

# RS31-EZ-T

3" On-Ceiling Speaker

**SOUNDTUBE**  
ENTERTAINMENT



## Specifications: RS31-EZ-T

## Mounting hardware included

Nominal Impedance	8 ohm
Impedance (min)	8 ohm
Sensitivity dB @ 2.83V/1M	85.0dB
Sensitivity dB @ 1W/1M (2)	85.0dB
Frequency Response ( $\pm 3$ dB)	170 Hz - 14 kHz
Frequency Response ( $\pm 10$ dB)	120 Hz - 22 kHz
Max. Program Power	40W
Max. Continuous Power RMS	20W
Max. Power SPL @ 1 M	98.0dB
Directivity Factor (Q) (Averaged 100Hz - 10kHz, @ 2kHz)	4.9 (Average 100 Hz - 10 kHz) 7.1 (2 kHz)
Directivity Index (DI) dB (Averaged 100Hz - 10kHz, @ 2kHz)	5.1dB (Average 100 Hz - 10 kHz) 8.5dB (2 kHz)
Tap Selector	Selectable terminal input strip
70.7 Volt Transformer Taps	20w / 98.0dB
100 Volt Transformer Taps (dB)	20w / 98.0dB
25 Volt Transformer Taps (dB)	3w / 90.0dB
Transformer Options	25 / 70.7 / 100 Volt option, no 8 ohm bypass
Transducer - Full-Range Driver	3" Polypropylene Driver with Butyl Rubber Surround
Coverage Angle (-6 dB @ 10 kHz)	45
Angle	70
Coverage Angle (-6 dB @ 2 kHz)	70
Colors	Black or white
Inputs	Terminal strip
Height (SM = Height)	125.4 mm / 4.9 in
Diameter (SM = Width)	110.5 mm / 4.4 in
SM Depth (Including Bracket)	96.8 mm / 3.8 in
Weight	0.6 kg / 1.3 lb
Shipping Weight	0.9 kg / 2.0 lb
Packaging	1 per box
Regulatory - UL	Approved UL1480A
Regulatory - CE	Approved

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Regulatory - RoHS

Regulatory - IP

## Mounting hardware included

approved

not planned

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## Key Features

- One 3 inch (76.1 mm) polypropylene driver with butyl rubber surround
- Integrated 20-watt transformer for 25/70.7/100-volt applications.
- Weatherized components for indoor/outdoor applications.
- Ultra-low profile ZeroReflection™ ABS enclosure (4.35 inch diameter by 4.35 inch height without stabilizing arm).
- Corrosion-resistant, powder-coated aluminum grille.
- UL 1480 (UEAY) planned.
- High quality black or white paint finish.
- Included accessories: Mounting element, cover plate, 10ft speaker signal/hanging cable.

## Description

Includes a 20-watt transformer. One 3 inch (76.1 mm) polypropylene driver with butyl rubber surround. Ultra-low profile ZeroReflection™ ABS enclosure (4.35 inch diameter by 4.35 inch height without stabilizing arm). Corrosion-resistant, powder-coated aluminum grille. UL 1480 (UEAY) listed. Included accessories: Mounting element, cover plate, 10ft speaker signal/hanging cable. Transformer does not include 8 ohm bypass.

## Applications

Engineered for rapid installation and low profile mounting for smaller venues, the RS31-EZ-T is ideal for finished ceiling applications in retail, restaurants, conference rooms, patio areas, educational facilities or any setting where full-range intelligibility, unobtrusive design and installation ease are paramount. For additional bass response down to 41 Hz (- 10 dB), the SM1001p powered 10-inch subwoofer may be incorporated.

## Patented SoundTube Technologies

SoundTube and MSE Audio Group

constantly develop new technologies that enhance audio product performance. SoundTube 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 verified 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 transducer shall consist of one full-range 76.2 mm (3.0 in.) polypropylene cone with butyl rubber surround. Performance specifications for a typical production

unit shall be as follows: Useable frequency response shall extend from 120 Hz - 22 kHz (- 10 dB). Measured sensitivity (2.83 volt input, 1 meter) shall be at least 85.0 dB. The speaker shall have a nominal impedance of 8 ohms, with a 20-watt transformer for distributed systems. The transformer shall have a selectable terminal input strip for 25-, 70.7- and 100-volt applications. Rated power capacity shall be at least 20 watts continuous (RMS) and conform to EIA-426-B. Maximum continuous power output at 1 meter shall be 98 dB. Installation shall be by mounting element designed to retro-fit in most junction boxes. The speaker will hang via 10 foot signal/hanging cable (included). Cover plate is included to store excess signal/ hanging cable as it is screwed into place, concealing the mounting element and junction box. The 20-watt transformer will be mounted directly inside the mounting element. The speaker utilizes weatherized components for indoor and outdoor applications. External wiring shall be by low-profile screw terminal and shall accept from 10 - 22-gauge wire. The enclosure shall be constructed of injection-molded, ABS. The grille shall be constructed of powder-coated aluminum for lasting performance and affix to the speaker baffle via pressure fit. Overall cabinet dimensions shall be no more than 110.5 mm (4.35 in.) in height by 110.5 mm (4.35 in.) in diameter. The unit height with stabilizing arm shall be no more than 139.7 mm (5.5 in.). The system shall be the RS31-EZ-T for high-impedance applications.

## SoundTube

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

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## Mechanical Drawings

