

---

**Roland**

**ep-97** DIGITAL PIANO

**ep-77** DIGITAL PIANO

**Owner's Manual**

# 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>	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * 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.

### 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.
- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.
- 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.
- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged.

- 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
  - 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!)

---

# Roland

## ep-97 DIGITAL PIANO

## ep-77 DIGITAL PIANO

### Owner's Manual

Thank you for purchasing a Roland ep-97 or ep-77 Digital Piano. True to the ep philosophy, the ep-97 and ep-77 are high-quality digital pianos for music enthusiasts on a budget. This means that they provide all essential functions for countless hours of musical enjoyment.

#### Authentic piano performances

High-quality concert grand piano sounds, and a keyboard that's a true pleasure to play assure an even more realistic piano-playing experience.

#### Captures the brilliant resonance

The sound of a grand piano has a more brilliant timbre than that of an upright piano. This is because the sound of a grand piano contains a greater amount of high-frequency components. The ep-97/77 reproduces this characteristic of the grand piano.

#### Extended high-frequency response

One of the features of an acoustic piano is that for the strings of the highest  $1\frac{1}{2}$  octaves, there is no damper to restrict the vibration of the strings, irrespective of whether or not the damper pedal is used. Since this also allows these strings to vibrate sympathetically with other strings, they can sometimes be heard sounding independently from the low and middle-register strings.

The ep-97/77 faithfully simulates these characteristics of the acoustic piano (being a digital instrument, the ep-97/77 contains no strings).

#### Eight Tones for a wide variety of musical genres

The ep-97/77 comes with eight sounds, (called "Tones"), only two of which are acoustic piano sounds. That way, you can also use your instrument for playing harpsichord, organ, and pop/jazz music.

#### Three metronome sounds

The ep-97/77 provides a metronome that lets you use three different sounds. You can easily adjust the tempo and time signature.

#### Record your own performances

The ep-97/77 makes it easy to record your own performances.

Before using this instrument, carefully read the sections on pages 2 and 4. They provide important information concerning the proper operation of the ep-97/77.

To get the most out of the ep-97/77 and to ensure many years of trouble-free service, we urge you to read through this Owner's Manual thoroughly.

To avoid confusion, let's agree to use the word "button" for all keys on the front panel, and only use "key" when referring to the ep-97/77's keyboard.

# Contents

<b>1. Front panel</b> .....	<b>5</b>	<b>5. Recording your performance</b> .....	<b>12</b>
<b>2. Getting Ready</b> .....	<b>6</b>	5.1 Recording .....	12
2.1 Connecting the adapter .....	6	5.2 Listening to the recorded performance .....	13
2.2 Connecting the pedal .....	6	5.3 Deleting the song .....	13
2.3 Turning the power on and off .....	6	<b>6. Convenient functions</b> .....	<b>14</b>
2.4 Adjusting the volume .....	7	6.1 Transposing (same fingering, different notes) .....	14
2.5 Setting up the music stand .....	7	6.2 Master Tuning .....	14
2.6 Connecting headphones (sold separately) .....	7	6.3 "Locking" the buttons .....	15
<b>3. Listening to the demo songs</b> .....	<b>8</b>	<b>7. Connecting to audio equipment</b> ...	<b>16</b>
<b>4. Playing your own music</b> .....	<b>10</b>	<b>8. Connecting to MIDI devices</b> .....	<b>17</b>
4.1 Selecting Tones .....	10	<b>9. Appendix</b> .....	<b>21</b>
4.2 Layering two instrument sounds .....	10	<b>10. MIDI Implementation</b> .....	<b>23</b>
4.3 Adding Reverb .....	10	<b>11. Specifications</b> .....	<b>24</b>
4.4 Adding Chorus .....	10		
4.5 Using the metronome .....	11		

# Important notes

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

## Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- 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.
- 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.
- To avoid possible breakdown, do not use the instrument in a wet area, such as an area exposed to rain or other moisture.

## 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.

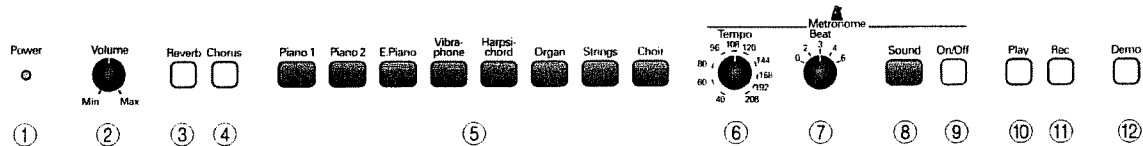
- Never use benzene, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

## Additional Precautions

- 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.
- 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).
- Be sure to put the ep-97/77 in the original cardboard box when you need to move it. Otherwise, use equivalent packaging materials.
- If using some other make of connection cable, please note the following precautions.
- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

All product names mentioned in this document are trademarks or registered trademarks of their respective owners.

# 1. Front panel



*Note:* Button, switch and knob names are enclosed in square brackets ( [ ] ).

*Note:* The front-panel layout of the ep-97 and ep-77 is identical. The only difference between the two is that the ep-97 has 88 keys, while the ep-77 has 76.

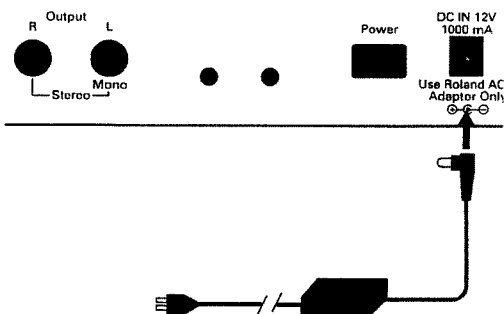
- ① **Power indicator**  
When the power is turned on, this will light in red (see page 6).
- ② **[Volume] knob**  
This knob controls the master volume level (p. 7).
- ③ **[Reverb] button**  
Press this button to add reverberation to the sound (p. 10).
- ④ **[Chorus] button**  
Press this button to add the Chorus effect to the sound (p. 10).
- ⑤ **Tone buttons**  
The following eight buttons are collectively referred to as the Tone buttons. Use these buttons to select the sound to be played on the keyboard (p. 10). The available tones are: Piano 1, Piano 2, E. Piano, Vibraphone, Harpsichord, Organ, Strings, Choir.  
By holding down three of these buttons while pressing a specific key, you can make various settings on the ep-97/77 (see pages 18~20 as well as “Functions assigned to the keyboard” on page 22).
- ⑥ **[Tempo] knob**  
Use this knob to adjust the tempo of the metronome (see page 11).
- ⑦ **[Beat] knob**  
Use this knob to select the time signature of the metronome (see page 11).
- ⑧ **[Sound] button**  
Press this button to select another metronome sound (see page 11).
- ⑨ **[On/Off] button**  
Press this button to switch the metronome on or off (see page 11).
- ⑩ **[Play] button**  
Press this button to play or stop the demo songs, or a recorded performance (p. 8, p. 13). It also is used to start/stop recording (p. 12).
- ⑪ **[Rec] button**  
Press this button to put the instrument in recording standby (p. 12).
- ⑫ **[Demo] button**  
Press this button to access the demo songs (p. 8).  
By holding down this button while you press a specific key, you can make various settings on the ep-97/77 (see page 14 and “Functions assigned to the keyboard” on page 22).

## 2. Getting Ready

*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.*

### 2.1 Connecting the adapter

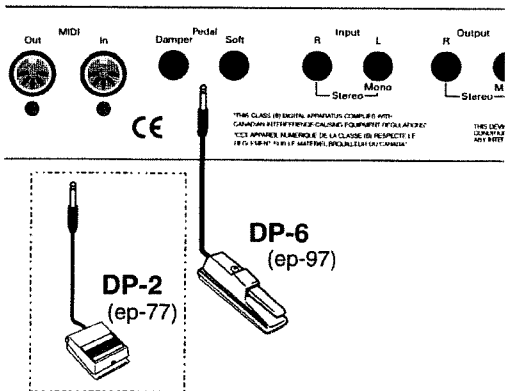
1. Connect the supplied AC adapter to a wall outlet.
2. Connect the ACJ or ACO adapter to the DC In jack on the rear panel of the ep-97/77.



*Note: Strong tension applied to the cord may cause it to be damaged or broken. Be careful not to pull the cord accidentally, or to apply strong pressure to it.*

### 2.2 Connecting the pedal

Connect the supplied pedal to one of the pedal jacks. A DP-6 is supplied with the ep-97, and a DP-2 is supplied with the ep-77.



If the pedal is connected to the Damper jack, it can be used as a damper pedal (to sustain the notes played on the keyboard). If the pedal is connected to the Soft jack, it can be used as a soft pedal (to lower the volume).

**Damper Pedal**—Use this function (jack) when you want the sound to linger on. While the damper pedal is depressed, the sound from the keyboard continues to linger for an extended period, even when you remove your fingers from the keys.

This is the same function as the right-most pedal on an acoustic piano.

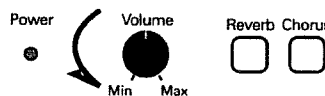
**Soft Pedal**—This pedal softens the sound. Playing with the soft pedal depressed produces a sound that is not as strong as when played with the equivalent strength. This is the same function as the left-most pedal on an acoustic piano.

*Note: By connecting an additional pedal, you can use both a Damper pedal and a Soft pedal simultaneously. Please contact the dealer where you purchased the ep-97/77.*

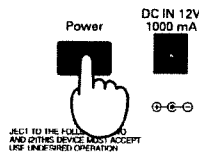
### 2.3 Turning the power on and off

Your ep-97 or ep-77 is fitted with an amplifier and speakers so that you do not need additional devices.

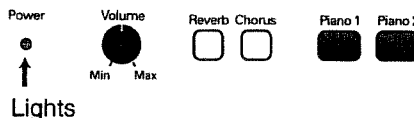
1. Turn the volume all the way down.



2. Press the [Power] switch, to turn on the power. The power switch is located at the right side of the back panel.



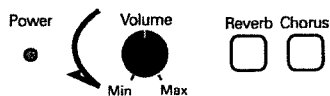
The power indicator lights in red. After a few seconds, the keyboard will produce sound when played.



*Note: Your ep-97/77 is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before it will operate normally.*

### Turning off the power

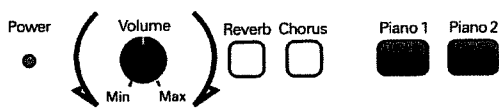
1. Turn the volume all the way down.



2. Press the [Power] switch to turn off the power. The power switch is located at the right side of the back panel. The Power indicator goes dark.

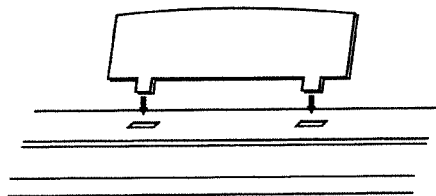
### 2.4 Adjusting the volume

Use the [Volume] knob to adjust the volume.



### 2.5 Setting up the music stand

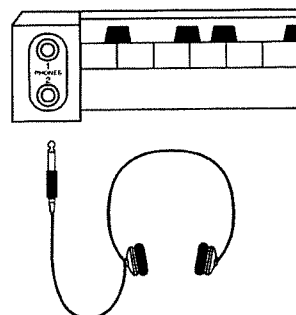
Install the music stand as shown in the diagram.



*Note: Before moving the ep-97/77, be sure to remove the music stand as a safety precaution.*

### 2.6 Connecting headphones (sold separately)

The ep-97/77 features two headphone jacks. This allows two people to listen through headphones simultaneously, making it very useful for lessons and when performing piano pieces for four hands. Additionally, this allows you to play without having to worry about bothering others around you, even at night.



1. Turn the volume all the way down.
2. Connect the headphones to either of the headphone jacks.
3. Adjust the volume.

By connecting headphones to the ep-97/77, you switch off its speakers, which is ideal for playing or practising without disturbing others.

*Note: Be sure to use stereo headphones.*

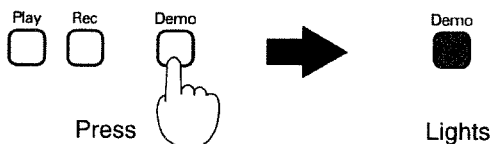
## 3. Listening to the demo songs

The ep-97/77 features eight internal piano songs you may want to listen to before starting to play yourself.

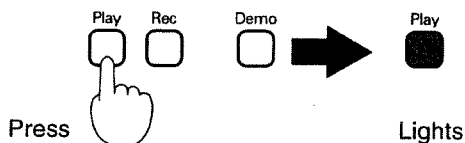
### Playing/stopping the demo songs

1. Press the [Demo] button, and confirm that the indicator has lit.

The [Play] button's indicator starts blinking.



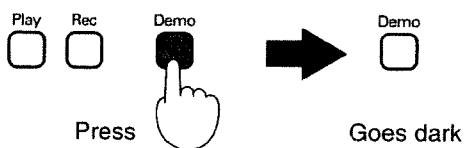
2. Press the [Play] button, and the indicator will change from blinking to lit.



The demo songs will play back consecutively, starting with the song you selected. When the last song has been played, playback will return to the first song and resume.

3. To stop the demo song playback, press the [Demo] button to make the indicator go out.

The demo song playback will stop.



*Note:* You can also stop demo song playback by pressing the [Play] or [Rec] button. In this case, the [Demo] button indicator will not go dark, though. When you press the [Play] button next, the demo will resume playing from the beginning of the song where playback was halted.

*Note:* It is not possible to change the tempo of a demo song.

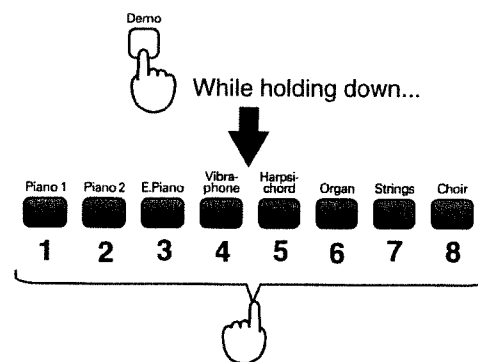
*Note:* If you press the [Demo] button while the metronome is sounding (see page 11), the metronome will stop sounding. It is not possible to use the metronome while a demo song is playing.

### Selecting a song for playback

Here's how you can select and play a desired demo song.

While holding down the [Demo] button, press the Tone button that corresponds to the demo song you wish to hear.

The indicators of the [Demo] button and the [Play] button will light.



...press the button corresponding to the desired song number.

The demo songs will play back consecutively, starting with the song you selected. When the last song has been played, playback will return to the first song and resume.

Subsequent demo songs are automatically played one after another until you stop playback.

### About the demo songs

- 1 Little White Room  
Scott Wilkie, ©1998 Scott Wilkie Media (ASCAP)
- 2 Valse No. 1 in E-flat Major, Op. 18 "Grand Valse Brillante"  
Frederic Chopin, ©1998 Roland Corporation
- 3 "From Foreign Lands And People" from "Scenes From Childhood" Op. 15  
Robert Schumann, ©1998 Roland Corporation
- 4 Nocturne No. 2 in E-flat Major, Op. 9-2  
Frederic Chopin, ©1998 Roland Corporation
- 5 Rhapsody No. 2, Op. 79  
J. Brahms ©1998 Roland Corporation
- 6 Slavonic Dance No. 10, Op. 72-2  
A. Dvorak, ©1998 Roland Corporation
- 7 Etude Op. 25-1 in A-flat Major "The Shepherd Boy"  
Frederic Chopin, ©1998 Roland Corporation
- 8 Fly Free  
John Maul, ©1998 Roland Corporation

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

*Note:* The data of the demo songs are not transmitted to the ep-97/77's MIDI OUTPUT.



---

### Profiles of Composers

**Scott Wilkie**—Scott Wilkie is a contemporary jazz recording artist, based in southern California. He tours frequently with his own band, and also appears as an artist for Roland in the U.S., Japan, Europe and South America. His debut solo album, *Boundless*, was released worldwide in 1999 on Narada/Virgin Records. You can find him on-line at [www.scot-wilkie.com](http://www.scot-wilkie.com).

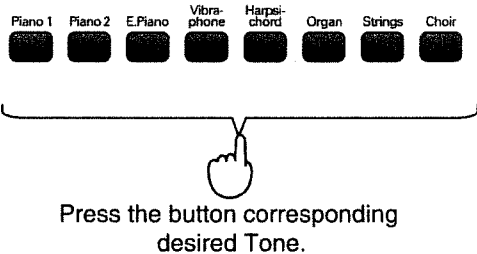
**John Maul**—John Maul is a musician, composer and arranger having graduated from the Royal Academy of Music in London. John's work encompasses studio recordings and live performances, including work with top UK Jazz artists. His writing credits include commercial music for BBC radio and television, as well as scoring jazz and classical works. Having been a product specialist for Roland U.K., John is now actively involved in music software composing/programming for both Roland Japan and various music publishers. Quite recently his "Musical Picture Book", a volume of original piano music encompassing all standards of musical ability, which included the piano and orchestral accompaniment data in SMF format, was published and printed.

## 4. Playing your own music

### 4.1 Selecting Tones

The ep-97/77 allows you to play using eight different sounds including piano. The ep-97/77's sounds are called "Tones".

Use the eight Tone buttons to select tones. When the ep-97/77 is turned on, it automatically selects the Tone "Piano 1".



Press any Tone button.

When you play the keyboard, the selected Tone is played.

**Piano 1:** bright (grand) piano sound

**Piano 2:** mellow piano sound

**E. Piano:** electric piano sound

**Vibraphone:** vibraphone sound

**Harpsichord:** harpsichord sound

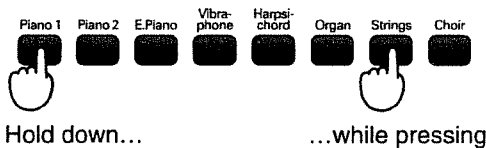
**Organ:** pipe organ sound

**Strings:** the sound of a string instrument ensemble

**Choir:** the sound of a vocal ensemble

### 4.2 Layering two instrument sounds

Playing with two different Tones on the keyboard simultaneously is called a "Layer".



1. While holding down the [Piano 1] button, press the [Strings] button.

When you play the keyboard, both the Piano 1 and Strings Tones are layered. This is only an example, though: you can hold down any Tone button and press another Tone button to layer two sounds.

2. To cancel the Layer function, press any Tone button.

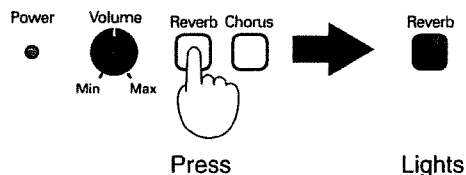
Now, only the sound of the button you pressed will be heard.

### 4.3 Adding Reverb

The ep-97/77 allows you to add reverberation to what you play on the keyboard. The Reverb effect provides a pleasant reverberation that gives the impression that you are performing in a concert hall or similar space.

The ep-97/77 does not remember for which Tones you switch on the Reverb effect. The effect is either on or off. When the power is turned on, the Reverb effect will be cancelled.

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



2. To cancel the Reverb effect, press the [Reverb] button once again to make the indicator go dark.

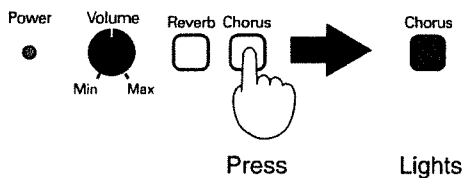
*Note: When two Tones are layered, the [Reverb] button applies to both Tones.*

### 4.4 Adding Chorus

The ep-97/77 allows you to add Chorus to what you play on the keyboard.

The Chorus effect creates a fuller sound with a distinct "stereo" impression ideal for pop music. The setting of the Chorus effect is memorized independently for each sound: when the power is turned on, the Chorus Effect will be applied to the "E.Piano" and "Vibraphone" Tones, and off for the other sounds.

1. Press the [Chorus] button to turn on the indicator. The Chorus Effect will be applied to the currently selected Tone.



*Note: Whenever you select a sound for which the Chorus effect is switched off by default, the [Chorus] button indicator will go dark.*

2. To cancel the Chorus effect, press the [Chorus] button once again to make the indicator go dark.

*Note: When two Tones are layered (see page 10), the [Chorus] button applies to both Tones. When you cancel the Layer mode, you will return to the default Chorus setting of each Tone.*

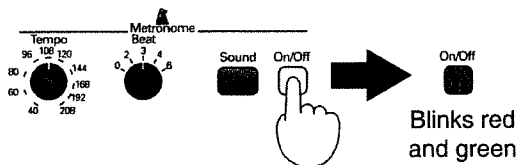
Note: Switching [Chorus] on/off will affect only the music you play on the ep-97/77's keyboard. If you press the [Chorus] button during playback of a demo song or a recorded performance, it has no effect.

## 4.5 Using the metronome

You can start or stop the metronome with a single button.

You can adjust the tempo, time signature and volume of the metronome (see below).

1. Press the [On/Off] button, and the metronome will begin sounding.



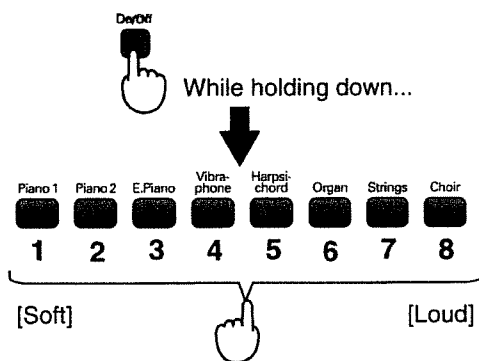
The [On/Off] indicator will blink in red and green in time with the currently selected tempo. It will blink in red on the downbeats, and in green on the upbeat. If the [Beat] knob is in the "0" position, the indicator blinks in green.

2. Press the [On/Off] button once again (indicator goes dark) to stop the metronome.

### Adjusting the metronome volume

The metronome volume can be adjusted in 8 levels. The metronome volume is set to "4" when the ep-97/77 is turned on.

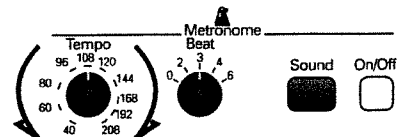
While holding down the [On/Off] button, press a Tone button.



...press the button corresponding to the desired volume.

### Changing the metronome's tempo

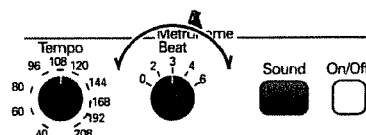
The metronome tempo can be adjusted using the [Tempo] knob. You can select a tempo in the range of 40~208 (quarter notes per minute).



### Changing the metronome's time signature

Use the [Beat] knob to select the number of beats per measure (which is more or less the same as the time signature).

You can select from the following five types: 0 (only upbeat sounds), 2 (2-beat), 3 (3-beat), 4 (4-beat), 6 (6-beat).



### Changing the metronome's sound

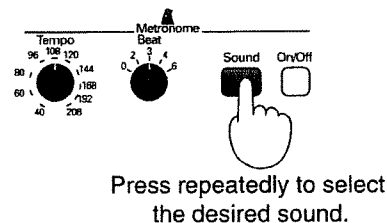
You can select from three types of metronome sound: conventional metronome sound, electronic metronome sound, and dog and cat sounds.

Immediately after switching on the ep-97/77, the conventional sound will be used.

1. Press the [On/Off] button to sound the metronome.

2. Press the [Sound] button.

Each time you press the button, the metronome sound will change to the next available choice: conventional, electronic, "dog and cat sounds".



Press repeatedly to select the desired sound.

# 5. Recording your performance

You can record what you play on your piano.

*Note: When you record, pay attention to the setting of the [Tempo] knob. Be sure to set it to the tempo at which you wish to record.*

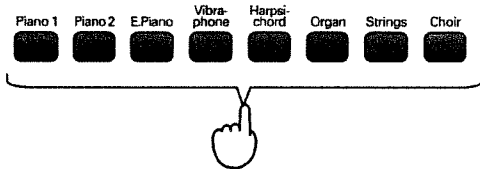
*Note: Only one song can be recorded on the ep-97/77. If a previously recorded performance exists, it will be erased the moment you begin recording another performance.*

*Note: Your song will be erased as soon as you switch off your ep-97/77.*

*Note: After approximately 5,000 notes have been recorded, the [Play] button's and [Rec] button's indicators will go out, and recording will end automatically.*

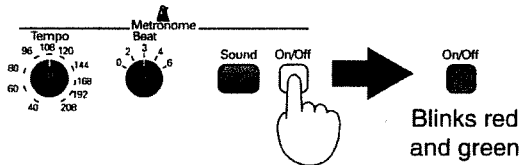
## 5.1 Recording

1. Use the Tone buttons to select the sound with which you wish to perform (see page 10).



You can select other Tones while recording.

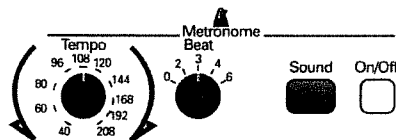
2. Press the [On/Off] button to turn on the indicator. The metronome will sound.



While listening to the metronome, select the tempo and beat (time signature) of the song that you wish to record.

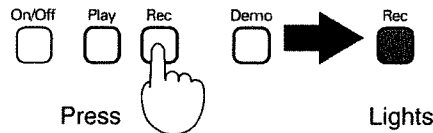
3. Use the [Tempo] knob to select the basic tempo for the song.

*Note: Moving the [Tempo] knob after recording has begun will not change the tempo.*



4. Use the [Beat] knob to select the time for the song. The time of the song cannot be changed during or after recording.

5. Press the [Rec] button (indicator lights).



The ep-97/77 is put in record standby mode and the [Play] indicator flashes.

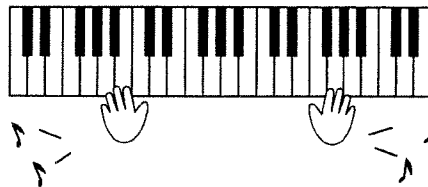
If you want to cancel the recording, then press the [Rec] button once more to make the indicator dark.

If you don't need the metronome, press the [On/Off] button to make the indicator go dark.

In the beginning it is probably a good idea to listen to the metronome as you record. The sound of the metronome is not recorded.

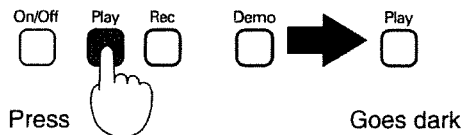
6. Recording will begin as soon as you play a note on the keyboard.

The [Play] indicator now lights steadily. Listen to the metronome, and play along with the tempo.



Instead of playing the keyboard, you can also begin recording by pressing the [Play] button to make the indicator light. In this case, you will hear a two-measure count-in before recording begins.

7. When you are finished recording, press the [Play] button to make the indicator go dark.



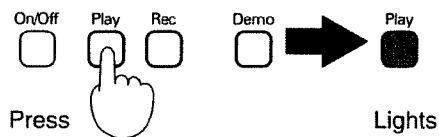
You can use the following methods to record your performances. This implies the use of external instruments, however.

- Connect an audio device to the ep-97/77, and record your performance on a cassette tape or other media (see page 16).
- Connect a MIDI sequencer, and record the performance on the sequencer (see page 17).

## 5.2 Listening to the recorded performance

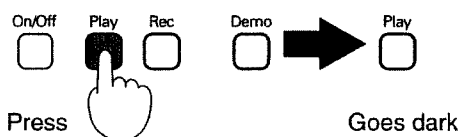
Here's how to listen to (audition) your song:

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



The music you recorded is played back. When the song ends, the [Play] button indicator will go dark, and playback will stop.

2. If you wish to stop playback before the end of your song, press the [Play] button to make the indicator go dark.

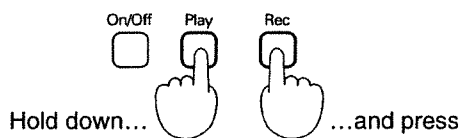


*Note: If you switch on the metronome, playback will begin after a two-measure count-in.*

## 5.3 Deleting the song

Your song will be erased as soon as you switch off your ep-97/77. You can, however, delete it beforehand to record another song.

Hold down the [Play] button while pressing the [Rec] button.



This deletes the recorded song.

## 6. Convenient functions

### 6.1 Transposing (same fingering, different notes)

You can play in a different key—without changing the keys you are playing. That way, even songs originally written in a difficult key with many ♯ (sharps) or ♭ (flats) (i.e. with many black keys), can be played in a more convenient way. This is especially useful when you are used to playing a given song in one key, while someone else wants you to play it in another key: just change the Transpose setting and you're there.

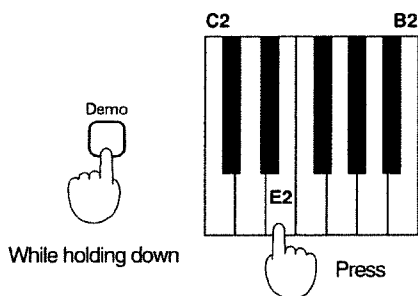
The transposition remains in effect until you change it or until you switch off the ep-97/77.

#### [Ex.] Playing in C and sounding in E

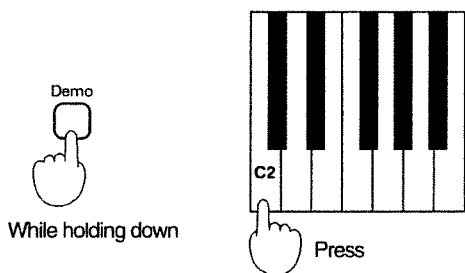
1. While holding down the [Demo] button, press the tonic (root) of the key to which you want to transpose.

Use the C2–B2 notes to select the key. (For our example, press the second “E” from the left.)

*Note:* Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.



2. To return to the previous condition, hold down the [Demo] button while pressing the C2 key.



*Note:* The transposition only applies to the notes you play on the ep-97/77's keyboard. It does not apply to note messages received via the MIDI IN connector.

### 6.2 Master Tuning

In situations such as when playing in ensemble with other instruments, you can adjust the ep-97/77's reference pitch to that of another instrument.

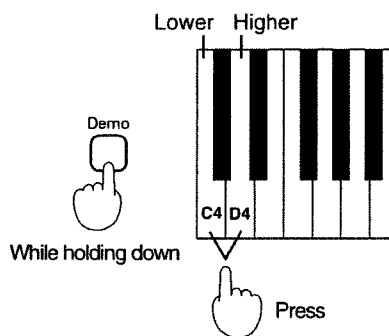
Middle A (“A4”) is generally used for tuning instruments. When playing in ensemble with other instruments, tune each instrument to the same reference pitch to ensure that you will be in tune with each other.

“440.0 Hz” is the power-on default for the reference pitch.

#### Lowering/ raising the reference pitch

While holding down the [Demo] button, press the “C4” note to lower the reference pitch, or the “D4” note to raise it.

*Note:* Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.



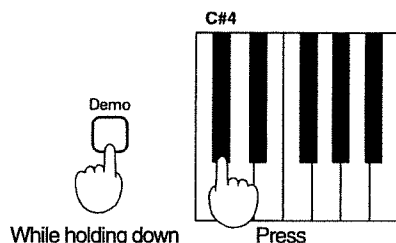
Each time you press the “C4” key, the pitch will fall by 0.1 Hz. If you continue holding the key, the pitch will continue falling.

Each time you press the “D4” key, the pitch will rise by 0.1 Hz. If you continue holding the key, the pitch will continue rising.

### Setting the reference pitch to 440.0Hz

While holding down the [Demo] button, press the "C#4" key on the keyboard.

*Note: Refer to "Functions assigned to the keyboard" on page 22 for the exact keys to press.*



The reference pitch will be set to 440.0 Hz. This is the most commonly used setting.

### Example: setting the reference pitch to 442.0Hz straight away

While holding down the [Demo] button, press the "D#4" key on the keyboard.

*Note: Refer to "Functions assigned to the keyboard" on page 22 for the exact keys to press.*

The standard pitch will be set to 442.0 Hz. This setting is often used for concert pianos. The A4 (Middle A) key will sound at 442.0 Hz.

*Note: By holding down the [Demo] and (Metronome) [Sound] buttons, and pressing the corresponding note, you can hear a reference tone (Middle A) as you adjust the pitch.*

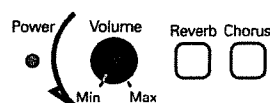
## 6.3 "Locking" the buttons

You can disable all buttons with the exception of certain operations. This is a convenient way for music classes etc. where you don't want your pupils to try out the other Tones or to play with the recording function.

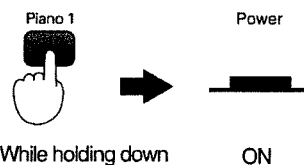
While the panel is locked, only the following operations can be performed.

- Play using the piano sound
- Key transpose (see page 14)
- Master Tuning (see page 14)

1. Before switching the power on, turn the volume all the way down.



2. While holding down the [Piano 1] button, press the [Power] switch.



3. Adjust the volume.

Playing the keyboard now produces a Piano 1 Tone. It will not be possible to switch to another sound.

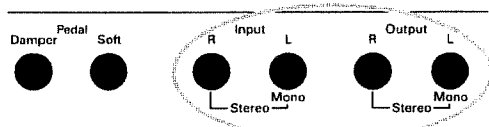
4. Switching the power off and back on again releases the panel lock and returns the ep-97/77 to its usual state.

*Note: If you turn on the power while holding down the Metronome [On/Off] button, it will also be possible to sound the metronome. In that case, you can also adjust the metronome tempo, time, volume, and sound (while the remaining functions are locked).*

# 7. Connecting to audio equipment

Read this chapter if you wish to connect the ep-97/77 to an audio device. Connecting the ep-97/77 to an audio device allows you to use an external amplifier or to record your performance onto cassette, MD or other recording media.

## About the audio jacks



**Output Jacks**—Use audio cables (sold separately) to connect the ep-97/77 to an amplifier, a mixing console, your HiFi amp, etc. If you wish to record your performance, connect the Output jacks of your ep-97/77 to the inputs of the accessed deck, MD recorder, etc.

**Input Jacks**—You can use audio cables (sold separately) to connect another audio producing device to the ep-97/77, and hear its sound through the speakers of the ep-97/77.

## 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.*

1. Turn the volume down completely on all equipment.
2. Turn off the ep-97/77 and any other devices to be connected.
3. Use audio cables (sold separately) to connect the other device to the ep-97/77.

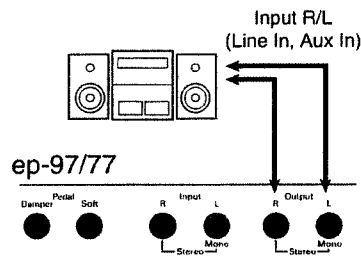
*Note: If the device you are connecting is monaural, connect it to the L (Mono) jack. In this case, connect nothing to the R jack of the ep-97/77.*

Use a cable from Roland to make the connection. For cable makes, please note the following: Some connection cables contain resistors. Do not use them. They can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.

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

*Note: When connecting the ep-97/77 to an external amplifier, be sure to set the [Volume] control no higher than 3/4 (“3 o’clock”).*

## Using an external amplifier or recording your music with an audio device

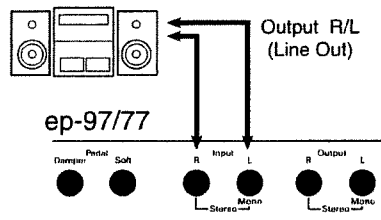


1. Turn on the power to the ep-97/77.
2. Turn on the power to the connected equipment.
3. Adjust the volume.

### Recording procedure

1. Connect the ep-97/77 and the audio device.
2. Start recording on the connected audio device.
3. Begin playing on the ep-97/77.
4. When you finish playing, stop recording.

## Listening to the sound of an audio device through the speakers of the ep-97/77



1. Turn on the power to the connected equipment.
2. Turn on the power to the ep-97/77.
3. Adjust the volume.



## 8. Connecting to MIDI devices

Read this chapter if you wish to connect the ep-97/77 to an external MIDI device.

If the ep-97/77 is connected to a MIDI sequencer, such as one from the MT series, a performance recorded on the ep-97/77 can be transmitted to the MIDI sequencer. It is also possible to record the performance directly on the MIDI sequencer. The recorded performance can be saved on the MIDI sequencer.

When the ep-97/77 is connected to an MT series sequencer, the rich variety of sounds built into the MT can be played from the keyboard of the ep-97/77.

### About MIDI

MIDI, short for “Musical Instrument Digital Interface,” was developed as a standard for the exchange of performance data between electronic instruments and computers.

The ep-97/77 is equipped with MIDI connectors to allow such exchange of performance data with external equipment and devices. Connecting the keyboard to other devices via these jacks provides you with an even greater variety of ways to use your ep-97/77.

### About the MIDI connectors

**MIDI In connector**—Use a MIDI cable (sold separately) to connect from here to the MIDI Out connector on the external MIDI device.

MIDI messages sent from connected external equipment will be received here. As a result, the ep-97/77 will produce sound, change tones, or perform other operations.

**MIDI Out connector**—Use a MIDI cable (sold separately) to connect from here to the MIDI In connector on the external MIDI device. Performance data detailing what has been played on the keyboard, and other data, such as that generated when a pedal is depressed, is sent out from here to external MIDI devices.

### 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.*

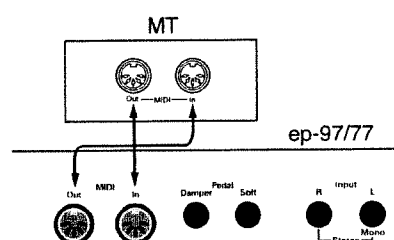
1. Turn the volume down completely on all equipment.
2. Turn off the ep-97/77 and any other devices to be connected.
3. Use MIDI cable (sold separately) to connect the external MIDI device to the MIDI connector on the ep-97/77.  
Take a look at the connection examples.
4. If necessary, use audio cables to connect the other devices to the ep-97/77 (see page 16).

5. You should also make the settings below as needed. For details on making MIDI-related settings for the ep-97/77, refer to “Cautions when connecting an external MIDI device” on page 18 and following.

6. Turn on the power to all equipment.

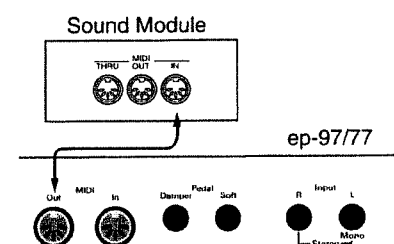
7. Adjust the volume.

### Connecting to a sequencer (Roland MT series)



*Note: The MT-80s has no MIDI Out connector.*

### Connecting to a MIDI sound module

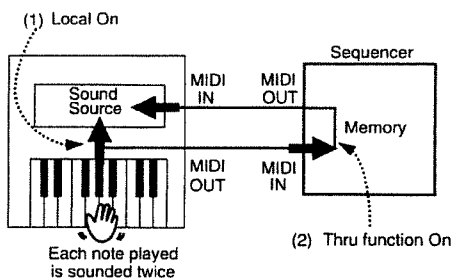


### Cautions when connecting an external MIDI device

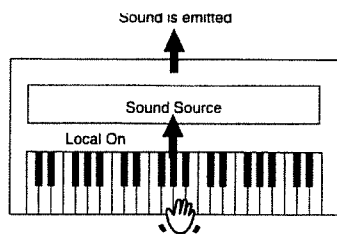
Here we will explain the “Local On/Off” and “Omni On/Off” settings that you need to be aware of when connecting the ep-97/77 to an external MIDI device.

#### Disconnecting the ep-97/77's keyboard and internal sound generator—Local On/Off

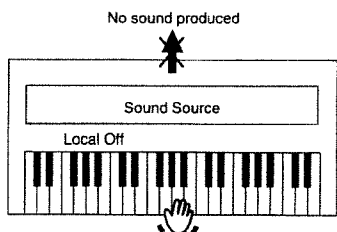
When the ep-97/77 is connected to a MIDI sequencer or the like, set it to Local Off. As shown in the diagram, the data that is produced when you play the keyboard will reach the sound generator by two routes, (1) and (2), causing each note to be played in duplicate. To prevent this, select the Local Off setting to cut route (1).



When Local is on:



When Local is off:



Note: Be aware that if you set your instrument to Local Off when no external MIDI device is connected, there will be no sound.

Note: Local On is set when the power is switched on.

While holding down the [Piano 1] button, [Piano 2] button, and [Harpichord] button, press the “B4” note to turn the setting On, or press the “C5” note to turn the setting Off.

Note: Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.

If the ep-97/77 is connected to a Roland MT series (except MT-80S), it is not necessary to make the Local Off setting. When the power is turned on, the MT will transmit a Local Off message. If you first switch on the ep-97/77 and then the MT, the ep-97/77 will automatically be set to Local Off.

#### Receiving on all MIDI channels—Omni

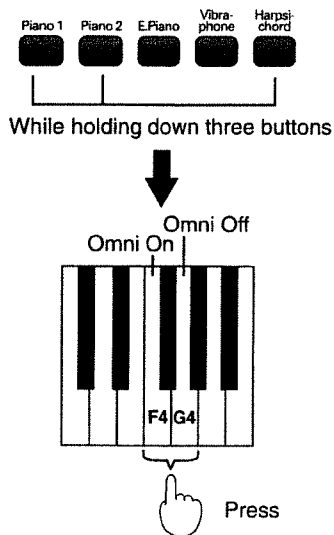
MIDI features sixteen MIDI channels, numbered 1–16. The connected devices must be set to use the same MIDI channel as the ep-97/77, otherwise no sound will be produced.

When set to Omni On, the ep-97/77 receives on all MIDI channels, so that you do not need to set a specific one. This may be practical for playing back sequences containing piano music on different channels for the left and right hands. It should not be used, however for playing back commercial Standard MIDI Files as that will cause the ep-97/77 to produce so many notes that you hardly recognize the piece in question.

Omni Off is automatically set when the power is switched on.

Hold down the [Piano 1] button, the [Piano 2] button, and the [Harpichord] button, and press the “F4” note to turn the setting On, or the “G4” note to turn the setting Off.

Note: Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.



## 8.1 Setting the MIDI channel

MIDI features sixteen MIDI channels, numbered 1–16. The connected devices must be set to use the same MIDI channel, otherwise no sound will be produced.

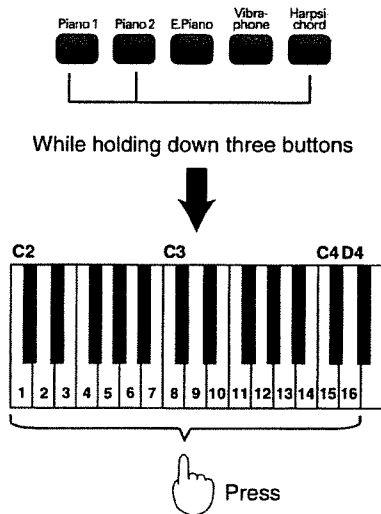
- In a setup where you wish to play the ep-97/77 and also have another MIDI-equipped instrument or sound module play the same notes, you must set the channel used for reception on your external device to the same channel that the ep-97/77 uses for transmission.
- If you use another MIDI keyboard as a master instrument and want the ep-97/77 to play these notes, you need to set the receive channel on the ep-97/77 to the same channel that the master keyboard is transmitting on.
- If you want to use the ep-97/77 as tone generator for an external sequencer, select the MIDI channel assigned to the track whose data the ep-97/77 should play back.

*Note: When the ep-97/77 is turned on, channel “1” is selected.*

While holding down the [Piano 1], [Piano 2], and [Harpichord] buttons, press the appropriate key on the keyboard.

The MIDI transmit and receive channel will switch to the number that corresponds to the note you pressed.

*Note: Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.*



## 8.2 Program Changes

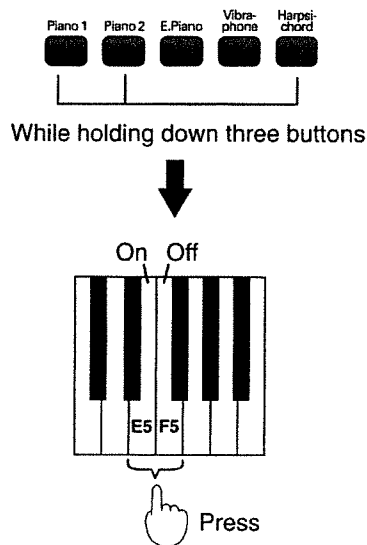
Program Changes are messages that tell an instrument to “switch to sound number x”. When the other device receives this message, it will switch to whichever of its sounds corresponds to the number contained in the message.

When you press one of the ep-97/77’s Tone buttons to select another Tone, a Program Change message with the corresponding Program Number is sent via the MIDI Out connector. Furthermore, a Program Change message received via the MIDI In will cause the ep-97/77 to select the corresponding Tone.

Each time the power is turned on, the instrument will be set to “On” (it will transmit/receive Program Change messages).

If you set it to “Off,” the ep-97/77 will no longer send out Program Change messages and ignore any Program Change messages transmitted by an external unit.

While holding down the [Piano 1] button, [Piano 2] button, and [Harpichord] button, press the “E5” note to turn the setting On, or the “F5” note to turn the setting Off.



*Note: Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.*

The Tones and their corresponding Program Change numbers appear below:

Progr	Tone	Progr	Tone
01	Piano 1	19	Piano 2 + Organ
02	Piano 2	20	Piano 2 + Strings
03	E.Piano	21	Piano 2 + Choir
04	Vibraphone	22	E.Piano + Vibraphone
05	Harpsichord	23	E.Piano + Harpsichord
06	Organ	24	E.Piano + Organ
07	Strings	25	E.Piano + Strings
08	Choir	26	E.Piano + Choir
09	Piano 1 + Piano 2	27	Vibraphone + Harpsichord
10	Piano 1 + E.Piano	28	Vibraphone + Organ
11	Piano 1 + Vibraphone	29	Vibraphone + Strings
12	Piano 1 + Harpsichord	30	Vibraphone + Choir
13	Piano 1 + Organ	31	Harpsichord + Organ
14	Piano 1 + Strings	32	Harpsichord + Strings
15	Piano 1 + Choir	33	Harpsichord + Choir
16	Piano 2 + E.Piano	34	Organ + Strings
17	Piano 2 + Vibraphone	35	Organ + Choir
18	Piano 2 + Harpsichord	36	Strings + Choir

### 8.3 Control Changes

Messages known as “Control Changes” are used to inform another device when you press a pedal, switch on/off the Chorus or Reverb effect, etc.

Each time the power is turned on, the instrument will be set to transmit/receive all Control Change messages.

If you set it to “Off” the ep-97/77 will no longer send or receive Control Change messages.

While holding down the [Piano 1] button, [Piano 2] button, and [Harpsichord] button, press the “A5” note to turn the setting On, or the “B5” note to turn the setting Off.

*Note: Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.*

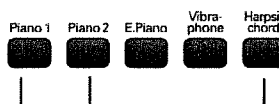
*Note: If you want to know more about Control Change Number, please refer to “MIDI Implementation” on page 23.*

### 8.4 Transmitting song data from MIDI OUT

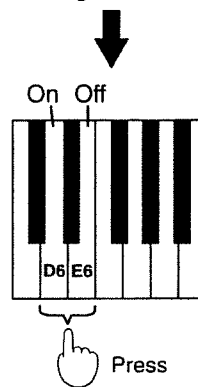
If this setting is left “On”, the music recorded with the ep-97/77 can be transmitted from the MIDI Out connector. Each time the power is turned on, this setting reverts to “Off.”

Hold down the [Piano 1] button, the [Piano 2] button, and the [Harpsichord] button, and press the “D6” note to turn the setting On, or the “E6” note to turn the setting Off.

*Note: Refer to “Functions assigned to the keyboard” on page 22 for the exact keys to press.*



While holding down three buttons



*Note: The data that you recorded will disappear when the power of the ep-97/77 is turned off. If you wish to save the recording on an external device, use the following procedure.*

1. Connect a MIDI sequencer such as the MT series (see page 17).
2. Record the performance on the ep-97/77.
3. Set this setting to “On.”
4. Start recording with the connected MIDI device.
5. Start playback of the recorded song on the ep-97/77.
6. When playback ends, stop recording.
7. Use the connected MIDI sequencer to save the data on a floppy disk or other media.

## 9. Appendix

### 9.1 Troubleshooting

If you are encountering problems with the ep-97/77, please read the section below before assuming that there is a malfunction.

#### The piano cannot be switched on

Is the adapter properly connected? (p. 6)

#### No sound is produced

Is the [Volume] knob set to the minimum position? (p. 7)

Are headphones connected? (p. 7)

Is Local On/Off set to "Off"? (p. 18)

#### Demo songs do not play

Did you lock the panel? (p. 15)

#### Metronome does not sound

Did you lock the panel? (p. 15)

#### Buttons do not function

Did you lock the panel? (p. 15)

#### Keyboard sound does not change

Did you lock the panel? (p. 15)

#### Two sounds are produced when the keyboard is played

Have you layered two Tones? (p. 10)

#### The pitch of the keyboard sounds incorrect

Is the Master Tuning setting correct? (p. 14)

Is the Transpose setting correct? (p. 14)

#### The pedals are not functioning, or function intermittently

Are the pedals connected properly? (p. 6)

#### Can't record

Did you lock the panel? (p. 15)

Is the [Demo] button's indicator lit? Press the [Demo] button; the indicator goes out (p. 8).

The metronome sound or count-in is never recorded.

#### The recorded performance has been deleted

The song data that you recorded will disappear when the power of the ep-97/77 is turned off (p. 12).

If you record again after recording, the first-recorded performance will be erased (p. 12).

#### Bass notes sound wrong/buzzing or vibration occurs

If you can't hear the problem in the *headphones*:  
When playing at high volumes, resonance may occur in the piano itself or in objects near the piano. At times, other objects in the room, such as fluorescent lights or glass doors, could start vibrating. This

becomes more noticeable when sounding the lower frequencies at high volume. To minimize such unwanted resonance, please observe the following:

- Locate the instrument at least 10~15 cm away from the walls.
- Reduce the volume.
- Increase the distance from the object that is resonating.

If you can hear the problem in the *headphones*, there may be another reason. Please contact your dealer.

#### In the upper range, the sound changes abruptly beyond a certain key

On an acoustic piano, notes in the upper one and a half octaves of the keyboard continue to sound until they decay naturally, regardless of the damper pedal. There is a difference in the timbre as well. Roland pianos faithfully simulate such characteristics of the acoustic piano. On the ep-97/77, the range that is unaffected by the damper pedal will change depending on the Key Transpose setting.

#### When the ep-97/77 is connected to an external device

##### No sound is produced

Is the power to all equipment turned on?

Are the connections between ep-97/77 and the MIDI sequencer or the other external devices correct? (p. 16, p. 17)

Is the MIDI channel setting correct? (p. 19)

Is the Omni On/Off setting correct? (p. 18)

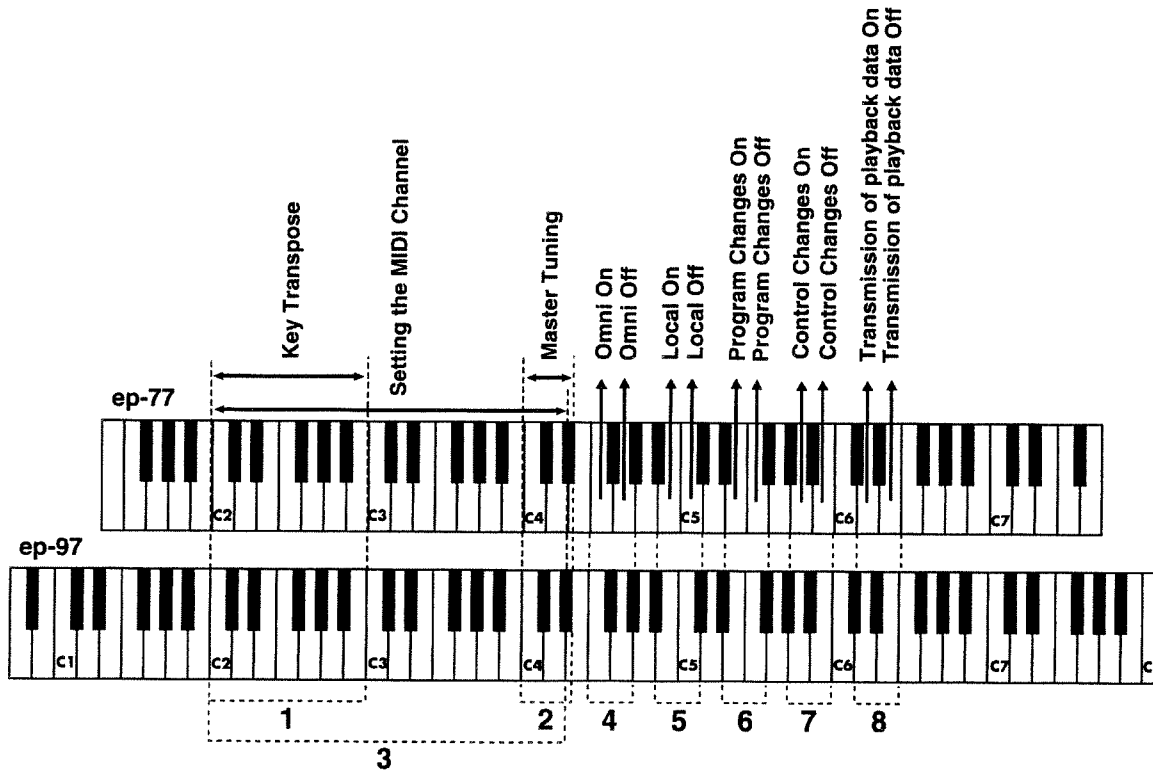
##### Strange sounds (double notes) are produced when the ep-97/77 is played

With the sequencer's "Thru" function on, the same notes may be sounded twice. Switch off the Local function (p. 18).

##### The volume level of the instrument connected to input jacks is too low

Could you be using a connection cable that contains a resistor? Use a connection cable without resistor.

## 9.2. Functions assigned to the keyboard



1, 2—While holding down the [Demo] button, press the appropriate key on the keyboard.

3~8—While holding down the [Piano 1], [Piano 2], and [Harpichord] buttons, press the appropriate key on the keyboard.

# 10. MIDI Implementation

DIGITAL PIANO  
Model ep-77/97

## MIDI Implementation Chart

Date : September 1999  
Version : 1.00

ENGLISH

Function...	Transmitted	Recognized	Remarks
Basic Channel Default Changed	1 1-16	1 1-16	
Mode Default Messages Altered	Mode 3 x .....	Mode 3 OMNI ON/OFF	
Note Number : True Voice	15-113 *1 22-108 *2 .....	0-127 15-113	*1 ep-97 *2 ep-77
Velocity Note ON Note OFF	O x 8n v=64	O x	
After Touch Key's Ch's	x x	x x	
Pitch Bend	x	x	
Control Change 6, 38 7 11 64 66 67 91 93 100, 101	O *3 x x O *3 x O *3 O *3 O *3 O *3 O *3 O *3	O *3 O *3 *4 O *3 *4 O *3 *4 O *3 *4 O *3 *4 O *3 O *3 O *3 O *3	Data entry Volume Expression Hold 1 Sostenuto Soft Effect1 depth (Reverb) Effect3 depth (Chorus) RPN LSB, MSB
Prog Change : True #	O (0-35) *3 .....	O (0-127) *3 0-35	
System Exclusive	O	O	
System Common : Song Pos : Song Sel : Tune	x x x	x x x	
System Real Time : Clock : Commands	x x	x x	
Aux Message : All sound off : Reset all controllers : Local Control : All Notes OFF : Active Sense : Reset	x x x x O x	x O O O (123-127) O x	
Notes	*3 O x is selectable. *4 These message can affect only MIDI notes.		

Mode 1 : OMNI ON, POLY

Mode 2 : OMNI ON, MONO

O : Yes

Mode 3 : OMNI OFF, POLY

Mode 4 : OMNI OFF, MONO

X : No

A separate publication titled "MIDI Implementation" is also available. It provides complete details concerning the way MIDI has been implemented on this unit. If you should require this publication (such as when you intend to carry out byte-level programming), please contact the nearest Roland Service Center or authorized Roland distributor.

## 11. Specifications

### ep-97, ep-77: Roland Digital Piano

#### Keyboard

ep-77: 76 weighted keys with touch-sensitivity

ep-97: 88 weighted keys with touch-sensitivity

#### Keyboard modes

Whole, Dual

#### Sound Generator

**Maximum Polyphony**—64 voices

**Tones**—Piano 1, Piano 2, Electric Piano, Vibraphone, Harpsichord, Organ, Strings, Choir

**Master Tuning**—415.3 Hz to 466.2 Hz (0.1-Hz steps)

**Effects**—Chorus (On/Off), Reverb (On/Off)

**Key Transposition**—6 to +5 (semitone steps)

#### Composer

**Metronome**—Beat: 0, 2, 3, 4, 6, Volume: 8 levels, Sounds: 3 types, 1 track, 1 song

**Note Storage**—Approx. 5,000 notes

**Tempo**—Quarter note (♩) = 40 to 208

**Resolution**—96 ticks per quarter note

**Control**—Play/Stop, Rec, Tempo

#### Others

**Rated Power Output**—5 W x 2

**Speakers**—12 cm x 2

**Connectors**—Output Jacks (L/Mono, R), Input Jacks (L/Mono, R), Headphones Jack x 2 (stereo), Pedal Connector x 2 (Damper/Soft), MIDI In, MIDI Out

**Power Supply**—ep-77: ACO adapter (12V/1A), ep-97: ACJ adapter (12V, 2A)

**Power Consumption**—ep-77: 1A (1000mA), ep-97: 1.7A (1700mA)

#### Dimensions

**ep-97:** 1326 x 382 x 114mm (W x D x H)

With stand: 1326 x 390 x 766mm

**ep-77:** 1157 x 343 x 110mm (W x D x H)

With stand: 1157 x 390 x 754mm

#### Weight

ep-97: 15 kg

ep-77: 10.5 kg

#### Accessories

AC adapter (ACJ or ACO type)

Music Stand

Owner's Manual

Pedal Switch (DP-6/ep-97, DP-2/ep-77)

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



- 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/amperes) 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.



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



- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor.



- 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 body, or its plugs, with wet hands when plugging into, or unplugging from, an outlet or this unit.



**CAUTION**

- If you need to move the instrument, take note of the precautions listed below. At least two persons are required to safely lift and move the unit. It should be handled carefully, all the while keeping it level. Make sure to have a firm grip, to protect yourself from injury and the instrument from damage.
- Check to make sure the knob bolt securing the unit to the stand have not become loose. Fasten them again securely whenever you notice any loosening.
- Disconnect the power cord.
- Disconnect all cords coming from external devices.
- Remove the music stand.



- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (p. 6).



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



For the U.K.

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

BLUE: NEUTRAL  
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:  
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.  
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.  
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

For EU Countries



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

For the USA

**FEDERAL COMMUNICATIONS COMMISSION  
RADIO FREQUENCY INTERFERENCE STATEMENT**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.  
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

**NOTICE**

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

**Al Fanny Trading Office**  
P.O. Box 2904,  
El Horneih Heliopolis, Cairo,  
EGYPT  
TEL: (02) 4185531

#### REUNION

**Maison FO - YAM Marcel**  
25 Rue Jules Mermet  
Chaudron - BP79 97491  
Ste Clotilde REUNION  
TEL: 28 29 16

#### SOUTH AFRICA

**That Other Music Shop  
(PTY) Ltd.**  
11 Melle Street (Cnr Melle and  
Juta Street)  
Braamfontein 2001  
Republic of SOUTH AFRICA  
TEL: (011) 403 4105

**Paul Bothner (PTY) Ltd.**  
17 Werdmuller Centre Claremont  
7700  
Republic of SOUTH AFRICA

P.O. Box 23032  
Claremont, Cape Town  
SOUTH AFRICA, 7735  
TEL: (021) 64 4030

### ASIA

#### CHINA

**Beijing Xinghai Musical  
Instruments Co., Ltd.**  
6 Huangmichang Chao Yang  
District, Beijing, CHINA  
TEL: (010) 6774 7491

#### HONG KONG

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

#### INDIA

**Rivera Digitec (India) Pvt. Ltd.**  
409, Nirman Kendra Mahalaxmi  
Flats Compound Off. Dr. Edwin  
Moses Road, Mumbai-400011,  
INDIA  
TEL: (022) 498 3079

#### INDONESIA

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

#### KOREA

**Cosmos Corporation  
Service Station**  
261 2nd Floor Nak-Won Arcade  
Jong-Ro ku, Seoul, KOREA  
TEL: (02) 742 8844

#### MALAYSIA

**Bentley Music SDN BHD**  
140 & 142, Jalan Bukit Bintang  
55100 Kuala Lumpur, MALAYSIA  
TEL: (03) 2443333

#### PHILIPPINES

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

#### SINGAPORE

**Swee Lee Company**  
150 Sims Drive,  
SINGAPORE 387381  
TEL: 748-1669

#### CRISTOFORI MUSIC PTE LTD

Blk 3014, Bedok Industrial Park E,  
#02-2148, SINGAPORE 489980  
TEL: 243 9555

#### 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 Verg NakornKasem, Soi 2,  
Bangkok 10100, THAILAND  
TEL: (02) 2248821

#### VIETNAM

**Saigon Music**  
138 Tran Quang Khai St.,  
District 1  
Ho Chi Minh City  
VIETNAM  
TEL: (08) 844-4068

### AUSTRALIA/ NEW ZEALAND

#### AUSTRALIA

**Roland Corporation  
Australia Pty., Ltd.**  
38 Campbell Avenue  
Dee Why West, NSW 2099  
AUSTRALIA  
TEL: (02) 9982 8266

#### NEW ZEALAND

**Roland Corporation (NZ) Ltd.**  
97 Mt. Eden Road, Mt. Eden,  
Auckland 3, NEW ZEALAND  
TEL: (09) 3098 715

### CENTRAL/LATIN AMERICA

#### ARGENTINA

**Instrumentos Musicales S.A.**  
Florida 656 2nd Floor  
Office Number 206A  
Buenos Aires  
ARGENTINA, CP1005  
TEL: (54-11) 4- 393-6057

#### BRAZIL

**Roland Brasil Ltda.**  
R. Coronel Octaviano da Silveira  
203 05522-010  
Sao Paulo BRAZIL  
TEL: (011) 3743 9377

#### CHILE

**Comercial Fancy S.A.**  
Avenida Rancagua #0330  
Providencia Santiago, CHILE  
TEL: 56-2-373-9100

#### EL SALVADOR

**OMNI MUSIC**  
75 Avenida Notre y Alameda  
Juan Pablo 2 No. 4010  
San Salvador, EL SALVADOR  
TEL: (503) 262-0788

#### MEXICO

**Casa Veerkamp, s.a. de c.v.**  
Av. Toluca No. 323 Col. Olivar de  
los Padres 01780 Mexico D.F.  
MEXICO  
TEL: (525) 668 04 80

**La Casa Wagner de  
Guadalajara s.a. de c.v.**  
Av. Corona No. 202 S.J.  
Guadalajara, Jalisco Mexico  
C.P. 44100 MEXICO  
TEL: (3) 613 1414

#### PANAMA

**Productos Superiores, S.A.**  
Apartado 655 - Panama 1  
REP. DE PANAMA  
TEL: (507) 270-2200

#### URUGUAY

**Todo Musica**  
Cuareim 1488, Montevideo,  
URUGUAY  
TEL: 5982-924-2335

#### VENEZUELA

**Musiland Digital C.A.**  
Av. Francisco de Miranda,  
Centro Parque de Cristal, Nivel  
C2 Local 20 Caracas  
VENEZUELA  
TEL: (02) 285 9218

### EUROPE

#### AUSTRIA

**Roland Austria GES.M.B.H.**  
Siemensstrasse 4, P.O. Box 74,  
A-6063 RUM, AUSTRIA  
TEL: (0512) 26 44 260

#### BELGIUM/HOLLAND/ LUXEMBOURG

**Roland Benelux N. V.**  
Houtstraat 3 B-2260 Oevel  
(Westerlo) BELGIUM  
TEL: (014) 575811

#### DENMARK

**Roland Scandinavia A/S**  
Nordhavnsvej 7, Postbox 880  
DK-2100 Copenhagen  
DENMARK  
TEL: (039)16 6200

#### FRANCE

**Roland France SA**  
4, Rue Paul Henri SPAAK  
Parc de l'Esplanade F 77 462 St.  
Thibault Lagny Cedex FRANCE  
TEL: 01 600 73 500

#### FINLAND

**Roland Scandinavia As,  
Filial Finland**  
Lautasaarentie 54 B  
Fin-00201 Helsinki, FINLAND  
TEL: (9) 682 4020

#### GERMANY

**Roland Elektronische  
Musikinstrumente  
Handelsgesellschaft mbH.**  
Oststrasse 96, 22844 Norderstedt,  
GERMANY  
TEL: (040) 52 60090

#### GREECE

**STOLLAS S.A.**  
Music Sound Light  
155, New National Road  
26422 Patras, GREECE  
TEL: 061-435400

#### HUNGARY

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

#### IRELAND

**Roland Ireland**  
Audio House, Belmont Court,  
Donnybrook, Dublin 4,  
Republic of IRELAND  
TEL: (01) 2603501

#### 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: 273 0074

#### POLAND

**P. P. H. Brzostowicz**  
UL. Gibraltarska 4,  
PL-03664 Warszawa POLAND  
TEL: (022) 679 44 19

#### PORTUGAL

**Tecnologias Musica e Audio,  
Roland Portugal, S.A.**  
RUA SANTA CATARINA  
131 - 4000 Porto -PORTUGAL  
TEL: (02) 208 44 56

#### ROMANIA

**FBS LINES**  
Plata Libertatii 1,  
RO-4200 Cheorgheni  
TEL: (066) 164-609

#### RUSSIA

**Slami Music Company**  
Sadojava-Triumfalnaja st., 16  
103006 Moscow, RUSSIA  
TEL: 095 209 2193

#### SPAIN

**Roland Electronics  
de España, S. A.**  
Calle Bolivia 239 08020 Barcelona,  
SPAIN  
TEL: (93) 308 1000

#### SWEDEN

**Roland Scandinavia A/S  
SWEDISH SALES OFFICE**  
Danvik Center 28, 2 tr.  
S-131 30 Nacka SWEDEN  
TEL: (08) 702 0020

#### SWITZERLAND

**Roland (Switzerland) AG  
Musitronic AG**  
Gerberstrasse 5, CH-4410 Liestal,  
SWITZERLAND  
TEL: (061) 921 1615

#### UKRAINE

**TIC-TAC**  
Mira Str. 19/108  
P.O. Box 180  
295400 Munkachevo, UKRAINE  
TEL: (03131) 414-40

#### UNITED KINGDOM

**Roland (U.K.) Ltd.**  
Atlantic Close, Swansea  
Enterprise Park SWANSEA  
SA7 9FJ,  
UNITED KINGDOM  
TEL: (01792) 700139

### MIDDLE EAST

#### BAHRAIN

**Moon Stores**  
Bab Al Bahrain Road,  
P.O. Box 20077  
State of BAHRAIN  
TEL: 211 005

#### CYPRUS

**Radex Sound Equipment Ltd.**  
17 Diagorou St., P.O. Box 2046,  
Nicosia CYPRUS  
TEL: (02) 453 426

#### ISRAEL

**Halilit P. Greenspoon &  
Sons Ltd.**  
8 Retziv Fa'aliya Hashnaya St.  
Tel-Aviv-YahO ISRAEL  
TEL: (03) 6823666

#### JORDAN

**AMMAN Trading Agency**  
Prince Mohammed St. P.O. Box  
825 Amman 11118 JORDAN  
TEL: (06) 4641200

#### KUWAIT

**Easa Husain Al-Yousifi**  
P.O. Box 126 Safat 13002  
KUWAIT  
TEL: 5719499

#### LEBANON

**A. Chahine & Fils**  
P.O. Box 16-5857 Gergi Zeidan St.  
Chahine Building, Achrafieh  
Beirut, LEBANON  
TEL: (01) 335799

#### OMAN

**OHI Electronics & Trading  
Co. LLC**  
P.O. Box 889 Muscat  
Sultanate of OMAN  
TEL: 959085

#### QATAR

**Badie Studio & Stores**  
P.O. Box 62,  
DOHA QATAR  
TEL: 423554

#### SAUDI ARABIA

**aDawlah Universal  
Electronics APL**  
P.O. Box 2154 ALKHOBAR 31952,  
SAUDI ARABIA  
TEL: (03) 898 2081

#### SYRIA

**Technical Light & Sound  
Center**  
Khaled Ibn Al Walid St.  
P.O. Box 13520  
Damascus - SYRIA  
TEL: (011) 2235 384

#### TURKEY

**Barkat Muzik aletleri ithalat  
ve ihracat limited ireketi**  
Siraselviler Cad. Billurcu Sok.  
Mucadelle Cikmeze No. 11-13  
Taksim, Istanbul, TURKEY  
TEL: (0212) 2499324

#### U.A.E.

**Zak Electronics & Musical  
Instruments Co.**  
Zabeel Road, Al Sherooq Bldg.,  
No. 14, Grand Floor DUBAI  
U.A.E.  
P.O. Box 8050 DUBAI, U.A.E.  
TEL: (04) 360715

### NORTH AMERICA

#### CANADA

**Roland Canada Music Ltd.  
(Head Office)**  
5480 Parkwood Way Richmond  
B. C., V6V 2M4 CANADA  
TEL: (604) 270 6626

#### Roland Canada Music Ltd. (Toronto Office)

Unit 2, 109 Woodbine Downs  
Blvd, Etobicoke, ON  
M9W 6Y1 CANADA  
TEL: (0416) 213 9707

#### U. S. A.

**Roland Corporation U.S.**  
5100 S. Eastern Avenue  
Los Angeles, CA 90040-2938,  
U. S. A.  
TEL: (323) 890 3700



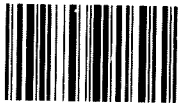
 Roland®

---

**K6018361**

UPC

K6018361



:099:

**Roland**