



# APL-500

## SELF-POWERED ARRAYABLE LOUDSPEAKER

### DESCRIPTION:

The bi-amped APL-500 provides the same superior sonic quality and performance as the AE-5, but in a self-powered format. This fully arrayable speaker is highly effective when used alone or as the building block for a large system.

### ADVANCED TECHNOLOGIES:

Patented all-digital amplifier operating at 460 kHz provides high power levels with extremely low distortion. State-of-the-art digital processing circuits render pristine sound quality. Advanced limiter algorithms provide precise system control without harming sound quality at even the most aggressive levels. Universal AC voltage compatibility with power factor correction.

### POWER AMPLIFIERS:

Dual 500W amplifiers, total 1000W output

### DRIVER COMPLEMENT:

**LOW-FREQUENCY:** One Apogee 12" (305mm) neodymium magnet cone-type driver is treated with a waterproofing compound, providing resistance to moisture, and enabling long-term stability of cone resonance and cone mass parameters; also treated with Ferrofluid® for greater power handling capability, lower distortion, and control of short-term impedance rise

**HIGH-FREQUENCY:** One Apogee 1" (26mm) throat composite diaphragm compression driver is treated with Ferrofluid

### HANDLES:

Two handles designed as an integral part of the enclosure (no moving parts)

### GRILLE:

Powder-coated, diamond-punched steel with acoustic foam covering

### TRIM:

Optional protective steel trim on edges; powder-coated for durability

### RIGGING HARDWARE:

Four 12 gauge steel nutplates, mounted two on top and two on bottom, recessed so as to be nominally flush; accepts 3/8"-16 thread, nutplates are backed with 12 gauge steel internal brackets (10mm nutplate or Aeroquip™ Pan fittings optional)

### ENCLOSURE TYPE:

20° trapezoidal, optimally-vented bass

### CABINET CONSTRUCTION:

Multi-ply Finland birch with stainless steel fasteners

### WARRANTY:

Three (3) years, limited

### ENGINEERING DATA:

#### FORMAT:

Bi-amped, two-way, self-contained processing electronics and dual power amplifiers

#### DISPERSION:

H: 90° x V: 45°

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

53 Hz to 17.5 kHz ± 3 dB

#### MAX. SPL (@1M):

126 dB cont. / 132 dB peak

#### DIMENSIONS:

14" (356mm) W x 23" (584mm) H x

16.5" (419mm) D

#### WEIGHT:

80 lb. (36.2 kg)

### ELECTRONICS SPECIFICATIONS:

#### INPUT:

XLR, active balanced 50k ohms

#### LOOP-THROUGH OUTPUT:

Daisy-chain audio signal, XLR type connector

#### AMPLIFIER POWER:

500 WRMS LF / 500 WRMS HF

#### RMS LIMITER:

100 ms long duration protection

#### PEAK LIMITER:

3 to 5 ms transient protection

#### HIGH-PASS SWITCH:

80 Hz, 12 dB octave, XLR type connector

#### COOLING:

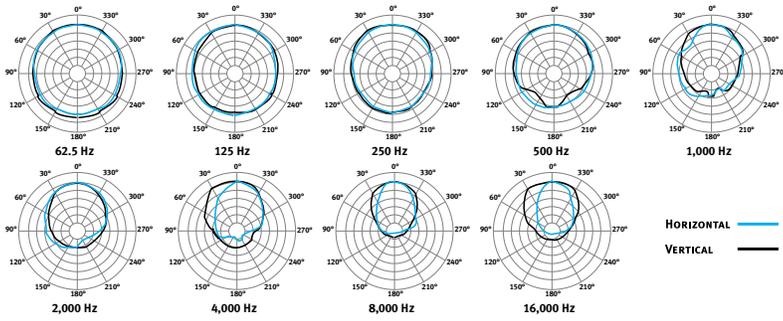
Passive using external heat sinks

#### VOLTAGE:

115V AC or 230V AC selection switch, Neutrik Powercon™ AC inlet; power cable included

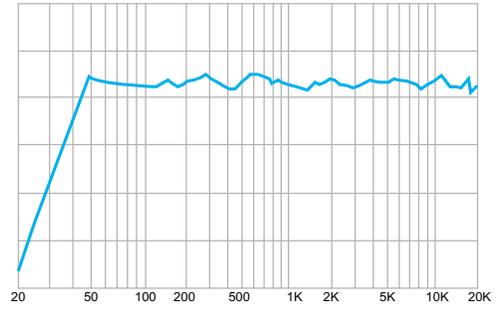
**Apogee**  
SOUND INTERNATIONAL, LLC

## POLAR MEASUREMENTS (6 dB/division, normalized)



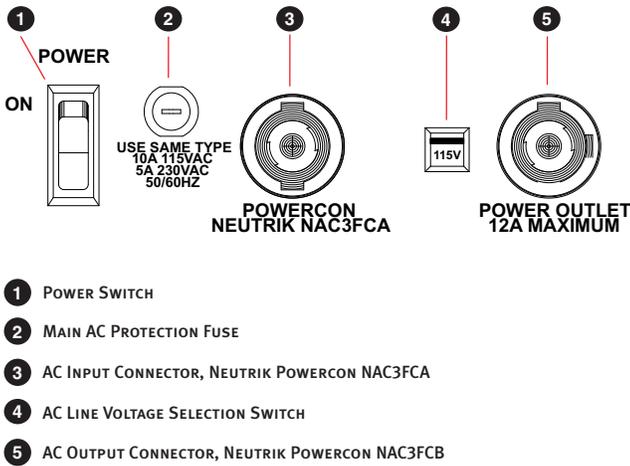
All polar measurements obtained in a free-field environment at 10° increments.

## FREQUENCY RESPONSE (10 dB/division)

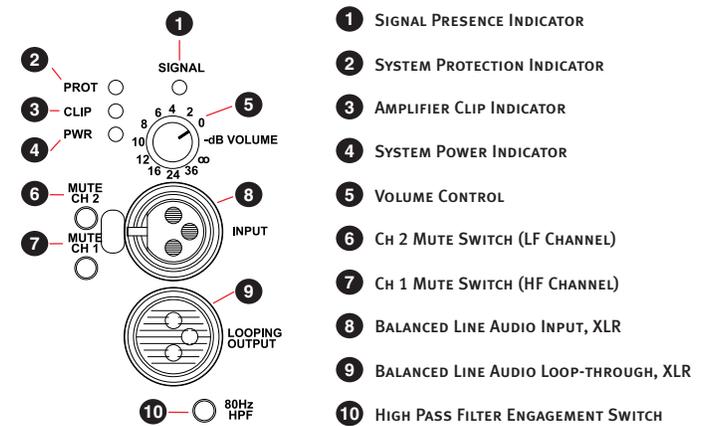


Measured in a free-field anechoic environment using a swept one-third octave input.

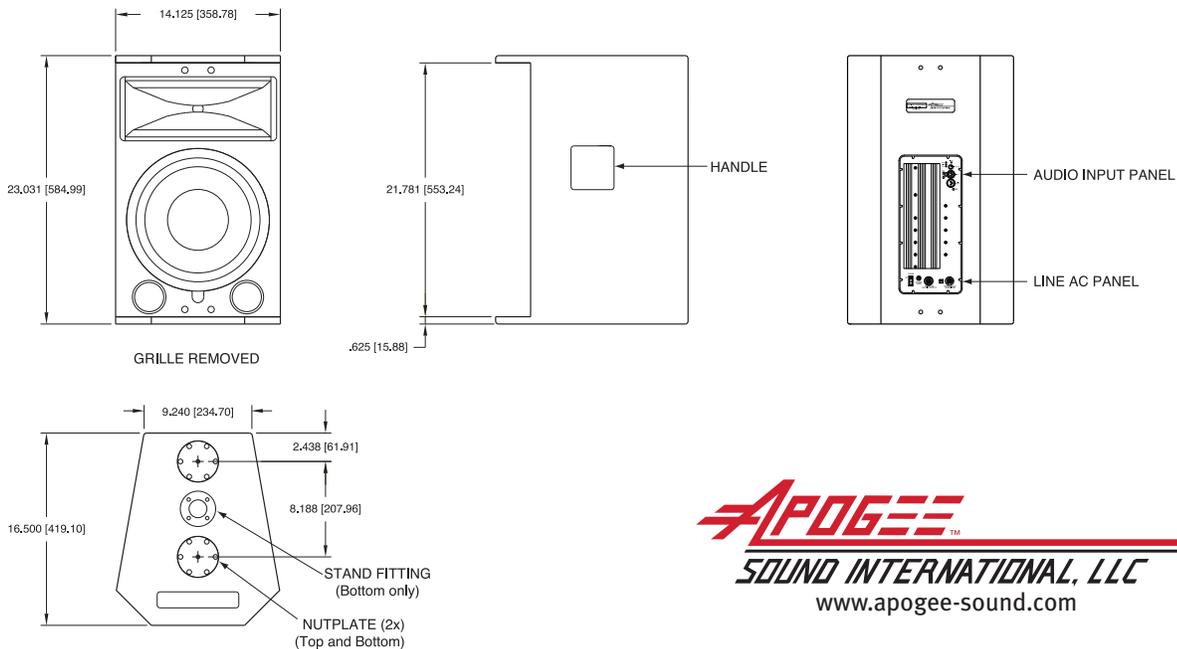
### LINE AC PANEL



### AUDIO INPUT PANEL



### DIMENSIONAL DRAWINGS



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