

FCC ID: RXU-LUXPI  
"partial"

**CA9300**  
Wanderer Monitoring System  
Installation Manual

Install Manual  
Released: 11/30/97  
0510-0053

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**Information to User (Section 15.21)**

The user is cautioned that any change or modification not expressly approved by the party responsible for compliance with FCC regulations could void the user's authority to operate the equipment.

Transceiver: FCC ID: KXU - LFTX1  
Transponder: FCC ID: KXU - LUXP1  
UHF Receiver: FCC ID: KXU - SRG3RX

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.

**CODE ALERT.**

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(414) 790 -1771 • 1-800-669-9946 • FAX (414) 790-1784

**\*\*\*IMPORTANT NOTICE\*\*\***

BEFORE BEGINNING INSTALLATION,  
FIRST READ THIS MANUAL THOROUGHLY.

**\*\*\*\* IMPORTANT \*\*\*\***

READ *“SYSTEM TUNING AND RECEIVER MOUNTING”*

READ *“MOUNTING THE RECEIVERS”*

READ *“EXCESSIVE INTERFERENCE”*

THEN, IF YOU STILL HAVE QUESTIONS,  
OR CANNOT RESOLVE SYSTEM PROBLEMS

CALL OUR TECHNICAL DEPARTMENT

TO REVIEW PROCEDURES.

Technical Department: 1-800-669-9946

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Wanderer Monitoring System  
CA9300 Introduction

# Wanderer Monitoring System CA9300 Overview

The Code Alert® CA9300 wanderer monitoring system is designed to meet the specific needs of the health care industry. The lightweight, coded transponder is the center of the system. When a resident or patient wearing a transponder enters a monitored zone, the transponder receives a signal from the loop antenna and sends a coded UHF signal to the UHF Receiver. The UHF Receiver sends the control information to the control unit for decoding, which in turn triggers an alarm condition. Only a resident or patient wearing a transponder activates the alarm; everyone else can move freely through the alarm zone. Code Alert provides you with a reliable system for protecting residents and patients who tend to wander.

The primary electronics for the CA9300 are housed within a durable metallic enclosure that is conveniently mounted near the doorway, hallway or elevator to be monitored. The control unit has a pleasing, unassuming appearance and also contains the audio alarm, the keypad, and the transmitter.

The control unit has a keypad which is used to reset the system following an alarm. Staff may also use the keypad to bypass the system long enough to escort a resident/patient through the monitored zone without setting off the alarm. When the time allotted for bypass has elapsed, the system automatically resets itself.

The control unit has three indicator lights. When the red light is on, the system is active. The yellow signal light indicates when a UHF signal is received or noise is in the area. When the green light is on, the system is disarmed, allowing bypass for a set amount of seconds. The system will automatically re-arm itself when the bypass time has expired.

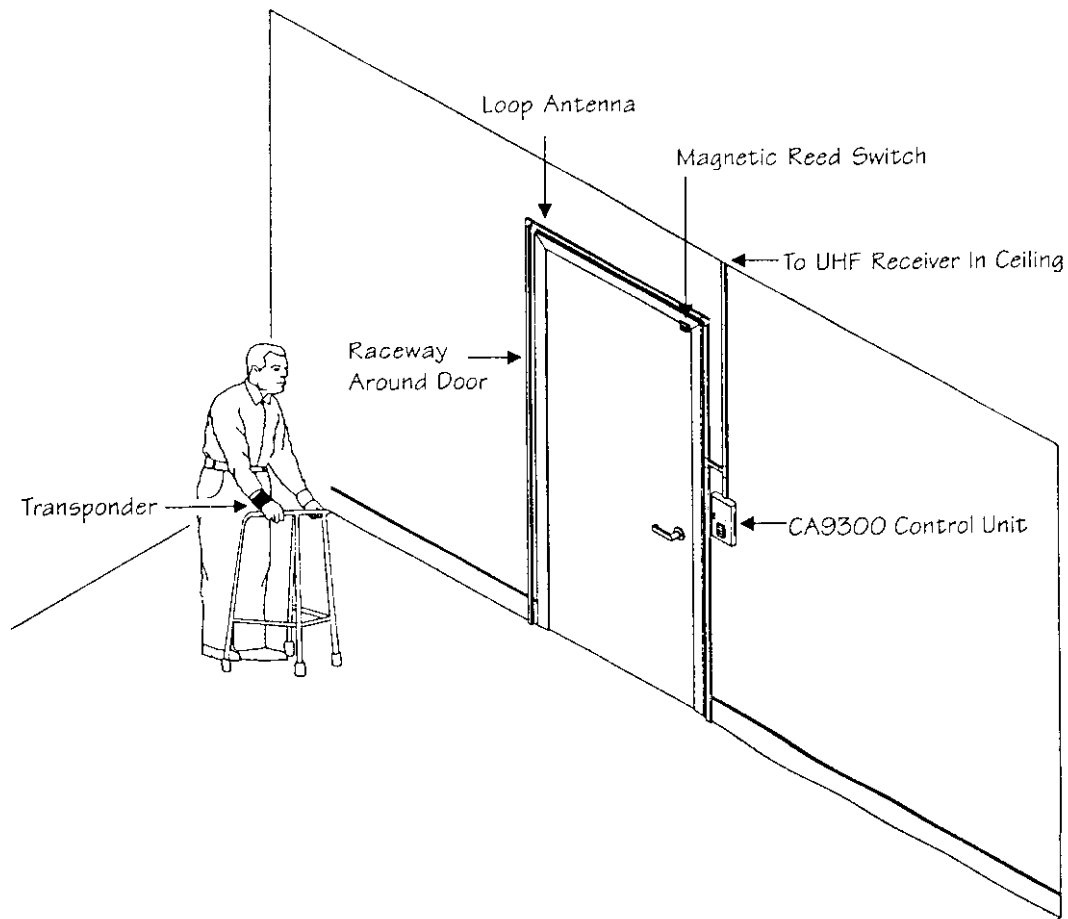


Figure 1: Wanderer Monitoring System Overview



## Wanderer Monitoring System Common Sources of Interference

Common sources of interference include TV's, computer monitors, electric motors, electrical distribution panels, etc. These types of devices should be **AT LEAST SIX FEET** away from the receiver, even through walls and ceilings.

Keep all Computers and Televisions  
**at least 6 feet** away from your  
Wanderer Monitoring System

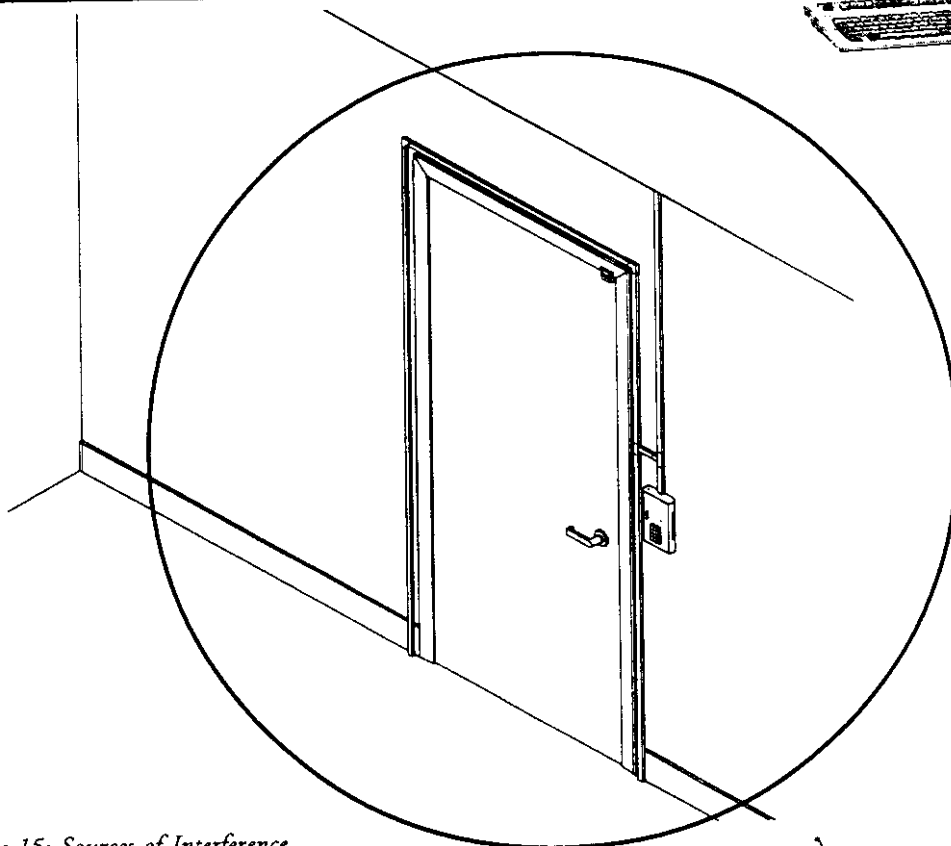
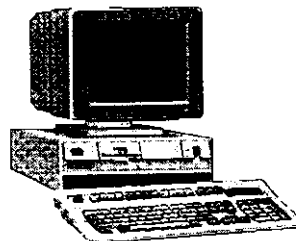
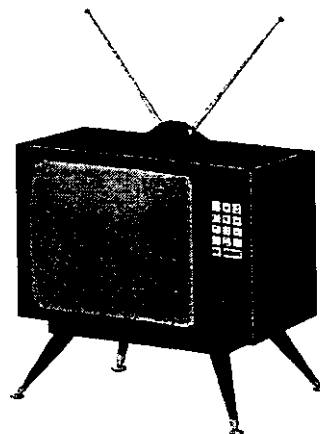


Figure 15: Sources of Interference

View the area around your detection  
zone as a sphere. Keep all interference  
sources outside the sphere.



# Wanderer Monitoring System Transponder

## Overview

The Code Alert system revolves around time-tested transponder technology which has proven reliable and accurate under the most demanding conditions. Code Alert transponders have been refined to the point that they do not require special handling or care.

The transponder is worn on the wrist or ankle, and emits a coded signal that is recognized and interpreted by the CA9300 control unit and receivers. The signal is coded to prevent stray electronic signals, such as those transmitted by electric wheelchairs, electrical and electronic equipment, etc., from activating the system and creating a false alarm.

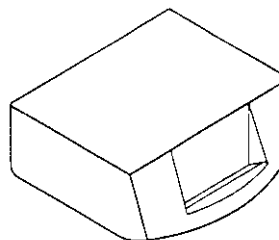


Figure 21: 2-Year Transponder

## Fastening a transponders

1. Insert the band through the slot on the transponder from bottom to top and pull the band **over the top of the transponder** and down through the slot on the other side.
2. Bring the band around the wrist/ankle so that the end with the adjustment holes meets the end with the snap.
3. Adjust the band to a position where the transponder will not slip off, yet is loose enough to provide comfort for the resident. **CAUTION - Place the ankle transponder loose enough to prevent possible ankle edema.**
4. Once the adjustment is made, slip the selected hole down onto the wide collar of the snap. Bend the excess band back over so the next hole also slips down onto the collar.
5. Fold the flap with the snap peg over onto the band and into the collar and squeeze the two securely together.
6. Cut off excess band with scissors.

This procedure will provide a secure and safe fit on the resident.

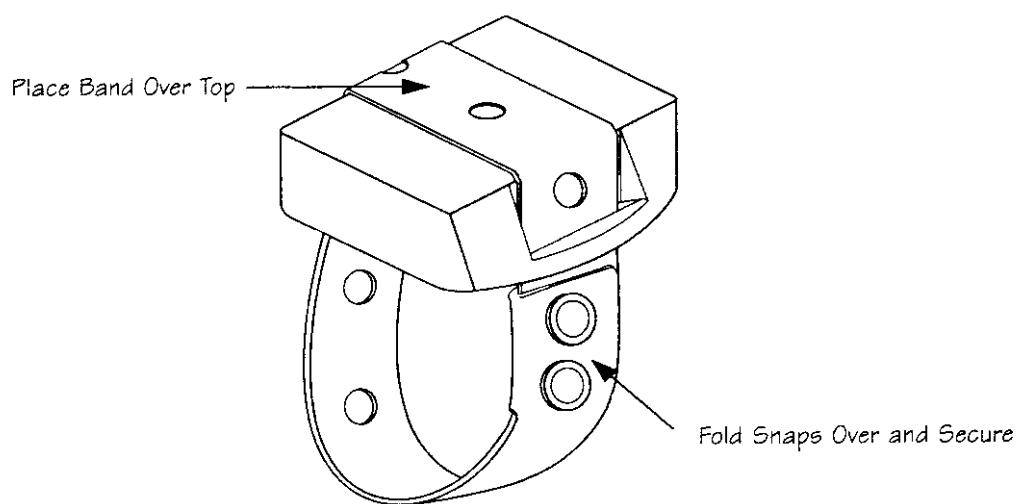


Figure 22: Fastening the Band

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## Operation

To ensure proper operation of the Infant and Child Security System exit alarms after they have been installed, please proceed with the following tests:

### Reset Code

Place a transponder in your hand and pass through the security zone. The alarm should sound at this time if the system is operating correctly. Now enter the reset code on the keypad: 1-3-7-9. This will reset the system to its resting state. (Make sure the transponder is not in range when resetting the system.)

Reset Code: **1** - **3** - **7** - **9** is factory preset.

### Bypass Code

To test the bypass function of the system. Press the 1 and # keys simultaneously on the keypad. The green light labeled "STATUS" on the control unit should light at this time. Walk through the zone with the transponder in your hand. The system should remain in its resting, non-alarmed state.

If any of these tests fail call Code Alerts' Technical Department at 1-800-669-9946.

Bypass Code: **1** + **#** (entered simultaneously) is factory preset.

**Note:** Due to the sensitivity of the Wanderer Monitoring System equipment, we urge that you do not try to repair or work on the system without first contacting Code Alerts' Technical Department.

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## Final Checklist

After you feel fairly confident that you have installed all the Wanderer Monitoring System equipment properly, please proceed with the following checklist:

- Test each CA9300 detection zone for proper operation.
  - Staff alert panel operates properly by lighting proper zone LED and sounding alarm.
  - Voice Alarm announces correct location.
  - Reset and bypass codes operate at each detection zone.
  - Any optional equipment installed at the CA9300 zones operate properly.

**Note:** When using a central power supply attach each control units power individually and then test each zone.

## Tips and Reminders

It is important that there be two or more staff members (possibly an administrator or a maintenance person) appointed to ensure proper use and operation of the Wanderer Monitoring System, and to document any necessary information your facility may need to keep.

1. Be certain that all staff members and new staff members are trained on the proper use of the Wanderer Monitoring System. Reading the in-service manual is important in familiarizing staff with the system.
2. Check the transponder band regularly for normal wear and tear. If you notice any fraying of the edges, replace it promptly.
3. Test each detection zone on a regular basis, ideally weekly.
4. Make sure that the appropriate staff are aware of which residents are wearing transponders. You may want to keep an active list of the names.
5. Respond quickly but calmly to all alarms.
6. If you believe you are experiencing some difficulty with the system, call our Technical Department immediately (1-800-669-9946). If you are unable to call immediately, document the date, time and details of the incident and call us as soon as possible.

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# Wanderer Monitoring System Product Specifications\*

## TWO YEAR (2) YEAR TRANSPONDER SPECIFICATIONS:

Size: 1.5 x 1.7 x .562 inches  
Weight: .9 ounces  
Color: Beige  
Enclosure: Polycarbonate  
Power Supply: 3.5V Battery  
Battery Life: 2 years  
Range: 4.5 Feet

## BAND SPECIFICATIONS:

Size: .75 inches wide  
Color: Navy Blue or Gray  
Material: Nylon

## CA9300 CONTROL UNIT SPECIFICATIONS:

Size: 8.5 x 5.25 x 1.35 inches (Surface Mount)  
Weight: 1.5 pounds  
Color: Beige  
Enclosure: Cold Rolled Steel (Surface Mounted)  
Power Supply: Plug-In Class 2 Transformer 16VAC 1100mA  
-or- Central Power Supply 15V DC, 400mA per unit required.  
Operating Temperature: 0°C to 40°C (32°F to 104°F)  
Outputs: N.O. & N.C. Dry Relay Contacts - Jumper Selectable (2)  
N.O. & N.C. 12V DC Relay Contacts - Jumper Selectable (2)  
RS-232 Data, 95dB Alarm Tone at 2.8 kHz  
Alarm Reset: 4-digit code; select from eight sequences - DIP Switch Selectable  
Alarm Bypass: 30 seconds; select from four times (15, 30, 45, 60 seconds)  
Indicators: Power On (Red LED)  
Signal (Yellow LED)  
Status (Green LED)  
Fuse: Transmitter, Standard Fast-Blow Fuse (750mA)  
Controller, Standard Fast-Blow Fuse (750mA)  
Transmitter Frequency: 131kHz

*\* Specifications Subject to Change*

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EIGHT ZONE STAFF ALERT PANEL SPECIFICATIONS:

Size: 6.5 x 4.5 x 2.25 inches  
Weight: 1 pound  
Color: Beige  
Composition: Stainless Steel Faceplate and Enclosure  
Power: 12VAC 300mA Class 2 Transformer  
Operating Temperature: 0°C to 40°C (32°F to 104°F)  
Wiring: 22/2 AWG Stranded

RACEWAY

Size: .75" x .5"  
Color: Beige  
Composition: 94V-O PVC lengths, 94V-O ABS fittings  
Adhesive: Acrylic pressure sensitive foam tape 1/16" thick

SRG3-UHF RECEIVER SPECIFICATIONS:

Size: 3.75 x 2.25 x 1 inches  
Weight: .25 pounds  
Color: Beige  
Enclosure: UL 94VO ABS Plastic  
Power Supply: 12V DC  
Operating Temperature: 0°C to 40°C (32°F to 104°F)  
Outputs: DATA  
Indicators: Signal (Red LED)  
Range: 10 feet, minimum

LOOP ANTENNA

Location: 2 turns #18 wire around door to be monitored  
Frequency: 131kHz