## PS-C43RT

## 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 insound 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 also shares consistent voicing, ensuring seamless sonic integration when used together throughout a space.

The Sonance Professional Series PS-C43RT 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.

The optional Square Grille Adapter allows speakers to match the aesthetic of square downlights and HVAC grilles to achieve continual sight lines.

A high-excursion 4" polypropylene woofer delivers effortless low bass extension, even at high volumes, while the pivoting chambered 1" soft dome tweeter can be directed to ensure accurate coverage, when speaker positioning is compromised.

The PS-C43RT features a sealed metal enclosure, integrated cable and conduit clamping, removable Euroblock connector with loop-through, swingopen connecter cover and seismic attachment. Additionally, the Sonance PS-C43RT is certified for UL 1480 and UL 2043.

#### FEATURES AND BENEFITS

#### PERFORMANCE

- Class-leading sensitivity & sonic performance
- Exceptional off-axis response
- Heavy duty voice coil for longevity and reliability
- Full-fidelity transformer for uncompromised tonality
- Consistent voicing across product range

#### **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
- Smallest in class form factor

### **APPLICATIONS**

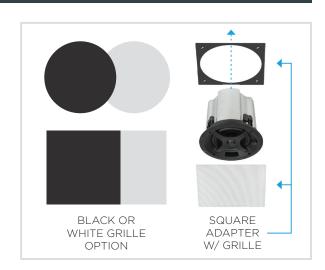
- Boardrooms & Corporate Offices
- Shopping Malls, Retail Spaces & Showrooms
- Restaurants, Bars & Lounges
- Galleries & Museums
- Casinos, Convention Centers & Hotels
- Houses of Worship
- Educational Facilities











#### TECHNICAL SPECIFICATIONS

#### LOUDSPEAKER

Frequency Range (-10dB) 57Hz - 25kHz Frequency Range (-3dB) 75Hz - 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 105dB @ 1 meter (3.3 feet) average, 110dB peak

Rated Impedance 8 Ohms nominal, 6 Ohms minimum
Transformer Taps 70V: 30W, 15W, 7.5W and 3.8W
100V: 30W, 15W and 7.5W

Crossover Point 3000Hz

Overall Dimension 6.3" Diameter x 7.01" Depth (160mm x 178mm)

Cut Out Dimension 5.875" Diameter (149mm)
Net Weight 5.63 lbs (2.55kg) each
Shipping Weight 21.80 lbs (9.89kg) pair

Unit of Measure Pair

Grille Supplied with bezel-less white grille, black grille optional

**TRANSDUCERS** 

LF Driver 4" (100mm) Polypropylene Cone, Butyl Rubber Surround HF Driver 1" (25mm) Cloth dome, Pivoting, Ferrofluid cooled

**ENCLOSURE** 

Input Connectors Four pin Euroblock with loop output connections

Knockouts One, side mounted .75"

Safety Agency UL 1480, UL 2043, NFPA 90A, NFPA 70

Maximum Ceiling Thickness 1.732" (44mm)
Suspension Points One, on top surface

### **ACCESSORIES**

### **INCLUDED ACCESSORIES**

- C-Ring x 2
- Tile Support Rails x 4
- Cutout Template x 2
- Euroblock Connector x 2
- White Grille x 2



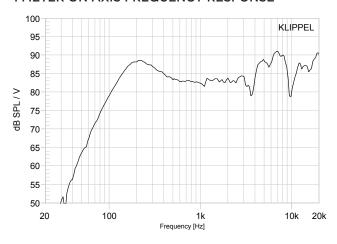
**OPTIONAL ACCESSORIES** 

- Replacement Round Grille White (1 pair) | 40152
- Round Grille Black (1 pair) | 40155
- Square Adaptor w/ Grille White (5 pair) | 40158
- Square Adaptor w/ Grille White (1 pair) | 45158
- Square Adaptor w/ Grille Black (5 pair) | 40161
- Square Adaptor w/ Grille Black (1 pair) | 45161
- Flex Bracket (5 pair) | 92471
- Metal Pre-construction Bracket (5 pair) | 40177
- Tile Support Rails w/ C-Ring (1 pair) | 40172
- Replacement RotoLock Feet (Bag) | 40175

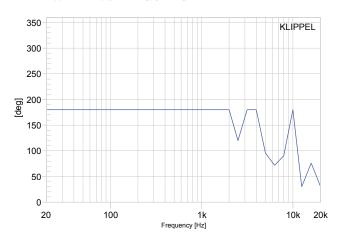
PS-C43RT SKU# 40130

#### PERFORMANCE MEASUREMENTS

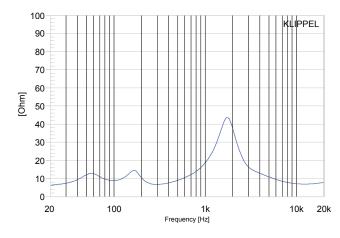
#### 1 METER ON AXIS FREQUENCY RESPONSE



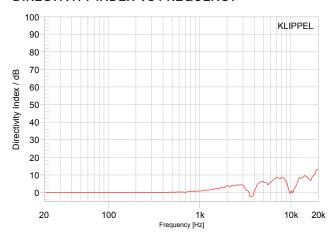
#### **BEAMWIDTH VS FREQUENCY**



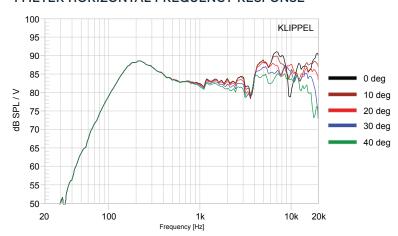
#### **IMPEDANCE VS FREQUENCY**



#### **DIRECTIVITY INDEX VS FREQUENCY**

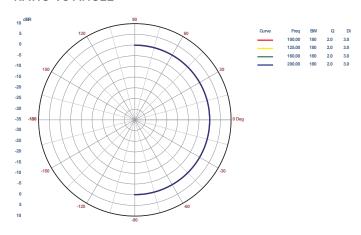


#### 1 METER HORIZONTAL FREQUENCY RESPONSE

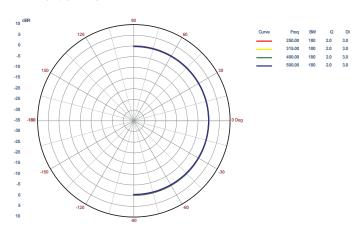


## POLAR PLOTS (1/3 OCTAVE)

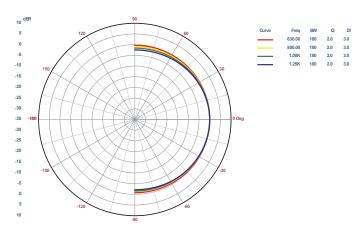
#### **RATIO VS ANGLE**



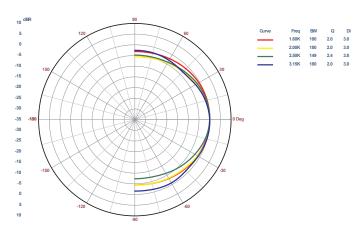
#### **RATIO VS ANGLE**



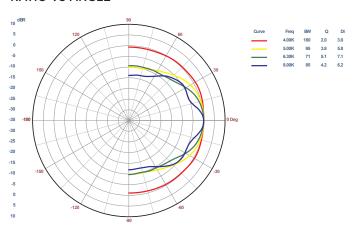
**RATIO VS ANGLE** 



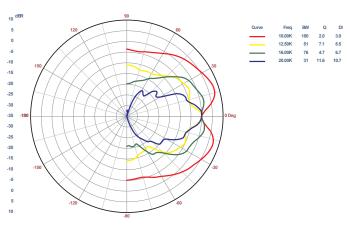
**RATIO VS ANGLE** 



**RATIO VS ANGLE** 



**RATIO VS ANGLE** 



### **DIMENSIONAL SKETCHES SPECIFICATIONS**

PS-C43RT Loudspeaker

Diameter: 6.3" (160mm) Depth: 7.01" (178mm)

Cut Out

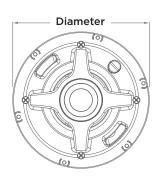
Diameter: 5.875" (149mm)

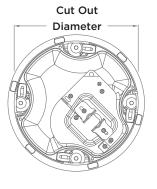
With Grille

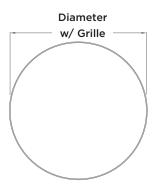
Diameter: 6.3" (160mm)

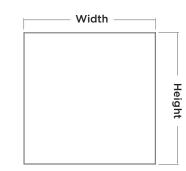
With Square Adapter and Grille

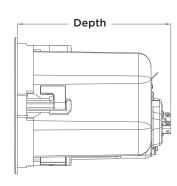
Width: 6.36" (162mm) Height: 6.36" (162mm)

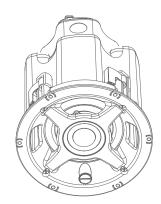












Tile Bridge



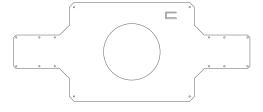
C-Ring



Flex Bracket



**Metal Pre-construction Bracket** 



### **ASSOCIATED PRODUCTS**

IN-CEILING SPEAKERS		SURFACE MOUNT SPEAKER	
PS-C63RT In-Ceiling Speaker	40131	PS-S43T Surface Mount Speaker White	40142
PS-C83RT In-Ceiling Speaker	40132	PS-S53T Surface Mount Speaker White	40143
PS-C83RWT In-Ceiling Speaker	40133	PS-S63T Surface Mount Speaker White	40144
PS-C43RTLP In-Ceiling Speaker	40181	PS-S83T Surface Mount Speaker White	40145
PS-C63RTLP In-Ceiling Speaker	40182	PS-S83WT Surface Mount Speaker White	40146
		PS-S43T Surface Mount Speaker Black	40147
PENDANT SPEAKERS		PS-S53T Surface Mount Speaker Black	40148
PS-P43T Pendant Speaker White	40134	PS-S63T Surface Mount Speaker Black	40149
PS-P63T Pendant Speaker White	40135	PS-S83T Surface Mount Speaker Black	40150
PS-P83T Pendant Speaker White	40136	PS-S83WT Surface Mount Speaker Black	40151
PS-P83WT Pendant Speaker White	40137		
PS-P43T Pendant Speaker Black	40138	DSP AMPLIFIER	
PS-P63T Pendant Speaker Black	40139	Sonamp DSP 2-750 Amplifier	93095
PS-P83T Pendant Speaker Black	40140	·	
PS-P83WT Pendant Speaker Black	40141		

#### 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 1" (25mm) cloth dome, pivoting, 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 75Hz - 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 75Hz - 20KHz shall be 87dB. The unit shall be supplied with a line matching transformer suitable for 100 volt or 70 volt with a front mounted control allowing user selectable power taps of 30W, 15W, 7.5W and 3.8W (70V) and an 8 Ohm bypass. The back shall be constructed from deep drawn steel. The baffle shall be ported and injection molded using fire rated ABS that meets UL 94V-0. The speaker shall be suitable for use in air handling spaces per UL 2043, NFPA 90 and NFPA 70 S7232 as well as UL 1480, UL Rated signaling speaker. Wire shall be terminated in an enclosed area on the rear of the back can with a secondary 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 6.3" Diameter x 7.01" Depth (160mm x 178mm). The total enclosure shall weigh 3 lbs. (1.36 kg) per unit. It shall share consistent voicing with other form factors and sizes within its product family so as to provide continuity of sonic signature when combined within a project. The loudspeaker shall be the Sonance Professional Series PS-C43RT. No other system shall be acceptable unless the above combined performance specifications are equaled or exceeded.

#### SAFETY AGENCY COMPLIANCE

Sonance Professional Series In-Ceiling Speaker are compliant with:

#### **UL 2043**

Standard For Safety For Speakers for Fire Alarm, Emergency, and Commercial and Professional Use. Suitable for use in air-handling spaces.

#### **UL 1480**

Standard For Safety For Speakers for Fire Alarm, Emergency, and Commercial and Professional Use.

#### NFPA 70

2002 National Electrical Code

#### NFPA 90A

Installation of Air Conditioning and Ventilation Systems, Section 2-3.10.1(A)







# 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.

- 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. 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

# 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, wether based upon warranty, contract, negligence, strict product liability or other theory.

#### SONANCE

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