HXII-BP Beltpack
Digital Partyline Solutions

Linking People Together

HXII-BP

Key Features and Benefits

Beltpack
- Easy to use front panel with OLED displays
- (2) Keysets freely assignable to system channels
- Stacked keys allow unique combination of channels
- Independent Program Audio level control
- USB Call Signal Flasher
- Binaural controls on HXII-BP-X5

Connectivity
- Powerline connection via XLR cables
- Ethernet Network port with PoE

Mechanical
- Multiple mounting options
- Rugged, light-weight poly-carbonate enclosure
- IP-53

The HelixNet System
- Networked Intercom System
- Flexible cabling.
- 12 partyline channels. Expandable to 24 channels via optional license
- Program Audio distribution with independent level

Effortless Management
- Easy to use CCM browser configuration tool using optional HLI-ET2
- Fast front panel control and configuration
- Plug-and-go installation with hardware auto-discovery
- Central upgrades automatically managed from main station

HelixNet is a fully networked partyline intercom, supporting up to 24 channels and independent program audio over XLR, LAN and WAN.

Description

HelixNet's HXII-BP beltpack is a 2-channel intercom user station supported by the HMS-4X main station.

The beltpack provides two keysets assignable to any intercom channel and allows multiple channels to be uniquely stacked onto a keyset. The beltpack is provisioned with a headset connection, independent Program Audio level control and a micro-USB Flasher connection to a third-party USB light.

HXII-BP-X5 allows connection to dual ear 5-pin headsets for split-ear binaural operation, allowing the user to pan the keysets channels between left and right ears.

Local and Central Management Options

HXII-BP can be added to a HelixNet system without central configuration or interruption. Front panel allows tactile device configuration and channel assignment.

Roles can be created and applied to one or multiple HXII-BP remotely or locally. Roles can be edited locally or centrally managed from the Core Configuration Manager (CCM).

Connectivity and Power Options

HXII-BP connects to HMS-4X main station over XLR Powerline or network to HMS-4X with HLI-ET2 Ethernet module. Power is supplied to the HXII-BP over the XLR Powerline or PoE when connected over Ethernet.

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Technical Specifications

Channels
Two intercom channels
Program Audio

Connectors
XLR Powerline: 3-pin XLR–F
LAN/PoE: RJ45 etherCON
Headset: 4-pin XLR or 5-pin XLR-F
USB: Micro AB

Microphone Pre-Amplifier
Headset Mic Impedance: 200Ω (Dynamic)
Headset Mic Voltage: 1.7V (Electret selectable)
Limiter: +23dB

Route to 4-wire output at 0dBu out:
Mic Gain: 60dB (Dynamic), 45dB (Electret)
Frequency Response: 300Hz – 10 kHz ±
Distortion: <0.2% THD @ 1kHz
Noise: <-55dBu (Dynamic), <-65dBu (Electret)

Headphone Amplifier
Load Impedance: >32Ω
Output Level: +12dBu before clipping
Sidetone: -12dBu (selectable)

Route from a 4-wire input at 0dBu in:
Max Gain: 0dB
Frequency Response: 40Hz - 10kHz ±3dB
Distortion: <0.2% THD @ 1kHz
Noise: -65dBu
Headphone Limiter: 0dBu (selectable)

Power
DC Voltage Range: 30-60 volts
Powerline: Powered from Powerline = 1 endpoints (10 max)

IEEE 802.3af-2003 – Class 1
PSE: 4.0 W DC max @ Power Source
PD: 3.84 W DC max @ Powered Device

Environmental
32°F to +104°F (0°C to +40°C)
0 - 90% relative humidity
IP-53 rated

Dimensions
5.3 x 3.9 x 1.7 in (HxWxD)
(135 x 99 x 43 mm)

Weight
12.2 oz (0.35 kg)

Network Specifications

Network Protocols
Ethernet IPv4 – Unicast Audio and Control
mDNS – Multicast Device Discovery
Layer 3 routable with mDNS function limitations
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, Linking Optional for device names and linking

Network Parameters
Endpoint resource use: 1 (-X4 variant)

Endpoint resource use: 2 (-X5 for binaural)

Bandwidth: 300 (max) kbps from each active audio input to HMS
1200 (max) kbps from HMS to each endpoint

QoS tags:
DSCP=46, High Priority / Expedited Forwarding (EF)

Link-Local Default IP address range:
169.254.0.0/16

System reserved IP range: 10.0.0.0/8 for endpoints

Recommended Ethernet Switches
Managed Ethernet Switch – Layer 3
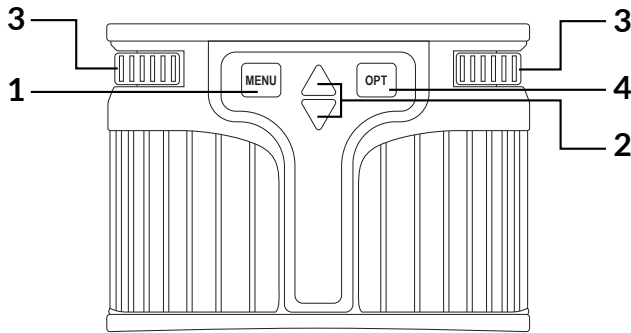100/1000 Base-T ports for endpoints 1000 Base IP Trunks between switches

QoS configuration:
Energy Efficient Ethernet bypass option
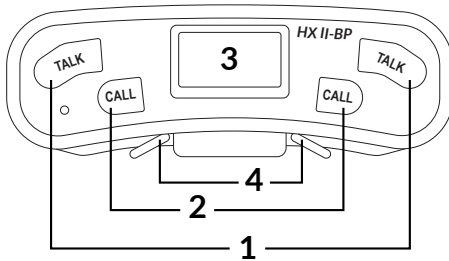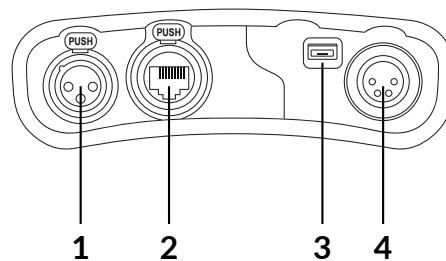IGMP Snooping bypass option

HXII-BP Front

HXII-BP Top

HXII-BP Bottom

Legend

Beltpack Front
1. Menu Access
2. Program Level
3. Volume Level
4. Option button for Binaural Balance Adjustment (X5 only)

Beltpack Top
1. Talk Key
2. Channel Call
3. OLED Display Screen
4. Desktop Feet/Belt Clips

Beltpack Bottom
1. 3-pin XLR Powerline In
2. Power-over-Ethernet (PoE) Line In
3. USB Micro AB Connector
4. XLR Headset Jack
   - 4-pin M (X4 only)
   - 5-pin F (X5 only)

Order Code

HXII-BP-X4
HXII-BP-X5

For DPL daisy-chaining, the following must be ordered:
SP-2

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**