

## Description

The SoundTube TS81 is an 8" coax drop-in tile speaker designed for distributed audio systems. The TS81-EZ delivers high-efficiency and great performance across a wide operating bandwidth. Designed for quick versatile installations, this speaker fits into standard 2x2 ceiling tile grids and can be wired to 25, 70.7, and 100 V amplifiers.

## Features

- Fits standard 2x2 ceiling tile T-Bar systems.
- Drop-in design reduces installation time & costs.
- Punched speaker grille blends in with acoustic ceiling tiles.
- High-sensitivity 102 dB max output.
- Great for music and speech.
- 8" speaker with built-in 25/70.7/100 V transformer.
- UL 1480 and UL 2043 certified.

## TS81-EZ PRODUCT SPECIFICATIONS

System Type	8" coaxial, drop-in tile speaker
Sensitivity dB @ 2.83 V / 1 M	92 dB
Sensitivity dB @ 1 W / 1 M	92 dB
Frequency Response ( $\pm 3$ dB)	130 Hz - 20 kHz
Frequency Response ( $\pm 10$ dB)	90 Hz - 22 kHz
Max. Program Power	30 W
Max. Continuous Power (RMS)	15 W
Max. SPL dB @ 1 M	102 dB
Tap Selector	Wire leads
Transducer: Low-Frequency Driver	8" dual cone
Transducer: High-Frequency Driver	N/A
Low-Frequency Voice Coil	20 mm   0.79"
Coverage Angle ( $\pm 6$ dB @ 2 kHz)	140°
Coverage Angle ( $\pm 6$ dB @ 10 kHz)	105°
Coverage Angle (Averaged 2-10 kHz)	80°
Enclosure Material	Drawn steel backcan with ABS baffle
Grille	Painted steel
Inputs	Wire leads
Color	White
Height	603.3 mm   23.75"
Width	603.3 mm   23.75"
Depth	88.9 mm   3.5"
Weight	4.1 kg   9 lbs
Shipping Weight	5 kg   11 lbs
Packaging	One per box
Certifications	CE, RoHS, UL 1480, UL 2043

## Applications

Engineered for drop-in ceiling applications requiring true intelligibility, quality sound and quick installation, the TS8-EZ delivers smooth and even coverage ideal for offices, retail, gyms, airports, theme parks, transportation, schools and other establishments with drop-in tile ceilings.

## Patented Technologies

SoundTube Entertainment and the MSE Audio Group constantly develop new technologies which enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dome, enclosure and dispersion technologies. The MSE Audio Group 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") coated paper dual cone transducer. The loudspeaker shall be available with a selectable 25/70.7/100 V and transformer. The low-frequency voice coil diameter shall be 20 mm (0.79").

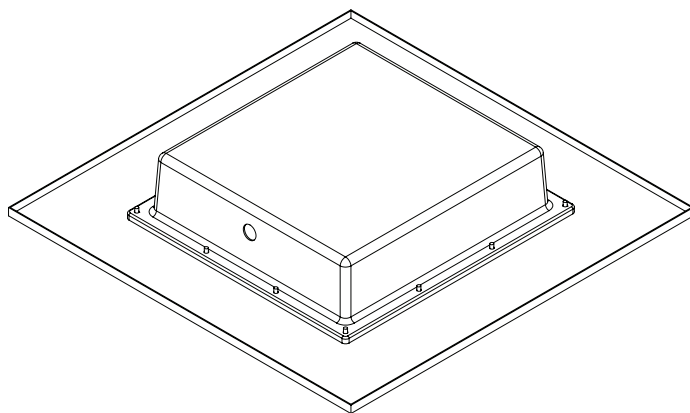
Performance specifications for a typical production unit shall be as follows: usable frequency response shall extend from 90 Hz – 22 kHz ( $\pm 10$  dB). Measured sensitivity (2.83 V, 1 M) shall be at least 92 dB. The speaker shall have a nominal impedance of 8  $\Omega$ . The speaker shall be available for 25, 70.7, and 100 V. Rated power capacity shall be at least 15 W continuous (RMS) and conform to EIA-426 testing. Maximum continuous output at 1 M shall be 102 dB. Installation for the speaker shall be tool-free drop-in.

The enclosure shall be black powder-coated steel. The grille shall be powder-coated steel with a tool-free locking system. Overall dimensions are 603.3 mm (23.75") square and 88.9 mm (3.5") deep. The external wiring shall be via wire leads.

## SoundTube®

13720 W. 109th St.  
Lenexa, KS 66215  
Phone: 913.663.5600  
Fax: 913.663.3200  
Toll Free: 855.663.5600  
[www.mseaudio.com](http://www.mseaudio.com)

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



## Mechanical Drawings

Insert drawings of mechanical drawings, provided by engineering.

## Plots

Insert drawings of plots and graphs, provided by engineering.

## Graphs

Frequency Response

Phase/Impedance Response

Beamwidth

Directivity Index (DI)