

LIMITED WARRANTY

Euphoria warrants any products purchased in the U.S.A. from an authorized Euphoria dealer. All products are warranted to be free from defects in material and workmanship under normal use and service for a period of two (2) years when the unit is installed by an authorized Euphoria dealer. Non-authorized dealer installed products carry a one (1) year parts and labor limited warranty. This warranty applies to the original purchase only.

Euphoria will either repair or replace (as its option) any unit that had been found to be defective and under warranty provided the defect occurs within:

Two (2) years, if purchased through an authorized Euphoria dealer with original proof of purchase.

This limited warranty periods do not extend to units having been subjected to misuse, abuse, neglect, or accident. Products that in Euphoria's judgment shows evidence of having been altered, modified, or serviced without Euphoria's authorization, will be ineligible under this warranty.

To obtain warranty services please contact your retailer or visit our website at www.euphoriacaraudio.com for more details.



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EUPHORIA

F475 : F4100

M750 : M1500 : M2250 : M2750



USER MANUAL

Installation Instructions | Owners Manual

Due to continuous improvement of the product, specifications are subject to change without notice.

INTRODUCTION

Congratulations on your purchase of a DB Drive state-of-the-art power amplifier. Your selection of a DB Drive car audio product indicates a true appreciation of fine musical reproduction. Whether adding to an existing system or including your DB Drive amplifier in a new system, you are certain to notice immediate performance benefits.

KEEP YOUR SALES RECEIPT

Take this time to attach your sales receipt to the manual and put in a safe place. In case of any unforeseen reason this product may need warranty service, your receipt will be necessary to establish purchase date.

RECOMMENDATION

A power amplifier's performance is only as good as its installation. Proper installation will maximize the system's overall performance. It is recommended that you have our product installed by an authorized DB Drive retailer. However, if you decide to install it yourself, please carefully read through this manual and take your time to do a quality installation.

Due to continuing product improvements and possible manual revisions, we recommend checking our website for latest product information at www.euphoriacaraudio.com

IMPORTANT! Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system.

WARNING!

Exposure to high power sound system can cause hearing loss or damage. Listening to your system at loud levels while driving will impair your ability to hear traffic sounds and emergency vehicles. Use common sense when listening to your system.

Serial # _____

Model # _____

SAFETY PRECAUTIONS

Fuse amplifiers power wire at the battery

Be sure to fuse the power wire within 12" of the car's battery. This will protect the car's battery in case of a short circuit between the power amplifier and battery. **THIS IS A MUST**, the amplifier's built-in fuse will only protect the power amplifier not the car's battery!

Use high grade wire connectors

To ensure maximum power transfer and secure safe connections, it is recommended to use high grade barrier spades (for connection at amplifier) and terminal rings (for connection at battery).

Do not run any wires underneath vehicle

Exposed wires have a chance of being cut or damaged. It is best to run all wires through the vehicle under the carpet and/or side panels. This lends to a cleaner installation and less risk of damage.

Use caution when mounting amplifier

Remember there are many electrical wires, gas lines, vacuum lines, brake lines as well as a gas tank in the automobile. Make sure you know where they are when mounting the amplifier to avoid puncturing lines, shorting wires or drilling holes in the gas tank.

Run signal wires away from electrical wires

To avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise), run wires away from the car's electrical wiring.

Make all ground wires as short as possible and at the same point

In order to reduce the chance of ground loops (i.e. engine noise), make the grounding wire as short as possible to reduce the wire's resistance. Also, when using multiple components, make sure all units are grounded at the same point.

Avoid sharp edges when running the wires

To avoid the possibility of power, signal or speaker shorts, be careful not to allow the amplifiers wires to come in contact with sharp edges. Use a grommet to protect the wire when running through the fire wall.

FEATURES AND BENEFITS

DC Offset Protection

This circuit protects the output of the amplifier against DC voltage. If for some reason DC voltage is detected at the output stage, the amplifier will shut down protecting the speakers from direct current.

Short Circuit Protection

The circuit protects the amplifier from damage due to a short found in the speakers or wiring. If one of the speakers or its wiring comes in contact with ground, the amplifier will shut down. To resume normal operation, correct the problem and turn the head unit off, then back on. The amplifier will reset and play again.

Thermal Protection

To protect the amplifier circuitry against damage caused by prolonged exposure to high temperatures, a thermal protection circuit is activated if the amplifier reaches excessively high operating temperature. Once the thermal circuit is activated, the amplifier will shut down to cool off. The amplifier will automatically turn back on once it cools down to a safe operating temperature.

Power Indicator

The diagnostic L.E.D. illuminates when the amplifier is on and receiving power.

Built-in Crossover

The DB Drive Euphoria 4 channel amplifiers (F475 & F4100) feature a variable 12dB slope High Pass crossover for channels 1 and 2. Channels 3 and 4 feature a selectable 3 way 12dB Variable crossover that enable the user to select High Pass, Band Pass or Low Pass settings.

Power and Speaker Distribution Blocks

Heavy gauge bare wire distribution blocks are provided for maximum power and signal transfer with minimal resistance.

Bass Boost

The DB Drive Euphoria Mono amplifiers feature a variable Bass Boost gain centered at 45Hz that enables the user to adjust the amount of bass boost needed to achieve the desired amount of low end response from the subwoofer system.

Line out

Full range line outputs have been provided for convenient connection to additional amplifiers in the system. The outputs are buffered to reduce signal loss. Please note that the amplifier's input level adjusts these level outputs.

Power Fusing

This protects the amplifier against short circuits and excessive current.

Remote Turn-on

Automatically turns amplifier on when connected to the head unit's remote output. The amplifier will turn on and off with the head unit to save current consumption. This control also operates the reset circuit for the amplifier's protection. It must be connected with the head unit in order to reset protection circuits.

Adjustable Input Sensitivity

Allows you to fine-tune the level matching between your source and the power amplifier.

Low Impedance Stability

F475 - 2 Ohm Stereo (4 Channel)
F4100 - 2 Ohm Stereo (4 Channel)
M750 - 1 Ohm Mono
M1500 - 1 Ohm Mono
M2250 - 1 Ohm Mono
M2750 - 1 Ohm Mono

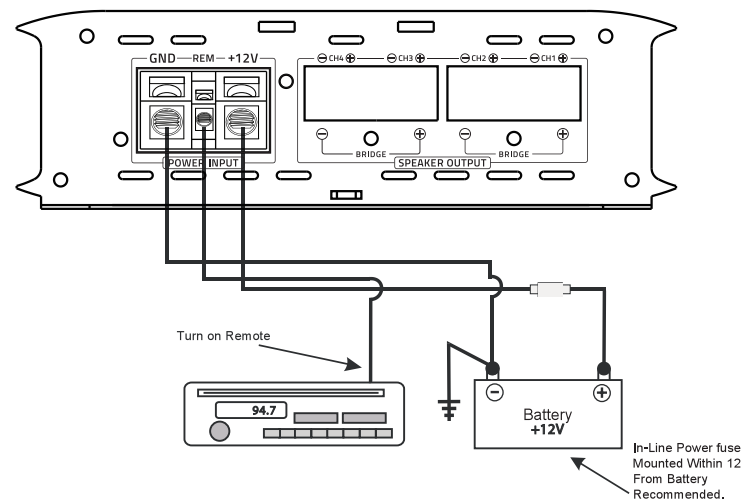
MOUNTING LOCATION

Before you start the installation, it will be necessary to find a mounting location for the amplifier. Find a location in which the amplifier will receive adequate ventilation in order to dissipate the heat it develops during operation. Two popular mounting locations are in the trunk or under the seat.

Select the location in which you wish to mount the amplifier. Use caution when mounting amplifier, there are many wires, gas lines, vacuum lines, brake lines as well as a gas tank in the automobile. Make sure you know where they are when mounting the amplifier to avoid puncturing lines, shorting wires or drilling holes in the gas tank. Once you are ready, use a pencil to mark the mounting holes in the bottom panel. After you have marked the locations of the holes move amplifier out of the way and drill small starter holes to make the tapping screws easier to install. Use provided screws to tighten down the **amplifier**.



POWER CONNECTIONS



IMPORTANT! Before making any connections, disconnect the car's battery until the installation is completed to avoid possible damage to the electrical system.

Connect the amplifier to the car's battery

At times, the amplifier will need to draw large levels of current that cannot be provided by any circuit in the car's fuse box. We recommended using a 4 gauge power wire for your connections depending on the amplifier and length of the wire. Strip one end of the wire to connect to the terminal on the amplifier marked "batt+". Loosen screw terminal and connect bare wire and tighten. Use caution to make sure no stray wire strands come in contact with surrounding terminals causing short circuits. Run the wire directly to the positive terminal of the car's battery. Make sure to use an in-line fuse within 12" of the car's battery to protect the electrical system and amplifier against short circuits and/or power surges.

Connect the ground terminal of the amplifier to the car's chassis

For the ground connection, use a 4 gauge wire (black) to connect to the terminal marked "ground" and then connect it to the car's chassis. Try to keep the length of the cable as short as possible, preferably less than 6". Also make sure that the point on the car where the connection is to be made is free of paint and dirt.

Connect the remote terminal of the amplifier to a switchable +12V source

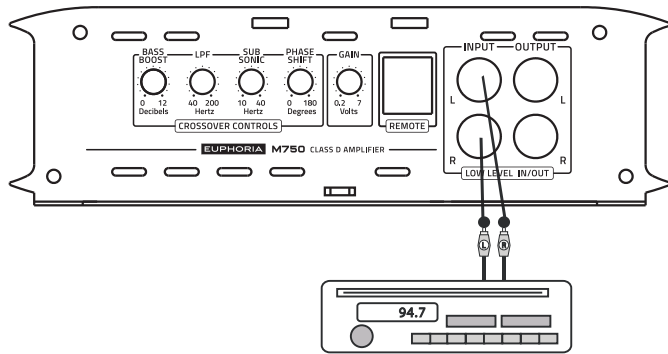
This connection allows the amplifier to be turned on and off with the power control of the radio. If the radio has a REMOTE output terminal, connect it to the amplifier's terminal marked "remote" (using a 16 gauge wire or heavier). Now when the radio is turned on, the amplifier will automatically turn on. This connection can also be made to the radio's Power Antenna wire.

SIGNAL CONNECTIONS

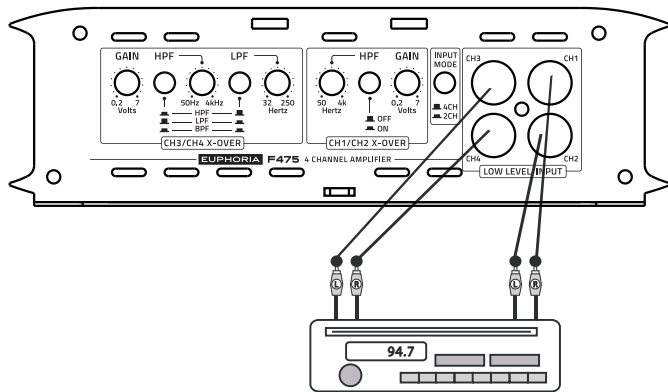
Connect the RCA output of the head unit to the RCA input terminals of the amplifier.

To make these connections, we recommend high quality RCA cables, which are available at your local car audio retailer. Run signal wires away from electrical wires to avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise).

MONO SIGNAL CONNECTION



SIGNAL CONNECTION: 4 Channel Amplifier using 2 pair of RCA inputs.



SPEAKER CONNECTIONS

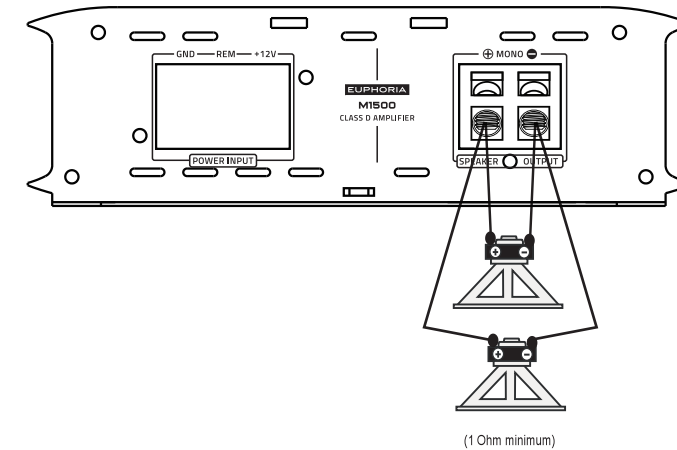
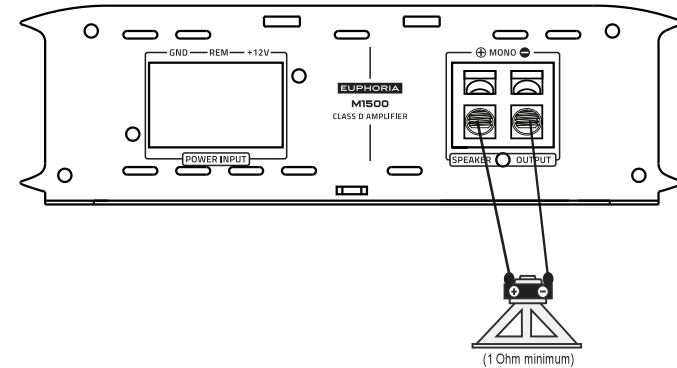
(M750 - M1500 - M2250 - M2750)

IMPORTANT! The following speaker connection are for the amplifier in normal mono configuration.

Make the speaker connections using speaker wire that is at least 16 gauge or heavier.

As with any audio component, proper phasing of the amplifier and speakers is essential for strong bass response. When connecting, make sure that positive (+) from the amplifier is connected to the positive (+) of the speaker, and the same for negative (-).

Please note that although M750, M1500, M2250 and M2750 are mono amplifiers, we have provided two sets of speaker terminals on the amplifier. These terminals are connected in paralleled internally (connected together). The second set of speaker terminals are intended for ease of connection when running multiple woofers.



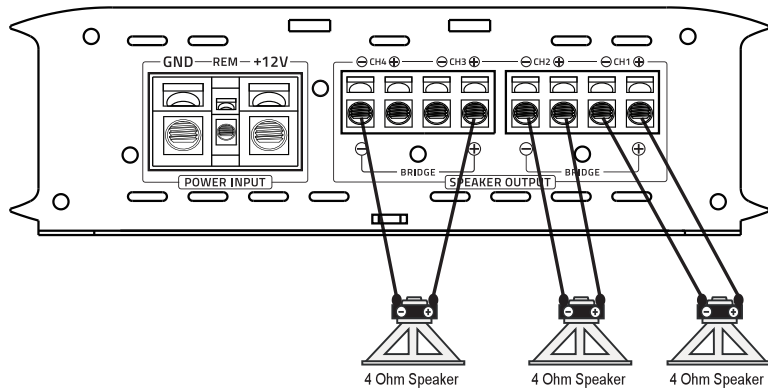
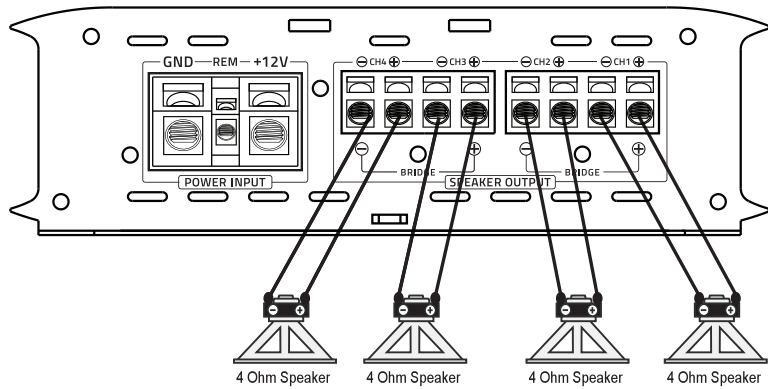
SPEAKER CONNECTIONS

(F475 - F4100)

Make the speaker connections using speaker wire that is at least 16 gauge or heavier.

As with any audio component, proper phasing of the amplifier and speakers is essential for strong bass response. When connecting, make sure that positive (+) from the amplifier is connected to the positive (+) of the speaker, and the same for negative (-).

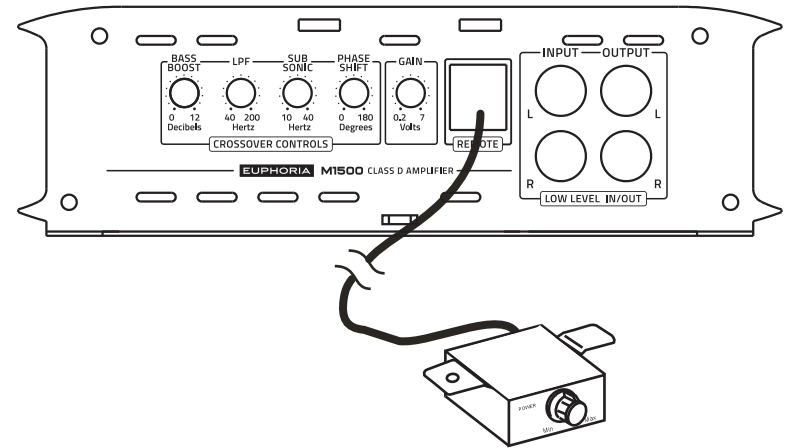
*****CAUTION!** In the bridged mode, the amplifier must see a 4 Ohm load or higher. Any lower than 4 ohms will cause the amplifier to overheat and possible cause permanent damage to the amplifier!



REMOTE BASS CONTROL MODULE

(M750 – M1500 – M2250 – M2750)

Before connecting the remote, it will be necessary to find a mounting location that will be easy to access for adjustment. Once you select your mounting location, you will need to run the control wire from the remote to the amplifier. To avoid possibility of induced noise from the car's electrical system (i.e. popping noises or engine noise), run the cable from the remote to the amplifier away from the car's electrical wiring.



Built-in Crossover

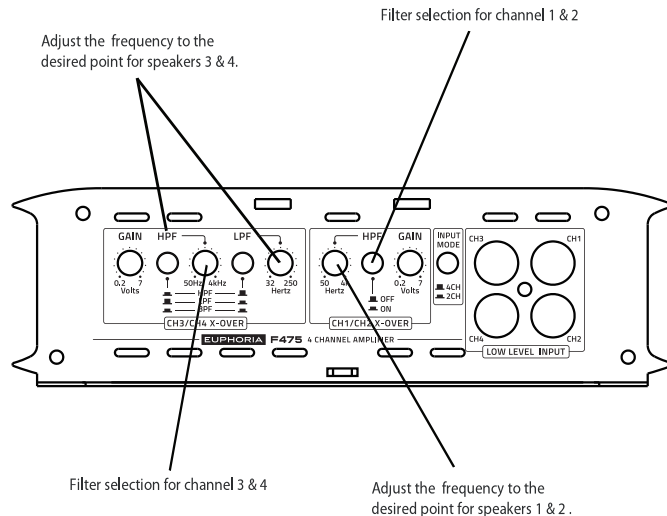
(4 Channel: F475, F4100)

The DB Drive Euphoria 4 channel amplifiers (F475 and F4100) feature a 12db Slope crossover network. Channels 1 and 2 can be used in the High pass setting or full range and channels 3 and 4 feature a selectable 3 way crossover system that can be used in High pass, Bandpass or low pass settings.

Adjustments and Settings

The F475 and F4100 amplifiers are equipped with a variable crossover network that allows you to select the crossover mode (Highpass—Full Range) and desired crossover point for channels 1 and 2. With a High Pass range between 50Hz and 4 KHz, channels 1 and 2 can be used with a component tweeter or any type of full range speaker requiring High Pass filtering. Channels 3 and 4 allow you to select between a 3 way completely variable High pass Bandpass or Low pass setting that can be configured in many different ways allowing the user set up the perfect audio system.

For example if you wish to drive a pair of subwoofers on channels 3 and 4 in the bridged mode, you can select the LP switch settings on the amplifier to filter out the high frequencies. You will then need to adjust the Lowpass control to the desired frequency setting. This will only send low frequencies to your subwoofers. If you wish to use the Bandpass crossover filter you must set the x-over push button switch settings to BP. Once the BP switch setting is selected you will use both the Lowpass and Highpass controls to filter out the unwanted low and high frequencies to create the desired Bandpass filter. (The Bandpass crossover is available on only channels 3 and 4) To use the Highpass filter select the x-over push button switches to the HP setting, this will filter out any unwanted low frequencies.



ADJUSTMENTS AND SETTINGS

(Mono: M750, M1500, M2250, M2750)

The M750, M1500, M2250 and M2750 are equipped with a variable 24db slope Lowpass crossover network and a 24db slope subsonic filter. The mono amps also feature a variable Bass Boost EQ is set at 45Hz.

In some subwoofer enclosure installations it may necessary to use the Phase Shift feature. The Phase Shift button sets the Subwoofer signal between 0 degree setting and 180 degree settings. This will also allow you to fine tune the subwoofer enclosure depending on vehicle location.

