

BOSS**DIGITAL DELAY DD-200**

Owner's Manual



Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (the leaflet "USING THE UNIT SAFELY" and the Owner's Manual (p. 17)). After reading, keep the document(s) where it will be available for immediate reference.

Panel Descriptions

Top Panel



1 Display

Shows the delay time, etc.

2 [TIME] knob

Specifies the delay time.

Each time you press the button, the delay time indication switches between time and tempo (BPM).

Example indications

1 ms = " 1.", **100 ms** = " 100.", **1 s** = " 1.00.",

Tempo: 120 = " 120.", **Tempo: 1000** = " 1k.",

Tempo: 99000 = " 99k.", **Tempo: 100000** = " 10k."

3 [FEEDBACK] knob

Adjusts the amount of feedback (amount of repetition).

* Depending on the sound that's being input and on the position of the knob, oscillation might occur.

4 [E.LEVEL] knob

Adjusts the volume of the effect sound.

If the mode is REVERSE, maximizing E.LEVEL cuts the direct sound.

5 Mode knob

Selects the delay mode.

Mode	Explanation
STANDARD	Clear digital delay.
ANALOG	Mild analog delay.
TAPE	Sound with the distinctive waver of a tape echo unit. Models the Roland RE-201.
DRUM	Models the Binson EchoRec2.
SHIMMER	Delay that combines a pitch-shifted sound.
TERA ECHO	Echo sound that is neither reverb nor delay, with spaciousness and motion.
PAD ECHO	Delay sound with a drifting feel.
PATTERN	Sound that combines 16 delays.
LO-FI	Fat sound with a sense of distortion.
DUAL	Two delays connected in series.
DUCKING	The volume and feedback are automatically adjusted according to the input. Won't get in the way of your performance even if applied deeply.
REVERSE	Delay that plays backward.

6 [PARAM] knob

Adjusts an appropriate parameter for each mode.

Mode	Explanation
STANDARD	Adjusts the sense of attack for the delay sound.
ANALOG	Adjusts the character of the delay sound and the sense of distortion.
TAPE	Selects the combination of the three playback heads. If a decimal point "." is shown for the lowest digit, distortion is added to the sound.
DRUM	Selects the combination of the four playback heads. If all of the playback heads are combined, the display indicates "ALL." If a decimal point "." is shown for the lowest digit, distortion is added to the sound.
SHIMMER	Adjusts the brilliance of the delay sound.
TERA ECHO	Adjusts the amount of distinctive character for the effect sound.
PAD ECHO	Adjusts the sense of attack for the effect sound.
PATTERN	Selects the pattern of delays.
LO-FI	Adjusts the sense of distortion for the effect sound.
DUAL	Adjusts the second delay time. This is specified as a proportion (%) relative to the first delay.

Panel Descriptions

Mode	Explanation
DUCKING	Adjusts the sensitivity by which the volume is automatically adjusted according to the input. Increasing this value makes the response more sensitive at lower volumes.
REVERSE	Adjusts the sense of attack for the delay sound.

7 [TONE] knob

Adjusts the tonal character of the effect sound.

When the knob is in the center position, the response is flat. Turning the knob toward the right boosts the high-frequency range, and turning it toward the left cuts the high-frequency range.

8 [MOD DEPTH] knob

Adjusts the depth at which the effect sound is modulated.

9 [TAP DIVISION] button

Specifies the delay time in terms of a note length relative to the BPM.

Preventing accidental operation (panel lock)

By long-pressing the [TAP DIVISION] button, you can switch between enabling (unlocking) or disabling (locking) operation of the knobs and buttons.

If you attempt an operation while the unit is locked, the display indicates “L []”.

10 TAP DIVISION indicator

This indicates the delay time as a note value; the interval at which you press the pedal is considered as a quarter note (100%)

TAP DIVISION indicator					Explanation
♪	♪	♪	TRI	DOT	
✓				✓	Dotted half note (300%)
✓					Half note (200%)
	✓			✓	Dotted quarter note (150%)
✓			✓		Half-note triplet (133%)
	✓				Quarter note (100%)
		✓		✓	Dotted eighth note (75%)
	✓		✓		Quarter-note triplet (67%)
		✓			Eighth note (50%)
		✓	✓		Eighth-note triplet (33%)

11 [MEMORY] button

Switches or saves memories (MANUAL, 1–4) (p. 8).

12 MEMORY indicator

Indicates the currently selected memory.

13 [ON/OFF] switch

Turns the delay on/off.

14 [MEMORY/TAP] switch

Switches memories (p. 8).

Long-press the [MEMORY/TAP] switch to select tap mode.

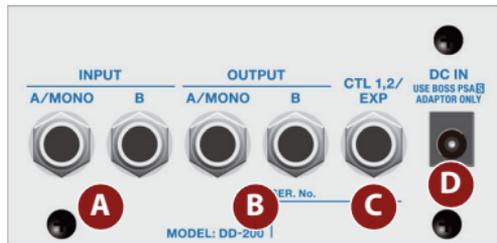
By pressing the switch at the tempo of the song you're performing, this lets you specify a matching delay time.

MEMO

The function of the footswitch can be changed by "MF" (MEMORY FUNCTION).

Rear Panel (Connecting Your Equipment)

- * To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.



A INPUT (A/MONO, B) jacks

Connect your guitar, bass, or effect unit here.

Use the A and B jacks if connecting an effect unit that has stereo output. Use only the A jack if using this unit in mono.

Turning On/Off the Power

The INPUT A jack also operates as the power switch. The power turns on when you insert a plug into the INPUT A jack.

When powering up

Power-up equipment such as your guitar amp last.

When powering down

Power-down equipment such as your guitar amp first.

- * Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

B OUTPUT (A/MONO, B) jacks

Connect this jack to your amp or monitor speakers.

Use only the OUTPUT A jack if using this unit in mono. Even sound that is input in stereo is output in mono.

C CTL 1, 2/EXP jack

Using the jack as CTL 1/2

You can connect a footswitch (sold separately: FS-5U, FS-6, FS-7) and use it to tap-input the delay time or switch memories (p. 10).

Using the jack as EXP

You can connect an expression pedal (sold separately: EV-30, Roland EV-5, etc.) and use it to control the delay time or the volume of the effect sound (p. 12).

- * Use only the specified expression pedal. By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

D DC IN jack

An AC adaptor (sold separately: PSA-seriesS) can be connected to this jack.

- * Use only the specified AC adaptor (sold separately: PSA-seriesS) and plug it into an AC outlet of the correct voltage.
- * If the AC adaptor is connected while power is on, the power supply is drawn from the AC adaptor.

Side Panel (Connecting Your Equipment)



E MIDI jacks

Use a TRS/MIDI connecting cable (sold separately: BMIDI-5-35) to connect an external MIDI device. You can use an external MIDI device to switch the memories of this unit.

- * Do not connect an audio device here. Doing so will cause malfunctions.

F USB port

Connect your computer using a commercially available USB cable that supports USB 2.0.

- * Do not use a micro USB cable that is designed only for charging a device. Charge-only cables cannot transmit data.
- * This is used only for program updates.

Saving and Switching Memories

Saving to Memory

Here's how to save delay settings that you edited.

- 1. Long-press the [MEMORY] button.**

The display indicates "M-1".

- 2. Press the [MEMORY] button to select the save-destination (MAN, 1-4).**

If you decide to cancel, press the [TAP DIVISION] button.

- 3. Long-press the [MEMORY] button to confirm the save-destination.**

The memory is saved.

* If you save to MAN, the settings of the panel are applied as the values for MODE, FEEDBACK, E.LEVEL, PARAM, TONE, and MOD DEPTH.

Switching Memories

Here's how to recall a saved memory.

- 1. Press the [MEMORY] button to select a memory.**

Each time you press the button, you cycle through the memories in the order of "MAN (manual) → 1 → 2 → 3 → 4 → MAN..."

What is "MAN" (manual)?

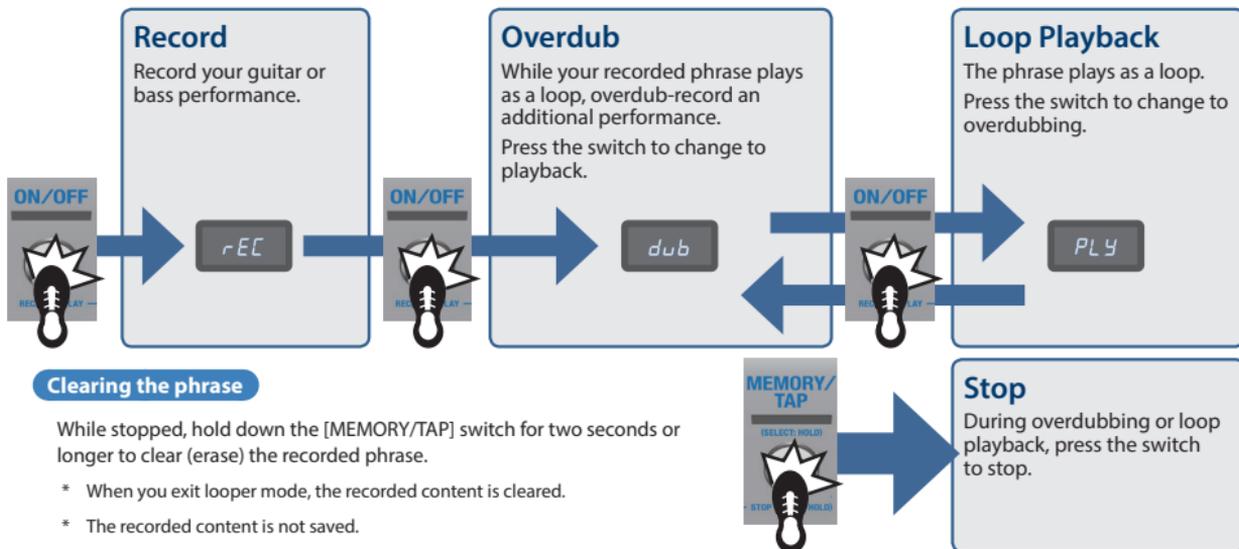
If you select "MAN," the delay is heard using settings that reflect the actual positions of the knobs. The delay time and TAP DIVISION use the settings that you wrote into memory.

Performing with Phrase Loops

You can use the looper to perform while recording and playing-back the sound in real time to create layers. This lets you layer sounds while applying delay.

Entering (exiting) looper mode: Press the [ON/OFF] switch and [MEMORY/TAP] switch simultaneously.
When the looper starts, the display indicates "L O P".

* Maximum recording time: approximately 60 seconds (mono)



Clearing the phrase

While stopped, hold down the [MEMORY/TAP] switch for two seconds or longer to clear (erase) the recorded phrase.

- * When you exit looper mode, the recorded content is cleared.
- * The recorded content is not saved.

* If there is recorded data, the ON/OFF indicator is lit. If there is no data, the indicator is unlit.

Overall Settings (Menu)

Basic Operation

1. Press the [TAP DIVISION] button and [MEMORY] button simultaneously.

You enter menu mode.

2. Turn the [TIME] knob to select a parameter, and then press the [TIME] knob.

The value is displayed.

3. Turn the [TIME] knob to edit the value.

4. Press the [TIME] knob.

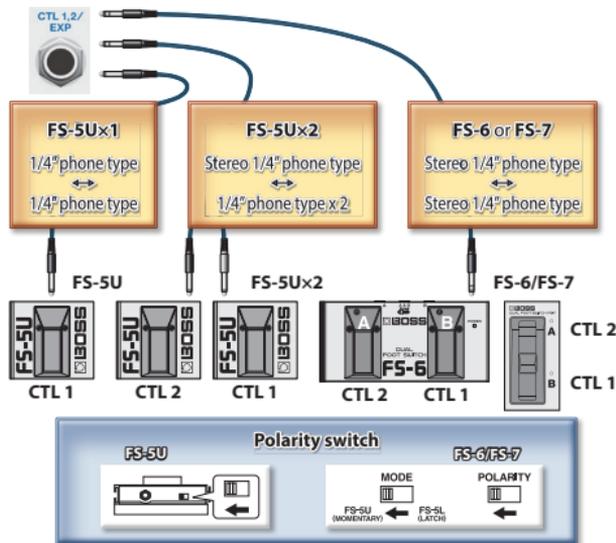
5. Press the [TAP DIVISION] button and [MEMORY] button simultaneously.

You exit menu mode.

Assigning functions to external pedals

You can connect footswitches (sold separately: FS-5U, FS-6, FS-7) to the CTL 1, 2/EXP jack, and use them to tap-input the delay time or to switch memories.

Use the menu items "C 1F" or "C 2F" to make these settings (p. 11).



Menu Parameter List

Parameter	Explanation
$\overline{C}rY$ (CARRYOVER)	Specifies whether the effect sound is carried-over (<i>on</i>) or not carried-over (<i>off</i>) when you switch sounds or turn off the delay.
$\overline{t}hd$ (TEMPO HOLD)	Specifies whether the tempo (BPM) is held (<i>on</i>) or changed (<i>off</i>) when you switch sounds.
$\overline{S}BF$ (ON/OFF FUNCTION)	Specify the functions of the [ON/OFF] switch, [MEMORY/TAP] switch, and footswitches connected to the CTL 1, 2/ EXP jack.
$\overline{M}FC$ (MEMORY FUNCTION)	* The functions that can be assigned differ depending on the switch.
$\overline{C}IF$ (CTL1 FUNCTION)	<i>off</i> : No operation.
$\overline{C}2F$ (CTL2 FUNCTION)	<i>SB</i> (ON/OFF SWITCH): Turns the effect on/off.
	<i>MOM</i> (MOMENT): Outputs the delay sound only while held down.
	<i>FAD</i> (FADE): Makes the delay sound fade-in/out.

Parameter	Explanation
	<i>MAN</i> (MANUAL): Selects manual.
	<i>M1-4</i> (MEMORY1-4): Selects memory 1-4.
	<i>MUP, MDN</i> (MEMORY UP, DOWN): Selects memories according to MEMORY EXTENT (p. 12). Long-press the switch to select tap mode (the indicator blinks at the tempo).
$\overline{S}BF$ (ON/OFF FUNCTION)	<i>TAP</i> (TAP TEMPO): Tap-enters the tempo (tap mode).
$\overline{M}FC$ (MEMORY FUNCTION)	<i>HLD</i> (HOLD): Repeats the delay sound while held down (hold mode).
$\overline{C}IF$ (CTL1 FUNCTION)	<i>WRP</i> (WARP): Simultaneously controls the feedback amount and volume of the delay sound, letting you produce a fantasy-like delay (warp mode).
$\overline{C}2F$ (CTL2 FUNCTION)	<i>TST</i> (TWIST): Produces an aggressive rotating effect (twist mode).
	<i>RL2</i> (ROLL 1/2), <i>RL4</i> (ROLL 1/4), <i>RL8</i> (ROLL 1/8): Sets the delay time to 1/2-1/8 (roll mode).

Overall Settings (Menu)

Parameter	Explanation
<i>SBF</i> (ON/OFF FUNCTION)	<i>LPS</i> (LOOP ON/OFF): Turns the looper on/off.
<i>NFC</i> (MEMORY FUNCTION)	<i>LPC</i> (LOOPER CONTROL): Controls the looper. Tap: Switches the looper between play/overdub/stop. Double-tap: Stops the looper. Long-press while stopped: Clears the phrase.
<i>CT1F</i> (CTL1 FUNCTION)	<i>LPP</i> (LOOPER PLAY/DUB/STOP): Switches the looper between play/overdub/stop
<i>CT2F</i> (CTL2 FUNCTION)	<i>LSE</i> (LOOPER STOP): Stops the looper. Hold for two seconds or longer to clear the phrase.
	Specifies the function of an expression pedal connected to the CTL 1, 2/EXP jack. <i>OFF</i> : No operation.
<i>EPF</i> (EXPRESSION FUNCTION)	<i>TIME</i> (TIME/BPM): The same operation as the [TIME] knob. <i>Fdb</i> (FEEDBACK): The same operation as the [FEEDBACK] knob. <i>ELU</i> (E.LEVEL): The same operation as the [E.LEVEL] knob. <i>Mod</i> (MOD DEPTH): The same operation as the [MOD DEPTH] knob. <i>PRM</i> (PARAM): The same operation as the [PARAM] knob. <i>ILU</i> (INPUT LEVEL): Adjusts the input level.

Parameter	Explanation
<i>EPn</i> (EXPRESSION MIN)	Specifies the variable range of the parameter controlled by EXPRESSION FUNCTION. The variable range differs depending on the parameter.
<i>EPN</i> (EXPRESSION MAX)	
<i>SBP</i> (ON/OFF PREFERENCE)	
<i>NEP</i> (MEMORY PREFERENCE)	<i>MEM</i> (MEM): The setting in memory is used
<i>CT1P</i> (CTL1 PREFERENCE)	<i>SYS</i> (SYS): The controller's function is fixed regardless of memory
<i>CT2P</i> (CTL2 PREFERENCE)	
<i>EXP</i> (EXPRESSION PREFERENCE)	
	Selects how output occurs. <i>nor</i> (NORMAL): Output is stereo if plugs are inserted in the OUTPUT A/B jacks; if not, output is mono from the OUTPUT A jack. <i>dPE</i> (DIRECT/EFFECT): The direct sound is output from the OUTPUT A jack, and the effect sound is output from the OUTPUT B jack. <i>dNE</i> (DIRECT MUTE): The direct sound is not output.
<i>ETF</i> (MEMORY EXTENT FROM)	Specify the memory switching range (MEMORY EXTENT FROM-TO). <i>MAN</i> (MANUAL), 1-4
<i>ETT</i> (MEMORY EXTENT TO)	

Parameter	Explanation					
rCh (MIDI RECEIVE CHANNEL)	Specifies the MIDI receive channel. If this is "oFF," MIDI messages are not received. <i>1-16, oFF</i>					
tCh (MIDI TRANSMIT CHANNEL)	Specifies the MIDI transmit channel. If this is "oFF," MIDI messages are not transmitted. <i>1-16, rCU (RECEIVE), oFF</i>					
P_{in} (PC IN)	Specifies whether program changes are received (on) or not received (oFF).					
P_{out} (PC OUT)	Specifies whether program changes are transmitted (on) or not transmitted (oFF). Correspondence between memories and program numbers					
	<table border="1"> <thead> <tr> <th>Memory</th> <th>Program number</th> </tr> </thead> <tbody> <tr> <td>MAN</td> <td>1</td> </tr> <tr> <td>MEMORY 1-4</td> <td>2-5</td> </tr> </tbody> </table>	Memory	Program number	MAN	1	MEMORY 1-4
Memory	Program number					
MAN	1					
MEMORY 1-4	2-5					
CC_1 (CC IN)	Specifies whether control changes are received (on) or not received (oFF). By receiving CC messages, this unit lets you use MIDI to control the same operations as a knob or footswitch.					
CC_o (CC OUT)	Specifies whether control changes are transmitted (on) or not transmitted (oFF).					

Parameter	Explanation
tnc (TIME CC)	Specify the controller number corresponding to each controller. <i>oFF, 1-3 1, 64-95</i>
Fbc (FEEDBACK CC)	
ELC (E.LEVEL CC)	
PrC (PARAM CC)	
tnC (TONE CC)	
ndC (MOD CC)	
SBC (ON/OFF SWITCH CC)	
NEC (MEMORY CC)	
$CTL1$ (CTL1 CC)	
$CTL2$ (CTL2 CC)	
EPc (EXPRESSION CC)	Controls the effect on/off status.
EFc (EFFECT ON OFF CC)	

Overall Settings (Menu)

Parameter	Explanation
<i>SYN</i> (SYNC)	<p>Specifies the tempo clock to which this unit will synchronize.</p> <p><i>INT</i> (INTERNAL): Synchronize to the internal tempo.</p> <p><i>AUTO</i> (AUTO): Normally synchronize to the internal tempo, but if MIDI clock is being input via the MIDI IN connector, synchronize the tempo to MIDI clock.</p> <p>If you're using the DD-200 as a slave device, choose the "<i>AUTO</i>" setting.</p>
<i>RTS</i> (REALTIME SOURCE)	<p>Specifies the source of realtime messages that are output to the MIDI OUT connector.</p> <p><i>INT</i> (INTERNAL): Internal realtime messages are the source.</p> <p><i>IN</i> (MIDI): Realtime messages from the MIDI IN connector are the source.</p>
<i>MTH</i> (MIDI THRU)	<p>Specifies whether MIDI messages received at the MIDI IN connector are retransmitted without change from the MIDI OUT connector (<i>ON</i>) or are not retransmitted (<i>OFF</i>).</p>
<i>LOP</i> (LOOP SWITCH)	<p>Specifies whether the looper is used (<i>ON</i>) or not used (<i>OFF</i>).</p> <p>If this is "<i>OFF</i>," you can't enter looper mode.</p>

Parameter	Explanation
<i>P1-PG</i> , <i>P10-PGG</i> , <i>P00-P28</i>	<p>Specify the memory corresponding to the received program number. Bank select is ignored (received regardless).</p>

Returning to the Factory Settings (Factory Reset)

Here's how to return the DD-200 to its factory-set state.

1. While holding down the [ON/OFF] switch and [MEMORY/TAP] switch, turn on the power (insert a plug into the INPUT A jack).

The display indicates "F C E."

2. Press the [MEMORY/TAP] switch.

The display indicates "S U R."

If you decide to cancel, press the [MEMORY] button.

3. Press the [MEMORY/TAP] switch.

The factory reset is executed.

4. When the display indicates "F i n," turn the power off and on again.

Installing Batteries

Insert the batteries as shown below, being careful to orient the batteries correctly.

- * Batteries should always be installed or replaced before connecting any other devices. This way, you can prevent malfunction and damage.

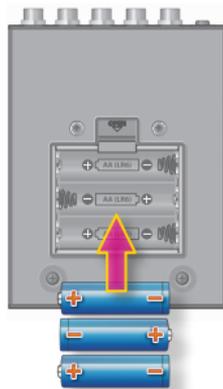
- * If operating this unit on batteries, please use alkaline batteries.

- * Even if batteries are installed, the unit will turn off if you connect or disconnect the power cord from the AC outlet while the unit is turned on, or if you connect or disconnect the AC adaptor from the unit. When this occurs, unsaved data may be lost. You must turn off the power before you connect or disconnect the power cord or AC adaptor.

- * When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.

- * If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (leaflet "USING THE UNIT SAFELY" and Owner's manual).

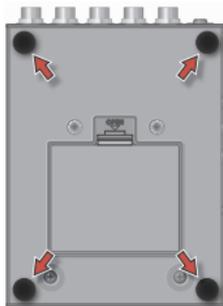
- * "L o" will appear on the display if the batteries are low. Replace them with new ones.



Attaching the Rubber Feet

You can attach the rubber feet (included) if necessary. Attach them in the locations shown in the illustration.

- * Using the unit without rubber feet may damage the floor.



Main Specifications

BOSS DD-200: DIGITAL DELAY

Power Supply	Alkaline battery (AA, LR6) x 3, AC adaptor (sold separately)
Current Draw	225 mA
Expected Battery Life Under Continuous Use	Alkaline: Approx. 4 Hours * These figures will vary depending on the actual conditions of use.
Dimensions	101 (W) x 138 (D) x 63 (H) mm / 4 (W) x 5-7/16 (D) x 2-1/2 (H) inches 101 (W) x 138 (D) x 65 (H) mm / 4 (W) x 5-7/16 (D) x 2-9/16 (H) inches (including rubber foot)
Weight	680 g / 1 lb 8 oz (including batteries)
Accessories	Owner's Manual Leaflet "USING THE UNIT SAFELY" Alkaline battery (AA, LR6) x 3 Rubber foot x 4
Options	AC adaptor: PSA-5 series Footswitch: FS-5U Dual footswitch: FS-6, FS-7 Expression pedal: FV-500H, FV-500L, EV-30, Roland EV-5 MIDI/TRS connecting cable: BMIDI-5-35

* 0 dBu = 0.775 Vrms

- * This document explains the specifications of the product at the time that the document was issued. For the latest information, refer to the Roland website.



CAUTION

Keep small items out of the reach of children

To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.



- Included Parts
Rubber feet (p. 16)
-

Repairs and Data

- Before sending the unit away for repairs, be sure to make a backup of the data stored within it; or you may prefer to write down the needed information. Although we will do our utmost to preserve the data stored in your unit when we carry out repairs, in some cases, such as when the memory section is physically damaged, restoration of the stored content may be impossible. Roland assumes no liability concerning the restoration of any stored content that has been lost.

Additional Precautions

- Any data stored within the unit can be lost as the result of equipment failure, incorrect operation, etc. To protect yourself against the irretrievable loss of data, try to make a habit of creating regular backups of the data you've stored in the unit.
- Roland assumes no liability concerning the restoration of any stored content that has been lost.
- Do not use connection cables that contain a built-in resistor.

Intellectual Property Right

- It is forbidden by law to make an audio recording, video recording, copy or revision of a third party's copyrighted work (musical work, video work, broadcast, live performance, or other work), whether in whole or in part, and distribute, sell, lease, perform or broadcast it without the permission of the copyright owner.
 - Do not use this product for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this product.
 - This product includes third party open source software.
Copyright (c) 2009-2017 ARM Limited. All rights reserved.
Licensed under the Apache License, Version 2.0 (the "License"); You may obtain a copy of the License at <http://www.apache.org/licenses/LICENSE-2.0>
 - Roland, BOSS are either registered trademarks or trademarks of Roland Corporation in the United States and/or other countries.
 - Company names and product names appearing in this document are registered trademarks or trademarks of their respective owners.
- In this manual, company names and product names of the respective owners are used because it is the most practical way of describing the sounds that are emulated using DSP technology.