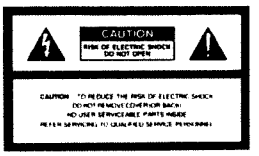
Owner's Manual

RolandPiano 6000s



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

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

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

IMPORTANT SAFETY INSTRUCTIONS

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

1. Read all the instructions before using the product.
2. To reduce the risk of injury, close supervision is necessary when a product is used near children.
3. Do not use this product near water- for example, near a bathtub, washbowl, kitchen sink, in a wet basement, or near a swimming pool, or the like.
4. This product should be used only with a cart or stand that is recommended by the manufacture.
5. This product, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss.
   Do not operate for a long period of time at a high volume level or at level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should consult an audiologist.
6. The product should be located so that its location or position does not interfere with its proper ventilation.
7. The product should be located away from heat sources such as radiators, heat registers or other products that produce heat.
8. The product should avoid using in where it may be effected by dust.
9. The product should be connected to a power supply only of the type described in the operating instructions or as marked on the product.
10. The power-supply cord of the product should be unplugged from the outlet when left unused for a long period of time.
11. Do not tread on the power-supply cord.
12. Do not pull the cord but hold the plug when unplugging.
13. When setting up with any other instruments, the procedure should be followed in accordance with instruction manual.
14. Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.
15. The product should be serviced by qualified service personnel when:
    - A: The power-supply cord or the plug has been damaged; or
    - B: Objects have fallen, or liquid has been spilled into the product; or
    - C: The product has been exposed to rain; or
    - D: The product does not appear to operate normally or exhibits a marked change in performance: or
    - E: The product has been dropped, or the enclosure damaged.
16. Do not attempt to service the product beyond that described in the user-maintenance instructions. All other servicing should be referred to qualified service personnel.

SAVE THESE INSTRUCTIONS

WARNING

THIS APPARATUS MUST BE EARTH GROUNDED.

The three conductors of the mains lead attached to this apparatus are identified with color as shown in the table below, together with the matching terminal on the UK type power plug. When connecting the mains lead to a plug, be sure to connect each conductor to the correct terminal, as indicated.

"This instruction applies to the product for United Kingdom."

MAINS LEADS		PLUG
Conductor	Color	Mark on the matching terminal
Live	Brown	Red or letter L
Neutral	Blue	Black or letter N
Grounding	Green-Yellow	Green, Green-Yellow, letter E or symbol

Bescheinigung des Herstellers /Importeurs

Hiermit wird bescheinigt, daß der/die/das

ROLAND DIGITAL PIANO HP-6000s

(Gerat Typ Bezeichnung)

in Ubereinstimmung mit den Bestimmungen der

Amtsbl. Vfg 1046 / 1984

(Amtsblattverfugung)

funk-entstort ist.

Der Deutschen Bundespost wurde das Inverkehrbringen dieses Gerates angezeigt und die Berechtigung zur Uberprufung der Serie auf Einhaltung der Bestimmungen eingeraumt.

Roland Corporation Osaka / Japan

(Name des Herstellers/Importeurs)

RADIO AND TELEVISION INTERFERENCE

"Warning - This equipment has been verified to comply with the limits for a Class B computing device, pursuant to Subpart J, of Part 15, of FCC rules. Operation with non-certified or non-verified equipment is likely to result in interference to radio and TV reception."

The equipment described in this manual generates and uses radio-frequency energy. If it is not installed and used properly, that is, in strict accordance with our instructions, it may cause interference with radio and television reception.

This equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J, of Part 15, of FCC Rules. These rules are designed to provide reasonable protection against such a interference in a residential installation. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by the following measure:

- Disconnect other devices and their input output cables one at a time. If the interference stops, it is caused by either the other device or its I/O cable.

These devices usually require Roland designated shielded I/O cables. For Roland devices, you can obtain the proper shielded cable from your dealer. For non-Roland devices, contact the manufacturer or dealer for assistance.

If your equipment does cause interference to radio or television reception, you can try to correct the interference by using one or more of the following measures:

- Turn the TV or radio antenna until the interferences stops.
- Move the equipment to one side or the other of the TV or radio.
- Move the equipment farther away from the TV or radio.
- Plug the equipment into an outlet that is on a different circuit than the TV or radio. (That is, make certain the equipment and the radio or television set are on circuits controlled by different circuit breakers or fuses.)
- Consider installing a rooftop television antenna with coaxial cable lead-in between the antenna and TV.

If necessary, you should consult your dealer or an experienced radio/television technician for additional suggestions. You may find helpful the following booklet prepared by the Federal Communications Commission:

"How to Identify and Resolve Radio-TV Interference Problems."

This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402. Stock No. 004-000-00345-4

Please read the separate volume "MIDI", before reading this owner's manual.

FEATURES

The Roland Piano utilizes SA/S technology to reproduce the timbres, dynamics, and characteristics of many of the world's most famous acoustic and electric keyboard instruments, with powerful output of 60W+60W. These instrument voices include two acoustic grand pianos, electric grand piano, harpsichord, clavi, vibraphone and two electric pianos.

The Roland Piano includes built-in Chorus Tremolo and Reverb effects.

Each of the keyboard timbres of the Roland Piano can be controlled via the keyboard of its own or through MIDI with full control over velocity (dynamics).

CONTENTS

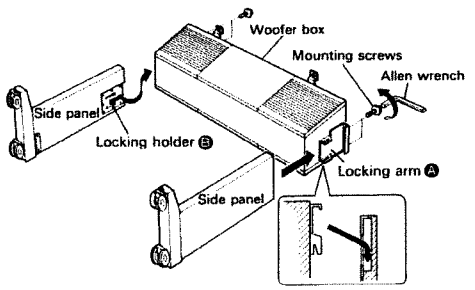
■ STAND ASSEMBLY

1

- Fit the locking arm Ⓐ on each end of the woofer box into the groove of the locking holder Ⓑ on each side panel.
- Fix the side panels with 4 mounting screws.

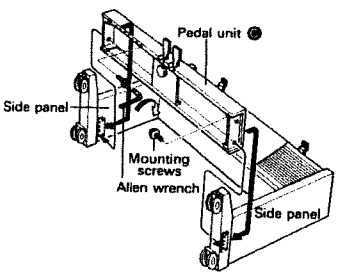
Accessories:

Mounting screws 8
Connecting pins 2
Allen wrench 1
Screwdriver 1



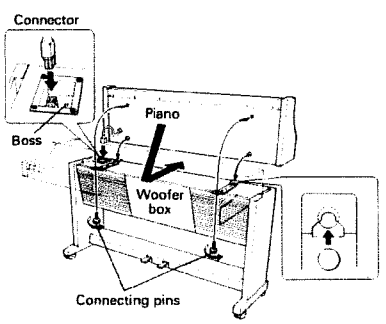
2

- Install the pedal unit Ⓒ to both side panels as shown in the figure.
- Fix it with 4 mounting screws using the allen wrench.



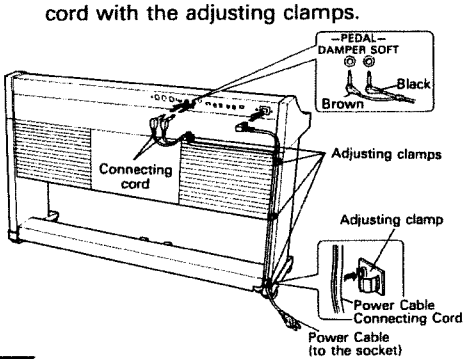
3

- Link the connector of the Piano with the connector at the upper left of the stand (with the pawl facing to the boss on the connector housing).
- Place the body of the Piano on the stand using care not to have the connecting cords cuaght and then fix the body with connecting pins. (Use a large size screwdriver or a coin to tighten the connecting pins.)



4

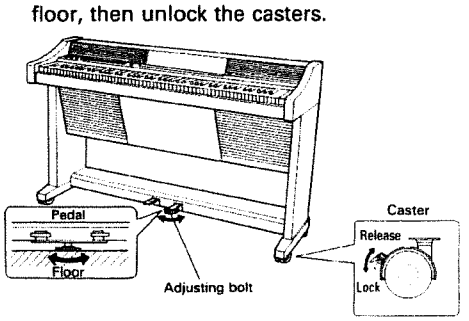
- Connect the brown connecting cord to the Damper Pedal Jack (DAMPER) and the black one to the Soft Pedal Jack (SOFT) on the piano.
- Connect the power cable to the receptacle on the piano.
- Fix the power cord and connecting cord with the adjusting clamps.



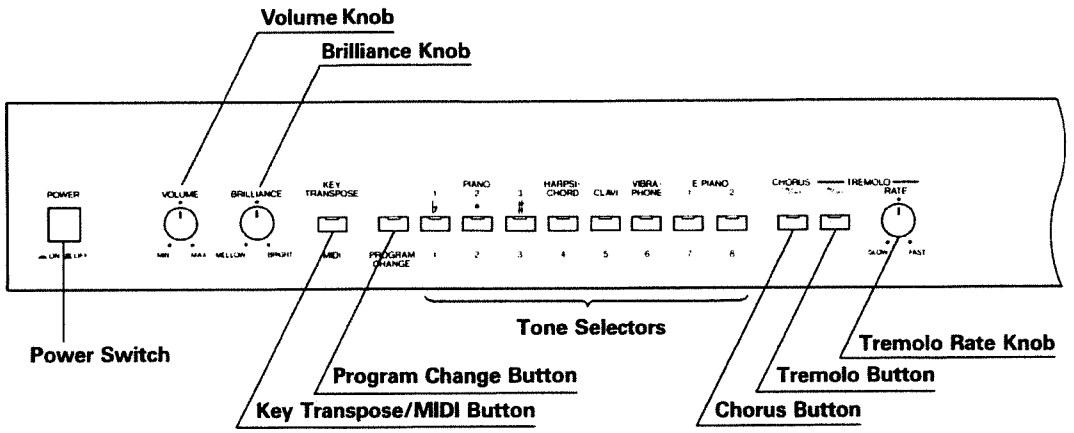
5

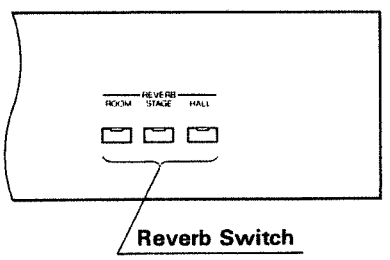
- After installing the assembled stand in place, turn the adjusting bolt to prevent deflection of the pedal unit.
- Use the locks (provided at the front casters), if necessary.

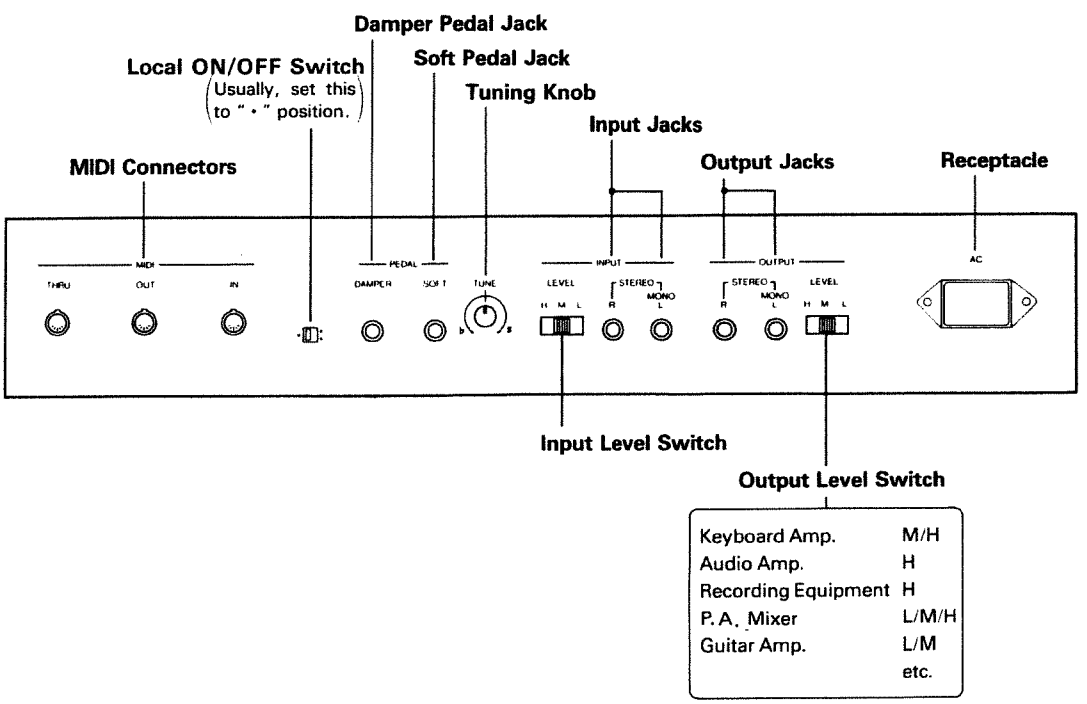
CAUTION:
When moving the piano, be sure to keep the adjusting bolt away from the floor, then unlock the casters.



■ PANEL DESCRIPTION







Keyboard Amp.	M/H
Audio Amp.	H
Recording Equipment	H
P.A. Mixer	L/M/H
Guitar Amp.	L/M
	etc.

IMPORTANT NOTES

Power Supply

- Do not use the same socket that is used for any noise generating device, such as a motor or variable lighting system.
- This unit might not work properly if the power cable is plugged in with the unit turned on. If this happens, simply turn the unit off, and turn it on again in a few seconds.
- The appropriate voltage to be used is shown on the name plate on the rear panel. Be sure that the voltage system in your country meets the requirement.

Power Cord

- When disconnecting the power cord from the socket, do not hold the cord but the plug. When the unit is not to be used for a long period, disconnect the power cord.

Location

- Operating this unit near a neon or fluorescent lamp may cause noise interference. If so, change the angle or position of the unit.
- Avoid using this unit in extreme heat or humidity or where it may be affected by dust or vibration.

Cleaning

- Use a soft cloth and clean only with a mild detergent.
- Do not use solvents such as paint thinner.

1 OPERATION

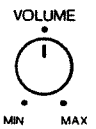
1. Basic Operation

① **Connect the plug of the power cable to the wall socket.**

② **Turn the piano on.**

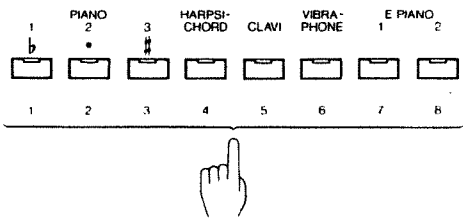
* For about 2 seconds after turned on, the piano cannot be played because of the muting circuit.

③ **Adjust the volume with the Volume Knob.**



2. Tone Selection

The Roland Piano features 8 keyboard sounds; two acoustic grand pianos, electric grand piano, harpsichord, clavi, vibraphone and two electric pianos. To select one of these voices, press one of the Tone Selector buttons numbered 1 through 8. One keyboard sound can be selected at a time.



VOICE PRESERVE FUNCTION

The Roland Piano features the Voice Preserve Function,. that is, while you are playing the keyboard using a certain voice, you can request the next voice to be used, without the voice actually changing until you release all the keys.

When the piano is being played with the Note or Damper ON, the voice does not change. (the indicator of the corresponding sound flashes.) To change the voices, lift all Notes and the Damper OFF. (Now, the indicator of the new voice is constantly lighted.)

3. Tuning

The Tune Knob is provided for controlling the overall tuning center of the Roland Piano. This is especially useful for tuning to other acoustic instruments, synthesizers, and synthesizer sound modules. Since the Roland Piano incorporate S/A Synthesis, the tuning of indiviudal notes will never be necessary. At its center position, Middle A = 422Hz.

At the Center Position,
middle A = 442Hz

TUNE

4. Damper/Soft Pedal

The Damper Pedal Jack and Soft Pedal Jack are provided to connect the cables from the stand's pedals. These pedals function just like the damper and soft pedal on an acoustic piano.

*** The Soft Pedal can be used as a Sostenuto pedal.**

• Damper Pedal

The Damper Pedal makes the sound decay slowly.

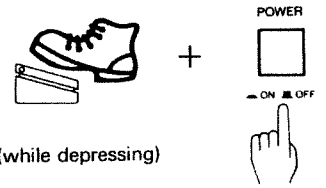
• Soft Pedal

The Soft Pedal serves to make the performance softer.

• Sostenuto Pedal

How to turn the Soft Pedal to Sostenuto Pedal.

Connect the Soft Pedal to the Soft Pedal Jack, and turn the piano on while holding the pedal down.



(while depressing)

Now, the Soft Pedal works as a Sostenuto Pedal.

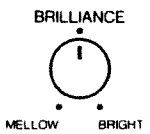
When the pedal is turned to a Sostenuto Pedal, it loses the Soft Pedal function.

Pressing the Sostenuto Pedal will turn on the Damper of the note currently played. The following notes will not take on any effect.

* To retrun the pedal to the Soft Pedal, turn the piano off once, then turn it on again.

5. Brilliance

As you rotate the Brilliance knob clockwise, the tone will be brighter, and mellower when rotated counterclockwise.

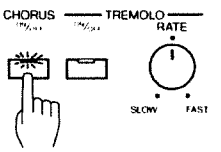


6. Chorus/Tremolo

The piano includes built-in Chorus and Tremolo effects.

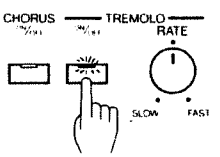
a. Chorus

By pressing the Chorus button, a lush stereo chorus effect can be obtained through the instrument's internal speaker/amplifier system or via the stereo outputs.



b. Tremolo

The Tremolo button engages the tremolo effect. The Tremolo circuit is stereo and is especially useful when used with the electric piano and vibraphone sounds.



The Tremolo Rate Knob is used to increase or decrease the speed of the tremolo effect. Rotating it clockwise increases the tremolo speed while rotating it counterclockwise the speed of the effect.

* On/Off of the Tremolo and/or the Chorus effect can be separately set in each voice and is retained until the piano is turned off.

When the piano is switched on, the effects of voices are set as follows:

Piano 1	OFF
Piano 2	OFF
Piano 3	OFF
Harpsichord	OFF
Clavi	OFF
Vibraphone	ON (Tremolo)
E. Piano 1	ON (Chorus)
E. Piano 2	ON (Chorus)

7. Reverb

Reverberation, different from the direct sound that reaches you directly from the sound source, reaches your ears after reflecting here and there. For example, when a musical instrument is played in a hall, even after the instrument stops giving sound, there is remaining sound in the hall for a while. This is the reverberation.

The Piano provides three different reverb effects, ROOM, STAGE and HALL.

- **ROOM**

This gives the reverberations of a live room.

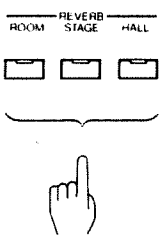
- **STAGE**

This gives the reverberations of a stage.

- **HALL**

This gives the reverberations of a concert hall.

Simply press a relevant Reverb Button, ROOM, STAGE or HALL (the corresponding indicator lights up) to select a reverb.

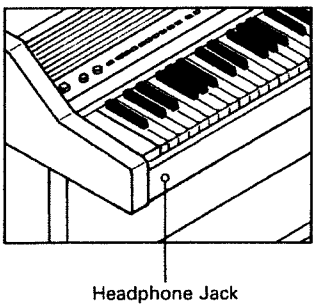


Pushing the same button again will turn off the reverb.

* STAGE is selected when the piano is switched on.

8. Headphones

Standard stereo headphones can be used with the Roland Piano for private listening and practice. Connecting the headphone plug to the headphone jack will disconnect the internal speakers. The Volume knob on the front panel will adjust the headphone volume.



9. Key Transpose

The keyboard of your Roland Piano can be transposed within a range of up a perfect 4th and down a diminished 5th.

<**Procedure**>

While holding the Key Transpose Button down, press the following button as many times as necessary.

♯ Button

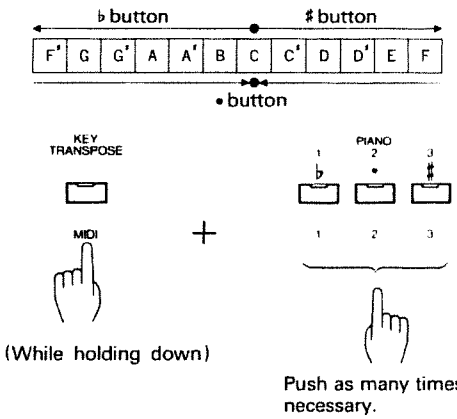
Each time this button is pressed (it can be used up to five times), the key is transposed up a semi-tone from the C key.

♭ Button

Each time this button is pressed (it can be used up to six times), the key is transposed down a semi-tone from the C key.

• Button

Pushing this button returns to the normal condition (C key).



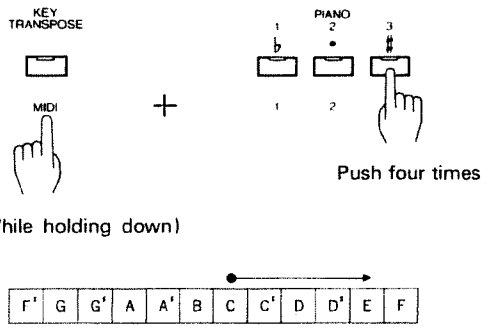
* While you are taking the transposing procedure, the piano cannot be played.

When the transposition is done, the indicator will light up.

Once the key is transposed, the Transpose On or Off can be selected simply by pushing the Key Transpose Button.

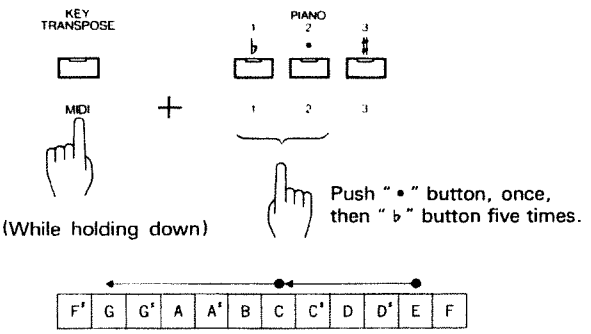
[e.g. 1] Transposing C to E key

→ While holding the Key Transpose Button down, push the ♯ Buton four times.



[e.g. 2] Transposing E to G key

→ While holding the Key Transpose Button down, push the • Button once to return to C key, then without releasing the Transpose Button, push the ♭ Button five times.



2 SETUP WITH AUXILLARY AUDIO EQUIPMENT

• Input Jacks

The external input jacks are provided for connecting the outputs of other electronic instruments (rhythm machines CR-1000, TR-626 or sound module MT-32, etc.) to the internal speakers and amplifier of the Roland Piano. A level switch is also provided to match the output of the device(s) to the input of the speaker/amplifier. Usually, the switch should be set to the high (H) position. However, if you detect audible distortion through the speakers, select either the middle (M) or low (L) position.

• Output Jacks

These Output Jacks are provided for connecting the Roland Piano to larger sound systems such as a home stereo system, multi-track recorders, mixers, and/or auxillary instrument amplifiers. As with the input Jacks, the Output Jacks have a three-way switch for setting the output level. The Output Jacks can be used in a stereo or monoural configuration.

<**Setup**>

① Turn down the volume of the external amplifier connected to the piano.

② Connect the Output Jacks of the piano to the Line In's (e.g. AUX) of the amplifier.

③ Adjust the volume of the piano with the Output Level Switch (see page 3).

④ Adjust the volume of the amplifier.

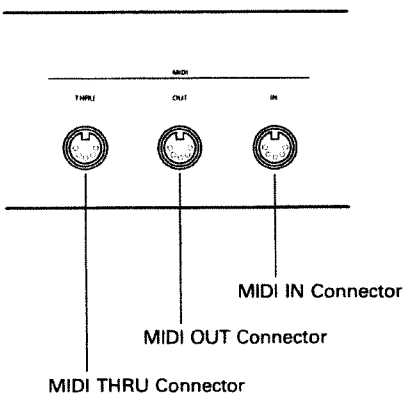
* Connecting the headphone plug to the headphone jack will disconnect the internal speakers.

3 MIDI

Part of the power of your Roland Piano is in the use of the MIDI (Musical Instrument Digital Interface). To learn more about MIDI and the various music systems that can be added to your HP-Piano, refer to the enclosed booklet "MIDI" and the MIDI implementation chart in the back of this owner's manual.

1. MIDI Connectors

The Roland Piano has MIDI IN, MIDI OUT and MIDI THRU Connectors on the rear panel.



• MIDI IN Connector

When using the piano as a MIDI sound module controlled by the external MIDI device, connect the MIDI IN Connector to the MIDI OUT or MIDI THRU on the external device.

• MIDI OUT Connector

When using the piano as a keyboard controller that drives the external device, connect the MIDI OUT Connector to the MIDI IN on the external device.

• MIDI THRU Connector

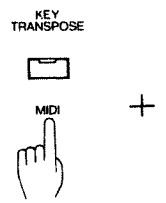
Through this, the exact copy of the signal fed into the MIDI IN is sent out.

2. Setting MIDI Channels

The Roland Piano cannot have different MIDI channels for transmitting and receiving.

<**How to set MIDI Channels**>

While holding the MIDI Button down, push the key that corresponds to the MIDI Channel number you want. (See page 15.)



(holding down)

\+

Push the key which corresponds to the MIDI channel you want.

* Usually, the default setting for receive channel is OMNI OFF, and transmit channel is CH 1.

3. Program Change

a. Transmit

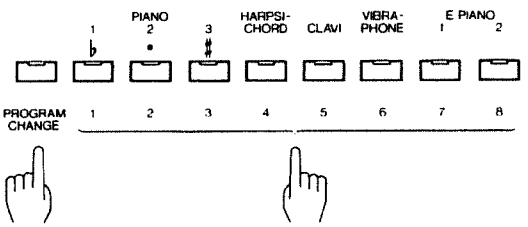
The Roland Piano can send the Program Change in the following two different ways; with the Tone Selector buttons or with the keyboard. Program change messages 1 to 8 can be transmitted in either way, but 9 to 128 can be transmitted in the later way.

▶ Using the Program Change Button and Tone Selectors

Using the Program Change Button and the Tone Selectors 1 to 8, Program Change messages can be transmitted.

<**Procedure**>

While holding the Program Change Switch down, press one of the Tone Selector buttons (1 to 8). In this way, the corresponding Program Change 1 to 8 can be transmitted.



(While holding down)

▶ Using the Key Transpose Button and Keyboard

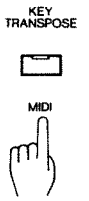
Using the Key Transpose Button and keyboard, 1 to 128 Program Change messages can be trasmitted. The upper right table shows how the Group/Bank/Voice numbers on the piano correspond to the Program numbers.

Program Change Table

GROUP	NO / BANK	1	2	3	4	5	6	7	8
A	1	1	2	3	4	5	6	7	8
	2	9	10	11	12	13	14	15	16
	3	17	18	19	20	21	22	23	24
	4	25	26	27	28	29	30	31	32
	5	33	34	35	36	37	38	39	40
	6	41	42	43	44	45	46	47	48
	7	49	50	51	52	53	54	55	56
	8	57	58	59	60	61	62	63	64
B	1	65	66	67	68	69	70	71	72
	2	73	74	75	76	77	78	79	80
	3	81	82	83	84	85	86	87	88
	4	89	90	91	92	93	94	95	96
	5	97	98	99	100	101	102	103	104
	6	105	106	107	108	109	110	111	112
	7	113	114	115	116	117	118	119	120
	8	121	122	123	124	125	126	127	128

<**Procedure**>

While holding the Key Transpose Button down, push the keys that correspond to the Group, Bank and Number you need. (See page 15.)



\+ Push the key which corresponds to the Group/Bank/Number you want.

(While holding down)

b. Receive

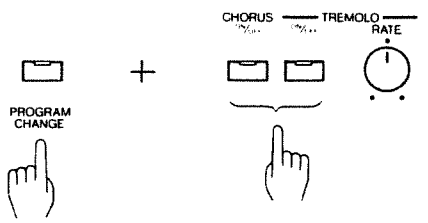
When the piano receive Program Change messages 1 to 32, the corresponding voice is automatically selected.

How the Program Change numbers correspond to the voices is shown in "MIDI Implementation" at the back of the manual.

* The Roland Piano receives 1 to 32 Program Change messages, but ignores 33 to 128.

4. Chorus/Tremolo

On/Off of the Chorus or Tremolo effect of an external device can be controlled: push the Chorus or Tremolo Button on the piano, while holding the program Change Button down.



(While holding down)

5. MIDI Functions

The Roland Piano can select any of the following three modes that decide how the messages are received and transmitted.

(I) Note On/Off, Pedal and Program Change messages are transmitted and received.

(II) Notes On/Off, Pedal and Program Change messages are transmitted. Program Change messages are not received.

(III) Note On/Off, Pedal and Program Change messages are transmitted and received.
The moment a new voice is selected on the piano, the corresponding Program Change (1 to 8) is transmitted. On/Off of Chours and/or Tremolo is also tramsitted. Even without taking the Chorus/Tremolo procedure, Chorus and/or Tremolo On/Off messages are transmitted by turning on or off Chorus and/or Tremolo effect. This mode may be used when recording data into a MIDI sequencer.

<**How to select one of the three modes**>

(I) Turning the piano on will automatically select this mode.

(II) Turn the piano on while holding down the Tone Selector, Piano 1.

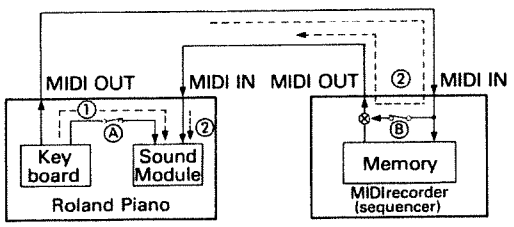
(III) Turn the piano on while holding the Program Change button down.

6. Local ON/OFF

Usually, MIDI devices, including the Roland Piano, are not intended to transmit MIDI messages received at MIDI IN to MIDI OUT. However, MIDI sequencers are provided with the SOFT THRU function that enables to do that.

The Soft Thru function can be effective when using a MIDI Keyboard Controller and a separate MIDI sound module with a sequencer. That is, to record keyboard performance from a keyboard controller into a sequencer, and play it using the sound module, you connect the sound module to the MIDI THRU on the sequencer, play the keyboard controller, then disconnect it from the MIDI THRU, and connect it to the MIDI OUT of the sequencer to play it back. Such complication can be resolved by the Soft Thru function. Simply turn Soft Thru on, connect the sound module to the MIDI OUT on the sequencer, and you can record and playback without changing the setups.

The Soft Thru function, however, must not be on when using the sequencer with a Roland Piano type keyboard that contains both the keyboard and a sound module in it. If the Soft Thru on the sequencer is set to ON, the piano stutters, or the maximum voices are reduced. This is because the same performance information travels to the sound module section of the piano through the internal connection (①) and via sequencer (②).



Ⓐ LOCAL SWITCH
Ⓑ SOFT THRU SWITCH

* These switches do not mechanically exist. These are the functions engaged in the software.

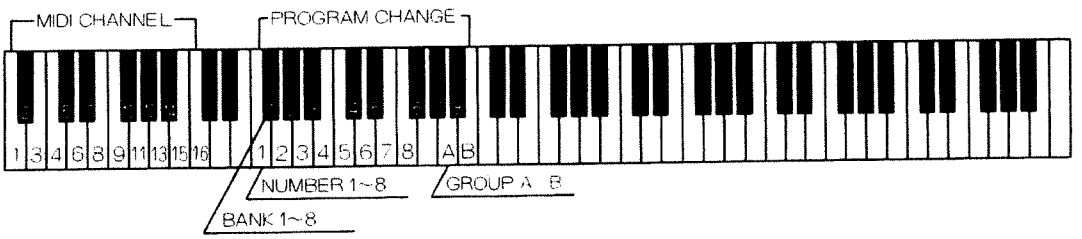
Most of the sequencers are default to SOFT THRU OFF, and therefore free from such a trouble. However, if the sequencer cannot be set to SOFT THRU OFF, you can set LOCAL OFF on the piano by setting the Local Switch on the piano to the " : " position. LOCAL ON may be called a normal condition (① route is connected).

· position → LOCAL ON
: position → LOCAL OFF

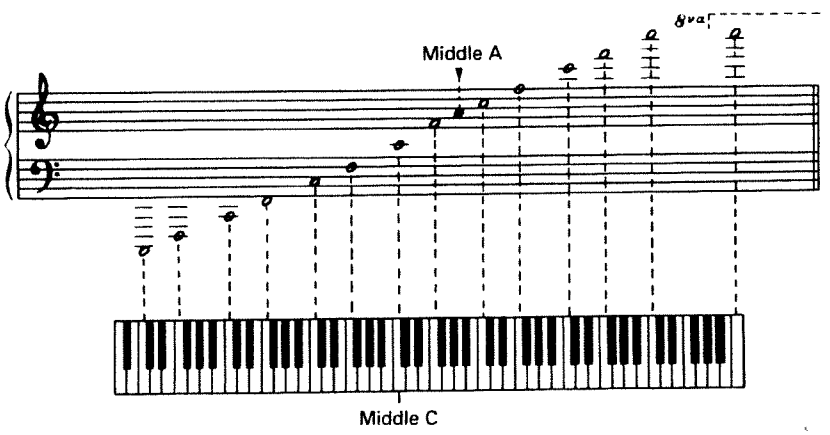
* Unless a MIDI cable is connected to the MIDI IN connector on the piano, LOCAL OFF cannot be set.

■ APPENDIX

MIDI Channel and Program Change correspond to the keyboard as shown below.



Sound Range Diagram



DIGITAL PIANO
HP－6000s

MIDI Implementation

Date : Oct. 12. 1987
Version : 1.00

1. TRANSMITTED DATA

■Note event

Note off

Status	Second	Third
9nH	kkH	00H

kk=Note Number 0FH－71H (15－113)
n=MIDI Channel 0H－FH (1－16)

Note on

Status	Second	Third
9nH	kkH	vvH

vv=Velocity 01H－7FH (1－127)

The range of note numbers may be changed by transposition.
The table below shows the degree of transposition.
The power－up default value is 0.
To transpose the keyboard up a maximam of 5 or down a maximum of 6 semitones.
Hold down the transpose switch then press the [♭] or [#] switch, the number of semitones required to transpose the keyboard down or up the required amount.
To return the keyboard to normal, held down the transpose switch and press the [♮] (reset) switch.
Pressing the [#] more than 5 times will not transpose up more than 5 semitones.
Pressing the [♭] more than 6 times will not transpose down more than 6 semitones.

Transposed value (semitones)	Transmitted note range
−6	15－102
−5	16－103
−4	17－104
−3	18－105
−2	19－106
−1	20－107
0	21－108
+1	22－109
+2	23－110
+3	24－111
+4	25－112
+5	26－113

■Control change

Hold－1

Status	Second	Third
BnH	40H	vvH

vv=7FH : ON
vv=00H : OFF

Sostenuto

Status	Second	Third
BnH	42H	vvH

vv=7FH : ON
vv=00H : OFF

If the power has been applied while the SOFT pedal is held down, the SOFT pedal will be changed to the SOSTENUTO pedal.

Soft

Status	Second	Third
BnH	43H	vvH

vv=7FH : ON
vv=00H : OFF

Tremolo

Status	Second	Third
BnH	5CH	vvH

vv=7FH : ON
vv=00H : OFF

Chorus

Status	Second	Third
BnH	5DH	vvH

vv=7FH : ON
vv=00H : OFF

When CHORUS or TREMOLO switch is pressed while holding PROGRAM CHANGE, respective effect ON or OFF message is sent. Switching is stored into the internal volatile memory (erased upon power off). This switching does not affect the internal functions.

When the piano has been turned on with PROGRAM CHANGE being held down : Pressing CHORUS (or TREMOLO) for on introduces Chorus (Tremolo) into the new voice of the piano (or turns off the effect, if being on). At the same time Chorus (Tremolo) ON (in this example) message is sent. This effect switching is memorized (volatile) : Will be recalled later upon selecting this voice (tone) again and sent as Chorus (Tremolo) ON message.

■Program change

Status	Second
CnH	ppH

pp=Program Change (0－127)

Pressing a TONE button while holding PROGRAM CHANGE will send the Program Change message (0－7) assigned to the button. This switching does not change the piano's voices.

Switch	Prog #
PIANO 1	0
PIANO 2	1
PIANO 3	2
HARPSICHORD	3
CLAVI	4
VIBRAPHONE	5
E. PIANO 1	6
E. PIANO 2	7

When the piano has been turned on with PROGRAM CHANGE being held down : Pressing a TONE button on the piano calls the tone just the same as in the normal tone selection. At the same time the Program Change message assigned to that button as well as Control Change message of Chorus (Tremolo) ON or OFF contained in that tone are sent. (See the last paragraph in Control Change).

The following table shows the GROUP, BANK and NUMBER values related with key position which is set while the TRANSPOSE/MIDI switch is held down.

Key	Related value
A 3	GROUP A
B 3	GROUP B
F# 2	BANK 1
G# 2	BANK 2
A# 2	BANK 3
C# 3	BANK 4
D# 3	BANK 5
F# 3	BANK 6
G# 3	BANK 7
A# 3	BANK 8
F 2	NUMBER 1
G 2	NUMBER 2
A 2	NUMBER 3
B 2	NUMBER 4
C 3	NUMBER 5
D 3	NUMBER 6
E 3	NUMBER 7
F 3	NUMBER 8

When one of the above－mentioned keys is pressed while the TRANSPOSE/MIDI switch is held down, a PROGRAM CHANGE message will be transmitted.
The transmitted program change numbers are related to the GROUP, BANK and NUMBER values as follows.

GROUP A / NUMBER	1	2	3	4	5	6	7	8
BANK								
1	0	1	2	3	4	5	6	7
2	8	9	10	11	12	13	14	15
3	16	17	18	19	20	21	22	23
4	24	25	26	27	28	29	30	31
5	32	33	34	35	36	37	38	39
6	40	41	42	43	44	45	46	47
7	48	49	50	51	52	53	54	55
8	56	57	58	59	60	61	62	63

GROUP B / NUMBER	1	2	3	4	5	6	7	8
BANK								
1	64	65	66	67	68	69	70	71
2	72	73	74	75	76	77	78	79
3	80	81	82	83	84	85	86	87
4	88	89	90	91	92	93	94	95
5	96	97	98	99	100	101	102	103
6	104	105	106	107	108	109	110	111
7	112	113	114	115	116	117	118	119
8	120	121	122	123	124	125	126	127

■ Mode message

Status	Second	Third
BnH	mmH	00H

mm = 7BH : ALL NOTES OFF *1
mm = 7CH : OMNI OFF *2
mm = 7FH : POLY ON *2

*1 When all keys on the keyboard are released, the ALL NOTES OFF (BnH, 7BH, 00H) is sent.
*2 When power is first applied or Basic Channel is changed, OMNI OFF and POLY ON are sent in the Basic Channel.

■ Active sensing

Status
FEH

2. RECOGNIZED RECEIVE DATA

■ Note event

Note off

Status	Second	Third
8nH	kkH	vvH
9nH	kkH	00H

kk = Note number : 00H – 7FH (0 – 127)
vv = Velocity : ignored
n = MIDI Channel : 0H – FH (1 – 16)

Note on

Status	Second	Third
9nH	kkH	vvH

vv = Velocity : 01H – 7FH (1 – 127)

Note numbers outside of the range 15 – 113 are transposed to the nearest octave inside this range.
The transpose function does not affect the recognized NOTE numbers.

■ Control change

Hold – 1

Status	Second	Third
BnH	40H	vvH

vv = 00H – 3FH : OFF
vv = 40H – 7FH : ON

Sostenuto

Status	Second	Third
BnH	42H	vvH

vv = 00H – 3FH : OFF
vv = 40H – 7FH : ON

Soft

Status	Second	Third
BnH	43H	vvH

vv = 00H – 3FH : OFF
vv = 40H – 7FH : ON

Tremolo

Status	Second	Third
BnH	5CH	vvH

vv = 00H – 3FH : OFF
vv = 40H – 7FH : ON

Ignored if the power has been applied with the PIANO 1 switch being held down.

Chorus

Status	Second	Third
BnH	5DH	vvH

vv = 00H – 3FH : OFF
vv = 40H – 7FH : ON

Ignored if the power has been applied with the PIANO 1 switch being held down.

■ Program change

Status	Second
CnH	ppH

pp : Program Change (0 – 31)

Ignored if the power has been applied with the PIANO 1 switch being held down.

Received Program Change messages are assigned as follows.
The program numbers 32 – 127 are ignored.

Prog#	Voice	CHORUS	TREMOLO
0	PIANO 1	OFF	OFF
1	PIANO 2	OFF	OFF
2	PIANO 3	OFF	OFF
3	HARPSICHORD	OFF	OFF
4	CLAVI	OFF	OFF
5	VIBRAPHONE	OFF	OFF
6	E. PIANO 1	OFF	OFF
7	E. PIANO 2	OFF	OFF
8	PIANO 1	ON	OFF
9	PIANO 2	ON	OFF
10	PIANO 3	ON	OFF
11	HARPSICHORD	ON	OFF
12	CLAVI	ON	OFF
13	VIBRAPHONE	ON	OFF
14	E. PIANO 1	ON	OFF
15	E. PIANO 2	ON	OFF
16	PIANO 1	OFF	ON
17	PIANO 2	OFF	ON
18	PIANO 3	OFF	ON
19	HARPSICHORD	OFF	ON
20	CLAVI	OFF	ON
21	VIBRAPHONE	OFF	ON
22	E. PIANO 1	OFF	ON
23	E. PIANO 2	OFF	ON
24	PIANO 1	ON	ON
25	PIANO 2	ON	ON
26	PIANO 3	ON	ON
27	HARPSICHORD	ON	ON
28	CLAVI	ON	ON
29	VIBRAPHONE	ON	ON
30	E. PIANO 1	ON	ON
31	E. PIANO 2	ON	ON

If the power has been applied while the PROGRAM CHANGE switch being held down, received Program Change messages 0 – 7 are recognized (8 – 127 ignored) and assigned as follows. These messages do not affect TREMOLO and CHORUS ON/OFF.

Prog#	Voice
0	PIANO 1
1	PIANO 2
2	PIANO 3
3	HARPSICHORD
4	CLAVI
5	VIBRAPHONE
6	E. PIANO 1
7	E. PIANO 2

■ Mode message

All notes off

Status	Second	Third
BnH	7BH	00H

When the ALL NOTES OFF is recognized, all the notes which had been turned ON by received MIDI Note ON messages are turned OFF.
However, the notes being held on by MIDI Damper ON message are not turned off until the subsequent Dampper OFF message.

OMNI OFF

Status	Second	Third
BnH	7CH	00H

OMNI ON

Status	Second	Third
BnH	7DH	00H

MONO

Status	Second	Third
BnH	7EH	0mH

POLY

Status	Second	Third
BnH	7FH	00H

These Mode Messages (OMNI OFF, OMNI ON, MONO, POLY) are also recognized as ALL NOTES OFF as well as follows :

	POLY ON (127)	MONO ON (126) mmmm = 1	MONO ON (126) mmmm ≠ 1
OMNI OFF (124)	OMNI = OFF POLY	OMNI = OFF POLY	OMNI = ON POLY
OMNI ON (125)	OMNI = ON POLY	OMNI = ON POLY	OMNI = ON POLY

■ Active sensing

Status
FEH

3. BASIC CHANNEL SETTING

When the power is first applied, the Basic Channel is normally set to 1, and the receiver is set to MODE 3 (OMNI OFF, POLY ON).

However, the Basic Channel may be changed when the following key on the keyboard is pressed while the TRANSPOSE/ MIDI switch is held down. The receiver will be set to the MODE 3 (OMNI OFF, POLY ON).

When the highest key (C8) on the keyboard is pressed while the TRANSPOSE/ MIDI switch is held down. The Basic Channel will be set to 1, and the receiver is set to the MODE 1 (OMNI ON, POLY ON).

Key	Basic Channel	OMNI
Power-on	1	OFF
A 0	1	OFF
A# 0	2	OFF
B 0	3	OFF
C 1	4	OFF
C# 1	5	OFF
D 1	6	OFF
D# 1	7	OFF
E 1	8	OFF
F 1	9	OFF
F# 1	10	OFF
G 1	11	OFF
G# 1	12	OFF
A 1	13	OFF
A# 1	14	OFF
B 1	15	OFF
C 2	16	OFF
C 8	1	ON

DIGITAL PIANO
HP−6000s

MIDI Implementation Chart

Date : Oct. 12. 1987
Version : 1.00

Function...		Transmitted	Recognized	Remarks
Basic Channel	Default	1	1	
	Changed	1−16	1−16	
Mode	Default	Mode 3	Mode 3	
	Messages	POLY. OMNI OFF	POLY. OMNI ON/OFF	
	Altered	*********	MONO (M≠1) →1. (M=1) →3	
Note Number		15−113	0−127	
	True Voice	*********	15−113	
Velocity	Note ON	○	○	v=1−127
	Note OFF	× (9n. v=0)	×	
After Touch	Key's	×	×	
	Ch's	×	×	
Pitch Bender		×	×	
Control Change	64	○	○	Hold 1 (Damper pedal)
	66	○	○	Sostenuto pedal
	67	○	○	Soft pedal
	92	○	○	Tremolo
	93	○	○	Chorus
Prog Change		○ (0−127)	○ (0−31) can be ignored by	
	True #	*********	0−31 power−up setting	
System Exclusive		×	×	
System Common	Song Pos	×	×	
	Song sel	×	×	
	Tune	×	×	
System Real Time	Clock	×	×	
	Commands	×	×	
Aux Message	Local ON/OFF	×	×	
	All Notes OFF	○	○ (123−127)	
	Active Sense	○	○	
	Reset	×	×	
Notes		When power on, ch−1 OMNI OFF and POLY are sent. When Basic Channel is changed, Mode is set to 3.		

Mode 1 : OMNI ON. POLY
Mode 2 : OMNI ON. MONO
Mode 3 : OMNI OFF. POLY
Mode 4 : OMNI OFF. MONO

○ : Yes
× : No

■ SPECIFICATIONS

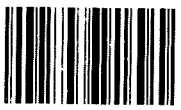
Keyboard	88 Keys, 16 Voice Polyphonic (10 Voice Polyphonic for Harpsichord, Clavi and Electric Piano 2)
Preset Voice	Pianos 1,2,3, Harpsichord, Clavi, Vibraphone, Electric Pianos 1,2
Effects	Chorus ON/OFF, Tremolo ON/OFF, Tremolo Rate, Reverb (Room Stage, Hall) ON/OFF
Connectors	Output Jacks (Mono, Stereo) Input Jacks (Mono, Stereo) Damper Pedal Jack Soft Pedal Jack MIDI IN Connector MIDI OUT Connector MIDI THRU Connector
Switches	Power Switch, Output Level Switch, Input Level Switch
Speakers	25cm × 2, 12cm × 2, Dome Tweeter × 2
Output	60W × 2
Finish	Roland Original Oak
Dimensions W × D × H	1403(W) × 546(D) × 822(H)mm/57 1/4" × 21 1/2" × 32 3/8" (including a stand)
Weight	97kg/214lb 2oz (including a stand)
Consumption	190W (117V), 365W (220/240V)
Accessories	Stand (KS-6000), Music Rest, Power Cord

'87-11-BGA1-1S

Roland®

76193392

UPC 76193392



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