

ALA20TAW

Passive Column Line Array Loudspeaker



Features

- Use In Fixed Install or Portable Applications
- 40° Vertical Coverage
- 135° Horizontal Coverage
- 70.7V, 100V or 6Ω Operation
- Twenty (20) Proprietary 3" (76mm) Full Range Transducers
- Six (6) High Frequency Tweeters
- Barrier Strip and NL-4 Terminals
- Lightweight Aluminum Housing
- IP33C Weather Rating
- EN54-24 Certified
- · Available In Black or White Finish
- Wall Mount Bracket Included

Applications

- Challenging Acoustic Spaces
- Architecturally Sensitive Spaces
- Houses of Worship
- Transportation Hubs
- Retail Spaces
- Conference Rooms

- Lecture Theatres
- Gymnasiums
- Convention Centers
- Museums
- Stadium Concourses
- Multipurpose Venues

General Description

The EN54-24 certified ALA20TAW column line array loudspeaker delivers maximum pattern control performance in a minimum footprint and excels in applications that require excellent speech intelligibility. The ALA20TAW's transducer configuration combines twenty tight packed 3" (76mm) full range drivers and six 22mm high frequency tweeters in an extruded aluminum housing to offer both durability and optimum sound reproduction. The lightweight and easy to install enclosure has contemporary aesthetics that are a compliment to any environment. The back of the enclosure incorporates vertical channels that accept the included wall mount allowing the installer to slide the mount to the location that provides the desired vertical tilt. An optional pole mount bracket enables the array to be used in portable applications coupled with a portable A-Line subwoofer system.



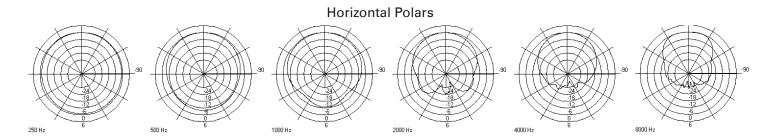
System	
Туре	Full Range, Column Loudspeaker
Operation Mode	Non-Powered Passive
Operating Range (-10dB)	90Hz - 20kHz
Frequency Response (+/-5dB)	110Hz - 20kHz
Input Sensitivity @ 1W/1m	97dB
Input Sensitivity @ 1W/4m EN54-24	82dB
Vertical Coverage	40° 400Hz - 4kHz
Horizontal Coverage	135° 1.5kHz - 4kHz
Max Input Ratings (6 Ω)	500W Continuous, 1000W Program 54.8V RMS, 77.4V Peak
Transformer Taps - 70.7V	60W (81 Ohm), 30W (163 Ohm), 15W (326 Ohm), 7.5W (653 Ohm) and Low Impedance (6Ω)
Transformer Taps - 100V	60W (163 Ohm) RNP, 30W (326 Ohm), 15W (653 Ohm) and Low Impedance (6Ω)
Directivity Factor (Q)	10 @ 2kHz
Directivity Factor (DI)	10 @ 2kHz
Max SPL @ 1 m (Passive)	124 dB SPL Continuous 127 dB SPL (Peak 6Ω)
Max SPL @ 4m EN54-24 (Passive - 100V/60W)	97 dB (+/-3dB)
Recommended Signal Processing	90Hz High Pass Filter
Recommended Power Amplification	1000W @ 6Ω
Transducers	
LF Transducer Oty and Size	20 x 76mm
LF Voice Coil Size	20mm
HF Transducer Qty and Size	6 x 22mm
HF Voice Coil Size	20mm
Maximum Output	127dB SPL (Peak 6Ω)
Nominal Impedance	6Ω
Minimum Impedance	4.9Ω @ 10kHz
Crossover Frequency	3.8kHz
Enclosure	
Color	White (RAL9016) or Black (RAL9011)
Enclosure Material	Extruded Aluminum
Grille Material	Powder Coated Aluminum, White (RAL9016) or Black (RAL9011)
Baffle Material	Aluminum
Mount Material	Powder Coated CRS, Zinc Plated Hardware
Input Connection	Barrier Terminal For Transformer & 6Ω Inputs, NL4 For 6Ω Input
Mounting/Rigging Provisions	Wall Mounting Hardware Provided
Ingress Protection	IP33C
Logo	White on Black (Removable)
Product Dimensions (HxWxD)	65.75" (1670mm) x 4.61" (117mm) x 5.43" (138mm)
Shipping Dimensions (HxWxD)	71.75" (1822mm) x 8.13" (206mm) x 10.00" (254mm)
Net Weight	38.1 lbs. (17.3kg)
Shipping Weight	45.7 lbs (20.7kg)
Warranty Coverage	
Warranty Period	5 Years
NOTES:	

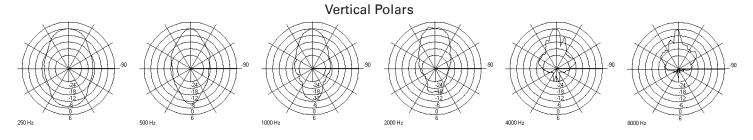
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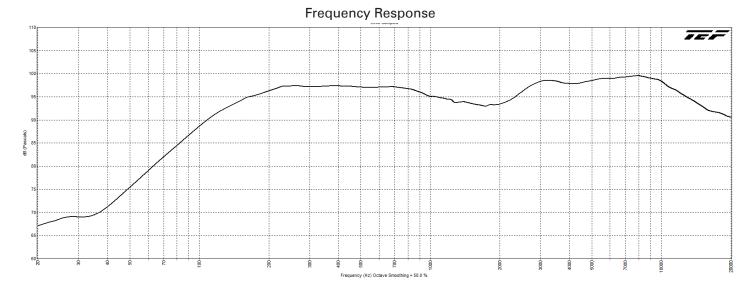
- 1. Sensitivity: Half space, 1 meter, 2.83V RMS.
- 2. Power: All power figures are calculated using the rated nominal impedance.
- 3. Frequency response and sensitivity are half space measurements.
- 4. Recommended power amplification is 1.5x program power.
- 5. RNP Rated Noise Power

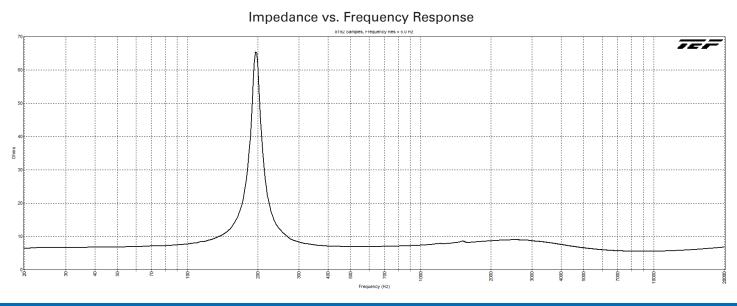




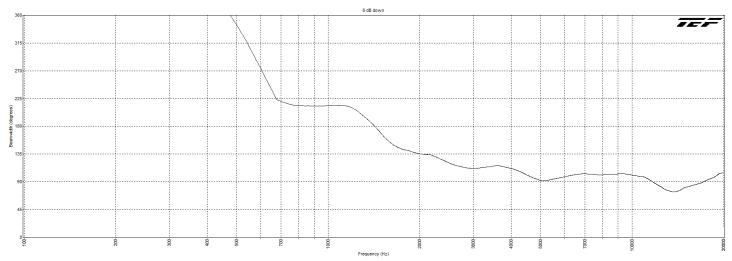




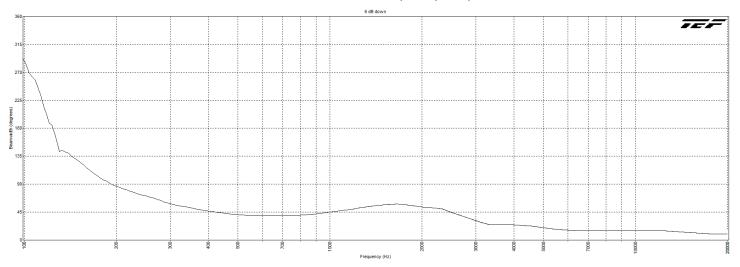




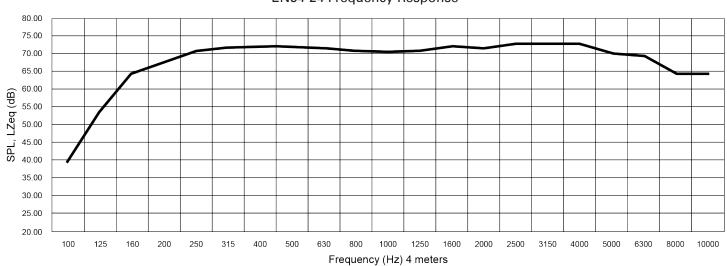
Horizontal Beamwidth vs. Frequency Response



Vertical Beamwidth vs. Frequency Response



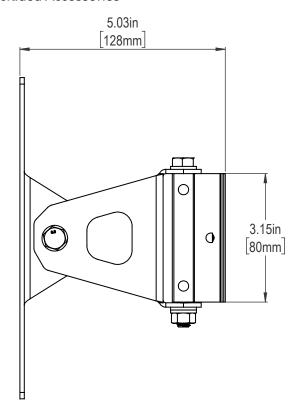
EN54-24 Frequency Response

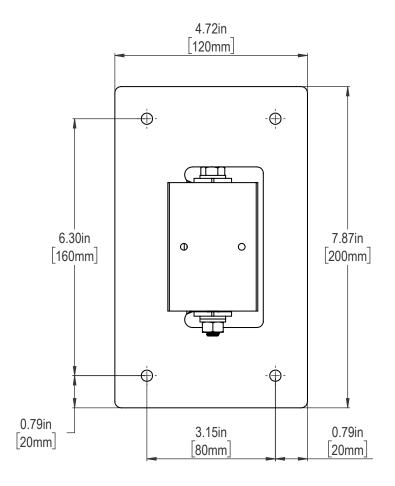


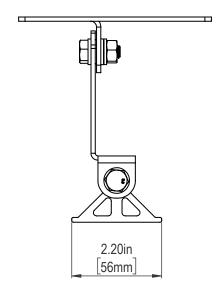
Dimensional Drawings 0.89in [23mm] 5.43in [117mm] [138mm] 2.36in [60mm] 3.15in [80mm] Ø 0.25in [6mm] 65.75in [1670mm] 4.72in [120mm] 3.19in Ø [81mm] FRONT VIEW SIDE VIEW **BACK VIEW** ISOMETRIC VIEW 2.20in [56mm] 0.59in Ø 0.33in [15mm]

TOP VIEW

Included Accessories



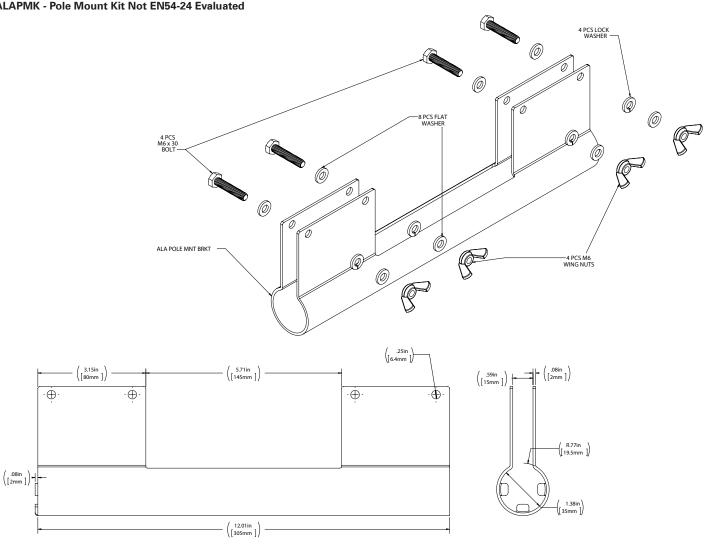






Optional Accessories

ALAPMK - Pole Mount Kit Not EN54-24 Evaluated





Architect and Engineer Specifications

The loudspeaker system shall be a two way, full range EN54-24 certified column array system with twenty 3" (76mm) LF transducers and six 22mm dome tweeter HF transducers. The paintable enclosure shall be constructed of extruded aluminum. The back of the enclosure shall incorporate vertical channels that accept an included wall mount and allow the loudspeaker to slide up or down the mount for desired vertical aiming. The mounting system shall provide at least ±10°vertical tilt capability. The system shall have a frequency response of 110Hz to 20kHz (+/-5 dB) and a low impedance (6 Ω) input capability of 54.8V RMS. The sensitivity at 1W/1m shall be 97 dB SPL with a max SPL of 127 dB SPL at 1m. The loudspeaker system shall have a vertical coverage of 40° (400Hz - 4kHz) and a horizontal coverage of 135° average (1.5Hz - 4kHz). The system shall be equipped with a 60W high performance transformer for use in 70.7V or 100V distributed audio systems. In 70.7V operation, it shall provide 60W, 30W, 15W and 7.5W taps. In 100V operation, it shall provide 60W, 30W and 15W taps. Dimensions shall be 65.75" high (1670mm) x 4.61" wide (117mm) x 5.43" deep (138mm), with a loudspeaker weight of 38.1 lbs (17. 3kg).

