Industrial Ringdown/Autodialer Telephone
Model WP71

Installation & Operation
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Package Contents

(1) WP71 Telephone
(1) Installation & Operation Manual
Overview

WP71 Industrial Ringdown Telephone
The WP71 is a rugged industrial telephone designed to provide safe, reliable, point to point communication in harsh environments such as refineries, mills, plants, warehouses or areas with high humidity.

The WP71 Telephone may be supplied with an optional Auto Dialer or dialing may be programmed through a PABX. If an Auto Dialer is ordered with the WP71 refer to the manual for the Auto Dialer for instructions on programming and for compliances.

Features

Enclosure
- weather tight, rugged Valox & steel
- spring loaded hinged door
- stainless steel mounting bracket

Encapsulated Circuitry
- circuit boards are resistant to corrosive agents (e.g. H₂S, SO₂ and NH₃), and environments with high humidity

Magnetic Reed Hook Switch
- no moving parts

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

Tone (DTMF) Operation
- factory set to tone (DTMF) dialing
- pulse dialing can be ordered or configured in the field

Heavy Duty Handset Cord
- withstands severe use

Hearing-Aid Compatible
- compatible with inductively coupled hearing-aid devices
Figure 1 - Features

Figure 2 - Dimensions
Installing the WP71

- Follow all appropriate electrical codes and use only approved electrical fittings for the installation.
- **Do not connect this product directly to a C.O. line.**
- Choose a wall location that is free of obstructions and permits space for ¼" NPT conduit runs.
- Ensure mounting can support 5.5 lbs (2.5kg) and any additional foreseeable load.
- Ensure that none of the electrical connection circuits are live.
- Use the template provided or the telephone to locate and drill holes for #8 or M4 mounting screws.
- Secure the unit to the wall.
- Open the door and remove the (4) #8 Philips drive screws on the access plate.
- Bring cable into the enclosure through the conduit entrance and attach individual wires from the exchange (Tip/Ring/Ground) to the surge arrester (Tip & Ring are not polarity sensitive). If a conduit hub is used, ensure it is grounded to the ground stud.
- Ensure all connections are tight, then replace the access plate and secure with (4) #8 Philips drive screws.
- Connect the telephone line wiring into the system.
- The WP71 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 WP71 refer to the manual for the Auto Dialer for instructions on programming.
- Test the unit by making and receiving a call.

Operating the WP71

- The WP71 Ringdown phone is designed for automatic calling simply by removing the handset from the cradle.
Fuse Replacement

- Disconnect the telephone from Tip and Ring power supplied by the PABX or central office before attempting to replace the fuse.
- 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.
- Replace fuse in fuse holder with a 0.25 Amp 3AG fast blow fuse.
- Carefully replace the front plate and install all eight 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.

**WARNING!**

- Replace only with a 0.25 Amp 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 - Fuse Replacement
## Engineering Specifications

### Electrical Performance

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audible Range Frequency Response</td>
<td>300 – 3400 Hz</td>
</tr>
<tr>
<td>Transmit Objective Loudness Rating (TOLR)</td>
<td>-38 +/- 3 dB</td>
</tr>
<tr>
<td>Receive Objective Loudness Rating (ROLR)</td>
<td>Typical -50 +/- 3 dB</td>
</tr>
<tr>
<td>Side Tone Objective Loudness Rating (SOLR)</td>
<td>Typical -11 +/- 4 dB</td>
</tr>
<tr>
<td>Ringer Output</td>
<td>80 dB Max</td>
</tr>
<tr>
<td>FCC Ringer Equivalence</td>
<td>0.8B</td>
</tr>
<tr>
<td>Set Impedance</td>
<td>600 Ohms Nominal</td>
</tr>
<tr>
<td>Maximum Loop</td>
<td>15,000 Ft (4,600 M) of 22 AWG Copper</td>
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</table>

### Electrical Requirements

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ringer Sensitivity</td>
<td>40 – 100 V, 16 – 25 Hz</td>
</tr>
<tr>
<td>Line Voltage</td>
<td>24 – 56 VDC</td>
</tr>
<tr>
<td>Loop Current</td>
<td>20 - 120 mA</td>
</tr>
<tr>
<td>Connection Method</td>
<td>Surge Arrestor / Terminal Block</td>
</tr>
<tr>
<td>Fuse</td>
<td>¼ Amp 3AG Fast Blow</td>
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</table>

### Environmental

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Weatherproof</td>
<td>Enclosure NEMA 3R</td>
</tr>
<tr>
<td>Temperature</td>
<td>-40° to +140° F (-40° to +60° C)</td>
</tr>
<tr>
<td>Humidity</td>
<td>0 to 95% RH</td>
</tr>
<tr>
<td>Dustproof</td>
<td>Fully Gasketted Enclosure</td>
</tr>
<tr>
<td>Corrosion Resistant</td>
<td>MIL-STD-810E Salt Fog</td>
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### Mechanical

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
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<tbody>
<tr>
<td>Hook Switch (Cradle Switch) Life</td>
<td>&gt;1,000,000 Operations</td>
</tr>
<tr>
<td>Body Construction</td>
<td>GE Valox 357R Engineering Polymer</td>
</tr>
<tr>
<td>Dimensions (H x W x D)</td>
<td>14 x 9.7 x 3.9 inches (356 x 246 x 99 mm)</td>
</tr>
<tr>
<td>Net Weight</td>
<td>6.5 LBS (2.95 KG)</td>
</tr>
<tr>
<td>Handset Material</td>
<td>High Impact ABS</td>
</tr>
<tr>
<td>Microphone</td>
<td>Noise Reducing Electret</td>
</tr>
<tr>
<td>Optional Microphone</td>
<td>Noise Canceling Dynamic</td>
</tr>
<tr>
<td>Receiver</td>
<td>Hearing Aid Compatible</td>
</tr>
<tr>
<td>Standard Mounting</td>
<td>Vertical Wall</td>
</tr>
<tr>
<td>Wiring Access</td>
<td>7/8” Opening for Owner Supplied Fitting</td>
</tr>
<tr>
<td>Hardware Material</td>
<td>Stainless Steel</td>
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Guardian Telecom Inc.  
Installation and Operation  
Model WP71

<table>
<thead>
<tr>
<th>Compliance</th>
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<tbody>
<tr>
<td>CSA</td>
<td>LR65547-32</td>
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<tr>
<td>WEATHERPROOF</td>
<td>ENCLOSURE NEMA 3R</td>
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<tr>
<td>ENVIRONMENTAL SURVIVABILITY</td>
<td>MIL-STD-810E</td>
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**Models and Options**

- P6080 Model WP71 Industrial Weather Resistant Ringdown Telephone
- P6080-20 Model WP71 Industrial Weather Resistant Ringdown Telephone with 20' Handset Cord

**Accessories**

- P005156 Internal autodialer
- P7224 Potted ring detect relay
- P7225 Weather Proof ring detect relay
- P7227 Potted off-hook detect relay (24V)
- P7229 Weather Proof off-hook detect relay
Warranty
Guardian Telecom warrants your product to be free of defects in material and workmanship for a period of one year. Guardian Telecom will repair or replace any defective unit that is under warranty free of charge.

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.

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.

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Calgary, Alberta, Canada T2E 8W1
Toll-free 1-800-363-8010
Ph. (403) 258-3100
Fax. (403) 253-4967
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 burn-out, 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 a RMA form online at www.guardiantelecom.com, 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.
### Notes:

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<tr>
<th>Description</th>
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<tbody>
<tr>
<td>Model No.</td>
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<tr>
<td>Part No.</td>
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<tr>
<td>Serial No.</td>
<td></td>
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<tr>
<td>Date of Purchase</td>
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