



## IPD-RS82-EZ PRODUCT SPECIFICATIONS

System Type	8" coax, open-ceiling, ported, Dante™-enabled network
Frequency Response (±3 dB) <sup>1</sup>	100 Hz - 22 kHz
Frequency Response (±10 dB) <sup>1</sup>	80 Hz - 22 kHz
Max. Power SPL @ 40W PoE	103 dB
Max. Power SPL @ PoE+	100 dB
Max. Power SPL @ PoE	98 dB
Coverage Angle (±6 dB @ 2 kHz)	107°
Coverage Angle (±6 dB @ 10 kHz)	38°
Coverage Angle (Avg. 2-10 kHz)	82°
Directivity Factor (Q)	6 (Averaged 100 Hz - 10 kHz); 3.8 (2 kHz)
Directivity Index (DI) dB	7.8 (Averaged 100 Hz - 10 kHz); 5.9 (2 kHz)
Transducer: Low-Frequency Driver	203 mm (8") polypropylene cone, butyl rubber surround
Transducer: High-Frequency Driver	25.4 mm (1") silk dome tweeter with BroadBeam Ring™
Low-Frequency Voice Coil	25.4 mm   1"
Crossover Frequency	2.5 kHz
Network Type: Low Pass	12 dB per octave, 2nd order
Network Type: High Pass	12 dB per octave, 2nd order
Enclosure Material	Injection molded ABS, glass fiber reinforced
Grille	Powder-coated aluminum
Inputs	RJ45 Ethernet port
Colors	Black or white (paintable)
Height	327.7 mm   12.9"
Diameter	325.9 mm   12.83"
Weight	3.6 kg   8 lbs
Packaging	One per box
Included Accessories	Hanging hardware, weather plug, cover plate
Optional Accessories	N/A
Certifications	CE, RoHS, FCC, UL60065 Listed

## Description

The IPD-RS82-EZ is an 8" coaxial, open-ceiling speaker for IP-addressable audio networks on the Dante™ platform. Hanging hardware is included and features a built-in hanging bracket and screw-on cover plate for fast, easy, and secure installation. The unit may be mounted direct-to-conduit via the locking cover plate (see installation instructions for additional information).

Power, audio, and control are delivered to the speaker via a CAT5 or CAT6 cable; connection on the other end is made to a PoE or PoE+ switch, or to SoundTube's STNet Switch, which provides 40 W PoE (Power over Ethernet) to each speaker. Configuration and zoning of the speaker is done via software. Should any problem occur with the speaker during operation, it will be reported immediately via SoundTube monitoring software.

## Features

- IP-addressable, self-powered (PoE) speaker.
- Dante™ I/O for interconnectivity with Dante™-enabled audio systems.
- One 203 mm (8") coaxial with BroadBeam Ring™ technology for high-frequency dispersion and one 25.4 mm (1") silk dome tweeter.
- Fast connection of power, audio, and control functions via one CAT5 or CAT6 cable.
- 40 W PoE provided by SoundTube STNet Switch; also works with standard PoE+ and PoE switches.
- Provides report-back on any problems via SoundTube software.
- Weatherized components for indoor and outdoor applications.
- Includes hanging hardware with galvanized steel cables and hanging bracket for fast, easy, and secure installation. Unit may be hung or mounted direct-to-conduit via locking cover plate.
- Enclosure constructed of injection molded ABS with glass fiber reinforcement for lasting durability in indoor or outdoor applications.
- Aluminum grille with protective powder-coated finish.
- Unit ships in eco-friendly, recyclable packaging.
- UL60065 listed.
- High-quality black or white paint finish. Speaker is paintable.
- Included accessories: hanging hardware, weather plug, cover plate.

<sup>1</sup> Frequency response measured in half or full space as dictated by speaker mounting configuration

## Applications

Designed for superior off-axis performance and easy installation, the IPD-RS82-EZ offers attractive styling in an economical speaker for open-ceiling uses. The IPD-RS82-EZ offers attractive styling in an economical speaker for open-ceiling uses. The IPD-RS82-EZ includes hanging cables and a built-in mounting plate for suspending the speaker; a threaded opening is provided on top of its cover plate for direct-to-conduit mounting. Cost-effective engineering with high-performance sound makes the IPD-RS82-EZ speaker ideal for music and paging applications in retail, grocery stores, restaurants, hotels, casinos, museums, trade shows, and conference rooms.

## Patented Technologies

SoundTube by MSE Audio constantly develops new technologies to enhance audio product performance. SoundTube innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dome, enclosure and dispersion technologies. MSE Audio actively defends its patents in order to protect SoundTube resellers and end-users.

## Technical Data and Specification Tools

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data is available from SoundTube Entertainment or at [www.soundtube.com](http://www.soundtube.com).

Technical data and downloads include:

- EASE™ data - 3-D polar plots.
- EASE™ Address - 2-D modeling for distributed systems
- AutoDesk® Revit® software
- Tech Sheets - technical information and architectural specs for system engineers
- SoundTubeSPEC™ - Proprietary speaker placement software

## Independent Data Acquisition and Verification

All data for SoundTube speakers is independently collected from and verified by NWAALabs ([www.nwaalabs.com](http://www.nwaalabs.com)) using their proprietary MACH testing system. All data is collected and analyzed according to ASTM, ISO and AES standards using EASERA, TEF and MLSSA. Full balloon data including both phase and magnitude is compiled into a variety of formats including EASE 4.x, GLL and CLF.

## Architectural Specifications

The loudspeaker shall consist of one 203 mm (8") low-frequency driver and one 25.4 mm (1") high-frequency driver. The low-frequency voice coil diameter shall be 25.4 mm (1"). The high-frequency transducer shall have a silk dome tweeter with BroadBeam Ring™ technology.

Performance specifications of a typical production unit shall be as follows: Usable frequency range shall extend from 80 Hz - 22 kHz ( $\pm 10$  dB). The frequency dividing network shall have a crossover frequency of 2.5 kHz. The unit shall accept 40 W PoE in addition to PoE+ and standard PoE, as well as the audio signal from a provided network switch, and shall be configurable via software. Maximum continuous output at 1 M with a 40 W input shall be 103 dB.

Installation shall be by galvanized steel cable attached to the speaker

chassis via fixed cable end that interlocks with integrated mounting bracket. Alternatively, installation shall be available via direct conduit connection to the units top cover plate. The external wiring shall be via RJ45 Ethernet port, accepting standard CAT5 or CAT6 Ethernet cable. The system shall be for indoor and outdoor applications and shall have a weather-resistant plug protecting all wire connectors inside the cover plate.

The enclosure shall be constructed of injection-molded ABS. The grille shall be constructed of powder-coated aluminum for lasting performance in the elements. Overall cabinet dimensions shall be no more than 327.7 mm (12.9") in height by 325.9 mm (12.8") in diameter. The unit shall weigh no more than 3.6 kg (8 lbs) and shall include hanging hardware and weather-resistant cover plate plug.

The system shall be the SoundTube IPD-RS82-EZ with hanging hardware for Dante applications.

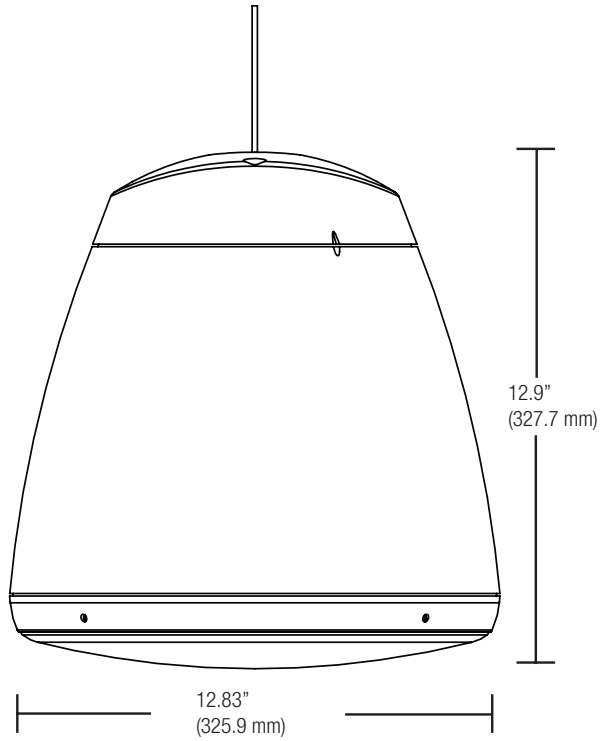
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All SoundTube speakers come with a 5-year limited warranty and 3-year warranty on all electronics.

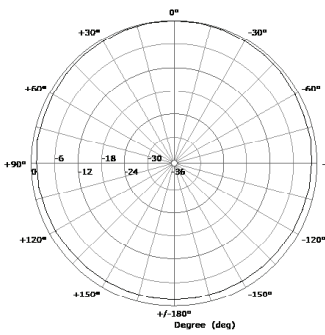
## Mechanical Drawings

Side

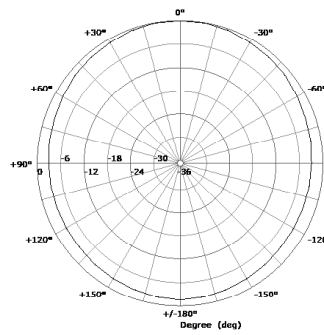


## Plots

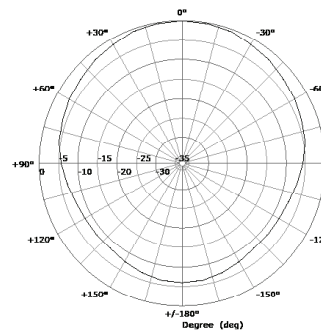
125 Hz



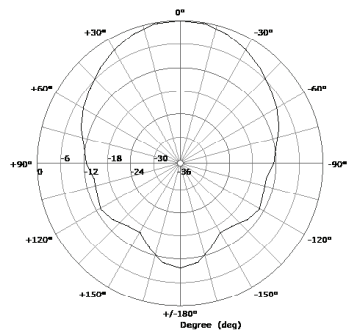
250 Hz



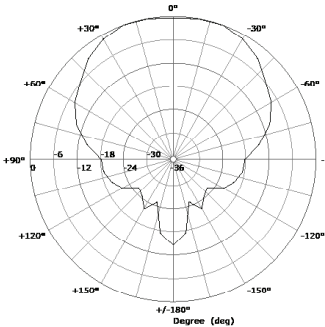
500 Hz



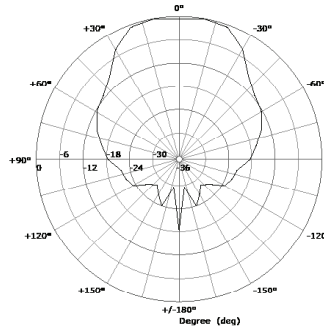
1,000 Hz



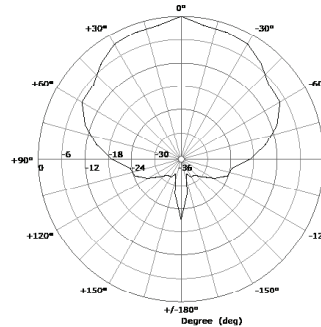
2,000 Hz



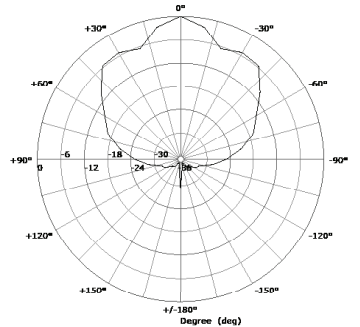
4,000 Hz



8,000 Hz

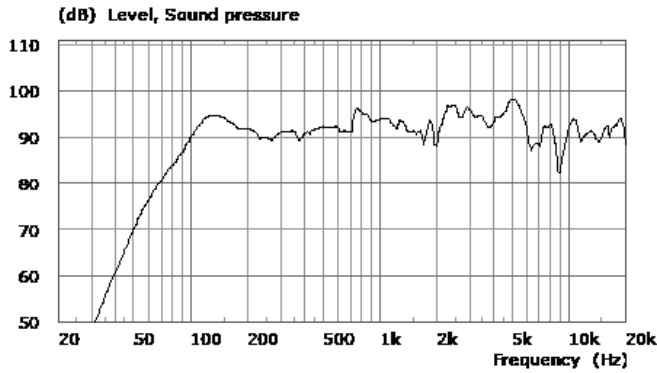


10,000 Hz

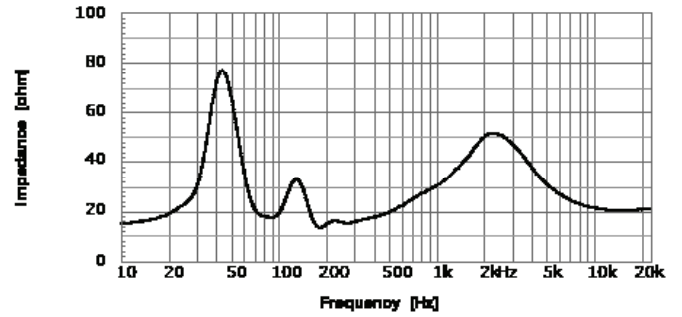


## Graphs

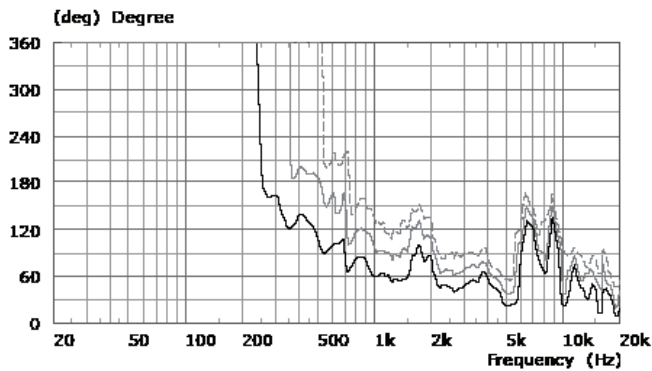
Frequency Response



Phase/Impedance Response



Vertical Beamwidth



Directivity Index (DI)

