



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) permanent 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):

125 dB cont. / 131 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:

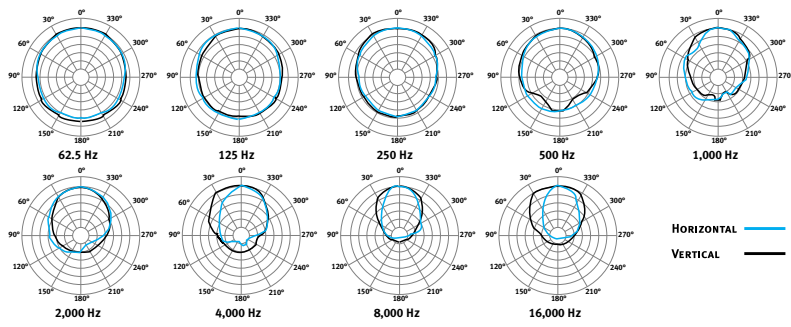
Passive using external heat sinks

VOLTAGE:

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

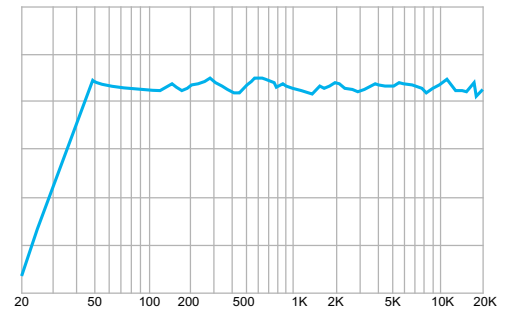
APOGEE
SOUND INTERNATIONAL

POLAR MEASUREMENTS (6 dB/division, normalized)



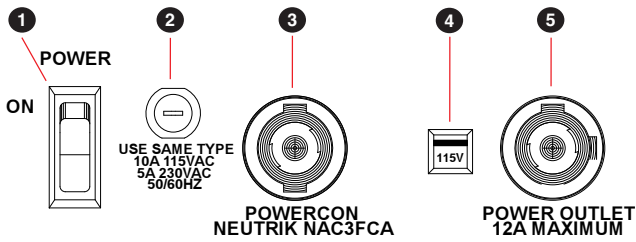
All polar measurements obtained in a free-field environment at 10° increments.

FREQUENCY RESPONSE (10 dB/division)



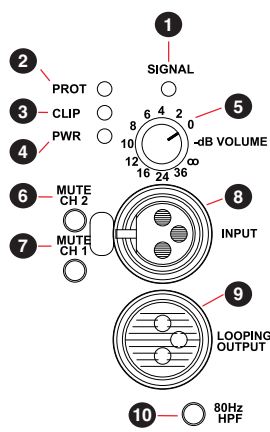
Measured in a free-field anechoic environment using a swept one-third octave input.

LINE AC PANEL



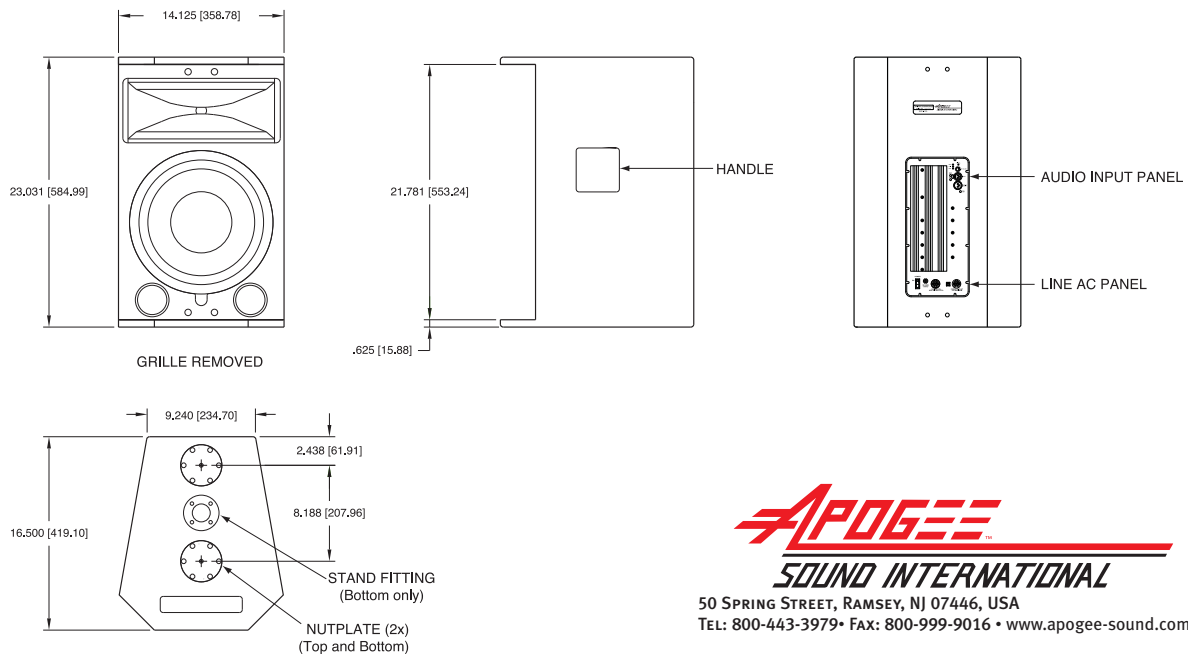
- 1 POWER SWITCH
- 2 MAIN AC PROTECTION FUSE
- 3 AC INPUT CONNECTOR, NEUTRIK POWERCON NAC3FCA
- 4 AC LINE VOLTAGE SELECTION SWITCH
- 5 AC OUTPUT CONNECTOR, NEUTRIK POWERCON NAC3FCB

AUDIO INPUT PANEL



- 1 SIGNAL PRESENCE INDICATOR
- 2 SYSTEM PROTECTION INDICATOR
- 3 AMPLIFIER CLIP INDICATOR
- 4 SYSTEM POWER INDICATOR
- 5 VOLUME CONTROL
- 6 CH 2 MUTE SWITCH (LF CHANNEL)
- 7 CH 1 MUTE SWITCH (HF CHANNEL)
- 8 BALANCED LINE AUDIO INPUT, XLR
- 9 BALANCED LINE AUDIO LOOP-THROUGH, XLR
- 10 HIGH PASS FILTER ENGAGEMENT SWITCH

DIMENSIONAL DRAWINGS



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