AMP1-DA/106 2-CHANNEL AUDIO MONITOR

Description

The AMP1-DA/106 provides self-powered, full-fidelity stereo audio monitoring of 2 channels from analog and AES/EBU Digital sources and ultra-high resolution LEDs with 106 segments in the smallest rack space possible.

This unit contains four high performance transducers driven by three power amplifiers: one amplifier/driver combination handles midrange and high frequency information in stereo, while the second handles summed low frequency information below the 500 Hz crossover point.

The unique design provides optimally focused sound for operators in an ultra near field (1 to 3 ft.) working environment and offers performance comparable to that of many separate monitor pairs, yet does so without the installation hassles, awkward speaker placements and "added-on" look. This provides for a higher SPL for the operator while reducing overall ambient sound and adjacent bay crosstalk.

The level meters are now available with a choice of BBC, DIN, Nordic and VU scales and PPM Only.

Extended HF response reveals potential problems with audio whine or hiss and electronic rather than acoustic cancellation of bass frequencies provides positive audible detection of out-of-phase (reversed polarity) audio feeds. A headphone jack is provided on the front panel, usage automatically mutes the speakers.

Output limiter circuits are incorporated to protect the speakers, and extensive magnetic shielding allows placement immediately adjacent to video monitors with no color impurities.

Our unique tri-color LED design means we can offer an almost unlimited variety of options such as phase correlation, peak hold, loudness, sum and difference, and alternate scales and color mappings. The standard display mode is set as a single segment PPM "dot" above a VU bar; each segment's color is fixed according to its position on the scale. Level calibration may be set via dip switches to select one of four different calibration levels.

The AMP1-DA/106 is ideally suited for use in VTR bays, mobile production vehicles, teleconferencing installations, multimedia systems, satellite link and cable TV facilities, and on-air radio studios.

Features

Full fidelity audio monitoring in only 1RU

Two unbalanced AES/EBU digital inputs (selectable)

Two balanced analog inputs (1 stereo)

Balanced analog output of selected digital source

Order Part Number

AMP1-DA/106: 8101-0020

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Two ultra high resolution 106 Segment tri-color LED bar graphs

Simultaneous VU (bar) and PPM (dot) bar graph display ballistics

Custom variations of standard scales and/or color masks available on request

Wide dynamic range

One dB midscale resolution

Powerful 98dB SPL at 2 feet (0.6m)

Premium quality drivers and power amplifiers

Extended frequency response and low distortion

Audible indication of phase/polarity problems

Headphone jack, mutes speakers

Blowout proof speakers

Quick and simple installation

Benefits

Thorough magnetic shielding allows placement next to video monitors.

Custom variations of standard scales and/or color masks are available on request for your convenience.

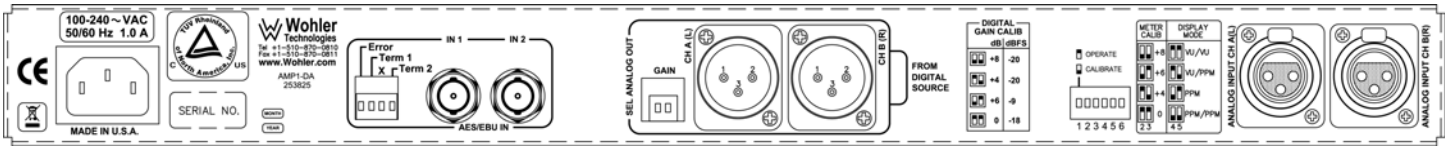
Audible indication of phase/polarity provides instant information about signal problems.

Focused sound reduces adjacent bay crosstalk.

Extended frequency response and low distortion provide high-quality reproduction

Two 106-segment, tri-color LED bar graphs provide ultra high resolution.

Rear Panel



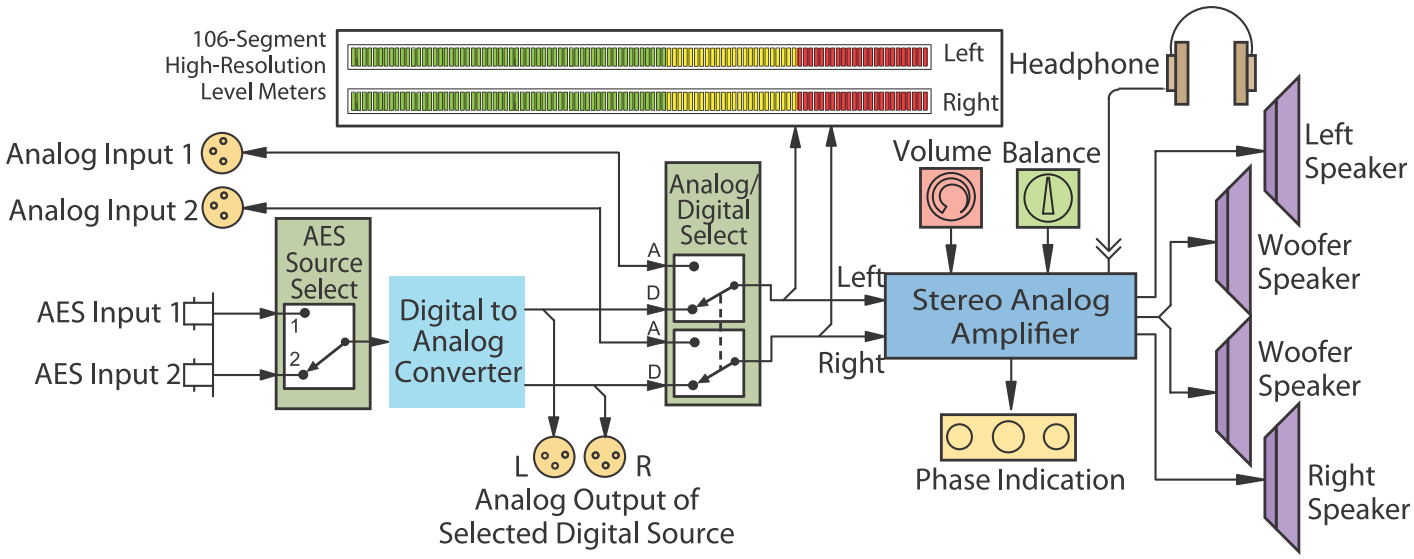
Physical Specifications

Dimensions (H x W x D)	1.75 x 19 x 12 inches (44.5x 483 x 305mm)
Shipping weight	14 lbs. (6.4 kg)
Space requirements	1RU in a standard 19" rack
Supplied accessories	AC external power unit/cord
Power connector	Attached external power unit plugs into standard U.S. outlet. Alternate power cables are available.
Power requirements	Power to the unit is 24V DC, 3.0 A. The external power supply then connects to mains power (100 to 240 VAC ± 10%, 50/60Hz.
Power consumption	Approximately 30 W
AC mains input:	100-240VAC, 50-60 Hz

Technical Specifications

Inputs	2 Analog (XLR, Male) 2 AES/EBU (BNC, Female)
Outputs	2 balanced analog output of selected input (XLR, male)
Additional rear panel controls	Termination DIP switch Gain/calibration DIP switch
Input level for maximum output (volume full on)	0 dBv balanced
Input overload	+26 dBv balanced
Peak acoustic output (2 feet)	98 dB SPL
Response, 6th octave	80 Hz - 16 kHz ± 7 dB (-10 dB @ 50 Hz, 22 kHZ)
Power output **RMS each side (4 Ω)** **RMS bass (4 Ω)**	 10 W transient / 5 W continuous 20 W transient / 10 W continuous
Distortion, electrical:	Less than 0.15% at any level below limit threshold
Distortion, acoustic	8% or less at worst case frequencies above 180 Hz including cabinet resonance; typically less than 2%
Hum and noise	Better than -68 dB below full output
Magnetic shielding	< 1 Gauss any adjacent surface
Power consumption (average max)	35 W
D to A gain calibration, (dB = dBFS)	+8 = -20, +4 = -20, +6 = -9, 0 = -18 (DIP selectable)
AES sampling rate	32 to 48 KHz, auto-select
D to A converter	24-bit low jitter
Converted analog out (S/N)	>90 dB
Converted analog out (THD)	< 0.008%
AES termination	Removable (DIP select)
Level meter type	106-segment, tri-color LED bar graph
Bar graph quantity	2 each, horizontal
LED color	Red • amber • green
Metering range	72 dB
Reference level select	0, +4, +6, or +8 dBv
Display mode select	VU only • VU/PPM • PPM only
Peak hold select	Manual, 3-sec, 10-sec, or off
PPM ballistics select	Type I • Type II • DIN 4506 • SSRT
Scale select	AES • Extended VU • Alternate AES • VU • BBC • NORDIC • DIN

Block Diagram



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