Eclipse HX-PiCo

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The Eclipse HX-PiCo is a small to mid-size solution for a high-quality, cost-effective digital matrix system that can have up to 36 audio ports in a 1RU rack space.

DESCRIPTION

The Eclipse HX-PiCo frame is a one rack unit (1RU) digital matrix intercom frame. The front panel of the Eclipse HX-PiCo provides controls (pushbuttons), indicator lights, and a display for operating the system. The back panel holds the RJ-45 connectors (ports) for connecting user panels, interface modules, interface frames, and other matrix frames to the system.

INTERFACE MODULES

External to the HX-PiCo matrix frame, interface modules are supported in optional 1RU and 3RU IMF frames. Interface modules convert the HX-PiCo ports to other types of signals that communicate with devices such as telephones, two-way radios, camera intercoms, partylines, and other forms of external communication.

Interface modules include: TEL-14 (telephone interface), CCI-22 (dual partyline interface), FOR-22 (4-wire interface), GPI-6 (general-purpose inputs), RLY-6 (relay outputs), and AES-6 (digital interface used with V-Series panels with the AES-3 option card and AES equipment).

LINKING ECLIPSE HX-PICO'S

Two 36-port Eclipse HX-PiCo matrix frames can be intelligently linked using the high capacity PiCo-Link (CAT-5) connector on each device to create a 72-port non-blocking system.

LINKING WITH ECLIPSE HX MATRIX FRAMES

An Eclipse HX-PiCo can intelligently link to Eclipse HX-Omega, Eclipse HX-Median or Eclipse HX-Delta matrices using dedicated trunk lines between ports on the linked systems. Up to 64 matrix ports may be connected together for a networked system. Any port may be used as a trunk line, creating one full-duplex communications path between other matrices within the system. Typically, the number of trunk lines equals the anticipated maximum simultaneous communications between matrices. The system intelligently uses and releases these lines to route the communications traffic between panels connected with the various matrices, routing the calls through available open trunks.

POWER AND REDUNDANCY

The system offers dual redundant internal power supplies to ensure no system failure at any point during critical use. One power supply unit can power an entire matrix, while the second unit provides a backup in case of failure or damage to the first unit. Built-in sensors are connected to a warning light, allowing the system operator to diagnose a potential problem and take action.

HIGH SPEED SOFTWARE

The EHX Software provides configuration for all Eclipse HX matrices and networked systems.

KEY FEATURES AND BENEFITS

- 36 analog ports (32 ports support panels or interfaces)
- 8 onboard GPOs and 8 onboard GPIs
- Intelligent linking of up to 64 matrices with 4-wire trunks and LAN
- PiCo-Link: intelligently links audio between co-located Eclipse HX-PiCo frames
- 2 internal power supplies for redundancy
- User menu for I/O levels, routing and status
- DTMF inward access and outward dialing
- 4 configurations selectable by front menu
- Individual level control adjustments
- VOX-programmable audio
- Remote access via Internet/Ethernet
- Supports EHX Software (Eclipse HX Configuration Software)

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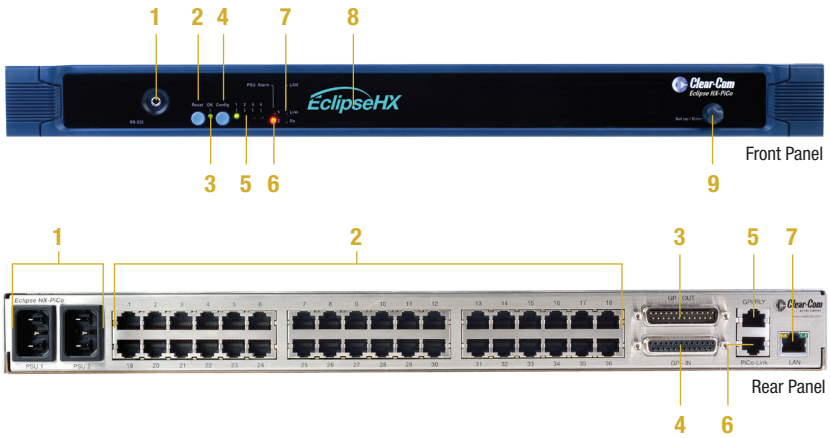

Eclipse HX-PiCo Front Panel

1. PC null-modem serial connector
2. Reset button
3. OK light (LED)
4. Configuration (CONFIG) button
5. Configuration status lights
6. Power supply alarm lights (1 and 2)
7. LAN Status lights
8. Display (menu) screen
9. Setup / Enter rotary control

Eclipse HX-PiCo Rear Panel

1. IEC AC power input connectors (2)
2. RJ-45 connectors (36)
3. GPO connector
4. GPIs connector
5. GPI-6/RLY-6 interface module connector (RJ-45)
6. PiCo-Link connector (RJ-45)
7. LAN connector (RJ-45)

TECHNICAL SPECIFICATIONS

0 dBu is referenced to 0.775 volts RMS

General

Power Consumption:	60 W Max. per inlet
No. of Panel Compatible Ports:	32
No. of Analog Audio Ports:	4
No. of Power Supply Units:	2
No. of Ports Per System (max.):	36 per system; 72 ports from 2 HX-PiCo linked matrices

Matrix Performance

Sample Rate:	48 kHz
Resolution:	24 bit
Frequency Response:	at 48 kHz sampling: 30 Hz - 22 kHz ± 3 dBu
Crosstalk (Adjacent Channel):	<-70 dBu
Nominal Level:	0 dBu
Matrix Headroom:	18 dBu
Distortion:	<0.05 %, at 0 dBu, 300 Hz to 10 kHz; <0.1 %, at 0 dBu, 100 Hz - 20 kHz
Off Noise:	<-98 dBu relative to +18 dBu, 20 Hz - 22 kHz
On Noise:	<-83 dB relative to +18 dBu, 20 Hz - 22 kHz
Key Response, Intra-System:	<40 ms for audio route
Linked Systems:	<60 ms for audio between matrices

Matrix Interfaces

GPI Inputs:	8 total; opto-isolated
GPI Outputs (Relays):	8 total; isolated relay contacts
GPI Connector:	25-pin D-type socket on rear panel
GPO Connector:	25-pin D-type plug on rear panel
External GPI-6/RLY-6:	RJ-45 on rear panel
Network:	10/100 Base-T Ethernet
Serial PC RS-232 Baud Rate:	57600
Maximum Distance:	10 meters
Number of Ports:	1
Connector:	3.5 mm socket on front

System Programming

Crosspoint Level Control:	0.355 dB steps
Input Level Control:	0.355 dB steps
Output Level Control:	0.355 dB steps
VOX Input Detection Threshold:	0 dB to - 40 dB adjustable

Environmental

Operating Temperature:	32°F - 104°F (0°C - 40°C)
Storage Temperature:	-67°F - 158°F (-55°C - 70°C)
Humidity (max.):	90% non-condensing

Dimensions

19 in. W x 1.75 in. H x 12 in. D

(482 mm x 44 mm x 300 mm)

Weight

11 lbs (5 kg)

Notice About Specifications

While Clear-Com makes every attempt to maintain the accuracy of the information contained in its data sheets, that information is subject to change without notice. Performance specifications included in this data sheet are design-center specifications and are included for customer guidance and to facilitate system installation. Actual operating performance may vary.

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