



## LA880i PRODUCT SPECIFICATIONS

System Type	3-way, full-range line array, ported
Impedance (Rated) <sup>1</sup>	4 Ω
Sensitivity dB @ 2.83 V / 1 M	91 dB
Sensitivity dB @ 1 W / 1 M <sup>2</sup>	88 dB
Frequency Response (±3 dB) <sup>3</sup>	71 Hz - 22 kHz
Frequency Response (±10 dB) <sup>3</sup>	58 Hz - 22 kHz
Max. Program Power <sup>4</sup>	500 W
Max. Continuous Power <sup>5</sup>	300 W
Max. SPL dB @ 1 M <sup>6</sup>	113 dB
Coverage Angle (±6 dB @ 2 kHz)	104° Horizontal   30° Vertical
Coverage Angle (±6 dB @ 10 kHz)	77° Horizontal   51° Vertical
Coverage Angle (Avg. 2-10 kHz)	91° Horizontal   52° Vertical (500-10 K)
Directivity Factor (Q)	6.9 (averaged 100 Hz - 10 kHz)   12.3 dB (2 kHz)
Directivity Index (DI)	9.2 dB (averaged 100 Hz - 10 kHz)   10.9 dB (2 kHz)
Low-Frequency Driver	8 - 114 mm (4.5") woofers, paper with rubber surround
Mid-Frequency Driver	8 - 51 mm (2") midrange, paper with foam surround
High-Frequency Driver	63.5 mm (2.5") planar magnetic ribbon tweeter
Low-Frequency Voice Coil	25.4 mm   1"
Crossover Frequency	1.1 kHz and 2.5 kHz
Network Type: Low Pass	12 dB/Oct
Network Type: High Pass	12 dB/Oct
Enclosure Material	Painted MDF and plywood
Grille	Powder-coated steel
Inputs	4-pin, 5.08 mm Euroblock or SpeakOn for individual or daisy chain connection
Height	1038.1 mm   40.9"
Width	200.9 mm   7.9"
Depth (Including Bracket)	304.5 mm   12"
Weight	18.2 kg   40.1 lbs
Included Accessories	Bent back bracket, safety cable, Euroblock connector
Optional Accessories	AC-LA8-BACK, AC-LA8-LINK, AC-LA8-FLY, 300 W transformer (AC-LA8-XFMR), plus a variety of mounting brackets
Certifications	CE, RoHS

## Description

The SoundTube LA880i is not a typical line array column loudspeaker. It is an advanced LAPS (Line Array-Point Source) 3-way design that provides a very short near-field extent and robust far-field performance. Frequency tapering of low and mid frequency pass bands allows the LA880i to maintain a more consistent ratio of array height to radiated wavelength, ensuring a stable vertical beamwidth that outperforms many other single box line arrays.

Featuring eight 4.5" woofers, eight 2" midrange drivers and one 2.5" planar magnetics (ribbon) high-frequency driver for extremely smooth high-frequency response, the LA880i achieves superb coverage in an enclosure measuring only 7.9" x 40.9" x 12".

## Features

- Passive, fixed length, column line array with 3-way design.
- Eight 4.5" (114 mm) woofers; eight 2" (51 mm) neodymium-motor midrange drivers; one 2.5" (63.5 mm) planar magnetics (ribbon) high-frequency driver.
- Line Array - Point Source (LAPS) technology provides short near-field extent and robust far-field performance.
- Paintable enclosure is constructed of MDF and plywood with metal threaded mounting points.
- Powder-coated, paintable steel grille.
- Available in black or white finish.
- Custom woodgrain cabinets or paint finishes available (contact us for details).
- Flexible mounting options include surface-mount, pole-mount, ceiling-mount or suspended (flown). (Allen Products mounting accessories sold separately).
- Euroblock and SpeakOn connectors allow for fast connections and easy daisy chaining.
- Additional low-frequency directivity control with LA808i LFDE.
- Included accessories: safety cable mounting plate and mounting bolts, Euroblock connector, safety cable.
- NOTE: Mounting brackets not included.

<sup>1</sup> Impedance listed per IEC 60268-5

<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

## Applications

Designed for use in large public spaces, the LA880i 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 40° x 120° throughout the coverage area. The LA880i was designed for use in transportation platforms, airports, houses of worship, auditoriums and other public gathering spaces. For areas with a high reverberation time, addition of the LA808i LFDE (Low-Frequency Directivity Element) can increase the directivity of low frequencies by up to an octave lower than with the LA880i alone.

The LA880i is not weatherized and is intended only for indoor applications.

## 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, 3-way column line array with eight 4.5" (114 mm) woofers; eight 2" (51 mm) neodymium-motor midrange drivers and one 2.5" (63.5 mm) planar magnetics (ribbon) high-frequency driver.

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 (ref. 2.83 V / 1 M) shall be 91 dB. The speaker shall have a rated impedance of 4  $\Omega$  rated power handling shall be 500 W and maximum continuous output at 1 meter shall be 113 dB.

The low-frequency drivers shall include a treated paper cone and butyl rubber surround. They shall use a die cast aluminum basket and a ferrite motor structure. The midrange drivers shall include a treated paper dome with pressed foam surround. They shall use a die cast aluminum basket with a neodymium motor structure. The high-frequency driver shall be a planar magnetics (ribbon) unit with a neodymium motor structure.

Mounting points for wall mount, pole mount, ceiling mount or suspension via cables shall be provided. Mounting hardware shall be Allen Products or equivalent. Input connectors shall include a four-position terminal block and Neutrik SpeakOn. The four-position terminal block shall accept from 10 - 22-gauge wire.

The enclosure shall be constructed of MDF and plywood with metal 0.25" x 20 threaded insert mounting points and a steel grille. The enclosure and grille shall be available in black or white textured paint, and shall also be paintable by the installer. A bent back plate with plate mounting hardware and safety cable attachment point shall be included. Speaker mounting brackets and hardware shall be available for use with 3rd party manufacturer mounting systems.

Additional low-frequency directivity shall be available via addition of the separate LA808i unit providing eight 4.5" (115 mm) woofers in a single cabinet. Additional unit shall be joined to LA880i via included (with LA808i) mounting plates. Electrical connection of the additional unit shall be made via included (with LA808i) jumper cable.

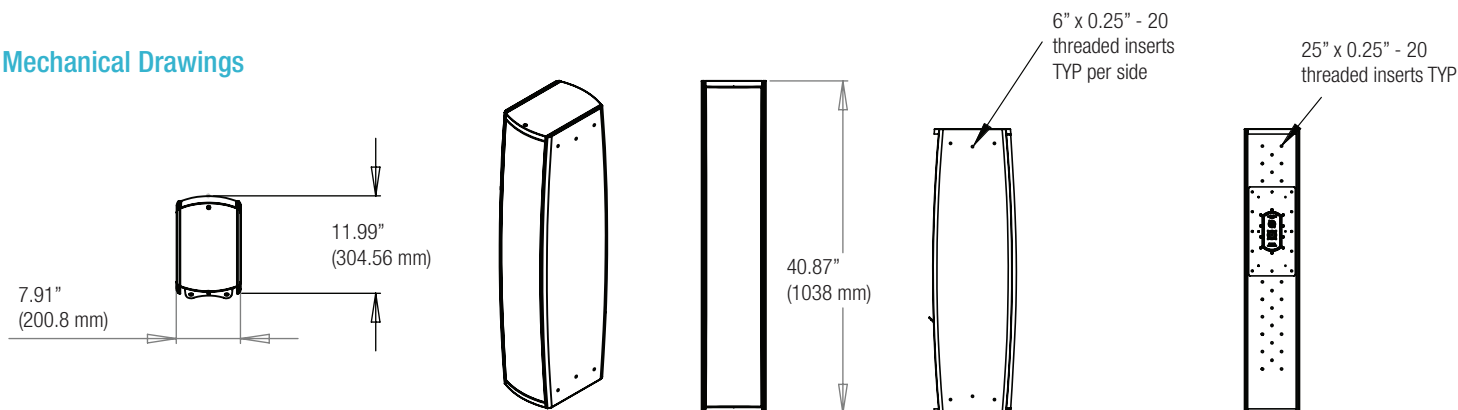
The system shall be the SoundTube LA880i line array.

## 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.

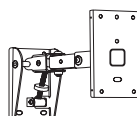
## Mechanical Drawings



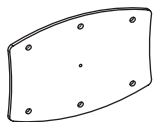
## Accessories

**AC-LA8-BACK-BK**

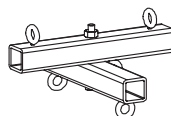
Bent back plate for LA8 series. Use for safety tie-off, or secondary mounting. Includes 1 bracket and 3 mounting screws. Black only. **Comes with LA880i and LA808i.** This can also be sold separately.

**ST-MM-120HD**

Heavy duty Allen Products pan and tilt surface-mount bracket kit. Weight rated up to 120 lbs. Use to support up to 3 LA8 cabinets. Black only.

**AC-LA8-LINK-BK/WH**

Side connector plates for LA8 series. Use to link 2 LA8 cabinets, or other top or bottom mount accessories. Includes 2 brackets and 12 mounting screws. Available in black or white. **Comes with LA808i** and can also be sold separately.

**ST-SAS-1WA-20**

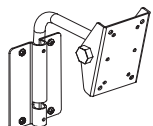
Allen Products fly bracket. Use with AC-LA8-FLY and ST-TCK-010 to suspend LA8 system from above. Only experienced rigging professionals should install the LA8 in a flown configuration. Black only.

**AC-LA8-FLY-BK/WH**

Top mounted fly point plates for LA8 series. Use to add 2 fly points to the LA8 cabinets. Includes 2 brackets and 6 mounting screws. Available in black or white.

**AC-RS-HH-10**

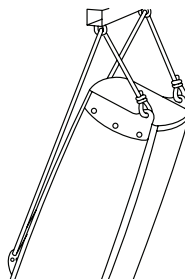
LA series safety cable kit - 10' safety cable, 2 SpeedClamps and fasteners. **Comes with LA880i and LA808i.** This can also be sold separately.

**ST-MM-024**

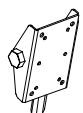
Allen Products pan and tilt surface-mount bracket kit. Weight rated for up to 60 lbs. Only use with single LA8 cabinet. For multiple cabinets, use ST-MM-120HD. Black only.

**ST-PA-010**

Pole-mount adapter for Allen Products brackets. Use to adapt ST-MM-024, or ST-MM-120HD for use on a pole. Black only.

**ST-TCK-010-BK/S**

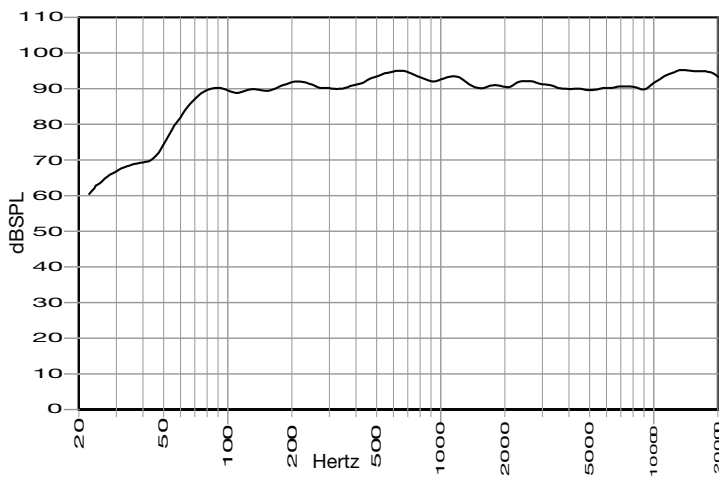
Allen Products fly cable kit. Use with ST-1WA-20 and AC-LA8-FLY to suspend the LA8 system from above. Only experienced rigging professionals should install the LA8 in a flown configuration. Available in black or silver.

**ST-MM-018**

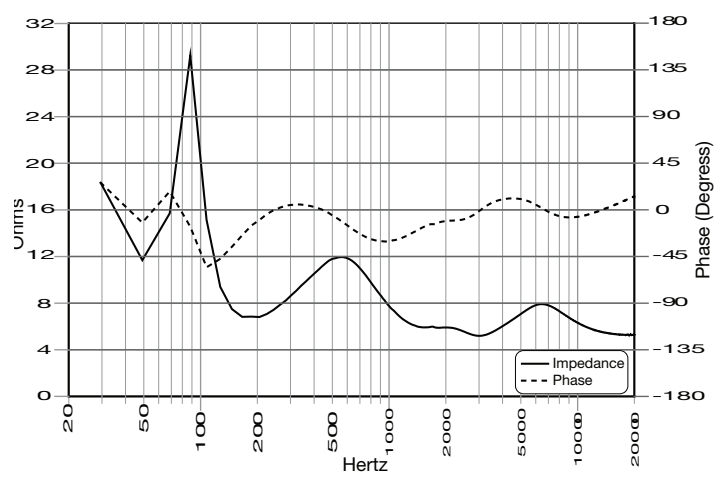
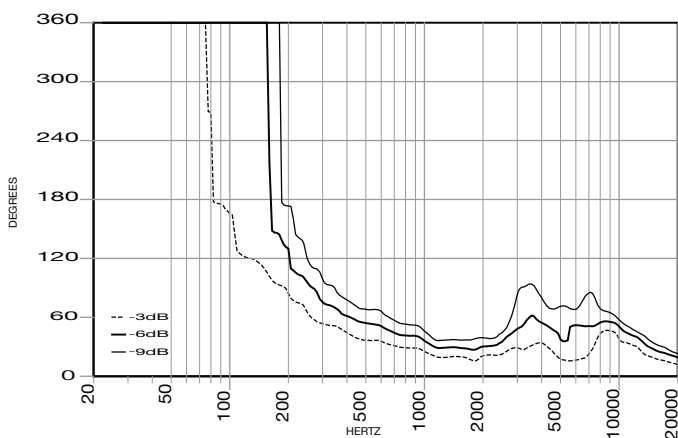
Allen Products ceiling-mount bracket kit. Use to hang LA8 system from a secure ceiling. Black only.

## Graphs

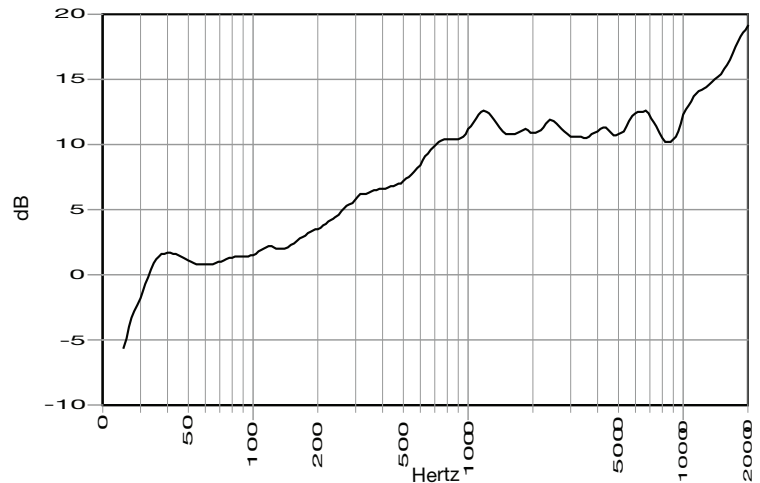
Frequency Response



Phase/Impedance Response

Vertical Beamwidth ( $\pm 6$  dB)

Directivity Index (DI)



## Plots

