

Roland®

# INTERACTIVE ARRANGER

E-09

## Owner's Manual

Thank you, and congratulations on your choice of the Roland E-09.

**Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (pp. 2-3; p. 4). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.**

### Conventions Used in This Manual

Operating buttons are enclosed in square brackets; e.g., [PIANO].

Page references are given as (p. \*\*).

The special symbols have the following meanings.

**NOTE**

This indicates an important note you must read.

**MEMO**

This indicates a memo regarding settings or functionality. Read it as necessary.

**TIP**

This indicates a hint for operation. Read it as necessary.

**cf.**

This indicates a reference to related information. Read it as necessary.

**TERM**

This explains a term that may be unfamiliar. Read it as necessary.

### Glossary of Terms

**TERM**

"**Tones**" are the sounds you will normally play on the E-09. If we use the analogy of an orchestra, a "tone" corresponds to an instrument held by a musician. Each tone also includes parameters (settings) such as effects. (p. 10)

**TERM**

The "**Arranger**" is the E-09's automatic accompaniment function. (p. 13)

**TERM**

"**Music Styles**" are musical templates used by the arranger. The E-09 contains a variety of built-in music styles, such as rock, dance, Latin, and jazz. (p. 14)

**TERM**

"**Music Assistant**" settings specify the type of tone and music style, together with other settings such as the keyboard part and various additional parameters. The E-09 contains a variety of built-in music assistant settings. (p. 15)

**TERM**

"**User Programs**" specify the type of tone and music style, together with other settings such as the keyboard part and various additional parameters. You can edit the settings and save them as a user program. (p. 16)

**TERM**

"**Songs**" are recordings you make of your own performances using the 16-track recorder. You can create a song by adding the arranger to your own keyboard performance. (p. 19)

Copyright © 2005 ROLAND CORPORATION

All rights reserved. No part of this publication may be reproduced in any form without the written permission of ROLAND CORPORATION.

**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.

Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

## USING THE UNIT SAFELY

### INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

#### About WARNING and CAUTION Notices

<b> WARNING</b>	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
<b> CAUTION</b>	<p>Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly.</p> <p>* Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.</p>

#### About the Symbols

	The  symbol alerts the user to important instructions or warnings. The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The  symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The  symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

### ALWAYS OBSERVE THE FOLLOWING

#### **WARNING**

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.
- Do not open (or modify in any way) the unit or its AC adaptor.
- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.
- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.
- This unit should be used only with a rack or stand that is recommended by Roland.



#### **WARNING**

- When using the unit with a rack or stand recommended by Roland, the rack or stand must be carefully placed so it is level and sure to remain stable. If not using a rack or stand, you still need to make sure that any location you choose for placing the unit provides a level surface that will properly support the unit, and keep it from wobbling.
- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.
- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.
- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!
- This unit, 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 immediately stop using the unit, and consult an audiologist.



## **WARNING**

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.  

- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.  

- Protect the unit from strong impact.  
(Do not drop it!)  

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/ampères) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.  

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

## **CAUTION**

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.  

- This (E-09) for use only with Roland stand KS-12. Use with other stands is capable of resulting in instability causing possible injury.  

- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.  

- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.  

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.  

- Never climb on top of, nor place heavy objects on the unit.  

- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.  

- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.  

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (p. 9).  

- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.  


# IMPORTANT NOTES

In addition to the items listed under “USING THE UNIT SAFELY” on page 2–3, please read and observe the following:

## Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

## Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit 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 unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.
- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.  
You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

## Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, 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 unit’s memory may be lost when the unit is sent for repairs. Important data should always be backed up in another MIDI device (e.g., a sequencer), or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

## Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of losing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit’s memory in another MIDI device (e.g., a sequencer).
- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit’s memory, or in another MIDI device (e.g., a sequencer) once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit’s buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- 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.
- To avoid disturbing your neighbors, try to keep the unit’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 unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.
- Do not apply undue force to the music stand while it is in use.

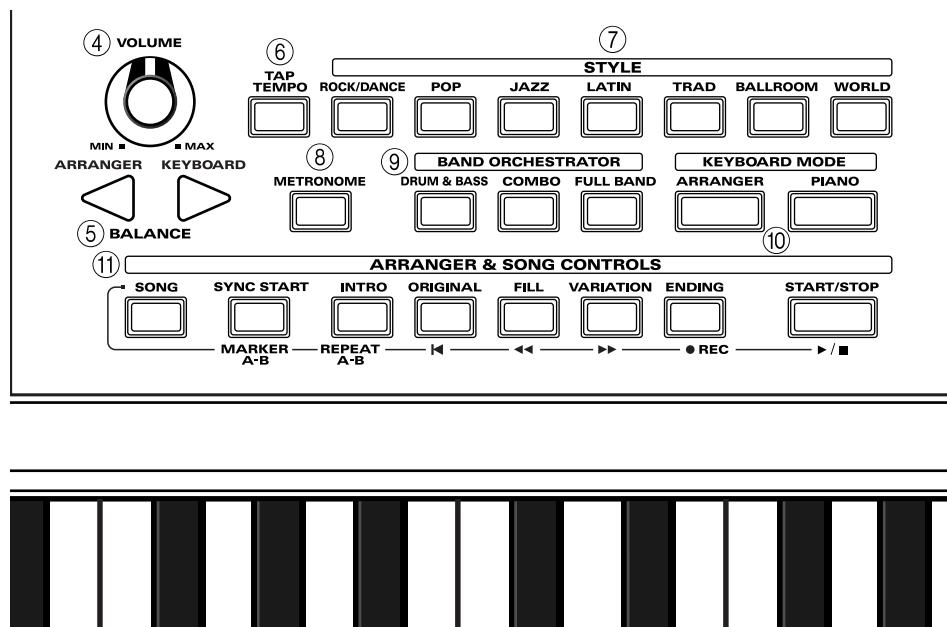
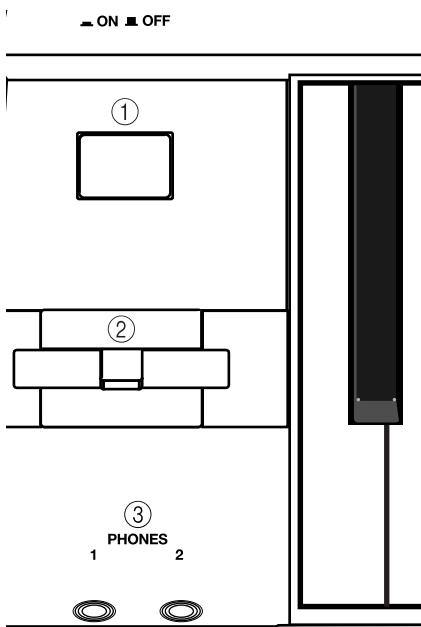
# Contents

<b>USING THE UNIT SAFELY .....</b>	<b>2</b>
<b>IMPORTANT NOTES.....</b>	<b>4</b>
<b>Introduction.....</b>	<b>6</b>
Top and Rear Panels .....	6
Top Panel.....	6
Rear Panel.....	8
Making the Connections .....	8
Connecting an External Device or Foot Switch .....	8
Connecting the AC Adaptor.....	8
Turning the Power On/Off .....	8
Turning the Power On.....	8
Turning the Power Off .....	9
Listening to the Demo Songs.....	9
Adjusting the Display Contrast .....	9
Returning the E-09 to Its Factory-Set State.....	9
<b>Playing the Sounds from the Keyboard .....</b>	<b>10</b>
Playing the Main Part .....	10
Playing the Main Part and Split Part.....	10
Playing the Main Part and Dual Part .....	10
Selecting Tones .....	11
Using the Numeric Keys .....	11
Using the TONE Category Buttons .....	11
Drum Sounds and Sound Effects (SFX).....	11
Sounding the Metronome .....	11
Transposing.....	12
Octave Setting.....	12
Changing the Keyboard Scale .....	12
<b>Performing with an Accompaniment (Arranger) .....</b>	<b>13</b>
Using the Arranger .....	13
Changing the Arranger Ensemble .....	13
Changing the Volume Balance of the Arranger Playback and the Keyboard Performance .....	13
Changing the Tempo of the Arranger.....	13
Arranger Sync Start .....	13
Stopping the Arranger.....	13
Selecting a Music Style .....	14
Music Style Functions.....	14
One-Touch.....	14
Melody Intelligence .....	14
<b>Performance Functions and Effects .....</b>	<b>15</b>
Performance Functions.....	15
Keyboard Touch.....	15
Pitch Bend and Modulation.....	15
Foot Switch.....	15
Music Assistant .....	15
User Program.....	16
Effects.....	16
Reverb .....	16
Chorus .....	17
Multi-Effects (MFX) .....	17
<b>Song Functions .....</b>	<b>19</b>
Recording Your Own Performance .....	19
All Recording Mode .....	19
Keyboard Recording Mode .....	19
Single Recording Mode .....	20
Punch-In/Out Recording Mode .....	20
Playing the Song.....	21
Changing the Playback Location of the Song .....	21
Minus-One Playback .....	21
<b>Function Menu .....</b>	<b>22</b>
Setting a Function Menu Parameter .....	22
KBD SET Parameters .....	22
METRONOME Parameters .....	23
Octave Parameters .....	23
Volume Parameters.....	23
ARR SET Parameters .....	24
EFFECTS Parameters .....	24
KBD SCALE Parameters .....	25
MIDI Parameters .....	25
UTILITY Parameters.....	25
<b>MIDI Functions .....</b>	<b>26</b>
MIDI Channels.....	26
MIDI Parameters .....	27
Bulk Dump .....	28
Bulk Load .....	28
<b>Other Functions .....</b>	<b>29</b>
<b>Appendices.....</b>	<b>31</b>
Troubleshooting .....	31
Tone List .....	32
Drum Set List .....	37
Music Style List.....	43
Specifying Chords .....	44
MIDI Implementation Chart.....	46
Specifications .....	47
<b>Index.....</b>	<b>48</b>

# Introduction

## Top and Rear Panels

### Top Panel



#### 1. Power Button

Turns the power on/off. (p. 8)

#### 2. Bender/Modulation Lever

Moving this lever to left or right changes the pitch of the sound. Pushing the lever away from yourself adds modulation (normally vibrato) to the sound. (p. 15)

#### 3. PHONES 1/2 Jacks

You can connect two sets of headphones (sold separately) to these jacks. The internal speakers will be turned off if you connect headphones.

#### NOTE

The headphone volume may decrease if you connect two sets of headphones.

#### 4. VOLUME Knob

Adjusts the overall volume of the E-09.

#### 5. BALANCE (ARRANGER and KEYBOARD) Buttons

These buttons adjust the volume balance between the accompaniment (or song) and the part you're playing on the keyboard. (p. 13)

#### 6. TAP TEMPO Button

You can use this button to adjust the tempo. (p. 13)

#### 7. STYLE Section

Here you can select music styles for the displayed group.

#### 8. METRONOME Button

Switches the metronome on/off. If you hold down this button, a screen will appear in which you can make settings, such as the time signature and volume of the metronome. (p. 11)

#### 9. BAND ORCHESTRATOR Section

Press these buttons if you want to change the ensemble of the arranger (accompaniment) or if you want to use the minus-one function. (p. 13, p. 21)

#### 10. KEYBOARD MODE Section

- ARRANGER Button

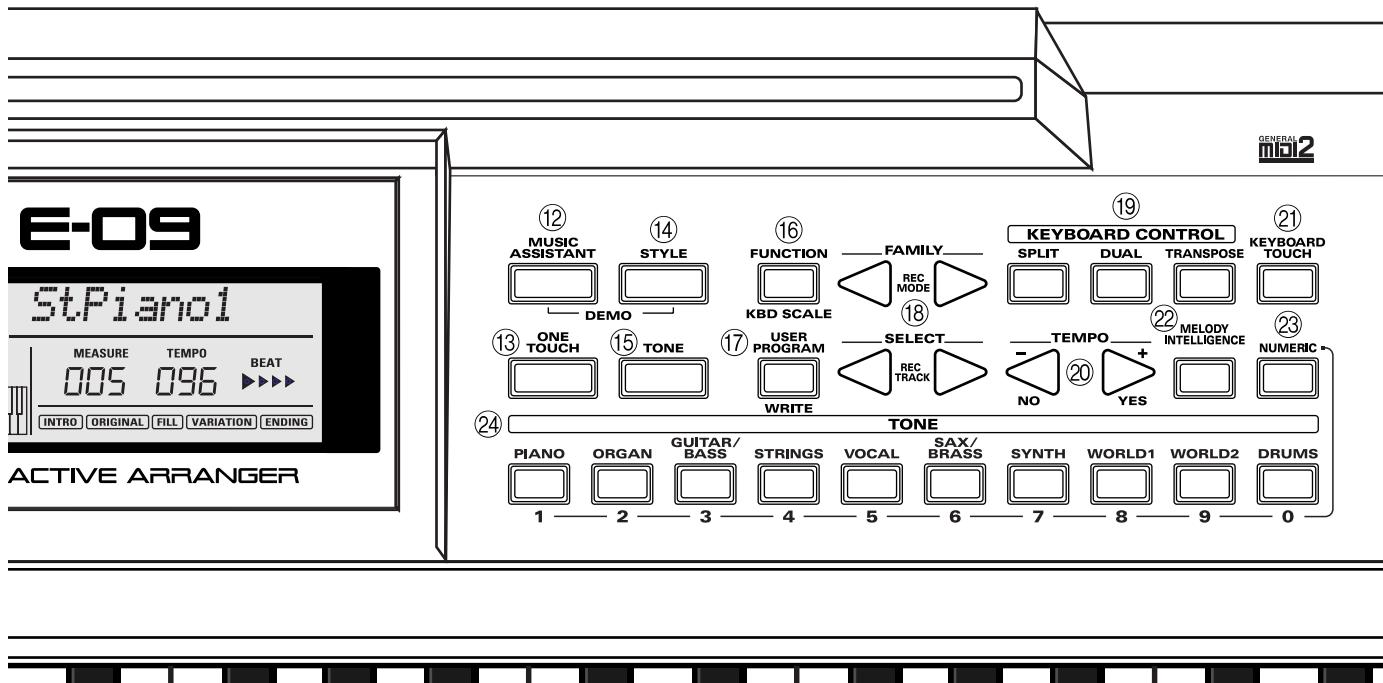
Press this button when you want to use the arranger function (automatic accompaniment).

- PIANO Button

If you press this button, you'll be able to play a piano sound using the entire keyboard.

#### 11. ARRANGER & SONG CONTROLS Section

Press these buttons to play back the arranger or songs. (p. 13, p. 19)



## 12. MUSIC ASSISTANT Button

Selects music assistants. (p. 15)

## 13. ONE TOUCH Button

Selects one-touch settings. This will recall settings that are appropriate for the selected music style. (p. 14)

## 14. STYLE Button

Selects music styles. (p. 14)

## 15. TONE Button

Selects tones. (p. 10)

## 16. FUNCTION Button

Accesses a screen where you can edit various parameters. (p. 22)

## 17. USER PROGRAM Button

Selects user programs. (p. 16)

## 18. FAMILY (REC MODE) [◀][▶]

## SELECT (REC TRACK) [◀][▶]

Use these buttons to select tones, music styles, music assistants, songs, or functions. Use the FAMILY [◀][▶] buttons to select the group. To move more rapidly through the selections, hold down a button or press the other button while you hold down the one you pressed first. Use the SELECT [◀][▶] buttons to select an item within the selected group. Here too, you can move more rapidly through the selections by holding down a button or by pressing the other button while you continue holding down the first button.

## 19. KEYBOARD CONTROL Section

- SPLIT** Button  
Divides the keyboard into left-hand and right-hand areas so that you can play different tones in each area. (p. 10)
- DUAL** Button  
Lets you play two tones simultaneously. (p. 10)
- TRANSPOSE** Button  
Transposes the keyboard. (p. 12)

## 20. TEMPO [◀] (-/NO) / [▶] (+/YES)

These buttons adjust the tempo of the arranger. They are also used to edit the value of various parameters.

## 21. KEYBOARD TOUCH Button

Turns keyboard touch on/off. If this is off, all notes you play on the keyboard will sound at the same loudness (which you may specify). (p. 15)

## 22. MELODY INTELLIGENCE Button

Turns melody intelligence on/off. If you hold down this button, the melody intelligence harmony type editing screen will appear. (p. 14)

## 23. NUMERIC Button

Press this when you want to use the TONE category buttons as numeric buttons. (p. 11)

## 24. TONE Category Buttons

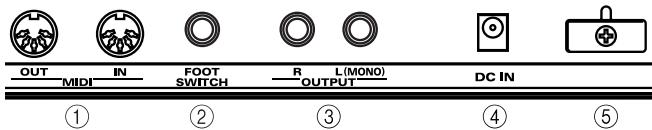
Use these buttons to select tones for the displayed category. (p. 11)

## Attaching the Music Rest

Insert the included music rest into the groove located at the upper middle of the top panel.

## Introduction

### Rear Panel



#### 1. MIDI OUT/IN Connectors

Connect your MIDI equipment here. (p. 26)

#### 2. FOOT SWITCH Jack

Connect a separately available foot switch (Roland DP series unit or BOSS FS-5U) to the rear panel FOOT SWITCH jack. You can use the foot switch to sustain the notes even after removing your fingers from the keyboard. Other functions can also be assigned to the foot switch. For details, refer to "FSW (Foot Switch Assign)" (p. 23).

#### 3. OUTPUT R/L (MONO) Jacks

Connect these jacks to your cassette deck, power amp, audio amp, keyboard amp, monitor speakers, etc.

#### 4. DC IN Connector

Connect the supplied AC adaptor to this connector.

#### 5. Cord Hook

Use this hook to fasten the cord of the AC adaptor.

## Making the Connections

### NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

### Connecting an External Device or Foot Switch

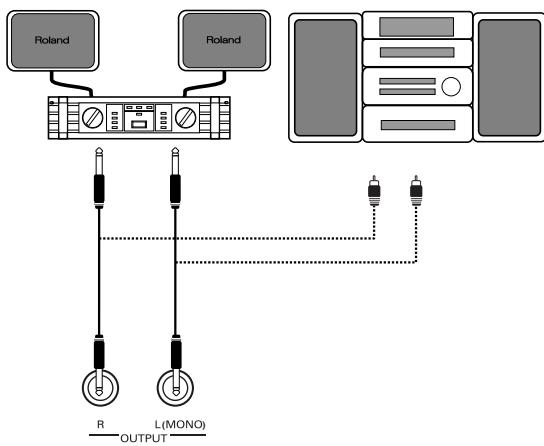
#### Connecting an External Device

If you want to record your performance (or a song recorded on the E-09) to a cassette tape or other media, connect the E-09's rear panel OUTPUT jacks to the input jacks of your external recording device.

### MEMO

If you connect separately available stereo headphones to the PHONES 1 or 2 jack, the internal speakers will be muted.

Cassette deck, power amp, audio amp, keyboard amp, monitor speakers, etc.



### Connecting a Foot Switch

### NOTE

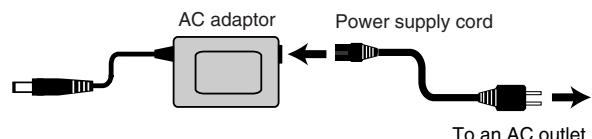
The E-09's power must be switched off when you connect a foot switch.

Connect the separately available foot switch (Roland DP series unit or BOSS FS-5U) to the rear panel FOOT SWITCH jack. You can use the foot switch to sustain the notes even after removing your fingers from the keyboard. Other functions can also be assigned to the foot switch. For details, refer to "FSW (Foot Switch Assign)" (p. 23).

## Connecting the AC Adaptor

#### 1. Place the E-09 in a level location.

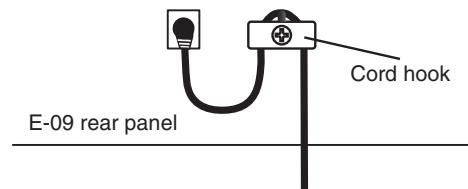
#### 2. Plug the supplied power cord into the supplied AC adaptor.



#### 3. Connect the AC adaptor to the rear panel DC IN connector, and then plug the power cord into an AC outlet.

### NOTE

To prevent the inadvertent disruption of power to your unit (should the plug be pulled out accidentally), and to avoid applying undue stress to the AC adaptor jack, anchor the power cord using the cord hook, as shown in the illustration.



## Turning the Power On/Off

### Turning the Power On

### NOTE

Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

#### 1. Before you turn on the power, set the VOLUME knob to the far left position to minimize the volume.

#### 2. Press the power button on the top panel to turn on the power.

### NOTE

This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.

### NOTE

If you've connected the E-09 to a keyboard amp or audio amp, switch on the E-09's power before you switch on your amp.

#### 3. Turn the VOLUME knob to adjust the volume of the E-09.

## Turning the Power Off

1. Press the top panel power button once again to turn off the power.

### NOTE

If you've connected the E-09 to a keyboard amp or audio amp, switch off the power to your amp before you switch off the E-09's power.

## Listening to the Demo Songs

### NOTE

All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.

### NOTE

No data for the music that is played will be output from MIDI OUT.

1. Simultaneously press [MUSIC ASSISTANT] and [STYLE] so both buttons are lit.
2. Turn the VOLUME knob to adjust the volume.
3. Press [START/STOP] so it's lit.  
The demo song starts playing.
4. Press [START/STOP] so it goes out.  
The demo song stops playing.
5. Press [MUSIC ASSISTANT] or [STYLE] to exit the demo mode.

## Adjusting the Display Contrast

1. Press [FUNCTION] so it's lit.
2. Use FAMILY [◀][▶] to access the "UTILITY" screen.
3. Use SELECT [◀][▶] to access the "LCD Contrast" screen.
4. Use TEMPO [◀(-)][▶(+)] to adjust the contrast of the characters in the screen.
5. Press [FUNCTION] so it goes out.

### TIP

Alternatively, you can adjust the display's contrast by holding down [NUMERIC] and using TEMPO [◀(-)][▶(+)].

## Returning the E-09 to Its Factory-Set State

1. Press [FUNCTION] so it's lit.
2. Use FAMILY [◀][▶] to access the "UTILITY" screen.
3. Use SELECT [◀][▶] to access the "Factory Reset" screen.  
"Yes" begins blinking in the screen.
4. Press TEMPO [▶(YES)].  
The screen prompts "Sure?"
5. Press TEMPO [▶(YES)] once again.

# Playing the Sounds from the Keyboard

Immediately after you've turned on the power, the E-09 is set up so that you can play a piano sound across the full extent of the keyboard. The E-09's keyboard provides the following three "parts."

<b>MAIN</b>	A single tone is assigned across the entire keyboard (Main part)
<b>SPLIT</b>	The keyboard area at the left of the split point is the "split part," and the area at the right is the "main part." Each part can play a different tone.
<b>DUAL</b>	The entire keyboard is assigned to simultaneously play two tones (the main part and the dual part).

The E-09 contains 614 different tones. You can play these tones from the three keyboard parts (main, split, and dual).

## (MEMO)

If you press the KEYBOARD MODE [PIANO] button so it's lit, the main part is assigned to the entire keyboard and a piano sound will be selected.

## NOTE

You can't use the arranger (automatic accompaniment) if the KEYBOARD MODE [PIANO] button is lit.

## Playing the Main Part

1. Press [TONE] so it's lit.
2. Use FAMILY [◀][▶] to select a tone group.
3. Use SELECT [◀][▶] to select a tone from the group you selected in step 2.
4. Play the keyboard.  
Turn the VOLUME knob to adjust the volume.
5. Hold down [TONE], and adjust the volume of the main part by pressing BALANCE [◀] (to decrease the volume) or [▶] (to increase the volume).

## Playing the Main Part and Split Part

1. If you want to play different tones in the left and right hands, press [SPLIT] so it's lit.  
A tone will automatically be selected for the split part according to the tone of the main part.

### Selecting a Tone for the Main Part

2. Press [TONE] so it's lit.
3. Use FAMILY [◀][▶] to select a tone group.
4. Use SELECT [◀][▶] to select a tone for the main part from the group you selected in step 3.

### Selecting a Tone for the Split Part

5. Hold down [SPLIT], and use FAMILY [◀][▶] to select a tone group.
6. Hold down [SPLIT], and use SELECT [◀][▶] to select a tone for the split part from the group you selected in step 5.

## NOTE

You can't select a drum set for the split part.

## TIP

You can add a monophonic bass part (Auto Bass) to the split part. For details, refer to p. 23.

### 7. Play the keyboard.

Turn the VOLUME knob to adjust the volume.

## MEMO

The tone of each part is automatically set to the appropriate octave.

## MEMO

The split point is set to C4 (note number 60).

## TIP

You can change the split point. For details, refer to "Split Point" (p. 22).

### 8. Adjust the volume balance between the main part and the split part.

To adjust the volume of the main part, hold down [TONE] and press BALANCE [◀] (to decrease the volume) or [▶] (to increase the volume).

To adjust the volume of the split part, hold down [SPLIT] and press BALANCE [◀] (to decrease the volume) or [▶] (to increase the volume).

## Playing the Main Part and Dual Part

### 1. If you want to play two different tones simultaneously, press [DUAL] so it's lit.

A tone appropriate for layering on the main part will automatically be selected for the dual part.

### Selecting a Tone for the Main Part

2. Press [TONE] so it's lit.
3. Use FAMILY [◀][▶] to select a tone group.
4. Use SELECT [◀][▶] to select a tone for the main part from the group you selected in step 3.

### Selecting a Tone for the Dual Part

5. Hold down [DUAL], and use FAMILY [◀][▶] to select a tone group.
6. Hold down [DUAL], and use SELECT [◀][▶] to select a tone for the dual part from the group you selected in step 5.

## NOTE

You can't select a drum set for the dual part.

### 7. Play the keyboard.

Turn the VOLUME knob to adjust the volume.

### 8. Adjust the volume balance between the main part and the dual part.

To adjust the volume of the main part, hold down [TONE] and

press BALANCE [◀] (to decrease the volume) or [▶] (to increase the volume).

To adjust the volume of the dual part, hold down [DUAL] and press BALANCE [◀] (to decrease the volume) or [▶] (to increase the volume).

## Selecting Tones

As an alternative to using the FAMILY or SELECT [◀][▶] buttons, you can also select tones using the numeric keys or TONE category buttons.

## Using the Numeric Keys

1. Press [TONE] so it's lit.
2. Press [NUMERIC] so it's lit.
3. Use TONE category buttons [1]–[0] to enter a tone number.

**Example:** To enter "12"

Press [1] -> [2] and wait a few moments until the number is confirmed. Alternatively, press [0] -> [1] -> [2].

To select the tone for the split part, hold down [SPLIT] while you enter the tone number.

To select the tone for the dual part, hold down [DUAL] while you enter the tone number.

### TIP

To defeat the numeric key function, press [NUMERIC] so it goes out.

## Using the TONE Category Buttons

You can use the TONE category buttons to select tones directly, without using [TONE], FAMILY [◀][▶], SELECT [◀][▶], or numeric keys. This method lets you select from nine melody sounds and one drum set.

You can assign a favorite tone to each button. This is convenient for live performance, since you can select a tone simply by pressing a single button.

## Assigning other tones to the TONE category buttons

After selecting a tone, press the TONE category button for the group that includes the selected tone. The screen will briefly indicate "Memorized."

You can assign the following groups of tones to each of the category buttons.

[PIANO]	PIANO, ELECTRIC PIANO
[ORGAN]	ORGAN, ACCORDION, KEYBOARD, CHROMATIC PERC
[GUITAR/BASS]	ACOUSTIC GUITAR, ELECTRIC GUITAR, BASS
[STRINGS]	STRINGS
[VOCAL]	VOCAL
[SAX/BRASS]	SAX, WIND, ACOUSTIC BRASS
[SYNTH]	SYNTH BRASS, SYNTH LEAD, POLY SYNTHESIZER, PAD
[WORLD1]	WORLD 1
[WORLD2]	WORLD 2, PERCUSSION, SFX
[DRUMS]	DRUMS

## Drum Sounds and Sound Effects (SFX)

### Drum Sets

The last sixty-one tones (615–675) are called "drum sets." If you select a drum set, a different sound is assigned to each note of the keyboard. For example, you can use the leftmost key to play a bass drum (kick) sound, and another key to play a snare drum sound. A drum set is a collection of ninety or more sounds, each assigned to a different key.

### NOTE

You can't assign a drum set to the split part or dual part.

## Sound Effects (SFX)

The E-09 contains numerous sound effects, drum, and percussion tones (551–614). You can assign these tones to a keyboard part and play them. These tones can be assigned to the main, split, or dual part and played across the entire range of the keyboard.

### TIP

If [SPLIT] is lit, you will probably want to set the split point near **C6** if you want to use your right hand to play sound effects or percussion, or near **C3** if you want to play these using your left hand. (p. 22)

## Sounding the Metronome

It's convenient to sound the metronome while you're practicing a new song.

1. Press [METRONOME] so it's lit.  
The metronome will sound.
2. Hold down [METRONOME] for a while until the "Metro TS" screen appears.  
In this screen you can set the time signature of the metronome.
3. Use TEMPO [◀ (-)][▶ (+)] to select a time signature.  
Range: 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 6/8, 9/8
4. Use SELECT [◀][▶] to access the "Metro Vol" screen.
5. Use TEMPO [◀ (-)][▶ (+)] to adjust the volume.  
Range: 0–127
6. When you press the [METRONOME] button so it goes out, the metronome will stop sounding.

## Playing the Sounds from the Keyboard

### Transposing

You can shift the pitch of your performance without changing the position at which you're playing the keyboard. For example, if a song is in a difficult key containing numerous sharps or flats, you can transpose it so that it's easier to play.

You can also use this function to transpose the playback of a song. If you're accompanying a singer, you can transpose the pitch to a comfortable range for the singer without having to change your keyboard fingering.

#### NOTE

Transpose is not applied to drum sets.

1. Press [TRANSPOSE] so it's lit.
2. Hold down [TRANSPOSE] for a while until the "Transpose" screen appears.
3. Use TEMPO [ $\blacktriangleleft$  (-)][ $\triangleright$  (+)] to adjust the transposition.

Range: -12–+12

#### MEMO

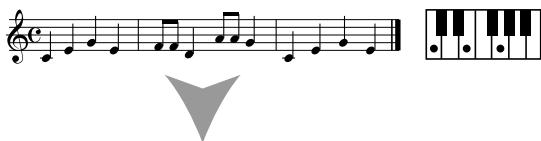
If you set this to "0," the transpose function will be off.

4. To turn the transpose function off, press [TRANSPOSE] so it goes out.

**Example: The song is in the key of E major, but you want to play it using the keyboard fingering of the key of C**

The note E is four semitones (keys including the black keys) above the note C, so you would set the transposition value to "+4."

When you play "C, E, G"



it sounds as "E G# B"



#### MEMO

You can save this setting in a user program. (p. 16)

#### cf.

You can also specify where the transpose setting is to be applied. Refer to "Trans Mode" (p. 22).

### Octave Setting

You can raise or lower the pitch of the tone for each keyboard part (main, split, dual) in steps of an octave, over a range of four octaves upward or downward.

#### Main Part

Hold down [TONE] and use TEMPO [ $\blacktriangleleft$  (-)][ $\triangleright$  (+)] to change the octave of the main part.

#### Split Part

Hold down [SPLIT] and use TEMPO [ $\blacktriangleleft$  (-)][ $\triangleright$  (+)] to change the octave of the split part.

#### Dual Part

Hold down [DUAL] and use TEMPO [ $\blacktriangleleft$  (-)][ $\triangleright$  (+)] to change the octave of the dual part.

### Changing the Keyboard Scale

As an alternative to the equal tempered scale used in most Western music, you can adjust the pitch of each note to the scales used by other musical cultures or tuning systems.

You can independently adjust the pitch of each note in the octave (C, C#, D, Eb, E, F, F#, G, Ab, A, Bb, B).

For example, if you adjust the pitch of the "C" note, this adjustment will apply to the "C" note of each octave.

1. Hold down [FUNCTION] and press the key whose note pitch you want to adjust.

The pitch will be lowered by 1/4 tone.

The keyboard in the center of the screen will indicate the notes whose pitch has been lowered.

#### TIP

To check the notes for which the pitch has been lowered, press and hold [FUNCTION]. While you continue holding down [FUNCTION], the keyboard in the center of the screen will indicate the state of the pitch.

#### TIP

To return a note to its original pitch, hold down [FUNCTION] and press the same key you pressed in step 1.

# Performing with an Accompaniment (Arranger)

## Using the Arranger

### 1. Press [ARRANGER] so it's lit.

The keyboard will be divided into left and right parts; "split" and "main." In the left-hand side, hold down notes to specify a chord. In the right-hand side, play along with the accompaniment.

#### MEMO

The C4 key (note number 60) is assigned as the split point.

### 2. Press [START/STOP] so it's blinking.

The arranger begins playing. The button begins blinking in time with the arranger's time signature.

#### TIP

If you play the left-hand area of the keyboard while [ARRANGER] is lit and the arranger playback is stopped, a stereo strings sound will play. You can also add a monophonic bass sound (-> "Auto Bass," p. 23). If you don't want the strings sound or bass sound to be heard, turn off "Educational" (p. 24).

#### TIP

If you press [START/STOP] while [ARRANGER] is not lighted, only the drums will play, allowing you to add a rhythm accompaniment to your keyboard performance. The drums will be based on the currently selected music style. If you want to select a different music style, refer to p. 14.

### 3. With your left hand, play a chord (or a single note).

### 4. When you play a different chord (or single note), the arranger will also switch to a different chord.

### 5. Use the following buttons to select other patterns within the currently selected music style.

[INTRO]	An accompaniment pattern used for the introduction.
[ORIGINAL]	A simple accompaniment pattern.
[FILL]	An accompaniment pattern used to transition between ORIGINAL and VARIATION.
[VARIATION]	A more complex accompaniment pattern, that's ideal for a break or similar section in the song.
[ENDING]	If you press this button instead of [START/STOP], an ending will play and then the arranger will stop playing.

#### MEMO

The chord name is shown in the arranger chord area of the screen.

While using your left hand to play the arranger chord, use your right hand to play the melody.

## Changing the Arranger Ensemble

By pressing one of the BAND ORCHESTRATOR buttons so it's lit, you can change the accompaniment patterns produced by the arranger while playback continues.

DRUMS & BASS	Simple accompaniment patterns containing only drums and a bass line.
COMBO	Accompaniment patterns containing several instruments (a band).
FULL	Accompaniment patterns with a lavish arrangement (multiple instruments).

## Changing the Volume Balance of the Arranger Playback and the Keyboard Performance

### To Increase the Volume of the Arranger (or Song Part)

Press BALANCE [◀] (ARRANGER).

### To Increase the Volume of Your Keyboard Performance

Press BALANCE [▶] (KEYBOARD).

## Changing the Tempo of the Arranger

Use TEMPO [◀][▶] to slow down (-) or speed up (+) the tempo of the arranger.

#### TIP

By pressing TEMPO [◀] and [▶] simultaneously, you can reset the arranger tempo to the default tempo setting specified by the currently playing music style.

#### TIP

You can also enter the tempo by pressing [TAP TEMPO] three times or more at the desired interval. By holding down [TAP TEMPO], you can reset the arranger tempo to the default tempo setting.

## Arranger Sync Start

### 1. Press [SYNC START] so it's lit.

#### TERM

**Sync Start** is a function that causes the arranger to start playing when you play a note to the left of the split point. This is convenient when you want the arranger to begin playing the moment you specify the chord with your left hand.

#### TIP

To cancel this function, press [SYNC START] so it goes out.

## Stopping the Arranger

### 1. Press [START/STOP] once again so it goes out.

The arranger will stop playing.

#### TIP

If you press [ENDING], an ending phrase will play and then the arranger will stop.

## Performing with an Accompaniment (Arranger)

### Selecting a Music Style

1. Press [ARRANGER] so it's lit.
2. Press [STYLE] so it's lit.
3. Use FAMILY [◀][▶] to select one of the following groups.  
ROCK (001–006), DANCE (007–023), 8BEAT (024–036), 16BEAT (037–047), JAZZ (048–053), LATIN (054–063), TRADITIONAL (064–079), BALLROOM (080–097), WORLD (98–130)
4. Use SELECT [◀][▶] to select a music style from the group you selected in step 3.

#### TIP

As an alternative to using FAMILY or SELECT [◀][▶], you can use the numeric keys to select a music style.

1. Press [NUMERIC] so it's lit.

2. Use TONE category buttons [1]–[0] to enter a style number.

**Example:** To enter "12"

Press [1] → [2] and wait a few moments until the number is confirmed. Alternatively, press [0] → [1] → [2].

\* To defeat the numeric keys, press [NUMERIC] so it goes out.

### Music Style Functions

To access the following functions, you'll need to press [ARRANGER] so it's lit.

#### One-Touch

This function automatically sets the following items to the best setting for the selected music style.

- The tones of the main part, split part, and dual part
- Reverb and chorus settings

#### MEMO

You can choose from two different one-touch settings for each music style.

1. Select the music style you want to use.

2. Press [ONE TOUCH].

The upper left of the screen will indicate "OT1."

OT 1 Piano 2

If [TONE] is lit, the screen will show the name of the tone. (In the above example, this is "Piano 2.")

3. If you want to use "OT2" press [ONE TOUCH] once again.

Selecting a different music style will cancel the one-touch function.

### Melody Intelligence

#### TERM

**Melody Intelligence** is a function that automatically adds harmony to the melody that you play in the right-hand side of the keyboard, as appropriate for the chord you hold down in the left-hand side of the keyboard.

1. Press [MELODY INTELLIGENCE] so it's lit.

#### TIP

To turn off this setting, press [MELODY INTELLIGENCE] so it goes out.

### Changing the Harmony Type for Melody Intelligence

You can choose one of eighteen different settings for the Melody Intelligence function.

1. Press and hold [MELODY INTELLIGENCE] for a few moments.

The melody intelligence setting screen will appear.

2. Press TEMPO [◀][▶] to select the type you want to use.

1 Duet	4 Strings	7 BigBand	10 Broadway	13 Latin	16 WltzOrg
2 Organ	5 Choir	8 Country	11 Gospel	14 CntrGuit	17 Octave1
3 Combo	6 Block	9 Traditional	12 Romance	15 CntrBald	18 Octave2

#### MEMO

You can save this setting in a user program. (p. 16)

# Performance Functions and Effects

## Performance Functions

### Keyboard Touch

The force or speed with which you play the keyboard will vary the volume or brightness of the main part, split part, and dual part. All of the acoustic instrument sounds (e.g., piano, violin, drum) will respond to your keyboard touch, allowing you to reproduce the musically expressive range of that instrument. The sound will be louder and more brilliant if you play strongly, and softer and more muted if you play softly.

#### 1. Press [KEYBOARD TOUCH] so it's lit.

Keyboard touch is now turned on.

#### TIP

If you press [KEYBOARD TOUCH] once again so it goes out, the keyboard touch will be fixed; i.e., the sound will no longer vary in response to your keyboard playing touch.

### Specifying a Fixed Keyboard Touch

Here's how to specify the uniform strength each note will have if [KEYBOARD TOUCH] is unlit.

#### 1. Press [KEYBOARD TOUCH] until the screen indicates "KBD Touch."

[FUNCTION] lights.

#### 2. Use TEMPO [ $\blacktriangleleft$ (-)][ $\triangleright$ (+)] to specify the "KBD Touch" setting. (Range: 1–127)

A setting of "1" will be extremely faint (normally inaudible), and a setting of "127" will be the maximum strength (very loud and bright).

#### 3. Press [FUNCTION] so it goes out.

#### MEMO

Some of the internal tones switch between different sounds depending on your keyboard playing strength. For such tones, only one of these sounds will be heard if you specify a fixed keyboard touch.

#### MEMO

The keyboard touch setting can be saved in a user program. (p. 16)

## Pitch Bend and Modulation

You can use the BENDER/MODULATION lever located at the left of the keyboard to apply two types of effect to the sound of the keyboard part.

#### TERM

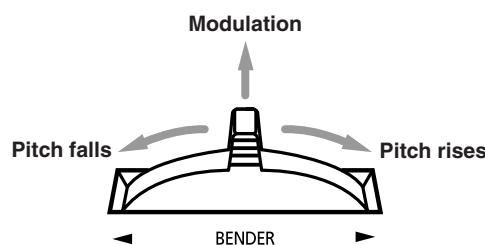
**Pitch Bend** lowers the pitch you're playing when you move the lever to the left, or raises it when you move the lever to the right.

#### TERM

**Modulation** applies vibrato to the sound when you push the lever away from yourself while playing.

#### MEMO

If the MFX type is **ROTARY**, this will switch the speed of rotation instead of applying the modulation effect.



If you push the lever away from yourself while moving it to left or right, both effects will be applied.

#### cf.

You can specify the range of pitch bend that will occur. For details, refer to "PB Range" (p. 22).

## Foot Switch

#### NOTE

You must connect the foot switch while the E-09's power is switched off.

Connect a separately available foot switch (Roland DP series unit or BOSS FS-5U) to the rear panel **FOOT SWITCH** jack. By pressing the foot switch, you can sustain the sound even after taking your fingers off the keyboard. You can also assign other functions to the foot switch. For details, refer to "FSW (Foot Switch Assign)" (p. 23).

## Music Assistant

Music assistant settings let you instantly recall settings that are appropriate for the song you're playing.

#### NOTE

You can't use Music Assistant while a song is playing.

Selecting music assistant settings will recall settings for the following items.

- Music style
- Tempo
- The tone of the main part, split part, and dual part
- Effects
- Band orchestrator
- Keyboard touch

## Selecting Music Assistant Settings

#### 1. Press [MUSIC ASSISTANT] so it's lit.

The screen will show the name of the music assistant setting.

#### 2. Use FAMILY [ $\blacktriangleleft$ ][ $\triangleright$ ] to select the group (musical style) that includes the music assistant settings you want to use.

You can choose from the following groups.

Ballad, Ballroom, Dancing, Easy List, Evergreen, JazzSwng, PopHit, General

#### 3. Use SELECT [ $\blacktriangleleft$ ][ $\triangleright$ ] to choose music assistant settings from the group you selected in step 2.

#### TIP

As an alternative to using the FAMILY or SELECT buttons, you can use the numeric keys to make your selection.

1. Press [NUMERIC] so it's lit.
2. Use TONE category buttons [1]–[0] to enter a music assistant number.

## Performance Functions and Effects

**Example:** To enter "12"

Press [1] -> [2] and wait a few moments until the number is confirmed. Alternatively, press [0] -> [1] -> [2].

### TIP

When you're finished using the numeric keys, press [NUMERIC] so it goes out.

### TIP

If you've edited the music assistant settings (for example by changing the tone of the main part), you can save the edited settings in a user program.

## User Program

The E-09 provides 100 user programs (00–99). You can use these to store settings for most of the front panel operations and function menus (p. 22).

### NOTE

MIDI settings (p. 26) are automatically stored in the E-09. They are not saved in a user program.

## Saving Your Settings in a User Program

### 1. Hold down [USER PROGRAM] for a few moments.

The display will indicate "Write?"

### 2. Continue holding down [USER PROGRAM], and press TONE category numeric buttons [1]–[0]. (00–99)

**Example:** To enter "6"

Press [6] and wait a few moments until the number is confirmed. Alternatively, press [0] -> [6].

### 3. Press TEMPO [▶ (YES)], and then take your finger off [USER PROGRAM].

### 4. Enter a name for the user program.

Use FAMILY [◀][▶] to move the cursor, and use SELECT [◀][▶] to change each character.

### 5. Press TEMPO [▶ (YES)].

The screen will show "Complete," and the settings will be saved.

### TIP

We recommend that you frequently store your settings to a user program even while you're in the process of editing.

### MEMO

If the KEYBOARD MODE [ARRANGER] or [PIANO] button is lit, the state of that button will also be saved in the user program.

### MEMO

The most recently selected music style is also saved in the user program.

## Selecting a User Program

### 1. Press [USER PROGRAM] so it's lit.

[NUMERIC] will automatically light.

The display will indicate the number of the most recently selected user program, or "1" if you have not selected a user program since turning on the power.

### NOTE

If you hold down [USER PROGRAM], you will be saving (rather than selecting) a user program.

### 2. Use TONE category numeric buttons [1]–[0] to enter a user program number. (00–99)

**Example:** To enter "6"

Press [6] and wait a few moments until the number is confirmed. Alternatively, press [0] -> [6].

### TIP

When you're finished using the numeric keys, press [NUMERIC] so it goes out.

## Effects

The E-09 provides reverb, chorus, and multi-effects (MFX). You can change the type of each effect.

You can also adjust the amount of reverb or chorus that is applied to the keyboard parts.

### NOTE

You can't use chorus together with MFX.

## Reverb

You can apply reverb (reverberation) to the sounds you're playing. Reverb simulates the ambience you experience when performing in a concert hall or other spacious location.

When you switch on the E-09's power, reverb will be applied to all keyboard parts (main, dual, split) as well as to the arranger and song parts.

If you don't need reverb, you can turn reverb off or set the reverb amount to "0" for the keyboard parts. You can't change the amount of reverb applied to the arranger or to the parts of an already-recorded song.

### MEMO

If MFX (p. 17) is set to anything other than "Off," you can apply that MFX and reverb simultaneously to the tone of the main part.

## Applying Reverb

### 1. Press [FUNCTION] so it's lit.

### 2. Use FAMILY [◀][▶] to select "EFFECTS."

### 3. Use SELECT [◀][▶] to select "REVERB."

### 4. Use TEMPO [◀(-)][▶(+)] to select the type of reverb.

Off	Reverb will not be applied.
Room 1–3	These simulate the reverberation of a room. Higher numbers simulate larger rooms.
Hall 1, 2	These simulate the reverberation of a concert hall. Higher numbers simulate a larger hall. These produce deeper reverberation than the Room settings.
Plate	This is a digital simulation of a metal plate reverb unit. It is particularly suitable for percussion sounds.
Delay	This is a delay effect (without reverb) which produces echo-like repeats.
PanDelay	This repeats the sound while making it alternate between left and right.

5. Play the keyboard to hear the effect.
6. Press [FUNCTION] so it goes out.

### Adjusting the Amount of Reverb Applied to the Keyboard Parts

1. Press [FUNCTION] so it's lit.
2. Use FAMILY [◀][▶] to select "EFFECTS."
3. Use SELECT [◀][▶] to select one of the following parameters.

Parameter	Value	Explanation
Rev MAIN	0–127	Adjusts the amount of reverb applied to the tone of the main part.
Rev DUAL	0–127	Adjusts the amount of reverb applied to the tone of the dual part.
Rev SPLIT	0–127	Adjusts the amount of reverb applied to the tone of the split part.

4. Use TEMPO [◀(-)][▶(+)] to adjust the amount of reverb applied to the part you selected in step 3.

If you don't want reverb to be applied, set this to "0."

5. Play the keyboard to hear the effect applied to each part.
6. Press [FUNCTION] so it goes out.

**MEMO**

You can save these settings in a user program. (p. 16)

## Chorus

You can apply a chorus effect to the sounds you play. The chorus effect adds a three-dimensional spaciousness and depth to the sound. You can choose from eight types of chorus effect.

When you switch on the E-09's power, the amount of chorus applied to the keyboard parts (main, dual, split) is set to "0," meaning that chorus will not be applied to the keyboard parts.

If you don't want to use chorus, you can turn it off or set the chorus amount to "0" for the keyboard parts. You can't change the amount of chorus applied to the arranger or to the parts of an already-recorded song.

**MEMO**

You can't use chorus if MFX is set to anything other than "Off."

### Applying Chorus

1. Press [FUNCTION] so it's lit.
2. Use FAMILY [◀][▶] to select "EFFECTS."
3. Use SELECT [◀][▶] to select "CHORUS."
4. Use TEMPO [◀(-)][▶(+)] to select the type of chorus.

Off	Chorus will not be applied.
Chorus 1–4	These are typical chorus effects that give the sound spaciousness and depth.
FB Chorus	This chorus produces a flanger-like effect, softening the sound.
Flanger	This produces a metallic-sounding effect reminiscent of a jet airplane taking off and landing.

S-Delay	This delays the sound to create an echo effect.
S-DelayFb	This repeats the sound at short intervals.

5. Play the keyboard to hear the effect.
6. Press [FUNCTION] so it goes out.

### Adjusting the Amount of Chorus Applied to the Keyboard Parts

1. Press [FUNCTION] so it's lit.
2. Use FAMILY [◀][▶] to select "EFFECTS."
3. Use SELECT [◀][▶] to select one of the following parameters.

Parameter	Value	Explanation
Chr MAIN	0–127	Adjusts the amount of chorus applied to the tone of the main part.
Chr DUAL	0–127	Adjusts the amount of chorus applied to the tone of the dual part.
Chr SPLIT	0–127	Adjusts the amount of chorus applied to the tone of the split part.

4. Use TEMPO [◀(-)][▶(+)] to adjust the amount of chorus applied to the part you selected in step 3.

If you don't want chorus to be applied, set this to "0."

5. Play the keyboard to hear the effect applied to each part.
6. Press [FUNCTION] so it goes out.

**MEMO**

You can save these settings in a user program. (p. 16)

## Multi-Effects (MFX)

There are 47 types of multi-effect (MFX) that you can apply to the main part. Some of these combine two effects.

**NOTE**

MFX are not applied to the following three types of tones.

- The split part
- The dual part
- Drum sets

1. Press [FUNCTION] so it's lit.
2. Use FAMILY [◀][▶] to select "EFFECTS."
3. Use SELECT [◀][▶] to select "MFX."
4. Use TEMPO [◀(-)][▶(+)] to select the type of MFX.

**MEMO**

You can save these settings in a user program. (p. 16)

Off	MFX will be off.
Enhancer	Controls the harmonic content of the high-frequency range to give the sound more definition and crispness.
Overdrive 1–4	Produces a natural-sounding distortion similar to that of a vacuum tube amp. 1: Small amp 2: Built-in type 3: Large double stack amp 4: Large triple stack amp

## Performance Functions and Effects

<b>Distortion 1–4</b>	Produces a more intense distortion than Overdrive. You can choose from four types.
<b>Phaser</b>	Combines the original sound with a phase-shifted sound, and modulates it to produce a twisting, swishing effect.
<b>AutoWah</b>	Cyclically moves a filter to create a repeating wah effect (cyclic change in tone).
<b>Rotary</b>	Simulates the sound of a classic rotary speaker. You can switch the rotational speed (slow / fast) by pushing the BENDER/MODULATION lever away from yourself, creating an authentic-sounding sense of modulation. This effect is ideal for organ sounds.
<b>StFlanger (stereo flanger)</b>	Produces a metallic resonance reminiscent of a jet airplane taking off and landing.
<b>StepFlanger</b>	Varies the sound of a flanger in pitched steps.
<b>Compressor</b>	Makes the volume more consistent by restraining loud sounds and boosting soft sounds.
<b>Limiter</b>	Prevents distortion by compressing sounds that are above a specified volume level.
<b>HexaChorus</b>	Applies a six-phase chorus to add spaciousness and depth to the sound. (Six chorus sounds with differing delays are layered together.)
<b>TremChorus (tremolo chorus)</b>	Applies a chorus effect with tremolo (cyclic change in volume).
<b>StChorus (stereo chorus)</b>	Applies a stereo chorus effect.
<b>Space-D</b>	Applies a multiple chorus with dual-phase stereo modulation. This creates a transparent chorus effect with no sense of modulation.
<b>StDelay (stereo delay)</b>	Creates an echo effect by repeating the input sound.
<b>Mod Delay (modulation delay)</b>	Modulates the delayed sound to create a flanger-like effect.
<b>3Tap Delay (triple tap delay)</b>	Produces delayed sound from three positions; center, left, and right.
<b>4Tap Delay (quadruple tap delay)</b>	Produces four delayed sounds.
<b>TmCtrDelay (time control delay)</b>	Lets you control the delay time in real time while you push the modulation lever.
<b>Reverb</b>	Adds reverberation to the original sound, simulating an expansive space.
<b>GateRevNr (gate reverb normal)</b>	Reverb that cuts the reverberation during its decay.
<b>GateRevRv (gate reverb reverse)</b>	Gated reverb that gradually increases in volume.
<b>GateRevS1 (gate reverb sweep 1)</b>	Moves the reverb sound from right to left.

<b>GateRevS2 (gate reverb sweep 2)</b>	Moves the reverb sound from left to right.
<b>2PitchShift (2 voice pitch shifter)</b>	Shifts the pitch of the original sound. Two pitch-shifted sounds can be layered with the original sound.
<b>FbPitchShift (feedback pitch shifter)</b>	Shifts the pitch of the original sound and returns the pitch-shifted sound to the input, producing an echo.
<b>OD&gt;Chorus</b>	Connects overdrive and chorus in series.
<b>OD&gt;Flanger</b>	Connects overdrive and flanger in series.
<b>OD&gt;Delay</b>	Connects overdrive and delay in series.
<b>DS&gt;Chorus</b>	Connects distortion and chorus in series.
<b>DS&gt;Flanger</b>	Connects distortion and flanger in series.
<b>DS&gt;Delay</b>	Connects distortion and delay in series.
<b>EH&gt;Chorus</b>	Connects enhancer and chorus in series.
<b>EH&gt;Flanger</b>	Connects enhancer and flanger in series.
<b>EH&gt;Delay</b>	Connects enhancer and delay in series.
<b>Cho&gt;Delay</b>	Connects chorus and delay in series.
<b>FL&gt;Delay</b>	Connects flanger and delay in series.
<b>Cho&gt;Flanger</b>	Connects chorus and flanger in series.
<b>Cho/Delay</b>	Connects chorus and delay in parallel.
<b>FL/Delay</b>	Connects flanger and delay in parallel.
<b>Cho/Flanger</b>	Connects chorus and flanger in parallel.

### MEMO

With the factory settings, the MFX type will automatically switch according to the tone you select. For details, refer to "Tone MFX" (p. 24).

5. Play the keyboard to hear the sound of the effect.

6. Press [FUNCTION] so it goes out.

### NOTE

If MFX is set to anything other than "Off," you can't apply chorus to the tone of the main part.

# Song Functions

## Recording Your Own Performance

You can use the 16-track recorder to record your own performances. The E-09 provides the following four recording modes.

Recording a new song	
Rec All	Simultaneously record your keyboard performance and the arranger accompaniment.
Rec Keyboard	Record only your keyboard performance.
Recording additional material into an existing song	
Rec Single	Record one track at a time. You can freely select the track to be recorded.
Rec PunchI/O (punch-in/out)	Re-record a specified region of a certain track.

### MEMO

The E-09 can handle only one song. This song will not be erased even if you turn off the power.

### NOTE

"Single" will be automatically selected after you perform the first recording. Be aware that if you select "ALL" or "Keyboard," the previously recorded song will be erased. If you want to add new material to the song you recorded, you should choose "Single" or "Punch I/O." If you haven't recorded a song yet, you won't be able to select "Single" or "Punch I/O."

### NOTE

You can't record a song if the E-09 is synchronized with an external MIDI device.

## All Recording Mode

Here's how you can record what you play on the keyboard while the arranger accompaniment plays.

### NOTE

The previously recorded song will be erased by the new recording.

1. Press [ARRANGER] so it's lit. (p. 13)
2. Press [STYLE] so it's lit, and select a music style (p. 14). Alternatively, press [MUSIC ASSISTANT] so it's lit, and select a music assistant (p. 15).
3. Press [INTRO], [ORIGINAL], or [VARIATION] to select the arranger section you want to use.
4. Press [START/STOP] so it's blinking. The arranger will start playing.
5. Use TEMPO [◀ (-)][▶ (+)] to adjust the tempo of the arranger.
6. Press [START/STOP] once again so it goes out. The arranger will stop playing.
7. Press [SONG] so it's lit.
8. Press [● REC] so it's blinking.
9. Use REC MODE [◀ ][▶ ] to select "Rec All" as the recording mode.

10. Select the tone that you want to use in the right-hand side of the keyboard.

Press [TONE] so it's lit, and use the FAMILY and SELECT [◀ ][▶ ] buttons, the numeric keys, or the TONE category buttons to make your selection. For details, refer to pp. 10–11.

11. Use either of the following methods to start recording.

- Press [▶/■].  
[● REC] lights, and [▶/■] begins blinking in time with the time signature of the arranger.
- Press [SYNC START] so it's lit, and play a chord with your left hand.  
[● REC] lights, and [▶/■] begins blinking in time with the time signature of the arranger.

12. Perform.

13. Use either of the following methods to stop recording.

- Press [▶/■] so it goes out.  
[● REC] also goes out.
- Press [ENDING].  
The ending phrase begins playing. When it ends, [ENDING], [▶/■], and [● REC] will all go out.

14. When you stop recording, the screen prompts "Save Song?," asking you whether you want to save your performance.

To save your performance, press TEMPO [▶ (YES)]. If you don't want to save your performance, press TEMPO [◀ (NO)].

## Keyboard Recording Mode

Here's how you can record only your keyboard performance. The arranger is not used.

### NOTE

The previously recorded song will be erased by your new recording.

1. Select the keyboard part and tone you want to use for your performance. (pp. 10–11)
2. Press [SONG] so it's lit.
3. Press [● REC] so it's blinking.
4. Use REC MODE [◀ ][▶ ] to select "Rec Keyboard" as the recording mode.
5. Select the tone that you want to use in the right-hand side of the keyboard.  
Press [TONE] so it's lit, and use the FAMILY and SELECT [◀ ][▶ ] buttons, the numeric keys, or the TONE category buttons to make your selection. For details, refer to pp. 10–11.
6. Use the metronome if desired. (p. 11)
7. Press [▶/■] to start recording.  
[● REC] lights, and [▶/■] begins blinking in time with the time signature of the metronome.
8. Perform.

### MEMO

If you select a drum set for the main part and use the keyboard to play the drum sounds, your performance will be recorded on track 16.

## Song Functions

9. Press [▶/■] to stop recording.  
[▶/■] and [● REC] go out.
10. When you stop recording, the screen prompts “Save Song?,” asking you whether you want to save your performance.  
To save your performance, press TEMPO [▶ (YES)].  
If you don’t want to save your performance, press TEMPO [◀ (NO)].

### Single Recording Mode

In this mode you can layer a new performance onto the previously recorded notes, and record each track separately.

#### NOTE

You can't use this mode if no song has been recorded.

1. Press [SONG] so it's lit.
2. Press [● REC] so it's blinking.
3. Use REC MODE [◀][▶] to select “Rec Single” as the recording mode.
4. Use REC TRACK [◀][▶] to select the track you want to record.  
If you select a track that has already been recorded, the new recording will overwrite the existing recording.
5. Select the tone that you want to use in the right-hand side of the keyboard.  
Press [TONE] so it's lit, and use the FAMILY and SELECT [◀][▶] buttons, the numeric keys, or the TONE category buttons to make your selection. For details, refer to pp. 10–11.
6. Press [▶/■] to start recording.  
[● REC] lights. After a one-measure count-in, all previously recorded parts begin playing.
7. Perform.
8. Press [▶/■] to stop recording.  
[▶/■] and [● REC] go out.

If you want to record additional parts, return to step 2.

9. When you stop recording, the screen prompts “Save Song?,” asking you whether you want to save your performance.  
To save your performance, press TEMPO [▶ (YES)].  
If you don’t want to save your performance, press TEMPO [◀ (NO)].

The performances of the keyboard and the arranger parts are recorded on the following tracks.

Track	Part name	Description
1	Accomp 1	—
2	Arranger bass	The bass part that sounds when the arranger plays.
3	Accomp 2	—
4	Main	This is the Main part. MFX (p. 17) can be applied only to track 4.
5	Accomp 3	—

Track	Part name	Description
6	Dual	This is the Dual part.
7	Accomp 4	—
8	Accomp 5	—
9	Accomp 6	—
10	Arranger drums	Since track 10 is restricted to the drum part, you can select a drum set for this track.
11	Split	This is the Split part.
12	Auto Bass	For details, refer to “Auto Bass” (p. 23).
13	—	—
14	—	—
15	Melody Intel.	Melody intelligence (p. 14)
16	(Main)	If you select a drum set for the tone of the Main part, it will be recorded on track 16.

### Punch-In/Out Recording Mode

This lets you “punch-in/out” to re-record a specified portion of a single track. The data before and after the newly recorded portion will not be erased.

#### NOTE

You can't use this if no song has been recorded.

Original track



Only this portion is overwritten by the new recording



1. Press [SONG] so it's lit.
2. Press [● REC] so it's blinking.
3. Use REC MODE [◀][▶] to select “Rec Punch/I/O” as the recording mode.
4. Use REC TRACK [◀][▶] to select the track you want to record.
5. Press [▶/■] to start song playback.
6. When you come to the point at which you want to begin re-recording, press [● REC] once again.  
[● REC] lights, and recording begins.
7. Perform.
8. Press [● REC] so it goes out.  
Recording will stop.
9. Press [▶/■] to stop song playback.  
If you want to re-record again, return to step 2.
10. When you stop recording, the screen prompts “Save Song?,” asking you whether you want to save your performance.  
To save your performance, press TEMPO [▶ (YES)].  
If you don’t want to save your performance, press TEMPO [◀ (NO)].

## Using a Foot Switch to Punch In/Out

You can use a separately available foot switch (Roland DP series unit or BOSS FS-5U) to start or stop recording. This lets you use both hands for your performance; for example, allowing you to use your left hand to operate the pitch bend/modulation lever while you use your right hand to play the melody.

1. Connect the foot switch to the rear panel FOOT SWITCH jack.
2. Press [FUNCTION] so it's lit.
3. Use FAMILY [ $\blacktriangleleft$ ][ $\triangleright$ ] to select "KBD SET." (p. 22)
4. Use SELECT [ $\blacktriangleleft$ ][ $\triangleright$ ] to select the "FSW" parameter. (p. 23)
5. Use TEMPO [ $\blacktriangleleft$ (-)][ $\triangleright$ (+)] to select "PunchI/O."
6. Continue with step 1 and those that follow under "Punch-In/Out Recording Mode."

In steps 6 and 8 of "Punch-In/Out Recording Mode," press the foot switch instead of [ $\bullet$  REC].

## Playing the Song

1. Press [SONG] so it's lit.
2. Press [ $\blacktriangleleft$ ] to return to the beginning of the song.
3. Press [ $\triangleright/\blacksquare$ ] to start song playback.
4. Press [ $\triangleright/\blacksquare$ ] once again to stop song playback.

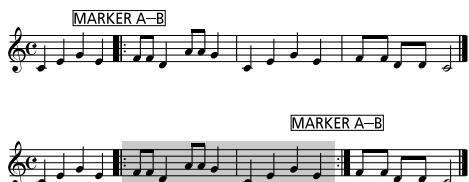
## Changing the Playback Location of the Song

You can use the following buttons to change the playback location within the song.

- [ $\blacktriangleleft$ ]  
Moves to the beginning of the song.
- [ $\blacktriangleleft\blacktriangleleft$ ]  
Moves to the preceding measure.
- [ $\triangleright\triangleright$ ]  
Moves to the next measure.

## Repeat Playback of a Specified Region

You can specify a region (A-B) and play it repeatedly. You can do this while the song is playing or while it is stopped.



1. Use [ $\blacktriangleleft\blacktriangleleft$ ][ $\triangleright\triangleright$ ] to move to the measure at which you want to start repeating.
2. Press [MARKER A-B] to set marker "A" to the current location.

3. Use [ $\blacktriangleleft\blacktriangleleft$ ][ $\triangleright\triangleright$ ] to move to the measure at which you want to stop repeating.
4. Press [MARKER A-B] to set marker "B" to the current location.
5. Press [REPEAT A-B] so it's lit.
6. If the song was stopped, press [ $\triangleright/\blacksquare$ ] at this point to begin repeat playback.

### TIP

To cancel repeat playback, press [REPEAT A-B] so it goes out.

### NOTE

Don't set the marker at the last measure of the song; repeat playback will not work correctly if you do this.

## Minus-One Playback

Here's how you can mute (silence) a specific track of the song.

## Muting a Track

1. Press [DRUMS & BASS] (factory setting: track 10), [COMBO] (factory setting: track 1), or [FULL] (factory setting: track 2) to specify the track you want to mute.
2. Press [ $\triangleright/\blacksquare$ ]. The song begins playing, with the track you specified in step 1 muted.

## Changing the Muted Tracks

You can change the track that is muted by each of the buttons [DRUMS & BASS], [COMBO], and [FULL].

1. Hold down one of the buttons [DRUMS & BASS], [COMBO], or [FULL].  
The mute track setting screen will appear.
2. Use TEMPO [ $\blacktriangleleft$ (-)][ $\triangleright$ (+)] to change the track that is muted by that button.

# Function Menu

The Function menu lets you make a variety of different settings.

## MEMO

Parameters marked by “\*\*” can be saved in a user program. (p. 16)

## Setting a Function Menu Parameter

Here's the basic procedure for setting a parameter of the Function menu.

**1. Press [FUNCTION] so it's lit.**

**2. Use FAMILY [◀][▶] to select the function group that includes the parameter you want to set.**

- **KBD SET:** KBD Touch, MasterTune, Transpose, Trans Mode, PB Range, Split Point, Split Hold, Split Int, FSW
- **METRONOME:** Metro TS, Metro Vol
- **OCTAVE:** Main Oct, Dual Oct, Split Oct
- **VOLUME:** Main Vol, Dual Vol, Split Vol, Auto Bass, Acc Drum, Acc Bass, Accomp
- **ARR SET:** ChordInt, Arr Hold, Educational, Bass Inv, MI
- **EFFECTS:** REVERB, CHORUS, MFX, Tone MFX, Rev MAIN, Chr MAIN, Pan MAIN, Rev DUAL, Chr DUAL, Pan DUAL, Rev SPLIT, Chr SPLIT, Pan SPLIT
- **KBD SCALE:** Scale C/C#/D/Eb/E/F/F#/G/Ab/A/Bb/B, Scale Mode
- **MIDI:** Local, MIDI TxRx, Sync Rx, Style PC, NTA Rx14, Pitch Bend, Modulation, Prog Change, Velo Rx, Clock Tx, Start Stop
- **UTILITY:** LCD Contrast, Factory Reset, Bulk Dump

**3. Use SELECT [◀][▶] to select the parameter you want to adjust.**

**4. Use TEMPO [◀(-)][▶(+)] to adjust the selected parameter.**

## TIP

To reset the parameter to its default value, press TEMPO [◀(-)] and [▶(+)] simultaneously.

**5. If you want to adjust another parameter, return to step 2.**

## KBD SET Parameters

Parameter	Value	Explanation
KBD Touch *	1–127 (default: 110)	Adjusts the strength of the notes when Keyboard Touch is turned “off” ([KEYBOARD TOUCH] unlit). For details, refer to p. 15. This screen will also appear if you hold down [KEYBOARD TOUCH] for a few moments.
MasterTune	427.4–452.6 (default: 440.0)	Adjusts the reference pitch. The reference pitch is usually expressed as the pitch of the middle “A” note. When playing together with other instruments, you must ensure that all instruments are set to the same reference pitch so that they will be in tune. The setting that adjusts the reference pitch is called “Master Tune.”
Transpose *	-12–12 (default: 0)	Specifies the transposition that will occur when Transpose is turned on ([TRANSPOSE] lit), in units of semitones. For details, refer to p. 12. This screen will also appear if you hold down [TRANSPOSE] for a few moments.
Trans Mode *	INT, MIDI, I+M (default: INT)	Specifies the part(s) that will be affected by the Transpose setting. <b>INT:</b> The keyboard parts and arranger parts will be transposed. Notes received from the MIDI IN connector will play at their original pitch. <b>MIDI:</b> Only the notes received from the MIDI IN connector will be transposed. <b>I+M:</b> The keyboard parts, the arranger parts, and all notes received from the MIDI IN connector will be transposed.
PB Range	0–24 (default: 2)	Specifies the amount of change that will occur when you move the BENDER/MODULATION lever all the way to left or right. You can set this in semitone steps over a range of 24 semitones (2 octaves). Pitch bend can be used only with the Main part and Dual part. (p. 15)
Split Point *	48–84 (default: 60)	Specifies the split point (the key forming the boundary between tones) for the Arranger and the Split part. This specifies the lowest key that will play the Main part. “60” corresponds to “C4.” This screen will also appear if you hold down [ARRANGER] for a few moments.
Split Hold *	OFF, ON (default: OFF)	Makes the Split part continue sounding. A note you play on the Split part will continue sounding until you play the next note on that part.
Split Int *	OFF, ON (default: OFF)	Lets you produce a chord by holding down one key in the Split part. For example, to produce a “C” chord, you would normally need to hold down the three keys “C,” “E,” and “G.” However, the Split Int function lets you produce the “C” chord simply by holding down the “C” key alone.

Parameter	Value	Explanation
FSW	Sustain, Sostenuto, Soft, Rotary S/F, Start/Stop, BassInv, PunchI/O (default: Sustain)	<p>Assigns the function performed by a separately available foot switch connected to the rear panel FOOT SWITCH jack.</p> <p><b>Sustain:</b> The foot switch will function as a sustain pedal (also called "hold" or "damper"). While you hold down the pedal, notes will be sustained even after you take your fingers off the keyboard.</p> <p><b>Sostenuto:</b> The foot switch will function as a Sostenuto pedal, sustaining only the notes that had already been pressed at the moment you pressed the pedal. (Subsequently played notes will not be sustained.) This function is available only for the keyboard parts.</p> <p><b>Soft:</b> The foot switch will function as a Soft pedal. Notes played while holding down the pedal will sound softer. This function is available only for the keyboard parts.</p> <p><b>Rotary S/F:</b> The foot switch will switch the speed of the rotary effect. This is valid only if the "Rotary" type is set to MFX. (p. 18)</p> <p><b>Start/Stop:</b> The foot switch will start/stop playback for the arranger or song. This is the same function as [START/STOP].</p> <p><b>BassInv:</b> The foot switch will turn the Bass Inversion function on/off. (p. 24)</p> <p><b>PunchI/O:</b> The foot switch will control punch-in and punch-out when you are using punch-in/out recording. (p. 21)</p>

## METRONOME Parameters

Parameter	Value	Explanation
Metro TS	1/4–6/4, 6/8, 9/8 (default: 4/4)	<p>Specifies the time signature of the metronome (the number of beats per measure). This setting will change automatically when you select a music style that has a different time signature. For details on using the metronome, refer to p. 11.</p> <p>This screen will also appear if you hold down [METRONOME] for a few moments.</p>
Metro Vol	0–127 (default: 100)	Specifies the volume of the metronome.

## Octave Parameters

Parameter	Value	Explanation
Main Oct *	-4–0–4 (default: 0)	<p>Raises or lowers the octave setting of the Main part in steps of one octave.</p> <p>* If a drum set is assigned to the Main part, this parameter does not transpose the pitch of the drum/percussion sounds, but instead changes the drum/percussion sounds that are assigned to the keys.</p>
Dual Oct *	-4–0–4 (default: 0)	Raises or lowers the octave setting of the Dual part in steps of one octave.
Split Oct *	-4–0–4 (default: 0)	Raises or lowers the octave setting of the Split part in steps of one octave.

## Volume Parameters

Parameter	Value	Explanation
Main Vol *	0–127 (default: 127)	<p>Adjusts the volume of the Main part.</p> <p>You can also adjust this by holding down [TONE] and using BALANCE [◀][▶]. (p. 10)</p>
Dual Vol *	0–127 (default: 110)	<p>Adjusts the volume of the Dual part.</p> <p>You can also adjust this by holding down [DUAL] and using BALANCE [◀][▶]. (p. 10)</p>
Split Vol *	0–127 (default: 75)	<p>Adjusts the volume of the Split part.</p> <p>You can also adjust this by holding down [SPLIT] and using BALANCE [◀][▶]. (p. 10)</p>
Auto Bass	OFF, 0–127 (default: OFF)	<p>When the Split part is on, this adjusts the volume of the Auto Bass part (which plays a monophonic bass according to the chord you play). Turn this OFF if you don't need the Auto Bass part.</p> <p>If the Bass Inversion function (p. 24) is off, the root of the chord you play with your left hand (using the Split part) is sounded by the Auto Bass part.</p> <p>The Auto Bass part follows the Educational setting (p. 24).</p>
Acc Drum *	0–127 (default: 100)	Adjusts the volume of the arranger's drum part.
Acc Bass *	0–127 (default: 100)	Adjusts the volume of the arranger's bass part.
Accomp *	0–127 (default: 100)	Adjusts the volume of the arranger's Accomp parts 1–6.

### MEMO

BALANCE [◀] (ARRANGER) adjusts the volume of all arranger parts.

## Function Menu

### ARR SET Parameters

Parameter	Value	Explanation
ChordInt	OFF, MODE1, MODE2 (default: MODE1)	Allows the accompaniment chords to be detected using simplified fingering that does not require you to play all the notes in the chord. <b>OFF:</b> The chord will consist of only the notes you play in the Split part keyboard region. <b>MODE1:</b> You can specify chords using the method described in "Specifying Chords" (p. 44). <b>MODE2:</b> You can specify chords using the following four methods. <b>Major chord:</b> Play the root of the chord <b>Minor chord:</b> Play the root and the nearest black key to the left <b>Seventh chord:</b> Play the root and the nearest white key to the left <b>Minor seventh chord:</b> Play the root and the nearest black key and white key to the left
Arr Hold *	OFF, ON (default: ON)	Selects how the arranger parts will sound. <b>OFF:</b> When you take your hand off the left side of the keyboard, the arranger part instrumental sounds other than drums (i.e., A.Bass and Accomp) will stop, and only the rhythm part will continue sounding. <b>ON:</b> The chord you were playing in the left hand will be remembered. The arranger will continue playing using that chord until you play another chord. * This parameter will be turned on each time you switch on the E-09's power.
Educational	OFF, ON (default: ON)	This is a function provided for educational purposes. <b>OFF:</b> If [ARRANGER] is lit and the arranger playback is stopped, the left-hand side of the keyboard will be muted unless [SPLIT] is lit. <b>ON:</b> If [ARRANGER] is lit and the arranger playback is stopped, a stereo strings and a monophonic bass (if Auto Bass is on) will play. This lets you play chords (and bass line) with your left hand without using the E-09's accompaniment function.
Bass Inv *	OFF, ON (default: OFF)	Selects how chords will be detected by the arranger. Example: when you play "E G C" <b>OFF:</b> The bass will be sounded on the "C" note just as if you had played "C E G." The accompaniment will use the "C" chord. <b>ON:</b> The bass will be sounded on the lowest note you played ("E"). The accompaniment will use the "C (on E)" chord.
MI *	-> p. 14 (default: Traditional)	Selects the harmony type for the melody intelligence function. This screen will also appear if you hold down [MELODY INTELLIGENCE] for a few moments. (p. 14)

### EFFECTS Parameters

Parameter	Value	Explanation
REVERB *	8 types -> p. 16 (default: Hall 2)	Selects the type of reverb. (p. 16)
CHORUS *	8 types -> p. 17 (default: Chorus 3)	Selects the type of chorus. (p. 17)
MFX *	47 types -> p. 17 (default: Rotary)	Selects the type of multi-effects. (p. 17)
Tone MFX	OFF, ON (default: ON)	This lets you specify whether the MFX type will be automatically selected according to the Main part tone you select. For example, a distortion/overdrive effect will be selected for rock guitar tones, and a rotary effect will be selected for organ tones. <b>OFF:</b> The MFX will not change when you switch the tone of the Main part. <b>ON:</b> The MFX will change when you switch the tone of the Main part.
Rev MAIN *	0–127 (default: 100)	Adjusts the amount of reverb applied to the tone of the Main part. With a setting of "0" there will be no reverb.
Chr MAIN *	0–127 (default: 100)	Adjusts the amount of chorus applied to the tone of the Main part. With a setting of "0" there will be no chorus. * You can't apply chorus if MFX is set to anything other than "Off."
Pan MAIN *	RND, L63–0–R63 (default: 0)	Adjusts the stereo location (the position between the left and right speakers) of the Main part. If you select "RND," the stereo location will change randomly for each note you play. Values beginning with "L" position the sound toward the left speaker, a value of "0" is the center, and values beginning with "R" position the sound toward the right speaker.
Rev DUAL *	0–127 (default: 100)	Adjusts the amount of reverb applied to the tone of the Dual part. With a setting of "0" there will be no reverb.
Chr DUAL *	0–127 (default: 100)	Adjusts the amount of chorus applied to the tone of the Dual part. With a setting of "0" there will be no chorus.

Parameter	Value	Explanation
Pan DUAL *	RND, L63–0–R63 (default: 0)	Adjusts the stereo location (the position between the left and right speakers) of the Dual part. If you select “RND,” the stereo location will change randomly for each note you play. Values beginning with “L” position the sound toward the left speaker, a value of “0” is the center, and values beginning with “R” position the sound toward the right speaker.
Rev SPLIT *	0–127 (default: 100)	Adjusts the amount of reverb applied to the tone of the Split part. With a setting of “0” there will be no reverb.
Chr SPLIT *	0–127 (default: 100)	Adjusts the amount of chorus applied to the tone of the Split part. With a setting of “0” there will be no chorus.
Pan SPLIT *	RND, L63–0–R63 (default: 0)	Adjusts the stereo location (the position between the left and right speakers) of the Split part. If you select “RND,” the stereo location will change randomly for each note you play. Values beginning with “L” position the sound toward the left speaker, a value of “0” is the center, and values beginning with “R” position the sound toward the right speaker.

## KBD SCALE Parameters

Parameter	Value	Explanation
Scale C–B *	-64–63 (default: 0)	As an alternative to the equal tempered scale used in most Western music, you can adjust the pitch of each note to the scales used by other musical cultures or tuning systems (such as oriental or baroque music). You can independently adjust the pitch of each note in the octave (C, C#, D, Eb, E, F, F#, G, Ab, A, Bb, B). For example, if you adjust the pitch of the “C” note, this adjustment will apply to the “C” note of each octave. In most cases, a quarter tone upward or downward will be appropriate, so you should try settings of “50” or “-50.”
Scale Mode *	Main, All (default: Main)	Specifies the part(s) to which the above scale setting will apply. <b>Main:</b> Only the tone of the Main part <b>All:</b> The tones of all parts

## MIDI Parameters



Refer to p. 27.

## UTILITY Parameters



For details on “LCD Contrast” and “Factory Reset,” refer to p. 9.



For details on “Bulk Dump,” refer to p. 28.

# MIDI Functions

You can connect the E-09 to an external MIDI device and control each device from the other by transmitting and receiving performance data. For example, you can use one device to select or play sounds on the other device.

The E-09 has MIDI connectors which allow it to transmit and receive performance data. By using these connectors to connect external devices to the E-09, you can enjoy an even wider range of possibilities.

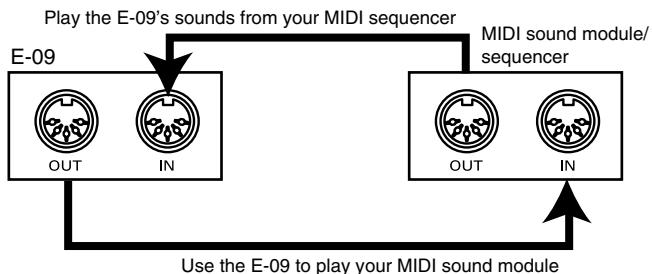
## TERM

**MIDI** stands for "Musical Instrument Digital Interface," and is a universal standard that allows electronic musical instruments and computers to exchange performance data.

## Connection Example

### NOTE

To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.



## MIDI Channels

MIDI provides sixteen channels, numbered 1–16. Even if MIDI devices are connected, you won't be able to switch or play sounds unless the two devices are set to the same MIDI channel.

MIDI channel	Part	Explanation
1	Accomp 1	–
2	Arranger bass	This is the Bass part played by the arranger
3	Accomp 2	–
4	Main	This is the Main part. MFX (p. 17) can be applied only to track 4.
5	Accomp 3	–
6	Dual	This is the Dual part.
7	Accomp 4	–
8	Accomp 5	–
9	Accomp 6	–
10	Arranger drums	Since track 10 is restricted to the Drum part, you can select a drum set here.
11	Split	This is the Split part.
12	Auto Bass	For details, refer to "Auto Bass" (p. 23).
13	–	–
14	–	–
15	Melody Intell.	Melody Intelligence. (p. 14)
16	(Main)	If you select a drum set for the Main part, it will be recorded on track 16.

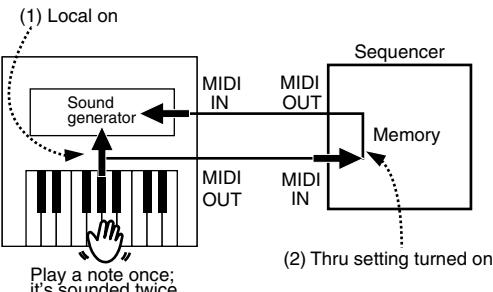
## MIDI Parameters

**cf.**

For details on how to set these parameters, refer to "Setting a Function Menu Parameter" (p. 22).

**MEMO**

MIDI parameters other than "Local" are saved as soon as you press [FUNCTION] and turn off its LED.

Parameter	Value	Explanation
Local	OFF, ON (default: ON)	If the data generated when you play the keyboard is sent to the sound generator via two routes (1) and (2) as shown in the diagram, the notes will overlap or be cut off. To prevent this, you should turn "Local Off" to break route (1). Choose the "OFF" setting if you've connected the E-09 to a sequencer.   * The setting of this parameter is cleared when you switch off the E-09's power.
MIDI TxRx	ALL, KBD, STL, SNG, OFF (default: ALL)	Selects the part(s) that will transmit and receive MIDI. <b>ALL:</b> All parts <b>KBD:</b> Only the keyboard parts (Main, Dual, Split, Auto Bass) <b>STL:</b> Only the arranger parts (Backing 1–6, Backing bass, Backing drums) <b>SNG:</b> Only the song parts (1–16) <b>OFF:</b> None of the E-09's parts will transmit or receive MIDI messages.
Sync Rx	OFF, ON (default: OFF)	Specifies whether or not the E-09 will synchronize to an external MIDI device. You can use synchronization when the MIDI OUT connector of an external device is connected to the E-09's MIDI IN connector. (If you've connected the IN and OUT connectors in the opposite direction, refer to the owner's manual of the external device you've connected.) <b>OFF:</b> The E-09 will not synchronize with the other MIDI device. <b>ON:</b> The E-09 will receive MIDI Start (or Continue) messages, and will begin song recording or playback in synchronization with the subsequently received MIDI Clock messages. When the E-09 receives a Start message, it will wait briefly for MIDI Clock messages. If the E-09 receives MIDI Clock messages, it will synchronize to them. If the E-09 does not receive MIDI Clock messages, it will use its own tempo. In either case, a MIDI Stop message will stop playback or recording. * The arranger does not receive MIDI Continue messages.
Style PC	OFF, 1–16 (default: 10)	Program change messages will be transmitted/received when you select a different music style within the E-09.
NTA Rx14	OFF, ON (default: 10)	NTA stands for "Note-to-Arranger." Notes you play in the left side of the keyboard are sent to the arranger together with the chord data. These notes can also be received via MIDI from an external MIDI keyboard controller or other device. If you want to use the arranger without playing the E-09's keyboard, turn this setting "ON" and transmit these note messages (from your computer or external MIDI device) on MIDI channel 14 to the E-09.
Pitch Bend	OFF, ON (default: ON)	Turns transmission/reception of Pitch Bend messages on/off. These messages temporarily raise or lower the pitch of the tone.
Modulation	OFF, ON (default: ON)	Turns transmission/reception of Modulation messages on/off. These messages add vibrato to the sound. (Control Change CC01)
Prog Change	OFF, ON (default: ON)	Turns transmission/reception of Program Change messages on/off. These messages are used to select tones or music styles.
Velo Rx	ON, 1–127 (default: ON)	Turns transmission/reception of velocity data on/off. This applies only to note messages received via MIDI. If this is "ON," the E-09 will use the velocity values that it receives. Otherwise, the E-09 will use the fixed velocity value (1–127) you specify here.
Clock Tx	OFF, ON (default: ON)	Specifies whether or not MIDI Clock messages are to be transmitted during arranger playback or song recording. Use this when you want to synchronize an external MIDI device with the E-09.
Start Stop	OFF, ON (default: ON)	Specifies whether or not Start/Stop/Continue messages are to be transmitted when arranger playback or song recording starts or stops. Turn this "Off" if you want to control a MIDI organ or other sound module without playing/stopping the arranger.

### Bulk Dump

You can use this procedure to transmit user programs and song data from the E-09 via MIDI to a sequencer or other external MIDI device, and save the data on that device. Prepare your external sequencer to record a conventional performance, and perform the following procedure on the E-09.

1. Use a separately available MIDI cable to connect the E-09's MIDI OUT connector to the MIDI IN connector of your external sequencer.
2. Press [FUNCTION] so it's lit.
3. Use FAMILY [◀][▶] to access the "UTILITY" screen.
4. Use SELECT [◀][▶] to access the "Bulk Dump?" screen.  
"Yes" begins blinking in the screen.
5. Press TEMPO [▶ (YES)].  
The screen prompts "Sure?"
6. Press TEMPO [▶ (YES)] once again.

### Bulk Load

You can use this procedure to receive user programs and song data (previously saved as described above) from a sequencer or other external MIDI device back into the E-09 to restore (overwrite) the data via MIDI.

#### NOTE

Once you carry out the Bulk Load procedure, the user programs and song data in the E-09 will be overwritten. If there is any data in the E-09 that you want to keep, make sure to save it to an external MIDI device before you proceed.

1. Switch on the E-09's power. (p. 8)  
If the power is already turned on, switch it off, then turn it on again.
2. Use a separately available MIDI cable to connect the E-09's MIDI IN connector to the MIDI OUT of your external MIDI sequencer.
3. Transmit the bulk data from your external MIDI sequencer to the E-09.

# Other Functions

## Transpose Lock

**Hold down [NUMERIC] and press [TRANSPOSE].**

Once locked this way, the set transposition will remain in effect no matter what you do on the instrument.

- \* *To release the lock, once again hold down [NUMERIC] and press [TRANSPOSE].*

## Tempo Lock

**Hold down [NUMERIC] and press [MELODY INTELLIGENCE].**

Once locked this way, the set tempo will remain in effect no matter what you do on the instrument.

- \* *To release the lock, once again hold down [NUMERIC] and press [MELODY INTELLIGENCE].*

## Style Lock

**Hold down [NUMERIC] and press [SPLIT].**

Thereafter, the style setting will be preserved even if you switch music assistants or user programs.

- \* *To release the lock, once again hold down [NUMERIC] and press [SPLIT].*

## Tone Lock

**Hold down [NUMERIC] and press [DUAL].**

Thereafter, the tone setting will be preserved even if you switch music assistants or user programs.

- \* *To release the lock, once again hold down [NUMERIC] and press [DUAL].*

### TIP

To determine whether a function is locked or not, hold down [NUMERIC] and note the buttons that are lighted (lit = locked).

**MEMO**

# Appendices

## Troubleshooting

This page contains items for you to check if you experience problems, and the appropriate action to take. Refer to the section that corresponds to the problem you're having.

Problem	Check/Action
Power does not turn on	Are the supplied AC adaptor and power cable correctly connected to the E-09 and to an electrical outlet? (p. 8) -> Use only the supplied AC adaptor and power cable. Use of any other adaptor or cable may cause malfunctions.
No sound from the E-09	Could the VOLUME knob be turned down?
	Could headphones be connected? -> If headphones are connected, there will be no sound from the E-09's speakers.
	If there is no sound when you play the keyboard, could Local Control be turned "OFF"? -> Turn "Local" ON. (p. 27)
	Could pedal operations or MIDI messages (Expression or Volume) received from an external MIDI device have lowered the volume?
No Sound from a Specific Part	Could the volume of the part be turned down? -> Adjust the volume parameters (Main Vol, Dual Vol, Split Vol, Auto Bass, Acc Drum, Acc Bass, Accomp). (p. 23)
	Could you have used the Minus-One function to mute (silence) a specific part? (p. 21)
	Does the MIDI receive channel of the part match the MIDI transmit channel of the connected MIDI device? -> Set the MIDI channel of the connected external MIDI device to match the E-09's receive channel. (p. 26)
No sound from a connected MIDI device	Is the instrument set to send MIDI messages? -> Set "MIDI TxRx" to an appropriate setting, something other than "OFF." (p. 27)
	Does the MIDI transmit channel of the E-09's keyboard controller section match the MIDI receive channel of the connected MIDI device? -> Set the MIDI channel of the connected external device to match the E-09. (p. 26)
No sound from a specific region of the keyboard	Some tones such as drum sets or bass sounds have a limited range.
Effect not applied	If reverb or chorus are set to an amount of "0" for the keyboard part, there will be no effect. -> Set "Rev MAIN, Chr MAIN, Rev DUAL, Chr DUAL, Rev SPLIT, Chr SPLIT" to values above "0." (p. 24)
	If "MFX" is set to anything other than "OFF," chorus cannot be applied to the tone of the Main part.
Effect sounds wrong	If "Tone MFX" is "OFF," some combinations of tone and effect may sound strange in comparison to other tones. -> Turn "Tone MFX" ON. Alternatively, switch "MFX" to a different type. (p. 24)
Pitch does not change when you move the Pitch Bend lever	Could the pitch bend range be set to "0"? -> Change the "PB Range" to a value other than "0." (p. 22)
Sound is moved (panned) to left or right each time you play a note	Some tones are randomly panned between left and right each time you play a note. -> You can't change the setting of such tones.
	If Pan MAIN, Pan DUAL, or Pan SPLIT is set to "RND," the sound will randomly move between left and right each time you play a note. (p. 24)
Sound is distorted	The sound may be distorted depending on the effect or part volume settings. Try adjusting the following parameters. <ul style="list-style-type: none"><li>• Volume parameters: Main Vol, Dual Vol, Split Vol, Auto Bass, Acc Drum, Acc Bass, Accomp (p. 23)</li><li>• Amount of reverb or chorus applied to the keyboard parts: Rev MAIN, Chr MAIN, Rev DUAL, Chr DUAL, Rev SPLIT, Chr SPLIT (p. 24)</li><li>• Overall volume or volume balance</li></ul>
	Could an effect such as overdrive or distortion (which intentionally distorts the sound) be applied?
	If [FUNCTION] is lit, pressing TEMPO [ $\blacktriangleleft$ (-)][ $\triangleright$ (+)] will not change the tempo.
Pitch is wrong	Some tones may seem to have a different pitch in certain regions when compared to other tones.
	Could the E-09's tuning be incorrect? -> Check the "MasterTune" setting. (p. 22)
	Could the pitch have been modified by pedal operations or pitch bend messages received from an external MIDI device?
Notes are interrupted	If more than 64 notes are played simultaneously, currently-sounding notes may be cut off.
Notes are "stuck" (continue sounding) when you play the keyboard	Is the foot switch connected correctly?

## Appendices

### Tone List

Button	No.	Tone	Category	PC	CC 00	CC 32
PIANO	1	St.Piano 1	PIANO	1	8	2
	2	EuropeanPf	PIANO	1	16	2
	3	Piano 2	PIANO	2	0	2
	4	Honkytonk	PIANO	4	0	2
	5	Piano 1	PIANO	1	0	2
	6	St.Piano 2	PIANO	2	8	2
	7	Piano 3	PIANO	3	0	2
	8	EG+EP 1	PIANO	3	1	2
	9	EG+EP 2	PIANO	3	2	2
	10	St.Piano 3	PIANO	3	8	2
	11	OldUpright	PIANO	4	8	2
	12	E.Piano 1	ELECTRIC PIANO	5	0	2
	13	St.Soft EP	ELECTRIC PIANO	5	8	2
	14	Dyno EP	ELECTRIC PIANO	5	47	2
	15	Wurly	ELECTRIC PIANO	5	48	2
	16	EP Legend	ELECTRIC PIANO	6	10	2
	17	Hard FM EP	ELECTRIC PIANO	6	24	2
	18	EP Phase	ELECTRIC PIANO	6	32	2
	19	FM+SA EP	ELECTRIC PIANO	5	16	2
	20	60s EP	ELECTRIC PIANO	5	24	2
	21	Hard EP	ELECTRIC PIANO	5	25	2
	22	Mellow EP	ELECTRIC PIANO	5	26	2
	23	E.Piano 2	ELECTRIC PIANO	6	0	2
	24	Detuned EP	ELECTRIC PIANO	6	8	2
	25	St.FM EP	ELECTRIC PIANO	6	16	2
	26	Nylon+EP	ELECTRIC PIANO	100	5	2
ORGAN	27	Organ 2	ORGAN	18	0	2
	28	Organ 1	ORGAN	17	0	2
	29	R&B Organ	ORGAN	17	10	2
	30	Cool Organ	ORGAN	17	34	2
	31	60s Organ1	ORGAN	17	16	2
	32	Cheese Org	ORGAN	17	24	2
	33	Org Oct 2	ORGAN	17	21	4
	34	Org Oct 1	ORGAN	17	20	4
	35	Perc Org 1	ORGAN	18	9	2
	36	Organ 3	ORGAN	19	0	2
	37	Rotary Org	ORGAN	19	8	2
	38	RotarySlow	ORGAN	19	16	2
	39	RotaryFast	ORGAN	19	24	2
	40	ChurchOrg1	ORGAN	20	0	2
	41	ChurchOrg2	ORGAN	20	8	2
	42	OrganFlute	ORGAN	20	24	2
	43	Trem Flute	ORGAN	20	32	2
	44	Reed Organ	ORGAN	21	0	2
	45	Organ 101	ORGAN	17	1	2
	46	Dtnd Org 1	ORGAN	17	7	2
	47	Trem Organ	ORGAN	17	8	2
	48	Organ 109	ORGAN	17	9	2
	49	60s Organ2	ORGAN	17	17	2
	50	60s Organ3	ORGAN	17	18	2
	51	Pop Organ	ORGAN	17	31	2
	52	Rock Organ	ORGAN	17	32	2
	53	Even Bar	ORGAN	17	33	2
	54	Organ Bass	ORGAN	17	40	2
	55	Organ 201	ORGAN	18	1	2
	56	Chorus Org	ORGAN	18	8	2
	57	Dtnd Org 2	ORGAN	18	10	2
	58	Perc Org 2	ORGAN	18	32	2
	59	ChurchOrg3	ORGAN	20	16	2
	60	Puff Organ	ORGAN	21	16	2
	61	Squeeze Me	ACCORDION	22	5	4
	62	Oktober	ACCORDION	22	6	4
	63	Vint Accdn	ACCORDION	22	10	4
	64	Romance	ACCORDION	22	11	4
	65	La Seine	ACCORDION	22	12	4
	66	Accrdn 1	ACCORDION	22	1	4
	67	Accrdn 2	ACCORDION	22	2	4

Button	No.	Tone	Category	PC	CC 00	CC 32
ORGAN	68	Accrdn 3	ACCORDION	22	3	4
	69	AccrdnJuno	ACCORDION	22	4	4
	70	Accrdn It	ACCORDION	22	8	2
	71	Accrdn Fr	ACCORDION	22	0	2
	72	Bandoneon	ACCORDION	24	0	2
	73	SqueezeBox	ACCORDION	24	24	4
	74	Harmonica1	ACCORDION	23	0	2
	75	Harmonica2	ACCORDION	23	1	2
	76	Harpsi 2	KEYBOARD	7	24	2
	77	St.Harpsi	KEYBOARD	7	16	2
	78	Harpsi 1	KEYBOARD	7	0	2
	79	CoupledHps	KEYBOARD	7	8	2
	80	Clav	KEYBOARD	8	0	2
	81	Comp Clav	KEYBOARD	8	8	2
	82	Pulse Clav	KEYBOARD	8	39	2
	83	Celesta	CHROMATIC PERC	9	0	2
	84	Music Box	CHROMATIC PERC	11	0	2
	85	Vibraphone	CHROMATIC PERC	12	0	2
	86	Marimba	CHROMATIC PERC	13	0	2
	87	Xylophone	CHROMATIC PERC	14	0	2
	88	Tublr Bell	CHROMATIC PERC	15	0	2
	89	Sft Crystl	CHROMATIC PERC	99	2	2
	90	LoudGlockn	CHROMATIC PERC	99	4	2
	91	Choir&Bell	CHROMATIC PERC	99	16	2
	92	TinkleBell	CHROMATIC PERC	113	0	2
	93	Glocken	CHROMATIC PERC	10	0	2
	94	Hard Vibe	CHROMATIC PERC	12	1	2
	95	St.Vibe	CHROMATIC PERC	12	8	2
	96	St.Marimba	CHROMATIC PERC	13	8	2
	97	ChurchBell	CHROMATIC PERC	15	8	2
	98	Carillon	CHROMATIC PERC	15	9	2
	99	Crystal	CHROMATIC PERC	99	0	2
	100	Syn Mallet	CHROMATIC PERC	99	1	2
	101	RndGlocken	CHROMATIC PERC	99	3	2
	102	GlcknChime	CHROMATIC PERC	99	5	2
	103	Clr Bells	CHROMATIC PERC	99	6	2
	104	X'mas Bell	CHROMATIC PERC	99	7	2
	105	VibraBells	CHROMATIC PERC	99	8	2
	106	Digi Bell	CHROMATIC PERC	99	9	2
	107	Air Bells	CHROMATIC PERC	99	17	2
	108	Bell Harp	CHROMATIC PERC	99	18	2
	109	Gamelimba	CHROMATIC PERC	99	19	2
GUITAR/BASS	110	Nylon Gt 1	ACOUSTIC GUITAR	25	0	2
	111	Velo Harm	ACOUSTIC GUITAR	25	24	2
	112	Nyln+Steel	ACOUSTIC GUITAR	26	9	2
	113	Requint Gt	ACOUSTIC GUITAR	25	40	2
	114	FlamencoGt	ACOUSTIC GUITAR	25	49	2
	115	StlStr Gt1	ACOUSTIC GUITAR	26	0	2
	116	12 Str Gt	ACOUSTIC GUITAR	26	8	2
	117	Mandolin	ACOUSTIC GUITAR	26	16	2
	118	Ukulele	ACOUSTIC GUITAR	25	8	2
	119	Guitarron	ACOUSTIC GUITAR	25	9	4
	120	Nylon Gt 2	ACOUSTIC GUITAR	25	16	2
	121	Nylon Gt 3	ACOUSTIC GUITAR	25	32	2
	122	StlStr Gt2	ACOUSTIC GUITAR	26	32	2
	123	Steel+Body	ACOUSTIC GUITAR	26	33	2
	124	E.Gt Harm	ACOUSTIC GUITAR	32	0	2
	125	Ac.Gt Harm	ACOUSTIC GUITAR	32	16	2
	126	Atmosphere	ACOUSTIC GUITAR	100	0	2
	127	Nylon Harp	ACOUSTIC GUITAR	100	2	2
	128	Gt Fret Nz	ACOUSTIC GUITAR	121	0	2
	129	Jazz Gt 1	ELECTRIC GUITAR	27	0	2
	130	PedalSteel	ELECTRIC GUITAR	27	8	2
	131	Clean Gt 2	ELECTRIC GUITAR	28	1	2
	132	JC Cln Gt	ELECTRIC GUITAR	28	4	2
	133	MidTune Gt	ELECTRIC GUITAR	28	23	2
	134	Muted Gt	ELECTRIC GUITAR	29	0	2
	135	Overdrive	ELECTRIC GUITAR	30	0	2
	136	Dist Gt 1	ELECTRIC GUITAR	31	0	2
	137	Power Gt 1	ELECTRIC GUITAR	31	16	2
	138	Mellow Gt	ELECTRIC GUITAR	27	1	2

## Appendices

Button	No.	Tone	Category	PC	CC 00	CC 32
GUITAR/ BASS	139	Jazz Gt 2	ELECTRIC GUITAR	27	2	2
	140	Clean Gt 1	ELECTRIC GUITAR	28	0	2
	141	Open Hard	ELECTRIC GUITAR	28	3	2
	142	Chorus Gt	ELECTRIC GUITAR	28	8	2
	143	Clean Gt 3	ELECTRIC GUITAR	28	48	2
	144	Mt Dist Bs	ELECTRIC GUITAR	29	1	2
	145	Funk Pop	ELECTRIC GUITAR	29	8	2
	146	Funk Gt	ELECTRIC GUITAR	29	16	2
	147	Jazz Man	ELECTRIC GUITAR	29	24	2
	148	Gt Pinch	ELECTRIC GUITAR	30	4	2
	149	Dist Gt 2	ELECTRIC GUITAR	31	1	2
	150	Dazed Gt	ELECTRIC GUITAR	31	2	2
	151	Feedback 1	ELECTRIC GUITAR	31	8	2
	152	Feedback 2	ELECTRIC GUITAR	31	9	2
	153	Power Gt 2	ELECTRIC GUITAR	31	17	2
	154	5th Dist	ELECTRIC GUITAR	31	18	2
	155	Rock Rhy 1	ELECTRIC GUITAR	31	24	2
	156	Rock Rhy 2	ELECTRIC GUITAR	31	25	2
	157	Rock Rhy 3	ELECTRIC GUITAR	31	26	2
	158	Feedback 3	ELECTRIC GUITAR	32	8	2
	159	Gt CutNz 1	ELECTRIC GUITAR	121	1	2
	160	Gt CutNz 2	ELECTRIC GUITAR	121	3	2
	161	Dist CutNz	ELECTRIC GUITAR	121	4	2
	162	PickScrape	ELECTRIC GUITAR	121	6	2
	163	Ac.Bass 1	BASS	33	0	2
	164	Ac.Bass 2	BASS	33	1	2
	165	Fingrd Bs1	BASS	34	0	2
	166	Jazz Bass	BASS	34	2	2
	167	Fingrd Bs3	BASS	34	3	2
	168	Pick Bass1	BASS	35	0	2
	169	Frtlss Bs1	BASS	36	0	2
	170	Slap Bass1	BASS	37	0	2
	171	Syn Bass 1	BASS	39	0	2
	172	Reso SH Bs	BASS	39	16	2
	173	Square Bs	BASS	39	22	2
	174	Ac.Bass 3	BASS	33	2	2
	175	Ac.Bass 4	BASS	33	3	2
	176	Baby Bass	BASS	33	4	4
	177	Fingrd Bs2	BASS	34	1	2
	178	Fingrd Bs4	BASS	34	4	2
	179	FingerSlap	BASS	34	7	2
	180	Pick Bass2	BASS	35	3	2
	181	Mt Pick Bs	BASS	35	8	2
	182	Frtlss Bs2	BASS	36	1	2
	183	Frtlss Bs3	BASS	36	2	2
	184	Frtlss Bs4	BASS	36	3	2
	185	Syn Frtlss	BASS	36	4	2
	186	Mr.Smooth	BASS	36	5	2
	187	Frtlss Bs5	BASS	36	8	2
	188	Fat Frtlss	BASS	36	48	2
	189	Reso Slap	BASS	37	8	2
	190	Slap Bass2	BASS	38	0	2
	191	Syn Bs 101	BASS	39	1	2
	192	Juno Bass	BASS	39	2	2
	193	106 Bass	BASS	39	3	2
	194	Acid Bass	BASS	39	8	2
	195	TB303 Bass	BASS	39	9	2
	196	Techno Bs	BASS	39	10	2
	197	Clav Bass	BASS	39	19	2
	198	Hammer	BASS	39	20	2
	199	JungleBass	BASS	39	21	2
	200	Pop Syn Bs	BASS	39	23	2
	201	LightSynBs	BASS	39	24	2
	202	FatTB Bass	BASS	39	25	2
	203	Syn Bass 2	BASS	40	0	2
	204	Syn Bs 201	BASS	40	1	2
	205	Mod Bass	BASS	40	2	2
	206	Seq Bass	BASS	40	3	2
	207	Beef FM Bs	BASS	40	8	2
	208	X Wire Bs	BASS	40	9	2
	209	RubberBass	BASS	40	16	2

Button	No.	Tone	Category	PC	CC 00	CC 32
GUITAR/ BASS	210	SH101 Bs 1	BASS	40	17	2
	211	SH101 Bs 2	BASS	40	18	2
	212	SmoothBass	BASS	40	19	2
	213	Mild Bass	BASS	40	20	2
	214	Detuned Bs	BASS	40	21	2
	215	Attack Pls	BASS	40	29	2
	216	Str Slap	BASS	121	2	2
	217	Bass Slide	BASS	121	5	2
STRINGS	218	St.Strings	STRINGS	49	16	2
	219	St.SlowStr	STRINGS	50	10	2
	220	Legato Str	STRINGS	50	8	2
	221	SynStrings	STRINGS	51	0	2
	222	SuspensStr	STRINGS	45	9	2
	223	Pizz Str	STRINGS	46	0	2
	224	XP Strings	STRINGS	49	4	4
	225	Str Oct	STRINGS	49	32	4
	226	OR Str Oct	STRINGS	49	35	4
	227	Violin 1	STRINGS	41	0	2
	228	SlowVioln1	STRINGS	41	8	2
	229	Viola 1	STRINGS	42	0	2
	230	Cello 1	STRINGS	43	0	2
	231	Contrabass	STRINGS	44	0	2
	232	Violin 2	STRINGS	41	1	2
	233	SlowVioln2	STRINGS	41	9	2
	234	Viola 2	STRINGS	42	1	2
	235	Cello 2	STRINGS	43	1	2
	236	Trem Str	STRINGS	45	0	2
	237	Slow Trem	STRINGS	45	8	2
	238	Strings 1	STRINGS	49	0	2
	239	Strings 2	STRINGS	49	1	2
	240	Orchestra1	STRINGS	49	8	2
	241	Orchestra2	STRINGS	49	9	2
	242	Trem Orch	STRINGS	49	10	2
	243	XP Orch	STRINGS	49	21	4
	244	Choir Str	STRINGS	49	11	2
	245	Velo Str	STRINGS	49	24	2
	246	60s Str	STRINGS	49	40	2
	247	Slow Str 1	STRINGS	50	0	2
	248	Slow Str 2	STRINGS	50	1	2
	249	Warm Str	STRINGS	50	9	2
	250	OB Strings	STRINGS	51	1	2
	251	Syn Str 1	STRINGS	51	2	2
	252	70s Str 1	STRINGS	51	8	2
	253	70s Str 2	STRINGS	51	9	2
	254	Syn Str 2	STRINGS	52	0	2
	255	Syn Str 3	STRINGS	52	1	2
	256	Double Hit	STRINGS	56	10	2
	257	Orch Hit	STRINGS	56	0	2
	258	Bass Hit	STRINGS	56	1	2
	259	6th Hit	STRINGS	56	2	2
	260	Euro Hit	STRINGS	56	3	2
	261	Techno Hit	STRINGS	56	4	2
	262	Impact Hit	STRINGS	56	8	2
	263	Philly Hit	STRINGS	56	9	2
	264	Lo-Fi Rave	STRINGS	56	16	2
VOCAL	265	St.Choir	VOCAL	53	8	2
	266	Humming	VOCAL	54	40	2
	267	Voice Doos	VOCAL	54	0	2
	268	Syn Vox	VOCAL	55	0	2
	269	Solo Vox	VOCAL	86	0	2
	270	ChoirAahs1	VOCAL	53	0	2
	271	Mellow Chr	VOCAL	53	9	2
	272	ChoirAahs2	VOCAL	53	32	2
	273	Syn Voice	VOCAL	55	8	2
	274	Ana Voice	VOCAL	55	19	2
	275	Harp Vox	VOCAL	100	3	2
	276	HllwReleas	VOCAL	100	4	2
SAX/ BRASS	277	Blow Tenor	SAX	67	8	2
	278	XP Breathy	SAX	67	10	4
	279	Sop Sax 1	SAX	65	0	2
	280	Alto Sax 1	SAX	66	0	2

## Appendices

Button	No .	Tone	Category	PC	CC 00	CC 32
SAX / BRASS	281	XP AltoSax	SAX	66	2	4
	282	Tenor Sax1	SAX	67	0	2
	283	XP Tnr Sax	SAX	67	2	4
	284	Baritn Sax	SAX	68	0	2
	285	Sop Sax 2	SAX	65	8	2
	286	Alto Sax 2	SAX	66	1	2
	287	Hyper Alto	SAX	66	8	2
	288	Tenor Sax2	SAX	67	1	2
	289	Velo Tenor	SAX	67	9	2
	290	Flute Vib	WIND	74	48	2
	291	Piccolo	WIND	73	0	2
	292	Oboe	WIND	69	0	2
	293	Bassoon	WIND	71	0	2
	294	Clarinet	WIND	72	1	2
	295	Pan Flute	WIND	76	0	2
	296	Sad Pipe	WIND	76	40	4
	297	Desert Fl	WIND	76	41	4
	298	Whistle	WIND	79	0	2
	299	EnglshHorn	WIND	70	0	2
	300	JzClarinet	WIND	72	0	2
	301	BsClarinet	WIND	72	8	2
	302	Flute	WIND	74	0	2
	303	Recorder	WIND	75	0	2
	304	Ocarina	WIND	80	0	2
	305	BottleBlow	WIND	77	0	2
	306	Trumpet 1	ACOUSTIC BRASS	57	0	2
	307	Latin Tp 1	ACOUSTIC BRASS	57	7	4
	308	Latin Tp 2	ACOUSTIC BRASS	57	6	4
	309	FlugelHorn	ACOUSTIC BRASS	57	8	2
	310	Trombone 1	ACOUSTIC BRASS	58	0	2
	311	Tuba 1	ACOUSTIC BRASS	59	0	2
	312	Mute Tp 1	ACOUSTIC BRASS	60	0	2
	313	Fr.Horns 1	ACOUSTIC BRASS	61	0	2
	314	Brass 1	ACOUSTIC BRASS	62	0	2
	315	Brass Fall	ACOUSTIC BRASS	62	16	2
	316	Twin Tp	ACOUSTIC BRASS	62	24	2
	317	Tb Sect 1	ACOUSTIC BRASS	62	26	2
	318	Brass Oct	ACOUSTIC BRASS	62	30	4
	319	Trumpet 2	ACOUSTIC BRASS	57	1	2
	320	Trumpet 3	ACOUSTIC BRASS	57	2	2
	321	Dark Tp	ACOUSTIC BRASS	57	3	2
	322	XP Trumpet	ACOUSTIC BRASS	57	5	4
	323	Bright Tp	ACOUSTIC BRASS	57	24	2
	324	Warm Tp	ACOUSTIC BRASS	57	25	2
	325	Trombone 2	ACOUSTIC BRASS	58	1	2
	326	Trombone 3	ACOUSTIC BRASS	58	2	2
	327	Bright Tb	ACOUSTIC BRASS	58	4	2
	328	Tuba 2	ACOUSTIC BRASS	59	1	2
	329	Mute Tp 2	ACOUSTIC BRASS	60	2	2
	330	Fr.Horns 2	ACOUSTIC BRASS	61	1	2
	331	XP Horns	ACOUSTIC BRASS	61	10	4
	332	FrHornSolo	ACOUSTIC BRASS	61	8	2
	333	XP Horn	ACOUSTIC BRASS	61	4	4
	334	Horn Orch	ACOUSTIC BRASS	61	16	2
	335	Brass 2	ACOUSTIC BRASS	62	1	2
	336	Brass 3	ACOUSTIC BRASS	62	8	2
	337	XP Brass 1	ACOUSTIC BRASS	62	6	4
	338	XP Brass 2	ACOUSTIC BRASS	62	11	4
	339	XP Tp&Sax	ACOUSTIC BRASS	62	15	4
	340	Twin Bones	ACOUSTIC BRASS	62	25	2
	341	Tb Sect 2	ACOUSTIC BRASS	62	27	2
SYNTH	342	Syn Brass1	SYNTH BRASS	63	0	2
	343	Jump Brass	SYNTH BRASS	63	5	2
	344	OctSynBrss	SYNTH BRASS	63	16	2
	345	VeloBrass2	SYNTH BRASS	64	17	2
	346	Poly Brass	SYNTH BRASS	63	1	2
	347	Syn Brass5	SYNTH BRASS	63	3	2
	348	Juno Brass	SYNTH BRASS	63	4	2
	349	Syn Brass3	SYNTH BRASS	63	8	2
	350	Quak Brass	SYNTH BRASS	63	9	2
	351	Oct Brass	SYNTH BRASS	63	18	2

Button	No .	Tone	Category	PC	CC 00	CC 32
SYNTH	352	Syn Brass2	SYNTH BRASS	64	0	2
	353	Soft Brass	SYNTH BRASS	64	1	2
	354	Syn Brass4	SYNTH BRASS	64	8	2
	355	VeloBrass1	SYNTH BRASS	64	16	2
	356	Big Lead	SYNTH LEAD	82	4	2
	357	SquareWave	SYNTH LEAD	81	0	2
	358	Mellow FM	SYNTH LEAD	81	3	2
	359	CC Solo	SYNTH LEAD	81	4	2
	360	260 Sync	SYNTH LEAD	81	17	2
	361	Saw Wave 1	SYNTH LEAD	82	0	2
	362	Pulse Saw	SYNTH LEAD	82	2	2
	363	GR-300	SYNTH LEAD	82	6	2
	364	Wasp Syn	SYNTH LEAD	82	16	2
	365	Rhythm Saw	SYNTH LEAD	82	45	4
	366	Seq Saw	SYNTH LEAD	82	46	2
	367	SynCallip	SYNTH LEAD	83	0	2
	368	PurePan Ld	SYNTH LEAD	83	2	2
	369	Charang	SYNTH LEAD	85	0	2
	370	Wire Lead	SYNTH LEAD	85	1	2
	371	Dist Lead	SYNTH LEAD	85	8	2
	372	Square	SYNTH LEAD	81	1	2
	373	Hollow Min	SYNTH LEAD	81	2	2
	374	Shmoog	SYNTH LEAD	81	5	2
	375	LM Square	SYNTH LEAD	81	6	2
	376	Sine Wave	SYNTH LEAD	81	8	2
	377	DistSquare	SYNTH LEAD	81	16	2
	378	P5 Saw	SYNTH LEAD	82	1	2
	379	Feline GR	SYNTH LEAD	82	3	2
	380	Velo Lead	SYNTH LEAD	82	5	2
	381	LA Saw	SYNTH LEAD	82	7	2
	382	Dr.Solo	SYNTH LEAD	82	8	2
	383	Saw Wave 2	SYNTH LEAD	82	9	2
	384	Saw Wave 3	SYNTH LEAD	82	10	2
	385	Natural Ld	SYNTH LEAD	82	36	2
	386	Vent Synth	SYNTH LEAD	83	1	2
	387	Chiffer Ld	SYNTH LEAD	84	0	2
	388	5thSawWave	SYNTH LEAD	87	0	2
	389	Big Fives	SYNTH LEAD	87	1	2
	390	Bass&Lead	SYNTH LEAD	88	0	2
	391	Big&Raw	SYNTH LEAD	88	1	2
	392	Fat&Perky	SYNTH LEAD	88	2	2
	393	Delayed Ld	SYNTH LEAD	88	7	2
	394	Poly Syn	POLY SYNTHESIZER	91	0	2
	395	80sPolySyn	POLY SYNTHESIZER	91	1	2
	396	Ice Rain	POLY SYNTHESIZER	97	0	2
	397	Warm Atoms	POLY SYNTHESIZER	100	1	2
	398	Brightness	POLY SYNTHESIZER	101	0	2
	399	Fantasia 1	POLY SYNTHESIZER	89	0	2
	400	Fantasia 2	POLY SYNTHESIZER	89	1	2
	401	Harm Rain	POLY SYNTHESIZER	97	1	2
	402	African wd	POLY SYNTHESIZER	97	2	2
	403	Clav Pad	POLY SYNTHESIZER	97	8	2
	404	Rave	POLY SYNTHESIZER	98	8	2
	405	Warm Pad	PAD	90	0	2
	406	Thick Pad	PAD	90	1	2
	407	Rotary Str	PAD	90	3	2
	408	Soft Pad	PAD	90	4	2
	409	SpaceVoice	PAD	92	0	2
	410	Heaven II	PAD	92	1	2
	411	Itopia	PAD	92	3	2
	412	Blow Pad	PAD	92	13	4
	413	Ethno Pad1	PAD	92	14	4
	414	Ethno Pad2	PAD	92	15	4
	415	Tine Pad	PAD	94	1	2
	416	Panner Pad	PAD	94	2	2
	417	Sweep Pad	PAD	96	0	2
	418	Polar Pad	PAD	96	1	2
	419	Shwimmer	PAD	96	9	2
	420	Soundtrack	PAD	98	0	2
	421	AmbientPad	PAD	100	6	2
	422	Goblin Syn	PAD	102	1	2

## Appendices

Button	No .	Tone	Category	PC	CC 00	CC 32
SYNTH	423	ResoPanner	PAD	103	5	2
	424	StarTheme1	PAD	104	0	2
	425	Horn Pad	PAD	90	2	2
	426	Sine Pad	PAD	90	5	2
	427	BowedGlass	PAD	93	0	2
	428	Metal Pad	PAD	94	0	2
	429	Halo Pad	PAD	95	0	2
	430	Converge	PAD	96	8	2
	431	CelestPad	PAD	96	10	2
	432	Ancestral	PAD	98	1	2
	433	Prologue	PAD	98	2	2
	434	Goblin	PAD	102	0	2
	435	50s Sci-Fi	PAD	102	2	2
	436	Echo Drops	PAD	103	0	2
	437	Echo Bell	PAD	103	1	2
	438	Echo Pan 1	PAD	103	2	2
	439	Echo Pan 2	PAD	103	3	2
	440	Big Panner	PAD	103	4	2
	441	WaterPiano	PAD	103	6	2
	442	StarTheme2	PAD	104	1	2
WORLD 1	443	SitarDrone	WORLD 1	105	4	4
	444	Sitar 3	WORLD 1	105	3	4
	445	Sarod	WORLD 1	105	24	4
	446	Erhu	WORLD 1	111	8	4
	447	Erhu/Vib	WORLD 1	111	10	4
	448	Matouqin	WORLD 1	111	19	4
	449	Shehnai 3	WORLD 1	112	2	4
	450	Bonang 2	WORLD 1	113	26	4
	451	Gender 2	WORLD 1	113	27	4
	452	Saron	WORLD 1	113	28	4
	453	Yangqin	WORLD 1	47	32	4
	454	Yanqin/Hrd	WORLD 1	47	33	4
	455	Yanqin/Trm	WORLD 1	47	34	4
	456	Yanqin Trm	WORLD 1	47	36	4
	457	Guzheng	WORLD 1	108	1	4
	458	Guzhng/Trm	WORLD 1	108	2	4
	459	Guzhng Trm	WORLD 1	108	4	4
	460	Sanxian	WORLD 1	107	16	4
	461	Sanxn/Trem	WORLD 1	107	17	4
	462	Pipa	WORLD 1	106	32	4
	463	Pipa/Vib	WORLD 1	106	33	4
	464	Pipa/Trem	WORLD 1	106	34	4
	465	Pipa Trem	WORLD 1	106	37	4
	466	Qudi	WORLD 1	74	24	4
	467	Qudi/Orn	WORLD 1	74	25	4
	468	Bangdi	WORLD 1	74	28	4
	469	Bandi/Grwl	WORLD 1	74	29	4
	470	Bandi Grwl	WORLD 1	74	30	4
	471	Xiao	WORLD 1	78	8	4
	472	Xiao/Orn	WORLD 1	78	9	4
	473	Xun	WORLD 1	74	32	4
	474	Xun/Orn	WORLD 1	74	33	4
	475	Shakuhachi	WORLD 1	78	0	2
	476	Hulusi 1	WORLD 1	112	40	4
	477	Hulusi 2	WORLD 1	112	44	4
	478	Shehnai 1	WORLD 1	112	0	2
	479	Shehnai 2	WORLD 1	112	1	2
	480	Pungi	WORLD 1	112	8	2
	481	Suona	WORLD 1	112	32	4
	482	Suona/Grwl	WORLD 1	112	33	4
	483	Suona Grwl	WORLD 1	112	34	4
	484	Hichiriki	WORLD 1	112	16	2
	485	Bagpipe	WORLD 1	110	0	2
	486	Shamisen	WORLD 1	107	0	2
	487	Tsugaru	WORLD 1	107	1	2
	488	Koto	WORLD 1	108	0	2
	489	TaishoKoto	WORLD 1	108	8	2
	490	Zither	WORLD 1	47	24	2
	491	Harp	WORLD 1	47	0	2
	492	Bonang 1	WORLD 1	113	8	2
	493	Gender 1	WORLD 1	113	9	2

Button	No .	Tone	Category	PC	CC 00	CC 32
WORLD 1	494	Gaml Gong	WORLD 1	113	10	2
	495	St.Gamelan	WORLD 1	113	11	2
	496	RamaCymbal	WORLD 1	113	16	2
	497	Atarigane	WORLD 1	114	8	2
	498	Gopichant	WORLD 1	106	16	2
	499	Sitar 2	WORLD 1	105	1	2
	500	Sitar 1	WORLD 1	105	0	2
	501	Dtnd Sitar	WORLD 1	105	2	2
	502	TamburaDrn	WORLD 1	105	17	4
	503	SteelDrums	WORLD 2	115	0	2
WORLD 2	504	Quena	WORLD 2	75	8	4
	505	Zampona	WORLD 2	76	16	4
	506	Duduks	WORLD 2	112	41	4
	507	Jerba	WORLD 2	112	43	4
	508	Banjo 1	WORLD 2	106	0	2
	509	Banjo 2	WORLD 2	106	2	4
	510	Mute Banjo	WORLD 2	106	1	2
	511	Bouzouki	WORLD 2	106	11	4
	512	Saz	WORLD 2	106	13	4
	513	Tar	WORLD 2	106	12	4
	514	HurdyGurdy	WORLD 2	111	18	4
	515	Fiddle	WORLD 2	111	0	2
	516	Kamanche	WORLD 2	111	16	4
	517	Gadulka	WORLD 2	111	17	4
	518	Rabab 2	WORLD 2	106	10	4
	519	Rabab 1	WORLD 2	106	8	2
	520	Oud 1	WORLD 2	106	24	2
	521	Oud 2	WORLD 2	106	25	4
	522	Oud/Trem	WORLD 2	106	27	4
	523	Oud Trem	WORLD 2	106	26	4
	524	Oud&Str	WORLD 2	106	28	4
	525	Tambura	WORLD 2	105	9	4
	526	Kanoon 2	WORLD 2	108	17	4
	527	Kanoon Oct	WORLD 2	108	18	4
	528	Kanoon&Chr	WORLD 2	108	19	4
	529	Kanoon 1	WORLD 2	108	16	2
	530	Kawala 2	WORLD 2	76	9	4
	531	Kawala Oct	WORLD 2	76	10	4
	532	Kawala 1	WORLD 2	76	8	2
	533	Kaval Duo	WORLD 2	76	32	4
	534	Nay	WORLD 2	74	18	4
	535	Nay Oct	WORLD 2	74	19	4
	536	Mizmar	WORLD 2	112	24	4
	537	Mizmar Oct	WORLD 2	112	25	4
	538	MizmarDual	WORLD 2	112	26	4
	539	Zourna	WORLD 2	112	42	4
	540	Gaida	WORLD 2	110	16	4
	541	Santur 3	WORLD 2	16	2	4
	542	Santur 2	WORLD 2	16	1	2
	543	Santur 1	WORLD 2	16	0	2
	544	Cimbalom	WORLD 2	16	8	2
	545	Afro Harp	WORLD 2	16	32	4
	546	Kalimba 1	WORLD 2	109	0	2
	547	Kalimba 2	WORLD 2	109	1	4
	548	Balafon 1	WORLD 2	13	16	2
	549	Balafon 2	WORLD 2	13	17	2
	550	Log Drum	WORLD 2	13	24	2
	551	Timpani	PERCUSSION	48	0	2
	552	Castanets	PERCUSSION	116	8	2
	553	Agogo Bell	PERCUSSION	114	0	2
	554	Woodblock	PERCUSSION	116	0	2
	555	Taiko	PERCUSSION	117	0	2
	556	Concert BD	PERCUSSION	117	8	2
	557	Mt CncrtBD	PERCUSSION	117	9	2
	558	Melo Tom 1	PERCUSSION	118	0	2
	559	Real Tom	PERCUSSION	118	1	2
	560	Melo Tom 2	PERCUSSION	118	8	2
	561	Rock Tom	PERCUSSION	118	9	2
	562	Synth Drum	PERCUSSION	119	0	2
	563	808 Tom	PERCUSSION	119	8	2
	564	Elec Perc	PERCUSSION	119	9	2

## Appendices

Button	No .	Tone	Category	PC	CC 00	CC 32
WORLD 2	565	RevCymbal1	PERCUSSION	120	0	2
	566	RevCymbal2	PERCUSSION	120	1	2
	567	Rev Snare1	PERCUSSION	120	8	2
	568	Rev Snare2	PERCUSSION	120	9	2
	569	Rev Kick	PERCUSSION	120	16	2
	570	RevCnctrBD	PERCUSSION	120	17	2
	571	Rev Tom 1	PERCUSSION	120	24	2
	572	Rev Tom 2	PERCUSSION	120	25	2
	573	Thunder	SFX	123	2	2
	574	Wind	SFX	123	3	2
	575	Bird 1	SFX	124	0	2
	576	Bird 2	SFX	124	3	2
	577	HorseGallp	SFX	124	2	2
	578	Telephone2	SFX	125	1	2
	579	Helicopter	SFX	126	0	2
	580	Car Engine	SFX	126	1	2
	581	Car-Pass	SFX	126	3	2
	582	Siren	SFX	126	5	2
	583	Train	SFX	126	6	2
	584	Applause 1	SFX	127	0	2
	585	Laughing	SFX	127	1	2
	586	Screaming	SFX	127	2	2
	587	Explosion	SFX	128	3	2
	588	Breath Nz	SFX	122	0	2
	589	FlKeyClick	SFX	122	1	2
	590	Seashore	SFX	123	0	2
	591	Rain	SFX	123	1	2
	592	Stream	SFX	123	4	2
	593	Bubble	SFX	123	5	2
	594	Dog	SFX	124	1	2
	595	Kitty	SFX	124	4	2
	596	Growl	SFX	124	5	2
	597	Telephone1	SFX	125	0	2
	598	Door Creak	SFX	125	2	2
	599	Door	SFX	125	3	2
	600	Scratch 1	SFX	125	4	2
	601	Scratch 2	SFX	125	7	2
	602	WindChimes	SFX	125	5	2
	603	Car-Stop	SFX	126	2	2
	604	Car-Crash	SFX	126	4	2
	605	Jetplane	SFX	126	7	2
	606	Starship	SFX	126	8	2
	607	Burst Nz	SFX	126	9	2
	608	Punch	SFX	127	3	2
	609	Heart Beat	SFX	127	4	2
	610	Footsteps	SFX	127	5	2
	611	Applause 2	SFX	127	6	2
	612	Gun Shot	SFX	128	0	2
	613	MachineGun	SFX	128	1	2
	614	Laser Gun	SFX	128	2	2

## Drum Sets

Button	No .	Rhythm	Category	PC	CC 00	CC 32
DRUMS	615	Standard 1	DRUMS	1	0	2
	616	Jazz Kit 1	DRUMS	33	0	2
	617	New TR-909	DRUMS	31	0	2
	618	Hip Hop	DRUMS	10	0	2
	619	R&B	DRUMS	14	0	2
	620	Tech&House	DRUMS	12	0	2
	621	Drum'n'Bss	DRUMS	11	0	2
	622	Latin Perc	DRUMS	47	0	4
	623	India Perc	DRUMS	45	0	4
	624	GamelanPrc	DRUMS	46	0	4
	625	OrientPerc	DRUMS	95	0	4
	626	China Perc	DRUMS	44	0	4
	627	India Kit	DRUMS	94	0	4
	628	Std Latin	DRUMS	75	0	4
	629	Jazz Latin	DRUMS	76	0	4
	630	TR909Latin	DRUMS	77	0	4
	631	HipHopLatn	DRUMS	80	0	4
	632	R&B Latin	DRUMS	81	0	4
	633	TechnoLatn	DRUMS	78	0	4
	634	D'n'B Latn	DRUMS	79	0	4
	635	Std Asia	DRUMS	67	0	4
	636	Jazz Asia	DRUMS	68	0	4
	637	TR909 Asia	DRUMS	69	0	4
	638	HipHopAsia	DRUMS	70	0	4
	639	R&B Asia	DRUMS	71	0	4
	640	TechnoAsia	DRUMS	72	0	4
	641	D'n'B Asia	DRUMS	73	0	4
	642	Std OR2	DRUMS	96	0	4
	643	Jazz OR2	DRUMS	97	0	4
	644	TR-909 OR2	DRUMS	98	0	4
	645	HipHop OR2	DRUMS	99	0	4
	646	R&B OR2	DRUMS	100	0	4
	647	Techno OR2	DRUMS	101	0	4
	648	D'n'B OR2	DRUMS	102	0	4
	649	Std OR1	DRUMS	82	0	4
	650	Jazz OR1	DRUMS	83	0	4
	651	TR-909 OR1	DRUMS	84	0	4
	652	HipHop OR1	DRUMS	87	0	4
	653	R&B OR1	DRUMS	88	0	4
	654	Techno OR1	DRUMS	85	0	4
	655	D'n'B OR1	DRUMS	86	0	4
	656	OR Kit 1	DRUMS	93	0	4
	657	OR Kit 2	DRUMS	117	0	3
	658	MxKit&Latn	DRUMS	89	0	4
	659	MxKt&India	DRUMS	90	0	4
	660	MxKit&OR2	DRUMS	103	0	4
	661	MxKit&OR1	DRUMS	92	0	4
	662	MxKit&Chin	DRUMS	91	0	4
	663	Standard 2	DRUMS	2	0	2
	664	Standard 3	DRUMS	3	0	2
	665	Room	DRUMS	9	0	2
	666	Power	DRUMS	17	0	2
	667	Jazz Kit 2	DRUMS	34	0	2
	668	Brush Kit	DRUMS	41	0	2
	669	Orchestra	DRUMS	49	0	2
	670	Ethnic	DRUMS	50	0	2
	671	Electronic	DRUMS	25	0	2
	672	TR-808&909	DRUMS	26	0	2
	673	Dance	DRUMS	27	0	2
	674	Kick&Snare	DRUMS	51	0	2
	675	SFX	DRUMS	57	0	2

# Drum Set List

	PC: 1 [CC32: 2] Standard 1	PC: 33 [CC32: 2] Jazz Kit 1	PC: 31 [CC32: 2] New TR-909	PC: 10 [CC32: 2] Hip Hop	PC: 14 [CC32: 2] R&B	PC: 12 [CC32: 2] Tech&House	PC: 11 [CC32: 2] Drum'n'Bss	PC: 47 [CC32: 4] Latin Perc	PC: 45 [CC32: 4] India Perc	PC: 46 [CC32: 4] GamelanPrc	PC: 95 [CC32: 4] OrientPerc
9	.....	.....	909 Kick 3	909 Kick 3	909 Kick	909 Kick 3	909 Kick 3	.....	.....	.....	.....
10	.....	.....	House Kick	House Kick	House Kick	909 Kick2	House Kick	.....	.....	.....	.....
11	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
C0 12	.....	.....	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	909 Kick	.....	.....	.....	.....
13	.....	.....	HipHop Kick	909 Kick	HipHop Kick	HipHop Kick	HipHop Kick	.....	.....	.....	.....
14	.....	.....	SimpleKick	909 Kick2	909 Kick2	SimpleKick	SimpleKick	.....	.....	.....	.....
15	.....	.....	TR-909 OHHsh	TR-909 OHHsh	R&B OHHsh	TR-909 OHHsh	TR-909 OHHsh	.....	.....	.....	.....
16	.....	.....	TR-909 OHH	TR-909 OHH	R&B OHH	TR-909 OHH	TR-909 OHH	.....	.....	.....	.....
17	.....	.....	Ah	Ah	Ah	Ah	Ah	.....	.....	.....	.....
18	.....	.....	Ha	Ha	Ha	Ha	Ha	.....	.....	.....	.....
19	.....	.....	ShutHa	ShutHa	ShutHa	ShutHa	ShutHa	.....	.....	.....	.....
20	.....	.....	ShutHi	ShutHi	ShutHi	ShutHi	ShutHi	.....	.....	.....	.....
21	.....	.....	One	One	One	One	One	.....	.....	.....	.....
22	.....	.....	Two	Two	Two	Two	Two	.....	.....	.....	.....
23	.....	.....	Three	Three	Three	Three	Three	.....	.....	.....	.....
C1 24	.....	.....	Four	Four	Four	Four	Four	.....	.....	.....	.....
25	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	.....	.....	.....	.....
26	Finger Snap	Finger Snap	Snap	Snap	Snap	Snap	Snap	.....	.....	.....	.....
27	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	.....	.....	.....	.....
28	Slap	Slap	Slap	Slap	Slap	Slap	Slap	.....	.....	.....	.....
29	ScratchPush	ScratchPush	Scratch Push2	Scratch Push2	Scratch Push2	Scratch Push2	Scratch Push2	.....	.....	.....	.....
30	ScratchPull	ScratchPull	Scratch Pull2	Scratch Pull2	Scratch Pull2	Scratch Pull2	Scratch Pull2	.....	.....	.....	.....
31	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	.....	.....	.....	.....
32	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	.....	.....	.....	.....
33	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	.....	.....	.....	.....
34	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	.....	.....	.....	.....
35	Kick 1	Jazz Kick 2	909 Kick	HipHop Kick	909 Kick 3	909 Kick	TR-808 Kick	.....	Tabla Ge	Wadon 6	.....
C2 36	Kick 2	Jazz Kick 1	909 Kick 2	SimpleKick	SimpleKick	House Kick	909 Kick2	Voice 1	Tabla Ge	Wadon 6	Merjaf dom
37	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Voice 2	Tabla Te	Wadon 3	Merjaf sak
38	Snare 2	Jazz Snare 1	909 Snare	HipHop Snare	R&B Snare	Techno Snare	Jungle Snare	Bongo Lo1	Tabla Ge Hi	Wadon 2	Merjaf tak
39	909Clap	Hand Clap2	909Clap	FunkClap	R&B Clap	909Clap	909Clap	Bongo Lo2	Hand Clap2	Wadon 5	TarMag dom
40	Snare 1	Jazz Snare	909Snare2	HipHopSnare2	909Snare2	House Snare	Ps Snare	Bonga Hi	Tabla Na	Wadon 7	TarMag sak
41	Real Tom 6	Real Tom 6	808 Tom 2	Real Tom 6	Real Tom 6	Synth Drum 2	808 Tom 2	Conga Lo	Tabla Tun	Wadon 4	TarMag tak
42	Close Hihat	Jazz Cld.HH	TR-909 CHH	HipHopCHH	R&B CHH	TR-909 CHH	R&B CHH	Conga Hi	Tambourine1	Kane Side	Tar1 dom
43	Real Tom 6	Real Tom 6	808 Tom 2	Real Tom 6	Real Tom 6	Synth Drum 2	808 Tom 2	Conga	Conga Slap	Wadon 1	Tar1 sak
44	Pedal HiHat	Jazz Pedl.HH	TR-909 CHH	HipHopCHH	R&B CHH	TR-909 CHH	R&B CHH	Timbales Lo	Tambourine2	Kane	Tar1 tak
45	Real Tom 4	Real Tom 4	808 Tom 2	Real Tom 4	Real Tom 4	Synth Drum 2	808 Tom 2	Timbales Hi	Udo Slap	Dhol	Tar2 dom
46	Open HiHat	Jazz Open HH	TR-909 OHH	HipHopOHH	R&B OHH	TR-909 OHH	HipHopOHH	Timbales	Ceng Ceng	KwaengwariMt	Tar2 sak
47	Real Tom 4	Real Tom 4	808 Tom 2	Real Tom 4	Real Tom 4	Synth Drum 2	808 Tom 2	Claves	Udo Short	Tabla Ge	Tar2 tak
C3 48	Real Tom 1	Real Tom 1	808 Tom 2	Real Tom 1	Real Tom 1	Synth Drum 2	808 Tom 2	Cuica Lo	Udo Long	Dholak 1	Duff dom1
49	Crash Cym.1	Crash Cym.1	909 Crash	Crash Cym.1	909 Crash	909 Crash	909 Crash	Cuica Hi	Xiao Bo	Kwaengwari f	Duff dom2
50	Real Tom 1	Real Tom 1	808 Tom 2	Real Tom 1	Real Tom 1	Synth Drum 2	808 Tom 2	Surdo 1	Timbl Paila	Tabla Te	Udu sak 1
51	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Surdo 2	Kwaengwari p	Rama Cymbal	Duff sak 2
52	China Cymbal	China Cymbal	China Cymbal	ReverseCymbal	ReverseCymbal	ReverseCymbal	ReverseCymbal	China Cymbal	Caixa	Gamelan Gong	Duff tak
53	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Repinique 1	Ride Bell	Kwaengwari f
54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Repinique 2	Ceng Ceng	Ceng Ceng	Doholla dom
55	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Repinique	Splash Cym.	Kopyak Op	Doholla sak
56	Cowbell	808cowbe	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	Quide	Nao Bo	Saron	Doholla tak
57	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Guiro	Crash Cym.1	Kopyak Mt	Kasoor dom1
58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	RecoReco	Vibraslap	Saron	Kasoor dom2
59	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	MtI Guiro	Ride Bell	Gamelan Gong	Kasoor sak
C4 60	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Maracas	Conga MtLow	Bonang	Tabel1 dom
61	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Shaker	Cga Mute Hi	Bonang	Tabel1 sak
62	Mute H.Conga	Mute H.Conga	808 Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Cabasa	Cga Mute Lo	Bonang	Tabel1 tak
63	Conga Hi Opn	Conga Hi Opn	808 Conga	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Lo Opn	Caxixa	Dholak 1	Bonang	Tabel2 dom
64	Conga Lo Opn	Conga Lo Opn	808 Conga	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Ganza	Dholak 2	Bonang	Tabel2 sak
65	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	Agogo 1	Dhol 1	Bonang	Tabel2 tak
66	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Agogo 2	Wadon 6	Bonang	Merwas dom
67	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Wadon 1	Bonang	Merwas sak1
68	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Marombo Bell	Wadon 5	Merwas sak2
69	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cowbell 1	Wadon 7	Bonang
70	Maracas	Maracas	808marac	Maracas	Maracas	Maracas	Maracas	808marac	Cowbell 2	Wadon 3	Merwas tak
71	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	Pandeiro 1	Wadon 4	Nagroos1 tak
C5 72	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	Pandeiro 2	Wadon 2	Gender
73	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Tambourim 1	Wadako Rim	Nagroos2 dom
74	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Tambourim 2	Djembe	Nagroos2 sid
75	Claves	Claves	808clave	Claves	Claves	Claves	Claves	Claves	Djembe rim	Claves	Nagroos2 roll
76	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Arito	Open Surdo	Twesat 1
77	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Quijada	Mute Surdo	Twesat 2
78	Mute Cuica	Mute Cuica	Mute Cuica	Hoo	Hoo	Hoo	Hoo	Mute Cuica	Chekeré	Tamborim	Twesat 3
79	Open Cuica	Open Cuica	Open Cuica	Hoo	Hoo	Hoo	Hoo	Open Cuica	Cajon Lo	Talking Drum	Yehal dom
80	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Cajon Hi	Bend Tlk Drm	Yehal tak
81	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Hand Clap	Mut Pandiero	Or Clap
82	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Castanets	Opr Pandiero	Yebab
83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Mute Triangle	Req Dum	ZaghruhaStop
C6 84	Bar Chimes	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Open Triangle	Req Tik	Saron	OR Conga Lo
85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Bombo 1	Sitar 3	Saron	OR Conga LoMt
86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Bombo 2	Sitar 3	Saron	OR Conga FX
87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Bombo 3	Sitar 3	Saron	OR Conga Hi
88	.....	.....	.....	.....	.....	.....	.....	Bombo 4	Sitar 3	Saron	OR Bongo Lo1
89	.....	.....	.....	.....	.....	.....	.....	Bombo 5	Sitar 3	Saron	OR Bongo Lo2
90	.....	.....	.....	.....	.....	.....	.....	.....	Sitar 3	Saron	OR Bongo Hi
91	.....	.....	.....	.....	.....	.....	.....	.....	Sitar 3	Saron	Tabla Ge 1
92	.....	.....	.....	.....	.....	.....	.....	.....	Sitar 3	Saron	Tabla Ge 2
93	.....	.....	.....	.....	.....	.....	.....	.....	Sitar 3	Saron	Tabla Dom
94	.....	.....	.....	.....	.....	.....	.....	.....	Sitar 3	Saron	Tabla Ge Hi
95	.....	.....	.....	.....	.....	.....	.....	.....	.....	Saron	Tabla Roll
C7 96	.....	.....	.....	.....	.....	.....	.....	.....	Sitar 3	Saron	Tabla Tak
97	.....	.....	.....	.....	.....	.....	.....	.....	Real Tom 6	.....	Tabla Flam
98	.....	.....	.....	.....	.....	.....	.....	.....	Real Tom 4	.....	Tabla Rim1
99	.....	.....	.....	.....	.....	.....	.....	.....	Real Tom 4	.....	Tabla Rim2
100	.....	.....	.....	.....	.....	.....	.....	.....	Real Tom 1	.....	Tabla Rim3
101	.....	.....	.....	.....	.....	.....	.....	.....	Real Tom 1	.....	Tabla Te
102	.....	.....	.....	.....	.....	.....	.....	.....	909Clap	.....	Tabla Na
103	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	High Timbale
104	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Mute Triangle
105	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Open Triangle
106	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Maracas
107	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	Shaker
C8 108	.....	.....	.....	.....	.....	.....	.....	.....	.....	Tambourine	.....
109	.....	.....	.....	.....	.....	.....	.....	.....	.....	Jingle Bell	.....
110	.....	.....	.....	.....	.....	.....	.....	.....	.....	Bar Chimes	.....
111	.....	.....	.....	.....	.....	.....	.....	.....	.....	Kane	.....
112	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....



	PC: 69 [CC32: 4] TR909 Asia	PC: 70 [CC32: 4] HipHopAsia	PC: 71 [CC32: 4] R&B Asia	PC: 72 [CC32: 4] TechnoAsia	PC: 73 [CC32: 4] D'n'B Asia	PC: 96 [CC32: 4] Std OR2	PC: 97 [CC32: 4] Jazz OR2	PC: 98 [CC32: 4] TR-909 OR2	PC: 99 [CC32: 4] HipHop OR2	PC: 100 [CC32: 4] R&B OR2	PC: 101 [CC32: 4] Techno OR2
9	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	----- Mix HH Cl 4	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick
10	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick House Kick	909 Kick 2 House Kick	909 Kick 3 House Kick	Mix HH Cl 4	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick
11	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick House Kick	909 Kick 2 House Kick	909 Kick 3 House Kick	Mix HH Cl 4	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick	909 Kick 3 House Kick
C0	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	Mix HH Cl 1 Mix HH Cl 2 Mix HH Cl 2 Mix HH Cl 3	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick	12 TR-808 Kick HipHop Kick
13	13 SimpleKick	13 SimpleKick	13 SimpleKick	13 SimpleKick	13 SimpleKick	Mix HH Cl 3	13 SimpleKick	13 SimpleKick	13 SimpleKick	13 SimpleKick	13 SimpleKick
14	14 TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh	TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh	14 TR-909 OHHsh
15	15 TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH	TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH	15 TR-909 OHH
16	16 Ah	16 Ah	16 Ah	16 Ah	16 Ah	Mix HH Op 1	16 Mix HH Op 1	16 Mix HH Op 1	16 Mix HH Op 1	16 Mix HH Op 1	16 Mix HH Op 1
17	17 Ha	17 Ha	17 Ha	17 Ha	17 Ha	Mix Snare 1	17 Mix Snare 1	17 Mix Snare 1	17 Mix Snare 1	17 Mix Snare 1	17 Mix Snare 1
18	18 ShutHa	18 ShutHa	18 ShutHa	18 ShutHa	18 ShutHa	Mix Snare 2	18 Mix Snare 2	18 Mix Snare 2	18 Mix Snare 2	18 Mix Snare 2	18 Mix Snare 2
19	19 ShutHi	19 ShutHi	19 ShutHi	19 ShutHi	19 ShutHi	Mix Snare 3	19 Mix Snare 3	19 Mix Snare 3	19 Mix Snare 3	19 Mix Snare 3	19 Mix Snare 3
20	20 One	20 One	20 One	20 One	20 One	Mix Snare 4	20 Mix Snare 4	20 Mix Snare 4	20 Mix Snare 4	20 Mix Snare 4	20 Mix Snare 4
21	21 Two	21 Two	21 Two	21 Two	21 Two	Mix Kick 2	21 Mix Kick 2	21 Mix Kick 2	21 Mix Kick 2	21 Mix Kick 2	21 Mix Kick 2
22	22 Three	22 Three	22 Three	22 Three	22 Three	Mix Kick 3	22 Mix Kick 3	22 Mix Kick 3	22 Mix Kick 3	22 Mix Kick 3	22 Mix Kick 3
23	23 Three	23 Three	23 Three	23 Three	23 Three	Mix Kick 4	23 Mix Kick 4	23 Mix Kick 4	23 Mix Kick 4	23 Mix Kick 4	23 Mix Kick 4
C1	24 Four	24 Four	24 Four	24 Four	24 Four	Mix Kick 1	24 Mix Kick 1	24 Mix Kick 1	24 Mix Kick 1	24 Mix Kick 1	24 Mix Kick 1
25	25 Snare Roll	25 Snare Roll	25 Snare Roll	25 Snare Roll	25 Snare Roll	Snare Roll	25 Snare Roll	25 Snare Roll	25 Snare Roll	25 Snare Roll	25 Snare Roll
26	26 Snap	26 Snap	26 Snap	26 Snap	26 Snap	Finger Snap	26 Finger Snap	26 Finger Snap	26 Finger Snap	26 Finger Snap	26 Finger Snap
27	27 High-Q	27 High-Q	27 High-Q	27 High-Q	27 High-Q	High-Q	27 High-Q	27 High-Q	27 High-Q	27 High-Q	27 High-Q
28	28 Slap	28 Slap	28 Slap	28 Slap	28 Slap	Slap	28 Slap	28 Slap	28 Slap	28 Slap	28 Slap
29	29 Scrch Push2	29 Scrch Push2	29 Scrch Push2	29 Scrch Push2	29 Scrch Push2	ScratchPush	29 ScratchPush	29 ScratchPush	29 ScratchPush	29 ScratchPush	29 ScratchPush
30	30 Scrch Pull2	30 Scrch Pull2	30 Scrch Pull2	30 Scrch Pull2	30 Scrch Pull2	ScratchPull	30 ScratchPull	30 ScratchPull	30 ScratchPull	30 ScratchPull	30 ScratchPull
31	31 Sticks	31 Sticks	31 Sticks	31 Sticks	31 Sticks	Sticks	31 Sticks	31 Sticks	31 Sticks	31 Sticks	31 Sticks
32	32 SquareClick	32 SquareClick	32 SquareClick	32 SquareClick	32 SquareClick	SquareClick	32 SquareClick	32 SquareClick	32 SquareClick	32 SquareClick	32 SquareClick
33	33 Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click	Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click	33 Mtrrm.Click
34	34 Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell	Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell	34 Mtrrm.Bell
35	35 Hiphop Kick	35 Hiphop Kick	35 Hiphop Kick	35 Hiphop Kick	35 Hiphop Kick	TR-808 Kick	35 TR-808 Kick	35 TR-808 Kick	35 TR-808 Kick	35 TR-808 Kick	35 TR-808 Kick
C2	36 909 Kick2	36 SimpleKick	36 SimpleKick	36 House Kick	36 House Kick	Kick 2	36 Kick 2	36 Kick 2	36 Kick 2	36 Kick 2	36 Kick 2
37	37 Side Stick	37 Side Stick	37 Side Stick	37 Side Stick	37 Side Stick	Side Stick	37 Side Stick	37 Side Stick	37 Side Stick	37 Side Stick	37 Side Stick
38	38 909 Snare	38 HipHop Snare	38 Techno Snare	38 R&B Snare	38 Jungle Snare	Snare 2	38 Snare 2	38 Snare 2	38 Snare 2	38 Snare 2	38 Snare 2
39	39 909Clap	39 FunkClap	39 R&B Clap	39 909Clap	39 909Clap	Hand Clap2	39 Hand Clap2	39 Hand Clap2	39 Hand Clap2	39 Hand Clap2	39 Hand Clap2
40	40 909Share2	40 HiphopShare2	40 909Share2	40 House Snare	40 Ps Snare	Share 1	40 Share 1	40 Share 1	40 Share 1	40 Share 1	40 Share 1
41	41 808 Tom 2	41 Real Tom 6	41 Real Tom 6	41 Synth Drum 2	41 808 Tom 2	Real Tom 6	41 Real Tom 6	41 Real Tom 6	41 Real Tom 6	41 Real Tom 6	41 Real Tom 6
42	42 TR-909 CHH	42 HiphopCHH	42 R&B CHH	42 TR-909 CHH	42 TR-909 CHH	Close HiHat	42 Close HiHat	42 Close HiHat	42 Close HiHat	42 Close HiHat	42 Close HiHat
43	43 808 Tom 2	43 Real Tom 6	43 Real Tom 6	43 Synth Drum 2	43 808 Tom 2	Real Tom 6	43 Real Tom 6	43 Real Tom 6	43 Real Tom 6	43 Real Tom 6	43 Real Tom 6
44	44 TR-909 CHH	44 HiphopCHH	44 R&B CHH	44 TR-909 CHH	44 TR-909 CHH	R&B CHH	44 R&B CHH	44 R&B CHH	44 R&B CHH	44 R&B CHH	44 R&B CHH
45	45 808 Tom 2	45 Real Tom 4	45 Real Tom 4	45 Synth Drum 2	45 808 Tom 2	Real Tom 4	45 Real Tom 4	45 Real Tom 4	45 Real Tom 4	45 Real Tom 4	45 Real Tom 4
46	46 TR-909 OHH	46 HiphopOHH	46 R&B OHH	46 TR-909 OHH	46 TR-909 OHH	Open HiHat	46 Open HiHat	46 Open HiHat	46 Open HiHat	46 Open HiHat	46 Open HiHat
47	47 808 Tom 2	47 Real Tom 4	47 Real Tom 4	47 Synth Drum 2	47 808 Tom 2	Real Tom 4	47 Real Tom 4	47 Real Tom 4	47 Real Tom 4	47 Real Tom 4	47 Real Tom 4
C3	48 808 Tom 2	48 Real Tom 1	48 Real Tom 1	48 Synth Drum 2	48 808 Tom 2	Real Tom 1	48 Real Tom 1	48 Real Tom 1	48 Real Tom 1	48 Real Tom 1	48 Real Tom 1
49	49 909 Crash	49 Crash Cym.	49 Crash Cym.	49 909 Crash	49 Crash Cym.	Crash Cym.	49 Crash Cym.	49 Crash Cym.	49 Crash Cym.	49 Crash Cym.	49 Crash Cym.
50	50 808 Tom 2	50 Real Tom 1	50 Real Tom 1	50 Synth Drum 2	50 808 Tom 2	Real Tom 1	50 Real Tom 1	50 Real Tom 1	50 Real Tom 1	50 Real Tom 1	50 Real Tom 1
51	51 Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal	Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal	51 Ride Cymbal
52	52 China Cymbal	52 ReverseCymbal	52 ReverseCymbal	52 China Cymbal	52 ReverseCymbal	China Cymbal	52 China Cymbal	52 ReverseCymbal	52 China Cymbal	52 ReverseCymbal	52 ReverseCymbal
53	53 Ride Bell	53 Tambourine	53 Tambourine	53 Tambourine	53 Tambourine	Ride Bell	53 Ride Bell	53 Tambourine	53 Tambourine	53 Tambourine	53 Tambourine
54	54 Tambourine	54 Tambourine	54 Tambourine	54 Tambourine	54 Tambourine	Tambourine	54 Tambourine	54 Tambourine	54 Tambourine	54 Tambourine	54 Tambourine
55	55 Splash Cym.	55 Splash Cym.	55 Splash Cym.	55 Splash Cym.	55 Splash Cym.	Splash Cym.	55 Splash Cym.	55 Splash Cym.	55 Splash Cym.	55 Splash Cym.	55 Splash Cym.
56	56 808cowbe	56 Cowbell	56 Cowbell	56 Cowbell	56 Cowbell	808cowbe	56 808cowbe	56 Cowbell	56 Cowbell	56 Cowbell	56 Cowbell
57	57 Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2	Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2	57 Crash Cym.2
58	58 Vibraslap	58 Vibraslap	58 Vibraslap	58 Vibraslap	58 Vibraslap	Vibraslap	58 Vibraslap	58 Vibraslap	58 Vibraslap	58 Vibraslap	58 Vibraslap
59	59 Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal	Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal	59 Ride Cymbal
C4	60 Tabla Ge	60 Tabla Ge	60 Tabla Ge	60 Tabla Ge	60 Tabla Ge	Tabla Ge	60 Tabla Ge	60 Tabla Ge	60 Tabla Ge	60 Tabla Ge	60 Tabla Ge
61	61 Tabla Te	61 Tabla Te	61 Tabla Te	61 Tabla Te	61 Tabla Te	Tabla Te	61 Tabla Te	61 Tabla Te	61 Tabla Te	61 Tabla Te	61 Tabla Te
62	62 Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi	Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi	62 Tabla Ge Hi
63	63 Hand Clap2	63 Hand Clap2	63 Hand Clap2	63 Hand Clap2	63 Hand Clap2	Hand Clap2	63 Hand Clap2	63 Hand Clap2	63 Hand Clap2	63 Hand Clap2	63 Hand Clap2
64	64 Tabla Na	64 Tabla Na	64 Tabla Na	64 Tabla Na	64 Tabla Na	Tabla Na	64 Tabla Na	64 Tabla Na	64 Tabla Na	64 Tabla Na	64 Tabla Na
65	65 Tabla Tun	65 Tabla Tun	65 Tabla Tun	65 Tabla Tun	65 Tabla Tun	Tabla Tun	65 Tabla Tun	65 Tabla Tun	65 Tabla Tun	65 Tabla Tun	65 Tabla Tun
66	66 Tambourine1	66 Tambourine1	66 Tambourine1	66 Tambourine1	66 Tambourine1	Tambourine1	66 Tambourine1	66 Tambourine1	66 Tambourine1	66 Tambourine1	66 Tambourine1
67	67 Conga Slap	67 Conga Slap	67 Conga Slap	67 Conga Slap	67 Conga Slap	Conga Slap	67 Conga Slap	67 Conga Slap	67 Conga Slap	67 Conga Slap	67 Conga Slap
68	68 Tambourine2	68 Tambourine2	68 Tambourine2	68 Tambourine2	68 Tambourine2	Tambourine2	68 Tambourine2	68 Tambourine2	68 Tambourine2	68 Tambourine2	68 Tambourine2
69	69 Udo Slap	69 Udo Slap	69 Udo Slap	69 Udo Slap	69 Udo Slap	Udo Slap	69 Udo Slap	69 Udo Slap	69 Udo Slap	69 Udo Slap	69 Udo Slap
70	70 Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng	Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng	70 Ceng Ceng
71	71 Ceng Ceng	71 Ceng Ceng	71 Ceng Ceng	71 Ceng Ceng	71 Ceng Ceng	Mut Pandiero	71 Mut Pandiero	71 Mut Pandiero	71 Mut Pandiero	71 Mut Pandiero	71 Mut Pandiero
C5	72 Udo Long	72 Udo Long	72 Udo Long	72 Udo Long	72 Udo Long	Udo Long	72 Udo Long	72 Udo Long	72 Udo Long	72 Udo Long	72 Udo Long
73	73 Xiao Bo	73 Xiao Bo	73 Xiao Bo	73 Xiao Bo	73 Xiao Bo	Xiao Bo	73 Xiao Bo	73 Xiao Bo	73 Xiao Bo	73 Xiao Bo	73 Xiao Bo
74	74 Timb Paila	74 Timb Paila	74 Timb Paila	74 Timb Paila	74 Timb Paila	Timb Paila	74 Timb Paila	74 Timb Paila	74 Timb Paila	74 Timb Paila	74 Timb Paila
75	75 Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p	Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p	75 Kwaengwari p
76	76 Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong	Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong	76 Gamelan Gong
77	77 Ride Bell	77 Ride Bell	77 Ride Bell	77 Ride Bell	77 Ride Bell	Ride Bell	77 Ride Bell	77 Ride Bell	77 Ride Bell	77 Ride Bell	77 Ride Bell
78	78 Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng	Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng	78 Ceng Ceng
79	79 Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero	Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero	79 Mut Pandiero
80	80 Nao Bo	80 Nao Bo	80 Nao Bo	80 Nao Bo	80 Nao Bo	Nao Bo	80 Nao Bo	80 Nao Bo	80 Nao Bo	80 Nao Bo	80 Nao Bo
81	81 Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero	Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero	81 Opo Pandiero
82	82 Req Dum	82 Req Dum	82 Req Dum	82 Req Dum	82 Req Dum	Req Dum	82 Req Dum	82 Req Dum	82 Req Dum	82 Req Dum	82 Req Dum
83	83 Req Tik	83 Req Tik	83 Req Tik	83 Req Tik	83 Req Tik	Req Tik	83 Req Tik	83 Req Tik	83 Req Tik	83 Req Tik	83 Req Tik
C6	84 Wadon 6	84 Wadon 6	84 Wadon 6	84 Wadon 6	84 Wadon 6	Wadon 6	84 Wadon 6	84 Wadon 6	84 Wadon 6	84 Wadon 6	84 Wadon 6
85	85 Wadon 3	85 Wadon 3	85 Wadon 3	85 Wadon 3	85 Wadon 3	Wadon 3	85 Wadon 3	85 Wadon 3	85 Wadon 3	85 Wadon 3	85 Wadon 3
86	86 Wadon 2	86 Wadon 2	86 Wadon 2	86 Wadon 2	86 Wadon 2	Wadon 2	86 Wadon 2	86 Wadon 2	86 Wadon 2	86 Wadon 2	86 Wadon 2
87	87 Wadon 5	87 Wadon 5	87 Wadon 5	87 Wadon 5	87 Wadon 5	Wadon 5	87 Wadon 5	87 Wadon 5	87 Wadon 5	87 Wadon 5	87 Wadon 5
88	88 Wadon 7	88 Wadon 7	88 Wadon 7	88 Wadon 7	88 Wadon 7	Wadon 7	88 Wadon 7	88 Wadon 7	88 Wadon 7	88 Wadon 7	88 Wadon 7
89	89 Wadon 4	89 Wadon 4	89 Wadon 4	89 Wadon 4	89 Wad						

	PC: 102 [CC32: 4] D'n'B OR2	PC: 82 [CC32: 4] Std OR1	PC: 83 [CC32: 4] Jazz OR1	PC: 84 [CC32: 4] TR-909 OR1	PC: 87 [CC32: 4] HipHop OR1	PC: 88 [CC32: 4] R&B OR1	PC: 85 [CC32: 4] Techno OR1	PC: 86 [CC32: 4] D'n'B OR1	PC: 93 [CC32: 4] OR Kit 1	PC: 117 [CC32: 3] OR Kit 2	PC: 89 [CC32: 4] MxKit&Latin
9	909 Kick 3	-----	-----	909 Kick 3	909 Kick 3	909 Kick 3	909 Kick 3	909 Kick 3	-----	-----	-----
10	House Kick	Mix HH Cl 4	Mix HH Cl 4	House Kick	House Kick	House Kick	909 Kick2	House Kick	-----	-----	-----
11	909 Kick	Mix HH Cl 1	Mix HH Cl 1	TR-808 Kick	TR-808 Kick	TR-808 Kick	909 Kick	909 Kick	-----	Wadaiko	-----
12	HipHop Kick	Mix HH Cl 2	Mix HH Cl 2	HipHop Kick	HipHop Kick	HipHop Kick	HipHop Kick	HipHop Kick	Ohkawa	-----	-----
13	SimpleKick	Mix HH Cl 3	Mix HH Cl 3	SimpleKick	909 Kick2	909 Kick2	SimpleKick	SimpleKick	Shimedaiko	-----	-----
14	TR-909 OH!Hsh	Mix HH Op 1	Mix HH Op 1	TR-909 OH!Hsh	TR-909 OH!Hsh	R&B OH!Hsh	TR-909 OH!Hsh	TR-909 OH!Hsh	H kotuzumi	-----	-----
15	TR-909 OH	Mix HH Op 2	Mix HH Op 2	TR-909 OH	TR-909 OH	R&B OH!	TR-909 OH	TR-909 OH	L Kotuzumi	-----	-----
16	Ah	Mix Snare 1	Mix Snare 1	Ah	Ah	Ah	Ah	Ah	Tabla Ge	-----	-----
17	Ha	Mix Snare 2	Mix Snare 2	Ha	Ha	Ha	Ha	Ha	Tabla Na	-----	-----
18	ShutHa	Mix Snare 3	Mix Snare 3	ShutHa	ShutHa	ShutHa	ShutHa	ShutHa	Tabla Te	Mix Rev 5	-----
19	ShutHi	Mix Snare 4	Mix Snare 4	ShutHi	ShutHi	ShutHi	ShutHi	ShutHi	Tabla Tun	Mix Rev 4	-----
20	One	Mix Kick 2	Mix Kick 2	One	One	One	One	One	Udo Long	Mix Rev 3	-----
21	Two	Mix Kick 3	Mix Kick 3	Two	Two	Two	Two	Two	Djembe rim	Mix Rev 2	-----
22	Three	Mix Kick 4	Mix Kick 4	Three	Three	Three	Three	Three	TR-909 CHH	Mix Rev 1	-----
C1	24	Four	Mix Kick 1	Mix Kick 1	Four	Four	Four	Four	Tambourine	TR-808 Kick	-----
	25	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Mambo Bell	Mix Sandy 1	-----
	26	Snap	Finger Snap	Finger Snap	Snap	Snap	Snap	Snap	Agogo	Mix Kick 4	-----
	27	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	High-Q	Agogo	Mix Sandy 2	-----
	28	Slap	Slap	Slap	Slap	Slap	Slap	Slap	Shaker	Mix Kick 3	-----
	29	ScratchPush2	ScratchPush	ScratchPush2	ScratchPush2	ScratchPush2	ScratchPush2	ScratchPush2	Cabasa	House Kick	-----
	30	ScratchPull2	ScratchPull	ScratchPull2	ScratchPull2	ScratchPull2	ScratchPull2	ScratchPull2	Mix Snare 5	Mix Sandy 3	-----
	31	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Elec Snare 2	Mix Kick 1	-----
	32	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	909 Snare 2	Mix Sandy 4	-----
	33	Mtrrm.Click	Mtrrm.Click	Mtrrm.Click	Mtrrm.Click	Mtrrm.Click	Mtrrm.Click	Mtrrm.Click	Wadaiko	909 Snare 1	Mix Kick 2
	34	Mtrrm.Bell	Mtrrm.Bell	Mtrrm.Bell	Mtrrm.Bell	Mtrrm.Bell	Mtrrm.Bell	Mtrrm.Bell	Mute Surdo	Mix Kick 3	Mix Sandy 5
	35	TR-808 Kick	Kick 1	Jazz Kick 2	909 Kick	HipHop Kick	909 Kick 3	909 Kick	TR-808 Kick	TR-707 BD	Mix Kick 5
C2	36	909 Kick2	Kick 2	Jazz Kick 1	909 Kick2	SimpleKick	House Kick	909 Kick2	TR-707 BD	Mix Kick 6	Mix Kick 6
	37	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	TR-707 Rim	TR-707 Rim	TR-707 Rim
	38	Jungle Snare	Snare 2	Jazz Snare 1	909 Snare	HipHop Snare	Techno Snare	Jungle Snare	TR-707 SD	Mix Snare 1	-----
	39	909Clap	909Clap	Hand Clap2	909Clap	FunkClap	R&B Clap	909Clap	Hand Clap ST	Mix Clap	-----
	40	Ps Snare	Snare 1	Jazz Snare	909Snare2	HipHopSnare2	House Snare	Ps Snare	TR-707 SD	Mix Snare 4	Mix Snare 5
	41	808 Tom 2	Real Tom 6	Real Tom 6	808 Tom 2	Real Tom 6	Real Tom 6	Synth Drum 2	808 Tom 2	Tom	TR-707 SD
	42	R&B CHH	Close Hi-Hat	Jazz Cld.HH	TR-909 CHH	HipHopCHH	R&B CHH	TR-909 CHH	R&B CHH	TR-707 Hh-c	Nom HH Cl
	43	808 Tom 2	Real Tom 6	Real Tom 6	808 Tom 2	Real Tom 6	Real Tom 6	Synth Drum 2	808 Tom 2	Tom	Real Tom 6
	44	R&B CHH	Pedal HiHat	Jazz Pedl.HH	TR-909 CHH	HipHopCHH	R&B CHH	TR-909 CHH	R&B CHH	TR-707 Hh-c	Mix HH Cl 2
	45	808 Tom 2	Real Tom 4	Real Tom 4	808 Tom 2	Real Tom 4	Real Tom 4	Synth Drum 2	808 Tom 2	Tom	Real Tom 4
	46	HipHopOHH	Open HiHat	Jazz Open HH	TR-909 OHH	HipHopOHH	R&B OH!	TR-909 OHH	HipHopOHH	TR-707 Hh-o	Nom HH Op 1
	47	808 Tom 2	Real Tom 4	Real Tom 4	808 Tom 2	Real Tom 4	Real Tom 4	Synth Drum 2	808 Tom 2	Tom	Real Tom 4
C3	48	808 Tom 2	Real Tom 1	Real Tom 1	808 Tom 2	Real Tom 1	Real Tom 1	Synth Drum 2	808 Tom 2	Tom	Real Tom 1
	49	909 Crash	Crash Cym.	Crash Cym.1	909 Crash	Crash Cym.	909 Crash	909 Crash	TR-707 Crash	Crash Cym.1	Mix HH Cl 4
	50	808 Tom 2	Real Tom 1	Real Tom 1	808 Tom 2	Real Tom 1	Real Tom 1	Synth Drum 2	808 Tom 2	Tom	Real Tom 1
	51	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Mix HH Cl 1
	52	China Cymbal	China Cymbal	China Cymbal	China Cymbal	ReverseCymbal	ReverseCymbal	China Cymbal	Doholla Dom	Ride Bell	Snare 1
	53	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Doholla Sak	Doholla Dom	Snare Roll
	54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Doholla Sak	Mix HH Cl 2
	55	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Doholla Tak2	Doholla Sak	Mix Share 4
	56	808cowbe	Cowbell	Cowbell	808cowbe	Cowbell	Cowbell	Cowbell	Doholla 1	Doholla 1	Mix HH Cl 3
	57	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Doholla Tak1	Doholla 2	Side Stick
	58	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Dohola	Mix HH Op 1
	59	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Doholla Tak1	Doholla Tak1	Mix HH Op 2
C4	60	Merjal dom	Doff Dom	Doff Dom	Doff Dom	Doff Dom	Doff Dom	Doff Dom	Doff Dom	Doff Tak 2	Doholla Tak2
	61	Merjal sak	Doff Tak 1	Doff Tak 1	Doff Tak 1	Doff Tak 1	Doff Tak 1	Doff Tak 1	Doff Tak 1	Doff Tak 1	Voice 1
	62	Merjal tak	Doff Tak 2	Doff Tak 2	Doff Tak 2	Doff Tak 2	Doff Tak 2	Doff Tak 2	Doff Tak 2	Doff Tak 3	Voice 2
	63	TarMag dom	Doff Tak 3	Doff Tak 3	Doff Tak 3	Doff Tak 3	Doff Tak 3	Doff Tak 3	Doff Tak 3	Doff Tak 3	Bongo Lo1
	64	TarMag tak	Low Bong	Low Bong	Low Bong	Low Bong	Low Bong	Low Bong	Doff Tak 3	Doff Tak 3	Bongo Lo2
	65	TarMag tak	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Doff Tak 1	Doff Tak 1	Bongo Hi
	66	Tar1 dom	Doholla Sak	Doholla Sak	Doholla Sak	Doholla Sak	Doholla Sak	Doholla Sak	Doholla Sak	Doholla Sak	Wadon 2
	67	Tar1 tak	Doholla Tak2	Doholla Tak2	Doholla Tak2	Doholla Tak2	Doholla Tak2	Doholla Tak2	Doholla Tak2	Doholla Tak2	Wadon 5
	68	Tar1 tak	Doholla Tak1	Doholla Tak1	Doholla Tak1	Doholla Tak1	Doholla Tak1	Doholla Tak1	Doholla Tak1	Doholla Tak1	Conga Lo
	69	Tar2 dom	Doholla Dom	Doholla Dom	Doholla Dom	Doholla Dom	Doholla Dom	Doholla Dom	Doholla Dom	Doholla Dom	Conga Hi
	70	Tar2 sak	Dholak 1	Dholak 1	Dholak 1	Dholak 1	Dholak 1	Dholak 1	Dholak 1	Dholak 1	Timbles Lo
	71	Tar2 tak	Dholak 2	Dholak 2	Dholak 2	Dholak 2	Dholak 2	Dholak 2	Dholak 2	Dholak 2	Timbles Hi
C5	72	Duff dom1	Dhol	Dhol	Dhol	Dhol	Dhol	Dhol	Req Dom2	Bombo	Cuica Lo
	73	Duff dom2	Tabla Ge	Tabla Ge	Tabla Ge	Tabla Ge	Tabla Ge	Tabla Ge	Req Tak2	Tabla Ge	Cuica Hi
	74	Duff sak 1	Tabla Ge	Tabla Ge	Tabla Ge	Tabla Ge	Tabla Ge	Tabla Ge	Req Dom1	Tabla Tak	Surdo 1
	75	Duff sak 2	Tabla Dom	Tabla Dom	Tabla Dom	Tabla Dom	Tabla Dom	Tabla Dom	Req Tak1	Tabla Te	Surdo 2
	76	Duff tak	Tabla Ge Hi	Tabla Ge Hi	Tabla Ge Hi	Tabla Ge Hi	Tabla Ge Hi	Tabla Ge Hi	Req Rim	Tabla Dom	Caixa
	77	Duff dish	Tabla Roll	Tabla Roll	Tabla Roll	Tabla Roll	Tabla Roll	Tabla Roll	Req Slap	Tabla Ge Hi	Repinique 1
	78	Doholla dom	Tabla Tak	Tabla Tak	Tabla Tak	Tabla Tak	Tabla Tak	Tabla Tak	ZaghruataLoop	Tabla Roll	Repinique 2
	79	Doholla sak	Tabla Flam	Tabla Flam	Tabla Flam	Tabla Flam	Tabla Flam	Tabla Flam	Req Khan-c	Tabla Flam	Requie
	80	Doholla tak1	Tabla Rim1	Tabla Rim1	Tabla Rim1	Tabla Rim1	Tabla Rim1	Tabla Rim1	ZaghruataStop	Tabla Na	Quide
	81	Kasor dom1	Tabla Rim3	Tabla Rim3	Tabla Rim3	Tabla Rim3	Tabla Rim3	Tabla Rim3	Req Khan-o	Tabla Rim1	Guiro
	82	Kasor dom2	Tabla Rim2	Tabla Rim2	Tabla Rim2	Tabla Rim2	Tabla Rim2	Tabla Rim2	Req Loop	Tabla Tun	Maracas
	83	Kasor sak	Tabla Te	Tabla Te	Tabla Te	Tabla Te	Tabla Te	Tabla Te	Req Slap	Tabla Rim2	Shaker
C6	84	Tabel1 dom	Tabla Na	Tabla Na	Tabla Na	Tabla Na	Tabla Na	Tabla Na	Sagat L-o	Tabla Tak	Cabasa
	85	Tabel1 sak	Tabla Tun	Tabla Tun	Tabla Tun	Tabla Tun	Tabla Tun	Tabla Tun	Sagat R	Req Dom1	Caxixi
	86	Tabel1 tak	Req Tak2	Req Tak2	Req Tak2	Req Tak2	Req Tak2	Req Tak2	Sagat L-c	Req Dom2	Ganza
	87	Tabel2 dom	Req Tak1	Req Tak1	Req Tak1	Req Tak1	Req Tak1	Req Tak1	Sagat L-c	Req Dom2	Jingle Bell
	88	Tabel2 sak	Req Rim	Req Rim	Req Rim	Req Rim	Req Rim	Req Rim	Sagat L-c	Req Dom2	Req Rim
	89	Tabel2 tak	Req Dom2	Req Dom2	Req Dom2	Req Dom2	Req Dom2	Req Dom2	Sagat L-c	Req Dom2	Cowbell 1
	90	Merwas dom	Req Dom1	Req Dom1	Req Dom1	Req Dom1	Req Dom1	Req Dom1	Sagat L-c	Req Dom1	Cowbell 2
	91	Merwas tak1	Req Khan-c	Req Khan-c	Req Khan-c	Req Khan-c	Req Khan-c	Req Khan-c	Sagat L-c	Req Dom1	Pandeiro 1
	92	Merwas sak2	Req Khan-o	Req Khan-o	Req Khan-o	Req Khan-o	Req Khan-o	Req Khan-o	Sagat L-c	Req Dom1	Pandeiro 2
	93	Merwas tak	Req Slap	Req Slap	Req Slap	Req Slap	Req Slap	Req Slap	Sagat L-c	Req Dom1	Tambourin 1
	94	Nagroos1 dom	Req Loop	Req Loop	Req Loop	Req Loop	Req Loop	Req Loop	Sagat L-c	Req Dom1	Tambourin 2
	95	Nagroos1 tak	Req Dum	Req Dum	Req Dum	Req Dum	Req Dum	Req Dum	Sagat L-c	Req Dom1	Tambourine
C7	96	Nagroos1 roll	Req Tik	Req Tik	Req Tik	Req Tik	Req Tik	Req Tik	Sagat L-o	Req Dom2	Apito
	97	Nagroos2 dom	Sagat L-o	Sagat L-o	Sagat L-o	Sagat L-o	Sagat L-o	Sagat L-o	Sagat L-o	Req Dom1	Quijada
	98	Nagroos2 side	Sagat R	Sagat R	Sagat R	Sagat R	Sagat R	Sagat R	Sagat R	Req Dom2	Chékere
	99	Sagat L	Sagat L-c	Sagat L-c	Sagat L-c	Sagat L-c	Sagat L-c	Sagat L-c	Sagat L-c	Req Dom2	Cajon Lo
	100	Twesat 1	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Sagat L-c	Req Dom2	Cajon Hi
	101	Twesat 2	Mut Pandiero	Mut Pandiero	Mut Pandiero	Mut Pandiero	Mut Pandiero	Mut Pandiero	Sagat L-c	Req Dom2	Hand Clap
	102	Twesat 3	Opr Pandiero	Opr Pandiero	Opr Pandiero	Opr Pandiero	Opr Pandiero	Opr Pandiero	Sagat L-c	Req Dom2	Sagat Close
	103	Yehal dom	Tambourine1	Tambourine1	Tambourine1	Tambourine1	Tambourine1	Tambourine1	Sagat L-c	Req Dom2	Mute Triangle
	104	Yehal tak	Tambourine2	Tambourine2	Tambourine2	Tambourine2	Tambourine2	Tambourine2	Sagat L-c	Req Dom2	Open Triangle
	105	Or Clap	Udo Slap	Udo Slap	Udo Slap	Udo Slap	Udo Slap	Udo Slap	Sagat L-c	Req Dom2	Agogo 1
	106	Yebab	Udo Short	Udo Short	Udo Short	Udo Short	Udo Short	Udo Short	Sagat L-c	Req Dom2	Agogo 2
	107	ZaghruataStop	Udo Long	Udo Long	Udo Long	Udo Long	Udo Long	Udo Long	Sagat L-c	Req Dom2	RecoReco
C8	108	OR Conga Lo	ZaghruataLoop	ZaghruataLoop	ZaghruataLoop	ZaghruataLoop	ZaghruataLoop	ZaghruataLoop	ZaghruataStop	ZaghruataStop	Doff Tak 1
	109	OR Conga LoMt	ZaghruataStop	ZaghruataStop	ZaghruataStop	ZaghruataStop	ZaghruataStop	ZaghruataStop	ZaghruataStop	ZaghruataStop	Mit Guro
	110	OR Conga FX	Hand Clap ST	Hand Clap ST	Hand Clap ST	Hand Clap ST	Hand Clap ST	Hand Clap ST	Hand Clap ST	Hand Clap ST	Doholla Dom
	111	OR Conga Hi	Hand Clap 1	Hand Clap 1	Hand Clap 1	Hand Clap 1	Hand Clap 1	Hand Clap 1	Hand Clap 1	Hand Clap 1	Bombo 1
	112	OR Bongo Lo1	Wadon 6	Wadon 6	Wadon 6	Wadon 6	Wadon 6	Wadon 6	Wadon 6	Wadon 6	Bombo 2
	113	OR Bongo Lo2	Wadon 1	Wadon 1	Wadon 1	Wadon 1	Wadon 1	Wadon 1	Wadon 1	Wadon 1	Bombo 3
	114	OR Bongo Hi	Wadon 7	Wadon 7</td							

	PC: 90 [CC32: 4] MxKit&India	PC: 103 [CC32: 4] MxKit&OR2	PC: 92 [CC32: 4] MxKit&OR1	PC: 91 [CC32: 4] MxKit&Chin	PC: 2 [CC32: 2] Standard 2	PC: 3 [CC32: 2] Standard 3	PC: 9 [CC32: 2] Room	PC: 17 [CC32: 2] Power	PC: 34 [CC32: 2] Jazz Kit 2	PC: 41 [CC32: 2] Brush Kit	PC: 49 [CC32: 2] Orchestra
19	Mix Rev 5	Mix Rev 5	Mix Rev 5	Mix Rev 5	-----	-----	-----	-----	-----	-----	-----
20	Mix Rev 4	Mix Rev 4	Mix Rev 4	Mix Rev 4	-----	-----	-----	-----	-----	-----	-----
21	Mix Rev 3	Mix Rev 3	Mix Rev 3	Mix Rev 3	-----	-----	-----	-----	-----	-----	-----
22	Mix Rev 2	Mix Rev 2	Mix Rev 2	Mix Rev 2	-----	-----	-----	-----	-----	-----	-----
23	Mix Rev 1	Mix Rev 1	Mix Rev 1	Mix Rev 1	-----	-----	-----	-----	-----	-----	-----
C1 24	TR-808 Kick	TR-808 Kick	TR-808 Kick	TR-808 Kick	-----	-----	-----	-----	-----	-----	-----
25	Mix Sandy 1	Mix Sandy 1	Mix Sandy 1	Mix Sandy 1	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Snare Roll
26	Mix Kick 4	Mix Kick 4	Mix Kick 4	Mix Kick 4	Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap	Finger Snap
27	Mix Sandy 2	Mix Sandy 2	Mix Sandy 2	Mix Sandy 2	High-Q	High-Q	High-Q	High-Q	High-Q	Jazz Cld.HH	Jazz Cld.HH
28	Mix Kick 3	Mix Kick 3	Mix Kick 3	Mix Kick 3	Slap	Slap	Slap	Slap	Slap	Pedal HiHat	Pedal HiHat
29	House Kick	House Kick	House Kick	House Kick	ScratchPush	ScratchPush	ScratchPush	ScratchPush	ScratchPush	ScratchPush	Jazz Open HH
30	Mix Sandy 3	Mix Sandy 3	Mix Sandy 3	Mix Sandy 3	ScratchPull	ScratchPull	ScratchPull	ScratchPull	ScratchPull	ScratchPull	Ride Cymbal
31	Mix Kick 1	Mix Kick 1	Mix Kick 1	Mix Kick 1	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
32	Mix Sandy 4	Mix Sandy 4	Mix Sandy 4	Mix Sandy 4	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick	SquareClick
33	Mix Kick 2	Mix Kick 2	Mix Kick 2	Mix Kick 2	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click	Mtrnm.Click
34	Mix Sandy 5	Mix Sandy 5	Mix Sandy 5	Mix Sandy 5	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell	Mtrnm. Bell
35	Mix Kick 5	Mix Kick 5	Mix Kick 5	Mix Kick 5	Std2 Kick2	Std1 Kick2	Room Kick 2	Power Kick2	Jazz Kick 2	Jazz Kick 2	Jazz Kick 1
C2 36	Mix Kick 6	Mix Kick 6	Mix Kick 6	Mix Kick 6	Std.2 Kick1	Std.1 Kick1	Room Kick 1	Power Kick1	Jazz Kick 1	Jazz Kick 1	Concert BD
37	TR-707 Rim	TR-707 Rim	TR-707 Rim	TR-707 Rim	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick	Side Stick
38	Mix Snare 1	Mix Snare 1	Mix Snare 1	Mix Snare 1	Std.2 Share1	Std.1 Share1	Room Snare 1	Dance Snare1	Jazz Snare 1	Brush Swirl	Concert Snr
39	Mix Clap	Mix Clap	Mix Clap	Mix Clap	808clap	808clap	Hand Clap2	Hand Clap2	Hand Clap1	Hand Clap1	Castanets
40	Mix Snare 5	Mix Snare 5	Mix Snare 5	Mix Snare 5	Std.2 Share2	Std.1 Share2	Room Snare 2	Power Snare1	Jazz Snare 2	Brush Swirl	Concert Snr
41	Mix Snare 6	Mix Snare 6	Mix Snare 6	Mix Snare 6	Real Tom 6	Real Tom 6	Room Tom 5	Rock Tom 4	Real Tom 6	Lite Tom 4	Timpani
42	Norm HH Cl	Norm HH Cl	Norm HH Cl	Norm HH Cl	Jazz Cld.HH	Close HiHat	Room Cth	Room Cth	Jazz Cld.HH	Brs Cth	Timpani
43	Mix Snare 2	Mix Snare 2	Mix Snare 2	Mix Snare 2	Real Tom 6	Real Tom 6	Room Tom 5	Rock Tom 4	Real Tom 6	Lite Tom 4	Timpani
44	Norm HH Pd	Norm HH Pd	Norm HH Pd	Norm HH Pd	Pedal HiHat	Pedal HiHat	Pedal HiHat	Pedal HiHat	Pedal HiHat	Pedal HiHat	Timpani
45	909Share2	909Share2	909Share2	909Share2	Real Tom 4	Real Tom 4	Room Tom 2	Rock Tom 4	Real Tom 4	Lite Tom 4	Timpani
46	Norm HH Op	Norm HH Op	Norm HH Op	Norm HH Op	Jazz Open HH	Open Hi Hat	R8 Oh2	R8 Oh2	Jazz Open HH	Brush Ohh	Timpani
47	Mix Snare 3	Mix Snare 3	Mix Snare 3	Mix Snare 3	Real Tom 4	Real Tom 4	Room Tom 2	Rock Tom 4	Real Tom 4	Lite Tom 4	Timpani
C3 48	Jungle Snare	Jungle Snare	Jungle Snare	Jungle Snare	Real Tom 1	Real Tom 1	Room Tom 2	Rock Tom 1	Real Tom 1	Lite Tom 4	Timpani
49	Mix HH Cl 4	Mix HH Cl 4	Mix HH Cl 4	Mix HH Cl 4	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym.1	Crash Cym.1	Brush Crash	Timpani
50	TR-707 SD	TR-707 SD	TR-707 SD	TR-707 SD	Real Tom 1	Real Tom 1	Room Tom 2	Rock Tom 1	Real Tom 1	Lite Tom 4	Timpani
51	Mix HH Cl 1	Mix HH Cl 1	Mix HH Cl 1	Mix HH Cl 1	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Brush Ride	Timpani
52	Snare 1	Snare 1	Snare 1	Snare 1	China Cymbal	China Cymbal	China Cymbal	China Cymbal	China Cymbal	China Cymbal	Timpani
53	Snare Roll	Snare Roll	Snare Roll	Snare Roll	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Brush RideBL	Timpani
54	Mix HH Cl 2	Mix HH Cl 2	Mix HH Cl 2	Mix HH Cl 2	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
55	Mix Snare 4	Mix Snare 4	Mix Snare 4	Mix Snare 4	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.	Splash Cym.
56	Mix HH Cl 3	Mix HH Cl 3	Mix HH Cl 3	Mix HH Cl 3	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell	Cowbell
57	Side Stick	Side Stick	Side Stick	Side Stick	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Crash Cym.2	Con.Cymbal2	Vibraslap
58	Mix HH Op 1	Mix HH Op 1	Mix HH Op 1	Mix HH Op 1	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap	Vibraslap
59	Mix HH Op 2	Mix HH Op 2	Mix HH Op 2	Mix HH Op 2	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Ride Cymbal	Concert Cym.
C4 60	Tabla Ge	Merja! dom	Doff Dom	Tang Gu Op	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High	Bongo High
61	Tabla Te	Merja! sak	Doff Tak 1	Shu Gu Rim	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo	Bongo Lo
62	Tabla Ge Hi	Merja! tak	Doff Tak 2	Shu Gu	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga	Mute H.Conga
63	Hand Clap2	TarMag dom	Doff Tak 3	Shu Ban 2	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn	Conga Hi Opn
64	Tabla Na	TarMag sak	Low Bongo	Ban Gu 4	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn	Conga Lo Opn
65	Tabla Tun	TarMag tak	Bongo High	Tang Gu Op	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
66	Tambourine1	Tar1 dom	Doholla Sak	Nao Bo	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
67	Conga Slap	Tar1 sak	Doholla Tak2	Tang Gu Mt	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
68	Tambourine2	Tar1 tak	Doholla Tak1	Xiao Bo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo	Agogo
69	Udo Slap	Tar2 dom	Doholla Dom	Tang Gu Op	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
70	Ceng Ceng	Tar2 sak	Dholak 1	HuYinLuoH Op	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas	Maracas
71	Udo Short	Tar2 tak	Dholak 2	Tang Gu Mt	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle	ShrtWhistle
C5 72	Udo Long	Duff dom1	Dhol	Tang Gu Op	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle	LongWhistle
73	Xiao Bo	Duff dom2	Tabla Ge	HuYinLuoH Op	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
74	Timbl Paila	Duff sak 1	Tabla Ge	Tang Gu Mt	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
75	Kwaengwari p	Duff sak 2	Tabla Dom	Shou Luo 1	Claves	Claves	Claves	Claves	Claves	Claves	Claves
76	Gamelan Gong	Duff tak	Tabla Ge Hi	HuYinLuoL. Mt	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
77	Ride Bell	Duff dish	Tabla Roll	Shou Luo 2	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock	Woodblock
78	Ceng Ceng	Mut Pandiero	Tabla Tak	Xiao Bo	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica
79	Mut Pandiero	Doholla sak	Tabla Flam	Ban Gu 4	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica
80	Nao Bo	Doholla tak	Tabla Rim1	Nao Bo	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle	Mute Triangle
81	Opn Pandiero	Kasoos dom1	Tabla Rim3	HuYinLuoH Op	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle	Open Triangle
82	Req Dum	Kasoos dom2	Tabla Rim2	HuYinLuoH Mt	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker
83	Req Tik	Kasoos sak	Tabla Te	HuYinLuoL. Mt	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6 84	Wadon 6	Tabel1 dom	Tabla Na	Gu Roll	Bar Chimes	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
85	Wadon 3	Tabel1 sak	Tabla Tun	Gu Hi	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
86	Wadon 2	Tabel1 tak	Req Tak2	Kane Side	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
87	Wadon 5	Tabel2 dom	Req Tak1	Kopyak Mt	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
88	Wadon 7	Tabel2 sak	Req Rim	Kopyak Op	-----	-----	-----	-----	-----	-----	Applause
89	Wadon 4	Tabel2 tak	Req Dom2	Chenchen Opn	-----	-----	-----	-----	-----	-----	-----
90	Kane Side	Merwas dom	Req Dom1	Chenchen Cis	-----	-----	-----	-----	-----	-----	-----
91	Wadon 1	Merwas sak1	Req Khan-c	-----	-----	-----	-----	-----	-----	-----	-----
92	Kane	Merwas sak2	Req Khan-o	Kwaengwari p	-----	-----	-----	-----	-----	-----	-----
93	Dhol	Merwas tak	Req Slap	Kwaengwari f	-----	-----	-----	-----	-----	-----	-----
94	KwaengwariMt	Nagroos1 dom	Req Loop	KwaengwariMt	-----	-----	-----	-----	-----	-----	-----
95	Kwaengwari f	Nagroos1 tak	Req Dum	-----	-----	-----	-----	-----	-----	-----	-----
C7 96	Rama Cymbal	Nagroos1 roll	Req Tik	Jingle Bell	-----	-----	-----	-----	-----	-----	-----
97	-----	Nagroos2 dom	Sagat L-o	Sagat Open	-----	-----	-----	-----	-----	-----	-----
98	-----	Nagroos2 side	Sagat R	Sagat Close	-----	-----	-----	-----	-----	-----	-----
99	-----	Nagroos2 roll	Sagat L-c	Ban Gu 1	-----	-----	-----	-----	-----	-----	-----
100	-----	Twesat 1	Jingle Bell	Ban Gu 2	-----	-----	-----	-----	-----	-----	-----
101	-----	Twesat 2	Mut Pandiero	-----	-----	-----	-----	-----	-----	-----	-----
102	-----	Twesat 3	Opn Pandiero	-----	-----	-----	-----	-----	-----	-----	-----
103	-----	Yehal dom	Tambourine1	-----	-----	-----	-----	-----	-----	-----	-----
104	-----	Yehal tak	Tambourine2	-----	-----	-----	-----	-----	-----	-----	-----
105	-----	Or Clap	Udo Slap	-----	-----	-----	-----	-----	-----	-----	-----
106	-----	Yehal	Udo Short	-----	-----	-----	-----	-----	-----	-----	-----
107	-----	ZaghruhaStop	Udo Long	-----	-----	-----	-----	-----	-----	-----	-----
C8 108	-----	OR Conga Lo	ZaghruhaLoop	-----	-----	-----	-----	-----	-----	-----	-----
109	-----	OR Conga LoMt	ZaghruhaStop	-----	-----	-----	-----	-----	-----	-----	-----
110	-----	OR Conga FX	Hand Clap ST	-----	-----	-----	-----	-----	-----	-----	-----
111	-----	OR Conga Hi	Hand Clap2	-----	-----	-----	-----	-----	-----	-----	-----
112	-----	OR Bongo Lo1	Wadon 6	-----	-----	-----	-----	-----	-----	-----	-----
113	-----	OR Bongo Lo2	Wadon 1	-----	-----	-----	-----	-----	-----	-----	-----
114	-----	OR Bongo Hi	Wadon 7	-----	-----	-----	-----	-----	-----	-----	-----
115	-----	Tabla Ge 1	Wadon 4	-----	-----	-----	-----	-----	-----	-----	-----
116	-----	Tabla Ge 2	Wadon 2	-----	-----	-----	-----	-----	-----	-----	-----
117	-----	Tabla Dom	Wadon 5	-----	-----	-----	-----	-----	-----	-----	-----
118	-----	Tabla Ge Hi	Wadon 3	-----	-----	-----	-----	-----	-----	-----	-----
119	-----	Tabla Roll	Wadaiiko	-----	-----	-----	-----	-----	-----	-----	-----
C9 120	-----	Tabla Tak	Mute Surdo	-----	-----	-----	-----	-----	-----	-----	-----
121	-----	Tabla Flam	Mute Triangle	-----	-----	-----	-----	-----	-----	-----	-----
122	-----	Tabla Rim1	Open Triangle	-----	-----	-----	-----	-----	-----	-----	-----
123	-----	Tabla Rim2	-----	-----	-----	-----	-----	-----	-----	-----	-----
124	-----	Tabla Rim3	-----	-----	-----	-----	-----	-----	-----	-----	-----
125	-----	Tabla Te	-----	-----	-----	-----	-----	-----	-----	-----	-----
126	-----	Tabla Na	-----	-----	-----	-----	-----	-----	-----	-----	-----
127	-----	Tabla Tun	-----	-----	-----</						

	PC: 50 [CC32: 2] Ethnic	PC: 25 [CC32: 2] Electronic	PC: 26 [CC32: 2] TR-808&909	PC: 27 [CC32: 2] Dance	PC: 51 [CC32: 2] Kick&Snare	PC: 57 [CC32: 2] SFX	
C1	24 25 26 27 28 29 30 31 32 33 34 35	Finger Snap Tambourine Castanets Crash Cym.1 Snare Roll Concert Snr Concert Cym. Concert BD Jingle Bell Bell Tree Bar Chimes	Snare Roll Finger Snap High-Q Slap Scratch Push2 Scratch Pull2 Sticks SquareClick Mtrnm.Click Mtrnm. Bell Elec Kick 2	Snare Roll Finger Snap High-Q Slap Scratch Push2 Scratch Pull2 Sticks SquareClick Mtrnm.Click Mtrnm. Bell Dance Kick 2	Snare Roll Finger Snap High-Q Slap Scratch Push2 Scratch Pull2 Sticks SquareClick Mtrnm.Click Mtrnm. Bell Dance Kick 2	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----
C2	36 37 38 39 40 41 42 43 44 45 46 47	Wadaiko Wadaiko Rim Shimedaiko Atarigane Hyoushigi Ohkawa H kotsuzumi L kotsuzumi Ban Gu Big Gong Small Gong Bend Gong	Elec Kick 1 Side Stick Elec. Snare 808clap Elec Snare 2 Synth Drum 2 Jazz Clsd.HH Synth Drum 2 Pedal HiHat Synth Drum 2 Jazz Open HH Synth Drum 2	TR-808 Kick 808 Rimshot 808 Snare 1 808clap 909 Snare 1 808 Tom 2 808 chh 808 Tom 2 808 chh 808 Tom 2 808 Tom 2 808 Tom 2	Elec Kick 2 Side Stick Power Snare2 808clap Elec Snare 1 Synth Drum 2 CR-78 chh Synth Drum 2 808 chh Synth Drum 2 CR-78 ohh Synth Drum 2	----- ----- ----- ----- Std.1 Kick1 Std.1 Kick2 Std.2 Kick1 Std2 Kick2 Kick 1 Kick 2 Soft Kick Jazz Kick 1	Dist.CutNoiz Bass Slide Pick Scrape High-Q Slap ScratchPush ScratchPull Sticks SquareClick Mtrnm.Click Mtrnm. Bell Gt.CutNoise2 Gt.CutNoise2 Dist.CutNoiz
C3	48 49 50 51 52 53 54 55 56 57 58 59	Rama Cymbal Rama Cymbal Gamelan Gong Udo Short Udo Long Udo Slap Bendir Req Dum Req Tik Tabla Te Tabla Na Tabla Tun	Synth Drum 2 Crash Cym.1 Synth Drum 2 Ride Cymbal ReverseCymbal Ride Bell Tambourine Splash Cym. Cowbell Crash Cym.2 Vibraslap Ride Cymbal	808 Tom 2 808 Crash 808 Tom 2 Ride Cymbal China Cymbal Ride Bell Tambourine Splash Cym. Cowbell Crash Cym.2 Vibraslap Ride Cymbal	Synth Drum 2 Crash Cym.1 Synth Drum 2 Ride Cymbal ReverseCymbal Ride Bell Tambourine Splash Cym. Cowbell Crash Cym.2 Vibraslap Ride Cymbal	Jazz Kick 2 Concert BD Room Kick 1 Room Kick 2 Fi.KeyClick Power Kick1 Power Kick2 Elec Kick 2 Elec Kick 1 TR-808 Kick Footsteps TR-909 Kick Applause Dance Kick 2	Gt.Cut Noise Gt.Cut Noise String Slap Laughing Screaming Punch Heart Beat Footsteps DoorCreaking
C4	60 61 62 63 64 65 66 67 68 69 70 71	Tabla Ge Tabla Ge Hi Talking Drum Bend Tlk Drm Caxixi Djembe Djembe rim Low Timbale Timbl Paila High Timbale Cowbell Bongo High	Bongo High Bongo Lo Mute H.Conga Conga Hi Opn Conga Lo Opn High Timbale Low Timbale Agogo Agogo Cabasa Maracas ShrtWhistle	Bongo High Bongo Lo 808 Conga 808 Conga 808 Conga High Timbale Low Timbale Agogo Agogo Cabasa 808marac ShrtWhistle	Bongo High Bongo Lo Mute H.Conga Conga Hi Opn Conga Lo Opn High Timbale Low Timbale Agogo Agogo Cabasa Maracas ShrtWhistle	Std.1 Snare1 Std.1 Snare2 Std.2 Snare1 Std.2 Snare2 Tight Snare Concert Snr Jazz Snare 1 Jazz Snare 2 Room Snare 1 Room Snare 2 Dance Snare1 Power Snare1	Door Scratch Wind Chimes Car-Engine Car-Stop Car-Pass Car-Crash Siren Train Jetplane Helicopter Starship
C5	72 73 74 75 76 77 78 79 80 81 82 83	Bongo Lo Mute H.Conga Conga Hi Opn Conga MtLow Conga Slap Conga Lo Opn Conga Side Mut Pandiero Open Pandiero Open Surdo Mute Surdo Tamborim	LongWhistle Short Guiro Long Guiro Claves Woodblock Woodblock Mute Cuica Open Cuica Mute Triangl Open Triangl Shaker Jingle Bell	LongWhistle Short Guiro Long Guiro 808clave Woodblock Woodblock Mute Cuica Open Cuica Mute Triangl Open Triangl Shaker Jingle Bell	LongWhistle Short Guiro Long Guiro Claves Woodblock Woodblock Hoo Hoo Mute Triangl Open Triangl Shaker Jingle Bell	Rev.Snare Power Snare2 Elec Snare 1 Dance Snare2 Elec Snare 2 House Snare Elec. Snare Elec Snare 3 808 Snare 1 808 Snare 2 909 Snare 1 909 Snare 2	Gun Shot Machine Gun Lasergun Explosion Dog Horse-Gallop Bird Rain Thunder Wind Seashore Stream
C6	84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	Agogo Agogo Shaker Low Whistle Low Whistle Mute Cuica Open Cuica Mute Triangle Open Triangle Short Guiro Long Guiro Cabasa Up	Bell Tree Castanets Castanets Open Surdo Open Surdo ----- ----- ----- ----- ----- ----- ----- Cabasa Down Claves Woodblock Woodblock	Bell Tree Castanets Castanets Mute Surdo Mute Surdo ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----	Bell Tree Brush Tap Brush Slap1 Brush Slap2 Brush Slap Brush Swirl Brush Swirl Long Swirl ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----	Brush Swirl Kitty Bird 2 Growl Applause 2 Telephone 1 Telephone 2 ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----	Bubble Kitty Bird 2 Growl Applause 2 Telephone 1 Telephone 2 ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----

## Music Style List

Category	No.	Name	Tempo	Time Sign.
ROCK	1	SteadyRk	73	4/4
	2	PowerRck	132	4/4
	3	ElecRock	124	4/4
	4	DynoRock	76	4/4
	5	ThumpRck	104	4/4
	6	USBallad	88	4/4
DANCE	7	DJ_Grove	105	4/4
	8	SmoothDnc	121	4/4
	9	FeverDnc	113	4/4
	10	80sTekno	134	4/4
	11	EuroDnce	138	4/4
	12	IbizaDnc	138	4/4
	13	KeepOnDc	140	4/4
	14	90sTekno	140	4/4
	15	HrdTekno	140	4/4
	16	90sHouse	132	4/4
	17	ClubHous	130	4/4
	18	Hip'nHop	102	4/4
	19	NowHipHp	87	4/4
	20	Cool Rap	94	4/4
	21	PianoRap	94	4/4
	22	70sDance	108	4/4
	23	EasyHop	88	4/4
8BEAT	24	Time_Pop	130	4/4
	25	FriendBt	60	4/4
	26	PianoBal	56	4/4
	27	Soul Bal	58	4/4
	28	ClassBal	62	4/4
	29	SimpleBl	80	4/4
	30	AlClapBl	80	4/4
	31	LayBakBl	83	4/4
	32	PoppinBl	92	4/4
	33	UKLiteBl	104	4/4
	34	UpTempBl	110	4/4
	35	SmilePop	118	4/4
	36	German P	120	4/4
16BEAT	37	Groovin'	116	4/4
	38	FateBeat	78	4/4
	39	Easy Pop	64	4/4
	40	Soul Pop	75	4/4
	41	NightPop	78	4/4
	42	Guitar P	86	4/4
	43	LatinPop	92	4/4
	44	LightPop	94	4/4
	45	FeelGood	98	4/4
	46	Groovy P	100	4/4
	47	SunnyPop	104	4/4
JAZZ	48	SwingPop	128	4/4
	49	JzBallad	70	4/4
	50	BigBand	144	4/4
	51	JazzClub	150	4/4
	52	BgBndBld	82	4/4
	53	JazzWltz	100	3/4
	54	LuvBossa	136	4/4
LATIN	55	MidBossa	150	4/4
	56	UpBossa	168	4/4
	57	UpSamba	103	4/4
	58	Discsamb	117	4/4
	59	Salsa	100	4/4
	60	Merengue	124	4/4
	61	Bachata	128	2/4
	62	Jogetmly	114	4/4
	63	Guarach	181	4/4

Category	No.	Name	Tempo	Time Sign.	
TRADITIONAL	64	SlyBlues	116	4/4	
	65	CntryKng	120	4/4	
	66	Ska	125	4/4	
	67	Blues	61	4/4	
	68	70s R&B	117	4/4	
	69	FunkSoul	105	4/4	
	70	Reggae	140	4/4	
	71	Country	130	4/4	
	72	CntryPop	105	4/4	
	73	Cajun	114	4/4	
	74	Cool6_8	64	6/8	
	75	Oldie6_8	92	6/8	
	76	Schlager	127	4/4	
	77	March4_4	125	4/4	
	78	Polka	130	4/4	
	79	PolkaPop	127	4/4	
BALLROOM	80	70sDisco	126	4/4	
	81	BigSamba	116	4/4	
	82	Rockin'	185	4/4	
	83	Boogie	150	4/4	
	84	Twist	162	4/4	
	85	EngWltz	91	3/4	
	86	WW Waltz	180	3/4	
	87	SlWaltz	90	3/4	
	88	Tango	120	4/4	
	89	Musette	175	3/4	
	90	Cha-Cha	130	4/4	
	91	Mambo	102	4/4	
	92	Beguine	110	4/4	
	93	Rhumba	100	4/4	
	94	Shuffle	145	4/4	
	95	Foxtrot	185	4/4	
	96	Charlest	205	4/4	
	97	PasDoble	122	4/4	
WORLD	98	Vahde	80	4/4	Oriental
	99	Bayon	100	4/4	
	100	Roman_98	130	9/8	
	101	Funk-OR	100	4/4	
	102	Wehda-Kb	120	4/4	
	103	WehdaKb2	135	4/4	
	104	Masmoudi	120	8/4	
	105	Dabkah-T	113	6/4	
	106	Saidi	110	4/4	
	107	Saidi-EG	95	4/4	
	108	Progmk	119	4/4	
	109	Disco-OR	102	4/4	
	110	Cmprsari	132	4/4	Indonesia
	111	Minang	82	4/4	
	112	Popsunda	98	4/4	
	113	Kromong	128	4/4	
	114	Raja Bha	89	4/4	India
	115	Dadra	70	6/8	
	116	Kehrva A	110	4/4	
	117	Bhangra	109	4/4	
	118	Bangla	110	4/4	
	119	LookTung	68	4/4	Thailand
	120	RumWong	88	4/4	
	121	Sam-Cha	130	4/4	
	122	Armenian	101	3/4	Russia
	123	Povorot	128	4/4	
	124	Kazak	69	3/4	
	125	ChinaPop	89	4/4	China
	126	JiangNan	72	4/4	
	127	ChnOpera	120	4/4	
	128	JingJu	136	4/4	
	129	Korean	100	4/4	Korea
	130	K_latin	134	4/4	

## Appendices

### Specifying Chords

● = Constituent notes of this chord.

★ = Keys you need to press to hear this chord.



● = Constituent notes of this chord.

★ = Keys you need to press to hear this chord.



Interactive Arranger  
Model E-09

## MIDI Implementation Chart

Date : Sep. 30, 2005  
Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1–16 1–16, OFF	1–16 1–16, OFF	
Mode	Default Messages Altered	Mode 3 Mode 3, 4 (M = 1) *****	Mode 3 Mode 3, 4 (M = 1)	* 2
Note Number :	True Voice	0–127 *****	0–127 0–127	
Velocity	Note On Note Off	O X	O X	
After Touch	Key's Channel's	X X	O O	
Pitch Bend		O	*1	O *1
Control Change	0, 32	O	*1	O *1
	1	O	*1	O *1
	5	X		
	6, 38	O		
	7	O		
	10	O		
	11	X		
	64	O		
	65	O		
	66	O		
	67	O		
	71	X		
	72	X		
	73	X		
	74	X		
	75	X		
	76	X		
	77	X		
	78	X		
Program Change	84	X		
	91	O		O (Reverb)
	93	O		O (Chorus)
	98, 99	O		
	100, 101	O		O NRPN LSB, MSB RPN LSB, MSB
Program Change	: True Number	O *****	*1 0–127	*1 Program No. 1–128
System Exclusive		O	O	
System Common	: Song Position	O	*1	O *1
	: Song Select	X		X
	: Tune Request	X		X
System Real Time	: Clock	O	*1	O
	: Commands	O	*1 *3	O *3
Aux Messages	: All Sound Off	X		O (120, 126, 127)
	: Reset All Controllers	X		O (121)
	: Local On/Off	X		O (123–125)
	: All Notes Off	X		O
	: Active Sensing	O		X
	: System Reset	X		
Notes		* 1 O X is selectable. * 2 Recognized as M=1 even if M≠1. * 3 The arranger does not transmit or receive MIDI Continue messages.		

Mode 1 : OMNI ON, POLY  
Mode 3 : OMNI OFF, POLY

Mode 2 : OMNI ON, MONO  
Mode 4 : OMNI OFF, MONO

O : Yes  
X : No

## Specifications

### E-09: Interactive Arranger

#### Keyboard

61 keys (with velocity)

#### [Sound Generator]

#### Maximum Polyphony

64 voices

#### Parts

16 parts + Keyboard part

#### Wave Memory

32 M bytes (16-bit linear equivalent)

#### Tones

Tones: 614 + 256 (GM2)  
Drum Sets: 61 + 9 (GM2)

#### Effects

MFX: 47 types  
Reverb: 8 types  
Chorus: 8 types

#### Transpose

-12 to +12 (in semitones)

#### [Arranger]

#### Tempo

20 to 250

#### Styles

130 styles

#### Band Orchestrator

3 types: Drum & Bass, Combo, Full Band

#### User Program

100 programs

#### One Touch Setting

2 settings/styles

#### Control

start/stop, sync start, intro original, fill in, variation, ending,  
tap tempo,

#### Melody Intelligence

18 types

#### Music Assistant

130 types

#### [Metronome]

#### Signature

1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 6/8, 9/8

#### [Song Controls]

#### Tracks

16

#### 16-track Recorder Mode

4 easy modes (ALL, Keyboard, Single, Punch In/Out)

#### Control

start/stop, recording, reset, rewind, forward, marker A-B,  
repeat A-B

#### [Others]

#### Rated Power Output

7.5 W + 7.5 W

#### Speakers

10 cm x 2

#### Controller

Pitch Bend/Modulation Lever

#### Display

Large backlit custom LCD

#### Connectors

Output Jacks (L/MONO, R)  
Headphones Jack 1/2  
MIDI Connectors (IN, OUT)  
Foot Switch Jack

#### Power Supply

DC 9 V (AC Adaptor)

#### Current Draw

2,000 mA

#### Dimensions

1045 (W) x 320 (D) x 128 (H) mm  
41-3/16 (W) x 12-5/8 (D) x 5-1/16 (H) inches

#### Weight

7.3 kg / 16 lbs 2 oz (excluding AC adaptor)

#### Accessories

Music rest  
Owner's Manual  
AC Adaptor (PSB-1U)

#### Options

Keyboard Stand: KS-12  
Pedal Switch: DP series  
Foot Switch: BOSS FS-5U

\* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

# Index

## Numerics

2PitchShift .....	18
3Tap Delay .....	18
4Tap Delay .....	18

## A

AC Adaptor .....	8
Acc Bass .....	23
Acc Drum .....	23
Accomp .....	20, 23, 26
All .....	19
Arr Hold .....	24
ARR SET .....	24
ARRANGER .....	13
Arranger bass .....	20, 26
Arranger drums .....	20, 26
Auto Bass .....	20, 23, 26
AutoWah .....	18

## B

BAND ORCHESTRATOR .....	13
Bass Inv .....	24
Bulk Dump? .....	28
Bulk Load .....	28

## C

Cho/Delay .....	18
Cho/Flanger .....	18
Cho>Delay .....	18
Cho>Flanger .....	18
ChordInt .....	24
CHORUS .....	17, 24
Chr DUAL .....	17, 24
Chr MAIN .....	17, 24
Chr SPLIT .....	17, 25
Clock Tx .....	27
COMBO .....	13, 21
Compressor .....	18
Contrast .....	9
Cord Hook .....	8

## D

DC IN .....	8
Delay .....	16
Demo .....	9
Display .....	9
Distortion .....	18
Drum Sets .....	11
DRUMS & BASS .....	13, 21
DS>Chorus .....	18
DS>Delay .....	18
DS>Flanger .....	18
Dual .....	20, 26
Dual Oct .....	23
Dual Part .....	10
Dual Vol .....	23

## E

Educational .....	24
EFFECTS .....	16–17, 24
EH>Chorus .....	18
EH>Delay .....	18
EH>Flanger .....	18
ENDING .....	13, 19
Enhancer .....	17
Ensemble .....	13

## F

Factory Reset .....	9
FB Chorus .....	17
FbPitchShift .....	18
FILL .....	13
FL/Delay .....	18
FL>Delay .....	18
Flanger .....	17
FOOT SWITCH .....	8, 15, 21
FSW .....	21, 23
FULL .....	13, 21
FUNCTION .....	9, 15–17, 21–22, 27–28

## G

GateRevNr .....	18
GateRevRv .....	18
GateRevS1 .....	18
GateRevS2 .....	18

## H

Hall .....	16
Harmony .....	14
HexaChorus .....	18

## I

INTRO .....	13, 19
-------------	--------

## K

KBD SET .....	21–22
KBD Touch .....	15, 22
Keyboard .....	10, 19
Keyboard Scale .....	12
Keyboard Touch .....	15

## L

LCD Contrast .....	9
Limiter .....	18
Local .....	27

## M

Main .....	20, 26
Main Oct .....	23
Main Part .....	10
Main Vol .....	23
MARKER A-B .....	21
MasterTune .....	22
Melody Intell. .....	20, 26
Melody Intelligence .....	14
Metro TS .....	11, 23
Metro Vol .....	11, 23
Metronome .....	11, 23

MFX .....	17, 24
MI .....	24
MIDI .....	26–27
MIDI cable .....	28
MIDI channel .....	26
MIDI TxRx .....	27
Minus-One .....	21
Mod Delay .....	18
Modulation .....	15, 27
Multi-Effects .....	17
Music Assistant .....	15
Music Rest .....	7
Music Style .....	14
Muted Track .....	21
<b>N</b>	
NTA Rx14 .....	27
Numeric .....	11
<b>O</b>	
Octave .....	12, 23
OD>Chorus .....	18
OD>Delay .....	18
OD>Flanger .....	18
One-Touch .....	14
ORIGINAL .....	13, 19
OT1 .....	14
OT2 .....	14
OUTPUT .....	8
Overdrive .....	17
<b>P</b>	
Pan DUAL .....	25
Pan MAIN .....	24
Pan SPLIT .....	25
PanDelay .....	16
Part .....	20, 26
PB Range .....	22
Performance .....	15
Phaser .....	18
PHONES .....	8
PIANO .....	10
Pitch Bend .....	15, 27
Plate .....	16
Power .....	8
Prog Change .....	27
PunchI/O .....	21
Punch-In/Out .....	20–21
<b>R</b>	
REC .....	19–20
Rec All .....	19
Rec Keyboard .....	19
REC MODE .....	19–20
Rec PunchI/O .....	20
Rec Single .....	20
REC TRACK .....	20
Recording .....	19
REPEAT A-B .....	21
Repeat Playback .....	21

Rev DUAL .....	17, 24
Rev MAIN .....	17, 24
Rev SPLIT .....	17, 25
REVERB .....	16, 18, 24
Room .....	16
Rotary .....	18
<b>S</b>	
Scale C–B .....	25
Scale Mode .....	25
S-Delay .....	17
S-DelayFb .....	17
SFX .....	11
SONG .....	19–21
Sound Effects .....	11
Space-D .....	18
Split .....	20, 26
Split Hold .....	22
Split Int .....	22
Split Oct .....	23
Split Part .....	10
Split Point .....	22
Split Vol .....	23
Start Stop .....	27
START/STOP .....	13, 19
StChorus .....	18
StDelay .....	18
StepFlanger .....	18
StFlanger .....	18
STYLE .....	14
Style Lock .....	29
Style PC .....	27
Sync Rx .....	27
Sync Start .....	13, 19
<b>T</b>	
TAP TEMPO .....	13
Tempo .....	13, 19
Tempo Lock .....	29
TmCtrDelay .....	18
TONE .....	10–11
TONE Category .....	11
Tone Lock .....	29
Tone MFX .....	24
Track .....	20
Trans Mode .....	22
Transpose .....	12, 22
Transpose Lock .....	29
TremChorus .....	18
<b>U</b>	
User Program .....	16
UTILITY .....	9, 28
<b>V</b>	
VARIATION .....	13, 19
Velo Rx .....	27
Volume .....	10, 23
Volume Balance .....	13

**MEMO**



This product complies with the requirements of European Directive 89/336/EEC.

For EU Countries

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.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

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

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

### AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.



# Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

## AFRICA

### Egypt

A1 Fanny Trading Office  
9, EBN Hagar A1 Askalan Street,  
ARD E1 Golf, Heliopolis,  
Cairo 11341, EGYPT  
TEL: 20-2-417-1828

### Reunion

Maison FO - YAM Marcel  
25 Rue Jules Hermann,  
Chaudron - BP79 97 491  
Ste Clotilde Cedex,  
REUNION ISLAND  
TEL: (062) 218-429

### SOUTH AFRICA

T.O.M.S. Sound & Music  
(Pty)Ltd.  
2 ASTRON ROAD DENVER  
JOHANNESBURG ZA 2195,  
SOUTH AFRICA  
TEL: (011)417 3400  
FAX: (011)417 3462

Paul Bothner(PTY)Ltd.  
Royal Cape Park, Unit 24  
Londonderry Road, Ottery 7800  
Cape Town, SOUTH AFRICA  
TEL: (021) 799 4900

## ASIA

### CHINA

Roland Shanghai Electronics Co.,Ltd.  
5F. No.1500 Pingliang Road  
Shanghai 200090, CHINA  
TEL: (021) 5580-0800

Roland Shanghai Electronics Co.,Ltd.  
(BEIJING OFFICE)  
10F. No.18 3 Section Anhuaxili  
Chaoyang District Beijing  
100011 CHINA  
TEL: (010) 6426-5050

### HONG KONG

Tom Lee Music Co., Ltd.  
Service Division  
22-32 Pun Shan Street, Tsuen Wan, New Territories,  
HONG KONG  
TEL: 2415 0911

Parsons Music Ltd.  
8th Floor, Railway Plaza, 39 Chatham Road South, T.S.T.,  
Kowloon, HONG KONG  
TEL: 2333 1863

INDIA  
Rivera Digitec (India) Pvt. Ltd.  
409, Nirmal Kendra  
Mahalaxmi Flats Compound Off. Dr. Edwin Moses Road, Mumbai-400011, INDIA  
TEL: (022) 2493 9051

INDONESIA  
PT Citra Intirama  
Jl. Cideng Timur No. 15J-150 Jakarta Pusat  
INDONESIA  
TEL: (021) 6324170

### KOREA

Cosmos Corporation  
1461-9, Seocho-Dong,  
Seocho Ku, Seoul, KOREA  
TEL: (02) 3486-8855

### MALAYSIA

Roland Asia Pacific Sdn. Bhd.  
45-1, Block C2, Jalan PJU 1/39, Dataran Prima, 47301 Petaling Jaya, Selangor, MALAYSIA  
TEL: (03) 7805-3263

## PHILIPPINES

G.A. Yupangco & Co. Inc.  
339 Gil J. Puyat Avenue  
Makati, Metro Manila 1200,  
PHILIPPINES  
TEL: (02) 899 9801

## SINGAPORE

SWEE LEE MUSIC  
COMPANY PTE. LTD.  
150 Sims Drive,  
SINGAPORE 387381  
TEL: 6846-3676

## TAIWAN

ROLAND TAIWAN  
ENTERPRISE CO., LTD.  
Room 5, 9fl. No. 112 Chung Shan N.Road Sec.2, Taipei,  
TAIWAN, R.O.C.  
TEL: (02) 2561 3339

## THAILAND

Theera Music Co., Ltd.  
330 Soi Vergn NakornKasem, New Road, Sumpantawongse, Bangkok 10100, THAILAND  
TEL: (02) 224-8821

## AUSTRALIA/ NEW ZEALAND

### AUSTRALIA/ NEW ZEALAND

Roland Corporation  
Australia Pty.,Ltd.  
38 Campbell Avenue  
Dee Why West. NSW 2099  
AUSTRALIA

### For Australia

Tel: (02) 9982 8266  
For New Zealand  
Tel: (09) 3098 715

## CENTRAL/LATIN AMERICA

### ARGENTINA

Instrumentos Musicales S.A.  
Av.Santa Fe 2055  
(1123) Buenos Aires  
ARGENTINA  
TEL: (011) 4508-2700

### BARBADOS

A&B Music Supplies LTD  
12 Webster Industrial Park  
Wildey, St.Michael, Barbados  
TEL: (246)430-1100

### BRAZIL

Roland Brasil Ltda.  
Rua San Jose, 780 Sala B  
Parque Industrial San Jose  
Cotia - Sao Paulo - SP, BRAZIL  
TEL: (011) 4615 5666

### CHILE

Comercial Fancy II S.A.  
Rut.: 96.919.420-1  
Nataniel Cox #739, 4th Floor  
Santiago - Centro, CHILE  
TEL: (02) 688-9540

### COLOMBIA

Centro Musical Ltda.  
Cra 43 B No 25 A 41 Bododega 9  
Medellin, Colombia  
TEL: (574)3812529

### COSTA RICA

JUAN Bansbach Instrumentos Musicales  
Ave.1. Calle 11, Apartado 10237,  
San Jose, COSTA RICA  
TEL: 258-0211

## CURACAO

Zeelandia Music Center Inc.  
Orionweg 30  
Curacao, Netherland Antilles  
TEL:(305)5926866

## DOMINICAN REPUBLIC

Instrumentos Fernando Giraldez  
Calle Proyecto Central No.3  
Ens.La Esperilla  
Santo Domingo,  
Dominican Republic  
TEL:(809) 683 0305

## ECUADOR

Mas Musika  
Rumichaca 822 y Zaruma  
Guayaquil - Ecuador  
TEL:(593-4) 2302364

## EL SALVADOR

OMNI MUSIC  
75 Avenida Norte y Final  
Alameda Juan Pablo II,  
Edificio No.4010 San Salvador,  
EL SALVADOR  
TEL: 262-0788

## GUATEMALA

Casa Instrumental  
Calzada Roosevelt 34-01,zona 11  
Ciudad de Guatemala  
Guatemala  
TEL:(502) 599-2888

## HONDURAS

Almaen Pajaro Azul S.A. de C.V.  
BO.Paz Barahona  
3 Ave.11 Calle S.O  
San Pedro Sula, Honduras  
TEL: (504) 553-2029

## MARTINIQUE

Musique & Son  
Z.I.Les Mangle  
97232 Le Lamantin  
Martinique F.W.I.  
TEL: 596 596 426860

## Gigamusic SARL

10 Rte De La Folie  
97200 Fort De France  
Martinique F.W.I.  
TEL: 596 596 715222

## MEXICO

Casa Veerkamp, s.a. de c.v.  
Av. Toluca No. 323, Col. Olivar de los Padres 01780 Mexico  
D.F. MEXICO  
TEL: (55) 5668-6699

## NICARAGUA

Bansbach Instrumentos Musicales Nicargua  
Altamira D'Este Calle Principal de la Farmacia 5ta.Avenida  
1 Cuadra al Lago.#503  
Managua, Nicaragua  
TEL: (505)277-2557

## PANAMA

SUPRO MUNDIAL, S.A.  
Boulevard Andrews, Albrook, Panama City, REP. DE PANAMA  
TEL: 315-0101

## PARAGUAY

Distribuidora De Instrumentos Musicales  
J.E. Olear y ESQ. Manduvira  
Asuncion PARAGUAY  
TEL: (595) 21 492147

## PERU

Audionet  
Distribuciones Musicales SAC  
Juan Fanning 530  
Miraflores  
Lima - Peru  
TEL: (511) 4461388

## TRINIDAD

AMR Ltd  
Ground Floor  
Maritime Plaza  
Barataria Trinidad W.I.  
TEL: (868) 638 6385

## URUGUAY

Todo Musica S.A.  
Francisco Acuna de Figueroa  
1771  
C.P.: 11.800  
Montevideo, URUGUAY  
TEL: (02) 924-2335

## VENEZUELA

Instrumentos Musicales Allegro,C.A.  
Av.las industrias edf.Guitar import  
#7 zona Industrial de Turumo  
Caracas, Venezuela  
TEL: (212) 244-1122

## EUROPE

### AUSTRIA

Roland Elektronische Musikinstrumente HmbH.  
Austrian Office  
Edward-Bodem-Gasse 8,  
A-6020 Innsbruck, AUSTRIA  
TEL: (0512) 26 44 260

### BELGIUM/FRANCE/

### HOLLAND/

Roland Central Europe N.V.  
Houtstraat 3, B-2260, Oevel (Westerlo) BELGIUM  
TEL: (014) 575811

### CROATIA

ART-CENTAR  
Degenova 3.  
HR - 10000 Zagreb  
TEL: (1) 466 8493

### CZECH REP.

CZECH REPUBLIC  
DISTRIBUTOR s.r.o  
Voctárova 247/16  
CZ - 180 00 PRAHA 8,  
CZECH REP.  
TEL: (2) 830 20270

### DENMARK

Roland Scandinavia A/S  
Nordhavnsvej 7, Postbox 880,  
DK-2100 Copenhagen DENMARK  
TEL: 3916 6200

### FINLAND

Roland Scandinavia As, Filial Finland  
Elannontie 5  
FIN-01510 Vantaa, FINLAND  
TEL: (09) 68 24 020

### GERMANY

Roland Elektronische Musikinstrumente HmbH.  
Oststrasse 96, 22844 Norderstedt, GERMANY  
TEL: (040) 52 60900

### GREECE/CYPRUS

STOLLAS S.A.  
Music Sound Light  
155, New National Road  
Patras 26442, GREECE  
TEL: 2610 435400

### HUNGARY

Roland East Europe Ltd.  
Warehouse Area 'DEPO' Pf.83  
H-2046 Torokbalint, HUNGARY  
TEL: (23) 511011

### IRELAND

Roland Ireland  
G2 Calmount Park, Calmount Avenue, Dublin 12  
Republic of IRELAND  
TEL: (01) 4294444

### ITALY

Roland Italy S. p. A.  
Viale delle Industrie 8,  
20020 Arese, Milano, ITALY  
TEL: (02) 937-78300

## NORWAY

Roland Scandinavia Avd.  
Kontor Norge  
Lilleakerveien 2 Postboks 95  
Lilleaker N-0216 Oslo NORWAY  
TEL: 2273 0074

## POLAND

ROLAND POLSKA SP. Z O.O.  
UL. Gibraltar 4.  
PL-03 664 Warszawa  
POLAND  
TEL: (02) 679 4419

## PORTUGAL

Roland Iberia, S.L.  
Portugal Office  
Cais das Pedras, 8/9-1 Dto  
4050-465, Porto, PORTUGAL  
TEL: 22 608 00 60

## ROMANIA

FBS LINES  
Piata Libertatii 1,  
535500 Gheorgheni,  
ROMANIA  
TEL: (266) 364 609

## RUSSIA

MuTek  
Dorozhnya ul.3,korp.6  
117 545 Moscow, RUSSIA  
TEL: (095) 981-4967

## SLOVAKIA

DAN Acoustic s.r.o.  
Povazska 18.

SK - 940 01 Nové Zámky  
TEL: (035) 6424 330

## SPAIN

Roland Iberia, S.L.  
Paseo García Faria, 33-35  
08005 Barcelona SPAIN  
TEL: 93 493 91 00

## SWEDEN

Roland Scandinavia A/S  
Danvik Center 28, 2 tr.  
S-131 30 Nacka SWEDEN  
TEL: (08) 702 00 20

## SWITZERLAND

Roland (Switzerland) AG  
Landstrasse 5, Postfach,  
CH-4452 Ittingen,  
SWITZERLAND  
TEL: (061) 927-8383

## UKRAINE

EURHYTHMICS Ltd.  
P.O.Box: 37-a.  
Nedecy Str. 30  
UA - 89600 Mukachevo,  
UKRAINE  
TEL: (03131) 414-40

## UNITED KINGDOM

Roland (U.K.) Ltd.  
Atlantic Close, Swansea  
Enterprise Park, SWANSEA  
SA7 9FJ,  
UNITED KINGDOM  
TEL: (01792) 702701

## MIDDLE EAST

Bahrain Moon Stores  
No.16, Bab Al Bahrain Avenue,  
P.O.Box 247, Manama 304,  
State of BAHRAIN  
TEL: 17 211 005

## IRAN

MOCO INC.  
No.41 Nike St., Dr.Shariyat Ave.,  
Roberoye Cerahae Mirdamad  
Tehran, IRAN  
TEL: (021) 285-4169  
ISRAEL Halilit P. Greenspoon & Sons Ltd.  
8 Retzif Ha'aliya Hashnya St.  
Tel-Aviv-Yafo ISRAEL  
TEL: (03) 6823666

## JORDAN

MUSIC HOUSE CO. LTD.  
FREDDY FOR MUSIC  
P. O. Box 922846  
Amman 11192 JORDAN  
TEL: (06) 5692696

## KUWAIT

EASA HUSAIN AL-YOUSIFI & SONS CO.  
Abdullah Salem Street,  
Safat, KUWAIT  
TEL: 243-6399

## LEBANON

Chahine S.A.L.  
Gerge Zeidan St, Chahine  
Bldg., Achrafieh, P.O.Box: 16-  
5857 Beirut, LEBANON  
TEL: (01) 20-1441

## OMAN

### TALENTZ CENTRE L.L.C.

Malatan House No.1  
Al Noor Street, Ruwi  
SULTANATE OF OMAN  
TEL: 2478 3443

## QATAR

Al Emadi Co. (Badie Studio & Stores)

P.O. Box 62, Doha, QATAR

TEL: 4423-554

## SAUDI ARABIA

### aDawliah Universal

Electronics API  
Corniche Road, Aldossary  
Bldg., 1st Floor, Alkhobar,

SAUDI ARABIA

TEL: P.O. Box 2154, Alkhobar 31952

## SYRIA

### Technical Light & Sound Center

Rawda, Abdul Qader Jazairi St.  
Bldg. No. 21, P.O.BOX 13520,  
Damascus, SYRIA  
TEL: (011) 223-5384

## TURKEY

ZUHAL DIS TICARET A.S.  
Galip Dede Cad. No.37  
Beyoglu - Istanbul / TURKEY

TEL: (0121) 249 85 10

## U.A.E.

Zak Electronics & Musical Instruments Co. L.L.C.  
Zabeel Road, Al Sherooq Bldg.,  
No. 14, Grand Floor, Dubai,  
U.A.E.

TEL: (04) 3360715

## NORTH AMERICA

### CANADA

### Roland Canada Ltd. (Head Office)

5480 Parkwood Way  
Richmond B. C., V6V 2M4  
CANADA

TEL: (604) 270 6626

### Roland Canada Ltd. (Toronto Office)

170 Admiral Boulevard  
Mississauga On L5T 2N6

CANADA

TEL: (905) 362 9707

### Roland Canada Ltd. (Montreal Office)

1700, Bab Al Bahrain Avenue,  
P.O.Box 247, Manama 304,  
State of BAHRAIN

TEL: 17 211 005

### IRAN

### MOCO INC.

No.41 Nike St., Dr.Shariyat Ave.,  
Roberoye Cerahae Mirdamad  
Tehran, IRAN

TEL: (021) 285-4169

### ISRAEL

### Halilit P. Greenspoon & Sons Ltd.

8 Retzif Ha'aliya Hashnya St.

Tel-Aviv-Yafo ISRAEL

TEL: (03) 6823666

As of November 1, 2006 (ROLAND)