



# APL-12

## SELF-POWERED CONCERT SUBWOOFER SYSTEM

### DESCRIPTION:

The APL-12 self-powered subwoofer incorporates internal amplifiers and intelligent, front-end signal processing into a robust enclosure designed for concert touring, AV presentations, and fixed installations. The dual cone drivers provide powerful, deep bass with rapid transients for a crisp, clean, and accurate sonic image.

### ADVANCED TECHNOLOGIES:

Patented all-digital amplifier operating at 350 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.

### POWER AMPLIFIERS AND PROCESSOR:

Dual amplifiers, one per driver, with 2400W total music power

### DRIVER COMPLEMENT:

Dual Apogee 18" (460mm) permanent magnet cone-type drivers are 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

### HANDLES:

Four 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 pieces on top and bottom edges; powder-coated for durability

### RIGGING HARDWARE:

Four 12 gauge steel nutplates, mounted two on each side, 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:

Rectangular, optimally-vented bass

### CABINET CONSTRUCTION:

Multi-ply birch with stainless steel fasteners

### WARRANTY:

Three (3) years, limited

### ENGINEERING DATA:

#### FORMAT:

Self-contained dual power amplifiers with integrated processing electronics

#### DISPERSION:

Omni-directional

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

32 Hz to 100 Hz  $\pm$  3 dB

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

134 dB cont./140 dB peak

#### DIMENSIONS:

44.75" (1137mm) W x 30" (762mm) H x  
22.5" (572mm) D

#### WEIGHT:

214 lb. (97 kg)

### ELECTRONICS SPECIFICATIONS:

#### INPUT:

XLR connectors, active balanced 35k ohms

#### LOOP-THROUGH OUTPUT:

Daisy-chain audio signal, XLR type connector

#### AMPLIFIER POWER:

2400W total music power, dual amplifiers

#### RMS LIMITER:

100 ms long duration protection

#### PEAK LIMITER:

3 to 5 ms fast-acting transient protection

#### COOLING:

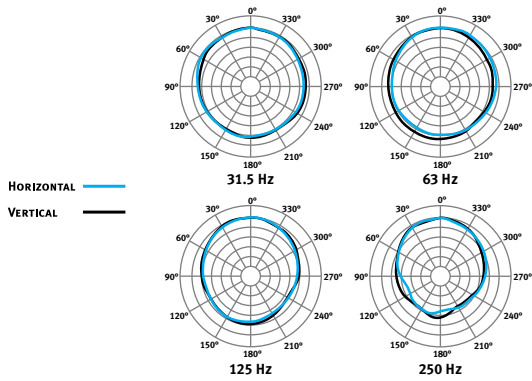
Passive using external heat sinks

#### VOLTAGE:

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

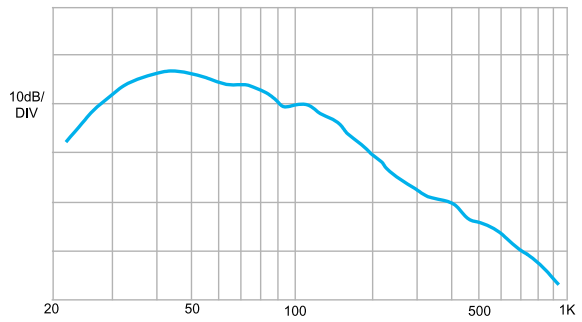
**APOGEE**  
SOUND INTERNATIONAL

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



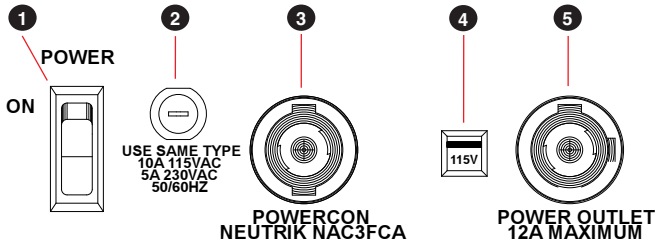
All polar measurements obtained in a free-field environment at 10° increments.

## FREQUENCY RESPONSE (10 dB/division)



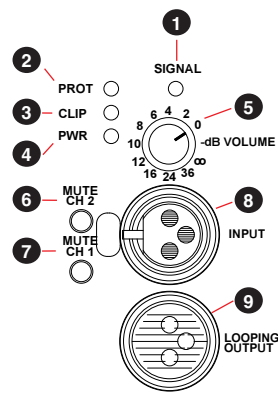
Measured in a free-field anechoic environment using a swept one-third octave input.

## LINE AC PANEL



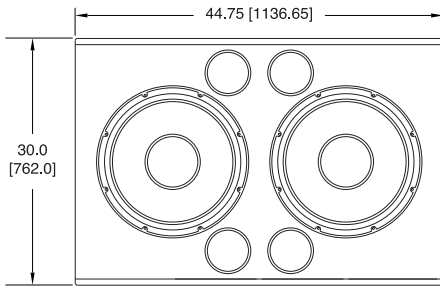
- 1 POWER SWITCH
- 2 MAIN AC PROTECTION FUSE
- 3 AC INPUT CONNECTOR, NEUTRIK POWERCON NAC3FCA
- 4 AC LINE VOLTAGE SELECTION SWITCH
- 5 AC OUTPUT CONNECTOR, NEUTRIK POWERCON NAC3FCB

## AUDIO INPUT PANEL

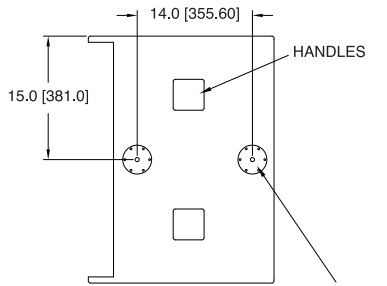


- 1 SIGNAL PRESENCE INDICATOR
- 2 SYSTEM PROTECTION INDICATOR
- 3 AMPLIFIER CLIP INDICATOR
- 4 SYSTEM POWER INDICATOR
- 5 VOLUME CONTROL
- 6 CH 2 MUTE SWITCH
- 7 CH 1 MUTE SWITCH
- 8 BALANCED LINE AUDIO INPUT, XLR
- 9 BALANCED LINE AUDIO LOOP-THROUGH, XLR

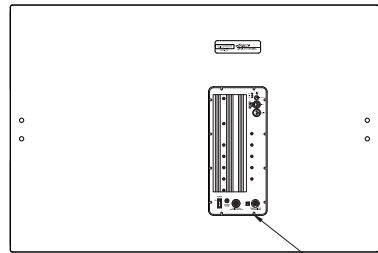
## DIMENSIONAL DRAWINGS



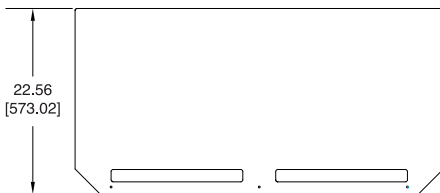
FRONT VIEW  
(WITHOUT GRILLE)



SIDE VIEW  
(WITHOUT GRILLE)



REAR VIEW



TOP VIEW

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