



AVA1404

*7-Band Amplified Equalizer
with LED Power Meter
and Subwoofer Output*

**Congratulations on your
purchase of a BOSS Equalizer.**

It has been designed, engineered
and manufactured to bring you
the highest level of performance
and quality, and will afford you
years of listening pleasure.

Thank you for making
BOSS your choice for car audio
entertainment!

USER'S MANUAL

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How an equalizer is used

The **BOSS** AUDIO SYSTEMS AVA1404 combines the functions of a graphic equalizer and a powerful 200W 4-channel amplifier.

It is intended for use in a car audio system where the output signal from the head unit is not adequate for driving the speakers in a four-channel speaker system, AND there is no additional amplifier present for the Front and Rear channels.

System application

A stereo input signal is applied to the equalizer using EITHER (but not both) the low level RCA inputs (from your head unit's LINE OUT connectors) or from high level inputs (the head unit's speaker outputs).

The user adjusts the various boost/cut levels at the desired frequencies.

The AVA1404 adds amplification of 200 watts (max power) to the equalizer output for the Front and Rear channels. These must be connected to your speaker system as shown in the wiring diagram.

Please note!

You CANNOT connect the Front or Rear outputs of this equalizer to the inputs of any amplifier!

The subwoofer channel is not amplified. So If you wish to use the AVA1404's stereo outputs (low level outputs provided, via stereo RCA jacks on the rear panel), you must connect an additional amplifier in order to drive the subwoofer.

Adjusting the equalizer

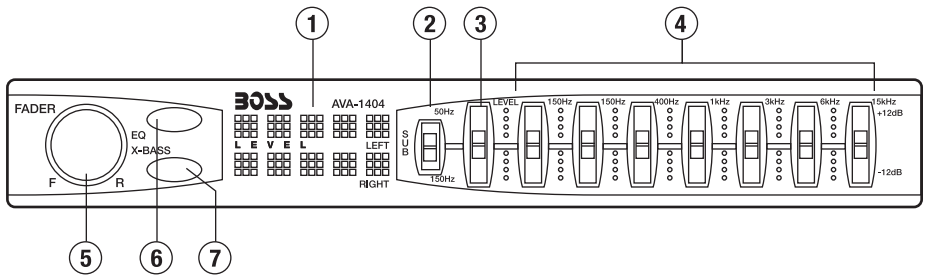
This graphic equalizer consists of several audio filters, each centered at a specific frequency in the audio range. The AVA1404 enables you to cut or boost the output level by up to 12dB as desired at the following frequencies:

60Hz • 150Hz • 400Hz • 1kHz • 3kHz
6kHz • 15kHz

In addition, the subwoofer channel level can be controlled independently, and either 50Hz or 150Hz can be selected as the center frequency for the bass level control.

The AVA1404 also features a bass enhancement circuit called X-BASS. This allows you to add additional emphasis to the bass frequencies in the audio spectrum.

Front panel controls and features



1 LED LEVEL METER

2 SUBWOOFER FREQUENCY SELECTOR

This control is used to set the center frequency for the subwoofer channel at either 50Hz or 150Hz. This establishes the point in the frequency spectrum where the subwoofer level control will have the greatest effect.

3 SUBWOOFER LEVEL CONTROL

Although the AVA1404 does not have an overall level control (you set volume level for your system from the head unit), it features an independent level control for the subwoofer channel. This gives you the ability to balance the amount of bass in the audio mix to your personal taste.

4 BOOST/CUT CONTROLS

Each of these controls represents a range of frequencies surrounding a center frequency to cover the audio spectrum from subwoofer frequencies to treble frequencies.

Adjust these controls to suit your taste and listening environment. Each center frequency can be adjusted +/- 12 dB.

5 FADER

Use this control to balance the sound level between front and rear speakers as desired.

6 EQ ON/OFF SELECTOR

This button permits you to turn on and off the equalization provided by the AVA1404.

7 X-BASS PROCESSOR ON/OFF

The AVA1404 features a bass enhancement circuit called X-BASS. Use this when you want to emphasize the bass portion of your audio.

Installation

Before installing your new **BOSS** AUDIO SYSTEMS equalizer, please become familiar with all the information contained in this manual.

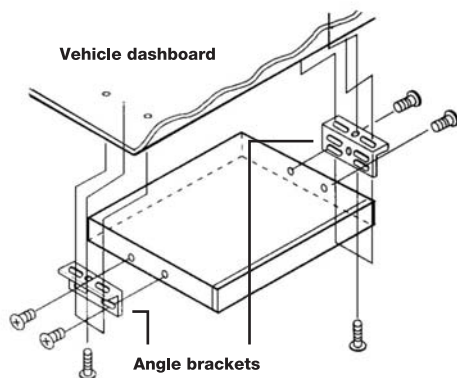
Choose a mounting location where the unit will not distract or otherwise interfere with the driver's ability to control the vehicle.

Use only the installation parts and hardware provided with the unit to ensure proper installation. Using other parts can cause malfunction and possible damage to your **BOSS** AUDIO SYSTEMS equalizer.

Avoid installing the unit in a location which is subject to high temperatures, direct sunlight, hot air from such sources as heaters or exhaust lines, or where it will be subject to contact with dust, dirt, moisture or excessive vibration.

Mounting the equalizer

The AVA1404 is designed to be installed to the underside of your vehicle dashboard or other similar surface using the screws and brackets provided. Install the unit securely, according to the diagram below.



Turning on the power

The AVA1404 has internal ON/OFF circuitry which responds to turning ON or OFF the head unit of your car audio system. This requires that your head unit have a remote turn-on lead available on the rear panel (which most head units have).

With this convenient remote turn-on/off feature, you never have to worry about turning off the power to the equalizer when you shut off the audio system.

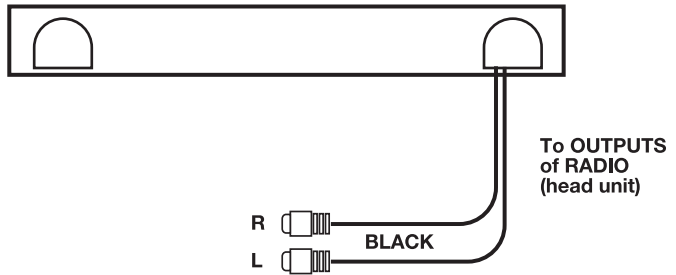
Setting system power output levels

The AVA1404 does not have Volume Level controls. Therefore, all of your audio system level controls are made at the head unit.

Audio connections

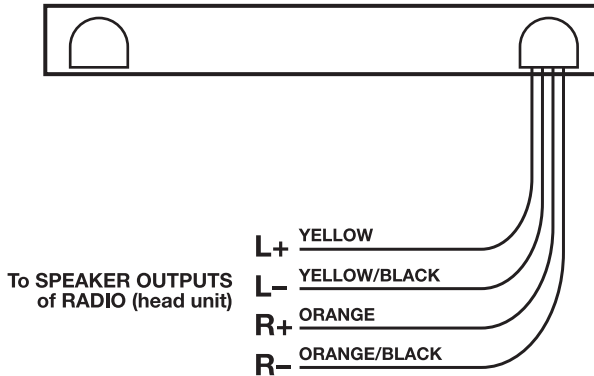
Review the diagrams below and connect the unit as shown.

Using Line Level inputs



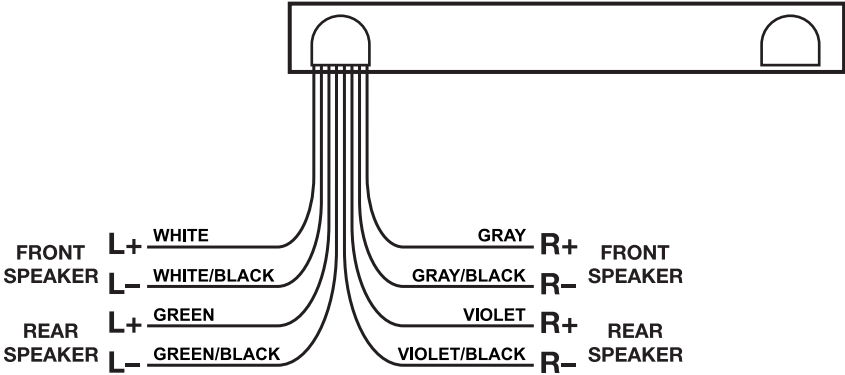
**CAUTION! Use Low Level (RCA) inputs
OR High Level (speaker) inputs – not BOTH!**

Using High (Speaker) Level inputs



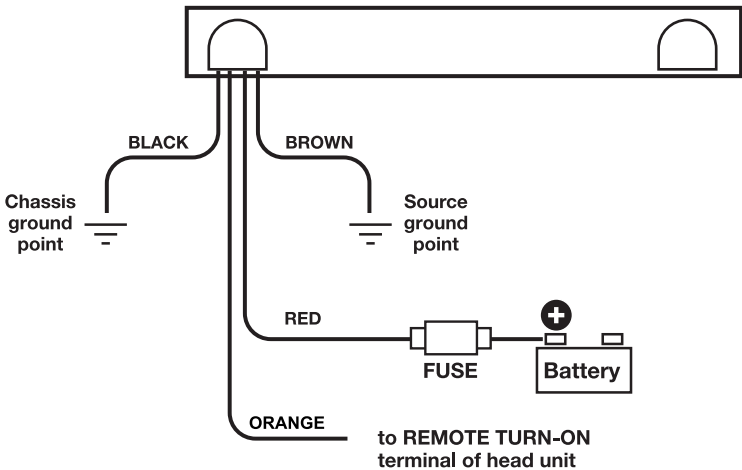
Audio connections

Speakers



Power connections

Please note that this equalizer contains an internal ON/OFF switch, which is activated when the head unit is turned on. For this reason, in order to use this equalizer, your head unit must have a remote-turn on lead.



Specifications



AVA1404

7-Band Amplified Equalizer with LED Power Meter and Subwoofer Output

EQ center frequencies	60Hz, 150Hz, 400Hz, 1 kHz, 3 kHz, 6kHz, 15kHz
Equalization range	+/- 12dB (boost/cut)
Frequency response	20Hz-20kHz
Signal-to-noise ratio	60dB
EQ THD	less than 0.05%
Subwoofer THD	less than 0.05%
Channel separation	45dB
High level input voltage	4V
Low level input voltage	0.5v
Defeat/equalizer	0dB +/- 1dB
Power supply	10-16V negative ground
Output voltage	1.5V, subwoofer channel only
Total output power, front and rear channels	200 watts max power

All specifications subject to change without notice.