ELEKTRA

MOBILE AUDIO

Alpha Series Amplifier Manual

α500.4 Four Channel

α1100.5 Five Channel

α800.1 Monoblock

α1200.1 Monoblock

CE

www.elektramobileaudio.com

INTRODUCTION

Thank you for choosing ELEKTRA Mobile Audio amplifiers! Your choice of ELEKTRA Mobile Audio amplifiers indicates a desire for high quality music reproduction in the automobile. ELEKTRA Mobile Audio brings to you years of car audio expertise. Whether you are a daily driving music lover, or a serious car audio competitor, ELEKTRA Mobile Audio has the product for you!

To take full advantage of the ELEKTRA Mobile Audio gear you have just purchased, please read and follow the instructions in this manual. As with all of our products, professional installation by an authorized ELEKTRA Mobile Audio dealer is highly recommended! Be sure to ask your authorized ELEKTRA Mobile Audio dealer about whether your product may qualify for an extended warranty.

ELEKTRA Mobile Audio amplifiers offer high quality audio reproduction for the audiophile and the everyday listener alike. All models feature fully variable crossovers with 12 dB per octave slopes, allowing you the ability to tailor the sound to best fit the speakers and your listening preferences.

Amplifiers are generally mounted in the hatch/trunk area of a car or SUV, and under or behind the seat of most pickup trucks. Select a location that will provide adequate ventilation for the amplifier. Avoid mounting the amplifier with the fins facing down. The fins should be facing up, either vertically or horizontally. Secure the amplifier with the screws provided.

FEATURES

Platinum finish connections - Ensure solid electrical connections that resist corrosion.

Fully Variable Crossovers - Fully variable crossovers promote installation ease and save the cost of outboard crossovers. Additionally, they may be used in conjunction with outboard passive or active crossovers, depending on the complexity required by the system. The 12 dB per octave slope offers steep roll-off above or below the selected frequency.

Protection Circuitry - Overload, Short Circuit, Thermal, Low Voltage, High Voltage, and Reverse Polarity. These Protection features are designed to protect the amplifier from misuse, as well as from common causes of amplifier failure.

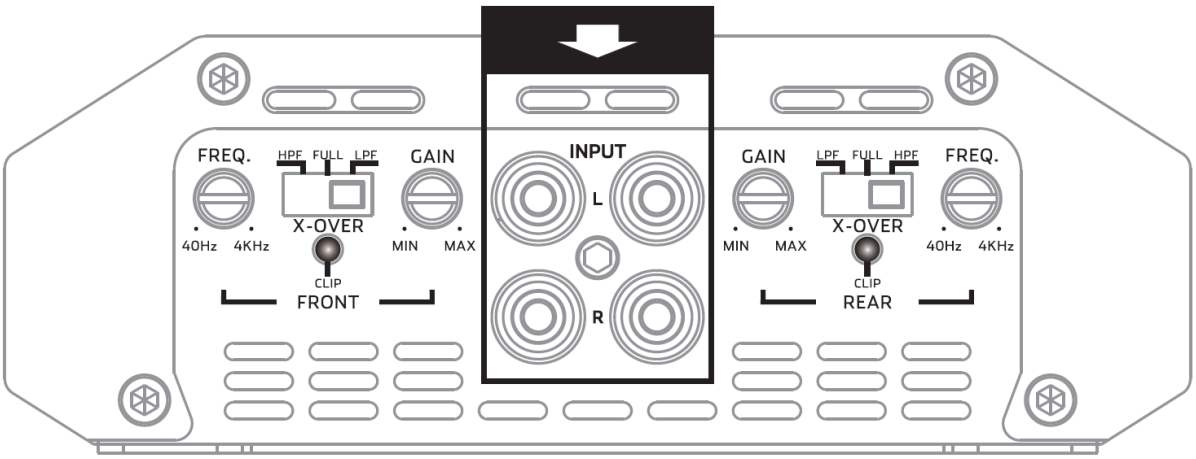
Design Features:

- IR (International Rectifier) Class-D Topology
- Mini Size Footprint For Easy Installation In Many Applications
- Surface Mount Component Technology
- Audio Precision Quality Control Verification
- Stable & Reliable Four Layers PCB Trace Layout
- Power & Protection & Clipping Led Lights Status Indicator
- Short Circuit, Thermal And Voltage Protection

SAFETY

Before securing the amplifier, inspect the mounting location carefully to ensure that you do not drill into, or damage any electrical, hydraulic, fluid, or fuel lines.

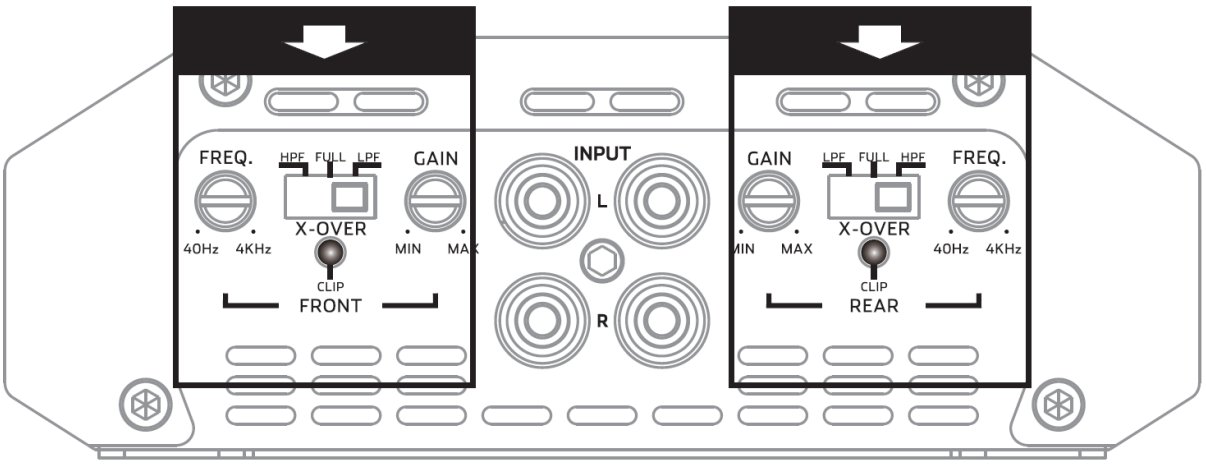
INPUT SECTION



Because of the wide range of head unit output configurations, all ELEKTRA Mobile Audio amplifiers have an adjustable input sensitivity, "Gain". The gain is not a volume or a power limiting control like a throttle. It makes the amplifier more sensitive to input from the stereo. With the gain up, the amplifier will reach full output at a lower volume setting on the deck. At higher gain settings, the amplifier also becomes more sensitive to noise from the car's electrical system. Try to run the gain at the lowest setting possible for your system.

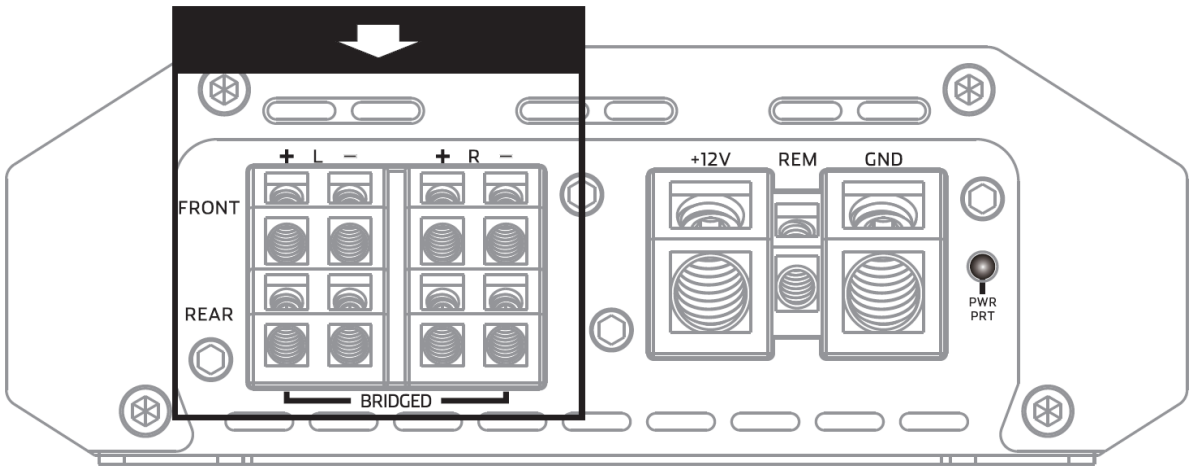
There is no correct gain setting. Because speakers require different power demands to reach the same output, the gains most often need to be used to compensate for these differences. If you tried to set all the gains at halfway you would probably find the system doesn't sound very good. Using good judgment and listening carefully to each speaker is still the best way to tune a system.

CROSSOVER CONTROLS



A crossover is a device that removes unwanted frequencies from a speaker or amplifier. A tweeter can easily be destroyed by bass notes if they are not filtered out. Likewise, a subwoofer will not sound natural if it is playing midrange notes. A crossover removes these sounds from the speaker. Careful adjustment is needed to ensure that all the speakers are playing the right sounds and that you are left with no "holes" or gaps in the frequency response.

SPEAKER OUTPUTS



This amplifier is a multi-channel amplifier design, this means it has more than one channel of speaker outputs. It is equipped with a large block style terminal for speaker connections. Make this connection carefully and neatly. Strip your wire back and twist the exposed leads and insert them into the block terminal while being careful that there are no loose or frayed strands of wire. Tighten the Allen head screw down on the terminal until the wire is tightly secured in place. If the wires ever come in contact with each other the amplifier will go into protection.

INSTALLATION INSTRUCTIONS

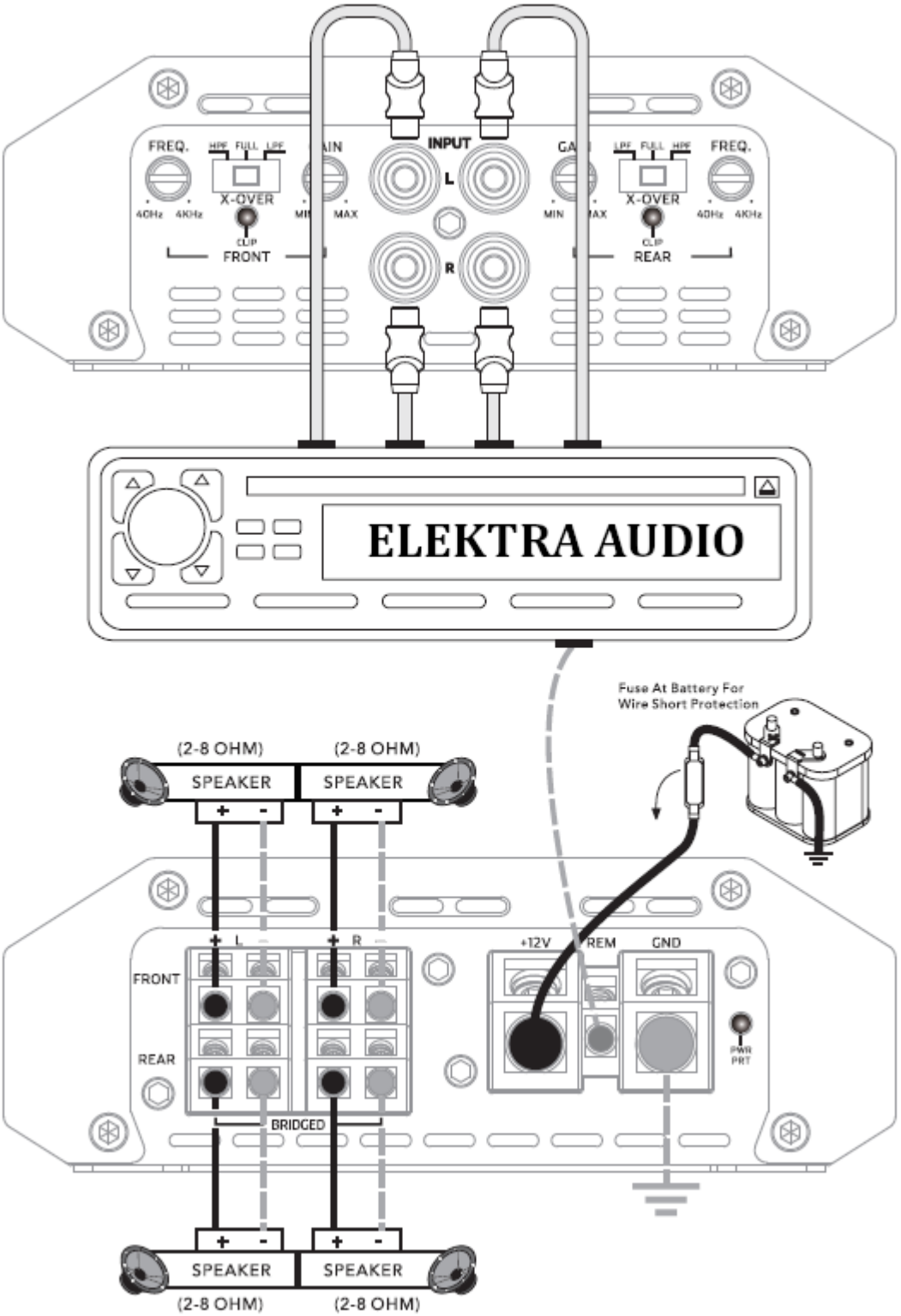
Ensure that you know your total IMPEDANCE loads before you make any connections.

1. Before you start, disconnect the negative cable from the car battery. Tape the exposed end so that it is isolated from the battery.
2. Run an appropriate gauge wire from the battery to the amplifier. Plan this part of the installation carefully as this cable will carry a very high current. The cable can cause a fire if it shorts to the body or if it is not properly fused.
3. Connect the power wire to the battery using a fuse capable of the total current load of all amplifiers connected. Install the fuse after STEP 7. Locate the fuse as close as possible to the battery. If the fuse is further than 18 inches (wire length) from the battery you should reevaluate the wire and fuse placement.
4. Find the closest clear metal area to the amplifier for a ground. Sand, grind or scrape all paint and undercoating from the body and screw the ground securely in place. It is advisable to test the ground with an ohmmeter between the ground cable and the negative battery terminal to ensure a good low resistance connection. Some alloys used in modern cars do not offer the best ground. If you believe this is the case consult with your installation specialist.
5. Run the speaker wire to the speakers. It is advised that you leave some extra wire at this point. You can cut the wires to exact length later.
6. If you haven' t already done so, mount the amplifier to the vehicle now.
7. Connect the power and ground to the amplifier, then you can install the fuse at the battery.
8. Connect the remote wire from the head unit to the amplifier. This is a good time to turn on the amplifier for testing. Make sure it turns on properly and does not go into protection.
9. Turn off the amplifier and connect the speaker wires to the amplifier and speakers. Make sure the polarity (+ and -) is correct.
10. Connect the RCA'S to the amplifier.
11. Double check the amplifier controls at this time, and adjust if needed.
12. Now you're ready to play the system for the first time. It is best to leave the gain all the way down at first. Start with the head unit volume low and turn it up.
13. Now you can tune the amplifier. Take your time and make only one adjustment at a time. It may take some time to get the system fully adjusted. Now have fun!

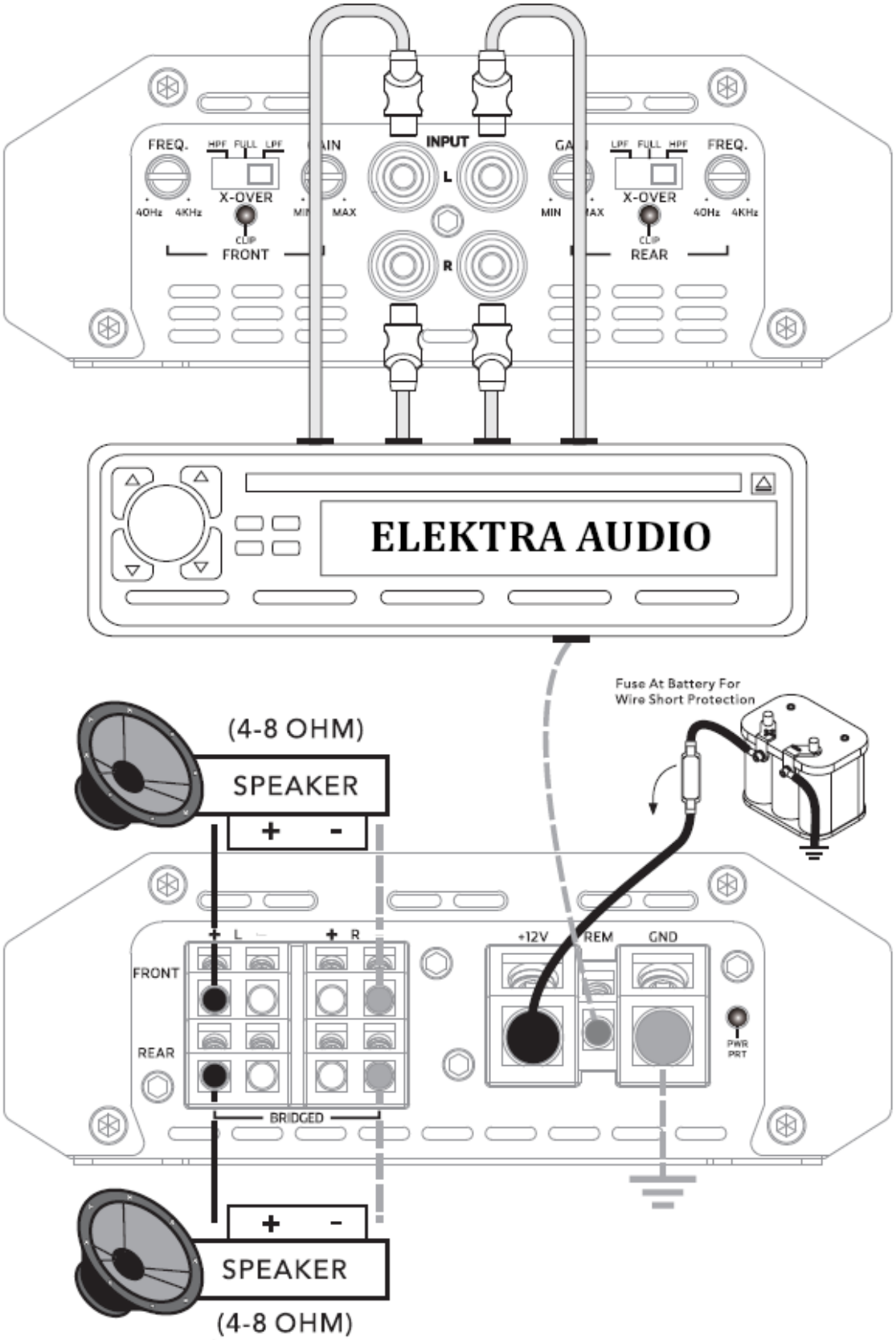
SPECIFICATIONS

Model No.	α500.4	α1100.5	α800.1	α1200.1
RMS POWER OUTPUT AT 1Ω	-	-	800Wx1CH	1200Wx1CH
RMS POWER OUTPUT AT 2Ω	240Wx4CH	150Wx4CH+ 500Wx1CH	600Wx1CH	1000Wx1CH
RMS POWER OUTPUT AT 4Ω	125Wx4CH	80Wx4CH+ 300Wx1CH	400Wx1CH	600Wx1CH
RMS POWER OUTPUT AT 4Ω BRIDGED	480Wx2CH	300Wx2CH	-	-
TOTAL HARMONIC DISTORTION	0.3%	0.3%	0.3%	0.3%
S/N RATIO REF. 1W @ 4Ω	>90dB	>90dB	>90dB	>90dB
GAIN RANGE	0.2-6V	0.2-6V	0.2-6V	0.2-6V
CROSSOVER RANGE	40-4kHz	40-4kHz	Lpf:50-250Hz	Lpf:50-250Hz
FREQUENCY RANGE	20-20kHz	20-20kHz	10-250Hz	10-250Hz
DIMENSIONS (MM)	218x174x49.5	268x174x49.5	198x174x49.5	268x174x49.5
DIMENSIONS (IN)	8.6x6.9x1.9	10.6x6.9x1.9	7.8x6.9x1.9	10.6x6.9x1.9

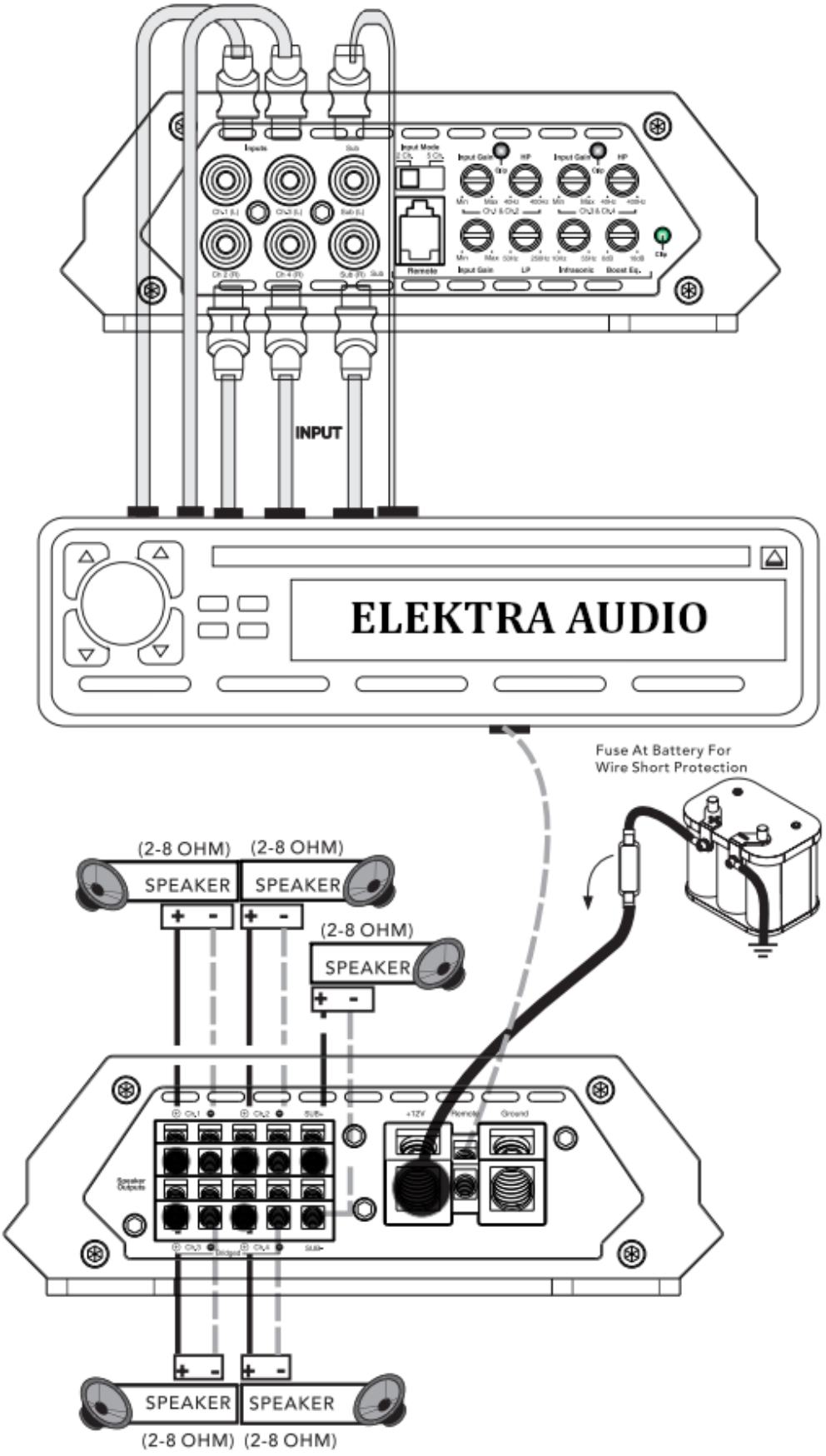
INSTALLATION DIAGRAM - α500.4 FOUR CHANNEL



INSTALLATION DIAGRAM - α500.4 FOUR CHANNEL (bridged)



INSTALLATION DIAGRAM - α1100.5 FIVE CHANNEL



INSTALLATION DIAGRAM – α800.1 & α1200.1 MONOBLOCK