MVXA-2016

Multi-Channel Amplified Monitor Panels

Features

- Sophisticated Electronic DesignAchieves 8 or 16 Channel Audible & Visual Monitoring in a Single Rack Space
- Each Meter Can be Individually Referenced to Line Level (1VRMS), 25VRMS, 70VRMS, or 100VRMS Input to Collectively Monitor Multiple Signal Types in any Combination
- An Internal Speaker, Headphone Jack, Line Level Output, and an External Speaker Output are Available for Versatile Aural Monitoring of Each Channel
- A 12 Segment LED Meter for Each Channel Provides Accurate Visual Monitoring of all Channels Simultaneously
- Green LED’s Indicate Standard VU Ballistics of -30dB to -2dB, Red LED’s indicate Peak Response at 0dB to +3dB Above Reference Level for Easy Identification of Critical Signal Levels
- Top Panel Diagram Depicts Functional Operation and Jumper Settings for Easy Installation and Service

Specifications

- Height: 1RU, 1 1/4” (34mm)
- Depth: 13 1/5” (335.28mm)
- Width: 19” (482mm)
- Weight: 7 lbs. (3.2 kg)
- Supply Voltage: 15 VAC power supply (included)
- Channels: MVXA-2016 is 16 channels
- Total Harmonic Dist.: < 1%
- Floor Noise: 76dB
- Internal Speaker: 3 Watts / 8Ω
- Power Consumption: 6 Watts
- Frequency Response: 35Hz - 20kHz
- Channel Turn-On Delay: 1 Second
- Inputs Avail. "0dB" Ref: Line Level (1VRMS), 25VRMS, 70VRMS, 100VRMS

LED Display

- Accuracy: 1.5dB
- Sensitivity: -30dB to +3dB
- Monitoring Range: 0.0316 VRMS (-30dBV) to 141 VRMS
- Dynamics: Bottom 10: Green, VU Response (-30dB to -2dB) Top 2: Red, Peak Response (0dB to +3dB)

Audio Outputs

- 3 Watt Amplifier (5 Watt Peak) into: Internal Speaker, Headphone Jack, External Speaker Output (4Ω or 8Ω), and Line Level Output.
General Description

The MVXA monitor panels (patent pending) are active devices for aural and visual monitoring of sixteen different speaker and line level circuits in any combination. Superior single-circuit board design offers outstanding performance with easy visual assessment in an ultra-thin single rack unit chassis.

MVXA-2016 is a sixteen channel monitor panel. Equipped with the finest components including DC coupled capacitors at each input to maintain signal integrity without distortion, noise, or ground-loop occurrence (no transformer required).

The MVXA-2016 will simultaneously monitor any combination of 25V, 70.7V, 100V, or line level signals from -30dBv (line level reference) to 200VRMS (100VRMS reference).

Each input signal is individually calibrated using easy to position jumpers. Clear, visual monitoring of each signal is accomplished using individual twelve segment LED bargraphs with a resolution of 33dB each. The bottom ten LEDs are green and have standard VU ballistics of -30dB – -2dB. The top two LEDs are red to identify peak response at 0dB – +3dB above reference level. These easy-to-see red LEDs provide quick identification of critical signal levels.

The MVXA-2016 also provides for audio monitoring of each signal utilizing a 3 Watt amplifier with front panel volume control to drive an internal speaker, a headphone jack, and/or an external speaker output. For high fidelity purposes, a line level output with 35Hz – 20kHz response is also provided on the rear panel. The internal speaker may be bypassed or used in conjunction with the external speaker or line level device by simply moving the speaker/headphone disconnect jumper.

The back panel includes: 15VAC power input connector (power supply included); speaker out terminals; line level out terminals; speaker/headphone disconnect jumper; and sixteen input terminals that are individually selectable to a 0dB reference for 25V, 70.7V, 100V, or line level using extended tab jumpers. To facilitate wire management, the bottom panel extends outward to offer a ¾” full-length opening for wire access and holes for tie wrapping. To protect terminal connections, a back panel cover (equipped with knockouts) secures in position. The top panel features an easy-to-follow circuit diagram of the unit’s basic operation. Units are finished in black and include rack mount brackets.

Applications

Rely on MVXA-2016 for operational supervision of control centers when head-end amplification is remotely located. MVXA-2016 is ideal for aural and visual monitoring of multi-channel commercial or industrial sound and communications systems in office buildings, auditoriums, airports, convention halls, sports/recreation areas, theaters, schools, churches, houses of worship, factories, and service centers. The compact design of the MVXA-2016 is ideally suited for shelf, rack, or wall mounting.

Architect And Engineer Specifications

Multi-channel, amplified monitor panel shall be Atlas Sound Model MVXA-2016 or approved equal. Unit shall be capable of visually monitoring 16 channels simultaneously. Independent aural monitoring of each channel shall be provided by an internal speaker, a headphone jack, a 3-watt speaker level output, and a line level output to drive an external amplifier. It shall be able to monitor any combination of line level, 25V, 70.7V, and 100V inputs. It shall feature standard E.I.A. spacing for mounting within 1½” of vertical panel space (1 rack unit). It shall include a circuit diagram on the top panel of the unit’s basic operation. Unit shall also include a power supply with input voltage of 10VAC – 30 VAC, 60Hz. It shall be finished in black and weigh 7 lbs. (3.18 kg).