

# SONANCE<sup>®</sup> PROMMERCIAL<sup>™</sup> SPEAKERS R870V IN-CEILING

## Key Features:

(common to all Sonance Prommercial ceiling models)

- Wide dispersion design, maximum coverage using less speakers
- Meets UL and NFPA regulations for air handling spaces.
- 70/100 volt or 8 ohm operation is standard on every model of the Sonance Prommercial line.
- Transformer taps adjustable from front baffle
- Speakers are packaged with grille, back can and tile rails for fast and easy installation

The Sonance Prommercial series brings the quality and reliability of Sonance, The Leader in Architectural Audio<sup>™</sup>, to the commercial audio industry.

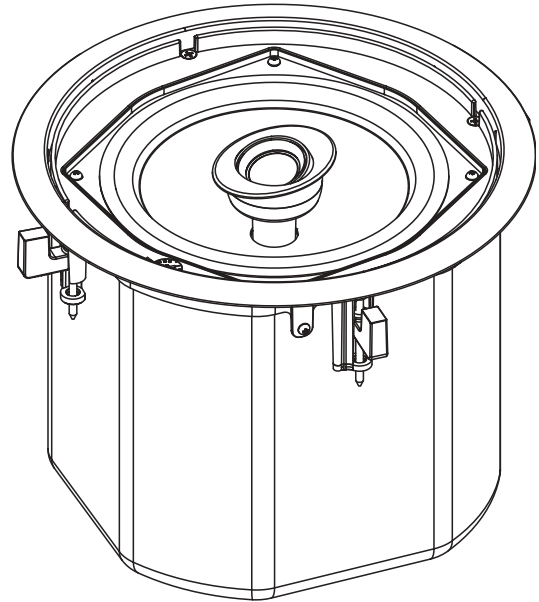
High power handling, wide on and off-axis frequency response and low distortion allow the R870V to be used in the most demanding applications.

A rotary switch accessible on the front baffle of the R870V allows selection of 70 volt, 100 volt or 8 ohm. One model is suitable for any type of installation.

The 8" woofer features a polypropylene cone and a rubber surround. A 1.5" aluminum voice coil former and high temperature adhesives are used for long term high power handling. The pole piece of the woofer is vented for additional cooling and to reduce distortion. The woofer is mounted in a sealed deep drawn steel enclosure. A sealed enclosure is used for its superior power handling and shallower 12 dB per octave low frequency roll off.

The tweeter in the 870V is a coaxially mounted 1" pivoting cloth dome. The tweeter is mounted on a small baffle to allow a low crossover frequency to the woofer providing smooth off-axis frequency response.

Input connection is accomplished quickly using an included removable connector. The removable connector allows systems to be pre-wired before



installation of the speakers. Speaker baffles and grilles are paintable to match any decor. A paint plug is included with all ceiling speakers.

**The entire installation can be accomplished without access behind the ceiling.** Tile rails and a C-shaped support are included with each speaker. The speakers include four mounting feet that firmly attach the speaker to the ceiling surface.

The highest fidelity is ensured with the use of any of the Sonance Prommercial series of speakers

## Applications:

- Foreground music
- Public address
- Airports
- Hotels
- Boardrooms
- Cruise ships
- Houses of worship
- Paging
- Casinos
- Convention Centers
- Restaurants
- Offices
- Retail stores

## SPECIFICATIONS:

Sonance Prommercial R870V

**Tweeter:** 1" (25mm) Pivoting Cloth dome

**Woofers:** 8" (203mm) Polypropylene cone with a rubber surround

**Frequency Range:** 50 Hz to 20 kHz - 10dB

**Nominal Sensitivity:** 90 dB 1w 1m

**Nominal Coverage angle:** 120.0 degrees conical

**Directivity Factor:** 4.25 averaged from 100 Hz to 10 kHz

**Directivity Index:** 7.19 averaged from 100 Hz to 10 kHz

**Transformer Taps:** 70 volt - 60W, 30W, 15W and 7.5W  
100 volt - 60W, 30W, 15W and 7.5W

**Power Capacity:** 140 watts maximum program power,  
70 watts continuous Pink noise

**Enclosure:** Back Can, Deep draw steel

**Baffle:** ABS meets UL94V-0 fire rating

**Grille:** Paintable weather resistant aluminum

**Termination:** Locking removable quick connect with two input terminals and two loop through terminals

**Speaker Dimensions:** 12" (305mm) x 9.31" (236mm)

**Cutout Dimensions:** 10" (254mm) diameter

**Product Weight:** 11.0 lbs (4.99 kg) each

**Shipping Weight:** 23.0 lbs (10.44 kg) per pair

**Included Accessories:** C - support plate

2 international compatible  
tile support rails

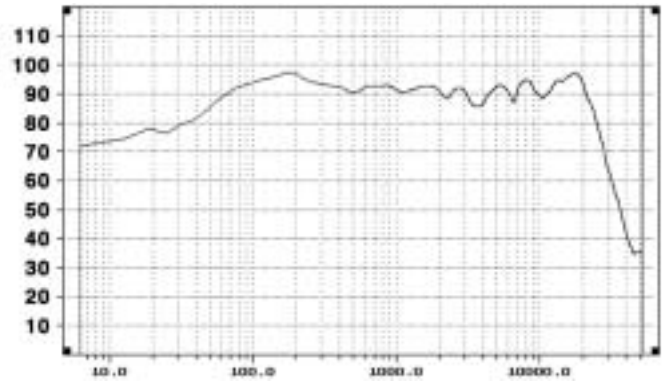
Cut-out template

Paint plug

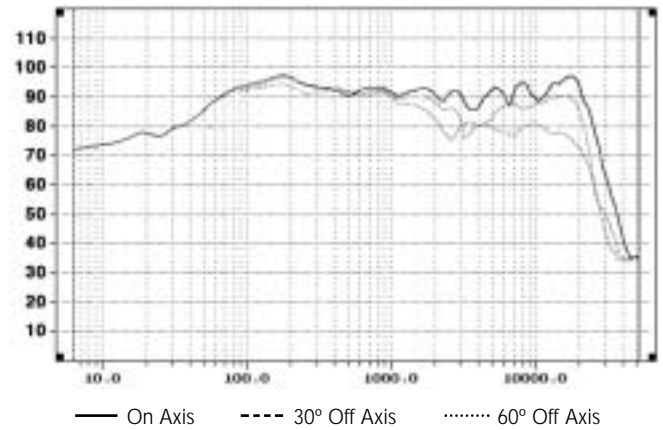
Removable quick connect  
wire terminator

**Certifications:** UL-94V-0 CE  
UL-2043 NFPA-70  
UL-1480 NFPA-90A

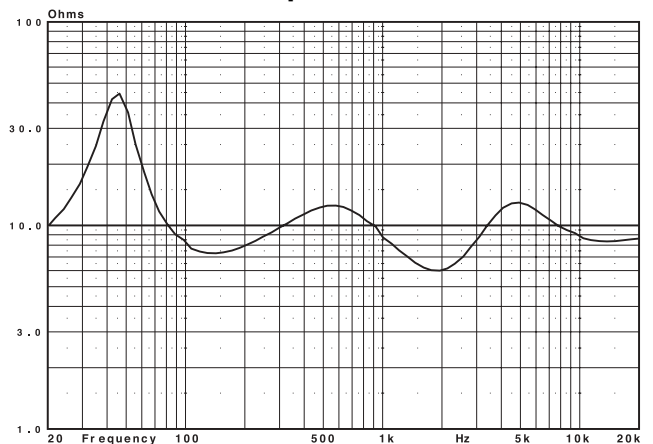
## On Axis SPL



## Off Axis SPL

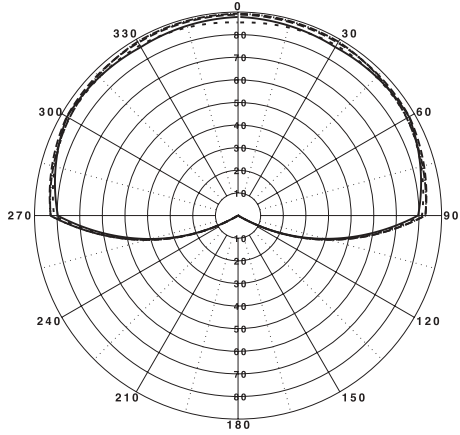


## Impedance

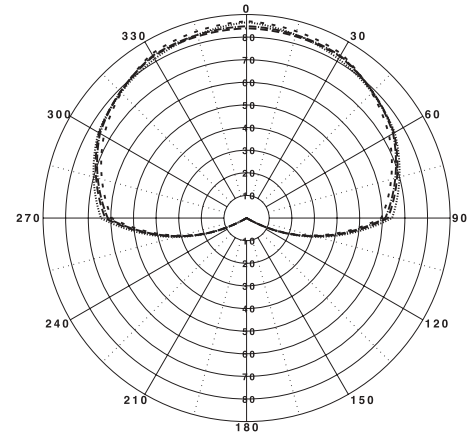


Frequency response curves are measured at a distance of 1 meter with 1 watt of input in a half space environment.

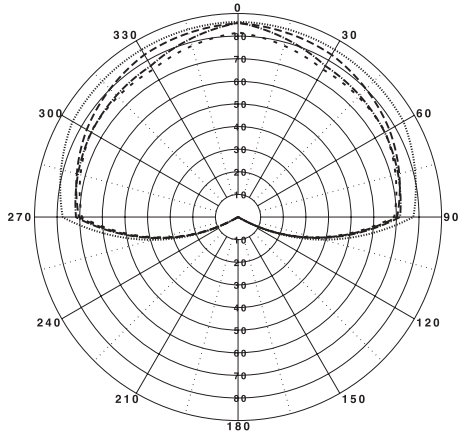
# 1/3 OCTAVE POLAR



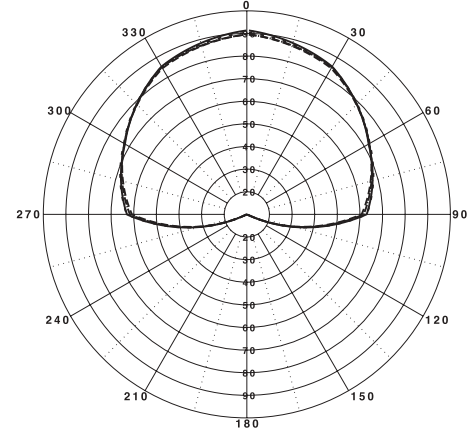
FreqHz	Deg	Q	DI dB
100.0	180	2.7	4.4
250.0	175	3.0	4.8
500.0	183	1.8	2.6
750.0	164	3.0	4.7



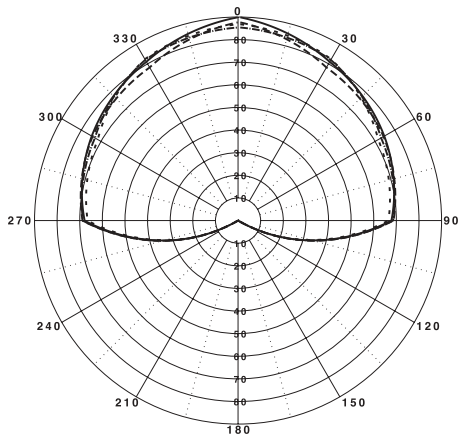
FreqHz	Deg	Q	DI dB
9.0k	68	7.7	8.9
10.0k	99	4.8	6.8
11.0k	91	5.3	7.2
12.0k	76	6.6	8.2



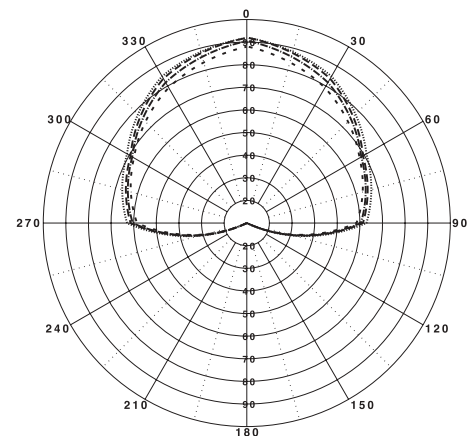
FreqHz	Deg	Q	DI dB
1.0k	156	3.0	4.8
2.0k	95	5.4	7.3
3.0k	42	10.0	10.0
4.0k	59	6.7	8.2



FreqHz	Deg	Q	DI dB
13.0k	65	8.4	9.2
14.0k	68	7.9	9.0
15.0k	65	8.5	9.3
16.0k	61	9.4	9.7



FreqHz	Deg	Q	DI dB
5.0k	39	11.7	10.7
6.0k	78	6.4	8.1
7.0k	69	7.6	8.8
8.0k	42	11.6	10.6



FreqHz	Deg	Q	DI dB
17.0k	52	10.5	10.2
18.0k	45	11.9	10.7
19.0k	42	12.4	10.9
20.0k	42	12.4	10.9

## Architectural Specifications R870V:

The loudspeaker shall be of the two way type comprising a single flush mount enclosure containing one 8" (203mm) low frequency transducer and one coaxially mounted 1" (25mm) pivoting high frequency transducer.

Frequency response shall be 50-20000 Hz. Total power handling shall be 70 watts RMS and 140 watts program. Sensitivity measured with 2.83 volts input at 1 meter on axis averaged between 50-20000 Hz shall be 89 dB. 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 60W, 30W, 15W, 7.5W and a 8 ohm bypass.

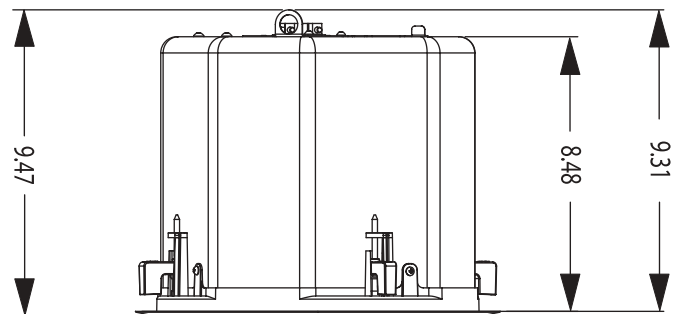
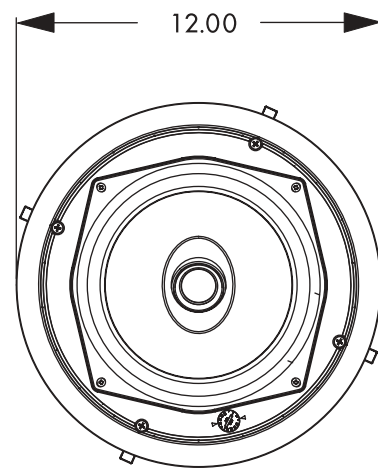
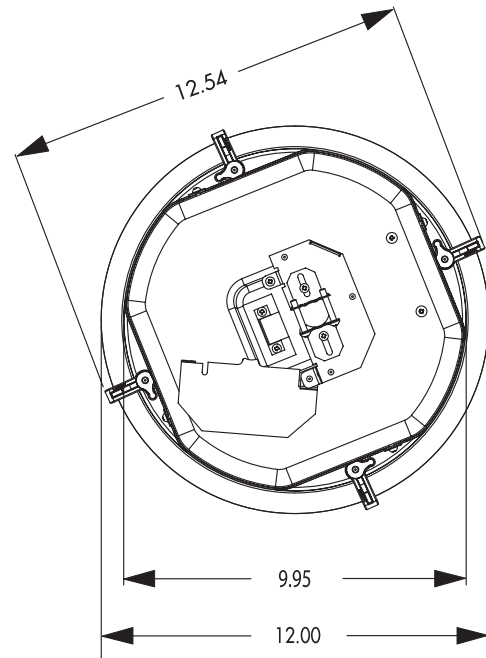
The back can shall be constructed from deep drawn steel. The baffle shall be injection molded using fire rated ABS that meets UL94V-0. Wire shall be terminated in an enclosed area on the rear of the back can. Strain relief shall be provided for wire or 1/2" (13mm) solid or flexible conduit. A support hook 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 12" (305mm) in diameter x 9.31" (236mm) mounting depth. The total enclosure shall weigh 11 lbs. (4.99 kg) per unit.

The loudspeaker shall be the Sonance Prommercial R870V. No other system shall be acceptable unless the above combined performance specifications are equaled or exceeded.

Specifications are subject to change.



The Leader in Architectural Audio™

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