

HKB-2X Speaker Station

Digital Partyline Solutions

Linking
People
Together



HKB-2X

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
- Standard US ANSI/NEMA OS-1 electrical box 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 or Core Configuration Manager

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 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 user stations using various cable types, including a single shielded twisted-pair cable. The user can select between 4 of any 24 available channels with the ability to talk and/or listen on the selected channel. The user can then listen via the integrated speaker or headset and can talk via a headset mic or push-to-talk microphone.

Operation

The HKB-2X speaker station can assign and monitor four channels of intercom over a single cable while talking on any two of the four channels at any given time. Access to channels and other functions are assignable through the main menu or the Core Configuration Manager (CCM)*. 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 program audio.

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 HKB-2X receives audio data, control data, and DC power via the same Powerline cable connection to a HMS-4X Main Station.

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.

Technical Specifications

Channels

Two intercom channels (Selectable)
Program Audio (Assignable from Main Station)

Connectors

Intercom Line: (2) 3-pin XLR-M-F

Intercom Line Pin Function:

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

Headset: 4-pin XLR-M & 2.5mm TRS jack

USB: Micro AB

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

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: 40Hz - 10kHz ±3dB

Distortion: <0.1% THD @ 1kHz

Noise: -65dBu

Headphone Limiter: 0dBu (selectable)

Power Requirements

4W DC Voltage Range: ±30-60 volts

Environmental

32° - +113°F (0 - +45°C)

90% relative humidity

Dimensions

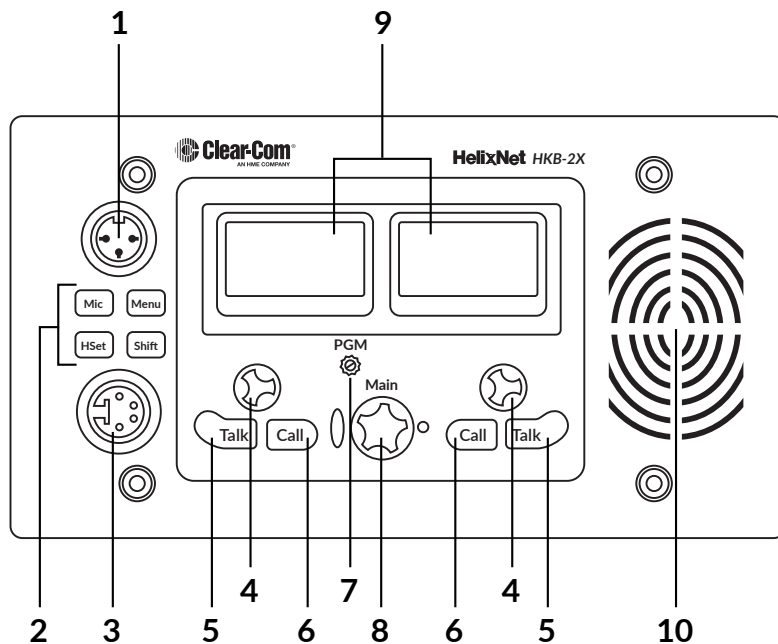
4.5 x 8.2 x 2.4 in (HxWxD)

(114 x 209 x 61 mm)

Weight

18.8 oz (0.53 kg)

HKB-2X Front



Legend

Front

1. 3-pin XLR-F microphone connector
2. Headset/Microphone key set
3. 4-pin XLR-M headset connector
4. Rotary volume controls
5. Talk keys
6. Call keys
7. Program audio level control
8. Speaker/Headphone rotary control
9. Tilt-adjustable display screens
10. Loudspeaker

Order Code

HKB-2X

Optional Enclosure (sold separately):
S-MOUNT