



RT-2

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 \(p. 20\)](#)). After reading, keep the document(s) where it will be available for immediate reference.

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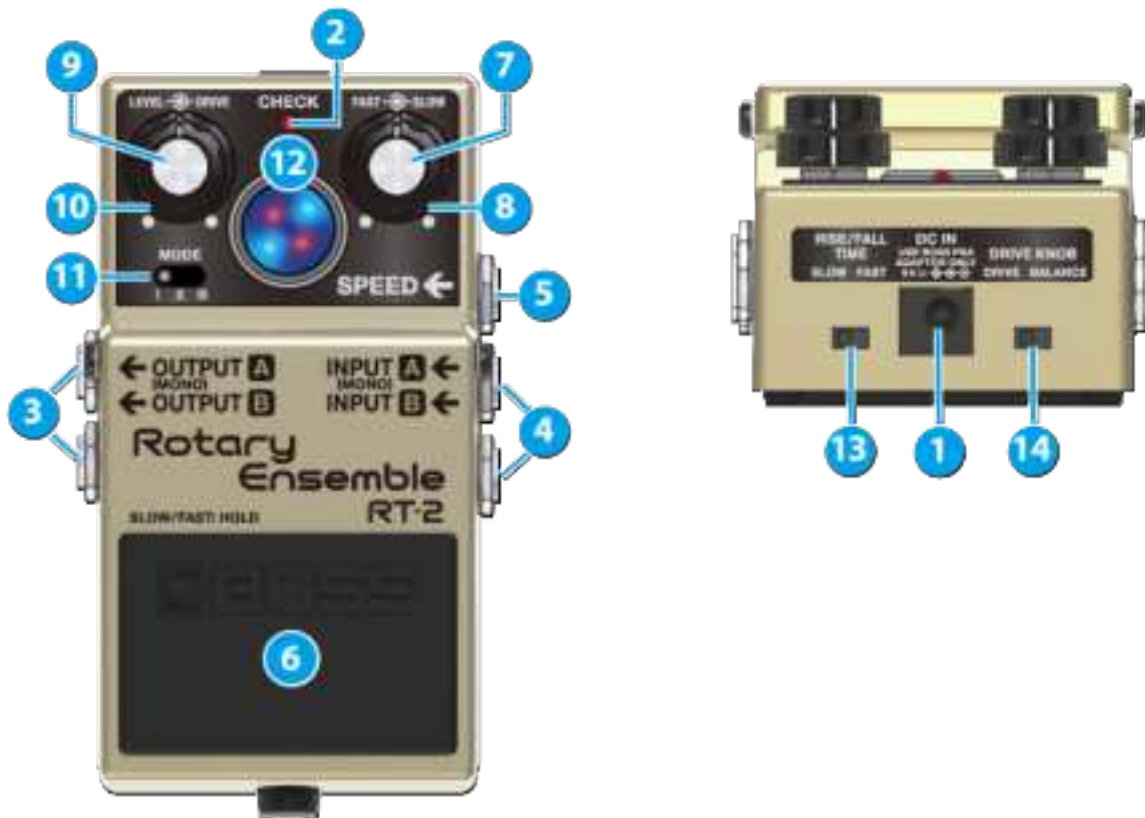
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Use your smartphone to scan the 2D code of the card included with this product, or visit the following website.

<https://www.boss.info/start/>

Panel descriptions



	Name	Explanation
1	DC IN jack	Use this jack to connect a separately sold AC adaptor (PSA series). 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 series) which is sold separately, and connect it to 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.
2	CHECK indicator	This indicator shows whether the effect is on/off, and also shows the rotary speed and the battery state. The indicator lights when an effect is ON. When the rotor rotation speed is set to FAST, the indicator lights up red; and when the rotor rotation speed is set to SLOW, the indicator lights up green. * The brightness of the CHECK indicator (LED) will dim as the battery lowers. Replace the battery when the LED is dim or does not light. For details on how to replace, refer to “Replacing the battery (p. 6)”.
3	OUTPUT A (MONO) jack, OUTPUT B jack	Connect these jacks to your amp or monitor speakers. Use only the OUTPUT A (MONO) jack when using this unit in mono. For stereo output, use the OUTPUT A (MONO) and OUTPUT B jacks. When you connect to both the OUTPUT A (MONO) and OUTPUT B jacks, an effect is produced according to the OUTPUT MODE settings. For details, refer to “Selecting how the effect sound is output (OUTPUT MODE) (p. 14)”.
4	INPUT A (MONO) jack, INPUT B jack	Connect your guitar, bass guitar, keyboard or effect unit to these jacks. If you're using this unit in mono, connect to the INPUT A (MONO) jack only. Use the INPUT A (MONO) and INPUT B jacks when connecting to an effect unit with stereo outputs. The INPUT A (MONO) jack doubles as the power switch. The power turns on when you insert a plug into the INPUT A (MONO) jack.

Panel descriptions

	Name	Explanation
5	SPEED jack (CTL/EXP jack)	Connect a footswitch or expression pedal here. Using the jack as a CTL jack: Connect a separately sold footswitch (FS-5U, FS-6, FS-7) to control the switching between SLOW/FAST or the brake feature. Refer to “Using a footswitch (p. 9)” for the functions that can be assigned. Using the jack as an EXP jack: Connect a separately sold expression pedal (EV-30, Roland EV-5, etc.) to continuously change the effect settings for the expression pedal’s pushed-up (horizontal) position and for the pushed-down (slanted) position. For more on function settings, refer to “Controlling the knob parameters using an expression pedal (EXP FUNCTION) (p. 10)”. * Use only the specified expression pedal. Connecting any other expression pedals may cause the unit to malfunction or become damaged.
6	Pedal switch	Turns the effect on/off, or switches between rotor speeds (SLOW/FAST). There are four types of pedal switches that you can change to suit your playing style. Type 1 is the factory setting. Type 1: (effect on/off priority) Lets you switch the effect on/off using the pedal. Long-press the pedal to toggle between SLOW and FAST. Type 2: (SLOW/FAST priority) Lets you switch between SLOW/FAST using the pedal. Long-press the pedal, then release the pedal to turn off the effect. When you press the pedal while the effect is off, this turns the effect on. Type 3: (effect on/off priority) Lets you switch the effect on/off using the pedal. When the effect is on, the setting is always SLOW. The FAST setting is used only while you long-press the pedal. Type 4: (effect on/off priority) Lets you switch the effect on/off using the pedal. When the effect is on, the setting is always FAST. The SLOW setting is used only while you long-press the pedal.
7	[FAST SPEED] knob	Adjusts the rotation speed of the rotor when switched to FAST.
8	[SLOW SPEED] knob	Adjusts the rotation speed of the rotor when switched to SLOW.
9	[LEVEL] knob	Adjusts the volume when the effect is on.
10	[DRIVE] knob	Adjusts the amount of distortion. When the [MODE] switch is set to “III”, the amount of distortion and volume are emphasized. * You can use the [DRIVE KNOB] switch to toggle the function of the [DRIVE] knob.
11	[MODE] switch	I: This is the sound of the standard setting of a Leslie 122. This is the most typical of the three modes, and can be used for a wide range of instruments. II: This is based on the sound of mode I, but is adjusted for a wider range. When combined with other distortion effect units, a natural sense of spaciousness can be obtained. III: This is a new dimension of rotary sound that combines a strong sense of rotation and deeper distortion. Compared to other modes, the attack feel, sonic definition and the amount of distortion are emphasized, offering greater presence in an ensemble setting.
12	VIRTUAL ROTOR	The rotary speaker effect is shown by the movement of the indicator lights. The red light indicates the rotation of the treble rotor, and the blue light indicates the rotation of the bass rotor.

	Name	Explanation
13	[RISE/FALL TIME] knob	Adjusts the rate of change when switching from SLOW to FAST or from FAST to SLOW. SLOW: The switching time is slower. FAST: The switching time is faster.
14	[DRIVE KNOB] switch	Toggles the function of the [DRIVE] knob. DRIVE: Adjusts the amount of distortion. BALANCE: Adjusts the balance between the treble rotor and the bass rotor. The most recent DRIVE and BALANCE values from the last time the knob was operated are stored in memory. When the unit is reset to its factory settings, DRIVE is reset to the minimum value and BALANCE is set to the center.

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

* Do not use connection cables that contain a built-in resistor.

Replacing the battery

About the battery

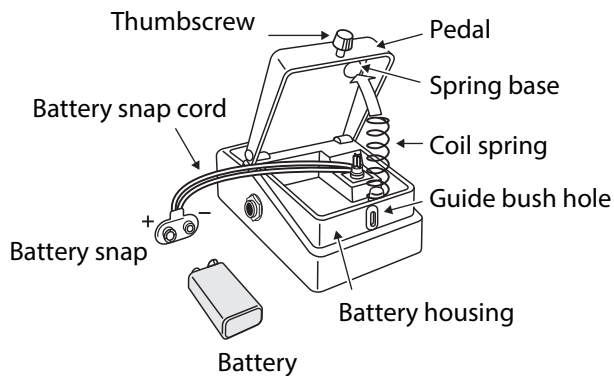
- This device already contains a battery when shipped from the factory. This is a test battery, which may not last as long as a new one.
- Use an alkaline battery if you are running the unit on battery power.
- If you handle the battery improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in the “USING THE UNIT SAFELY” and “IMPORTANT NOTES” leaflets for proper use.
- The sound may distort if the batteries are nearly depleted. This is not a malfunction. If this happens, replace the battery or use the separately sold AC adaptor.

NOTE

- When operating on battery power only, the CHECK indicator gets dimmer when battery power gets too low. Replace the batteries as soon as possible.
- If you notice noise when the unit is running on battery power, this may be because the battery is almost depleted. Try replacing the battery or using a separately sold AC adaptor.
- If the CHECK indicator keeps switching on and off when the unit is running on battery power, this may be because the battery is almost depleted. Try replacing the battery or using a separately sold AC adaptor.

Replacing the battery

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



- 1 Hold down the pedal and loosen the thumbscrew, then open the pedal upward.**

You don't need to take the thumbscrew out completely to open the pedal.

- 2 Remove the old battery from the battery housing, and remove the snap cord connected to it.**

- 3 Connect the battery snap to the new battery, and place the battery inside the battery housing.**

Be sure to carefully observe the battery's polarity (+ versus -).

- 4 Slip the coil spring onto the spring base on the back of the pedal, and then close the pedal.**

Carefully avoid getting the snap cord caught in the pedal, coil spring, and battery housing.

- 5 Finally, hold down the pedal while tightening the thumbscrew into the guide bush hole.**

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.
- * 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.

Turning the power on

1 Connect a plug to the INPUT A (MONO) jack.

This turns on the RT-2.

The unit turns on with the effect off (the CHECK indicator is unlit).

MEMO

The CHECK indicator briefly lights up when this unit is turned on.

2 Turn on your amp or other audio equipment.

Turning the power off

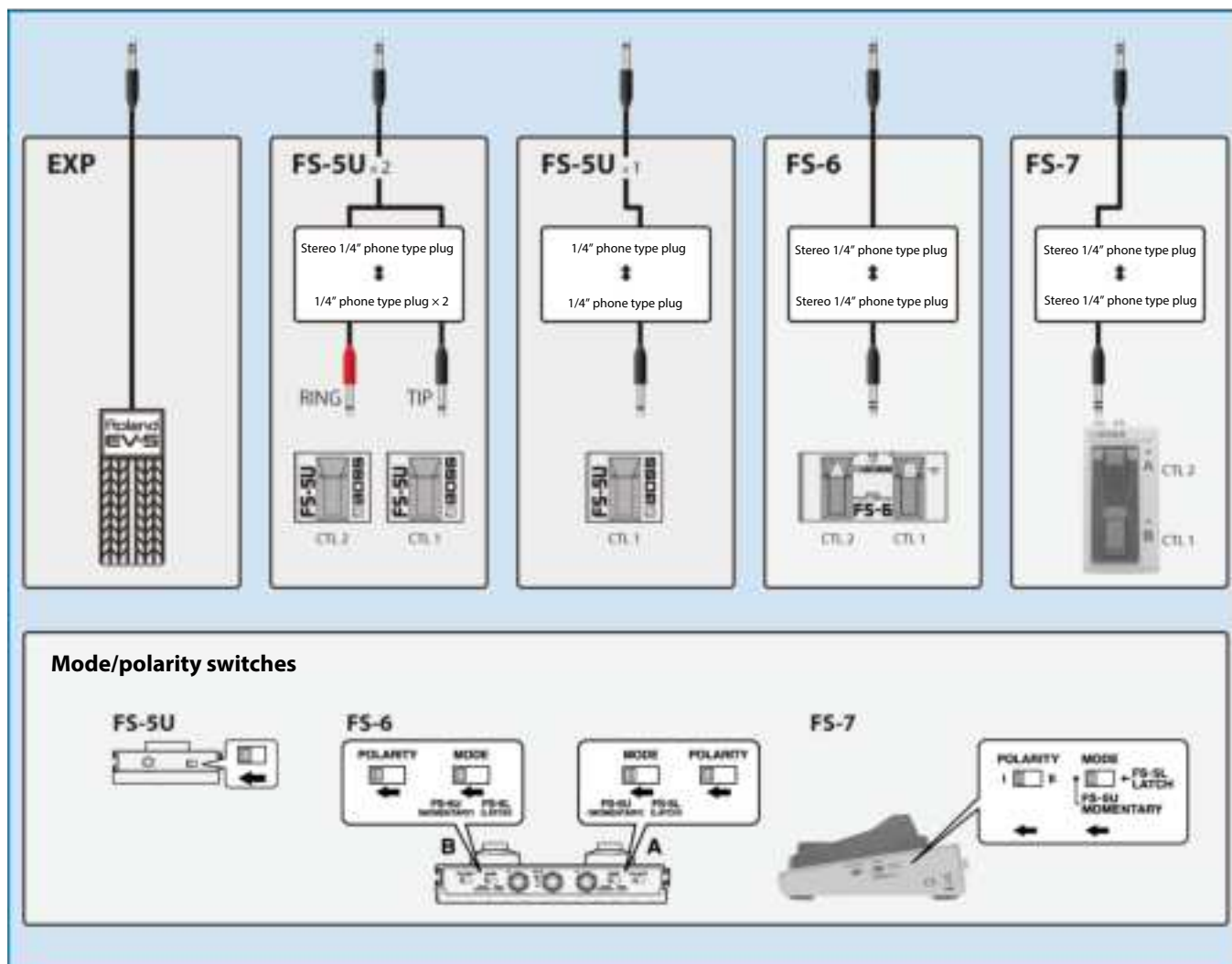
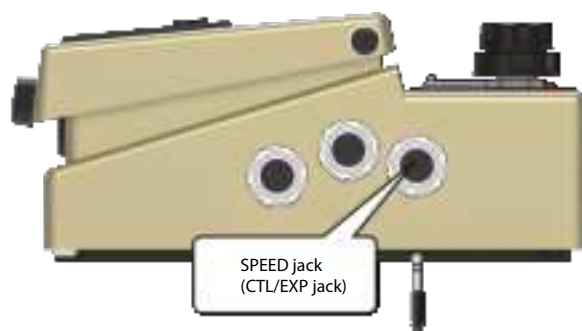
1 Turn off your amp or other audio equipment.

2 Unplug the cable from the INPUT A (MONO) jack.

This turns off the RT-2.

Connecting an external pedal

When using an external pedal (footswitch or expression pedal), connect as follows.



Using a footswitch

You can connect a footswitch to the SPEED jack (CTL/EXP jack) to switch between SLOW/FAST and operate the brake.

Footswitch	CTL1 function	CTL2 function
FS-5U	Toggle between SLOW/FAST	-----
FS-5U x 2, FS-6, FS-7	Toggle between SLOW/FAST	Operate the brake

NOTE

When the footswitch is connected, the pedal switch on this unit is limited to switching the effect on/off. (Toggling between SLOW/FAST cannot be done with the pedal switch in this case.)

Operating the brake

You can operate the brake to stop the rotation of the rotor.

1 Press footswitch CTL2.

The rotor stops rotating.

The time until the rotor stops rotating depends on the position of the [RISE/FALL TIME] switch. When the switch is on the SLOW side, the time until rotation stops is longer; and when the switch is on the FAST side, the time until rotation stops is shorter.

2 To release the brake, press footswitch CTL2 again.

Controlling the knob parameters using an expression pedal (EXP FUNCTION)

You can control the rotary speaker rotation speed as well as the LEVEL, DRIVE and BALANCE settings with a separately sold expression pedal (such as a Roland EV-30 or EV-5) that you've connected to the SPEED jack.

You can set the respective values for when the expression pedal is at MAX position (pressed down firmly with your toes) and at MIN position (pressed down firmly with your heel), and make continuous changes.

With the factory settings, the rotation speed of the rotary speaker can be controlled by the expression pedal.

Follow the steps below to change the parameter that's controlled by the expression pedal.

- 1 Turn off the RT-2 (unplug the cable from the INPUT A (MONO) jack).
- 2 Turn the [FAST] knob to the maximum (MAX) setting.
- 3 Turn all other knobs besides the [FAST] knob to the minimum (MIN) setting.
- 4 Set the [MODE] switch to the "III" position.



- 5 Turn on the power by connecting a plug to the INPUT A (MONO) jack while holding down the pedal switch.

The CHECK indicator blinks, and the unit enters settings mode.

- 6 Use the [DRIVE] knob to select the parameter to assign to the expression pedal.

The VIRTUAL ROTOR display changes according to the parameter selected.

Virtual rotor (red) display	Explanation
Lights up at the 12 o'clock position 	Controls the LEVEL.
Lights up at the 3 o'clock position 	Controls the DRIVE.

Virtual rotor (red) display	Explanation
Lights up at the 6 o'clock position 	Controls the BALANCE.
Lights up at the 9 o'clock position (factory setting) 	Controls the rotation speed of the rotary speaker. * When you press down on the expression pedal with your heel, the value changes until it reaches the setting of the [SLOW] knob; and when you press down on the expression pedal with your toes, the value changes until it reaches the setting of the [FAST] knob. * The CHECK indicator lights up orange while the expression pedal is controlling the rotation speed.

7 Use the [SLOW] knob to set the minimum value that's reached when you press the expression pedal with your heel.

This can't be set if you've selected the rotation speed of the rotary speakers in step 6.

8 Use the [FAST] knob to set the maximum value that's reached when you press the expression pedal with your toes.

This can't be set if you've selected the rotation speed of the rotary speakers in step 6.

9 Press the pedal switch.

The CHECK indicator rapidly blinks red, and the expression pedal parameter settings are stored in memory.

The device can be used normally after around 2–3 seconds.

* This setting is remembered even after the power is turned off.

NOTE

Under the following conditions, the pedal switch only works as the effect on/off switch, regardless of the action of the pedal switch you set.

- When an expression pedal is connected to the SPEED jack (CTL/EXP jack), and is set to control the rotary speaker rotation speed

Changing how the pedal switch works

With the factory settings, the effect can be turned on/off by operating the pedal switch, and you can switch between SLOW/FAST by long-pressing the pedal switch. This behavior can be changed.

You can select how the pedal works according to your playing style. For example, you can switch between SLOW/FAST by pressing the pedal switch, or switch to SLOW (FAST) only while pressing and holding the pedal.

Follow the steps below to change how the pedal switch works.

- 1 Turn off the RT-2 (unplug the cable from the INPUT A (MONO) jack).
- 2 Turn the [SLOW] knob to the maximum (MAX) setting.
- 3 Turn all other knobs besides the [SLOW] knob to the minimum (MIN) setting.
- 4 Set the [MODE] switch to the "I" position.



- 5 Turn on the power by connecting a plug to the INPUT A (MONO) jack while holding down the pedal switch.

The CHECK indicator blinks, and the unit enters settings mode.

- 6 Use the [DRIVE] knob to select the type of pedal switch.

The VIRTUAL ROTOR display changes according to the type selected.

Type	VIRTUAL ROTOR (blue) display	Explanation
Type 1 (factory setting)	Lights up at the 12 o'clock position 	Operating the pedal switch: • Toggles the effect on/off. Long-pressing the pedal switch: • Toggles between SLOW/FAST, regardless of whether the effect is on or off.
Type 2	Lights up at the 3 o'clock position 	Operating the pedal switch: • When you press the pedal while the effect is off, this turns the effect on. • When you press the pedal while the effect is on, this toggles between SLOW/FAST. Long-pressing the pedal switch: • When you press the pedal while the effect is on, the CHECK indicator blinks. When you release the pedal switch, the effect turns off.

Type	VIRTUAL ROTOR (blue) display	Explanation
Type 3	Lights up at the 6 o'clock position 	Operating the pedal switch: • Toggles the effect on/off. • The effect always turns on in SLOW mode. Long-pressing the pedal switch: • The effect operates in FAST mode while the pedal is pressed. Release the pedal switch to return to SLOW mode.
Type 4	Lights up at the 9 o'clock position 	Operating the pedal switch: • Toggles the effect on/off. • The effect always turns on in FAST mode. Long-pressing the pedal switch: • The effect operates in SLOW mode while the pedal is pressed. Release the pedal switch to return to FAST mode.

7 Press the pedal switch.

The CHECK indicator rapidly blinks red, and the pedal switch operation is stored in memory.

The device can be used normally after around 2–3 seconds.

* This setting is remembered even after the power is turned off.

NOTE

Under the following conditions, the pedal switch only works as the effect on/off switch, regardless of the action of the pedal switch you set.

- When a footswitch is connected to the SPEED jack (CTL/EXP jack; switch between SLOW/FAST using the footswitch)
- When an expression pedal is connected to the SPEED jack (CTL/EXP jack), and is set to control the rotary speaker rotation speed

Selecting how the effect sound is output (OUTPUT MODE)

By changing the output mode, you can change the way the effect sound is output.

Follow the steps below to change the output mode.

- 1 Turn off the RT-2 (unplug the cable from the INPUT A (MONO) jack).
- 2 Turn the [FAST] knob to the maximum (MAX) setting.
- 3 Turn all other knobs besides the [FAST] knob to the minimum (MIN) setting.
- 4 Set the [MODE] switch to the "I" position.



- 5 Turn on the power by connecting a plug to the INPUT A (MONO) jack while holding down the pedal switch.
The CHECK indicator blinks, and the unit enters settings mode.
- 6 Set the [MODE] switch to the position that corresponds to the desired output mode.

[MODE] switch position	CHECK indicator color	Explanation
I	Color of current setting	Shows the current output mode. The output mode is not changed. For an explanation of the colors that correspond to the current output mode, see the "red" and "green" descriptions below.
II	Red	Stereo output: (factory setting) The OUTPUT A (MONO) and OUTPUT B jacks are used to output individual effects, creating a stereo effect.
III	Green	Effect (wet) sound + direct (dry) sound The effect (wet) sound is output from the OUTPUT A (MONO) jack, and the direct (dry) sound is output from the OUTPUT B jack.

- 7 Press the pedal switch.
The CHECK indicator rapidly blinks red, and the output mode setting is stored in memory.
The device can be used normally after around 2–3 seconds.
* This setting is remembered even after the power is turned off.

Configuring the noise suppressor

The RT-2 has a built-in noise suppressor that can cut unwanted noise.

Follow the steps below to change how the noise suppressor works.

- 1 Turn off the RT-2 (unplug the cable from the INPUT A (MONO) jack).
- 2 Turn the [SLOW] knob to the maximum (MAX) setting.
- 3 Turn all other knobs besides the [SLOW] knob to the minimum (MIN) setting.
- 4 Set the [MODE] switch to the "III" position.



- 5 Turn on the power by connecting a plug to the INPUT A (MONO) jack while holding down the pedal switch.
The CHECK indicator blinks, and the unit enters settings mode.
- 6 Set the [MODE] switch to the position that corresponds to the desired noise suppressor effect.

[MODE] switch position	CHECK indicator color	Explanation
I	Red	Switches the noise suppressor off (factory setting).
II	Green	This noise suppressor setting is effective for low noise levels.
III	Orange	This noise suppressor setting is effective for high noise levels.

With this setting, you can monitor the sound of the effect. This lets you configure the noise suppressor while checking its effectiveness.

- 7 Press the pedal switch.

The CHECK indicator rapidly blinks red, and the noise suppressor setting is stored in memory.

The device can be used normally after around 2–3 seconds.

* This setting is remembered even after the power is turned off.

Restoring the factory settings (factory reset)

- 1 Turn off the RT-2 (unplug the cable from the INPUT A (MONO) jack).
- 2 Set the [RISE/FALL TIME] switch to the “FAST” position.



- 3 Set the [DRIVE KNOB] switch to the “BALANCE” position.



- 4 Turn the [SLOW] knob to the maximum (MAX) setting.
- 5 Turn all other knobs besides the [SLOW] knob to the minimum (MIN) setting.
- 6 Set the [MODE] switch to the “II” position.



- 7 Turn on the power by connecting a plug to the INPUT A (MONO) jack while holding down the pedal switch.
The CHECK indicator slowly blinks orange.
- 8 Press the pedal switch.
The CHECK indicator rapidly blinks orange.
Once the CHECK indicator lights up orange continuously, the RT-2 is restored to its factory settings.
- 9 Turn off the power (unplug the cable from the INPUT A (MONO) jack).

Factory parameter settings

Parameter	Value
OUTPUT MODE → "Selecting how the effect sound is output (OUTPUT MODE) (p. 14)"	Stereo output
EXP FUNCTION → "Controlling the knob parameters using an expression pedal (EXP FUNCTION) (p. 10)"	Rotation speed (SLOW/FAST) of the rotary speaker
Noise suppressor → "Configuring the noise suppressor (p. 15)"	Off
Pedal switch type → "Changing how the pedal switch works (p. 12)"	Type 1 (on/off priority, long-press to switch between SLOW/FAST)
DRIVE → "[DRIVE KNOB] switch (p. 5)"	Minimum
BALANCE → "[DRIVE KNOB] switch (p. 5)"	Center

Troubleshooting

Problem	Items to Check	Action
Power does not turn on	Is a plug connected to the INPUT A (MONO) jack?	Make sure that the plug is properly connected.
	The battery may be nearly depleted.	Replace the battery with a new one. If using AC power, make sure that the AC adaptor (sold separately) is properly connected.
	Is the specified PSA series AC adaptor (sold separately) connected correctly?	Make sure that the AC adaptor is properly connected.
CHECK indicator is dim, or repeatedly lights up and then goes dark	The battery may be nearly depleted.	Replace the battery with a new one. If using AC power, make sure that the AC adaptor (sold separately) is properly connected.
No sound	Have the output mode settings been made correctly?	Check the output mode settings and the OUTPUT jack connection.
	Is your output device correctly connected to the OUTPUT jack?	→“ Selecting how the effect sound is output (OUTPUT MODE) (p. 14) ”
The sound does not distort when the [DRIVE] knob is turned, or the sound is muffled or thin	The [DRIVE KNOB] switch might be set to the “BALANCE” position.	Set the [DRIVE KNOB] switch to the “DRIVE” position and then turn the [DRIVE] knob.
The output sound is noisy	The battery may be nearly depleted.	Replace the battery with a new one. If using AC power, make sure that the AC adaptor (sold separately) is properly connected.

Main specifications

Sample Rate	48 kHz
AD Conversion	24 bits + AF method AF method (Adaptive Focus method) is a proprietary method from Roland and BOSS that vastly improves the signal-to-noise ratio (SN) of the AD and DA converters.
DA Conversion	32 bits
Nominal Input Level	INPUT A (MONO), INPUT B: -20 dBu
Maximum Input Level	INPUT A (MONO), INPUT B: +7 dBu
Input Impedance	INPUT A (MONO), INPUT B: 1 MΩ
Nominal Output Level	OUTPUT A (MONO), OUTPUT B: -20 dBu
Maximum Output Level	OUTPUT A (MONO), OUTPUT B: +7 dBu
Output Impedance	OUTPUT A (MONO), OUTPUT B: 1 kΩ
Recommended Load Impedance	OUTPUT A (MONO), OUTPUT B: 10 kΩ or greater
Bypass	Buffered bypass
Controls	[SLOW] knob [FAST] knob [DRIVE] knob [LEVEL] knob [MODE] switch Pedal switch [RISE/FALL TIME] switch [DRIVE KNOB] switch
Indicator	CHECK indicator (Used for indication of Tempo and check battery) VIRTUAL ROTOR
Connectors	INPUT A (MONO) jack, INPUT B jack, OUTPUT A (MONO) jack, OUTPUT B jack: 1/4-inch phone type CTL/EXP jack: 1/4-inch TRS phone type DC IN jack
Power Supply	Alkaline battery (9 V, 6LR61 or 6LF22, commercially available) AC adaptor (PSA series: sold separately)
Current Draw	115 mA
Expected battery life under continuous use	Alkaline: Approx. 2.5 hours * These figures will vary depending on the actual conditions of use.
Dimensions	73 (W) x 129 (D) x 59 (H) mm 2-7/8 (W) x 5-1/8 (D) x 2-3/8 (H) inches
Weight (including battery)	450 g 1 lb
Accessories	Leaflet ("USING THE UNIT SAFELY", "IMPORTANT NOTES", and "Information") Dry battery (9 V, 6LR61 or 6LF22)
Options (sold separately)	AC adaptor: PSA series Footswitch: FS-5U 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.

Important notes

- Batteries should always be installed or replaced before connecting any other devices. This way, you can prevent malfunction and damage.
- If the battery (batteries) run extremely low, the sound may distort / interruptions in the sound may occur at high volume levels, but this does not indicate a malfunction. If this occurs, please replace the battery (batteries) / use the AC adaptor (sold separately).
- 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. You must turn off the power before you connect or disconnect the power cord or AC adaptor.
- Never strike or apply strong pressure to the display.
- This unit allows you to display using an LED at high speed. For some people, viewing such images can cause headache, nausea, or other discomfort. Do not use this unit to create video that might cause these types of health problems. Roland Corporation will accept no responsibility for any such health problems that may occur in yourself or in viewers.

For the USA

SUPPLIER'S DECLARATION OF CONFORMITY Compliance Information Statement

Model Name :	RT-2
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

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RT-2
Owner's Manual
01
Roland Corporation

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