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.





Shown in optional S-Mount

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



Upward Tilt

Straight-forward Dowr

Downward Tilt

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:	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:	$\begin{array}{l} 300 \text{Hz} - 10 \text{ kHz} \pm 3 \text{dB-} \\ \text{Contoured for Intelligibility} \end{array}$	
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 0dBu in:		
Max Gain:	0dB	
LS Frequency Response (Remote Station): 180Hz – 11kHz +3dB		
Distortion:	<0.1% THD @ 1kHz	
Noise (Remote Station)	. ~-20dBu	

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):

RJ-45 Connector: Conforms to PoE standard: **Power Required:**

IEEE 802.3af-2003 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.

