# **HKB-2X Speaker Station**



The HKB-2X is a four-channel, two display with shift page, flush mount digital partyline headset and speaker station that connects to HelixNet Main or Remote Stations over microphone or Ethernet cables and can be locally powered via an external power supply or third party Power-over-Ethernet (PoE) power source.

#### **DESCRIPTION**

The HKB-2X is a four-channel, two display with shift page, digital partyline speaker station that connects with the HMS-4X Main Station and other Remote Stations using various cable types, including a single shielded twisted-pair cable (mic, CAT5 or CAT6 cables). Plug-and-go installation, quick access to system settings, simple cable operations and fast update capabilities make the HKB-2X easy to use.

## **OPERATION**

The HKB-2X speaker station can assign and monitor four channels of intercom over a single cable while communicating (talking) on any two of the four channels at any given time. Access to channels and other functions are assignable through the main menu. The menu is accessed via the front panel pushbutton with parameter selection and scrolling controlled by the left and right Call buttons and rotary channel level controls. User controls include position adjustable OLED displays, momentary/latching Talk button, Call button and rotary encoder level controls. The station has separate screw-pot level control for

listening to program audio assigned to a channel. The HKB-2X has separate buttons to activate the headset or the gooseneck mic.

## **POWER OPTIONS**

When using a combination of power options, the priority of power is applied; local power first, PoE second, then Powerline. The Speaker Station receives audio data, control data, and DC power via the same Powerline cable connection to a HMS-4X Main Station. A Powerline connection draws power directly from the Main Station, which can support ten beltpacks, three to five Remote or Speaker Stations or a combination of each per Powerline output. When using a local AC/DC power adaptor, an additional 20 Remote or Speaker Stations can be supported on each Powerline circuit. Additionally, the Speaker Station has the capability to be locally powered via an external power supply or a third party Power-over-Ethernet (POE) power source. When using PoE power source exclusively, power is drawn over an Ethernet cable, which can support up to 60 additional Remote or Speaker Stations.

The HLI-ET2 Ethernet module is required in the HMS-4X Main Station for Ethernet connection of remote devices.

#### **MOUNTING OPTIONS**

The HKB-2X can be mounted into a standard 4-gang ANSI/NEMA OS-1 electrical box or in the optional S-Mount enclosure to enable desktop use. Screw holes on the front panel are provided to accommodate surface wall box mounting.

## **KEY FEATURES AND BENEFITS**

- For use with HelixNet Main and Remote Stations
- 4-channel, two display, digital networked partyline station
- Fits 4-gang standard electrical wall box (US ANSI/NEMA OS-1) or optional S-Mount enclosure
- 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)
- · Displays swivel up and down for best viewing
- Individual Partyline and Program Audio speaker levels with speaker mute
- Menu setup using displays

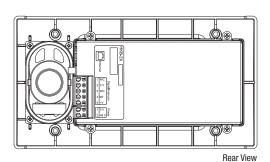


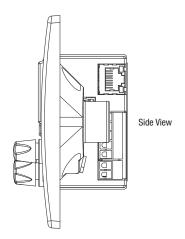






## **HKB-2X Speaker Station**





#### **TECHNICAL SPECIFICATIONS**

#### **Channels**

Four intercom channels Any networked program audio feeds (Assignable to intercom channels)

#### **Connectors**

Headset: 4-pin XLR-M Gooseneck Mic: 3-pin Tuchel

As Surface Mount Station:

Intercom line: Screw terminal block

(3-way)

DC Power: Screw terminal (2)

Ethernet/PoE: RJ-45

In S-Mount Desktop:

Intercom line: (1) 3-pin XLR-M

(1) 3-pin XLR-F

DC Power: 3-pin to AC adapter

(provided)

Ethernet/PoE: RJ-45

## **Microphone Pre-amplifier**

Headset Mic

Impedance:  $200\Omega$  (Dynamic)

Headset Mic Voltage: 1.7V (Electret selectable)

Limiter: +23dB

The following specified for a route to four-wire output at OdBu 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)

Max Power: 5W

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

Max Gain: OdE

LS Frequency Response

(Remote Station): 180Hz – 11kHz +3dB

Distortion: <0.1% THD @ 1kHz

Noise (Remote Station): <-50dBu

#### **Main Power**

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 third party supplied Ethernet power source (PoE):

Connector: RJ-45

Conforms to PoE

standard: IEEE 802.3af-2003

Power Required: 13W

### **Environmental**

Max temperature is 40°C (104°F)

0 - 90% relative humidity

## **Dimensions**

As Wall Speaker: Fits standard ANSI/NEMA

OS 1 4-gang wall box

With S-Mount: 10.4"W x 6.9"H x 6.7"D

(265mm x 175mm x 170mm)

## Weight

1.5lbs (0.7kg)

#### 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.

