



Heavy Duty Emergency VoIP Telephones

HDE-20/30-V Series

Installation and Operation



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HDE-20/30-V SERIES P007867 Rev. A

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Table of Contents

1. Package Contents	3
2. Accessories	4
3. Product Overview	4
4. Updating Your VoIP Product	4
6. Typical System Installation	5
7. Features	6
8. Installing the HDE-20-V Series Telephones	10
9. Installing the HDE-30-V Series Telephones	14
10. Supported SIP Servers	15
11. HDE-20/30-V Telephones Wiring	15
11.1. Connections	15
11.2. Connecting a Device to the Auxiliary Relay	16
11.3. Identifying the Connector Locations and Functions	17
11.4. Network Connectivity, and Data Rate	18
11.4.1. Verify Network Activity	18
11.5. RESET Switch	19
11.5.1. Announcing the IP Address	19
11.5.2. Restore the Factory Default Settings	19
11.6. Adjust the Volume	19
12. Making a call from the HDE-V	20
12.1. LED Indicator	20
13. Specifications	21
14. Field Repairs	22
15. Replacement Parts	23
16. Warranty	24
17. Disclaimer	24
18. Warning	24
19. Service Telephone Number	24
20. Feedback	24
21. Guardian Product Return	25
22. Cleaning Tips for Guardian Telephones	26
23. Storage	26

Figures

Figure 1 - Typical Installation	5
Figure 2 - Wiring	7
Figure 3 - PCBA Layout	7
Figure 4 - HDE-20-V Series Features	8
Figure 5 - HDE-20-V Series Dimensions	9
Figure 6 - HDE-20-V Series Mounting	9
Figure 7 - HDE-30-V Series Features	11
Figure 8 - HDE-30-V Series Dimensions	12
Figure 9 - HDE-30-V Series Mounting	13
Figure 10 - Terminal Block Connections	15
Figure 11 - Connector Locations	17
Figure 12 - Network Activity	18
Figure 13 - RESET Switch	19

Tables

Table 1 - Connector Functions	17
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1. Package Contents

- (1) HDE-20/30-VoIP Telephone
- (1) Driver bit for vandal resistant screws

2. Accessories

POE – Injector – Auxiliary Power Supply (Contact Sales)

Loud Ringers and Strobe Lights

Note: Guardian Discovery Utility, Interoperability Guide, VoIP Technical Support, Firmware and Autoprovisioning template are available at www.guardiantelecom.com.

The Setup and Configuration manual is available at [P007451](#).

3. Product Overview

HDE-20/30-V Series Heavy Duty Emergency Telephones

The HDE-20/30-V Series telephones are intended for use in public areas where direct assistance or hands-free communication is required; they provide a hands-free, two-way link to assistance. A call may be initiated from the telephone or from the monitoring station. The telephone may be programmed to autodial one telephone number. With an optional external signaling alarm such as a Scream Alert* an HDE-20/30-V telephone is an effective tool to alert emergency personnel of an urgent situation. These telephones also provide the capability of monitoring the status of each unit from a remote location informing personnel of a malfunction via event configurations. Monitoring equipment is sold separately.

All models come with an ADA (American Disability Act) compliant label (in Braille), making it well suited for University and College campuses, elevators, parking facilities, ATMs, mass transit stations, amusement parks, senior citizen housing, hospitals and medical centers, or industrial parks.

All models have a relay contact that can energize an alerter, camera or other security device when a call is made from the telephone. The telephone may also be programmed to energize the alerter when an incoming call is made. Two auxiliary relays are provided that can be activated by the monitor to perform any function desired, such as unlocking doors.

***Scream Alert** - a device with a VOX circuit. When the VOX detects a scream, the Scream Alert will momentarily close a relay contact, which will be used to trigger an Emergency phone call.

MODELS

Order Number	Model	Call Button Configuration	Maximum Speaker Volume @ 1.0 Meters	
			Line Powered (0.25W)	With External Power (3.3W)
SURFACE MOUNT				
P6940	HDE-20-V	Single Call Button	75.4dB	86.1dB
P6941	HDE-21-V	Single Call Button With Keypad	75.4dB	86.1dB
P6942	HDE-22-V	Dual Call Button	75.4dB	86.1dB
P6943	HDE-23-V	Dual Call Button With Keypad	75.4dB	86.1dB
RECESSED MOUNT				
P6945	HDE-30-V	Single Call Button	75.4dB	86.1dB
P6946	HDE-31-V	Single Call Button With Keypad	75.4dB	86.1dB
P6947	HDE-32-V	Dual Call Button	75.4dB	86.1dB
P6948	HDE-33-V	Dual Call Button With Keypad	75.4dB	86.1dB

4. Updating Your VoIP Product

Please review www.guardiantelecom.com support pages to obtain the latest F/W or contact Guardian Telecom Support at <mailto:rmateststation@guardiantelecom.com>

6. Typical System Installation

The Voice-over-IP (VoIP) HDE-20/30-V Telephones are Power-over-Ethernet (PoE 802.3af) and Voice-over-IP (VoIP) two-way communications devices that easily connect into existing local area networks (LANs) with a single cable connection. The telephones are compatible with most SIP-based IP PBX servers that comply with SIP RFC 3261.

Figure 1 illustrates how the HDE-20/30-V Telephones can be installed as part of a VoIP phone system.

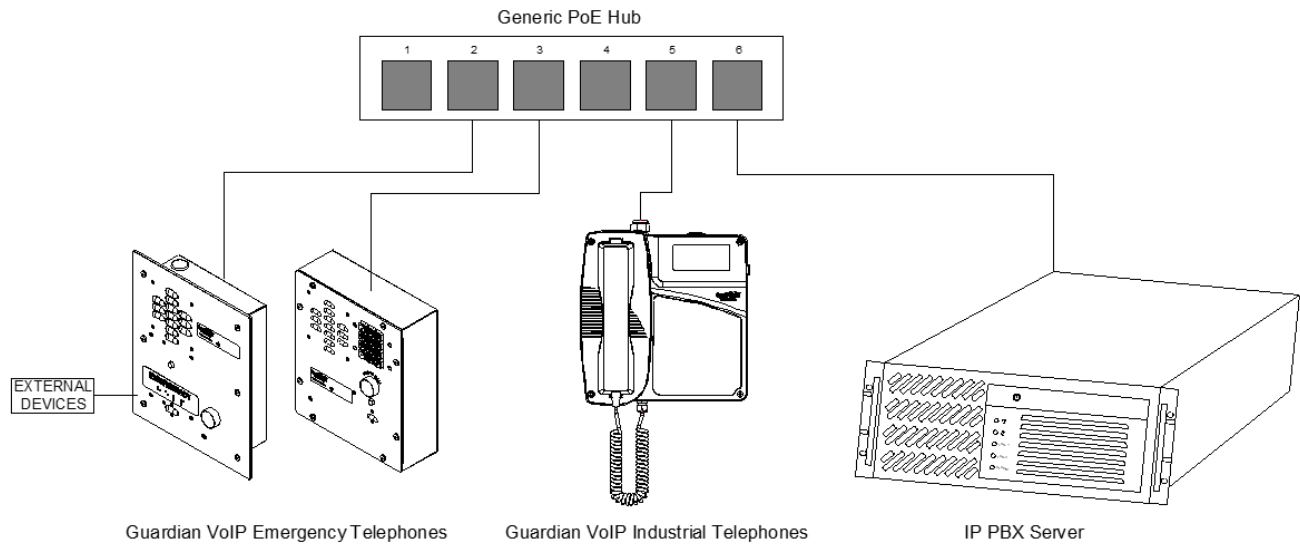


Figure 1 - Typical Installation

7. Features

- *Enclosure*
 - 16 Gauge 316ss, or 16 Gauge 316ss with powder coating
- *-Vandal resistant buttons*
- *-Tamper resistant screws*
- *-Corrosion resistant hardware*
- *Temperature range -22 ° to +140 °F (-30 ° to +60 °C)*
- *Optional conformal coated circuit boards are resistant to corrosive agents (e.g. H₂S, SO₂ and NH₃) and environments with high humidity*
- *Waterproof connections & stainless steel fittings for longer life*
- *Modular parts for easy service*
- *Compatible with inductively coupled hearing-aid devices*
- *Adaptive full duplex operation*
- *Compatible with most SIP-based IP PBX servers that comply with SIP (RFC 3261). (Refer to the Guardian VoIP webpage for a list of certified servers)*
- *Network web management interface*
- *Guardian discovery utility makes it easy to detect, locate and launch the web based configuration screens*
- *Product self-diagnostic testing available through web interface*
- *Network adjustable speaker volume and microphone sensitivity sets default levels. User adjustable volume control on Handset.*
- *PoE 802.3af enabled (Powered-over-Ethernet) or alternate power source*
- *Web Based User Interface allows remote setup of network, product operations, updates, self-diagnostics and other functional access.*
- *Auxiliary Relay – Multiple activation selectable through web interface*
- *Dual speeds of 10 Mbps and 100 Mbps*
- *Network/Web management*
- *Network configurable relay activation settings*
- *Dial Out Extension supports the addition of comma delimited pauses before sending additional DTMF tones*
- *Network downloadable product firmware*
- *Tamper proof design*
- *Autoprovisioning and Device Configuration Export/Import saves setup time on multiple deployments.*
- *Configurable audio files*
- *Event Monitoring / Triggers – (Refer to VoIP Configuration Guide – P/N: P007451)*
- *Three year warranty*
- *Peer-to-peer capable*

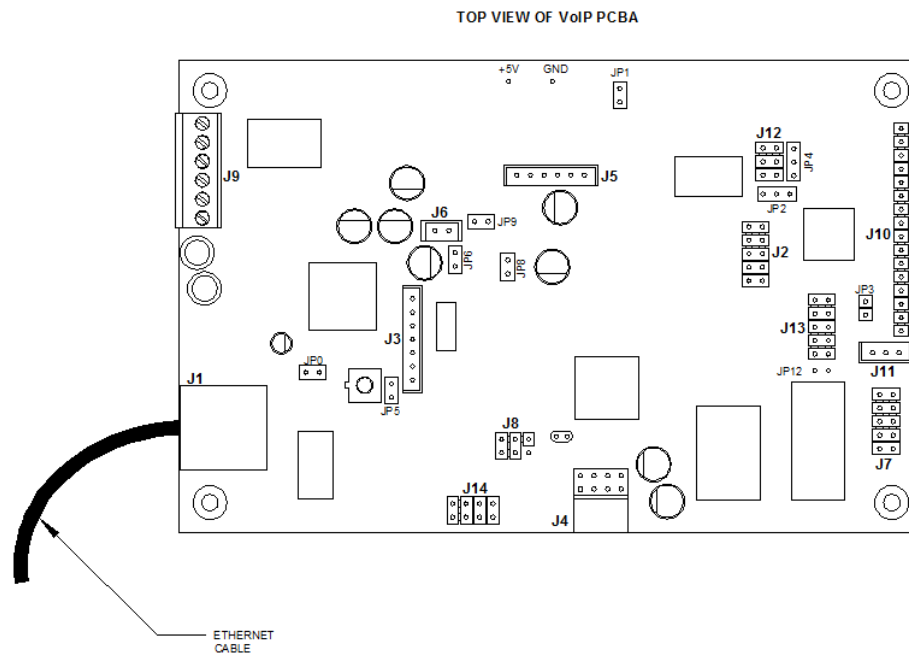


Figure 2 - Wiring

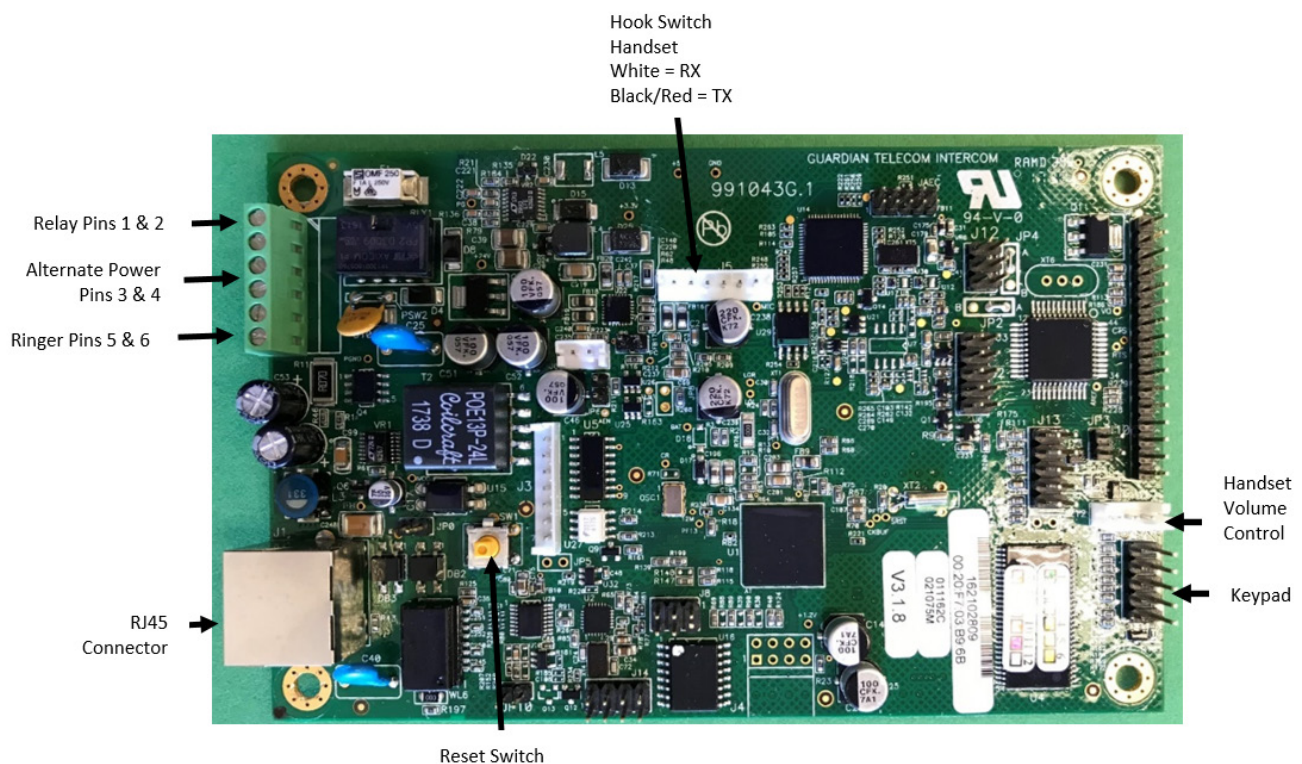
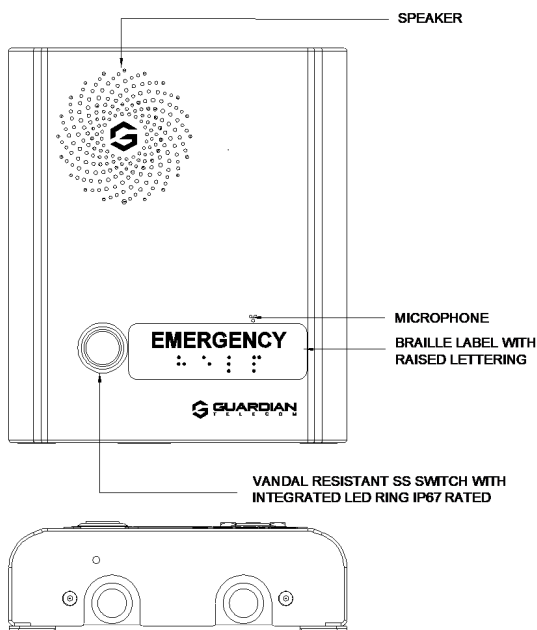
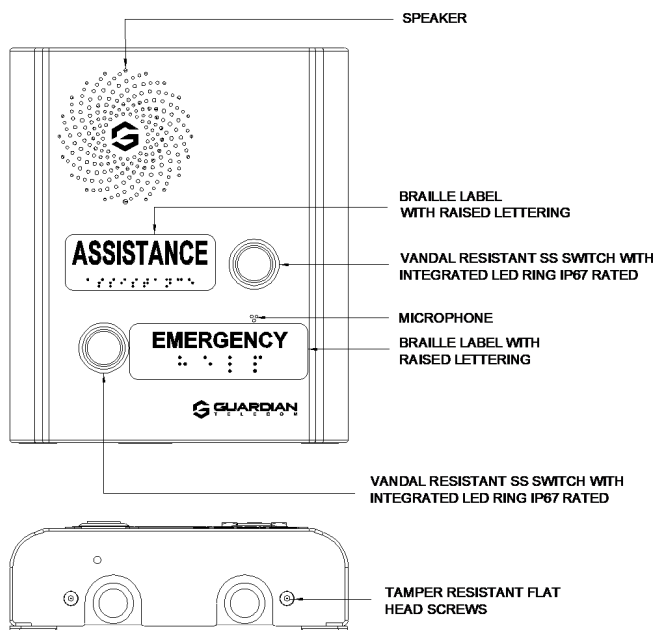


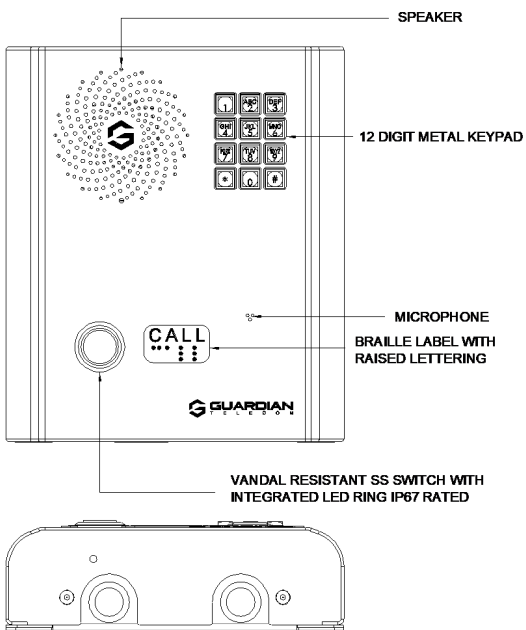
Figure 3 - PCBA Layout



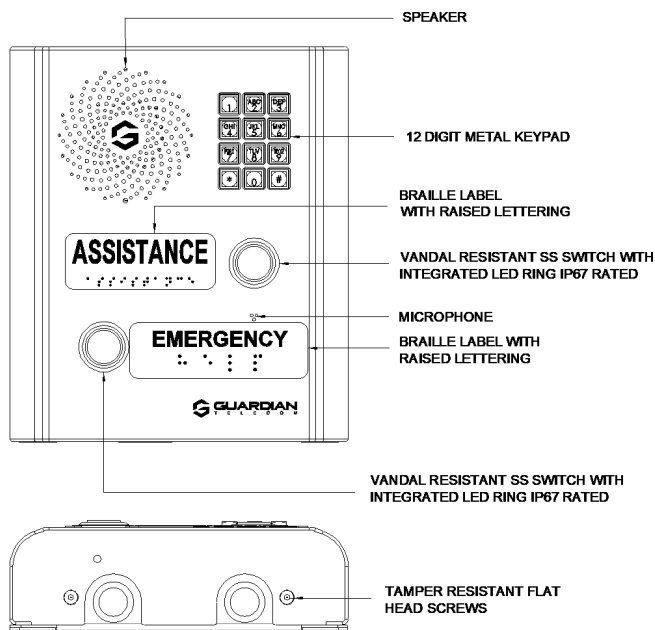
HDE-20



HDE-22



HDE-21



HDE-23

Figure 4 - HDE-20-V Series Features

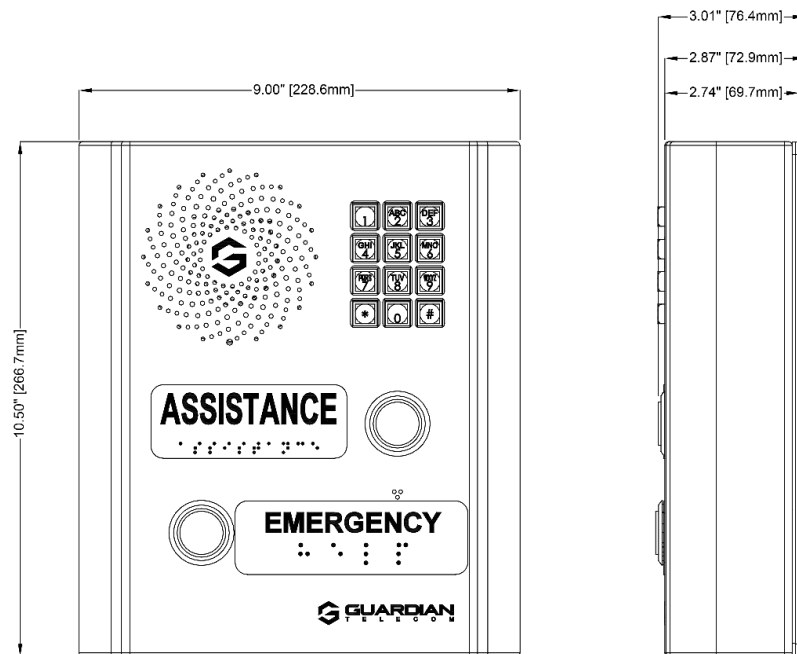


Figure 5 - HDE-20-V Series Dimensions

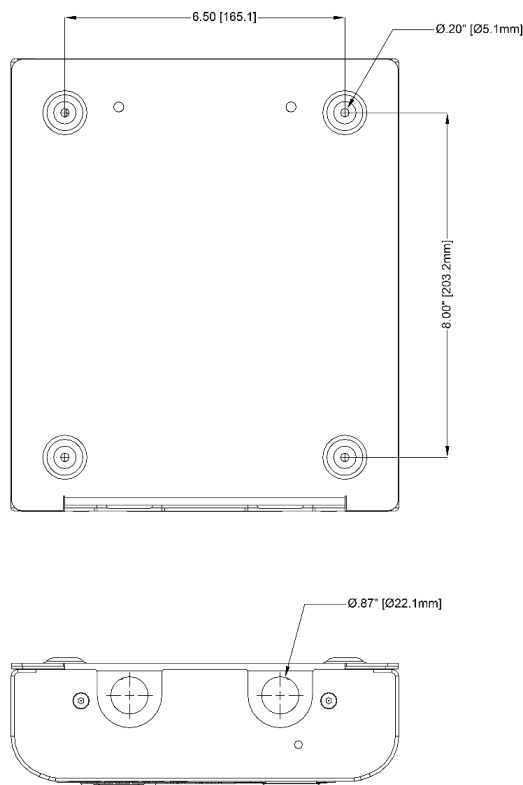


Figure 6 - HDE-20-V Series Mounting

8. Installing the HDE-20-V Series Telephones

Follow all appropriate electrical codes and use only approved electrical fittings for the installation.

To Avoid The Danger Of An Accidental Shock or Circuit Damage

- If using an auxiliary power supply ensure that it is unplugged during installation.
- If using the onboard relay to control an external device or relay ensure power is off during installation.

Determine if power to operate the telephone will be provided via the ethernet or if external power will be required. If external power is required, install Guardian's Auxiliary Power Supply or equivalent.

Remove the cover screws from the front of the unit and carefully remove the front cover assembly. Note that the electronics are attached to the front plate

Install a cable gland or bushing into the 7/8" (22mm) opening in the bottom of the enclosure for the network cable.

If additional access is required for auxiliary power or connection to the on board relay punch another opening in the bottom of the enclosure near the original opening. Make sure that the cable gland, bushing or wiring will not interfere with the PCBA or any parts of the faceplate when it is installed.

Choose a wall location that is free of obstructions and permits space for cable or conduit runs. Ensure mounting can support 7lbs (3kg) and any additional foreseeable load.

Use the enclosure to locate and drill holes for #8 or M4 mounting screws.

For convenience while connecting wiring the faceplate may be temporarily mounted inverted to either side of the enclosure.

Thread the bare end of the Network cable out of the enclosure through the gland and insert the plug into the RJ-45 connector on the PCBA.

If using an alternate power supply bring the wiring into enclosure and connect to the terminal block.

If the onboard relay is to be utilized, bring the wiring into enclosure and connect to the terminal block.

Commissioning

Connect the auxiliary power supply if utilized.

Connect the telephone into the network. Allow approx. 30sec for the phone to boot up.

Determine that the telephone is properly connected by pressing the RTFM switch for less than five seconds to announce the IP address.

Test the unit by calling to and from another unit.

Test the operation of the on board relay if it is utilized.

Ensure all connections are tight, then replace and secure the faceplate. Use the driver bit provided to install the tamper resistant screws.

Programming

Set up and configure if changes are required to the default settings.

Test the unit by making calls to and from another unit.

See: Figure 5 - HDE-20-V Series Dimensions

See:
Figure 2 - Wiring

See: Section 11.2
Connecting a Device to the Auxiliary Relay and Figure 10 - Terminal Block Connections.

Tip: Store the driver bit in a secure place for future use.

Tip: See Manual P007451 - Setup and Configuration

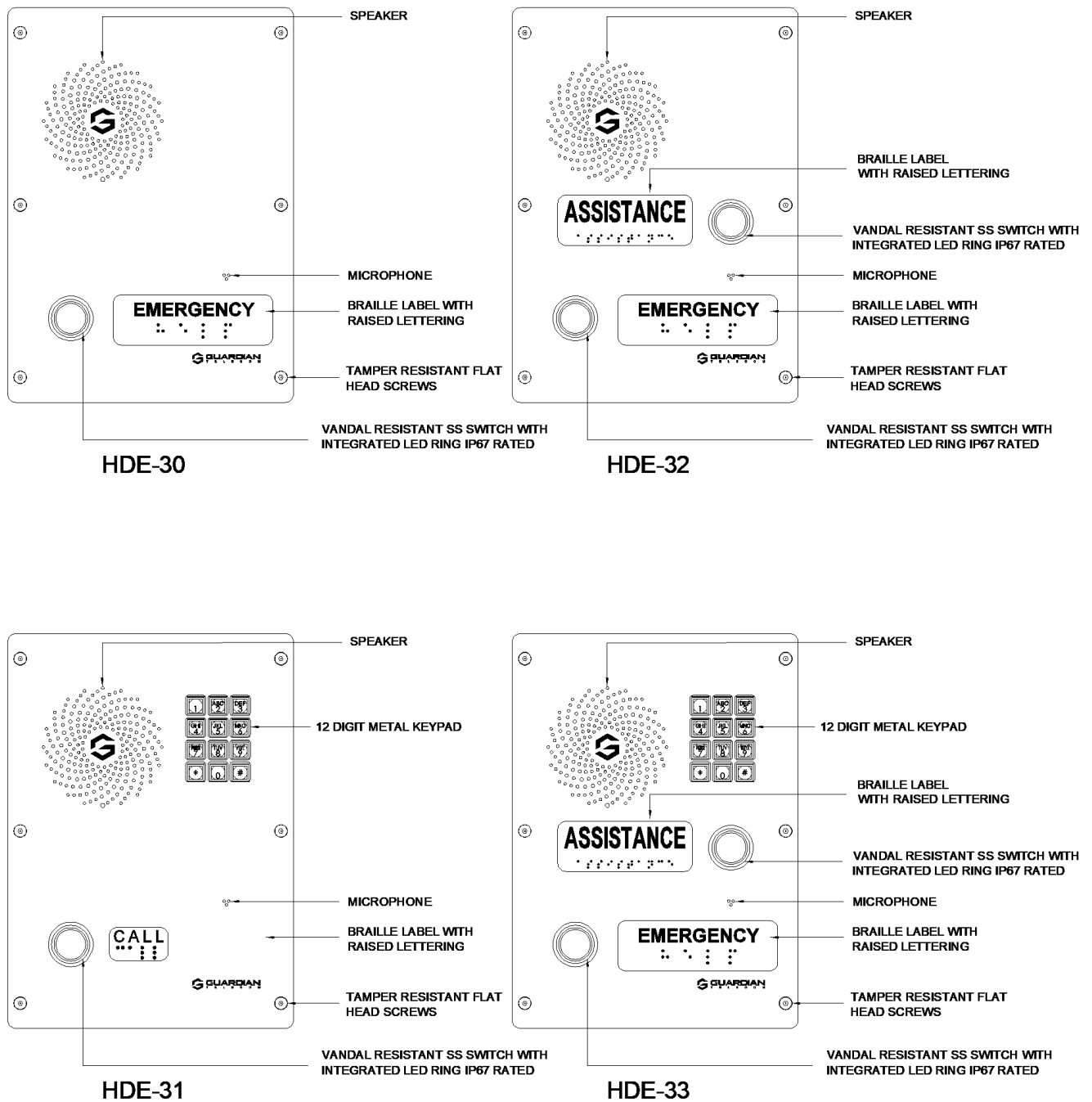


Figure 7 - HDE-30-V Series Features

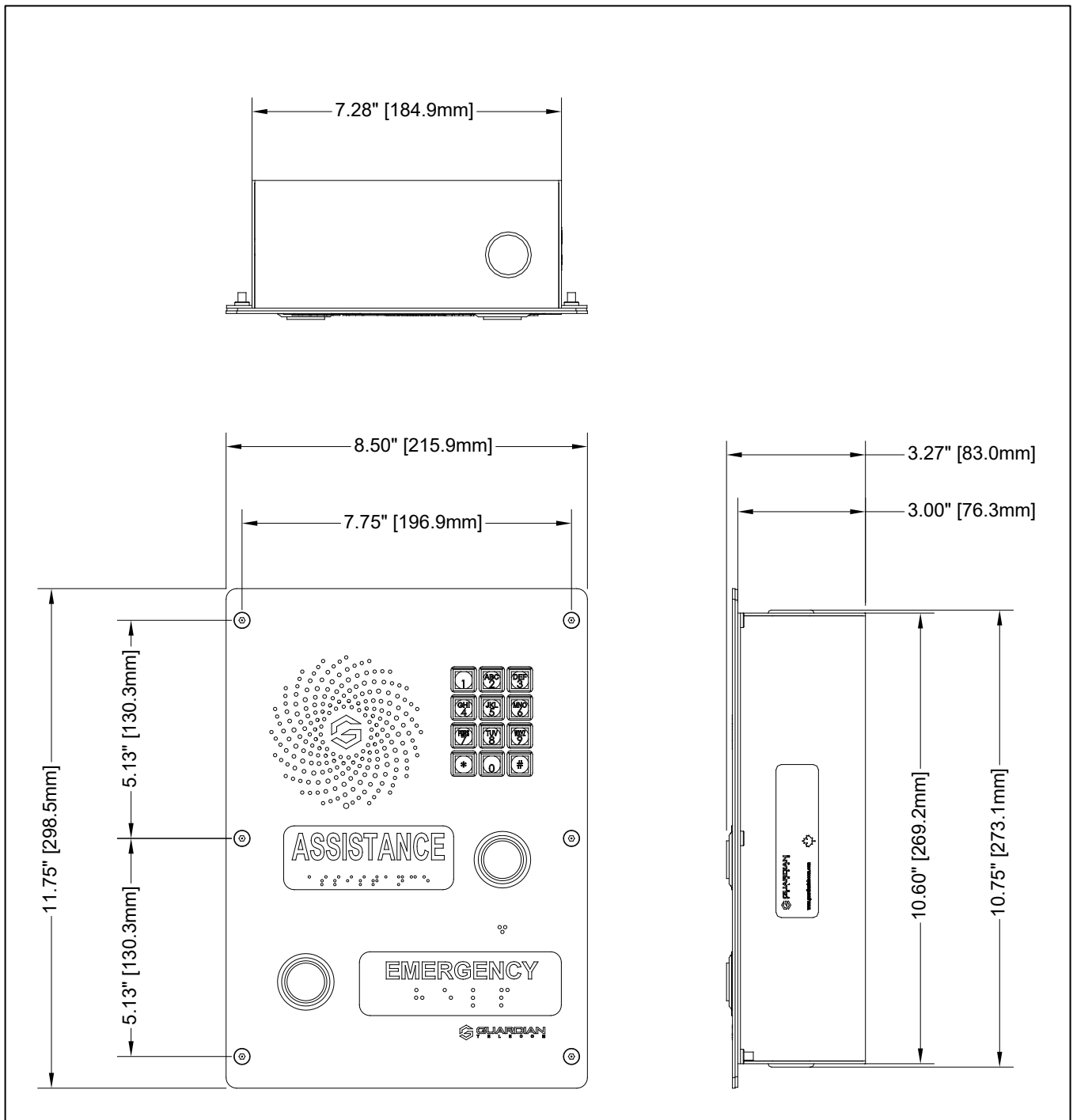


Figure 8 - HDE-30-V Series Dimensions

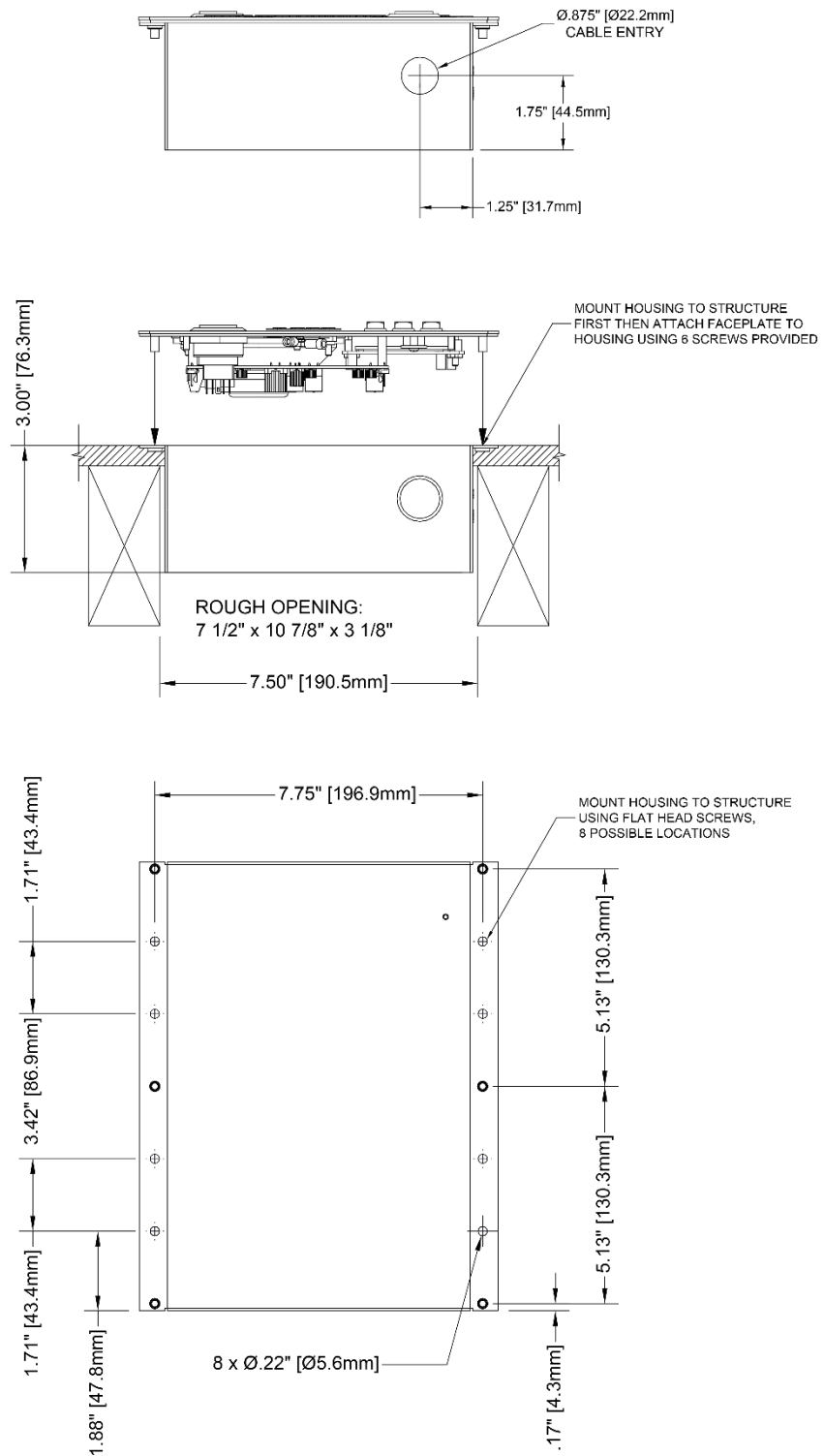


Figure 9 - HDE-30-V Series Mounting

9. Installing the HDE-30-V Series Telephones

Follow all appropriate electrical codes and use only approved electrical fittings for the installation.

Note: The VoIP PCBA is susceptible to damage from electrostatic discharge (ESD) and is protected by a metal shield. If it is necessary to remove the shield, take suitable precautions.

- If using an auxiliary power supply ensure that it is unplugged during installation.
- If using the onboard relay to control an external device or relay ensure power is off during installation.

Determine if power to operate the telephone will be provided via the ethernet or if external power will be required. If external power is required, install Guardian's Auxiliary Power Supply or equivalent.

Remove the cover screws from the front of the unit and carefully remove the front cover assembly. Note that the electronics are attached to the front plate

Prepare an opening 7 1/2" (190 mm) wide, 10 7/8" (276 mm) high and 3 1/8" (79 mm) deep. Install blocking around the rough opening if required.

Trim the left and right edges of the opening so that the upper surface of the enclosure flanges will be flush with the exterior of the wall when it is installed.

Install a cable gland or bushing into the 7/8" (22mm) opening in the bottom of the enclosure for the network cable.

If additional access is required for auxiliary power or connection to the on board relay punch another opening in the bottom of the enclosure near the original opening. Make sure that the fittings or wiring will not interfere with the PCBA or any parts of the faceplate when it is installed.

Thread the bare end of the Network cable out of the enclosure through the gland and opening.

If using an alternate power supply bring the wiring through the opening and into the enclosure.

If the onboard relay is to be utilized, bring the wiring through the opening and into the enclosure.

Secure the enclosure into the opening with flat head screws.

To facilitate making connections the faceplate can be temporarily attached inverted to either side of the enclosure.

Insert the Network plug into the RJ-45 connector on the PCBA.

Connect the alternate power supply to the terminal block if it is used.

Connect the onboard relay wiring to the terminal block if it is used.

Commissioning

Turn on the auxiliary power supply if utilized.

Connect the telephone into the network. Allow approx. 30sec for the phone to boot up.

Determine that the telephone is properly connected by pressing the RTFM switch for less than five seconds to announce the IP address.

Test the unit by calling to and from another unit.

Test the operation of the on board relay if it is utilized.

Ensure all connections are tight, then replace and secure the faceplate. Use the driver bit provided to install the tamper resistant screws.

Programming

Set up and configure if changes are required to the default settings.

Test the unit by making calls to and from another unit.

See: Figure 9 - HDE-30-V Series Mounting

See:
Figure 2 - Wiring

See: Figure 10 - Terminal Block Connections and 11.2 Connecting a Device to the Auxiliary Relay.

Tip: Store the driver bit in a secure place for future use.

Tip: See Manual P007451 - Setup and Configuration

Supported Protocols

The HDE-20/30-V Telephone with Keypad supports:

- SIP (Session Initiation Protocol)
- HTTP Web-based configuration
 - Provides an intuitive user interface for easy system configuration and verification of HDE-20/30-V Telephone with Keypad operations.
- DHCP Client
 - Dynamically assigns IP addresses in addition to the option to use static addressing.
- TFTP Client
 - Facilitates hosting for the Autoprovisioning configuration file.
- RTP
- RTP/AVP - Audio Video Profile
- Facilitates autoprovisioning configuration values on boot
- Audio Encodings
 - PCMU (G.711 mu-law)
 - PCMA (G.711 A-law)
 - G722.1 (Siren7)
 - G722.2 (AMR-WB)
 - G729.1 (G729J & G729EV)

10. Supported SIP Servers

As a SIP device, this product will operate with most IP PBX servers.

11. HDE-20/30-V Telephones Wiring

11.1. Connections

Figure 9 shows the pin connections on the J9 (terminal block). This terminal block can accept a wire range from 16 AWG to 26 AWG.

Note: As an alternative to using PoE power 24 VDC at 1A can be supplied to the terminal block.

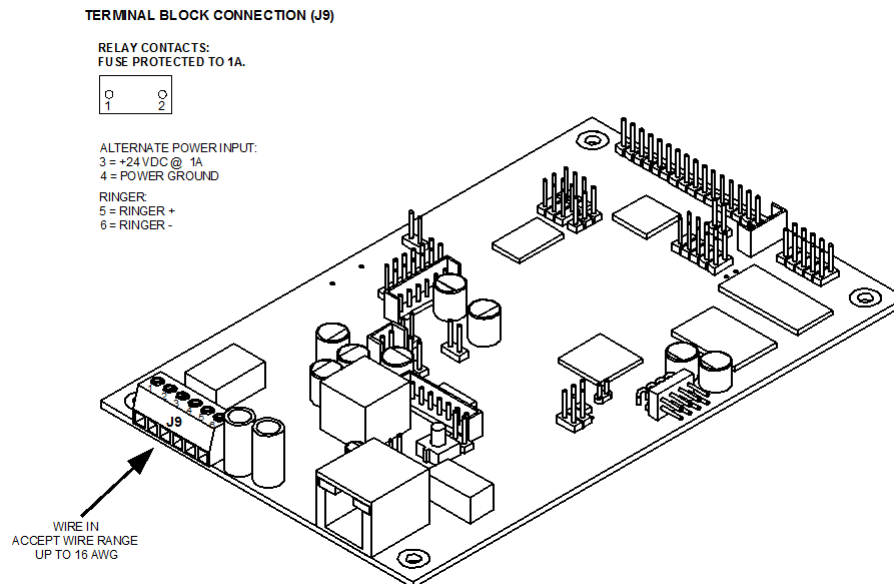


Figure 10 - Terminal Block Connections

11.2. Connecting a Device to the Auxiliary Relay

The HDE-20/30-V Telephone incorporates one on-board relay located on the PCBA, which enables users to control a low current external relay or device. An external relay could control a ringer, strobe light, door lock or any other apparatus. The on board relay is protected by a 1 Amp, non-replaceable fuse. **Power switched by the relay should not exceed the rating of the fuse. Consideration of a safety factor is recommended.**

Warning: The relay circuitry contains a non-replaceable 250VAC 1A fuse. If the fuse blows, the board must be returned to Guardian or an approved service center for repair.

The Telephone relay activation time is selectable through the web interface on the Device Configuration Page. The relay is controlled by DTMF tones generated from the phone to which the VoIP phone is connected; no matter which one initiated the call. The DTMF tones are selectable from the web interface as well.

Note: The three-digit code for the auxiliary relay must be sent in conformance with RFC2833 DTMF generation.

Note: Firmware version 3.4.0 or later requires a "#" to execute the DTMF command. Example 321# - activate relay.

See: Figure 10 - Terminal Block Connections

See: Manual P007451 Setup and Configuration

11.3. Identifying the Connector Locations and Functions

See Figure 10 and Table 1 to identify the connector locations and functions.

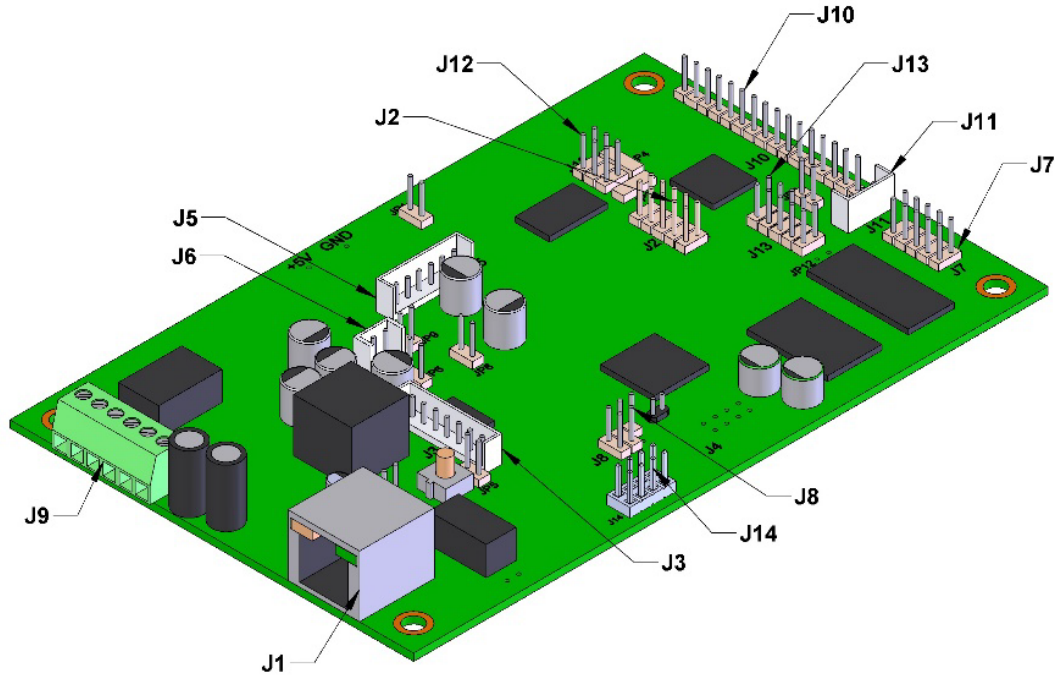


Figure 11 - Connector Locations

Connector	Function
J1	PoE Network Connection (RJ-45)
J2	Hands free Microphone Interface/LED Interface
J3	Not used
J4	JTAG Interface
J5	Handset/Reed Switch Interface
J6	Speaker Interface
J7	Keypad Interface
J8	RS232 Port
J9	Terminal Block (see Figure 9)
J10	Not used
J11	Switch Pushbutton
J12	ISP-DIP/Debug UART

Table 1 - Connector Functions

11.4. Network Connectivity, and Data Rate

When you plug in the Ethernet cable or power supply:

- The square, green **Link** light above the Ethernet port indicates that the network connection has been established (see Figure 11). The Link light changes color to confirm the auto-negotiated baud rate:
 - This light is yellow at 10 Mbps.
 - It is orange at 100 Mbps.

11.4.1. Verify Network Activity

The square, yellow **Activity** light blinks when there is network activity.

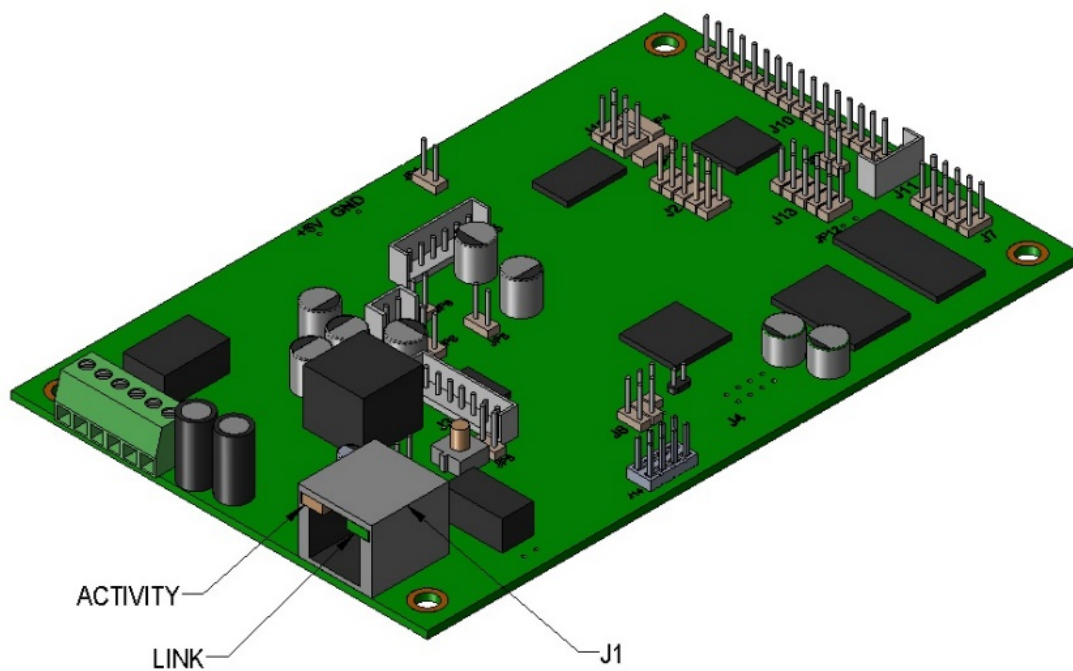


Figure 12 - Network Activity

11.5. RESET Switch

Note: The VoIP PCBA is susceptible to damage from electrostatic discharge (ESD) and is protected by a metal shield. If it is necessary to remove the shield, take suitable precautions.

When the Telephone is operational and linked to the network use the Reset Test Function Management (**RESET**) switch (Figure 12), on the Telephone board to announce the Telephone's IP Address, and test that the audio is working (see Section 12.5.1). The message will come through the speaker.

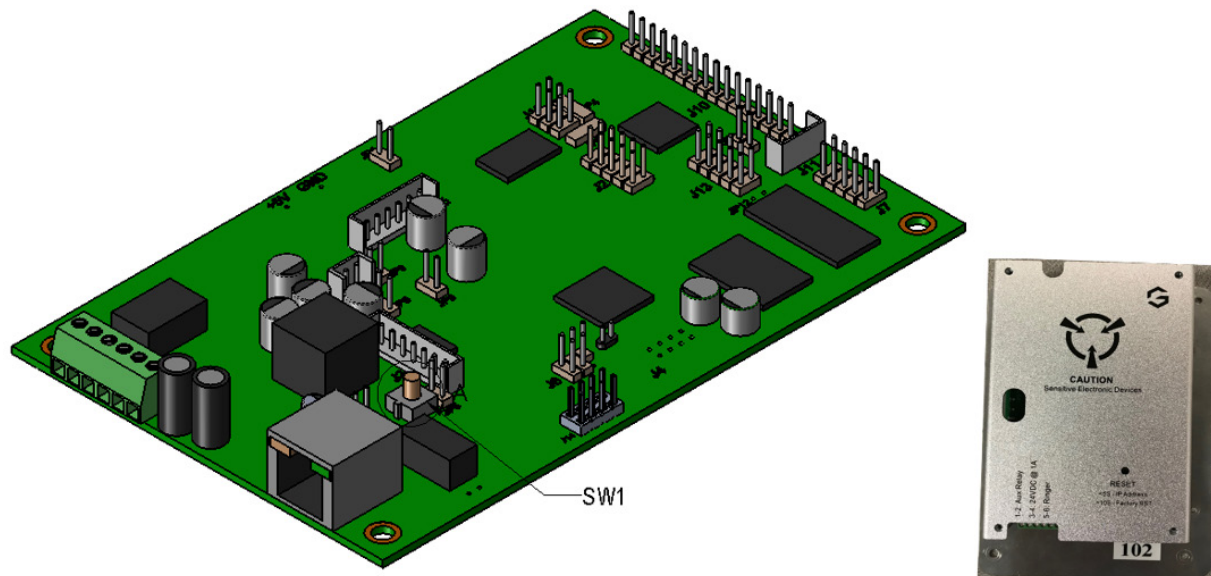


Figure 13 - RESET Switch

11.5.1. Announcing the IP Address

To announce a telephone's current IP address:

1. Press and release the RTFM switch (SW1). Do not hold more than five seconds.

Note The telephone will use DHCP to obtain the new IP address (DHCP-assigned address or default to 10.10.10.10 if a DHCP server is not present).

Note Pressing and holding the RTFM switch for longer than five seconds will restore the telephone to the factory default settings.

11.5.2. Restore the Factory Default Settings

When troubleshooting configuration problems, it is sometimes convenient to restore the device to a known state.

Note: Each Telephone is delivered with factory set default values.

To set the factory default settings:

1. Press and hold the **RTFM** switch (SW1) for more than five seconds.
2. The telephone announces that it is restoring the factory default settings.

Note The telephone will use DHCP to obtain the new IP address (DHCP-assigned address or default to 10.10.10.10 if a DHCP server is not present).

11.6. Adjust the Volume

You can adjust the volume through the Device Configuration Page.

12. Making a call from the HDE-V



HDE-20 and HDE-30:

Press the red EMERGENCY button and the phone number(s) programmed into Registers 00 and 01 will automatically be dialed.



HDE-21 and HDE-31:

Press the blue CALL button and then dial the phone number upon hearing the dial tone. If some preset digits were programmed into Register 02, they will precede the number dialed on the keypad by the user.

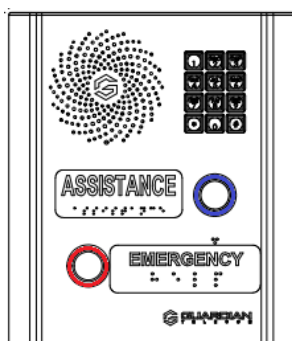


HDE-22 and HDE-32:

If the red EMERGENCY button is pressed, the phone number(s) programmed into Registers 00 and 01 will automatically be dialed.

If the blue ASSISTANCE button is pressed, the phone number programmed into Register 02 will automatically be dialed.

Note: The EMERGENCY call always takes priority over an ASSISTANCE call. In the event the EMERGENCY button is pressed while an ASSISTANCE call is in progress, the ASSISTANCE call will be disconnected and the EMERGENCY call will be processed.



HDE-23 and HDE-33:

If the red EMERGENCY button is pressed, the phone number(s) programmed into Registers 00 and 01 will automatically be dialed.

If the blue ASSISTANCE button is pressed, the user can dial the phone number upon hearing the dial tone. If some preset digits were programmed into Register 02, they will precede the number dialed on the keypad by the user.

Note: The EMERGENCY call always takes priority over an ASSISTANCE call.

12.1. LED Indicator

Action	Phone Status	LED Status
Press EMERGENCY button or CALL button and dial	Phone dials pre-programmed number or number dialed	Off
	Phone linked or connected to dialed number	Steady on

13. Specifications

Electrical Performance

SPEAKER OUTPUT	>85 dB
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Category

ETHERNET I/F	10/100 MBPS
PROTOCOL	SIP RFC 3261 COMPATIBLE
POWER INPUT: METHOD #1 METHOD #2	802.3AF COMPLIANT PoE SWITCH OR POWER INJECTOR 24VDC @ 1A POWER ADAPTER
CODECS SUPPORTED	G711, A-LAW AND μ -LAW G722.1 (SIREN7) G722.2 (AMR-WB) G729.1 (G729J AND G729EV)
RELAY CONTACT	FUSE PROTECTED TO 1A

Environmental

OPERATING TEMPERATURE	-22° TO +140° F (-30° TO +60° C)
HUMIDITY	0 TO 95% RH
DUSTPROOF	FULLY GASKETTED ENCLOSURE

Mechanical

HOUSING MATERIAL	16 GAUGE STEEL, ZINC DICHROMATE PLATED AND POWDER COATED
DIMENSIONS HDE-11/1100-VoIP (H x W x D)	12.0" (305mm) x 10.0" (254mm) x 3.0" (77mm)
DIMENSIONS HDE-12/1200-VoIP (H x W x D)	10.5" (267mm) x 9.0" (229mm) x 3.6" (91mm)
NET WEIGHT HDE-11/1100-VoIP	6.6LBS (3KG)
NET WEIGHT HDE-12/1200-VoIP	7LBS (3.2KG)
SHIPPING DIMENSIONS	16" x 10.5" x 9.5" (242mm 407mm x 267mm)
SHIPPING WEIGHT	10 LBS (4.6KG)
MOUNTING HDE-11/1100-VoIP	RECESSED
MOUNTING HDE-12/1200-VoIP	VERTICAL WALL
WIRING ACCESS	ONE 7/8" DIAMETER OPENING FOR OWNER SUPPLIED FITTING
HARDWARE MATERIAL	STAINLESS STEEL

COMPLIANCE

FCC	PART 15, CLASS A
ICES-003	CLASS A
IEC	61000-6-2: 2005
CISPR	22: 2008

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.

14. Field Repairs

Note: The VoIP PCBA is susceptible to damage from electrostatic discharge (ESD) and is protected by a metal shield. If it is necessary to remove the shield, take suitable precautions.

See: Replacement Parts

Disconnect the telephone IP Cable and Aux Power if necessary.

Carefully remove the front cover assembly and separate from the housing by disconnecting the harness plugs. NOTE that the handset and all electronics are attached to the front plate.

Perform the necessary repairs or adjustments.

Carefully replace the front plate and install all screws. Do not over tighten the cover screws. There is a flexible gasket between the cover and the body; excessive tightening of the screws deforms the gasket and reduces the weather resistance of the set.

Ringer Speaker Replacement

Unplug the speaker connector from the main board.

Remove the screws that hold the speaker cap to get access to the speaker.

Install the new speaker and gasket.

Reconnect the speaker connector to the main board.

Main Circuit Board Replacement

Label any wiring attached to the circuit board. Disconnect wiring and ribbon cable.

Remove the six screws holding the circuit board in place. Carefully remove the board.

Switch Contact Block Replacement

Disconnect the two wires from the switch block that connect it to the circuit board.

Remove the retaining screw and lift off the switch block.

Position the new switch block, tighten the retaining screw and re-connect the wiring.

Pushbutton Replacement

Remove the switch block as above.

To disconnect the pushbutton assembly loosen the two retaining screws and rotate the base while holding the metal ring.

Reassembly is the reverse of the disassembly.

15. Replacement Parts

Part No.	Description	Field Replaceable
P003021	GASKET - METAL KEYPAD	Yes
P004248	GASKET - HDE SURFACE MOUNT BACK	Yes
P004249	GASKET - HDE SURFACE MOUNT, BOTTOM	Yes
P005764	GROMMET - 7/8" SOLID BLACK	Yes
P005951	SWITCH - 30mm PUSH BUTTON RED, SS, C/W LED, 3V	Yes
P006003	GASKET - MICROPHONE/SPEAKER INSTALLATION	Yes
P006484	SWITCH - 30mm PUSH, BUTTON, ,BLUE, SS, C/W LED	Yes
P007395	PCBA - VOIP/TEL/HANDSET (VOIP TEL)	Yes
P007531	SA - METAL KEYPAD HDE VOIP C/W PCB AND CABLE	Yes
P007535	SCREW - #10-32 x 1/2" (T-25) FLAT HD, TORX TAMPER RESISTANT	Yes
P007637	SA - MICROPHONE 12" WIRES W/O CONNECTOR	Yes
P007777	BACK PLATE - HDE SURFACE MOUNT	Yes
P007780	HOUSING - HDE FLUSH MOUNT ALU. W/O POWDER COATING	Yes
P007781	GASKET - HDE-RECESSED MOUNT, 2mm EPDM	Yes
P008123	SA - SPEAKER, WHISPER 8 Ohm, 15W, WIDE RANGE	Yes
P008133	FACEPLATE - HDE-20-V, SINGLE PUSH BUTTON, SM, VOIP	Yes
P008134	FACEPLATE - HDE-21-V, SINGLE BUTTON, W/KEYPAD, SM, VOIP	Yes
P008135	FACEPLATE - HDE-22-V, DUAL PUSH BUTTON, SM, VOIP	Yes
P008136	FACEPLATE - HDE-23-V, DUAL BUTTON, W/KEYPAD, SM, VOIP	Yes
P008137	FACEPLATE - HDE-30-V, SINGLE PUSH BUTTON, RM, VOIP	Yes
P008138	FACEPLATE - HDE-31-V, SINGLE BUTTON, W/KEYPAD, RM, VOIP	Yes
P008139	FACEPLATE - HDE-32-V, DUAL PUSH BUTTON, RM, VOIP	Yes
P008140	FACEPLATE - HDE-33-V, DUAL PUSH BUTTON, W/KEYPAD, RM, VOIP	Yes

16. Warranty

Guardian Telecom, a division of Circa Enterprises Inc. warrants that its products are free from defective workmanship and materials. Guardian Telecom will, within three years from the date of final sale to the customer, replace or repair any such products provided they are returned to our facilities for examination. Freight costs (including brokerage if applicable), both to and from Guardian, are the sole responsibility of the customer. This warranty does not extend to any items that are deemed to have been misused, modified, neglected, improperly specified, improperly installed, or used in violation of instructions or specifications approved by Guardian Telecom. Guardian Telecom, a division of Circa Enterprises Inc. shall not be liable for incidental or consequential damage of any kind caused by any defect in our product. The total liability shall not, under any circumstances, exceed the purchase price of the products furnished by Guardian Telecom, a division of Circa Enterprises Inc.

A return authorization must be obtained prior to warranty claims or repairs.

17. Disclaimer

The products covered by this manual are designed for use in Industrial Environments and/or Hazardous Locations. Due to the range of possible applications for these instruments the manufacturer will not be responsible for damages or losses of any kind suffered as a result of the use of this product, including consequential damages.

18. Warning

This device may be opened and reassembled by qualified personnel only, for the purposes of installing the product, making adjustments and replacing components, following the instructions in the product manual.

High voltages may be present in this product when connected to telephone wiring.

19. Service Telephone Number

1-800-363-8010

Guardian Telecom provides a customer service telephone number that is toll-free within North America. If you need assistance when installing or operating this product, please call the toll-free telephone number between regular business hours (8:00AM-5:00PM), Mountain Standard Time. If you are calling outside of regular business hours, please leave a detailed message, and a member of Guardian Telecom's Service Department will return your call as soon as possible. If your product requires service, Guardian personnel will supply you with an RMA (return materials authorization) number over the telephone or through our web site product return page. This number must be included with your return address and the name of the person to contact.

Guardian Telecom, a Division of Circa Enterprises Inc.

Toll-free 1-800-363-8010

Phone (403) 258-3100

Fax. (403) 255-2595

www.guardiantelecom.com

20. Feedback

Guardian Telecom continually strives to make reliable, durable, and easy to use products. If you, as an installer or user of our equipment, have any suggestions for improvements to this or any of our products or documents, including this manual, we would appreciate hearing from you.

21. Guardian Product Return

Guardian products have been quality tested and are in full working order when shipped from the factory, given the rugged nature of these products shipping is not expected to damage a unit. In the unlikely event of a malfunction, Guardian follows the three-step procedure below.

Step I - On-Site Correction

The most common source of difficulties with a new product is improper installation in one of two ways: incorrect wiring connections or connection to an incorrect power source.

Product wiring needs to be properly connected to the on-site wiring. Correct wiring instructions are shown in the user manual included with the product.

VoIP telephones must receive power either from the Ethernet (POE) or from an external source. If a VoIP telephone fails to function, refer to the Question & Answer section in the Setup and Configuration manual P007451. If the solution is not found in the Q & A section contact Guardian Tech Support at 1-800-363 8010.

Step II - Return Materials Authorization (RMA)

When a product has been installed following user manual instructions and the unit fails to operate, the user must contact Guardian Telecom to obtain authorization to return the product. This can be done by completing an RMA form online at <https://www.guardiantelecom.com/support/rma/>, or by calling the service telephone number given in this manual.

After providing information on the product, the owner and the nature of the problem, Guardian will issue a RMA number, to be shown on documentation returned with the product.

In addition to the RMA number, shipping documents should include name, address and telephone number of the owner along with contact information for the person responsible for the repair and/or the user who identified the malfunction.

(Where a product is being returned for repair from outside of Canada, customs documentation must show the product's serial number, date of export [date of purchase], and a notation that the equipment is: "Canadian goods returning.")

Step III - Factory Authorized Service

Once received, each product is carefully inspected and tested. If the product is under warranty, repairs are completed and the product returned to the owner, generally within five working days of receipt by the factory.

A product that has been subjected to misuse, neglect or accident or is beyond the warranty period will be evaluated. The service department will provide the owner's representative with a repair cost estimate. Once approved, repairs are completed and the product returned, generally within five working days.

22. Cleaning Tips for Guardian Telephones

Guardian Telephones may occasionally need to be cleaned to maintain appearance. Generally, wiping the surface with a clean, water-dampened cloth will remove most films or residues. If the soiling is too stubborn for plain water, a mild detergent solution may be used. Be sure to wipe away any detergent residue with a plain water dampened cloth. The Telephone may be cleaned with any general-purpose household glass and surface type cleaner. Do not spray the telephone directly! Spray the cleaner on a soft cloth then wipe the surface. Pre-treated cloths such as those used for eyeglasses or cameras may be used to clean the Telephone. Premoistened towelettes may also be used, however, avoid those containing lanolin or aloe, as they will leave a slippery residue. The handset and surface of the telephone may be cleaned with disinfectants used for general cleaning in a medical environment. Isopropyl alcohol may be used applied with a cloth. Avoid using alcohol on silicon-based keypads, since doing so may significantly degrade legibility.

- Do not use furniture polishes, waxes or plasticizer-based cleaner (Armor All etc.)
- Do not use lanolin, aloe, glycerin or other skin care type products.
- Do not apply any solvent such as acetone, mineral spirits etc.
- Do not directly spray or immerse the handset.

23. Storage

General Storage (All situations):

- Note any stacking limits or warnings on packaging (if any).
- Do not store in temperatures over +80C.
- Store in original packaging if possible until needed.

Long Term Storage (> 6 Months):

- If area is air-conditioned and not subject to high changes in humidity, continue to store in original packaging.
- If wide humidity shifts are expected, then use these steps:
 - Remove product from packaging (including plastic bags) and store on shelf in open air.
 - If area is subject to a high degree of dust, to help maintain cosmetic appearance you can cover with cloth (Do not cover with plastic or materials that will trap moisture) or clean periodically.
 - Do not store out of packaging long term where they are exposed to sunlight. Long-term exposure to UV may cause fading on plastic parts.

Model No.

Part No.

Serial No.

Date of Purchase



SAI GLOBAL
ISO 9001:2015

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