80W+80W Amplifier (120-1960) Installation

Faxback Doc. # 7556

- NOTE: You can connect this amplifier in many different ways. You can even use it with balanced transformerless (BTL) circuitry. However, improper connections can damage your amplifier and/or other components in your auto-sound system. If, after completely reading the manual, you do not feel confident about installing your amplifier and have questions such as...
- \* Does my vehicle have a 12-volt negative-ground electrical system?
- \* Which wire is the power wire?
- \* How do I connect a wire to the fuse box?

...We strongly urge you to have your amplifier installed by a professional auto-sound handler.

CHOOSING THE MOUNTING LOCATION

We suggest that you connect the wiring and confirm that your amplifier operates properly before you actually mount it in your vehicle. However, you should choose the mounting location first. Then, when the unit is connected and working properly, you can mount it without rerouting the wires.

Choose a mounting location below the dash that:

- \* Is as near as possible to your vehicle's radio, tape player, or other main auto-sound component
- \* Does not interfere with operation of the vehicle
- \* Is not directly in front of a heating vent
- \* Allows for drilling mounting holes, without damaging other vehicle components.
- \* Allows enough leg room for passengers
- \* Allows convenient and safe routing of wires

Then, connect the wiring as follows with the amplifier as close as possible to the chosen location.

## WIRING CONNECTIONS

CAUTION: If the wiring harness (for power and speakers) on your older existing radio/tape is not compatible with your new Realistic amplifier's wiring harness, we suggest that you modify the existing wiring using adapters available at your local Radio Shack store. Or, you can have a qualified technician modify the older wiring for you. Modifying your power amplifier voids its warranty.

CONNECTING POWER AND SPEAKERS TO THE AMPLIFIER

- Before you make any connections, disconnect the positive (+) wire from your vehicle's battery. This reduces the possibility of damage to your system during installation.
  - NOTE: You must reset the clock, digital tuner memories for the radio, and any other timer/memory devices when you reconnect the battery wire after wiring is complete.
- Connect the amplifier's black (ground) wire to a nearby part to the vehicle's metal frame.
  - NOTE: Many parts of modern vehicles are made of plastic or other materials that do not conduct electricity. You must connect the black wire to a metal part that is not insulated from the vehicle's frame by one of these non-conducting parts.
- Connect the speaker wiring harness(es) (not included) to the speakers in your vehicle as shown in the manual.
  - CAUTION: If you use existing speaker wiring or if you run new wires, be sure that chassis ground is not used for any speaker connection. There must be a separate insulated wire for each speaker connection (+ and -).
- 4. Plug the speaker's wiring harness into the amplifier.
- 5. Connect the thin red wire with in-line fuse holder to ACCESSORY power +12 volts which switches on and off with the ignition key.
- 6. Connect the larger red (power) wire with an in-line fuse holder directly to the car battery +12 volts source.



Radio / Tape Player



Amplifier

LEFT RIGHT Speaker 4-ohm

SPEAKER TIPS

- \* Your speakers should be capable of handling 160 watts per pair. Radio Shack auto-sound speakers are normally sold and rated by pairs.
- \* The amplifier is designed for best performance using 4-ohm speakers. Using speakers with less than 4-ohm impedances can damage the amplifier.

CONNECTING REMOTE ON/OFF

- \* Depending on whether or not your vehicle's radio or tape player has a switched power lead, do either a or b:
  - a. IF THE RADIO OR TAPE PLAYER HAS A SWITCHED POWER LEAD (for the auto antenna and such), connect the single orange wire that terminates in a male quick disconnect plug to the switched power lead. With the connection, the amplifier turns on and off automatically with the radio or tape player.
  - b. IF THE RADIO OR TAPE PLAYER DOES NOT HAVE A SWITCHED POWER LEAD, connect the amplifier's orange lead to a power source of +12 volts that is switched on/off by the ignition key (such as the ACC terminal found in most fuse boxes).

CONNECTING THE AMPLIFIER TO YOUR EXISTING AUTO-SOUND SYSTEM



Radio / Tape Player



LEFT RIGHT Speaker 4-ohm

IF THE EXISTING AUTO-SOUND COMPONENT (RADIO OR TAPE PLAYER HAS RCA-TYPE LINE OUTPUT JACKS:

- Connect the radio/tape player's line outputs to the amplifier LINE INPUT jacks using shielded cables with RCA-type plugs. (Connect left to left and right to right).
- Disconnect the square, in-line connectors in the amplifier's input wiring harness.
- 3. Insert the amplifier's input wiring plug into the matching jack on the existing radio/tape player (or into the matching jack that you or a qualified technician added to the existing component).

IF THE EXISTING AUTO-SOUND COMPONENT (RADIO OR TAPE PLAYER HAS RCA-TYPE LINE OUTPUT JACKS:

- 1. Be sure that the square, in-line connectors in the amplifier input wiring are securely connected.
- Insert the amplifier's input wiring plug into the matching jack on the existing radio/tape player (or into the matching jack that you or a qualified technician added to the existing component).

CONNECTING A FOUR-SPEAKER SYSTEM USING ONE AMPLIFIER





LEFT RIGHT Speaker 4-ohm

If the source radio/tape player has both high and low impedance output, you can have two pairs of speakers. Use the front speaker output of the radio/tape player to drive the front speakers, and using the RCA high impedance output, connect the amplifier's HIGH Impedance input to drive the powerful, 4-ohm rear speakers.

## CONNECTING A FOUR-SPEAKER SYSTEM USING TWO AMPLIFIERS

If you want to have four powerful, 4-ohm speakers in your vehicle, you can use two amplifiers -- one for the front speakers and one for the rear speakers. Both amplifiers can be driven by the HIGH Impedance output of the radio/tape player, using two Phone Plug Y-Adapters (Cat. No. 42-2438) connected to the left and right input of each amplifier respectively.

## INSTALLING THE PROPER FUSES

If the fuse for your existing auto-sound unit isn't rated at 3 amps, replace the fuse in the amplifier's 3-amp in-line fuse with a fuse that matches the rating of the existing unit's fuse.

TESTING THE AMPLIFIER

Before mounting the amplifier in the location you chose earlier, we suggest that you reconnect the vehicle battery's positive (+) wire and test your entire auto-sound system. See "Operation".

## MOUNTING THE AMPLIFIER

Attach the amplifier as follows in the location you chose prior to connecting the wiring. You can unplug the wiring harnesses to make mounting more convenient.

- 1. Attach the left and right mounting brackets to the sides of the amplifier with the long end of the bracket against the dash.
- Using the brackets as a guide, mark the locations for the mounting holes.
- 3. Drill 3/16-inch holes in the marked locations, using care not to damage anything on the opposite side of the mounting surface.

- 4. Remove the mounting brackets from the amplifier and attach them to the mounting surface using the supplied sheet-metal screws.
- 5. Attach the amplifier to the brackets and plug in the wiring harnesses.

MOUNTING TWO AMPLIFIERS

Attach the amplifiers as follows in the location you chose prior to connecting the wiring. You can unplug the wiring harnesses to make mounting more convenient.

- 1. Attach the left and right mounting brackets to the sides of the amplifier with the short end of the bracket against the dash.
- 2. Using the brackets as a guide, mark the locations for the mounting holes.
- 3. Drill 3/16-inch holes in the marked locations, using care not to damage anything on the opposite side of the mounting surface.
- 4. Remove the mounting brackets from the amplifier and attach them to the mounting surface using the supplied sheet-metal screws.
- 5. Attach the amplifiers to the brackets one above the other and plug in the wiring harnesses.

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