



INSTRUCTION MANUAL

CRK20 ROCK SPEAKER

INTRODUCTION

Thank you for purchasing Sonance CRK20 Rock Speakers. When properly installed, these speakers will provide you with years of outdoor entertainment pleasure.

To get the most out of your new speakers, please read this manual thoroughly before you begin installation.

PARTS LIST

Each Sonance CRK20 Rock Speaker includes the following:

- (2) CRK20 Rock Speakers
- (1) Meter of wire attached to each speaker

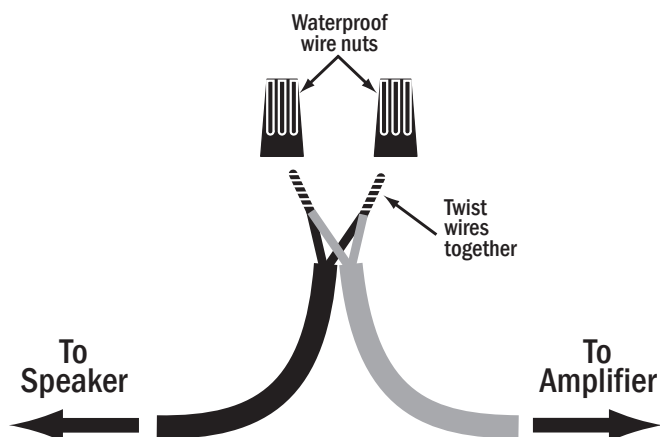
INSTALLING AND CONNECTING THE SPEAKERS

1. Decide on the locations for the speakers. Also, estimate the length of additional wire you'll need for each speaker. (Sonance Rock Speakers feature a wide angle of coverage. A few speakers will cover a large area with sound.)

Note: When purchasing additional wire, Sonance strongly recommends using direct burial grade wire. See Wire Gauge and Sound Quality for the suggested wire gauge for different wire lengths.

2. Dig a 4" – 5" deep trench to run the speaker wires in.
3. Run the appropriate gauge wire through the trench from your amplifier to the speaker locations. (Do not connect the wires to the amplifier at this time.)
4. Connect the speaker wires you ran from your amplifier to the wires that came attached to the speakers. (See illustration below.) Sonance recommends using **waterproof wire nuts** to connect the wires. These are *not* included with the Rock Speakers.

IMPORTANT: Be sure not to let any stray '+' and '-' wires touch each other. Touching wires can cause a short-circuit that could damage your amplifier.



5. After you have made the above connections, connect the wires to your amplifier.

- The conductor you connected to the speaker's red wire should be connected to the amplifier's '+' terminal; the conductor you connected to the speaker's black wire should be connected to the amplifier's '-' terminal.

IMPORTANT: Be sure not to let any stray '+' and '-' wires touch each other. Touching wires can cause a short-circuit that could damage your amplifier.

6. After confirming that you've properly made all of the connections, turn your amplifier on and test the system with your favorite music. If the speakers are operating properly, refill the wire trench and enjoy your new speakers.

WIRE GAUGE AND SOUND QUALITY

Extra resistance in the speaker wire can make a speaker sound less dynamic and reduce definition of the bass frequencies. In extreme cases, it can even attenuate high frequencies. Also, amplifier power is wasted in wire with extra resistance, reducing your system's maximum output level.

To prevent degrading sound quality, the total wire resistance should be less than 10% of the speaker's impedance. This means that for 8-ohm speakers like the CRK20 Rock Speaker, the total resistance of the wire should be less than 0.8 ohms. Refer to the following table when selecting the proper wire gauge for your system:

Wire resistance in Ohms vs. length of cable run						
Distance in Feet	50'	100'	150'	200'	250'	300'
20 gauge	1.04	2.07	3.11	4.14	5.18	6.22
18 gauge	.65	1.30	1.96	2.61	3.26	3.91
16 gauge	.41	.82	1.22	1.63	2.04	2.45
14 gauge	.26	.52	.77	1.03	1.29	1.55
12 gauge	.16	.32	.49	.65	.81	.97
10 gauge	.10	.20	.31	.41	.51	.61

SPECIFICATIONS

- Design: Weather-resistant rock loudspeaker
- Tweeter: 1" (25mm) Polyurethane dome
- Woofer: 8" (203mm) Black polypropylene cone, rubber surround
- Frequency Response: 40Hz – 20kHz ±3dB
- Impedance: 8 Ohms nominal
- Power Handling: 10 watts minimum; 150 Watts maximum
- Sensitivity: 90dB SPL (2.83V 1 meter)
- Dimensions (W x H x D): 15½" x 13½" x 11½"
(394mm x 343mm x 292mm)



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TECHNICAL ASSISTANCE AND SERVICE

If you any have questions about the operation or installation of this product, please call our Technical Assistance Department on any business day at (800) 582-0772 or (949) 492-7777; from 7am to 5pm, Pacific Time.

If your speakers should need repair or service, contact your Sonance Authorized Dealer for help, or use the following procedure:

1. Prior to calling, note the product's model number, serial number, purchase date, and the name and address of the dealer where you purchased the product.
2. Contact our Technical Assistance Department at the above number(s) and describe the problem the unit is experiencing. If applicable, they will issue a Return Authorization Number.

IMPORTANT: YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR SPEAKER TO SONANCE!

3. If you're directed to return the unit to Sonance for repair, pack the unit in its original shipping carton. If needed, you can obtain replacement packaging from us for a small charge. Note: it is best if you place the box into an additional outer "overcarton" before shipment to minimize a chance of theft in shipment. Please include a copy of the original bill of sale inside the package.
4. Contact United Parcel Service, Federal Express, or RPS to arrange prepaid (not collect) shipping. Do not use the U.S. Postal Service.

IMPORTANT: FREIGHT COLLECT SHIPMENTS WILL BE REFUSED.

5. Write the Return Authorization Number on the outside of the shipping carton.
6. Ship the packaged unit to:

Quality Assurance Department
Sonance
212 Avenida Fabricante
San Clemente, CA 92672-7531

LIMITED LIFETIME WARRANTY COVERAGE (U.S. ONLY)

Sonance warrants to the original retail purchaser only that this Sonance product will be free from defects in materials and workmanship, provided the speaker was purchased from a Sonance Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the Authorized Sonance Dealer from whom they were purchased, or to the Sonance factor at the address listed on this instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If, upon examination at the Factor or Authorized Sonance Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, sonance or the Authorized Sonance Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, Sonance, at its sole option, may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, Sonance

assumes no responsibility or liability for such modification. All replaced parts and product become the property of Sonance. Products replaced or repaired under this warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by Sonance. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions. This Warranty will be void if the Serial Number on the product has been removed, tampered-with or defaced. This Warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will Sonance be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if Sonance or a Authorized Sonance Dealer has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply. All implied warranties on the product are limited to the duration of this expressed Warranty. Some states do not allow limitation on the length of an implied warranty. If the original retail purchaser resides in such a state, this limitation does not apply.

EXCLUSIONS AND LIMITATIONS

The warranty set forth above is in lieu of all other warranties, express or implied, of merchantability, fitness for a particular purpose, or otherwise. The warranty is limited to Sonance products registered herein and specifically excludes any damage to loudspeakers and other allied or associated equipment which may result for any reason from use with this product. Sonance shall, in no event, be liable for incidental or consequential damages arising from any breach of this warranty or otherwise. This warranty gives you specific legal rights, and you may have other rights which vary from state to state.