



User Manual

MBA-460 / MBA-475

**4 CH CLASS AB AMPLIFIER
OWNER'S MANUAL**



4 CH AMPLIFIER

THANK YOU

Thank you for making the AWESOME decision to purchase our Audio Hi-Performance amplifier. Proper installation matched with our speakers and subwoofers provide superior sound and performance for endless hours of enjoyment whether you are waking the neighbors or just out enjoying your tunes. So, congratulations on your purchase, thanks for your support and most importantly, enjoy the ultimate audio experience with our amplifiers!

WE'RE HERE TO HELP

We're here to help with any installation or technical support.

IMPORTANT NOTICE

Whenever working on the vehicle, it is recommended to disconnect the battery prior to starting work. Failure to do so may lead to a risk of electric shock or equipment damage.

When connecting power and ground wires ensure that the wire is connected to the vehicle's battery correctly. Failure to do so can result in damage to the vehicle if a short circuit develops between the vehicle connection point and the product.

FEATURES

- 2 Layers PCB
- LED Indicator
- Stable and Reliable Circuit Design
- Small Size Footprint for Easy Installation
- Surface Mount Component Technology
- Audio Precision Quality Control Verification
- Direct Insert Power and Speaker Terminals
- Short Circuit, Thermal, and Voltage Protection

SPECIFICATIONS

	MBA-460	MBA-475
RMS Power ($\leq 1\%$ THD+N)	60W*4@4 Ohm 80W*4@2 Ohm 160W*2@4 Ohm	75W*4@4 Ohm 95W*4@2 Ohm 190W*2@4 Ohm
Dimensions	280*216*50	320x216x50

- S/N Ratio: $\geq 90\text{dB}$
- Frequency Response: 10Hz-50KHz
- Maximum Input Signal: 8V
- Minimum Input Signal: 200mV
- Crossover: Low Pass Filter 50Hz- 250Hz
- Crossover: High Pass Filter 50Hz-2KHz

IN THE BOX

- 4 CH Amplifier
- Manual
- (4)3.5x20mm Screws

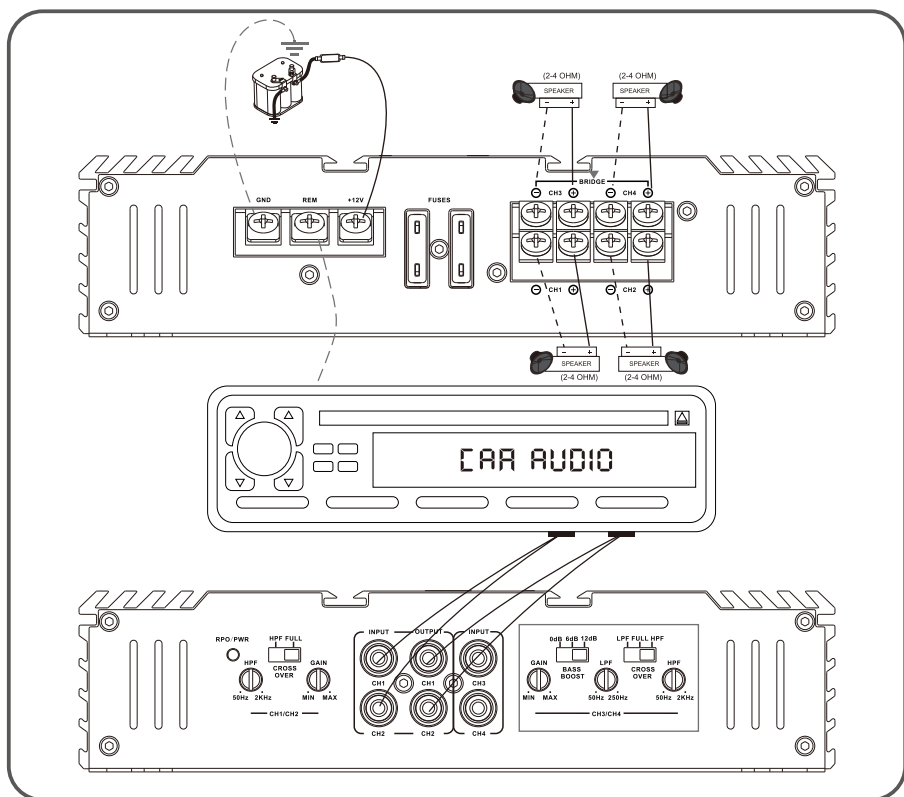
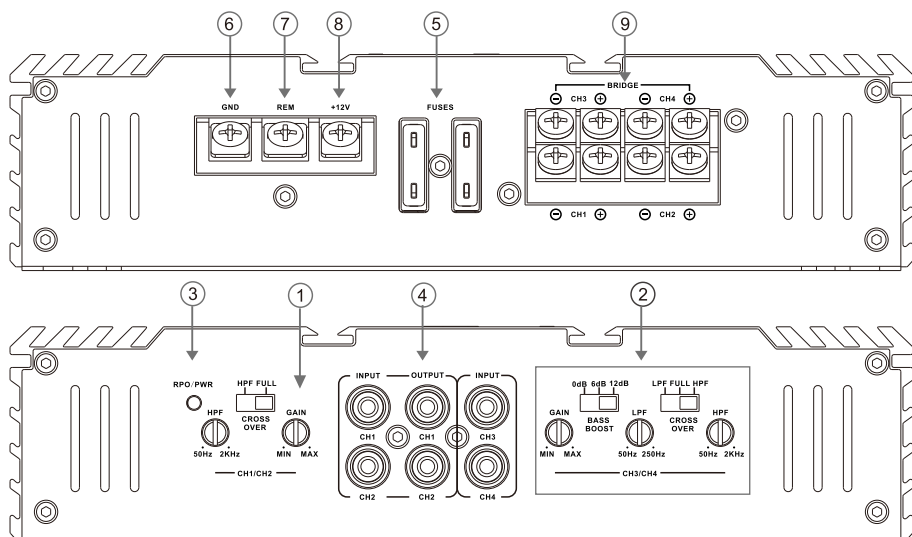
INSTALLATION AND MOUNTING

We recommend your new 4 ch amplifier be installed by an Authorized our retailer. Any deviation from specified installation instructions can cause serious damage to the amplifier, speakers and/or vehicles electrical system. Damage caused from improper installation is NOT covered under warranty. Please verify all connections prior to system turn on!

1. Disconnect the vehicle's negative battery cable.
2. Determine the mounting place for your amplifier. Keep in mind there should be sufficient air flow for proper cooling. Mark the mounting holes from the amplifier to be drilled. Before drilling make sure all vehicle wires, gas lines, brake lines and gas tank are clear and will not interfere with installation. Drill the desired holes and mount the amplifier.
3. Install a positive (+) power cable from the vehicle's battery through the firewall using a grommet or firewall bushing to avoid cable damage from sharp edges of the firewall. Run the cable through the interior of the vehicle and connect it to the amplifier's(+12V) terminal. Do Not connect to the battery at this time. Note:Use only proper gauge wire for both positive and negative connections.
4. Install a circuit breaker or fuse within 20cm of the battery. This effectively lowers the risk of severe damage to you or your vehicle in case of a short circuit or accident. Make sure the circuit breaker is switched off or the fuse is taken out of the fuse holder until all connections are made. Now connect your positive power cable to the positive battery terminal of the battery.
5. Grounding-Locate a proper ground point on the vehicle's chassis and remove all paint, dirt or debris to reveal a bare metal surface. Attach the ground wire to that contact point. Connect the opposite end of the ground wire to the(GND) terminal on the amplifier.
6. Connect a Remote Turn-on wire from the source unit to the amplifier's (REM) terminal. If the source unit does not have a dedicated Remote Turn-on lead, you may connect to the source unit's Power Antenna lead.
7. Connecting signal cables to the amplifier-There are two ways to supply the signal to your amp.
 - To get maximum performance, we suggest connecting a high quality RCA to the corresponding outputs at the source unit and inputs of the amplifier.
 - If a source unit is being used without RCA outputs, use the included high-level amplifier's speaker terminals using the right gauge speaker wire.
8. Connect your speakers to your amplifier's speaker terminals using the right gauge speaker wire. Your amp can drive a 2 ohm minimum load for max power.
9. Double check all previous installation steps, in particular, wiring and component connections. Once verified, reconnect the vehicle's negative battery cable, tune the circuit breaker on or place the fuse in the fuse holder. Note: Gain Levels on the amplifier should be turned all the way down (counter clockwise) before proceeding with adjustments.

CONTROL FUNCTIONS

1. **Gain Control (INPUT LEVEL)**-The gain control matches the input sensitivity of the amplifier to the source unit being used. The operating range varies from 200mv to 8V.
Adjusting the gain:
Step 1: Turn the gain control on the amplifier all the way down (counter clockwise).
Step 2: Turn up the volume control on the source unit to approximately 3/4 of maximum.
Step 3: Adjust the gain control on the amplifier until audible distortion occurs.
Step 4: Adjust the gain control down until audible distortion disappears.
Step 5: The amplifier is now calibrated to the output of the source unit.
2. **FILTER Mode and FREQ Control** - These controls allow control over the frequencies played for the rear channels. There is an option for Low Pass, Full Range, or High Pass. In LP or HP mode, the crossover frequency can be tuned from 50Hz to 2KHz
3. **POWER / PROTECT** -The POWER LED illuminates Green when the amp is switched on. When the amp is in short circuit or thermal protection, the PROTECT LED is on.
You need to check the amplifier or wait for the amplifier temperature to cool down before restarting.
4. **RCA Inputs**-These RCA inputs are used with source units that have RCA or Line level outputs. (Source units need a minimum level of 100mV output for proper operation of the amplifier). We recommends only high quality twisted pair cables (such as Street Wires) to decrease the possibility of radiated noise entering the system.
5. **FUSES**: If the fuse blows, check the power connection and replace the fuse. If the fuse blows again after replacement, there may be an internal malfunction. In this case, consult your dealer.
6. **Ground Terminal**-A proper ground is required for your amplifier to operate at peak performance. A short ground cable the same diameter as the power cable must be used to attach the ground terminal directly to the chassis of the vehicle. Always remove paint, dirt or debris to expose bare metal where the ground will be attached.
7. **Remote Terminal** - The Amplifier can be turned on by applying 12 volts to this terminal. Typically this voltage is supplied by a wire from the source unit marked "remote" or "power antenna".
8. **Power Terminal(+12V)** - This is the main power input for the amplifier and must be connected directly to the positive terminal of the vehicles battery for proper operation. Use caution when installing (+12) power cable in the vehicle. Avoid running this cable parallel with RCA cables, antennas, or other sensitive equipment due to massive currents that can induce noise into the audio system. It is also very important to have a tight, secure connection for maximum performance. We recommends using 4AWG wire with the 4 ch amplifier.
9. **Speaker Terminals(+/-)** - Connect speakers to these terminals, Observe speaker polarity throughout the system. Improper phase can result in loss of bass response and/or poor overall sound quality



NOTE:

Specifications and the design are subject to possible modification without notice due to improvements.