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## INSTALLATION and USER GUIDE CT-200 TRANSMITTER

PLEASE READ THE QUALIFICATION AND WARRANTY  
STATEMENTS ON THE BACK OF THIS SHEET

### PRODUCT DESCRIPTION

Three CT-200 versions are available for use in retirement communities, assisted living facilities, and full time nursing homes. In most cases, they will be part of a network of transmitters and receivers tied back to a central location (nurse's station, etc.). All versions are powered by long life lithium batteries.

- CT-200RB Has both emergency and responder switches.
- CT-200CK Same as "RB" but includes activity monitoring.
- CT-200SD Use with existing smoke alarm systems to send RF report to nurses' station.

### RF TESTING

The CT-200 must be positioned to provide a strong signal to the system's receiver. Refer to the appropriate receiver installation manual for details on testing the signal. Temporarily place the transmitter at the selected location then activate it by pressing a switch or causing a smoke detector to trip. Do not hold the transmitter in your hand. Use a piece of tape to hold the CT-200 in place if needed.

Sometimes a small change in transmitter location or orientation can overcome a marginal signal. Reconfirm signal reception after the transmitter is permanently mounted.

### INSTALLATION

#### General Guidelines:

Do not expose the CT-200 to moisture or to temperatures outside of its operating range (40° to 120° F).

Avoid mounting the CT-200 on metal frames or surfaces. You may need to space the housing off at least 1/4" when mounting on metal.

#### CT-200SD

The CT-200SD should be mounted within 3" of an existing smoke detector with the microphone opening on the side of the case facing the detector. Modern smoke detectors sound in a cycle of three beeps followed by quiet period. The unit should trip (LED lights) by the end of the second beep in the first round of three beeps.

Test that the CT-200 trips properly at 6" prior to installing at the 3" distance. If it does not trip by the end of the second beep, increase the microphone's sensitivity until it trips at 6" (see illustration). Do not increase the sensitivity more than required since false alarms might occur in noisy environments.

#### Mounting:

On the front of the case, push the narrow plastic strip in the direction of the arrow and remove it. Loosen and remove the two exposed screws. Lift the front away from the back of the case.

**CAUTION:** Static electricity can damage electronic components. Always touch a grounded, bare metal surface before working with the CT-200.

Place the back against the wall and mark the location of the mounting holes. Use an awl or small Philips head screwdriver to make holes for the blue screw anchors. Mount the back with the screws provided. (Note: The holes match up with standard recessed receptacle wall boxes.)

Set the transmitter's identification number into the coding switches, install the battery as indicated by the label in the battery well, then reattach the front to the back of the case.

### OPERATION

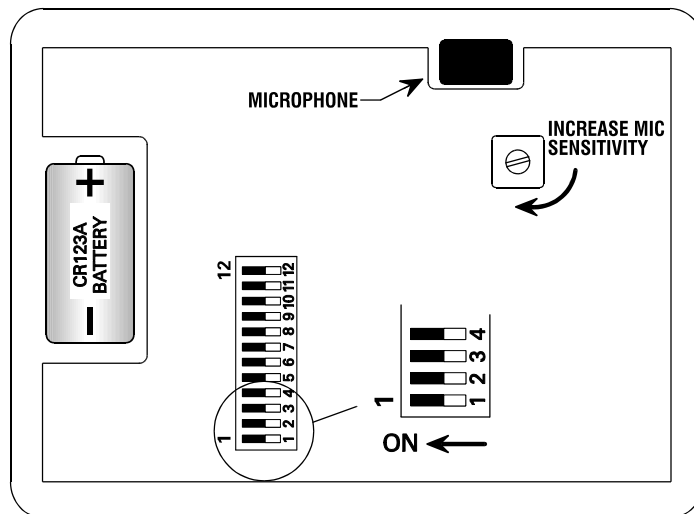
The LED of the front of the case lights to indicate an RF report whenever the emergency switch (large red button), responder switch (small black button), or smoke detector microphone are activated.

The LED continues to blink after the report if the alarm was caused by the emergency switch. It will blink until the responder switch is pressed. While the LED is blinking, the CT-200 will retransmit the alarm signal every 5 minutes until the responder switch is pressed (up to 8 hours).

The CT-200CK's includes an activity monitor that requires the resident to press the responder switch within a 3 hour window each day. The LED blinks rapidly to remind the resident during the window. To set the widow start time, press and hold in the responder switch until the LED blinks 4 times. For example, to set a window from 7:30 AM to 10:30 AM. press and hold the responder switch at 7:30 AM.

There are no switches on the CT-200SD.

CT-200's automatically transmit a status/battery report every 66 minutes.



### TRANSMITTER CODING

Set the ID of the transmitter into the 12 coding switches on the transmitter circuit board. Use a small pointed object such as a paper clip to move the switch. Setting instructions are found in the receiver installation manual.

### BATTERY

The CT-200 uses a single CR123A lithium battery. Battery voltage (good/low) is reported with each hourly check-in report. We recommend that the facility's staff change the batteries on a regular basis for each user.

### SPECIFICATIONS

Size: 4.7" L x 3.3" W x 1.0" H

Battery: Single CR123A, 3 volt, lithium battery.

Typical Battery Life: Five years for CT-200RB and CT-200SD. Four years for CT-200CK. Operation at the temperature extremes may reduce battery life. Lithium batteries have a recommended shelf life of 10 years.

Operating temperature range: 40° to 120° F

### TESTING

**No electronic product can perform better than the care and maintenance it receives.**

Occasionally, residents may be shown how and when to test the CT-200. In most cases, however, testing should be done by the facility's staff. All testing actions must be confirmed at the central monitoring location (nurses' station, etc.).

Complete testing of all parts of the system should be performed no less than once per month. In some cases, more frequent tests may be appropriate. Only the on-site facility personnel can make this determination.

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## UNDERSTANDING RADIO FREQUENCY DEVICES

Although radio transmission links have proven themselves by providing dependable communication, both customer and installer need to understand their limitations and restrictions before using the system. Refer to each system's receiver Installation Guide for additional RF information.

**The system's radio reception may be changed when electronic devices, computers, large appliances, mirrors, foil wallpaper, etc., are added or moved within the residence. Have your customer notify you if they have any concerns when making changes of this nature.**

Some of the areas you should be aware of are:

Transmitters have limited power and therefore limited range because they must comply with FCC Rules and Regulations as Part 15 devices.

The CT-200's batteries must be replaced when indicated by low battery transmissions.

Periodic testing will reveal any new source of interference or a failure of the system.

Receivers may be blocked by other signals occurring near their operating frequency.

The receiver can only respond to one transmitter at a time.

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## IMPORTANT

Before using this product, read both the Installer Qualifications statement and the product Warranty and its limitations of remedies which follow. If you do not agree with what they say, promptly return this product. Use of this product indicates that you have accepted the terms of the warranty.

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## INSTALLER QUALIFICATIONS

The product(s) described in this guide should be installed only by a qualified, adequately trained **security installer** or **health care provider** who is familiar with this class of product.

**The Capricorn CT-200 may be installed as part of a personal emergency response network (PERN). These systems usually are not as complex as complete security installations. Nevertheless, correct installation and user education is vital to the proper operation of a PERN. In many cases, final installation may be left to a local health care provider or other individuals in the health services industry. It is the responsibility of the purchaser of this equipment to ensure that any individual who places this product into service is fully trained and qualified.**

The on-site installer or dealer, in consultation with the end user, must make the necessary decisions on system configuration and protection level. The installer must take care to follow industry accepted installation practices and procedures as well as comply with local and state regulations.

Please call Capricorn's Technical Services Department at 800-438-3750 if you have questions concerning this product. The general knowledge required for proper installation of any security product should be obtained from local, state or regional training/licensing classes, classes provided by security industry associations and/or on the job apprenticeship at established installing companies. Business insurance coverage for your installations should be obtained through your local agent or through agents recommended by security industry or health care associations.

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## LIMITED WARRANTY

Capricorn Electronics, Inc. warrants that this product of its manufacture will be free from defects in material and workmanship under normal use and service for 24 months from the date of manufacture. The warranty expiration date is printed on the label inside the product.

**THIS WARRANTY EXTENDS ONLY TO WHOLESALE CUSTOMERS WHO BUY DIRECT FROM CAPRICORN ELECTRONICS, INC. OR THROUGH ITS NORMAL DISTRIBUTION CHANNELS. CONSUMERS SHOULD INQUIRE FROM THEIR SELLING DEALER AS TO THE NATURE AND EXTENT OF THE DEALER'S WARRANTY, IF ANY.**

Capricorn Electronics, Inc.'s obligation under this warranty is limited to repairing or replacing, without charge, any part or parts which shall be returned to its factory, transportation charges prepaid, prior to the warranty expiration date and which upon examination shall disclose to the manufacturer's satisfaction to have been originally defective.

This warranty shall not apply to any of the manufacturer's products which have been subject to misuse, negligence or accident or which have been repaired or altered outside of the manufacturer's factory.

There are no obligations or liabilities on the part of the manufacturer for consequential damages arising out of or in connection with the use or performance of this product or other indirect damages with respect to loss of property, revenue, or profit, or cost of removal, installation or reinstallation. All implied warranties including implied warranties for merchantability and implied warranties for fitness are valid only until the warranty expiration date.

Purchaser is on notice that Capricorn Electronics, Inc. does not represent that this product will in every case provide adequate warning or protection or prevent personal injury or property loss. An alarm is not insurance or a guarantee that there will be no risk of burglary, robbery, or fire or that no personal injury or property loss will occur. **CAPRICORN ELECTRONICS, INC., THEREFORE, SHALL NOT BE LIABLE FOR ANY DAMAGES, EITHER CONSEQUENTIAL OR INCIDENTAL, ARISING FROM THE USE, INSTALLATION, SERVICING OR MAINTENANCE OF THE PRODUCT. CAPRICORN ELECTRONICS, INC. SHALL NOT BE LIABLE FOR ANY PERSONAL INJURY, PROPERTY LOSS OR ANY OTHER LOSS BASED ON THE CLAIM THAT THE PRODUCT FAILED TO GIVE WARNING OR FOR ANY COSTS FOR PROVIDING REPLACEMENT EQUIPMENT DURING PERIODS OF MALFUNCTION OR REPAIR.**

The above Capricorn Electronics, Inc. warranty is a limited warranty and is the only warranty made between Capricorn Electronics, Inc. and purchasers. It supersedes and is in lieu of all other warranties expressed or implied, and of all other liabilities or obligations on the part of Capricorn Electronics, Inc. In no event shall the liability of Capricorn Electronics, Inc. exceed the purchase price of the product. Some states do not allow the exclusion of implied warranties and, therefore, the exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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## FCC REGULATION INFORMATION

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.

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.