RE-202

Reference Manual

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Panel Descriptions

Top Panel

	Name	Function
1	[MEMORY] button	Switches between or saves memories (MANUAL, 1–4). The currently selected memory number is shown by the MANUAL and MEMORY 1–4 indicators. When using an external MIDI device to select memories 5–127, the indicators all remain dark.
2	[INPUT] button	Use this to select the device that's connected to INPUT. GUITAR: Use this when connecting a guitar or bass guitar. LINE: Use this when connecting a synthesizer, mixer or similar equipment. * These are system settings, which apply to all memories. * Long-press the [INPUT] button to configure the expression pedal function.
3	[TAPE] button	Switches between the sounds of new tape and tape that's been somewhat used. The tone and wavering of the sound change. * By long-pressing the [TAPE] button, you can switch between enabling (unlocking) or disabling (locking) the knobs and buttons. If you attempt an operation while the unit is locked, the display blinks.
4	[SATURATION] knob	Adjusts the compressed feel, which is caused by preamp distortion and the magnetic saturation of the tape.
5	[WOW & FLUTTER] knob	Adjusts the wavering in tape speed, which occurs due to the friction resistance of the tape mechanism, tape slippage and so on. Turning this clockwise produces more wavering.
6	[MODE SELECTOR] knob	Switches between modes 1–12. The combination of four different playback heads gives you 12 types of echo. 1.5. Head Combinations for Each Mode(P.8)
7	[BASS] knob	Adjusts the echo's low frequency range.
8	[TREBLE] knob	Adjusts the echo's high frequency range.
9	[REVERB VOL] knob	Adjusts the volume of the reverb. If the [ECHO VOL] knob is turned all the way counterclockwise, you can use only reverb.

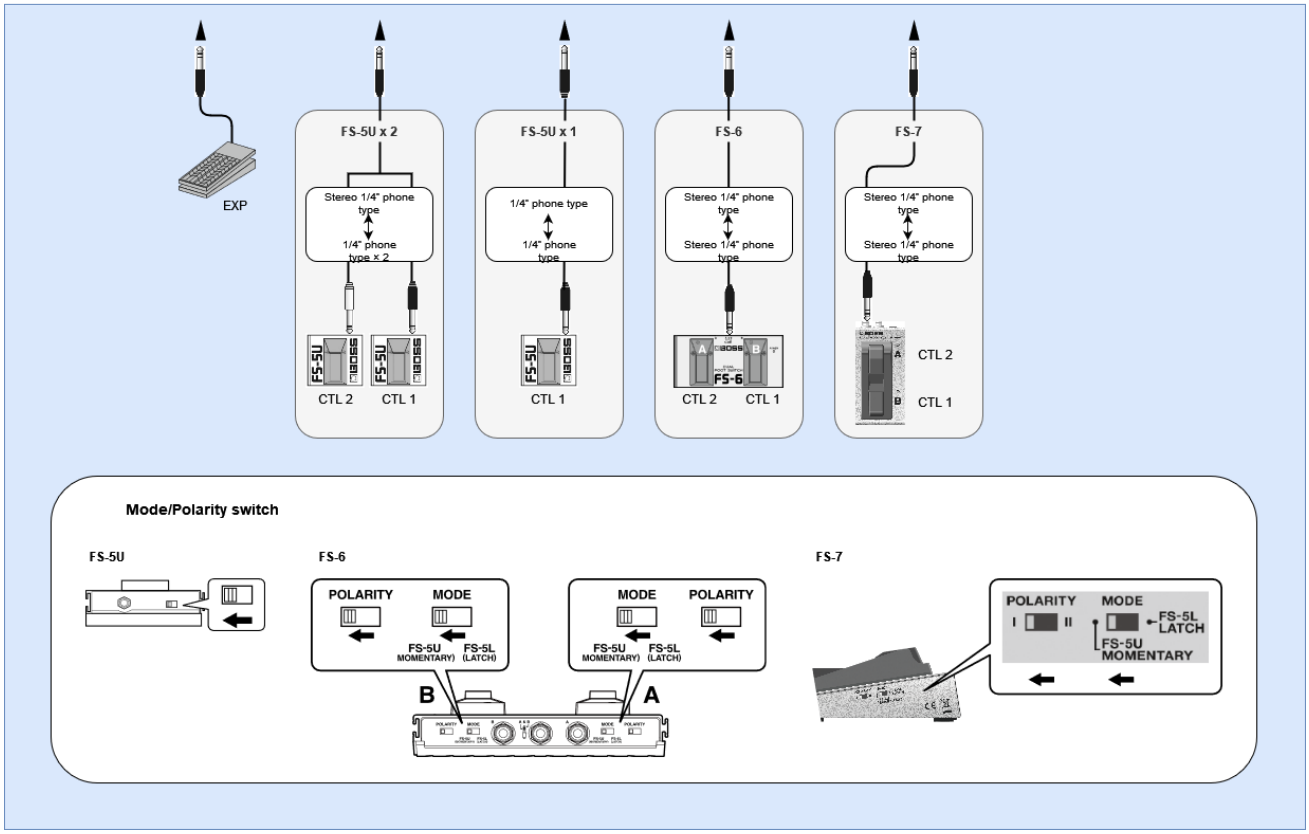
	Name	Function
10	[REPEAT RATE] knob	Adjusts the tape speed. The farther the knob is turned clockwise, the shorter the intervals become between echoes. The tone also changes along with the speed.
11	[INTENSITY] knob	Adjusts the echo volume (amount of feedback). Turn this all the way clockwise to make the effect oscillate.
12	[ECHO VOL] knob	Adjusts the echo volume.
13	[ON/OFF] switch	Press to turn the effect on/off. Long-press (WARP) to create stronger reverberations the longer you press, producing a dreamlike sound.
14	[MEMORY] switch	Press to switch between memories. Long-press to select whether reverb is used simultaneously with echo or not.
15	[TAP] switch	Press to set the REPEAT RATE according to the tempo of the song being played. Long-press (TWIST) to produce an aggressive sense of rotation that oscillates the echoed sound while you press.

Rear Panel

	Name	Function
16	INPUT A/MONO, B	Connect your electric guitar, keyboard, or other musical instruments and effect units to these input jacks. For mono output, connect to the A/MONO jack.
17	OUTPUT A/MONO, B	Connect your guitar amp, keyboard amp, other effect units or your mixer here. When connected to both the A/MONO and B jacks, the reverb effect is heard in stereo if you apply this effect. For mono output, connect to the A/MONO jack.
18	CTL 1, 2/EXP jack	● **Using as the CTL 1, 2 jack** You can connect a footswitch (FS-5U, FS-6, FS-7; sold separately) to switch between TWIST and WARP effects, switch memories up/down and so on. ● **Using as the EXP jack** Connect an expression pedal (such as the EV-30 or Roland EV-5; sold separately) to continuously change the effect settings for the expression pedal's pushed-up (horizontal) position and for the pushed-down (slanted) position.
19	MIDI IN/OUT connectors	Use TRS/MIDI connecting cables (BMIDI-5-35, BMIDI-1-35, BCC-1-3535; sold separately) to connect this unit to an external MIDI device. You can use an external MIDI device to switch between up to 127 memories on this unit. * Do not use these connectors for connecting to audio devices. Doing so may cause a malfunction.
20	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. * Used only for updating programs.
21	DC IN jack	Connect the AC adaptor to this jack. * Use only the specified AC adaptor (PSA-series), connected to a 100 V AC power source. * When you connect the included AC adaptor to the DC IN jack, the unit turns on. 1.4. Turning the power on/off(P.7)
22	Ground terminal	Connect this to an external earth or ground. This should be connected when necessary.

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

Connecting External Pedals



Turning the power on/off

Once everything is properly connected, be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.

Turning the Power On

Turn on the power to your amp last.

Turning the Power Off

Turn off the power to your 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.

Head Combinations for Each Mode

MODE	1	2	3	4	5	6	7	8	9	10	11	12
Playback head 1	●			●		●	●	●		●	●	●
Playback head 2		●		●	●		●				●	●
Playback head 3			●		●	●	●		●	●		●
Playback head 4								●	●	●	●	●

* The delay times for playback heads 2, 3 and 4 are 2x, 3x and 4x the delay time of playback head 1 respectively. When you use tap input, this is set as the delay time (tap delay time) for playback head 1, which is the base delay time for each mode.

* Modes 8–12 feature the sound of playback head 4, which was not on the Roland Space Echo RE-201.

* MODE 12 differs from the other modes, in that the positions of the four playback heads are optimized to create a highly dense sound.

Saving and Switching Between Memories

Saving to a Memory

You can save the settings you've edited.

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

   The indicator of the currently selected memory number blinks, and the memory enters write standby mode.

2. **Take your finger off the [MEMORY] button.**

3. **Press the [MEMORY] button to select where to save the memory.**

   Each time you press the button, the memory selector cycles through as follows: MANUAL→1→2→3→4.

MEMO

You can use an external MIDI device to select memories 5–127. When you select memories 5–127, the MEMORY 1–4 indicators all blink.

4. **Long-press the [MEMORY] button once more to save.**

   The memory number indicators blink rapidly. Once they remain lit, the write operation is finished.
   When using an external MIDI device to select memories 5–127, the MEMORY 1–4 indicators all blink rapidly and then go dark.

* If you operate the knobs or footswitch before step 3, the write operation is canceled.

* If you've saved to MANUAL, only the [TAPE] button and expression pedal settings are saved.

Switching Memories

Here's how to recall a saved memory.

1. **Press the [MEMORY] button or [MEMORY] switch to select the memory.**

   Each time you press the button/switch, the memory selector cycles through as follows: MANUAL→1→2→3→4.

MEMO

You can use an external MIDI device to select memories 5–127 via MIDI. When you select memories 5–127, the MEMORY 1–4 indicators all go dark.

What is "MANUAL"?

Normally, effects are applied according to the settings in memory. However, when you select MANUAL, effects are applied according to the position of the knobs on the panel. At this time, the [TAPE] button and expression pedal settings that are recalled are those saved in MANUAL (which are editable).

Various Settings

Setting the Expression Pedal Function

By connecting an expression pedal (such as the Roland EV-5, sold separately) to the CTL 1, 2/EXP jack, you can operate the top panel knobs except for the [MODE SELECTOR] knob.

You can set the respective sounds for when the expression pedal is at MAX position (pushed all the way up with your toes) and at MIN position (pushed all the way down with your heel), and make continuous changes to them.

* Use only the specified expression pedal. Connecting expression pedals made by third-party manufacturers may cause this unit to malfunction.

You can use different expression pedal settings for MANUAL and for each memory in MEMORY 1–4 respectively.

1. **Use the [MEMORY] button to select the memory (MANUAL, MEMORY 1–4) for which you want to configure the expression pedal.**
2. **Long-press the [INPUT] button.**

   The GUITAR indicator blinks.
3. **Use the respective knobs to set the sound that's used when the pedal is at the MIN value (pushed all the way down with your heel).**
4. **Press the [INPUT] button again.**

   The LINE indicator blinks.
5. **Use the respective knobs to set the sound that's used when the pedal is at the MAX value (pushed all the way up with your toes).**
6. **Press the [INPUT] button again to exit the function settings.**

Setting the Footswitch Functions (CTL 1 FUNCTION, CTL 2 FUNCTION)

Here's how to configure the functions of the footswitch connected to the CTL 1, 2/EXP jack (FS-5U, FS-6, FS-7; sold separately).

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Set the [MODE SELECTOR] knob to "6" if you wish to set the CTL 1 function, or to "7" if you wish to set the CTL 2 function.**
3. **Use the [MEMORY] button to select the function to set.**

MEMORY indicators	Function
MANUAL	Select the next memory.
1	Select the previous memory.
2	Turn on/off effects.
3	Press the footswitch at the tempo of the song you're playing to specify a matching repeat rate.
4	CTL 1: WARP is on while the switch is pressed. CTL 2: TWIST is on while the switch is pressed.

4. **Press the [TAP] switch to exit the function settings.**

Turning the Direct Sound Output On/Off (DIRECT ON/OFF)

You can turn the output of the direct sound off when you want to output only the effect's sound, such as when you're connecting this unit to the send/return of a mixer.

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "8" setting.**
3. **Select on or off with the [MEMORY] button.**

MEMORY indicators	Function
MANUAL	Outputs the direct sound.
1	Does not output the direct sound.

4. **Press the [TAP] switch to exit the settings.**

Switching Between Direct Sounds (DIRECT MODE)

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "9" setting.**

Use the [MEMORY] button to select a sound.

MEMORY indicators	Function	Explanation	
MANUAL	Analog Bypass	The audio input is outputted without change.	
1	RE-201 Simulation	Uses digital signal processing to recreate the sound of the direct sound going through a RE-201 preamp.	The saturation effect is canceled when the effect is OFF.
2			The saturation effect remains even when the effect is OFF.

3. **Press the [TAP] switch to exit the settings.**

* When this is set to "RE-201 Simulation," the simulation effect is still heard even when the effect is off.
* When this is set to "RE-201 Simulation," the effect of the [SATURATION] knob when the effect is on adds preamp distortion to both the echo sound and the direct sound at the same time.

Preserving/Muting the Tail of an Effect when the Effect is Switched Off (CARRYOVER)

This sets whether to preserve (carry over) the tail of an effect after the effect is switched off or when switching to a different memory.

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "10" setting.**
3. **Use the [MEMORY] button to select the setting.**

MEMORY indicators	Function
MANUAL	Reverberation carries over
1	Reverberation does not carry over

4. **Press the [TAP] switch to exit the settings.**

Setting the Operation Mode for the [REPEAT RATE] Knob (TIME MODE)

You can switch the operating mode of the [REPEAT RATE] knob to change the tape speed's adjustable range. The setting range for the tap delay time (delay time for playback head 1) also changes at the same time.

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "11" setting.**
3. **Use the [MEMORY] button to select the mode.**

MEMORY indicators	Mode	Function
MANUAL	Normal	The [REPEAT RATE] knob operates in the same range as the Roland RE-201. The value for the tap delay time can be set to a maximum of one second.
1	Long	The setting range for the [REPEAT RATE] knob is twice that of Normal mode. The value for the tap delay time can be set to a maximum of two seconds.

4. **Press the [TAP] switch to exit the settings.**

Switching Between Reverb Types (REVERB TYPE)

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "12" setting.**
3. **Use the [MEMORY] button to select the reverb type.**

MEMORY indicators	Reverb Type
MANUAL	RE-201 SPRING
1	HALL
2	PLATE
3	ROOM
4	AMBIENCE

4. **Press the [TAP] switch to exit the settings.**

Setting a Reverb Type for Each Memory

You can set a reverb type for each memory.

* To set a reverb type for each memory, first change the setting in "3.11. Set/Do Not Set the Reverb Type for Each Memory (REVERB TYPE PREFERENCE)(P.20)" to "1".

1. **Hold down the [MEMORY] switch, and release it once the LED starts blinking.**
2. **Use the [MEMORY] button to select the reverb type.**

MEMORY indicators	Reverb Type
MANUAL	RE-201 SPRING
1	HALL
2	PLATE
3	ROOM
4	AMBIENCE

3. **Press the [MEMORY] switch to exit the settings.**

Setting the Maximum Value of MEMORY (MEMORY EXTENT)

Here's how to set the maximum value for the selectable memories.

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "1" setting.**
3. **Use the [MEMORY] button to set the maximum value.**

MEMORY indicators	Maximum Value
1	1
2	2
3	3
4	4

4. **Press the [TAP] switch to exit the settings.**

Switching Between TWIST Types (TWIST TYPE)

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "2" setting.**
3. **Use the [MEMORY] button to select the twist type.**

MEMORY indicators	TWIST type	Explanation
MANUAL	Normal	Produces a typical effect.
1	Hard	Produces a wilder effect.
2	Natural	Produces a natural effect to match the echo you set.

4. **Press the [TAP] switch to exit the settings.**

Tap Settings (TAP SETTING)

When you use the [TAP] switch to set the tempo, you can select which playback head the effect is based on. Select between quarter notes or dotted eighth notes.

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the "3" setting.**
3. **Use the [MEMORY] button to select the tap setting.**

MEMORY indicators	Tap Setting
MANUAL	Playback head 1, quarter notes
1	Playback head 1, dotted eighth notes
2	SHORT (the head for which the delay time is shortest in each mode), quarter notes
3	SHORT (the head for which the delay time is shortest in each mode), dotted eighth notes
4	LONG (the head for which the delay time is longest in each mode), quarter notes
MANUAL+1	LONG (the head for which the delay time is longest in each mode), dotted eighth notes

4. **Press the [TAP] switch to exit the settings.**

* 1.5. Head Combinations for Each Mode(P.8)

Set/Do Not Set the Reverb Type for Each Memory (REVERB TYPE PREFERENCE)

You can set a reverb type for each memory.

1. **Press and hold down the [TAP] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to the “4” setting.**
3. **Use the [MEMORY] button to select the setting.**

MEMORY indicator	REVERB TYPE PREFERENCE
MANUAL	Sets a common reverb type for all memories. (SYSTEM)
1	Sets a reverb type for each memory. (MEMORY)

4. **Press the [TAP] switch to exit the settings.**

MIDI Settings

1. **Press and hold down the [ON/OFF] switch, and turn on the power.**
2. **Turn the [MODE SELECTOR] knob to select the parameter to set.**
3. **Use the [MEMORY] button to select the setting.**
4. **Press the [ON/OFF] switch to exit the settings.**

Setting	[MODE SELECTOR] knob	Value	Indicators that are lit	Explanation
Receive channel (RX CH)	6	OFF	MEMORY: MANUAL, HEAD: 1	Off
		1	MEMORY: 1, HEAD: 1	CH. 1
		2	MEMORY: 2, HEAD: 1	CH. 2
		3	MEMORY: 3, HEAD: 1	CH. 3
		4	MEMORY: 4, HEAD: 1	CH. 4
		5	MEMORY: MANUAL, HEAD: 2	CH. 5
		6	MEMORY: 1, HEAD: 2	CH. 6
		7	MEMORY: 2, HEAD: 2	CH. 7
		8	MEMORY: 3, HEAD: 2	CH. 8
		9	MEMORY: 4, HEAD: 2	CH. 9
		10	MEMORY: MANUAL, HEAD: 3	CH. 10
		11	MEMORY: 1, HEAD: 3	CH. 11
		12	MEMORY: 2, HEAD: 3	CH. 12
		13	MEMORY: 3, HEAD: 3	CH. 13
		14	MEMORY: 4, HEAD: 3	CH. 14
		15	MEMORY: MANUAL, HEAD: 4	CH. 15
		16	MEMORY: 1, HEAD: 4	CH. 16
Transmit channel (TX CH)	7	OFF	MEMORY: MANUAL, HEAD: 1	Off
		1	MEMORY: 1, HEAD: 1	CH. 1
		2	MEMORY: 2, HEAD: 1	CH. 2
		3	MEMORY: 3, HEAD: 1	CH. 3
		4	MEMORY: 4, HEAD: 1	CH. 4
		5	MEMORY: MANUAL, HEAD: 2	CH. 5
		6	MEMORY: 1, HEAD: 2	CH. 6

Setting	[MODE SELECTOR] knob	Value	Indicators that are lit	Explanation
		7	MEMORY: 2, HEAD: 2	CH. 7
		8	MEMORY: 3, HEAD: 2	CH. 8
		9	MEMORY: 4, HEAD: 2	CH. 9
		10	MEMORY: MANUAL, HEAD: 3	CH. 10
		11	MEMORY: 1, HEAD: 3	CH. 11
		12	MEMORY: 2, HEAD: 3	CH. 12
		13	MEMORY: 3, HEAD: 3	CH. 13
		14	MEMORY: 4, HEAD: 3	CH. 14
		15	MEMORY: MANUAL, HEAD: 4	CH. 15
		16	MEMORY: 1, HEAD: 4	CH. 16
		RX	MEMORY: 2, HEAD: 4	Transmits on the same channel as the RX CHANNEL.
Receive program change message (PC IN)	8	ON	MEMORY: MANUAL	Program change messages are received.
		OFF	MEMORY: 1	Program change messages are not received.
Transmit program change messages (PC OUT)	9	ON	MEMORY: MANUAL	Program change messages are transmitted.
		OFF	MEMORY: 1	Program change messages are not transmitted.
Receiving control change message (CC IN)	10	ON	MEMORY: MANUAL	Control change messages are received.
		OFF	MEMORY: 1	Control change messages are not received.
Transmit control change messages (CC OUT)	11	ON	MEMORY: MANUAL	Control change messages are transmitted.
		OFF	MEMORY: 1	Control change messages are not transmitted.
MIDI clock sync (SYNC)	12	INTERNAL	MEMORY: MANUAL	Operations are synchronized to the RE-202's internal clock.
		AUTO	MEMORY: 1	Operations are synchronized to the MIDI clock received via MIDI. However, operations are automatically synchronized to the RE-202's internal clock if the unit is unable to receive the external clock.
REALTIME SOURCE	1	INTERNAL	MEMORY: MANUAL	Internal real-time messages are used as the clock source.
		MIDI	MEMORY: 1	Real-time messages from the MIDI IN connector are used as the clock source.
MIDI THRU	2	ON	MEMORY: MANUAL	Specifies whether MIDI messages received at the MIDI IN connector are retransmitted as-is from the MIDI OUT connector (ON) or are not retransmitted (OFF).
		OFF	MEMORY: 1	
DEVICE ID	3	17	MEMORY: MANUAL, HEAD: 1	This sets the MIDI Device ID used for transmitting and receiving Exclusive messages.
		18	MEMORY: 1, HEAD: 1	
		19	MEMORY: 2, HEAD: 1	
		20	MEMORY: 3, HEAD: 1	
		21	MEMORY: 4, HEAD: 1	
		22	MEMORY: MANUAL, HEAD: 2	

Setting	[MODE SELECTOR] knob	Value	Indicators that are lit	Explanation
		23	MEMORY: 1, HEAD: 2	
		24	MEMORY: 2, HEAD: 2	
		25	MEMORY: 3, HEAD: 2	
		26	MEMORY: 4, HEAD: 2	
		27	MEMORY: MANUAL, HEAD: 3	
		28	MEMORY: 1, HEAD: 3	
		29	MEMORY: 2, HEAD: 3	
		30	MEMORY: 3, HEAD: 3	
		31	MEMORY: 4, HEAD: 3	
		32	MEMORY: MANUAL, HEAD: 4	

Restoring the Factory Default Settings (Factory Reset)

1. **Press and hold down the [ON/OFF] switch and [TAP] switch, and turn on the power.**
2. **Press the [TAP] switch.**

   This starts the factory reset. The MEMORY indicators light up in this order: MANUAL→1→2→3→4. The reset is finished once the [ON/OFF] switch lights up.
3. **Turn off the power.**

NOTE

Don't turn off the power while the factory reset is in progress.

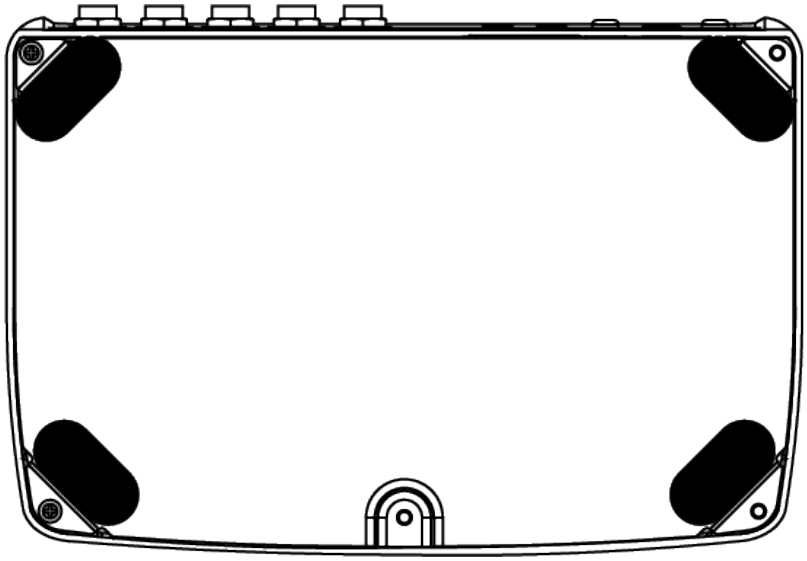
Attaching the Rubber Feet

You can attach the rubber feet (included) if necessary.

Attach them in the locations shown in the illustration.

* 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.

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



Main Specifications

Sampling Frequency	48 kHz
AD Conversion	24 bits + AF method * AF method (Adaptive Focus method) This is a proprietary method from Roland & BOSS that vastly improves the signal-to-noise (SN) ratio of the AD converter.
DA Conversion	32 bits
Processing	32-bit floating point
Modes	12 modes
Memory	127 + Manual
Nominal Input Level	INPUT A/MONO, INPUT B: -10 dBu
Maximum Input Level	INPUT A/MONO, INPUT B: +7 dBu
Input Impedance	INPUT A/MONO, INPUT B: 1 M ohm
Nominal Output Level	OUTPUT A/MONO, OUTPUT B: -10 dBu
Maximum Output Level	OUTPUT A/MONO, OUTPUT B: +7 dBu
Output Impedance	OUTPUT A/MONO, OUTPUT B: 1 k ohm
Recommended Load Impedance	OUTPUT A/MONO, OUTPUT B: 10 k ohms or greater
Bypass	Buffered bypass
Controls	ON/OFF switch, MEMORY switch, TAP switch SATURATION knob, WOW & FLUTTER knob, MODE SELECTOR knob, BASS knob, TREBLE knob, REVERB VOL knob, REPEAT RATE knob, INTENSITY knob, ECHO VOL knob MEMORY button, INPUT button, TAPE button
Connectors	INPUT A/MONO jack, INTPUT B jack, OUTPUT A/MONO jack, OUTPUT B jack: 1/4-inch phone type CTL 1, 2/EXP jack: 1/4-inch TRS phone type MIDI (IN, OUT) jacks: Stereo miniature phone type DC IN jack USB port: USB micro B-type (program update only)
Power Supply	AC adaptor
Current Draw	140 mA
Dimensions	192 (W) x 133 (D) x 52 (H) mm / 7-9/16 (W) x 5-15/64 (D) x 2-3/64 (H) inches 192 (W) x 133 (D) x 53 (H) mm / 7-9/16 (W) x 5-15/64 (D) x 2-3/32 (H) inches (including rubber foot)
Weight	860 g 1 lb 15 oz
Accessories	AC adaptor Owner's Manual Leaflet ("USING THE UNIT SAFELY," "IMPORTANT NOTES," and "Information") Rubber foot
Options (sold separately)	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, BMIDI-1-35, BMIDI-2-35, BCC-1-3535, BCC-2-3535

* 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.

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