English

AC-3 Acoustic Simulator

Owner's Manual

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (supplied on a separate sheet).

After reading, keep the document(s) where it will be available for immediate reference.

BOSS

Main Features

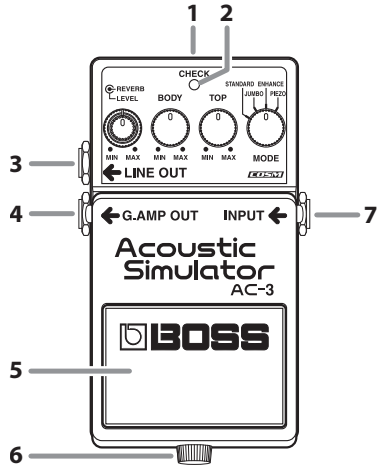
- Effects processor utilizes COSM technology to transform electric guitar input into beautiful acoustic guitar sounds.
- MODE knob allows you to select from a choice of four different acoustic guitar characters (tones).
- Features two types of output jacks, one for guitar amps and another for line out jacks, providing you with outputs suited to the connected device.
- "BODY" and "TOP" knobs can be used to adjust the acoustic guitar's characteristic body resonance and harmonics, allowing you to produce a wide variety of tones.
- Includes high-quality reverb developed exclusively for the AC-3.

COSM (Composite Object Sound Modeling)

Composite Object Sound Modeling (COSM) is BOSS/Roland's innovative and powerful sound modeling technology.

COSM analyzes the many factors that make up the original sound, such as the electrical and physical characteristics of the original, and then produces a digital model that can reproduce the same sound.

Panel Descriptions



1. AC Adaptor jack

Accepts connection of an AC Adaptor (optionally available BOSS PSA-series).

By using an AC Adaptor, you can play without being concerned about how much battery power you have left.

* **If there are batteries in the unit while an AC adaptor is being used, normal operation will continue should the line voltage be interrupted (power blackout or power cord disconnection).**
* **Use only the specified AC adaptor (PSA-series).**

2. CHECK indicator

This indicator shows whether an effect is ON/OFF, and doubles as the Battery Check indicator.

The indicator lights when an effect is ON.

* **If this indicator goes dim or no longer lights while an effect is ON, the battery is near exhaustion and should be replaced immediately. For instructions on changing the battery, refer to "Changing the Battery" (p. 13).**
* **The CHECK indicator shows whether the effect is on or off, and indicates the different functions. It does not indicate whether the power to the device is on or not.**

3. LINE OUT jack

This output jack is used for connecting to mixers, recorders, and other devices that accept line-level input.

When a cable is also connected to the G.AMP OUT jack, the output is sent from the LINE OUT jack when the effect is switched on, while the output is muted when the effect is switched off.

For details, refer to "Connections" (p. 6–p. 11).

4. G.AMP (Guitar Amp) OUT jack

This output jack is used for connecting to guitar amps and other effects processors.

The effect sound or direct sound is output from here depending on whether the effect is switched on or off.

When a cable is simultaneously connected to the LINE OUT jack, the output from the G.AMP OUT jack is muted when the effect is switched on, while the direct sound is output when the effect is switched off.

For details, refer to "Connections" (p. 6–p. 11).

5. Pedal switch

This switch turns the effects on/off.

6. Thumbscrew

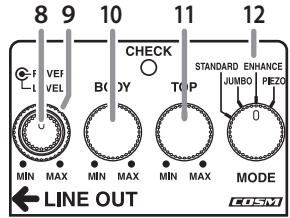
When this screw is loosened, the pedal will open, allowing you to change the battery.

* **For instructions refer to "Changing the Battery" (p. 13).**

7. INPUT jack

This jack accepts input signals (coming from an electric guitar, some other musical instrument, or another effects unit).

* **The INPUT jack doubles as power switch.**
Power to the unit is turned on when you plug into the INPUT jack; the power is turned off when the cable is unplugged. When not using the effects unit, be sure to disconnect the plug from the INPUT jack.



8. REVERB knob

This adjusts the amount of reverb applied to the sound.

9. LEVEL knob

This adjusts the volume of the effect sound.

10. BODY knob

This adjusts the resonance of the sound produced by the guitar body, altering the characteristic mellowness and breadth of the acoustic guitar sound.

11. TOP knob

This adjusts the sense of attack and the harmonic content of the upper range.

12. MODE knob

Provides for selection of the tone. The knob can be used to select any of four tones.

STANDARD	This tone is that of the popular Dreadnought acoustic guitar body style.
JUMBO	This setting provides a tone characteristic of an oversized guitar body, a tone featuring a rich bass response along with a beautiful high end.
ENHANCE	Providing a sharper attack than the standard tone, this tone does not become masked by the sounds of other instruments, even in bands and ensembles.
PIEZO	This setting provides the tone of a round-back acoustic guitar, with subdued body resonance and a unique attack.

Connections

* **Power is turned on whenever a plug is inserted into the INPUT jack.**
* **Raise the amp volume only after turning on the power to all connected devices.**
* **The use of an AC adaptor is recommended as the unit's power consumption is relatively high. Should you prefer to use batteries, please use the alkaline type.**
* **To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.**
* **We recommend that you keep batteries installed in the unit even though you'll be powering it with the AC adaptor. That way, you'll be able to continue a performance even if the cord of the AC adaptor gets accidentally disconnected from the unit.**
* **Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.**

  When powering up:

  Turn on the power to your guitar amp last.

  When powering down:

  Turn off the power to your guitar amp first.

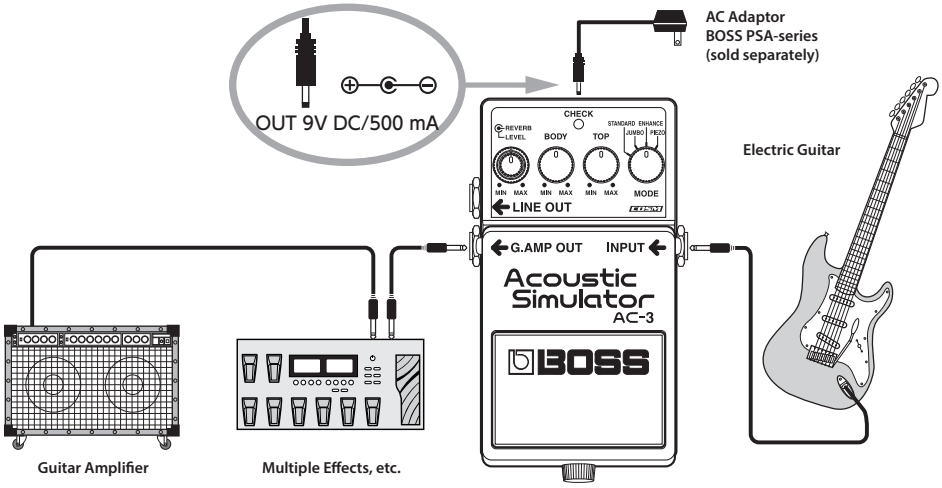
* **Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.**
* **When operating on battery power only, the unit's indicator will become dim when battery power gets too low. Replace the battery as soon as possible.**
* **If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in "USING THE UNIT SAFELY" and "IMPORTANT NOTES."**

NOTE (Placement)

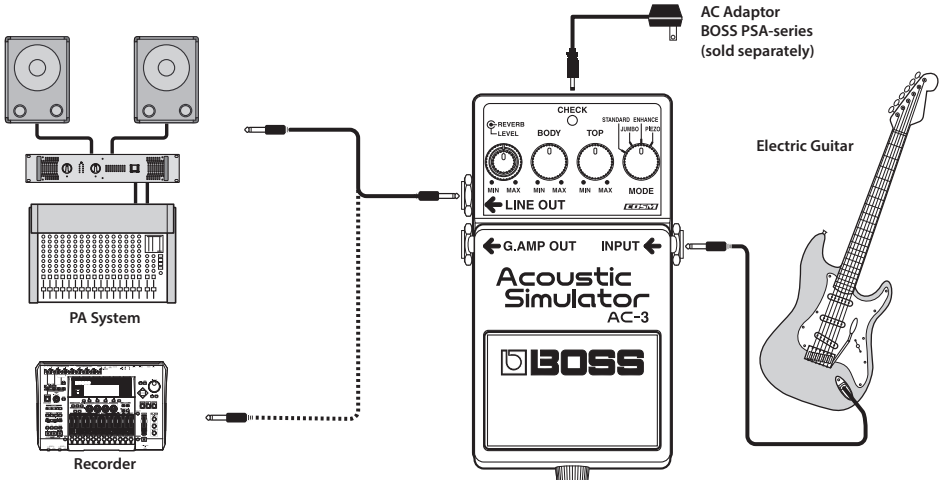
Depending on the material and temperature of the surface on which you place the unit, its bottom cover (rubber) may discolor or mar the surface. You can place a piece of felt or cloth under the bottom cover to prevent this from happening.

If you do so, please make sure that the unit will not slip or move accidentally.

When Connecting to a Guitar Amp



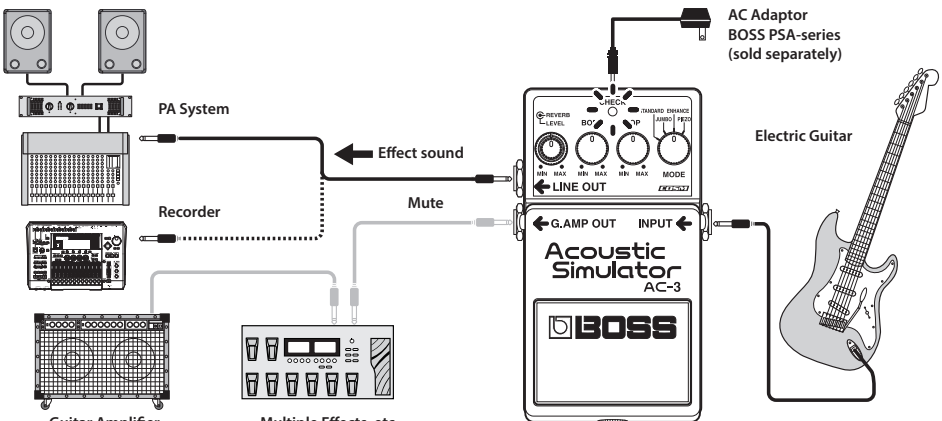
When Connecting to a PA System, Recorder, or Similar Equipment



When Connecting Both to a Guitar Amp and PA System (or Recorder or Similar Equipment)

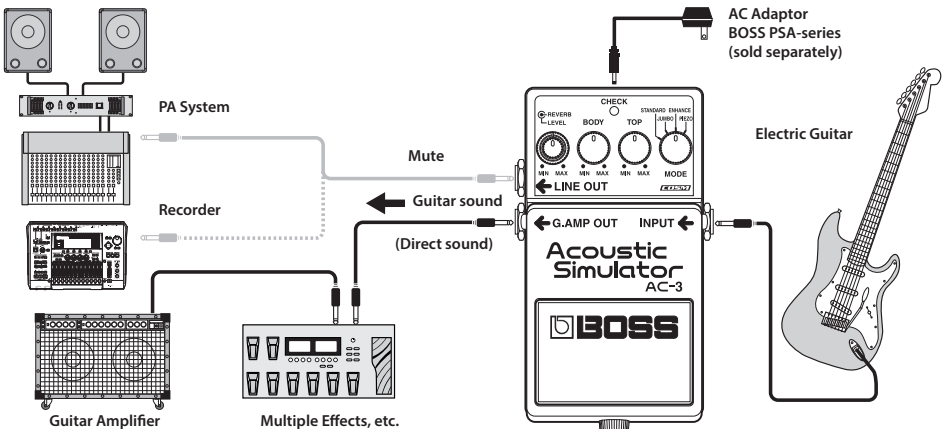
■ **With Effect On**

The CHECK indicator lights, the output from the AC-3: G.AMP OUT jack is muted, and the effect sound is output from the LINE OUT jack.



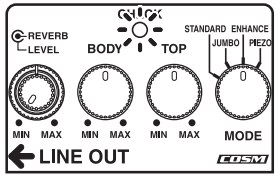
■ With Effect Off

The CHECK indicator is off, the guitar sound (with effect off) is output from the AC-3: G.AMP OUT jack, and the output from the LINE OUT jack is muted.

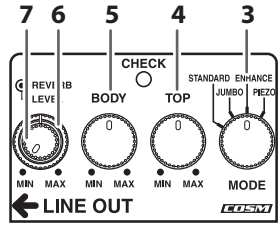


The following shows the correspondence between output jack connection status and the sound output.

	Output from LINE OUT		Output from G.AMP OUT	
	Effects On	**Effects Off**	**Effects On**	**Effects Off**
Both LINE OUT and G.AMP OUT Connected	Effect Sound (Line)	Mute	Mute	Direct Sound
Only LINE OUT Connected	Effect Sound (Line)	Direct Sound	-	-
Only G.AMP OUT Connected	-	-	Effect Sound (for Guitar Amp)	Direct Sound



1. **When you have made the necessary connections (p. 6–p. 11), set the knobs as shown in the illustration.**
2. **Depress the pedal switch to turn the effect on.**
   (Make sure that the CHECK indicator lights.)

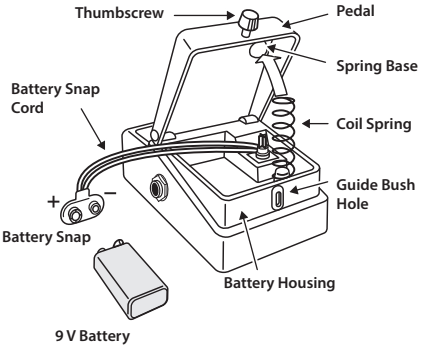


3. **Select the mode with the MODE knob.**
4. **Adjust the harmonic content with the TOP knob.**
   * **If the sound is distorted, adjust by turning the TOP knob to the left (counterclockwise).**
   * **Distortion can also be suppressed by turning the LEVEL knob to the left.**
5. **Adjust the breadth of the sound with the BODY knob.**
6. **Using the LEVEL knob, adjust the balance of the volume for when the effects are on and when off.**
7. **Adjust the amount of reverb with the REVERB knob.**

Changing the Battery

When the indicator goes dim or no longer lights while an effect is on, it means that the battery is nearly dead and must be replaced. Replace the battery following the steps below.

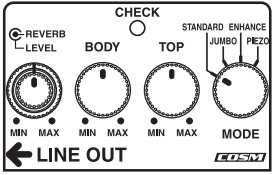
* **The use of an AC adaptor is recommended as the unit's power consumption is relatively high. Should you prefer to use batteries, please use the alkaline type.**



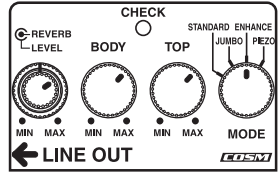
1. **Loosen the thumbscrew at the front of the pedal, then lift the pedal upwards to open the unit.**
   The thumbscrew can be left in the pedal while changing the battery.
2. **Remove the old battery from the battery housing, and remove the snap cord connected to it.**
3. **Connect the snap cord to 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, insert the thumbscrew into the guide bush hole and fasten it securely.**

Setting Samples

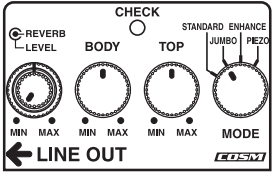
Finger Picking
(Single coil, front pickup)



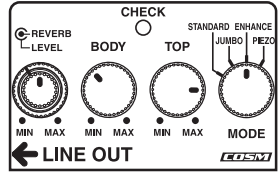
Solo Phrase
(Single coil, front pickup)



Chord Stroke
(Single coil, front pickup)



Humbucking Setting
(Humbucking, front pickup)



Main Specifications

AC-3: Acoustic Simulator

Nominal Input Level	-20 dBu
Input Impedance	1 MΩ
Nominal Output Level	-20 dBu
Output Impedance	1 kΩ
Recommended Load Impedance	10 kΩ or greater
Power Supply	DC 9 V: Dry battery/9 V type (6LR61 (alkaline)), AC Adaptor (PSA-series: optional)
Current Draw	45 mA (DC 9 V) * Expected battery life under continuous use: Alkaline: 7.5 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	440 g / 1 lb (including battery)
Accessories	Owner's Manual, Leaflet ("USING THE UNIT SAFELY," "IMPORTANT NOTES," and "Information"), Dry battery/9 V type (6LR61) * The battery that was supplied with the unit is for temporary use intended primarily for testing its operation. We also suggest replacing this with an alkaline dry cell.
Options	AC Adaptor (PSA-series)

*** 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.**