

# SONANCE

## PS-C41RT

### PROFESSIONAL SERIES IN-CEILING SPEAKER

#### PROFESSIONAL SERIES

From Sonance, the company that created the architectural audio category, comes a range of professional loudspeakers that set a new benchmark in sound quality and aesthetics for commercial environments.

Sonance Professional Series includes a range of In-Ceiling, Pendant, and Surface Mount Speakers that deliver unequalled fidelity, extremely low distortion, wide dispersion and a smooth power response. The range features the Sonance Laminated Core Transformer (SLCT), delivering full-fidelity sonic performance in either 70V or 100V mode.

The Sonance Professional Series PS-C41RT In-Ceiling Speaker features a one-piece bezel-less grille that is magnetically secured and allows for a one-step painting process to simplify installation and minimize visual distraction.

An optional black grille and square grille adapters in black or white are available, allowing the installer to match the aesthetics of square downlights, HVAC grilles, or ceiling tiles.

A 4" (100mm) polypropylene woofer delivers effortless low bass extension, while the .75" (19mm) soft dome tweeter provides accurate high frequency detail.

The PS-C41RT features a flame retardant polypropylene/glass fiber blend UL94V-0 enclosure, integrated cable and conduit clamping, removable Euroblock connector with loop-through, connector cover and seismic attachment. Certifications include UL1480A, UL2043, EN 54, NFPA90A, NFPA70, CSA-C22.2 No.205 and CSA C22.1.



#### FEATURES AND BENEFITS

##### PERFORMANCE

- Class-leading sonic performance
- Flat response for natural musicality and intelligibility for voice
- Full-fidelity transformer for uncompromised tonality

##### AESTHETICS

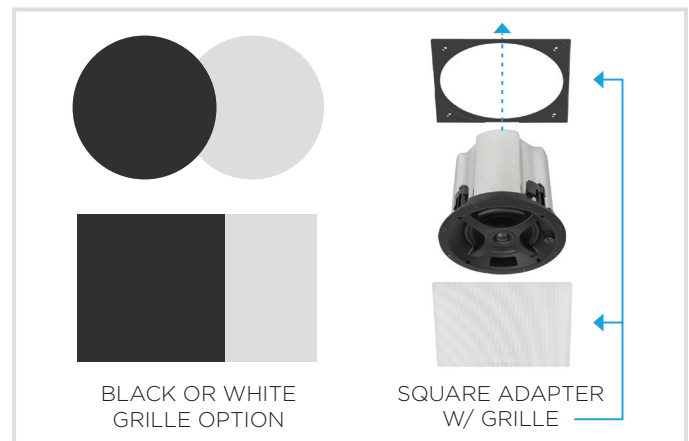
- Bezel-less design for clean and minimalistic aesthetic
- Optional Square Adapters to match light fixtures
- Optional black grilles in round or square

##### INSTALLATION

- Magnetic grille retention for fast installation and removal
- Finger-adjustable selector tap
- One-step simplified painting process

#### APPLICATIONS

- Shopping Malls
- Airports
- Boardrooms & Corporate Offices
- Educational Facilities
- Government Facilities



# SONANCE

## TECHNICAL SPECIFICATIONS

### LOUDSPEAKER

SKU	45165
Frequency Range (-10dB)	70Hz - 25kHz
Frequency Range (-3dB)	95Hz - 20kHz
Power Capacity	60 Watts Continuous Program Power 30 Watts Continuous Pink Noise
Nominal Sensitivity	87dB
Nominal Coverage Angle	120 degrees conical coverage
Directivity Factor (Q)	7.6
Directivity (DI)	8.1dB
Rated Maximum SPL	102dB @ 1 meter (3.3 feet) average, 108dB peak
Rated Impedance	8 Ohms nominal, 6 Ohms minimum
Transformer Taps	25W, 12.5W, 6.3W, and (3.2W @70V)
Crossover Point	3000Hz
Overall Dimension	6.3" x 6.5" Deep (160mm x 165mm)
Cut Out Dimension	5.875" Diameter (149mm)
Net Weight	5 lbs (2.27kg) Each
Shipping Weight	21.55 lbs (9.77kg) Pair
Unit of Measure	Each

### TRANSDUCERS

LF Driver	4" (100mm) Polypropylene Cone, Butyl Rubber Surround
HF Driver	0.75" (19mm) Cloth Dome, Ferrofluid Cooled

### ENCLOSURE

Input Connectors	Four pin, Euroblock with loop output connections
Knockouts	Side mounted 3/4"
Safety Agency	UL1480A, UL2043, EN 54, NFPA90A, NFPA70, CSA-C22.2 No.205 and CSA C22.1.
Ceiling Thickness Range	0.125" - 2" (3mm - 50mm)
Suspension Points	One, on top surface

## INCLUDED ACCESSORIES

- (1) C-Ring
- (2) Tile Support Rails
- (1) Cutout Template
- (1) Euroblock Connector
- (1) White Grille

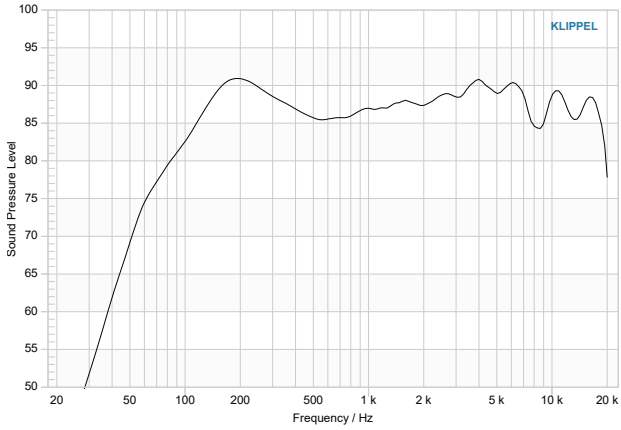
## OPTIONAL ACCESSORIES

- 40152 4" Replacement Round Grille White PR
- 40155 4" Round Grille Black PR
- 40158 4" Square Adapter w/ Grille White 5 PR
- 45158 4" Square Adapter w/ Grille White PR
- 40161 4" Square Adapter w/ Grille Black 5 PR
- 45161 4" Square Adapter w/ Grille Black PR
- 92471 4" Round Drywall Construction Flex Bracket 5 PR
- 40177 4" Metal Pre-construction Bracket 3 PR
- 40172 4" Tile Support Rails w/ C-Ring PR
- 40179 Replacement RotoLock Toggle Feet BAG

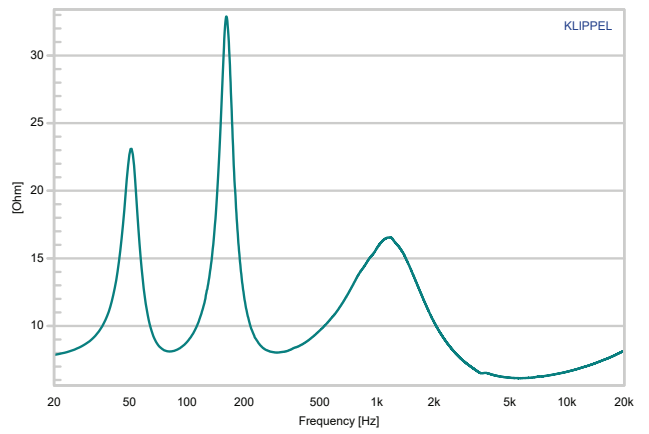
# SONANCE

## PERFORMANCE MEASUREMENTS

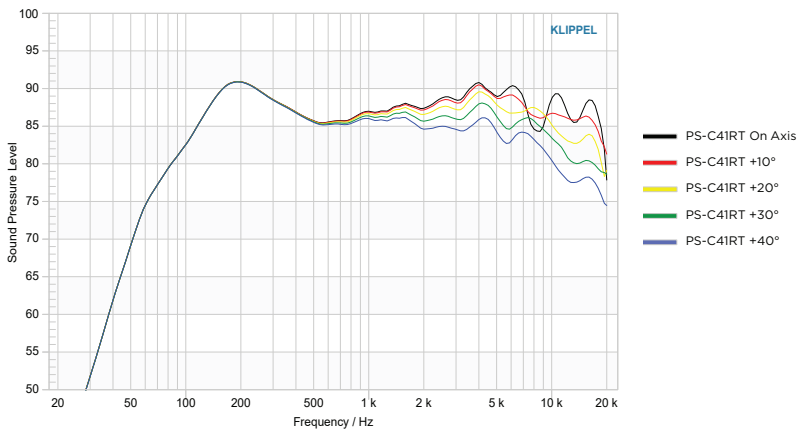
### 1 METER ON AXIS FREQUENCY RESPONSE



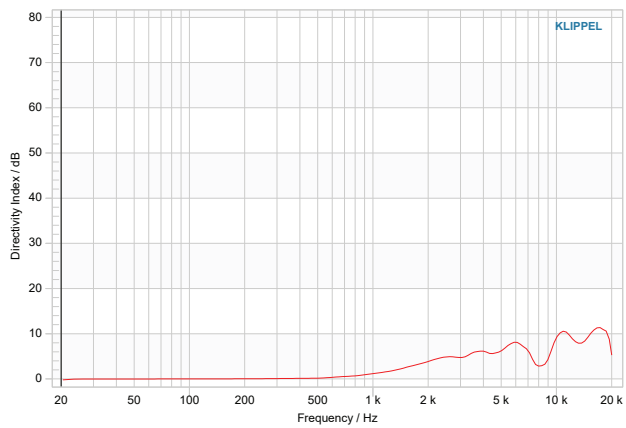
### IMPEDANCE VS FREQUENCY



### 1 METER OFF AXIS FREQUENCY RESPONSE



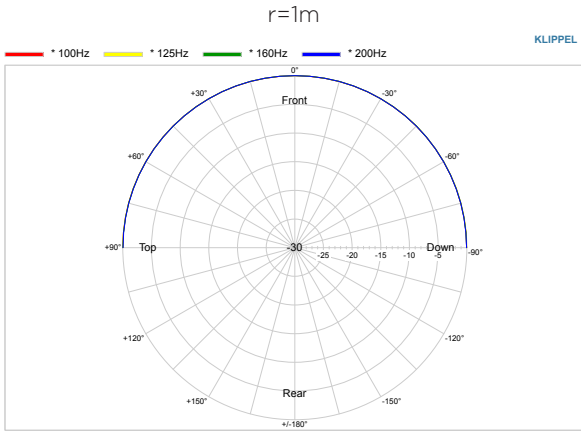
### DIRECTIVITY INDEX VS FREQUENCY



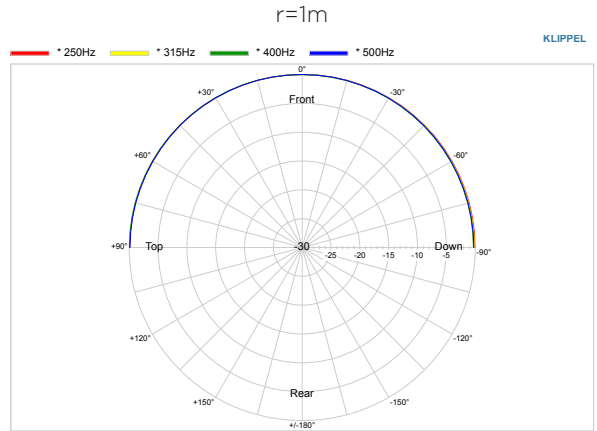
# SONANCE

## POLAR PLOTS

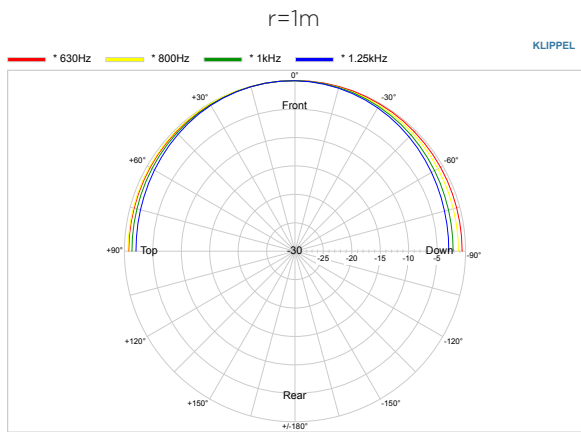
100-200



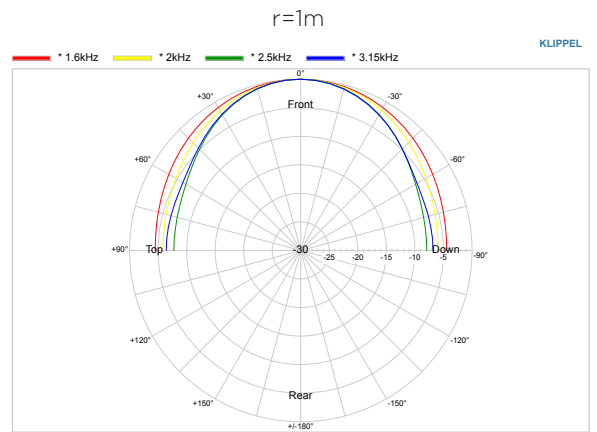
250-500



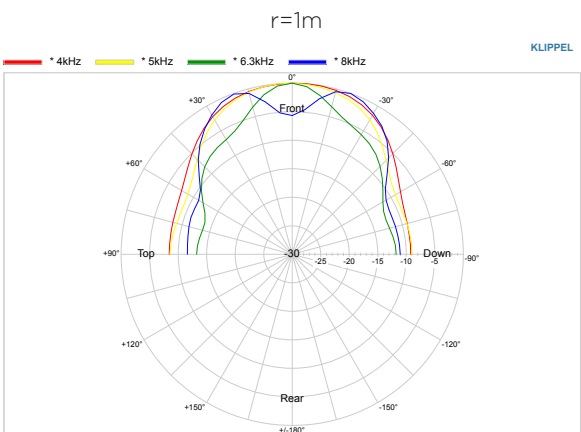
630-1250



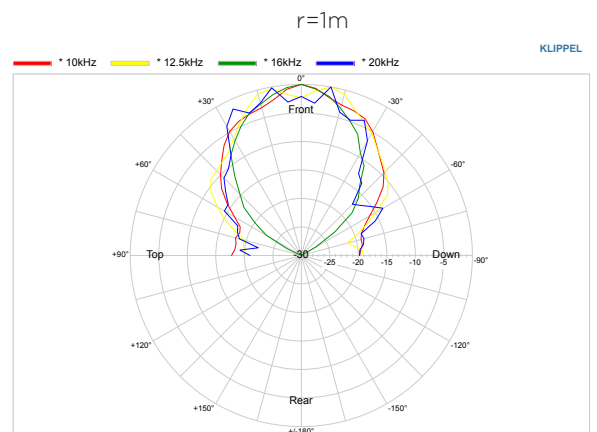
1600-3150



4000-8000



10000-20000



# SONANCE

## DIMENSIONAL SKETCHES SPECIFICATIONS

### PS-C41RT Loudspeaker

Diameter: 6.3" (160mm)  
Depth: 6.5" (165mm)

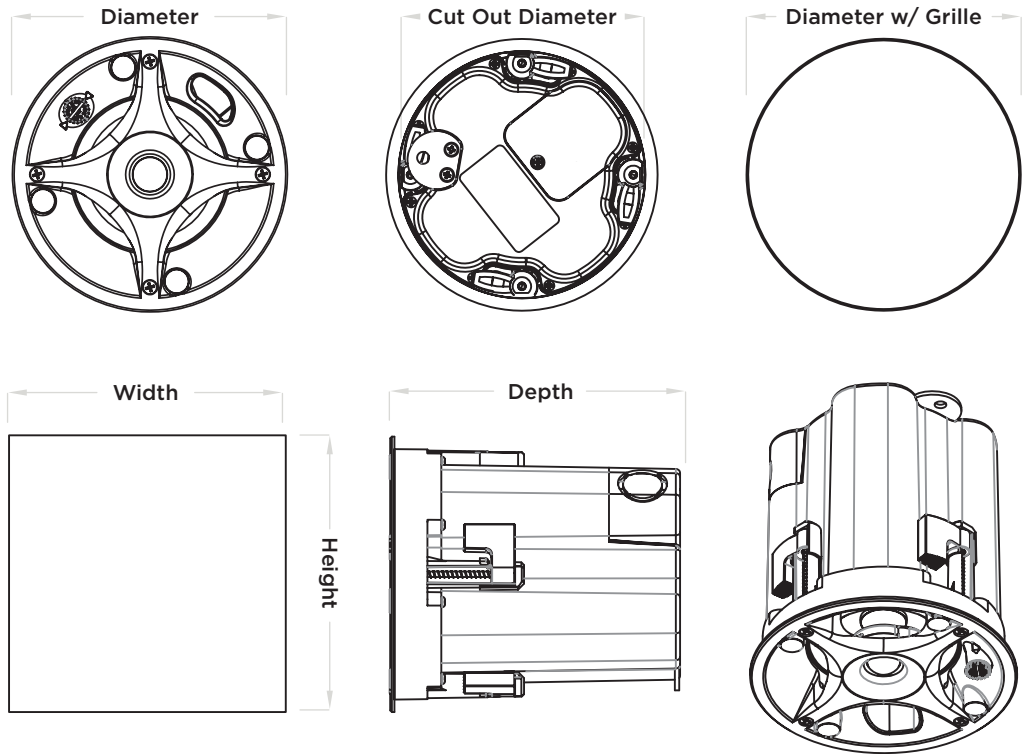
Cut Out  
Diameter: 5.875" (149mm)

### With Grille

Diameter: 6.3" (160mm)

### With Square Adapter and Grille

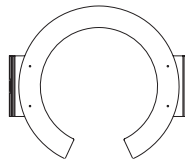
Width: 6.36" (162mm)  
Height: 6.36" (162mm)



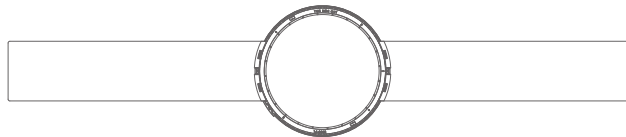
### Tile Bridge



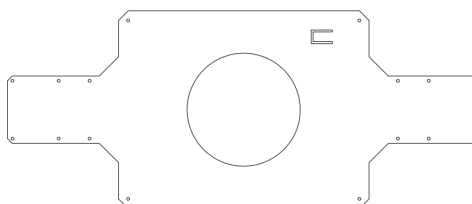
### C-Ring



### Flex Bracket



### Metal Pre-construction Bracket



# SONANCE

## ASSOCIATED PRODUCTS

### INVISIBLE SERIES SPEAKERS

IS6T Speaker	40198
IS8T Speaker	40197

### PROFESSIONAL SERIES IN-CEILING SPEAKERS

PS-C61RT In-Ceiling Speaker	45166
PS-C43RT In-Ceiling Speaker	45130
PS-C63RT In-Ceiling Speaker	45131
PS-C83RT In-Ceiling Speaker	45132
PS-C83RWT In-Ceiling Speaker	40133
PS-C43RTLTP In-Ceiling Speaker	45181
PS-C63RTLTP In-Ceiling Speaker	45182

### PROFESSIONAL SERIES PENDANT SPEAKERS

PS-P43T Pendant Speaker White	45134
PS-P63T Pendant Speaker White	45135
PS-P83T Pendant Speaker White	45136
PS-P83WT Pendant Speaker White	40137

### PROFESSIONAL SERIES SURFACE MOUNT SPEAKERS

PS-S43T Surface Mount Speaker White	45142
PS-S53T Surface Mount Speaker White	45143
PS-S63T Surface Mount Speaker White	45144
PS-S83T Surface Mount Speaker White	45145
PS-S83WT Surface Mount Speaker White	40146
PS-S43T Surface Mount Speaker Black	45147
PS-S53T Surface Mount Speaker Black	45148
PS-S63T Surface Mount Speaker Black	45149
PS-S83T Surface Mount Speaker Black	45150
PS-S83WT Surface Mount Speaker Black	40151
PS-P43T Pendant Speaker Black	45138
PS-P63T Pendant Speaker Black	45139
PS-P83T Pendant Speaker Black	45140
PS-P83WT Pendant Speaker Black	40141

### DSP AMPLIFIER

Sonamp DSP 2-750 Amplifier	93095
----------------------------	-------

## ARCHITECTURAL SPECIFICATIONS

The loudspeaker shall be of the two-way type comprising a single flush mount enclosure containing one 4" (100mm) polypropylene cone, butyl rubber surround low frequency transducer and one coaxially mounted .75" (19mm) cloth dome, ferrofluid cooled high frequency transducer. It shall utilize a one-piece bezel-less grille design and an optional square grille adapter shall also be available if required. Frequency range shall be 95Hz - 20KHz (-3dB). Total power handling shall be 30 Watts continuous pink noise and 60 Watts program. Sensitivity measured with 2.83 volts input at 1 meter on axis averaged between 95Hz - 20KHz shall be 87dB. The unit shall be supplied with a laminated core line matching transformer suitable for 100 volt or 70 volt with a front mounted control allowing user selectable power taps of 25W, 12.5W, 6.25W and 3.125W (70V) and an 8 Ohm bypass. The back shall be constructed from Flame retardant polypropylene/glass fiber blend. The baffle shall be ported, and injection molded using fire rated Flame retardant polypropylene/glass fiber blend that meets UL94V-0. The speaker shall be suitable for use in air handling spaces per UL1480A, UL2043, NFPA90A, NFPA70, CSA-C22.2 No.205 and CSA C22.1. Wire shall be terminated in an enclosed area on the rear of the back can with a knock-out. Strain relief shall be provided for wire. A seismic attachment shall be provided on the rear of the back can, to allow additional support when necessary. The system shall include a support backing plate to reinforce the ceiling material and tile support rails which can all be installed from beneath the ceiling tile. External dimensions shall be 6.30" Diameter x 6.5" Depth (160mm x 165mm). The total enclosure shall weigh 5 lbs. (2.27 kg) per unit. It shall have a relatively flat frequency response and accurate sonic performance to deliver both good intelligibility and musicality. The loudspeaker shall be the Sonance Professional Series PS-C41RT. No other system shall be acceptable unless the above combined performance specifications are equaled or exceeded.

# SONANCE

## SAFETY AGENCY COMPLIANCE

### SAFETY AGENCY COMPLIANCE

Sonance Professional Series loudspeaker models PS-C41RT and PS-C61RT meet the following standards:

**UL-1480A:** Speakers for Commercial and Professional Use

**UL-2043:** Fire Test for Heat and Visible Smoke Release for Discrete Products and their Accessories Installed in Air Handling Spaces

**EN 54:** EN-54-24:2008 Fire detection and alarm systems. Part 24:Components of voice alarm systems - Loudspeakers

**CSA-C22.2 No.205:** Signal Equipment

Shall be installed in accordance with:

**NFPA-70:** National Electric Code

**NFPA-90A:** Installation of Air Conditioning and Ventilation

**CSA C22.1:** Canadian Electrical Code



## TECHNICAL ASSISTANCE AND SERVICE

The Technical Assistance Department at Sonance is available at (949) 492-7777 to answer any questions concerning the operation and installation of your speakers between the hours of 7:00 AM and 5:00 PM Pacific time, Monday through Friday, except holidays.

In the event your unit should need repair or service, you may return the unit to your authorized dealer or use the following guidelines:

### PLEASE KEEP ORIGINAL PACKAGING WHEN POSSIBLE.

1. Be prepared to state the model number and / or serial number, date of purchase, and dealer's name and address when calling.
2. Contact Sonance directly at (949) 492-7777 or at [www.sonance.com](http://www.sonance.com). **YOU MUST HAVE PRIOR AUTHORIZATION TO RETURN YOUR UNIT.**
3. If you are returning the product directly to Sonance, call us to obtain a return authorization number before shipping.
4. Ship the product via United Parcel Service, Federal Express, or other package delivery service. Please do not use the U.S. Postal Service.
5. Include the return authorization number on the shipping label.
6. Ship to:

Attn: Quality Assurance Department,  
RMA#(include RMA number here)  
Sonance  
11016 Mulberry Ave.  
Suite B  
Fontana, CA 92337

# SONANCE

## WARRANTY, REMEDY, EXCLUSIONS AND LIMITATIONS (USA ONLY)

### LIMITED WARRANTY

Sonance warrants this product to the original purchaser to be free from defects in material and workmanship, under normal use and conditions, for a period of five (5) years from the date of original purchase as shown on the invoice. The foregoing exclusive warranty gives you specific legal rights, and you may have other rights, which vary from state to state. This warranty applies exclusively to the original purchaser.

The exclusive warranty does not apply and is ineffective if:

1. The invoice fails to establish that the product was purchased from an authorized Sonance dealer or distributor;
2. The product was subjected to misuse, neglect, accident, or improper installation.  
(Damage to the product was caused by accident, abuse or misuse);
3. The product was modified, altered, or repaired by unauthorized personnel; or
4. The unit was not used as described in the installation and operating instructions.

### EXCLUSIVE REMEDY

Sonance agrees, at its option during the five (5) year warranty period, to repair any defect in material or workmanship or to furnish an equal product in exchange without charge to the purchaser, subject to the verification of the defect and proof of the date of purchase.

### WARRANTY EXCLUSIONS AND DAMAGE LIMITATIONS

The exclusive warranty set forth above is in lieu of all other warranties, express or implied, including without limitation the implied warranties of merchantability and fitness for a particular purpose, which are expressly disclaimed. In no event, and under no circumstances or legal or equitable theory, shall Sonance be liable or responsible for any direct or indirect damages, consequential damages, loss, or injury, including without limitation, personal injury, bodily injury, property damage, emotional distress, death, real property or personal property damage, business interruption, costs of delay or lost profits arising from the product, whether based upon warranty, contract, negligence, strict product liability or other theory.

## SONANCE

©2021 Sonance. All rights reserved. Sonance is a registered trademark of Dana Innovations. Due to continuous product improvement, all features and specifications are subject to change without notice. For the latest Sonance product specification information visit our website at [www.sonance.com](http://www.sonance.com).

SONANCE • 991 Calle Amanecer • San Clemente, CA 92673 USA  
PHONE: (949) 492-7777 • FAX: (949) 361-5151 • Technical Support: (949) 492-7777 • [www.sonance.com](http://www.sonance.com)  
10.17.24