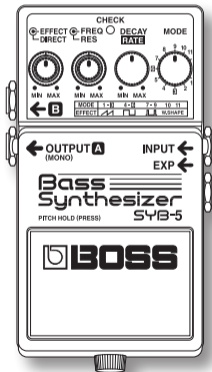


SYB-5 Bass Synthesizer

Owner's Manual



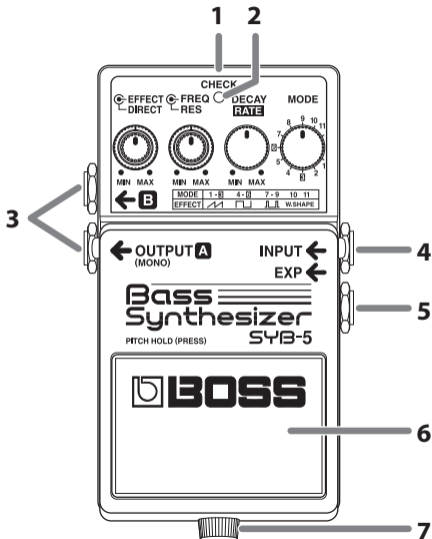
Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IMPORTANT NOTES" (separate sheet). These sections provide important information concerning the proper operation of the unit.

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

Main Features

- This compact effect creates a variety of bass synthesizer sounds.
- This unit features a dual-system bass synthesizer, which creates sounds in two different ways, and 11 modes to produce a variety of sound characteristics.
- Features a mode that changes the filter, synchronizing it with the internal LFO. This is useful for creating techno sounds.
- One mode uses an all-pass filter, allowing you to create a whole new synth sound that has a sense of depth and motion.
- The Hold function allows you to output effect sounds (synthesizer sound) continuously while you keep the pedal down. (This applies when the Mode is set to 1–9.)
- In the stereo output mode, the effect sound (synthesizer sound) and direct sound can be output separately.
- The SYB-5 not only works with four-string basses, it is compatible with five- and six-string basses as well (the range for detecting pitch is A0–C5).
- Equipped with Expression/Control jack. You can connect an expression pedal (the optional Roland EV-5, BOSS EV-30) and use it to switch the bass synth sounds.

Panel Descriptions



1. DC IN jack

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

- * As soon as you connect the AC adaptor, the unit is turned on.
- * 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.
- * 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. 15).
- * The CHECK indicator shows whether the effect is being applied or not. It does not indicate whether the power to the device is on or not.

3. OUTPUT A (MONO) Jack, OUTPUT B Jack

The output jacks are used to connect the unit to amplifiers or other devices.

- * For mono output, use OUTPUT A (MONO).
- * For stereo use:
OUTPUT A:
Only the processed signal is output.
OUTPUT B:
Only the dry signal is output.

4. INPUT jack

This jack accept input signal coming from a bass.

- * When running the unit on battery power, the INPUT jack 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. Be sure to disconnect a cord plugged into the INPUT jack when not using this effects device. When the AC adaptor is used, the power remains on at all times, and this function is disabled.

Panel Descriptions

5. EXP jack

Connect an expression pedal (the optional Roland EV-5, BOSS EV-30) here. You can then use the expression pedal to change the bass synth sound.

* For more details, refer to "Using the EXP Jack" (p. 12).

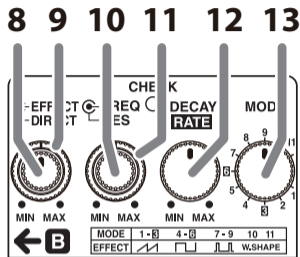
6. Pedal switch

This switch turns the effects on/off.
This is also used for the Hold function.

7. Thumbscrew

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

* For instructions on changing the battery, refer to "Changing the Battery" (p. 15).



8. EFFECT (Effect Level) knob

This adjusts the output level of the effect sound (synth sound). The volume of the effect sound increases as you turn the knob clockwise.

* Rotating this knob fully counterclockwise will eliminate the effect sound.

9. DIRECT (Direct Level) Knob

This adjusts the output level of the direct sound. The volume of the direct sound increases as you turn the knob clockwise.

* Rotating the knob fully counterclockwise will eliminate the direct sound.

10. FREQ (frequency) knob

This adjusts the frequency of the filter.
The sound becomes brighter as you turn the knob clockwise.

11. RES (resonance) knob

This adjusts the feedback amount of the filter.
Rotating the knob clockwise will make the sound more unusual.

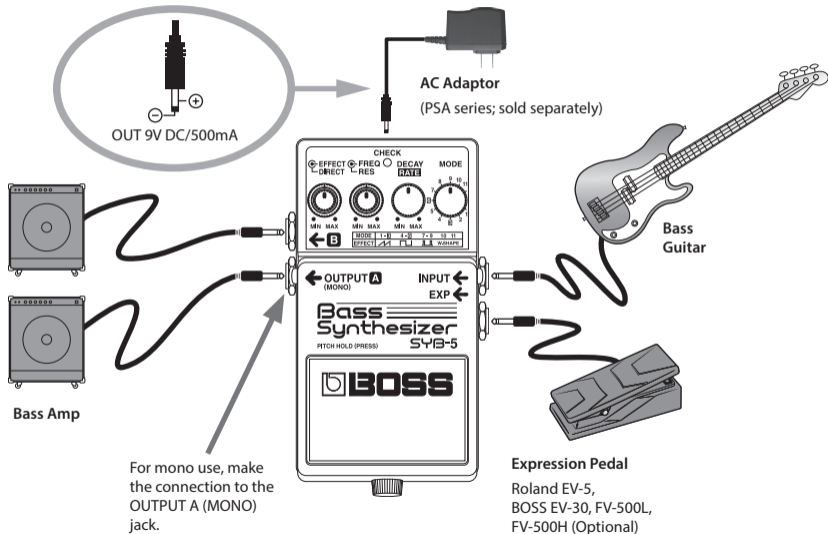
12. DECAY/RATE knob

When MODE is 1, 2, 4, 5, 7–11
The knob works as a decay knob that determines the period of time over which the frequency of the filter should move. As you rotate the knob clockwise, this time is increased.
When set to MAX, the frequency of the filter is fixed.
When MODE is 3, 6
The knob functions as a rate knob, adjusting the speed at which the filter fluctuates.

13. MODE knob

This knob switches the tone.
For more on the tones for each mode, refer to the "Mode Chart" (p. 8).

Connections



- * To ensure stable conditions, connect the SYB-5 directly to your bass's output.
- * When running the unit on battery power, inserting a plug into the INPUT Jack will automatically switch the unit on.
- * If operating this unit on batteries, please use alkaline batteries.
- * To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.
- * 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 bass amp last.
When powering down: Turn off the power to your bass amp first.
- * Use only the specified expression pedal. By connecting any other expression pedals, you risk causing malfunction and/or damage to the unit.
- * 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" (supplied on a separate sheet).

Mode Chart




The Mode allows you to select two bass synthesizers. Each mode will work as follows.

1–9: INTERNAL SOUND MODE




This mode detects the pitch and attack from the input bass guitar sound and creates sound using the internal sound source. Depending on the number selected, the output sound of the internal sound source will differ as follows:

- * The SYB-5 not only works with four-string basses, it is compatible with five- and six-string basses as well (the range for detecting pitch is A0–C5).




■ SAW WAVE

- 1:  A sawtooth wave is output. This produces a sharp-edged sound.
- 2:  (-1OCT)
A sawtooth wave one octave lower than "1" is output.
- 3:  (AUTO)
This automatically shifts the filter frequency for the sound in "1."

■ SQUARE WAVE

- 4:  A square wave is output. This creates a milder sound than that produced with the sawtooth wave.
- 5:  (-1OCT)
This outputs a combination of the sound in "4" with a square wave one octave below it simultaneously.
- 6:  (AUTO)
This automatically shifts the filter frequency for the sound in "4."

■ PULSE WAVE

- 7:  1
A pulse wave is output. This produces a sharp-edged sound, but one that differs from that produced with the sawtooth wave.
- 8:  2
This outputs a pulse wave using an all-pass filter. Creates a sound that has a sense of depth and motion.
- 9:  (PWM) (Pulse Width Modulation)
This outputs a fat, spreading sound by modulating the variations in the width of the pulse wave.
- * When using the internal sound modes (MODE 1–9), the above function will not work properly if you play chords. So, have all the other strings muted, and play the bass guitar using single notes.

10-11: WAVE SHAPE MODE

This mode directly transforms the audio input from the bass guitar into a synthesized bass sound. The direction in which the frequency shifts differs depending on the number you select.

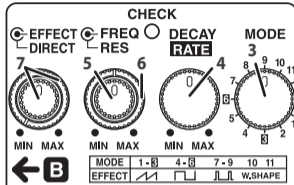
10: Up

The frequency of the filter rises when the string is played, then gradually returns to the original frequency.

11: Down

The frequency of the filter drops when the string is played, then gradually returns to the original frequency.

Operating the Unit



1. When you have made the necessary connections (p. 6), 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. Set the DECAY/RATE knob to your taste, depending on the selected mode.

When MODE is 1, 2, 4, 5, 7-11

Use the knob as a time knob to set the time for the frequency of the filter to move.

When MODE is 3, 6

Use the knob as a rate knob to adjust the speed at which the filter fluctuates.

5. Adjust the frequency of the filter using the FREQ knob.
6. Adjust the feedback amount of the filter using the RES knob.
7. Adjust the volume of the effect and direct sounds using the EFFECT Level and DIRECT Level knobs.

Using the HOLD Function

In the Internal Sound Mode (when MODE 1–9), you can use the Hold function that allows you to output the effect sound (synthesizer sound) continuously while holding the pedal down. It is also possible to mix the direct sound to the effect sound continuously being output by playing the bass guitar to it.

1. Turn the Effect On by pressing the Pedal Switch.

2. Select the Internal Sound Mode (MODE 1–9) using the Mode switch.

Set the other knobs to your taste.

3. Play the bass guitar using single notes.

4. Press the Pedal Switch once again while the effect sound you wish to output continuously is being played, to hold it.

The Hold function remains in effect and the CHECK indicator flashes as long as you continue to press the Pedal Switch. In this state, the SYB-5 continues to output the effect sound.

5. To switch off the Hold function, release the Pedal Switch.

The CHECK indicator will stop flashing and instead light constantly, showing that the unit is returned to the normal Effect On status.

Using the EXP Jack

With an expression pedal (the optional Roland EV-5, BOSS EV-30) connected to the EXP jack, you can then have the bass synth sound change as you move the pedal.

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

When MODE is 1, 2, 4, 5, 7-11

You can shift the filter's frequency by adjusting the expression pedal. This produces an effect similar to that of a wah pedal.

- You can adjust the filter frequency shifted by movement of the pedal with the **FREQ** knob.
 - You can adjust the range within which the filter frequency shifts with the expression pedal's minimum volume.
- * **The DECAY pedal has no function at this time.**

When MODE is 3, 6

Here, adjusting the expression pedal changes the speed (rate) at which the filter fluctuates.

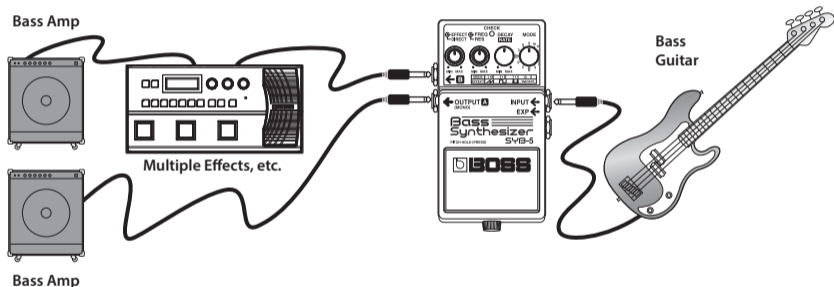
- You can use the **RATE** knob to adjust the rate for times when the pedal is depressed.
- The rate for times when the pedal is released can be adjusted by means of the expression pedal's minimum volume.

Outputting the Direct Sound and Effect Sound Separately

When you connect a plug to OUTPUT B, only the direct sound is output from the OUTPUT B jack, and only the effect sound (synth sound) is output from the OUTPUT A (MONO) jack.

This allows you to create the impression that the direct and effect sounds are being output from separate amps, adding yet a different effect to the sound.

- * In this case, sounds are output only from the OUTPUT B jack when the effect is switched off.

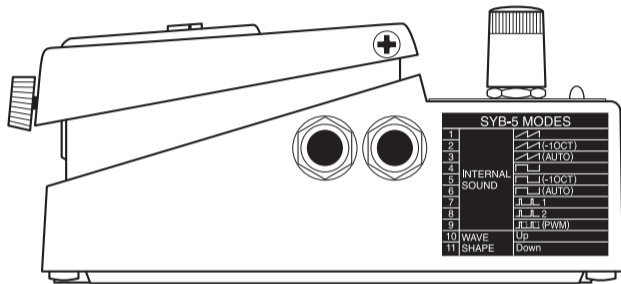


- * To ensure stable conditions, connect the SYB-5 directly to your bass's output. Connect any additional effects to the SYB-5's OUTPUT A (MONO) or OUTPUT B jacks.

Using the Mode Label

The SYB-5 is supplied with a Mode Label which shows the effect obtained with each of the modes.

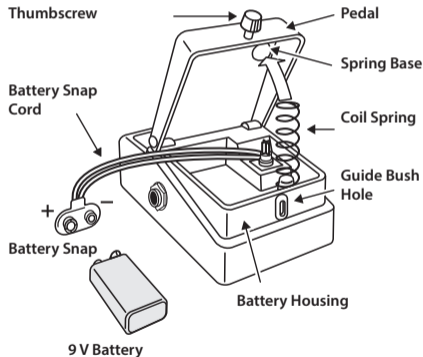
The label (which serves as a quick reference) can be attached as shown in the illustration.



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

- * The pedal can be opened without detaching the thumbscrew completely.

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 -).

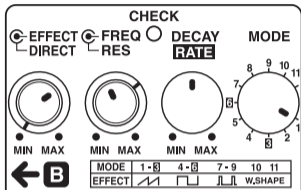
4. Slip the coil spring onto the spring base on the back of the pedal, and then close the pedal.

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

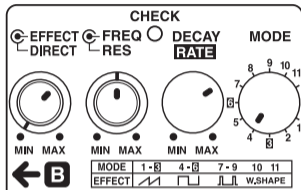
5. Finally, insert the thumbscrew into the guide bush hole and fasten it securely.

Setting Samples

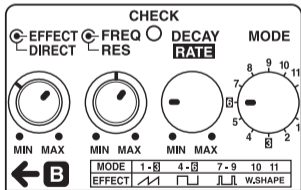
SAW WAVE



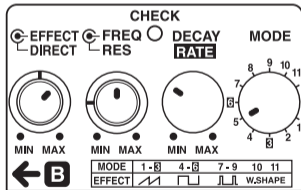
SQUARE WAVE



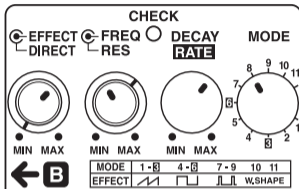
SLOW AUTO FILTER



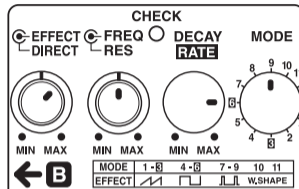
FAT SOUND



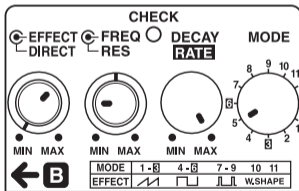
TALKING



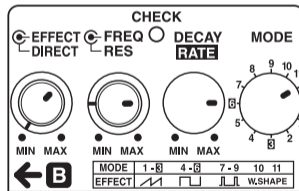
PULSE WIDTH MODULATION



DEEP



FILTER SWEEP



Main Specifications

BOSS SYB-5: Bass Synthesizer

Nominal Input Level	-20 dBu
Input Impedance	1 M Ω
Nominal Output Level	-20 dBu
Output Impedance	1 k Ω
Recommended Load Impedance	10 k Ω or greater
Power Supply	DC 9 V: Dry battery/9 V type (6LR61 (alkaline), 6F22 (carbon)), AC Adaptor (PSA-series: optional)
Current Draw	50 mA (DC 9 V) * Expected battery life under continuous use: Alkaline: 6 hours, Carbon: 2 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, Mode Label, Leaflet ("USING THE UNIT SAFELY," "IMPORTANT NOTES," and "Information"), Dry battery/9 V type (6LR61)
Options	AC Adaptor (PSA-series) Expression Pedal (Roland EV-5, BOSS EV-30, FV-500L, FV-500H)

* 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.