



Specifications: HPCF8-T64 HPCF8-8

System Type	8" 2-way high-power in-ceiling (voice coil/8 Ohm direct or 64 Watt transformer for 70.7/100 Volt applications)
Frequency Response (-3 dB) ¹	75 Hz – 16.6 kHz
Frequency Response (-6 dB) ¹	70 Hz – 17.3 kHz
Low Frequency (-10 dB) ¹	52 Hz
Max. Program Power	250 W
Max. Continuous Power RMS ²	125 W
Max. SPL dB @ 1M	116 dB
Sensitivity dB @ 1W/1M ³	95 dB (half space)
Impedance	8 Ohm (nominal value)
Tap Selector	Selectable via tap wires.

Transformer Taps

70.7 V	Output	100 V	Output
64 W	113 dB	n/a	n/a
32 W	110 dB	64 W	113 dB
16 W	107 dB	32 W	110 dB
8 W	104 dB	16 W	107 dB

Coverage Angle (-6 dB @ 2 kHz)	115°
Coverage Angle (-6 dB @ 8 kHz)	90°
Directivity Factor (Q)	5.24 (100 Hz to 10 kHz averaged) 5.85 @ 2 kHz
Directivity Index (DI)	5.37 dB (100 Hz to 10 kHz averaged) 7.67 dB @ 2 kHz

Transducers

Low Frequency Driver	1 x 203 mm (8.0 in) concentric coaxial coated fiber driver
High Frequency Driver	1 x 25 mm (1.0 in) compression driver with a 50 mm (2.0 in) titanium diaphragm
Crossover Frequency	1.8 kHz

Network Type

Low Pass	12 dB per octave, 2nd order
High Pass	18 dB per octave 3rd order with protection circuitry
Inputs	Selectable tap wire
Enclosure Material	Steel backcan
Colors	Black or white
Backcan Diameter	305 mm (12.0 in)
Backcan Height	254 mm (10.0 in)
Visible Diameter	368 mm (14.5 in)
Visible Height	44 mm (1.75 in)
Net Weight	9.53 kG (21.0 lbs)

Accessories

Included Accessories	Tile bridge, backcan & safety cable
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¹ Frequency response is measured in half space.

² Continuous power rating, EIA-426-B test.

³ 2.83 Volts at a distance of 1 meter.

SoundTube continually develops new product innovations and improvements. Updates to existing products without prior notice are an example of SoundTube's drive for constant improvement.

Key Features

- High-SPL, high-efficiency system for the sound reinforcement and PA markets.
- BroadBeamHP® wide dispersion pattern provides smooth off-axis coverage and reduces overall system costs.
- One 203 mm (8.0 in) concentric coaxial coated fiber driver, 25 mm (1.0 in) compression driver with a 50 mm (2.0 in) titanium diaphragm.
- Voice coil/8 Ohm direct & 70.7/100 Volt model options.
- Includes tile bridge, safety cable and backcan for ease of ordering and installation.
- Low-profile design for clean appearance.
- Dual-concentric driver design provides uniform horizontal coverage.
- Black & white color options.

Applications

The HPCF8 is a high-SPL flush-mount speaker with BroadBeamHP® dispersion technology providing a wide coverage pattern for in-ceiling applications. The HPCF8 is engineered for installations requiring full-range background and foreground music plus paging. A smooth and even coverage pattern makes the HPCF8 an ideal choice for use in gyms, aerobic rooms, convention centers, stadiums and other high-power in-ceiling applications.

Backcan

HPCF8 in-ceiling speakers are packaged with grille, tile bridges and backcan. HPCF8 backcan is UL listed for plenum spaces and houses the electrical sub-assembly and all connection hardware.

Crossover Network

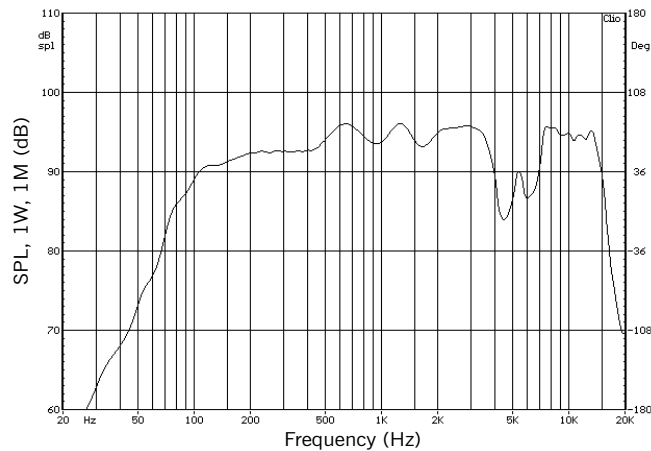
An advanced crossover network with low-phase shift and impedance equalization generates a coherent wave front. The HPCF8 crossover incorporates UL-listed, military grade glass-epoxy board material for long-term reliability.

Technical Data

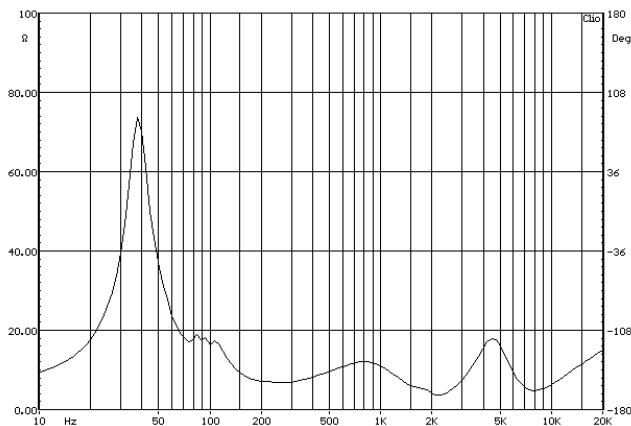
SoundTube Entertainment strives to provide complete and effective technical information and data to dealers, engineers and designers. All data are available from SoundTube Entertainment or at www.soundtube.com.



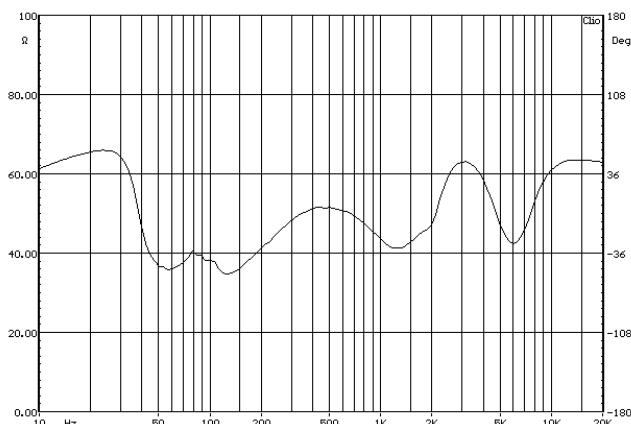
Frequency Response (unequalized)



Impedance Response



Phase Response



Technical data and downloads include:

Tech Sheets – Technical information and architectural specs for system engineers.

Data Acquisition

All performance data acquired at SoundTube's Technical Measurement Center (TMC) are analyzed using standardized measurement techniques, including Measured Length Sequence (MLS) and Time Delay Spectrometry (TDS). Performance, development, and data acquisition tools include: Gold Line TEF 20 Suite, CLIO, LMS, LEAP, and proprietary modeling software.

Data for Other SoundTube Products

Also available: sales & installation information for all SoundTube speaker systems, including open-ceiling, in-ceiling, surface-mount, in-ground and sound-focusing speakers.

Architectural Specifications

The loudspeaker shall be of in-ceiling design consisting of one 203 mm (8.0 in) concentric coaxial coated fiber driver, 25 mm (1.0 in) compression driver with a 50 mm (2.0 in) titanium diaphragm. The low frequency voice coil diameter shall be 50 mm (2.0 in).

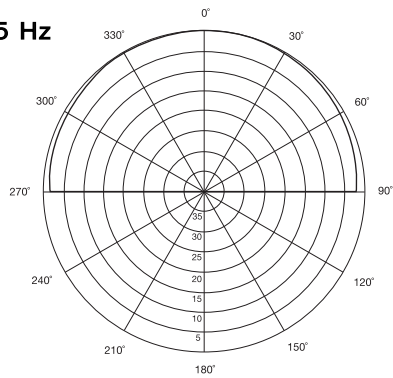
Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 52 Hz – 17.3 kHz. The loudspeaker shall be available in separate 64 W transformer and 8 Ohm models. Taps shall be nominally 4 W @ 70.7 V (8 W @ 100 V), 8 W @ 70.7 V (16 W @ 100 V), 16 W @ 70.7 V (32 W @ 100 V), 32 W @ 70.7 V (64 W @ 100 V), 64 W @ 70.7 V (tap position not used @ 100 V). The frequency-dividing network shall have a crossover frequency of 1.8 kHz. Rated power capacity of the components and network shall be at least 125 Watts continuous RMS power.

The HPCF8 backcan shall be constructed of formed steel and the baffle of heat-resistant ABS material. The external wiring shall be accomplished via hardwire leads.

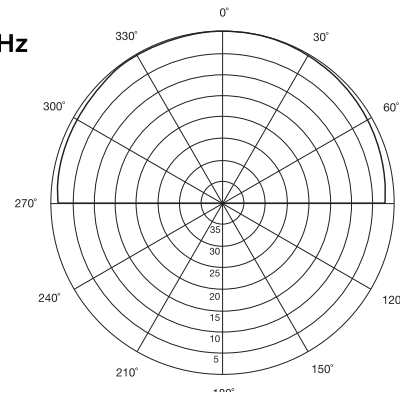
The system shall include a steel support backing plate (tile bridge) to reinforce the ceiling material and tile support rails. The

Horizontal One Octave Polars

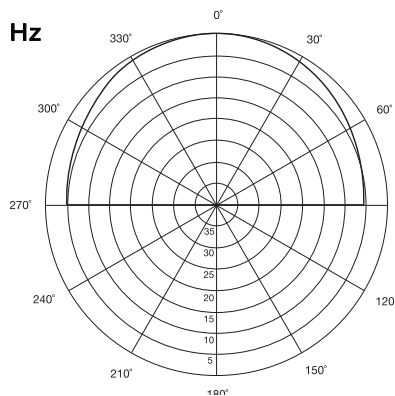
125 Hz



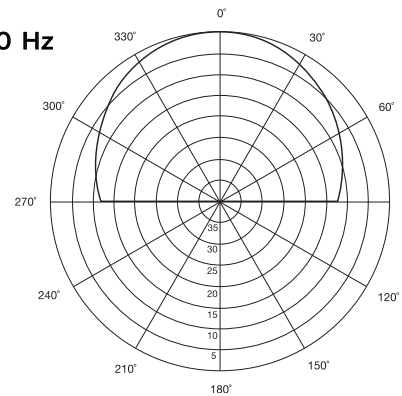
250 Hz



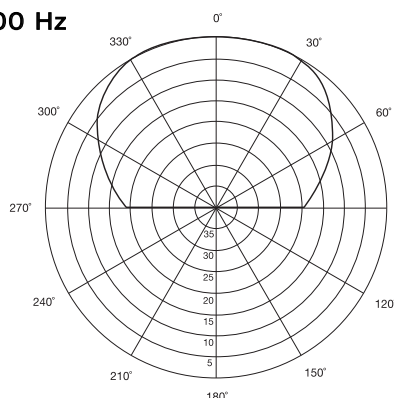
500 Hz



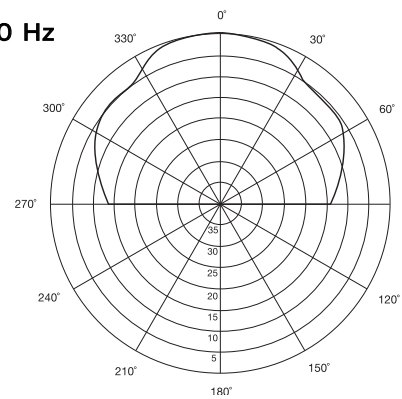
1,000 Hz



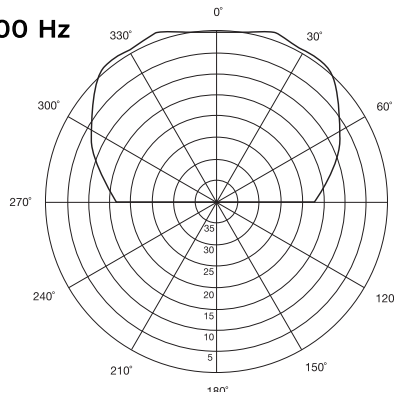
2,000 Hz



4,000 Hz

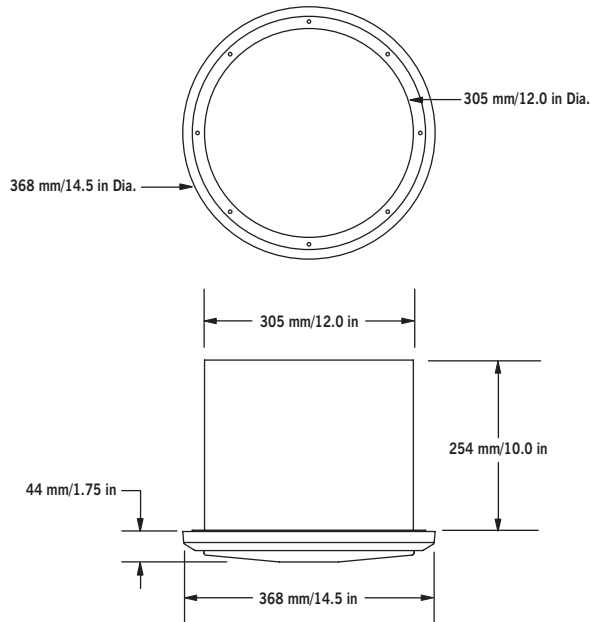


8,000 Hz





Mechanical Drawings



rectangular tile bridge [603 mm (23.75 in) x 413 mm (16.25 in)] which is constructed of 23-gauge steel that drops into standard drop-tile ceiling systems.

Overall front face diameter shall not exceed 368 mm (14.5 in); overall depth from the bottom of the ceiling shall not exceed 44 mm (1.75 in) and shall weight no more than 9.53 kG (21.0 lbs).

The low-frequency transducer shall have a treated fiber cone and treated fabric surround that is formulated to resist weather elements and insects. The high-frequency transducer shall be constructed of one 25 mm (1.0 in) compression driver with a 50 mm (2.0 in) titanium diaphragm.

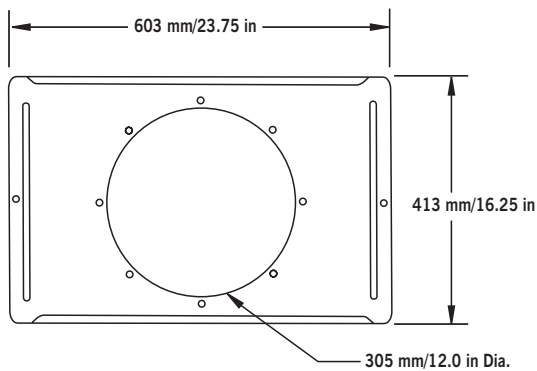
The systems shall be the SoundTube HPCF8-8 for low impedance and HPCF8-T64 for high impedance.

SoundTube Entertainment

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

Included Accessories



Tile Bridge

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.