



Preliminary* Specifications: XT-Spyke

System Type	2-way full range line array (Optional 120 Watt transformer for 25/70.7/100 Volt applications)
Impedance (Rated) ¹	8 ohm
Sensitivity dB @ 2.83V / 1 m	92.0 dB
Sensitivity dB @ 1 W/1 m ²	92.0 dB
Frequency Response (-3 dB) ³	85 Hz - 20 kHz
Frequency Response (-10 dB) ³	65 Hz - 22 kHz
Max. Program Power ⁴	150 W
Max. Continuous Power ⁵	300 W
Max. SPL dB @ 1 m ⁶	114 dB
Coverage Angle (-6 dB @ 2 kHz)	120° horizontal 50° vertical
Coverage Angle (-6 dB @ 10 kHz)	77° horizontal 51° vertical
Coverage Angle (Avg. 2 to 10 kHz)	91° horizontal 52° vertical (500-10k)
Tap Selector - optional	5-Position rotary switch with transformer bypass position
Directivity Factor (Q)	6.9
Directivity Index (DI)	9.2 dB
Low-Frequency Driver	8 - 76 mm (3.0 in) woofers, polypropylene
High-Frequency Driver	8 - 25 mm (1.0 in) titanium dome tweeters
Crossover Frequency	2.4kHz
Network Type: Low-Pass	12dB/OCT
Network Type: High-Pass	18dB/OCT
Enclosure Material	Roto-molded polyethylene plastic
Grille	Painted coated stainless steel
Inputs	Weatherproof SpeakOn
Colors	Green, Black or White
Height	949.3 mm (37.37 in)
Width	172.7 mm (6.80 in)
Depth	148.5 mm (5.85 in)
Depth (Including Bracket)	223.5 mm (8.80 in)
Weight	7.80 kg (17.2 lbs)
Shipping Weight	8.5 kg (18.7 lbs)
Included Accessories	Mounting plate and mounting bolts, SpeakOn connector and safety cable
Optional Accessories	120 W transformer and tap switch
Packaging	1 per box
Regulatory - UL	UL 1480 planned
Regulatory - CE	Approved
RoHS	Approved

Key Features

- Passive, fixed length, column line array with 2-way design.
- Eight 3.0 inch (76 mm) woofers polypropylene woofers and eight 1.0 inch (25 mm) titanium dome tweeters.
- Optional 120 Watt transformer for 25/70.7/100 Volt applications
- Line Array – Point Source (LAPS) technology provides short near-field extent and robust far-field performance
- UV-, scratch-, chlorine- and weather-resistant with professional-grade components for long-lasting performance and durability.
- Painted stainless steel grille - custom paintable
- Available in green, black or white finish.
- Flexible mounting options include surface-mount and pole-mount.
- Weatherproof SpeakOn connectors allow for fast connections and easy daisy chaining.
- UL 1480 UEAY planned.
- Included accessories: Stainless steel mounting plate, mounting bolts and safety cable.

Description

The SoundTube XT-Spyke is not a typical line array column loudspeaker. It is an advanced LAPS (Line Array-Point Source) 2-way design that provides a very short near-field extent and robust far-field performance. Frequency tapering of low and high frequency pass bands allows the XT-Spyke to maintain a more consistent ratio of array height to radiated wavelength, ensuring a stable vertical beamwidth that out-performs many other single box line arrays. Featuring eight 3.0-inch woofers and eight 1-inch high frequency drivers for extremely smooth high frequency response, the XT-Spyke achieves superb coverage in an enclosure measuring only 37.37" x 6.80" x 5.50".

¹ Impedance listed per IEC 60268-5

² 1w1m sensitivity determined using nominal impedance

³ Frequency response measured in half or full space as dictated by speaker mounting configuration

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

Transformer Taps

70.1 V Output	100 V Output	25 V Output
120 W 113.0 dB	120 W 113.0 dB	15 W 104.0 dB
60 W 110.0 dB	60 W 110.0 dB	8 W 101.0 dB
30 W 107.0 dB	30 W 107.0 dB	4 W 98.0 dB
15 W 104.0 dB	15 W 104.0 dB	2 W 95.0 dB
8 W 101.0 dB		



Applications

Designed for outdoor use in large public spaces, the XT-Spyke is ideal for PA and sound reinforcement applications. Its near-field to far-field transition occurs at only 3 meters (about 10') from the speaker, maintaining a constant directivity of 91 x 50 degrees throughout the coverage area. The XT-Spyke was designed for use in transportation platforms, airports, houses of worship, auditoriums and other public gathering spaces.

Patented SoundTube Technologies

SoundTube Entertainment and MSE Audio are constantly developing new technologies that enhance audio product performance. SoundTube Entertainment innovations are protected by multiple U.S. and international patents, which explicitly cover SoundTube dome, enclosure and directivity technologies. MSE Audio 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.

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

All data for SoundTube speakers are independently collected from and verified by an independent third-party lab. All data are 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 be a single-cabinet, 2-way column line array with eight 3 inch (76 mm) woofers and eight 1.0 inch (25 mm) high-frequency drivers.

Performance specifications of a typical production unit shall be as follows: usable frequency response shall extend from 58 Hz – 22 kHz (-10 dB). Measured sensitivity (ref. 2.83 V / 1 m) shall be 92 dB. The speaker shall have a rated impedance of 8 ohms. Rated power handling shall be 150 watts and maximum continuous output at 1 meter shall be 114 dB.

The low frequency drivers shall include a polypropylene cone and surround. They shall use a die cast aluminum basket and a ferrite motor structure. The high frequency drivers shall be titanium dome tweeters.

Mounting points for wall mount, pole mount and spyke mount shall be provided. Input connectors shall include a Neutrik SpeakOn

The enclosure shall be constructed of roto-molded polyethylene plastic with metal ¼" x 20 threaded inserts mounting points and a stainless steel grille. The enclosure and grille shall be available in green, black or white. A mounting bracket with mounting hardware and safety cable attachment point shall be included.

The system shall be the SoundTube XT-Spyke line array.

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



Preliminary Graphs

Frequency Response

Phase/Impedance Response

Vertical Beamwidth (-6dB)

Directivity Index (DI)

Preliminary Polar Plots

125 Hz

250 Hz

500 Hz

1,000 Hz



2,000 Hz

4,000 Hz

8,000 Hz

10,000 Hz

XT-Spyke

Outdoor Line Array Speaker

Preliminary* Technical Information for System Engineers



SOUNDTUBE
ENTERTAINMENT

Mechanical Drawings

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.
