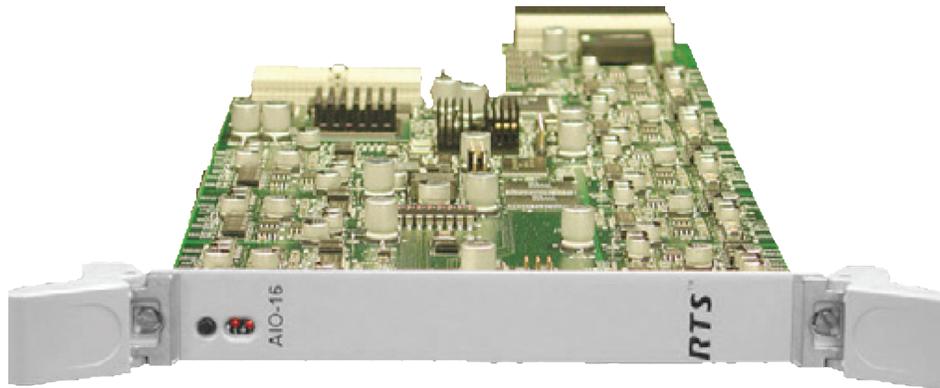


AIO-16 Audio Card



Installed directly into the ADAM or ADAM-M Matrix Intercom System, the AIO-16 card gives 16 ports of audio in and out for each card installed. This doubles the amount of audio ports available from its predecessor the AIO-8. The AIO-16 is hot swappable, allowing the user to insert the card and begin using it instantaneously. Once inserted into the system, it uses its “smart card” capability to see the backcard configuration and switches its keypad communication protocol accordingly.

The AIO-16 is fully compatible with AIO-8 cards. It can run side-by-side the AIO-8, seamlessly integrating into the port scheme already in place.

There are three (3) AIO-16 backcards, the traditional 50-pin SCSI backcard and the new 50-pin MDR backcard, which allows for a separate data driver per keypad port, and the RJ-45 backcard, exclusively designed for the ADAM-M frame.

There are also three new breakout panels that can be used with the AIO-16 card—DB-9, RJ-45 and Telco Breakouts—bringing the total number of breakout panels compatible with the AIO-16 to six (6).

NOTE: When using either the DB-9 Breakout panel, the RJ-45 Breakout panel, or the 48-port Telco Breakout panel you must use the MDR backcard.

Specifications

Analog

Signal type: Fully differential (balanced)
 Nominal level: 8dBu
 Maximum level: 21dBu
 Input Impedance: High (22k Ω)
 Output Impedance: Low (600 Ω)

A/D and D/A

Sampling Rate: 44.1kHz
 Resolution: 24-Bits
 Converter Architecture: 128x Oversampling Δ - Σ Modulator

Audio Performance

SNR with 21dBu signal output (A-weighted):
 84dB (typ.)/ 81dB (min.)
 THD+N at 21dBu, 1kHz (unweighted): <0.007%
 Frequency Response at 21dBu:
 within \pm 1dB from 50Hz–20kHz
 All measurements performed using an Audio Precision System 2 Dual Domain System. Measurements were performed using a sine wave at:
 f=1kHz and level=21dBu
 bandwidth=50Hz to 20kHz

Connections

4-wire balanced audio. Optional RS-485 data is available to communicate with keypanels. AIO-16 can be plugged into either a SCSI backcard or MDR backcard.

SCSI Backcard

Backward compatibility to existing AIO-8 breakout panels. This card carries two (2) single RS-485 data pairs; one (1) data pair per group of eight (8) keypanel ports.

MDR Backcard

Can be connected to 1 RU, 48-port CAT-5 breakout panel or to a 2 RU, 32-port DB-9 breakout panel. This card has 16 RS-485 data pair so each intelligent key panel can communicate with the matrix separately.

Order Information

AIO-FC-16 • AIO-16 Card • 16-channel Audio Input/Output card for the ADAM Intercom System.
 AIO-BC-16-SCSI • SCSI Backcard • SCSI Backcard with two 50-pin connectors. One data pair per connector.
 AIO-BC-16-MDR • MDR Backcard • Backcard with two MDR connectors. Allows for a separate data pair per keypanel port.
 XCP-32-DB9-BP • DB-9 Breakout Panel XCP-32-DB9 • 32-port DB-9 breakout panel for expansion of the ADAM Intercom System.
 XCP-48-RJ45 • RJ-45 Breakout Panel XCP-48-RJ45 • 48-port RJ-45 breakout panel for expansion of the ADAM Intercom System.
 XCP-48-TELCO • Telco Breakout Panel XCP-48-Telco • 48-port Telco breakout panel for expansion of the ADAM Intercom System.
 XCP-40-DB9 • DB-9 Breakout Panel XCP-40-DB9 • DB-9 Breakout Panel for expansion of ADAM at 40+, 80+, and 120+.
 XCP-40-RJ11 • RJ-12 Breakout Panel • RJ-12 Breakout Panel for expansion of the ADAM Intercom System.
 XCP-24 • 24-Port Telco Breakout Panel XCP-24-Telco • 24-port Telco Breakout Panel for expansion of the ADAM Intercom System.
 RJ45BC-ADM M • ADAM M - RJ45 Back Card • RJ45 Back Card for Adam M

The specification information is subject to change without notification.
 Brand names mentioned are the property of their respective companies.

RJ-45 Backcard

Specifically designed for the AIO-16 card used exclusively in the ADAM-M intercom system. Not compatible with any other card or intercom system. Supports both RJ-45 and RJ-12 connector plugs, as well as 568A, 568B, and USOC wiring.

XCP-32-DB9 Breakout Panel: 9-pin male D-sub

Pin 1: Keypanel Data +
 Pin 2: Keypanel Data -
 Pin 3: N/A
 Pin 4: Audio Out +
 Pin 5: Audio Out -
 Pin 6: N/A
 Pin 7: Audio In -
 Pin 8: Audio In +
 Pin 9: N/A

XCP-48-RJ45 Breakout Panel

Pin 1: N/A
 Pin 2: Keypanel Data -
 Pin 3: Audio Out +
 Pin 4: Audio In +
 Pin 5: Audio In -
 Pin 6: Audio Out -
 Pin 7: Keypanel Data +
 Pin 8: N/A

XCP-955 Breakout Panel

Pin 1: Keypanel Data -
 Pin 2: Audio Out +
 Pin 3: Audio In +
 Pin 4: Audio In -
 Pin 5: Audio Out -
 Pin 6: Keypanel Data +