



KAPTION
AUDIO

2/4 Channel Amplifiers

A150.2

A400.4

OWNERS MANUAL & INSTALLATION GUIDE

Introduction

Congratulation on your new purchase of a Kaption Audio amplifier. Kaption Audio amps are built with the most advanced technology today with superior sound quality to deliver a superb listening experience. We have dedicated ourselves for years in order to offer the best possible quality level and reliability in Car Audio.

It is highly recommended that a Kaption Audio authorized dealer installs your amplifier in order to ensure the best quality sound.

Kaption Audio amplifiers can reproduce high sound pressure levels that can cause permanent damage to the human ears. **BE CAUTIOUS** and enjoy for many years.

KAPTION AUDIO AMPLIFIERS COME WITH A ONE (1) YEAR PARTS AND LABOR LIMITED WARRANTY.

PLEASE READ THIS MANUAL BEFORE INSTALLING YOUR KAPTION AUDIO AMPLIFIER.

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Features

- Class “A/B” amplifier
- Nickel plated high current drain power terminal & speaker terminals
- Nickel plated RCA inputs & outputs
- Soft remote ON / OFF circuitry
- Full MOSFET circuitry
- Variable input level control
- Built-in variable Hi/Low Pass Filter
- Built-in variable Bass Boost
- Supports Bridge Mode
- Protection circuit against thermal, over load, short, reverse polarity
- Power & Protection LED indicators

Installation

The quality of the installation will affect the system performance and reliability. If you realize the complexity of the installation, you may wish to contact your local authorized dealer. The amplifier is generally mounted in the rear trunk area, but they can be mounted in any other convenient area such as beneath a seat.

Please be sure to locate this unit in area with reasonable air circulation and protection from unusual hazards. When deciding on a mounting location, it should be considered to minimize the power supply wires and speaker wires. Minimizing the wires will provide higher audio output from the system. It is important to ensure that the cooling fins of the heat sink are not against a panel or surface preventing air circulation.

Mark the locations for the mounting screw holes by using the amplifier as a template and marking the location of the four mounting holes. Drill 3.5mm diameter holes at the marked locations and install the unit on the floor or the chassis using the supplied tapping screws.

CAUTION Before drilling or cutting any holes, investigate the layout of your automobile thoroughly. Use caution when working near the gas lines or hydraulic lines and electrical wiring. Please mount the amplifier before using.

Functions

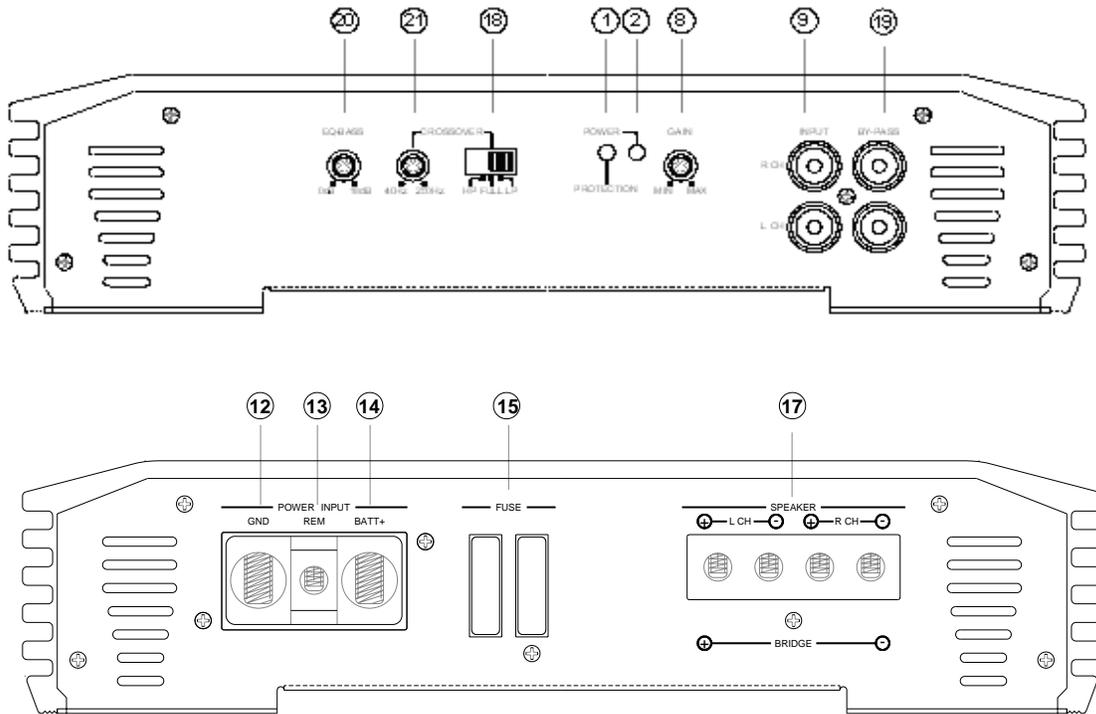


Fig 1. Panel Layout for 2 Channel Class AB Amplifier

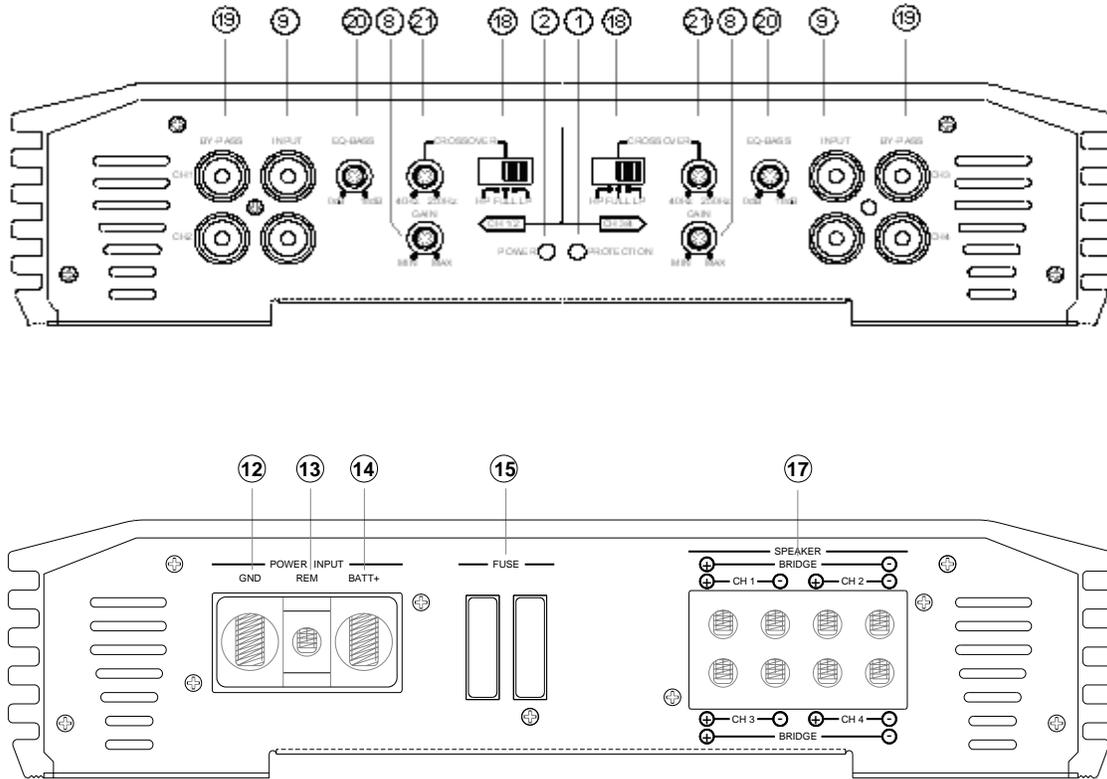


Fig 2. Panel Layout for 4 Channel Class AB Amplifier

1. Protection Indicate LED
 - Lights red when the short protection operates
2. Power Indicate LED
 - Lights blue when the power turns on.
8. Gain control
 - This control is used to match the input sensitivity of the amplifier to the particular source unit that you are using.
9. Line In (RCA) Jacks
 - These RCA input jacks are for use with source units with Low line level outputs. A source unit with a minimum output of 250mV is required for proper operation. However, this will accept levels up to 6Vrms.

12. GND: Ground

- When making a connection to the vehicle chassis, use the proper size ring terminal to suit the ground cable and fasten it to the vehicle with a threaded bolt and nut. Good grounding forms the basis for the audio quality of the entire system. The best solution is to connect the ground cables of all audio-components (Radio, Amplifier, Equalizer etc.) in one common place of the vehicle's chassis.

13. REM: Remote Turn on

- Connect this terminal to the source unit's power antenna or remote turn on output. Some source unit's power antenna output disengages when a source other than the tuner is selected. In this case, you must select a different switched +12V source.

14. Battery+ (Power Input Connection)

- This terminal is the main power input for the amplifier and must be connected to the positive (+) terminal of the car battery.

15. Fuse

- Used to protect the amplifier. If replacement is necessary, use the same type. Never use a fuse with a different rating as serious damage can occur.

17. Speaker Connection Terminal

- Used to connect the amplifier to the speakers. Minimum recommended speaker cable size is 16 gauge.

18. X-Over Switch for FULL/HP/LP

- Activates the built in electronic crossover network. This works in conjunction with the variable X-over control.

19. By-Pass (RCA) Jacks

- RCA style output jacks allow for a signal to be sent to other amplifier.

20. EQ Bass Control

- This equalization circuit is used to enhance the low frequency response of the vehicle's interior. With up to 18dB of boost centered at 40Hz, the bass EQ can be adjusted to meet your own personal taste.

21. X-over Control

- A variable X-over control having a range from 40Hz to 250Hz. This is used in conjunction with the X-over switch in the Low Pass or High Pass position.

Power Supply Connections

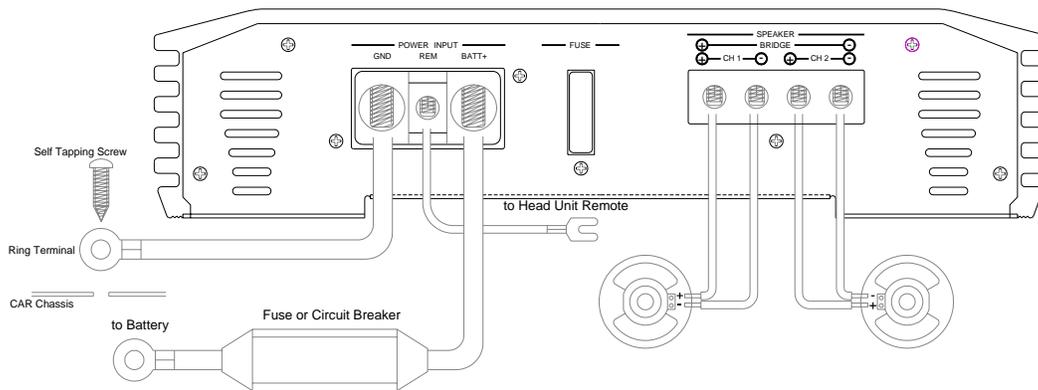


Fig 3. Power Input Connections

All power connections are made via a nickel-plated terminal strip at one end of the amplifier chassis. It is highly recommended that you read the following precautions and contact your nearest authorized dealer if you are unsure of any details.

Before installations make sure the source unit (i.e., your radio in the vehicle) power switch is in the OFF position.

Disconnect the negative (-) lead at the battery before making any electrical connections to avoid short circuits. When making connections, be sure that each connection is clean and secure. Insulate over your final connections with electrical tape or shrink tubing. Failure to do so may damage your equipment.

A secure, clean ground connection is critical to the performance of your audio amplifier. Use the shortest ground wire possible to minimize resistance and avoid noise problems.

Connect the amplifier's positive (+) power lead via an external fuse directly to the battery; the fuse must be as close as possible to the positive (+) terminal. Use a rating that equals the total current consumption at full output of all amplifiers in the system. Adding an external fuse will protect the electrical system from short circuits that can cause a fire.

Important: Do not connect this wire to the car's fuse panel.

Caution: Never ground the speakers to the vehicle chassis or body.

Make sure that your vehicle's electrical system (i.e., alternator, battery, etc.) are capable of handling the additional load. If you are planning a multi-amplifier system, you may need to add a second battery and possibly upgrade the alternator with a higher output rated model. Consult your authorized dealer for recommendations.

It is also recommended to add a digital capacitor to supplement the vehicles battery and assist the amplifier(s)

To avoid possible noise problems, run the amplifier's positive (+) power lead along one side of the vehicle to the battery. Run the remote turn-on wire and RCA audio cables down the center, and route the speaker wires along the remaining side. If wires must cross, run them perpendicular to each other.

When creating passage holes for the power wiring, use grommets to eliminate any sharp edges created during drilling. This will protect the wire from being nicked and causing a short circuit.

Extra cable can cause signal loss and act as an "antenna" for noise. Use only higher quality RCA cables that are no longer than necessary to make a direct connection with the source unit or equalizer.

CAUTION

To begin, make +12V wire connection, secondly the ground connection and finally the remote connection. Furthermore, the +12V wire must always be fused at the battery for protection against possible damage. If need to replace the power fuse, replace it with a same value shown on the surface of the fuse. Using a fuse of a different type or rating may result a serious hazard.

Wiring Diagram

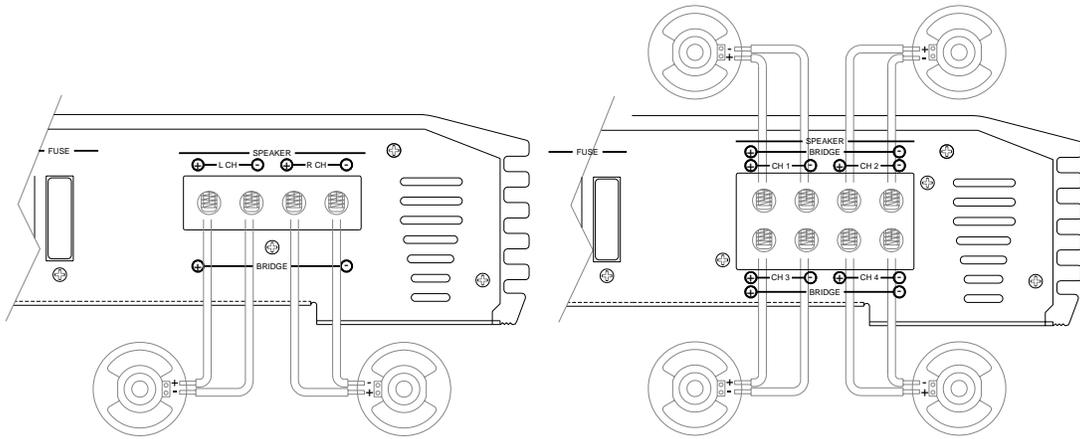


Fig 4. Two or Four Speaker Connection / 2 ohms minimum

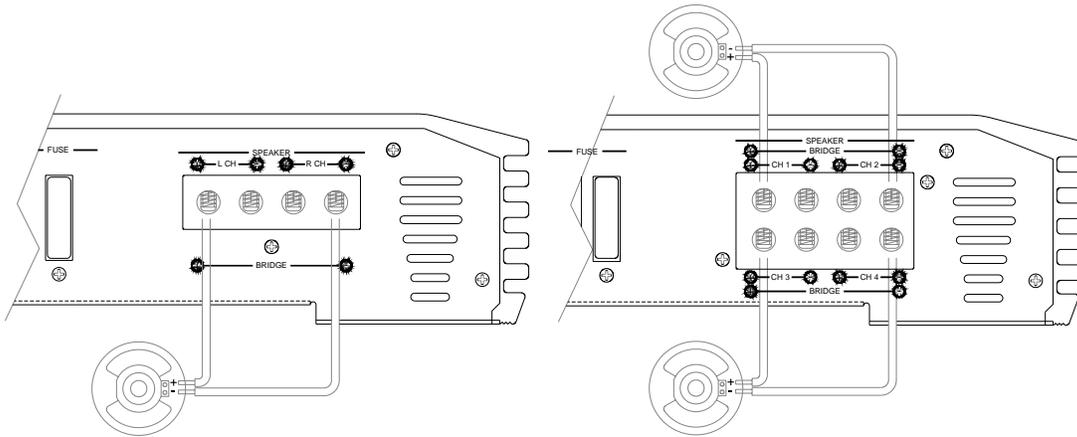


Fig 5. One or Two Speaker Connection / 4 ohms minimum

CAUTION

Maintaining proper impedance is critical when wiring the Class AB model amplifiers. Improper wiring can cause severe damage to both the speaker and the amplifier. Wiring diagrams are supplied with the amplifier. If you are not sure on how to connect your amplifier, Please contact an authorized Kaption Audio dealer before you attempt to wire the amplifier.

Specifications

MODEL	A150.2	A400.4
Rated Output Power @ 4ohms	75W x 2	100W x 4
Rated Output Power @ 2 ohms	100W x 2	150W x 4
Signal to Noise Ratio	> 90 dB	> 90 dB
Frequency Response	20Hz~50kHz	20Hz~50kHz
Low Pass Filter	40~4000 Hz	40~4000 Hz
Crossover Slope	12dB Octave	12dB Octave
Subsonic Filter	30Hz~300Hz (HPF)	30Hz~300Hz (HPF)
Bass EQ at 45Hz	0~18dB	0~18dB
Input Gain Control	0.2V~6.0V	0.2V~6.0V
Low Level Input Impedance	20K Ohms	20K Ohms
Damping Factor	>100 into 4Ohms	>100 into 4Ohms
Fuse Rating	30A	40A
Dimension (W x H x L) (inches)	9-1/4"x 2-1/4"x 12-5/8"	9-1/4"x 2-1/4"x 14-5/8"



KAPTION AUDIO

Kaption Audio
399 Four Valley Dr, Unit 27
Concord, Ontario, Canada
L4K 5Y7

1-866-KAPTION (527-8466)

www.kaptionaudio.com