

REVERB RV-500

Owner's Manual

- Thanks to 32-bit high-precision processing at a 96 kHz sampling rate from input to output, the RV-500 gives you stunningly high-quality reverb.
- With an easily readable screen and an independent [TAP/CTL] switch, it delivers both high functionality as well as ease of use during live performances.
- A total of 12 types of reverb are provided, including classic varieties as well as “DUAL” which lets you use two reverbs simultaneously, the sparkling “SHIMMER,” and models such as “Roland SPACE ECHO RE-201” and “Roland DIGITAL REVERB SRV-2000.” Powerful DSP lets you use delay and modulation simultaneously for all reverbs.
- The memory function lets you store and recall 297 different setups from internal memory. “CARRYOVER” provides seamless transition that preserves the reverberant sound when switching between patches.
- By connecting the RV-500 via a USB cable or MIDI cables, you can switch sounds and control parameters in synchronization with your computer DAW or an external MIDI device.

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Getting Ready

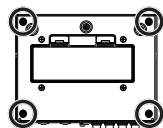
Installing the Batteries

Install four alkaline batteries (AA, LR6) in the battery compartment located on the bottom of the unit.

- * 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" (separate sheet "USING THE UNIT SAFELY" and Owner's manual (p. 28)).
- * We recommend that you keep batteries installed in the unit even though you'll be powering it with the AC adaptor. That way, you'll be able to continue a performance even if the cord of the AC adaptor gets accidentally disconnected from the unit.
- * "BATTERY LOW" 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.



Connecting the Equipment

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

USB (⚡) port

Use a commercially available USB 2.0 cable to connect this port to your computer.

You can synchronize with a DAW via MIDI.



MIDI IN, OUT connectors

Connect an external MIDI device here.

You can synchronize with an external MIDI device via MIDI.



DC IN jack

Accepts connection of an AC Adaptor (PSA-S series; sold separately). By using an AC Adaptor, you can play without being concerned about how much battery power you have left.

- * Use only the specified AC adaptor (PSA-S series; sold separately), and connect it to an AC outlet of the correct voltage. Do not use any other AC adaptor, since this may cause malfunction.
- * If the AC adaptor is connected while power is on, the power supply is drawn from the AC adaptor.



INPUT A/MONO, B jacks

Connect your electric guitar, or another instrument or effect unit, to these jacks.

- * Use the INPUT A/MONO jack and B jack when connecting a stereo-output effects unit. Use only the INPUT A/MONO jack if you're using a mono source.

Turning the power on/off

The INPUT A/MONO jack doubles as the power switch. Power to the unit is turned on when you plug into the INPUT A/MONO jack; the power is turned off when the cable is unplugged.

When powering up:

Turn on the power to your amp last.

When powering down:

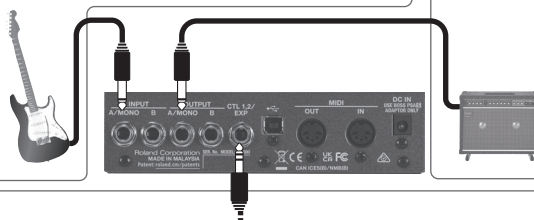
Turn off the power to your amp first.

OUTPUT A/MONO, B jacks

Connect these jacks to your amp or monitor speakers.

If you're using a mono setup, use only the OUTPUT A/MONO jack.

- * Do not connect headphones to the OUTPUT A/MONO, B jacks. Doing so may damage the headphones.



CTL 1, 2/EXP jack

You can control various parameters by connecting a footswitch (FS-5U, FS-5L, FS-6, FS-7: sold separately) or an expression pedal (such as the EV-30, Roland EV-5: sold separately) to the CTL 1, 2/EXP jack (p. 22).

When Connecting an FS-5U (or FS-5L)

1/4" phone type ↔
1/4" phone type

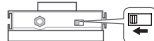


CTL 1



When connecting an FS-5L, set MODE to "MOMENT" (p. 22).

POLARITY switch



When Connecting Two FS-5Us (or FS-5Ls)

Stereo 1/4" phone type ↔
1/4" phone type x 2

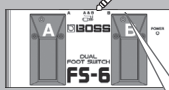


CTL 2

CTL 1

When Connecting an FS-6

Stereo 1/4" phone type ↔
Stereo 1/4" phone type



CTL 2

CTL 1

When Connecting an FS-7

Stereo 1/4" phone type ↔
Stereo 1/4" phone type



CTL 2

CTL 1

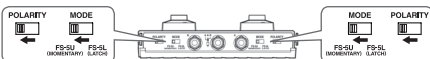
When connecting expression pedal

- * Use only the specified expression pedal (EV-30, Roland EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.

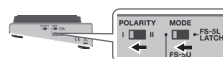


EXP

MODE/POLARITY switch



MODE/POLARITY switch



Basic Operation

Adjusting the Reverb

[MODE] knob

Selects the type of reverb.

ROOM	Reverb that simulates the reverberation in a room.
HALL	Reverb that simulates the reverberation in a concert hall.
PLATE	Reverb that simulates plate reverb (a reverb unit utilizing the vibration of a metal plate).
SPRING	Reverb that simulates the spring reverb unit built into some guitar amps.
SHIMMER	Reverb with a distinctively brilliant high frequency range.
FAST DECAY	Reverb with a fast decay that won't obstruct your performance even if the effect is applied deeply.

EARLY REFLECTION	Reverb that extracts only the early reflections.
NON-LINEAR	Gated reverb or reverse reverb.
SFX	Reverb with a distinctive effect.
DUAL	Reverb that lets you use two types of reverb simultaneously.
SRV	Reverb that models the Roland SRV-2000 digital reverb.
SPACE ECHO	Reverb that models the Roland RE-201 Space Echo.

[LOW] knob

Adjusts the character of the effect sound's low-frequency range.

[TIME/VALUE] knob

Adjusts the reverb time.

To make larger changes in the value, turn the knob while pressing it.

[PRE-DELAY] knob

Adjusts the time until when the reverb sound is output.

[E. LEVEL] knob

Adjusts the volume of the effect sound.

[A] [B] switches

Switch banks/patches (p. 7).

[HIGH] knob

Adjusts the character of the effect sound's high-frequency range.

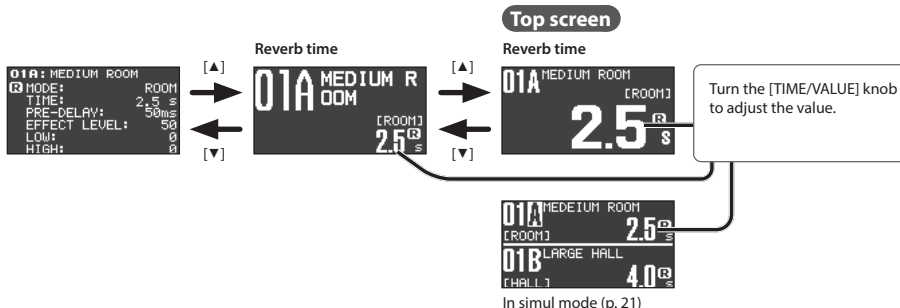
[TAP/CTL] switch

Press this switch to change how the reverb is applied (p. 8).



[▼] [▲] buttons

Switch screens.

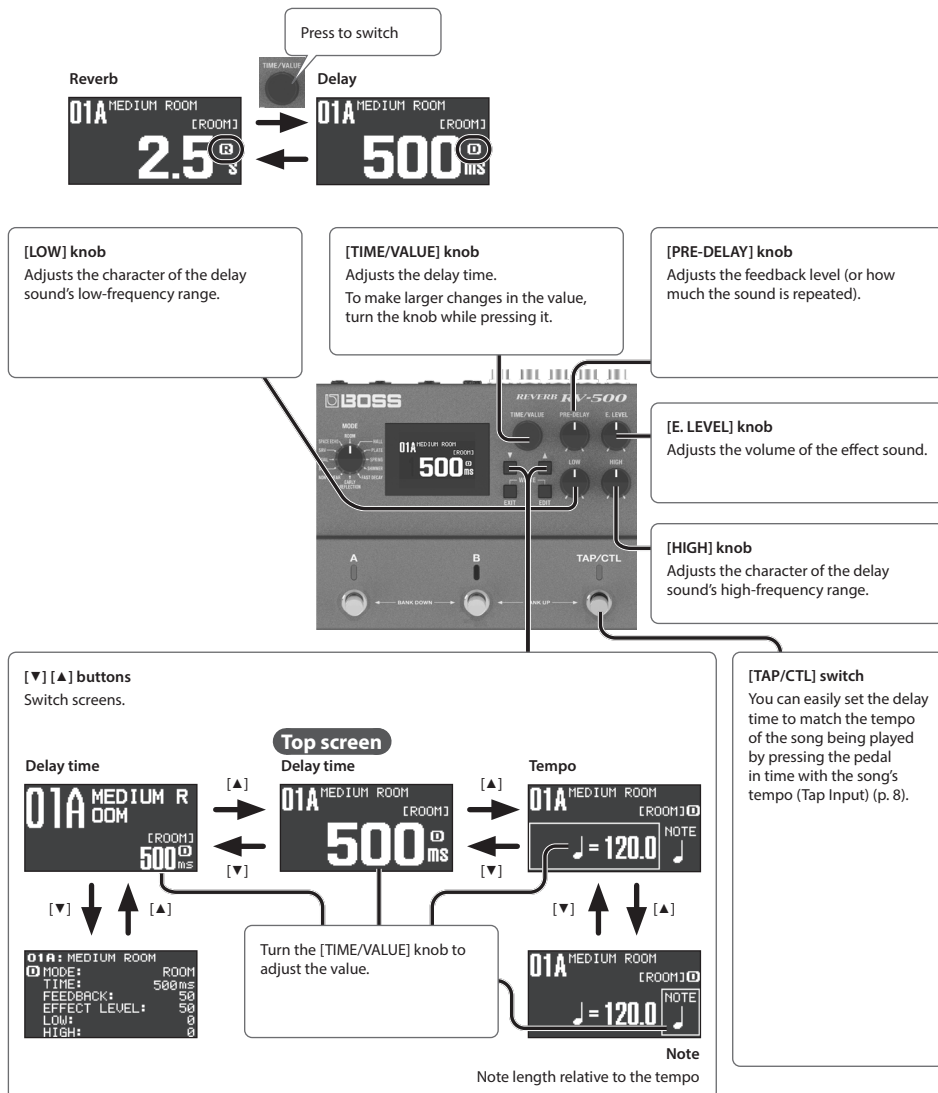


Adjusting the Delay

The RV-500 lets you use reverb and delay simultaneously.

Each time you press the [TIME/VALUE] knob, you alternate between adjusting the reverb and adjusting the delay.

* To use delay, use CONNECTION to specify how delay is connected (p. 11). If CONNECTION is turned "OFF," the delay is off.



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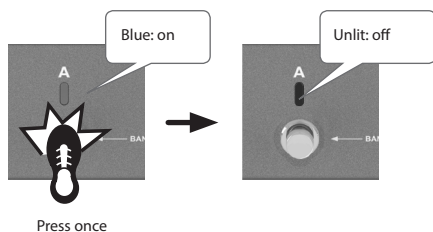
Turning Reverb On/Off

Patch A reverb

Each time you press the [A] switch, the reverb alternately turns on (lit blue) / off (unlit).

Patch B reverb

Each time you press the [B] switch, the reverb alternately turns on (lit blue) / off (unlit).

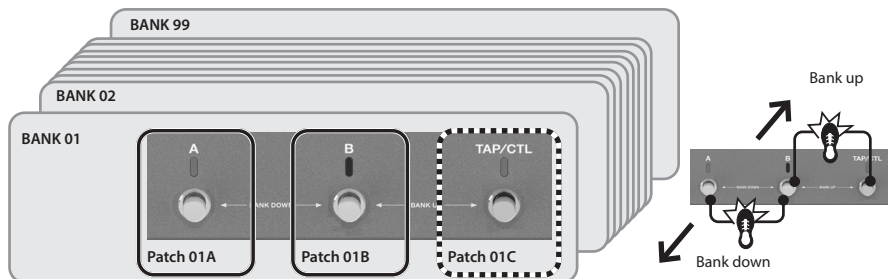


MEMO

You can also make settings so that patches A and B are used simultaneously (p. 20).

Patches and Banks

Settings for MODE, PRE-DELAY, EFFECT LEVEL, LOW, HIGH, and TIME are collectively called a "patch." You can select patches using [A], [B], and [TAP/CTL] switches (p. 20). A combination of patches A, B, and C is called a "bank."

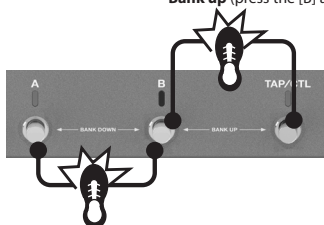


* If you want to use the [TAP/CTL] switch to select patch C, refer to "Assigning the Functions of the [A], [B], and [TAP/CTL] Switches" (p. 20).

Switching Banks/Patches

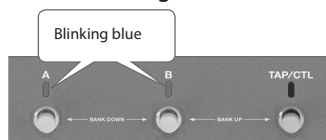
1. Switch banks (01–99).

Bank up (press the [B] and [TAP/CTL] switches simultaneously)



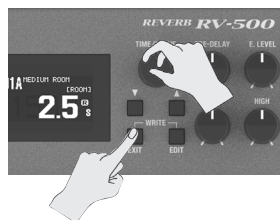
Bank down (press the [A] and [B] switches simultaneously)

2. Press a blinking switch ([A] or [B]) to switch patches.



MEMO

You can recall a different patch by turning the [TIME/VALUE] knob while you hold down the [EXIT] button.



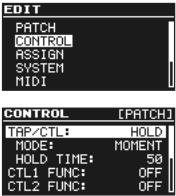
MEMO

- You can specify whether the reverb sound is or is not retained when switching patches (p. 20).
- You can change the functions that are controlled by the [A], [B], and [TAP/CTL] switches; for example, you can make the [A] switch turn reverb on/off.

Using the [TAP/CTL] Switch to Control the Reverb

With the initial settings, the [TAP/CTL] switch holds the reverb sound (HOLD); however, you can change this assignment so that the switch varies the way in which reverb is applied.

- 1. Press the [EDIT] button.
- 2. Use the [▲] [▼] buttons to select “CONTROL” and then press the [EDIT] button.
- 3. Use the [▲] [▼] buttons to select a parameter, and use the [TIME/VALUE] knob to edit the value.



Parameter	Value	Explanation
TAP/CTL		Specifies the function of the [TAP/CTL] switch.
TAP/CTL MODE (*1)	MOMENT	The switch is normally off (minimum value), and turns on (maximum value) only while you hold it down.
	TOGGLE	The switch alternately switches off (minimum value) and on (maximum value) each time you press it.
HOLD TIME (*2)	0–100	Specifies the time over which the input sound plays back repeatedly.
RISE TIME (*3)	0–100	Specifies the time over which the twist effect rises.
FALL TIME (*3)	0–100	Specifies the time over which the twist effect falls.
TAP/CTL PREF	PATCH	Different settings can be made for each patch.
	SYSTEM	The same settings are shared by all patches.

*1: This is shown if TAP/CTL is set to “HOLD,” “TWIST,” or “WARP”
*2: This is shown if TAP/CTL is set to “HOLD.”
*3: This is shown if TAP/CTL is set to “TWIST.”

TAP/CTL Settings

Value	Explanation
OFF	No assignment.
HOLD	The input sound plays back repeatedly while you hold down the switch.
WARP	Simultaneously controls the reverb sound’s feedback level and volume to produce a totally unreal reverb.
TWIST	A new type of reverb that produces an aggressive, spinning sensation.
TAP	Lets you specify the delay time by tap input.
MOMENT	Outputs the reverb sound only while you hold down the switch.
FADE	Fades-in/-out the input sound.
BANK UP	
BANK DOWN	Change banks.

- 4. Press the [EXIT] button to return to the top screen.

Editing a Patch

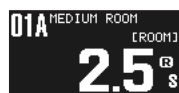
You can edit a variety of patch-related parameters.

1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "PATCH," and then press the [EDIT] button.
3. Use the [▲] [▼] buttons to select a parameter, and use the [TIME/VALUE] knob to edit the value.
4. Press the [EXIT] button to return to the top screen.

* Save the edited patch as described in the procedure on "Saving a Patch" (p. 10).



Basic [EDIT] operations



[EDIT] button

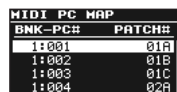
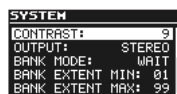
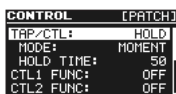
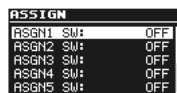
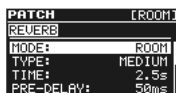


[EDIT] button

[EXIT] button

Use the [▲] [▼] buttons to move the cursor

Use the [▲] [▼] buttons to move the cursor
Use the [TIME/VALUE] knob to edit the value



Saving a Patch

Here's how to save a patch that you've edited.

1. Press the [EXIT] button and [EDIT] button simultaneously.
2. Use the [TIME/VALUE] knob to select the save-destination number.

Bank	[A] switch	[B] switch	[TAP/CTL] switch
Bank 01	01A	01B	01C
Bank 02	02A	02B	02C
:	:	:	:
Bank 99	99A	99B	99C

```
WRITE
[EDIT]:EXECUTE
NAME:
MEDIUM ROOM
WRITE TO
01A:MEDIUM ROOM
```

* Patch C can be selected if FSW MODE (p. 20) is set to "A/B/C" or "SW DN/UP."

3. Press the [▲] button to select the patch name.
4. Edit the patch name.

[▲] [▼] buttons	Move the cursor
[TIME/VALUE] knob	Edit the character

```
WRITE
[EDIT]:EXECUTE
NAME:
MEDIUM ROOM
WRITE TO
01A:MEDIUM ROOM
```

* Press the [TIME/VALUE] knob to change the type of character.

5. Press the [EDIT] button to save the patch.

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

By moving the cursor to "WRITE TO" and turning the [TIME/VALUE] knob, you can initialize a patch (INIT) or exchange patches (EXCHANGE).

```
INITIALIZE
[EDIT]:EXECUTE
INIT
01A:MEDIUM ROOM
```

```
EXCHANGE
[EDIT]:EXECUTE
01A:MEDIUM ROOM
EXCHANGE
01A:MEDIUM ROOM
```

Parameter List

PATCH

Parameters Common to All Modes

Parameter	Value	Explanation
REVERB		
MODE	Selects the type of reverb (p. 4). The same function as the [MODE] knob.	
TIME	0.1–10.0 s (*1)	Adjusts the length (time) of the reverb sound.
PRE-DELAY	0–200 ms	Adjusts the time until when the reverb sound is output.
EFFECT LEVEL	0–100	Adjusts the volume of the reverb sound.
LOW (*2)	-50–+50	Adjusts the low frequency range tone.
HIGH (*2)	-50–+50	Adjusts the high frequency range tone.
LOW CUT (*2)	FLAT, 20–800 Hz	This sets the frequency at which the low cut filter begins to take effect. When FLAT is selected, the low cut filter will have no effect.
HIGH CUT (*2)	630 Hz–16.0 kHz, FLAT	This sets the frequency at which the high cut filter begins to take effect. When FLAT is selected, the high cut filter will have no effect.
LOW DAMP (*3)	-50–+50	Adjusts the amount of attenuation for the low frequency region.
HIGH DAMP (*3)	-50–+50	Adjusts the amount of attenuation for the high frequency region.
DENSITY (*4)	1–10 (*5)	Adjusts the density of the reverb sound.
MOD DEPTH	0–100	Adjusts the depth to which the reverb sound is modulated.
MOD RATE	0–100	Adjusts the speed at which the reverb sound is modulated.

*1: If MODE is "EARLY REFLECTION" or "NON-LINEAR (REVERSE, NON-LINEAR)," the range is 0.1–10.0 s.

*2: Except when MODE is "SRV" or "SPACE ECHO"
(when MODE is "SPACE ECHO," these are shown as "BASS" and "TREBLE").

*3: Except when MODE is "EARLY REFLECTION," "NON-LINEAR," "SRV," or "SPACE ECHO"

*4: Except when MODE is "SFX" or "SPACE ECHO"

*5: If MODE is "SRV," the range is 0–9.

DELAY		
CONNECTION	OFF, SERIES, PARALLEL	Specifies whether reverb and delay are connected in series (SERIES) or in parallel (PARALLEL). If this is set to "SERIES," the effects are connected in the order of delay → reverb. If this is set to "OFF," the delay is off.
TIME	1–2000 ms	Adjusts the delay time.
BPM	Specifies the tempo. The range of this setting depends on the TIME or NOTE value.	
NOTE	♩–∞	Adjusts the delay time. This is specified in terms of a note length relative to the BPM.
FEEDBACK	0–100	Adjusts the amount of delay sound that is returned to the input. Higher values produce a larger number of delay repetitions.
EFFECT LEVEL	0–120	Adjusts the volume of the delay sound.
LOW	-50–+50	Adjusts the low frequency range tone.
HIGH	-50–+50	Adjusts the high frequency range tone.
MOD DEPTH	0–100	Adjusts the depth to which the delay sound is modulated.
MOD RATE	0–100	Adjusts the speed at which the delay sound is modulated.
TEMPO HOLD	OFF, ON	Specifies whether the tempo (BPM) changes or is maintained when you switch between patches. If the tempo is maintained, the delay time can be maintained. However, if you switch between patches that have different NOTE settings (♩ or ♪ etc.), the delay time will also be different.

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Parameter List

Parameter	Value	Explanation
COMMON		
CARRYOVER	OFF, ON	You can specify whether the reverb sound is carried-over when you switch patches or turn the reverb off (p. 20).
DIRECT LEVEL	0–100	Adjusts the volume of the direct sound.
INPUT LEVEL	0–100	Adjusts the volume that is input to the reverb and delay.
DUCK SENS	0–100	Adjusts the sensitivity at which the volume is automatically adjusted according to the input. Higher values allow the adjustment to occur in response to lower volumes.
DUCK PRE DEPTH	0–100	When the input sound is loud, this automatically reduces the volume that is being input to the reverb and delay. As this setting approaches 100, the input volume reduction is applied more deeply.
DUCK POST DEPTH	0–100	When the input sound is loud, this automatically reduces the volume that is being output from the reverb and delay. As this setting approaches 100, the output volume reduction is applied more deeply.
OUTPUT GAIN	–6–+6 dB	Adjusts the output level.

Parameters for Each Mode

ROOM

Parameter	Value	Explanation
REVERB		
TYPE	AMBIENCE, SMALL, MEDIUM, LARGE	Selects the size of the room.

HALL

Parameter	Value	Explanation
REVERB		
TYPE	SMALL, MEDIUM, LARGE	Selects the size of the concert hall.

SPRING

Parameter	Value	Explanation
REVERB		
SPRING NUMBER	1–3	Selects the number of springs.

SHIMMER

Parameter	Value	Explanation
REVERB		
PITCH 1		
PITCH 2	–24–+24	Adjusts the amount of pitch shift.
FINE 1		
FINE 2	–50–+50	Finely adjusts the amount of pitch shift.
RELEASE 1		
RELEASE 2	0–100	Adjusts the length of the reverberation (PITCH).
LEVEL 1		
LEVEL 2	0–100	Adjusts the volume of the pitch-shifted sound.

FAST DECAY

Parameter	Value	Explanation
REVERB		
DECAY	1–10	Adjusts the decay of the reverb sound.

EARLY REFLECTION

Parameter	Value	Explanation
REVERB		
TYPE	1–4	Selects the type of effect.
ENVELOPE	1–10	Selects the envelope of the reverb.

NON-LINEAR

Parameter	Value	Explanation
REVERB		
TYPE	GATE, REVERSE, NON-LINEAR	Selects the type of reverb.
GATE		
THRESHOLD	0–100	Adjusts the length of the reverb sound.
HOLD TIME	0.1–1.0 s	Adjusts the time from when the gate is closed until the gate opens next.
REVERSE, NON-LINEAR		
GATE TIME	0.1–1.0 s	Adjusts the gate time.

SFX

Parameter	Value	Explanation
REVERB		
TYPE	Selects the type of reverb.	
	LO-FI	Sound quality typical of an AM radio or telephone.
	SLOWVERB	Sound with a gentle rise and soft overtones.
	STORM	Sound that appears to be tossed by a storm.
LO-FI		
LO-FI	1–10	Adjusts the frequency bandwidth of the reverb.
DISTORTION	0–10	Adjusts the depth of distortion.
LO-FI LEVEL	0–100	Adjusts the LO-FI portion (sound similar to an AM radio or telephone) to which reverb and delay are not applied.
SLOWVERB		
RISE TIME	0–100	Adjusts the rise time of the reverb sound.
SENS	0–100	Adjust the way in which the reverb sound rises in response to the input.
LOWER HARM	0–100	Adjusts the sound of one octave below.
UPPER HARM	0–100	Adjusts the sound of one octave above.
UNISON MIX	0–100	Adjusts the sound at the same pitch as the input.
DETUNE	0–100	Adjusts the modulation of the overtone sound.
STORM		
COLOR	0–100	Adjusts the character of the reverb.
DEPTH	0–100	Adjusts the depth to which the reverb sound is modulated.
SPEED	0–100	Adjusts the speed at which the reverb sound is swept.

Parameter List

DUAL

Parameter	Value	Explanation
REVERB		
TYPE1	ROOM, HALL, PLATE, SPRING	Selects the type of reverb (p. 4). The same function as the [MODE] knob.
TYPE2		
TIME1	0.1–10.0s	Adjusts the length (time) of the reverb sound.
TIME2		
PRE-DELAY1	0–200 ms	Adjusts the time until the reverb sound is output.
PRE-DELAY2		
LOW1	-50+50	Adjusts the character of the low frequency region.
LOW2		
HIGH1	-50+50	Adjusts the character of the high frequency region.
HIGH2		
DENSITY1	1–10	Adjusts the density of the reverb sound.
DENSITY2		
EFFECT LEVEL1	0–100	Adjusts the volume of the reverb sound.
EFFECT LEVEL2		
CROSSOVER	PARALLEL, 100 Hz–4.00 kHz	Splits the input into two, and inputs each to a different reverb. If you choose the "PARALLEL" setting, the same signal is input to both.

SRV

Parameter	Value	Explanation
REVERB		
SELECTION	Selects the type of reverb provided by the Roland SRV-2000 digital reverb.	
	P-A	Plate reverb.
	P-B	Plate reverb with a sound that's more flamboyant than P-A.
	H37–H15	Hall reverb. Increasing this value increases the size of the concert hall.
	R37–R0.3	Room reverb. Increasing this value increases the size of the room.
HF DAMP	0.05–1.00	Adjusts the high frequency components of the reverb sound.
DENSITY	0–9	Adjusts the density of the late reverberation.
ATTACK GAIN	0–9	Adjusts the gain of the early reflections.
ATTACK TIME	0–9	Adjusts the time of the early reflections.
ER DENSITY	0–9	Adjusts the density of the early reflections.
ER LEVEL	0–99	Adjusts the volume of the early reflections.
LOW GAIN	-24+12 dB	Adjusts the amount of boost/cut for the low frequency region.
LOW FREQ	0.04–1.00 kHz	Specifies the center frequency of the low frequency region.
MID GAIN	-24+12 dB	Adjusts the amount of boost/cut for the mid frequency region.
MID FREQ	0.25–9.99 kHz	Specifies the center frequency for the mid frequency region.
MID Q	0.2–9.0	Specifies the bandwidth of the mid frequency region. Larger values make the bandwidth narrower.
HIGH GAIN	-24+12 dB	Adjusts the amount of boost/cut for the high frequency region.
HIGH FREQ	0.80–9.99 kHz	Specifies the center frequency for the high frequency region.
HIGH Q	0.2–9.0	Specifies the bandwidth of the high frequency region. Larger values make the bandwidth narrower.
OUTPUT MODE	MONO, STEREO	Specifies the output mode of the reverb.

SPACE ECHO

Parameter	Value	Explanation
ECHO		
REPEAT RATE	1 ms–10.0 s	Adjusts the spacing of the echoes (delay time).
BPM	Specifies the tempo. The range of this setting depends on the REPEAT RATE and NOTE values.	
NOTE	♪–∞	Adjusts the delay time. This is specified in terms of a note length relative to the BPM.
INTENSITY	0–100	Adjusts the volume of the repeated echoes (the amount of feedback).
ECHO VOLUME	0–120	Adjusts the volume of the echoes.
HEAD SELECT	1–1+2+3	Selects the combination of playback heads.
BASS	-50–+50	Adjusts the low frequency region of the echo.
TREBLE	-50–+50	Adjusts the high frequency region of the echo.

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CONTROL

You can specify the functions of the [TAP/CTL] switch and of a footswitch or expression pedal connected to the CTL 1,2/EXP jack.

- “Using the [TAP/CTL] Switch to Control the Reverb” (p. 8)
- “Assigning a Function to an External Pedal” (p. 22)

ASSIGN

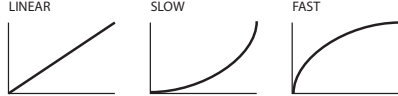
ASSIGN INPUT SENS

Parameter	Value	Explanation
ASGN INPUT SENS	0–100	Adjusts the input sensitivity when “INPUT” is selected for SRC.

ASSIGN 1–8

Parameter	Value	Explanation
SW	OFF, ON	Turns the ASSIGN 1–8 on/off.
	Specifies the controller (source).	
	TAP/CTL	[TAP/CTL] switch.
	EXP PDL (EXP PEDAL)	External expression pedal (EV-30, EV-5 etc.; sold separately) connected to the CTL 1,2/EXP jack.
	CTL1, 2 PDL	External footswitch connected to the CTL 1,2/EXP jack.
	INT PDL	Internal pedal The virtual expression pedal will begin operating when started by the specified trigger (TRIGGER), modifying the parameter specified by “TARGET.” For details on the parameters that can be assigned to the internal pedal, refer to “TIME” and “CURVE” (p. 17)
	WAVE PDL	Wave pedal The virtual expression pedal will cyclically modify the parameter specified by “TARGET” in a fixed wave form.
	INPUT (INPUT LEVEL)	The assigned target parameter will change according to the input level. * If you want to adjust the input sensitivity, set the SENS (INPUT SENS).
SRC (SOURCE)	CC#1–31, CC#64–95	Controller number from an external MIDI device
	Specifies the operation of the controller.	
	MOMENT	The value will normally be OFF (minimum value), and will be ON (maximum value) only while the control is being operated. * If you want to use the internal pedal or wave pedal, set to “MOMENT.”
	TOGGLE	The value will toggle between OFF (minimum) and ON (maximum) each time the control is operated.
TRG (TARGET)	This selects the parameter to be changed.	
MIN (TARGET MIN)	Specifies the range of change for the parameter. The values will depend on the parameter that’s assigned by “TARGET.”	
MAX (TARGET MAX)		

Parameter List

Parameter	Value	Explanation
ACT LOW	0–126	Within the operating range of the source, this specifies the range that will control the target parameter.
ACT HIGH	0–127	The target parameter will be controlled within the range specified. Normally, you should leave ACT LOW at “0” and ACT HIGH at “127.”
WAVE RATE (*1)	0–100, 	Specifies the time for one cycle of the wave pedal. * If, due to the tempo, the time is longer than the range of allowable settings, it is then synchronized to a period either 1/2 or 1/4 of that time.
WAVE FORM (*1)	SAW, TRI, SIN	Select one of the following to specify the change produced by the wave pedal. 
TRIGGER (INT PEDAL TRIGGER) (*2)	Specifies how the motion of the internal pedal will be triggered.	
	PAT CNG (PATCH CHANGE)	This is activated when a patch is selected.
	EXP LOW	This is activated when an external expression pedal connected to the CTL 1,2/ EXP jack is set to the minimum position.
	EXP MID	This is activated when the external expression pedal connected to the CTL 1,2/ EXP jack is moved through the middle position.
	EXP HIGH	This is activated when the external expression pedal connected to the CTL 1,2/ EXP jack is set to the maximum position.
	CTL1, 2 PDL	This is activated when an external footswitch connected to the CTL 1,2/EXP jack is operated.
TIME (INT PEDAL TIME) (*2)	CC#1–#31 CC#64–#95	This is activated when a control change is received.
	0–100	This specifies the time over which the internal pedal will move from the toe-raised position to the toe-down position.
CURVE (INT PEDAL CURVE) (*2)	LINEAR, SLOW (SLOW RISE), FAST (FAST RISE)	Select one of the following curves to specify the change produced by the internal pedal. 

*1: SRC=WAVE PDL only

*2: SRC=INT PDL only

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Parameter List

BANK

You can specify how patches A and B are connected and output when using simul mode.

- “Using Two Patches Simultaneously (Simul Mode)” (p. 21)

SYSTEM

Parameter	Value	Explanation
CONTRAST	1–16	Adjusting the contrast of the display
OUTPUT	Selects how output occurs.	
	STEREO	Stereo output.
	A:DIR B:EFX	Direct sound is output from the OUTPUT A/MONO jack, and effect sound is output from the B jack.
	DIRECT MUTE	The direct sound is not output; only the effect sound is output.
BANK MODE	Specifies the timing at which the patch is changed when you change banks.	
	WAIT	Switching the bank only changes the indication of the screen, and does not switch the patch at that point. When you press the [A] or [B] switch, the bank and number are finalized, and operation switches to the next patch.
	IMMEDIATE	Operation immediately switches to the next patch when you switch banks.
BANK EXTENT MIN	01–99	Sets the lower limit for the banks.
BANK EXTENT MAX	01–99	Sets the upper limit for the banks.
KNOB LOCK	OFF, ON	Specifies whether knob operations are disabled (ON) or not disabled (OFF).
KNOB MODE	IMMEDIATE, HOOK	When you move a knob, this setting specifies whether control data for that knob position is always output (IMMEDIATE) or is output only after the knob position has passed through the current value of the parameter (HOOK).
BYPASS	BUFFERED, TRUE	Specifies how the bypass sound is output (buffered bypass or true bypass).
PEDAL ACT	PUSH, RELEASE	Specifies whether the operation occurs when you press the [A], [B], or [TAP/CTL] switch or when you release the switch.
FSW MODE	Specifies how the footswitch is used (p. 20).	
USB MODE	Specifies the USB operating mode (p. 25).	

MIDI

Parameter	Value	Explanation
Rx CHANNEL	Ch.1–16, OFF	Specifies the receive channel. If this is “OFF,” MIDI messages are not received.
Tx CHANNEL	Ch.1–16, Rx, OFF	Specifies the transmit channel. If this is “OFF,” MIDI messages are not transmitted.
PC IN	OFF, ON	Specifies whether program changes are received.
PC OUT	OFF, ON	Specifies whether program changes are transmitted.
BANK SEL OUT	MSB, M+L	Specifies the bank select message that is transmitted simultaneously with the program change. If you select MSB, only MSB (CC#0) is transmitted. If you select M+L, both MSB and LSB (CC#32) are transmitted.
CC IN	OFF, ON	Specifies whether control changes are received.
CC OUT	OFF, ON	Specifies whether control changes are transmitted.

Parameter	Value	Explanation
TIME CC (R)	OFF, CC#1–31, 64–95	[TIME/VALUE] knob (reverb)
PRE-DLY CC (R)		[PRE-DELAY] knob (reverb)
E.LEVEL CC (R)		[E. LEVEL] knob (reverb)
LOW CC (R)		[LOW] knob (reverb)
HIGH CC (R)		[HIGH] knob (reverb)
TIME CC (D)		[TIME/VALUE] knob (delay)
PRE-DLY CC (D)		[PRE-DELAY] knob (delay)
E.LEVEL CC (D)		[E. LEVEL] knob (delay)
LOW CC (D)		[LOW] knob (delay)
HIGH CC (D)		[HIGH] knob (delay)
EFFECT SW		Specifies the controller number that switches between effect-on and bypass.
EFFECT A SW (*1)		Specifies the controller number of the corresponding knobs or switches. The parameters that can be controlled differ depending on the mode. MEMO For details on MIDI, refer to “MIDI Implementation” (PDF). https://roland.cm/boss_om
EFFECT B SW (*1)		
CTL1 CC		
CTL2 CC		
EXP CC		External EXP pedal
SYNC	Selects the tempo clock input that is used for synchronization.	
	INTERNAL	Synchronizes to the internal tempo.
	EXT (USB)	Synchronizes to the tempo from the USB port.
	EXT (MIDI)	Synchronizes to the tempo from the MIDI IN connector.
	AUTO	Normally synchronizes to the internal tempo, but if MIDI clock is being input from the MIDI IN connector or the USB port, the tempo is synchronized to MIDI clock (AUTO). If the RV-500 is a slave device, choose the “AUTO” setting.
REALTIME SRC	Selects the source of the realtime messages that are transmitted from the MIDI OUT connector or the USB port.	
	INT	Internal realtime messages are the source.
	USB	Realtime messages from the USB port are the source.
	MIDI	Realtime messages from the MIDI IN connector are the source.
MIDI IN->OUT USB IN->OUT	Specifies the connector to which MIDI messages received from the MIDI IN connector and the USB port are output.	
	OFF	MIDI messages are not output.
	USB	MIDI messages are output to the USB port.
	MIDI	MIDI messages are output to the MIDI OUT connector.
	U+M	MIDI messages are output to the USB port and the MIDI OUT connector.
DEVICE ID	1–32	Sets the MIDI Device ID used for transmitting and receiving System Exclusive messages.

*1: EFFECT A SW and EFFECT B SW are available only when FSW MODE is set to A/B SIMUL.

MIDI PC MAP

Parameter	Value	Explanation
BNK-PC# 1:001–3:128	01A–99C	Specifies the program number that corresponds to each patch number.

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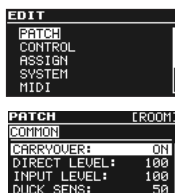
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Convenient Functions

Specifying Whether to Carry-Over the Reverb Sound

You can specify whether the effect sound is carried-over (ON/OFF) when you switch patches or turn the reverb off.

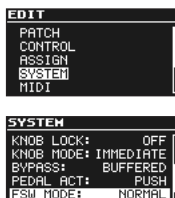
1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "PATCH," and then press the [EDIT] button.
3. Use the [▲] [▼] buttons to select "CARRYOVER," and use the [TIME/VALUE] knob to select ON / OFF.
4. Press the [EXIT] button to return to the top screen.



* If FSW MODE (p. 20) is set to "A/B SIMUL," the effect sound is not carried-over even if CARRYOVER is ON (when the effect is turned off, the sound remains).

Assigning the Functions of the [A], [B], and [TAP/CTL] Switches

1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "SYSTEM" and then press the [EDIT] button.
3. Use the [▲] [▼] buttons to select "FSW MODE," and use the [TIME/VALUE] knob to select the mode.



Mode	Explanation
NORMAL	Use the [A] and [B] switches to select patch A or patch B. You can use the [TAP/CTL] switch to hold the reverb or to input the tap tempo.
A/B/C	Use the [TAP/CTL] switch to select patch C. * In this case, you can't use the [TAP/CTL] switch to change how the reverb is applied.
A/B SIMUL	Patches A and B can be used simultaneously (p. 21). Press the unlit [A] or [B] switch to make both light.
SW DN/UP	Use the [A] switch to turn effect on/off, and use the [B] switch and [TAP/CTL] switch to change patches.

4. Press the [EXIT] button to return to the top screen.

Using Two Patches Simultaneously (Simul Mode)

If FSW MODE is set to "A/B SIMUL," you can use two patches A and B simultaneously (simul mode).

1. Set FSW MODE to "A/B SIMUL" (p. 20).
2. Press the unlit [A] or [B] switch to make them both light.

Now you can use two patches simultaneously.

MEMO

- The patch that's selected in the screen (selected by the [▼] [▲] buttons) is the patch that your editing will affect.
- The TAP/CTL (p. 8) and external footswitch setting (p. 22) apply to both patches A and B.

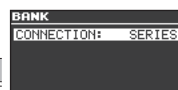
Selected patch



Simul mode settings (BANK)

Here's how to specify how patches A and B are connected and output when in simul mode.

1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "BANK," and then press the [EDIT] button.
3. Use the [▲] [▼] buttons to select a parameter, and use the [TIME/VALUE] knob to edit the value.



Parameter	Value	Explanation
CONNECTION	SERIES	Specifies how patches A and B are connected. Patches A and B are connected in series, in the order A → B.
	PARALLEL	Patches A and B are connected in parallel.
OUTPUT MODE (*1)	MIX	Specifies how sound is output from the OUTPUT A/MONO and B jacks. Patches A and B are mixed and output.
	A/B	Sound that is input to the INPUT A/MONO jack passes through patch A and is output to the OUTPUT A/MONO jack.
		Sound that is input to the INPUT B jack passes through patch B and is output to the OUTPUT B jack. * If OUTPUT (p. 18) is set to "A:DIR B:EFX," patches A and B are mixed and output.

*1: This is shown if CONNECTION is set to "PARALLEL."

4. Press the [EXIT] button to return to the top screen.

MEMO

The BANK parameter is saved when you save the patch.

Assigning a Function to an External Pedal

You can assign a function to a footswitch (sold separately: FS-5U, FS-5L, FS-6, FS-7) or expression pedal (sold separately: EV-30, Roland EV-5 etc.) connected to the CTL 1,2/EXP jack.

1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "CONTROL," and then press the [EDIT] button.
3. Use the [▲] [▼] buttons to select a parameter, and use the [TIME/VALUE] knob to edit the value.



Parameter	Value	Explanation
CTL 1/2 FUNC		Specifies the function of a footswitch connected to the CTL 1,2/EXP jack.
CTL 1/2 MODE (*1)	MOMENT	The switch is normally off (minimum value), and turns on (maximum value) only while you hold it down.
	TOGGLE	The switch alternately switches off (minimum value) and on (maximum value) each time you press it.
HOLD TIME (*2)	0–100	Specifies the time for which the reverb sound is held.
RISE TIME (*3)	0–100	Specifies the time over which the twist effect rises.
FALL TIME (*3)	0–100	Specifies the time over which the twist effect falls.
EXP FUNC		Specifies the function of an expression pedal connected to the CTL 1,2/EXP jack.
TRG MIN		Specify the minimum value (MIN) and maximum value (MAX) of the parameter that is controlled by the expression pedal. The values depend on the parameter that is assigned in EXP FUNC.
TRG MAX		
CTL 1/2 PREF	PATCH	Different settings can be made for each patch.
EXP PREF	SYSTEM	The same settings are shared by all patches.

*1: This is shown if TAP/CTL is set to "HOLD," "TWIST," or "WARP"

*2: This is shown if TAP/CTL is set to "HOLD"

*3: This is shown if TAP/CTL is set to "TWIST"

CTL1 FUNC and CTL2 FUNC Settings

Value	Explanation
OFF	No assignment.
HOLD	Holds the reverb sound while you hold down the switch.
WARP	Simultaneously controls the reverb sound's feedback level and volume to produce a totally unreal reverb.
TWIST	A new type of reverb that produces an aggressive, spinning sensation.
TAP	Lets you specify the delay time by tap input.
MOMENT	Outputs the reverb sound only while you hold down the switch.
FADE	Fades-in/-out the input sound.
BANK UP	
BANK DOWN	Change banks.

EXP FUNC Settings

Value	Explanation
OFF	No function is assigned. Select this if you're using the ASSIGN1–8 setting (p. 16).
RV TIME	Controls the reverb time.
RV PRE-DLY	Adjusts the time until when the reverb sound is output.
RV LOW	Adjusts the character of the effect sound's low-frequency range.
RV HIGH	Adjusts the character of the effect sound's high-frequency range.
RV LEVEL	Controls the reverb level.
RV MOD DPT	Adjusts the depth to which the reverb sound is modulated.
RV MOD RAT	Adjusts the speed at which the reverb sound is modulated.
DL TIME	Controls the delay time.
DL F.BACK	Adjusts the amount of delay sound that is returned to the input.
DL LOW	Adjusts the character of the delay sound's low-frequency range.
DL HIGH	Adjusts the character of the delay sound's high-frequency range.
DL LEVEL	Controls the delay level.
DL MOD DPT	Adjusts the depth to which the delay sound is modulated.
DL MOD RAT	Adjusts the speed at which the delay sound is modulated.

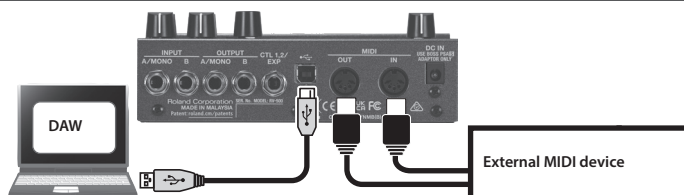
4. Press the [EXIT] button to return to the top screen.

Synchronizing with a DAW or External MIDI Device

You can synchronize your RV-500 performance with a computer or an external MIDI device by sending and receiving MIDI messages.

For example, an external MIDI device or DAW could switch patches on the RV-500 or control its tempo.

Connection Example



MIDI Messages That Can Be Transmitted and Received

Patch changes

Bank select (CC#0, #32) and program change

Synchronization

Tempo clock (F8)

Patch data

System exclusive messages

Other messages



Must be ON

Switch, knob	MIDI message	Value	Remarks
[TIME/VALUE] knob	Controller Number 17 (reverb) Controller Number 22 (delay)	0-127	-
[PRE-DELAY] knob	Controller Number 18 (reverb) Controller Number 23 (delay)		
[E. LEVEL] knob	Controller Number 19 (reverb) Controller Number 24 (delay)		
[LOW] knob	Controller Number 20 (reverb) Controller Number 25 (delay)		
[HIGH] knob	Controller Number 21 (reverb) Controller Number 26 (delay)		
CTL 1 switch	Controller Number 80	0, 127	Transmits "127" when pressed, "0" when released
CTL 2 Switch	Controller Number 81	0-127	-
EXP pedal	Controller Number 16	0-127	-
Effect on, Bypass	Controller Number 27	ON, OFF	ON = Effect on, OFF = Bypass In simul mode, this turns the selected patch on/off.
Effect A on, Bypass	Controller Number 28	ON, OFF	ON = Effect (patch A) on, OFF = Bypass
Effect B on, Bypass	Controller Number 29	ON, OFF	ON = Effect (patch B) on, OFF = Bypass

MIDI Routing

For details on how to set the MIDI parameters, refer to “Basic [EDIT] operations” (p. 9).

Main Setting Items

Item	Parameter	Explanation
Synchronization source	SYNC	Specifies whether the synchronization source is the RV-500 (INTERNAL), USB, or an external device connected via MIDI.
Realtime messages	REALTIME SRC	Specifies whether realtime messages generated by the RV-500 are transmitted, and whether realtime messages received via the MIDI IN connector or the USB port are transmitted.
MIDI message output destination	MIDI IN->OUT	Specifies the MIDI messages that are transmitted from the MIDI OUT connector.
	USB IN->OUT	Specifies the MIDI messages that are transmitted from the USB port.

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If you experience problems connecting with your DAW

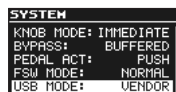
Normally, you don't need to install a driver in order to connect the RV-500 to your computer. However, if some problem occurs, or if the performance is poor, using the BOSS original driver may solve the problem.

In this case, setting “USB MODE” to “VENDOR” on the RV-500, install the driver on your personal computer.

For details on downloading and installing the BOSS original driver, refer to the BOSS website. For further details, refer to the Readme.htm file that comes with the download.

➔ <https://www.boss.info/support/>

The program you need to use, and the steps you need to take to install the USB driver will differ depending on your computer setup, so please carefully read and refer to the Readme.htm file that comes with the download.



Restoring the Factory Default Settings

Here's how to reset the settings to their factory state. If you like, you can also reset the system settings or just a specific range of patches.

1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "FACTORY RESET," and then press the [EDIT] button.
3. Use "FROM" and "TO" to specify the range that you want to reset.

Parameter	Value	Explanation
FROM	SYSTEM	System parameter settings.
TO	01A-99C	Settings for Patches.
	BANK01-99	Settings for Banks (Patch A-C, BANK parameters).

```
EDIT
SYSTEM
MIDI
MIDI PC MAP
MIDI BULK DUMP
FACTORY RESET
```

```
FACTORY RESET
[EDIT]:EXECUTE
FROM:
SYSTEM
TO:
99C:ROOM REVERB
```

4. Press the [EDIT] button.
A confirmation message appears.
5. Press the [EDIT] button to reset the settings.

If you decide to cancel without resetting, press the [EXIT] button.

```
FACTORY RESET
[EDIT]:EXECUTE
SYSTEM
↓
99C:ROOM REVERB
Are you sure?
```

Transmitting Data to an External MIDI Device

You can use Exclusive messages to set another RV-500 to the same settings or to save effect sound settings to MIDI sequencers and other such devices. This transmission of data is referred to as bulk dump.

1. Press the [EDIT] button.
2. Use the [▲] [▼] buttons to select "MIDI BULK DUMP," and then press the [EDIT] button.
3. Use "FROM" and "TO" to specify the range that you want to reset.

Parameter	Value	Explanation
FROM	SYSTEM	System parameter settings.
TO	01A-99C	Settings for Patches.
	BANK01-99	Settings for Banks (Patch A-C, BANK parameters).
	TEMP	Current reverb settings in the panel display.

```
EDIT
SYSTEM
MIDI
MIDI PC MAP
MIDI BULK DUMP
FACTORY RESET
```

```
MIDI BULK DUMP
[EDIT]:EXECUTE
FROM:
SYSTEM
TO:
TEMP
```

4. Press the [EDIT] button.
The bulk dump is executed.

Troubleshooting

Problem	Items to check	Action
Power does not turn on	Is your guitar correctly connected to the INPUT A/MONO jack?	Check the connection once again.
	Could the batteries be low?	Install fresh batteries.
	Is the specified PSA-S series AC adaptor connected correctly?	Check the connection once again.
No sound is output / No reverb sound is output / No direct sound is output	Is the SYSTEM: OUTPUT (p. 18) setting correct?	Check the SYSTEM: OUTPUT (p. 18) setting and the OUTPUT jacks connection.
	Is your output device correctly connected to the OUTPUT jacks?	
Footswitch does not change sounds as you expect	Is the SYSTEM: FSW MODE (p. 20) setting correct?	The FSW MODE (p. 20) setting determines what happens when you press the [A], [B], and [TAP/CTL] switches. Check the setting.
Reverb sound does not remain when you switch patches or turn off the reverb	Is the PATCH: CARRYOVER (p. 20) setting "ON"?	If CARRYOVER (p. 20) is set to "OFF" the reverb sound does not remain.
	Could the SYSTEM: BYPASS (p. 18) setting be "TRUE"?	If this is set to "TRUE" (True bypass), the reverb sound cannot be carried-over when the effect is turned off even if CARRYOVER is turned "ON." Set SYSTEM: BYPASS to "BUFFERED."
	Could the SYSTEM: FSW MODE (p. 20) setting be "A/B SIMUL"?	If this is set to "A/B SIMUL," you can't make the reverb sound remain when switching patches, even if CARRYOVER is "ON."
		Check the setting.

Main Specifications

BOSS RV-500: Reverb

Power Supply	Alkaline battery (AA, LR6) x 4 AC adaptor
Current Draw	225 mA
Battery Life for Continuous Use	Alkaline batteries (AA, LR6): Approximately 4.5 hours * This figure will vary depending on the actual conditions of use.
Dimensions	170 (W) x 138 (D) x 62 (H) mm 6-3/4 (W) x 5-7/16 (D) x 2-1/2 (H) inches
Weight (including batteries)	1.0 kg 2 lbs 4 oz
Accessories	Owner's manual, Leaflet "USING THE UNIT SAFELY," Alkaline Batteries (AA LR6) x 4
Options (sold separately)	AC adaptor: PSA-S series Footswitch: FS-5U, FS-5L Dual Footswitch: FS-6, FS-7 Expression pedal: FV-500H, FV-500L, EV-30, Roland EV-5

* 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.

USING THE UNIT SAFELY

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. 2)



IMPORTANT NOTES

Power Supply: Use of Batteries

- 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.

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.
- Never strike or apply strong pressure to the display.
- Do not use connection cables that contain a built-in resistor.

Intellectual Property Right

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