


HRM-4X Remote Station

Digital Partyline Solutions



Linking
People
Together



HRM-4X

Key Features and Benefits

- For use with the HMS-4X HelixNet main station
- Access to all networked channels of audio from main station
- Expand Main Station with Remote Stations to provide up to 24 keys in one location
- Select any 4 channels from up to 24 channels of audio
- Core Configuration Management (CCM) browser-based tool (with software v3.0 or higher)
- Large format yellow OLED, 10-character label displays
- Connects to main station over mic or Ethernet cable
- Powered by Powerline, PoE or AC/DC adapter (universal)
- Rotary channel level controls
- Speaker and Program level controls
- Line/LAN Status indication

HelixNet is a digital partyline system with up to 24 channels of full-duplex audio and program audio over any shielded twisted-pair cable.

Description

The HRM-4X is a 1RU, 4-channel remote station that connects to the HMS-4X main station and other user stations using various cable types, including a single shielded twisted-pair cable. The HRM-4X provides access to four simultaneous channels of intercom communication, plus assignable program audio.

Operation

The HRM-4X has separate buttons to activate the headset or the gooseneck mic. User controls include OLED displays, momentary/latching Talk button, Call button and rotary encoder level controls per channel. Access to channels and other functions are assignable through the menu or the Core Configuration Manager (CCM) browser-based tool*.

Roles

Every HelixNet device may be assigned a role, which is a pre-defined configuration of that particular device. The number of roles is virtually unlimited, so a role could be used by many devices to assure they are all configured identically, or a unique role could be assigned to an individual for their complete ability to customize their own settings.

Power Options

When using a combination of power options, the priority of power is applied; local power first, Power-over-Ethernet (PoE) second, then Powerline. The HRM-4X receives audio data, control data, and DC power via the same Powerline cable connection to a HMS-4X main station.

*CCM is only available in software v3.0 and requires HLI-ET2 or HLI-FBS for access.

Technical Specifications

dBu is an absolute measurement. 0 dBu is referenced to 0.775 volts RMS.

Channels

Four local from any networked Main Station. One local and any networked program audio feeds (assignable to intercom channels).

Connectors

Intercom Line: (1) 3-pin XLR-M, (1) 3-pin XLR-F

Intercom Line Pin Function:

- Pin 1: Ground
- Pin 2: +30V DC and Audio
- Pin 3: -30V DC and Audio

Ethernet/PoE: Ethercon RJ-45

Headset: 4-pin XLR-M

Gooseneck Mic: 3-pin Tuchel

USB: Type A

Program: 3-pin XLR-F

Stage Announce: 3-pin XLR-M

Hot Mic/IFB Interface: 1/4" (0.64 cm) phone jack

GPIO: 9 way D-type male (1xGPI, 1xGPO)

DC Power: 3-pin to AC adapter (provided)

Microphone Pre-amplifier

Headset Mic Impedance: 200Ω (Dynamic)

Headset Mic Voltage: 1.7V (Electret selectable)

Limiter: +23dB

The following specified for a route to four-wire output at 0dBu out:

Mic Gain: 60dB (Dynamic), 45dB (Electret)

Frequency Response: 300Hz - 10 kHz ±3dB, contoured for intelligibility

Distortion: <0.2% THD @ 1kHz

Noise: <-55dBu (Dynamic), <-65dBu (Electret)

Headphone Amplifier

Load Impedance: >32Ω

Output Level: +12dBu before clipping

Sidetone: -12dBu (selectable)

The following specified for a route from a four-wire input at 0dBu in:

Max Gain: 0dB

Frequency Response: 180Hz - 11kHz +3dB

Distortion: <0.1% THD @ 1kHz

Noise: <-65dBu

Headphone Limiter: 0dBu (selectable)

Loudspeaker Amplifier

Load Impedance: 8Ω

Output Level: +18dBu before clipping

The following specified for a route from a four-wire input at 0dBu in:

Max Gain: 18dB

Frequency Response: 200Hz - 10kHz ±3dB

Distortion: <0.1% THD @ 1kHz

Noise: <-50dBu

Program Line Input

Maximum Level Before Clipping: +18dBu

Nominal Input Level: 0dBu (selectable)

Input Impedance: >= 10KΩ

The following specified for a route to four-wire output at 0dBu out:

Frequency Response: 20Hz - 10kHz ±3dB

Distortion: <0.2% THD @ 1kHz

Noise: <-65dBu

Stage Announce Input

Maximum Level Before Clipping: 18dBu

Nominal Output Level: 0dBu (selectable)

Output Impedance: <= 100Ω

The following specified for a route from a dynamic headset:

Frequency Response: 300Hz - 12kHz ±3dB

Distortion: <0.1% THD @ 1kHz

Noise: <-55dBu

Hot Mic Input

Maximum Level Before Clipping: +12dBu

Nominal Output Level: 0dBu (selectable)

Output Impedance: <= 100Ω

The following specified for a route from a dynamic headset:

Frequency Response: 300Hz - 12kHz ±3dB

Distortion: <0.2% THD @ 1kHz

Noise: <-55dBu

Power

Via Powerline:

4W DC Voltage Range: ±30V

Via AC Adapter:

Input Voltage Range: 100 - 240VAC

Input Frequency Range: 50 - 60Hz

Input Power: <= 250VAC

AC Adapter Power Connector: IEC60320-1-C14

Via Power-over-Ethernet (PoE):

Connector: RJ-45

Conforms to PoE standard: IEEE 802.3af-2003

Power Required: 13W

Environmental

32° - +104°F (0 - +40°C)

90% relative humidity

Dimensions

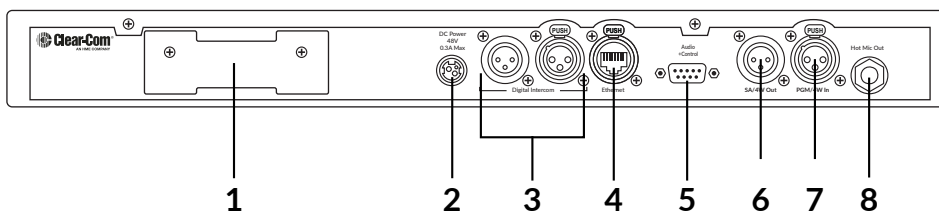
1.75 x 19 x 6.4 in (HxWxD)

(44 x 483 x 165 mm)

Weight

4 lbs (1.8kg)

HRM-4X Back Panel



Legend

1. Power supply holder clip
2. DC power connector
3. Partyline In/Out
4. Ethernet connector
5. GPIO DB-25, Announce Out Relay
6. Stage Announce Line Out
7. Program Input
8. Hot Mic Output - 1/4" TRS

Order Code

HRM-4X