4	7	48

WORLD

Style Name	Tempo	Time Sig.	Progr. Change + CC 00	CC 32
81 Afro1	104	4/4	2	72
82 Afro2	115	4/4	2	73
83 Afro3	112	4/4	2	74
84 Afro4	112	4/4	2	75
85 Latin1	127	4/4	2	76
86 Latin2	128	4/4	2	77
87 Latin3	144	4/4	2	78
88 Latin4	125	4/4	2	79

DIVISION STYLE PROGRAM CHANGE

Division	Decim.	Hex
Original Basic	PC 1	00H
Original Advanced	PC 2	01H
Variation Basic	PC 9	08H
Variation Advanced	PC 10	09H
Fill in to Original Basic	PC 89	58H
Fill in to Original Advanced	PC 90	59H
Fill in to Variation Basic	PC 97	60H
Fill in to Variation Advanced	PC 98	61H
Break Mute	PC 113	70H
Intro Basic	PC 65	40H
Intro Advanced	PC 66	41H
Ending Basic	PC 73	48H
Ending Advanced	PC 74	49H

DIVISION STYLE PROGRAM CHANGE (E series compatibility)

Division	Dec	Hex
Fill In to Variation	PC 81	50H
Fill In to Original	PC 82	51H
Intro	PC 83	52H
Ending	PC 84	53H
Break Mute	PC 85	54H

(These program change messages are intended for compatibility with older E series instruments. They do not require the use of CC00 and CC32 messages.)

For Nordic Countries

Apparatus containing Lithium batteries

ADVARSEL!

Lithiumbatteri - Eksplosionsfare ved fejlagtig håndtering.
Udskiftning må kun ske med batteri af samme fabrikat og type.
Levér det brugte batteri tilbage til leverandøren.

VARNING!

Explosionsfara vid felaktigt batteribyte.
Använd samma batterityp eller en ekvivalent typ som rekommenderas av apparattillverkaren.
Kassera använt batteri enligt fabrikantens instruktion.

ADVARSEL!

Lithiumbatteri - Eksplosjonsfare.
Ved utskifting benyttes kun batteri som anbefalt av apparatfabrikanten.
Brukt batteri returneres apparatleverandøren.

VAROITUS!

Paristo voi räjähtää, jos se on virheellisesti asennettu.
Vaihda paristo ainoastaan laitevalmistajan suosittelemaan tyyppiin. Hävitä käytetty paristo valmistajan ohjeiden mukaisesti.

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"

CE

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.

CLASSE B AVIS

Cet appareil numérique ne dépasse pas les limites de la classe B au niveau des émissions de bruits radioélectriques fixés dans le Règlement des signaux parasites par le ministère canadien des Communications.

Roland®

K6018331

UPC K6018331

RES 200-98 Printed in Italy by Arti Grafiche srl - Ancona 98-11 - EM-2000 - O.M.-E-D

Roland®

602152249