

# MP-70 Roland Digital Piano

# Owner's Manual

Thank you, and congratulations on your choice of the Roland Digital Piano MP-70.

#### **Main Features**

#### Piano Sounds with Rich Resonance and Wide-Ranging Expressiveness

The stereo sampling piano sound generator realistically reproduces even the sound of the hammers striking the strings, producing the tones of a high-quality concert grand piano. Maximum polyphony of 64 notes ensures that you can use the pedal freely without running out of notes.

#### Pursuing the Playing Feel of a Grand Piano

These instruments feature a compact progressive hammer action keyboard, which duplicates the touch of a grand piano, with a heavier touch in the lower register, and a lighter touch in the upper register.

The pedal is designed for good-feeling response, and allows subtle performance nuances to be expressed.

#### A Variety of Practice Features to Help You Develop Your Musicality

In addition to a metronome, the MP-70 features a two-track recorder, which allows you to experience piano lessons in a way possible only on electronic pianos.

#### 66 Piano Songs Built-In

The internal songs are mainly classical pieces, and include compositions for listening enjoyment as well as for lessons.

Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (p. 2), "USING THE UNIT SAFELY" (p. 3, 4), and "IMPORTANT NOTES" (p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Owner's manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.

WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



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



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

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

# IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS

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

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Do not use this apparatus near water.
- 6. Clean only with a dry cloth.
- 7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



- Unplug this apparatus during lightning storms or when unused for long periods of time.
- 14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

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.

#### **USING THE UNIT SAFELY**

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

#### About **AWARNING** and **ACAUTION** Notices

# ⚠ WARNING Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly. 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  $\triangle$  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**

#### **MWARNING**

 Before using this unit, make sure to read the instructions below, and the Owner's Manual.



 Do not open or perform any internal modifications on the unit.



 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.



 The unit should be connected to a power supply only of the type described in the operating instructions, or as marked on the bottom of unit.



 Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.



 Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits.
 Damaged cords are fire and shock hazards!



#### **<b>⚠WARNING**

 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.



 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 power cord 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 power-supply cord, or the plug has been damaged; or
- If smoke or unusual odor occurs
- Objects have fallen into, or liquid has been spilled onto the unit; or
- The unit has been exposed to rain (or otherwise has become wet); or

.....

- The unit does not appear to operate normally or exhibits a marked change in performance.
- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

.....



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



#### **∴WARNING**

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.



 Do not put anything that contains water (e.g., flower vases) on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.



 The unit should be located so that its location or position does not interfere with its proper ventilation.



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



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



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



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



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



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 screws 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.
- Raise the adjusters on the stand (p. 10).
- · Close the lid.
- Remove the music stand.
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet (p. 8).



 Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.



 Be careful when opening/closing the lid so you do not get your fingers pinched (p. 8). Adult supervision is recommended whenever small children use the unit.

.....



 Keep any wing nut you may remove and the included screws of stand in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.



# **IMPORTANT NOTES**

In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "USING THE UNIT SAFELY" on pages 3 and 4, please read and observe the following:

#### **Power Supply**

- Do not connect this unit to same electrical outlet that is being
  used by an electrical appliance that is controlled by an inverter
  (such as a refrigerator, washing machine, microwave oven, or air
  conditioner), or that contains a motor. Depending on the way in
  which the electrical appliance is used, power supply noise may
  cause this unit to malfunction or may produce audible noise. If it
  is not practical to use a separate electrical outlet, connect a power
  supply noise filter between this unit and the electrical outlet.
- 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.
- Although the LCD and LEDs are switched off when the POWER switch is switched off, this does not mean that the unit has been completely disconnected from the source of power. If you need to turn off the power completely, first turn off the POWER switch, then unplug the power cord from the power outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible.

#### **Placement**

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also, do not allow lighting devices that normally are used while their light source is very close to the unit (such as a piano light), or powerful spotlights to shine upon the same area of the unit for extended periods of time. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Do not allow rubber, vinyl, or similar materials to remain on the unit for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not allow objects to remain on top of the keyboard. This can be the cause of malfunction, such as keys ceasing to produce sound.
- Do not paste stickers, decals, or the like to this instrument.
   Peeling such matter off the instrument may damage the exterior finish.

#### **Maintenance**

- To clean the unit, use a dry, soft cloth; or one that is slightly dampened. Try to wipe the entire surface using an equal amount of strength, moving the cloth along with the grain of the wood. Rubbing too hard in the same area can damage the finish.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.
- The pedals of this unit are made of brass.
   Brass eventually darkens as the result of the natural oxidization process. If the brass becomes tarnished, polish it using commercially available metal polisher.

#### **Additional Precautions**

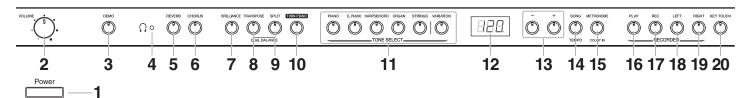
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- A small amount of heat will radiate from the unit during normal operation.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, pack it in shock-absorbent material. Transporting the unit without doing so can cause it to become scratched or damaged, and could lead to malfunction.
- Do not apply undue force to the music stand while it is in use.
- Use a cable from Roland to make the connection. 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.
- Before opening or closing the keyboard lid, always make sure
  that no pets or other small animals are located on top of the
  instrument (in particular, they should be kept away from the
  keyboard and its lid). Otherwise, due to the structural design of
  this instrument, small pets or other animals could end up getting
  trapped inside it. If such a situation is encountered, you must
  immediately switch off the power and disconnect the power cord
  from the outlet. You should then consult with the retailer from
  whom the instrument was purchased, or contact the nearest
  Roland Service Center.

# Contents

USING THE UNIT SAFELY	Chapter 4.
IMPORTANT NOTES	Popardina Vaur Parformana
INFORTANT NOTES	Notes Regarding Recording2
Panel Descriptions	Recording a New Song2
Front Panel	
Rear Panel	Recording the Right-Hand and Left-Hand Parts
	Separately2
Before You Start Playing	
Connect the Pedal Cable	
Connect the Power Cord	
Setting Up the Music Stand	Saving Recorded Songs Even with the Power
Opening/Closing the Lid	
Connecting Headphones	Deleting backed up songs3
Using the Headphones Hook	
Turning the Power On and Off	Changing Various Settings
Adjusting the Sound's Volume and Brilliance	Changing the Damper Pedal's Resonance 3
About the Pedals1	Making Detailed Settings (Function)
Chapter 1.	Tuning to Other Instruments' Pitches (Master Tuning)3
	Changing the Townson
Enjoying the Internal Songs and Demo1	Setting the Tuning Curve (Stretch Tuning)3
Listening to Internal Songs	
Playing Back All Songs Continuously (All Song Play)1	
Selecting a Song and Playing It1 Listening to the Demo Songs	
Playing Back the Tone Demo Songs	•
	Disabling the Ruttons When Light a Tone Other Than
Chapter 2. Performance1	Piano (Tone Lock)3
Performing with a Variety of Sounds1	Getting the Master Tune Setting To Be
Adjusting the Keyboard Touch (Key Touch)1	Remembered While the Power Is Turned Off3
Applying Effects to the Sound1	
Adding Reverberation to the Sound (Reverb)	ć ·
Changing the depth of the reverb effect	•
Adding richness to the sound (Chorus)	
Transposing the Key of the Keyboard	Connecting to Audio Equipment3
(Transpose)1	Connecting to a Computer3
Splitting the Keyboard Into Two Sections for	Connecting MIDI Devices3
Four-Hand Performances (Twin Piano Mode)1	What's MIDI?3
Playing Two Sounds Together (Dual Play)1	Making MIDI-related Settings
Adjusting the Volume Balance in Dual Play	Wild Seria Charlic Settings
(Dual Balance)1	Switching Local Control on and Off
Playing Different Tones with the Left and Right	-
Hands (Split Play)2	
Changing the Keyboard's Split Point	
Using Metronome	
Sounding the Metronome	10110 2201
Changing the Metronome Volume2	Internal Song List4
Chapter 3.	Easy Operation List4
Playing Along with the Internal Songs 2	MIDI Implementation Chart4
Changing the Tempo2	Main Chasitications 1
Adding a Count-in to Match the Timing (Count-In)	
	II IUCA

# **Panel Descriptions**

#### **Front Panel**



#### 1 [Power] switch

Turns the power on/off (p. 9).

#### 2 [VOLUME] knob

Adjusts the overall volume level (p. 9).

#### 3 [DEMO] button

You can listen to a demo of the instrument's tones (p. 13).

#### 4 [∩ (Headphones)] indicator

This indicator lights up when headphones are connected to the headphones jack (p. 8).

#### 5 [REVERB] button

Adds reverberation to the sound (p. 16).

#### 6 [CHORUS] button

Adds richness to the sound (p. 16).

#### 7 [BRILLIANCE] button

Adjusts the tone brightness (p. 9).

#### 8 [TRANSPOSE] button

Transposes the pitch of the keyboard (p. 17).

#### 9 [SPLIT] button

Divides the keyboard into right-hand and left-hand areas, allowing you to play a different sound in each area (p. 20). By holding down this button and the [TWIN PIANO] button, and pressing other specified button, you can make settings for various functions (p. 32–p. 36, p. 38–p. 39).

#### 10 [TWIN PIANO] button

You can divide the keyboard into two separate sections, allowing two people to perform in the same registers (p. 18).

#### 11 TONE SELECT buttons

They are used to choose the kinds of tones (tone groups) played by the keyboard (p. 14).

#### 12 Display

Displays information such as the song number, tempo, beat, and parameter settings values.

#### 13 [-] [+] buttons

Allow you to select the value of various settings. Pressing both the [+] and [-] buttons simultaneously returns the setting of a particular item or function to its original value.

#### 14 [SONG/TEMPO] button

Used to select from the internal songs (p. 11, p. 23). Each time you press this button, the song number and the tempo will be displayed alternately. While the song number is displayed, the button indicator will light in red. While the tempo is displayed, it will light in green.

#### 15 [METRONOME/COUNT IN] button

Turns the metronome on/off (p. 21). Also featured is the countin sound, which can be played before the song starts, allowing you to begin playing with the song with perfect timing (p. 23).

#### **RECORDER**

Plays back or records a performance.

#### 16 [PLAY] button

Starts and stops playback of internal songs and recorded performances (p. 11, p. 26).

Also starts/stops recording of a performance (p. 26-p. 30).

#### 17 [REC] button

Puts the MP-70 in recording-standby mode (p. 25-p. 30).

#### 18 [LEFT] button

Plays back or records a performance separately for each hand (p. 24, p. 27–p. 30). The left-hand performances of the internal songs are assigned to this button.

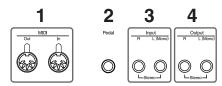
#### 19 [RIGHT] button

Plays back or records a performance separately for each hand (p. 24, p. 27–p. 30). The right-hand performances of the internal songs are assigned to this button.

#### 20 [KEY TOUCH] button

Modifies the playing feel of the keyboard (p. 15).

#### **Rear Panel**



#### 1 MIDI Out/In connectors

Connect to external MIDI devices to exchange performance data (p. 38).

#### 2 Pedal connector

Connect the pedal cable of the special stand to this connector (p. 8).

#### 3 Input jacks

These jacks can be connected to another sound generating device or an audio device, so that the sound of that device will be output from the MP-70's speakers (p. 37).

#### 4 Output jacks

Allows you to output the piano's sound to sound reinforcement equipment to obtain a more powerful sound. These can also be connected to a tape recorder or other recording device to record a performance (p. 37).

# **Before You Start Playing**

#### **Connect the Pedal Cable**

Insert the pedal cable into the Pedal jack on the rear panel of the MP-70.

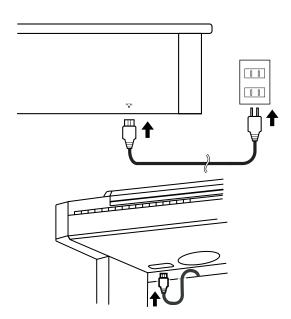


#### **Connect the Power Cord**

Insert the included power cord into the AC inlet on the bottom panel of the MP-70, and then plug it into an electrical outlet.

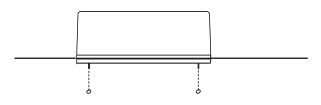


Be sure to use the supplied power cord.



### **Setting Up the Music Stand**

Insert the music stand into the two holes as shown in the following diagram.



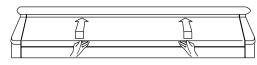
NOTE

Before moving the piano, be sure to remove the music stand to prevent accidents.

### **Opening/Closing the Lid**

To open the lid, use both hands to lift it lightly, and slide it away from yourself.

To close the lid, pull it gently toward yourself, and lower it softly after it has been fully extended.



NOTE

When opening and closing the lid, be careful not to let your fingers get caught. If small children will be using the MP-70, adult supervision should be provided.

NOTE

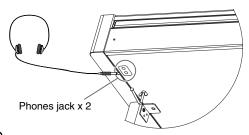
If you need to move the piano, make sure the lid is closed first to prevent accidents.

### **Connecting Headphones**

The MP-70 has two jacks for plugging in headphones. 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.

Plug the headphones into the Phones jack located at the bottom left of the piano.

When headphones are connected, the [\(\hat{\cap}\) (Headphones)] indicator (p. 7) lights up, and sounds stop playing from the speakers of the MP-70. The headphone volume is adjusted by the [VOLUME] knob (p. 9) of the MP-70.



NOTE

Use Stereo headphones.

#### Some notes on using headphones

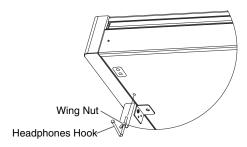
- To prevent damage to the cord, handle the headphones only by the headset or the plug.
- Connecting the headphones when the volume of connected equipment is turned up may result in damage to the headphones. Lower the volume on the MP-70 before plugging in the headphones.
- Listening at excessively high volume levels will not only damage the headphones, but may also cause hearing loss. Use the headphones at a moderate volume level.

#### ■ Using the Headphones Hook

Whenever you are not using the headphones, you can hang them on the headphones hook at the lower left of the MP-70.

#### **Attaching the Headphones Hook**

Press and twist the headphones hook included with the MP-70 into the hole in the bottom of the MP-70 (refer to the figure below). Turn the wing nut of headphones hook to secure the headphones hook.



### **Turning the Power On and Off**



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

To turn the power on, turn the [VOLUME] knob all the way down, and then press the [Power] switch.

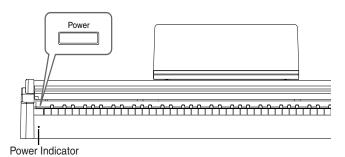
The power will turn on, and the Power indicator at the left front of the MP-70 will light.

After a few seconds, you will be able to play the keyboard to produce sound.

Use the [VOLUME] knob to adjust the volume.

#### NOTE

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



To turn the power off, turn the [VOLUME] knob all the way to the left, and press the [Power] switch.

The Power indicator at the left front of the MP-70 will go dark, and the power will be turned off.

#### NOTE

If you need to turn off the power completely, first turn off the Power switch, then unplug the power cord from the power outlet. Refer to **Power Supply** (p. 5).

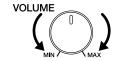
# Adjusting the Sound's Volume and Brilliance

Turn the [VOLUME] knob to adjust the overall volume.

Press the [BRILLIANCE] button to adjust the brightness of the sound.

Select one of the three available settings to obtain the desired brilliance.

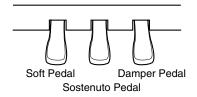
[BRILLIANCE] button's indicator	Off	Red	Green
Brilliance	Medium	Mellow	Bright





#### **About the Pedals**

The pedals have the following functions, and are used mainly for piano performance.



#### Damper pedal (right pedal)

While this pedal is pressed, notes will be sustained even after you take your fingers off the keys.

On an acoustic piano, holding down the damper pedal will allow the remaining strings to resonate in sympathy with the sounds that you played from the keyboard, adding a rich resonance.

The MP-70 simulates this sympathetic resonance.



You can change the amount of resonance applied with the damper pedal. Please refer to "Changing the Damper Pedal's Resonance" (p. 32).

#### Sostenuto pedal (center pedal)

This pedal sustains only the sounds of the keys that were already played when you pressed the pedal.

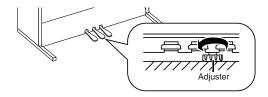
#### Soft pedal (left pedal)

When you hold down this pedal and play the keyboard, the sound will have a softer tone.

#### About the adjuster

When you move the MP-70 or if you feel that the pedals are unstable, adjust the adjuster located below the pedals as follows.

O Rotate the adjuster to lower it so that it is in firm contact with the floor. If there is a gap between the pedals and the floor, the pedals may be damaged. In particular when placing the instrument on carpet, adjust this so that the pedals firmly contact the floor.



# Chapter 1. Enjoying the Internal Songs and Demo

### **Listening to Internal Songs**

The MP-70 comes with 66 piano songs onboard.

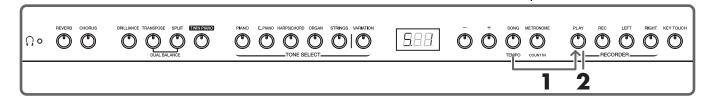
#### ■ Playing Back All Songs Continuously (All Song Play)

The internal songs can be played back consecutively.



"Chapter 3. Playing Along with the Internal Songs" (p. 23)

"Internal Song List" (p. 43)



Hold down the [SONG/TEMPO] button, and press the [PLAY] button.

The [Song/Tempo] button's indicator will light in red, the [Play] button's indicator will blink, and the songs will play back successively, starting with the currently selected song.

The song number appears in the display for several seconds.



You can press the [-] or [+] button to select the song that you want to play back. When all songs have been played, playback will return to the first song and resume.

#### Stopping the playback

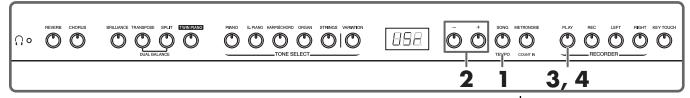
**2** Press the [PLAY] button.

Playback will stop.

#### MEMO

When you play back an internal song, the reverb effect will automatically be turned on (the button's indicator lights).

#### ■ Selecting a Song and Playing It



#### Choosing the song to play back

Press the [SONG/TEMPO] button, getting its indicator to light in red.

The song number appears in the display for several seconds.



**2** Press the [-] or [+] button to select a song.

Holding down the button causes the numbers to change continuously.

#### Chapter 1. Enjoying the Internal Songs and Demo

#### **Playing back**

**3** Press the [PLAY] button.

The button's indicator will light, and the selected song will play.

#### Stopping the playback

4 Press the [PLAY] button.

The button's indicator goes out, and playback stops.

The next time you press the [PLAY] button, the song that was stopped is played from the beginning.

#### About the display for the internal songs

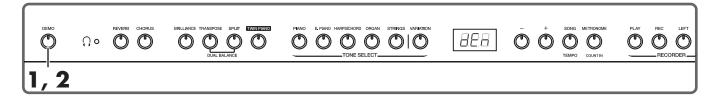
Display	Descriptions
S. U	Songs saved with Song Backup (p. 31).
USr (user)	The location where you can record your performance. (For details on recording $\rightarrow$ p. 26)
Numbers with a "S."	Internal songs.

<sup>\*</sup> You can select "S.U" when executing Song Backup. Select "USr" then press the [-] button.

### **Listening to the Demo Songs**

You can listen to various demo songs, including those demonstrating the piano and other tones, as well as the function applied to the piano tones.

#### ■ Playing Back the Tone Demo Songs



#### Press the [DEMO] button.

The button's indicator flashes, and playback of the tone demo songs starts.



When playback of the last song is finished, playback then returns to the first song. When you press any of the tone buttons, or the [TWIN PIANO] button, or the [SPLIT] button while the [DEMO] button is flashing, the demo song corresponding to that button is played.

Button assigned tone demo	Demo content		Copyright
[PIANO]	Piano tone demo songs		
[E. PIANO]	E. Piano tone and Vibraphone tone demo songs		
[HARPSICHODE]	Harpsichord tone demo songs		
[ORGAN]	Organ tone demo songs	Adrian	© 2005
[STRINGS]	Strings tone and Choir tone Scott Roland Corp demo songs		Roland Corporation
[SPLIT]	Demo songs using the Split function (p. 20)		
[TWIN PIANO]	Demo songs using the Twin Piano function (p. 18)		

#### **Stopping the Tone Demo Songs**

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

The [DEMO] button's indicator goes off, and the demo quits.

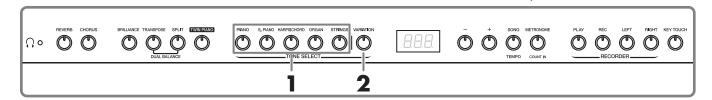


No data for the music that is played will be output from MIDI OUT.

# Chapter 2. Performance

# Performing with a Variety of Sounds

The MP-70 contains 15 different internal tones. The tones are organized into five tone groups, which are assigned to the TONE SELECT buttons.



#### Selecting a tone group

#### Press any TONE SELECT button.

The indicator of the button you pressed will light.

When you play the keyboard, you will hear a sound in the selected tone group.

#### **Selecting variation tones**

#### **2** Press the [VARIATION] button.

Three different tones (numbered 1–3) are assigned to each TONE SELECT button. Use the [VARIATION] button to select among them.

Each time you press the [VARIATION] button, the button's indicator will change color, and the three sounds will be selected successively.

Tone number	1	2	3
[VARIATION] button's indicator	Off	Red	Green

Some of the number 3 tones form pairs, which can be layered and sounded together.

The tone you've selected is heard when you finger the keyboard.



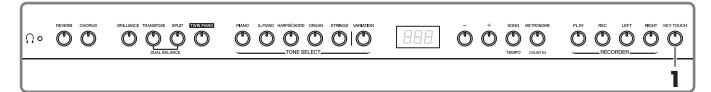
For more details, refer to "Tone List" (p. 42).



When Dual play (p. 19) or Split play (p. 20) is used, only sound number 1 or 2 can be selected. If you use Dual play or Split play with a TONE SELECT button for which tone number 3 is selected, tone number 1 will be selected for that TONE SELECT button.

# Adjusting the Keyboard Touch (Key Touch)

You can adjust the touch (playing feel) of the keyboard.



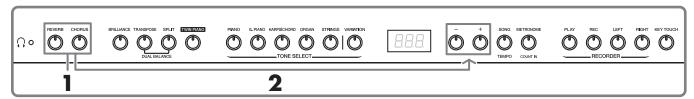
#### Press the [KEY TOUCH] button.

The button's indicator will light, and the feel of the keyboard will change.

Each time you press the [KEY TOUCH] button, the button's indicator will change color, and the feel of the keyboard will change.

Indicator	Settings	
OFF	Medium	This allows you to play using the most natural touch. This is the closest to the touch of an acoustic piano.
Red	Heavy	Fortissimo (ff) cannot be produced unless you play more strongly than usual, making the keyboard feel heavier. Dynamic fingering adds even more feeling to what you play.
Green	Light	Fortissimo (ff) can be produced by playing less strongly than usual, making the keyboard feel lighter. This setting makes it easy to play, even for children.
Orange	Fixed	Sounds at a fixed volume, regardless of your keyboard playing strength.

### **Applying Effects to the Sound**



#### ■ Adding Reverberation to the Sound (Reverb)

By applying the reverb effect you can produce a pleasant reverberation, making it sound as though you were performing in a concert hall.

Press the [REVERB] button.

The button's indicator will light, and a reverb effect will be applied to the sound. To cancel the reverb effect, press the [REVERB] button, getting its indicator to go dark.

#### ■ Changing the depth of the reverb effect

The amount (depth) of the reverb effects can be set to any of eight levels.

**2** Hold down the [REVERB] button and press the [-] or [+] button.

The currently specified value will be displayed.

Higher values will produce a deeper effect.



#### Adding richness to the sound (Chorus)

By adding the chorus effect, you can give the sound greater dimension, with more fatness and breadth.

Press the [CHORUS] button.

The button's indicator will light, and a chorus effect will be applied to the sound.

To cancel the chorus effect, press the [CHORUS] button, getting its indicator to go dark.

#### ■ Changing the depth of the chorus effect

The amount (depth) of the chorus effects can be set to any of eight levels.

**2** Hold down the [CHORUS] button and press the [-] or [+] button.

The currently specified value will be displayed.

Higher values will produce a deeper effect.

#### MEMO

When you play back an internal song, the reverb effect will automatically be turned on (the button's indicator lights).



When the power is turned on, reverb is set to "4."



When you hold down the [REVERB] button, the currently specified reverb depth value will be displayed.



You cannot save separate reverb settings to each tone individually.



You can save separate chorus effect on/off settings to each tone individually. The original settings are restored when the power is turned off.

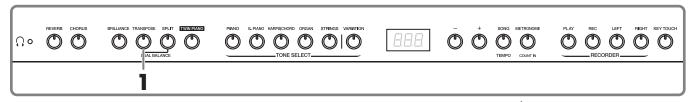


When the power is turned on, chorus is set to "4."

# Transposing the Key of the Keyboard (Transpose)

By using the "Transpose function," you can transpose your performance without changing the notes you play. For example, even if the song is in a difficult key with numerous sharps ( $\sharp$ ) or flats ( $\flat$ ), you can transpose it to a key that is easier for you to play.

When accompanying a vocalist, you can easily transpose the pitch to a range that is comfortable for the singer, while still playing the notes as written (i.e., with the same fingering positions).



Continue to hold down the [TRANSPOSE] button, and press a note to indicate the tonic of the key to which you want to transpose.

The button's indicator will light, and the keyboard will be transposed.

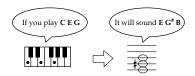
You can also transpose by holding down the [TRANSPOSE] button and pressing the [-] or [+] button.

If you hold down the [TRANSPOSE] button and press the [-] and [+] buttons simultaneously, the setting will return to the original value (0).

This can be set in a range of -6–0–5 (semitone steps).

For example, if you want the E pitch to sound when you play the C key, hold down the [TRANSPOSE] button and press the E key.

Counting from C as a reference point, one moves up four keys, including the black keys, to reach E, thus "4" appears in the display.



When the transpose value is set to "0," the button's indicator will remain dark even if you press the [TRANSPOSE] button.

To cancel the transpose function, press the [TRANSPOSE] button, extinguishing its indicator.

When you press the [TRANSPOSE] button once again, getting its indicator to light, the keyboard will be transposed to the note you specified here.



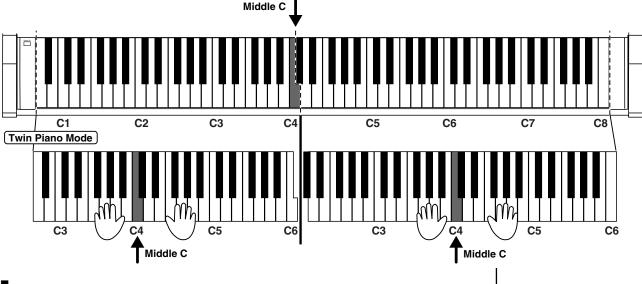
When you hold down the [TRANSPOSE] button, the currently specified value will be displayed.



This setting returns to the original value (0) when you turn off the power.

### Splitting the Keyboard Into Two Sections for Four-Hand Performances (Twin Piano Mode)

You can divide the keyboard into two separate sections, allowing two people to perform in the same registers.



Press the [TWIN PIANO] button.

The [TWIN PIANO] button and the [SPLIT] button's indicator will lit.



The following occur when Twin Piano Mode is switched on:

- The keyboard is divided into two separate sections, and the pitch changes.
- The grand piano tone is sounded by both the left and right sections of the keyboard, and the same effect settings are used for both.
- The right pedal now functions as the damper pedal for the right keyboard section, and the left pedal functions as the damper pedal for the left keyboard section.
- The center pedal now functions as the Sostenuto pedal for the right keyboard section.
- If recording is in progress or the instrument is in recording standby, recording is stopped or recording standby is cancelled. The [REC] button is disabled while Twin Piano Mode is active.
- If the Split function happens to be on, it is switched off.

### **2** To exit the function, press the [TWIN PIANO] button.



The Damper Resonance function is disabled while Twin Piano Mode is active.



Tones and effects can be switched while Twin Piano Mode is active. In that case, the same tone or effect is set for both the left and right sections.

# Playing Two Sounds Together (Dual Play)

Simultaneously playing two tones when one key is pressed is called "Dual play."

Simultaneously press the two TONE SELECT buttons that you want to play together.

The indicator of the button you pressed will light.

When you play the keyboard, the tones of the two TONE SELECT buttons you selected will sound simultaneously.

To cancel Dual play, press any TONE SELECT button.

#### To change the tone of the right button of the two selected tones

Press the [VARIATION] button.

Dual play now features the tone of the left side's TONE SELECT button along with the newly selected tone.

#### To change the tone of the left button of the two selected tones

Cancel the Dual play, and then re-select the tone.

#### Adjusting the Volume Balance in Dual Play (Dual Balance)

You can change the volume balance between the two layered sounds in Dual play.

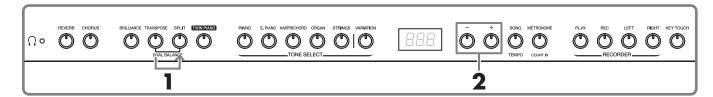


When Dual play is used, the [VARIATION] button's indicator will light to indicate the selection of the right button of the two selected tones.



When Dual play is used, only sound number 1 or 2 can be selected.

If you use Dual play with a TONE SELECT button for which tone number 3 is selected, tone number 1 will be selected for that TONE SELECT button.



Hold down the [TRANSPOSE] button and press the [SPLIT] button.

The indicators of the buttons you pressed will blink.

The current volume balance appears in the display.

**2** Press the [-] or [+] button to change the value.

The volume balance changes.

To return to the original volume balance, press the [-] and [+] buttons simultaneously.



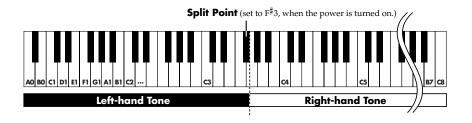
Press the [TRANSPOSE] or [SPLIT] button, and the buttons' indicator will return to the previous state.



This setting returns to the original value when you turn off the power.

# Playing Different Tones with the Left and Right Hands (Split Play)

Dividing the keyboard into right-hand and left-hand areas, then playing different sounds in each is called "Split play." The boundary key is called the "split point."

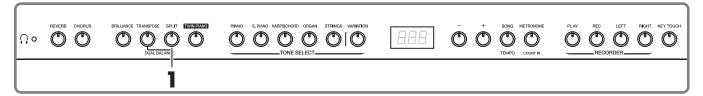




The split point key is included in the left-hand keyboard area.



In Split play, the damper pedal will be applied only to the right-hand area of the keyboard. If you want the damper pedal to be applied to the left-hand area, refer to "Applying the Damper Pedal to the Left-hand Keyboard Area" (p. 35).



#### Press the [SPLIT] button.

The button's indicator will light.

The keyboard is divided into right-hand and left-hand areas.

The tone played on the right side is the tone in use before the [SPLIT] button is pressed, while the bass tone is played on the left side.

To cancel Split play, press the [SPLIT] button, getting its indicator to go dark.

#### Changing tone played by the left hand

#### Press the [VARIATION] button.

Each time you press the [VARIATION] button, the button's indicator will change color, and the left-hand tone will change.

Some tones assign the tone that had been selected before you pressed the [SPLIT] button to the left hand area of the keyboard.

#### Changing tone played by the right hand

#### Press the TONE SELECT button.

The tone of the right-hand area will change. A tone that is a suitable match for the right-hand tone will be selected for the left-hand area.

If you want to change the variation for the right-hand tone, cancel Split play and then re-select the tone.

#### MEMO

### When using Dual play, press the [SPLIT] button

The right hand will play the tone of the left button of Dual play, and the left hand will play a suitable match for the right-hand tone.

#### MEMO

When Split play is used, only tone numbers 1 or 2 can be selected.

If you use Split play with a Tone button for which tone numbers 3 selected, tone number 1 will be selected for that Tone button.



For information about the tones that can be selected for the left hand section, refer to the "Tone List" (p. 42).



The selected left hand tone is remembered for each TONE SELECT button. When you turn off the power, it will return to the original setting.

#### ■ Changing the Keyboard's Split Point

You can change the location where the keyboard is divided (the split point) within the range of B1 through B6.

While continuing to hold the [SPLIT] button, press the key that you want to specify as the split point.

The key you pressed becomes the split point, and belongs to the left-hand section of the keyboard.

You can also change the setting by pressing the [-] or [+] button while continuing to hold down the [SPLIT] button.

If you hold down the [SPLIT] button and simultaneously press the [-] and [+] buttons, the setting will return to its original value (F#3).



### **Using Metronome**

#### **■ Sounding the Metronome**

The MP-70 features a built-in metronome.

While a song plays back, the metronome will sound at the tempo and time signature (Beat) of that song.



The setting is at "F#3" when the piano is powered up.

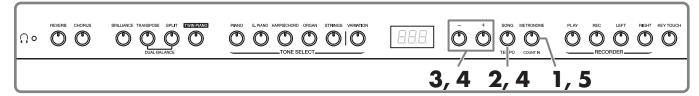


The split point key is displayed as follows.

Display	С	C	d	E_
Letter name	С	C#	D	Еμ
Display	Е	F	F -	G
Letter name	Е	F	F#	G
Display	A_	A	b_	b
Letter name	Αþ	A	В	В



When you continue holding the [SPLIT] button, the currently specified split point will be displayed.



#### Sounding the metronome

Press the [METRONOME/COUNT IN] button.

The metronome will sound.

The button flashes in red and green in time with the beat selected at that time. The button lights in red on the downbeats, and in green on weak beats.

#### Changing the tempo

- **2** Press the [SONG/TEMPO] button; the button's indicator lights in green.
- **3** Press the [-] or [+] button to adjust the tempo.

#### Changing the beat of metronome

4 Hold down the [SONG/TEMPO] button, and press the [-] or [+] button.

The currently selected beat will be displayed.

If you hold down the [SONG/TEMPO] button and press the [-] or [+] button, the beat will change.

If you hold down the [SONG/TEMPO] button and press the [-] and [+] buttons simultaneously, the beat will go back to what it was before you changed it.



Display	beat	Display	beat
2.2	2/2	6.4	6/4
0.4	Only weak beats	7.4	7/4
2.4	2/4	3.8	3/8
3.4	3/4	6.8	6/8
4.4	4/4	9.8	9/8
5.4	5/4	12.8	12/8

#### Stopping the metronome

Once again press the [METRONOME/COUNT IN] button, getting the button to go dark.

The metronome will stop.

#### ■ Changing the Metronome Volume

The volume of the metronome can be adjusted, with nine volume levels available.

# Hold down the [METRONOME/COUNT IN] button and press the [-] or [+] button.

The currently specified volume will be displayed.

Continue to hold down the [METRONOME/COUNT IN] button, and press the [-] or [+] button to sound the metronome, and change the volume.



#### NOTE

It is not possible to change the beat during song playback or recording.



When you hold down the [SONG/TEMPO] button, the currently specified metronome beat will be displayed.



### Correspondence between beat and tempo display

Beat	Tempo Value
2/2	=10-125
x/4	=20-250
x /8	=40-500



This is set to "4" when the instrument is turned on.



When you hold down the [METRONOME/COUNT IN] button, the currently specified metronome volume will be displayed.



When the metronome volume is set to "0," the metronome sound does not play.

# Chapter 3. Playing Along with the Internal Songs

Here's how you can play along with the internal songs.

You can slow down the playback tempo of the song, or play back each hand separately. Before you try playing the song, listen to it several times to get a general feel for the song. For details on operation, refer to "Selecting a Song and Playing It" (p. 11).

### **Changing the Tempo**

If the song has a rapid tempo, you can slow down the tempo so that you can practice it more easily. It is effective to gradually raise the tempo as you practice.

#### MEMO

If you turn on the metronome while the song plays back, the metronome will sound at the beat and tempo of the song.

#### MEMO

Some of the internal songs have tempos that change during the song.



First select the song that you want to play back (p. 11).

#### Press the [SONG/TEMPO] button, getting its indicator to light in green.

The tempo appears in the display.

Each time you press the [SONG/TEMPO] button, the tempo and the currently selected song number (prefixed by "S.") will be displayed alternately.

While the tempo is displayed, the [SONG/TEMPO] button indicator will light in green. While the song number is displayed, it will light in red.

#### **2** Press the [-] or [+] button to adjust the tempo.

The tempo can be adjusted in a range of  $\downarrow$  =20–250.

You can also change the tempo during playback.

Pressing the [+] button once increases the tempo by one unit. Holding down the button increases the tempo continuously.

Pressing the [-] button once decreases the tempo by one unit. Holding down the button makes the tempo change (slow down) continuously.

If you press the [-] and [+] buttons simultaneously, you will return to the basic tempo of the song (the tempo before you modified it).

#### ■ Adding a Count-in to Match the Timing (Count-In)

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

Sounding a "count sound" leading up to playback of a song is called "Count-In."

On the MP-70, if you playback a song while the metronome is sounding, two measures of lead-in count will be heard at the beginning of the song.

#### MEMO

### Correspondence between beat and tempo display

Beat	Tempo Value
2/2	=10-125
x/4	=20-250
x /8	=40-500



### Indication of the tempo during song playback

While the song is playing, the initial tempo of the song will continue to be displayed, regardless of tempo changes during the song.



For more about the display for the internal songs, refer to p. 12.

#### MEMO

During the count-in, the count measure is indicated in the display as "-2" then "-1."



This appears when a song with a pickup (a song that does not start on the first beat) is played back.



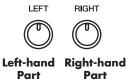
"Sounding the Metronome" (p. 21)

### **Playing Each Hand Separately**

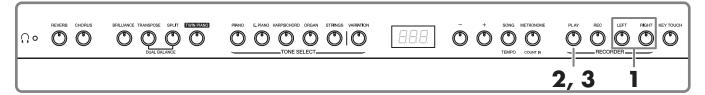
The internal songs have different parts recorded to the left-hand and right-hand performances.

When playing back internal songs, you can select the parts to be played.

Left-hand performances are assigned to the [LEFT] button, and right-hand performances are assigned to the [RIGHT] button.



Here's how to practice each hand separately along with the song.



First select the song that you want to play back (p. 11).

#### Selecting the part that you yourself will play

Press the [LEFT] or [RIGHT] button.

The indicator of the button you've pressed goes out, and the sound of the selected part will no longer be heard.

For example, if you want to practice the right hand, press the [RIGHT] button and get its indicator to go dark. When you play back the song, the right-hand performance will not sound.

#### Playing back a song

**2** Press the [PLAY] button, getting its indicator to light.

The song will begin playing back. The part you selected in step 1 will not sound.

Practice your right-hand performance along with the left-hand playback.

Once again press the button you selected in step 1. The button's indicator will light, and the sound will be heard once again.

You can also mute and resume the sound of the parts by pressing the [LEFT] button or [RIGHT] button even while the song is playing.

#### Stopping the song

**3** Press the [PLAY] button.

The song will stop.

# Chapter 4. Recording Your Performance

You can easily record your performances.

A recorded performance can be played back to hear your own playing, or to add additional parts.

The following types of recording can be done using the MP-70.

· Recording just your own keyboard performance

(→ "Recording a New Song" p. 26)

- Recording along with an internal song (→ "Recording Along with a Song" p. 27)
- Recording each hand separately (→ "Recording the Right-Hand and Left-Hand Parts Separately" p. 28)

#### ■ Notes Regarding Recording

- Only one song can be recorded.
- Recorded performances are normally deleted when you turn off the power to the MP-70, but you can use the Song Backup function (p. 31) to have the recorded performance be retained even while the power is turned off.
- You can also record performances to external audio devices as well as save performance data onto floppy disks or other media using an external MIDI device. For details, refer to "Chapter 6. Connecting External Devices" (p. 37).

#### If you see the following...

If you attempt to record using a different internal song when a performance has already been recorded, the following will appear, and the indicators of [REC] button will blink.



If it is OK to erase the performance, press the [REC] button.

If you do not want to erase the performance, press the [PLAY] button.

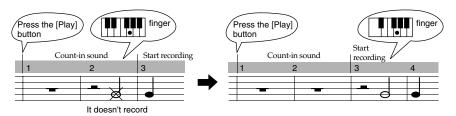
#### **Recording Songs Starting with Pickups**

Use the following method to record songs that start with pickup beats (where the song begins on a beat other than the first beat of the measure).

1. Press the [PLAY] button in Step 6 of "Recording a New Song" on the next page.

After a two-measure count-in, recording begins.

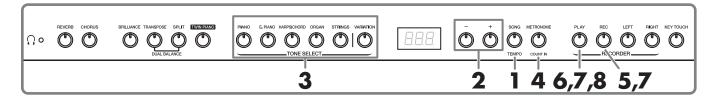
No recording takes place while the count sound is playing, even if the keys are played.



- 2. Start performing once recording begins.
- 3. After the performance is finished, press the [PLAY] or [REC] button.

### **Recording a New Song**

Record only the keyboard performance without playing along with an internal song.



#### Recording settings (select "USr")

Press the [SONG/TEMPO] button, getting its indicator to light in red.

The song number appears in the display for several seconds.

2 Press [-] and [+] buttons simultaneously.

"USr" appears in the display.

#### Specifying the tone and tempo for recording

- 3 Select the tone that you want to play (p. 14).
- 4 If necessary, turn on the metronome.

Sound the metronome while you set the tempo and beat of the song (p. 21).

**5** Press the [REC] button.

The [REC] button's indicator will light, the [PLAY] button's indicator will blink, and you will be in recording-standby mode.

#### Start recording

**6** Recording will start when you either press the [PLAY] button or play the keyboard.

Two measures of the count sound are played, and the recording begins.

Note that recording will also begin as soon as you play anything on the keyboard, even if you do not press the [PLAY] button. There is no count sound played when you start in this manner.

When recording begins, the [PLAY] button and [REC] button indicators will light. Go ahead and perform on the keyboard.

#### Stop recording

**7** Press the [PLAY] or [REC] button.

Recording will stop, and the indicators for the [PLAY] and [REC] buttons will go dark.

#### Play back the recorded performance

**8** Press the [PLAY] button.

You will hear the recorded performance.

Once again press the [PLAY] button, and playback will stop.

#### NOTE

If you layer a newly recorded performance without erasing the recorded song, the song tempo and beat will be stored with the settings that were recorded first.

#### MEMO

#### About the "USr" display

When you stop recording, the

" USF " display will change

to " USc. ."

The "." in the lower right of the display indicates that there is already a recorded performance.

#### MEMO

Refer to the previous page if recording a song that starts with pickup beats (where the song begins on a beat other than the first beat of the measure).

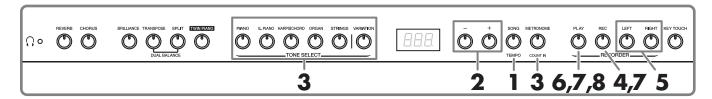


If you record without specifying the recording track, the performance will be recorded to the [LEFT] button. If you want to record the right and left hands separately on separate recording tracks, refer to "Recording the Right-Hand and Left-Hand Parts Separately" (p. 28).

### **Recording Along with a Song**

You can record a performance that you play along with an internal song.

Using the [LEFT] or [RIGHT] buttons, you can perform and record just the right-hand part of a song while listening to the left-hand playback of an internal song.



#### Selecting the song to record

Press the [SONG/TEMPO] button, getting its indicator to light in red.

The display will indicate the song number for several seconds.

- **2** Use the [-] or [+] button to select the song that you want to play.
- **3** As necessary, set the tone, metronome, and tempo (p. 21).
- 4 Press the [REC] button.

The [REC] button's indicator will light.

#### Selecting the track to record

**5** Press the [LEFT] or [RIGHT] button.

When you want to record the left-hand performance, press the [LEFT] button; to record that of the right hand, press the [RIGHT] button.

The indicators of the button you pressed and of the [PLAY] button will blink, and the MP-70 enters recording-standby mode.

#### Starting to record

**6** Press the [PLAY] button.

Recording begins after two measures of count sound. Play along with the song.

#### Stop recording

**7** Press the [PLAY] or [REC] button.

Recording will stop, and the indicators for the [PLAY] and [REC] buttons will go dark. The recorded performance is stored in "USr (User)."

#### Play back the recorded performance

**8** Press the [PLAY] button.

You will hear the recorded performance.

Once again press the [PLAY] button, and playback will stop.



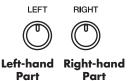
If "dEL" appears in the display, refer to p. 25.

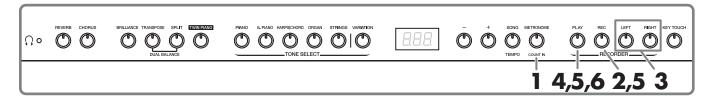
# Recording the Right-Hand and Left-Hand Parts Separately

You can use the MP-70's recorder to record the right-hand and left-hand parts separately.

You can also specify individual parts to record to when you want to do a recording over again.

Press the [LEFT] or [RIGHT] button to specify the part to be recorded.





As described in steps 1 and 2 of "Recording a New Song" (p. 26), select "USr" before you continue. When layering recordings with internal songs, select the internal song as described in steps 1 and 2 of "Selecting a Song and Playing It" (p. 11).

- As necessary, turn on the metronome (p. 21).
- **2** Press the [REC] button.

The [REC] button's indicator will light.

The indicator on the button for the part to which a performance has been recorded will light.

The indicator on the button for the part which is about to be recorded will flash.

#### Selecting the track to record

**3** Press the [LEFT] or [RIGHT] button to select the track that you want to record.

The indicator of the button you pressed will blink, and the MP-70 enters recording-standby mode.

#### **Start recording**

4 Press the [PLAY] button.

Two measures of the count sound are played, and the recording begins. Go ahead and perform on the keyboard.

Note that recording will also begin as soon as you play anything on the keyboard, even if you do not press the [PLAY] button. There is no count sound played when you start in this manner.

#### NOTE

If you layer on a newly recorded performance without erasing the recorded song, the song tempo, beat, and metronome settings of the original recording will be stored along with the new recording.



The track buttons allow you to record to either the [LEFT] or the [RIGHT] button, one at a time.

#### Stop recording

### **5** Press the [PLAY] or [REC] button.

Recording stops, and the indicators for the [PLAY] and [REC] buttons go out.

The performance of the specified part has been recorded.

To record the performance of the other part, go back to Step 2 and repeat the procedure from there.

You can listen to the performance you recorded already while you record.

#### Play back the recorded performance

#### 6 Press the [PLAY] button.

You will hear the recorded performance.

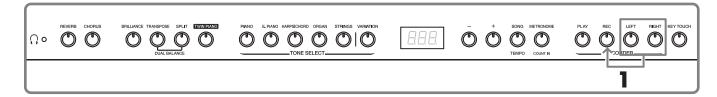
Press the [PLAY] button once again, and playback will stop.

### **Erasing Recorded Performances**

You can erase a recorded performance.

#### ■ Erasing a Performance from the Specified Track

You can select a recorded track and erase it.

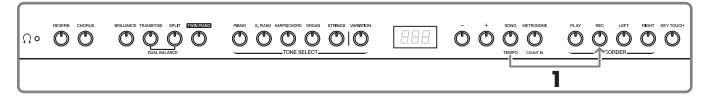


Hold down either the [LEFT] or [RIGHT] button and press the [REC] button.

The indicator of the button you pressed will go dark, and the performance of the selected track will be erased.

#### **■** Erasing a Song

You can erase a song you've recorded.



Hold down the [SONG/TEMPO] button and press the [REC] button.

The following display will appear, and the indicators of the [REC] and [PLAY] button will blink.



If you decide not to erase the performance, press the [PLAY] button.

**2** Once again press the [REC] button.

The recorded performance is erased.

# Saving Recorded Songs Even with the Power Turned Off (Song Backup)

Normally, any songs you have recorded are deleted when you turn off the power to the MP-70. However, if you wish, you can have such recorded songs be saved even while the power is turned off. This function is called "Song Backup."



Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

**2** Press the [SONG/TEMPO] button.

The button's indicator flashes.

The following appears in the display.



**3** Press the [REC] button.

The display flashes, and Song Backup is executed.

When Song Backup is finished, the display and buttons return to their normal appearance.

#### ■ Deleting backed up songs

- \* You can delete backed up songs only when you have no songs recorded.
- Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

**2** Press the [SONG/TEMPO] button.

The following appears in the display.



To cancel the procedure, press the [SPLIT] button or the [TWIN PIANO] button.

**3** Press the [REC] button.

The backed up song is deleted.

The display and buttons return to their normal appearance.



You can select and play songs that have been backed up in the same way as you do with the internal songs (p. 11). Songs that have been backed up are indicated in the display as shown below.



# Chapter 5. Changing Various Settings

# Changing the Damper Pedal's Resonance

On an acoustic piano, depressing the damper pedal makes the notes you play resonate with other strings, adding rich reverberations and fatness to the sound. The damper pedal on the MP-70 recreates this resonance (damper resonance) when depressed.

You can select from eight levels of depth for the resonant sound (resonance level).

This is set to "5" when the instrument is turned on.

- \* This setting is enabled only with the piano tones. You cannot set this for other tones.
- **1.** Hold down the [REVERB] and [CHORUS] button, and press the [-] or [+] button.

When you continue holding the [REVERB] and [CHORUS] button, the currently specified value will be displayed. Larger values will produce a deeper effect.



# Making Detailed Settings (Function)

You can make performance-related settings such as tuning and temperament.

#### How to enter function mode

**1.** Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode. The indicators for the [SPLIT] and [TWIN PIANO] buttons and the button to which the function is assigned start flashing.

#### Setting the various functions

Press the button to which the desired function is assigned.

The indicators for pressed button, [SPLIT] button, and [TWIN PIANO] button flash.

Button	Function	Page
[PIANO]	Master Tuning	p. 33
[E. PIANO]	Temperament	p. 34
[HARPSICHORD]	Stretch Tuning	p. 34
[ORGAN]	Applying the damper pedal to the left-hand keyboard area	p. 35
[STRINGS]	MIDI send channel	p. 39
[VARIATION]	Local Control	p. 39

Button	Function	Page
[SONG/TEMPO]	Song Backup  Deleting Backed Up Songs	p. 31
[METRONOME/ COUNT IN]	Saving the master tune setting	p. 36
[PLAY]	Transmitting a recorded performance	p. 39
[RIGHT]	V-LINK	p. 36

For details on each function, refer to the explanations below.

#### **3.** Press the [-] or [+] button to change the value.

If you press the [-] and [+] buttons simultaneously, the value will return to the power-up default setting.

The procedure differs from that for Song Backup.

For more details, refer to p. 31.

#### How to exit function mode

#### 4. Press the [SPLIT] or [TWIN PIANO] button.

The button's indicator will return to the previous state.

# ■ Tuning to Other Instruments' Pitches (Master Tuning)

In situations such as when playing ensemble with other instruments, you can tune the MP-70's standard pitch to the pitch of another instrument. The standard pitch generally refers to the pitch of the note that's played when you finger the middle A key.

# **1.** Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

2. Press the [PIANO] button.



The last three digits are indicated in the display. "440.0 Hz" is indicated in the figure above.

**Value** 415.3 Hz-440.0 Hz-466.2 Hz

Power-up default setting  $440.0\ Hz$ 

This setting remains in effect until you turn off the power.

→ If you want to have the settings remain stored even while the power is turned off, refer to "Getting the Master Tune Setting To Be Remembered While the Power Is Turned Off" (p. 36).

#### **■** Changing the Temperament

You can play classical styles such as Baroque using historic temperaments (tuning methods).

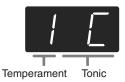
Today, compositions are generally created with equal temperament in mind and are played using equal temperament. However in past ages of classical music, a variety of temperaments were used. Playing a composition with its original tuning lets you enjoy the sonorities of the chords that the composer originally intended.

# **1.** Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

#### 2. Press the [E.PIANO] button.

The following appears in the display.



You can choose from among the seven temperaments described below.

Dis- play	Temperament	Qualities
1	Equal	In this tuning, each octave is divided into twelve equal steps. Every interval produces about the same amount of slight dissonance.
2	Pythagorean	This tuning, devised by the philosopher Pythagoras, eliminates dissonance in fourths and fifths. Dissonance is produced by third-interval chords, but melodies are euphonious.
3	Just Major	This tuning eliminates ambiguities in the fifths and thirds. It is unsuited to playing melodies and cannot be transposed, but is capable of beautiful sonorities.
4	Just Minor	The Just tunings differ from major and minor keys. You can get the same effect with the minor scale as with the major scale.
5	Mean Tone	This scale makes some compromises in just intonation, enabling transposition to other keys.
6	Werckmeister	This temperament combines the Mean Tone and Pythagorean tunings. Performances are possible in all keys (first technique, III).
7	Kirnberger	This is an improvement of the Mean Tone and Just tunings that provides a high degree of freedom of modulation. Performances are possible in all keys (III).

Power-up default setting 1 C

#### **Tonic**

When playing with tuning other than equal temperament, you need to specify the tonic note for tuning the song to be performed (that is, the note that corresponds to C for a major key or to A for a minor key).

While hold down **the [E. PIANO] button**, and press **a note** to specify the desired tonic key.

The tonic note you specify will be displayed as follows.

Display	С	C <sup>-</sup>	d	E_	Е	F	F	G	A_	A	b_	b
Letter name	С	C#	D	Εþ	Е	F	F#	G	Αþ	A	в♭	В

If you choose an equal temperament, there's no need to select a tonic note.

- \* If you record with a temperament other than equal temperament selected, and then want to play back that performance, use this setting to select the same temperament for playback as the temperament you used when recording.
- \* When performing in ensemble with other instruments, be aware that depending on the key, there may be some shifting of the pitch. Tune the MP-70 to the fundamental pitch of the other instruments.

# ■ Setting the Tuning Curve (Stretch Tuning)

A piano is generally tuned to a pitch with a lower bass range and a higher treble range than equal temperament. This special tuning method for pianos is called "Stretch Tuning."

**1.** Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

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

The button's indicator flashes.

The following appears in the display.



Display	Descriptions
OFF	This is the standard tuning curve. This is the right choice when using Dual play (p. 19), or when playing in ensemble with other instruments.
On	This tuning curve expands the bass and treble ends somewhat. It is suitable for performances such as piano solos. This setting is in effect when you turn on the power.

#### Power-up default setting On

\* This effect works only with the piano tones.

# ■ Applying the Damper Pedal to the Left-hand Keyboard Area

When you are using Split play (p. 20), you can apply the damper pedal effect to the sound played by the left-hand keyboard range.

# **1.** Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

#### 2. Press the [ORGAN] button.

The following appears in the display.



Display	Descriptions
On	The damper pedal effect will be applied to the sound of the left and right hand keyboard area.
OFF	The damper pedal effect will not be applied to the sound of the left-hand keyboard area.

Power-up default setting OFF

# Preventing the Settings from Changing During Performance

# ■ Disabling Everything Except Piano Play (Panel Lock)

The "Panel Lock" function locks the MP-70 in a state where only piano performance can be used, and all buttons will be disabled. This prevents the settings from being inadvertently modified even if children press the buttons accidentally. In the Panel Lock state, only the grand piano sound can be played.

- Turn the volume to the minimum, and press the [Power] switch to turn off the power.
- **2.** Hold down the [PIANO] button and press the [Power] switch to turn on the power.

The following display will appear.



All buttons are disabled.

#### **3.** Adjust the volume.

When you play the keyboard, the grand piano sound will be heard.

To defeat the Panel Lock function, turn the volume down to the minimum, and turn on the power once again.

# ■ Disabling the Buttons When Using a Tone Other Than Piano (Tone Lock)

Even when using Tones other than the Piano, you can set the instrument so all of its buttons are disabled (the settings in effect at that time will be maintained).

**1.** Hold down the [DEMO] button and press the [KEY TOUCH] button.

The song or the metronome sound that is playing will stop. The following will appear in the display:



All buttons are disabled while the instrument is set like this. To cancel the Tone Lock function, once again hold down the [DEMO] button while you press the [KEY TOUCH] button.

# Getting the Master Tune Setting To Be Remembered While the Power Is Turned Off

Normally, the Master Tune setting reverts to the default value when the power is turned off. However, you can set the MP-70 so that the Master Tune value is retained even while the power is turned off.

**1.** Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

**2.** Press the [METRONOME/COUNT IN] button.

The button's indicator flashes.

The following appears in the display.



3. Press the [REC] button.

The Master Tune setting is saved.

When Memory Backup is finished, the display and buttons return to their normal appearance.

→ To return the Master Tune value to the initial setting, set the value to "440.0 Hz" in the Master Tune settings screen (p. 33; set the value so that "40.0" is indicated in the display), then carry out Steps 1-3.

### **Using the V-LINK function**

Connecting the MP-70 to a V-LINK compatible image device allows you to control the images with the MP-70.

#### **V-LINK**

V-LINK (**V-LINK**) is a function that allows music and images to be performed together. By using MIDI to connect two or more V-LINK compatible devices, you can easily enjoy a wide range of visual effects that are linked to the expressive elements of a music performance.

#### How to Use the V-LINK

 Hold down the [SPLIT] button, and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

2. Press the [RIGHT] button.

The button's indicator flashes.

The following appears in the display.



Display	Descriptions
OFF	The V-LINK function is switched off.
On	The V-LINK function is switched on. You can control images using the twelve keys at the left end of the keyboard.

#### Power-up default setting OFF

**3.** Press the [-] and [+] buttons to switch the V-LINK function on and off.

You can control images using the twelve keys at the left end of the keyboard.

While V-LINK is switched on, the following will appear in the display.



\* While V-LINK is switched on, no sound is produced when you press any of the twelve keys at the left end of the keyboard.

#### How to exit function mode

**4.** Press the [SPLIT] or [TWIN PIANO] button.

The button's indicator returns to its original state.

# Chapter 6. Connecting External Devices

# **Connecting to Audio Equipment**

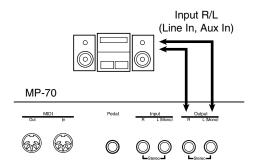
You can connect audio devices to play the sound of the MP-70 through the speakers of your audio system, or to record your performance on a tape recorder or other recording device.

When connecting, please use an audio cable with a standard phone plug (sold separately).

# **Connection Examples**

\* 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.

# Playing the sound of the MP-70 through the speakers of an audio system/Recording the performance of the MP-70 on a recording device

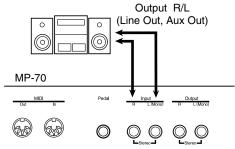


O Use the following procedure when turning on the power.

- **1.** Turn on the power of the MP-70.
- **2.** Turn on the power of the connected device.
- **3.** Adjust the volume of each device.

  When Recording MP-70 Performances on a Recording Device
- **4.** Start recording with the connected device.
- **5.** Perform on the MP-70.
- **6.** When the performance ends, stop recording on the connected equipment.

# Playing the sound of an audio device through the speakers of the MP-70



\* When connection cables with resistors are used, the volume level of equipment connected to the inputs (input jacks) may be low. If this happens, use connection cables that do not contain resistors, such as those from the Roland PCS series.

O Use the following procedure when turning on the power.

- 1. Turn on the power of the connected device.
- **2.** Turn on the power of the MP-70.
- **3.** Adjust the volume of each device.

# Turning off the power

- **1.** Set the volume of the MP-70 and of the connected devices to the minimum position.
- **2.** Turn off the power to the MP-70.
- **3.** Turn off the connected equipment.

# **Connecting to a Computer**

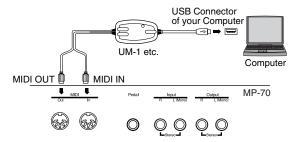
You can use a USB MIDI interface cable (sold separately) to connect the MP-70 to your computer.

If the MP-70 is connected to a computer in which sequencer software such as Roland's "Visual MT" is installed, a song you've recorded on the MP-70 can be saved on your computer.

# **Connection Examples**

- \* 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.
- \* In order to make connections to your computer, you must install "MIDI driver" software on your computer. For details, refer to the owner's manual for your MIDI interface.

Use a USB MIDI interface cable to connect the USB connector of your computer to the MIDI connectors of the MP-70.



# **Connecting MIDI Devices**

By connecting an external MIDI device and exchanging performance data, you can control the performances on one device from the other. For instance, you can output sound from the other instrument or switch tones on the other instrument.

# ■ What's MIDI?

MIDI stands for Musical Instrument Digital Interface, an international standard which allows performance information to be communicated among electronic musical instruments and computers.

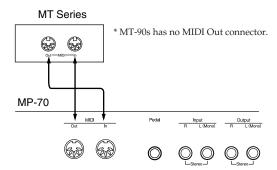
The MP-70 provides MIDI connectors, which allow performance data to be exchanged with external devices. When these connectors are used to connect the MP-70 to external devices, an even wider range of possibilities becomes available.

\* 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.

# **Connection Examples**

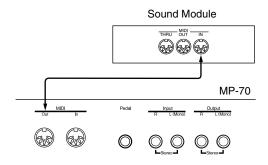
\* To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.

# Playing the MP-70 from a MIDI sequencer/ Recording an MP-70 performance on a MIDI sequencer



\* Set Local Off if you have connected the MP-70 to a MIDI sequencer. Refer to "Switching Local Control on and Off" (p. 39). Also set your MIDI sequencer to MIDI Thru mode (so that messages received at MIDI IN will be re-transmitted without change from MIDI OUT). For details, refer to the owner's manual of your MIDI sequencer.

# Perform on the MP-70 to play a MIDI sound generator



# **Making MIDI-related Settings**

Here's how you can set the transmit channel and other MIDIrelated settings.

## How to enter function mode

**1.** Hold down the [SPLIT] button and press the [TWIN PIANO] button.

The MP-70 switches to the function mode.

The indicators for the [SPLIT] and [TWIN PIANO] buttons and the button to which the function is assigned start flashing.

### **Setting various functions**

**2.** Press the button to which the desired function is assigned.

The indicator of the button you pressed will blink. For details on the contents of each function, refer to the explanations that follow.

**3.** Press the [+] or [-] button to change the value.

If you press the [+] and [-] buttons simultaneously, the setting will return to the original value.

#### How to exit function mode

Press either the [SPLIT] button or the [TWIN PIANO] button.

The button's indicator will return to the previous state.

# ■ MIDI Send Channel Settings

MIDI features sixteen MIDI channels, numbered 1–16. Simply connecting a cable is not enough for communication to take place. The connected devices must be set to use the same MIDI channels. Otherwise, no sound will be produced, and no sounds can be selected.

- \* The MP-70 receives all channels 1-16.
- \* If you are using Dual play (p. 19) or Split play (p. 20) on the MP-70, only the channel you specify here will be transmitted.

If you press **the [STRINGS] button** in step 2 of "Making MIDI-related Settings" (p. 38), a display like the following will appear.

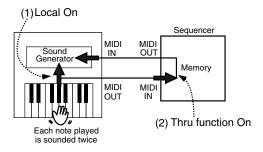


Value 1–16
Power-up default setting 1

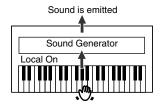
# Switching Local Control on and Off

When connecting a MIDI sequencer, set Local Control to "Off."

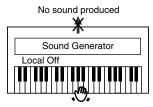
As illustrated, information describing what has been played on the keyboard is passed to the internal sound generator over two different routes, (1) and (2). As a result, you hear overlapping or intermittent sounds. To prevent this from happening, route (1) must be severed, by setting the unit to what is known as "Local Off."



Local Control ON: The keyboard and the internal sound generator are in a linked state.



Local Control OFF: The keyboard and the internal sound generator are in an unlinked state. No sound will be produced by the keyboard when it is played.



\* When a Roland MT series instrument is connected, it is not necessary to make the Local Off setting. MT units transmit Local Off messages when their power is switched on. If you turn on the power in the order of the MP-70 → MT series, Local Off will be set automatically.

If you press **the [VARIATION] button** in step 2 of "Making MIDI-related Settings" (p. 38), a display like the following will appear.



Value On, OF Power-up default setting On

# ■ Transmitting a Performance You Recorded

If you want to transmit a performance recorded on the MP-70 to an external MIDI device or computer, turn this setting "On." If this is "Off," the data will not be transmitted.

If you press **the [PLAY] button** in step 2 of "Making MIDI-related Settings" (p. 38), display like the following will appear.



Value On, OFF
Power-up default setting OFF

If you wish to use your MIDI sequence to save the performance, use the following procedure. In this situation, your external sequencer is set its MIDI Thru feature to be OFF. For details, refer to the owner's manual of your MIDI sequencer.

- Connect a MIDI sequencer such as the MT series (p. 38).
- **2** Record the performance on the MP-70 (p. 25).
- **3** Set this setting to "On."
- **4** Start recording with the connected MIDI device.
- **5** Start playback of the recorded song on the MP-70.
- **6** When playback ends, stop recording with the connected MIDI device.
- 7 Use a connected MIDI sequencer to save the data on a floppy disk or other media.

# **Troubleshooting**

If you think there's a problem, read this first.

Case	Cause/Remedy
The power doesn't come on	Is the power cord connected and plugged in correctly? (p. 8)
The button doesn't work	Is the panel locked? (p. 35) Is the Tone locked? (p. 35) Turn the power off, then back on.
	Is the volume level of the MP-70 turned all the way down? (p. 9)
	Are headphones plugged in and headphones indicator lights up? (p. 8) Has a plug remained connected to the Phones jack? When headphones are connected, the keyboard's speaker stops playing.
No sound is heard	Is Local Off selected? When Local Control is set to OFF, no sound is produced by playing the keyboard. Set Local Control to "ON" (p. 39).
	Is V-LINK switched on? While V-LINK is switched on, no sound is produced when you press any of the twelve keys at the left end of the keyboard (p. 36).
No sound is heard	Have all devices been switched on?
(when a MIDI in-	Are the MIDI cables connected correctly?
strument is con- nected)	Does the MIDI channel match the connected instrument? (p. 39)
Sounds are heard	Is the MP-70 in Dual play? (p. 19)
twice (doubled) when the key- board is played	When the MP-70 is connected to an external sequencer, set it to the Local OFF mode (p. 39). Alternatively, the sequencer could be set so its MIDI Thru feature is OFF.
The tone has	If you use Dual play or Split play with a TONE SELECT button for which tone number 3 is selected, tone number 1 will be selected for that TONE SELECT button (p. 14).
changed in the Split or Dual play	Some tones assign the tone that had been selected before you pressed the [SPLIT] button to the left hand area of the keyboard. Please refer to "Tone List" (p. 42).
	Is the panel locked? (p. 35) Is the Tone locked? (p. 35) Turn the power off, then back on.
Tone doesn't change	Are the indicators for the [SPLIT] and [TWIN PIANO] buttons flashing? Setting of functions is in progress. Press the [SPLIT] or [TWIN PIANO] button to exit function mode (p. 32).

Case Cause/Remedy	
Not all played notes are sounded	The maximum number of notes that the MP-70 can play simultaneously is 64. Frequent use of the damper pedal when playing along with a song may result in performance data with too many notes, causing some notes to drop out.
	Have you set Transpose? (p. 17)
The tuning or pitch of the keyboard or	Are the settings for the "Temperament" and "Stretch Tuning" correct? (p. 34)
song is off	Is the setting for the "Master Tuning" correct? (p. 33)
Song doesn't play back/ Only the sound of a particu- lar instrument in a song does not play	Are the indicator for the Track buttons ([LEFT] and [RIGHT] buttons) extinguished? (p. 24) If the button indicator is out, the music on that track is not heard. Press the track button so the indicator is illuminated.
Can't record	Has one of the track buttons for recording been selected? (p. 25–p. 28)
Tempo of recorded song or metro-	If you select an internal song in which the tempo changes during the song, and then record, the tempo will change in the same way for the performances. The tempo of the metronome will also change in the same way.
nome is off	If you record additional material without erasing the previously recorded song, the song will be recorded at the first-recorded tempo. Please erase the previously recorded song before you re-record (p. 30).
The recorded per- formance has dis- appeared	Any performance that has been recorded is deleted when the power to the MP-70 is turned off. A performance cannot be restored once it's been deleted.  If you do not want a performance to be deleted, use Song Backup (p. 31).
Depressing a ped- al has no effect, or the pedal effect doesn't stop	Is the pedal connected correctly?  Make sure the pedal cord extending from the stand is securely connected to the pedal jack on the rear of the unit (p. 8).
The pedal rattles	Adjust the adjuster underneath the pedal so that the pedal presses firmly against the floor surface (p. 10).
Reverberation still audible even with Reverb turned off	Since the MP-70's piano sounds faithfully reproduce the sense of spaciousness and reverberation of an actual acoustic piano's sound, a certain amount of reverberation is still perceptible, even with the reverb effect deactivated.

Case	Cause/Remedy
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 MP-70, the range that is unaffected by the damper pedal will change depending on the Key Transpose setting.
A High-pitched whine is produced	When listening through headphones:  Some of the more flamboyant and effervescent piano tones feature an ample high-end component, which may make the sound appear to have metallic reverberation added. Since this reverberation becomes particularly audible when supplemented by heavy reverb, you may be able to diminish the problem by reducing the amount of reverb applied to the sound.  When listening through speakers:  Here, a different cause (such as resonance produced by the MP-70) would be suspect. Consult your Roland dealer or nearest Roland Service Center.

Case	Cause/Remedy
The bass range sounds odd, or there is a vibrating resonance	When listening through speakers: Playing at loud volumes may cause instruments near the MP-70 to resonate. Resonation can also occur with fluorescent light tubes, glass doors, and other objects. In particular, this problem occurs more easily when the bass component is increased, and when the sound is played at higher volumes. Use the following measures to suppress such resonance.  • Place speakers so they are 10–15 cm from walls and other surfaces.
resonance	• Reduce the volume.  • Move the speakers away from any resonating objects.  When listening through headphones: Here, a different cause (such as resonance produced by the MP-70) would be suspect. Consult your Roland dealer or nearest Roland Service Center.
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 that does not contain a resistor.

# **Error Messages/Other Messages**

Display	Meaning
S. U	Indicates the song has been backed up.
USr	User Song. Stores recorded performances (p. 26).
USr.	The "." in the display indicates that there is performance material already recorded (p. 26).
S.	Internal song number (p. 11).
PU	This appears when a song with a pickup (a song that does not start on the first beat) is played back.
dEL	This appears when you attempt to delete a recorded song (p. 25, p. 30).
E.32	The amount of performance information is too large, and further recording is not possible.
E.41	A problem such as a loose MIDI cable occurred. Make sure the MIDI cables are correctly hooked up.
	V-LINK function is On (p. 36).

<sup>\*</sup> Error messages are indicated by an "E." before the number. Press any button, and you can cancel the error message.

# **Tone List**

		[SPLIT] Off		[SPLIT] On	
Button name	[VARIATION]	Tone	[VARIATION] Dark	[VARIATION] Red	[VARIATION] Green
	Dark	Grand Piano	Grand Piano / Acoustic Bass	Grand Piano / Acoustic Bass + Cymbal	Grand Piano / Strings
[PIANO]	Red	Mellow Piano	Mellow Piano / Acoustic Bass	Mellow Piano / Acoustic Bass + Cymbal	Mellow Piano / Strings
	Green	Piano + Strings			
	Dark	Electric Piano1	Electric Piano1 / Electric Bass	Electric Piano1 / Acoustic Bass	Electric Piano1 / Strings
[E. PIANO]	Red	Electric Piano2	Electric Piano2 / Electric Bass	Electric Piano2 / Acoustic Bass	Electric Piano2 / Strings
	Green	Vibraphone			
	Dark	Harpsichord	Harpsichord / Strings	Harpsichord / Organ Flute	Clav. / Electric Bass
[HARPSI- CHORD]	Red	Organ Flute	Organ Flute / Organ Bass	Organ Flute / Strings	Organ Flute / Choir
	Green	Clav.			
	Dark	Church Organ	Church Organ / Organ Bass	Church Organ / Strings	Church Organ / Choir
[ORGAN]	Red	Rotary Organ	Rotary Organ / Lower Organ	Rotary Organ / Electric Bass	Jazz Organ / Rotary Organ
	Green	Jazz Organ		1	
	Dark	Slow Strings	Slow Strings / Pizzicato	Slow Strings / Choir	Flute / Slow Strings
[STRINGS]	Red	Choir	Doos Voice / Voice Bass	Strings / Choir	Oboe / Strings
	Green	Strings		1	1

<sup>\*</sup> A+B: simultaneously playing two tones

You can change the volume balance between the two tones, refer to "Adjusting the Volume Balance in Dual Play (Dual Balance)" (p. 19).

A/B: A, the right-hand tone; and B, the left-hand tone in Split play

# **Internal Song List**

Song No.	Song Name	Composer	Copyright
S. 1	La Fille aux Cheveux de Lin	C. Debussy	© 2004 Roland Corporation
S. 2	Late Night Chopin	F. Chopin/ Arranged by John Maul	© 2002 Roland Corporation
S. 3	Fly Free	John Maul	© 1998 Roland Corporation
S. 4	L'éveil del l'amour	Masashi & Kazuko Hirashita	© 2000 Roland Corporation
S. 5	Sonate für Klavier No. 15	W. A. Mozart	© 1996 Roland Corporation
S. 6	Liebesträume III	F. Liszt	© 2001 Roland Corporation
S. 7	Étude, op.10-3	F. Chopin	© 2001 Roland Corporation
S. 8	Je te veux	E. Satie	© 1997 Roland Corporation
S. 9	Valse, op.64-1	F. Chopin	© 2001 Roland Corporation
S. 10	Golliwog's Cake walk	C. Debussy	© 1995 Roland Corporation
S. 11	Fantaisie-Impromptu	F. Chopin	© 2001 Roland Corporation
S. 12	1ére Arabesque	C. Debussy	© 1995 Roland Corporation
S. 13	An der schönen, blauen Donau	J. Strauss (II)	© 1996 Roland Corporation
S. 14	Auf Flügeln des Gesanges	F. Mendelsshon	© 1996 Roland Corporation
S. 15	Mazurka No.5	F. Chopin	© 1995 Roland Corporation
S. 16	1ère Gymnopédie	E. Satie	© 1997 Roland Corporation
S. 17	Étude, op.25-1	F. Chopin	© 1995 Roland Corporation
S. 18	Clair de Lune	C. Debussy	© 1998 Roland Corporation
S. 19	Étude, op.10-5	F. Chopin	© 2001 Roland Corporation
S. 20	Doctor Gradus ad Parnassum	C. Debussy	© 1995 Roland Corporation
S. 21	Grande Valse Brillante	F. Chopin	© 1995 Roland Corporation
S. 22	La prière d'une Vierge	T. Badarzewska	© 1996 Roland Corporation
S. 23	Course en Troïka	P. Tchaikovsky	© 1996 Roland Corporation
S. 24	To The Spring	E. Grieg	© 1996 Roland Corporation
S. 25	Valse, op.64-2	F. Chopin	© 1996 Roland Corporation
S. 26	Radetzky Marsch	J. Strauss (I)	© 1996 Roland Corporation
S. 27	Träumerei	R. Schumann	© 1996 Roland Corporation
S. 28	Moments Musicaux III	F. Schubert	© 1996 Roland Corporation
S. 29	Prélude, op.28-15	F. Chopin	© 1996 Roland Corporation
S. 30	The harmonious blacksmith	G. Handel	© 1996 Roland Corporation
S. 31	Ungarische Tänze V	J. Brähms	© 1996 Roland Corporation
S. 32	Türkischer Marsch	L. v. Beethoven	© 1996 Roland Corporation
S. 33	Nocturne No.2	F. Chopin	© 1996 Roland Corporation
S. 34	Frühlingslied	F. Mendelsshon	© 1996 Roland Corporation
S. 35	Präludium	J. S. Bach	© 1996 Roland Corporation
S. 36	Jägerlied	F. Mendelsshon	© 1996 Roland Corporation
S. 37	Menuet Antique	M. Ravel	© 1996 Roland Corporation
S. 38	Für Elise	L. v. Beethoven	© 1996 Roland Corporation
S. 39	Türkischer Marsch	W. A. Mozart	© 1996 Roland Corporation
S. 40	Ständchen	F. Schubert	© 1996 Roland Corporation
S. 41	Humoreske	A. Dvořák	© 1996 Roland Corporation

# **Internal Song List**

Song No.	Song Name	Composer	Copyright
S. 42	Blumenlied	G. Lange	© 1996 Roland Corporation
S. 43	Alpenglöckchen	T. Oesten	© 1996 Roland Corporation
S. 44	Menuett G dur	L. v. Beethoven	© 1996 Roland Corporation
S. 45	Venezianisches Gondellied	F. Mendelsshon	© 1996 Roland Corporation
S. 46	Alpenabendröte	T. Oesten	© 1996 Roland Corporation
S. 47	Farewell to the Piano	L. v. Beethoven	© 1996 Roland Corporation
S. 48	Brautchor	R. Wagner	© 1996 Roland Corporation
S. 49	Battle of Waterloo	W. Anderson	© 1996 Roland Corporation
S. 50	Wiener Marsch	C. Czerny	© 1996 Roland Corporation
S. 51	Le Coucou	L. C. Daquin	© 1996 Roland Corporation
S. 52	Menuett G dur	J. S. Bach	© 1992 Roland Corporation
S. 53	Spinnerlied	A. Ellmenreich	© 1996 Roland Corporation
S. 54	Gavotte	F. Gossec	© 1996 Roland Corporation
S. 55	Heidenröslein	G. Lange	© 1996 Roland Corporation
S. 56	Zigeuner Tanz	H. Lichner	© 1996 Roland Corporation
S. 57	La Cinquantaine	G. Marie	© 1996 Roland Corporation
S. 58	Csikos Post	H. Necke	© 1996 Roland Corporation
S. 59	Dolly's Dreaming Awakening	T. Oesten	© 1996 Roland Corporation
S. 60	La Violette	L. Streabbog	© 1996 Roland Corporation
S. 61	Fröhlicher Landmann	R. Schumann	© 1996 Roland Corporation
S. 62	Sonatine op.36-1	M. Clementi	© 1996 Roland Corporation
S. 63	Sonatine op.20-1	F. Kuhlau	© 1996 Roland Corporation
S. 64	Sonatine No.5	L. v. Beethoven	© 1996 Roland Corporation
S. 65	Hungarian Rag: Hungarian Dance No. 5 Ragtime Arrangement For Solo Piano	J. Brahms/ Arranged by John Maul	© 1996 Roland Corporation
S. 66	Paganini Boogie: Jazz Variation Based on "Caprice No. 24 in A Minor"	N. Paganini/ Arranged by John Maul	© 1998 Roland Corporation

<sup>\*</sup> All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.

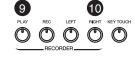
<sup>\*</sup> No data for the music that is played will be output from MIDI OUT.

# **Easy Operation List**









No.	You want to	Buttons	Page
Pres	s the [SPLIT] and [TWIN PL	ANO] buttons simultaneously, and press the [●] bu	tton.
<b>O</b>	Master Tuning	[SPLIT]+ [TWIN PIANO] → [PIANO]	p. 33
2	Selecting a temperament Specifying the keynote	[SPLIT]+ [TWIN PIANO] → [E. PIANO] → [E. PIANO] + key	p. 34
3	Stretch tuning	[SPLIT]+ [TWIN PIANO] → [HARPSICHORD]	p. 34
4	Applying the damper pedal to the left-hand keyboard area	[SPLIT]+ [TWIN PIANO] → [ORGAN]	p. 35
5	MIDI send channel settings	[SPLIT]+ [TWIN PIANO] → [STRINGS]	p. 39
6	Local Control	[SPLIT]+ [TWIN PIANO] → [VARIATION]	p. 39
7	Song Backup	[SPLIT]+ [TWIN PIANO] → [SONG/TEMPO]	p. 31
8	Saving the Master Tune setting	[SPLIT]+ [TWIN PIANO] → [METRONOME/COUNT IN]	p. 36
9	Transmitting a recorded performance	$[SPLIT]+[TWIN\ PIANO] \rightarrow [PLAY]$	p. 39
10	V-LINK	[SPLIT]+ [TWIN PIANO] → [RIGHT]	p. 36
Pres	s the [□] button, and press	the [-] or [+] button.	
1	Dual Balance	$[TRANSPOSE] + [SPLIT] \rightarrow [-] [+]$	p. 19
Holo	down the [■] button and p	oress the [-] or [+] button.	
1	Depth of the Reverb effect	[REVERB] + [-] [+]	p. 16
2	Depth of the Chorus effect	[CHORUS] + [-] [+]	p. 16
1	Damper pedal's resonance level	[REVERB] + [CHORUS] + [-] [+]	p. 32
3	Beat of metronome	[SONG/TEMPO] + [-] [+]	p. 22
4	Metronome volume	[METRONOME/COUNT IN] + [-] [+]	p. 22
lolo	down the [SPLIT] or [TRAI	NSPOSE] button and press the key.	
	Split Point	[SPLIT] + key	p. 21
	Key Transpose	[TRANSPOSE] + key	p. 17

# **DIGITAL PIANO**

Model MP-70

	Date : Mar. 8, 2006
MIDI Implementation Chart	Version: 1.00

dei ivii -70		Wile impleme	Tation Chart	version . i
	Function	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1 1–16	1 1–16	
Mode	Default Messages Altered	Mode 3 X ********	Mode 3 x	
Note Number :	True Voice	15–113 ********	0–127 15–113	
Velocity	Note ON Note OFF	O x 8n v=64	O x	
After Touch	Key's Ch's	x x	x x	
Pitch Bend		х	х	
Control Change	6, 38 7 11 64 66 67 91 93 100, 101	0 x x 0 0 0 0 0	00000000	Data entry Volume Expression Hold 1 Sostenuto Soft Effect 1 (Reverb) Effect 3 (Chorus) RPN LSB, MSB
Prog Change	: True Number	O (0117)	O (0–127) 0117	
System Exc	lusive	0	0	
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 O O O (123–127) O X	
Notes				

Mode 1: OMNI ON, POLY Mode 2: OMNI ON, MONO Mode 3 : OMNI OFF, POLY Mode 4 : OMNI OFF, MONO O:Yes X : No

# **Main Specifications**

Keyboard         88 keys (Compact Progressive Hammer Action Keyboard)           Touch Sensitivity         Preset 4 levels           Keyboard Modes         Whole, Dual (volume balance adjustable), Split (split point adjustable), Twin Piano           Sound Generator           Max. Polyphony         64 voices           Tones         15 tones in 5 groups           Temperament         7 types, bonic selectable           Stretched Tuning         215.3 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-645 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metromome         Slevels           Resort           Tracks         2 levacks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         9 flay/Stop, Rev. Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others         Selat LFD           Pasked Power Output         25 % x 2           Speakers         12 cm x 2           Departies         Poragemets, 3 characters (LED)         Headphones indicator </th <th>Keyboard</th> <th></th>	Keyboard	
Keyboard Modes         Whole, Dual (volume balance adjustable), Split (split point adjustable), Twin Piano           Sound Generator           Max. Polyphony         64 voices           Tones         15 tones in 5 groups           Temperament         7 types, tonic selectable           Stretched Tuning         21 yes           Master Tuning         415.3 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-6-+5 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome         Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels         8 levels           Recorder         Tracks         2 tracks           Song         1 song         1 song           Note Storage         Approx. 5000 notes         1 song           Tempo         Quarter note = 20-250         Resolution         96 ticks per quarter note           Control         Paly/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup         Preset Songs         66 songs + 13 Tone demo songs           Others         Beat LED         7 segments, 3 characters (LED)         Headphones indicator           Control         Volume, Brilliance (3 levels)         Pale Leck,	Keyboard	88 keys (Compact Progressive Hammer Action Keyboard)
Sound Generator           Max. Polyphony         64 voices           Tones         15 tones in 5 groups           Temperament         7 types, tonic selectable           Stretched Tuning         415.3 Hz466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-6-+5 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome           Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Recorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Presst Songs         66 songs + 13 Tone demo songs           Others           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Peakers         12 cm x 2           Peakers         2 beat LED / ** regenents, 3 characters (LED) Headphones indicator	Touch Sensitivity	Preset 4 levels
Max. Polyphony         64 voices           Tones         15 tones in 5 groups           Temperament         7 types, tonic selectable           Stretched Tuning         2 types           Master Tuning         415.3 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (6+-5 in semitones)           Effects         8 ceverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metromore         were to (8 levels)           Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Recorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         9 flicks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Display         Beat LED           7 segments, 3 characters (LED)         Head phones indicator           Control         Volu	Keyboard Modes	Whole, Dual (volume balance adjustable), Split (split point adjustable), Twin Piano
Tones         15 tones in 5 groups           Temperament         7 types, tonic selectable           Stretched Tuning         2 types           Master Tuning         4153 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-6-+5 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome         Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels         8 levels           Recorder         Tracks         2 tracks           Song         1 song         Note Storage           Approx. 5000 notes         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Bated Power Output         25 W x 2           Speakers         12 cm x 2           Beat LED         7 segments, 3 characters (LED)           Headphones indicator           Control         Volume, Brilliance (3 levels)      <	Sound Generator	
Temperament         7 types, tonic selectable           Stretched Tuning         2 types           Master Tuning         415.3 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-6-+5 in semittones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome         Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Recorder         Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         9 flicks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others         Sepeakers           Baet LED         7 segments, 3 characters (LED)           Papeakers         12 cm x 2           Beat LED         7 segments, 3 characters (LED)           Headphones indicator         Pedals           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Output jacks (I./Mono, R), Input jacks (I./Mono, R), Headphones jack x 2 (Stereo), MIDI In	Max. Polyphony	64 voices
Stretched Tuning         2 types           Master Tuning         415.3 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-6-15 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome         Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Recorder         Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others         Speakers           Speakers         12 cm x 2           Speakers         12 cm x 2           Pedals         Damper, Soft, Sostenuto           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pe	Tones	15 tones in 5 groups
Master Tuning         415.3 Hz-466.2 Hz (adjustable in increments of 0.1 Hz)           Transpose         Key Transpose (-6-+5 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome         1           Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Recorder         1           Tracks         2 tracks           Song         1 song           Note Storage         Approx.5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others         1           Rated Powr Output         25 W x 2           Speakers         12 cm x 2           Beat LED         7 segments, 3 characters (LED)           Headphones indicator         1           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         MIDI Out connector, Pedal jack	Temperament	7 types, tonic selectable
Transpose         Key Transpose (-6+5 in semitones)           Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome         Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Recorder         Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others         Track Select, Song Backup           Pased Power Output         25 W x 2           Speakers         12 cm x 2           Beat LED 7 segments, 3 characters (LED) Headphones indicator           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack           Power Supply         AC 117 V           Power	Stretched Tuning	2 types
Effects         Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)           Metronome           Beat         2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8           Volume         8 levels           Fecorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20–250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Beat LED         7 segments, 3 characters (LED)           Headphones indicator         Headphones indicator           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Conscors         MIDI Out connector, Pedal jack           Power Consumption         5 W           Dimensions (inculuding piano stand)         1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5	Master Tuning	415.3 Hz–466.2 Hz (adjustable in increments of 0.1 Hz)
Metronome           Beat         2/2,0/4,2/4,3/4,4/4,5/4,6/4,7/4,3/8,6/8,9/8,12/8           Volume         a levels           Recorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Read Power Output         2 SW x 2           Speakers         12 cm x 2           Speakers         12 cm x 2           Control         7 segments, 3 characters (LED) Headphones indicator           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         AC 117 V           Power Consumption         55 W           Dimensions (including piano stand)         42kg / 93 lbs	Transpose	Key Transpose (-6-+5 in semitones)
Beat         2/2,0/4,2/4,3/4,4/4,5/4,6/4,7/4,3/8,6/8,9/8,12/8           Volume         8 levels           Recorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20–250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Beat LED 7 segments, 3 characters (LED) Headphones indicator         1 Segments, 3 characters (LED) Headphones indicator           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack           Power Supply         AC 117 V           Power Consumption         5 SW           Dimensions (including piano stand)         1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)	Effects	Reverb (8 levels), Chorus (8 levels), Sympathetic Resonance (for Piano only, 8 levels)
Volume         8 levels           Recorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Speakers         12 cm x 2           Speakers         12 cm x 2           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack           Power Supply         AC 117 V           Power Consumption         55 W           Dimensions (including piano stand)         1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)           Weight (including piano stand)         42kg / 93 lbs	Metronome	
Recorder           Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others         Tothers           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Beat LED         7 segments, 3 characters (LED)           Headphones indicator         Headphones indicator           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Quitput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack           Power Consumption         4C 117 V           Power Consumption         1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)           Weight (including piano stand)         42kg / 93 lbs	Beat	2/2, 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 3/8, 6/8, 9/8, 12/8
Tracks         2 tracks           Song         1 song           Note Storage         Approx. 5000 notes           Tempo         Quarter note = 20-250           Resolution         96 ticks per quarter note           Control         Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup           Preset Songs         66 songs + 13 Tone demo songs           Others           Rated Power Output         25 W x 2           Speakers         12 cm x 2           Beat LED 7 segments, 3 characters (LED) Headphones indicator         Teegments, 3 characters (LED) Headphones indicator           Control         Volume, Brilliance (3 levels)           Pedals         Damper, Soft, Sostenuto           Other Functions         Panel Lock, Tone Lock, Song Backup           Connectors         Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack           Power Supply         AC 117 V           Power Consumption         55 W           Dimensions (including piano stand)         1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)           Weight (including piano stand)         42kg / 93 lbs	Volume	8 levels
Song1 songNote StorageApprox. 5000 notesTempoQuarter note = 20-250Resolution96 ticks per quarter noteControlPlay/Stop, Rec, Tempo, All Song Play, Track Select, Song BackupPreset Songs66 songs + 13 Tone demo songsOthersRated Power Output25 W x 2Speakers12 cm x 2Beat LED 7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs	Recorder	
Note StorageApprox. 5000 notesTempoQuarter note = 20-250Resolution96 ticks per quarter noteControlPlay/Stop, Rec, Tempo, All Song Play, Track Select, Song BackupPreset Songs66 songs + 13 Tone demo songsOthersRated Power Output25 W x 2Speakers12 cm x 2DisplayBeat LED 7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 38-7/8 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs	Tracks	2 tracks
Tempo Quarter note = 20–250  Resolution 96 ticks per quarter note  Control Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup  Preset Songs 66 songs + 13 Tone demo songs  Others  Rated Power Output 25 W x 2  Speakers 12 cm x 2  Beat LED 7 segments, 3 characters (LED) Headphones indicator Yolume, Brilliance (3 levels)  Pedals Damper, Soft, Sostenuto  Other Functions Panel Lock, Tone Lock, Song Backup  Connectors Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply AC 117 V  Power Consumption 55 W  Dimensions (including piano stand) 42kg / 93 lbs	Song	1 song
Resolution96 ticks per quarter noteControlPlay/Stop, Rec, Tempo, All Song Play, Track Select, Song BackupPreset Songs66 songs + 13 Tone demo songsOthersRated Power Output25 W x 2Speakers12 cm x 2DisplayBeat LED 7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs	Note Storage	Approx. 5000 notes
Control Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup  Preset Songs 66 songs + 13 Tone demo songs  Others  Rated Power Output 25 W x 2  Speakers 12 cm x 2  Beat LED 7 segments, 3 characters (LED) Headphones indicator  Control Volume, Brilliance (3 levels)  Pedals Damper, Soft, Sostenuto  Other Functions Panel Lock, Tone Lock, Song Backup  Connectors Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply AC 117 V  Power Consumption 55 W  Dimensions (1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)  Weight (including piano stand) 42kg / 93 lbs	Tempo	Quarter note = 20–250
Preset Songs66 songs + 13 Tone demo songsOthersRated Power Output25 W x 2Speakers12 cm x 2DisplayBeat LED 7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs	Resolution	96 ticks per quarter note
OthersRated Power Output25 W x 2Speakers12 cm x 2DisplayBeat LED 7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs	Control	Play/Stop, Rec, Tempo, All Song Play, Track Select, Song Backup
Rated Power Output 25 W x 2  Speakers 12 cm x 2  Beat LED 7 segments, 3 characters (LED) Headphones indicator  Control Volume, Brilliance (3 levels)  Pedals Damper, Soft, Sostenuto  Other Functions Panel Lock, Tone Lock, Song Backup  Connectors Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply AC 117 V  Power Consumption 55 W  Dimensions (including piano stand) 1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)  Weight (including piano stand) 42kg / 93 lbs	Preset Songs	66 songs + 13 Tone demo songs
Speakers12 cm x 2DisplayBeat LED 7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including piano stand)Weight (including piano stand)42kg / 93 lbs	Others	
Beat LED 7 segments, 3 characters (LED) Headphones indicator  Control Volume, Brilliance (3 levels)  Pedals Damper, Soft, Sostenuto  Other Functions Panel Lock, Tone Lock, Song Backup  Connectors Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply AC 117 V  Power Consumption 55 W  Dimensions (including piano stand) 1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)  Weight (including piano stand) 42kg / 93 lbs	Rated Power Output	25 W x 2
Display7 segments, 3 characters (LED) Headphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including piano stand)Weight (including piano stand)42kg / 93 lbs	Speakers	12 cm x 2
ControlHeadphones indicatorControlVolume, Brilliance (3 levels)PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs		Beat LED
Control Volume, Brilliance (3 levels)  Pedals Damper, Soft, Sostenuto  Other Functions Panel Lock, Tone Lock, Song Backup  Connectors Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply AC 117 V  Power Consumption 55 W  Dimensions (including piano stand) 1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)  Weight (including piano stand) 42kg / 93 lbs	Display	
PedalsDamper, Soft, SostenutoOther FunctionsPanel Lock, Tone Lock, Song BackupConnectorsOutput jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jackPower SupplyAC 117 VPower Consumption55 WDimensions (including piano stand)1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)Weight (including piano stand)42kg / 93 lbs		
Other Functions Panel Lock, Tone Lock, Song Backup  Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply AC 117 V  Power Consumption 55 W  Dimensions (including piano stand) 1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)  Weight (including piano stand) 42kg / 93 lbs		
Connectors  Output jacks (L/Mono, R), Input jacks (L/Mono, R), Headphones jack x 2 (Stereo), MIDI In connector, MIDI Out connector, Pedal jack  Power Supply  AC 117 V  Power Consumption  55 W  Dimensions (including piano stand)  1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including piano stand)  Weight (including piano stand)  42kg / 93 lbs		
Power Supply AC 117 V  Power Consumption 55 W  Dimensions (including piano stand) 1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including music rest)  Weight (including piano stand) 42kg / 93 lbs	Other Functions	<u> </u>
Power Consumption 55 W  Dimensions 1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches (including piano stand) 1,392 (W) x 422 (D) x 987 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 38-7/8 (H) inches (including music rest) Weight (including piano stand) 42kg / 93 lbs	Connectors	
Dimensions $1,392 \text{ (W)} \times 422 \text{ (D)} \times 818 \text{ (H)} \text{ mm} / 54-13/16 \text{ (W)} \times 16-5/8 \text{ (D)} \times 32-1/4 \text{ (H)} \text{ inches}$ (including piano stand) $1,392 \text{ (W)} \times 422 \text{ (D)} \times 987 \text{ (H)} \text{ mm} / 54-13/16 \text{ (W)} \times 16-5/8 \text{ (D)} \times 38-7/8 \text{ (H)} \text{ inches (including music rest)}$ Weight (including piano stand) $42 \text{kg} / 93 \text{ lbs}$	Power Supply	AC 117 V
(including piano stand) $1,392 \text{ (W)} \times 422 \text{ (D)} \times 987 \text{ (H)} \text{ mm} / 54-13/16 \text{ (W)} \times 16-5/8 \text{ (D)} \times 38-7/8 \text{ (H)} \text{ inches (including music rest)}$ Weight (including piano stand) $42 \text{kg} / 93 \text{ lbs}$	Power Consumption	55 W
Weight (including piano stand)  42kg / 93 lbs	Dimensions	1,392 (W) x 422 (D) x 818 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 32-1/4 (H) inches
(including piano stand) 42kg / 93 lbs	(including piano stand)	1,392 (W) x 422 (D) x 987 (H) mm / 54-13/16 (W) x 16-5/8 (D) x 38-7/8 (H) inches (including music rest)
Accessories Owner's Manual, Power Cord, Headphones, Headphones Hook	=	42kg / 93 lbs
	Accessories	Owner's Manual, Power Cord, Headphones, Headphones Hook

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

# Index

Symbols	M
7	Master Tuning
+	METRONOME
	METRONOME/COUNT IN
A	MIDI
AC inlet 8	MIDI Send Channel
Adjuster 10	Music Stand
All Song Play 11	Wide outer
Audio Equipment	0
Takin Equipment	ORGAN
В	Output
Backup 31	ouput
Beat	P
BRILLIANCE	Panel Lock35
DIGERRACE	Pedal
C	Phones jack
CHORUS	PIANO
Computer	PLAY
COUNT-IN	
7,20	All Songs Continuously
D	Along with the internal songs
Damper Pedal 10, 32, 35	Each Hand24
Damper Resonance	Selecting a song
Delete	Power
	D
DEMO	R
Display	REC
Dual Balance	Record
Dual Play	Along with a Song27
E	Backup
_	Each Hand28
E.PIANO	Erasing Performances
Easy Operation List	New Song
Effects	Songs Starting with Pickups
Erase	REVERB
Error Messages	RIGHT
F	, , , ,
F	S
Function	Soft Pedal
н	SONG
	Song Backup31
HARPSICHORD	Songs Starting with Pickup Beats
Headphones 7–8	Sostenuto Pedal
1	SPLIT
1	Split Play
Input	Split Point
Internal Song 11	Stretch Tuning
V	STRINGS
K	
KEY TOUCH 7, 15, 35	Sympathetic Resonance
1	
<b>L</b>	
LEFT	
Lid 8	
Local Control	

Т	
Temperament	
TEMPO	
Tone	
Tone Demo	
Tone Group	
Tone Lock	
TONE SELECT	7, 14, 19–20
Tonic	
Transmit	
TRANSPOSE	7, 17, 19
Troubleshooting	40
Tuning Curve	
TWIN PIANO	
Twin Piano Mode	
U	
USr	26–27
V	
VARIATION	
Variation Tone	
V-LINK	
VOLUME	
Metronome	22

For EU Countries



This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/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.

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

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

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

For Canada

# NOTICE

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

### **AVIS**

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



This product must be disposed of separately at your local waste recycling centre. Do not dispose of in household waste bin.

# Information

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

(AFRICA)

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

#### REUNION Maison FO - YAM Marcel

25 Rue Jules Hermann, Chaudron - BP79 97 491 Ste Clotilde Cedex RELINION ISLAND TEL: (0262) 218-429

#### **SOUTH AFRICA** T.O.M.S. Sound & Music

(Pty)Ltd.

FAX: (011) 403 1234

11 Melle St., Braamfontein. Johannesbourg, SOUTH AFRICA TEL: (011) 403 4105

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



#### CHINA

Roland Shanghai Electronics Co.,Ltd. 5F. No.1500 Pingliang Road

Shanghai 200090, CHINA TEL: (021) 5580-0800

Roland Shanghai Electronics Co Itd

(BEIJING OFFICE) 10F. No.18 3 Section Anhuaxili Chaoyang District Beijing 100011 CHINA TEL: (010) 6426-5050

## HONG KONG

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

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

#### INDIA

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

# **INDONESIA**

PT Citra IntiRama J1. Cideng Timur No. 15J-150 Jakarta Pusat INDONESIA TEL: (021) 6324170

## **KOREA**

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

### MALAYSIA

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

# **PHILIPPINES**

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

#### **SINGAPORE**

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

#### SRI LANKA

Penguin Electronics (Pvt) Ltd. 115, Maya Avenue, Colombo 06, SRI LANKA TEL: (11) 2552376

#### ΤΔΙΨΔΝ

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

### **THAILAND**

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

#### VIETNAM SAIGON MUSIC

DISTRIBUTOR (TAN DINH MUSIC) 138 Tran Quang Khai Street Dist. 1, Ho Chi Minh City VIETNAM TEL: (08) 848-4068

### AUSTRALIA/ **NEW ZEALAND**

#### AUSTRALIA/ NEW ZEALAND

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

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

### CENTRAL/LATIN **AMERICA**

#### **ARGENTINA**

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

### **BARBADOS**

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

#### BRAZIL

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

## CHILE

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

# COLOMBIA

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

#### **COSTA RICA**

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

#### CURACAO

Zeelandia Music Center Inc. Orionweg 30 Curacao, Netherland Antilles

#### DOMINICAN REPUBLIC

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

#### **ECUADOR** Mas Musika

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

#### EL SALVADOR OMNI MUSIC

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

#### **GUATEMALA**

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

### **HONDURAS**

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

# MARTINIQUE

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

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

#### MEXICO

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

# **NICARAGUA**

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

## **PANAMA**

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

#### **PARAGUAY**

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

# PERU

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

#### TRINIDAD

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

#### URUGUAY

**Todo Musica S.A.** Francisco Acuna de Figueroa C P · 11 800 Montevideo, URUGUAY TEL: (02) 924-2335

#### **VENEZUELA** Instrumentos Musicales

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

# EUROPE

#### **AUSTRIA** Roland Elektronische

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

#### BELGIUM/FRANCE/ HOLLAND/ LUXEMBOURG

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

#### CZECH REP. K-AUDIO

Kardasovska 626 CZ-198 00 Praha 9, TEL: (2) 666 10529

# DENMARK

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

#### **FINLAND** Roland Scandinavia As, Filial

Elannontie 5 FIN-01510 Vantaa, FINLAND TEL: (0)9 68 24 020

#### **GERMANY**

Roland Flektronische Musikinstrumente HmbH. Oststrasse 96, 22844 Norderstedt, GERMANY TEL: (040) 52 60090

# **GREECE/CYPRUS**

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

# HUNGARY

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

### IRELAND

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

#### ITALY

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

#### **NORWAY**

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

JORDAN MUSIC HOUSE CO. LTD.

FREDDY FOR MUSIC

P. O. Box 922846 Amman 11192 JORDAN

Abdullah Salem Street, Safat, KUWAIT

Chahine S.A.L. Gerge Zeidan St., Chahine

Beirut, LEBANON

Al Noor Street Ruw

TEL: (01) 20-1441

OMAN

**QATAR** 

Bldg., Achrafieh, P.O.Box: 16-5857

TALENTZ CENTRE L.L.C. Malatan House No.1

SULTANATE OF OMAN TEL: 2478 3443

Al Emadi Co. (Badie Studio &

Stores) P.O. Box 62, Doha, QATAR

Corniche Road, Aldossary

Bldg., 1st Floor, Alkhobar, SAUDI ARABIA

Technical Light & Sound

Center Rawda, Abdul Qader Jazairi St.

Bldg. No. 21, P.O.BOX 13520,

ZUHAL DIS TICARET A.S.

Zak Electronics & Musical

Zabeel Road, Al Sherooq Bldg., No. 14, Grand Floor, Dubai,

NORTH AMERICA

Instruments Co. L.L.C.

TEL: (04) 3360715

CANADA

(Head Office)

Roland Canada Ltd.

Galip Dede Cad. No.37 Beyoglu - Istanbul / TURKEY

P.O.Box 2154, Alkhobar 31952

SAUDI ARABIA

aDawliah Universal

Electronics APL

SAUDI ARABIA

SYRIA

TURKEY

U.A.E.

TEL: (03) 898 2081

Damascus SYRIA

TEL: (011) 223-5384

TEL: (0212) 249 85 10

EASA HUSAIN AL-YOUSIFI

TEL: (06) 5692696

KUWAIT

& SONS CO.

TEL: 243-6399

LEBANON

#### POLAND

MX MUSIC SP.Z.O.O. UL. Gibraltarska 4. PL-03664 Warszawa POLAND TEL: (022) 679 44 19

## **PORTUGAL**

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

#### ROMANIA

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

## RUSSIA

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

#### SPAIN

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

#### **SWEDEN**

Roland Scandinavia A/S SWEDISH SALES OFFICE Danvik Center 28, 2 tr. S-131 30 Nacka SWEDEN TEL: (0)8 702 00 20

# **SWITZERLAND**

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

#### 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) 702701

# MIDDLE EAST

# BAHRAIN

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

#### IRAN

MOCO INC. No.41 Nike St., Dr.Shariyati Ave., Roberoye Cerahe Mirdamad Tehran, IRAN

# ISRAEL

TEL: (021) 285-4169

TEL: (03) 6823666

Halilit P. Greenspoon & Sons Ltd. 8 Retzif Ha'aliya Hashnya St. Tel-Aviv-Yafo ISRAEL

## 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (604) 270 6626

Roland Canada Ltd. (Toronto Office) 170 Admiral Boulevard Mississauga On L5T 2N6 CANADA

TEL: (905) 362 9707

#### U. S. A.

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

As of April 1, 2006 (ROLAND)

