



## Specifications: RS4-EZ

Mounting hardware included

System Type	4-inch, full-range, open-ceiling, ported (20-watt transformer for 25/70.7/100-volt or transformer bypass)
Impedance (nominal) <sup>1</sup>	8 ohms
Sensitivity dB @ 2.83 V/1 m	90.0 dB
Sensitivity dB @ 1 W/1 m <sup>2</sup>	90.0 dB
Frequency Response (-3 dB) <sup>3</sup>	185 Hz - 13 kHz
Frequency Response (-10 dB) <sup>3</sup>	98 Hz - 22 kHz
Max. Program Power <sup>4</sup>	40 W
Max. Continuous Power RMS <sup>5</sup>	20 W
Max. Power SPL @ 1 m <sup>6</sup>	103.0 dB
Coverage Angle (-6 dB @ 2 kHz)	160°
Coverage Angle (-6 dB @ 10 kHz)	60°
Coverage Angle (averaged 2-10 kHz)	95°
Directivity Factor (Q)	4.3 (averaged 100 Hz - 10 kHz); 3.8 (2 kHz)
Directivity Index (DI)	4.9 dB (averaged 100 Hz - 10 kHz); 5.8 dB (2 kHz)
Tap Selector	Five-position rotary switch with transformer bypass position
Transducer - Full-Range Driver	102 mm (4.0 in.) Paper cone, treated cloth surround
Voice Coil	20.0 mm (0.79 in.)
Enclosure Material	Injection molded ABS, glass fiber reinforced
Grille	Steel with powder-coat finish
Inputs	Four-pin, 5.08 mm Euroblock for individual or daisy chain connection
Colors	Black or white (paintable)
Height	223.5 mm (8.80 in.)
Diameter	195.6 mm (7.70 in.)
Weight	1.8 kg (3.9 lbs.)
Shipping Weight	2.7 kg (6 lbs.)
Packaging	One per box
Included Accessories	Hanging hardware, Euroblock connector and terminal weather boot
Optional Accessories	Surface-mount bracket (AC-RS-SM5)
Regulatory - UL	UL 2239 (hanging cable) approved
Regulatory - CE	Approved
RoHS	Approved

### Transformer Taps

	70.7 V	Output	100 V	Output	25 V	Output
1 Impedance listed per IEC 60268-5	20 W	103.0 dB	20 W	103.0 dB	2.5 W	94.0 dB
2 1 W 1 m sensitivity determined using nominal impedance	10 W	100.0 dB	10 W	100.0 dB	1.0 W	91.0 dB
3 Frequency response measured in half or full space as dictated by speaker mounting configuration	5 W	97.0 dB	5 W	97.0 dB	0.63 W	88.0 dB
	2.5 W	94.0 dB			0.31 W	85.0 dB

4 Max program power is 3 dB above max continuous power

5 Continuous power rating, EIA-426-B test

6 Max output based on max continuous power

## Key Features

- One 4 inch (102 mm) full-range, treated fiber driver mounted to an ABS baffle.
- Weatherized components for indoor and outdoor applications.
- Includes hanging hardware with galvanized steel cables and integrated SpeedClamp™ self-locking wire grip for fast, easy and secure installation. Also includes Euroblock connector and terminal weather boot.
- Patented ZeroReflection™ enclosure technology for optimal sound reproduction and cabinet rigidity.
- Easy access five-position selectable tap switch for 25-, 70.7- and 100-volt applications with transformer bypass position simplifies ordering and inventory tracking.
- Steel grille with protective powder-coated finish for lasting durability.
- Average sensitivity of 90.0 dB offers high-output capabilities and reduced amplification costs.
- UL 2239 (hanging cable) approved
- High-quality black or white paint finish. Custom colors available.
- Optional accessory: AC-RS-SM5 bracket for surface-mount applications.

## Description

The RS4-EZ is a 4-inch, full-range, ported speaker with an open-ceiling enclosure design. Hanging hardware is included and features a SpeedClamp™ self-locking wire grip for fast, easy and secure installation. SoundTube's custom-engineered driver and electro-acoustic network deliver high-performance sound in a cost-effective speaker design. The RS4-EZ speaker incorporates a low-profile grille and a five-position tap switch with transformer bypass position.



## Applications

Designed for indoor and outdoor background to mid-level SPL applications, the RS4-EZ includes a single-point mounting system for rapid open-ceiling installations with an optional bracket for surface-mount applications. Cost-effective engineering with high-performance sound makes the RS4-EZ speaker ideal for music and paging applications in retail, grocery stores, restaurants, hotels, casinos, museums, trade shows and conference rooms. For applications where additional bass is required, SoundTube's RS1001i-II-T 10-inch subwoofer may be used.

## Patented SoundTube Technologies

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

## Technical Data and Specification Tools

### Technical Data

SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are 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

### Data Acquisition and Verification

All data for SoundTube speakers are independently collected from and veri-

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

## Architectural Specifications

The loudspeaker shall consist of a 102 mm (4.0 in.) full-range driver. The voice coil diameter shall be 20.0 mm (0.79 in.).

Performance specifications of a typical production unit shall be as follows: Useable frequency response shall extend from 98 Hz – 22 kHz (-10 dB). Measured sensitivity (2.83-volt input, 1 meter) shall be at least 90.0 dB. The speaker shall have a nominal impedance of 8 ohms. The speaker shall be available for 25-, 70.7- and 100-volt modes and shall include a five-position tap switch with a transformer bypass position. Rated power capacity shall be at least 20 watts continuous (RMS) and conform to EIA-426-B testing. Maximum continuous output at 1 meter shall be 103.0 dB.

The transducer shall have a treated fiber cone with a treated cloth surround and shall be mated to an ABS baffle.

Installation and safety attachment for the speaker shall be by galvanized steel cable affixed to the speaker chassis via an integrated forged-steel clasp with safety gate. The external wiring input connector shall be a four-pin, 5.08 mm Euroblock for 8 ohm or distributed systems and shall accept from 10 – 22-gauge wire. The system shall be for indoor and outdoor applications and shall have a weather-resistant boot covering all wire connectors.

The enclosure shall be constructed of injection-molded ABS. The grille shall be constructed of powder-coated steel for lasting performance in the elements. Overall cabinet dimensions shall be no more than 223.5 mm (8.80 in.) in height by 195.6 mm (7.70 in.) in diameter. The unit shall weigh no more than 1.8 kg (3.9 lbs.) and shall include hanging hardware, Euroblock connector and weather-resistant terminal boot.

The system shall be the SoundTube

RS4-EZ with hanging hardware for both low- and high-impedance applications.

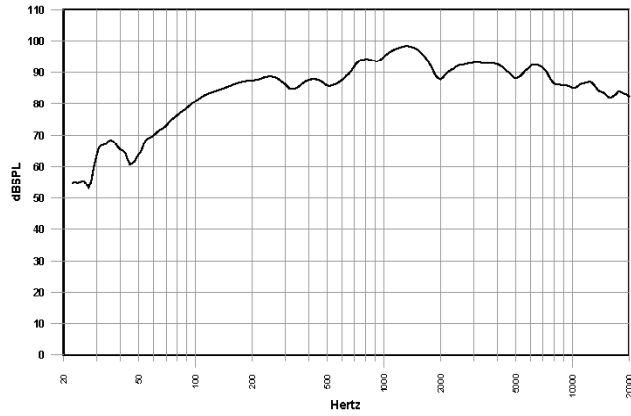
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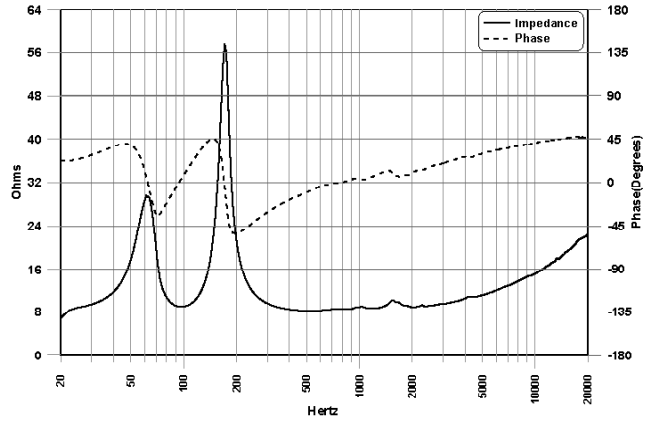
**All SoundTube products come with a 5-year limited warranty.**

Graphs and Plots

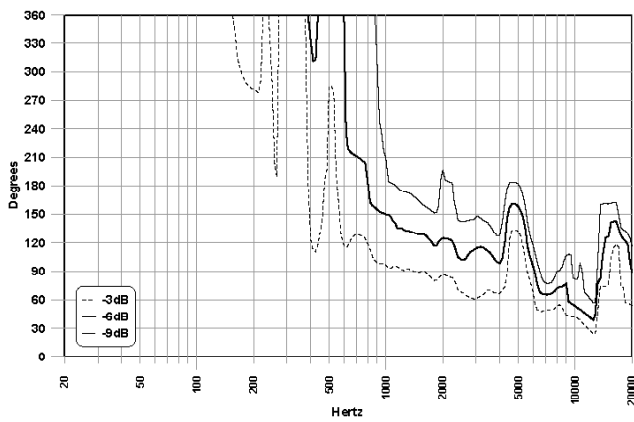
Frequency Response



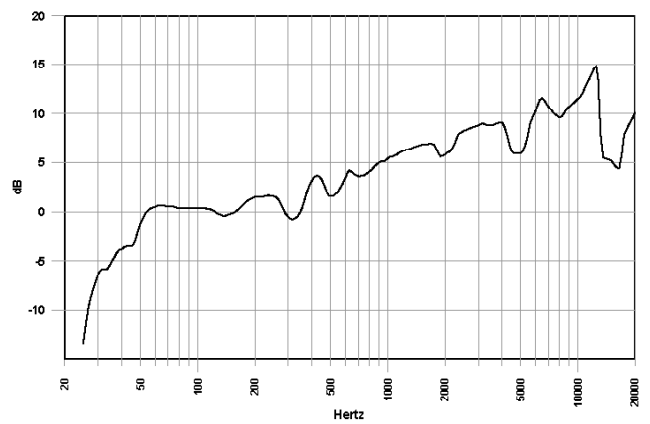
Impedance/Phase



Vertical Beamwidth



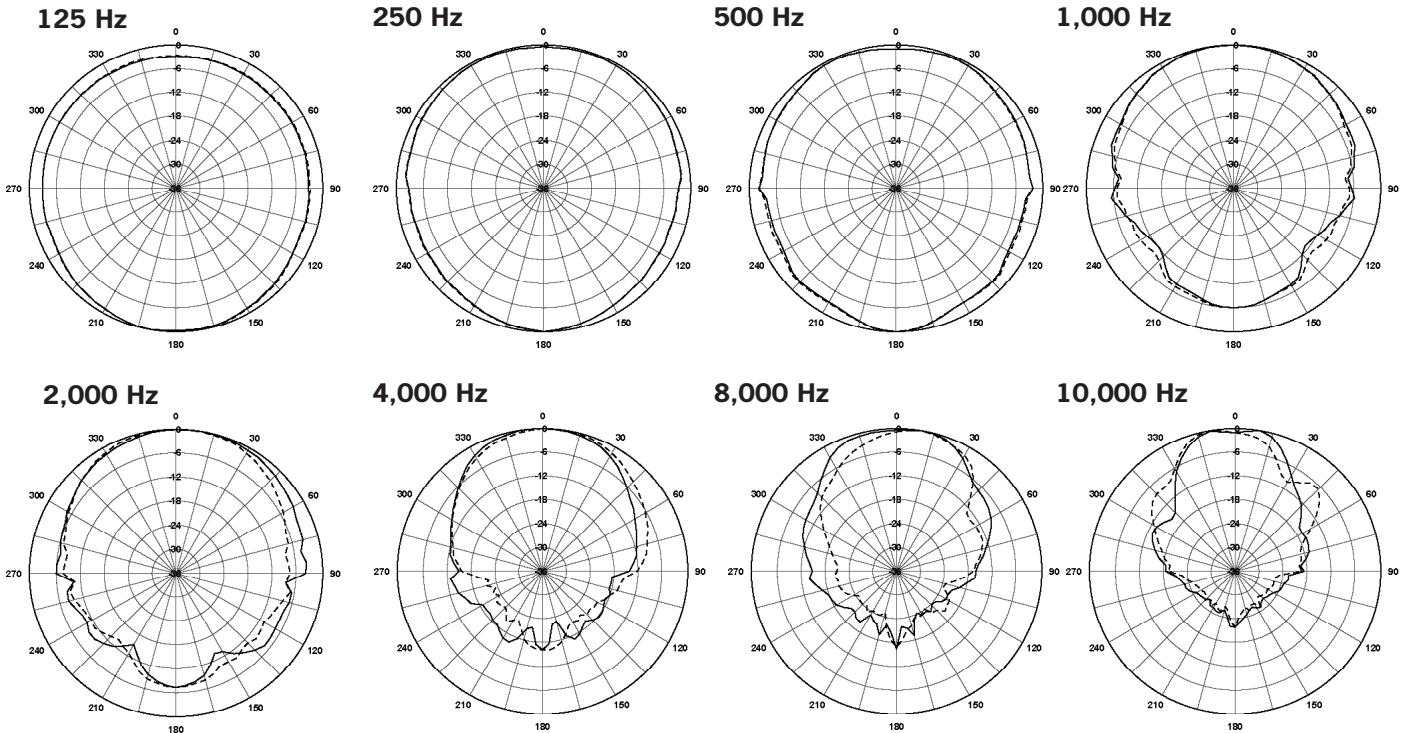
Directivity Index (DI)



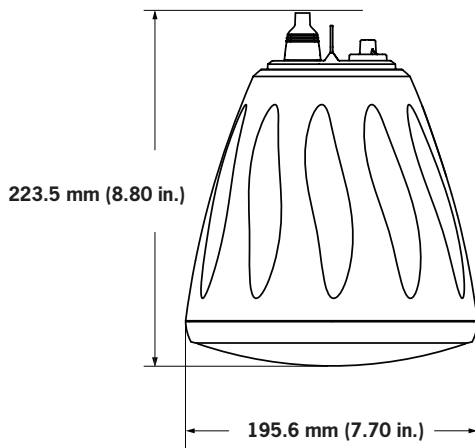


## Polar Plots

— Horizontal  
- - - Vertical



## Mechanical Drawings



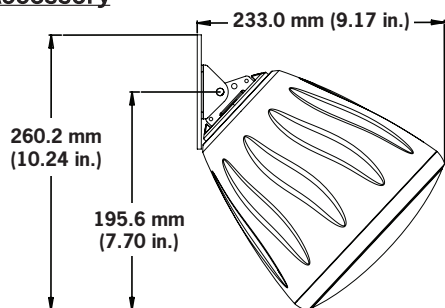
## Included Accessories



### Hanging Hardware: Main and Safety Cables w/ SpeedClamp™

SoundTube's hanging cable kit incorporates hanging and safety cables and fasteners for an integrated and easy-to-install system. Hanging and safety cables are infinitely adjustable to 2.74 m (9.0 ft).

## Optional Accessory



**Surface-Mount Bracket (AC-RS-SM5)**

SoundTube Entertainment manufactures a complete line of speakers for:  
**Open-Ceiling • In-Ceiling • Surface-Mount • Outdoor • Sound-Focusing**

All SoundTube products are designed and engineered in the USA.