



## 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

## Features

Full fidelity audio monitoring in only 1RU

Two unbalanced AES/EBU digital inputs (selectable)

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.

Two balanced analog inputs (1 stereo)

Balanced analog output of selected digital source

## Order Part Number

AMP1-DA/106: 8101-0020

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

## 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.

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

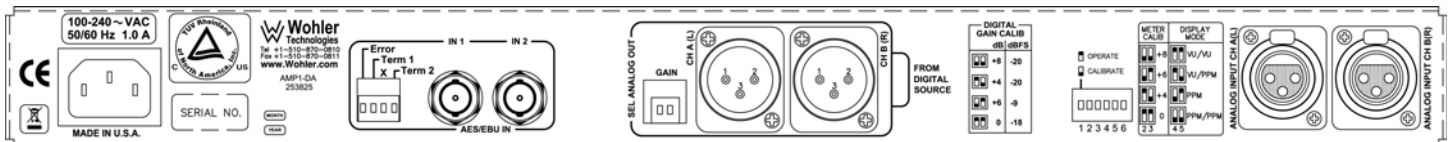
Quick and simple installation

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

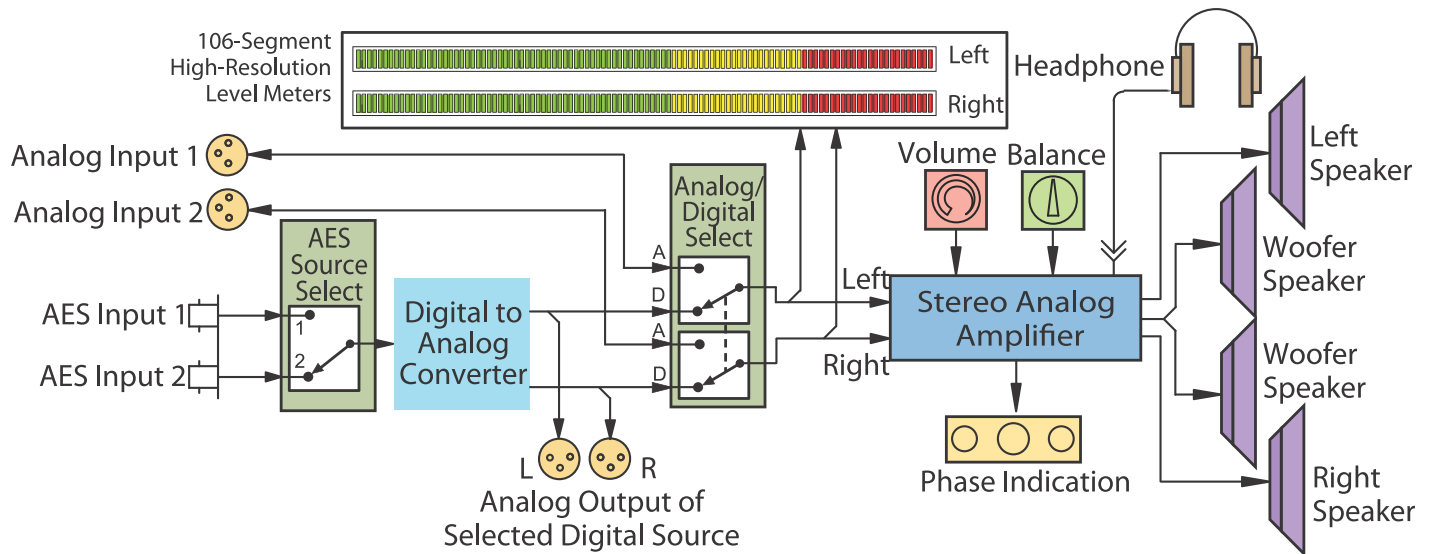


## Physical Specifications

<b>Dimensions (H x W x D)</b>	1.75 x 19 x 12 inches (44.5x 483 x 298 mm)
<b>Shipping weight</b>	14 lbs. (6.4 kg)
<b>Space requirements</b>	1RU in a standard 19" rack
<b>Supplied accessories</b>	AC external power unit/cord
<b>Power connector</b>	Attached external power unit plugs into standard U.S. outlet. Alternate power cables are available.
<b>Power requirements</b>	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).
<b>Power consumption</b>	Approximately 30 W
<b>AC mains input:</b>	100-240VAC, 50-60 Hz

## Technical Specifications

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

**Block Diagram**

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