GAI-TRONICS®
A HUBBELL COMPANY

HUBBCOM™
Device Configuration Guide

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Confidentiality Notice

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General Information

HUBBCOM™ devices are multi-functional; supplying intercom, public address, telephone, video, access control, and webpage portal capabilities. This manual provides information to configure HUBBCOM devices to perform the desired function(s) using the GUDA (GAI-Tronics Universal Device Application) software.

The software is available for free-down load at: https://www.hubbell.com/gai-tronics/en/guda-universal-device-application. Refer to GAI-Tronics Pub. 42004-531 for GUDA software user instructions.

Configuration Tree Structure

Access a HUBBCOM device using the GUDA software to display the HUBBCOM device's configuration parameters in a tree structure (see Figure 1). Select the nodes in the tree to display and edit the parameters required to configure each desired feature. Modify the parameters on the screens in the tree to configure the HUBBCOM device for its intended purpose.

This document explains each screen in the GUDA and the associated parameters for HUBBCOM devices. Default values for parameters have a **bold** font in the tables. HUBBCOM features vary by model number, so some screens may not apply to the current HUBBCOM device. Screens in the GUDA do not display for features not present in the configuration of the current HUBBCOM.

The root level of the configuration tree for a HUBBCOM device in the GUDA is the UNIT level (see Figure 2). The UNIT level of the configuration tree includes sub nodes for the required functions and available features of the connected HUBBCOM device; NETWORK, INTERCOM, PHONE, MONITORING, EXTERNALLY TRIGGERED CALLING, ACTIVATION, and DEMO.
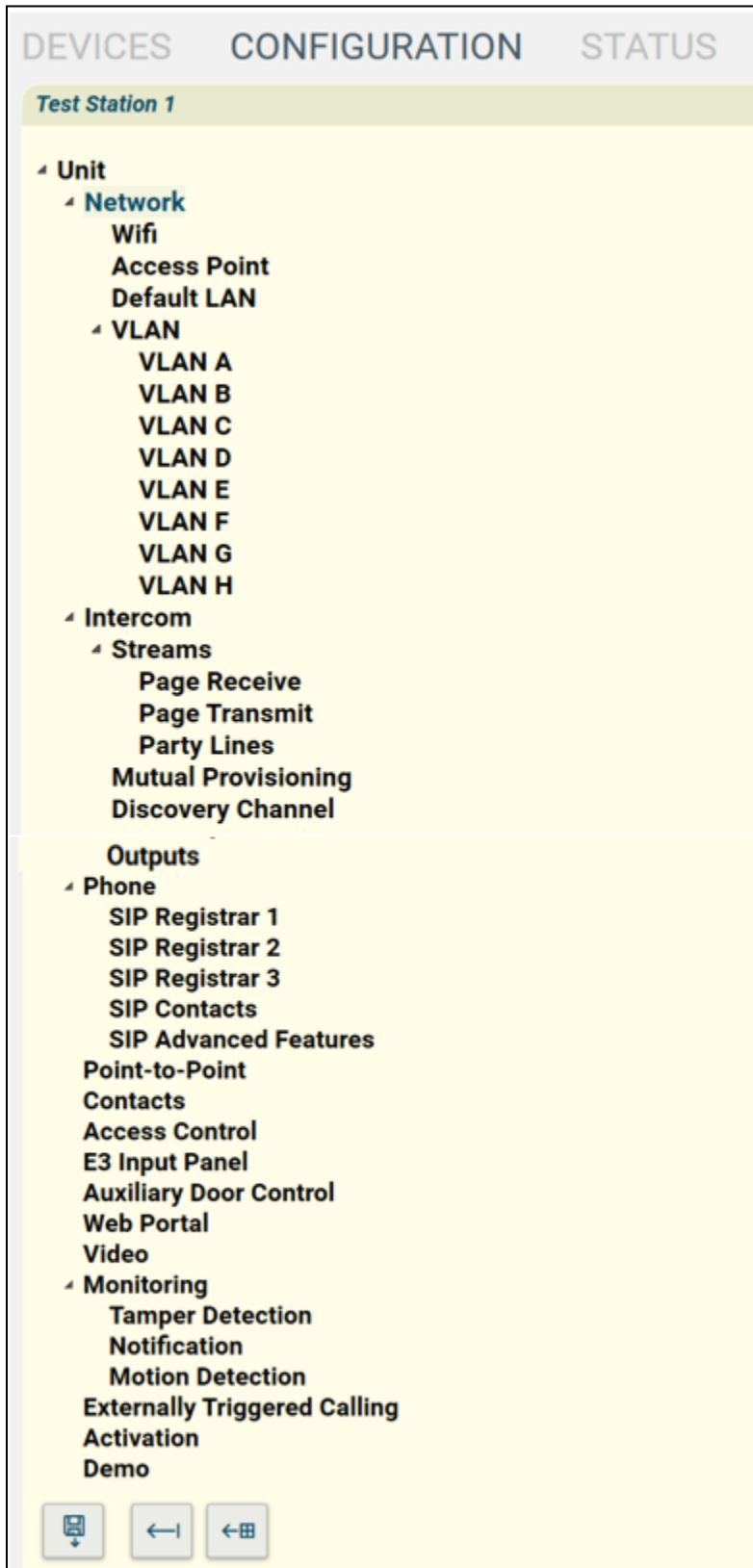
Figure 1. HUBBCOM Device Configuration Tree

Unit Screen

Unit

Model	GSC1100
Device Name	HUBBCOM-F8-DC-7A-1C-6F-39
Entry Station	No
Home Mode	Intercom
Number of Lines	4
Show Clock	No
External Speaker	Yes
Orientation	Auto
Brightness	High
Screen Saver On	No
Screen Saver Delay	60
Activity Detect Contact	None
Contact Active Times	*Start Time:* Select a time *End Time:* Select a time
Contact Active Times	*Start Time:* Select a time *End Time:* Select a time
Contact Active Times	*Start Time:* Select a time *End Time:* Select a time
Contact Active Times	*Start Time:* Select a time *End Time:* Select a time
Ring Tone	US Standard
Ringer Volume	5
Handset Volume	0
Handsfree Volume	0
Handsfree Mic Gain	0
Local Page Volume	0
External Speaker Volume	-9
Local Settings Enabled	Yes
Allow Demo Mode	No
Allow Factory Reset	No

LOGOUT   ADMIN   APPLY

Figure 2. Unit Screen

Use the UNIT parameters screen (see Figure 2) to configure the device hardware and top level functionality of the HUBBCOM device. The UNIT configuration screen contains the following parameters:

Table 1. Unit Configuration Parameters

Field Name	Description	Valid Settings
Model	This read-only field displays the model number of the currently connected HUBBCOM device.	HUBBCOM model number
Device Name	A user-friendly recognizable name of the HUBBCOM device.	Alpha numeric entry. The hyphen (-) is the only special character allowed. Default: **HUBBCOM-[MAC ADDRESS]**
Entry Station	*Applicable to*: Telephone functions. When set to YES, the HUBBCOM screen will display the ***Contact List—Favorites*** **NOTE:** Populate the ***Contact List—Favorites*** before configuring this station as an entry station. Once set as an entry station, the contact list is not accessible from the HUBBCOM screen. • *Two-way video*: allows both parties to view each other during the call. • *One-way video*: allows the called party to view the caller, but the caller cannot view the called party.	• **No** • Yes—two-way video • Yes—one-way video
Home Mode	Sets the HUBBCOM function to display upon start up. Options available depend on the model number. **NOTE:** The home screen is not available when configuring the station as an entry station. **NOTE:** Change this setting on the touch screen display under the SETTINGS/DEVICE tab.	• Intercom • Phone • Access Control • Web portal • **None**
Number of Lines	*Applicable to*: Telephone functions. Sets the number of simultaneous telephone connections the device can service.	1–**4**
Show Clock	Displays the date and time at the top left corner of all user screens	Yes/**No**
External Speaker	Enables the speaker amplifier to power an external loudspeaker connected to the speaker terminals on the rear of the HUBBCOM device.	Yes/**No**
Orientation	Defines the touch screen display orientation.	• **Auto** • Portrait (Right) • Portrait (Left) • Landscape (Normal) • Landscape (Inverted)

Field Name	Description	Valid Settings
Brightness	Sets the brightness of the touch screen display. **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	• **High** • Mid • Low
Screen Saver	Enable or disable the screen saver. **NOTE:** When the screen saver is active, the screen turns OFF resulting in a black screen. Motion detection by the camera or touching the screen turns the screen ON, restoring the previous image.	Yes/**No**
Screen Saver Delay	The time in seconds before the screen saver starts.	[15–3600] in 5-second steps (default: **60 s**)
Activity Detect Contact	Selects one of four available outputs to follow the unit's active state. The contact is active when the unit is active and deactivates when the screen saver starts. **NOTE:** Local outputs one and two are solid state relay contacts capable of switching 0.4A at 60 V max. Outputs are on the rear panel of the HUBBCOM. **NOTE:** USB 1 and 2 require connection to an external I/O board via the USB port on the rear panel of the HUBBCOM.	• **None** • Local Out 1 • Local Out 2 • USB Out 1 • USB Out 2
Contact Active Times	During the set time periods, the output contact deenergizes when the screen saver is active. There are four individual time-of-day periods.	Start Time–End Time (12:00 AM–12:00 PM)
Ring Tone	Front panel speaker audio tone for incoming phone call notification. **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	• **US Standard** • double low • double high • double low high • double high low • long-short low • short-long low • long-short high • short-long high • low • low double • mid • mid double • high • high double • highest • highest double

Field Name	Description	Valid Settings
Ringer Volume	Front panel speaker volume level for the *Ring Tone*. **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	Low 1–6 High
Handset Volume	Volume of the handset receiver. **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	−12 thru +12 Default: **0**
Handsfree Volume	Front panel speaker volume during handsfree phone calls. **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	−12 thru +12 Default: **0**
Handsfree Mic Gain	Sensitivity of the front panel microphone **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	−12 thru +12 Default: **0**
Local Page Volume	Volume of the front panel speaker during intercom paging. **NOTE:** Configurable on the touch screen display on the SETTINGS/DEVICE tab.	−12 thru +12 Default: **0**
External Speaker Volume	External speaker volume during intercom paging.	0–36, Default: **24**
Local Settings Enabled	Makes the SETTINGS button visible on the HUBBCOM main menu screen	Yes**No**
Allow Demo Mode	Makes the DEMO MODE button visible on the HUBBCOM main menu screen	Yes**No**
Allow Factory Reset	Makes the FACTORY RESET button visible on the HUBBCOM SETTINGS/DEVICE screen.	Yes**No**

Network Node

The NETWORK node has sub nodes for Ethernet IP network operation. The sub nodes include WIFI, ACCESS POINT, DEFAULT LAN, and VLAN.

Figure 3. Network Parameters Screen

Configure the following parameters on the NETWORK parameter screen:

Table 2. Network Parameters

Field Name	Description	Valid Settings
Network Mode	Defines how the station connects to the network or if it is acting as a wireless access point. **Wired**—Ethernet jack is in use as hardwired connection to the network. **Wireless**—WiFi adapter is in use for wireless connection to the network **Wire +AP**—Ethernet jack is in use for hardwired connection to the network and the Wi-Fi adapter is an access point for other Wi-Fi users.	• Wired • Wireless • Wired +AP
Hostname	A unique name to identify each station on the network.	Use a maximum of 32 characters consisting of *a–z*, *0–9* and -. The default hostname is assigned using the station's mac address.
Use IGMP Snooping	Enables or disables IGMP on the HUBBCOM switch port. This is the process of listening to IGMP network traffic to control delivery of IP multicasts.	**No**\Yes
NTP Server	IP address of the network time protocol server.	The NTP Server's IP address in IPv4 format.

Network—Default LAN

Figure 4. Network Configuration Screen

Table 3. Default LAN Parameters

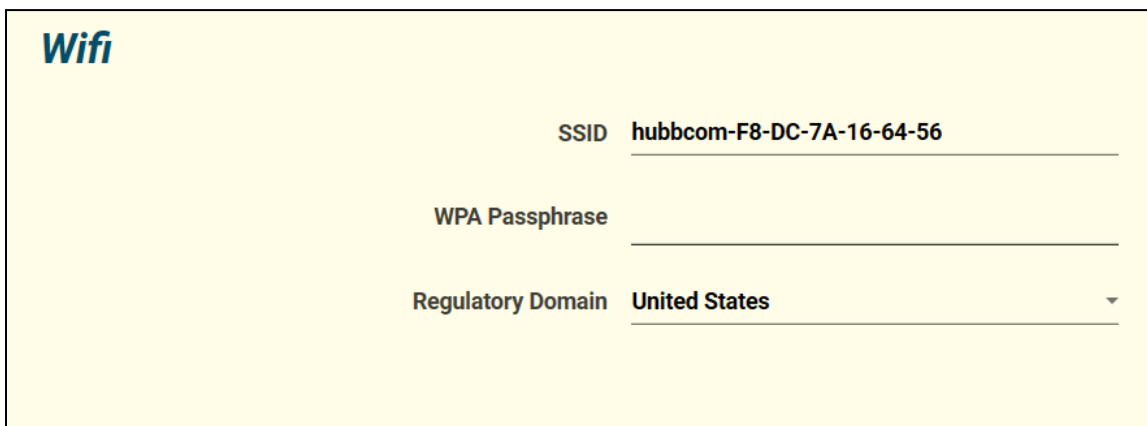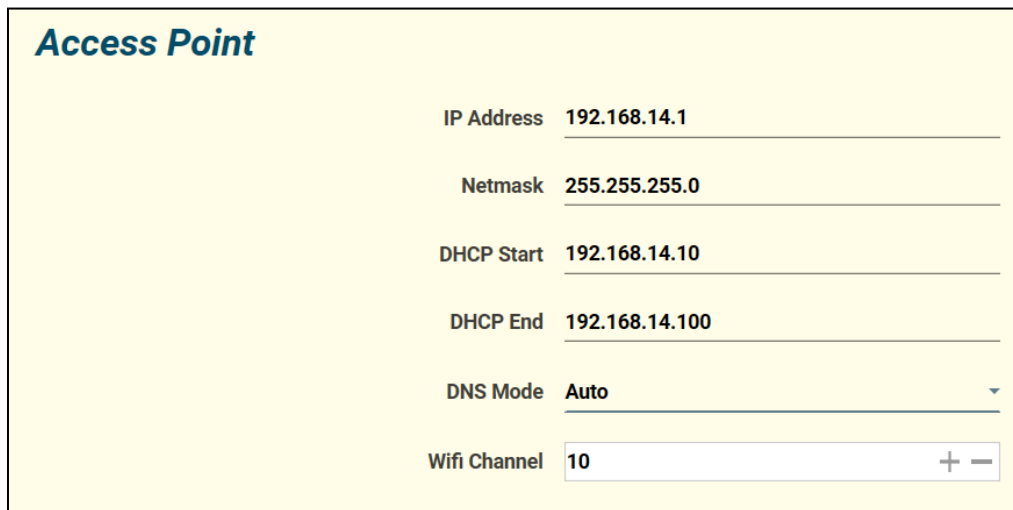| Field Name	Description	Valid Settings
Address Mode	Defines how the station acquires its IP Address.	- Static—Manually enter the IP address, subnet mask, and default gateway. **DHCP**— a DHCP server assigns the IP address, subnet mask, and default gateway.
IP Address	The station's IP address.	valid IPv4 address
Netmask	The network subnet mask.	valid IPv4 subnet mask
Default Gateway	The network default gateway IP address	valid IPv4 router address
Broadcast Address	Not Used	N/A
DNS	IP address of the primary domain name server IP address	valid IPv4 DNS server address

Network—WiFi

Figure 5. Wireless Network Screen

Table 4. WiFi Parameters

Field Name	Description	Valid Settings
SSID	The name of the Wi-Fi network that the HUBBCOM connects to.	As defined by the Wi-Fi network administrator.
WPA Passphrase	The password to connect to the SSID wireless network.	The passphrase may either be a string of 64 hexadecimal digits, or word/phrase of 8-63 ASCII characters.
Regulatory Domain	The set of laws or policies that regulate a WLAN based on its location. There are governing bodies in many countries around the world.	• **United States** • Global • Australia • Brazil • Canada • China • France • Israel • India • Japan • Korea • Mexico • Qatar • Saudi Arabia • UK

Network—Access Point

The access point feature projects a Wi-Fi signal to the area surrounding the HUBBCOM device. Local wireless devices connect to the HUBBCOM wired network via the access point.

Figure 6. Access Point Screen

Table 5. Access Point Parameters

Field Name	Description	Valid Settings
IP Address	IP address of the HUBBCOM wireless access point.	Enter the IP address in IPv4 format.
Netmask	The subnet mask of the HUBBCOM wireless access point.	Enter the subnet mask in IPv4 format.
The HUBBCOM automatically assigns an IP address to each wireless device that connects to the access point. Define the IP address range by setting the DHCP START and DHCP END parameters. The wireless devices receive IP addresses between the start and end addresses.		
DHCP Start	Enter the first IP address of the DHCP pool.	Enter the IP address in IPv4 format.
DHCP End	Enter the last IP address of the DHCP pool.	Enter the IP address in IPv4 format.
DNS Mode	Wireless devices automatically receive DNS (Domain Name Server) assignment.	• Select **Auto** • Select Manual
WiFi Channel	A WiFi channel is a subdivision of the WiFi frequency band. Each channel allows wireless devices to send and receive data. The HUBBCOM access point operates in the 2.4 GHz band which has 11 channels.	Set using (−) (+) buttons or enter a number: 1–11.

VLAN
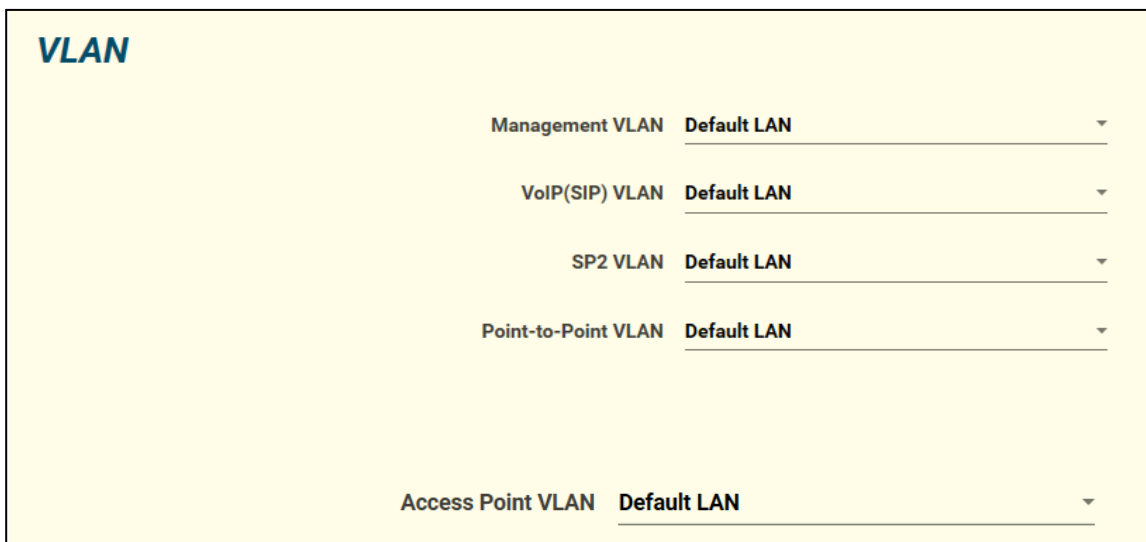
Figure 7. VLAN Screen

Table 6. VLAN Parameters

Field Name	Description	Valid Settings
Management VLAN	VLAN assigned to traffic when the HUBBCOM is communicating with GUDA software.	VLAN A–H
VoIP (SIP) VLAN	VLAN assigned to SIP traffic when the HUBBCOM device is operating in telephone mode.	VLAN A–H
Access Point VLAN	VLAN assigned to WiFi traffic when the HUBBCOM device is operating as an access point.	VLAN A–H
SP2 VLAN	VLAN assigned to *paging and party line* traffic when the HUBBCOM device is operating intercom mode.	VLAN A–H
Point-to-Point VLAN	VLAN assigned to audio and video traffic when one HUBBCOM device is in point to point communication with another HUBBCOM device.	VLAN A–H

VLAN A-H

Set parameters for each VLAN A–H separately.
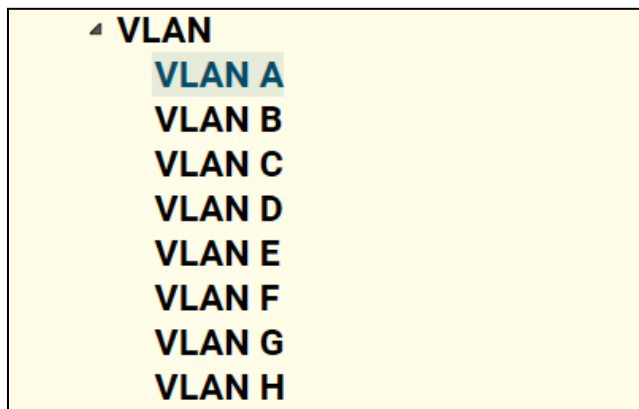

Figure 8. VLAN Subtree

Figure 9. VLAN A–H Screens
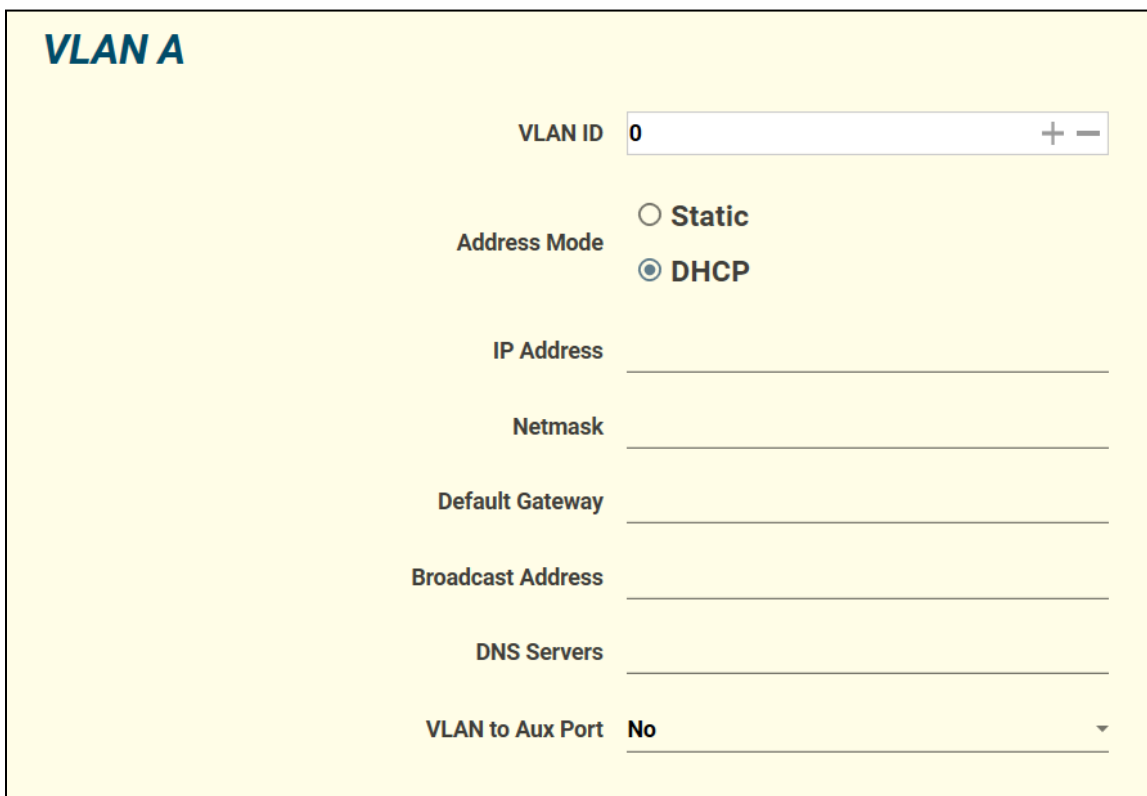
Table 7. VLAN A–H Parameters

Field Name	Description	Valid Settings
VLAN ID	Assigns traffic from this station to the specified VLAN number.	Use the (−) (+) buttons to adjust the value or enter a number.

Field Name	Description	Valid Settings
Address Mode	Defines how the station acquires its IP address.	• Static—Manually enter the IP address, subnet mask, and default gateway. • **DHCP**— a DHCP server assigns the IP address, subnet mask, and default gateway.
IP Address	The station's IP address.	Enter the IPv4 IP address.
Netmask	The network subnet mask.	Enter the IPv4 subnet mask.
Default Gateway	The network default gateway IP address.	Enter the IPv4 gateway IP address.
Broadcast Address	not used	**N/A**
DNS Servers	The primary domain name system server's IP address.	Enter the IPv4 IP address.
VLAN to Aux Port	VLAN traffic routes to the second Ethernet port (non-POE port) on the HUBBCOM	Yes/**No**

Intercom Screen

Figure 10. Intercom Screen

Table 8. Intercom Parameters

Field Name	Description	Valid Settings
Config Mode	Defines how a station will acquire its configuration parameters on boot-up. A configuration file contains information for all intercom functions.	• **Mutual**—Acquire a configuration file from a designated master station on the network. • Standard—On Boot-up, load the locally stored configuration settings.
SP2 Group	Identifies the group number of the station. Stations within the same group may use common intercom parameters.	**0**–F
SP2 ID	Identifies the ID number of the station. Each station in the same group must have a unique ID number. Assign unique intercom parameters to each station ID.	**00**–FF
Page A Name	A descriptive label for zone one's selection pushbutton on the intercom screen.	Enter text up to 20 characters. Default: **Zone 1**
Page B Name	A descriptive label for the 2nd zone's selection pushbutton on the intercom screen.	Enter text up to 20 characters. Default: **Zone 2**
Page C Name	A descriptive label for the 3rd zone's selection pushbutton on the intercom screen.	Enter text up to 20 characters. Default: **Zone 3**
Page D Name	A descriptive label for the 4th zone's selection pushbutton on the intercom screen.	Enter text up to 20 characters. Default: **Zone 4**
Page E Name	A descriptive label for the 5th zone's selection pushbutton on the intercom screen.	Enter text up to 20 characters. Default: **Zone 5**

Streams

Figure 11. Audio Streams Screen

Table 9. Audio Streaming Parameters

Field Name	Description	Valid Settings
Audio TTL	Defines the time to live (router hops) of the multicast audio packets.	Set using (−) (+) buttons or enter a number. Default: **8**
Page Timeout	Limits the amount of time (in minutes) that the station can generate a page while in the Intercom mode.	Set using (−) (+) buttons or enter a number. Disable timeout: 0 Default: **2 min**
Party Timeout	Limits the amount of time (in minutes) that the station handset can be off hook while in the Intercom mode.	Set using (-) (+) buttons or enter a number Disable timeout: 0 Default: **8 min**

Field Name	Description	Valid Settings
Speaker Mute	Mutes the local speaker(s) when paging from this station.	• Yes—mute the Audio at the local speaker(s) while the station is paging. • **No**—All Page RX audio is broadcast from the local speaker(s) while the station is paging.
Mutual Mute 1–6	The station speaker will NOT broadcast audio from any stations listed in the MUTUAL MUTE 1-6 list	Enter the last four octets of the station MAC address.

Page Receive

Page Receive

Page 1 RX Socket	239.1.1.1:50002
Page 2 RX Socket	239.1.1.2:50002
Page 3 RX Socket	239.1.1.3:50002
Page 4 RX Socket	239.1.1.4:50002
Page 5 RX Socket	239.1.1.5:50002
Page 6 RX Socket	0.0.0.0:0
Page 7 RX Socket	0.0.0.0:0
Page 8 RX Socket	0.0.0.0:0
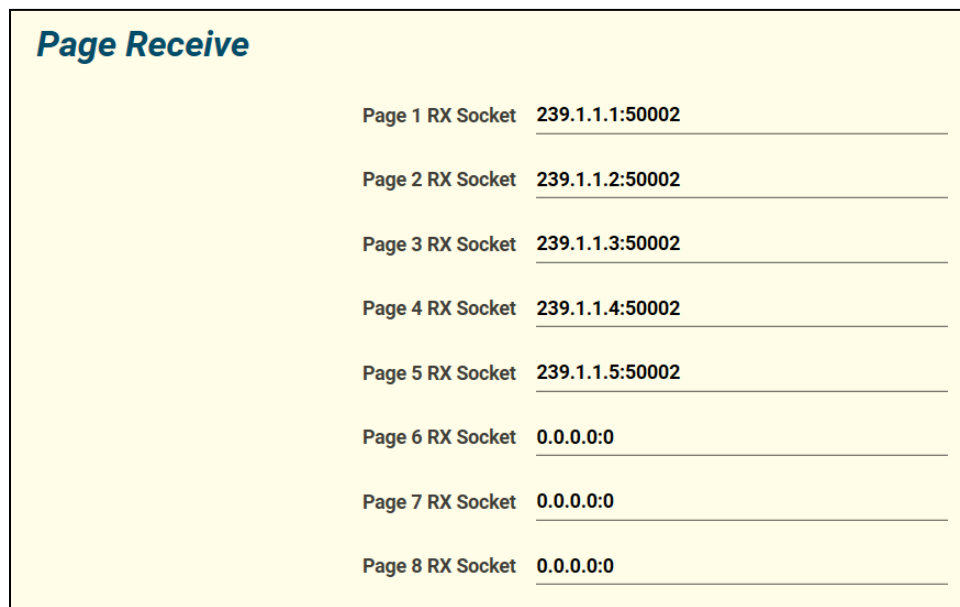
Figure 12. Page Receive Screen

Table 10. Page Receive Parameters

Field Name	Description	Valid Settings
Page 1 RX Socket Page 2 RX Socket Page 3 RX Socket Page 4 RX Socket Page 5 RX Socket Page 6 RX Socket	Stations receive audio on up to eight different multicast sockets. Each PAGE RX Socket (1–8) consists of a multicast IP address and a port number. Disable page RX socket (1–8): IP address : port—0.0.0.0:0. PAGE 1 RX Socket—highest priority	IPv4 format: xxx.xxx.xxx.xxx:P *xxx*: IP address octet *P*: Port number (49152–65534) Defaults: Page 1 RX: **239.1.1.1:50002** Page 2 RX: **239.1.1.2:50002** Page 3 RX: **239.1.1.3:50002**

Field Name	Description	Valid Settings
Page 7 RX Socket	PAGE 8 RX Socket—lowest priority	Page 4 RX: **239.1.1.4:50002**
Page 8 RX Socket		Page 5 RX: **239.1.1.5:50002**
		Page 6 RX: **0.0.0.0:0**
		Page 7 RX: **0.0.0.0:0**
		Page 8 RX: **0.0.0.0:0**

Page Transmit

The default page transmit sockets are below (see Figure 13). Change the socket addresses, as necessary, to configure a unique page and party system.

Page Transmit

Page A TX Socket	239.1.1.1:50002
Page A TX Defer	Yes
Page B TX Socket	239.1.1.2:50002
Page B TX Defer	Yes
Page C TX Socket	239.1.1.3:50002
Page C TX Defer	Yes
Page D TX Socket	239.1.1.4:50002
Page D TX Defer	Yes
Page E TX Socket	239.1.1.5:50002
Page E TX Defer	Yes

Figure 13. Page-Transmit Screen

Table 11. Page-Transmit Parameters

Field Name	Description	Valid Settings
	HUBBCOM INTERCOM screen (see Figure 10) shows five page-zone selection buttons. Assign a multicast socket to each button. Each page TX socket (A–E) consists of a multicast IP address and a port number. Disable page TX socket (1–8): IP address : port—0.0.0.0:0	IPv4 format: xxx.xxx.xxx.xxx:P *xxx*: IP address octet *P*: Port number (49152–65534)
Page A TX Socket	Transmit socket assigned to the 1st page selection button on HUBBCOM touch screen.	Default: **239.1.1.1:50002**
Page B TX Socket	Transmit socket assigned to the 2nd page selection button on HUBBCOM touch screen	Default: **239.1.1.2:50002**
Page C TX Socket	Transmit socket assigned to the 3rd page selection button on HUBBCOM touch screen	Default: **239.1.1.3:50002**
Page D TX Socket	Transmit socket assigned to the 4th page selection button on HUBBCOM touch screen	Default: = **239.1.1.4:50002**
Page E TX Socket	Transmit socket assigned to the 5th page selection button on HUBBCOM touch screen	Default: = **239.1.1.5:50002**
Page A–E TX Defer	Use this parameter to prevent two stations from simultaneously sending a page on the same page TX socket. The HUBBCOM station will not transmit onto a page TX multicast socket if that socket is in use.	• **Yes**—This station will NOT transmit if a page is already in progress on the selected PAGE TX socket (A–E). • No—the station will transmit onto the selected PAGE TX socket (A–E) regardless of the current paging status.

Party Lines

The default party line sockets are below (see Figure 14). Change the socket addresses, as necessary, to configure a unique page and party system.
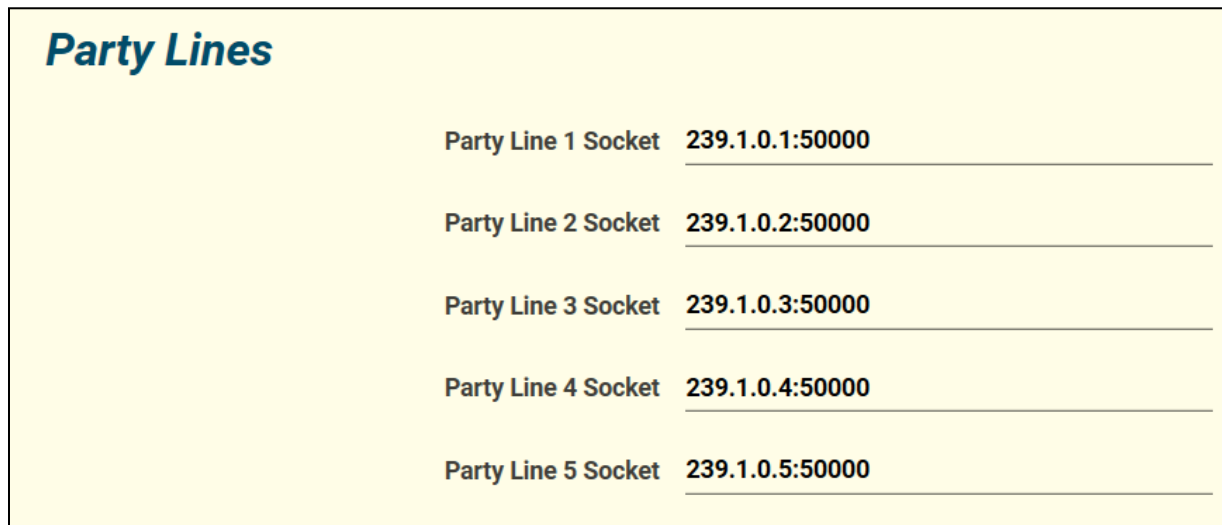
Party Lines

Party Line 1 Socket   **239.1.0.1:50000**

Party Line 2 Socket   **239.1.0.2:50000**

Party Line 3 Socket   **239.1.0.3:50000**

Party Line 4 Socket   **239.1.0.4:50000**

Party Line 5 Socket   **239.1.0.5:50000**

Figure 14. Party Line Sockets Screen

Table 12. Party Line Socket Parameters

Field Name	Description	Valid Settings
	HUBBCOM *Intercom* screen shows five party line selection buttons. Assign A multicast socket to each button. Each party line socket (1–5) consists of a multicast IP address and a port number. Set the IP address and port to 0.0.0.0:0 to disable the party line.	IPv4 format: xxx.xxx.xxx.xxx:P • *xxx* = IP address octet • *P*: = Port number (49152–65534)
Party Line 1 Socket	Socket assigned to the party line one button on HUBBCOM touch screen.	Default: **239.1.0.1:50000**
Party Line 2 Socket	Socket assigned to the party line two button on HUBBCOM touch screen	Default: **239.1.0.2:50000**
Party Line 3 Socket	Socket assigned to the party line three button on HUBBCOM touch screen	Default: **239.1.0.3:50000**
Party Line 4 Socket	Socket assigned to the party line four button on HUBBCOM touch screen	Default: **239.1.0.4:50000**
Party Line 5 Socket	Socket assigned to the party line five button on HUBBCOM touch screen	Default: **239.1.0.5:50000**

Mutual Provisioning

Configure intercom functionality of HUBBCOM devices on the mutual provisioning screens. HUBBCOM stations obtain their intercom and network parameters from a station designated as a *master station* when using mutual provisioning. The provisioning data transfer occurs on a special multicast socket. Encrypt the data, if desired. Implement up to three *master stations* (for redundancy purposes). The *master list* parameter identifies the three master stations using their SP2 group and station ID as defined on the intercom screen (see Figure 10).

Figure 15. Mutual Provisioning Parameters

This screen is view only. All settings on this screen are locked and cannot be changed:

- **Provision Socket**—used for communication among HUBBCOM and SP2 stations when operating in mutual configuration mode.

- **Master List**— master-station group and station number list; in priority order from highest to lowest. Format the list as follows: G.SS (G=Group, S=Station Number). Always set to **0.01**, **0.02**, **0.03**.

- **Designation**—indicates the name of the system. Only stations with the same designation receive the mutual configuration. There is typically only one system designation on a network.

- **Mutual Provn TTL**—time to live value used by the provisioning sockets. This determines the number of router-hops a data packet can make in the network.

- **Encrypt Mutual**—encrypt the data on the mutual provisioning socket (Yes/**No**).

Discovery Channel

Figure 16. Discovery Channel Parameter

Discovery Socket— the socket used to auto discover HUBBCOM stations on the network. This read only parameter is set to 239.239.239.239:50000
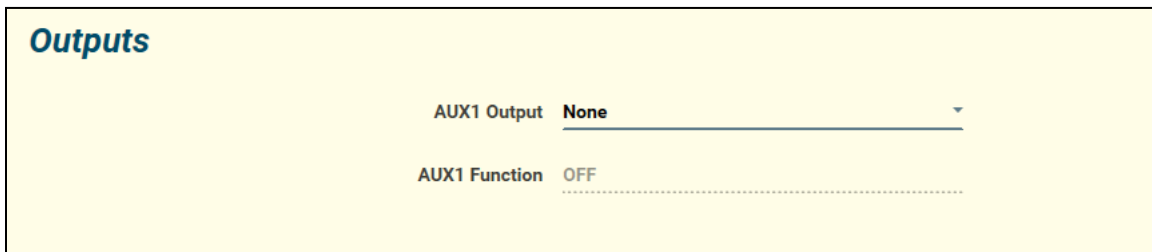
Outputs

Figure 17. Outputs Screen

Table 13. Output Parameters

Field Name	Description	Valid Settings
Aux 1 Output	The output triggered by the selected **Aux 1 Function**.	• **None** • Local 1 • Local 2 • USB Out 1 • USB Out 2 • Wiegand
Aux 1 Function	The intercom function that triggers the **Aux 1 Output**.	• **Off** • Idle • RX Page Any • RX Page 1-8 • TX Page Any • TX Page A-E • Party Any • Party 1-5 • On-Hook • Off-Hook

Phone Parameters

The SIP telephone feature allows for concurrent registration with up to three registrar servers. The HUBBCOM attempts to register with all three servers using the accounts specified by the SIP ID/ACCOUNT EXTENSION on the PHONE screen.
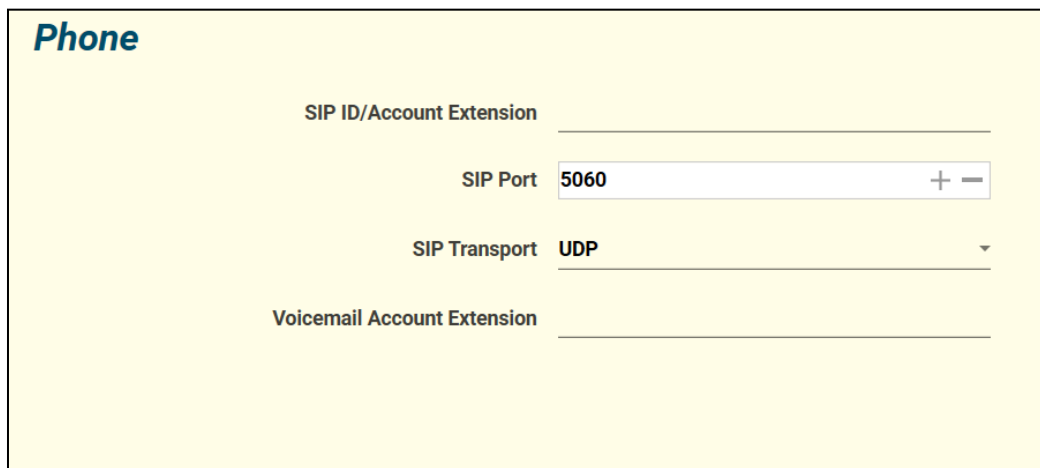
The HUBBCOM will not attempt to register with a registrar server whose settings are invalid:

• All three registrars are invalid if the SIP ID/ACCOUNT EXTENSION is empty.

• This registrar is invalid if the registrar dataset has its AUTHENTICATION PASSWORD empty.

• This registrar is invalid if the registrar dataset has its REGISTRAR ADDRESS containing fewer than seven characters.

Outbound calling is available if the HUBBCOM successfully registers with at least one registrar server. Otherwise, the HUBBCOM displays a full-screen popup window indicating that *No SIP Phone Calls are Possible*.

Outbound calls use only one registrar account that currently has a successful registration. The highest priority is registrar one; the lowest priority is registrar three.

Changes to the registrar settings do not affect the current operation of the HUBBCOM device. REBOOT the HUBBCOM device for changes to take effect.

Figure 18. Phone Parameters

Table 14. Phone Parameters

Field Name	Description	Valid Settings
SIP ID/Account Extension	The extension number assigned to this phone from the registrar (SIP Server).	The phone number provided by IP phone system administrator.
SIP Port	Port number used for SIP registration/signaling.	Default: **5060**
SIP Transport	Protocol used for sending bits of data (known as packets) over the network.	TCP or UDP Defined by the SIP Registrar
Voice Mail Account Extension	The number dialed to access the phone's voicemail box.	The phone number provided by the IP phone system administrator.

SIP Registrar 1–3

Enter up to three SIP registrars. The phone will always attempt to initiate a call with SIP registrar one first. If registration with registrar one fails, the phone attempts to call using registrar two or three in that order.

Figure 19. SIP Registrar 1–3 Screens

Table 15. SIP Registrar 1–3 Parameters

Field Name	Description	Valid Settings
Registrar Address or FDQN	Registrar Address—The IP address of the SIP phone system registrar (server). FQDN—The fully qualified domain name is the complete domain name for the SIP phone system registrar.	Registrar IP address in IPv4 format. Example: *192.168.1.100* The FQDN consists of two parts: the hostname and the domain name. Example: *reg.phoneco.com*
Proxy Address or FDQN	A Proxy server is a computer acting as an intermediate/bridge between the HUBBCOM and other SIP devices. It uses the registrar database to facilitate connections between devices.	Same format as registrar address or FDQN. Often the registrar provides this function. In this case the field can remain empty.
SIP ID /Account Extension:	This is a read only field which displays the same entry made on the phone screen above.	As assigned by phone system administrator.
Authentication Name	The account user name assigned by the registrar.	As assigned by phone system administrator.
Authentication Password	The account password assigned by the registrar.	As assigned by phone system administrator.
Reg Timeout (Sec)	Sets the suggested registration timeout value (in seconds) from the phone to the registrar. The registrar server can ignore and override this suggested time. Following the expiry of registration timeout, the phone will deregister and then automatically attempt to re-register.	Set using (-) (+) buttons or enter a number.
Keep Alive Interval	The time (in seconds) that the phone will send a keep alive message to ensure the port remains open. Set this number to zero (0) to disable.	Set using (−) (+) buttons or enter a number.

SIP Contacts

Figure 20. SIP Contact Parameters

Table 16. SIP Contact Parameters

Field Name	Description	Valid Settings
Allow Local Contacts	Allows the user to enter contacts by using the HUBBCOM touch screen.	**Yes**/No
Add Contacts using LDAP Serv	Depending on the SIP phone system server, the LDAP protocol may populate the phone contact list. This setting enables or disables the phone's LDAP protocol for communication with the server.	Yes/**No**

Field Name	Description	Valid Settings
LDAP Base DN (Search Start):	A Base DN is the point in the directory information tree where a Directory Server Agent will search for users. A DN (distinguished name) uniquely identifies an LDAP object. A DN is a sequence of RDNs (relative distinguished names) connected by commas and is structured like an absolute PATH on a file system. An RDN is an attribute with an associated value in the form attribute=value; normally expressed in a UTF-8 string format. A parent RDN item in the hierarchy is provided after a comma, and with no *spaces* included.	Enter character string
LDAP PBX DN (Subtree)	The RDN (relative to the Base DN) that locates the specific directory (phonebook) to retrieve from the DSA (Directory Service Agent) in its hierarchy. Do not include a trailing comma.	Enter character string e.g.: **ou=pbx**
Use anonymous access	Allows the HUBBCOM device to access the server directory as an anonymous user (with no credentials required). If the LDAP server does not support anonymous access, use the Root DN and Root Password Fields to specify the user name and password.	**Yes**/No
LDAP Root DN (admin user)	The username RDN (relative to the Base DN) provided to the LDAP server to permit directory access (when the LDAP server does not support anonymous access)	Enter character string e.g.: **cn=admin**
LDAP Root Password	The password corresponding to the Root DN username provided to the LDAP server to permit directory access (when the LDAP server does not support anonymous access)	Enter character string
Refresh Interval(minutes)	Interval at which the HUBBCOM will request contact list updates from the server.	Set using (-) (+) buttons or enter a number
LDAP attrib: accnt ID	The attribute designation (Field Name) that the directory(phonebook) uses as the identifier of a directory entry.	Enter character string e.g.: **AccountNumber**
LDAP attrib: common name	The attribute designation (Field Name) that the directory(phonebook) uses to refer to the *name* associated with a directory entry.	Enter character string e.g.: **CallerIDName**

SIP Advanced Features

Figure 21. SIP Advanced Features Parameters

SIP ADVANCED FEATURES define up to six *feature access codes* available from the SIP phone system in use. The codes and available functions vary between phone system suppliers. Depending on the feature, the phone system may return a confirmation message or a voice prompt requesting additional numbers from the HUBBCOM keypad.

It is possible to add additional numbers after the access code for actions such as call forwarding to a specific number, etc.

Press the ADVANCED button on the HUBBCOM telephone screen to access these actions.

Table 17. SIP Advanced Features Parameters

Field Name	Description	Valid Settings
#1–6 Description	A user-friendly name to describe the function.	text entry
#1–6 Feature Code	Enter the number/character string that the HUBBCOM dials to perform the function.	number/character string defined in the IP phone system function list

Point to Point Parameters

Figure 22. Point-to-Point Screen

Table 18. Point to Point Calling Parameters

Field Name	Description	Valid Settings
System Name	Defines the system name assigned to this HUBBCOM station. Point-to-point calls are only possible between HUBBCOM stations with the same *system name*. The station's contact list automatically populates to include all other stations with the same *system name*.	any alpha/numeric text entry Default: **HUBBCOM**
Entry Station Monitor	Allows audio/video monitoring of any HUBBCOM stations designated as ***Entry Stations***.	**No**/Yes

Field Name	Description	Valid Settings
Monitor Channel	Underlying parameter that defines the multicast address used for communication with entry stations. Do not normally change this setting. Change it only to eliminate interference with other network multicast activity. **NOTE:** Also change the channel number on the monitored *Entry Stations*.	0–255, Default: **75**
TTL	Time to live for point-to-point calling multicast packets.	0–255, Default: **5**
Call Group	The call group name that this HUBBCOM belongs to. Call Group names must be unique. Verify that the name selected is not a duplicate of any HUBBCOM device name in the system.	Enter a descriptive name for the call group.
Group Rollover Contact	This setting applies only to an incoming call for the HUBBCOM group that this station belongs to. The calling phone will re-dial this contact name or HUBBCOM number if the HUBBCOM station does not answer the call.	Select from the Contact List (either individual contacts or group contacts) or enter a SIP phone number.
Rollover Contact	This setting applies only to an incoming call directly to this HUBBCOM station. The calling HUBBCOM will re-dial this contact name or HUBBCOM number if the HUBBCOM station does not answer the call.	Select from the Contact List (either individual contacts or group contacts) or enter a SIP phone number
Time to Rollover (Sec)	Time that this HUBBCOM must ring before the calling HUBBCOM re-dials the rollover contact.	18–600, **60**
MAX Rollovers	The maximum times the calling HUBBCOM will re-dial other contacts.	1–600, **5**
AUX1 Output	Allows the calling HUBBCOM to activate the selected output on this HUBBCOM Station after it answers the call. The calling HUBBCOM's display has a pushbutton icon to manually activate the output.	• **None** • Local Out 1 • Local Out 2 • USB Out 1 • USB Out 2
Aux Out 1 Name	The name displayed on the calling HUBBCOM's pushbutton icon.	Enter a descriptive name for the outputs function.
Aux Out 1 Timer	The time that the output stays active.	1-71, **3**
AUX2 Output	Allows the calling HUBBCOM to activate the selected output on this HUBBCOM station after it answers the call. The calling HUBBCOM's display has a pushbutton icon to manually activate the output.	• **None** • Local Out 1 • Local Out 2 • USB Out 1 • USB Out 2

Field Name	Description	Valid Settings
Aux Out 2 Name	The name displayed on the calling HUBBCOM's pushbutton icon.	Enter a descriptive name for the output's function.
Aux Out 2 Timer	The time that the output stays active	1–71, **3**

Contact Parameters
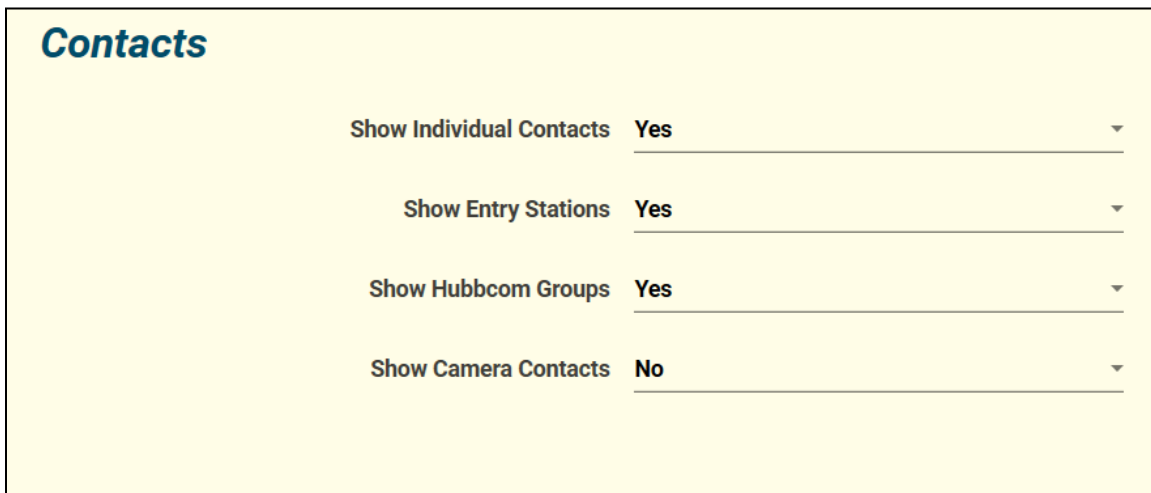
Figure 23. Contacts Screen

The parameters below turn ON or OFF the types of devices displayed in the station's contact list.

Table 19. Contact Parameters

Field Name	Description	Valid Settings
Show Individual Contacts	Displays all HUBBCOM stations with the same *system name* (set on the POINT-TO-POINT screen).	**Yes**/No
Show Entry Stations	Displays all HUBBCOM stations with the same *System Name* (set on the POINT-TO-POINT screen) and set as *Entry Station* on the UNIT Screen	**Yes**/No
Show HUBBCOM Groups	Displays all HUBBCOM Groups with the same *System Name*.	**Yes**/No

Field Name	Description	Valid Settings
Show Camera Contacts	When enabled, a camera icon appears on the HUBBCOM screen main menu. Manually add remote IP camera URLS to the contact list. When a remote IP camera is associated with a HUBBCOM Station, enter the camera URL under the HUBBCOM entry in the contact list. **NOTE:** Manually enter all remote IP camera URLs in the contact list.	Yes/**No**

Access Control Parameters

Figure 24. Access Control Parameters

Table 20. Access Control Parameters

Field Name	Description	Valid Settings
RFID/NFC Mode	The type of communication protocol the HUBBCOM uses to acquire data from compatible identification tags. • RFID (Radio Frequency Identification) uses electromagnetic fields in the 125 kHz range. • NFC (Near Field Communication). Uses 13.56 MHz frequency. Connections are over a secure channel that encrypts the data as it passes from card to reader.	• **Off** • RFID Only • NFC Only • RFID and NFC
Wiring Interface	The wiring scheme connected to the HUBBCOM used for access control. • Local—Access control wiring connects directly to the output contacts on the HUBBCOM. • 26-bit Weigand—Access control wiring connects to a remote access control system using the 26-bit Weigand wiring standard.	• **None** • Local • Wiegand
Keypad Enabled	Displays a numeric keypad on the HUBBCOM screen. The user can then manually enter a valid code number to activate the selected access control wiring interface.	Yes/**No**
Lockout Attempts	The number of failed attempts before the HUBBCOM locks out the access control features.	1–**10**
Lockout Time (sec)	The period the HUBBCOM stays in lockout mode.	**1**–180
Activation Relay	The output triggered upon a successful code entry.	• **None** • Local 1 • Local 2 • USB Out 1 • USB Out 2 • Wiegand
Activation Relay Time (sec)	The period the selected output stays active following a successful code entry.	1-60

Field Name	Description	Valid Settings
PIN 1–PIN 6	Enter up to six different PIN codes for activating the selected wiring interface from the HUBBCOM touchscreen. *For Local*: The PIN code entry will directly activate the relay. *For Weigand*: The PIN code entry will transmit the *facility code* and *card #* entered on the same screen as PIN number. The *facility code* and *card #* must be valid in the card access system.	0 -99999
Access Control Email	The HUBBCOM sends an email to this address based on the selected access control trigger. • Never • Lockout Only • Incorrect Entry • Every Nth Attempt (N = 1-100) • Always	Valid email address Select trigger from pull-down menu.

Auxiliary Door Control Parameters

This feature allows one HUBBCOM device to directly control the relay output of another HUBBCOM device. The most common use is to remotely open doors, as the name states.
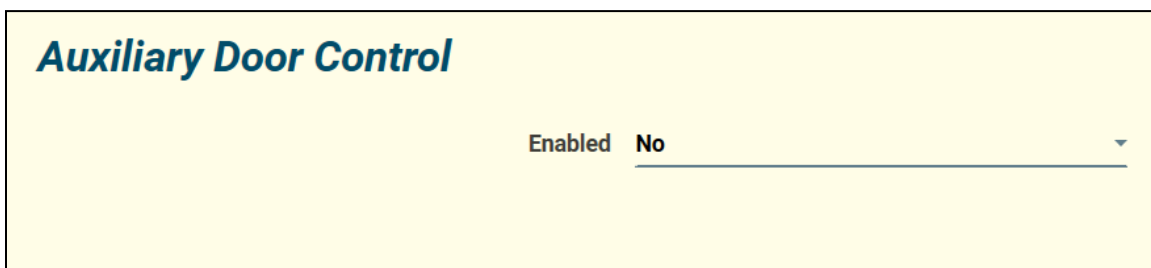

Figure 25. Auxiliary Door Control Enable Screen

Table 21. Auxiliary Door Control Parameter

Field Name	Description	Valid Settings
Enabled	Enables this feature.	Yes/**No**

Auxiliary Door Control

Enabled	Yes
Mode	Operator
Desired Device's Name	DeviceName
Multicast Address	0.0.0.0
Multicast Port	0
TTL	1

Figure 26. Auxiliary Door Control Enabled Screen

Table 22. Auxiliary Door Control Parameters

Field Name	Description	Valid Settings
Enabled	Enables this feature.	Yes/**No**
Mode	The HUBBCOM device that sends the door open command is the *operator* The HUBBCOM device that receives the command and activates its output relay is the *activator*.	• Operator • Activator
Desired Device Name	The device name of the companion HUBBCOM device. The *operator* HUBBCOM must have the device name of the *activator* HUBBCOM and visa-versa.	Enter the device name. **NOTE:** Device name must match exactly and is case sensitive.
Multicast Address	Multicast address to activate the output.	Example : 239.1.1.200
Multicast Port	Port number to activate the output.	Example : 50010
TTL	Time to Live of the multicast socket.	**1**–255

Web Portal Parameters
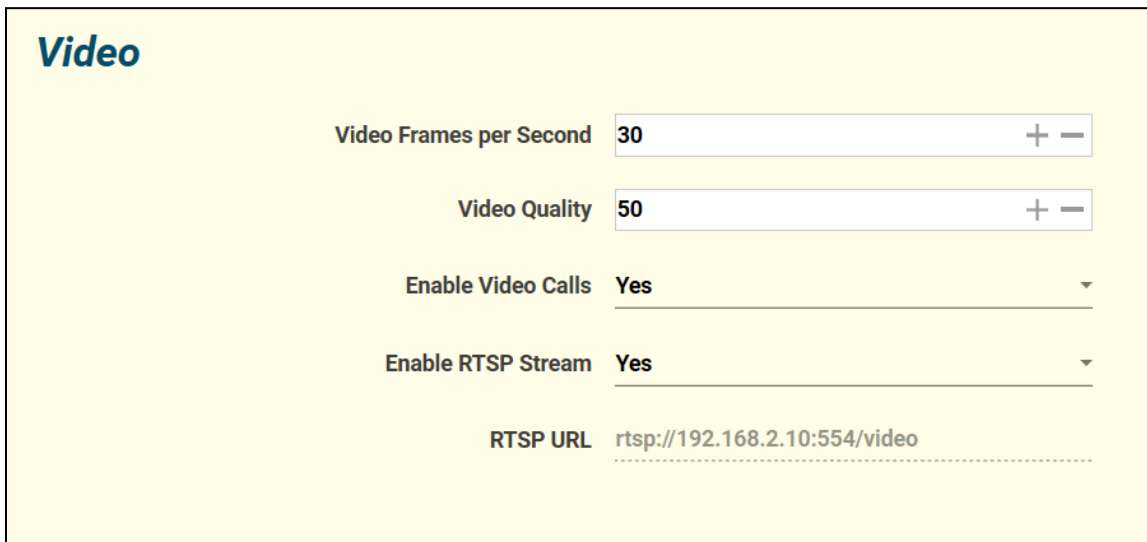
Figure 27. Web Portal Screen

Access up to three web pages from the HUBBCOM. Each entry 1-3 displays an icon on the HUBBCOM screen MAIN MENU with a label based on the WEB NAME X entry.

Table 23. Web Portal Parameters

Field Name	Description	Valid Settings
Web Name 1–3	Enter recognizable names for the websites accessed from the HUBBCOM Station. These names identify each web page icon on the HUBBCOM screen Main Menu.	Text Entry
Remote Web URL 1–3	The Uniform Resource Locator, (URL) is an address that sends users to a specific resource online, such as a webpage, video or other document or resource.	Enter each webpage URL. Example: https://www.hubbell.com/gai-tronics/en/hubbcom-ip-devices
Default	This setting only applies if the WEB PORTAL is set as the Home Mode on the UNIT screen.	Select the *Web URL n* radio button the HUBBCOM displays upon start-up or upon selection of the home mode.

Video Parameters

Figure 28. Video Screen

Table 24. Video Parameters

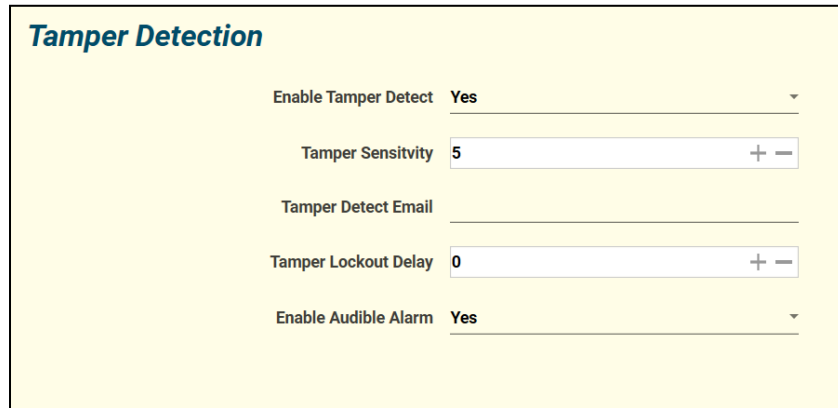| Field Name	Description	Valid Settings
Video Frames per Second	Frame rate (expressed in frames per second or FPS) is the frequency (rate) that consecutive images called frames appear on the display.	Default: **30**
Video Quality	Video compression value that adjusts the network bandwidth required for video transmission.	1–100, **50**
Enable Video Calls	Turns ON or OFF the point-to-point video calling feature.	Yes/**No**
Enable RTSP Stream	Turns ON or OFF the camera video streaming feature.	Yes/**No**
RTSP URL	RTS (Real-Time Stream Protocol)—the multimedia stream protocol used by the camera to deliver video. Users monitor the listed URL to obtain the camera's video stream.	N/A—This is a read-only field and is dependent on the station's IP address. Example: RTSP://192.168.1.100/video

Monitoring Parameters

Tamper Detection

Figure 29. Tamper Detection Settings

Table 25. Tamper Detection Parameters

Field Name	Description	Valid Settings
Enable Tamper Detect	Enables a tilt/movement sensor inside the HUBBCOM station	**Yes**/No
Tamper Sensitivity	Sets the sensitivity of the senor for detecting movement (tampering) of the HUBBCOM station. Increase the sensitivity by increasing the set value.	1–10, **5** 1—lowest sensitivity 10—highest sensitivity
Tamper Detect Email	Enter the email address that should receive notification of device tampering. Specify the email address on the NOTIFICATION SCREEN (see the Notification section) that sends an email when the tamper sensor activates. If the camera is enabled, it takes a snapshot photo and inserts it into the email message.	An active email address
Tamper Lockout Delay	When the tamper sensor activates, the HUBBCOM screen locks for the specified time (in seconds). The screen displays a lock-out message and all functions of the station are inoperable.	**0**–3600
Enable Audible Alarm	A tone plays over the HUBBCOM speaker during the lockout period.	**Yes**/No

Notification

Figure 30. Notification Settings

Table 26. Notification Parameters

Field Name	Description	Valid Settings
Email Server	The IP address of the SMTP server.	Obtain from email system administrator.
Email Server Port	The port number used by the SMTP service running on the mail server.	Default: **25**
Email Security	SSL (Secure Sockets Layer) is the standard security technology for establishing an encrypted link between server and client. This link ensures that all data passed remains private and integral. TLS (Transport Layer Security) provides encryption technology for the message while it is *in transit* from one secure email server to another.	• **None** • SSL • TLS
Email Account	The email account of this HUBBCOM device.	Obtain from email system administrator.
Email Account Password	Password to authenticate the email account to the SMTP server.	Obtain from email system administrator.

Motion Detection

Figure 31. Motion Detection Screen

Table 27. Motion Detection Parameters

Field Name	Description	Valid Settings
Motion Sensitivity	Sensitivity level of the motion sensor in the HUBBCOM device. Increase the sensitivity by increasing the set value.	1–100, **70** 1—lowest sensitivity 100—highest sensitivity
Motion Detect Email	Receipt email address for motion detected email messages.	Enter the email address that will receive the notifications when motion detection is enabled.
Notification Interval	Period between email notifications when motion detection is continuous.	1–60 Default = **10**

Externally Triggered Calling Parameters

Figure 32. External Call Configuration Screen

Assign each input an auto-dial telephone number. Activation of the input dials the assigned telephone number.

- External inputs one and two are on the rear panel of the HUBBCOM device.

- USB inputs one and two connect via USB to a remote HUBBCOM relay (Kit No. 12841-001).

Table 28. External Calling Parameters

Field Name	Description	Valid Settings
Ext. Input #1 Call Destination	Enter the phone number to dial.	Any telephone number that is accessible from the IP phone system.
Ext. Input #2 Call Destination		
USB Input #1 Call Destination		
USB Input #2 Call Destination		

Activation

Activate each HUBBCOM device upon first bootup of the device. Refer to the quick installation guide included with the HUBBCOM device for activation instructions. This screen allows changing the activation key to change the functionality of the HUBBCOM™ unit.

1. Enter Activation Key—Enter the key to activate the HUBBCOM™ device.

2. Click the APPLY button.

Activation

Enter Activation Key _____

Figure 33. HUBBCOM Activation Screen

Glossary of Terms

Table 29. Glossary

Term	Definition
MAC Address	A MAC (Media Access Control) address, also called the physical address, enables device communication on a physical network segment. MAC addresses are assigned by the manufacturer of the NIC (network interface card) and are stored in its hardware. Each NIC must have a unique MAC address on a physical network.
IP Address	A unique numerical address assigned to each device connected to a network using Internet Protocol for communication. Two versions of the IP (Internet Protocol) are in use: IPv4 (IP Version 4) and Ipv6 (IP Version 6). Each version defines an IP address differently. • An IPv4 address consists of 32 bits (4 octets). • Example: 192.168.1.100 • An Ipv6 address consists of 128 bits. Eight groups of four digits Example: 2001:0db8:0:0:0:ff00:0042:8329
Private IP Address	IP addresses reserved for use on private networks. These addresses cannot connect directly to the Internet. IPv4: • 10.0.0.0–10.255.255.255 • 172.16.0.0–172.31.25.255 • 192.168.0.0–192.168.255.255
Subnet mask	Used in conjunction with an IPv4 IP address, the subnet mask separates an IP address into logical network and host address components. Every host on a unique logical network must have the same subnet mask. Subnet Mask format—xxx.xxx.xxx.xxx (where xxx = 0–255).
Default Gateway	The IP address of the router to which all packets will be routed to for hosts that are not located on the same logical network. This is the address of the network router used to connect to devices on a different network.

Hostname	Hostnames are human-readable nicknames that resolve to the IP address of a device connected to a network. Hostnames are typically used in an administrative capacity and may appear in computer browser lists, active directory lists, to hostname resolutions, email headers, etc.
DHCP	Dynamic Host Configuration Protocol is a network service used to automatically assign IP address configuration data to hosts configured to request it upon boot-up. A DHCP server typically assigns an IP address, subnet mask, default gateway, and DNS server addresses.
DNS	Domain Name System is a network service used by IP network hosts to convert host names to IP addresses
IGMP	Internet Group Management Protocol is a communications protocol used by hosts, switches, and routers for creating, joining, and leaving multicast groups.
Time-to-Live (TTL)	This is a mechanism that limits the lifespan of IP data packets in a network. Data is discarded if the prescribed TTL elapses. Each time the IP data packet passes through a router, the TTL value is decremented by a value of 1. When the value reaches 0, the IP data packet is discarded. A TTL of 1 is restricted to the same subnet and won't be forwarded by a router.
Keep Alive	A message sent by one device to another to check that the link between the two is operating, or to prevent the link from being broken.
SMTP	Simple Mail Transfer Protocol is the procedure behind the flow email on the Internet.
SNMP	Simple Network Management Protocol is used for collecting information from and sending configuration commands out to network devices.
SNTP	Simple Network Time Protocol is the method used by IP network devices to obtain standardized time from a time server.
TFTP	Trivial File Transfer Protocol is a subset of the FTP file transfer protocol used by network clients to issue requests to read or write to/from a particular file on an FTP server computer.
Configuration	A named collection of settings that defines a station's behavior.
Network Socket	A network socket is the endpoint address of a service used in between hosts on a computer network. A port address is a number assigned to a service running on a particular host. A socket address is the combination of the IP address of the host and IP address and port number of the service, much like one end of a telephone connection is the combination of a phone number and a particular extension. Based on this address, Internet sockets deliver incoming data packets to the appropriate application IP address, process, or thread.

LDAP	LDAP (Lightweight Directory Access Protocol) is a vendor-neutral application protocol used to maintain distributed directory info in an organized, easy-to-query manner.
	Data Structure Example:
	 ``` dc=exmple,dc=com └─ cn=admin ├── cn=group1 │ ├──── cn=user1 │ ├──── cn=application1 │ │ └──── cn=user2 │ └──── cn=application2 │ ├──── cn=role1 │ │ └──── cn=user3 │ ├──── cn=role2 │ │ └──── cn=user4 │ ├──── cn=role3 │ │ └──── cn=user5 │ ├──── cn=role4 │ │ └──── cn=user6 │ └──── cn=role5 │ └──── cn=user7 └── cn=group 2 ├── cn=application3 ├── cn=application4 └── cn=application5 ```
ALS	Use Ambient Level Sensing to monitor external speakers by sensing ambient noise levels to adjust speaker volume.