

# ALA-3

## **ACOUSTIC LINEAR ARRAY** LOUDSPEAKER SYSTEM

#### **DESCRIPTION:**

The ALA-3 is the most compact model in the ALA-Series. Its' clarity, power, and precise directivity provide superb results, particularly in challenging acoustical environments.

#### **DRIVER COMPLEMENT:**

Low Frequency: Dual Apogee 10" (254mm) permanent magnet cone-type drivers, Ferrofluid® cooled 2.5" (64mm) Voice Coils; cones treated with a waterproofing compound, providing resistance to moisture, and enabling long-term stability of cone resonance and cone mass parameters

HIGH FREQUENCY: Dual Apogee 1" (25mm) compression drivers treated with Ferrofluid® for greater power handling capability, lower distortion, and control of short-term impedance rise

#### **INPUT CONNECTORS:**

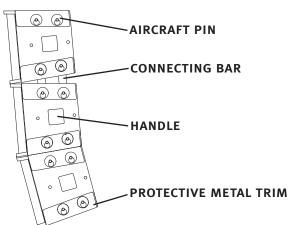
Neutrik<sup>™</sup> NL4MP Speakon<sup>™</sup> connectors standard; Cannon AP series and gas-tight barrier strips optional

#### **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 tightpack formation. The bars are secured in place with aircraft grade retention pins.

#### ENGINEERING DATA:

#### FORMAT:

Bi-amped/Two-way/Electronically-coupled

#### DISPERSION:

**ALA-3:** H: 60° x V: 10° **ALA-3W: H:** 90° x **V:** 10°

#### FREQUENCY RESPONSE (1M ON AXIS):

65 Hz to 17.5 kHz ± 3 dB

#### Max. SPL (@1m):

130 dB cont./136 dB peak

#### PTML (PEAK TRANSIENT MECHANICAL LIMIT):

144 dB

#### SENSITIVITY (1W @ 1M):

**LF:** 102 dB **HF:** 110 dB

#### **NOMINAL IMPEDANCE:**

LF: 4 ohms HF: 4 ohms

#### MAX. POWER HANDLING:

LF: 600W cont./2400W peak **HF:** 150W cont./600W peak

#### **DIMENSIONS:**

front: 35"(889mm) W x 14.5"(368mm) H rear: 29.3" (745mm) W x 12.3" (313mm) H

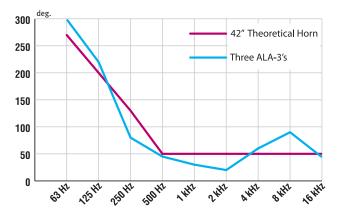
**depth:** 13"(330mm)

**WEIGHT:** 95 lb. (43 kg) without rigging bars



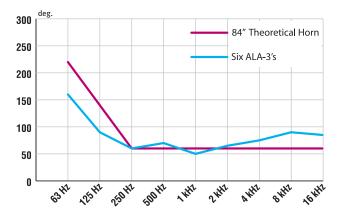
#### THREE ALA-3 SPEAKERS

The graph displayed below depicts the vertical beam width of an array of three ALA-3's compared the vertical beam width of a theoretically perfect horn. The vertical dimension of the perfect horn, at 42 inches\*, is equal to the vertical dimension of the three ALA-3's.



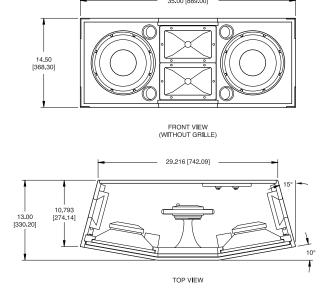
### SIX ALA-3 SPEAKERS

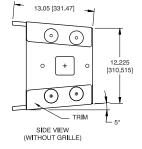
The graph displayed below depicts the vertical beam width of an array of six ALA-3's compared to the vertical beam width of a theoretically perfect horn. The vertical dimension of the perfect horn, at 84 inches\*, is equal to the vertical dimension of the six ALA-3's.

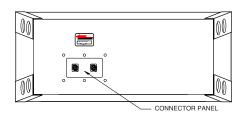


In both graphs, it can readily be seen that the Linear Array exhibits far better control than that of the horn, particularly in the lower frequencies. As more enclosures are added, the pattern control extends to lower and lower frequencies, while the directivity continues to increase.

#### **DIMENSIONAL DRAWINGS ALA-3** (dimensions in inches and millimeters)









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