

# HelixNet<sup>®</sup> 2.1

# IKB-12P Industrial KB Station User Guide



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Clear-Com HelixNet Industrial KB Station User Guide

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# 1 Important safety instructions

It is important to note the following safety information.

- Read these instructions.
- Keep these instructions.
- Heed all warnings.
- Follow all instructions.
- Do not use this apparatus near water, unless it is mounted in an approved enclosure.
- Clean only with dry cloth.
- Do **not** block any ventilation openings. Install in accordance with the manufacturer's instructions.
- Do **not** install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- Only use attachments/accessories specified by the manufacturer.
- Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
- Unless the apparatus is mounted in an approved enclosure, unplug it during lightning storms.
- Unplug the apparatus when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-cord supply or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning: To reduce the risk of fire or electric shock, do not expose this product to rain or moisture unless it is mounted in an approved enclosure.

# 1.1 Safety symbols

Familiarize yourself with the safety symbols in **Figure 1: Safety symbols**. These symbols are displayed on the apparatus and warn you of the potential danger of electric shock if the system is used improperly.



#### Figure 1-1: Safety symbols

Note: Important. For compliance notices, see 9 Compliance.

# **1.2** Further information

For the latest information about HelixNet Partyline, including software updates, see:

http://www.clearcom.com/product/helixnet.

For information about **Clear-Com accessories**, including headsets and gooseneck microphones, see http://www.clearcom.com/product/accessories.

For legal and contact information, see Page 2 of this guide.



# 2 Introduction

This guide is intended to help you install, configure, and use the **HelixNet<sup>®</sup> Industrial KB Station (IKB-12P)**.

The **HelixNet Industrial KB Station** is an easy-to-use intercom station that connects to a single partyline and enables users to send and receive audio. A HelixNet Main Station (HMS-4X) connect to and controls up to 64 Industrial KB Stations, and each station is individually configured and controlled using a menu driven display and a browser-based software configuration tool. The unit can be wall mounted or placed in a dedicated desk top unit.

The user station is easily expanded to include up to 40 call buttons. Each call button is assigned a profile which determines the button's functionality.



# 3 Panels and Interfaces

# 3.1 Industrial KB Station front panel



Figure 3-1 Industrial KB Station front panel

Key to Inc	dustrial KB S	Station f	ront panel	
Feature	Description	Description		
A	Handset.	Handset. The handset contains a Push-To-Talk (PTT) button.		
В	<b>OLED display screen</b> . An OLED display that shows three horizontal lines of text. In normal operating mode the display shows:			
	• T	he User	Name	
	• T	he audic	volume	
	• T	he profile	e name. For information about profiles, see <b>5.5 Profiles</b> .	
	In Menu mode, the display shows the menu driven configuration options. If the display is in Menu mode, the display screen times out of Menu mode and reverts to normal operating mode. <i>For more information about Menu mode, see</i> <b>5.1 Using the menus</b> .			
C	Audio level rotary control/menu navigation. To increase the volume to the handset loudspeaker / headphones, turn clockwise (up to 360°). To decrease the volume, turn counter-clockwise (up to 360°).			
D	Customis	able cal	I key labels.	
	Handset s	socket (4	4-pin XLR–M)	
		Pin	Function	
	_	1	Mic ground	
		2	Mic positive	
	3 Earphone ground			
		4	Earphone positive	
			Table 3-1 : Headset socket pin out	
F	12 station	call key	ys.	
G	Audio ale	rt buzze	r	

Table 3-2 Key to Industrial KB Station front panel



# 3.2 Industrial KB Station rear panel



Figure 3-2 Industrial KB Station rear panel

For information on expanding the unit to include more call buttons, see **4.4 Installing the Industrial KB Station** 

**You can install the** Industrial KB Station in a network which has a DHCP server which automatically assigns IP addresses, or in a network where you manually assign IP addresses. It is recommended to use a DHCP server if possible.

### 3.2.1 DHCP enabled networks

To install the Industrial KB Station in a network with a DHCP server:

 Ensure that there is a HelixNet Main Station (HMS-4X) in your network and that the Main Station is set to DHCP enabled. From the Main Station menu, select Networking > Preferences > DHCP > Enabled. See the HelixNet Partyline User Guide for more information.

**Note: Enabled** is the default Main Station DHCP setting.



- 2) From a Web browser, enter the address of the Main Station.
- 3) From the Configuration Editor tool, configure a new profile for the Industrial KB Station. See **7.6 Profile Editing screen**.
- 4) Connect an Ethernet cable (cat 5 or higher) from the Ethernet connector on the rear of the Industrial KB Station (see 3.2 Industrial KB Station rear panel) to a Power over Ethernet (PoE) switch.
- 5) If your network contains only one HelixNet Main Station, the Industrial KB Station automatically pairs with the Main Station.

If there is more than one Main Station, press and hold the rotary control on the front of the KB Station for four seconds, and then select **Networking > Pair to Station > By Name**, and select the name of the required Main Station. See **5.6.1Selecting a HelixNet Main Station controller**.

6) From the KB Station menu, select **Profiles**, and select the profile that you created in step 3. See **5.5 Profiles**.

### 3.2.2 Static IP addressed networks

To install the Industrial KB Station using static IP addressing:

- 1) Ensure that there is a HelixNet Main Station (HMS-4X) in your network.
- 2) From a Web browser, enter the address of the Main Station.
- 3) From the Configuration Editor tool, configure a new profile for the Industrial KB Station. See **7.6 Profile Editing screen**.
- 4) Connect an Ethernet cable (cat 5 or higher) from the Ethernet connector on the rear of the Industrial KB Station (see 3.2 Industrial KB Station rear panel) to a Power over Ethernet (PoE) switch.
- Press and hold the rotary control on the front panel of the KB Station for four seconds, and then select Networking > Preferences > DHCP > Disable. See 5.6.2 Selecting network preferences.
- 6) From **Networking > Preferences**, set the IP Address, Gateway and Subnet mask to the required settings. See **5.6.2 Selecting network preferences**.
- 7) You must now reboot the Industrial KB Station. Select **Administration > Reboot > Reboot Now**.
- 8) If your network contains only one HelixNet Main Station, the Industrial KB Station automatically pairs with the Main Station.

If there is more than one Main Station, press and hold the rotary control on the front of the KB Station for four seconds, and then select **Networking > Pair to Station >** 

By Name, and select the name of the required Main Station. See **5.6.1Selecting a** HelixNet Main Station controller.

9) From the KB Station menu, select **Profiles**, and select the profile that you created in step 3. See **5.5 Profiles**.

Adding extra call buttons to the Industrial KB Station.

# 3.3 KB Station handset



Figure 3-3 KB Station handset HS-6 with PTT



# 4 Installing the Industrial KB Station

This chapter describes how to install your Industrial KB Station.



Do not plug any non-approved equipment into HelixNet Partyline.

HelixNet Partyline operates at different voltage levels than analog two-wire partyline systems. Do **not** plug any analog two-wire partyline equipment into the HelixNet partyline ports, as this may cause damage.

For more safety instructions, see 1 Important safety instructions.

# 4.1 System overview

Up to 64 user stations are controlled by a HelixNet Main Station using a browser-based Configuration Editor. The Main Station connects to the Industrial KB Stations over LAN and each KB Station is powered remotely using PoE (Power over Ethernet). An example of an intercom system using HelixNet Industrial KB Stations is shown below.



Figure 4-1 HelixNet Industrial KB Station overview



# 4.2 Mounting the Industrial KB Station

The Industrial KB Station can be:

- Mounted in an enclosure for desktop use
- Mounted inside a wall box.

There are four mounting holes located at each corner of the unit that enable you to fix the unit to your existing desktop or wall-hanging enclosures.

# 4.3 Connecting the Industrial KB Station

There is no power switch, button or key on the Industrial KB Station. Power is supplied over Ethernet.

- 1) Ensure that the desktop or wall-hanging enclosure is connected to the LAN.
- 2) Ensure that a handset is connected to the handset connector.
- 3) To ensure that the unit is functioning correctly, initiate a test call. You can do this:
  - a) Using the browser-based Configuration Editor. See **7.4.4 Making a test call to a station**.
  - b) From the station by simultaneously pressing call key 1 (top left) and call key 12 (bottom right).

## 4.4 Installing the Industrial KB Station

You can install the Industrial KB Station in a network which has a DHCP server which automatically assigns IP addresses, or in a network where you manually assign IP addresses. It is recommended to use a DHCP server if possible.

### 4.4.1 DHCP enabled networks

To install the Industrial KB Station in a network with a DHCP server:

4) Ensure that there is a HelixNet Main Station (HMS-4X) in your network and that the Main Station is set to DHCP enabled. From the Main Station menu, select
 Networking > Preferences > DHCP > Enabled. See the HelixNet Partyline User Guide for more information.

Note: Enabled is the default Main Station DHCP setting.

- 5) From a Web browser, enter the address of the Main Station.
- 6) From the Configuration Editor tool, configure a new profile for the Industrial KB Station. See **7.6 Profile Editing screen**.
- 7) Connect an Ethernet cable (cat 5 or higher) from the Ethernet connector on the rear of the Industrial KB Station (see 3.2 Industrial KB Station rear panel) to a Power over Ethernet (PoE) switch.



8) If your network contains only one HelixNet Main Station, the Industrial KB Station automatically pairs with the Main Station.

If there is more than one Main Station, press and hold the rotary control on the front of the KB Station for four seconds, and then select **Networking > Pair to Station > By Name**, and select the name of the required Main Station. See **5.6.1Selecting a HelixNet Main Station controller**.

9) From the KB Station menu, select **Profiles**, and select the profile that you created in step 3. See **5.5 Profiles**.

### 4.4.2 Static IP addressed networks

To install the Industrial KB Station using static IP addressing:

- 10) Ensure that there is a HelixNet Main Station (HMS-4X) in your network.
- 11) From a Web browser, enter the address of the Main Station.
- 12) From the Configuration Editor tool, configure a new profile for the Industrial KB Station. See **7.6 Profile Editing screen**.
- 13) Connect an Ethernet cable (cat 5 or higher) from the Ethernet connector on the rear of the Industrial KB Station (see 3.2 Industrial KB Station rear panel) to a Power over Ethernet (PoE) switch.
- Press and hold the rotary control on the front panel of the KB Station for four seconds, and then select Networking > Preferences > DHCP > Disable. See 5.6.2 Selecting network preferences.
- 15) From **Networking > Preferences**, set the IP Address, Gateway and Subnet mask to the required settings. See **5.6.2 Selecting network preferences**.
- 16) You must now reboot the Industrial KB Station. Select **Administration > Reboot > Reboot Now**.
- 17) If your network contains only one HelixNet Main Station, the Industrial KB Station automatically pairs with the Main Station.

If there is more than one Main Station, press and hold the rotary control on the front of the KB Station for four seconds, and then select **Networking > Pair to Station > By Name**, and select the name of the required Main Station. See **5.6.1Selecting a HelixNet Main Station controller**.

18) From the KB Station menu, select **Profiles**, and select the profile that you created in step 3. See **5.5 Profiles**.

### 4.5 Adding extra call buttons to the Industrial KB Station

You can add extra call buttons to the unit up to a total of 40. To do this:



1) Access the two phoenix expansion connectors located on the back panel of the Industrial KB Station.



2) Make the necessary connection as follows. For each extra call button connect the coresponding switch connection (SW #) to GND.



# 5 Configuring the Industrial KB Station

This chapter describes how to configure the settings and manage the Speaker Station using the display screen configuration menus. There are four menu levels.

- **Note:** You can only use the configuration menus if they are unlocked. To lock or unlock a Station's menu, see **7.3 User Stations** .
- **Note:** For information about using the PC-based Configuration Editor, see **7 Using the Configuration Editor**.

This chapter contains the following sections:

- Using the menus
- <u>Configuration settings</u>
- Configuring the Audio settings
- <u>Station Settings</u>
- Station Settings
- Networking
- <u>Administration</u>
- Diagnostics

### 5.1 Using the menus

To place the Industrial KB Station in **Menu mode**, press the **Audio level rotary control/menu navigation key** for approximately four seconds, see **3.1 Industrial KB Station front panel.** 

To exit **Menu mode**, press the Menu navigation rotary control for approximately four seconds.

**Note:** Menu mode automatically exits if there is no activity on the front panel keys or rotary controls for five seconds or longer. If this happens, the display screen returns to its normal operating configuration.

### 5.1.1 Selecting menu options

Use the menu displays as follows:

- To navigate up or down the list of menu options, turn the rotary control clockwise or counter-clockwise respectively.
- To select a menu option, or to open a list of submenu options, briefly press the rotary control.
- To return to the previous menu screen, press the rotary control for approximately 0.5 seconds.
- **Note:** When the Industrial KB Station is in normal operating mode, the rotary control adjusts the audio volume of the handset. The volume level appears on the display.



# 5.2 Configuration settings

The following menu levels appear in Menu mode:

- Audio Settings use this menu to configure audio volume and quality.
- **Station Settings** use this menu to configure the station display brightness and screensaver settings.
- **Profiles** use this menu to select a profile.
- **Networking** use this menu to configure the station's IP settings and to pair to another station.
- Administration use this menu to reboot the station or to restore the system defaults.
- **Diagnostics** use this menu to gain troubleshooting or diagnostic information.

# 5.3 **Configuring the Audio settings**

### 5.3.1 Audio settings for the headset

To configure the audio settings for the headset:

1) In **Menu mode**, select **Audio Settings** and then **Headset**.

### Adjusting the level of sidetone on the headset

Sidetone allows you to hear your handset output audio through the handset earpiece.

- 1) In the third menu, select **Sidetone Gain**.
- 2) In the fourth menu, select one of the following:
  - 0dB
  - - 6dB
  - - 12dB (default)
  - - 18dB
- 3) To enable (confirm) the selected setting, press the **rotary control**.

# Limiting the audio level delivered to the headphones (or to disable headphone limiting)

- 1) In the third menu, select **Headphone Limit**.
- 2) In the fourth menu, select one of the following:
  - Off

**Note:** For a complete list of menu options, see **9 Menu maps**.

- +6dB
- 0dB (default)
- - 6dB
- 3) To confirm the selected setting, press the **rotary control**.
  - **Note:** When **Headphone Limit** is set to anything but **Off**, a LIM indication will be shown on the leftmost display.

#### Adjusting the headphone gain

- 1) In the third menu, select **Headphone Gain**.
- 2) In the fourth menu, select one of the following:
  - +12dB
  - +9dB
  - +6dB
  - +3dB
  - 0dB (default)
  - - 6dB
- 3) To confirm the selected setting, press the **rotary control**.

### Setting (or disabling) sidetone tracking on the headset

- 1) In the third menu, select **Sidetone Control**.
- 2) In the fourth menu, select one of the following:
  - Tracking The sidetone volume will follow (track) the Main volume level.
  - Non-Tracking The sidetone volume is set to maximum.
  - **Disabled -** Sidetone is disabled.

**Note:** The default is **Tracking**.

3) To confirm the selected setting, press the **rotary control**.

### Selecting the type of microphone on the headset

1) In the third menu, select **HS Mic Type**.

Note: HS = Headset.

- 2) In the fourth menu, select either of the following types of microphone:
  - Electret (-15dB)



- Dynamic (0dB) (default)
- Dynamic (-10 dB)
- 3) To confirm the selected setting, press the **rotary control.**

### 5.3.2 Audio settings for the microphone

To configure the audio settings for the microphone:

1) In Menu mode, select Audio Settings and then Microphone.

### Selecting the Headroom

- 2) From the third menu, select **Headroom.**
- 3) From the fourth menu, select one of the following:
  - Normal (default)
  - High Reduces the analog input gain and increases the digital gain accordingly. That reduces digital clipping at the A/D converter but increases the noise floor. This setting is intended for use in environments with very high background noise.
- 4) To confirm the selected setting, press the **rotary control**.

### Enabling or disabling the Contour Filter

The Contour filter is a Clear-Com algorithm enhancing speech intelligibility, especially when whispering or talking at a low volume.

- 1) From the third menu, select **Contour Filter**
- 2) From the fourth menu, select one of the following:
  - Enabled
  - Disabled

Note: The default is **Enabled**.

3) To confirm the selected setting, press the **rotary control**.

### 5.3.3 Enabling or disabling the buzzer alert

You can configure the Industrial KB Station to sound a warning buzzer when there is incoming audio.

To configure the buzzer:

- 1) In Menu mode, select Audio Settings and then Buzzer.
- 2) From the fourth menu, select one of the following:



- Enabled
- Disabled
- **Note:** The default is **Enabled**.
- 3) To confirm the selected setting, press the **rotary control**.

# 5.4 Station Settings

# 5.4.1 Setting the Station ID

To set the Station ID:

- 1) In Menu mode, select **Station Settings** and then **Station ID**.
- 2) Enter a Station ID. You can enter up to 10 letters or numbers.
- 3) To confirm the Station ID, press the **rotary control.**

### 5.4.2 Setting the display brightness

To set the brightness of the OLED display:

- 1) In Menu mode, select **Station Settings** and then **OLED Brightness**.
- 2) From the third menu, select one of the following:
  - High
  - Medium (default)
  - Low
- 3) To confirm the selected setting, press the **rotary control.**

# 5.4.3 Setting the display call feature

You can configure the Industrial KB Station to display caller ID when an incoming call arrives. To set the display call:

- 1) In Menu mode, select Station Settings and then Display Call
- 2) From the third menu, select one of the following:
  - Enabled (default)
  - Disabled
- 3) To confirm the selected setting, press the **rotary control.**



### 5.4.4 Setting the screensaver

You can choose to enable the screensaver, and to determine what it displays.

**Tip:** To exit screensaver mode, press any key on the front panel.

To enable or disable the screensaver:

- 1) In Menu mode, select Station Settings and then Screensaver.
- 2) From the third menu, select one of the following:
  - Station ID (default)
  - Black screen
  - Disabled
- 3) To confirm the selected setting, press the **rotary control**.

### 5.5 **Profiles**

Every Industrial KB Station has a Profile. This is assigned from the Intercom Station menu. This profile determines the functionality of the call buttons on the front panel.

- **Note:** You can only define and edit the contents of any profile by using the Configuration Editor. To assign a profile to the Industrial KB Station:
  - 1) In Menu mode, select Profiles.
  - 2) From the second menu, select a profile from the available list of profiles:
  - 3) To confirm the selected setting, press the **rotary control**.

# 5.6 Networking

### 5.6.1 Selecting a HelixNet Main Station controller

Each Industrial KB Station is controlled by a HelixNet Main Station. When the Industrial KB Station is connected to network, it will detect any Main Stations on the network and display that station's ID within the Networking menu. You can select which Main Station to pair with using the **Networking** menu. You can select a Main Station by its name or by its IP address.

To select a Main Station by name:

- 1) In **Menu mode**, select **Networking**, and then **Pair to Station**.
- 2) From the third menu, select **By Name**.
- 3) From the fourth menu, select a Main Station from the list of detected Main Stations.
- 4) To confirm the selected setting, press the **rotary control**.



To select a Main Station by IP address:

- 1) In **Menu mode**, select **Networking**, and then **Pair to Station**.
- 2) From the third menu, select **By Address**.
- 3) In the fourth menu, enter a Main Station IP address.
- 4) To confirm the selected setting, press the **rotary control**.

### 5.6.2 Selecting network preferences

You can edit the following network parameters:

- DHCP
- IP address
- Gateway
- Subnet Mask
- **Note:** If DHCP is enabled, you cannot edit the IP address, gateway or subnet mask. To enable DHCP:
  - 1) In Menu mode, select Networking, and then Preferences.
  - 2) From the third menu, select **DHCP**.
  - 3) From the fourth menu, select one of the following:
    - Enabled (default)
    - Disabled
  - 4) To confirm the selected setting, press the **rotary control**.

To edit the IP address:

- 1) In **Menu mode**, select **Networking**, and then **Preferences**.
- 2) From the third menu, select **IP Address.**
- 3) In the fourth menu, enter or edit the IP address.
- 4) To confirm the selected setting, press the **rotary control**.

To edit the gateway:

1) In **Menu mode**, select **Networking**, and then **Preferences**.



- 2) From the third menu, select **Gateway.**
- 3) In the fourth menu, enter or edit the gateway address.
- 4) To confirm the selected setting, press the **rotary control**.

To edit the subnet mask:

- 1) In Menu mode, select Networking, and then Preferences.
- 2) From the third menu, select **Subnet Mask.**
- 3) In the fourth menu, enter or edit the subnet mask.
- 4) To confirm the selected setting, press the **rotary control**.

# 5.7 Administration

### 5.7.1 Viewing the current versions of the software

To view the current version of the software:

1) In Menu mode, select **Administration > Software** 

### 5.7.2 Resetting the system defaults

To reset the Industrial KB Station to its default (factory mode) settings:

- 1) In Menu mode, select Administration and then Reset To Default.
- 2) In the third menu select: **Reset Now**.
- 3) To confirm the selected setting, press the **rotary control**.

### 5.7.3 Manually rebooting the Industrial KB Station

To manually reboot the Industrial KB Station:

- 1) In **Menu mode**, select **Administration** and then **Reboot**.
- 2) In the third menu, select **Reboot Now**.
- 3) To confirm the selected setting, press the **rotary control**.

# 5.8 Diagnostics

### 5.8.1 Viewing Ethernet information

### 1) In Menu mode, select Diagnostics and then Ethernet.

The third menu displays the following information:

- Status The status of the Ethernet
- IP Addr The IP address of the Industrial KB Station
- IP Mask The subnet mask of the Industrial KB Stations
- MAC The MAC address of the Industrial KB Station.

### 5.8.2 Viewing keysets information

To view information about the keyset:

### 1) In Menu mode, select Diagnostics and then Keyset.

The third menu displays the following information:

- Name The name of the Industrial KB Station
- Talkers The number of talkers on the partyline
- **Devices –** The number of Industrial KB Stations listening
- Main Stations The number of Main Stations listening.
- 2-Wire The number of 2-wire ports listening
- 4-Wire The number of 4-wire ports listening

### 5.8.3 Viewing main PCB information

To view information about the main PCB on the Industrial KB Station

### 1) In Menu mode, select Diagnostics and then Main PCB.

The third menu displays the following information:

- **Part –** The part number of the main PCB
- Revision The revision number of the main PCB
- Serial The serial number of the main PCB

# 6 Using the Industrial KB Station

This chapter describes how to use the Industrial KB Station.

# 6.1 Using the handset (HS-6)

Ensure that the handset (HS-6) is connected to the station using the 4-pin XLR connector. For more information, see **3.1 Industrial KB Station front panel**.

### 6.1.1 Making an outgoing call to other intercom users:

- 1) Lift the handset from its cradle
- 2) Press and hold one of the **Talk keys**. The call is routed to all Industrial KB Stations whose profile is assigned to the key

**Note:** To program the **Talk keys** and edit profiles use the Configuration Editor.

- 3) When you receive a reply, press the **Push-To-Talk (PTT)** button on the handset and speak into the microphone. See Figure 3-3 KB Station handset HS-6 with PTT.
- 4) When the call is finished, replace the handset onto the cradle.
- **Note:** The Intercom Station has infra-red sensors that detect when the handset is replaced on its cradle after a call. The Configuration Editor uses this information to determine the status of the Intercom Station. For more information, see **7.4.1 Viewing status information**.

### 6.1.2 Answering an incoming call

If there is an incoming call the OLED display will indicate this. If there is more than one incoming call, the OLED display cycles through the caller IDs. If the buzzer is enabled, you will also receive an audible notification. To answer the call:

- 1) Lift the handset from its cradle and press the **Push-To-Talk (PTT)** button on the handset. See **Figure 3-3 KB Station handset HS-6 with** PTT.
- 2) Replace the handset when the call is over.
- **Note:** The Intercom Station has infra-red sensors that detect when the handset is replaced on its cradle after a call. For more information, see **7.4.1 Viewing status information**.

### 6.1.3 Adjusting the volume level:

Adjust the volume of all incoming audio by turning the rotary control located below the OLED display.

To increase the volume level, turn the **rotary control** clockwise. To decrease the volume level, turn the **rotary control** counter-clockwise.



# 7 Using the Configuration Editor

The Configuration Editor is a software tool that you can download to your configuration PC browser. It offer a quick and easy way to configure HelixNet 2.1. This chapter contains the following sections:

- Introduction
- Accessing the Configuration Editor
- User Stations screen
- Station Details screen
- Profiles screen
- Profile Editing screen
- Change Password screen

### 7.1 Introduction

The HelixNet Configuration Editor is a browser-based software tool that enables you to view and manage the HelixNet 2.1 Industrial KB Stations that are present in your HelixNet.2.1 configuration. The Configuration Editor contains five main screens:

- The **User Stations screen**. Use this screen to view a synopsis of the stations present in your configuration, and the status of each station.
- The **Station Details screen**. Use this screen to view more information about a station and to change menu lock status. You can also trigger a test call.
- The **Profiles screen**. Use this screen to manage the profiles in your configuration. You can add, delete, back up and restore profiles.
- The **Profile Editing screen**. Use this screen to edit profiles. This allow you to determine the call key functionality of each station in your configuration.
- The **Change Password screen**. Use this screen to change the password used to log into the Configuration Editor.

Each of these screens contains a navigation bar at the top:



Figure 7-1 Navigation bar

The navigation bar shows the name of the HelixNet Main Station that is the controller for the Industrial KB Stations. You can navigate between screens using the menu buttons. The

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current page is highlighted. Clicking on the Clear-Com logo opens the Clear-Com website home page, www.clearcom.com.

# 7.2 Accessing the Configuration Editor

To access the Configuration Editor, enter the IP address of the HelixNet Main Station that is acting as the HelixNet 2.1 controller into an internet browser address field. You can use any of the following browsers:

- Microsoft internet Explorer, version 10 and later
- Mozilla Firefox, version 33 and later
- Google Chrome, version 34 and later

# 7.3 User Stations screen

When you open the Configuration Editor, the **User Stations** page displays. This shows a graphical representation of all the Industrial KB Stations present in your configuration.

**Note:** This page is refreshed every 10 seconds to ensure that the information is up to date.



#### Figure 7-2 User Stations

Each station is represented as an icon with the following information:

- Station name. A descriptive name for the station. To edit the station name, see 7.4.2 Renaming a station.
- **Profile**. The profile that is assigned to the station. This determines the station's call key functionality.
- IP address. The current IP address of the station.
- **Online status**. This icon indicates that the station is online (green arrow) or offline (red cross).
  - **Note:** If a station is offline, click the offline status icon to remove the station from the screen.



• Handset status. This icon indicates that the handset is onhook (white icon) or off hook (red icon).

# 7.4 Station Details screen

To access more detailed information about any station, click the required station on the **User Stations** page. The following screen appears.

Status Online   Handset On-Hook   Profile Profile 1   Menu Unlocked   Call Status Not Calling   1 Profile 3   2 Profile 3	Connected	to: Helix-d02b009		Profiles	x
Handset C On-Hook Profile Profile 1 Menu Unlocked Call Status Not Calling 1 Profile 2 Profile 3 2 Profile 3	Statio	on A			
	Handset Profile Menu Call Status	C On-Hook Profile 1 Unlocked Not Calling Profile 2 Profile	3	Test (	

Figure 7-3 Station Details

From this screen you can:

- View status information about the station
- Rename the station
- Lock or unlock the station's menu
- Make a test call to a station

### 7.4.1 Viewing status information

You can view the following status information:

- Online status (online of offline)
- Handset status (onhook or offhook)
- Menu lock status (locked or unlocked)
- Call status (calling or not calling)
- Call key profiles. This shows what profiles are assigned to each key. For more information about profiles, see **5.5 Profiles**.

### 7.4.2 Renaming a station

To rename a station, select the station name in the top left of the screen and edit it as required.

### 7.4.3 Locking or unlocking a station's menu

Before a station can be configured using its display panel, the station's menu must be unlocked. Alternatively, you can lock the menu to prevent user's reconfiguring the station.

To lock or unlock the menu:

• Click the Menu icon. The icon toggles between Locked and Unlocked.

### 7.4.4 Making a test call to a station

You can trigger a test call to a station to ensure that the station is connected properly and can receive and send audio.

To trigger a test call:

• Click the Test Call button in the top right of the screen.

### 7.4.5 Viewing Call key profiles

The Station Details screen list the station's call keys. For each call key, all the associated profiles are listed. To manage or edit station profiles, see **7.6 Profile Editing screen**.

### 7.5 **Profiles screen**

The **Profiles** screen allows you to manage the profiles in your configuration. To access the **Profiles** screen, select **Profiles** from the navigation bar.

Connected to: Helix-d02b0098	Clear-Com	User Stations	Profiles	×
Profiles				
add new profile here	Delete Backup Restore			
Profile 1 Stations: 1	Profile 2 Profile 2 Stations: 0 Station	te 3 tions: 0		
Profile 4 Stations: 0	Profile 5 Stations: 0			

Figure 7-4 Profiles screen



From the Profiles screen you can:

- View the stations allocated to each profile. To edit this information, see **7.6 Profile** Editing screen.
- Add or delete profiles
- Create a profiles database backup
- Restore a previous profile backup
- Access the **Profiles Editing** screen. Click on any profile to enter the **Profile Editing** screen.

### 7.5.1 Adding and deleting profiles

To add a new profile to your configuration:

• Enter the profile name in the top left edit field, and then click +.

To delete a profile from your configuration:

- 1) Click **Delete**. The screen now changes to **Delete** mode.
- 2) Click the **Delete** button on the profile that you wish to delete.

### 7.5.2 Creating a profile database backup

To create a profile database backup:

• Click **Backup**, and navigate to the preferred backup location.

### 7.5.3 Restoring a profiles backup

To restore a previously created backup:

• Click **Restore**, and navigate to the location of the backup.

### 7.6 **Profile Editing screen**

The **Profile Editing** screen allows you to edit the profiles in your configuration. To access the **Profile Editing** screen, click on the required Profile in the **Profiles** screen.

Connected to: Helix-d02b0098		User Stations	Profiles	۶
Profile 1				
1 Profile 2 Profile 3 Profile 3	+			
3 + 4 Profile 2 • Profile 3	•			
5 Profile 2 +				
7 <b>+</b> 8 <b>+</b>				

Figure 7-5 Profile Editing screen

From the **Profile Editing** screen you can:

- View a list of station **Call** keys, and see which profiles are associated with each **Call** key.
- Rename a profile
- Add profiles to a **Call** key
- Remove profiles from a Call key

### 7.6.1 Renaming a profile

To rename a profile:

• Click the profile name at the top left of the screen and edit it as required.

### 7.6.2 Adding a profile

To add a profile to a key:

- 1) For the required key, click +.
- 2) Select the required profile.

### 7.6.3 Removing a profile

To remove a profile from a key:

• For the required key profile, click the delete icon  $\Theta$ 

# 7.7 Change Password screen

To access the Change Password screen, select

Connected to: Helix-d02b0098		Clear-Com <sup>®</sup>	User Stations	Profiles	×
Password	l				
Old Password	old password				
New Password	new password				
Confirm New Password					
	Change Password				

Figure 7-6 Change Password screen

To change your password:

- 1) In the **Old Password** edit field, enter your current password.
- 2) In the **New Password** edit field, enter your new password.
- 3) In the **Confirm New Password** edit field, re-enter your new password
- 4) Click **Change Password**.

# 8 Specifications

# 8.1 Industrial KB Station (IKB-12P)

### 8.1.1 Connectors

Specification	Description / value
Handset	One 4-pin male XLR.
Ethernet/Power over Ethernet	RJ-45

Table 8-1: Station: Connectors

# 8.1.2 Microphone pre-amplifier

Specification	Description / value
Handset Mic impedance:	200 Ω (Dynamic)
Mic limiter range	>35 dB
Mic gain	60dB (dynamic)
Frequency response	400 Hz – 8 kHz + / -3dB (contoured for intelligibility)
Distortion	<0.5% THD @ 1 kHz
Noise-	<-55dBu dynamic

 Table 8-2: Station: Microphone pre-amplifier

# 8.1.3 Earphone amplifier

Specification	Description / value
Load impedance	>32 Ω
Output level	+12dBu before clipping
Sidetone	-6dB (selectable)
The following specified for a route from a 4-wire input @0dBu in:	
Max gain	12dB
Noise	<-65dBu (@ max gain)
Headphone limiter	-0dBu (selectable)

#### Table 8-3: Station: Headphone amplifier

### 8.1.4 Ethernet

Specification	Description / value
Fast Ethernet standard	100BaseT only, Auto MDIX

#### Table 8-4: Station: Ethernet

### 8.1.5 **Power requirements**

Specification	Description / value
Power requirements	5W
DC Voltage range	30 – 60Volts

#### Table 8-5: Station: Power requirements

### 8.1.6 Environmental

Specification	Description / value
Temperature	-10°C to +55°C (-14 to 131°F)
Humidity	0 - 95% relative humidity

#### Table 8-6: Station: Environmental



# 9 Menu maps

# **IKB-12P Industrial KB Station menu map**

Menu 1 (First) >	Menu 2 >	Menu 3>	Menu 4 (Last )
Audio Settings	Headset	Sidetone Gain	Range: 0dB to -18dB
			Default: -12db
		Headphone Limit	Off + Range: +6dB to -6dB
		Default: 0db	
		Headphone Gain	Range: 0 to +12dB
			Default: 0dB
		Sidetone Control	Tracking
			Non-Tracking
			Disabled
			Default: Tracking
		НЅ Міс Туре	Electret (-15dB)
Microphone			Dynamic (0 dB)
			Dynamic (-10 dB)
			Default: Dynamic (0 dB)
	Microphone	Headroom	Normal
			High
			Default: Normal



Menu 1 (First) >	Menu 2 >	Menu 3>	Menu 4 (Last )
		Contour Filter	Enabled Disabled
			Default: Enabled
	Buzzer	Enabled	None
		Disabled	
		Default: Enabled	
Station Settings	Station ID	Station ID entry	
		Alphanumeric entry	None
	OLED Brightness	High	
		Medium	Nega
		Low	None
		Default: Medium	
	Display Call	Enabled	
		Disabled	
		Default: Enabled	
	Screensaver	Station ID	None
		Black Screen	
		Disabled	
		Default: Station ID	
Profiles	None	None	None

Menu 1 (First) >	Menu 2 >	Menu 3>	Menu 4 (Last )
	Profile_1		
	Profile_2		
Network	Pair to Station	By Name By Address	Station IDs IP address: xx.xx.xx where x is a numeric value
	Preferences	DHCP	Enabled Disabled Default: Enabled
		IP Address Gateway	IP address: xx.xx.xx where x is a numeric value IP address: xx.xx.xx where x is a numeric value
		Subnet Mask	IP address: xx.xx.xx where x is a numeric value
Administration	Software	Software system version	None
	Reset To Default	Reset now	
	Reboot	Reboot now	
Diagnostics	Ethernet	Status	
		IP Address	
		IP Mask	
		MAC	

Menu 1 (First) >	Menu 2 >	Menu 3>	Menu 4 (Last )
	Keyset	Name: Industrial KB Station name Talkers: Number of talkers Devices: Number of Industrial KB Stations listening on party line Main Stations: Number of Main Stations listening 2-Wire: Number of 2-Wire ports listening 4-Wire: Number of 4-Wire ports listening	

# 10 Compliance

### FCC notice

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by Clear-Com, LLC, an HM Electronics, Inc. company could void the user's authority to operate this equipment.

### Industry Canada Compliance Statement

This Class[A] digital device complies with Canadian ICES-003.

### Avis de conformité à la réglementation d'Industrie Canada

Cet appareil numérique de la class[\*] est conforme à la norme NMB-003 du Canada.

### This equipment complies with the following specifications:

EN55022 Emissions

EN55024 Immunity

Electromagnetic Compatibility Directive 2004/108/EC

Low Voltage Directive 2006/95/EC

### Warning:

This is a Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### This equipment complies with the following specifications:

UL 60065-7

CAN/CSA-C22.2 No.60065-3

IEC 60065-7

Waste Electrical And Electronic Equipment (WEEE)



The European Union (EU) WEEE Directive (2002/96/EC) places an obligation on producers (manufacturers, distributors and/or retailers) to take-back electronic products at the end of their useful life. The WEEE Directive covers most Clear-Com products being sold into the EU as of August 13, 2005. Manufacturers, distributors and retailers are obliged to finance the costs of recovery from municipal collection points, reuse, and recycling of specified percentages per the WEEE requirements.

#### Instructions for Disposal of WEEE by Users in the European Union

The symbol shown below is on the product or on its packaging which indicates that this product was put on the market after August 13, 2005 and must not be disposed of with other waste. Instead, it is the user's responsibility to dispose of the user's waste equipment by handing it over to a designated collection point for the recycling of WEEE. The separate collection and recycling of waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local authority, your household waste disposal service or the seller from whom you purchased the product.



Figure 10-1: WEEE Symbol