



SDE-3

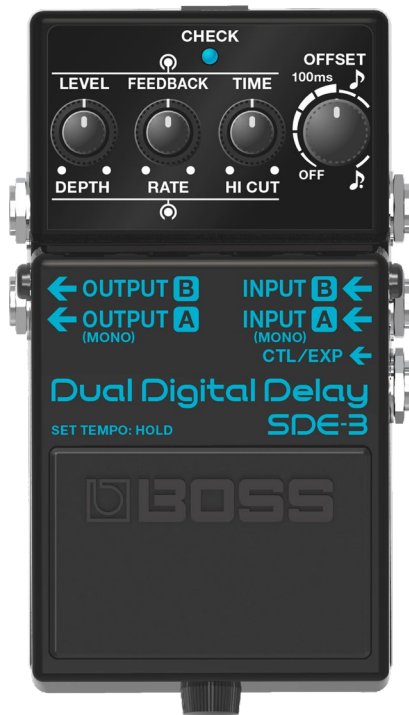
SDE-3

Owner's Manual

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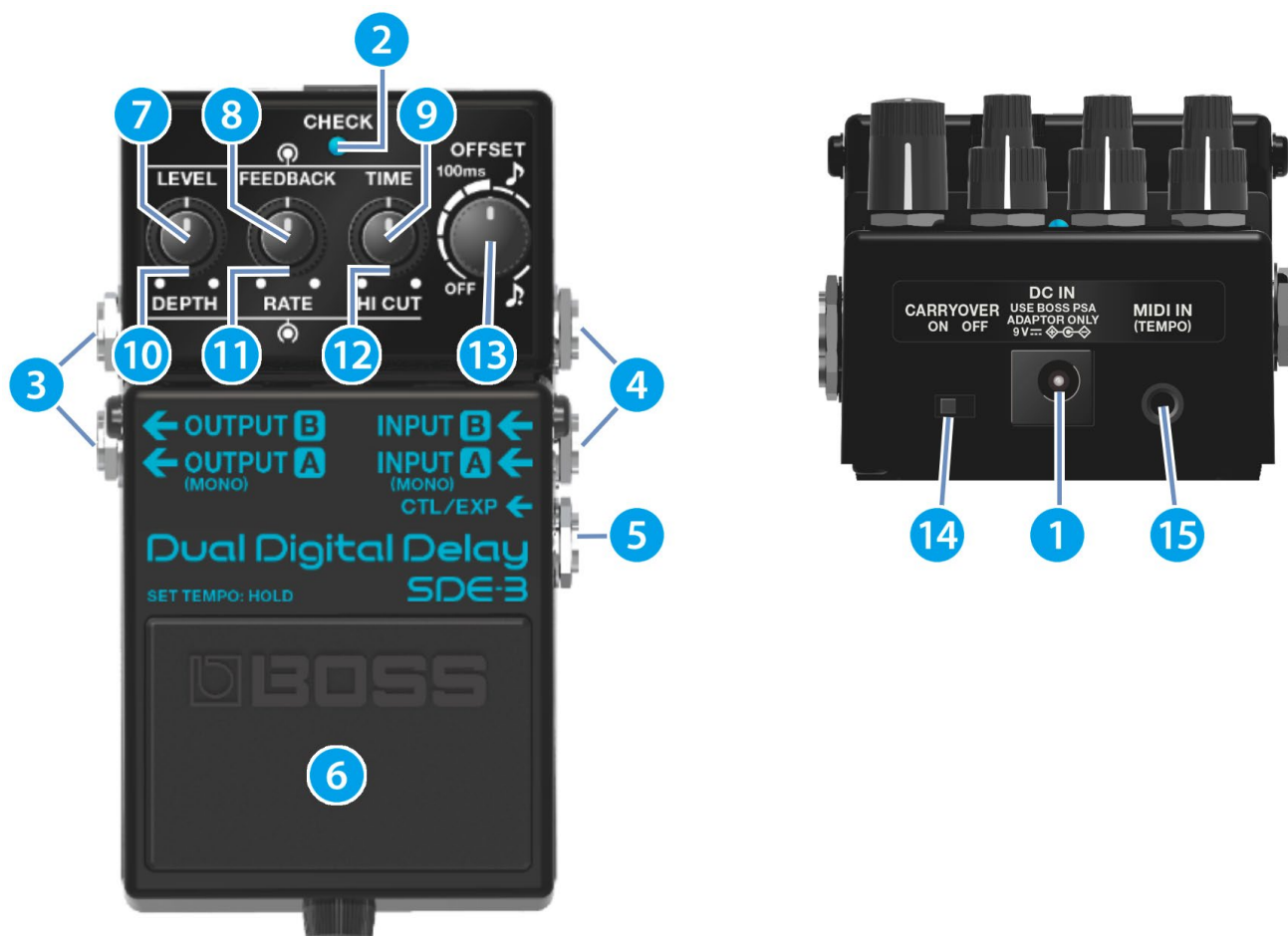
SDE-3 Owner's Manual



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

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Panel descriptions



Name	Function
1 DC IN jack	<p>Accepts connection of an AC adaptor (PSA series; sold separately).</p> <ul style="list-style-type: none"> * Use only the specified AC adaptor (PSA series; 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	<p>This indicator shows whether the effect is ON/OFF, and also shows the channel as well as the battery state (battery check). The indicator lights up when the effect is on, and goes dark when the effect is off.</p> <ul style="list-style-type: none"> * 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. <p>→ “Changing the batteries(P.8)”</p>
3 OUTPUT A (MONO) jack OUTPUT B jack	<p>Connect these jacks to your amp or monitor speakers. If you’re using this unit in mono, connect only the A (MONO) jack.</p> <ul style="list-style-type: none"> * If you’re using a stereo setup, 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. <p>→ “Changing the output mode(P.13)”</p>

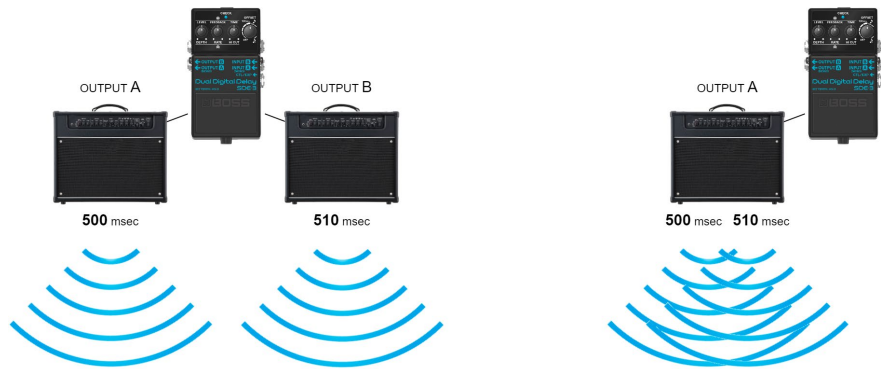
Name	Function
4	<p>INPUT A (MONO) jack INPUT B jack</p> <p>Connect your guitar or effect unit here. Use a 1/4" phone type (TS) ↔ 1/4" phone type (TS) cable to connect to this jack.</p> <p>* The INPUT A (MONO) jack doubles as the power switch. The power turns on when you insert a plug into the INPUT A (MONO) jack. → "Turning the power on/off(P.7)"</p>
5	<p>CTL/EXP jack</p> <ul style="list-style-type: none"> ● Using the jack as CTL (control) jack Connect a footswitch (FS-5U, FS-6, FS-7; sold separately) to control the tap tempo or momentary switch functions. For more about footswitch settings, refer to "Footswitch functions (CTL FUNCTION)(P.9)". ● Using the jack as EXP (expression) jack Connect an expression pedal (EV-30, Roland EV-5, etc.; sold separately) to continuously change the effect settings for the expression pedal's pushed-up (horizontal) position and for the pushed-down (slanted) position. For more about function settings, refer to "Controlling the knobs using an expression pedal (EXP FUNCTION)(P.10)". <p>* Use only the specified expression pedal. By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.</p>
6	<p>Pedal switch</p> <p>Switches the effect on/off and controls the various functions. This switch toggles the effects on/off. Long-press this switch to use tap tempo (tap tempo mode).</p> <p>Tap tempo mode</p> <p>Press the pedal switch for at least two seconds to switch to tempo mode (the CHECK indicator alternately lights up blue / red). Press the pedal switch in time with the tempo in quarter note intervals. Press the pedal switch for at least two seconds to exit the settings.</p>
7	<p>[LEVEL] knob</p> <p>Adjusts the volume of the effect sound. Turn the knob clockwise to increase the effect sound.</p>
8	<p>[FEEDBACK] knob</p> <p>Adjusts the amount of feedback. Turn the knob clockwise to increase the number of delay repeats.</p>
9	<p>[TIME] knob</p> <p>Adjusts the delay time. Turn the knob clockwise for a longer delay time. You can set the delay time to a value from 0 to 800 msec.</p> <p>* Connect only the OUTPUT B jack for a delay time of up to 1,600 msec (long delay). → "Long delay(P.13)"</p>
10	<p>[DEPTH] knob</p> <p>Sets the modulation depth.</p>
11	<p>[RATE] knob</p> <p>Sets the modulation speed.</p>
12	<p>[HI CUT] knob</p> <p>Adjusts how much the high-frequency components of the feedback sound are cut.</p>
13	<p>[OFFSET] knob</p> <p>Offsets the OUTPUT B delay time to get different delay times for the left and right channels (OFFSET). When you use tap tempo to change the delay time, the offset stays the same. The OUTPUT B value is only offset from the OUTPUT A value by the amount you set in OFFSET. When OFFSET is set to "OFF", the left and right delays sound at the same time.</p> <p>An offset value of 10 msec results in a very slight delay time, giving you an expansive, spatially synthesized delay sound. By using slight delays, you can create sounds that add expansiveness to the sound, or create a doubling effect. Try using this effect when you want to add thickness to your backing guitar sound or give your sound more impact when playing in a band.</p> <p>Example 1: When TIME is set to 500 msec and OFFSET is set to 10 msec, this results in a spacious sound with the OUTPUT A sound (500 msec) and OUTPUT B sound (500 msec + 10 msec OFFSET) delayed slightly.</p>

Name **Function**



For **stereo** output

For **mono** output



NOTE

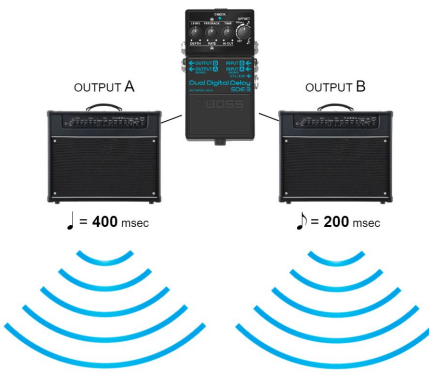
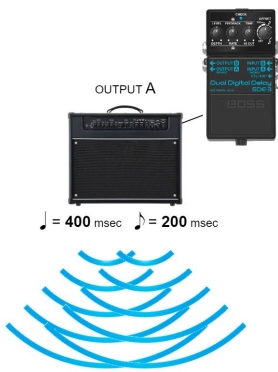
When OFFSET is set to "OFF", the output volume is increased.

Example 2:

When TIME is set to 400 msec and OFFSET is set to eighth notes (♪), the sound from OUTPUT A is delayed by a quarter note (♩, 400 msec) and OUTPUT B is delayed by an eighth note (♩, 200 msec).

The length set for TIME is equivalent to a quarter note (♩). When TIME is set to 400 msec, the BPM is 150.



Name	Function
	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>For stereo output</p>  </div> <div style="text-align: center;"> <p>For mono output</p>  </div> </div> <p>When TIME is set to 400 msec and OFFSET is set to dotted eighth notes (♩), the sound from OUTPUT A is delayed by a quarter note (♩, 400 msec) and OUTPUT B is delayed by a dotted eighth note (♩, 300 msec). The delay between notes changes according to the ♩ and ♩ setting on the [OFFSET] knob.</p>
14	<p>[CARRYOVER] switch</p> <p>Set this switch to ON if you want the delay to carry over even after the effect turns off, and select OFF if you don't want the delay to carry over.</p>
15	<p>MIDI IN jack</p> <p>Receives timing clocks from external devices. Normally, this unit synchronizes to the internal tempo. However, if a MIDI clock is input via the MIDI IN jack, the tempo synchronizes to that MIDI clock. In this case, you can't use tap tempo to set the tempo.</p> <ul style="list-style-type: none"> ● Use a TRS/MIDI connecting cable (BMIDI or BCC series, sold separately) to connect an external MIDI device. ● Do not use these connectors for connecting to audio devices. Doing so may cause a malfunction.

* 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.

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 all the connected units. 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.

When turning the power on

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

Turn on the SDE-3.

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

MEMO

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

2. Turn on your amp or other audio equipment.

When turning the power off

1. Turn off your amp or other audio equipment.

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

Turn off the SDE-3.

Changing the batteries

Use of battery

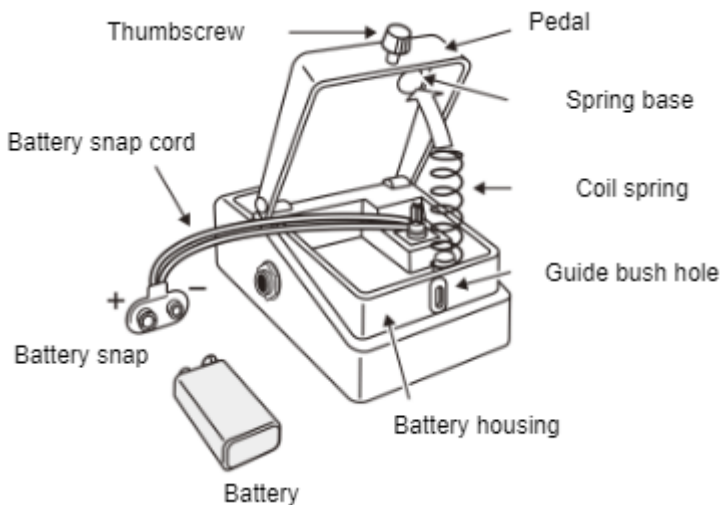
- If operating this unit on batteries, please use alkaline batteries.
- If you handle the battery (batteries) improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to the battery (batteries) that are listed in leaflet "USING THE UNIT SAFELY" and "IMPORTANT NOTES".
- This device contains a battery when shipped from the factory. This is a test battery, which may not last as long as a new one.
- If the batteries run extremely low, the sound may distort, but this does not indicate a malfunction. If this occurs, please replace the batteries / use the AC adaptor sold separately.

NOTE

- When operating on battery power only, the unit's CHECK indicator will become dim when battery power gets too low. Replace the battery 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 an AC adaptor sold separately.
- 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 an AC adaptor sold separately.

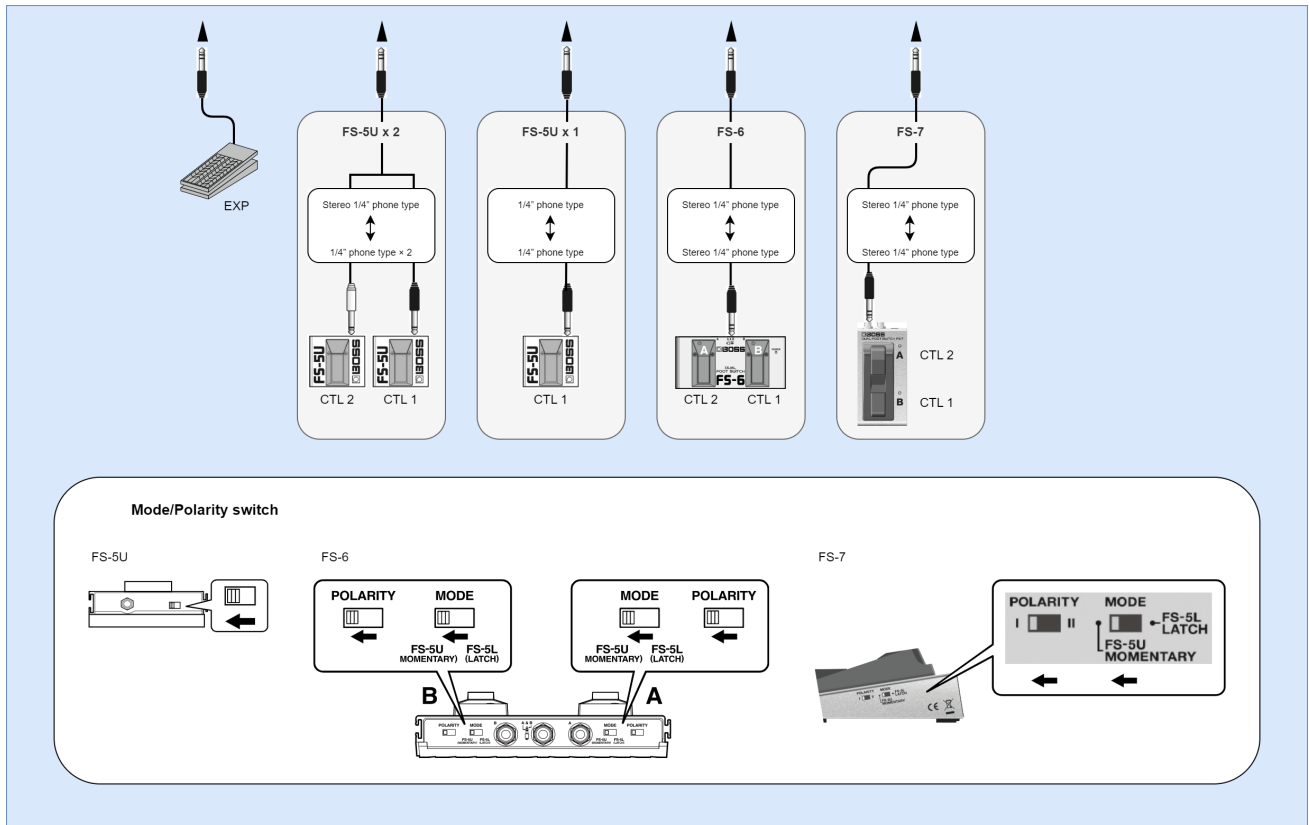
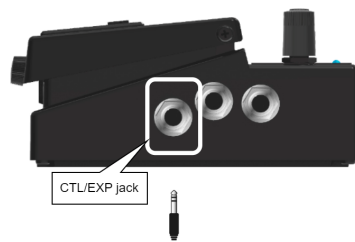
Replacing the battery

- * Batteries should always be installed or replaced before connecting any other devices. 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.**

Connecting an external pedal



Footswitch functions (CTL FUNCTION)

→ [Footswitch functions \(CTL FUNCTION\)\(P.9\)](#)

Expression pedal functions (EXP FUNCTION)

→ [Controlling the knobs using an expression pedal \(EXP FUNCTION\)\(P.10\)](#)

Footswitch functions (CTL FUNCTION)

You can connect footswitches (sold separately: FS-5U, FS-6, FS-7) to the CTL 1, 2/EXP jack, and use them to control the following functions.

NOTE

Latch-type footswitches (FS-5L) cannot be used.

These functions can't be changed.

Control	Explanation
CTL1	Sets the tempo using the tap tempo function. You can easily set the delay time to match the tempo of the song being played by pressing the switch in time with the song's tempo (Tap Input).
CTL2	Turns the hold function on/off. Repeats the delay sound while held down the switch (hold mode).

Controlling the knobs using an expression pedal (EXP FUNCTION)

You can control the settings of the [LEVEL], [TIME] and [FEEDBACK] knobs with an expression pedal (such as a Roland EV-5, sold separately) that you've connected to the CTL/EXP jack.

The factory setting is the value of the [LEVEL] knob.

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

Use the following settings to select the knob (parameter) that's controlled by the expression pedal.

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

1. Turn the [OFFSET] knob to the maximum (MAX) setting.
2. Turn all other knobs besides the [OFFSET] knob to the minimum (MIN) setting.



3. Insert a plug into the INPUT A (MONO) jack while holding down the pedal switch.

The CHECK indicator **blinks blue**.

4. Use the respective knobs to set the sound that's used when the pedal is at the MIN value (pressed firmly with your heel).

5. Press the pedal switch.

The CHECK indicator **blinks red**.

6. Use the respective knobs to set the sound that's used when the pedal is at the MAX value (depressed firmly with your toes).

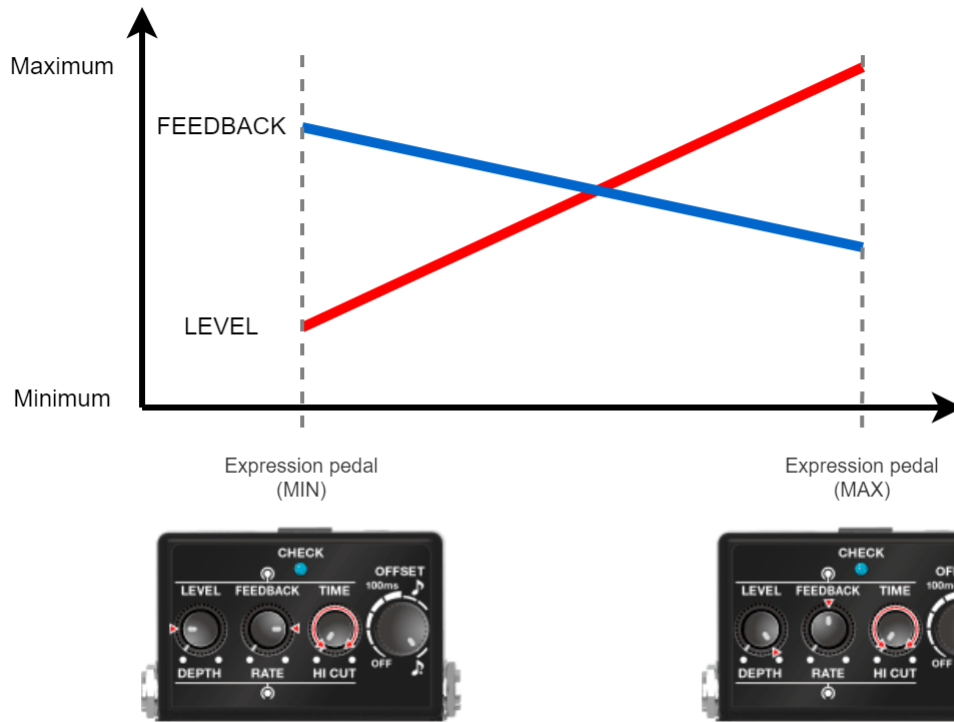
MEMO

To control multiple parameters at the same time, turn the knob in question to set it.

Knobs whose minimum (MIN) and maximum (MAX) value positions remain unchanged are not included in the knobs to be controlled.

7. Press the pedal switch again to exit the settings.

Example of how the value changes when setting the [LEVEL] and [FEEDBACK] knobs



The TIME remains constant with the value corresponding to the knob's position.

Controlling this unit from an external MIDI device

The SDE-3 delay time can be played back in sync with an external device when this unit receives a timing clock from an external MIDI device.

Using timing clocks to synchronize with an external MIDI device

When a timing clock (F8H) is received, the SDE-3 synchronizes with the tempo of the external device.

- **You can't use the following operations to set the tempo of the SDE-3 while it is synchronized to timing clocks.**
 - SDE-3 pedal switch or knob operations; connecting a footswitch to the SDE-3 and setting the tempo (tap tempo)
- **Tempo settings made via timing clocks are not stored on this device.**
- **Timing clocks are part of the MIDI system common information (system real-time messages). As such, they don't have MIDI channel settings.**

Changing the output mode

You can select from three different output modes for the SDE-3.

Mode	[OFFSET] knob position	Indicator color	Explanation
Stereo output	OFF	Blinking blue	The direct (dry) sound is mixed with the effect (wet) sound, and output from the OUTPUT A (MONO) and OUTPUT B jacks. Normal delay When the input is mono and only the OUTPUT A (MONO) jack is connected, the unit operates with normal delay time. When the input is stereo, connecting to either the OUTPUT A (MONO) jack or the OUTPUT B jack, or connecting to both jacks makes the unit operate with normal delay time. 0 – 800msec Long delay When the input is mono and only the OUTPUT B jack is connected, the delay time is doubled. 0 – 1,600 msec
			Effect (wet) sound + direct (dry) sound
Direct mute	Dotted eighth note	Blinking pink	Only the effect (wet) sound is output from the OUTPUT A (MONO) jack and the OUTPUT B jack.

Follow the steps below to change the output mode.

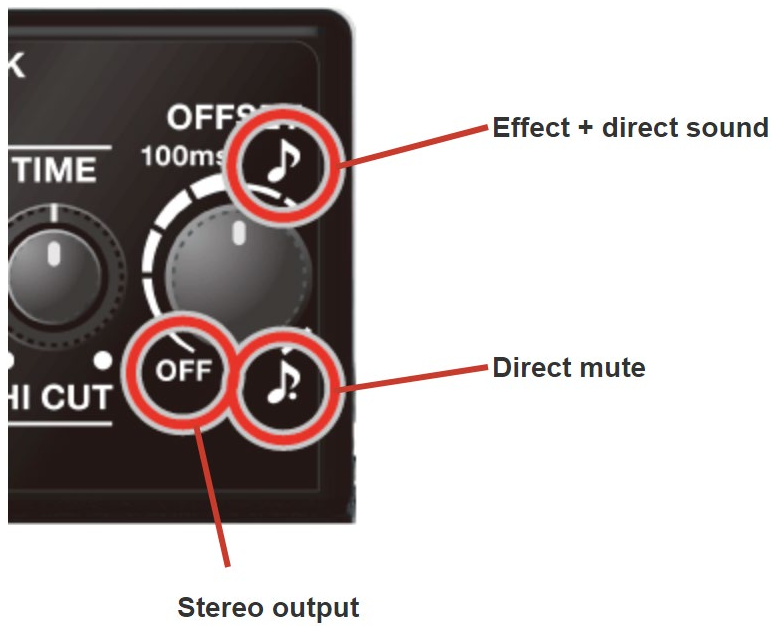
1. Turn the SDE-3 off.
2. Turn the [TIME] knob to the maximum (MAX) setting.
3. Turn all other knobs besides the [TIME] knob to the minimum (MIN) setting.



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

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

5. Turn the [OFFSET] knob to the output mode you wish to set.



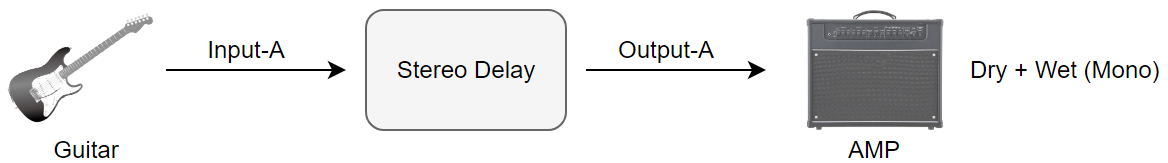
6. Press the pedal switch to save the settings.

The settings are saved when you press the pedal switch. Once the settings are saved, the unit returns to its normal state. This setting is saved even after the power is turned off.

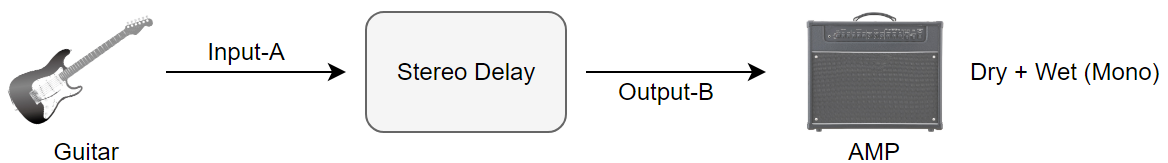
Connections

When using a single amp (1-in, 1-out)

Output mode: Stereo output



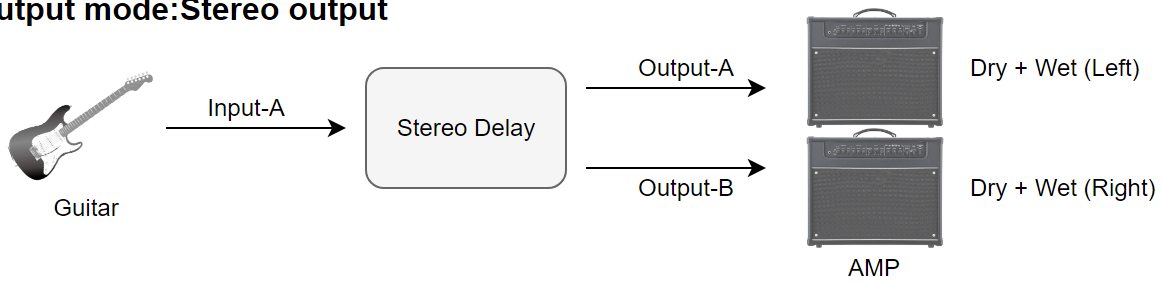
Output mode: Stereo output



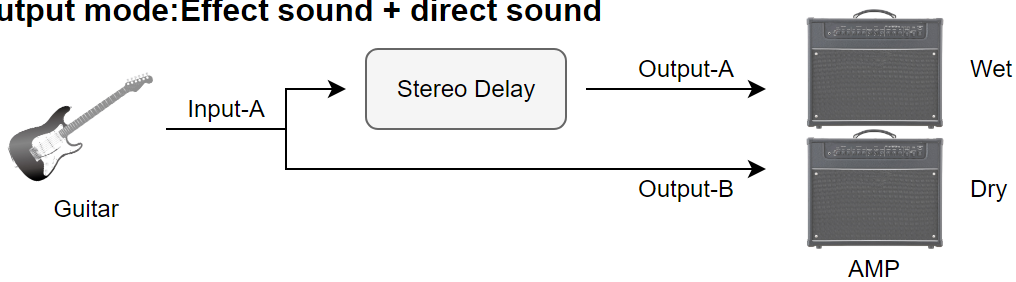
When only Output-B is connected, the delay time is doubled.

Using two amps (1-in, 2-out)

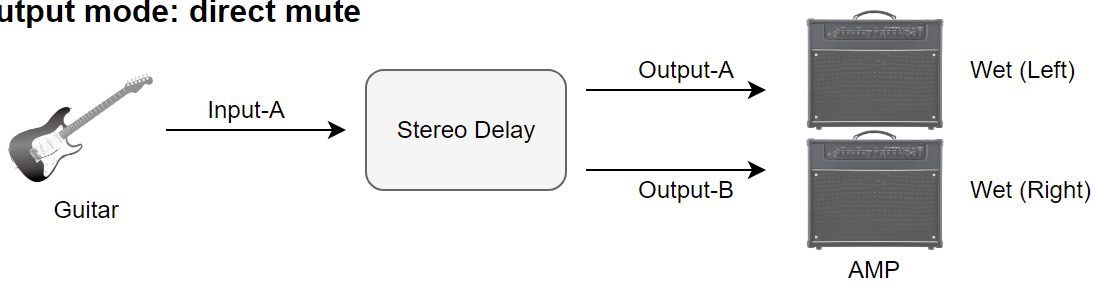
Output mode: Stereo output



Output mode: Effect sound + direct sound



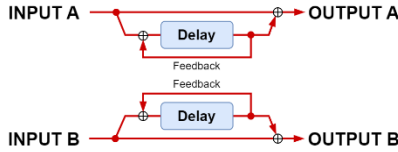
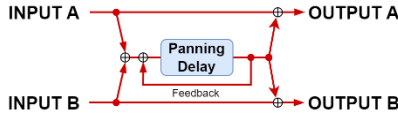
Output mode: direct mute



When using direct mute, only the effect (wet) sound is output.

Configuring the stereo delay effect

Here's how to configure the effect when using this unit as a stereo delay. You can select either stereo or panning for the stereo delay effect.

Mode	Effect	Explanation
STANDARD	Fully independent stereo	A delay with fully independent A/B channels. 
PAN	Panning	A panning delay. 

* For details on how to connect the stereo delay, refer to "Connections(P.14)".

1. Turn the SDE-3 off.
2. Turn the [RATE] knob to the maximum (MAX) setting.
3. Turn all other knobs besides the [RATE] knob to the minimum (MIN) setting.



4. 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.

5. Turn the [OFFSET] knob to the type of stereo delay effect you wish to set.



Mode	Effect	Indicator color	Explanation
STANDARD	Fully independent stereo	Blinking blue	A delay with fully independent A/B channels.
PAN	Panning	Blinking red	A panning delay.

This is set to "STANDARD" when using the factory settings.

6. Press the pedal switch.

The settings are saved when you press the pedal switch.
Once the settings are saved, the unit returns to its normal state.
This setting is saved even after the power is turned off.

Restoring the factory settings (Factory Reset)

1. Turn the SDE-3 off.
2. Set the [CARRYOVER] switch to OFF.



3. Turn the [HI CUT] knob to the maximum (MAX) setting.
4. Turn all other knobs besides the [HI CUT] knob to the minimum (MIN) setting.



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 pink**.

6. Press the pedal switch.

The CHECK indicator rapidly **blinks pink**.

Once the CHECK indicator **lights up pink** continuously, the SDE-3 is restored to its factory settings.

7. Turn off the power (unplug the cable from the INPUT A (MONO) jack).

This sets the SDE-3 as follows.

Parameter	Value
EXP FUNCTION	LEVEL
→ "Controlling the knobs using an expression pedal (EXP FUNCTION)(P.10)"	
Output mode	STEREO
→ "Changing the output mode(P.13)"	
Stereo delay effect	STANDARD
→ "Configuring the stereo delay effect(P.16)"	

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.
	Is the specified PSA series AC adaptor 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.
No sound is heard, the delay sound cannot be heard, or the direct sound cannot be heard	Is the output mode set correctly?	Check the output mode setting and the OUTPUT jack connection.
	Is your output device correctly connected to the OUTPUT jack?	
Delay sound does not carry over when the delay turns off	The [CARRYOVER] switch(P.7) might be set to "ON".	The delay sound does not carry over if the [CARRYOVER] switch(P.7) is set to "OFF".
The output sound is noisy	The battery may be nearly depleted.	Replace the battery with a new one.

Main Specifications

Sample Rate	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 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 M Ω
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 k Ω
Recommended Load Impedance	OUTPUT A (MONO), OUTPUT B: 10 k Ω or greater
Bypass	Buffered bypass
Controls	[TIME] knob [FEEDBACK] knob [LEVEL] knob [DEPTH] knob [RATE] knob [HI CUT] knob [OFFSET] Knob Pedal switch [CARRYOVER] switch
Indicator	CHECK indicator (Used for indication of Tempo and check battery)
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 MIDI IN jack: Stereo miniature phone type
Power Supply	Alkaline battery (9 V, 6LR61 or 6LF22, commercially available) AC adaptor (PSA series: sold separately)
Current Draw	75 mA
Expected battery life under continuous use (These figures will vary depending on the actual conditions of use.)	Alkaline: Approx. 4.5 hours
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 TRS/MIDI 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.

For the USA

SUPPLIER'S DECLARATION OF CONFORMITY Compliance Information Statement

Model Name : SDE-3
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

SDE-3

Owner's Manual

01

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