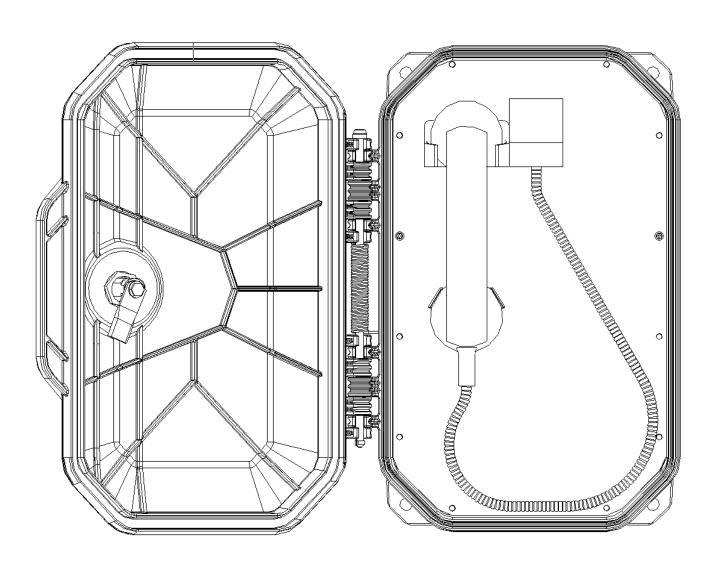




# Watertight Ringdown/Autodialer Telephones WTR-11 & WTR-41

## Installation & Operation



P005611 Rev. E 201214 12/14/2020 11:07 AM





## **Table of Contents**

Package Contents	2
Models	2
Options	2
Accessories	
Overview	3
Features	3
Installing the WTR	6
Operating the WTR	
Field Repairs	
Specifications	8
Replacement Parts	9
Government Certification	10
Warranty	11
Disclaimer	11
Warning	11
Service Telephone Number	11
Feedback	11
Guardian Product Return	12
Cleaning Tips for Guardian Telephones	13
Storage	13
•	
Table of Figures	
Figure 1 - Features WTR-11	4
Figure 2 - Features WTR-41	
Figure 3 - Dimensions & Mounting	
Figure 4 - Installation	
3	

## **Package Contents**

- (1) WTR Telephone
- (2) Door Latch Keys (if locking door option ordered)
- (12) Faceplate Screws (vandal resistant with driver bit if option ordered)

## **Models**

- P5300 WTR-11 Weatherproof 4X telephone with Coil cord.
- P5303 WTR-41 Weatherproof 4X telephone with armored handset cord.

## **Options**

- VR-WTE Vandal Resistant Faceplate Screws
- LCK-WTE Locking door
- P7224 Potted ring detect relay, (internal to telephone)
- P7227 Potted off-hook detect relay, (internal to telephone)
- AD Autodialer
- Pole Mounting Kit

## **Accessories**

- P7225 Weatherproof ring detect relay, (external to telephone)
- P7232 Weatherproof off-hook detect relay, (external to telephone)
- Loud Ringers and Strobe Lights



## Overview

### WTR Industrial Ringdown/Autodialer Telephones

Guardian's WTR telephones offer maximum efficiency under extreme environmental conditions. The sturdy Thermoplastic Resin enclosure protects the internal circuitry against windblown dust and rain, corrosion, splashing and high-pressure water.

The WTR is approved with a CSA Type 4X rating, making it the ideal telephone for use in wet or corrosive atmospheres such as chemical plants or offshore platforms.

The WTR may be supplied with an optional Auto Dialer or dialing may be programmed through a PABX. If an Auto Dialer is ordered with the WTR refer to the manual for the Auto Dialer for instructions on programming and for compliances.

## **Features**

#### **Enclosure**

- Thermoplastic Resin body construction
- weatherproof and corrosion resistant
- spring loaded hinged door (locking latch optional)

### **Encapsulated Circuitry**

encapsulated 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 Field Replaceable Fuse

Prevents injury to the user and damage to the electronic circuitry in the event of a high voltage spike on the telephone line

#### Mounting

- wall mounting with integral feet
- pole mounting kit available

#### Noise Reducing Microphone

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

### Receiver Volume Control

Switch in handset provides 13.5dB of range

#### Hearing-Aid Compatible

compatible with inductively coupled hearing-aid devices



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.



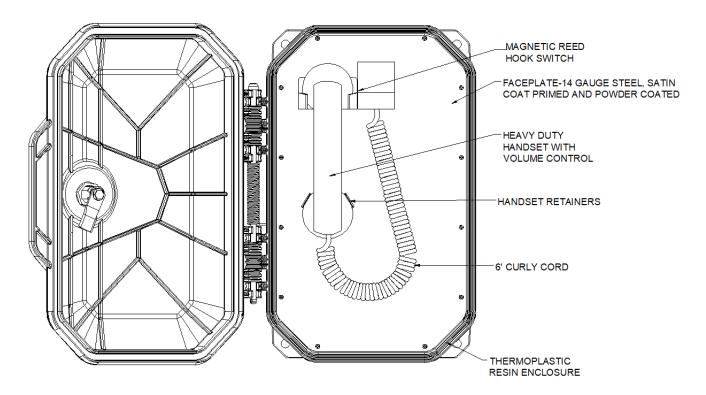


Figure 1 - Features WTR-11

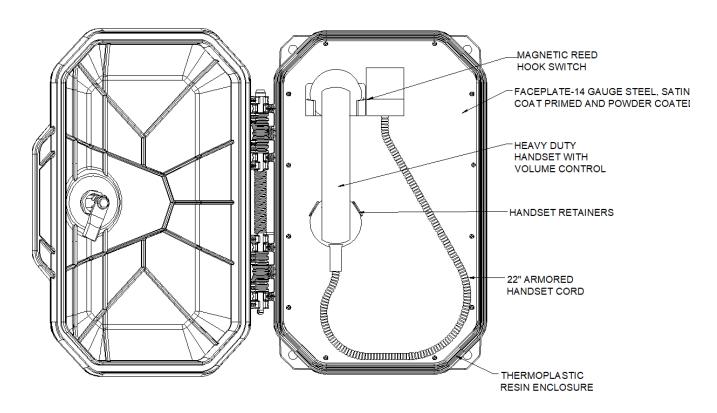


Figure 2 - Features WTR-41

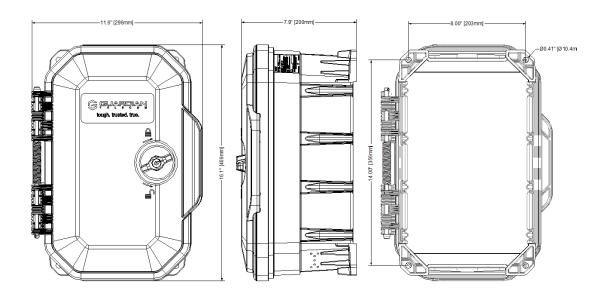


Figure 3 - Dimensions & Mounting

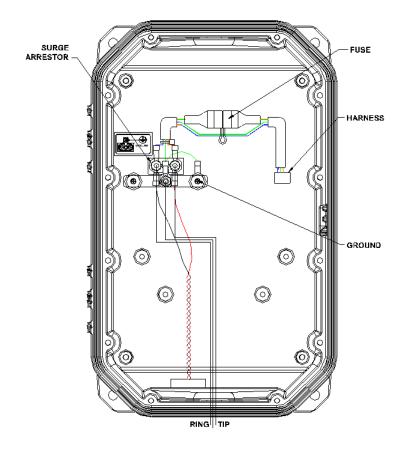


Figure 4 - Installation



## Installing the WTR

- Follow all appropriate electrical codes and use only approved electrical fittings for the installation.
- For waterproofing purposes ensure all glands and conduits are properly gasketed.
- Choose a wall location that is free of obstructions and permits space for ½" NPT conduit runs.
- Ensure mounting can support 16 lbs (7.3 kg) and any additional foreseeable load.
- Ensure that none of the telephone or electrical connection circuits are live.
- Separate the faceplate from the housing by removing the two temporary, factory installed screws and unplugging the wiring harness from the faceplate.
- Drill or punch holes at dimples for conduit or glands.
- Use the template provided or the enclosure itself to locate and drill holes for mounting screws.
- Secure the unit to the wall.
- Bring telephone wiring into the enclosure through the conduit entrance and attach individual wires from the exchange (Tip/Ring/Ground) to the surge arrestor, (Tip & Ring are not polarity sensitive.). If a conduit hub is used, ensure it is grounded to the ground stud.
- Wire the Off-hook Detect and/or Ring Detect Relays if utilized.
- Plug the wiring harness back into the faceplate and secure the faceplate using the screws provided.
- Close up unused cable entrances with approved plugs.
- Connect the telephone lines at the local exchange or demarcation block.
- The WTR 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 WTR, refer to the manual for the Auto Dialer for instructions on programming and for compliances.
- Test the unit by making calls to and from another station.
- Test the Off-hook Detect and/or Ring Detect Relays if utilized.

## **Operating the WTR**

 The WTR Ringdown/Autodialer phone is designed for automatic calling simply by removing the handset from the cradle. **See:** Figure 3 - Dimensions.

Tip: Use ¼" or M8 screws to secure the unit to the wall.

See: Figure 4 - Installation

**Note:** If Vandal Resistant screws were ordered as an option a special driver bit will be provided with them.



## **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.

- To avoid shock hazard disconnect the telephone from Tip and Ring power supplied by the PABX or central office, and disconnect Ring Detect Relay and/or Off-Hook Detect Relay wiring if utilized.
- 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 fourteen 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.

## **WARNING!**

- Replace only with a 0.25 amp 250V 3AG fast blow fuse. Failure to do so will void the warranty.
- If, on reconnecting power, the fuse fails, check the telephone system wiring. The fuse protects the Tip and Ring line from the telephone system.
   It is usually powered at 48 volts DC and must not be connected to 120 volts AC.

**See:** Figure 4 - Installation & Replacement Parts

See: Figure 4 - Installation



Specifications		
ELECTRICAL PERFORMANCE		
AUDIBLE RANGE FREQUENCY RESPONSE	300 – 3400 Hz	
TRANSMIT OBJECTIVE LOUDNESS RATING (TOLR)	-38 +/- 4 dB	
RECEIVE OBJECTIVE LOUDNESS RATING (ROLR)	TYPICAL 50 +/- 3 dB	
SIDE TONE OBJECTIVE LOUDNESS RATING (SOLR)	TYPICAL 11 +/- 4 dB	
RINGER OUTPUT	85 dB @ 1m	
FCC RINGER EQUIVALENCE	0.8B	
SET IMPEDANCE	600 OHMS NOMINAL	
MAXIMUM LOOP	15,000 FEET (4,600 METERS) OF 22 AWG COPPER	
ELECTRICAL REQUIREMENTS		
RINGER SENSITIVITY	40 – 100 V, 16 – 25 Hz	
LINE VOLTAGE	24 – 56 VDC	
LOOP CURRENT	20 - 120 mA	
CONNECTION METHOD	SURGE ARRESTOR	
Fuse	1/4 AMP 3AG FAST BLOW	
ENVIRONMENTAL		
WEATHERPROOF	ENCLOSURE NEMA 4X, IP66	
TEMPERATURE	-40° то +122° F (-40° то +50° С)	
HUMIDITY	0 To 100% RH	
DUST RESISTANT	FULL ENCLOSURE GASKET	
MECHANICAL		
Hook Switch (Cradle Switch) Life	>1 000 000 OPERATIONS	
BODY CONSTRUCTION	THERMOPLASTIC RESIN	
DIMENSIONS	16.1 x 11.6 x 7.0 INCHES (409 x 296 x 200)	
NET WEIGHT	16 LBS (7.3 KG)	
HANDSET MATERIAL	HIGH IMPACT ABS	
MICROPHONE	Noise Reducing Electret	
OPTIONAL MICROPHONE	Noise Canceling Dynamic	
Receiver	HEARING AID COMPATIBLE	
STANDARD MOUNTING	VERTICAL WALL	
CONNECTION FITTINGS	1/2" NPT THREADED OPENINGS	
HARDWARE MATERIAL	STAINLESS STEEL	



Compliance	
INDUSTRY CANADA	1012 6721 A
FCC	HQHCAN-22517-TE-E
WATERPROOF ENCLOSURE	CSA TYPE 4X, IP66

**Replacement Parts** 

<u> </u>			
Part No.	Description	Field Replaceable	
P006965	Faceplate	Yes	
P006499	Gasket – Faceplate	Yes	
P004050	Faceplate Screws – standard – (12 required)	Yes	
P007004	Faceplate Screws – Vandal Resistant – (12 required)	Yes	
P004260	Driver Bit for Vandal Resistant Screws	Yes	
P002786	Handset Cradle	Yes	
P004371	Handset Retainer	Yes	
P005391	Handset Assembly C/W Coil Cord and Noise Reducing Microphone	Yes	
P005699	Handset Assembly C/W Armored Cord and Noise Reducing Microphone	Yes	
P005582	Telephone Circuit Board	Yes	
P006646	Ringer – Floyd Bell BR-3	Yes	
P005917	Reed Switch	Yes	
P002992	Surge Arrestor – TII 126L1	Yes	
P002991	Fuse – Glass 0.25 Amp 250V 3AG	Yes	
P006442	Housing	Yes	
P006441	Door	Yes	
P006440	Hinge Pin	Yes	
P006439	Hinge Spring	Yes	
P006460	Door Latch – (non-locking)	Yes	
P006461	Door Latch – (locking)	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 can not 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 and replacing fuses, 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 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

## **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.



## **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.
- Connecting a telephone to a standard power source, rather than tip & 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.

## 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 <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.
- 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.



## **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.

## **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





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

E-mail: sales@guardiantelecom.com

(Click to open message box)

# Tough. Trusted. True.