



Main features

The ES-5 is a switching system that lets you connect effect pedals and other effect units, and then store and recall up to 200 different combinations of them.

It also provides a wide variety of external control functions for controlling your amp and effects in real time.

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Before using this unit, carefully read "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (leaflet "USING THE UNIT SAFELY" and Owner's Manual (p. 21)). After reading, keep the document(s) including those sections where it will be available for immediate reference.

Panel Descriptions

Rear Panel (Connecting Your Equipment)

NOTE

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

SEND 1–5, RETURN 1–5 jacks

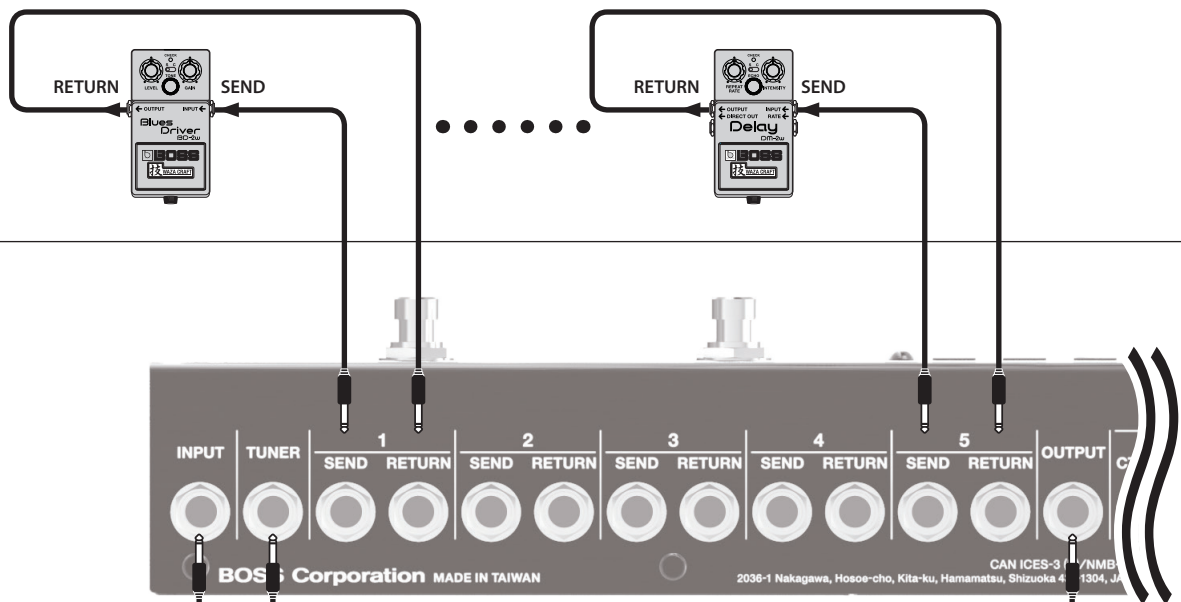
These jacks provide effect loops.

Signals are sent from SEND 1–5 jacks to each effect unit, and the signals from each effect unit are received at the RETURN 1–5 jacks.

Connect the SEND 1–5 jacks to the INPUT jack of each effect unit, and connect the OUTPUT jack of each effect unit to the RETURN 1–5 jacks.

What is an effect loop?

This is a connection in which an effect device is connected via send and return jacks. The ES-5 provides five effect loops, 1–5.



INPUT jack

Connect your guitar or bass to this jack.



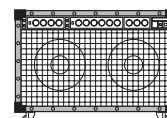
TUNER jack

This jack is for connecting an external tuner. The signal that is input from the INPUT jack is output from this jack even if mute is on.



OUTPUT jack

This is the output jack. Pressing the [MUTE] switch mutes the output from the OUTPUT jack.



EXT CTL jacks

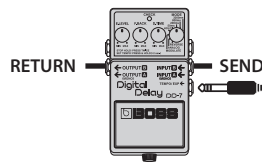
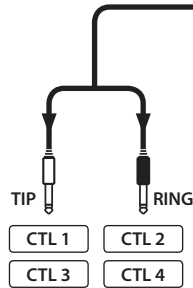
CTL 1/2, 3/4 jacks

These are control jacks for latch or momentary operation. You can use them to control various things such as switching amp channels or turning reverb on/off.

If you're using an effect device that's equipped with a footswitch jack, connect that jack here.

Each of these jacks can accommodate a stereo 1/4" plug (TRS) to make the appropriate connection to the device you're controlling.

* If 1/4" plug cables are connected, only CTL 1 and CTL 3 are available.



MIDI connectors

Connect an external MIDI device here to transmit and receive MIDI messages.

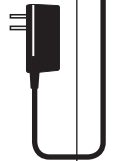
The operation of the MIDI OUT/THRU connectors depends on the system settings (p. 12).



DC IN jack

Connect the included AC adaptor here.

The power turns on when you plug the connected AC adaptor into an AC outlet.

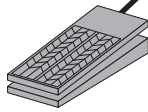


CTL IN jack

These let you control effect units or amps that are connected to the EXT CTL jacks.

To use this as EXP jack

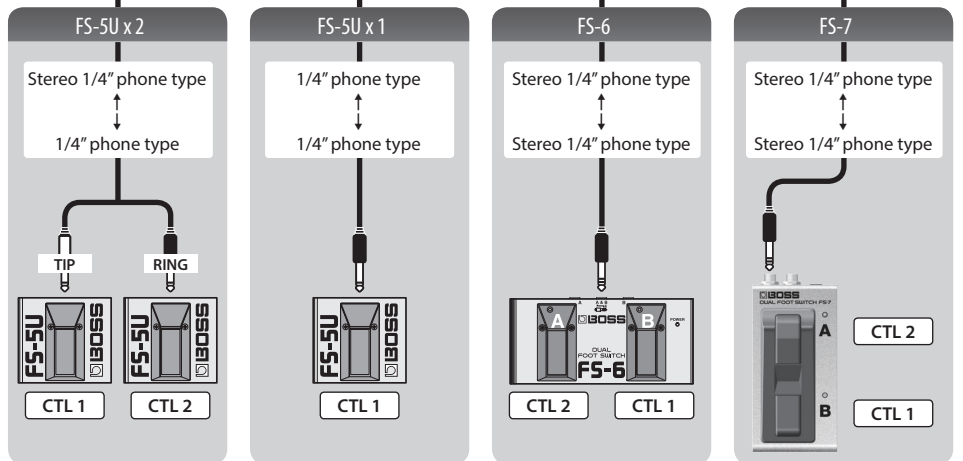
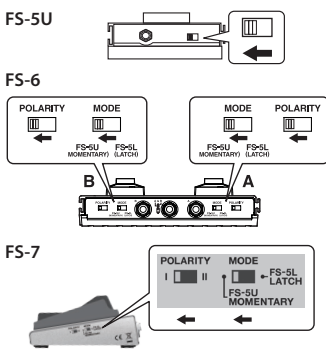
Connect an expression pedal (such as the Roland EV-5).



To use this as CTL 1/2 jack

Connect a footswitch.

Mode/Polarity switch



NOTE

- This instrument is equipped with balanced (TRS) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.
- Use only the specified expression pedal (FV-500H, FV-500L, Roland EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.



Top Panel

[EDIT] button

Press this to make patch settings or system settings.

[WRITE] button

Press this to save patch settings.

[–] [+] buttons

Use these to edit the value of a setting.

* Hold down one button while pressing the other button to make the value change rapidly.

[DISPLAY/EXIT] button

Press this to switch the play screen, to cancel an operation, or to return to the previous screen.

[ENTER] button

Press this to confirm an operation.

[◀] [▶] buttons

Use these to move the cursor or to select a category or parameter.

Lock function

When you press the [DISPLAY/EXIT] button and [ENTER] button simultaneously to activate Lock function, all buttons will be disabled.

This prevents settings from being changed when you inadvertently press a button.

The Lock function turns off when you press the two buttons simultaneously once again.

LOCKED!

Display

The ES-5 shows various information here.

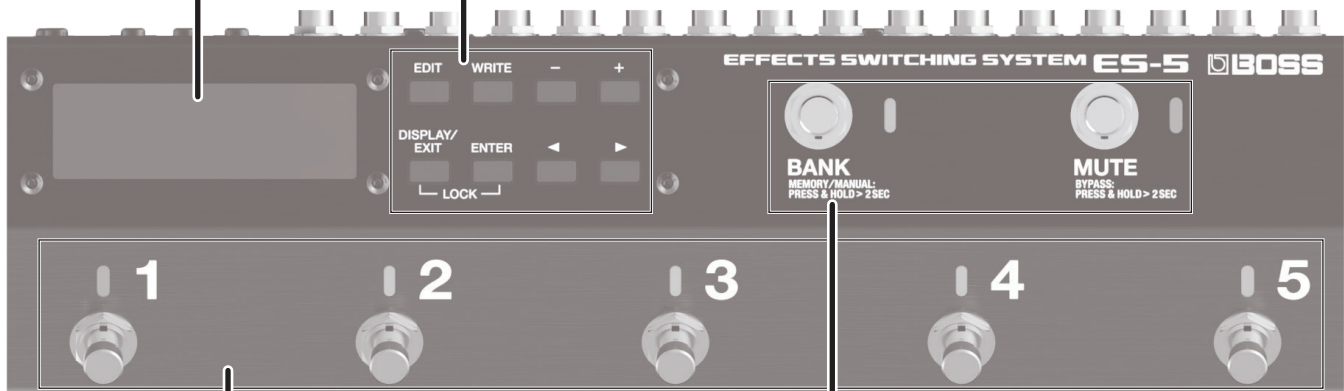
What is memory mode?

In this mode, you can select “patches,” where each patch is a combination of effect loops and various settings.

You can select from 200 patches by using the buttons or switches to specify the group, bank, and number.

What is manual mode?

In this mode you can turn the effect loops (1–5) on/off individually.



Number switches [1]–[5]

Use these to select a patch number. The indicator of the currently selected number is lit blue.

In manual mode, these switches turn each effect loop (1–5) on/off individually. When an effect loop is on, its number indicator is lit red.

[BANK] switch

In memory mode, use this switch to change banks. Each time you press the switch, you'll cycle through the banks in the order of 1 → 2 → 3 → 4 → 5 → 1 → ...

If you hold down this switch for two seconds or longer, you'll switch between memory mode (indicator lit blue) and manual mode (indicator lit red).

If you like, you can make this indicator blink in time with the tempo (p. 12).

* You can also change the way in which banks are switched (p. 12).

MEMO

You can also assign a different function to each switch (p. 10).

[MUTE] switch

Mutes the sound that is output from the ES-5. If mute is on, the indicator is lit blue.

Hold down the switch for two seconds or longer to enter the bypass state (indicator lit red); the input is output without change.

Attaching the Rubber Feet

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

Attach the rubber feet in alignment with the marks on the bottom of the unit.



- * When turning the unit over, be careful so as to protect the buttons and switches from damage. Also, handle the unit carefully; do not drop it.
- * If the rubber feet are not attached correctly, the unit may be deformed when you press the switches.

Turning the Power On and Off

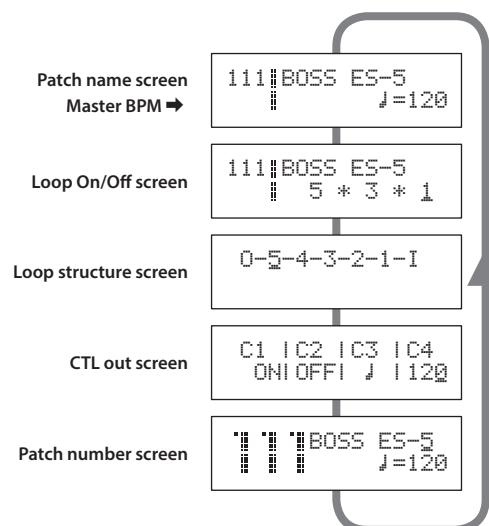
Once everything is properly connected (p. 2), be sure to follow the procedure below to turn on their power. If you turn on equipment in the wrong order, you risk causing malfunction or equipment failure.

- When powering up:** Turn on the power to your guitar amp last.
- When powering down:** Turn off the power to your guitar amp first.

Switching the Play Screen

The screen that appears when you turn on the power is called the "play screen," and the state in which the play screen is shown is called "play mode."

There are five types of play screen as shown in the following illustration, and you can use the [DISPLAY/EXIT] button to switch between them.



MEMO

Even in play mode, you can use the [◀] [▶] buttons and [-] [+] buttons to edit the settings.

To save your edited settings, use the patch write (p. 6) operation.

NOTE

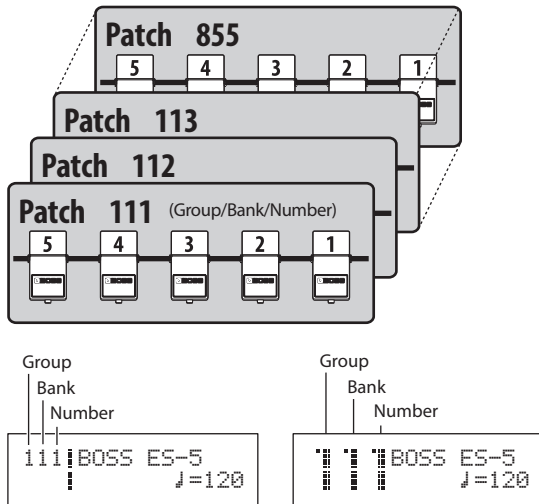
The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.

Saving/Recalling a Combination of Effect Units (Memory Mode)

“Memory mode” is the mode in which you can save combinations of effect loops (patches) in the ES-5, and recall those saved settings. In contrast to memory mode, “manual mode” is the mode in which you can use the switches to turn each effect loop on/off manually.

Patch Structure

A “patch” consists of a combination of effect loops (each effect loop’s on/off status and connection order) and parameter settings. Patches are organized by group (1–8), bank (1–5), and number (1–5). You can store 200 patches.



Switching Between Memory and Manual Modes

1. Hold down the [BANK] switch for two seconds or longer.

Each time you press this switch, you alternate between memory mode and manual mode.

- In memory mode, the BANK (MEMORY/MANUAL) indicator is lit blue.
- In manual mode, the BANK (MEMORY/MANUAL) indicator is lit red.

In manual mode

Pressing the number switches [1]–[5] turns each effect loop on/off.

- The number indicator is lit red if the corresponding effect loop is on, and unlit if that effect loop is off.

111 BOSS ES-5	1, 3, 5	On
5 * 3 * 1	2, 4	Off

Saving a Patch (Patch Write)

NOTE

- The patch you created is lost if you turn off the power or switch patches before performing the patch write operation.
- When you perform the patch write operation, the patch that was in the save-destination is lost.

1. Press the [WRITE] button.

```
111
Patch name
```

2. Use the [◀] [▶] buttons and [-] [+] buttons to select the save-destination group/bank/patch number.

- * You can also use the [BANK] switch and number switches [1]–[5] to select the bank number and patch number.

3. Press the [ENTER] button.

4. Use the [◀] [▶] buttons and [-] [+] buttons to assign a patch name.

- * If you decide to cancel the patch write operation, press the [DISPLAY/EXIT] button several times.

5. Press the [WRITE] button or the [ENTER] button.

The display indicates “Executing...,” and then the previous display reappears when patch write is completed.

MEMO

- You can write a patch from either memory mode or manual mode.
- When you write a patch, the ES-5 switches to memory mode.

Recalling a Patch (Patch Change)

1. Use the [◀] [▶] buttons and [-] [+] buttons to select a group.

2. Use the [BANK] switch to select a bank.

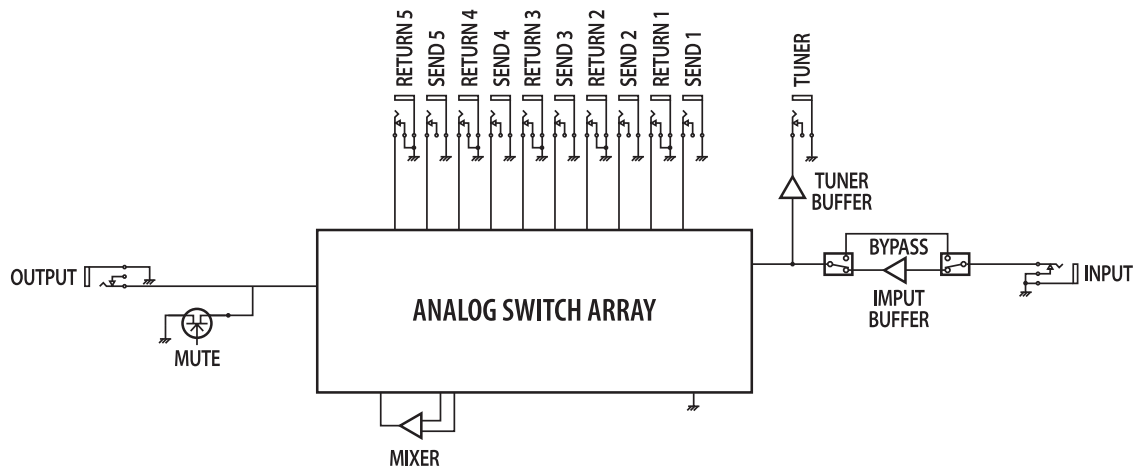
3. Use the number switches [1]–[5] to select a patch.

MEMO

- In the patch name screen and patch number screen of Play mode, you can use the [◀] [▶] buttons and [-] [+] buttons to select a patch.
- You can choose whether pressing the [BANK] switch cycles through banks 1–5, or whether banks 1–5 are selected by pressing the [BANK] switch and then pressing one of the number switches [1]–[5]. For details on how to make this setting, refer to “Making Global Settings (System Setting)” (p. 12).
- You can specify whether the next patch is selected as soon as you use the [BANK] switch to change banks, or whether the patch is not changed until you then press a number switch. For details on how to make this setting, refer to “Making Global Settings (System Setting)” (p. 12).

Creating a Patch

Block Diagram



The ES-5 uses an “analog switch array” that lets you freely change the connection order of your effect units. It also contains an internal mixer, and lets you create a wide range of sounds by connecting effect units in parallel or using the “Carryover” function.

Carryover

This function cuts only the input while leaving the output connected when you change patches. For example, you can use this to allow just the delay sound to remain when switching patches.

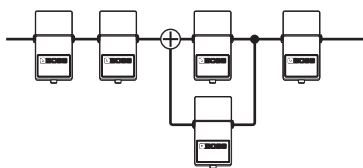
Tips for Creating Patches (Sounds)

Using the internal mixer is important in order to take advantage of the ES-5’s unique features, such as the ability to connect loops in parallel and use the Carryover function. Understanding how to use the mixer will make it even more enjoyable to create patches (sounds).

NOTE

- The same mixer is used for parallel connections and for Carryover. This means that depending on the settings, you might not be able to use a parallel connection, or that Carryover might not work.
- If you connect a loop in parallel or if you use the Carryover function, the mixer is configured appropriately for the parallel connections or Carryover settings. If you turn on the mixer without specifying parallel connections or Carryover, the mixer is configured immediately before the output.

Parallel connection



⊕ : Mixer

Using the Carryover function

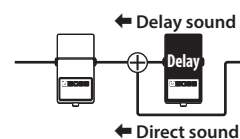
This lets you preserve the sound (e.g., delay sound) when you switch patches.

- Before the patch change



- After the patch change

The send to the delay loop is cut, and only the return is mixed with the direct sound.



* To use the Carryover function, enable Carryover for the patch that follows the patch change.

* Carryover might not work if the Loop Structure (p. 9) settings differ before and after the patch change.

Changing the Effect Loop Settings

In the Loop Structure screen you can make the following settings.

- Change the connection order of the effect loops
- Create a parallel connection
- Specify Carryover

Loop Structure screen

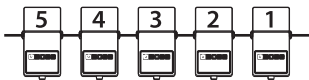
The Loop Structure screen shows the following content.

0-5-4-3-2-1-I

I	INPUT
1-5	Loop number
5-I	A loop for which Carryover is specified
0	OUTPUT

Changing the Effect Loop Connection Order

Before the change



Example: Change the order of effect loops 2 and 3

1. In play mode, press the [DISPLAY/EXIT] button several times to access the Loop Structure screen.

0-5-4-3-2-1-I

2. Use the [◀] [▶] buttons to select the loop whose connection you want to change.

Move the cursor to effect loop 2.

0-5-4-3-2-1-I

3. Use the [-] [+] buttons to move the loop number.

When you press the [-] button, effect loops 2 and 3 change places.

0-5-4-2-3-1-I

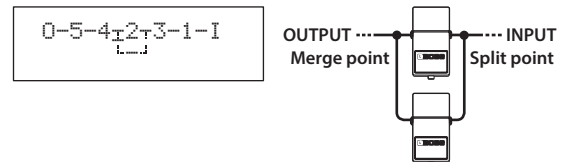


Making a Parallel Connection

Example: Connect effect loops 2 and 3 in parallel

4. Use the [◀] [▶] buttons to move the cursor to the merge point of the parallel connection, and press the [ENTER] button.

Move the cursor between effect loops 2 and 4, and press the [ENTER] button; the parallel loop is created.



* Depending on the settings, there might be cases in which parallel connection is not possible (p. 7).

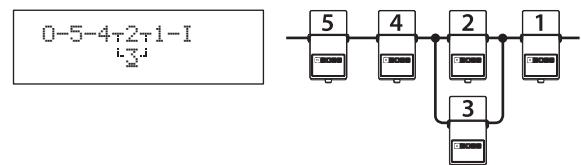
5. Use the [▶] button to select the loop whose connection you want to change.

Move the cursor to effect loop 3.

0-5-4-2-3-1-I

6. Use the [-] button to move the loop number.

When you press the [-] button three times to move effect loop 3, effect loops 2 and 3 are connected in parallel.



Cancelling a Parallel Connection

Use the [◀] [▶] buttons to move the cursor to the merge point of the parallel connection, and press the [ENTER] button; the parallel connection is cancelled.



Specifying Carryover

Example: You can specify Carryover for effect loop 5

7. Use the [◀] [▶] buttons to select the loop for which you want to specify Carryover, and press the [ENTER] button.

Move the cursor to effect loop 5 and press the [ENTER] button; Carryover is specified.

0-5-4-3-2-1-I

* Depending on the settings, there are cases in which Carryover does not work (p. 7).

Editing the Settings of a Patch (Memory Edit Mode)

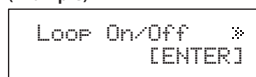
MEMO

Once you're in memory edit mode, you won't be able to switch between memory mode and manual mode. Also, the number switches [1]–[5] will turn each effect loop on/off.

Basic Operation

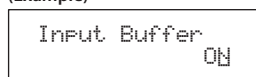
1. Recall the patch that you want to edit.
2. Press the [EDIT] button.
3. Use the [◀] [▶] buttons to select "Patch" or "CTL/EXP," and press the [ENTER] button.

(Example)



4. Use the [◀] [▶] buttons to select a parameter, and press the [ENTER] button.

(Example)



5. Use the [◀] [▶] buttons to move the cursor, and use the [-] [+] buttons to specify its value.

6. To save the edited settings, write the patch.

To cancel without saving, press the [DISPLAY/EXIT] button several times.

Parameter List

Patch



Parameter	Value/Explanation																
Patch Name	Up to 12 characters																
Loop On/Off	<p>You can turn each effect loop on/off. When on, a "♯" icon is shown.</p> <p>* You can also turn them on/off by pressing the number switches [1]–[5].</p>																
Loop Structure Carryover	<p>You can make the following settings. For details on operation, refer to "Changing the Effect Loop Settings" (p. 8).</p> <ul style="list-style-type: none"> • Connection order of each effect loop • Parallel connection settings • Carryover setting <p>* Depending on the settings, there are cases in which parallel connection is not possible, or in which Carryover does not work.</p>																
C1–4	<p>Specify the control signals that are sent from the EXT CTL CTL 1/2, 3/4 jacks when you switch patches. The available control signals depend on the Play Option/C1–4 setting (p. 12).</p> <p>For LAT</p> <table border="1"> <tr> <td>OFF</td> <td>Sends "off"</td> </tr> <tr> <td>ON</td> <td>Sends "on"</td> </tr> </table> <p>For PLS, INV</p> <table border="1"> <tr> <td>OFF</td> <td>Sends a short (100 ms) pulse when changing between "off" and "on."</td> </tr> <tr> <td>ON</td> <td>* If the display of the ES-5 differs from the state of the connected equipment, switch the state of the connected equipment.</td> </tr> </table> <p>For TP2–4</p> <table border="1"> <tr> <td>OFF</td> <td>Sends nothing</td> </tr> <tr> <td>♩</td> <td>Sends tempo at the interval of the specified note value according to the Master BPM value</td> </tr> <tr> <td>♩</td> <td>* Depending on the Master BPM setting, there are cases in which this cannot be sent.</td> </tr> <tr> <td>20–500</td> <td>Sends the specified tempo (♩=)</td> </tr> </table>	OFF	Sends "off"	ON	Sends "on"	OFF	Sends a short (100 ms) pulse when changing between "off" and "on."	ON	* If the display of the ES-5 differs from the state of the connected equipment, switch the state of the connected equipment.	OFF	Sends nothing	♩	Sends tempo at the interval of the specified note value according to the Master BPM value	♩	* Depending on the Master BPM setting, there are cases in which this cannot be sent.	20–500	Sends the specified tempo (♩=)
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♩	* Depending on the Master BPM setting, there are cases in which this cannot be sent.																
20–500	Sends the specified tempo (♩=)																
Input Buffer	Turns the input buffer on/off. ON, OFF																
Mixer Sw	Turns the mixer on/off. If you connect a loop in parallel or use the Carryover function, the mixer turns on automatically. ON, OFF																
Mixer Gain	<p>This is the output gain of the mixer. It is available only if Mixer Sw is ON.</p> <p>* If Mixer Sw is ON, the signal is output through the ES-5's op-amp.</p> <p>* If Input Buffer is off and all effect loops are off, turning Mixer Sw on might lower the volume.</p> <p>-12 dB, -9 dB, -6 dB, -3 dB, 0 dB, +3 dB, +6 dB</p>																
Master BPM	Specifies the patch's BPM. 20–500																

Creating a Patch

Parameter	Value/Explanation
Patch MIDI 1–8	
* When the Patch MIDI screen is displayed, pressing the [ENTER] button transmits all of the MIDI messages that are assigned in Patch MIDI 1–8.	
Ch	Specifies the transmit channel for MIDI messages. OFF (not transmitted), 1–16
LSB MSB	Specifies whether bank select messages are transmitted when you switch patches. * It is not possible to turn on only Bank LSB. * Not transmitted if PC is OFF. * It is not possible to transmit only bank select. Bank select is always transmitted in conjunction with program change.
	OFF Not transmitted. 0–127 The specified value is transmitted.
PC	Specifies whether a program change is transmitted when you switch patches.
	OFF Not transmitted. 1–128 The specified value is transmitted.
Ctl1–2 CC#	Specifies whether a control change is transmitted when you switch patches.
	OFF Not transmitted. CC#000–127 The specified control change is transmitted.
Ctl1–2 Val	Specifies the value of the control change. 0–127

CTL/EXP

Parameter	Value/Explanation
BANK, MUTE, NUMBER 1–5, CTL IN 1–2	
* If the Preference (p. 12) parameter is set to SYS, the screen indicates (SYS).	
	Specify the function of the [BANK] switch, [MUTE] switch, number switches [1]–[5], and footswitches connected to the CTL IN jack. * If Patch Slt Mod (p. 12) is set to MODE 2, BnkM/BnkD/BnkU wait for the bank to be selected.
	OFF Pressing the switch does nothing.
MemM	Switches between memory mode and manual mode.
Mute	[MUTE] switch
BnkM	Change banks • 1 → 2 → 3 → 4 → 5 → 1... • Hold down for two seconds to switch between memory/manual modes
GrpD, GrpU	Change groups • GrpD: 8 → 7 → 6 → ...1 → 8... • GrpU: 1 → 2 → 3 → ...8 → 1...
BnkD, BnkU	Change banks • BnkD: 5 → 4 → 3 → 2 → 1 → 5... • BnkU: 1 → 2 → 3 → 4 → 5 → 1...
MemD, MemU	Change patches • MemD: 855 → 111 • MemU: 111 → 855
Num1–5	Number switches [1]–[5]
Ctl1–4	A control signal is sent from the corresponding EXT CTL jack CTL 1/2, 3/4.
BPM	Tap the switch to control the master BPM.
Min, Max	Specify the values that are sent when the switch is pressed (Max) and released (Min). * These settings are available only when Func is Ctl1–4.
	OFF Sends "off" ON Sends "on"
Mod	Specifies the operation of the switch. * These settings are available only when Func is Ctl1–4.
	MOM Normally off; on only while the switch is being operated. TGL Alternates on/off each time the switch is operated.

Parameter	Value/Explanation
EXP IN	
* If the Preference (p. 12) parameter is set to SYS, the screen indicates (SYS).	
Func	Specify the function of the expression pedal connected to the CTL IN jack. OFF Operating the pedal does nothing. BPM Use the pedal to control Master BPM.
Min, Max	Specify the values that are sent when the pedal is advanced (Max) and returned (Min). * This can be set only if Func is BPM. (Min) 20–500, (Max) 20–500
Assign (A) 1–8	
Sw	Turns the assignment on/off. ON, OFF
	Specifies the controller (source).
	CTL1, 2 A footswitch connected to a CTL IN jack Mute [MUTE] switch Bank [BANK] switch Num1–5 Number switches [1]–[5] CNum Currently selected number switch EXP An expression pedal connected to a CTL IN jack.
Src	INT Internal pedal The virtual expression pedal will begin operating when started by the specified trigger (Trig), modifying the parameter specified by "Target." 
	WAV Wave pedal The virtual expression pedal will cyclically modify the parameter specified by "Target" in a fixed wave form. 
	CC000–127 Control change number from an external MIDI device
Mod	Specifies the operation of the controller. MOM The value will normally be off (minimum value), and will be on (maximum value) only while the control is being operated. TGL The value will toggle between off (minimum) and on (maximum) each time the control is operated.
Cate	Selects the Target category.
Target	Specifies the parameter to be controlled.
Min Max	Specifies the range of change for the parameter. The values will depend on the parameter that's assigned by Target.
Ch	*1 Specifies the transmit channel for control changes. 1–16
CC#	*1 Specifies the controller number that is transmitted. 000–127
Act L Act H	Within the operating range of the source, this specifies the range that will control the target parameter. (L) 0–126 The target parameter will be controlled within the range specified. Normally, you should leave Act L at "0" and Act H at "127." (H) 1–127
Trig	Specifies how the motion of the internal pedal will be triggered. PAT When the patch is switched ExpL, ExpM, ExpH When an expression pedal connected to a CTL IN jack (EXP) enters the following status ExpL Minimum ExpM Advance the pedal through the central value ExpH Maximum
Tim	*2 Specifies the time over which the internal pedal will move from the released (heel) position to the depressed (toe) position. 0–100

Parameter	Value/Explanation
*2 Crv	Select one of the following curves to specify the change produced by the internal pedal.
*3 Rate	Specifies the time for one cycle of the wave pedal. 0-100 If this is set to a note value, a time corresponding to the "Master BPM" value specified for each patch is assigned.
*3 Form	Select one of the following to specify the change produced by the wave pedal.

- *1 Shown if Cate is set to MIDI.
- *2 Shown if Src is set to INT.
- *3 Shown if Src is set to WAV.

Target List

Target	Min/Max	Explanation
When Cate is set to LOOP		
L1-5	OFF, ON OFF, ON	Effect loop on/off
When Cate is set to E.CTL		
CTL1-4	OFF, ON OFF, ON	Switches the setting of the jack.
When Cate is set to MODE		
MemM	MEM, MAN MEM, MAN	Switches between memory mode and manual mode.
Mute	OFF, ON OFF, ON	Mute on/off
Byp	OFF, ON OFF, ON	Bypass on/off
When Cate is set to MIDI		
000-127	0-127 0-127	The control change value is transmitted from the MIDI OUT connector.
When Cate is set to BPM		
MstBPM	20-500 20-500	Master BPM
Tap	OFF, ON OFF, ON	Uses tap operations to set the Master BPM.
When Cate is set to LED		
Mute, Bank, Num1-5	OFF, ON OFF, ON	Lights or turns off the indicator of the controller that is set to Target.

Making Global Settings (System Setting)

Settings that are shared by the entire ES-5 are called “system settings.”

1. Press the [EDIT] button.
2. Use the [◀] [▶] buttons to select the system setting category (Play Option–Others), and then press the [ENTER] button.

```

«Play Option »
 [ENTER]
    
```

```

Switch Mode »
      PUSH
    
```

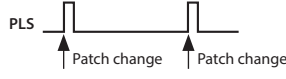
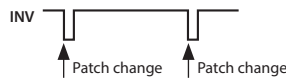
3. Use the [◀] [▶] buttons to select a parameter, and then press the [ENTER] button.

```

Switch Mode
      PUSH
    
```

4. Use the [-] [+] buttons to specify the value.
5. Press the [DISPLAY/EXIT] button several times to return to the play screen.

List of Parameters

Parameter	Value/Explanation
Category: Play Option	
Switch Mode	Specifies the timing at which the bank or patch is changed when you operate the switch. PUSH The change happens when you press the switch. RELEASE The change happens when you release the switch.
	Specifies how patches are switched. * Regardless of the Bank Chg Mode setting, the group is switched immediately.
Bank Chg Mode	WAIT Although the indication in the display is updated to reflect the change in the bank when a [BANK] switch is pressed, the patch will not change until a number switch has been pressed.
	IMMEDIATE The patch switches instantly when a [BANK] switch or any of the number switch is pressed.
C1–4	Specifies the operation of the EXT CTL CTL 1/2, 3/4 jacks. LAT (Latch) Latch operation
	Send a pulse when changing patches PLS 
	INV 
	TP2 (Tap 2) Turns on/off twice at the Master BPM setting when the patch changes
	TP3 (Tap 3) Turns on/off three times at the Master BPM setting when the patch changes
	TP4 (Tap 4) Turns on/off four times at the Master BPM setting when the patch changes
Bank Extent Min, Max	Specify the lower and upper limit of the banks that can be selected. Only the specified range of banks are available for selection. (Min) 1–5, (Max) 1–5
Patch Chg Time	Specifies the mute time when switching patches. 0–10
Patch Slct Mod	Specifies how patches are switched. MODE1 Each time the [BANK] switch is pressed, cycle through 1 → 2 → 3 → 4 → 5 → 1 → ...
	MODE2 Press the [BANK] switch and then press a number switch [1]–[5] to switch to banks 1–5.
Beat Indicator	If this is ON, the BANK (MEMORY/MANUAL) indicator blinks in time with the Master BPM (p. 9) setting. OFF, ON

Parameter	Value/Explanation
Category: Preference	
Input Buffer	Specifies whether the input buffer uses the setting of each patch or the system setting. PAT The settings of each patch are used. OFF, ON Turns the input buffer on/off.
	BANK, MUTE, NUMBER 1–5, CTL IN 1–2, EXP IN PAT The settings of each patch are used. SYS The settings of system settings are used.
Category: MIDI Setting	
MIDI Out Mode	Selects the operation of the MIDI OUT/THRU connector. OUT Operates as a MIDI OUT connector. THRU Operates as a MIDI THRU connector. MIDI data received at MIDI IN is mixed with the MIDI data of the ES-5, and output together.
	Rx Ch
Dev ID	Specifies the device ID used to transmit and receive exclusive messages. 1–32
Sync	This setting determines the basis used for synchronizing the timing for tempo and other time-based parameters. * When synchronizing performances to the MIDI Clock signal from an external MIDI device, timing problems in the performance may occur due to errors in the MIDI Clock.
	INT Synchronize with the ES-5's internal clock. AUTO Synchronize with MIDI clock received via MIDI. However, automatically synchronize with the ES-5's internal clock if MIDI clock messages cannot be received.
Clock Out	Specifies whether MIDI clock messages are transmitted. ON, OFF
Category: PC Map	
Bank 0/PC# 1/Memory Bank 1/PC#128/Memory	You can use the “program change table” to freely specify the correspondence between program change messages received by the ES-5 and the patches that are selected. 111–855 Specify the group/bank/number of the patch that is selected when “bank select MSB + program number” are received. * Bank select LSB is ignored.
Category: Others	
LCD Contrast	Adjust the contrast (brightness) of the display. 1–10
Pol Exp	Specify the polarity of the CTL IN EXP jack. ST If a Roland or BOSS expression pedal is connected
	IN If pressing or releasing the connected expression pedal produces the opposite result from what is expected
Pol C1, C2	Specify the polarity of the CTL IN CTL 1/2 jack. ST If a BOSS footswitch is connected
	IN If pressing or releasing the connected footswitch produces the opposite result from what is expected

Patch/Data Operations (Utility)

1. Press the [EDIT] button.
2. Use the [◀] [▶] buttons to select “Utility” and press the [ENTER] button.
3. Use the [◀] [▶] buttons to select the desired item, and press the [ENTER] button.

Copying a Patch (Patch Copy)

Patch Copy
111 → 855

Select the copy-source and copy-destination patches, and press the [ENTER] button.
* The copy-destination patch is overwritten.

Exchanging Patches (Patch Exchange)

Patch Exchange
111 ↔ 855

Select the exchange-source and exchange-destination patches, and press the [ENTER] button.

Initializing a Patch (Patch Init)

Patch Init
111

Select a patch that you want to initialize, and press the [ENTER] button.
When the confirmation message appears, press the [ENTER] button once again.

Copying a Bank (Bank Copy)

Bank Copy
11 → 85

Select the copy-source and copy-destination bank, and press the [ENTER] button.
* All patches in the copy-destination bank are overwritten.

Exchanging Banks (Bank Exchange)

Bank Exchange
11 ↔ 85

Select the exchange-source and exchange-destination banks, and press the [ENTER] button.

Copying a Group (Group Copy)

Group Copy
1 → 8

Select the copy-source and copy-destination group, and press the [ENTER] button.
* All patches in the copy-destination group are overwritten.

Exchanging Groups (Group Exchange)

Group Exchange
1 ↔ 8

Select the exchange-source and exchange-destination groups, and press the [ENTER] button.

Transmitting Data to an External MIDI Device (Bulk Dump)

Bulk Dump
Frm: Sys To: 855

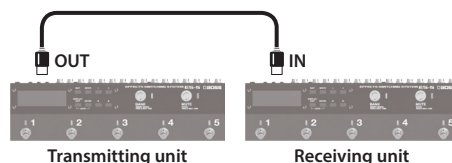
With the ES-5, you can use Exclusive messages to set another ES-5 to the same settings or to save settings to MIDI sequencers and other such devices. This transmission of data is referred to as bulk dump.
“System settings” + “settings of the selected patch” can be transmitted.

Frm (From) Sys, 111–855
To 111–855, Sys (*1)

*1 Shown if Frm is set to Sys.

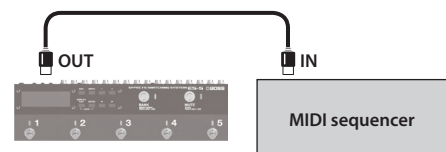
When Transmitting Data to Another ES-5

Make connections as shown in the illustration below, and set the transmitting and receiving units to the same device ID (p. 12).



When Saving to a MIDI Sequencer

Connect as shown in the figure below, and put the sequencer in the state where it is ready to receive Exclusive messages.



Specify the highest patch whose data you want to transmit, and press the [ENTER] button.

Restoring saved data from a MIDI sequencer to the ES-5

Connect your MIDI sequencer's MIDI OUT to the ES-5's MIDI IN, select the same device ID as when transmitting the data to the MIDI sequencer, and then transmit the data from the MIDI sequencer.

Restoring the Factory Settings (Factory Reset)

```
Factory Reset
Frm:Sys To:855
```

Frm (From)	Sys, 111-855
To	111-855, Sys (*1)

*1 Shown if Frm is set to Sys.

"System settings" + "settings of the selected patch" can be returned to their factory-set condition (Factory Reset).

* All data that is reset is lost.

Specify the highest patch that you want to reset, and press the [ENTER] button.

When the confirmation message appears, press the [ENTER] button once again.

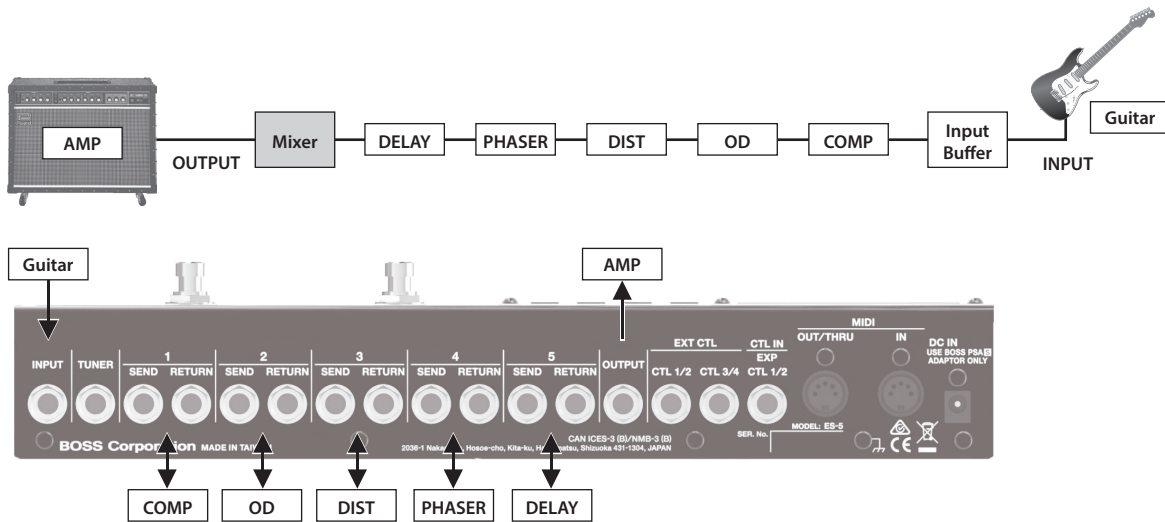
Advanced Applications

Adjusting the Level of Each Patch

Parameter	Value	Reference
Patch parameter		
Mixer Sw	ON	p. 9
Mixer Gain	-12 dB, -9 dB, -6 dB, -3 dB, 0 dB, +3 dB, +6 dB	

NOTE

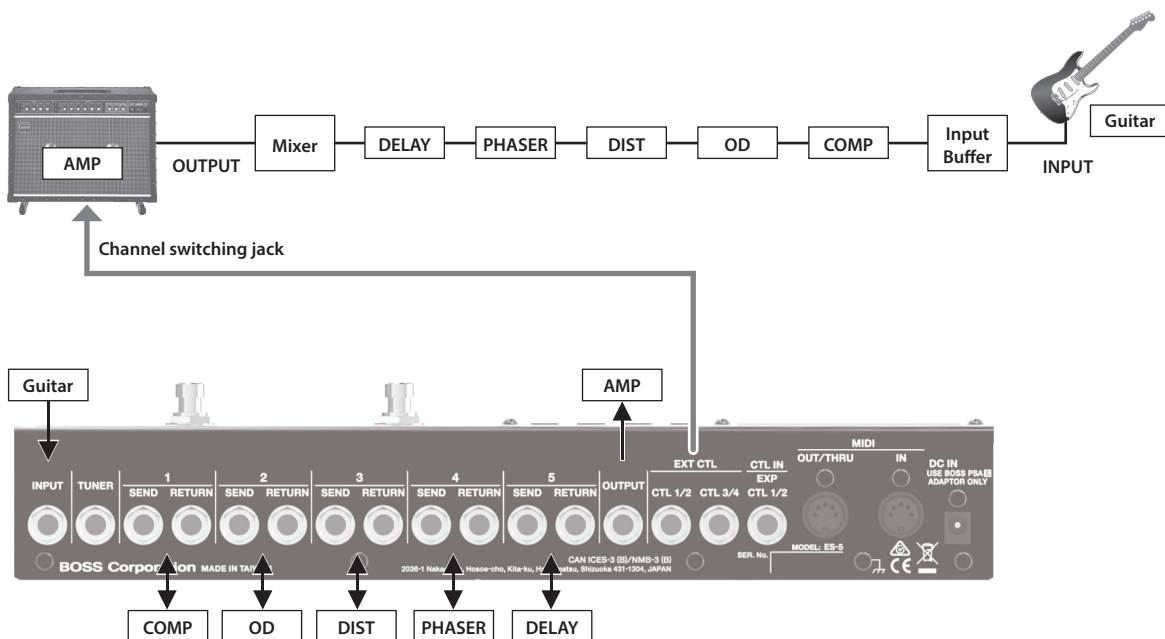
- If you're not using a parallel loop connection or Carryover, the mixer is placed immediately before the output.
- If Input Buffer is off and all effect loops are off, turning Mixer Sw on might lower the volume.



Switching the Amp's Channels

Parameter	Value	Reference
Patch parameter		
C1-4	ON, OFF	p. 9
System setting		
Play Option: C1-4	LAT, PLS	p. 12

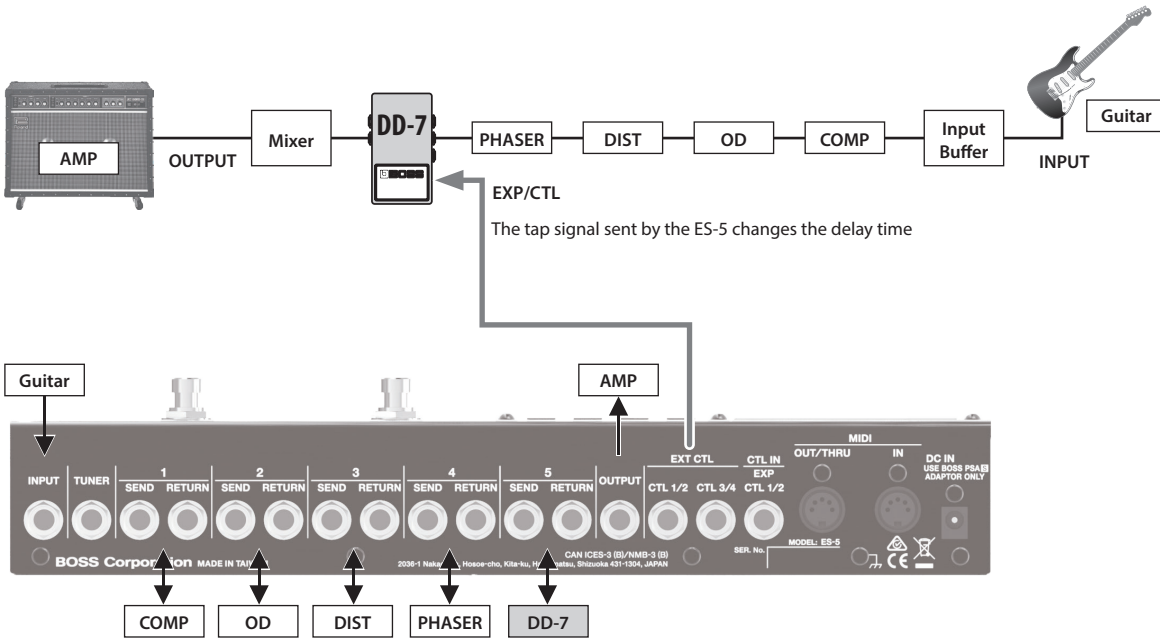
* As appropriate for the amp you're using, set Play Option: C1-4 to "LAT" or "PLS."



Changing the BOSS DD-7's Delay Time for Each Patch

Parameter	Value	Reference
Patch parameter		
C1-4	20-500	p. 9
System setting		
Play Option: CTL1-4	TP2-TP4	p. 12

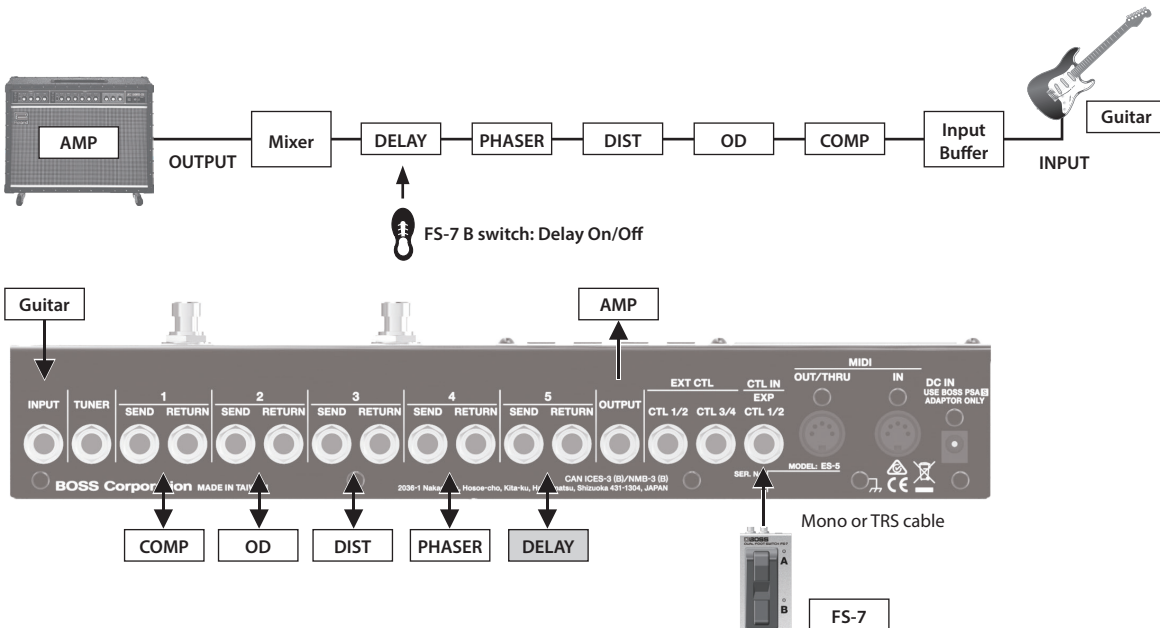
- * If you connect to the BOSS PH-3's EXP/CTL jack, you can change the Rate.
- * Depending on the settings of C1-4, there might be cases in which the delay time cannot follow.



Using the External Footswitch (BOSS FS-7's B Switch) to Turn Delay On/Off

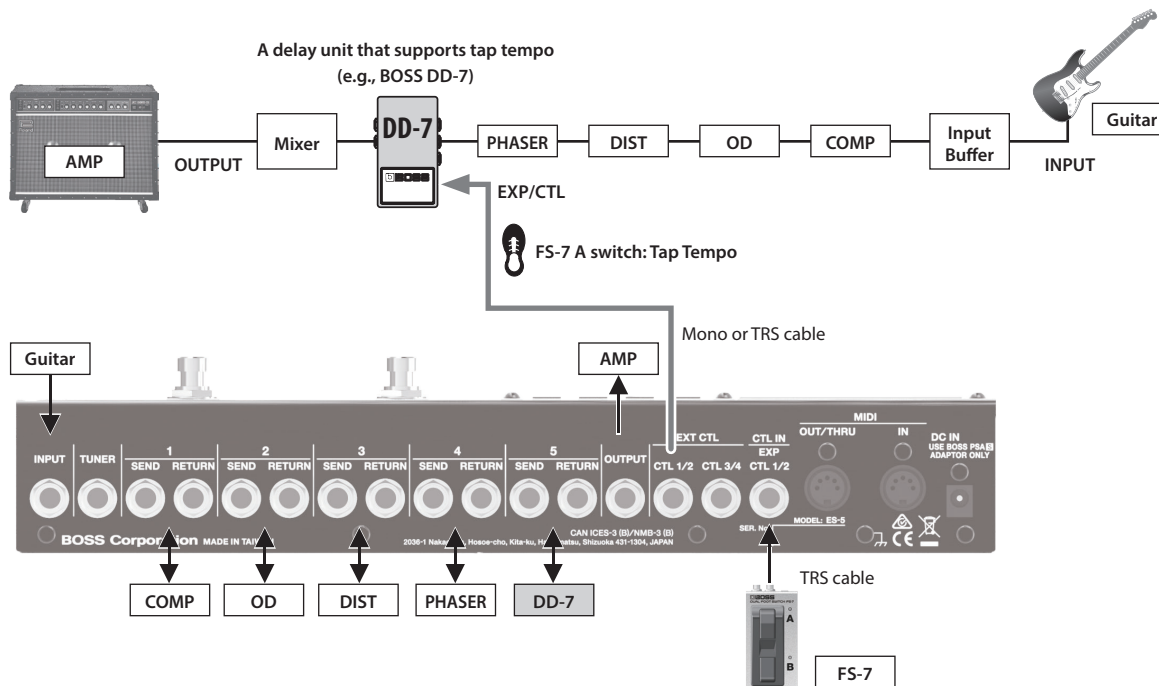
Parameter	Value	Reference	
Patch parameter (CTL/EXP)			
CTL IN 1	Func	OFF	
	Sw	ON	
	Src	CTL1	
Assign 1	Mod	TGL	p. 10
	Cate, Target	LOOP, L5	
	Min, Max	OFF, ON	
	Act L, Act H	0, 127	

- * You can also add an assignment to make the indicator light (p. 11).



Using the External Footswitch (BOSS FS-7's A Switch) to Change the Delay Time

Parameter	Value	Reference	
Patch parameter (CTL/EXP)			
CTL IN 2	Func	OFF	p. 10
	Sw	ON	
	Src	CTL2	
	Mod	MOM	
	Cate, Target	E.CTL, CTL1	
	Min, Max	OFF, ON	
Assign 1	Act L, Act H	0, 127	
	System setting		
Play Option: C1	TP2-TP4	p. 12	



English

日本語

Deutsch

Français

Italiano

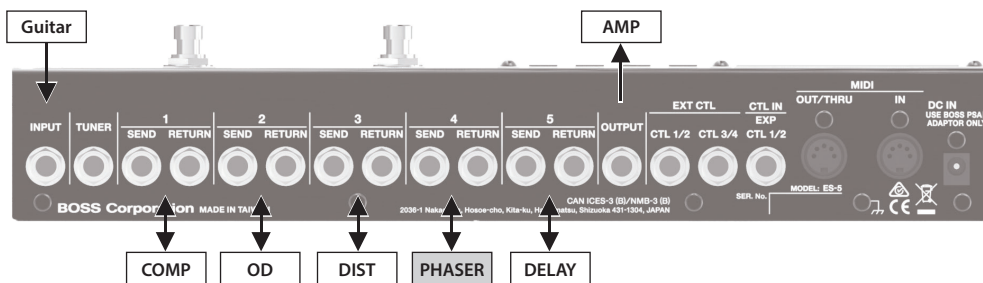
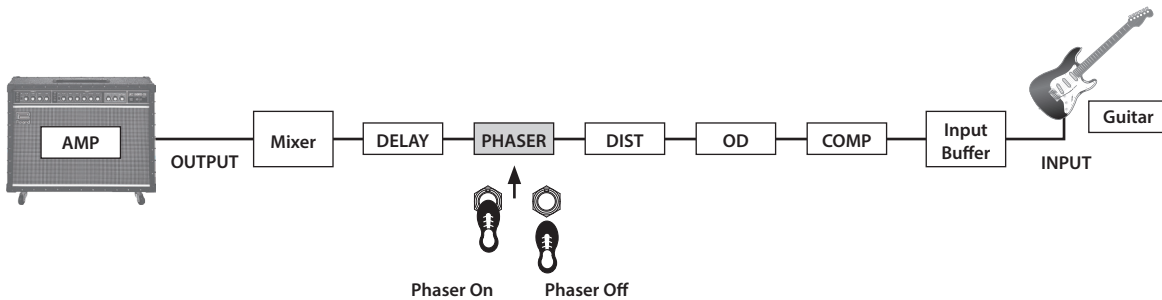
Español

Português

Nederlands

Applying Phaser Only While the Currently Selected Number Switch Is Held Down

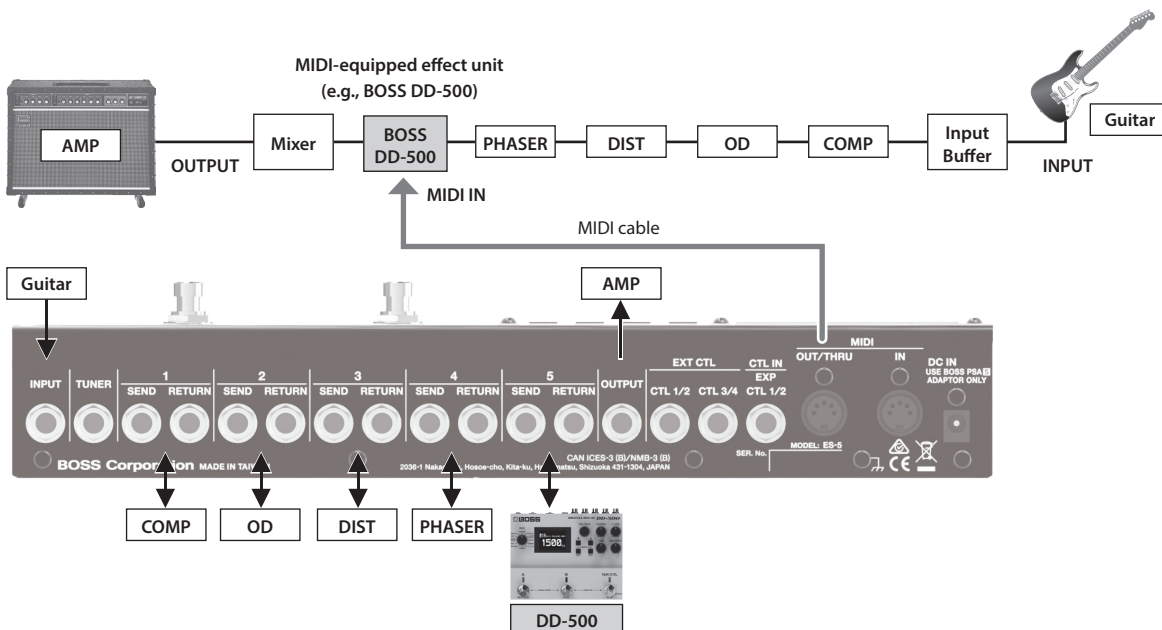
Parameter	Value	Reference	
Patch parameter (CTL/EXP)			
Assign 1	Sw	ON	p. 10
	Src	CNum	
	Mod	MOM	
	Cate, Target	LOOP, L4	
	Min, Max	OFF, ON	
	Act L, Act H	0, 127	



Switching a MIDI-Equipped Effect Unit's Memory When a Patch Is Changed

Parameter	Value	Reference	
Patch Parameter			
Patch MIDI 1	Ch	1-16	p. 10
	LSB	OFF, 0-127	
	MSB	OFF, 0-127	
	PC	1-128	

- * Set Ch (MIDI channel) to match the MIDI device that's connected.
- * If you want to switch more than 128 memories, use LSB and MSB (bank select LSB, MSB) as well.
- * The MIDI specification counts the PC (program change) starting at 1, but some devices start at 0. In this case, the memory number that is one less than the ES-3's PC setting is selected.

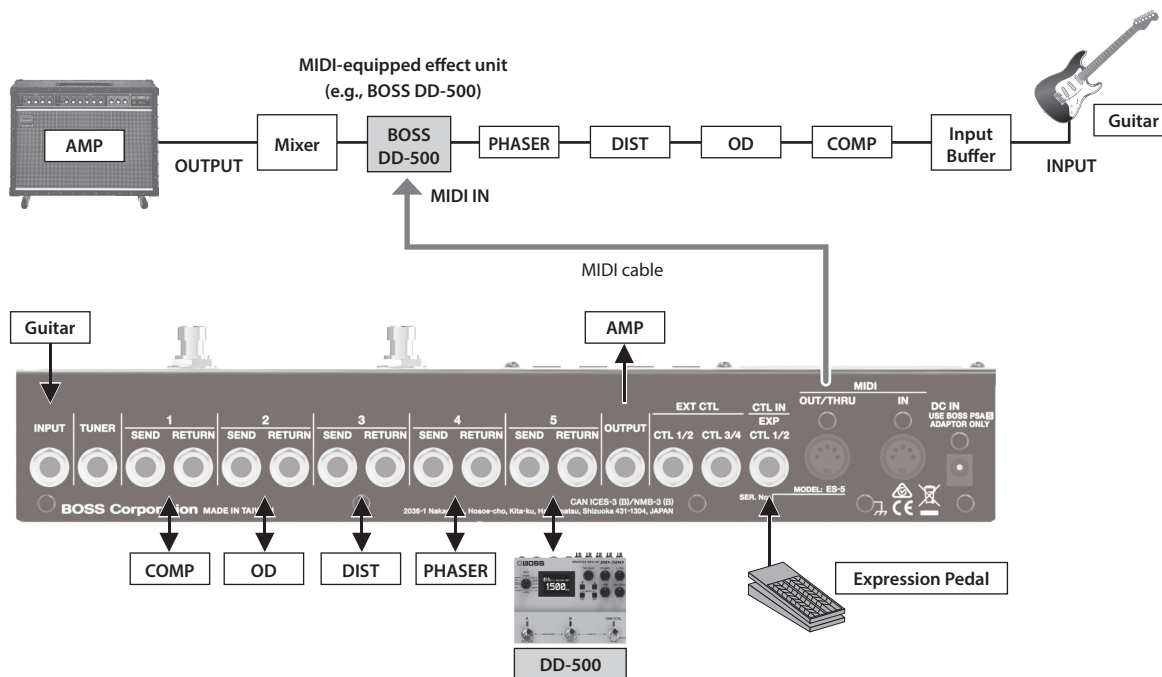


Using the Expression Pedal to Control a MIDI-Equipped Effect Unit

Parameter	Value	Reference	
Patch parameter (CTL/EXP)			
Assign 1	Sw	ON	p. 10
	Src	EXP	
	Mod	-	
	Cate	MIDI	
	Ch	1-16	
	CC#	000-127	
	Min, Max	0, 127	
Act L, Act H	0, 127		

* Set Ch (MIDI channel) and CC# (controller number) to match the MIDI device that's connected.

* By making multiple assignments, you can control multiple parameters simultaneously.

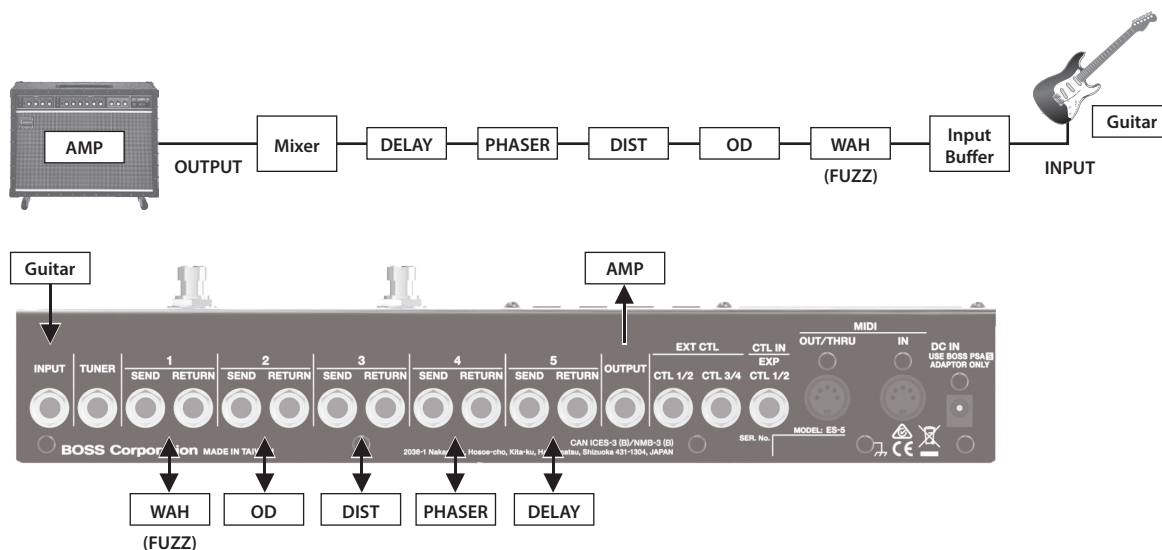


Connecting a Wah or Fuzz (Input Buffer Off)

The sound of some wah or fuzz units may change if they are connected after a buffer.

In this case, turn the ES-5's input buffer (Input Buffer) off.

Parameter	Value	Reference
Patch parameter		
Input Buffer	OFF	p. 9



Appendix

Troubleshooting

Problem	Items to check	Action	
No sound / volume too low	Are the connection cables broken?	Try using a different set of connection cables.	–
	Is the ES-5 correctly connected to the other devices?	Check connections with the other devices.	p. 2
	Is the connected amp turned off, or the volume lowered?	Check the settings of your amp/mixer system.	–
	Could the volume pedal have lowered the level?	Advance the volume pedal.	–
	Could mute be turned on?	Press the [MUTE] switch to turn mute off.	p. 4
	Is each effects set correctly?	Check the settings of each effects.	–
	Is the power to the external device connected to the SEND 1–5 and RETURN 1–5 jacks off, or is the volume of the device turned down?	Check the settings for the connected device.	–
	Could you be using a connection cable that contains a resistor?	Use a connection cable that does not contain a resistor.	–
Oscillating sound occurs	Could you have turned Input Buffer off and connected an effect loop in parallel, or specified Carryover?	Depending on the impedance of the signal, the volume may diminish. Turn on Input Buffer.	p. 9
	Could the gain value or the value of a volume-related parameter be too high due to the settings of a connected amp or effect unit?	Lower these values.	–
Sound switches on its own	Could an external MIDI device be set to modify the parameters?	Check the assignment settings.	p. 10
	Is "INT" or "WAV" set as the Src in Assign?	When the Src is set to "INT" or "WAV," the effect parameter set as the Assign Target changes automatically.	
Patch does not change	Is something other than the Play screen shown in the display?	On the ES-5, patches can be selected only when the Play screen is displayed. Press the [DISPLAY/EXIT] button several times to return to the Play screen.	p. 5
	Could you have changed the function of the [BANK] switch or the number switches [1]–[5]?	If the Func setting is set to OFF, change it to Bank, or Num1–5.	p. 10
Sound does not change when you switch patches	Are the loop settings of each patch correct?	Check the loop settings.	p. 9
Can't change the settings of a connected effect unit	Is the EXT CTL jack connected? Is the cable the correct type (mono, TRS)?	Check the cable type and connection.	p. 3
Can't specify Carryover / Can't specify parallel connection	Could you already be using the mixer?	There is only one internal mixer. Turn off the mixer that you're already using.	p. 7 p. 9
	Could the loop be turned off?	Turn the loop on.	p. 6
Can't use a controller to modify a parameter	Is the Preference setting set to anything other than PAT?	To change the settings for an individual patch, set the Preference setting to PAT. To change a specific setting for all patches in common, select a setting other than PAT.	p. 12
	Do the MIDI channel settings of both devices match?	Make sure that the MIDI channels of both devices match.	p. 10
	Do the controller number settings of both devices match?	Make sure that the controller number of both devices match.	p. 12
MIDI messages are not transmitted/received	Are the MIDI cables broken?	Try another set of MIDI cables.	–
	Are the MIDI cables connected correctly?	Connect MIDI IN and MIDI OUT.	–
	Do the MIDI channel settings match?	Match the MIDI channel settings. Receive channel of the ES-5: MIDI Setting → Rx Ch Transmit channel of the ES-5: Patch MIDI 1–8 → Ch	p. 12 p. 10
Effect not applied	Could the effect switch be off?	Check the on/off setting of each effect.	–

Error Messages

Display	Problem	Action	
MIDI BUFFER FULL!	The data cannot be processed correctly due to the high volume of MIDI messages.	Reduce the volume of MIDI messages transmitted to the ES-5. Reduce the tempo of the transmitting MIDI device.	–
MIDI OFFLINE!	Transmissions from the connected device have been interrupted. This message also appears when the power to the connected device has been turned off. It does not indicate damage.	Check to make sure no cable is disconnected and that there are no shorts.	–
DATA WRITE ERROR!	Writing to the memory for storage of user data failed.	The unit may be damaged. Consult the nearest Roland service center.	–
LOCKED!	The buttons are locked.	Turn "Lock function" off.	p. 4
NO MORE MIXER IS AVAILABLE!	The internal mixer is already being used.	Check the Loop Structure settings.	p. 7, p. 9
SYSTEM ERROR!	A problem has occurred in the system.	Contact your dealer or a nearby Roland service center.	–
MEMORY DAMAGED!	It is possible that the contents of memory have been damaged.	Please execute a Factory Reset. If this does not resolve the problem, contact your dealer or a nearby Roland service center.	–

Main Specifications

BOSS ES-5: Effects Switching System

Modes	Memory mode/Manual mode
Loops	5
Patch Memory	200
Nominal Input Level	INPUT, RETURN 1-5: -10 dBu
Maximum Input Level	INPUT, RETURN 1-5: +13 dBu
Input Impedance	INPUT: 1 MΩ (Buffer: On)
Nominal Output Level	SEND 1-5, OUTPUT, TUNER: -10 dBu
Maximum Output Level	SEND 1-5, OUTPUT, TUNER: +13 dBu
Output Impedance	OUTPUT, TUNER: 1 kΩ (Mixer: On)
Recommended Load Impedance	10 kΩ or greater
Controls	Number 1-5 switches, BANK switch, MUTE switch, EDIT button, WRITE button, - button, + button, DISPLAY/EXIT button, ENTER button, ◀ button, ▶ button
Display	16 characters, 2 lines (backlit LCD)
Indicator	Number 1-5 indicator, BANK (MEMORY/MANUAL) indicator, MUTE indicator
Connectors	INPUT jack, SEND 1-5 jacks, RETURN 1-5 jacks, OUTPUT jack, TUNER jack: 1/4-inch phone type EXT CTL CTL 1/2, CTL 3/4 jacks, CTL IN EXP CTL 1/2 jack: 1/4-inch TRS phone type MIDI connectors (IN, OUT/THRU) DC IN jack
Power Supply	AC adaptor
Current Draw	125 mA
Dimensions	337 (W) x 97 (D) x 68 (H) mm 13-5/16 (W) x 3-7/8 (D) x 2-11/16 (H) inches
Weight	1.3 kg / 2 lbs 14 oz
Accessories	AC adaptor, Owner's manual, Leaflet "USING THE UNIT SAFELY," Rubber foot x 4
Options (sold separately)	Footswitch: FS-5U, FS-5L, FS-6, FS-7 Expression pedal: FV-500L, FV-500H, Roland EV-5

* 0 dBu= 0.775 Vrms

USING THE UNIT SAFELY

⚠ WARNING

To completely turn off power to the unit, pull out the plug from the outlet
When the power needs to be completely turned off, pull out the plug from the outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible.



⚠ WARNING

Use only the supplied AC adaptor and the correct voltage
Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.



⚠ CAUTION

Keep small items out of the reach of children
To prevent accidental ingestion of the parts listed below, always keep them out of the reach of small children.
• Included Parts
• Rubber feet (p. 5)

Handle the ground terminal carefully
If you remove the screw from the ground terminal, be sure to replace it; don't leave it lying around where it could accidentally be swallowed by small children. When refastening the screw, make that it is firmly fastened, so it won't come loose.



IMPORTANT NOTES

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.
- Use only the specified expression pedal (FV-500H, FV-500L, Roland EV-5; sold separately). By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.
- Do not use connection cables that contain a built-in resistor.

- Depending on the circumstances of a particular setup, you may experience a discomforting sensation, or perceive that the surface feels gritty to the touch when you touch this device, or the metal portions of other objects, such as guitars. This is due to an infinitesimal electrical charge, which is absolutely harmless. However, if you are concerned about this, connect the ground terminal (see figure) with an external ground. When the unit is grounded, a slight hum may occur, depending on the particulars of your installation. If you are unsure of the connection method, contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

Unsuitable places for connection

- Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)



 **BOSS**