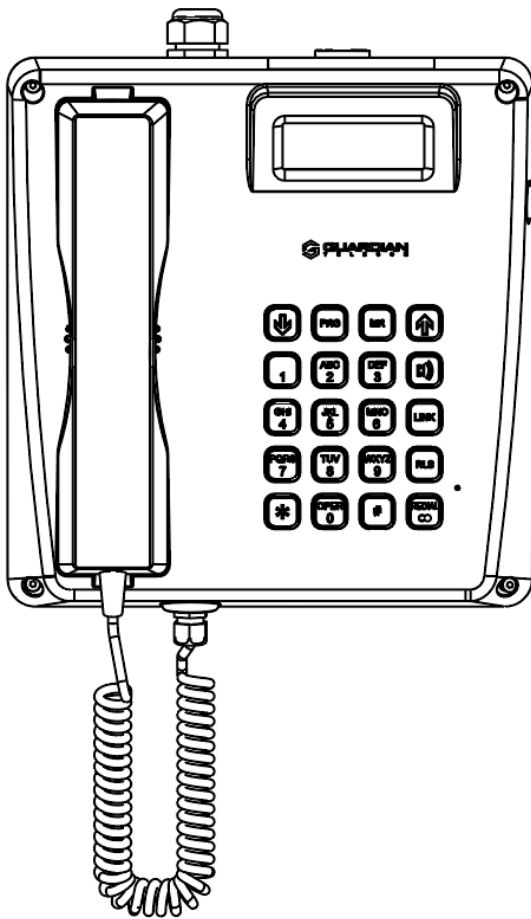


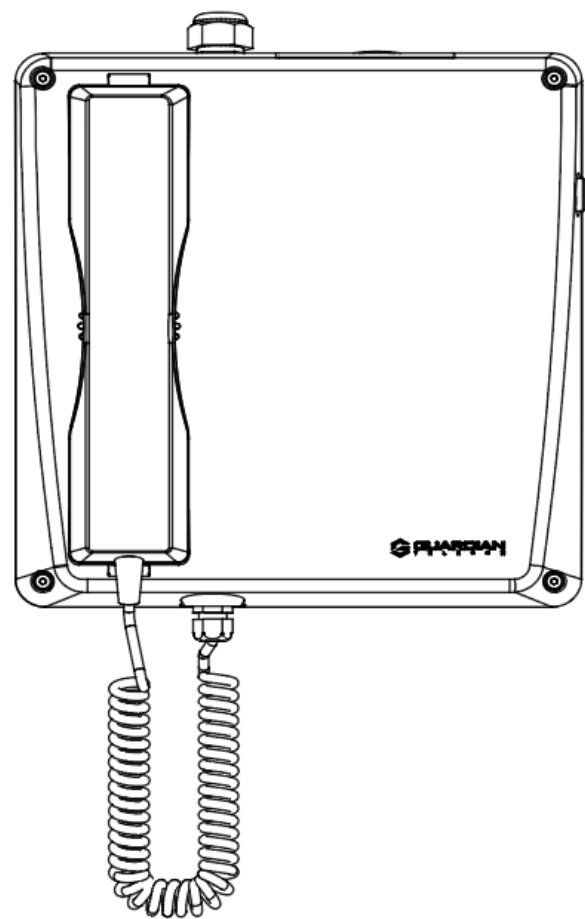
Industrial Desk/Wall Mount VoIP Telephones

DTR-VoIP and DTT-VoIP Series

Installation and Operation



DTT-50-VoIP



DTR-51-VoIP

PoE DTR/T-VoIP Installation Guide P007314 Rev. F

COPYRIGHT NOTICE:

© 2020 Circa Enterprises Inc.

ALL RIGHTS RESERVED

This manual and the related materials are the copyrighted property of Circa Enterprises. No part of this manual or related materials may be reproduced or transmitted, in any form or by any means (except for internal use by licensed customers), without prior express written permission of Circa Enterprises. This manual, and the products, software, firmware, and/or hardware described in this manual are the property of Circa Enterprises provided under the terms of an agreement between Circa Enterprises and the recipient of this manual, and their use is subject to that agreement and its terms.

DISCLAIMER: Except as expressly and specifically stated in a written agreement executed by Circa Enterprises Circa Enterprises makes no representation or warranty, express or implied, including any warranty or merchantability or fitness for any purpose, with respect to this manual or the products, software, firmware, and/or hardware described herein. Circa Enterprises assumes no liability for damages or claims resulting from any use of this manual or such products, software, firmware, and/or hardware. Circa Enterprises reserves the right to make changes, without notice, to this manual and to any such product, software, firmware, and/or hardware.

OPEN SOURCE STATEMENT: Certain software components included in Guardian products are subject to the GNU General Public License (GPL) and Lesser GNU General Public License (LGPL) "open source" or "free software" licenses. Some of this Open Source Software may be owned by third parties. Open Source Software is not subject to the terms and conditions of the Circa Enterprises COPYRIGHT NOTICE or software licenses. Your right to copy, modify, and distribute any Open Source Software is determined by the terms of the GPL, LGPL, or third party, according to who licenses that software.

Software or firmware provided by Circa Enterprises that is unrelated to Open Source Software is copyrighted by Circa Enterprises, subject to the terms of Circa Enterprises licenses, and may not be copied, modified, reverse-engineered, or otherwise altered without explicit written permission from Circa Enterprises.

TRADEMARK NOTICE: Guardian Telecom and the Guardian Telecom logos are trademarks of Circa Enterprises, other product names, trademarks, and service marks may be the trademarks or registered trademarks of their respective owners.



Toll-free 1-800-363-8010
Phone (403) 258-3100
Fax. (403) 255-2595
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.



GENERAL ALERT
ALERTE GÉNÉRALE

Warning

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

Avertissement

De danger électrique : Ce produit doit être installé par un électricien agréé selon tous les codes électriques et du bâtiment.



GENERAL ALERT
ALERTE GÉNÉRALE

Warning

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

Avertissement

Risque de dislocation: Pour éviter les blessures, cet appareil doit être solidement fixé au plancher/mur conformément aux instructions d'installation.

This product meets the applicable Industry Canada technical specifications. / Le présent matériel est conforme aux spécifications techniques applicables d'Industrie Canada.

If trouble is experienced with this equipment (DTR-VoIP and DTT-VoIP), for repair or warranty information, please contact Guardian Telecom at 1-800-363-8010. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

If this equipment requires AC power, it is suggested that a surge arrestor be used.

Table of Contents

1. Product Overview	6
2. Typical System Installation	6
3. Features	7
4. Installation	9
5. Wiring	11
6. Operation.....	11
7. Supported Protocols.....	12
8. Supported SIP Servers.....	12
9. DTR/DTT-VoIP Telephones Wiring	12
9.1. Connections	12
9.2. Connecting a Device to the Auxiliary Relay	13
9.3. Identifying the Connector Locations and Functions	14
9.4. Network Connectivity, and Data Rate	15
9.4.1. Verify Network Activity.....	15
9.5. RESET Switch	16
9.5.1. Announcing the IP Address.....	16
9.5.2. Restore the Factory Default Settings.....	16
9.6. Adjust the Volume.....	16
10. Specifications	17
11. Replacement Parts	18
12. Field Repairs	19
13. Warranty.....	20
14. Disclaimer.....	20
15. Warning.....	20
16. Service Telephone Number.....	20
17. Feedback.....	20
18. Guardian Product Return.....	21
19. Cleaning Tips for Guardian Telephones.....	22
20. Storage.....	22

Figures

Figure 1 - Typical Installation	6
Figure 2 - Features (typical).....	8
Figure 3 - Overall Dimensions.....	8
Figure 4 - Wall Installation of Base	9
Figure 5 - Wiring	10
Figure 6 - PCBA Layout.....	10
Figure 7 - Terminal Block Connections	12
Figure 8 - Connector Locations.....	14
Figure 9 - Network Activity	15
Figure 10 - RESET Switch	16

Tables

Table 1 - Connector Functions	14
-------------------------------------	----

Package Contents

- (1) DTR-VoIP or DTT-VoIP Telephone
- (1) Parts bag containing 1 Allen wrench and handset retainer
- (1) Mounting Template

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.

Models

- P3040 DTT-50-VoIP telephone with coil cord.
- P3041 DTT-60-VoIP telephone with armored handset cord.
- P3042 DTR-51-VoIP Ringdown telephone with coil cord.
- P3043 DTR-61-VoIP Ringdown telephone with armored handset cord.

Accessories

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

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>

1. Product Overview

DTT-VoIP Series Weather Resistant Telephones

DTR-VoIP and DTT-VoIP telephones provide safe, reliable communications in areas that are prone to high humidity, chemical vapors, dust and physical abuse.

These telephones are compatible with most SIP-based IP PBX servers that comply with SIP RFC 3261. Users can remotely monitor and program settings through a web browser to configure telephones on their network.

The DTR-51-VoIP and DTT-50-VoIP are standard models with a coiled handset cord and the DTR- 61-VoIP and DTT-60-VoIP are vandal resistant models with an armored handset cord.

2. Typical System Installation

The Voice-over-IP (VoIP) DTR-VoIP and DTT-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.

Figure 1 illustrates how the DTT-VoIP Telephones can be installed as part of a VoIP phone system.

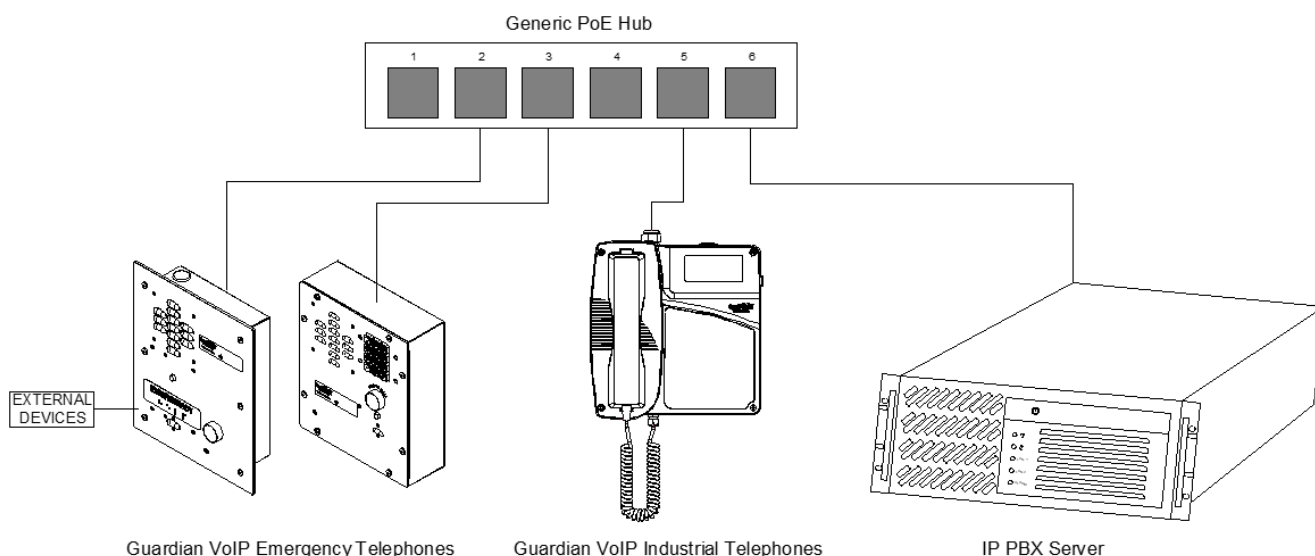


Figure 1 - Typical Installation

3. Features

- *Enclosure*
 - glass filled Polyester body construction
 - weatherproof and corrosion resistant
 - reversible base for desk or wall mount
 - 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*
- *Magnetic Reed Hook Switch - no moving parts*
- *Easily mounted on any sturdy vertical structure*
- *Noise Reducing Microphone allows a high level of intelligibility in locations with high background noise*
- *Armored Handset Cord (DTR-61 VoIP and DTT-60-VoIP only) withstands severe use*
- *Heavy duty K Type industrial handset*
- *Handset retainers to maintain on-hook status*
- *Modular parts for easy service*
- *Two M20 and one M12 cable entries*
- *Hearing-Aid Compatible & Receiver Volume Adjustment*
- *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).*
- *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*
- *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*
- *Optional security screws with driver bit*

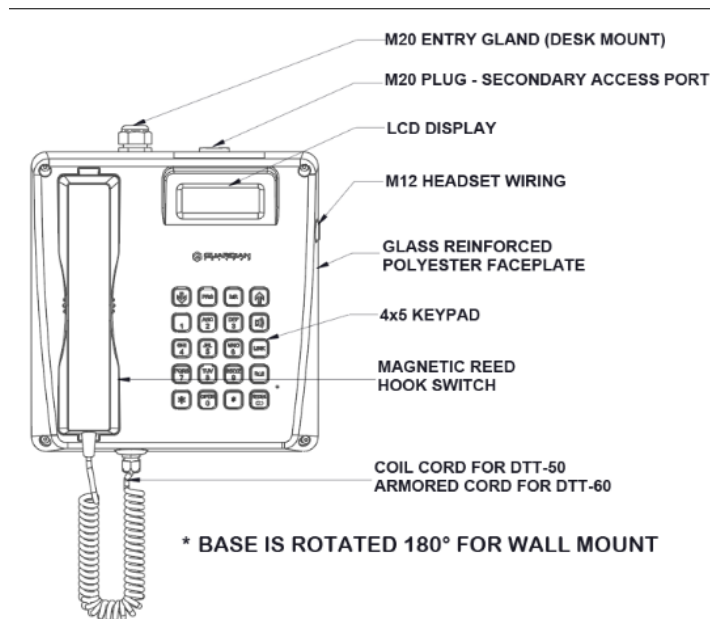


Figure 2 - Features (typical)

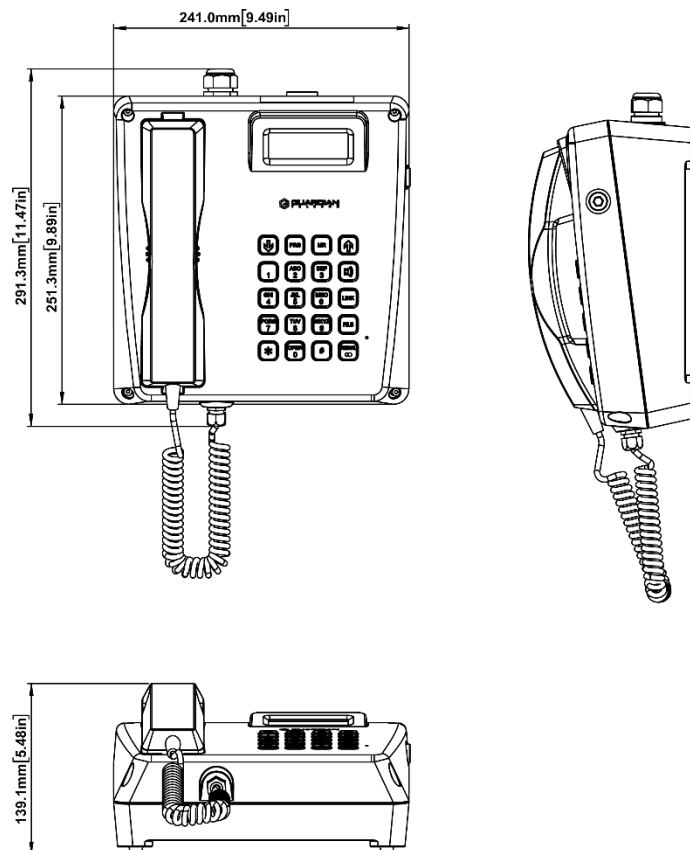


Figure 3 - Overall Dimensions

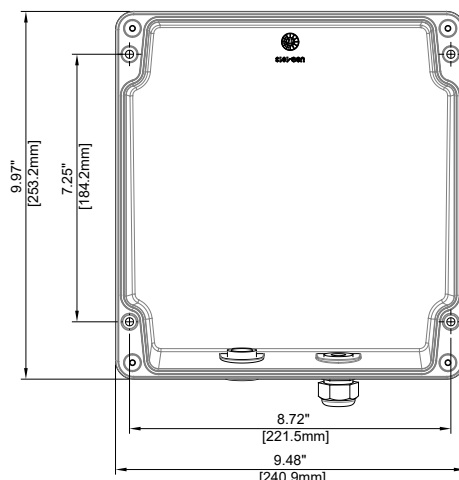


Figure 4 - Wall Installation of Base

4. Installation

Enclosure

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.

To Avoid The Danger Of An Accidental Shock or Circuit Damage

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

The telephone may be installed on a flat surface or wall mounted.

Using the 3mm Allen Key provided, loosen the four faceplate captive screws to detach the faceplate from the base.

Desk Top Configuration

If the telephone is to be desktop mounted set the base in the desired location.

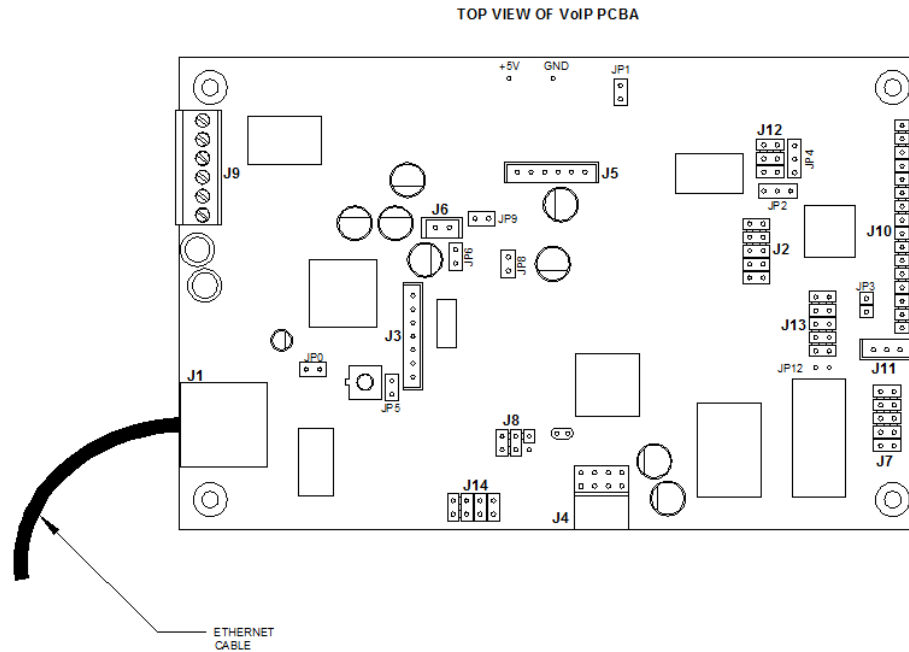
Wall Mount Configuration

If the telephone is to be wall mounted choose a location that is free of obstructions and permits space for wiring. Mount the base with the deepest dimension on the bottom. Mount as follows:

- The telephone weighs 3.95 kilograms (8.68 pounds), ensure that the mounting can support four times the weight of the unit; that is 15.8 kilograms (34.8 pounds). Wall anchors are not included; follow the manufacturer's instructions when installing anchors.
- Mounting to concrete or cinder block. Lead expansion anchors with M4 (#8) screws are recommended.
- Mounting to drywall. Hollow wall anchors (Molly Bolts) with M4 (#8) screws are recommended.
- Mounting to other surfaces. It is the responsibility of the installer to ensure that the base is attached in such a way as to support the weight specified above.

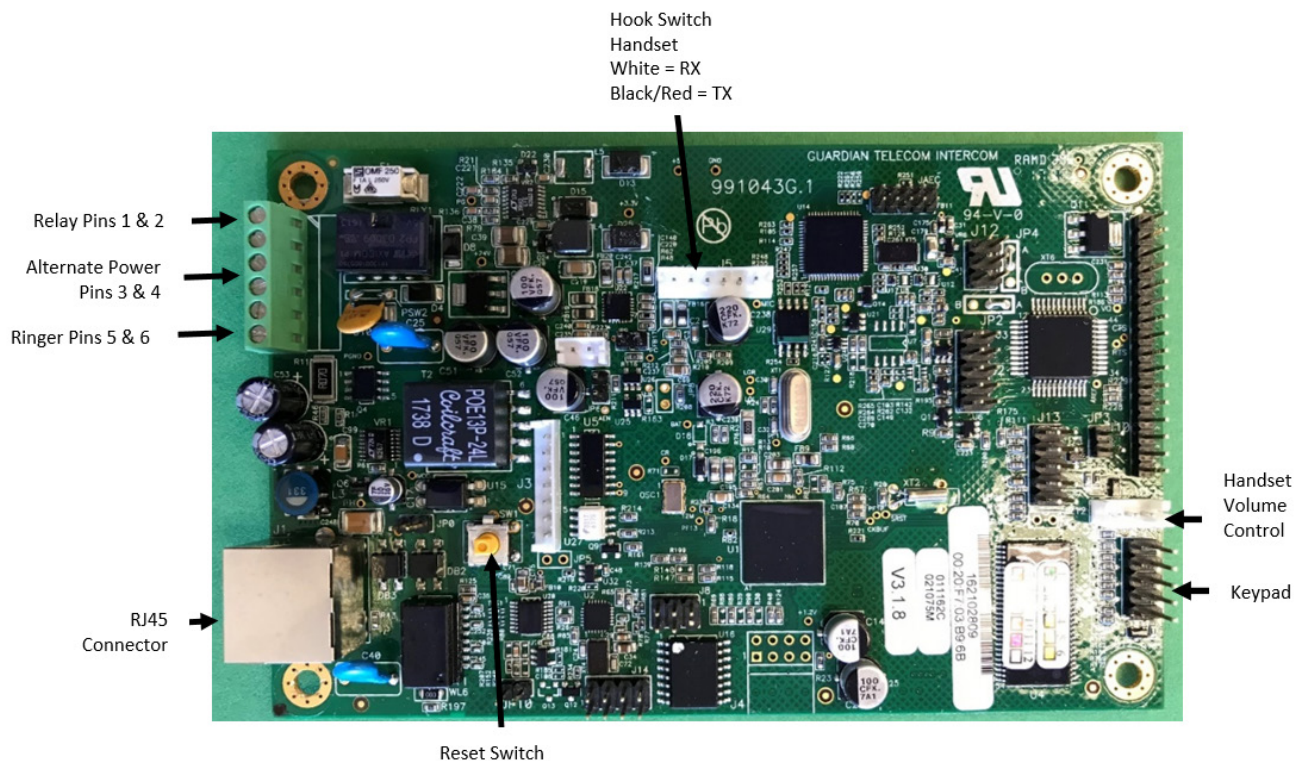
Install the handset retainer clips on the faceplate using the hardware supplied.

See: Figure 3 - Overall Dimensions



J1: STANDARD 8 PIN RJ45 10/100Base-T and power input via Power over Ethernet

Figure 5 - Wiring



Alternate Power – Pin 3 is positive and pin 4 is negative input.

Figure 6 - PCBA Layout

5. Wiring

WARNING: Use properly sized cable to ensure a gas/dust tight seal at the cable gland to maintain an IP66 rating, (M12 – 2 to 5mm), (M20 – 8 to 13mm). Take care not to lose parts of the gland if the cap is removed.

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.

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.

Connect the on board relay if utilized.

If using an alternate power supply connect to the terminal block.

Tighten the cable glands securely.

Connect the Network cable into the system.

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

Mount the faceplate and secure the captive screws to the base.

Apply power to the telephone. Allow approx. 30 seconds for the phone to boot up.

If using an auxiliary power supply apply power to the conductors.

If the built in Ring Detect Relay is utilized, apply power to the conductors.

Programming

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

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

Tip: If cable diameter is not in the range of the M12 or M20 glands provided an approved reducer and smaller gland can be fitted.

See: Section 9.2 Connecting a Device to the Auxiliary Relay and Figure 7 - Terminal Block Connections

Tip: See Manual P007402 - Setup and Configuration

6. Operation

Once your Model DTT-VoIP Telephone has been properly installed and energized, operation is identical to most other single line telephones.

DTR-VoIP telephones will dial the programmed number when the handset is lifted.

Adjust the receiver volume with the switch in the handset or on the keypad.

7. Supported Protocols

The DTT-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 DTT-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
 - 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)

8. Supported SIP Servers

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

9. DTR/DTT-VoIP Telephones Wiring

9.1. Connections

Figure 7 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 12 to 20 VDC at 500 mA can be supplied to the terminal block.

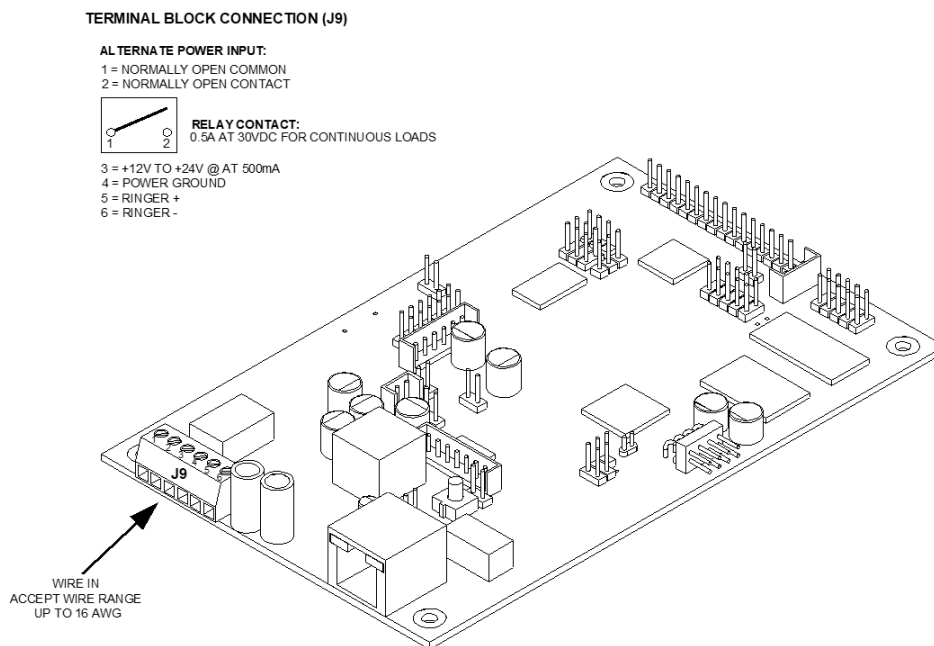


Figure 7 - Terminal Block Connections

9.2. Connecting a Device to the Auxiliary Relay

The ACR/ACT-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 0.5 Amps @ 30VDC.** The PCBA is not designed to handle AC voltages.

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.

*See: Manual P007402
Setup and Configuration*

9.3. Identifying the Connector Locations and Functions

See Figure 8 and Table 1 to identify the connector locations and functions.

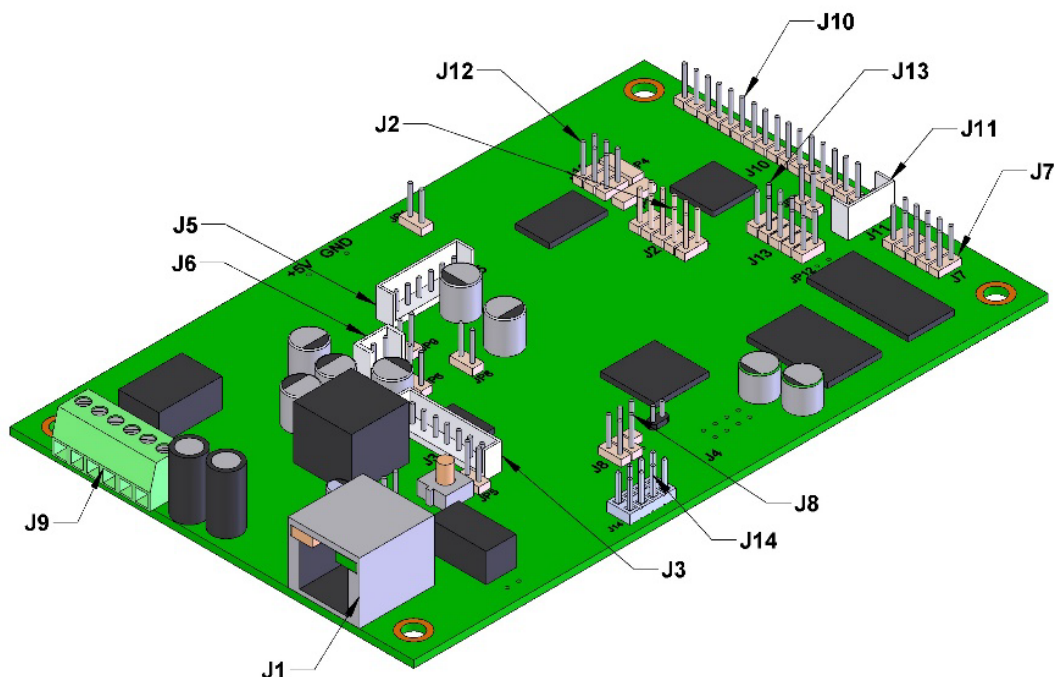


Figure 8 - Connector Locations

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 7)
J10	LCD Interface
J11	Handset V.C. Interface
J12	ISP-DIP/Debug UART

Table 1 - Connector Functions

9.4. 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 9). The Link light changes color to confirm the auto-negotiated baud rate:
 - This light is yellow at 9 Mbps.
 - It is orange at 100 Mbps.

9.4.1. Verify Network Activity

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

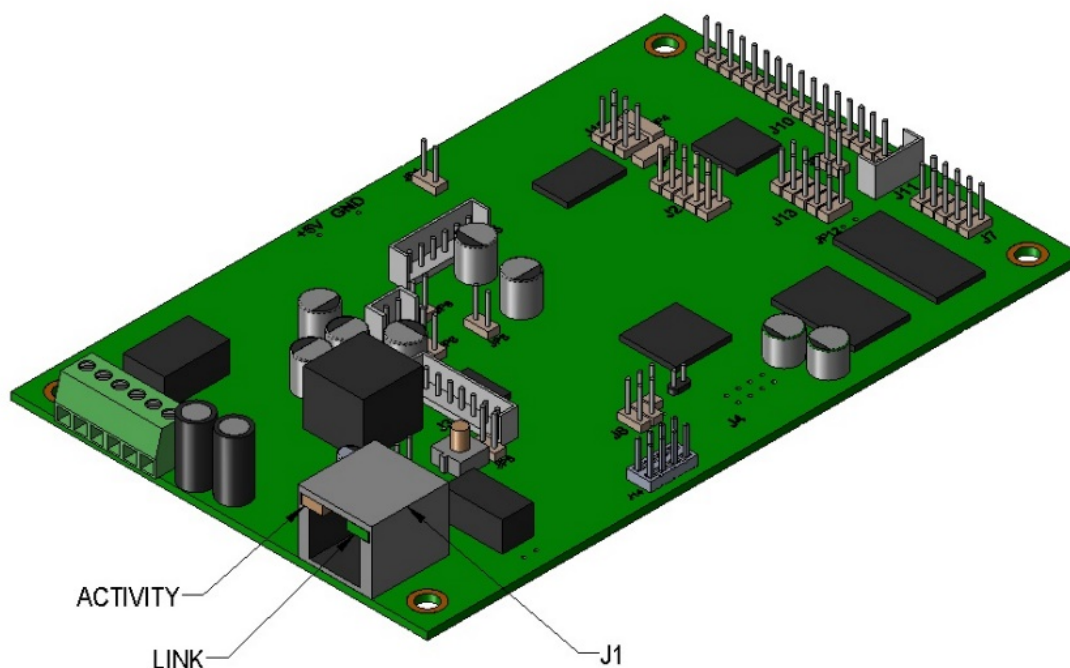


Figure 9 - Network Activity

9.5. RESET Switch

When the Telephone is operational and linked to the network use the Reset Test Function Management (**RESET**) switch (Figure 10), on the Telephone board to announce, the Telephone's IP Address, and test that the audio is working (see Section 9.5.1). If the handset is on hook it will announce through the handsfree speaker. Otherwise it will announce in the earpiece of the handset.

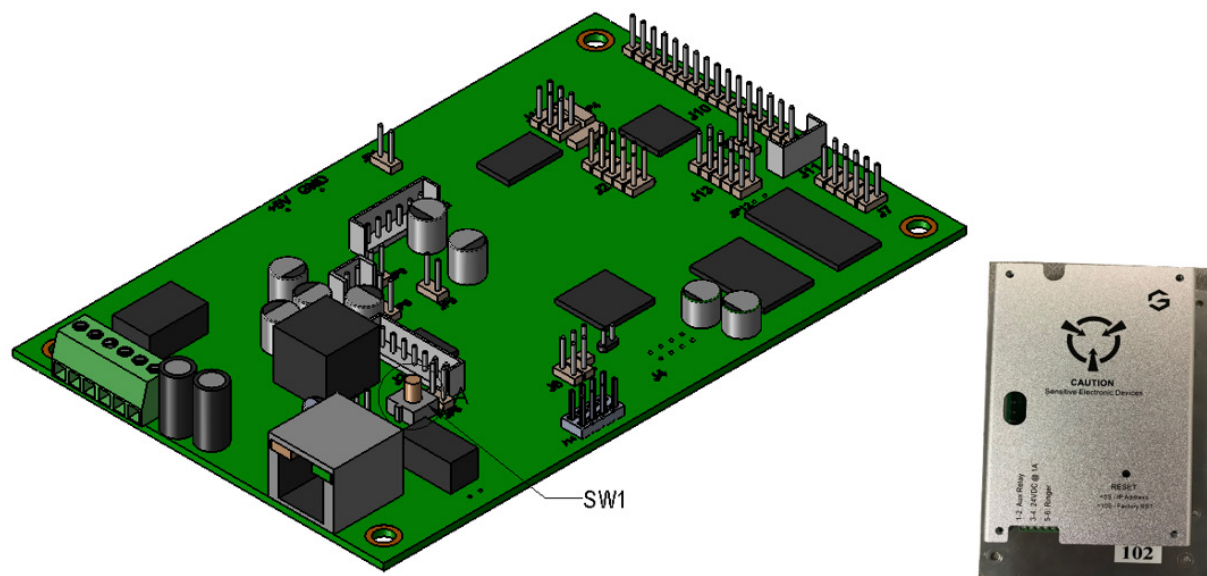


Figure 10 - RESET Switch

9.5.1. Announcing the IP Address

To announce a telephone's current IP address:

1. Press and release the RESET 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 RESET switch for longer than five seconds will restore the telephone to the factory default settings.

9.5.2. 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 restore the factory default settings:

1. Press and hold the **RESET** 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).

9.6. Adjust the Volume

You can adjust the volume through the Device Configuration Page.

10. Specifications

Electrical Performance

RINGER OUTPUT	>80 dB
MICROPHONE	NOISE REDUCING
RECEIVER	HEARING AID COMPATIBLE

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 @30VDC

Environmental

INGRESS PROTECTION RATING	IP66
OPERATING TEMPERATURE	-22° TO +140° F (-30° TO +60° C)
STORAGE TEMPERATURE	-58° TO +176° F (-50° TO +80° C)
HUMIDITY	0 TO 95% RH
DUSTPROOF	FULLY GASKETTED ENCLOSURE

Mechanical

HOOK SWITCH (CRADLE SWITCH) LIFE	>1 000 000 OPERATIONS
HOUSING MATERIAL	GLASS FILLED POLYESTER (CARBON LOADED)
HANDSET MATERIAL	GLASS FILLED POLYESTER (CARBON LOADED)
DIMENSIONS (H X W X D) WALL MOUNTED	11.1 X 9.7 X 6.2" (282 X 246 X 158 MM)
NET WEIGHT	8.7 LBS (3.95 KG).
SHIPPING DIMENSIONS	16.0 X 10.5 X 9.5" (407 X 267 X 242 MM)
SHIPPING WEIGHT	10.5 LBS (4.8 KG).
STANDARD MOUNTING	DESK OR WALL
WIRING ACCESS	½" NPT
HARDWARE MATERIAL	STAINLESS STEEL

COMPLIANCE

FCC	PART 15, CLASS A
ICES-003	CLASS A
IEC	61000-6-2: 2005 60950-1
CISPR	22: 2008
WEATHERPROOF ENCLOSURE	4X / IP66

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.

11. Replacement Parts		
Part No.	Description	Field Replaceable
P001039	Magnetic reed hook switch	Yes
P001462	O-Ring gaskets for faceplate screws (4 required)	Yes
P004123	Nylon fastener for hook switch	Yes
P3044	Replacement Handset c/w coil cord.	Yes
P006614	Handset retainer	Yes
P006617	Allen key for faceplate screws	Yes
P006656	Receiver cartridge & PCBA Assembly	Yes
P006668	M20 Plug	Yes
P006675	Faceplate gasket	Yes
P006679	M12 Gland	Yes
P006690	M20 Gland	Yes
P006692	M4 Faceplate screws (4 required)	Yes
P006819	Speaker	No
P006862	M12 Plug	Yes
P3045	Replacement Handset c/w armored cord.	Yes
P007013	Microphone cartridge PCBA assembly	Yes
P007177	Telephone housing base	Yes
P007395	PCBA, VoIP Telephone	Yes
P008107	Telephone faceplate	Yes

12. 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.

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 wiring. 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 four 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.

Handset Replacement

Refer to the instruction sheet included with the replacement handset.

Disconnect the handset wiring from the terminal block.

If the phone is equipped with an armored cord handset, remove the anchor screw from the armored cord lanyard.

Loosen the handset cable gland and pull out the cord.

Install the new replacement handset and tighten the gland.

Rewire the handset cord to the terminal block.

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 screws holding the circuit board in place and carefully remove the board.

Install the new board and reconnect wiring.

See: 12 Replacement Parts

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

13. 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.

14. 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.

15. 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.

16. 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) 255-2595

www.guardiantelecom.com

17. 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.

18. 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 manuals 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.

19. 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, like 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.

20. 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.

Date of Purchase

[illegible]



Tough. Trusted. True.

© Circa Enterprises 2021