



INSTRUCTION MANUAL

BASS RESTORATION PROCESSOR

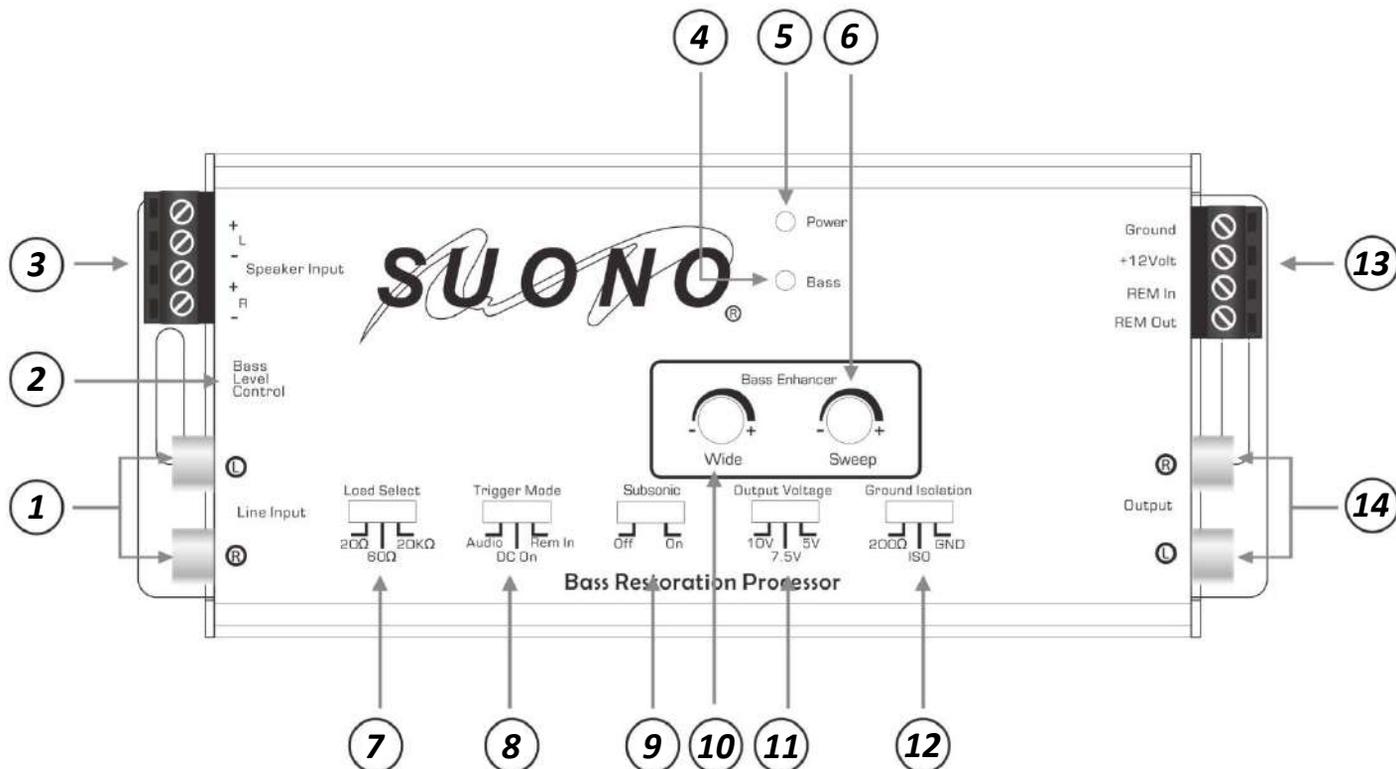
- Digital Bass Restoration Processor
- Signal-Level Inputs (RCA)
- High-Level Inputs with Impedance Emulator
- Automatic Turn-On with High-Level Inputs
- Remote Turn-On Output
- External Controller with Dual Function: Digital Bass and Output Gain
- Subsonic Filter

Congratulations on choosing a SUONO **Bass Restoration Processor**!

At SUONO, we take pride in our products and stand behind them with our name, technical support, and warranty. If you have any questions or comments, please don't hesitate to contact us—we will be happy to assist you. For the installation of your new SUONO processor, we strongly recommend visiting an authorized dealer.

To get the best performance from your new SUONO processor, please read this manual carefully.

For the Bass Restoration Processor to function correctly, it must receive a full-range audio signal, meaning it should not be connected after low-pass filters.



1. Line Input. (RCA) Signal-Level audio inputs. If your head unit has signal-level outputs, connect them here using a pair of RCA cables. The signal must be full-range, and the Load Selector (7) should be set to 20 K Ω .

2. Bass Level Control. Connect the included external bass controller cable here.

3. Speaker Input. Detachable connector for high-level (speaker-level) audio inputs. If your head unit does not have RCA audio outputs (as in the case with factory stereos), you can feed the processor with speaker-level audio outputs, even if they are amplified.

4. Bass LED. This LED lights up when the processor is actively restoring bass.

5. Power LED. This LED indicates that the processor is powered on.

6. Sweep. Adjusts the center frequency where the processing effect will be the strongest, between 25 and 70 Hz, allowing you to tailor it to your vehicle's acoustics or personal taste.

7. Load Select. This device accepts speaker-level audio signals (such as those from factory head units). However, some units require a speaker load to produce sound. Always start with the highest load setting, 20 K Ω . If there's no audio, reduce it to 60 Ω . If that doesn't work, select 20 Ω . If using RCA inputs, leave it at 20 K Ω .

8. Trigger Mode. This device offers multiple power-on options.

If using RCA audio signals, it must be turned on via the Remote-on wire from your head unit; set the switch to the far-right position: Rem-in. **If using high-level (speaker) audio signals**, the device turns on automatically upon detecting a signal. Set the switch to the center position: DC-On. **The far-left position, Audio**, should only be used if the above options are not suitable. This setting works with both RCA and speaker-level inputs and turns the unit on when it senses sufficient audio signal, turning it off about 20 seconds after the signal stops or becomes too weak.

9. Subsonic. Activates the subsonic (infrasonic) filter, protecting subwoofers from over-excursion. It's a 24 dB/octave high-pass filter at 22 Hz. We recommend always keeping it **ON**.

10. Wide. Adjusts the bandwidth of the Bass Restoration effect, according to your car's acoustics or personal preference.

11. Output Voltage. Sets the output level of the Bass Restoration effect. The higher the setting, the stronger the effect.

12. Ground Isolation. If engine noise appears after installation, try adjusting the position of this switch. The default setting is the center position: ISO.

13. Power Terminal Block. Detachable connector.

- **GROUND:** Negative cable to vehicle chassis (star ground configuration: each device with its own cable, all to the same point).

- **+12 Volt:** Positive power cable. Recommended fuse: 1 Amp.

- **REM In:** Remote-on wire from stereo to power on the unit.

- **REM Out:** Remote-out wire to turn-on external amplifiers.

14. Output. RCA audio output cables to send signal to the subwoofer amplifier.

External bass controller: the outer knob adjusts the output gain to the amplifier, while the inner knob controls the intensity of the Bass Restoration.

Specifications:

Frequency Response	10-30,000 Hertz
Total Harmonic Distortion (THD)	< 0.05%
Signal to Noise Ratio	>105 dB
Subsonic Filter (Infrasonic)	4 th order @ 22 Hertz
RCA Maximun Input Voltage	9 Volts RMS
Speaker Level Maximun Input Voltage	40 Volts RMS (400 watts)
Maximun Undistorted Output Voltage	9 Volts RMS
Rca Input Impedance	> 20 K Ω
Speaker Level Input Impedances	20, 60, or 20 K Ω
Output Impedance	< 150 Ω
Recommended Fuse	1 Ampere



WARRANTY:

SUONO warrants its products to the original retail purchaser for one (1) year from the date of purchase against defects in material and workmanship. Products found to be defective will be repaired or replaced (at SUONO's discretion) at no charge. Damage caused by misuse, abuse, product modification, accidents, improper installation, water, and unauthorized repair attempts is not covered. Cosmetic or finish damages are not covered. Products not purchased in the United States from an authorized dealer are not covered. Incidental or subsequent damages to other products are not covered. Any costs or expenses for removing and/or reinstalling the product are not covered. SUONO's total liability will not exceed the purchase price of the product. Some states do not allow limitations on implied warranties, so this may not apply to you. To obtain warranty service, please contact SUONO to request a Return Authorization Number (RA#) **before** sending your product. You are responsible for shipping the product to SUONO for service.

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