

AE-12s2

CONCERT SUBWOOFER SYSTEM

DESCRIPTION:

The AE-12s2 subwoofer delivers a deep, accurate response, adding power and intense impact without "muddying" or coloring the upper frequencies. The AE-12s2 perfectly complements the Apogee 3X3s2 and arrays of the AE-5, AE-8, and AE-9.



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

INPUT CONNECTORS:

Neutrik™ NL4MP Speakon™ standard; Cannon EP series and gas-tight barrier strips optional

COMPATIBLE PROCESSORS:

P-12, DPA-12, or D-1 Digital Controller

HANDLES:

Eight 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 (10mm nutplate or Aeroquip Pan fittings optional), nutplates are backed with 12 gauge steel internal brackets

ENCLOSURE TYPE:

Rectangular, optimally-vented bass

CABINET CONSTRUCTION:

Multi-ply Finland birch with stainless steel fasteners

ENGINEERING DATA:

FORMAT:

Single-amped/Electronically-coupled

DISPERSION:

Omni-directional

FREQUENCY RESPONSE (1M ON AXIS):

30 Hz to 105 Hz \pm 3 dB

MAX. SPL (@1M):

128 dB cont./134 dB peak

PTML (PEAK TRANSIENT MECHANICAL LIMIT):

145 dB

SENSITIVITY (1W @ 1M):

101 dB/20 Hz to 100 Hz

NOMINAL IMPEDANCE:

8 ohms, each driver; separate connections

MAX. POWER HANDLING:

1200W cont./4800W peak (600/2400W peak, each driver)

DIMENSIONS:

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

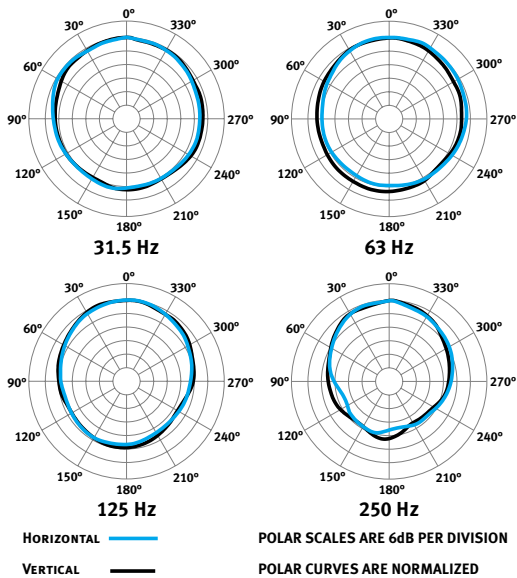
WEIGHT:

204 lbs (92.6 kg)

APPLICATIONS:

- CONCERT SOUND
- LARGE CLUBS & DISCOS
- MULTI-IMAGE PRESENTATIONS
- CORPORATE/INDUSTRIAL THEATER
- LARGE HOUSES OF WORSHIP

APOGEE
SOUND INTERNATIONAL, LLC



AE-12s2 POLAR MEASUREMENTS

All polar measurements obtained in a free-field environment at 10 degree increments. Data acquired utilizing: TEF System 12+, B&K 4007 Mic, HP 35660A Dual-Channel FFT Analyzer.

P-12 PROCESSOR SPECIFICATIONS

FRONT PANEL CONTROLS

- LEVEL:** Continuously adjustable with positive detents; linear taper controls allow precision attenuation
- PHASE REVERSE:** Selects in-phase or reverse phase output to low frequency drivers
- LINK:** Allows all subwoofer outputs to be driven by either or both inputs
- HIGH-PASS:** Selects high-pass or full-range output to other processors
- PRESET:** Enables rear panel PAR adjustments for calibration of the protection circuitry to the amplifier's dynamic headroom characteristics
- LOCK-OUT SWITCH:** Freezes the selected state of the other functions to avoid tampering
- RV ONLY:** Front panel line-level XLR inputs with "loop through" XLR outputs; front panel speaker output connectors (Neutrik™ NL4MP Speakon™ connectors standard; other connectors available); front panel pin 1 ground lift switches
- PV ONLY:** Rear panel barrier strip for pin 1 ground lift

SYSTEM PROTECTION

- RMS LIMITER:** 100ms integration time for protection against long-term overdrive
- PEAK LIMITER:** 3 to 5ms fast-acting to help protect against very high level transients
- USER ADJUSTABLE LIMITER THRESHOLD:** For control of amplifier clipping
- EXCURSION CONTROL:** Program defined adaptive enclosure alignment (modified B6)
- INPUTS:** XLR connectors, active balanced inputs (optional transformer-balanced inputs utilizing Jensen JE-11 P-1 transformers); note - pin 2 hot
- INPUT IMPEDANCE:** 50k-ohm AC-coupled active balanced (10k-ohm balanced with optional input transformer)
- OUTPUTS:** Active balanced AC-coupled outputs - XLR connectors on rear panel
- DISTORTION:** .02% THD typical at maximum output (+20 dBm)
- HUM & NOISE:** Better than -90 dBV
- DYNAMIC RANGE:** 110 dB

DIMENSIONS

- PV:** 19" (483mm) W x 1.8" (46mm) H x 11.8" (300mm) D; (1 EIU rack space)
- RV:** 19" (483mm) W x 3.5" (89mm) H x 11.8" (300mm) D; (2 EIU rack spaces)
- WEIGHT:** **PV:** 12 lbs. (5.5 kg)
RV: 17 lbs. (7.8 kg)

PV FOR PERMANENT INSTALLATIONS (SINGLE-CHANNEL)

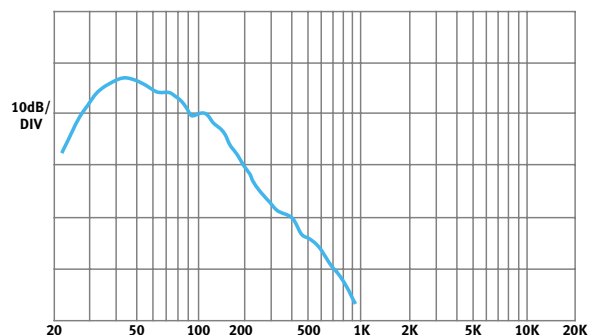


RV ROAD VERSION (DUAL-CHANNEL)



The P-12 processor is available in three versions to meet the requirements of permanent system installers and portable system operators. Each includes servo-loop protection circuits, time and frequency domain correction, and precision front-end utilizing factory-matched components for high Common Mode Rejection. All models feature front panel function switches (which retain their settings through power-up/power-down cycles), turn-on/turn-off muting, and Apogee's unique PAR™ adjustable protection circuitry. PAR (Positive Amplifier Return) senses the output of the amplifier and engages low distortion limiters to aid in protecting the drivers under abusive conditions. By selecting a "User Preset" mode, the protection circuits can be adjusted to match a wide range of power amps.

AE-12s2 LOUDSPEAKER



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



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