Emergency Call Vandal Resistant Telephone
Models ER1000/ER1100/ER1200

Installation & Operation
Table of Contents

Package Contents .........................................................................................2
Options and Accessories ..............................................................................2
Overview ......................................................................................................3
Features .........................................................................................................3
Installing the ER ............................................................................................6
Programming the ER .....................................................................................7
Incoming Calls ...............................................................................................10
Station Monitoring .......................................................................................10
Field Repairs .................................................................................................10
Fuse Replacement ..........................................................................................10
Operation .......................................................................................................11
Engineering Specifications ...........................................................................12
Warranty ........................................................................................................13
Disclaimer .....................................................................................................13
Warning ..........................................................................................................13
Service Telephone Number ...........................................................................13
Feedback ........................................................................................................13
Guardian Product Return ...............................................................................14

Table of Figures

Figure 1 - Features and Dimensions (typical) .............................................4
Figure 2 - Mounting And Wiring Access .....................................................4
Figure 3 - Wiring ............................................................................................5

Package Contents

(1) ER Telephone
(14) Tamper Resistant Screws
(1) Drive Bit For Tamper Resistant Screws
(1) Installation & Operation Manual

Options and Accessories

120VAC External Power Supply
• Increases sound level by 10dB and powers the Auxiliary Device Relay

Auxiliary Device Relay
• Switches power to a beacon, camera or similar device
Overview

ER Heavy Duty Emergency Telephones
ER Series telephones are intended for use in public areas where direct assistance is required. They provide a hands-free, two-way link to assistance through analog, half-duplex telephone transmission. ER telephones require programming from a remote DTMF telephone. Program options provide a great deal of flexibility in the way that the telephone responds. Three versions of the ER Emergency/Call telephones are available:

- ER1000 Emergency Telephone – provides direct two way communication with the push of a button.
- ER1100 Call Telephone – provides direct telephone service by pressing a button and dialing a number.
- ER1200 Emergency/Call Telephone – combines the features of the ER1000 and ER1100.

The ER1000 and ER1200 telephones may be programmed to autodial two numbers. If two numbers are stored the telephone will try the first number when the EMERGENCY button is pressed, if that number is busy it will try the second number. If the second number is also busy the telephone will go on-hook.

A call may be initiated from the telephone or from the monitoring station. Automatic answering allows security personnel to call the ER and listen in to activities in the immediate area for the duration of the pre-programmed talk time. With an optional external signaling alarm such as a Scream Alert the ER is an effective tool to alert emergency personnel of an urgent situation. These telephones also provide the capability of monitoring the status of each unit from a remote location informing personnel of a malfunction. Monitoring equipment is sold separately.

The ER is telephone line powered for basic operation and does not require external power. Provision of an optional 120VAC Power Supply will however, increase the speaker volume capability from a maximum of 80dB to 90 dB at 0.5 meter, and is also required to power the Auxiliary Device Relay option if installed. The Auxiliary Device Relay is closed whenever the ER is off-hook and can be used to supply power to a strobe light, camera or any other device.

No other telephones may be installed on an ER extension.

The ER telephone may be ordered with optional ADA (American Disability Act) compliant labels (in Braille), making it well suited for University and College campuses, elevators, parking facilities, ATMs, mass transit stations, amusement parks, senior citizen housing, hospitals and medical centers, or industrial parks.

Features

Enclosure
- Weatherproof Urethane with ten gauge steel mounting bracket

Call Button
- vandal resistant plastic

Conformal Coated Circuitry
- the circuit board is coated with an epoxy resin making it resistant to corrosive agents (e.g. H₂S, SO₂ and NH₃) and environments with high humidity

Remote Programming
- program options from a remote location (password protected)

Fuse
- prevents damage to the electronic circuits in the event of a high voltage spike on the telephone line
**Installation and Operation**

Models ER1000/ER1100/ER1200

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**Figure 1 - Features and Dimensions (typical)**

- **EMERGENCY**
  - 4.8" [122mm]
  - 9.5" [241mm]

- **EMERGENCY**
  - 15.5" [393mm]
  - Ø0.265" [Ø7mm] for #10 or M5

- **THREAD CONDUIT ENTRY, NPT 1/2"**
  - 2 PLACES

- **DIALING IN USE**

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**Figure 2 - Mounting And Wiring Access**
Figure 3 - Wiring
Installing the ER

- Follow all appropriate electrical codes and use only approved electrical fittings for the installation.
- No other telephones may be installed on the ER extension.
- Choose a wall location that is free of obstructions and permits space for cable or conduit runs.
- Ensure mounting can support 15 lbs (7 kg) and any additional foreseeable load.
- Ensure that none of the electrical connection circuits are live.
- Remove the cover screws from the front of the unit and carefully remove the front cover assembly. NOTE that the electronics are attached to the front plate. Unplug the wiring harness and set the faceplate aside.
- Use the template provided or the enclosure itself to locate and drill holes for #10 or M5 mounting screws.
- Secure the unit to the wall.
- Bring cable into the enclosure 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. If the ER has been ordered with the optional external power supply connection and Auxiliary Device Relay wire in accordance with local electrical standards. See: Figure 3 - Wiring.
- **WARNING:** A ground wire is required for any AC power brought into the emergency telephone. This ground wire shall be connected to the common ground via one of the mounting screws holding the circuit board to the faceplate. The one next to the “POWER LINE” terminal block is the nearest and easiest.
- Connect the telephone into the system.
- Adjust speaker volume with potentiometer on circuit board. **Note:** turn counterclockwise to adjust volume up.
- Ensure all connections are tight, then replace and secure the cover with the vandal resistant screws using the driver bit provided. Store the vandal resistant screw driver bit in a secure place for future use.
- Program the telephone.
- Test the unit by calling to and from another unit.

<table>
<thead>
<tr>
<th>LED Color</th>
<th>Phone Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Red</td>
<td>The unit is off-hook</td>
</tr>
<tr>
<td>Green</td>
<td>The unit has made a connection</td>
</tr>
</tbody>
</table>

Tip: Have another party call the ER in order to determine the appropriate volume setting.

See: Programming the ER.
Programming the ER

Note: The telephone will be out of use while in programming mode. Programming has to be done via a DTMF telephone.

To program the ER telephone, follow the steps outlined below:

- Call the emergency telephone from another telephone.
- After the emergency telephone has auto-answered, wait 5 seconds.
- Dial “0” to enter the programming mode.
- Key in the access code to access the programming mode. The default code is “12345678”. A tone directly follows to indicate authorization of your access code. If an incorrect code is entered the ER will cut off and it must be redialed.
- Press the corresponding Memory Slot Number to be programmed. (see below)
- A series of beeps will confirm which Memory Slot Number has been selected for programming. **Only one memory slot can be programmed on each call.**

<table>
<thead>
<tr>
<th>Memory Slot Number</th>
<th>Number Of Tones</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>7</td>
<td>Change Access Code</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1st. Auto dial Number</td>
</tr>
<tr>
<td>2</td>
<td>2</td>
<td>2nd. Auto dial Number</td>
</tr>
<tr>
<td>3</td>
<td>3</td>
<td>Station ID Number</td>
</tr>
<tr>
<td>4</td>
<td>4</td>
<td>System Designation</td>
</tr>
<tr>
<td>5</td>
<td>5</td>
<td>Talk Time</td>
</tr>
<tr>
<td>6</td>
<td>6</td>
<td>Maximum Dialing Number</td>
</tr>
</tbody>
</table>
### Memory Slot Number | Function | Description
---|---|---
0 | Change access code | Press “0”
The telephone initiates a series of seven beeps. Enter the new eight-digit access code. It will be stored when the eighth digit is entered. The telephone automatically goes on-hook after the new code is entered.

**WARNING!**
Record your access code in a secure location so that you can easily refer to it.

1 | The First Phone Number in Autodialing (ER1000 and ER1200 only) | Press “1”
The telephone initiates one beep. Enter the first telephone number. **Maximum 21 digits**, including 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, # and *. For less than 21 digits, put the programming phone back on hook to store the phone number. (see Note below)

2 | The Second Phone Number in Autodialing (ER1000 and ER1200 only) | Press “2”
The telephone initiates a series of two beeps. Enter the second telephone number. **Maximum 21 digits**, including 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, # and *. For less than 21 digits, put the programming phone back on hook to store the phone number. (see Note below)

**Note:** This number automatically dials if the first number is busy.

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**Note:** “#” will provide a 3 second pause during dialing. The number will be stored when the 21st digit is entered or when the telephone times out and goes back on hook.

If there is no answer at either of the autodial numbers the ER will go on-hook.
<table>
<thead>
<tr>
<th>Memory Slot Number</th>
<th>Function</th>
<th>Processes and Conditions</th>
</tr>
</thead>
</table>
| 3                  | Station ID Number | Press “3”  
The telephone initiates a series of three beeps.  
If the first key in the station ID number slot is an asterisk “*”  
the station ID will be enabled and will be transmitted at the beginning of every call.  
If the first key is not an asterisk the station ID will only be transmitted if the asterisk key is pressed on the receiving telephone during a call.  
This key will not be dialed out. The maximum number of digits is 20.  
See “Station Monitoring” for more information. |
| 4                  | System Designation | Press “4”  
The telephone initiates a series of four beeps.  
Press “1” to select PBX  
Or  
Press “2” to select Central Office.  
It is necessary to make this setting since the call progress tones from a PBX and the CO are different. |
| 5                  | Talk Time | Press “5”  
The telephone initiates a series of five beeps.  
Enter digit “1” to “9” corresponding to the number of minutes of talk time desired.  
**Note: The phone will automatically disconnect once the preset talk time limit has been reached.** |
| 6                  | Maximum Number of Manual Dialing Digits (for keypad version ER1100 and ER1200 only) | Press “6”  
The telephone initiates a series of six beeps.  
Enter digit “1” to “9” corresponding to the maximum number of dialing digits allowed. Enter “0” to disable Limited Maximum Dialing Number.  
A limited number of manual dialing digits will prevent users from dialing long distance. |

**WARNING!**

*You cannot program your ER telephone without the correct access code. Contact Guardian Telecom for assistance if you have lost or forgotten your access code.*

*Guardian Telecom can reprogram your ER telephone remotely with a master code.*
Incoming Calls

AUTO-ANSWER
Personnel at the monitoring office can call the emergency telephone and establish communication with someone requiring help. When the ER receives a call, it automatically goes off hook, turns on its LED and allows conversation to begin. This feature also allows security personnel to call the ER and listen in to activities in the immediate area for the duration of the pre-programmed talk time.

Station Monitoring
Provided that a telephone or other device on the receiving end of a call is capable of displaying caller ID, the station ID number will be displayed if slot five has an asterisk "*" as the first key. Otherwise the station ID can be determined at any time during a call by pressing the asterisk "*" key at the receiving station.

Equipment is available to automatically monitor the integrity of a system.

Field Repairs

Note: The only field repair permitted is the replacement of fuses. All other repairs or alterations must be carried out by Guardian Telecom or an Authorized Service Depot. See Warranty and Disclaimer for details.

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. NOTE that all the electronics are attached to the front plate.
• Replace fuse in fuse holder.
• 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.

WARNING!

• Replace only with a 0.25 amp 250VAC 2AG fast blow fuse. Failure to do so will void the warranty.
• If on reconnecting the line the fuse fails again 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 3 - Wiring
Operation

ER1000 EMERGENCY TELEPHONE
Press the EMERGENCY button. The pre-programmed telephone number automatically dials. If two auto-dial numbers were programmed in and the first number is busy the ER1000 will try the second number. If the second number is also busy the ER1000 will go on-hook. The Red LED will indicate the unit is dialing. If the unit is equipped with an external signaling device it will also activate. The Green LED will indicate when a connection has been made. A conversation can now take place.

ER1100 CALL TELEPHONE
Press the TO CALL button and wait for dial tone and green LED then dial the number. A conversation can now take place.

ER1200 EMERGENCY/CALL TELEPHONE
EMERGENCY - Press the EMERGENCY button. The pre-programmed telephone number automatically dials. If two auto-dial numbers were programmed in and the first number is busy the ER1200 will try the second number. If the second number is also busy the ER1200 will go on-hook. The red LED will indicate the unit is dialing. If the unit is equipped with an external signaling device option it will also activate. The green LED will indicate when a connection has been made. A conversation can now take place.

TO CALL - Press the TO CALL button and wait for dial tone and green LED then dial the number. A conversation can now take place.

NOTE: The Emergency call always takes priority over a regular call. In the event the emergency button is pressed while a regular call is in progress the regular call will be disconnected and the emergency call will proceed.
<table>
<thead>
<tr>
<th><strong>Engineering Specifications</strong></th>
</tr>
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<tbody>
<tr>
<td><strong>Audio Performance</strong></td>
</tr>
<tr>
<td>Audible Range Frequency Response</td>
</tr>
<tr>
<td>Dialing Method</td>
</tr>
<tr>
<td>Set AC Impedance</td>
</tr>
<tr>
<td>Transmit Objective Loudness Rating (TOLR)</td>
</tr>
<tr>
<td>Maximum Speaker Volume</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Set Impedance</td>
</tr>
<tr>
<td>Maximum Loop</td>
</tr>
<tr>
<td><strong>Electrical</strong></td>
</tr>
<tr>
<td>Auto Answer Sensitivity</td>
</tr>
<tr>
<td>Line Voltage</td>
</tr>
<tr>
<td>Loop Current</td>
</tr>
<tr>
<td>Line Fuse</td>
</tr>
<tr>
<td>Connection Method</td>
</tr>
<tr>
<td>Call Progress Tones</td>
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<tr>
<td></td>
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<tr>
<td></td>
</tr>
<tr>
<td>External Power Supply (Optional)</td>
</tr>
<tr>
<td>External Power Supply Fuse</td>
</tr>
<tr>
<td>Auxiliary Device Relay (Optional)</td>
</tr>
<tr>
<td><strong>Environmental</strong></td>
</tr>
<tr>
<td>Temperature</td>
</tr>
<tr>
<td>Humidity</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
</tr>
<tr>
<td>Body Construction</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Dimensions (W x H x D)</td>
</tr>
<tr>
<td>Net Weight</td>
</tr>
<tr>
<td>Standard Mounting</td>
</tr>
<tr>
<td>Wiring Access</td>
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<tr>
<td>Hardware Material</td>
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</tbody>
</table>
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.

Guardian Telecom Inc.
7552 - 10th Street N.E.
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:

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