



Description

The E MON-1/M is the world's first in-rack audio monitor capable of outputting and/or displaying audio from Dolby® E®, Dolby® Digital®, and PCM streams de-embedded from HD-SDI or SD-SDI. We worked closely with Dolby Laboratories to ensure development of a product that would meet high standards for the monitoring of both Dolby E distribution and Dolby Digital emission coding systems.

The E MON-1/M features an exceptionally high quality audio monitoring system offering premium quality multi-channel audio monitoring as well as professional level metering in a compact two rack space cabinet. This unit contains three audiophile-quality drivers and three power amplifiers; two speakers and amplifiers reproduce midrange and high frequency information in stereo, while the third amp/driver combination handles summed LF information below the 500 Hz crossover point.

Features

Includes an internal Dolby E and Dolby Digital AC-3 decoder

Select from an AES or HD/SD-SDI source

Includes front panel SDI group and subgroup selection

Eight 53 segment high-resolution tri-color LED level meters show simultaneous VU and PPM for superior level-metering. Output limiter circuits are incorporated to protect the speakers, and extensive magnetic shielding allows placement immediately adjacent to video monitors with no color impurities.

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. Extended HF response reveals potential problems with audio whine or hiss. Electronic rather than acoustic cancellation of bass frequencies provides positive audible detection of out-of-phase (reversed polarity) audio feeds.

Analog output of selected pair or downmix of multichannel programs

Meters and status display

LCD displays system status information

Order Part Number

E MON-1/M: 8103-0150

Eight high-resolution 53-segment level meters show simultaneous VU and PPM

Premium quality drivers and power amplifiers

Benefits

Thorough magnetic shielding allows placement next to video monitors

De-embeds PCM audio and Dolby E, Dolby Digital, and AC-3 from an HD-SDI or SD-SDI input

Monitor up to 8 channels of audio

Powerful 104dB SPL at 2 feet (0.6m)

Output limiter protected speakers

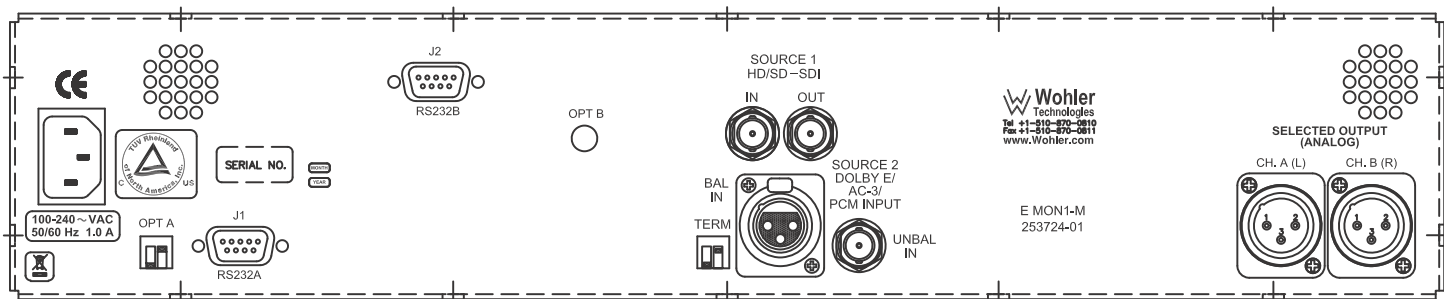
Audible indication of phase/polarity problems

Excellent frequency response and low distortion

Displays Dolby E & Dolby Digital bitstream metadata information

Focused sound reduces adjacent bay crosstalk

Rear Panel



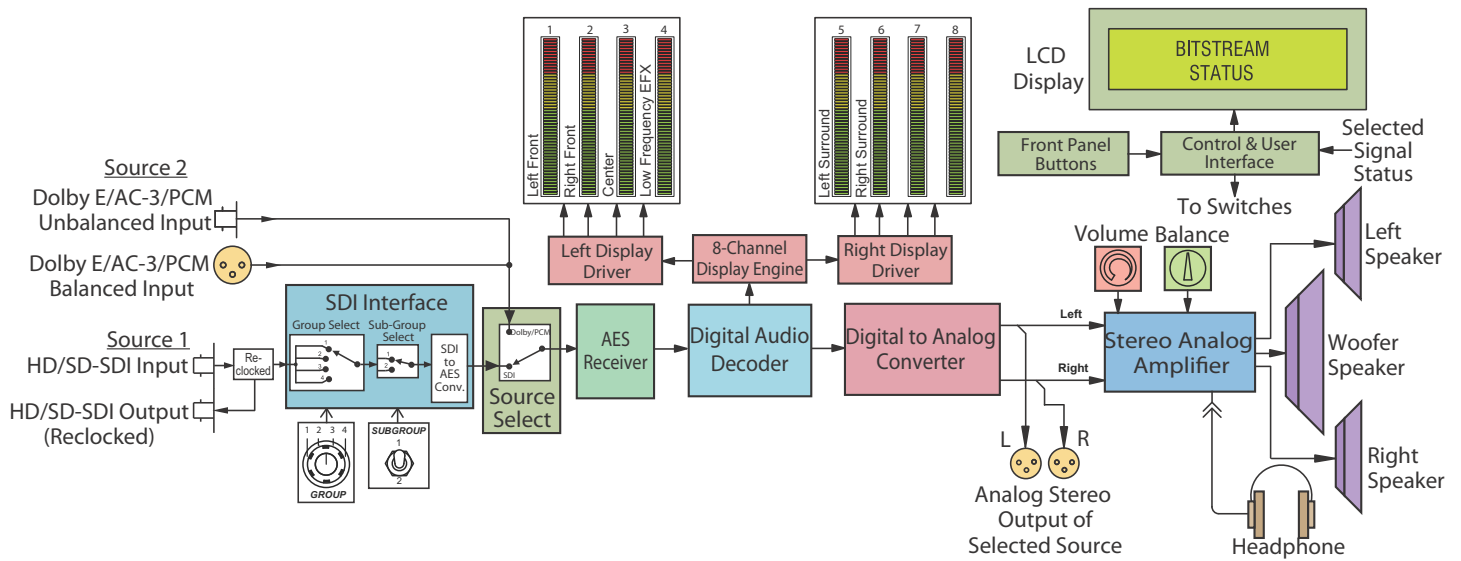
Physical Specifications

Dimensions (H x W x D)	3.5" h x 19" w x 12" d (89 mm x 483 mm x 305 mm)
Shipping weight	22 lbs. (9.98 kg)
Space requirements	2RU in a standard 19" rack
Supplied accessories	AC external power unit/cord
Power requirements	Power to the unit is 100 to 240 VAC \pm 10%, 50/60Hz.
Power output	
RMS each side (4Ω)	20 W transient/11 W continuous
RMS bass (4Ω)	36 W transient/20 W continuous
Peak acoustic output at 2 feet	104 dB SPL

Technical Specifications

Inputs	1 HD/SD-SDI (BNC; Source 1) 1 (110 Ω) balanced AES/Dolby E/Dolby Digital (3-pin XLR-F; Source 2) 1 (75 Ω) unbalanced AES/Dolby E/Dolby Digital (BNC; Source 2)
Outputs	1 HD/SD-SDI (BNC) 1 pair analog (3-pin XLR-M) (left and right)
Additional rear panel controls	J1 (RS-232 on DB-9) J2 (RS-232 on DB-9) Opt A (2-position DIP switch) Opt B (10-position rotary switch) Termination (2-position DIP switch)
Frequency response, 6th octave	80 Hz to 16 kHz \pm 5 dB (-10 dB at 40 H, 20 kHz)
Input level for maximum output (volume full on)	0 dBv balanced/-10 dB unbalanced
Hum and noise (analog)	Better than -68 dB below full output
Distortion, electrical	<0.1 at any level below input threshold
Distortion, acoustic	Typically < 1.5%, 6% or less at worst case frequencies above 120 Hz, including cabinet resonance
Converted analog output S/N	>90 dB
Converted analog output	THD: <0.008%
Magnetic shielding	<0.8 Gauss any adjacent surface
Power consumption (average maximum)	60 W
AC mains power input	100 to 250 V AC, 50 to 60 Hz Universal
Level meter type	53-segment LED bar graph
Meter dynamics	VU (bar) and PPM (dot)
Dynamic range	65 dB
Midscale resolution	1 dB
Segment colors	tricolor (Green, Red, and Amber)
Segment size	0.158" x 0.04" (4.0132 mm x 1.016 mm)

Block Diagram



Contact

Wohler Technologies, Inc.
 31055 Huntwood Avenue
 Hayward, CA 94544 USA
 +1 888 5 WOHLER (Toll Free)
 +1 510 870-0810
 +1 510 870-0811 (fax)

Wohler Europe
 +33 970 440 253
 +33 1 77 72 59 99 (fax)
 sales@wohler.com
 www.wohler.com

Wohler Asia
 1704 Lucky Commercial Center
 103 Des Voeux Road West
 Sheung Wan, Hong Kong
 +852 2851 8325
 +852 2850 8182 (fax)