

Help and Support RetroCarStuff.com



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RetroCarStuff.com

This is where you can find information on the fitting of your new Classic car Radio.

We import these products from USA and much of the information below was taken from Retrosound's website. If you have any vehicle specific Enquiries we will endeavor to answer within 24 hours or chat with an adviser on-line when available.

All of this information can be found on our website at www.retrocarstuff.com

We can be contacted on the website by email or direct chat with one of our operators online.

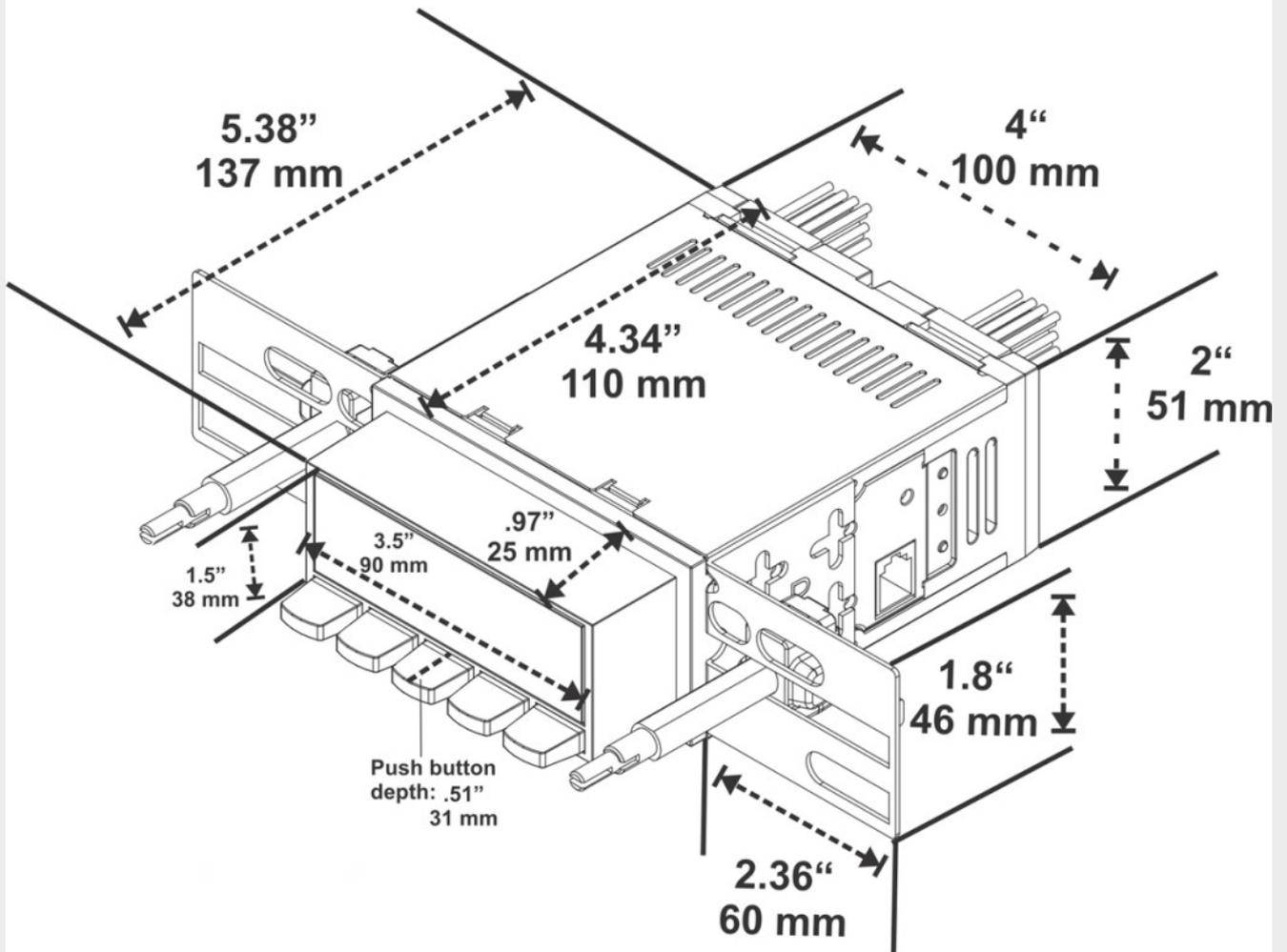
You can telephone us **01368 860800** Monday to Friday 08.30 to 17.00

Our postal address is: CarAudioStuff Ltd, Units 5 & 6 Spott Road
Industrial Estate, Dunbar, East Lothian EH42 1RS Scotland.

Basic Radio Dimensions

RetroSound[®]

RetroClassic Radio Dimensions



FAQ – RetroCarStuff

The chart below illustrates the most common problems you may encounter. For more detailed information, see Installation Tips – Wiring a Radio or Frequently Asked Installation Questions, or contact us or by phone at **01368 860800**.

Problem	Possible cause	Action to solve problem
Radio will not turn on (no sound, no lights)	Yellow wire (12 volts Constant) not connected or incorrect voltage	With a meter, check connections on Yellow wire (12 volts Constant) for proper voltage; it should be at least 12 volts
	Red wire (12 volts Ignition/Accessory) not connected or incorrect voltage	With a meter, check connections on Red wire (12 volts Ignition/Accessory) for 12 volts while key is in the On or ACC position
	Black wire (Ground) not connected	Be sure Black wire (Ground) is at a clean metal surface or a known ground
	Fuse blown at radio or in vehicle	Check and replace fuse(s) if blown
Radio turns on but no sound	Radio volume is down or radio is muted	Check volume control and mute function
	Internal amp is in protect mode	Check speaker wiring for shorted or grounded wires
	Make sure radio is in desired source mode (AUX,BT Audio, etc.)	Toggle radio to correct source
Radio blows fuses	Possible short in wiring	Check wiring to be sure there are no shorts. Possible incorrect fuse (15 amp rating is needed for radio)
	Vehicle is positive grounding or battery is in backwards	Check vehicle for correct negative grounding system or verify battery is installed correctly
When using a USB drive: "USB ERR" or "READING," then switches back to radio	Invalid media or device	Verify media is correct format (MP3 or WAV file, not MP4)

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Be sure to check or replace your existing speakers if they are not 4 ohm.

Unused speaker wires must not touch each other or “short out” by touching the vehicle’s chassis; this will cause the radio to not work.

Any unused speaker wires **MUST** be capped off individually.

Bridged: connecting two speaker wire outputs together in an effort to increase power. This will **NOT** work!

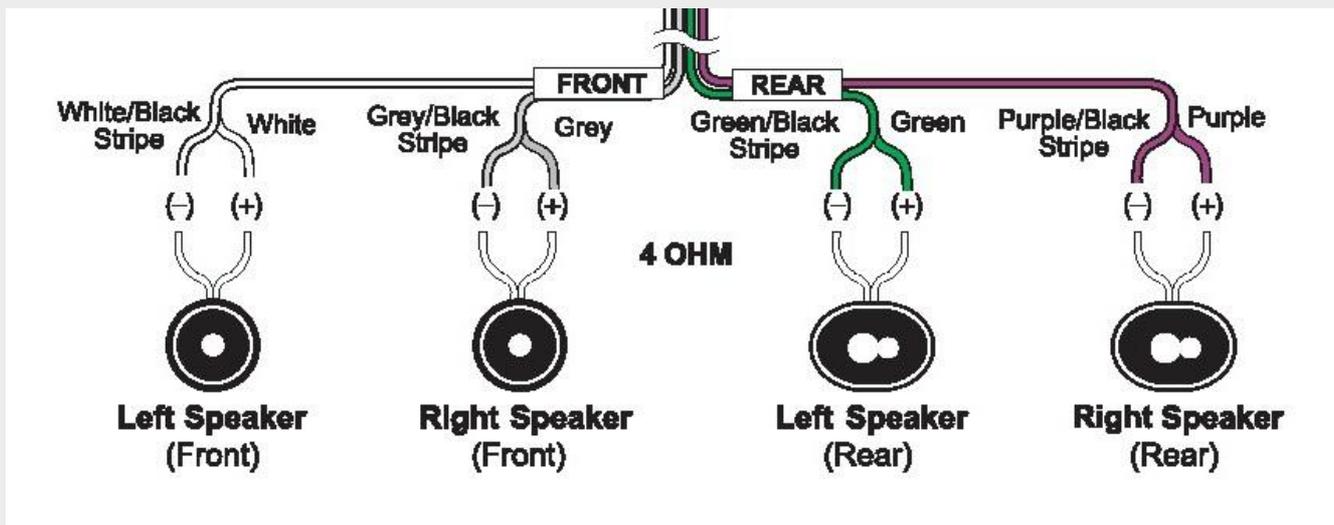
Your RetroSound radio’s speaker wires **CANNOT** be bridged.

Common grounding: when speakers in the vehicle use a chassis ground or a common grounding point for the negative side of the speakers. To use a RetroSound® radio you will need to either purchase an adapter or rewire your vehicle’s speakers.

Your RetroSound® radio’s speaker output wire **CANNOT** be wired to a common ground system.

RetroSound® radios are high-powered and are designed to work with 4 ohm speakers.

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From your RetroSound® radio speaker connector

With the factory radio or radio harness still in the car with speakers:

Remove the factory radio (if still in place) to access the wiring behind the factory radio, or go to where the old radio was located. There is usually a plug or harness coming from the rear of your factory radio (or in the original location of the factory radio).

After determining which wires carry voltage (see wiring a radio), next we will locate the speaker wires. In most vehicles there will normally be two wires per speaker* (one positive and one negative).

2 speakers should have four wires (one positive and one negative per speaker).

4 speakers should have eight wires (one positive and one negative per speaker).

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Speakers and speaker wires have a positive (+) and a negative (-) polarity, as do batteries. Hold the speaker wire you believe to be positive to the positive battery terminal (+). Gently tap, in a brushing motion, the other wire to the negative battery terminal (-). If the speaker is working and the wires are connected, you should hear static or a popping sound from the speaker each time the wire touches the terminal. If you do not hear static or popping, go directly to the speaker and test it.

The easiest way to determine speaker location and polarity of each speaker is with a common household battery (either AA or AAA – nothing larger). First, make sure that the speaker wires you are going to check do not carry voltage.

Listen for which speaker the sound is coming from and watch that speaker for movement as you test. If the speaker “pops out”, then polarity is correct. If speaker “pops in” then polarity is incorrect, and your speaker wires need to be reversed.

Once you have determined the speaker location and polarity connect those wires to the corresponding output wires on the RetroSound® radio.

*Note: If you have a common grounded system or factory amplified system, this testing may not work. It may be necessary to purchase an adapter or rewire your vehicle. For further options please contact technical support by email (support@retrosound.com) or by phone (702-483-2222).

No speakers or factory radio:

Follow the instructions in wiring a radio . Then simply run new wires to each speaker location in your vehicle, making sure to avoid sharp edges or moving parts .

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How do I install the HPA-1 Hidden Antenna?

The HPA-1 antenna is designed to mount inside your vehicle when you are not using a traditional fender mount antenna. Place the main body of the HPA-1 as high in the dash as possible. Avoid placing it near any high-current Ground the main body of the HPA-1 to a clean metal point close to the HPA-1 body via the small braided Route the antenna cable with the thin black power wire to your radio location. Connect the thin black wire to a 12 volt ignition source or the blue power antenna output wire of your RetroSound® radio. Connect the male antenna plug into the female antenna receptacle of your radio.

Why is my radio not turning on?

No. Our radios are designed to work on a 12 volt negative ground system only.

Do your radios work on a 6 volt system?

I have all my wiring done and my radio turns on. Why is there no sound?

Our radios require 12 volts on both Yellow 12 volt Constant and Red 12 volt Ignition/ACC wires. Be sure both have 12 volts. See Troubleshooting or Wiring a Radio for wiring instructions.

The speaker wiring could be touching the vehicle's chassis, causing it to be grounded (shorted).

If the car has an amplified speaker system such as Delco/Bose or Infinity you will need to purchase an adapter or will need to replace the speakers.

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If your vehicle is using older speakers that are the incorrect impedance the radio will not work. Our radios work with 4 ohm speakers; speakers with less than 4 ohms impedance will cause the radio to shut down or may damage the internal amplifier of the radio.

If your car has a common grounding speaker system (the speakers in the vehicle use a chassis ground or a common grounding point for the negative side of the speakers) you will need an adapter or will need to replace the speakers.

My car has a Delco/Bose amplified system. Can I use a RetroSound® radio?

Yes, but you will either need to replace the speakers or use a Delco/Bose adapter. You can get these adapters from many online retailers and/or most car stereo shops.

What is a common ground speaker system?

A common ground system means the negative (-) speaker wires in your car are connected to a common grounding point on the vehicle chassis, or at another point within the vehicle. RetroSound® radios will NOT work on a common ground system. You will need to run new wires to each speaker or use a floating ground adapter.

What speaker wire do you recommend?

We recommend 16 to 18 gauge speaker wire. For “runs” longer than 9 feet use 16 gauge.

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No. The remote antenna wire from the RetroSound® radio will not control the switch. It is used for a fully-automatic antenna only.

My car has a switch to operate the power antenna. Can I use the RetroSound® radio's remote antenna wire to control this?

How can your radio fit my car?

By using period-correct and vehicle-specific knobs and trim parts we can achieve a factory or vintage look. Our radio bodies are very small and are designed to fit in the radio location of almost all vintage vehicles.

What is a Bezel or Faceplate?

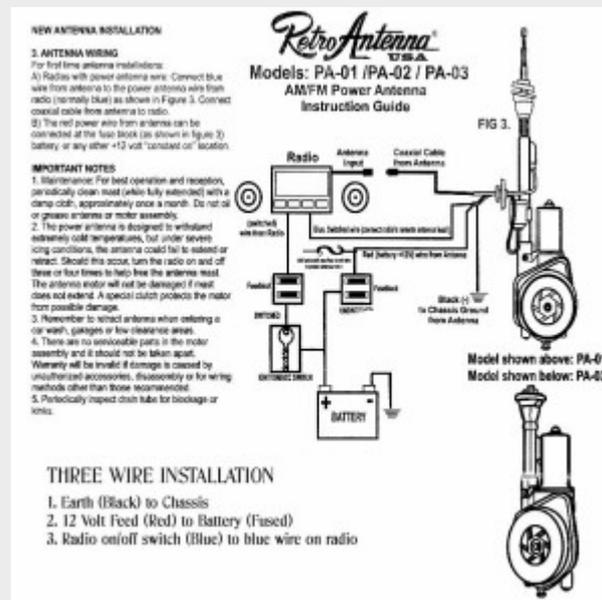
The face of our radio is a fixed size (3.5" W x 1.5" H). Most classic vehicles have a radio opening larger than the face of our radio, so we provide a bezel and/or faceplate to fill the space and finish the installation.

Most European vehicles would use a faceplate. A faceplate is an outer trim piece that is mounted to the front of the dash and secured with shaft nuts.

Most American cars fit the original factory radio from behind the dash. A bezel is a trim piece that slides onto the RetroSound® radio display face to fill the gap between the radio and the factory radio opening. The radio and bezel are loaded from behind the dash and secured.

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Please note that although very simple to install, all electric aerials should have the top nut on and tight before motoring up the mast. We recently had someone who bench tested his aerial and was confused when the mast shot out along with the purlon rope because he had removed the top. To then blame the product as faulty and not as described or fit for purpose was a little frustrating for us as you may imagine.



When connecting a Bluetooth device for the first time, you must first pair the device with the unit. For most devices, pairing only needs to be done once.

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To pair your device, follow these steps:

1. Make sure the BT (Bluetooth) function is turned “ON” in the radio sub-menu.
 - A) To access the sub-menu, press and hold the right front knob for three seconds, then release.
 - B) Repeatedly press and release the right front knob to scroll through the available menu options until reaching “BT OFF” or “BT DISCON.”
 - C) Turn right front knob clockwise to change function to “BT CONNEC.”
2. Ensure Bluetooth is enabled on the device you are connecting to the unit.
3. Search for a new Bluetooth device from the device (this may take up to 30 seconds).
4. Select “RETROSOUND” from the Bluetooth device list.

Yellow wire 12 volts Constant

Basic wiring (what a radio needs to work correctly):

6. If pairing was successful, “PAIRING OK” will be displayed on the LCD display. The paired device will then connect to the unit automatically.
5. Some devices may require you to enter a Personal Identification Number (PIN). If so prompted, enter “0000”

Red wire 12 volts Ignition/Accessory

Is the factory radio still in the car?

If you do not connect ALL of these wires the radio WILL NOT work.

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If so, this is a good place to start. Remove the factory radio to access the wiring behind the factory radio. There is usually a plug or harness coming from the rear of your factory radio.

Black wire Ground

Let's find a constant 12 volt wire. Using your meter (set to 12v DC) or test light find a good clean metal point in the dash to secure the ground side of your meter/test light. With the key in the off position, probe and test the wires. Not all factory radios have a 12 volt constant wire; you may need to go to the fuse box, cigarette lighter or ignition harness. You should find at least one wire carrying 12 volts at all times.

Found one? Now turn the ignition on, then off; there should be no change. Also turn the headlights on and then off. If this wire stays at 12 volts then this is the correct wire for Constant (yellow wire).

Is the factory radio no longer in the car?

You will need to test at the fuse box, cigarette lighter or ignition harness. Some fuse boxes have "tabs" or spades that provide 12 volts constant as well as Ignition/Accessory voltage.

Using your meter (set to 12v DC) or test light find a good clean metal point in the dash to secure the ground side of your meter/test light. With the key in the off position, probe and test the wires or tabs at the fuse box, locating a 12 volt constant point.

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Factory radio still in the car:

Found one? Now turn the ignition on, then off; there should be no change and voltage should remain at 12 volts. Also turn the headlights on and then off. If this wire stays at 12 volts then this is the correct wire for Constant (yellow wire).

You should find at least one wire carrying 12 volts. Turn the key off. The voltage should go away. Turn the key back to the On/Acc. and Run positions and voltage should come back. This is the correct wire for Ignition/Accessory (red wire).

Again using your meter (set to 12v DC) or a test light find a good clean metal point in the dash to secure the ground side of your meter/test light. With the key in the on/acc. position, probe and test the wires.

No factory radio:

You will need to test at the fuse box or ignition harness. Some fuse boxes have “tabs” or spades that provide 12 volts for accessories as well as a 12 volt constant.

Turn the key off. The voltage should go away. Turn the key back to the On/Acc. and Run positions and voltage should come back. This is the correct wire for Ignition/Accessory (red wire).

Using your meter (set to 12v DC) or test light find a good clean metal point in the dash to secure the ground side of your meter/test light. With the key in the on position, probe and test the wires at the ignition harness or tabs at the fuse box, locating one wire carrying 12 volts.

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When you tested for the 12 volt constant and Ignition/Accessory wires you grounded your meter/test light to a metal point in the dash. You can use this point.

To test a wire for a ground set your meter to “ohm”, then place the ground lead of your meter to the negative side of your car’s battery and use the other lead to test the wire. You should get a very low reading around .1 or .3. Turn on headlights and ignition to be sure there is no change in the reading. This is a good location for Ground (black wire).

Speakers come in many different sizes and configurations. We will cover the basic types for this tutorial.

There are a few things to consider when choosing speakers. How many speakers do you want or need? More important, what type and size do you need?

Types of speakers

Many classic vehicles have only one speaker mounting location, usually in the center dash or console. Other vehicles may have multiple speaker locations.

Dual voice coil: For vehicles with only one speaker location we recommend a dual voice coil dash replacement speaker. A dual voice coil allows you to connect both stereo channels from your radio to one speaker, providing you with a stereo mix from a single speaker location.

Single voice coil: For cars with multiple speaker locations, using stereo pairs of single voice coil speakers will work best.

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These types of speakers are generally used in vintage vehicles that only have one speaker location in the dash, the rear deck or between the rear seats. The ability to connect both stereo channels to one speaker provides a fuller, richer sound than a mono or single voice coil speaker will.

Coaxial: Coaxial speakers in automobiles are two or three-way loudspeakers in which the tweeter (or the tweeter and a mid-range driver) are mounted in front of the woofer, partially obscuring it. These are the most popular speakers for automotive applications.

Component systems: Component systems have a tweeter and mid-bass speaker that are mounted separately. These usually come with a crossover to send the high frequencies to the tweeter and the low frequencies to the mid-bass speaker.

Subwoofer: A subwoofer is a speaker that reproduces low bass frequencies. A subwoofer is usually combined with a crossover and a speaker enclosure for optimum performance.

What fits my car?

If you are replacing factory speakers you will need to know the proper size. If you have the old speakers you can measure them. Most automotive speakers are either round or oval. To find the speaker size measure the outside diameter of the speaker; for an oval speaker measure both length and width. (For example, an oval speaker might be 6×9-inches or 5×7-inches; a round speaker might be 5 1/4-inches or 6 1/2-inches.)

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If there are no speakers in the vehicle, measure the speaker opening. If the opening is round, you will need to measure the inside diameter of the opening. If you have an oval-shaped opening, measure the inside length and width of the opening. This will give you a good idea of the size of speaker you will need.

Make note of the location of mounting holes; in some cases you may need to drill new holes.

Measure the mounting depth. Be aware of anything that may be in the way of the back of the speaker such as air conditioning ducting, wiper motors or other parts.

Now that you have the right size and type of speakers for your car, it is time to install them.

Installing your speakers

2. Remove the old speakers.

1. Determine where the speakers will be mounted.

b. For door speakers it may be necessary to remove your door panels or grills to access speaker mounting screws or nuts.

a. For dash speakers you may need to gain access from below the dash, or remove the speaker grills from the top to access speaker mounting screws or nuts.

4. Check wires.

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c. Rear deck or package tray locations may require removing grills from the top of the deck, and/or accessing the speaker from the trunk area to remove mounting screws or nuts.

3. While removing the old speaker make note of wires and speaker markings and label the positive and negative wires.

a. Be sure wires are sound and free of any breaks or wearing that may cause a short.

b. If needed, run new wires from your radio to the speaker location, avoiding any sharp edges or moving parts.

5. Test fit your speakers.

a. Be sure the speakers fit your location and that there is nothing blocking the back of the speaker.

b. If you need to drill mounting holes, make sure there is nothing in the way (i.e. gas tank, wiring or other obstructions).

6. After test fitting, connect the positive and negative speaker wires to the speaker terminals. Be sure the polarity is correct (positive wire to positive terminal; negative wire to negative terminal). If the polarity is reversed you will have little bass response and poor overall sound quality (see speaker wiring tips).

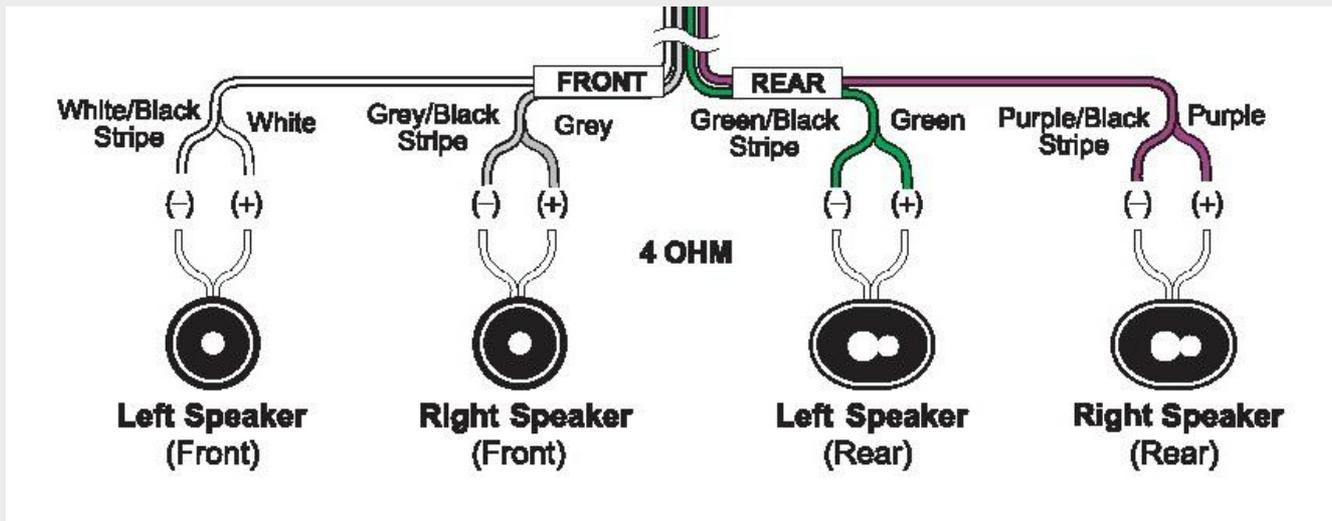
7. Secure the speaker using screws or nuts, making sure not to pinch any wiring.

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Single Voice Coil Speakers

8. Replace any grills or panels you removed.

Speaker wiring tips



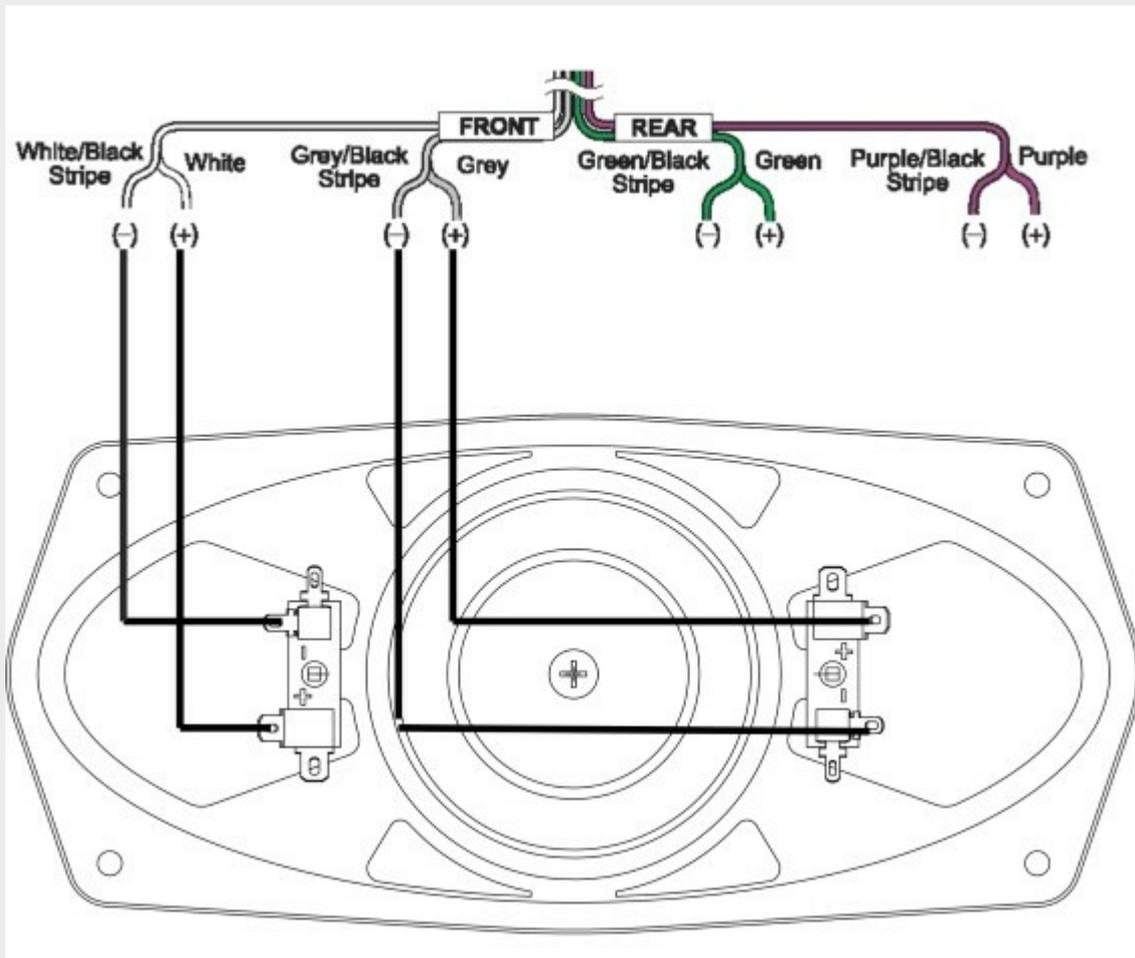
Single voice coil speakers have positive (+) and negative (-) terminals. Each will be connected to the positive (+) and negative (-) outputs of your radio (see diagram below).

Dual voice coil speakers can be wired treating each voice coil as an individual speaker. This type of connection will give you the best sound possible.

Dual voice coil speakers

If you are wiring just two speakers, remember to cap off the unused speaker wires.

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Using the radio's left and right front speaker outputs, connect the left positive (+) and negative (-) wires to one side of the dual voice coil speaker and the right positive and negative wires to the other (see diagram below).