



Specifications: HP12i-T64 HP12i-SM-T64

System Type	12" 2-way high-power ported (64 Watt transformer for 70.7/100 Volt applications with voice coil/8 Ohm direct)
Frequency Response (-3 dB) ¹	68 Hz – 20 kHz
Frequency Response (-6 dB) ¹	58 Hz – 20 kHz
Low Frequency (-10 dB) ¹	50 Hz
Max. Program Power	300 W
Max. Continuous Power RMS ²	150 W
Max. SPL dB @ 1M	121 dB
Sensitivity dB @ 1W/1M ³	99 dB
Impedance:	Voice coil/8 Ohm direct (nominal value)
Tap Selector	Selectable via barrier terminal strip

Transformer Taps

70.7 V	Output	100 V	Output
64 W	117 dB	n/a	n/a
32 W	114 dB	64 W	117 dB
16 W	111 dB	32 W	114 dB
8 W	108 dB	16 W	111 dB

Coverage Angle (-6 dB @ 2 kHz)	120°
Coverage Angle (-6 dB @ 8 kHz)	90°
Directivity Factor (Q)	5.26 (100 Hz to 10 kHz averaged) 5.02 @ 2 kHz
Directivity Index (DI)	6.35 dB (100 Hz to 10 kHz averaged) 7.01 dB @ 2 kHz

Transducers

Low Frequency Driver	1 x 304 mm (12.0 in) concentric coaxial coated paper drive
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	24 dB per octave, 4th order
High Pass	24 dB per octave 4th order with protection circuitry
Inputs	Corrosion-resistant gold-plated barrier strips
Enclosure Material	Roto-molded polyethylene plastic
Colors	Black or white
Diameter	426 mm (16.76 in)
Length	483 mm (19.0 in)
Net Weight	12.93 kG (28.5 lbs)

Accessories

Optional	See installation options on back page
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Key Features

- High-SPL, high-efficiency system for the sound reinforcement and PA markets.
- BroadBeamHP® coverage pattern providing smooth response and high SPL across the audio spectrum.
- One 304 mm (12.0 in) concentric coaxial coated fiber driver, 25 mm (1.0 in) compression driver with a 50 mm (2.0 in) titanium diaphragm.
- Weatherized components and sealed input panel for indoor/outdoor applications.
- Switchable dual input option for either voice coil/8 Ohm direct or 70.7/100 Volt applications.
- Multiple installation hardware options for overhead and surface-mount applications.
- ZeroReflection™ enclosure eliminates internal standing waves.
- Fine black or white finish.

Applications

The SoundTube HP12i is a premium low-profile, high-efficiency, high-SPL speaker with BroadBeamHP® coverage pattern technology providing high-performance audio for sound reinforcement and security/PA markets.

The HP12i is ideal for arenas, stadiums, gyms, ice rinks, nightclubs and other open-ceiling and outdoor applications where high SPL is required.

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.

Technical data and downloads include:

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

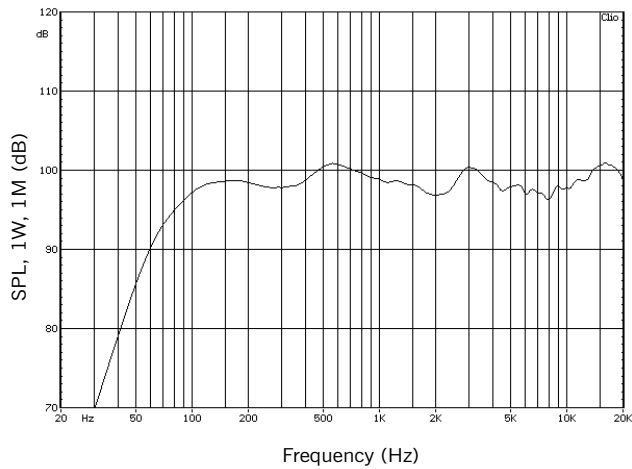
Data Acquisition

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

¹ Frequency response is measured in full space.
² Continuous power rating, EIA-426-B test.
³ 2.83 Volts at a distance of 1 meter.

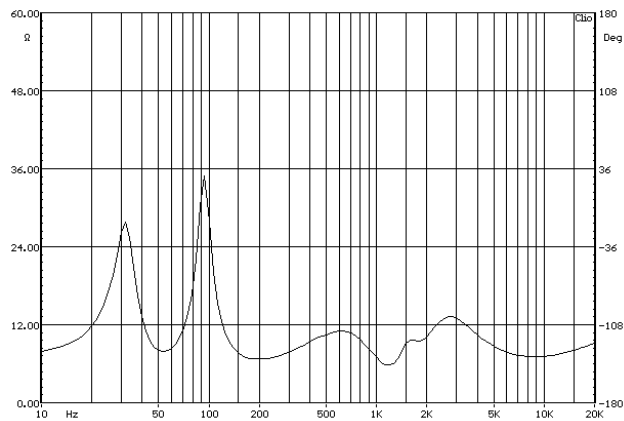
SoundTube continually develops new product innovations and improvements. Updates to existing products without prior notice are an example of SoundTube's drive for constant improvement.

Frequency Response (unequalized)

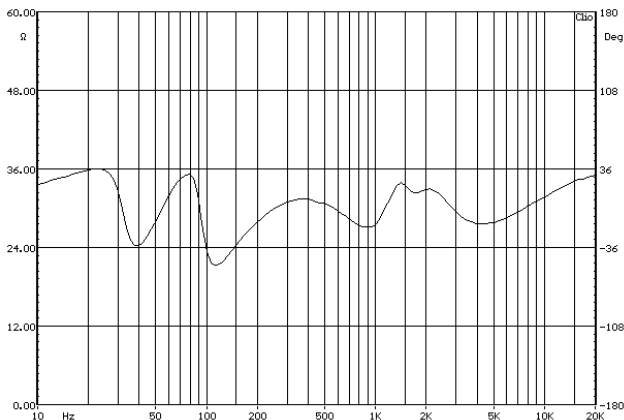


Frequency Response on-axis in full space (4 π).

Impedance Response



Phase Response



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 consist of a 304 mm (12.0 in) concentric coaxial coated fiber driver, 25 mm (1.0 in) compression driver with a 50 mm (2.0 in) titanium diaphragm and a frequency-dividing network installed in a dual-ported enclosure. The low-frequency voice coil diameter shall be 50 mm (2.0 in).

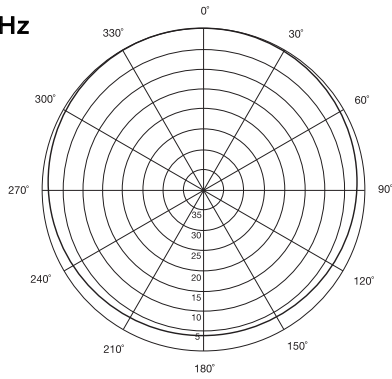
Performance specifications of a typical production unit shall be as follows: Usable frequency response shall extend from 50 Hz – 20 kHz. The loudspeaker shall be available with a switchable transformer / 8 Ohm input, and shall be equipped with corrosion resistant gold plated barrier strips for both impedance modes. 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 150 Watts continuous RMS power.

The enclosure shall be constructed of roto-molded polyethylene. The grille shall be constructed of UV-resistant ABS plastic material.

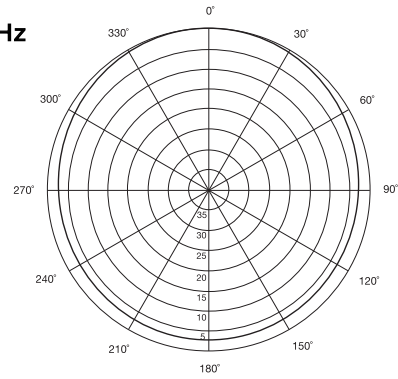
Installation for the HP12i shall be by two hanging aircraft cable with a 1/4-20 stud into threaded insert on rear input panel. The HP12i-SM model shall include a Surface Mount Bracket kit constructed of 12-gauge cold rolled steel (CRS) with electrostatic paint. The external wiring input connectors shall be barrier terminal strip and shall accept from 16 – 22 gauge wire (or wire of any size using a blade terminal input). Overall cabinet dimensions shall be no more than 426 mm (16.76 in) in diameter, by 483 mm (19.0 in) in length, and weigh no more than 12.93 kG (28.5 lbs).

Horizontal One Octave Polars

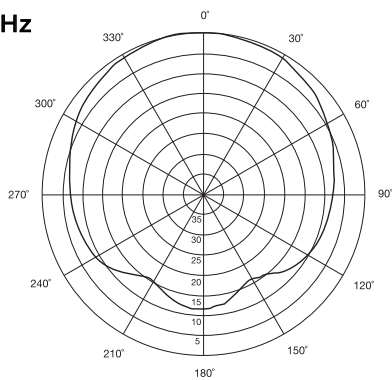
125 Hz



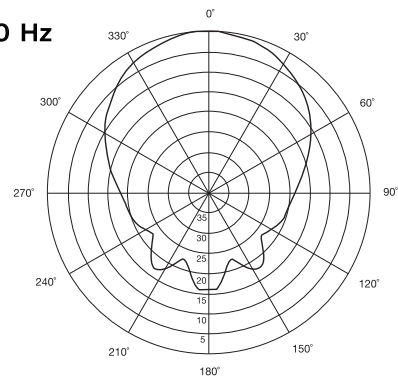
250 Hz



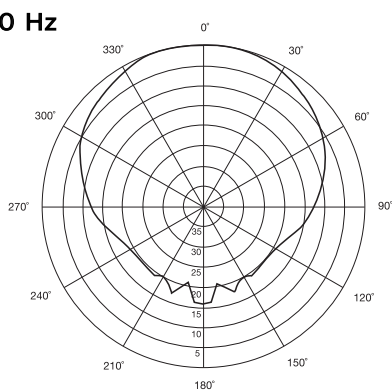
500 Hz



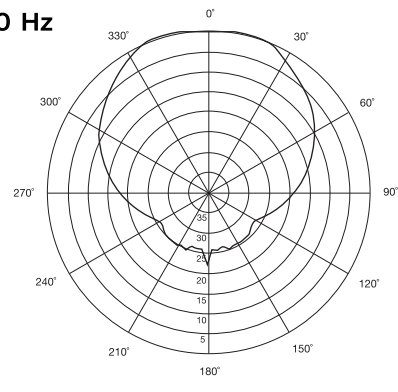
1,000 Hz



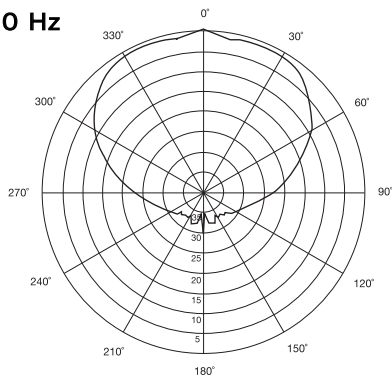
2,000 Hz



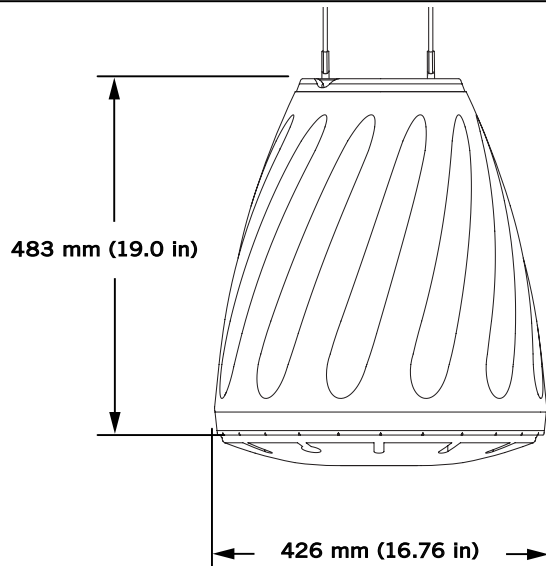
4,000 Hz



8,000 Hz



Mechanical Drawings



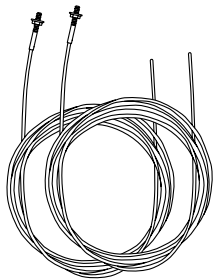
The system shall be the SoundTube HP12i for both low and high impedance.

SoundTube Entertainment

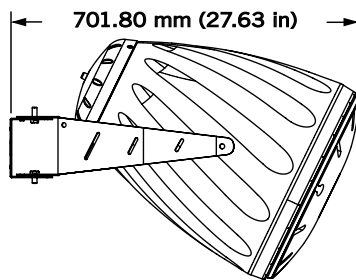
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All SoundTube products come with a 5-year limited warranty.

Installation Options



Hanging Cables with SpeedClamps™



HP12i-SM Surface-mount speaker system

Optional Accessories

(not shown)

AC-HK-10-HD – 10' adjustable Combi-Cable **AC-HK-20-HD** – 20' adjustable Combi-Cable
AC-HK-20 – 20' Hanging Cable **AC-BC1** – Beam Clamp **AC-SL1** – Snap Link
AC-FE1 – Forged Eyebolt **AC-HP12-GC** – Protective Sports Cage Grille

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