

Alero® Web Conferencing Audio Mixer

ALR-AEC-8 (FG1140-08)



Overview

The Alero ALR-AEC-8 is a dedicated microphone mixer for up to 8 microphones designed specifically for web conferencing applications such as Lync or Skype in medium to large meeting rooms. It also supports VTC and audio conferencing systems.

Common Applications

In the Business market, the ALR-AEC-8 is an optimal solution for mixing microphones used in conjunction with web conferencing in a medium to large size meeting room.

Features

- **8-Channel Automatic Microphone Mixer in a Single Enclosure** – Supports the number of presenters in a typical medium to large meeting room environment
- **USB Audio Output** – Enables Alero ALR-AEC-8 to be a microphone expansion unit for Enzo® or PC-Based web conferencing applications
- **Onboard Web Configuration Tool** – Simple to setup and configure without the training typically associated with other mic-mixing solutions, and no PC software required
- **Active Adjustment of Audio Levels and Settings** – Delivers superior audio quality without users having to make manual adjustments
- **Acoustic Echo Cancellation (AEC)** – Eliminates echo feedback during a web/audio conference
- **Automatic Gain Control (AGC)** – Provides uniform volume levels by increasing the gain when the participant is speaking softly and lowering levels when the person is speaking loudly
- **Noise Reduction (NR)** – Decreases the hiss or static that might be added when the AGC adjusts to compensate for side conversations, rustling participants or soft speaking
- **Control by AMX over IP or Contact Closures** – For simple mute group selection to full remote control and monitoring; Alero accommodates systems with no external control all the way to enterprise management
- **RPM Programmable** – Simplifies configuration of Alero in for any AMX solution that requires control and monitoring of the conferencing system

Specifications

GENERAL	
Enclosure	Metal with black matte finish
Dimensions (HWD)	1 3/4" x 17" x 9 1/8" (44.86 mm x 431.80 mm x 231.65 mm)
Weight	5.78 lbs (2.62 Kg)

Regulatory Compliance	FCC CFR Title 47 Part 15 CE EN 55022 CE EN 55024 CE EN 60950-1 IEC 60950-1 UL 60950-1 C-Tick CISPR 22 IC CISPR 22 VCCI CISPR 22 RoHS WEEE
Optional Accessories	PSR4.4 13.5 VDC, 4.5 A Power Supply (FG423-46)

ACTIVE POWER REQUIREMENTS	
Power Consumption	12 W
Power Connector	3.5mm Phoenix with retaining screws
Voltage DC (Typical)	12 VDC
DC Current Draw	1 AMP
Voltage DC Range	9-18 VDC

POWER SUPPLY	
External, Required	Optimal performance requires use of the following AMX power supply (not included): PSR4.4 13.5 VDC, 4.5 A Power Supply (FG423-46)

ENVIRONMENTAL	
Temperature (Operating)	32° F to 122° F (0° C to 50° C)
Temperature (Storage)	14° F to 140° F (-10° C to 60° C)
Humidity (Operating)	5% to 85% RH
Heat Dissipation (Typical)	14.3 BTU/hr

ETHERNET	
Connection	(1) RJ-45
Description	10/100 Port RJ-45 connector provides TCP/IP communication. Auto MDI/MDI-X enabled. Supports IPv4 and IPv6 networks. Supports HTTP, HTTPS, Telnet, FTP
Link/Act Indicator	Link/Activity LED (green) blinks when receiving Ethernet data packets, one on Ethernet RJ-45 connector and one on the front panel
Speed Indicator	Speed LED (yellow) lights On when the connection speed is 100 Mbps Ethernet connection and turns OFF when the speed is 10 Mbps

CONTROL PORTS AND INDICATORS	
I/O Channels	One 6-position 3.5mm Screw Terminal 5-channel binary I/O port for contact closure for Mute Group selection
Microphones	Signal: 8 Green LED when Mic signal is active LED blinks green Clip: 8 Red LED if input exceeds +8 LED blinks red
Power	1 Green LED when powered on

ACOUSTIC ECHO CANCELLATION	
Sampling frequency	48 kHz
Individual Acoustic Echo Cancellers (AEC)	8
AEC Tail Length	Up to 480 ms
Residual Echo Suppression	Off, light, medium & strong
Noise Reduction	0-24 dB
Comfort Noise	User adjustable for each microphone channel
Input channels	12 (8 Mic, 2 line, USB, mono VC in)
Output channels	4+1 (TX#1, TX#2, USB out, VC out) + Loudspeaker out
Free Mixing of Input/Output Channels	User adjustable mixing matrix
Automatic microphone mixing (AMM)	Tunable for each output channel
AEC Double-Talk Suppression	0.0 to -50.0 dB

LINE LEVEL AUDIO	
Line Level Audio Input Connections	(2) 3.5 mm 3-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) audio
Line Level Audio Output Connections	(2) 3.5 mm 3-position captive-wire terminals; support balanced (differential) or unbalanced (single-ended) audio
Video Conferencing (VC) Audio Input/Output Connections	(1) 3.5 mm 5-position captive-wire terminals; mono, supports balanced (differential) or unbalanced (single-ended) audio for input and output
Public Address System (PA) Connection	(1) 3.5 mm 5-position captive-wire terminals; 2 channels, supports balanced (differential) or unbalanced (single-ended) audio for output
Input Level (Nominal)	+4 dBu (1.228 Vrms) balanced or -10 dBV (0.3162 Vrms) unbalanced
Input Level (Maximum)	+14 dBu
Maximum Input Level	Gain range: 0-42 db
Input Impedance	>17 kOhms balanced, >10 kOhms unbalanced
Dynamic Range	>84 dB, 1 kHz signal, 0 dB gain, 20 kHz Bandwidth
Signal to Noise Ratio (SNR)	>84 dB, 1 kHz signal, 0 dB gain, 20 kHz Bandwidth with signal level at maximum
Total Harmonic Distortion plus Noise (THD + N)	<0.015 %, 1 kHz signal, 0 dB gain, 20 kHz Bandwidth
Crosstalk	<-84 dB, 1 kHz, channel-to-channel

MICROPHONE AUDIO	
Microphone Input Connections	(8) 3.5 mm 3-pin captive-wire MIC connectors; supports up to eight mono microphones, balanced audio
Microphone Input Level (Maximum)	5 dBu
Microphone Input Format Support	Mic level, balanced audio
Microphone Input Impedance	3.5 kOhms, accepts 60 to 600 Ohms sources
Microphone Input Gain	-24 dB to +89 dB, 1 dB steps
Phantom Power	48 volt all inputs

About AMX by HARMAN

Founded in 1982 and acquired by HARMAN in 2014, AMX® is dedicated to providing AV solutions for an IT World. AMX solves the complexity of managing technology with reliable, consistent and scalable systems comprising control, video switching and distribution, digital signage and technology management. AMX systems are deployed worldwide in conference rooms, classrooms, network operation/command centers, homes, hotels, entertainment venues and broadcast facilities, among others. AMX is part of the HARMAN Professional Group, the only total audio, video, lighting, and control vendor in the professional AV market. HARMAN designs, manufactures and markets premier audio, video, infotainment and integrated control solutions for the automotive, consumer and professional markets. Revised 8.5.15 ©2015 Harman. All rights reserved. Specifications subject to change.

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