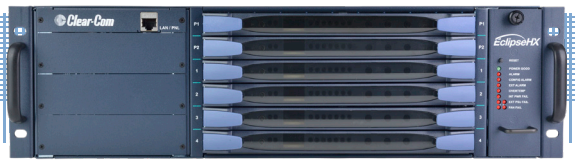
Eclipse HX-Delta Matrix Frame

Eclipse HX Digital Matrix Solutions

Linking People Together



Eclipse HX-Delta

Key Features and Benefits

- Compact 3RU Card Frame
- Slots for 2 CPU cards, 4 interface cards and 3 interface modules
- Up to 256 internal ports
- Dual PSUs for redundancy
- Dual cooling fans
- Alarms for frame temperature, external PCU failure and fan failure
- Front to rear LAN/Panel patch
- Front carrying handles for easy rack installation and extraction
- Fully compatible with Clear-Com V-Series Iris, V-Series, iStation, ICS panels and Agent-IC mobile app
- Replaceable fan/alarm card
- Replaceable power card
- Supported by EHX software for configuration and management

The Eclipse® HX-Delta is an advanced, small-size solution for a high-quality, high-density digital matrix system that can have up to 256 audio ports in a 3RU rack space.

Description

The Eclipse HX-Delta is a three rack unit (3RU) matrix intercom system frame with slots for two CPU cards, four I/O interface cards and three interface modules. Two external power supplies are provided. RJ45 and fiber connectors are located on the rear of the chassis, connecting the CPU and interface cards to intercom devices and media, such as user keypanels, interfaces, 4-wire audio equipment, wireless equipment and fiber optic cables.

Interface Cards

Serving as the central hub for connecting 16 to 256 ports of audio channels, the Eclipse HX-Delta achieves this level of connectivity with a combination of multiple Eclipse HX of I/O interface cards. Interface cards include: E-IPA-HX (up to 64 ports of IP connectivity), E-Dante-HX (up to 64 Dante channels), E-MADI64-HX (64 bi-directional channels to any AES10 compatible device), E-Que-HX (wireless cell controller or trunking line), MVX-A16-HX (analog RJ45). The E-FIB-HX (fiber connection) can connect Eclipse matrices together to expand existing intercom systems into larger systems.

Interface Modules

The Eclipse HX-Delta is designed with three available interface module slots for converting the 4-wire signals of the matrix to other types of signals that communicate with devices such as telephones, 2-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) and the RLY-6 (relay outputs).

User Panels and Mobile App

The Eclipse HX-Delta can connect to the following user panels: V-Series Iris, V-Series, iStation, ICS panels and the Agent-IC® mobile app.

Clear-Com® AN HME COMPANY

Eclipse HX-Delta Matrix Frame

Eclipse HX Digital Matrix Solutions

Expandable Architecture and Connections

Eclipse HX frames can intelligently trunk with multiple types of media including 4-wires, E1/T1, IP, MADI or a redundant Fiber + Data ring. A single intelligent networked system may include any combination of Eclipse HX-Delta Lite, -Delta, -Median, or -Omega systems. Networked system size varies from 72 to thousands of ports over many Eclipse frames.

Power and Redundancy

The system offers dual redundant external 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. A built-in sensor is connected to both an audible failure alarm and a warning light, allowing the system operator to diagnose a potential problem and take action.

Software

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

Technical Specifications

0 dBu is referenced to 0.775 volts RMS

Matrix Capabilities

Maximum Expansion Cards: 4
Maximum CPU Cards: 2 (included)
Maximum Power Supply Units: 2 (included)
Maximum Fiber Expansion Cards: 2
Ports per MVX Port Card: 16
Maximum MVX Port Cards: 4
Maximum E-QUE, IVC-32, LMC-64 Port Cards: 4
Maximum EMADI-64 Port Cards: 4
Maximum RJ45 Ports per Matrix: 64
Maximum Timeslots: 512

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 %, @ 0 dBu, 300 Hz to 10 kHz;
<0.1 %, @ 0 dBu, 100 Hz to 20 kHz
Off Noise: <-70 dBu (20 Hz - 22 kHz)
On Noise: <-65 dBu (20 Hz - 22 kHz)
Key Response, Intra-System: <40 ms for audio route
Linked Systems: <60 ms for audio between matrices

Power Supplies

Quantity: 2 per matrix
Mounting: External
AC Power Input: IEC (1 per PSU)
Input Voltage: AC 100 Volts - 240 Volts, 50/60 Hz
Power Consumption: 150 Watts Maximum
Status Indicators: LEDs viewable from front of rack

Environmental

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

Dimensions

19 x 5.25 x 17.5 in. (WxHxD)
(482 x 133 x 444.5 mm)

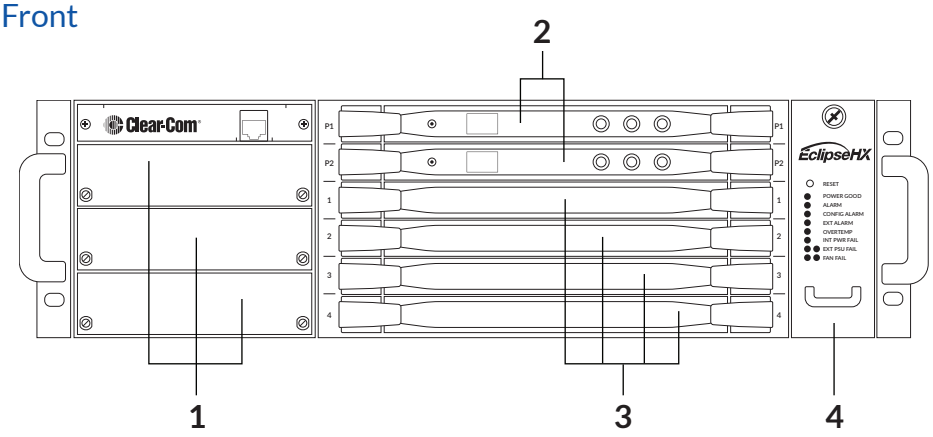
Weight

Empty: 18 lbs (8.2 kg)
Fully Loaded: 32.5 lbs (14.7 kg)

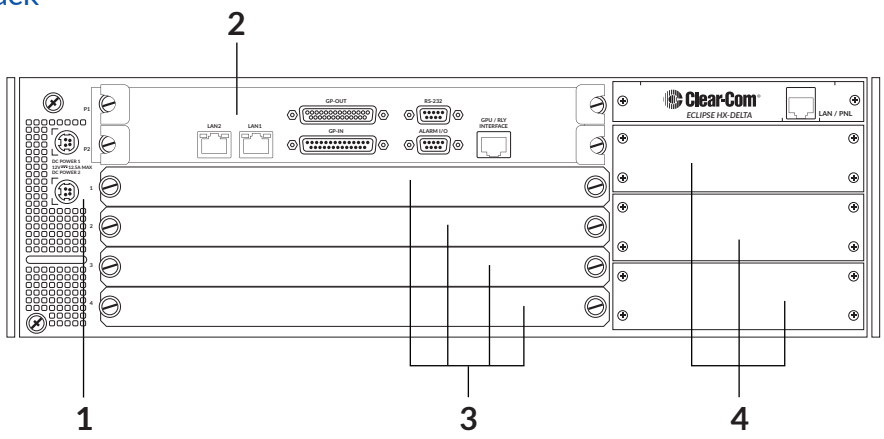
Eclipse HX-Delta Matrix Frame

Eclipse HX Digital Matrix Solutions

Front



Back



Legend

Front

1. Interface module slots
2. CPU cards (P1 and P2)
3. Interface card slots
4. Fan and alarm card

Back

1. Power supply card with connectors
2. CPU card rear panel
3. Interface card rear connector panel slots
4. Interface module rear connector panel slots

Order Codes

ECLIPSE-HX-DELTA-0P

ECLIPSE-HX-DELTA-16P

ECLIPSE-HX-DELTA-32P

ECLIPSE-HX-DELTA-48P

ECLIPSE-HX-DELTA-64P

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

WARNING: Cancer and Reproductive Harm - **www.P65Warnings.CA.Gov**

Rev: Jul/2022