

CA212

High Fidelity Power Amplifier Instruction Manual

harman/kardon

Congratulations on your purchase of a Harman Kardon CA212 High Fidelity Power Amplifier.

To fully understand the CA212's capability, please read this manual carefully and follow all of the instructions regarding its use and installation.

Features

- 5 Amperes of HCC (High instantaneous Current Capability) maintain a wide dynamic range and low distortion when driving low impedance or reactive loads.
- Ultrawide Bandwidth is achieved by the use of inherently fast open-loop circuitry. This improves transient accuracy and phase linearity.
- Low Negative Feedback
Highly linear circuitry produces low distortion with only 35dB of negative feedback. This further improves dynamic accuracy.

General Instructions

- This unit is for use in cars with 12 volt negative ground systems only. Never install this unit in a car using a 24V battery or a 12V battery with positive ground.
- To prevent discharge of the car battery, do not use this unit for long periods of time when the engine is not running.
- Should the fuse blow, first check that the connections are correct and then be sure to replace the fuse with a 5 ampere fuse, of the same type as the one supplied with the unit.
- Do not use speakers with a nominal impedance less than 4 Ohms.
- This unit is of the bridged-mono connection type. Never let the speaker output wires touch the car chassis. Do not use a common ground for the left and right channels.
- Do not operate the unit at high power levels inside a very hot car such as would occur if the car was left in direct sunlight with the windows shut. Wait until the temperature in the car returns to normal.
- If your unit behaves abnormally, turn it off immediately and consult an authorized Harman Kardon Service Station.

Accessories

1. Ground Wire (Black) (1 pc.)
2. Power Supply (with Fuse) Wire (Red) (1 pc.)
3. Spade Lug with Tube (1 pc.)
4. Bolt with Washer (5 pcs.)

Connections

Before beginning to make connections, make certain that the ignition key switch is OFF. Be careful to install the amplifier so that it cannot become caught in the sliding seat, or contact the car chassis with its terminals or wiring.

REMOTE terminal

This terminal enables the power switch of the tuner/deck to also turn on the CA212. Squeeze the neck with a pair of pliers to clamp the wires, and then connect it to the appropriate wire (power amplifier remote) on the tuner/deck.

If a specific wire for this purpose is not provided on the tuner/deck, use the wire for controlling the power antenna. If that wire is already connected to the power antenna, the CA212 can be connected in addition.

Should no power antenna wire be provided, connect the wires from both the REMOTE and +B terminals to the ACC circuit of the car, so that the car ignition switch will turn the CA212 ON and OFF.

+B terminal

The +B terminal is the positive power input terminal. It should be connected to a circuit which is turned on when the ignition switch is in the ACC position. And a power indicator on the front panel lights.

GND terminal

This is the negative power input terminal. It should be connected directly to the car chassis using the accessory black wire. It is not necessary to connect this terminal to the negative battery terminal. Engine noise will be minimized when the

ground wire is connected to the same point at which the in-dash receiver or tuner/deck is grounded.

Speakers wires

Connect the speaker systems to these wires. Be careful to connect the positive speaker terminals to the positive wires (blue and red) of the CA212. Do not connect the negative speaker wires (black) to the car chassis.

NOTE: Some cars are provided with speaker wires which often include a negative wire common to both left and right channels. This wire should not be used with the CA212. Be sure to connect the negative speaker wires from left and right channels to their respective wires on the CA212.

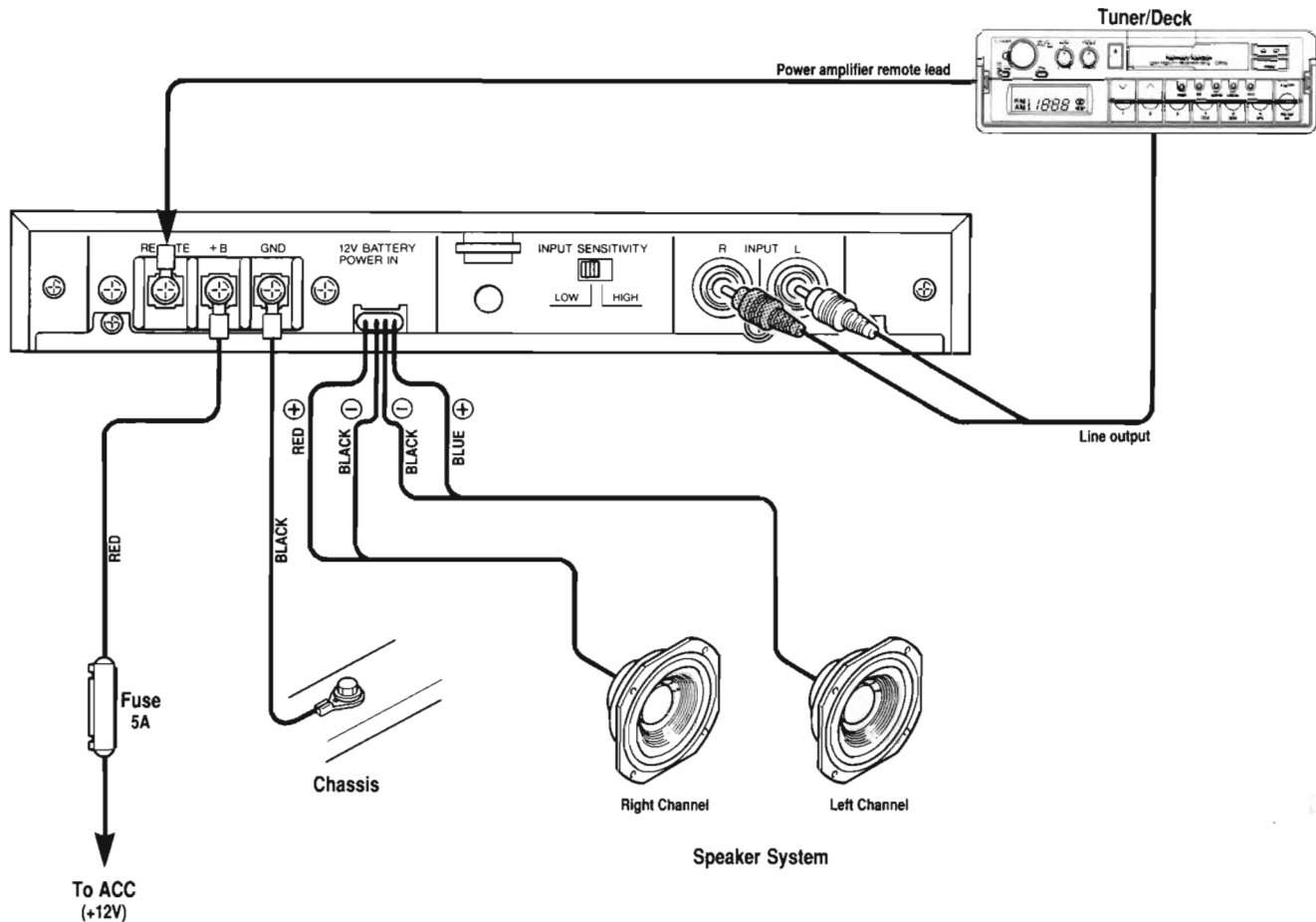
INPUT jacks

These input jacks are for connection to the line (preamplifier) output jacks on the tuner/deck. It is recommended that high quality shielded coaxial cables with tight-fitting RCA plugs be used for this connection.

INPUT SENSITIVITY switch

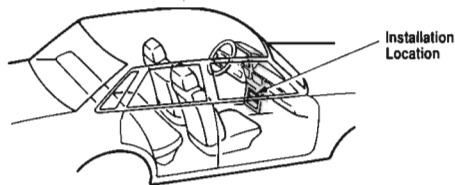
This switch matches the input sensitivity of the CA212 to the output level of the tuner/deck. If the rated output level is equal to or more than 0.5 volts (500 millivolts), set this switch in the "LOW" position. Otherwise, set it in the "HIGH" position.

If the output level of the tuner/deck is not known, assume that it is more than 0.5 volts. When operating the total system, if it is necessary to turn the volume control of the tuner/deck to maximum in order to obtain a desired listening level, then the output level is likely to be less than 0.5 volts, and the input sensitivity switch should be put in the "HIGH" position.



Connection Diagram

Installation



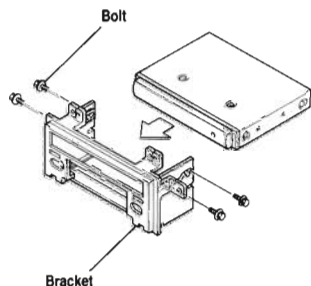
The locations shown in the above illustration are recommended for the CA212 installation. We recommend purchasing a mounting bracket specifically designed for your car in order to best install this unit.

Installation of the CA212 with a mount bracket

Securely mount this unit with the four accessory bolts (two for each side) after deciding the mounting position. Install the bracket with the unit mounted on the chassis of the car according to the instructions on the accompanying sheet.

To install this unit without a mounting bracket, please consult an authorized Harman Kardon Dealer or Service Station.

WARNING: After connecting the power supply wire and speaker wires to CA212, install the unit so that the CA212's terminals will not touch the car chassis.



Specifications

Power Output, RMS	: 12 Watts per channel into 4 Ohms, 20–20,000Hz
HCC (High instantaneous Current Capability)	: 5A
THD	: No more than 1% (4 Ohms)
Negative Feedback	: 35dB
Power Bandwidth	: 10Hz to 30,000Hz
Frequency Response	: 10Hz to 100,000Hz +0, -3dB
Signal-to-Noise Ratio	: 84dB
Input Sensitivity/Impedance	: 0.1V/0.5V (Switchable)/ 22k Ohms
Power Supply	: DC +13.8V (11–16V usable), negative ground
Typical Input Current Requirements	
At Idle	: 0.3A
Full Power Music Signal	: 1.2A (4 Ohms/ch.)
Full Power Sine Wave	: 3.6A (4 Ohms/ch.)
Dimensions	: 7-1/8" x 1" x 5-7/8" (180 x 25 x 149 mm)
Chassis Dimensions (W x H x D)	: 7" x 1" x 5-1/8" (178 x 25 x 130 mm)
Weight	: 2lbs. (0.9kg)

All specifications and features subject to change without notice.

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