harman/kardon
HIGH FIDELITY CAR AMPLIFIER

CA 215
owner's manual

Congratulations on your purchase of a Harman Kardon CA215 High Fidelity Car Amplifier.

To fully understand the CA215's capability, please read this manual carefully and follow all of the instructions regarding its use and installation.

FEATURES

■ *14 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 25dB of negative feedback. This further improves dynamic accuracy.
■ *Discrete Component Audio Circuitry is used because it was found to be the only way to provide HCC, Ultrawide Bandwidth and Low Negative Feedback.*

GENERAL INSTRUCTIONS

● *This unit is for use in cars with 12 volt negative ground systems.*
● *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 Cord (Black) (1 pc.)*
2. *Power Supply (with Fuse/Filter) Cord (Red) (1 pc.)*
3. *Spade Lug with Tube (5 pcs.)*
4. *Mounting Screws and Washers (1 set)*

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 CA215. 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 CA215 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 CA215 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.

GND terminal

This is the negative power input terminal. It should be connected directly to the car chassis using the accessory black cord. It is not necessary to connect this terminal to the negative battery terminal.

SPEAKER SYSTEM terminals

Connect the speaker systems to these terminals. Be careful to connect the positive speaker terminals to the positive terminals of the CA215. Do not connect the negative speaker terminals 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 CA215. Be sure to connect the negative speaker wires from left and right channels to their respective terminals on the CA215.

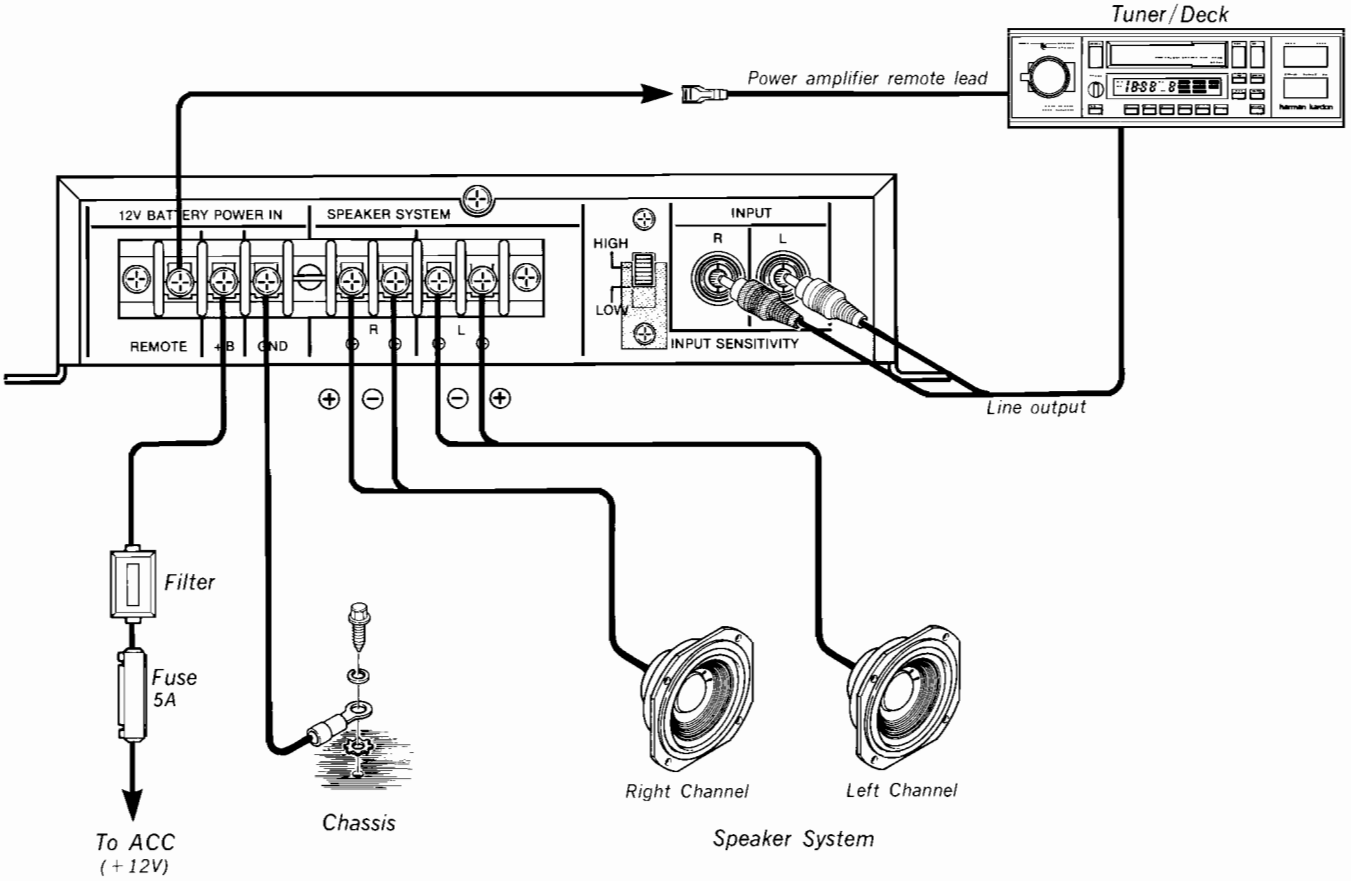
INPUT jacks

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

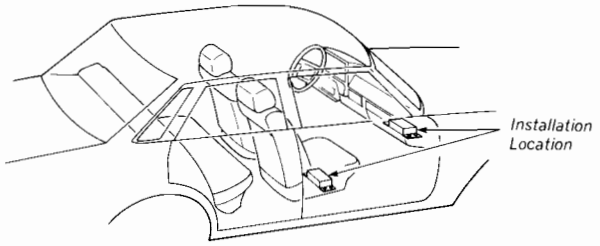
This switch matches the input sensitivity of the CA215 to the output level of the tuner/deck. If the rated output level is equal to or more than 0.5 volts (500 millivolts), set this switch in the "LOW" position. Otherwise, set it in the "HIGH" position.

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

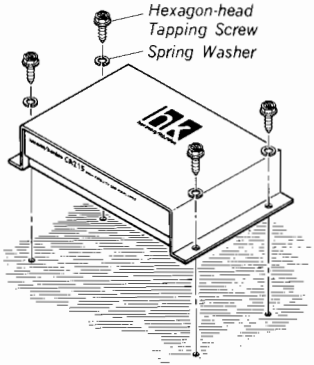
INSTALLATION



The locations shown in the above illustration are recommended for the CA215 installation. If you prefer another location, consult an authorized Harman Kardon Dealer or Service Station before making the installation.

Drill undersized holes in the car chassis corresponding to the four holes in the CA215 chassis so that the 5mm tapping screws fit tightly. We recommend 3.5mm or 1/8 inch diameter holes.

Securely mount the CA215 to the surface with the four 5mm hexagon-head tapping screws and spring washers.



WARNING : After connecting the power supply cord and speaker wires to CA215, install the unit so that the CA215'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)	: *14A*
THD	: *No more than 0.2% (4 Ohms)*
Negative Feedback	: *25dB*
Power Bandwidth	: *10Hz to 100,000Hz*
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 (W×H×D)	: *8-1/4"×1-11/16"×6-3/16" (208×42×156 mm)*
Weight	: *2lbs.3oz. (1kg)*

All specifications and features subject to change without notice.

harman/kardon 240 Crossways Park West, Woodbury, New York 11797 1111-J30227 Issue 2 Printed in Japan