LMB-3
Bass Limiter Enhancer

Owner's Manual

English

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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.

Main Features

The BOSS LMB-3 is a limiter/enhancer specifically designed for electric bass.
The LMB-3 allows you to create a well-balanced sound by controlling the volume difference of the sound or to avoid sound distortion.
By adjusting the THRESHOLD level and RATIO knobs, the intensity of the limiter can be spontaneously controlled.
Using the Enhance effect, you can make the sound clearer and sharper.

Panel Descriptions

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.

* **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).**

AC Adaptor
(PSA series; sold separately)

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.

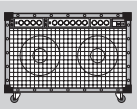
* **If this indicator goes dim or no longer lights while an effect is ON, the battery is near exhaustion and should be replaced immediately.**
* **The CHECK indicator shows whether the effect is on or off, and indicates the different functions. It does not indicate whether the power to the device is on or not.**

LEVEL knob
This knob adjusts the level of the effect sounds.
Set the knob so there is no volume difference between the effect and straight bass guitar sounds.

* **If this knob is turned all the way to the left, no sound is heard when the effect is on.**

ENHANCE knob
This knob adjusts the intensity of the enhance effect that makes the sound clearer and sharper.
Rotating the knob clockwise emphasizes the effect.

OUTPUT jack
Connect an amplifier to this jack.

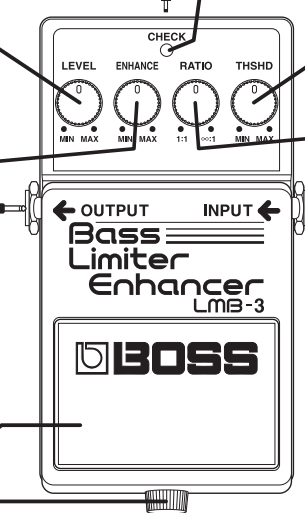


Bass Amplifier

Pedal Switch
This switch turns the effects ON/OFF.

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."**



THSHD knob
This knob controls the threshold level (the level at which the compression effect will kick in).
Rotating the knob counterclockwise lowers the threshold level.

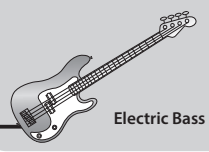
RATIO knob
This knob controls the compression ratio of the limiter. That is, it adjusts how much the limiter should compress those signals above the threshold level.

* **When it is set to "1:1", no limiter effect will be obtained.**

* **For a detailed explanation about the Ratio and Threshold Level, see "About the Limiter's Action".**

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

* **The INPUT jack also serves as the power switch. Power is turned on whenever a plug is inserted into the INPUT jack, and is turned off when the plug is disconnected. When not using the unit, you should disconnect any cord connected to the INPUT jack.**

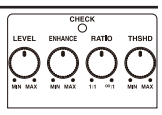


Electric Bass

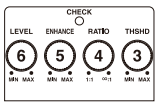
* **To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.**
* **Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.**
* **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.**

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

Operating the Unit



1. **When you have made the necessary connections, 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. **Adjust the Threshold Level (the level at which compression starts) using the THSHD Knob.**
4. **Adjust the compression ratio using the RATIO Knob.**
5. **Adjust the intensity of the enhance effect using the ENHANCE Knob.**
6. **Adjust the LEVEL Knob so there will be no volume difference between the effect and straight bass sounds.**

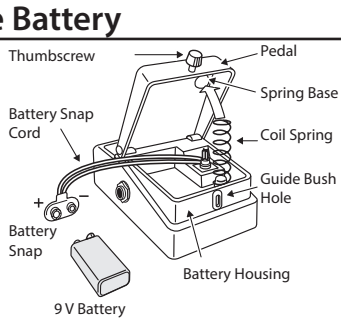
Use of Battery

* **A battery is supplied with the unit. The life of this battery may be limited, however, since its primary purpose was to enable testing.**
* **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).**
* **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.**
* **Batteries should always be installed or replaced before connecting any other devices. This way, you can prevent malfunction and damage.**

Changing the Battery

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.**

About the Limiter's Action

The LMB-3's limiter will function differently depending upon how you set the Ratio and Threshold Levels. The RATIO and THSHD Knobs work as described below.

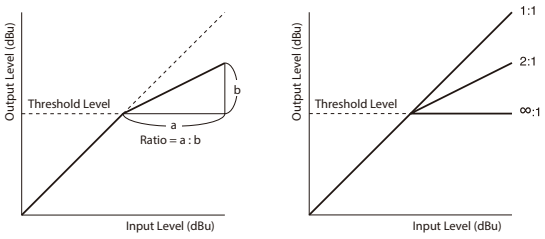
RATIO Knob

The compression ratio for the input signal is called Ratio. For instance, when the Ratio is set to "2:1", an input signal that is 6 dB louder than the Threshold Level will be compressed to one half, or 3 dB When it is set to "∞:1", any input signal above the Threshold Level will be compressed to the Threshold Level, then output.

THSHD Knob

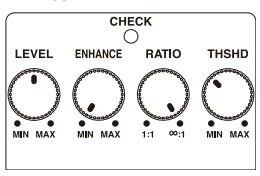
The Threshold Level is the level at which compression starts to work. When the input signal has reached the Threshold Level, the signal will be compressed at the compression ratio set with "RATIO", then output. When the input signal is lower than the Threshold Level, it will be output without compression.

The following figure shows how the output signal is affected by the settings of the RATIO and THSHD Knobs.

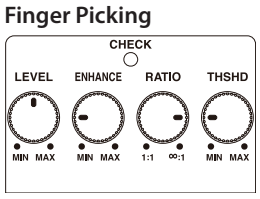


Setting Samples

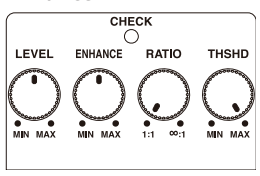
Limiter



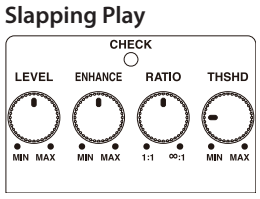
Finger Picking



Enhancer



Slapping Play



Main Specifications

BOSS LMB-3: Bass Limiter Enhancer

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 6F22 (9 V) type (carbon)/Dry battery 6LR61 (9 V) type (alkaline) AC Adaptor (PSA-series: optional)
Current Draw	17 mA (DC 9 V) * **Expected battery life under continuous use: Carbon: 13 hours, Alkaline: 25 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	430 g / 1 lb (including battery)
Accessories	Owner's Manual, Leaflet ("USING THE UNIT SAFELY," "IMPORTANT NOTES," and "Information"), Dry battery/9 V type (6F22)
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.**