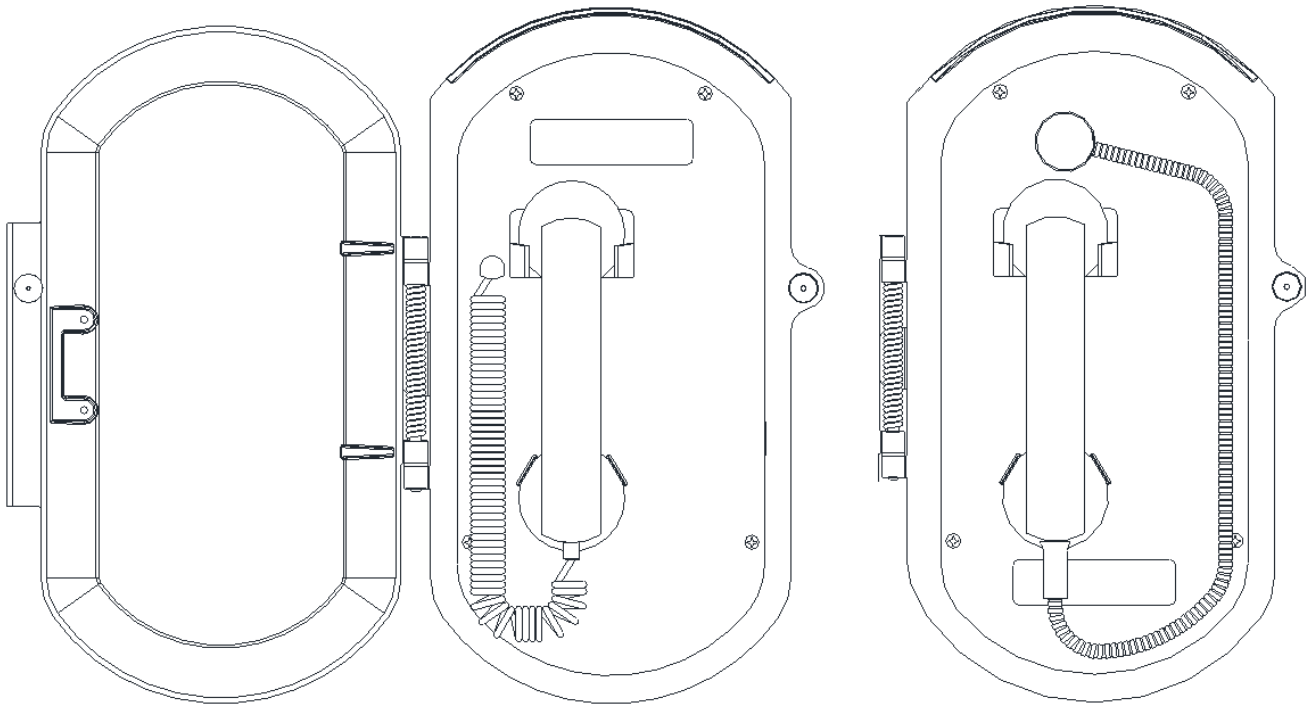




# Heavy Duty Ringdown/Autodialer Weather Resistant Telephone Model ACR

## Installation & Operation



**ACR-11**

**ACR-41**

## Table of Contents

Package Contents.....	2
Models .....	2
Options .....	2
Accessories.....	2
Overview.....	3
Features.....	3
Installing the ACR Telephone.....	6
Field Repairs.....	6
Specifications.....	7
Replacement Parts.....	8
Government Certification.....	9
Warranty .....	10
Disclaimer .....	10
Warning .....	10
Service Telephone Number.....	10
Feedback .....	10
Guardian Product Return .....	11
Cleaning Tips for Guardian Telephones .....	12
Storage .....	12

## Table of Figures

Figure 1 - Features.....	4
Figure 2 - Overall Dimensions.....	4
Figure 3 - Mounting .....	5
Figure 4 - Electrical Connections.....	5

## Package Contents

One (1) ACR Telephone

### Models

- P5424 ACR-11 with 4 foot heavy duty Coil cord
- P5425 ACR-41 with 18" armored cord and handset retainer clips

### Options

- Locking Door (LD)
- Noise Canceling Microphone (NC)
- Autodialer (AD)

### Accessories

- P7225 Weatherproof ring detect relay
- P7229 Weatherproof off-hook detect relay
- PXXXX External Loud Ringers and Strobe Lights

## Overview

### ***ACR Heavy Duty Ringdown/Autodialer Telephone***

The ACR Telephone meets the special requirements of sites prone to abuse and inclement weather. The telephone is housed in an aluminum enclosure with a locking or non-locking door. The unit resists moisture, dust and corrosive chemicals and is designed to provide reliable service in outdoor environments.

The ACR telephone may be supplied with an optional Auto Dialer or dialing may be configured by the PABX. If an Auto Dialer is ordered with the ACR, refer to the manual for the Auto Dialer for instructions on programming and for compliances.

## Features

### ***Enclosure***

- cast aluminum housing
- weather and dust resistant
- durable Hammertone Grey powder coat paint
- locking or non-locking door
- nylon bushings provide smooth door operation

### ***Encapsulated Circuitry***

- circuit boards are resistant to corrosive agents (e.g. H<sub>2</sub>S, SO<sub>2</sub> and NH<sub>3</sub>), and environments with high humidity

### ***Magnetic Reed Hook Switch***

- no moving parts

### ***Surge Arrestor And Fuse***

- protects the user and prevents damage to the electronic circuits in the event of a high voltage spike on the telephone line

### ***Noise Reducing Microphone***

- allows a high level of intelligibility in locations with high background noise

### ***Heavy Duty Handset Cord***

- withstands excessive use (armored cord available)

### ***Handset***

- compatible with inductively coupled hearing-aid devices
- receiver volume control in handset



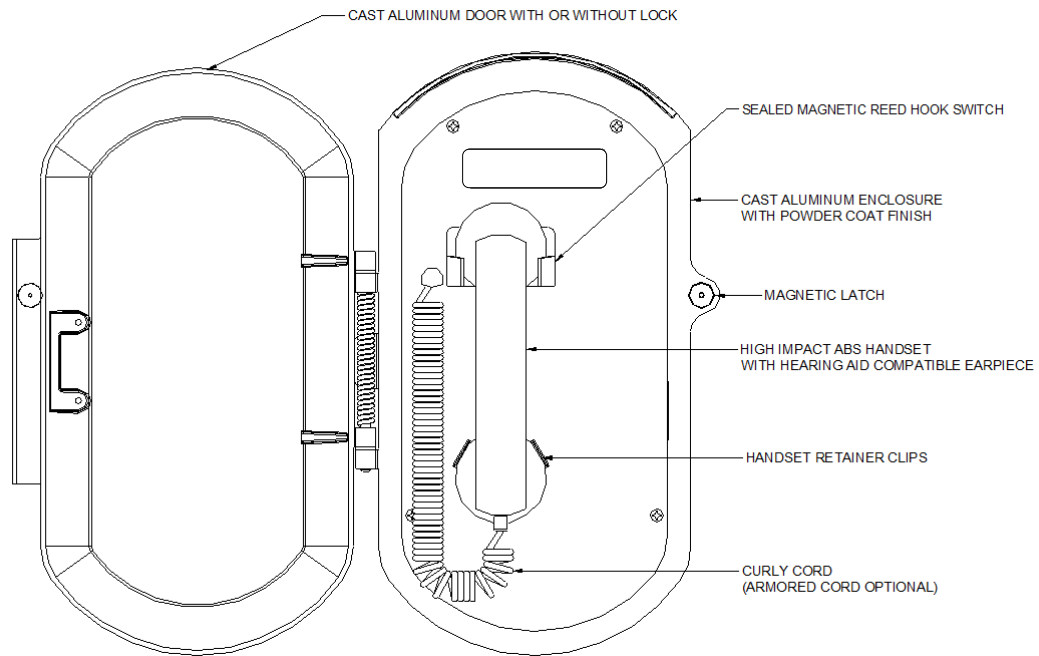
GENERAL ALERT  
ALERTE GÉNÉRALE

#### **Warning**

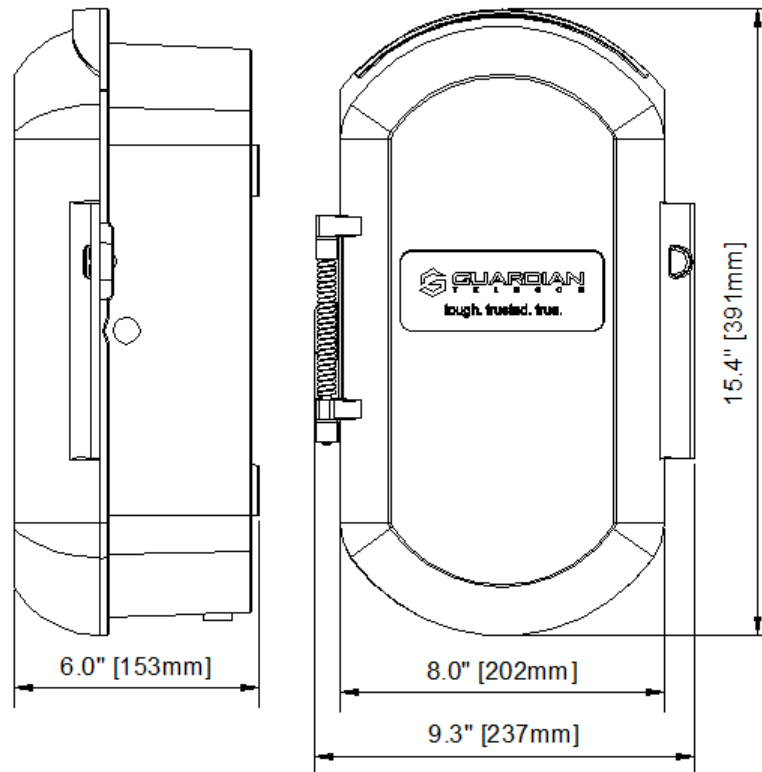
*Electrical Hazard:* Wiring connections for this product should be made by a licensed electrician or trades person according to all applicable electrical and building codes.

#### **Avertissement**

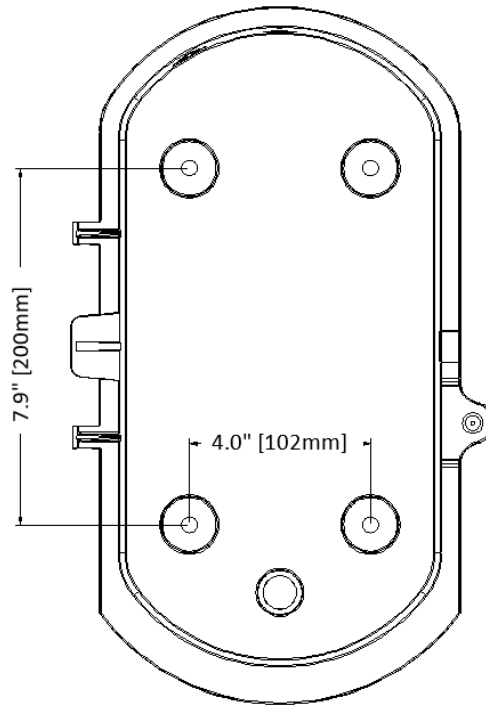
*Danger électrique :* Les connexions de câblage de ce produit doivent être effectuées par un électricien agréé ou une personne de métier selon tous les codes électriques et du bâtiment applicables.



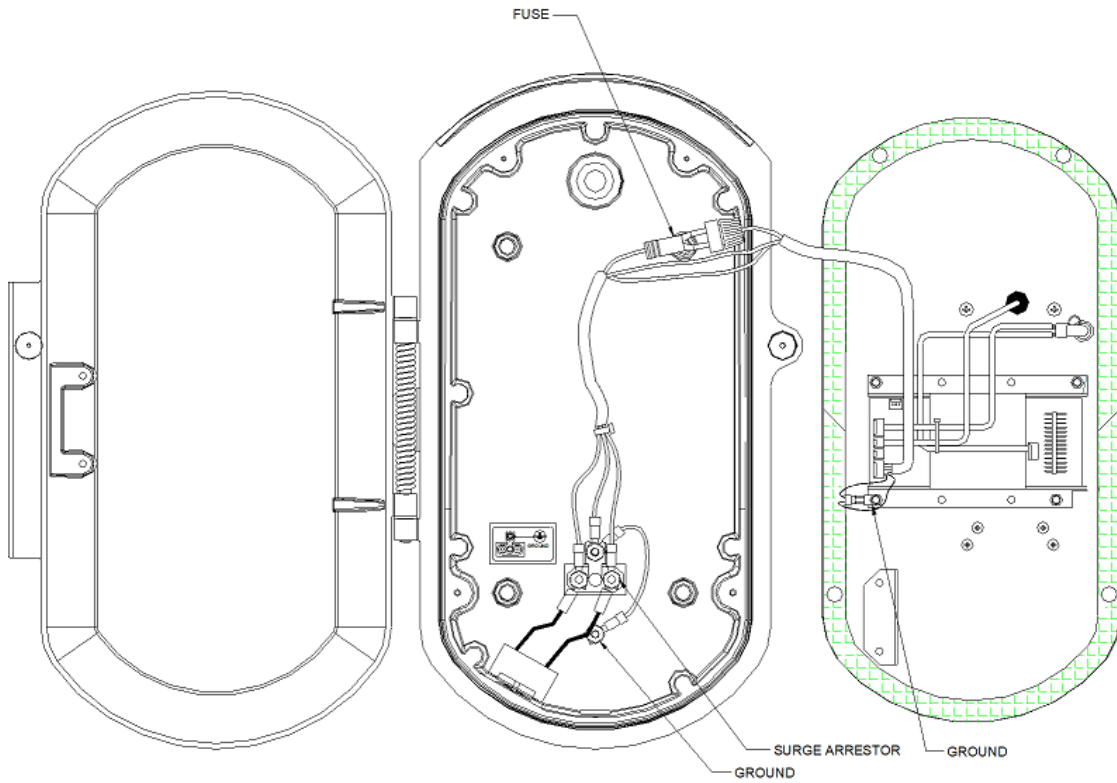
**Figure 1 - Features**



**Figure 2 - Overall Dimensions**



**Figure 3 - Mounting**



**Figure 4 - Electrical Connections**

### Installing the ACR Telephone

- Follow all appropriate electrical codes and use only approved electrical fittings for the installation.
- Choose a wall location that is free of obstructions and permits space for conduit or wire.
- Ensure mounting can support 12 lbs. (5.5 kg) and any additional foreseeable load.
- Ensure that none of the electrical connection circuits are live.
- Use the template provided to locate and drill holes for mounting screws.
- Open the door, remove the screws on the faceplate and remove the faceplate.
- Disconnect the faceplate harness.
- Secure the unit to the wall.
- Bring the telephone cable into the enclosure through the conduit entrance and connect individual wires from the exchange (Tip/Ring/Ground) to the surge arrestor. Tip and ring are not polarity sensitive. If a conduit hub is used, ensure that it is grounded to the ground stud.
- Reconnect the faceplate harness.
- Ensure all connections are secure.
- Replace the faceplate.
- Test the unit by calling to and from another unit on the exchange.

**See:** Government Certification.

**See:** Figure 3 - Mounting

**See:** Figure 3 - Mounting.

**Note:** Be careful when removing the faceplate. The circuit board is on the faceplate.

**See:** Figure 4 - Electrical Connections.

### 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 from Tip and Ring power supplied by the PABX or central office before attempting repairs.
- Loosen the four screws in the faceplate and remove the faceplate.
- Perform the necessary repairs or adjustments.
- Carefully replace the front plate and install the 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.

#### **Fuse Replacement**

- Remove the old fuse by pulling on the ends of the fuse holder to open. Insert a new 0.25 amp, 250Volt, 3AG fast blow fuse and close the fuse holder.

**See:** Figure 4 - Electrical Connections and Replacement Parts.

**Note:** Be careful when removing the faceplate. The circuit board is on the faceplate.

**Note:** Ensure that connections are secure before replacing faceplate.

<b>Specifications</b>	
<b><i>Electrical Performance</i></b>	
AUDIBLE FREQUENCY RANGE	300 – 3400 Hz
TRANSMIT OBJECTIVE LOUDNESS RATING (TOLR)	-41 +/- 3 dB
RECEIVER VOLUME ADJUSTMENT	13.5 dB IN 2.7 dB STEPS, 3 STEPS UP AND 2 STEPS DOWN
RECEIVE OBJECTIVE LOUDNESS RATING (ROLR)	
-AT NOMINAL VOLUME LEVEL	50.0 +/- 3 dB
-AT MAXIMUM VOLUME LEVEL	42.0 +/- 3 dB
-AT MINIMUM VOLUME LEVEL	55.5 +/- 3 dB
SIDE TONE OBJECTIVE RATING (SOLR)	
-AT NOMINAL VOLUME LEVEL	11 +/- 4 dB
-AT MAXIMUM VOLUME LEVEL	7 +/- 4 dB
-AT MINIMUM VOLUME LEVEL	14 +/- 4 dB
RINGER OUTPUT	85 dB @1m
FCC RINGER EQUIVALENCE (REN)	0.9 B
SET IMPEDANCE	600 OHMS NOMINAL
MAXIMUM LOOP	15,000 FEET (4,500M) OF 22 AWG COPPER
<b><i>Electrical Requirements</i></b>	
RINGER SENSITIVITY	40 – 100 V, 16 – 25 Hz
LINE VOLTAGE	24 – 56 VDC
LOOP CURRENT	20 – 120 MA
CONNECTION METHOD	SURGE ARRESTOR
MICROPHONE	NOISE REDUCING ELECTRET
MICROPHONE (OPTIONAL)	NOISE CANCELING DYNAMIC
FUSE	¼ AMP 250 VOLT 3AG FAST BLOW
<b><i>Environmental</i></b>	
ENCLOSURE	WEATHER AND CORROSION RESISTANT
DUST TIGHT	FACEPLATE GASKET
OPERATING TEMPERATURE	-40° TO +60° C (-40° TO +140° F)
HUMIDITY	0 – 90% RH NON-CONDENSING

<b>Mechanical</b>	
HOOK SWITCH (CRADLE SWITCH) LIFE	>1,000,000 OPERATIONS
BODY CONSTRUCTION	CAST ALUMINUM, POWDER COATED
FACEPLATE	STEEL, ZINC DICHROMATE PLATED AND POWDER COATED
DIMENSIONS H X W X D	15.4" X 9.3" X 6.0" (391 X 237 X 153 MM)
NET WEIGHT	12 LBS / 5.5 KG
SHIPPING DIMENSIONS	16" X 10.5" X 9.5" (407 X 267 X 242 MM)
SHIPPING WEIGHT	13 LBS / 5.9 KG
STANDARD MOUNTING	VERTICAL WALL
WIRING ACCESS	½" NPT
HANDSET MATERIAL	HIGH IMPACT ABS
HARDWARE MATERIAL	STAINLESS STEEL
<b>Compliance</b>	
FEDERAL COMMUNICATIONS COMMISSION (FCC)	REFERENCE NUMBER: HQHCAN-22517-TE-E
INDUSTRY CANADA (IC)	CERTIFICATION NUMBER : 1012-6721A

### Replacement Parts

<b>Part No.</b>	<b>Description</b>	<b>Field Replaceable</b>
P006275	ACR-11 Faceplate Assembly C/W Coil Cord Volume Control Handset	Yes
P006277	ACR-41 Faceplate Assembly C/W Armored Cord Volume Control Handset	Yes
P002786	Handset Cradle	Yes
P004371	Handset Retainer	Yes
P007257	Handset Assembly C/W 4' Coil Cord and Volume Control Handset	Yes
P007107	Handset Assembly C/W 18" Armored Cord and Volume Control Handset	Yes
P005582	Telephone Circuit Board Assembly	Yes
P002782	Ringer - Floyd Bell BR-3-39	Yes
P005917	Reed Switch	Yes
P002992	Surge Arrestor - TII 126L1	Yes
P002991	Fuse - Glass 0.25 Amp 250V	Yes
P004911	Enclosure	Yes
P004910	Door	Yes
P006555	Hinge pin	Yes
P006554	Spring	Yes



## Government Certification

Attached to the telephone are labels for *Industry Canada* and the *United States Federal Communications Commission*. These identify equipment certifications indicating the 60 and 70 series telephones meet certain telecommunications network protective, operational and safety requirements. These agencies do not guarantee the equipment will operate to the user's satisfaction.

Before installing this telephone equipment, users should ensure it is permissible to connect the equipment to facilities of the local telecommunications company.

Equipment must be installed using acceptable connection methods. In some cases, the telephone users inside wiring, associated with a single line service, may be extended by a certified connector assembly (telephone extension cord). The customer should be aware that in some situations compliance with the above conditions may not prevent degradation of service.

Repairs to certified equipment should be made by a supplier designated authorized maintenance facility.

For their own protection users should ensure the electrical ground connections of the power utility, telephone lines and internal metallic water pipe systems, if present, are connected. This precaution may be particularly important in rural areas.

**CAUTION:** Users should not attempt to make ground connections, but should contact the appropriate electrical inspection authority or electrician.

### **Load Number (LN)**

The Load Number (LN) assigned to each terminal device denotes the percentage of the total load to be connected to a telephone loop used by the device. Termination on a loop may consist of any combination of devices subject only to the requirement that the total of the Load Numbers of all the devices does not exceed 100.

### **Notification to Telephone Company**

Upon request, the customer must notify the telephone company of the particular line to which the connection will be made and provide the Industry Canada or FCC registration number. The local telephone company may request disconnection of the telephone where alterations or malfunctions affect the telephone's performance.

### **United States Federal Communications Commission**

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

### **Interference**

There is no guarantee that interference will not occur in a particular installation. If interference to radio or television reception from this equipment is suspected, proceed as follows:

1. Unplug the set, check for the interference.
2. Re-orient the receiving antenna.
3. Relocate the set with respect to the receiver.
4. Move the set away from the receiver.

If necessary, consult the supplier or an experienced radio/television technician for additional suggestions.

### **FCC Rules and Ringer Equivalence Number**

This equipment complies with Part 68 of the FCC Rules. On the side of this equipment is a label that contains, among other information, the FCC registration number and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

The REN is used to determine the quantity of devices which may be connected to the telephone line. Excessive RENs on the telephone line may result in the devices not ringing in response to an incoming call. In most, but not all areas, the sum of the RENs should not exceed five. To be certain of the number of devices that may be connected to the line, as determined by the total RENs, contact the telephone company to determine the maximum REN for the calling area.

### **Service changes and Limitations**

The telephone company may make changes in its facilities, equipment, operations, or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications in order to maintain uninterrupted service.

This equipment cannot be used on public coin telephone service as provided by your telephone company. Connection to party line service is subject to state tariffs (contact the state public utility commission, public service commission or corporate commission for information.)

### **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.***

### **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.

### **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.**

### **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**

**Ph. (403) 258-3100**

**Fax. (403) 255-2595**

**[www.guardiantelecom.com](http://www.guardiantelecom.com)**

### **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.

<b>Guardian Product Return</b>
<p>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.</p>
<p><b>Step I - On-Site Correction</b></p>
<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<ul style="list-style-type: none"> <li>• Connecting a telephone to a standard power source, rather than tip &amp; ring, will blow the telephone's internal, user-replaceable fuse. In the event of fuse burnout, disconnect the telephone from the power source, replace the fuse, and reconnect following the wiring diagrams provided with the product.</li> </ul>
<p><b>Step II - Return Materials Authorization (RMA)</b></p>
<ul style="list-style-type: none"> <li>• 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 <a href="https://www.guardiantelecom.com/support/rma/">https://www.guardiantelecom.com/support/rma/</a>, or by calling the service telephone number given in this manual.</li> </ul>
<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<ul style="list-style-type: none"> <li>• (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.")</li> </ul>
<p><b>Step III - Factory Authorized Service</b></p>
<ul style="list-style-type: none"> <li>• 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.</li> </ul>
<ul style="list-style-type: none"> <li>• 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.</li> </ul>

## **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.

## **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:**

Model No.
Part No.
Serial No.
Date of Purchase

THIS PAGE INTENTIONALLY LEFT BLANK

THIS PAGE INTENTIONALLY LEFT BLANK



SAI GLOBAL  
ISO 9001:2015

**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](http://www.guardiantelecom.com)**

**E-mail: [sales@guardiantelecom.com](mailto:sales@guardiantelecom.com)**

*(Click to open message box)*

***Tough. Trusted. True.***

© Circa Enterprises 2020