

HLI-4W2 4-Wire Interface Module

Digital Partyline Solutions

Linking
People
Together



HLI-4W2

Key Features and Benefits

Interface

- 4-wire interface for HMS-4X**
- Transformer isolated
- Level and VOX control
- Clear-Com call signal

The HelixNet System

- Wired Partyline - Networked
- Flexible cabling
- Up to 24 Channels - Licensed
- Program Audio user level control

Effortless Management

- Fast front panel control & configuration
- Easy to use CCM browser configuration
- Plug-and-go with auto discovery
- Central upgrades from main station

HelixNet® is a networked partyline intercom with up to 24 channels and Program Audio over XLR, LAN or WAN.

Description

The HelixNet HLI-4W2 is a dual 4-wire interface module for the HMS-4X** main station.

Interfacing

HLI-4W2's 4-wire analog transformer and electrically isolated interfaces are assignable to any channel in the HelixNet system and provide discreet analog line-level input and output. The 4-wire ports allow connectivity to any 4-wire intercom system, cameras, telephone circuits, stage announce, recorders or any other generic audio devices. Level control and VOX/Gate capability is provided for each interface to accommodate the connected device.

HLI-4W2 include call signaling circuits when used with compatible Clear-Com devices such as Eclipse® HX matrices and FreeSpeak II® Base II base stations.

Local and Central Management Options

HLI-4W2 can be added to any HMS-4X main station with an available option slot. Once installed, any channel can be independently assigned to either 4-wire port locally on the HMS-4X** front panel or centrally from the Core Configuration Manager™ (CCM*).

| Pin | Function |
|-----|-----------------------|
| 1 | RS422 data TX (+) |
| 2 | RS422 data TX (-) |
| 3 | Audio to matrix (+) |
| 4 | Audio from matrix (+) |
| 5 | Audio from matrix (-) |
| 6 | Audio to matrix (-) |
| 7 | RS422 data RX (+) |
| 8 | RS422 data RX (-) |

*CCM requires HLI-ET2

**HMS-4X is a legacy product as of 2022

Note: HMS-4X and HLI modules are not used in Arcadia® hosted HelixNet systems. HMS-4X and HLI Modules are legacy products as of 2022 and not recommended for new system designs and specifications, existing HMS-4X units and HLI modules are supported under Clear-Com's Warranty Terms.

HLI-4W2 4-Wire Interface Module

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Technical Specifications

Connectors

4-wire: (2) EtherCON RJ45

4-wire Option Module Inputs

Maximum Level Before Clipping: 18dBu

Nominal Input Level: 0dBu (selectable)

Input Impedance: $\geq 10K\Omega$

Route to 4-wire output at 0dBu in:

Frequency Response: 20Hz - 10kHz ± 3 dB

Distortion: $< 0.2\%$ THD @ 1kHz

Noise: < -65 dBu

4-wire Option Module Outputs

Maximum Level Before Clipping: 18dBu

Nominal Output Level: 0dBu (selectable)

Output Impedance: $\leq 100\Omega$

Route to 4-wire input at 0dBu in:

Frequency Response: 300Hz - 12kHz ± 3 dB

Distortion: $< 0.1\%$ THD @ 1kHz

Noise: < -55 dBu

Dimensions

2.2 x 7.4 x 1.5in (HxWxD)

(57 x 187 x 39mm)

Weight

13oz (0.38kg)

Network Specifications

(Firmware Version 4.2+)

Network Protocols

Ethernet IPv4–Unicast Audio and Control

mDNS–Multicast Device Discovery

Layer 3 routable with mDNS function

limitations

HTTP–Management

RTP–Audio Transport

WavPack–Audio Codec

Network Ports

Unicast:

Port 80 TCP–System Management

Port 6001 TCP–System Management

Port 6001 UDP–Audio Streams

Multicast:

Port 5353 UDP–mDNS, Names, Discovery

Network Parameters

HMS-4X Endpoint Resource Use:**

1 per active port

Bandwidth:

300 (max) kbps from each active port to HMS

1200 (max) kbps from HMS to each active port

Network Jitter Tolerance:

≤ 128 ms jitter buffer per audio stream receiver

automatically adjusted to network performance

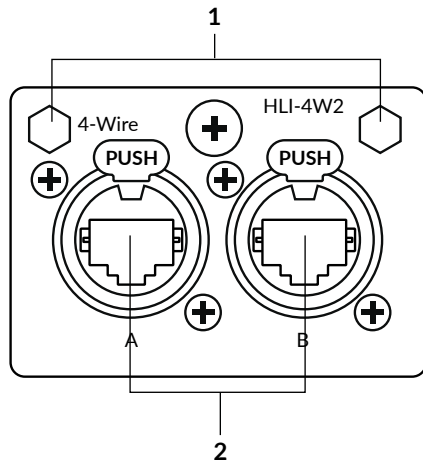
QoS Tags:

DSCP=41, Assured Forwarding (AF)

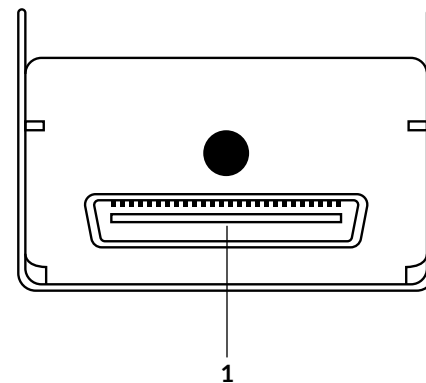
System Reserved IP Range:

10.0.0/8 for endpoints

Front



Back



Legend

Front

1. Handle mounting point
2. RJ45 connector

Back

1. Blade connector to HelixNet Main Station option slot

Order Code

HLI-4W2



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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