

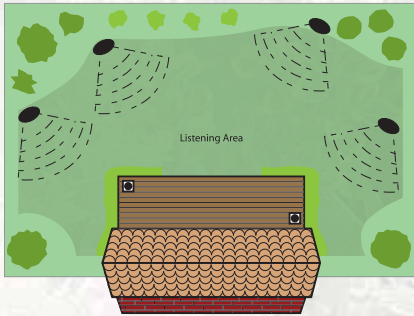
# How to Setup Your Outdoor Rock Speakers

**IMPORTANT!** Before running speaker wire through walls, under walkways, patios, etc... check local building code requirements or contact a qualified installation professional.

**WARNING!** Before digging, verify location of utility, gas lines and buried cables with a reputable utility locating organization.

## 1. Speaker Placement

Establish where the most likely or average listening area will be. Ideally, speakers should be placed on either side of the targeted listening area with at least 8 to 10-feet of total separation. For best performance, try to leave at least 4 to 5-feet of distance between each speaker and the listening area. These rock-type speakers have been designed so they can be placed on the ground among garden plantings; however, to avoid impeding the sound from the speaker, be careful not to cover up the grille area with any substance or heavy-coverage plants or shrubbery.



## 2. Speaker Wire Preparation & Connections

**NOTE:** Check your receiver/amplifier's specifications to determine the number of pairs of speakers your amplifier is capable of driving before you connect multiple speakers. The minimum safe impedance load of most receivers/amplifiers is typically 8 Ohms, which is usually one pair of speakers for each output. If you will be connecting more than two pairs of speakers to a single receiver/amplifier, it is recommended that you purchase and install a speaker selector. A speaker selector will allow you to install up to 8 pairs of speakers to a single receiver/amplifier, and allow you to turn on/off individual pairs of speakers as needed.

**NOTE:** Before proceeding, if you are unfamiliar with running speaker wires and are uncomfortable with this type of installation, please contact a qualified installation professional.

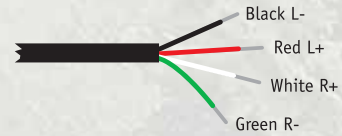
Use high-quality, moisture-resistant, four-conductor speaker wire. To determine the required length of speaker wire, measure and mark the path from the receiver/amplifier to each speaker and add enough extra speaker wire to accommodate burying the cable and moving the receiver/amplifier. It is always better to have more than enough than not enough. When choosing speaker wire, select the correct gauge based on the total length of the wire from the chart below:

### Minimum Wire Gauge Requirements

Under 50-feet	16 AWG (16 gauge)
100 to 200-feet	14 AWG (14 gauge)
Over 200-feet	12 AWG (12 gauge)

**IMPORTANT!** If you are running the speaker wire underground, it must be rated for direct burial (or ran inside PVC or metal conduit) to prevent deterioration. To prevent additional work, do not bury the speaker wire until after you have connected and tested your speakers.

- Make sure your receiver/amplifier is turned off before performing any connections.
- Using wire strippers, carefully remove 2 to 3-inches of the outer protective layer of the speaker wire. Then remove about 1/2-inch of the insulation from the ends of all four wires, exposing the copper wire for each. Optional: Slightly twist the loose copper strands together.



**NOTE:** This rock-type speaker has the ability to play both the left and right channels of a stereo audio system. When connecting speaker wires together, pay close attention to the labels (and colors) of each speaker wire, making sure to correctly connect each wire.

- Make the following speaker wire connections using weatherproof wire nuts: Connect the black wire to the amplifier's left negative wire. Connect the red wire to the amplifier's left positive wire. Connect the green wire to the amplifier's right negative wire. Finally, connect the white wire to the amplifier's right positive wire. As an additional weatherproofing option, fill the wire nut with a quality silicone-based sealant (if necessary) after each speaker has been tested and is working properly.

**IMPORTANT!** Most speaker wires use a red wire as positive and a black wire as negative. Connecting the positive and negative wires incorrectly or backwards will result in a weak bass response and may cause damage to your rock speaker and receiver/amplifier.

## 3. Speaker Wire Preparation & Connections

When all connections have been made and double-checked, turn on your receiver/amplifier and test for proper operation by walking around the listening area to ensure sound is coming from all connected speakers. If a speaker is not working correctly, please refer to the troubleshooting guide below. If everything sounds good and is working properly, you can now bury the speaker wires if necessary.

## Troubleshooting

Problem	Solution
No sound	Make sure the receiver/amplifier is plugged in and turned on. Check for power to the outlet on the wall. Check headphones if being used, are they plugged in or is the system on Mute? Re-check all connections.
No sound from one or more speakers	Check your balance control or volume control. Check that all speaker wires are properly connected. Swap a non-working speaker with a working one to determine if the problem is with the speaker or something else (i.e. wiring, receiver/amplifier)
Lack of bass or dislocated image	One or more speakers may be connected out of phase (their polarity is reversed). Check to ensure that each speaker's wire is connected with correct polarity: Red (+) to Red (+), Black (-) to Black (-), etc.



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