



## XT-SPYKE PRODUCT SPECIFICATIONS

System Type	2-way full range line array (Optional 120 W transformer for 25/70.7/100 V applications)
Impedance (Rated) <sup>1</sup>	8 Ω
Sensitivity dB @ 2.83 V/ 1 m	92.0 dB
Sensitivity dB @ 1 W/ 1 m <sup>2</sup>	92.0 dB
Frequency Response (±3 dB) <sup>3</sup>	100 Hz - 20 kHz
Frequency Response (±10 dB) <sup>3</sup>	65 Hz - 22 kHz
Max. Program Power <sup>4</sup>	150 W
Max. Continuous Power <sup>5</sup>	300 W
Max. SPL dB @ 1 m <sup>6</sup>	114 dB
Coverage Angle (±6 dB @ 2 kHz)	174° horizontal   25° vertical
Coverage Angle (±6 dB @ 10 kHz)	50° horizontal   20° vertical
Coverage Angle (Avg. 2 to 10 kHz)	180° horizontal   50° vertical (200-10k)
Tap Selector (Optional)	5-position rotary switch with transformer bypass position
Directivity Factor (Q)	9 (Average 100 Hz - 10 kHz)   12.1 (2 kHz)
Directivity Index (DI)	12.8 dB (Average 100 Hz - 10 kHz)   16.2 dB (2 kHz)
Low-Frequency Driver	8 - 76 mm (3") woofer, polypropylene
High-Frequency Driver	8 - 25.4 mm (1") titanium dome tweeters
Crossover Frequency	2.4 kHz
Network Type: Low-Pass	12 dB/OCT
Network Type: High-Pass	18 dB/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"
Width	172.7 mm   6.8"
Depth	148.5 mm   5.85"
Depth (Including Bracket)	223.5 mm   8.8"
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
Certifications	CE, RoHS

## 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" woofers and eight 1" high frequency drivers for extremely smooth high frequency response, the XT-Spyke achieves superb coverage in an enclosure measuring only 37.6" x 6.80" x 5.50".

## Features

- Passive, fixed length, column line array with 2-way design.
- Eight 3" (76 mm) polypropylene woofers and eight 1" (25.4 mm) titanium dome tweeter.
- 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.
- Included accessories: Stainless steel mounting plate, mounting bolts and safety cable.

<sup>1</sup> Impedance listed per IEC 60268-5 with a minimum less than 80% the nominal impedance

<sup>2</sup> 1 W/1 M sensitivity determined using nominal impedance

<sup>3</sup> Frequency response measured in half or full space as dictated by speaker mounting configuration

<sup>4</sup> Max program power is 3 dB above max continuous power

<sup>5</sup> Continuous power rating, EIA-426-B test

<sup>6</sup> Max output based on max continuous power

**Transformer Taps**

70.7 V	Output	100 V	Output	25 V	Output
120 W	113 dB	120 W	113 dB	15 W	104 dB
60 W	110 dB	60 W	110 dB	8 W	101 dB
30 W	107 dB	30 W	107 dB	4 W	98 dB
15 W	104 dB	15 W	104 dB	2 W	95 dB
8 W	101 dB				

**Applications**

Designed for outdoor use in large public spaces, the XT-Spyke is ideal for PA and sound reinforcement application. 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° 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 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 NWA Labs ([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 be a single-cabinet, 2-way column line array with eight 3" (76 mm) woofers and eight 1" (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 ( $\pm 10$  dB). Measured sensitivity (2.83 V / 1 m) shall be 92 dB. The speaker shall have a rated impedance of 8  $\Omega$ . Rated power handling shall be 150 W 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 Neutrik SpeakOn.

The enclosure shall be constructed of roto-molded polyethylene plastic with metal 1/4" 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.

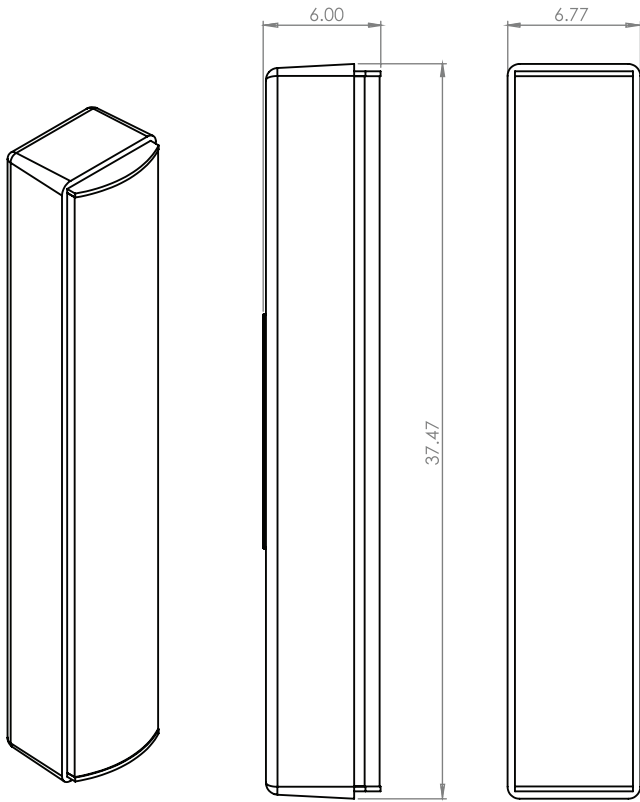
The system shall be the SoundTube XT-Spyke line array.

**SoundTube® by MSE Audio®**

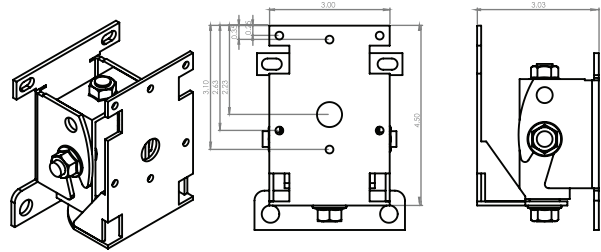
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All SoundTube speakers come with a 5-year limited warranty and 3-year warranty on all electronics.

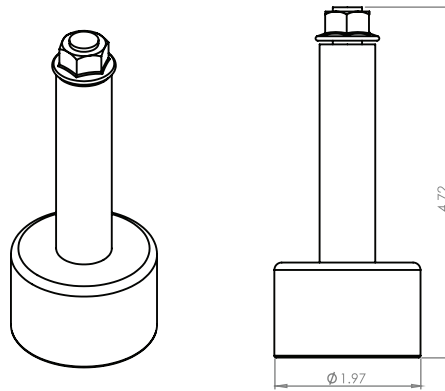
## Mechanical Drawings



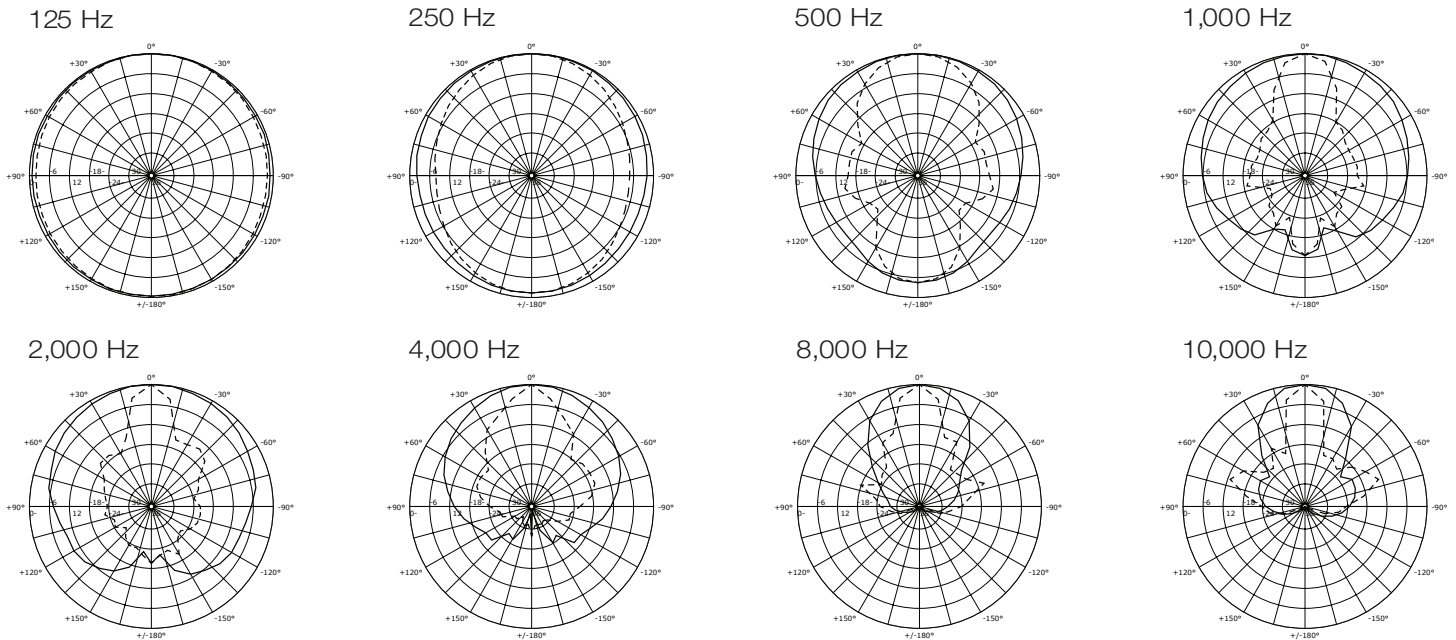
### Wall Mount Bracket



### Pole Mount Adapter

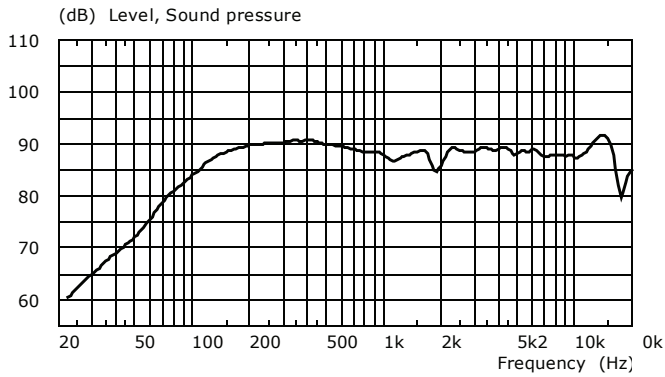


## Plots

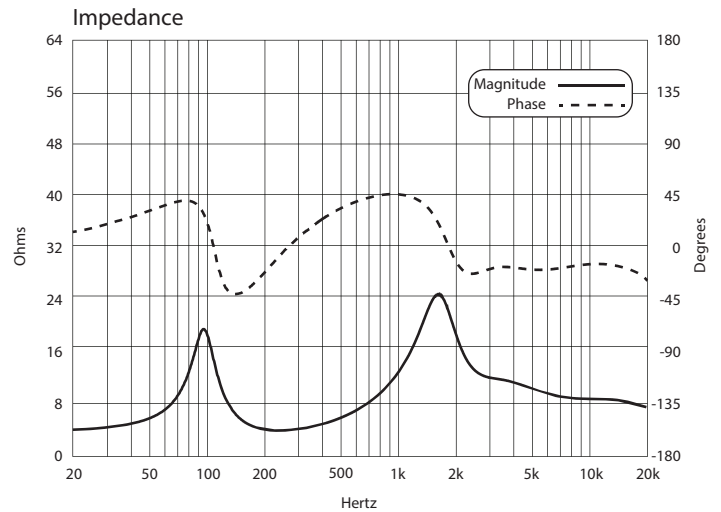


## Graphs

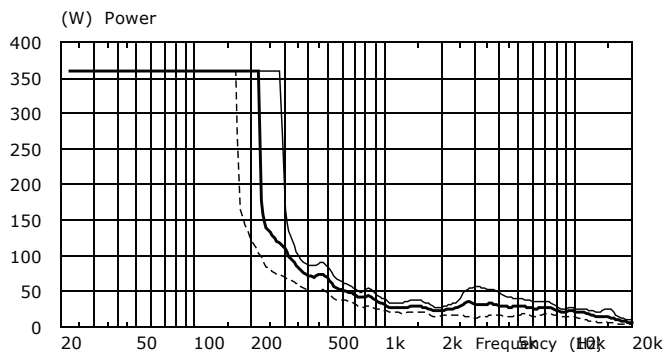
### Frequency Response



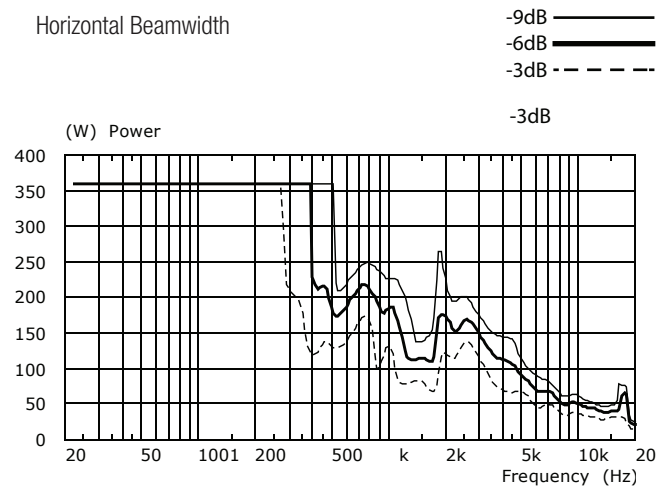
### Phase/Impedance Response



### Vertical Beamwidth



### Horizontal Beamwidth



### Directivity Index (DI)

