

BOSS MODULATION MD-200

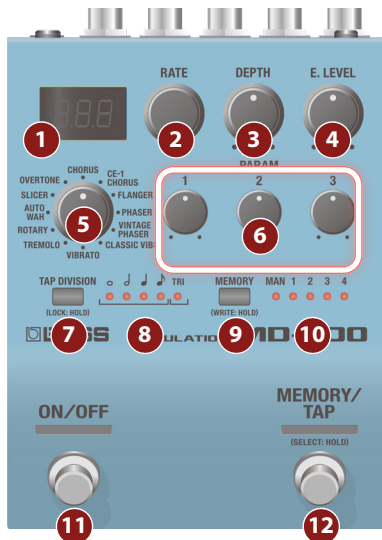
Owner's Manual



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. 19)). After reading, keep the document(s) where it will be available for immediate reference.

Panel Descriptions

Top Panel



1 Display

Shows the parameters and the values.

2 [RATE] knob

Adjusts the speed at which the effect sound changes, or switches memories.

The display changes each time you press the knob.
Rate (frequency) → Rate (tempo/frequency) →
Memory → Rate (frequency) ...

Example indications

Rate (frequency)

0.01 Hz = "0.0 1", 1 Hz = "1.00", 10 Hz = "10.0"

Rate (tempo/frequency)

tempo: 120 = "120.", tempo: 1000 = "1.00",
tempo: 10000 = "100."

* When the mode is ROTARY, this switches the speaker's rotation speed between SLW (slow) and FST (fast).

Memory

MANUAL = "MAN", memory 1-9 = "1"-"9", memory
10-99 = "10"-"99", memory 100-127 = "100"-"127"

3 [DEPTH] knob

Adjusts the depth to which the effect sound is modulated.

* When the mode is ROTARY, this adjusts the amount of preamp distortion. When the mode is SLICER, this adjusts the balance between the effect sound and the direct sound.

4 [E. LEVEL] knob

Adjusts the volume of the effect sound.

In some modes, this adjusts the balance between effect sound and direct sound.

5 Mode knob

Selects the effect.

Mode	Explanation
CHORUS (C H O)	Chorus sound using cutting-edge BOSS technology.
CE-1 CHORUS (C E 1)	A chorus sound that models the CE-1.
FLANGER (F L A N G)	Produces a flanging effect.
PHASER (P H A S E)	Produces a phase effect.
VINTAGE PHASER (V P H A S E)	Models the MXR PHASE90 produced during the 1970s.
CLASSIC VIBE (C U B)	Models the Uni-Vibe.

Mode	Explanation
VIBRATO (V I B)	Vibrato with a unique effect.
TREMOLO (T R E M O)	An effect that cyclically changes the volume.
ROTARY (R O T A R Y)	Realistically reproduces the sound of a rotary speaker.
AUTO WAH (A U T O W A H)	Cyclically modulates a filter to automatically create a wah effect.
SLICER (S L I C E R)	Cyclically cuts the sound to create a variety of slice patterns.
OVERTONE (O V E R T O N E)	Adds new overtones to create resonance and depth not present in the original sound.

6 PARAM [1]–[3] knob

Set the parameters. The parameters differ depending on the mode.

Holding down the [RATE] knob and turning the [DEPTH], [E. LEVEL], and PARAM [1] to [3] knobs, to indicate the parameter name (abbreviation) on the display while changing the value.

Mode	PARAM 1	PARAM 2	PARAM 3
CHORUS ($CHOR$)	SBT (SWEETNESS) Higher values create a more enveloping sound.	LCF (LOW CUT FREQUENCY) Adjusts the tonal character of the low-frequency region.	HCF (HIGH CUT FREQUENCY) Adjusts the tonal character of the high-frequency region.
CE-1 CHORUS ($CE-1$)	LYP (TYPE) CHO : Chorus sound of the CE-1 VB : Vibrato sound of the CE-1	LL (LOW LEVEL) Adjusts the tonal character of the low-frequency region.	HL (HIGH LEVEL) Adjusts the tonal character of the high-frequency region.
FLANGER (FLG)	RES (RESONANCE) Adjusts the amount of resonance (feedback).	MAN (MANUAL) Adjusts the center frequency at which the effect is applied.	LCF (LOW CUT FREQUENCY) Cuts the frequency components below the specified frequency. With the FLT (flat) setting, the low cut filter is not applied.
PHASER (PHS)	RES (RESONANCE) Adjusts the amount of resonance (feedback).	MAN (MANUAL) Adjusts the center frequency at which the effect is applied.	LCF (LOW CUT FREQUENCY) Cuts the frequency components below the specified frequency. With the FLT (flat) setting, the low cut filter is not applied.
VINTAGE PHASER (VPH)	LYP (TYPE) THR (THRU): Only phaser sound. CRH (CRUNCH): Distortion is added.	DRV (DRIVE) Adjusts the amount of distortion when CRH (CRUNCH) is selected.	TONE (TONE) Adjusts the tonal character when CRH (CRUNCH) is selected.

Panel Descriptions

Mode	PARAM 1	PARAM 2	PARAM 3
CLASSIC VIBE (CLVb)	LYP (TYPE) LHR (THRU): Only phaser sound. FUZ (FUZZ): Distortion is added.	DRU (DRIVE) Adjusts the amount of distortion when FUZ (FUZZ) is selected.	TON (TONE) Adjusts the tonal character when FUZ (FUZZ) is selected.
VIBRATO (Vb)	TON (TONE) Higher values produce more complex modulation.	DRE (DIRECT/EFFECT BALANCE) Adjusts the volume of the direct sound and the effect sound.	TON (TONE) Adjusts the tonal character.
TREMOLO (LTP)	LYP (TYPE) LTP (TREMOLO): Cyclically modulates the volume. PAN (PAN): By alternately changing the volume of left and right, this produces the impression that the sound is moving between the left and right speakers when heard in stereo. (If you don't use stereo output, this will not produce the intended effect.)	WAV (WAVEFORM) Selects the type of wave.	TON (TONE) Adjusts the tonal character.
ROTARY (ROT)	SLB (SLOW SPEED) Adjusts the SLB (slow) rotation speed.	FSE (FAST SPEED) Adjusts the FSE (fast) rotation speed.	RRH (ROTOR / HORN BALANCE) Adjusts the balance between the horn and the rotor.
AUTO WAH (AWH)	RES (RESONANCE) Adjusts the depth of the wah effect in the region of the center frequency.	FREQ (FREQUENCY) Specifies the center frequency of the wah effect.	FILT (FILTER TYPE) LPF: Low-pass filter. Only the low-frequency region is passed. HPF: High-pass filter. Only the high-frequency region is passed. BPF: Band-pass filter. Only a specific frequency region is passed.

Panel Descriptions

Mode	PARAM 1	PARAM 2	PARAM 3
SLICER (SL)	Pt n (PATTERN) Selects the pattern at which the sound is sliced.	At t (ATTACK) Adjusts the attack volume of the slice pattern.	dty (DUTY) Adjusts the length of sound for the slice pattern.
OVERTONE (oUt)	Lr (LOWER LEVEL) Adjusts the overtone one octave below.	un i (UNISON LEVEL) Adjusts the volume at which sound that is slightly pitch-shifted is added to the direct sound.	Ur (UPPER LEVEL) Adjusts the overtone one octave above.

7 [TAP DIVISION] button

Specifies the rate as a note value 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 L L”

8 TAP DIVISION indicator

Indicates the rate as a note value, relative to quarter-notes (100%) of the interval at which you press the pedal.

TAP DIVISION indicator					Explanation
o	♪	♪	♪	TRI	
✓					Whole note (25%)
✓				✓	Whole-note triplet (38%)
	✓				Half note (50%)
	✓			✓	Half-note triplet (75%)
		✓			Quarter note (100%)
		✓		✓	Quarter-note triplet (150%)
			✓		Eighth note (200%)
			✓	✓	Eighth-note triplet (300%)

9 [MEMORY] button

Switches or saves memories (MANUAL, 1–127) (p. 10).

The memory is switched each time you press the [MEMORY] button. You can also switch memories by holding down the [MEMORY] button and turning the [RATE] knob.

10 MEMORY indicator

Indicates the currently selected memory.

If a memory 5–127 is selected, the indicator is unlit.

11 [ON/OFF] switch

Turns the effect on/off.

12 [MEMORY/TAP] switch

Switches memories (p. 10).

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

By pressing the switch in time with the tempo of the song you're performing, you can specify a speed of modulation that matches the song.

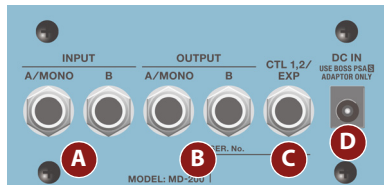
When the mode is ROTARY, this switches the rotation speed of the speaker.

MEMO

The function of the footswitch can be changed by "MFL" (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/MONO and B jacks if connecting an effect unit that has stereo output. Use only the A/MONO jack if using this unit in mono.

Turning On/Off the Power

The INPUT A/MONO jack also operates as the power switch. The power turns on when you insert a plug into the INPUT A/MONO 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/MONO jack if using this unit in mono. Even sound that is input in stereo is output in mono.

The input/output jacks can be used to utilize the insert loop function (p. 13).

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 rate or switch memories (p. 11).

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 rate or the volume of the effect sound (p. 13).

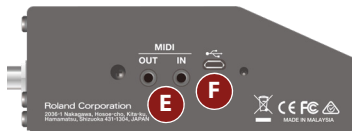
- * Use only the specified expression pedal. By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

D DC IN jack

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

- * Use only the specified AC adaptor (sold separately: PSA-S series) 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 (for program updates only)

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 effect settings that you edited.

1. Long-press the [MEMORY] button.

The display indicates “*MEM*”

2. Turn the [RATE] knob to select the save-destination (MAN, 1–127).

You can also select the save-destination by pressing the [MEMORY] button.

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, DEPTH, E.LEVEL, and PARAM 1–3.

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 ...127 → MAN...”

You can also switch memories by holding down the [MEMORY] button and turning the [RATE] knob.

* The MEMORY indicator is unlit if a memory 5–127 is selected.

MEMO

You can specify the memory switching range by editing the *EFF* (EXTENT FROM) and *ETT* (EXTENT TO) settings (p. 14).

What is “MAN” (manual)?

This unit normally applies the effect according to the settings that are saved in memory, but if you select MAN (manual) the effect is applied according to the positions of the panel knobs. Even in this case, the rate and TAP DIVISION recall the settings that are written to MAN (this can be changed).

Overall Settings (Menu)

English

日本語

Deutsch

Français

Italiano

Español

Português

Nederlands

Basic Operation

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

You enter menu mode.

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

The value is displayed.

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

4. Press the [RATE] knob.

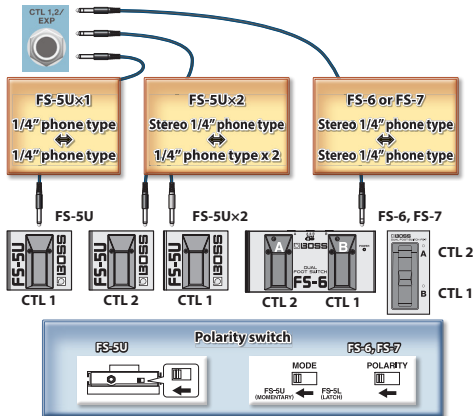
5. Press the [TAP DIVISION] button and [MEMORY] button simultaneously.

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 rate or to switch memories.

Use the menu items "CTL 1F" or "CTL 2F" to make these settings (p. 12).



Menu Parameter List

About the mark

- Can be set and saved for each memory by the "Saving to Memory" (p. 10) operation. If you do not perform this operation, the settings are lost when you switch memories.
- Can be set and saved for each memory if the preference (SWP/MEP/C1P/C2P/EPP) is set to MEM (MEMORY). To save, refer to "Saving to Memory" (p. 10).
If set to SYS (SYSTEM), the settings common to the unit are used. Function settings are saved automatically.

Parameter	Explanation
 thd (TEMPO HOLD)	OFF: Operates using the tempo/rate of the memory. on: Operates using the tempo/rate of the previous memory.

Parameter	Explanation
 SFF (ON/OFF SWITCH FUNCTION)	Specify the functions of the [ON/OFF] switch, [MEMORY/TAP] switch, and footswitches connected to the CTL 1, 2/ EXP jack. * The functions that can be assigned differ depending on the switch.
 NFC (MEMORY SWITCH FUNCTION)	OFF: No operation. SB (ON/OFF SWITCH): Turns the effect on/off. MoM (MOMENT): The effect is on only while you hold down the switch. MAN (MANUAL): Selects manual. 1-1 (MEMORY 1) - 1-9 (MEMORY 9): Selects memory 1-9.
 CT1F (CTL1 FUNCTION)	10 (MEMORY 10) - 99 (MEMORY 99): Selects memory 10-99. 100 (MEMORY 100) - 127 (MEMORY 127): Selects memory 100-127. UP (MEMORY UP): Increments the memory number according to the MEMORY EXTENT setting. <i>If you long-press the switch, it operates as tap tempo.</i> DOWN (MEMORY DOWN): Decrements the memory number according to the MEMORY EXTENT setting. <i>If you long-press the switch, it operates as tap tempo.</i>
 CT2F (CTL2 FUNCTION)	UP (MEMORY UP, ON/OFF): Increments the memory number according to the MEMORY EXTENT setting. Long-press the switch to turn the effect on/off. DOWN (MEMORY DOWN, ON/OFF): Decrements the memory number according to the MEMORY EXTENT setting. Long-press the switch to turn the effect on/off. TAP (TAP TEMPO): Operates as tap tempo.

Parameter	Explanation
EPF (EXPRESSION FUNCTION) MEMORY	Specifies the function of an expression pedal connected to the CTL 1, 2/EXP jack. OFF: No operation. RATE (RATE): The same operation as the [RATE] knob. DEPTH (DEPTH): The same operation as the [DEPTH] knob. ELU (E.LEVEL): The same operation as the [E.LEVEL] knob. PR1 (PARAM1): The same operation as the [PARAM 1] knob. PR2 (PARAM2): The same operation as the [PARAM 2] knob. PR3 (PARAM3): The same operation as the [PARAM 3] knob.
EPn (EXPRESSION MIN) MEMORY	Specifies the variable range of the parameter controlled by EXPRESSION FUNCTION. The variable range differs depending on the parameter.
EPn (EXPRESSION MAX) MEMORY	

Parameter	Explanation
ILP (INSERT LOOP POSITION) MEMORY	Selects the position at which the external effect unit is connected. OFF: The insert loop function is not used. PRE (PRE): Connect before the MD-200's effect. POST (POST): Connect after the MD-200's effect. Insert Loop Function  You can connect an external effect unit between the OUTPUT A/MONO jack and the INPUT B jack, and use it in conjunction with the MD-200's effect. For some effect types, you can specify "before or after distortion."

Overall Settings (Menu)

Parameter	Explanation
INS (INSERT LOOP SWITCH)	Turns the insert loop function on/off. OFF, ON
SWP (ON/OFF SWITCH FUNCTION PREFERENCE)	
MEP (MEMORY SWITCH FUNCTION PREFERENCE)	
CTL1 (CTL1 FUNCTION PREFERENCE)	MEM (MEM) : The setting in memory is used. SYS (SYS) : The controller's function is fixed regardless of memory.
CTL2 (CTL2 FUNCTION PREFERENCE)	
EPP (EXPRESSION FUNCTION PREFERENCE)	
EXT F (EXTENT FROM)	Specify the memory switching range (MEMORY EXTENT FROM-TO).
EXT T (EXTENT TO)	MAN (MANUAL) , 1-1 (MEMORY 1) - 127 (MEMORY 127)
GRB (GUITAR/BASS MODE)	Specifies the response of the FLANGER, PHASER, and AUTO WAH. GTR (Guitar) : Settings suitable for guitar. BAS (Bass) : Settings suitable for bass.

Parameter	Explanation
END (CHORUS CONTROL MODE)	Specifies the function of E.LEVEL when CHORUS or CE-1 CHORUS are selected as the mode. If this is set to ELU (EFFECT LEVEL), the E.LEVEL knob adjusts the balance between the direct sound and the effect sound. If this is set to ELL (TOTAL LEVEL), the E.LEVEL knob adjusts the combined volume of the direct sound and the effect sound. In this case, the direct sound and effect sound are mixed at a ratio of 1:1.
rch (MIDI RECEIVE CHANNEL)	Specifies the MIDI receive channel. If this is "OFF," MIDI messages are not received. 1-16, OFF
rch (MIDI TRANSMIT CHANNEL)	Specifies the MIDI transmit channel. If this is "OFF," MIDI messages are not transmitted. If this is RECEIVE, the same setting as the receive channel is used. 1-16, rcv (RECEIVE), OFF
PCIN (PC IN)	Specifies whether program changes are received (ON) or not received (OFF).

Overall Settings (Menu)

Parameter	Explanation						
$P_{O}t$ (PC OUT)	Specifies whether program changes are transmitted (<i>on</i>) or not transmitted (<i>off</i>). Correspondence between memories and program numbers						
	<table> <tr> <th>Memory</th><th>Program number</th></tr> <tr> <td>MAN</td><td>1</td></tr> <tr> <td>MEMORY 1–127</td><td>2–128</td></tr> </table>	Memory	Program number	MAN	1	MEMORY 1–127	2–128
Memory	Program number						
MAN	1						
MEMORY 1–127	2–128						
CC_i (CC IN)	Specifies whether control changes are received (<i>on</i>) or not received (<i>off</i>). 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 (<i>on</i>) or not transmitted (<i>off</i>).						

Parameter	Explanation
rEt (RATE CC)	
dPt (DEPTH CC)	
ELC (E.LEVEL CC)	
$P1C$ (PARAM1 CC)	
$P2C$ (PARAM2 CC)	
$P3C$ (PARAM3 CC)	
SHC (ON/OFF SWITCH CC)	Specify the controller number corresponding to each controller. <i>off, 1–31, 64–95</i>
MEC (MEMORY CC)	
$CTL1C$ (CTL1 CC)	
$CTL2C$ (CTL2 CC)	
$EXPc$ (EXPRESSION CC)	
EFC (EFFECT ON/OFF CC)	
SYn (SYNC)	Specifies the tempo clock to which this unit will synchronize. <i>int</i> (INTERNAL): Synchronize to the internal tempo. <i>Aut</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. If you're using the MD-200 as a slave device, choose the "Aut" setting.

Overall Settings (Menu)

Parameter	Explanation
<i>r t 5</i> (REALTIME SOURCE)	Specifies the source of realtime messages that are output to the MIDI OUT jack. <i>i n t</i> (INTERNAL) : Internal realtime messages are the source. <i>i d</i> (MIDI) : Realtime messages from the MIDI IN jack are the source.
<i>n t h</i> (MIDI THRU)	Specifies whether MIDI messages received at the MIDI IN connector are retransmitted without change from the MIDI OUT connector (<i>o n</i>) or are not retransmitted (<i>o f f</i>).
<i>P 1-P 9</i> (P1-P9) <i>P 10-P 99</i> (P10-P99) <i>P .00-P .28</i> (P100-P128)	Specify the memory corresponding to the received program number. Bank select is ignored (received regardless). If this is OFF, the effect turns off. <i>o f f, n a n, n- 1-n.27</i>

Returning to the Factory Settings (Factory Reset)

Here's how to return the MD-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/MONO jack).

The display indicates "F L 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.

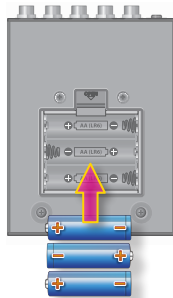
The factory reset is executed.

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.

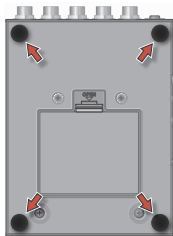
- * Batteries should always be installed or replaced before connecting any other devices. This way, you can prevent malfunction and damage.
- * If operating this unit on batteries, please use alkaline batteries.
- * Even if batteries are installed, the unit will turn off if you connect or disconnect 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").
- * "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 MD-200: Modulation

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	Leaflet "To obtain the Owner's Manual" Leaflet "USING THE UNIT SAFELY" Alkaline battery (AA, LR6) x 3 Rubber foot x 4
Options	AC adaptor: PSA-S series Footswitch: FS-SU Dual footswitch: FS-6, FS-7 Expression pedal: FV-500H, FV-500L, EV-30, Roland EV-5 MIDI/TRS connecting cable: BMIDI-S-35

* 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. 18)

.....

Additional Precautions

- 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.

For the USA

SUPPLIER'S DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : MD-200
Type of Equipment : Guitar Effects
Responsible Party : Roland Corporation U.S.
Address : 5100 S. Eastern Avenue Los Angeles, CA 90040-2938
Telephone : (323) 890-3700

Intellectual Property Right

- 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.