



**PURERESONANCEAUDIO<sup>®</sup>**

**SD4 CEILING SPEAKER ARRAY**

# **INSTALLATION AND OPERATION MANUAL**



Caution: Please read this manual carefully before operating.  
Damage caused by misuse is not covered by the warranty.

# INTRODUCTION

## DESCRIPTION

The SD4 SuperDispersion® omnidirectional drop tile ceiling speaker array has 360° of seamlessly smooth coverage which greatly improves speech intelligibility and provides powerful crystal clear music reproduction. Each 2' x 2' Array can replace over a dozen conventional ceiling speakers. Takes minutes to install, just remove one ceiling tile and drop the SD4 into any standard drop ceiling. The 8 ohm and 70 volt inputs are compatible with any commercial or stereo sound system.

## FEATURES

- SuperDispersion® 360 x 180 omnidirectional coverage
- Engineered for voice, paging and music applications
- Infinite-baffle in-ceiling speaker drops into standard 2x2 ceiling tile openings
- Impedance: 8 ohms nominal with built-in 70 volts (4, 8, 16, 32, 64 watt taps), easily adjustable by rotating switch
- Safety cable kit included
- 4 - 6.5" high compliance aluminum woofers with ported bass response and high frequency dome tweeters
- Uniquely designed fire retardant paintable ABS housing may be painted to match any décor
- Metal backbox that is acoustically engineered and sealed for maximum sonic performance
- Powerful – 160 watts at 8 ohms, 64 watts at 70 volts

## SPECIFICATIONS


System Type	Omnidirectional Ceiling Speaker
Power Handling	160 watts
Dispersion	180 x 360 degrees
Frequency Response	35 Hz - 20 kHz
Sensitivity	92dB
Driver Complement	4 full-range 6.5" drivers
Woofers	Aluminum
70V Taps	4, 8, 16, 32, 64 watts
Impedance	8 Ohms / 70V
Dimensions (H x W x D)	23.75" (603.25 mm) x 23.75" (603.25 mm) x 5.75" (146.05 mm)
Shipping Dimensions (H x W x D)	28" (711.2 mm) x 28" (711.2 mm) x 9.25" (234.95 mm)
Net Weight	25 lbs (11.34 kg)
Shipping Weight	32 lbs (14.5 kg)


# SAFETY PRECAUTIONS

- Be sure to read the instructions in this section carefully before use. The included conventions of safety symbols and messages are regarded as very important precautions.
- We recommend you keep this instruction manual handy for future reference.

## SAFETY SYMBOL AND MESSAGE CONVENTIONS

Safety symbols and messages described below are used in this manual to prevent bodily injury and property damage which could result from mishandling. Before operating this product, read this manual first and understand the safety symbols and messages so you are thoroughly aware of the potential safety risks.

 **WARNING!** Indicates a potentially hazardous situation which, if mishandled, could result in death or serious personal injury.

 **CAUTION!** Indicates a potentially hazardous situation which, if mishandled, could result in moderate or minor personal injury, and/or property damage.

## **WARNING!**

### IMPORTANT SAFETY INSTRUCTIONS

**\*\*\*THIS PRODUCT MUST BE INSTALLED BY A QUALIFIED TECHNICIAN.  
THE PROVIDED INSTALLATION HARDWARE MUST BE USED TO INSTALL THIS PRODUCT.  
SPEAKER UNIT MUST BE ATTACHED BY A SAFETY CABLE!\*\*\***

Pro Acoustics is not responsible for the structural integrity of the installation. Please make sure a qualified technician installs this product and the building's engineer or architect has approved the equipment and installation.

1. DO NOT block any ventilation openings. Install in accordance with all safety standards and regulations.
2. DO NOT install near any heat source such as stoves, radiators, heat registers, amplifiers or any other apparatus producing heat.
3. USE attachments and accessories as indicated by the manufacturer.
4. REFER all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged or objects have fallen into the apparatus, the apparatus does not operate normally, or has been dropped.

\*No user-serviceable parts inside. Refer all servicing to qualified service personnel.

\*WARNING: To prevent injury, this apparatus must be securely attached in accordance with the installation instructions. No naked flame sources – such as candles – should be placed close to the product.

\*CAUTION: Changes or modifications not expressly approved by the manufacturer could void the user's warranty.

# INSTALLATION & OPERATION GUIDE

## PREPARATION

- Remove the speaker from the box and packaging.
- Remove the ceiling tile from the grid where you wish to install the speaker. NOTE: If you are installing the speaker into a 2' x 4' ceiling tile space, you will need to cut the tile to fit the speaker and use a common ceiling t-rail.
- Pull all needed wires.
- Adjust the transformer “tap” setting according to the level specified by the system designer.

\*Use in conjunction with amplifier output/rating requirements.

\*\*Do not feed 70 volt or 25 volt signal into the speakers when the 8 ohm bypass mode has been selected. This will permanently damage the speaker

\*\*\*Do not exceed the maximum power rating of the speaker.

## TERMINATION

- Connect all wires.

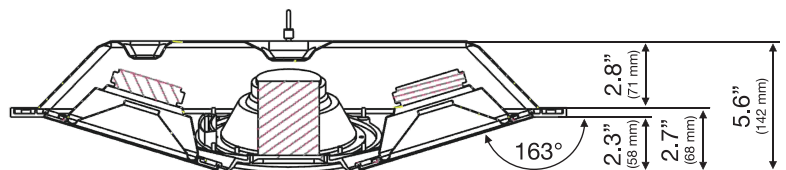
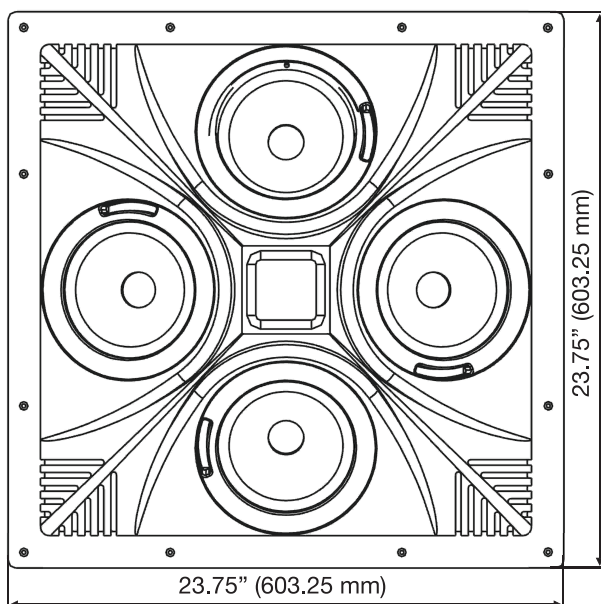
## INSTALLATION

- Thread the bare end of the hanging or safety cable through the Fastlink wire joiner.
- Attach the hanging or safety cable by securing it to or around the structure the speaker will hang from.
- Thread the cable back through the Fastlink wire joiner and pull to tighten.

### PLEASE NOTE:

It is imperative that the needed cable length is measured precisely. The tension cannot be loosened once pulled through the Fastlink.

- Attach the carabiner through one of the eye bolts on the back of the speaker.
- Repeat with each cable. All four eye bolts should have a safety cable attached.
- Angle the SD4 to fit into the ceiling and place the speaker driver side down into the tile.
- Your speaker should now be securely installed.



# BASIC SPEAKER INSTALLATION - 70 VOLT SYSTEMS AND APPLICATIONS

Figure 1.

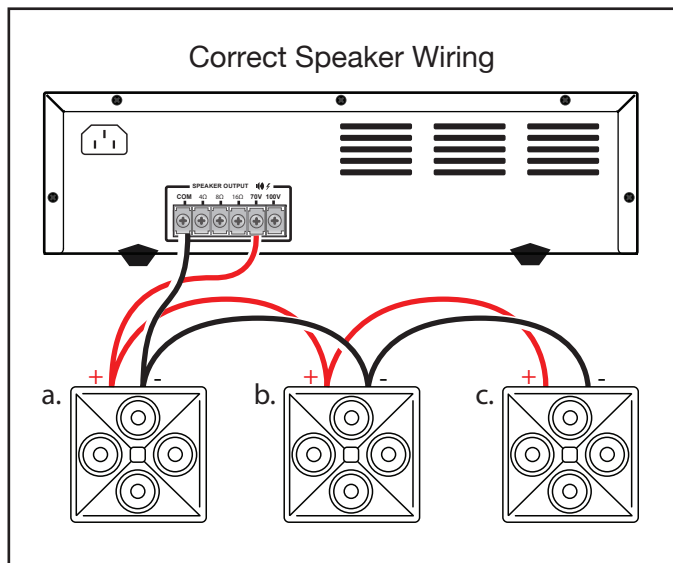
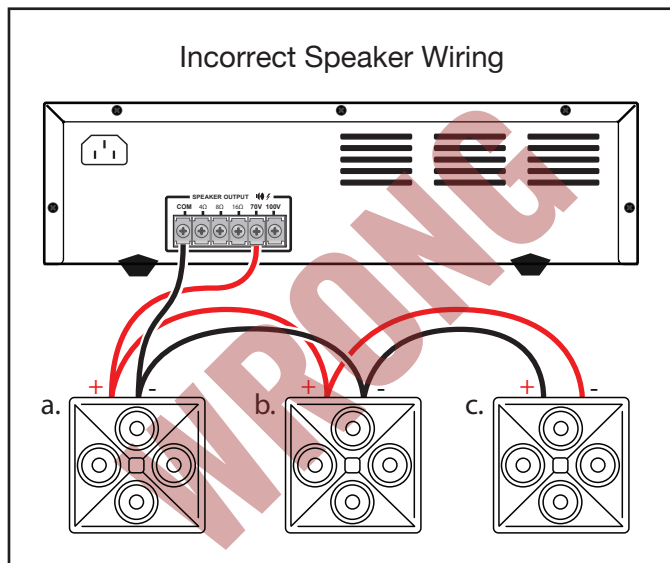


Figure 2.



Be careful not to cross wires when installing your speakers. Wiring should always be negative to negative and positive to positive (Figure 2. shows speaker c. incorrectly wired).

# BASIC ATTENUATOR/VOLUME CONTROL INSTALLATION

Figure 3.

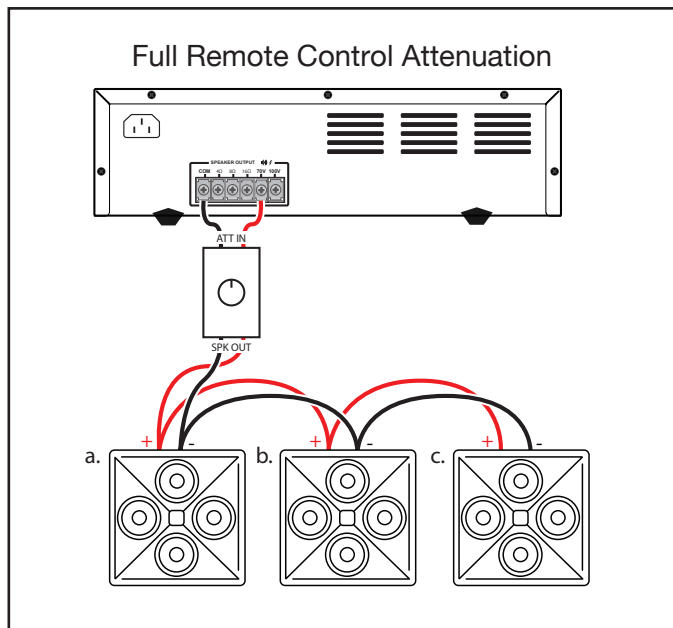
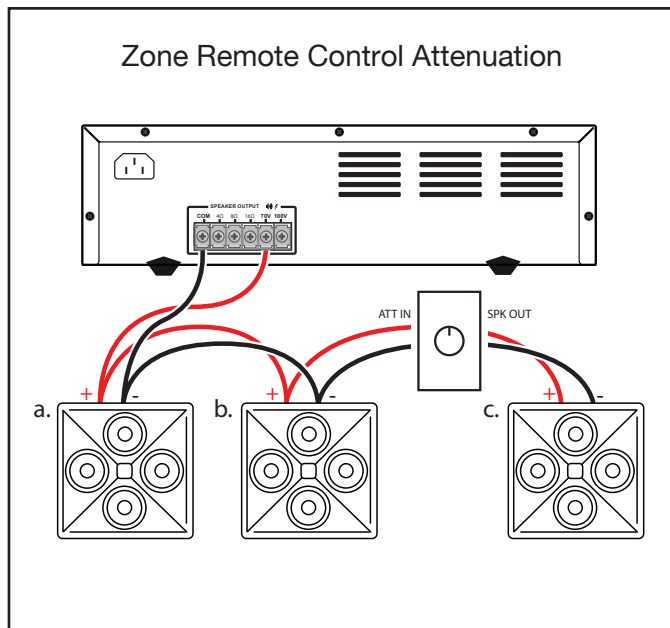


Figure 4.



# SERVICE

Ensure the problem is not related to operator error, or system devices that are external to this unit. Information provided in the troubleshooting portion of this manual may help with this process. Once it is certain that the problem is related to the product contact your warranty provider as described in the warranty section of this manual.

## LIMITED WARRANTY

PRO ACOUSTICS, LLC. ("PRO ACOUSTICS") warrants this product to the original purchaser to be free from defects in materials and workmanship (subject to the terms set forth below), for the following periods from the date of purchase.

### THIS WARRANTY COVERS THE LISTED PRODUCTS AGAINST DEFECTS IN MATERIALS OR WORKMANSHIP FOR THE FOLLOWING PERIOD

Warranty Terms	
Speakers	2 Years
Amplifiers & Electronics	1 Year
Microphones	1 Year
Accessories	1 Year

PRO ACOUSTICS will repair or replace (at PRO ACOUSTICS's option) this product or any defective parts (excluding electronics and amplifiers) in this product.

Your authorized PRO ACOUSTICS dealer will inspect the product and, if your dealer is not equipped to perform the repair of your PRO ACOUSTICS product, they will replace your product or return it to PRO ACOUSTICS for repair, at their discretion. Proof of purchase in the form of a bill of sale or receipted invoice, which is evidence that this product is within the warranty period, must be presented to obtain warranty service.

This warranty is invalid if the factory applied serial number has been altered or removed from this product. This warranty is invalid if this product was not purchased from a PRO ACOUSTICS authorized dealer. Cosmetic damage or damage due to the accident, acts of God, misuse, abuse, negligence, commercial use, or modification of, or to any part of, the product are not covered in this warranty. This warranty does not cover damage due to improper operation, maintenance or installation, or attempted repair by anyone other than PRO ACOUSTICS or a PRO ACOUSTICS dealer which is authorized to do PRO ACOUSTICS warranty work. Any unauthorized repairs will void this warranty.

This warranty does not cover products sold as is.

REPAIRS OR REPLACEMENTS AS PROVIDED UNDER THIS WARRANTY ARE THE EXCLUSIVE REMEDY OF THE CONSUMER/PURCHASER. PRO ACOUSTICS U.S.A. SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY LAW, THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER EXPRESS AND IMPLIED WARRANTIES WHATSOEVER, INCLUDING BUT NOT LIMITED TO, THE WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PRACTICAL PURPOSE.

This warranty gives you specific legal rights. You may have other rights which vary from state to state.

Specifications may change without notice.

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