



**KAPTION**  
AUDIO

**Digital Monoblock Amplifiers**

**D-500.1**

**D-1000.1**

**OWNERS MANUAL & INSTALLATION GUIDE**

## Introduction

Congratulation on your new purchase of 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

- Digital class “D” mono block amplifier
- 2 channels input / MONO output
- Nickel plated high current drain power terminals & speaker terminals
- Nickel plated RCA inputs & outputs
- Soft remote ON / OFF circuitry
- Fully 1 ohm mono operation
- Full MOSFET circuitry
- Variable input level control
- Built-in variable Low Pass Filter
- Built-in variable Subsonic Filter
- Built-in variable Bass Boost
- Built-in phase control switch
- Supports Bridge Mode
- Dash board mount remote gain control
- Protection circuit against thermal, over load, short, reverse polarity
- Power & Protection LED indicators

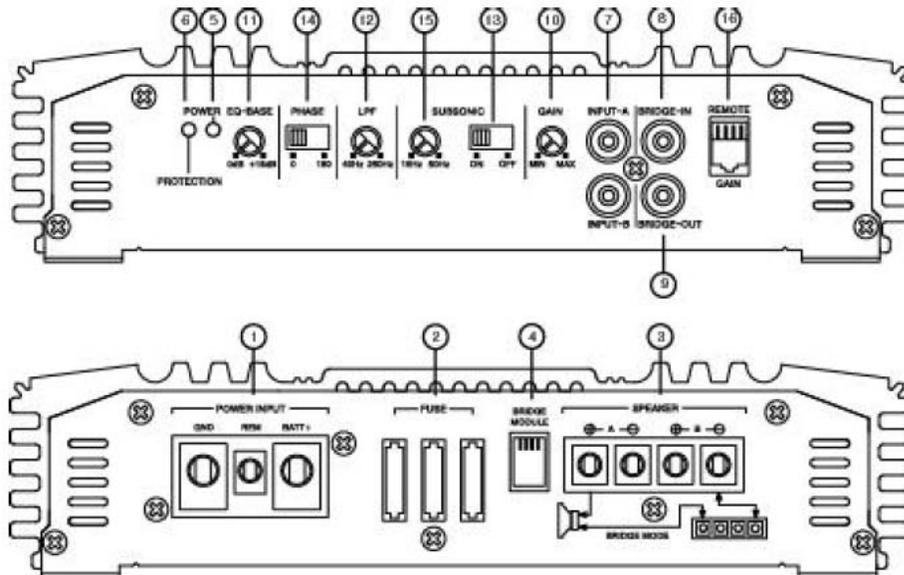
## Installation

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 areas such as beneath a seat.

Please be sure to locate this unit in areas with reasonable air circulation and protection from unusual hazards. When deciding the 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 prevention 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.



### 1. Power Connection Terminal

- Battery +  
+12V power cable must be connected directly to the positive terminal of the battery with an in-line protection fuse, not to the electrical system of the car (i.e., fuse block).
- 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 source unit's remote turn-on output or another switched +12V output.
- 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 and/or etc.) in one common place of the vehicle's chassis.

### 2. Fuse

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

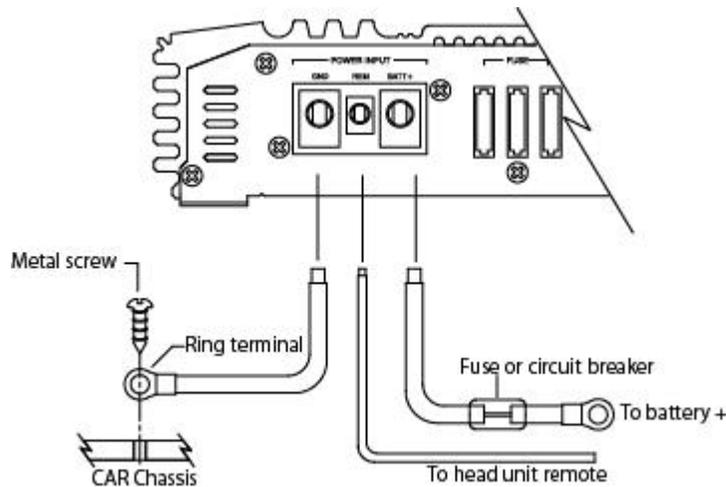
### 3. Speaker Connection Terminal

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

4. Bridge Module
  - Allows for the two amplifiers to be run in series and achieve double the output into one load.
5. Power Indicate LED
  - Lights blue when the power turns on.
6. Protection Indicate LED
  - Lights red when the short protection operates.
7. Low Level Inputs
  - These are the Low Level signal inputs and are connected to the source unit (Radio, Crossover or Equalizer).
8. Bridged Input
  - Signal input from the master amplifier in a two amplifier bridged mode setup.
9. Bridged Output
  - Signal output connected to the slave amplifier in a two amplifier bridged mode setup.
10. Input Level Adjustment
  - This input sensitivity adjustment is used to match the output signal from the radio or source unit to the input of the amplifier. The input section will handle a wide range of signal voltages from 250mV to 6V. Please note following explanation: In the min. Position (max. anticlockwise), the amplifier is the least sensitive to input voltages, and as a result, requires a higher input voltage: 6V. In the max. Position (max clockwise), the opposite applies and the amplifier is the most sensitive at 250mV Therefore, if your radio has a low level signal output of 1V, the input level adjustment would be closer to the max. position than the min. position. This is because a 1V signal is low so the amplifier sensitivity must be fairly high. The aim is to have the input level set to as close to the min. position as possible, and therefore reduce unwanted noise while maintaining the correct rated output. It is important to remember that this adjustment is not a volume control. If the sensitivity is set needlessly high, it may result system and engine noise, blown speakers and damage to the amplifier may result.
11. Bass Boost Adjustment
  - Allow for up to 18dB of boost at 45Hz for the speaker outputs when turned clockwise.
12. Variable Low Pass Filter
  - Adjust from 40Hz to 250Hz with a slope of 24dB per octave. This allows for the adjustment of the upper point of the frequency bandwidth and the respective subwoofer.

13. Subsonic filter selection switch
  - Subsonic filter ON/OFF control switch
14. Phase Switch
  - Adjust the speaker phase to either 0 or 180 degrees.
15. Variable Subsonic filter frequency Adjustment
  - Adjust from 15Hz to 50Hz with a slope of 24dB per octave. This allows for the attenuation of frequencies that are mostly inaudible and cause unnecessary strain on the amplifier.
16. Remote
  - Remote Gain control connecter

## Power Supply 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, 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.) is 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 vehicle's 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.

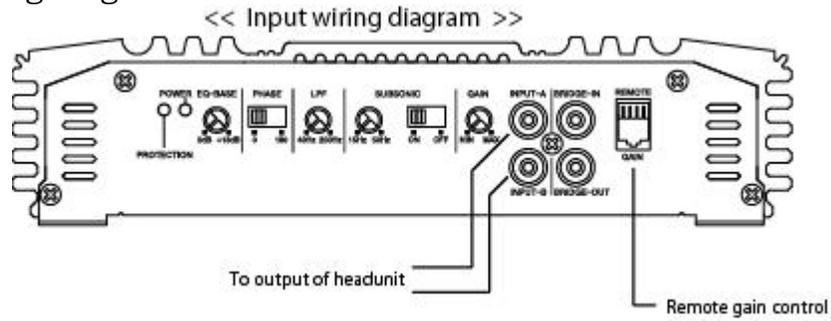
Extra cable can cause signal loss and act as an "antenna" for noise. Use only higher quality RCA cables that are no longer than necessary to make a direct connection with the source unit or equalizer.

#### CAUTION

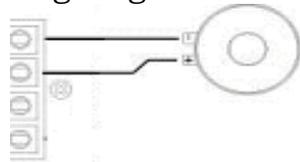
To begin, make +12V wire connection, secondly the ground connection and finally the remote connection. Furthermore, the +12V wire must always be fused as the battery and for protection against possible damage. If you would like to replace the power fuse, replace it with a same value shown on the surface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

# Wiring Diagram (single amplifier setup)

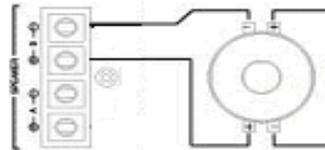
## Input wiring diagram



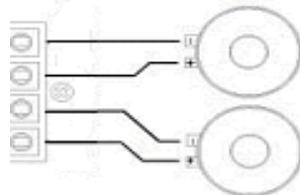
## Speaker wiring diagram



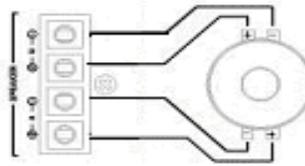
1e 4ohm subwoofer connection



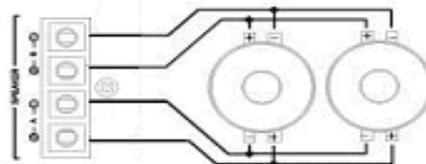
Dual 4ohm voice coils in series = 8ohm



> 4ohm subwoofer connection

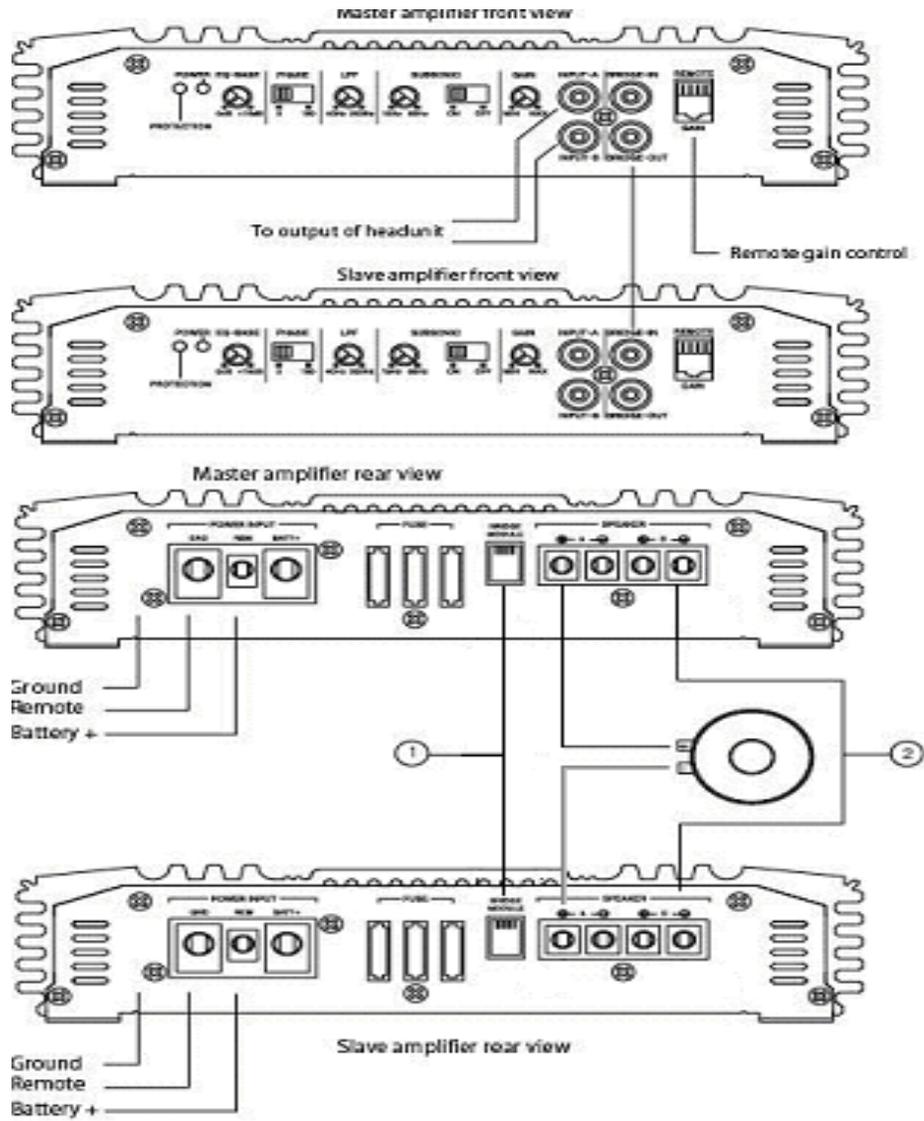


Dual 4ohm voice coils in parallel = 2ohm



Two dual 4ohm voice coils in parallel = 1ohm

# Bridging mode using two amplifiers



## CAUTION

When wiring 2 amplifiers in bridged mode to 1 speaker, connection (1) linking master amplifier to slave amplifier must be wired first. Connection (2) must be performed next between master and slave amplifier. Once connected, the speaker connection can be made to the master and slave amplifier. This will achieve double the output into one load. Any other form of connection may cause serious damage to the products or vehicle and may not be covered under warranty. Please follow all wiring as illustrated or contact an authorized Kaption Audio dealer.

## Specifications

MODEL	D-500.1	D-1000.1
Rated Output Power @ 4ohms	250 W	400W
Rated Output Power @ 2 ohms	400 W	730W
Rated Output Power @ 1ohms	550 W	1000W
RMS Output Power Bridges @ 2ohms	800 W (Dual)	1400W(DUAL)
Total Harmonic Distortion T.H.D	< 0.3%	< 0.3%
Signal to Noise Ratio	> 90 dB	> 95 dB
Input Sensitivity	0.25 ~ 6 V	0.25 ~ 6 V
Input Impedance	20 Kohm	20 Kohm
Frequency Response	15~250 Hz	15~250 Hz
Low Pass Filter @24dB/Oct-Variable	40~250 Hz	40~250 Hz
Subsonic Filter @ 24dB/Oct-Variable	15~50 Hz	15~50 Hz
Bass Boost @ 45Hz	0~18dB	0~18dB
Phase Control	0-180 degrees	0-180 degrees
Idle Current	1.0A	2.5A
Fuse Rating	30A x 3	30A x 3
Dimension (W x H x L) (inches)	9-1/4"x 2-1/4"x 10-7/8"	9-1/4"x 2-1/4"x 14-5/8"



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