

ROLAND DIGITAL PIANO

Roland

DIGITAL PIANO



Owner's Manual

Thank you, and congratulations on your choice of the Roland RD-150 Digital Piano. The RD-150 is a superb digital stage piano with 24 outstanding sounds, 64-voice polyphony, and numerous other functions that will prove useful to performing artists, music students, and teachers alike.

To get the most out of the RD-150 and to ensure many years of trouble-free service, we urge you to read through this manual thoroughly.

Note: To avoid confusion, let's agree to use the word "button" for all keys on the front panel, and only use "key" when referring to the RD-150's keyboard.

Contents

1. U	sing the instrument safely $\dots $ 4
2. Pr	ecautions6
3. Pa	nel descriptions
3.1	Front panel 7
3.2	Rear panel 8
4. Pr	eparations and main functions 9
4.1	Connections9
4.2	Using footswitches and pedals 9
4.3	Volume and Brilliance 10
4.4	Listening to the demo songs 10
4.5	Selecting sounds
4.6	Layering two Tones
4.7	Splitting the keyboard
4.8	Using effects
4.9	Transpose
4.10	Touch sensitivity (Key Velocity) 15
4.11	Using the metronome
5. Us	ing the Recorder16

6. O	Other useful functions	. 17
	Tuning the RD-150	
6.2		
6.3		
6.4	Pedal functions	.18
6.5	Saving the panel settings	.19
6.6		
7. N	MIDI functions	
7.1	MIDI transmit/receive channels	.20
7.2	MIDI filters	.21
7.3		
8. A	ppendix	
8.1	Troubleshooting	.23
8.2		
8.3	Automatic Split mode settings	.24
8.4	Automatic Chorus on/off assignments	
8.5		

Copyright © 2000 ROLAND EUROPE, All rights reserved. No part of this publication may be reproduced in any form without the written permission of Roland Europe Spa.

1. Using the instrument safely

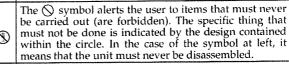
INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About A WARNING and A CAUTION Notices

≜WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠ CAUTION	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 Δ 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
1	triangle. It the case of the system is



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 powercord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

$oldsymbol{\Lambda}$ WARNING

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:



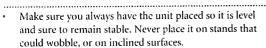
• Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are



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.





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



Please be sure to only use the RD-150 with the KS-12 stand manufactured by Roland. Using any other stand may be a serious safety hazard.



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



This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.



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



- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.



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

.....



Do not force the unit's power 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.



A PRECAUCIÓN

 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.



 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. Make sure to have a firm grip, to protect yourself from injury and the instrument from damage.



- · Disconnect the power cord.
- · Disconnect all cords coming from external devices.
- Before cleaning the unit, turn off the power and unplug the power cord from the outlet.



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



2. Precautions

In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "Using the instrument safely" on page 4, please read and observe the following:

Power supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to external speakers and other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers
- Do not expose the unit to direct sunlight, place it near
 devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Also,
 do not allow lighting devices that normally are used while
 their light source is very close to the unit, 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.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.
- Do not allow rubber, vinyl, or similar materials to remain on the piano for long periods of time. Such objects can discolor or otherwise harmfully affect the finish.
- Do not put anything that contains water (e.g., flower vases) on the piano. 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.

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

Additional Precautions

- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions
- Never strike or apply strong pressure to the display.
- When connecting /disconnecting 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 (or amplifier's) volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially late at night).
- When you need to transport the unit, pack it in shockabsorbent material. Transporting the unit without doing so can cause it to become scratched or damaged, and could lead to malfunction.
- Do not paste stickers, decals, or the like to this instrument. Peeling such matter off the instrument may damage the exterior finish.
- Do not allow foreign objects to fall between the keys. This
 can be the cause of malfunction, such as rattling keys or
 inaccurate response.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following.
- 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.

6

3. Panel descriptions

3.1 Front panel



① [Power on] button (right of keyboard)

(Not pictured here.) Press this button to switch the RD-150 on and off.

② [VOLUME] slider

Allows you set the RD-150's global output level (i.e. the combined signal when layering Tones or splitting the keyboard).

(3) [BRILLIANCE] slider

Allows you to adjust the brightness of the sound.

4 Level [LOWER] and [UPPER] sliders

These sliders allow you to set the volume balance between the "Lower" and "Upper" Tones when you are using two Tones simultaneously ("Layer") or playing different sounds with your left and right hands ("Split").

(5) Tone selection buttons

6 Display

The display keeps you informed you about the value you set for a parameter or function, etc.

(7) [DATA +/-] buttons

Use these buttons to set parameter values, to change the tempo, select Tone variations, set the transposition, etc.

® [SPLIT] button

Press this button whenever you want to play different Tones with the left and right hands. The split point can be changed.

(9) [KBD VELOCITY] button

This button has two functions: it allows you to switch off the keyboard's velocity sensitivity (indicator off) and to select a different velocity curve. When the indicator is off, all notes will be sounded with a velocity value of "64" (this value can be changed).

(fi) [TRANSPOSE] button

Use this button whenever you wish to sound in a different key than the one you are playing in.

(11) [FUNCTION] button

Press this button and a Tone selection button to select the desired "hidden" parameter. Here are the functions you can access using this procedure:

[FUNCTION] +	Explanation	Page
PIANO	Master Tune	17
POP PIANO	Time signature of the Recorder & metro- nome	15
ROCK PIANO	"Upper" Tone MIDI channel	20
HONKY TONK	"Lower" Tone MIDI channel	20
STAGE RHODES	Program change reception/transmission filter.	21
SA RHODES	Effect on/off reception/transmission filter	21
(E.PIANO)	MIDI reception/transmission filter for Vol- ume (CC07) and Expression (CC11) mes- sages.	22
(CLAV)	Damper assignment to the Upper or Lower Tone, or both.	18
[VIBRAPHONE]	Assignment of the Soft, Sostenuto, and Expression functions to Upper, Lower, or both.	18
ACOUSTIC BASS	Selection of the Soft or Sostenuto function for the footswitch connected to the Soll/Expr jack.	18
FINGER BASS	Selection of the temperament.	17
(DRCH.STRINGS)	Selection of the root note for the chosen temperament.	17
SYNTH STRINGS	Selection of the Stretch Tuning curve.	17
SYNTH PAD	Specifying the fixed velocity value.	18
JAZZ SCAT	MIDI Local Control function	21
CHOIR	Saving your panel settings	19

(12) [REVERB] button

Allows you to switch the Reverb effect on and off. When pressed in combination with DATA $\pm / -$, you can set the Reverb depth.

(3) [CHORUS] button

Allows you to switch the Chorus effect on and off. When pressed in combination with DATA \boxdot , you can set the Chorus depth.

Note: There is also a Sympathetic Resonance effect that is switched on automatically whenever you select a piano Tone. The depth of this effect can be changed via the (REVERB) +(CHORUS) buttons (see page 14).

(4) [METRONOME] button

Allows you to switch the metronome on and off, and to set the metronome level.

(15) Track [1]/[2] buttons

These buttons allow you to select the track for recording and playback.

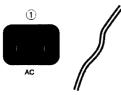
(6) [PLAY] button

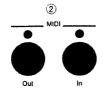
This button allows you to start (and stop) playback of the song you have recorded.

(7) [REC] button

Press this button to record what you play on the RD-150.

3,2 Rear panel











(1) AC socket

This is where you need to connect the supplied power cable.

② MIDI IN & OUT sockets

If you wish to control an external instrument from your RD-150, connect its MIDI IN jack to the RD-150 MIDI OUT socket.

To control the RD-150 using an external MIDI instrument (sequencer, synthesizer, etc.), connect its MIDI IN socket to the MIDI OUT socket of the external instrument.

(3) Pedal [Damper] socket

This is where you can connect the supplied DP-6 pedal that will function as Hold pedal (and sustain the notes you are playing).

4 Pedal [Soft/Expr.] socket

This is where you can connect either an optional DP-2, DP-6, or BOSS FS-5U footswitch, or an optional EV-5 expression pedal. If you connect a footswitch, you can select the Soft or Sostenuto function. If you connect an EV-5 pedal, it will function as expression pedal for swelling effects.

Note: In either case, you can select whether the footswitch/ expression affects only one Tone (Upper or Lower) or both. This selection only applies when layering Tones or splitting the keyboard, however.

⑤ Output [R], [L/Mono] sockets

Connect these sockets to a keyboard amplifier (KC series), your HiFi set, a pair of active speakers (of the Roland MA series), etc. The RD-150 does not contain speakers.

6 PHONES sockets

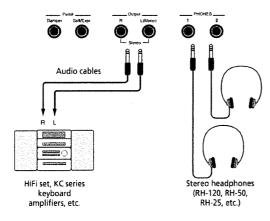
This is where you can connect optional stereo headphones (e.g. of the Roland RH series). Feel free to use either or both jacks simultaneously.

4. Preparations and main functions

4.1 Connections

Your RD-150 needs to be connected to a HiFi or keyboard amplifier in order to be audible. If your amplifier is mono, connect the RD-150's L(Mono) output to the amplifier's input.

You can also use one or two pairs of headphones (Roland RH series), in which case you do not need an amplifier.



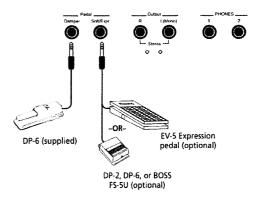
- 1. Switch off both the RD-150 and the device you wish to connect it to (amp, mixer, etc.).
- 2. Connect the INPUT jacks of the HiFi or keyboard amplifier to the RD-150's OUTPUT jacks using a pair of audio cables.

If the amplifier is fitted with RCA/phono jacks, consider using a pair of Roland PJ-1M audio cables (option).

- 3. Switch on the RD-150 and the external device (in that order).
- 4. Adjust the volume of the RD-150 and the external device.

4.2 Using footswitches and pedals

The RD-150 provides two Pedal sockets: Damper and Soft/Expr.). Here is how you can use these sockets:



Damper (Hold function)

By connecting the supplied DP-6 footswitch to this socket, you can hold (sustain) the notes you are playing on the RD-150's keyboard.

- 1. Connect the supplied DP-6 footswitch to the Pedal Damper socket.
- 2. Switch on the RD-150 by pressing its Power on button (far right, next to the keyboard).
- 3. Play a few notes on the keyboard while pressing the footswitch.

The notes you play will be sustained much longer than without using the pedal.

4. Release the footswitch to switch off the sustained notes.

The RD-150 provides three playing modes: Whole, Layer and Split. In Layer and Split modes, you can specify whether the Damper footswitch should affect the Upper Tone, the Lower Tone, or both. See page 18 for details.

Using a second footswitch or expression pedal

The Pedal Soft/Expr. socket allows you to connect an optional DP-2, DP-6, or BOSS FS-5U footswitch, or an EV-5 expression pedal. As only one of these can be used at a time (footswitch or expression pedal), you should first ask yourself which one you will need most often

(1) Footswitch functions

If you wish to take advantage of the *Soft* or *Sostemuto* function, you need a DP-2, DP-6, or BOSS FS-5U footswitch. You can then specify whether it should function as Soft or Sostenuto pedal (see page 18).

Soft— This is a function that allows you to reduce the volume and brightness of the notes you play by pressing the footswitch.

Sostenuto— Though similar to the Damper function described above, the Sostenuto function only sustains the notes whose keys are pressed while you press the footswitch. Subsequently played notes are not sustained.

Note: In Layer and Split modes, you can decide whether the footswitch should affect only one or both Tones (see page 18).

2 Expression function

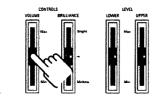
An optional EV-5 expression pedal allows you to change the volume in the same way as on an organ. You can thus create swelling effects. This is probably only useful for sound Layers or when working in Split mode, because it allows you to change the mix of the two Tones you are using. (The RD-150 does not contain organ sounds.)

Note: The RD-150 automatically detects whether you have connected a footswitch or an expression pedal.

Note: In Layer and Split modes, you can decide whether the expression pedal should affect only one or both Tones (see page 18).

4.3 Volume and Brilliance

Use the VOLUME slider to adjust the overall volume.



The "Max" position corresponds to the maximum volume, while the "Min" position means you won't hear the RD-150.

Note: The setting of this slider also determines the volume in the headphones.

Use the **BRILLIANCE** slider to set the desired brightness (tone color) of the sound.

At the "Bright" position, a bright tone is obtained, while a rounder (mellower) tone is obtained by setting the slider to the "Mellow" position.

4.4 Listening to the demo songs

The RD-150 contains 16 demonstration songs. Here's what you need to do to listen to them:

1. Hold down the **FUNCTION** button while pressing **REVERB**].

The message dEN appears in the display.

2. Press the Tone selection button ([PIANO] ~[CHOIR]) that corresponds to the demo song you want to listen to.

Playback will start as soon as you press a Tone selection button. All demo songs will be played back in sequence, starting with the song you selected.

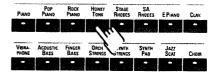
Note: All demo songs @2000 by Roland Europe.

4.5 Selecting sounds

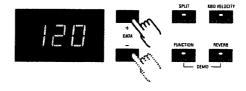
Your RD-150 comes with 24 high-quality sounds that you can select straight away using the Tone selection buttons. The Tones between brackets (with a "*") are Variation Tones. Here is a brief description of the Tones provided by the RD-150:

PIANO	The sound of a full concert grand piano. It offers rich reverberations in stereo.
(Piano 1*)	This is the sound of a full concert grand piano.
POP PIANO	This is a prominent, bright piano sound. It's ideal for popular music and band play.
(Classic Piano*)	This is a restrained piano with a European feel. It's optimal for classical performances.
ROCK PIANO	This is a piano sound with a prominent attack. It's ideal for rock music and for playing in a band.
HONKY TONK	This is the sound of a slightly detuned piano with a bright, enjoyable ambience.
STAGE RHODES	The sublime sound of the classic electric piano.
SA RHODES	This is a Rhodes piano sound. The sound is broad, yet has clarity and sweetness.
E PIANO	This is a popular electric-piano sound origi- nally created on a synthesizer.
CLAV	This is the sound of an instrument that boosts the vibration of a plucked string with an amp. It's optimal for rhythmical play.
(Clav 1*)	Another version of the above.
(Harpsichord*)	This is a delicate and refined harpsichord sound.
VIBRAPHONE	This is the sound of a large carillon called a vibraphone.
(Marimba*)	This is the sound of a large xylophone called a marimba.
(Glockenspiel*)	The sound of a small carillon called glockenspiel.
ACOUSTIC BASS	This is the sound of a plucked double bass.
FINGER BASS	This is the sound of a fingered electric bass (i.e. not played with a plectrum).
(Voice Bass*)	This is the sound of a jazz-scat bass part.
ORCH STRINGS	This is the sound of a beautiful strings ensemble.
SYNTH STRINGS	A synthesizer-string sound with a slow attack.
SYNTH PAD	A warm synthesizer sound that is ideal for playing chordal accompaniments ("carpets").
JAZZ SCAT	This tone can be divided into four types of voices according to the velocity with which you play the keyboard. It's optimal in combination with Voice Bass during split play.
CHOIR	A full, warm choir sound.
(Choir 1*)	Another kind of choir sound.
(Short 1)	Amorici King of Choir Soung,

1. To select a "main" Tone, press its button on the front panel.



- 2. To select a "Variation" Tone (one of the names between brackets in the above list), do the following:
- **a)** Switch off the Layer or Split mode by pressing one Tone selection button.
- **b)** Press a Tone selection button for which there is at least one Variation Tone (PIANO), for example).
- c) While holding down this button, press DATA [+]/[-] to select the desired Variation.



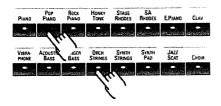
It would be a good idea to play a few notes on the key-board while selecting the Variation Tone.

4.6 Layering two Tones

The RD-150 also allows you to play two sounds simultaneously, which is called a "Layer". The most popular Layer combination is piano with strings, but feel free to experiment with other layers (piano with a Rhodes sound, for example).

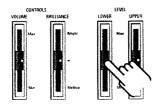
By way of example, let us select the "Pop Piano" and "Orch. Strings" Tones:

1. Hold down POP PIANO while pressing ORCH.STRINGS.



The indicators of these two buttons now light to signal that you have selected the Layer mode. Play a few notes on the keyboard to audition this combination.

2. Adjust the volume balance of the two Tones with the Level LOWER and UPPER sliders.



The first Tone you select (the Tone selection button you hold down) becomes the *Upper* Tone, while the second one (the other Tone selection button you press) becomes the *Lower* Tone.

- 3. To return to Whole mode (one Tone), press only one Tone selection button.
- 4. To program a different Layer, repeat step (1) above with different Tones.

Note: You can also select which Tone(s) should respond to footswitch and/or pedal messages. See page 18.

Note: You can store this setting so that it will be used next time you switch on the RD-150. There is only one memory, however, so that the previous settings will be overwritten whenever you store your new panel settings. Hold down FUNCTION while pressing CHOIR. Then confirm by pressing DATA \pm .

4.7 Splitting the keyboard

The RD-150 allows you to divide the keyboard into two sections, "Upper" and "Lower", and to play two different Tones with your left and right hands. Dividing the keyboard is called "Split", and the key where the keyboard is split is the "split point".







- 1. Start by selecting the Tone that you want to use in the right half (see "Selecting sounds" on page 11).
- 2. Press SPLIT (indicator lights).

The Tone you selected before pressing SPLIT can be played via the right half of the keyboard. This is the *Upper* Tone.

The RD-150 automatically assigns a matching Tone to the left half (the *Lower* Tone) and also transposes either the Upper or Lower Tone, or both. See "Split mode (default split point: Gb3)" on page 24 for details.

You can, however, select a different Lower Tone.

- 3. Adjust the volume balance of the two Tones with the Level LOWER and UPPER sliders.
- 4. Press [SPLIT] once again (indicator goes dark) to leave the Split mode.

Note: You can also select which Tone(s) should respond to footswitch and/or pedal messages. See page 18.

Using different Tones in Split mode

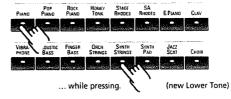
It is also possible to select different Tones for the Upper and Lower sections after activating the Split mode (while SPLIT) lights):

Press a Tone selection button to assign a different Tone to the Upper section.

In this case, the Lower Tone does not change.

To select a different Tone for the Lower section, press and hold the Tone selection button of the Tone you wish to assign to the right half (Upper), while pressing the Tone selection of the desired Lower Tone.

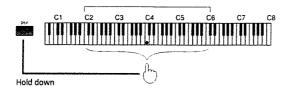
Press and hold...



Note: You can store this setting so that it will be used next time you switch on the RD-150. There is only one memory, however, so that the previous settings will be overwritten when you store your new panel settings. Hold down FUNCTION while pressing CHOIR. Then confirm by pressing DATA +.

Changing the split point

When you activate the Split mode, the keyboard will be split at the "Gb3", i.e. the Gb key more or less in the middle. You can, however, select a different split point:



The split point can be set anywhere between the C2 and the C6. There are two ways of changing the split point:

1. Press and hold SPLIT while setting the desired split point with the DATA +/- buttons.

The display briefly confirms the note you selected.

2. Press and hold SPLIT while pressing the desired key on the keyboard.

Note: You can store this setting so that it will be used next time you switch on the RD-150.

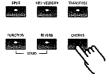
4.8 Using effects

The RD-150 comes with three digital effects: Chorus, Reverb, and Sympathetic Resonance. While Chorus and Reverb are available for all Tones, Sympathetic Resonance can only be used with piano Tones.

Adding Chorus

Chorus is an effect that gives the impression that several instruments are being played at the same time. As a result, the sound will be fatter and have more presence. The depth (volume) of the Chorus effect can be set in eight steps.

Press CHORUS and confirm that its indicator lights.



Note: The Chorus effect can be switched on and off for each Tone separately.

Changing the depth of the Chorus

Set the depth by holding down $\boxed{\texttt{CHORUS}}$ while pressing DATA $\boxed{+}$ / $\boxed{-}$.

Note: The depth is preset for each Tone, but can be changed.

Adding Reverb

By using the Reverb effect, you can obtain pleasant reverberations like those in a concert hall. The depth of the Reverb effect can be set in eight steps.

Press REVERB and confirm that its indicator lights.

Changing the depth of the Reverb

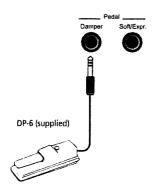
Set the depth by holding down $\overline{\tt REVERB}$ while pressing DATA + /-.

Note: The depth is preset for each Tone, but can be changed.

Sympathetic Resonance

On an acoustic piano, depressing the damper pedal makes the notes you play resonate with other strings, adding rich reverberations and thickness to the sound. The RD-150 simulates this effect for the piano Tones (PIANO) ~ROCK PIANO) and Variation Tones). The effect, called *Sympathetic Resonance*, is automatically added to these Tones, but you can vary the depth in eight steps.

Note that it is only audible when you use the footswitch connected to the Damper jack.



- **1. Simultaneously hold down CHORUS** and REVERB. The display now indicates the current Sympathetic Resonance depth.
- 2. Keep holding CHORUS and REVERB while setting the desired depth with DATA +/-.

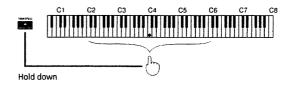
Note: The setting is at "4" when the RD-150 is powered up. You can, however, save it along with the other panel settings (see page 19).

Note: In Layer or Split mode, the depth you set here applies to both Tones, but will be temporarily memorized for the Upper Tone.

4.9 Transpose

Using the Transpose function, you can change the pitch of the entire keyboard. This means that the RD-150 will sound in another key than the one you are playing in. Transpose can be used for two purposes: (a) to play a song in an "easy" key while sounding in a "difficult" one; (b) to accommodate the voice of a singer.

Transposition via the keyboard



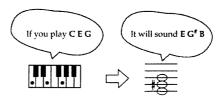
While holding down [TRANSPOSE], press the key that corresponds to the main note ("root") of the pitch you wish to transpose to.

The TRANSPOSE indicator lights, and you can play in the transposed key. When it is dark, the keyboard returns to its original setting (where pressing a C sounds a C, etc.).

You can alternate between "no transposition" and "transposition" simply by pressing TRANSPOSE button.

The interval you set will be remembered until you switch off your RD-150.

■ Example: playing a piece in E major with the fingering of C major



Press the E key while holding down TRANSPOSE, so that you hear an E every time you play a C.

Transposition via the buttons

Press and hold TRANSPOSE while setting the desired semitone interval with DATA + /-1.

The setting range is $-6\sim5$, which means "up to six semitones down, through five semitones up". Pressing DATA $\pm /-$ simultaneously will reset it to "1".

Note: The key you set will be retained until the RD-150 is switched off. When the indicator lights, transposition is on.

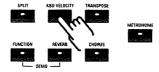
■ Example: playing a piece in E major with the fingering of C major

If you consider C major as the basic key, there are 4 semitones up to the "E". You must therefore select the value "4".

Note: The Transpose function only applies to the Tone you are currently playing. The demo songs, or the song you recorded yourself (see page 16) cannot be transposed.

4.10 Touch sensitivity (KBD Velocity)

You can change the keyboard's touch sensitivity. Though this will not change the "weight" of the keys, you will notice that it will be easier (or harder) to play loud notes (fortissimo). It is also possible to switch off the RD-150's velocity sensitivity altogether.



When you switch on the RD-150, [KBD_VELOCITY] will light automatically, which means that the force with which you strike the keys will influence the tone color and volume of the selected sound(s).

1. Press KBD VELOCITY (indicator goes dark) to switch off the velocity sensitivity.

All notes you play now have the same volume and timbre (tone color), regardless of the force with which you strike the keys. (The RD-150 is no longer velocity sensitive and uses the MIDI velocity value "64" for all notes. This value can be changed; see page 18.)

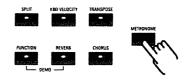
If you want the RD-150 to respond dynamically to your playing but think the response is too sensitive (or not sensitive enough), you can select a different velocity curve:

- 2. Press KBD VELOCITY so that the indicator lights.
- light): This imparts a lighter feel to the keyboard. Because stronger notes can be produced with less effort, this setting is ideal for children or inexperienced musicians.
- (heavy): This imparts a heavier feel to the keyboard. Because stronger notes cannot be produced unless played with greater than standard force, this setting provides a wider dynamic range.
- -R- (medium): This corresponds to the default setting, i.e. normal velocity sensitivity.

Note: Be sure to select "H" or "M" when using the Jazz Scat Tone. Otherwise, you won't be able to trigger the different vowel sounds.

4.11 Using the metronome

The RD-150 features a metronome you may want to use for practising. The beat (time signature) and tempo can be changed to your liking. Furthermore, the metronome's volume can be set in 128 steps.



- 1. Press [METRONOME] to start the metronome. (Press it again to stop the metronome when you no longer need it.)
- 2. Press and hold METRONOME and use the DATA

 → / buttons to set the desired metronome volume (0~127).
- 3. Use DATA + /- to set the metronome tempo. The setting range is = 40 - 210.

Time signature of the metronome

You can select another time signature than "4/4" which is set automatically:



- **1.** Press FUNCTION, followed by POP PIANO. The display now indicates the currently selected time signature (probably "4-4").
- 2. Use DATA ⊕ /□ to select a different time signature. The possibilities are:

0-4	Only the downbeat (first beat) of each measure is sounded.
2-4	2/4 time signature
3-4 "	3/4 time signature
4-4	4/4 time signature
5-4	5/4 time signature
6-4	6/4 time signature
3-8	3/8 time signature
6-8	6/8 time signature
9-8	9/8 time signature

3. Press FUNCTION again to leave the Function mode.

5. Using the Recorder

5.1 Recording your own music

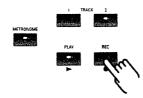
The RD-150 comes with a two-track Recorder function you could use for recording new ideas, new songs, or your own versions of existing music.

Note: It is not possible to transfer the recorded song to a sequencer via MIDI. So be sure to use an external sequencer for all songs you wish to keep.

1. Select the sound you want to use for recording, then set the Chorus, Reverb, tempo, etc.

You cannot change the tempo or beat while recording.

2. Press the REC button.



The indicator(s) for the track(s) where no data are recorded begin blinking. This is the Recording Standby mode.

A tape recorder records two channels for the sounds played by the right and left speakers. The place where a "channel" is recorded is called a *track*.

The RD-150 uses a similar system. You can take advantage of this to record your left and right hand parts onto separate tracks and then listen to them in isolation, possibly supplying the "missing" part. This is convenient for piano lessons.

You can also use these tracks for recording two different (four-hand) parts. Be aware, however, that the parts played in Split or Layer (see page 12) mode will be recorded onto the same track.

Note: Press REC again if you do not want to record after all.

3. Press Track ① or ② to cause the corresponding indicator to flash.

This means that the data of that track will be erased, and new data will be recorded. You cannot restore data that have been erased in this way.

When the indicator for a track lights steadily, the performance data recorded there will be played back during recording onto the other track. If you do not want to hear those data, switch off the track by pressing its button before pressing [REC].

4. Press the METRONOME button if you wish to use the metronome while recording.

See page 15 for how to set the metronome.

5. Press PLAY. The RD-150 starts recording after a two-measure count-in.

If you start playing without pressing PLAY, the RD-150 will start recording right away without any count-in.

6. Press the PLAY button to stop recording.

A note about recording

When in Recording Standby mode, if you press the button for a track that contains data (causing the indicator to flash), recording will start, and the newly recorded data will replace the previously recorded data. Data erased in this way cannot be restored.

There is a limit for the number of notes that can be recorded. If a pedal is used, the pedal messages are recorded, too, so that the number of notes you can record may decrease.

When the memory is almost full during recording, the REC indicator starts flashing faster. When no more data can be recorded, the REC indicator will go out, and recording stops automatically.

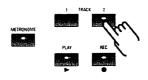
5.2 Playing back your song

- 1. Press PLAY to play back your song. (Press it again to stop playback.)
- 2. If necessary, use DATA $+ \sqrt{-}$ to change the playback tempo.

Changing the tempo does not affect the pitch.

Listening to a track in isolation

Press the Track button of the part you do not want to hear (confirm that its indicator is dark).



- 3. Press the PLAY button to start playback.
- 4. Press it again to stop playback.

6. Other useful functions

The following functions are accessible via the FUNCTION button. You probably won't need them every day, but they may come in handy at times.

6.1 Tuning the RD-150

This function allows you to ensure that your RD-150 uses the same standard pitch as other instruments (or a CD player, tape recorder, etc.) you are accompanying.

The RD-150 is a digital instrument, which means that it never goes out of tune, and that changing its tuning is a matter of pressing a few buttons rather than tuning a whole bunch of strings.

1. Press FUNCTION, followed by PIANO.



The display now indicates the current frequency used for the A4.

2. Use DATA []/[] to select a different frequency for the A4 (and hence the entire instrument).

The setting range is 415.3~466.2Hz. The normal tuning of electronic musical instruments is 440Hz.

Note that the first digit ("4") is omitted, so that "440Hz" is actually displayed as "40.0". Similarly, the frequency "415.3" will be displayed as "15.3", etc.

3. Press FUNCTION again to leave the Function mode.

6.2 Using other tunings

The RD-150 allows you to play classical music, such as baroque, with the tuning actually used in that period.

Most music today is composed and played based on the assumption that Equal Temperament (the most common tuning method) will be used. However, various other tunings were in existence during the age of classical music. By playing a piece using such an "old" tuning, you should be able to hear the natural sonorities of the chords, and appreciate the piece in the way it was originally intended.

- 1. Press FUNCTION, followed by FINGER BASS.
- 2. Use DATA \pm /= to select the desired scale.

Note: Certain scales also require that you set the root note of the key you wish to play in. See below for details.

Equal: This tuning divides the octave equally into 12 intervals.

Pythagorean: This method of tuning was invented in ancient Greece. It resolves the ambiguity of the fourths and fifths. Though thirds are somewhat imperfect, melodies sound clearer.

resolved the ambiguity of fifths and thirds. Quite beautiful sonorities are produced with chords, but the scale is unbalanced, so it is not well-suited for melodies.

film Just (Minor): This is a Just scale for playing pieces in minor keys.

Mean Tone: A temperament that adds some compromises to Just temperament, and facilitates transposition.

Werckmeister: By combining the Mean Tone and Pythagorean temperaments, it allows for playing in any key.

Hir Kirnberger: As a result of improvements made to the Mean Tone and Just temperaments, it is relatively tolerant towards transposition, and can be used to play in all keys.

3. Press FUNCTION again to leave the Function mode. Note: The temperament you select will be used until you switch off the RD-150 or until you select another temperament.

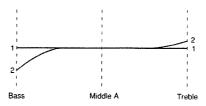
Specifying the root note

When you play using a tuning other than Equal Temperament, you need to specify the root/fundamental ("C" for major and "A" for minor) according to the key of the song to be played.

- 1. Press FUNCTION, followed by ORCH.STRINGS.
- 2. Use DATA \oplus / \ominus to select the desired root note. The display indicates the notes as intervals. Transposing from C to D therefore means that the display will indicate the number \exists , while \exists equals a fifth.

Stretch Tuning

Stretch Tuning is a tuning method specific to pianos. The pitch of a piano is generally tuned lower in the bass, and higher in the treble compared with equal temperament. This is done because low notes, when tuned right, sound a little sharp, while treble notes sound flat. By changing the tuning curve, the chords will sound subtly different.



1. Press FUNCTION, followed by SYNTH STRINGS.

- 2. Use DATA [+]/[-] to select the desired Stretch Tuning curve:
- This is a standard tuning curve which is suitable for playing in Layer mode or with other instruments.
- This is the tuning curve that stretches the bass and treble. This is suitable for piano solos.
- 3. Press [FUNCTION] again to leave the Function mode. Note: The tuning curve you select here will be retained until the RD-150 is switched off.

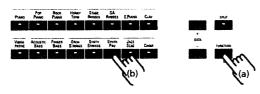
Note: When the RD-150 is switched on, "2" will be automatically selected.

Note: This Stretch Tuning only applies to "Piano" Tones.

6.3 Setting the fixed velocity value

The following procedure allows you to specify the fixed (uniform) velocity value to be used whenever you switch off the KBD VELOCITY button, thus deactivating the RD-150's velocity sensitivity.

1. Press FUNCTION (a), followed by SYNTH PAD (b).



- 2. Use DATA ± 1 to set the desired velocity value. The setting range is $1\sim127$ (very soft to very loud).
- 3. Press FUNCTION again to leave the Function mode (default value: 64).

6.4 Pedal functions

The RD-150 provides two sockets, one of which is labeled Damper, while the second is called Soft/Expr.].

The former is intended for the supplied DP-6 footswitch, while the latter accepts a DP-2, DP-6, or BOSS FS-5U footswitch, or an EV-5 expression pedal. See also page 9.

There are a few things you can set for these footswitches/the expression pedal.

Assigning the damper pedal

In Layer and Split modes (see page 12), you can decide whether the footswitch connected to the Damper socket should affect only the Upper Tone, only the Lower Tone, or both.

- 1. Press FUNCTION, followed by CLAV.
- 2. Use DATA +/- to select the desired assignment:
- -8- The damper pedal affects only the Upper Tone.
- The damper pedal affects only the Lower Tone.
- The damper pedal affects both the Upper and Lower Tones.
- 3. Press FUNCTION again to leave the Function mode.

Soft/Expr. functions

Setting the Soft/Expr. footswitch function

The RD-150 automatically detects whether you have connected a footswitch or an expression pedal. If you connect an optional footswitch to the Soft/Expr. socket, you can decide whether it should act as Soft or Sostenuto pedal. See also page 9. (If you connect an expression pedal, this function cannot be set.)

- 1. Press FUNCTION, followed by ACOUSTIC BASS.
- 2. Use DATA \pm / \equiv to select the desired assignment:
- SFE The footswitch functions as Soft pedal.
- 5th The footswitch functions as Sostenuto pedal.
- 3. Press FUNCTION again to leave the Function mode.

Assigning the Soft/Expr. footswitch or pedal to the desired Tones

In Layer and Split modes (see page 12), you can decide whether the footswitch or expression pedal connected to the Soft/Expr. socket should affect only the Upper Tone, only the Lower Tone, or both.

- 1. Press FUNCTION, followed by VIBRAPHONE.
- 2. Use DATA \pm /= to select the desired assignment:
- The footswitch/pedal affects only the Upper Tone.
- The footswitch/pedal affects only the Lower
- **U-L** The footswitch/pedal affects both the Upper and Lower Tones.
- 3. Press FUNCTION again to leave the Function mode.

6.5 Saving the panel settings

The settings that are currently in effect (everything, including Tone selection, effect depths, Layer/Split Tones, MIDI settings, etc.) can be saved, so that you do not need to program them again next time you switch on the RD-150.

Please be aware that there is one memory (a so-called "Flash ROM"). This means that your previous settings will be overwritten each time you save new settings.

- 1. Press FUNCTION, followed by CHOIR.
 The display now asks you for a confirmation: Sto (Store).
- 2. Press DATA 🛨 to save your settings.

6.6 Restoring the factory defaults

To erase the contents of the RD-150's memory (thus recalling the factory settings):

Press and hold REC + PLAY while switching on the RD-150.

The display now briefly shows the message FcŁ, after which the RD-150 returns to normal operation.

7. MIDI functions

If you do not intend to connect a MIDI instrument to the RD-150, you do not need to read this chapter.

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

Connecting MIDI devices

The RD-150 features two MIDI connectors for transmitting and receiving performance messages to and from an external device. By connecting external devices to these sockets, you can expand the possibilities of your RD-150.

■ MIDI connectors



The RD-150 has two MIDI sockets: MIDI OUT and MIDI IN. By connecting the piano to an external MIDI device to these sockets, they can control each other. For instance, you can play an external device or change sounds on the external device from the RD-150.

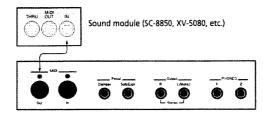
MIDI OUT— This sends out messages describing actions (such as playing the keyboard) to the MIDI IN jack on the external device.

MIDI IN— This receives the MIDI messages sent by an external MIDI device. The receiving MIDI device will act according to the MIDI messages received, and play notes, change Tones, etc.

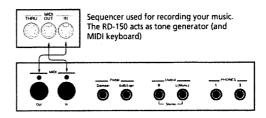
Connecting a MIDI device

- 1. Switch off the RD-150.
- 2. Connect the MIDI jack (e.g. "OUT") of the external device to the opposite connector of the RD-150 (e.g. "IN") using an optional MSC-15/25/50 MIDI cable.

Setup example: controlling a sound module



Setup with a MIDI sequencer



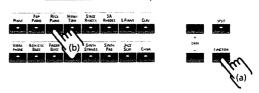
7.1 MIDI transmit/receive channels

MIDI provides 16 channels. MIDI messages are communicated between two devices over a MIDI channel. Even if the two devices are connected properly with a MIDI cable, messages cannot be sent or received if the MIDI channels are not set correctly. The RD-150 allows you to set two MIDI channels; one for the Upper Tone, and a second for the Lower Tone. The Lower Tone channel is used in Layer and Split modes (see page 12). In Whole mode (when neither the Layer, nor the Split mode is active), only the Upper Tone channel is used.

Note: The MIDI channels you set are retained until the RD-150 is switched off.

MIDI channel for the Upper Tone

1. Press FUNCTION, followed by ROCK PIANO.



- 2. Use DATA $\pm 1/-$ to select the desired MIDI channel for the Upper Tone (1~16/Off).
- 3. Press FUNCTION again to leave the Function mode.

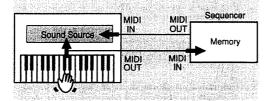
MIDI channel for the Lower Tone

- 1. Press FUNCTION, followed by HONKY TONK.
- 2. Use DATA ⊥/□ to select the desired MIDI channel for the Lower Tone (1~16/Off).
- 3. Press FUNCTION again to leave the Function mode.

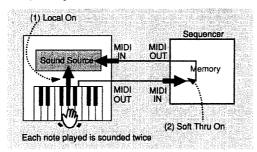
7.2 MIDI filters

Local Control

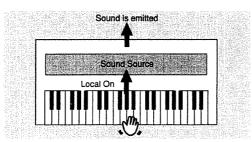
You can connect the RD-150 to a MIDI sequencer and record your performances with that sequencer. It goes without saying that these data can also be played back.



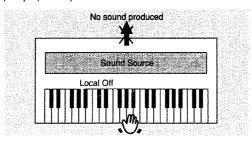
If the sequencer's (Soft) THRU (or MIDI Echo) function is turned on, the notes you record will be retransmitted right away to the RD-150 and thus played a second time. This happens because the keyboard information reaches the sound generator via two different routes (1) and (2). This makes the performance sound strange, and greatly reduces the number of available voices. To resolve this, you can disable route (1) by setting the RD-150 to LOCAL OFF.



Local ON— In this mode, the keyboard is connected to the RD-150's sound source.



Local Off— The keyboard and the internal tone generator are disconnected. No sound will be heard when you play on keyboard.



- 1. Press FUNCTION, followed by JAZZ SCAT.
- **2.** Use DATA \boxdot / \boxdot to select on or oFF (no connection).
- **3.** Press FUNCTION again to leave the Function mode. Note: The Local on/off setting you make here is retained until the RD-150 is switched off.

The Local function can also be set using so-called "MIDI Local Control" messages. When the RD-150 is used up with an MT-80/120/300, a Local Off message is transmitted as soon as you switch on the MT. This only works if you first switch on the MT and then the RD-150.

Program change reception/transmission filter

"Program Changes" are MIDI messages that allow you to remotely control Tone selection on the RD-150, or to select different sounds on an external instrument that is being controlled from the RD-150. In the latter case, you need to select a Tone on the RD-150 to cause the external instrument to change sounds as well.

With the following procedure, you can switch off/on the transmission/reception of MIDI Program Change messages.

- 1. Press FUNCTION, followed by STAGE RHODES.
- 2. Use DATA $\pm / -$ to select either on (transmit/receive) or OFF (do not transmit/receive).
- **3.** Press FUNCTION again to leave the Function mode. Note: This setting can be saved along with all other settings. See page 19.

Effect on/off filter

Another aspect that can be controlled via MIDI is switching on/off of the Chorus and Reverb effects. As long as this is possible (on), a special MIDI message will be transmitted to an external instrument whenever you switch the RD-150's Chorus or Reverb on/off. Conversely, when the RD-150 receives such a message from a sequencer, it will switch the corresponding effect on or off

- 1. Press FUNCTION, followed by SA RHODES.
- 2. Use DATA \pm /- to select either on (transmit/receive) or OFF (do not transmit/receive).
- **3.** Press FUNCTION again to leave the Function mode. Note: This setting can be saved along with all other settings. See page 19.

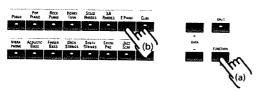
Volume & Expression filter

Whenever you change the volume setting of the LOWER or UPPER slider, the RD-150 transmits a Volume control change (CC07) on the MIDI channel assigned to the Lower or Upper Tone. This message can also be received for remote volume control of the RD-150's Tones.

Another type of (relative) volume message will be transmitted when you use an optional EV-5 expression pedal. The corresponding control change (CC11) can also be received.

The following procedure allows you to switch off the transmission/reception of these messages if you don't need them:

1. Press FUNCTION, followed by E.PIANO.



- 2. Use DATA +/- to select either on (transmit/receive) or OFF (do not transmit/receive).
- 3. Press FUNCTION again to leave the Function mode. Note: This setting can be saved along with all other settings. See page 19.

7.3 Program change numbers

Here are the MIDI program change numbers the RD-150 transmits whenever you select a Tone. If the RD-150 receives these messages, via MIDI, it will behave in the same way as when you press the corresponding Tone selection button.

Please be aware of the following for Program Change messages:

- These messages are transmitted and received on the Lower or Upper MIDI channel. See page 20 for how to set it.
- Program Change messages are only transmitted/ received if the filter in question is set to on. See page 21.

Piano	01	Vibraphone
Piano 1		Marimba
Pop Piano		Glockenspiel
Classic Piano		Acoustic Bass
Rock Piano	06	Finger Bass
Honky Tonk		Voice Bass
Stage Rhodes	07	Orch.Strings
SA Rhodes		Synth Strings
E.Piano	09	Synth Pad
Clav	12	Jazz Scat
Clav 1	11	Choir
Harpsichord	10	Choir 1

Vibraphone	13
Marimba	14
Glockenspiel	15
Acoustic Bass	16
Finger Bass	
Voice Bass	
Orch.Strings	19
Synth Strings	20
Synth Pad	
Jazz Scat	22
Choir	23

8. Appendix

8.1 Troubleshooting

If the RD-150 does not work properly, check the following first:

The piano cannot be switched on.

Check that the power cord is securely and correctly connected.

No sound is heard.

Check the setting of the VOLUME, LOWER and UPPER sliders.

Check whether the RD-150 is connected to an amplifier and whether the amp, etc., is switched on.

No sound is heard (when an external MIDI device is connected).

Check whether all relevant devices are switched on.

Check whether Local is set to "Off".

Two Tones sound when you play on the keyboard. Check whether the Layer mode is active.

If a sequencer is connected, check whether its Soft THRU function is turned off.

Not all notes sound.

The maximum number of voices of the RD-150 is 64. If you play along with a recorded song and frequently use the pedal(s), some notes are cut off.

The pitch of the keyboard sounds incorrect.

Check whether TRANSPOSE is off.

Check the temperament and Stretch Tuning settings.

Check the Master Tuning setting.

A footswitch or the expression pedal is not functioning properly; it does not have any effect, or it stays on. Check whether the pedal is securely and correctly connected.

8.2 Specifications

Keyboard

88 weighted keys (TP-23)

Keyboard modes

Whole, Split, Layer

Sound Source

Max. polyphony: 64 voices

Tones: 16 Main Tones (Stereo Piano, Pop Piano, Rock Piano, Honky-Tonk, Stage Rhodes, SA Rhodes, E.Piano, Clav, Vibraphone, Ac. Bass, Finger Bass, Orch. Strings, Synth Strings, Synth Pad, Jazz Scat, Choir

8 Variation Tones: Piano 1, Piano 2, Clav 1, Harpsichord,

Glockenspiel, Choir 1, Voice Bass

Panel controls

Sliders: Master Volume, Brilliance, Upper Level,

Lower Level

Switches: Tone Selection (x16), Reverb on/off, Chorus on/

off, Metronome, Recorder function, KBD

Velocity, Split

Adjustable functions

Master Tuning: 415.3Hz~466.2Hz, 0.1Hz steps

Transpose: -6-+5 semitone steps

Velocity: 3 curves, off (freely adjustable fixed value)

Temperaments: 7 preset temperament

Stretch Tuning: 2 types

Effects

Digital Reverb and Chorus (level adjustable in 8 steps) Sympathetic Resonance (for piano Tones): 8 levels

Pedal functions

Damper

Soft/Sostenuto or Expression (auto-detected)

Recorder

2 tracks, 1 song

Note storage: $\pm 5,000$ notes Tempo: $J = 40 \sim 210$ Resolution: 96 ticks per quarter note Controls: Play/Stop, Rec, Tempo, track selection

Metronome

Beat: 0/4, 2/4, 3/4, 4/4, 5/4, 6/4, 3/8, 6/8, 9/8 Volume: adjustable in 128 steps

Connectors

Damper, Soft/Expr., headphone jacks x2 (stereo) Output (L/Mono, R), MIDI IN, OUT

Power consumption

45W (230V, 230VE)

Dimensions

1380 (W) x 320 (D) x 105 (H) mm

Weight

22.5 kg

Supplied accessories

Owner's Manual, power cable, Music rest, DP-6 footswitch

Options

MSC series MIDI cables, KS-12 keyboard stand, KC series keyboard amplifiers, RH series headphones, DP-2, DP-6, or BOSS FS-5U foot switch/pedal, EV-5 expression pedal.

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

8.3 Automatic Split mode settings

The following Tone combinations produce automatic transpositions of the Lower and/or Upper Tone so as to be more useful from a musical point of view.

Split mode (default split point: Gb3)

Upper Tone (right)	Lower Tone (left)
1. Piano (–1 oct)	Ac. Bass
2. Pop Piano (–1 oct)	Ac. Bass
3. Rock Piano (-1 oct)	Finger Bass
4. Honky Tonk (-1 oct)	Ac. Bass
5. Stage Rhodes (-1 oct)	Finger Bass
6. SA Rhodes (-1 oct)	Finger Bass
7. E.Piano (–1 oct)	Finger Bass
8. Clav (-1 oct)	Finger Bass
9. Vibraphone (–1 oct)	Ac. Bass
10. Acoustic Bass (-2 oct)	Piano 1 (+2 oct)
11. Finger Bass (–2 oct)	Stage Rhodes (+2 oct)
12. Orch. Strings (–1 oct)	Ac. Bass
13. Synth Strings (–1 oct)	Ac. Bass
14. Synth Pad (–1 oct)	Ac. Bass
15. Jazz Scat(–1 oct)	Ac. Bass
16. Choir (-1 oct)	Ac. Bass

Octave when used as Lower Tone (Split mode)

		-	
1. Piano	+2	9. Vibraphone	+2
2. Pop Piano	+2	10. Acoustic Bass	-
3. Rock Piano	+2	11. Fingered Bass	-
4. Honky Tonk	+2	12. Orch. Strings	+2
5. Stage Rhodes	+2	13. Synth Strings	+2
6. SA Rhodes	+2	14. Synth Pad	+2
7. E.Piano	+2	15. Jazz Scat	+2
8. Clav	+2	16. Choir	+2

8.4 Automatic Chorus on/off assignments

Below please find the automatically selected status of the Chorus effect when you press one of the following Tone select buttons:

1. Piano	OFF	9. Vibraphone	OFF
2. Pop Piano	OFF	10. Acoustic Bass	OFF
3. Rock Piano	OFF	11. Fingered Bass	OFF
4. Honky Tonk	OFF	12. Orchestral Strings	OFF
5. Stage Rhodes	OFF	13. Synth Strings 1	OFF
6. SA Rhodes	ON	14. Synth Strings 2	OFF
7. E.Piano	ON	15. Jazz Scat	OFF
8. Clav	OFF	16. Choir	OFF

8.5 MIDI Implementation Chart

DIGITAL PIANO Model RD-150

MIDI Implementation Chart

Date: Sept 2000 Version: 1.00

	Function	Transmitted	Recognized	Remarks
Basic Channel	Default Changed	Upper: 1/Lower: 2 1–16	Upper: 1/Lower: 2 1–16	
Mode	Default Messages Altered	Mode 3 x	Mode 3	
Note		15–113	0–127	
Number :	True Voice	******	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		x	x	
Control Change	6, 38 7 11 64 66 67 91 93 100, 101	0 1 0 1 0 1 0 1 0 0 1 0 0 1 0 0 0 0 0 0	0 1 0 1 0 1 0 1 0 1 0 1 0 1 0 1	Data entry Volume Expression Hold 1 Sostenuto Soft Effect1 depth (Reverb) Effect3 depth (Chorus) RPN LSB, MSB
Prog Change	: True #	O (0-44) *1	O (0-127) *1 0-44	
System Exclusive		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 ON/OFF : All Notes OFF : Active Sense : System Reset	x x x X O	x O O (123–127) X	
Notes		*1 O x is selectable. *2 These message can	affect only MIDI 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

Information

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



EGYPT

Al Fanny Trading Office P.O. Box 2904, El Horrich Heliopolos, Cairo, EGYPT TEL: (02) 4185531

REUNION

Maison FO - YAM Marcel 25 Rue Jules Merman, ZL Chaudron - BP79 97391 Ste Clotilde REUNION TEL: 28 29 16

SOUTH AFRICA That Other Music Shop

(PTY) Ltd. 11 Melle Street (Cnr Melle and Juta Street)

Braamfontein, 2001, Republic of SOUTH AFRICA TEL: (011) 403 4105

Paul Bothner (PTY) Ltd. 17 Werdmuller Centre Claremont

Republic of SOUTH AFRICA

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



CHINA

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

HONG KONG

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

INDIA

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

INDONESIA

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

KORFA

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

MALAYSIA

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

PHILIPPINES

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

SINGAPORE

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

CRISTOFORI MUSIC PTE

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

TAIWAN

ROLAND TAIWAN ENTERPRISE CO., LTD. Room 5, 9fl. No. 112 Chung Shan N.Road Sec.2, Taipei, TAIWAN,

TFL: (02) 2561 3339

THAILAND

Theera Music Co., Ltd. 330 Verng NakomKasem, Soi 2. Bangkok 10100, THAILAND TEL: (02) 2248821

VIETNAM

Saigon Music 138 Tran Quang Khai St., District 1 Ho Chi Minh City VIETNAM TEL: (08) 841-4068

AUSTRALIA/ NEW ZEALAND

AUSTRALIA

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

TFL: (02) 9982 8266 NEW ZEALAND

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

CENTRAL/LATIN AMERICA

ARGENTINA

Instrumentos Musicales S.A. Florida 65o 2nd Floor Office Number 206A Buenos Aires ARGENTINA, CP1005 TEL: 154-11 4-393-6057

BRAZIL

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

COSTA RICA

JUAN Bansbach Instrumentos Musicales Ave. I. Calle I I. Apartado 10237, San Jose, COSTA RICA TEL: (506)258-0211

CHILE

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

EL SALVADOR

TEL: (503) 262-0788

OMNI MUSIC 75 Avenida Notre YY Alameda, Juan Pablo 2, No. 4010 San Salvador, EL SALVADOR

MEXICO

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

La Casa Wagner de

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

PANAMA

SUPRO MUNDIAL, S.A. Boulevard Andrews, Albrook, Panama City, REP. DE PANAMA TEL: (507) 315-0101

PARAGUAY

Distribuidora De Instrumentos Musicales J.E. Olear y ESQ, Mandavira Edeficio, El Dorado Planta Baja Asuncion PARAGUAY TEL: 595-21-492147

PFDII

VIDEO Broadcast S.A. Portinari 199 (ESQ. HALS), San Borja, Lima 41, REP. OF PERU TEL: 51-14-758226

URUGUAY

Todo Musica S.A. Cuareim 1844, Montevideo, URUGUAY TEL: 5982-924-2335

VENEZUELA

Musicland Digital C.A. Av. Francisco de Miranda, Centro Parque de Cristal, Nível C2 Local 20 Caracas VENEZUELA TEL: 002 285 9218

(EUROPE

AUSTRIA

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

BELGIUM/HOLLAND/ LUXEMBOURG

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

DENMARK

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

FRANCE

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

FINLAND

Roland Scandinavia As, Filial Finland Lauttassarentie 54 B Fin-00201 Helsinki, FINLAND TEL: 19) 682-4020

GERMANY

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

GREECE

STOLLAS S.A. Music Sound Light 155, New National Road 20422 Patras, GREECE TEL: 061-435400

HUNGARY

Intermusica Ltd. Warehouse Area DEPO PL83 H-2046 Torokbalint, HUNGARY TEL: (23) 511011

IRELAND

Roland Ireland Audio House, Belmont Court, Donnybrook, Dublin 4. Republic of IRELAND TEL: (01) 2603801

ITALY

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

NORWAY

Roland Scandinavia Avd. Kontor Norge Lilleakerveien 2 Postboks 95 Lilleaker N-0216 Oslo NORWAY TEL: 273 0074

POLAND

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

PORTUGAL

Tecnologias Musica e Audio, Roland Portugal, S.A. RUA DE SANTA CARARINA 131/133.4008-150 PORTO PORTUGAL TEL: (022) 208 4456

ROMANIA

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

RUSSIA

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

SPAIN

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

SWEDEN

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

SWITZERLAND

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

UKRAINE

TIC-TAC
Mira Str. 19/108
P.O. Box 180
295300 Munkachevo, UKRAINE
TEL: (03131) 414-40

UNITED KINGDOM

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

MIDDLE EAST

TEL: (01792) 700139

BAHRAIN

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

CYPRUS

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

ISRAEL

Halilit P. Greenspoon & Sons Ltd. 8 Retzif Fa'aliya Hashnya St. Tel-Aviv-Yaho ISRAFL TEL: (03) 6823660

JORDAN

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

KUWAIT

Easa Husain Al-Yousifi Abdullah Salem Street, Safat KUWAIT TEL: 5719499

LERANON

A. Chahîne & Fils P.O. Box 16-5857 Gergi Zeidan St. Chahîne Building, Achrafieh Beirut, LEBANON TEL: (01) 335790

QATAR

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

SAUDI ARABIA

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

SYRIA

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

TURKEY

Barkat muzik aletleri ithalat ve ihracat Ltd Sti Straselviler cad.Guney is hani 84-86/6, Taksim. Istanbul. TURKEY TEL: (0212) 2499324

U.A.F.

Zak Electronics & Musical Instruments Co. L.L.C. Zabeel Road, Al Sherooq Bldg., No. 14, Grand Floor DUBAI U.A.E. TEL: (04) 3360715

NORTH AMERICA

CANADA

Roland Canada Music Ltd. (Head Office) 5480 Parkwood Way Richmond B. C., V6V 2M4 CANADA TEL: (0604) 270 6626

Roland Canada Music Ltd. (Toronto Office)

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

U. S. A.

Roland Corporation U.S. 5100 S. Eastern Avenue Los Angeles, CA 90040-2938, U.S. A. TEL (373) 880 3700

RES 278-00 Printed in Italy by Alda Tecnografica S.r.l. - Grottammare (AP)

Roland® k6018408

k6018408



