

Lanzar®

440PSU

SD & USB Mp3 Audio Reader
Vibe Half Din In Dash 4 Band Rotary Equalizer w/



Owner's Manual
and
Installation Guide
www.lanzar.com

Congratulation!

You are now own the **Vibe 440PSU** parametric equalizer, the product of an uncompromising design and engineering philosophy. Your **Vibe 440PSU** parametric equalizer will perform any other parametric equalizer in the world.

To maximize the performance of your system, we recommend that you thoroughly acquaint yourself with its capabilities and features. Please retain this manual and your sales receipt for future reference.

Vibe 440PSU parametric equalizer are the result of American innovation and the highest quality control standards. When properly installed, they will provide you with many years of listening pleasure. Should your parametric equalizer ever need service or replacement due to the theft, please record the following information which will help protect your investment.

Model and Serial # _____

Dealer's Name _____

Date of Purchase _____

Installation Shop _____

Installation Date _____

CAUTION!

Prolonged listening at extremely high levels may result in hearing loss. Even though your car audio system with your new **Vibe 440PSU** parametric equalizer sounds better than anything you've ever heard, exercise caution to prevent hearing damage.

Specifications

Frequency Bands	SUB 50Hz, LOW 210Hz, MID 1KHz, HIGH 20KHz
Boost/Cut	+/- 18dB
Signal-To-Noise Ratio	110dB Ref 1V Input
Frequency Response	10Hz-15KHz, +/-1dB
Maximum Output Voltage	7V rms
Total Harmonic Distortion	0.05%
Input Sensitivity	150mV
Headroom	20dB
Input Impedance	10K ohms
Stereo Separation	82dB/1KHz
Operating Voltage	11-15V Negative Ground

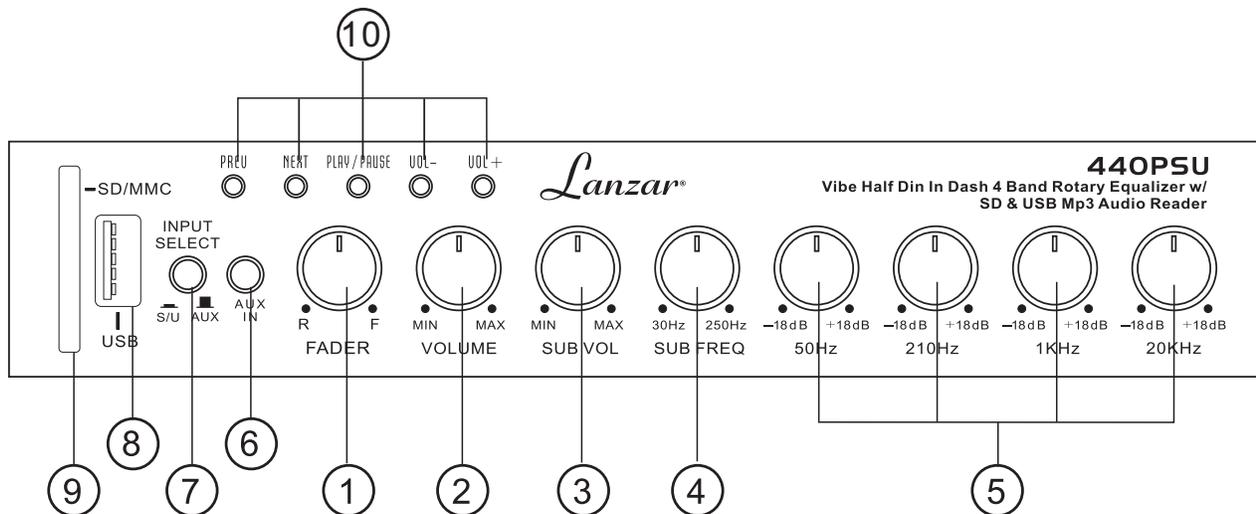
EQUALIZER BACKGROUND

There are basically three types of equalizers: graphic, parametric and a hybrid of these two, often referred to as paragraphic. Additionally, there are passive equalizers, which have no gain, active gain preamps, which have a gain stage usually with a volume control, and booster equalizers which we won't consider here since they are inferior passive equalizers with inexpensive IC amplifiers built-in.

As in state-of-the-art home audio systems the optimum system requires a dedicated preamp with enormous gain to drive the various power amplifiers. Since home audio amplifiers do not have adjustable sensitivity, they require a high output preamplifier to drive them to maximum levels.

This unit is the first production preamplifier to incorporate a specific bandwidth parametric equalizer with shelving control. With 18dB boost 'or cut on its four bands, it can compensate for acoustic anomalies unique to the automotive environment. The **Vibe 440PSU** easily becomes the Control Center of any high-end mobile entertainment system.

Controls (front panel)



1. PREAMP FADER CONTROL:

This control adjusts the volume between the front and rear output in 4-channel system.

2. MASTER VOUME CONTROL:

This is the main control to adjust the output level.

3. SUBWOOFER VOLUME CONTROL:

This adjusts the level of the subwoofer output.

4. SUBWOOFER FREQUENCY CONTROL

5. FREQUENCY BAND CONTROLS:

Adjust (cut or boost) the level of each frequency band up to +/-18dB.

6. INPUT SELECTOR SWITCH

This switch selects the AUX input.

7. INPUT SELECT FOR SD/USB OR AUX.

8. USB INPUT JACK

9. S/D CARD INPUT JACK

10. SD/ USB CONTROLS

a: PREV - Previous play

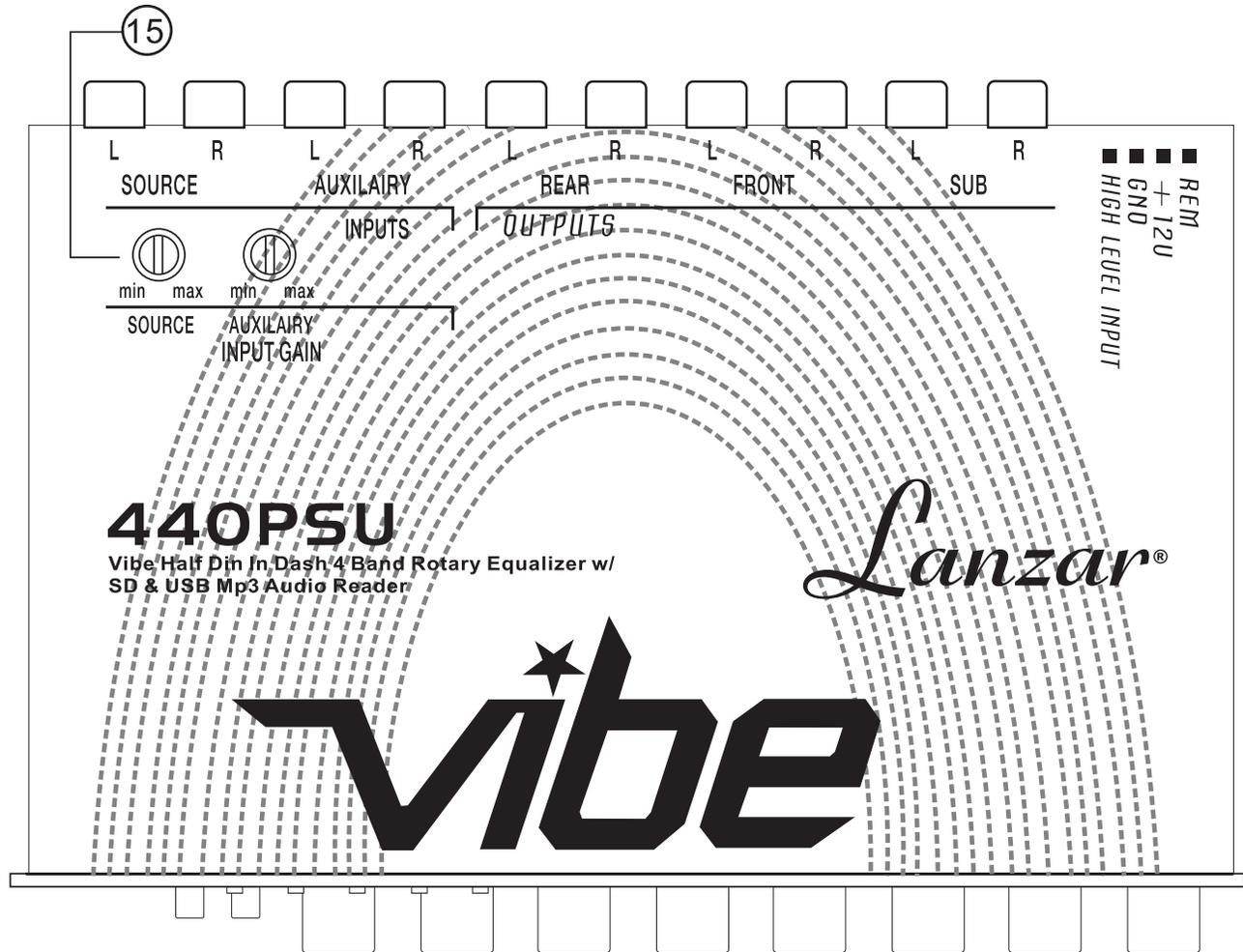
b: NEXT - Next play

c: PLAY/PAUSE

d: VOL- - Decrease volume of SD/USB signal

e: VOL+ - Increase volume of SD/ USB signal

Controls (Top Cover)

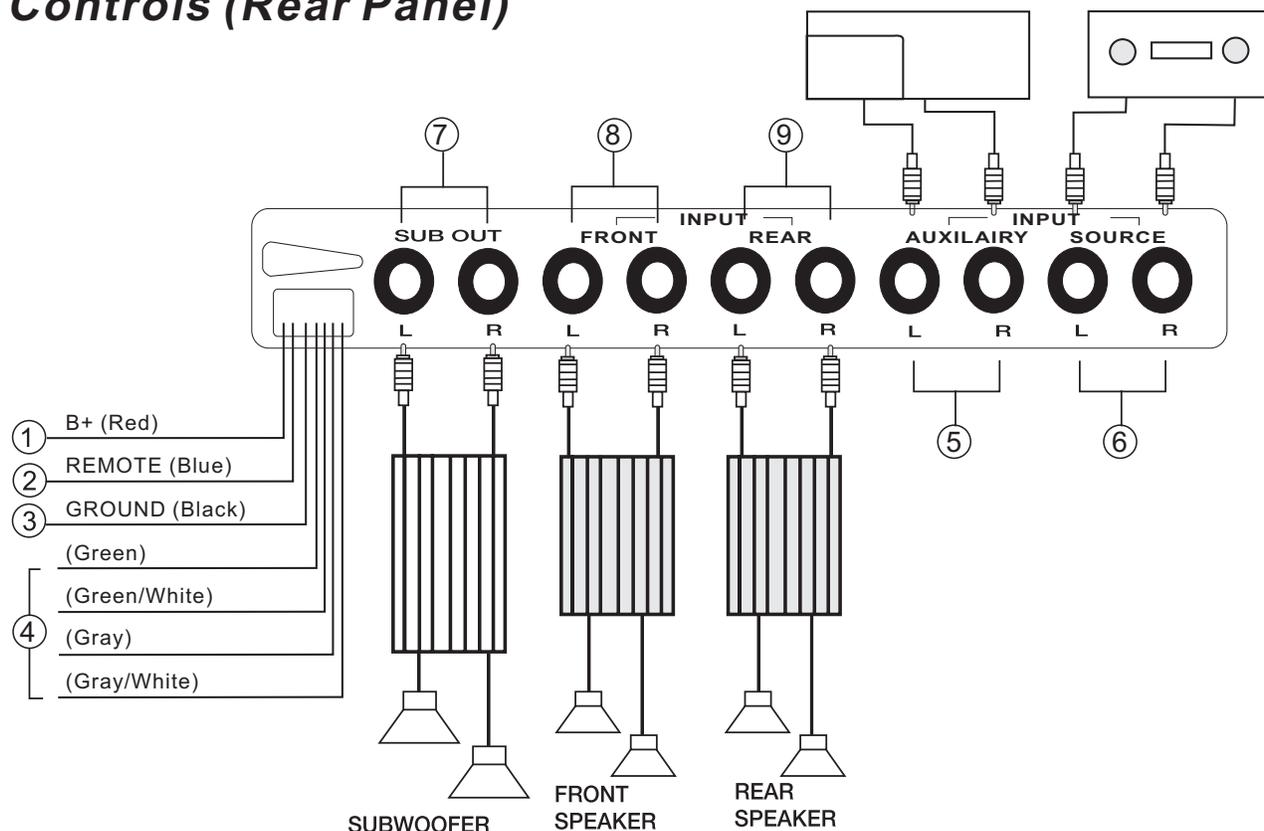


11. Independently adjust the left and right channel input sensitivity for each input (Source and Auxiliary)

 Turn the knob clockwise to increase the input level.

 Turn the knob counter clockwise to reduce the input level.

Controls (Rear Panel)



1. 12V Constant Power Lead (red): This is the main power input for the **Vibe 440PSU** and must be connected to a (+)12V constant power supply. DO NOT connect this to a switched 12V source or the system may pop when the key is turned off.

2. Remote Turn-On Input Lead (Blue): This is the input for turning on the **Vibe 440PSU** and system amplifiers. It should be connected to the (+)12V remote turn on output of the system head unit. The **Vibe 440PSU** has a built in turn off delay to prevent turn-off pops. When the remote turn on signal from the head unit shuts off, the amplifiers will turn off immediately and the **Vibe 440PSU** will stay on for five seconds before turning off. This feature is designed into the **Vibe 440PSU** to eliminate system turn off pops that can occur when several components turn off at the same time. DO NOT connect this to a (+)12V constant power supply.

3. Ground (black): Connect this terminal to a quality ground location, preferably the chassis of the head unit, which must itself be properly grounded to the vehicle chassis. It is not recommended that the factory radio ground be used for after-market audio components.

4. High level connection cables: Most aftermarket audio head unit have RCA (low-level) outputs. Plug the RCA output from the source unit into the RCA input of the **Vibe 440PSU**. If your audio source unit does not have RCA outputs, the **Vibe 440PSU** has the capability to accept high level (speaker level) inputs.

5. SOURCE Input: These are the pre-amp stereo RCA audio inputs to be connected to the source unit's front pre-amp outputs.

6. AUX Input: These are the pre-amp stereo RCA audio inputs to be connected to secondary source unit, or auxiliary device's pre-amp outputs.

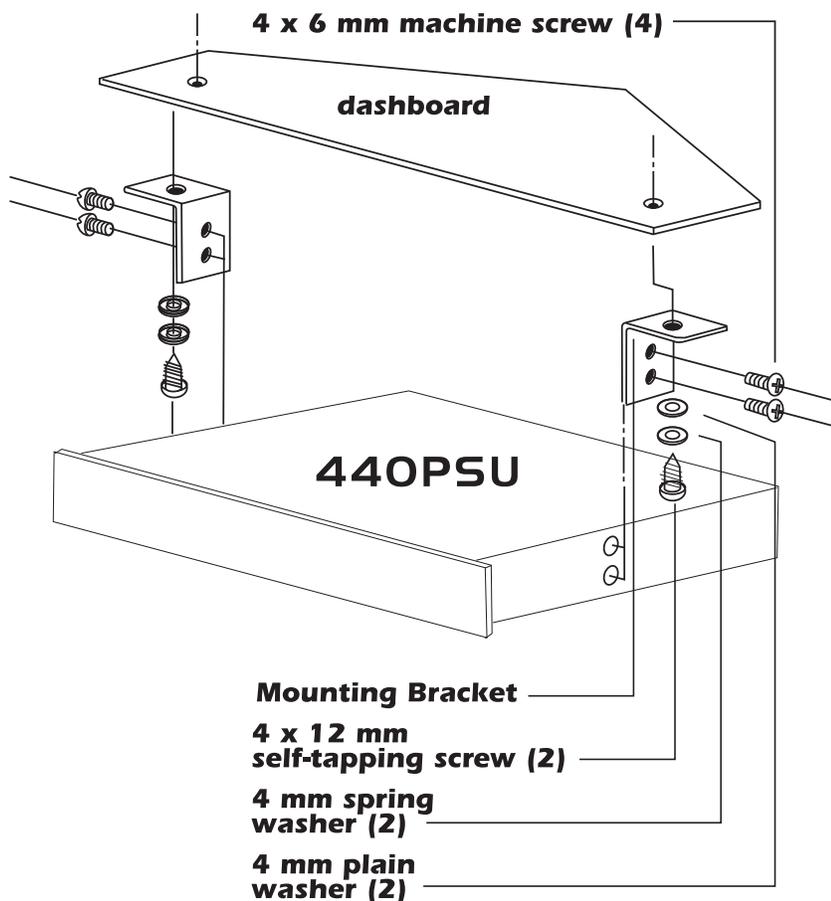
7. Sub Out: These are the pre-amp RCA audio outputs for sending the audio signal to the subwoofer amplifier.

8. Front Output: These are the pre-amp stereo RCA audio outputs for sending the audio signal to the front speaker amplifier.

9. Rear Output: These are the pre-amp stereo RCA audio outputs for sending the audio signal to the rear speaker amplifier.

Installation Instructions

1. Read this manual carefully and in its entirety before installing this equalizer.
2. Always disconnect the battery or remove the fuses for circuits you will be working on.
3. Check for clearance of any hazards such as wiring harnesses or heater core before mounting the equalizer to any panels in the vehicle.
4. Mount the equalizer in a location that is easy to access and won't be distracting to vehicle operation while making adjustments.
5. Route all power wires and audio cables away from sharp metal edges that can cause shorts to ground and any moving parts that can tangle the wires such as heater controls or wiper motors.
6. Route all power and signal cables as far as possible from other vehicle wiring harnesses. Loom when appropriate.
7. It is recommended that the equalizer be grounded directly to the chassis of the head unit. The head unit should be grounded at a chassis point (preferably bare or scraped sheet metal) other than the factory head unit ground wire or underdash brackets.
8. Use only the supplied machine screws to mount the equalizer or damage to the circuitry could occur.



■ Initial Settings

1. After completing unit installation, wire, and appropriate audio signal connections, power-up the source unit, play a familiar track, and set the volume level to approximately 75%.
2. Set all individual Graphic Equalizer Controls to 0dB. Master Volume Control and Subwoofer Level Control should be set to minimum, and fader set to even.
3. Press the Input Selection Switch to accept the input signal from the source unit or auxiliary source.
4. Set the CD Gain Selector setting appropriate to the pre-amp voltage of your source unit. Most source units provide 2V-4V pre-amp power. In this case, set the CD gain sensitivity to MID. If your source unit pre-amp voltage is higher, set the CD gain sensitivity to HI; if the voltage is lower, set the CD gain sensitivity to LOW. We recommend you never set the CD gain sensitivity to LOW with a source unit that provides a higher pre-amp voltage. This can create unwanted levels of distortion and possible damage to your **Vibe 440PSU**.
5. Set the Subwoofer Frequency Selector switch to the desired low-pass filter. Generally, the low-pass filter is set to 128Hz, and then the subwoofer amplifier's low-pass filter is fine tuned for the desired response.
6. Adjust the Subwoofer Level Control to achieve the desired tonal balance between the front/rear speakers and the subwoofer level.
7. Adjust the various individual Graphic Equalizer Controls to increase or decrease the output level of each frequency to achieve the desired response for the front stage and rear fill.