ALA-9

Acoustic Linear Array Loudspeaker System

Description:

The tri-amped **ALA-9** is the largest of the ALA series. It has an extremely high power capability, making it ideally suited for applications requiring high SPL capability, such as rock concerts, sporting events, and outdoor pageantry.

Driver Complement:

Low Frequency: Dual Apogee 15" (381 mm) neodymium magnet cone- type drivers, Ferrofluid® cooled 4" (102mm) Voice Coils; cone treated with a waterproofing compound, providing resistance to moisture, and enabling long-term stability of cone resonance and cone mass parameters

Mid Frequency: Dual Apogee 10" (254mm) permanent magnet cone-type drivers are treated with Ferrofluid and a waterproofing compound, providing resistance to moisture and enabling long-term stability of cone resonance and cone mass parameters

High Frequency: Three Apogee 2" (51 mm) throat compression drivers treated with Ferrofluid for greater power handling capability, lower distortion, and control of short-term impedance rise

Input Connectors:

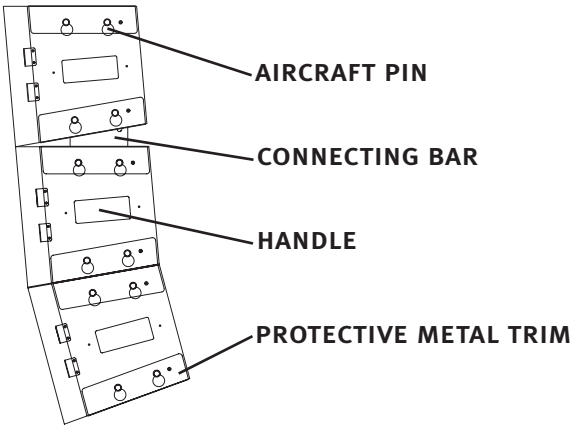
Neutrik™ NL8MP Speakon™ connectors standard; Cannon EP series and gas-tight barrier strips optional

Compatible Processors:

DLC24 Digital Controller

Rigging Hardware:

Internal formed-steel channels accept fully encapsulated steel joining bars, secured by aircraft-grade quick-release pins; all rigging parts are recessed



Apogee's unique rigging system makes assembly quick and easy. Enclosures are joined together by choosing the proper length connecting bars to achieve either a flat-pack formation or a tight-pack formation. The bars are secured in place with aircraft grade retention pins.

Engineering Data:

Format:
Tri-amped/Three-way/Horn-loaded MF and HF/Electronically-coupled

Dispersion:
ALA-9W H: 90° x **V:** 10°

Frequency Response (1m on axis):
45 Hz to 17.5 kHz + 3 dB

Max. SPL (@1m):
136 dB cont./142 dB peak

PTML (peak transient mechanical limit):
153 dB

Sensitivity (1 W @ 1 m):
LF: 100 dB SPL **MF:** 108 dB SPL **HF:** 112 dB SPL

Nominal Impedance:
LF: 8 ohms x 2 **MF:** 4 ohms **HF:** 4 ohms

Max. Power Handling:
LF: 1200W cont./4800W peak
MF: 600W cont./2400W peak
HF: 450W cont./1800W peak

Dimensions:
front: 47" (1194mm) W x 24" (610mm) H
rear: 47" (1194mm) W x 20.1" (511mm) H
depth: 22.7" (577mm)

Weight:
255 lb. (116 kg) without rigging bars

APOGEE™
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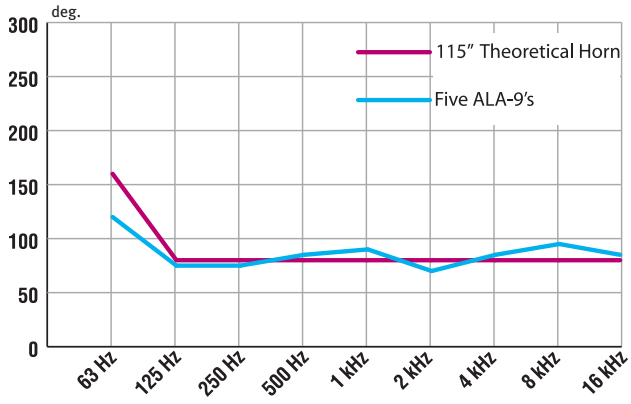
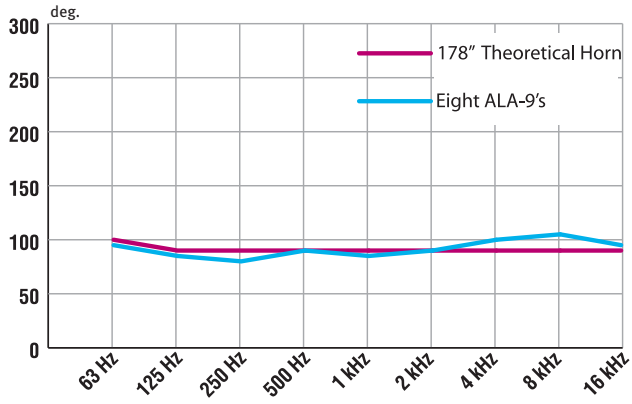
Five ALA-9 Speakers

The graph displayed below depicts the vertical beam width of an array of five ALA-9's compared to the frequency of a theoretically perfect horn. The vertical dimension of the perfect horn, at 115 inches*, is equal to the vertical dimension of the five ALA-9's.



Eight ALA-9 Speakers

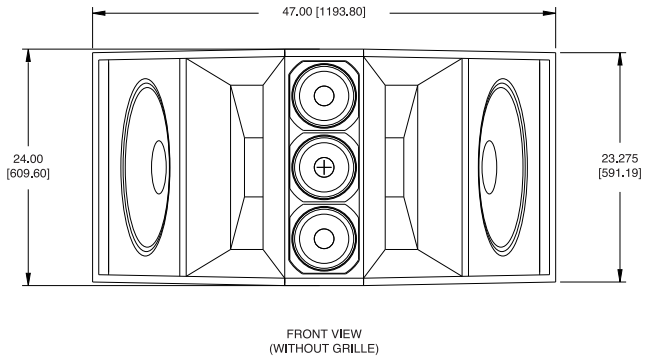
The graph displayed below depicts the vertical beam width of an array of eight ALA-9's compared to the frequency of a theoretically perfect horn. The vertical dimension of the perfect horn, at 178 inches*, is equal to the vertical dimension of the eight ALA-9's.

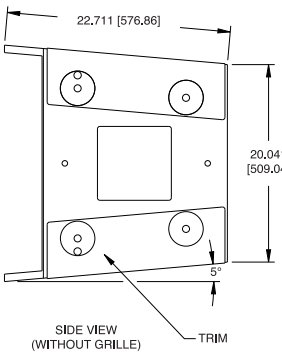


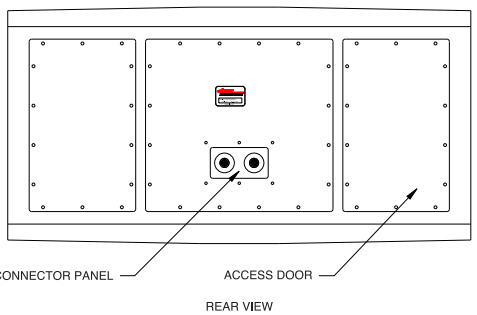
In both graphs, it can readily be seen that the Linear Array exhibits far better control than that of the horn, particularly in the lower frequencies. As more enclosures are added, the pattern control extends to lower and lower frequencies, while the directivity continues to increase.

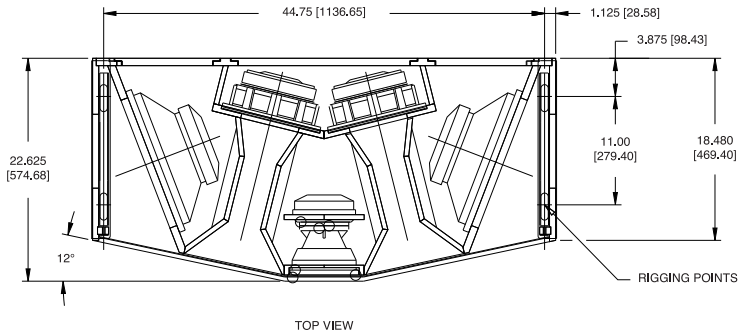
* Note: If such a horn were to be built, its' excessive depth would render it impractical to transport.

Dimensional Drawings ALA-9 (dimensions in inches and millimeters)









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