



Heavy Duty Emergency VoIP Telephones

HDE-VoIP Series

Installation and Operation



HDE11-VoIP



HDE1100-VoIP



HDE12-VoIP



HDE1200-VoIP

P007310 Rev. D 190116 1/18/2019 11:36 AM

HDE-VoIP Installation Guide P007310 Rev. E

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Toll-free 1-800-363-8010
Phone (403) 258-3100
Fax. (403) 253-4967
www.guardiantelecom.com
E-mail: sales@guardiantelecom.com

Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Install in accordance with the manufacturer's instructions.
6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
7. Only use attachments/accessories specified by the manufacturer.
8. Refer all servicing to qualified service personnel.
9. Prior to installation, consult local building and electrical code requirements.



Warning

Electrical Hazard: This product should be installed by a licensed electrician according to all local electrical and building codes.



Warning

Electrical Hazard: To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.

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1. Package Contents

- (1) HDE-VoIP Telephone
- (1) Driver bit for vandal resistant screws
- (1) Mounting template for HDE-12-VoIP and HDE-1200-VoIP

Note: Installation and Operation Manual, Setup and Configuration Manual, Guardian Discovery Utility, Interoperability Guide, VoIP Technical Support, Firmware and Autoprovisioning template are all available at www.guardiantelecom.com.

2. Models

Part Number	Model	Installation	Call Button Configuration
P6995	HDE-11-VoIP	Recessed	Single Emergency
P6996	HDE-1100-VoIP	Recessed	Call button & 12 digit keypad
P6997	HDE-12-VoIP	Wall Mount	Single Emergency
P6998	HDE-1200-VoIP	Wall Mount	Call button, Emergency button & 12 digit keypad

3. Accessories

POE – Injector – Auxiliary Power Supply (Contact Sales)
Loud Ringers and Strobe Lights

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>

5. Product Overview

HDE-VoIP Series Heavy Duty Emergency Telephones

The HDE-VoIP 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-VoIP 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.

The HDE-11-VoIP, HDE-12-VoIP and HDE-1200-VoIP telephones 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 be programmed to also energize the alerter when an incoming call is made.

*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.

6. Typical System Installation

The Voice-over-IP (VoIP) HDE-VoIP 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-VoIP Telephones can be installed as part of a VoIP phone system.

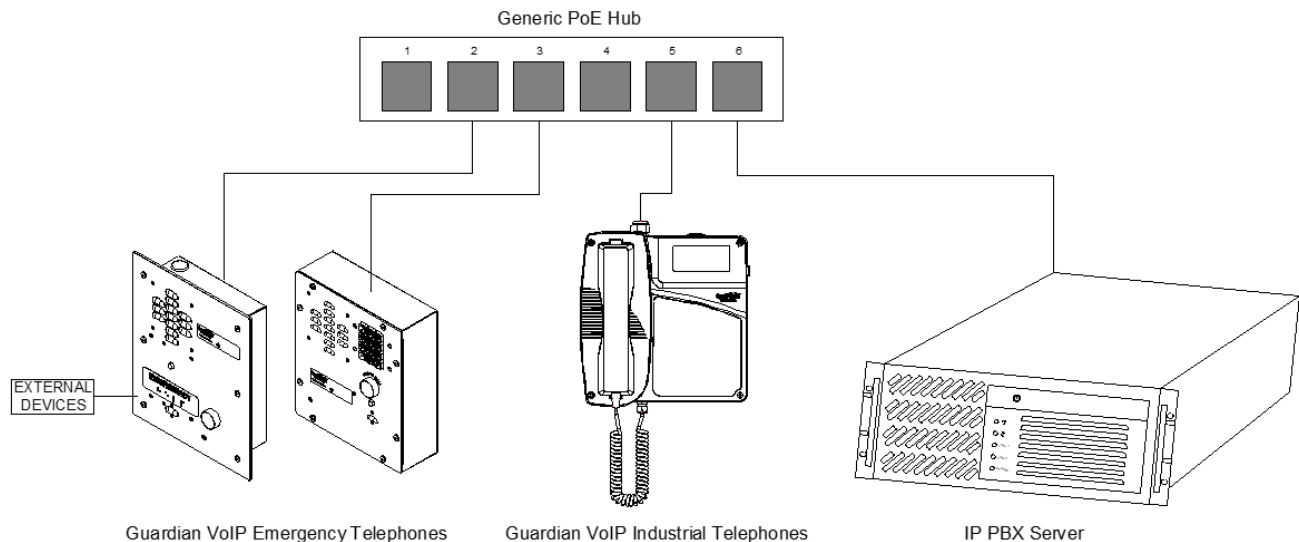


Figure 1 - Typical Installation

7. Features

- *Enclosure*
 - 16 Gauge steel, zinc dichromate plated and powder coated
 - 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: P007402)*
- *Three year warranty*
- *Peer-to-peer capable*

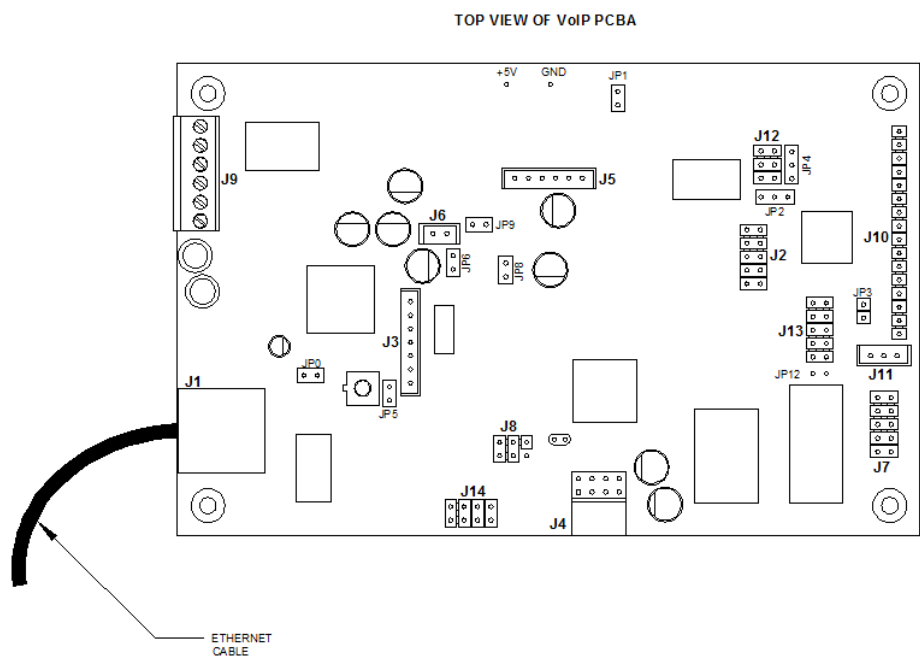
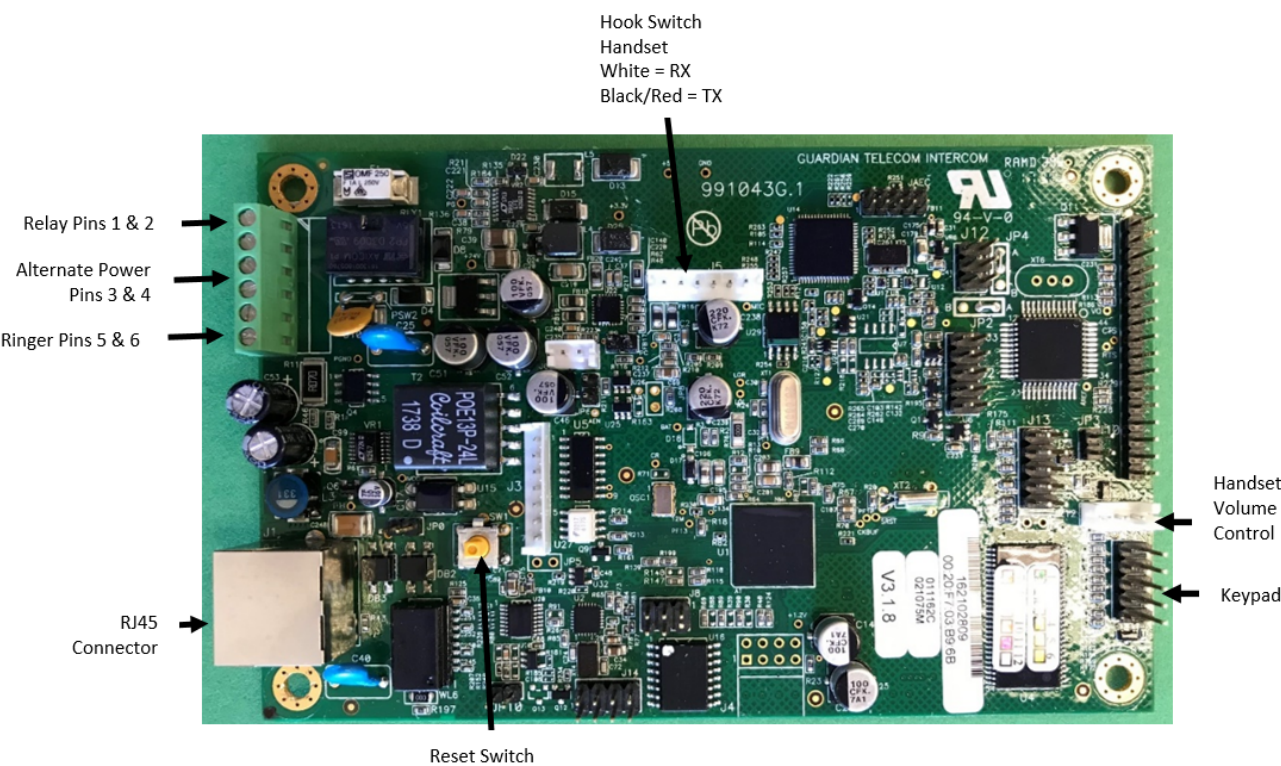


Figure 2 - Wiring



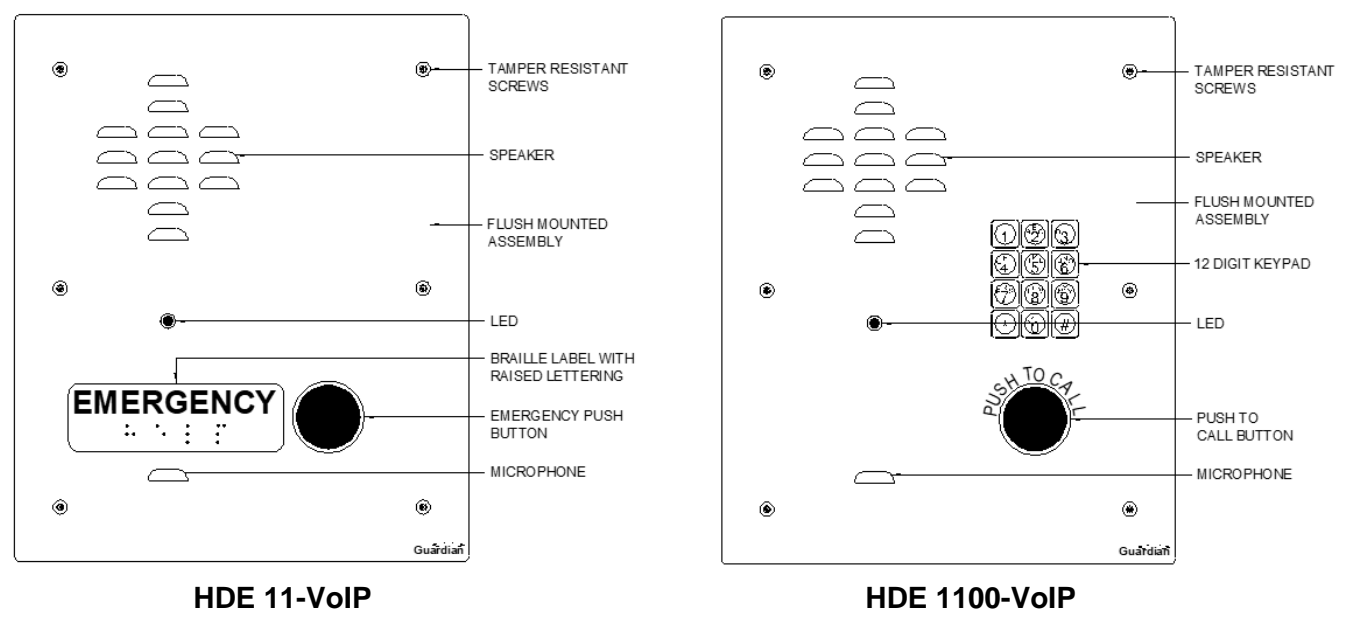


Figure 3 - HDE-11-VoIP & HDE-1100-VoIP Features

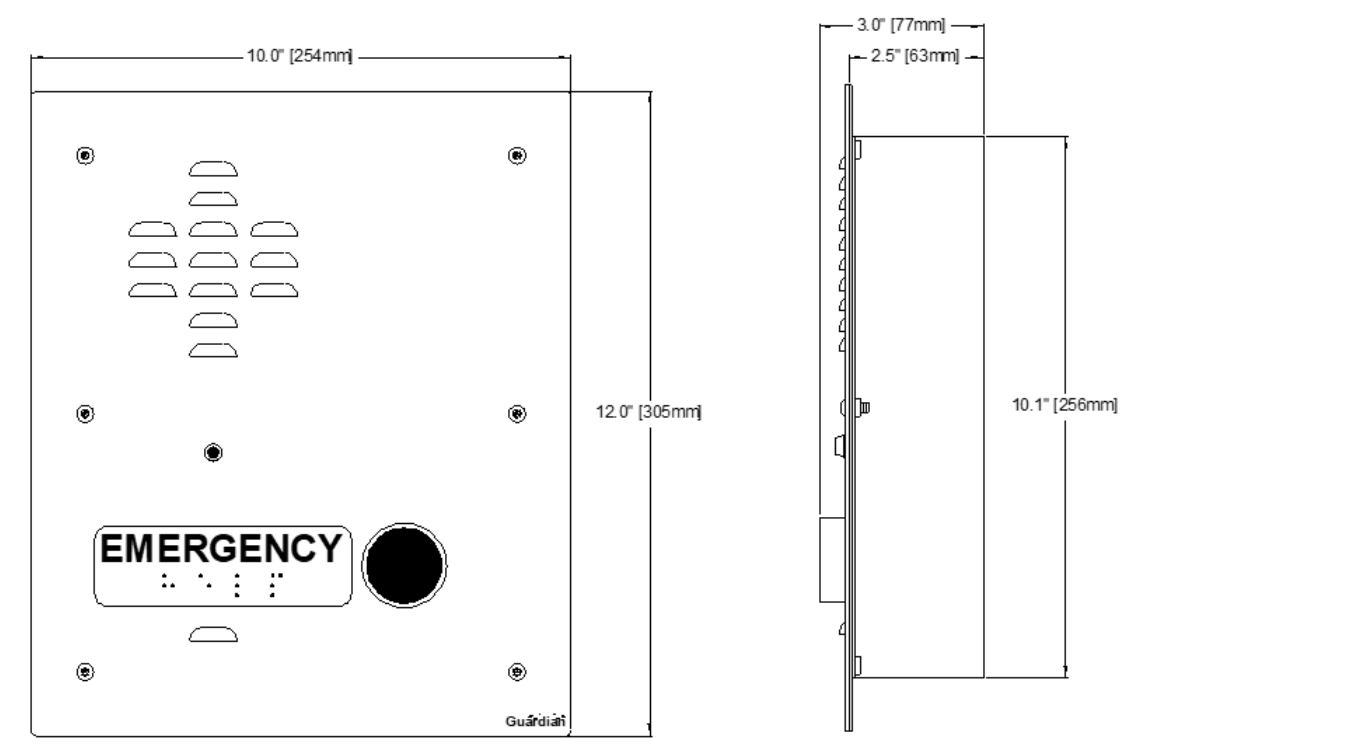


Figure 4 - HDE-11-VoIP & HDE-1100-VoIP Dimensions

8. Installing the HDE-11/1100-VoIP 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

Prepare an opening 7 ⁵/₈" (193 mm) wide, 10 ¹/₄" (260 mm) high and 2 ¹/₂" (64 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 5 - HDE-11-VoIP & HDE-1100-VoIP Mounting

See: Figure 2 - Wiring

See: Figure 9 - Terminal Block Connections and Section 12.2 Connecting a Device to the Auxiliary Relay.

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

Tip: See Manual P007402 - Setup and Configuration

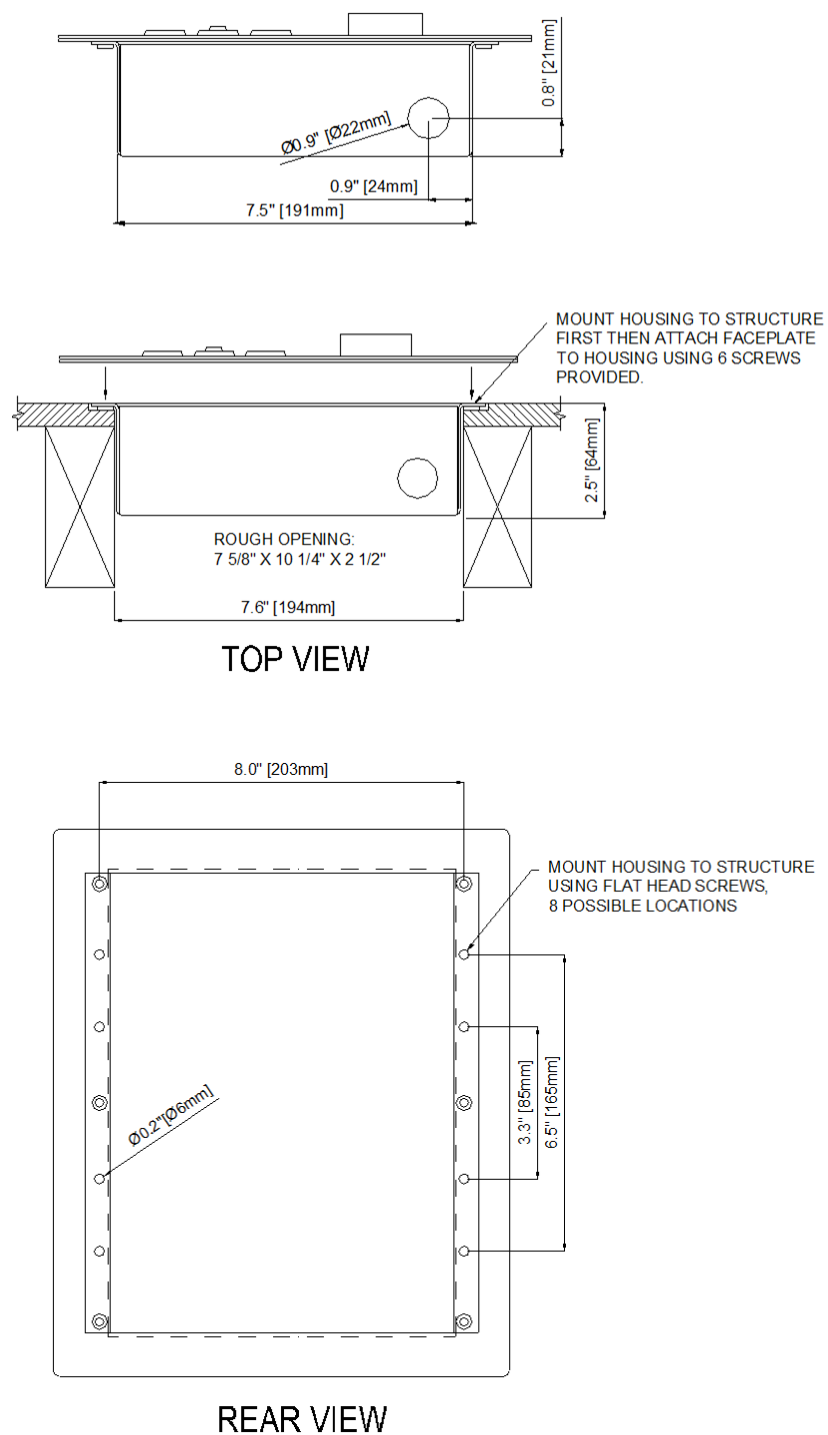


Figure 5 - HDE-11-VoIP & HDE-1100-VoIP Mounting

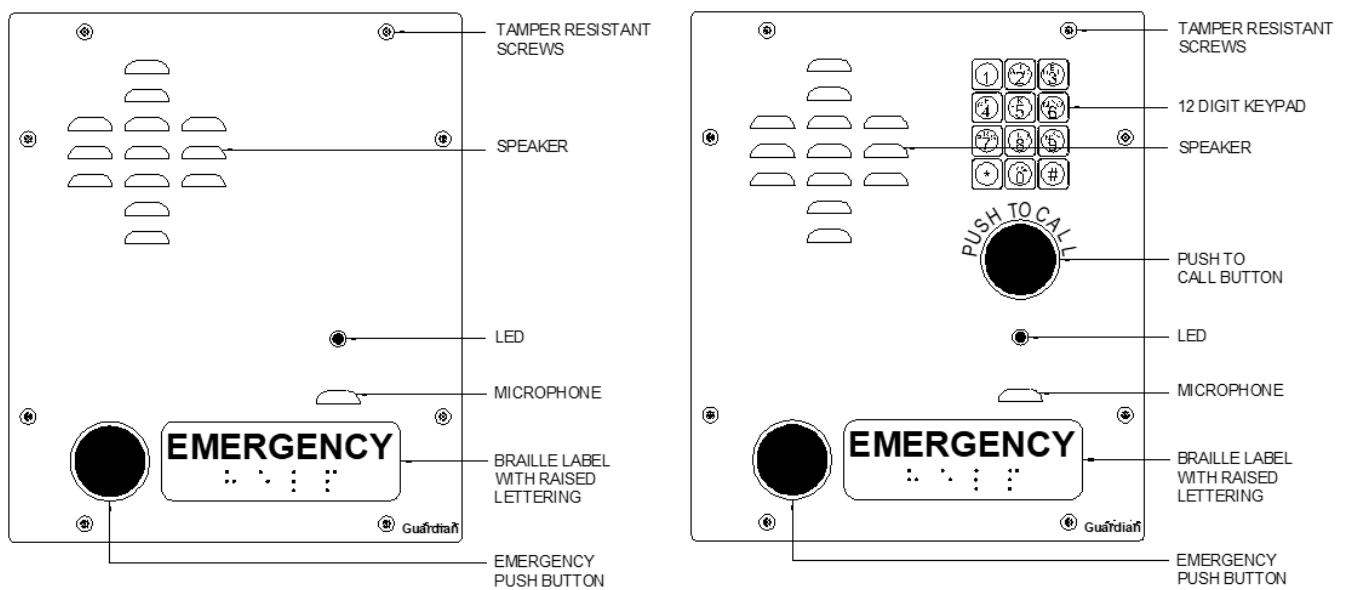


Figure 6 - HDE-12-VoIP & HDE-1200-VoIP Features

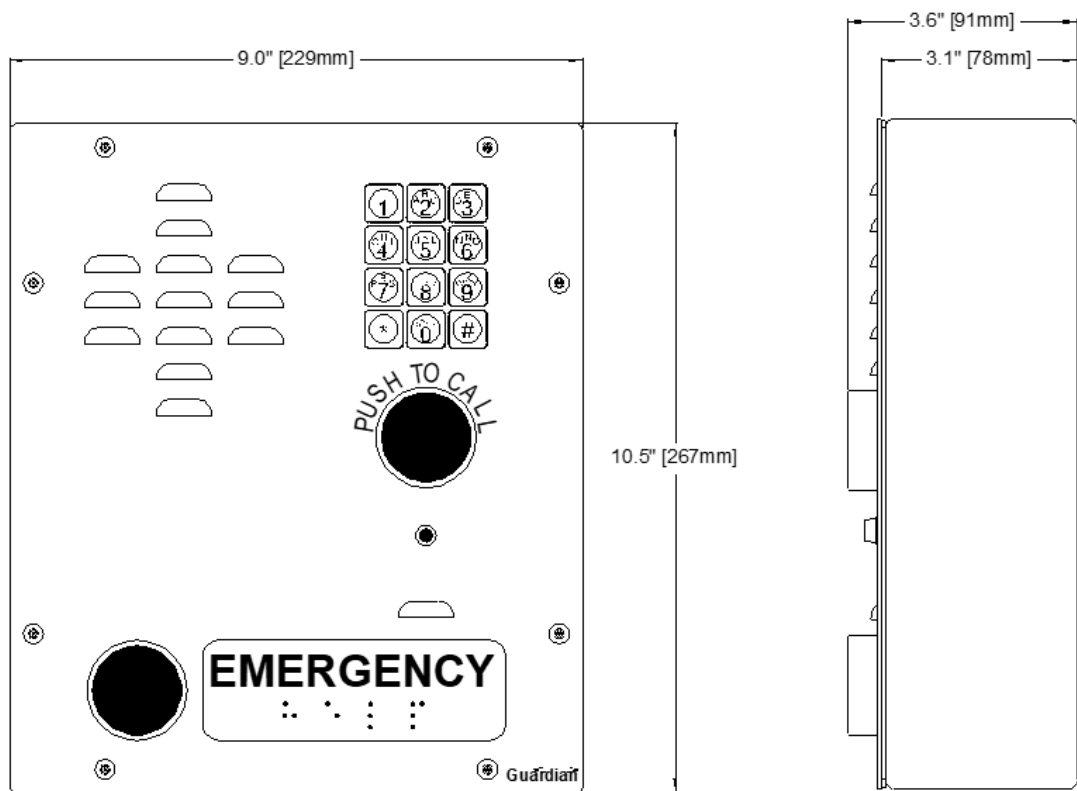


Figure 7 - HDE-12-VoIP & HDE-1200-VoIP Dimensions

9. Installing the HDE-12/1200-VoIP 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 template provided or the enclosure itself 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 7 - HDE-12-VoIP & HDE-1200-VoIP Dimensions

See: Figure 2 - Wiring

See: Section 12.2 Connecting a Device to the Auxiliary Relay and Figure 9 - Terminal Block Connections.

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

Tip: See Manual P007402 - Setup and Configuration

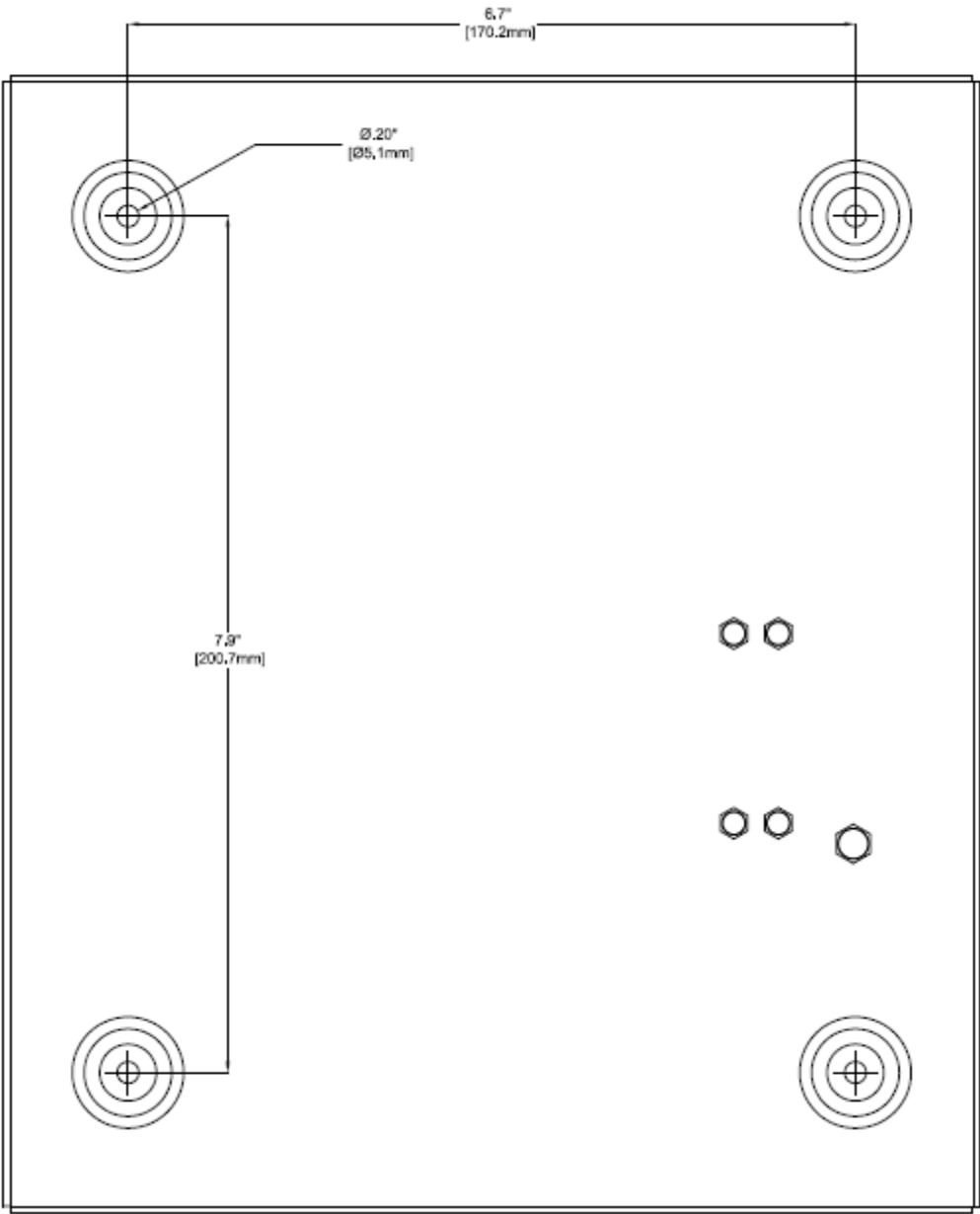


Figure 8 - HDE-12-VoIP & HDE-1200-VoIP Mounting

10. Supported Protocols

The HDE-VoIP 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-VoIP 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)

11. Supported SIP Servers

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

12. HDE-VoIP Telephones Wiring

12.1. 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.

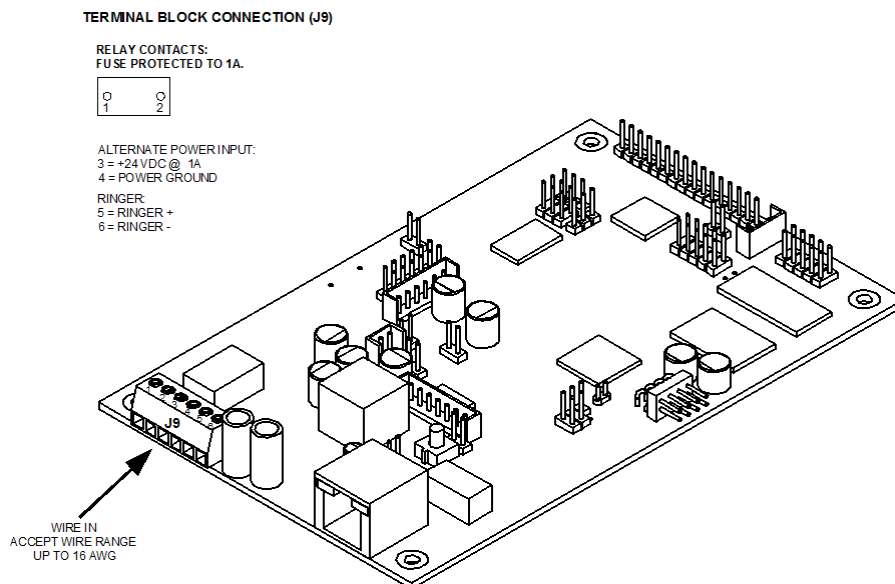


Figure 9 - Terminal Block Connections

12.2. Connecting a Device to the Auxiliary Relay

The HDE-VoIP 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 9 - Terminal Block Connections

See: Manual P007402 Setup and Configuration

12.3. Identifying the Connector Locations and Functions

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

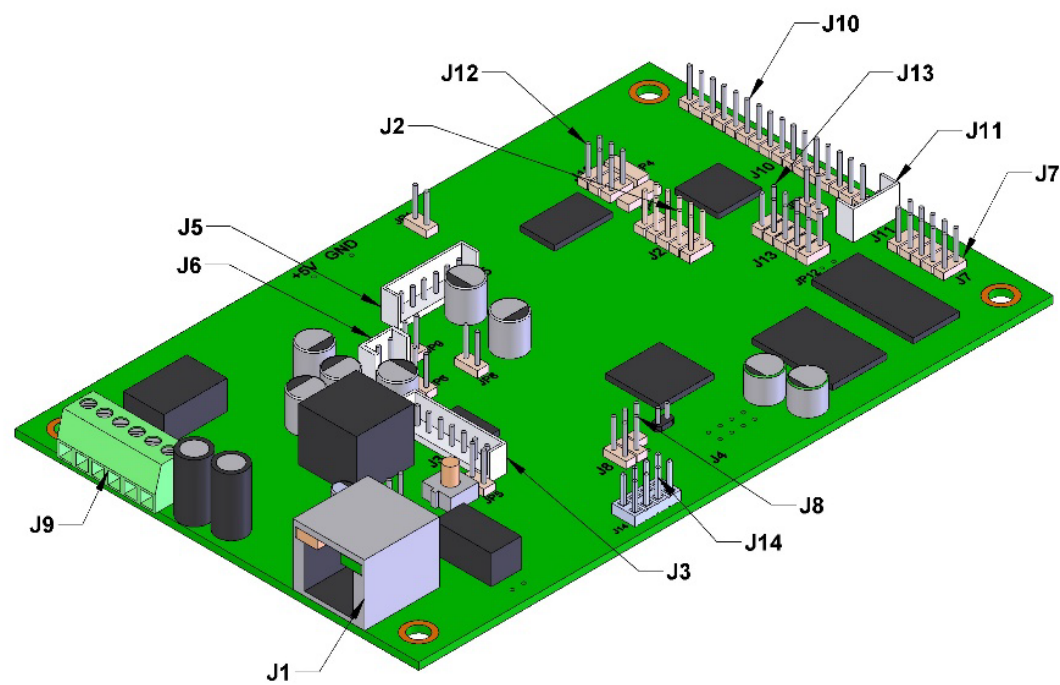


Figure 10 - Connector Locations

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

12.4. 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.

12.4.1. Verify Network Activity

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

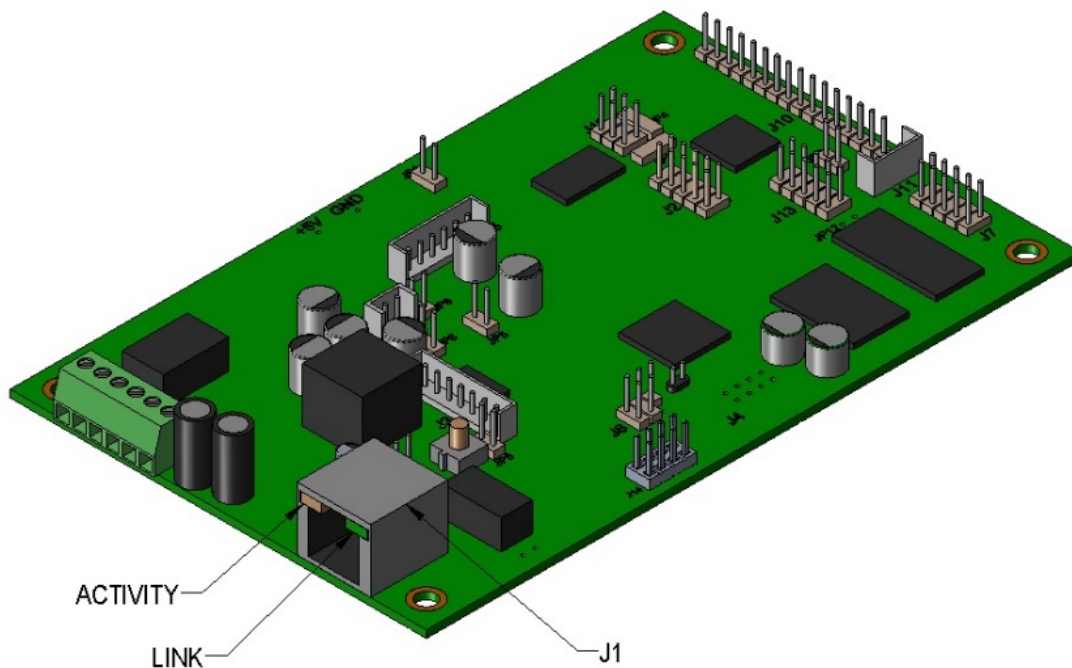


Figure 11 - Network Activity

12.5. RESET Switch

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.

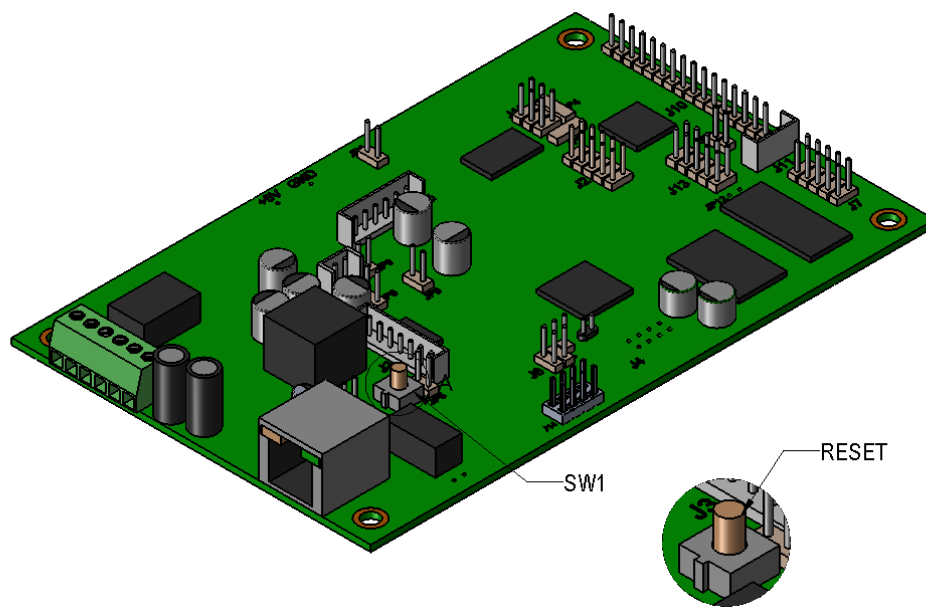


Figure 12 - RESET Switch

12.5.1. 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.

12.5.2. 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:

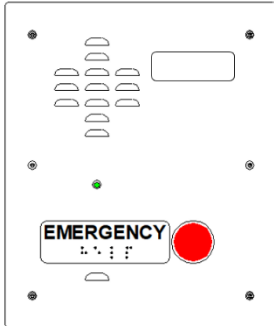
1. Press and hold the **RTFM** switch (SW1) for more than five seconds.
2. The telephone announces that it is restoring the factory default settings.

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).

12.6. Adjust the Volume

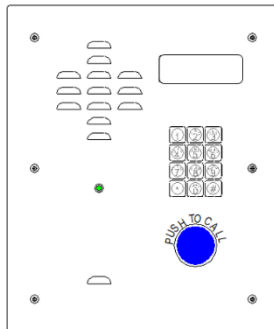
You can adjust the volume through the Device Configuration Page.

13. Operation



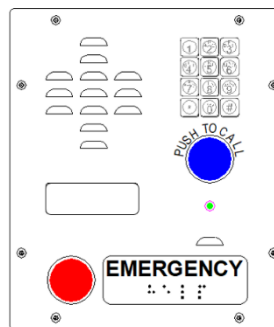
HDE-11-VoIP & HDE-12-VoIP EMERGENCY TELEPHONES

Press the EMERGENCY button. The pre-programmed telephone number automatically dials. If the unit is equipped with an external signaling device, it will also activate. The LED will indicate when a connection has been made. A conversation can now take place.



HDE-1100-VoIP CALL TELEPHONE

TO CALL - Press the PUSH TO CALL button, wait for dial tone then dial the number. If a speed dial extension was programmed in the phone will automatically dial that extension. A conversation can now take place.



HDE-1200-VoIP EMERGENCY/CALL TELEPHONE

EMERGENCY - Press the EMERGENCY button. The pre-programmed telephone number automatically dials. If the unit is equipped with an external signaling device option, it will also activate. The LED will indicate when a connection has been made. A conversation can now take place.

TO CALL - Press the PUSH TO CALL button, wait for dial tone then dial the number. If a speed dial extension was programmed in the phone will automatically dial that extension. A conversation can now take place.

NOTE: The Emergency call always takes **priority** over a regular call. In the event the emergency button is pressed while a regular call is in progress the regular call will be disconnected and the emergency call will proceed.

13.1. 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

14. Specifications**Electrical Performance**

SPEAKER OUTPUT	>85 dB
----------------	--------

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.

15. Field Repairs

Field repairs may only be carried out by qualified technicians using OEM parts. Substitution of parts voids warranty and may pose a hazard to users of the equipment.

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.

See: 12 Replacement Parts

Tip: Torque screws to 2.5 in/lbs (0.28 Nm).

16. Replacement Parts	
Part No.	Description
P004585	LED - Green Water Tight Panel Mount
P005682	Screw - #10-32 X 3/8" Torx Tamper Resistant
P005706	Bit - For Tamper Resistant Screws
P005952	Faceplate - HDE11-VoIP
P005958	Push Button Red C/W Metal Ring for HDE11-VoIP, HDE12-VoIP and HDE1200-VoIP*
P005992	Housing - For HDE11/1100-VoIP
P005993	Gasket - Faceplate HDE11/1100-VoIP
P006000	Switch - Contact Block N.O.*
P006239	Faceplate - HDE1100-VoIP
P006345	Speaker - 8 Ohm, 5 Watt
P006457	Housing - Steel HDE-12/1200-VoIP
P006458	Faceplate - HDE12, Single Button, Yellow
P006459	Faceplate - HDE1200 with Emergency Button, Call Button and Keypad
P006463	Gasket - HDE12, HDE1200-VoIP
P006482	Push Button "Blue" for HDE1100-VoIP and HDE1200-VoIP*
P007395	PCBA - VoIP
P007408	Microphone Gasket
P007410	Microphone W/O Connector
P007531	Keypad - Metal HDE1100-VoIP and HDE1200-VoIP C/W PCB and Cable

*Note: Each switch is made up of three parts - a pushbutton with metal ring and a switch block.

17. Warranty

Guardian Telecom warrants your product to be free of defects in material and workmanship for a period of three years. Guardian Telecom will repair or replace any defective unit that is under warranty.

This warranty is null and void if any non-authorized modifications have been made to this product, or if it has been subjected to misuse, neglect, or accident. This warranty covers bench repairs only; such repairs must be made at Guardian Telecom or an authorized service depot. Guardian Telecom is not responsible for costs incurred for on-site service calls, freight, or brokerage.

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

18. 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.

19. 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.

20. Service Telephone Number

1-800-363-8010

Guardian Telecom provides a customer service telephone number which 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) 253-4967

www.guardiantelecom.com

21. 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.

22. 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 P007402. 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.

23. 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.

24. 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.

Notes:

[illegible]



Guardian Telecom, A Division of Circa Enterprises Inc.

Toll-free 1-800-363-8010

Phone (403) 258-3100

Fax. (403) 253-4967

www.guardiantelecom.com

E-mail: sales@guardiantelecom.com

(Click to open message box)

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