1184 WIRELESS CARBON MONOXIDE DETECTOR

Installation Guide

DESCRIPTION

The 1184 is a 3 V battery powered wireless carbon monoxide (CO) detector that provides early warning when the electrochemical sensing technology measures CO levels in the air. The detector has an electrochemical CO sensor assembly coupled with an 1100 Series wireless transmitter and an audible sounder. The transmitter can send alarm, trouble, tamper, and low battery condition messages to the alarm panel. The detector works well for difficult wiring locations, for critically aesthetic applications, or for areas where hazardous materials exist.

Compatibility

• All DMP 1100 Series Receivers and Panels.

What is Included?

• 1184 Carbon Monoxide Detector with DMP wireless transmitter installed
• 3V lithium Model CR123-FIRE battery
• Hardware pack

Detector Annunciation Notifications

The 1184 provides the following transmitter messages, LED display, and audible annunciations:

<table>
<thead>
<tr>
<th>MESSAGE</th>
<th>KEYPAD DISPLAY</th>
<th>RED LED</th>
<th>GREEN LED</th>
<th>SOUNDER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alarm</td>
<td>ALARM</td>
<td>Blinks once every second</td>
<td>Off</td>
<td>Temporal 4</td>
</tr>
<tr>
<td>Low battery</td>
<td>LO BAT</td>
<td>Blinks once every 45 seconds</td>
<td>Off</td>
<td>Chirps after 7 days</td>
</tr>
<tr>
<td>Detector Head Removed</td>
<td>TROUBLE</td>
<td>Blinks once every 5 seconds</td>
<td>Off</td>
<td>One chirp every 45 seconds</td>
</tr>
<tr>
<td>Tamper (XR150/XR550) OPEN (XTL/XT30/XT50)</td>
<td>TAMPER</td>
<td>Off</td>
<td>On</td>
<td>Off</td>
</tr>
<tr>
<td>Detector End of Life</td>
<td>TROUBLE</td>
<td>Blinks once every 10 seconds</td>
<td>Off</td>
<td>One chirp every 45 seconds</td>
</tr>
</tbody>
</table>

Table 1: Detector Notifications

PROGRAM THE TRANSMITTER IN THE PANEL

1. In ZONE INFORMATION, enter the wireless ZONE NO: - and press CMD.
2. Enter the ZONE NAME and press CMD.
3. Select CO for ZONE TYPE and press CMD.
4. At NEXT ZN?, select NO.
5. Select YES when WIRELESS? displays.
6. Enter the eight-digit SERIAL#: - and press CMD.
7. Enter the SUPRVSN TIME and press CMD.

Figure 1: 1184

Figure 2: Carbon Monoxide Detector Callouts

1 TEST/HUSH BUTTON
2 GREEN LED Normal
3 RED LED Alarm
4 CO ENTRY POINTS
5 AUDIBLE SOUNDER
2 SELECT A LOCATION

Install the transmitter away from large metal objects which impair wireless performance. For the LED Survey Operation complete the following steps before proceeding:

1. Use a separate 1100 Series Transmitter for the LED Survey Operation such as an 1106 since the 1184 transmitter PCB is not visible.
2. Find the survey button on the 1106 transmitter PCB and the survey LED near the survey button location. The transmitter PCB Red Survey LED turns on whenever data is sent to the receiver then immediately turns off when the receiver acknowledgement is received.
3. Press and release the tamper switch to send data to the receiver to confirm operation.
   - **Confirmed:** If communication is confirmed, for each press or release of the tamper switch, the LED blinks immediately on and immediately off.
   - **Faulty:** If communication is faulty, the LED remains on for about 8 seconds or flashes multiple times in quick succession. Relocate the [generic product] or receiver until the LED confirms clear communication.
4. Test the communication between the control panel and the detector using the panel walk test feature. See *Test the Detector Alarm*.

General Location Guidelines

In addition to NFPA 720, use the following location guidelines to optimize performance from the CO detector:

- Install ceiling-mounted detectors at least 12 inches from any wall
- Install wall-mounted detectors at least as high as the light switch and 6 inches below the ceiling.
- Mount the detector on a firm permanent surface
- Locate the detector in environmentally controlled areas where the temperature does not exceed 104° F (40° C) or drop below 32° F (0° C).
- When mounting to suspended ceiling tile, the tile must be secured with the appropriate fastener to prevent tile removal
- Install in the vicinity of flame-fueled appliances, but no closer than 10 feet.
- Keep detectors away from vents and the reach of children and pets.

3 MOUNT THE DETECTOR

When setting up a wireless system, it is recommended to program zones and connect the wireless receiver before installing batteries in the transmitters.

1. Use the two screws provided to mount the base in the location previously surveyed for proper communication.
2. Use the alignment notch on the lip of the mounting base as a guide to align the detector with the alignment tabs.
3. Insert the detector into the mounting base and turn clockwise approximately 15 degrees to snap into place.

![Figure 3: Exploded View of CO Detector](image)

To remove the detector from the mounting base, grasp the detector and turn it counterclockwise approximately 15 degrees. The detector snaps off of the mounting base. See Figure 3.
4 INSTALL OR REPLACE THE BATTERIES

Caution: Properly dispose of used batteries. Do not recharge, disassemble, heat above 212°F (100°C), or incinerate. Risk of fire, explosion, and burns.

Observe polarity when installing the battery. Use only 3.0 V lithium batteries, DMP Model CR123-FIRE or Panasonic Model CR123A.

Note: When setting up a wireless system, it is recommended to program zones and connect the receiver before installing batteries in the transmitters.

1. Remove the detector from the mounting base. See the final section of Install the Detector.
2. The battery is located on the inside of the detector. The detector is supplied with a pre-installed battery. During the initial installation simply remove the battery pull tab to begin operation.
3. If replacing the battery, remove the old battery and dispose of properly.
4. Observing correct polarity, insert the new 3V lithium battery into the battery compartment and replace the cover. Use only new batteries when replacing old ones.
5. Reattach the detector to the mounting base.
6. Test the detector. See Test the Detector Alarm.

Note: The power cell degrades predictably over its 6-year life. As it ages, a timer runs, and compensation is applied. When the timer expires, the detector enters end of life trouble. In the end of life trouble, the red LED will flash once every 10 seconds, and the sounder will chirp every 45 seconds and can't be silenced. End of life trouble is latching and unable to be reset. At this time, the detector must be replaced.

5 TEST THE DETECTOR ALARM

Wireless Communication

The control panel alarm and all auxiliary functions should be verified for a complete test of the system. See the panel programming guide for additional information.

1. To conduct the Walk Test, reset the control panel. From the keypad, enter the code 8144 (WALK). The keypad displays WALK TEST. Select STD for Standard Walk Test. Refer to the panel programming guide for complete information on Walk Test operation.
2. Insert a small screwdriver into the Test hole on the front of the detector to activate the test, sound the detector's audible and send a message. Verify that the walk test trip counter increments to indicate a successful test.
3. Select END to stop the Walk Test. When the Walk Test ends or a 20-minute time-out expires, a final Sensor Reset occurs. Faulted zones then display on the keypad.

Detector Sensitivity

Before testing, be sure to notify the central station to avoid false alarms.

1. With a small screwdriver, press and hold the recessed Test switch on the detector for approximately 2 seconds. The detector will temporarily sound an alarm and the red LED will illuminate.
2. Within a few seconds the green LED will start to blink rapidly indicating the detector is in functional test mode awaiting gas entry.
3. Spray a very small amount of Solo™ brand C6 canned CO, available at most local security distributors or online, into one of the 3 small gas entry holes located on the top center of the detector.

Upon successful gas entry and if functioning properly, the detector will alarm by sounding in a Temporal 4 pattern with the red LED blinking. An alarm signal will be sent to the panel providing verification of alarm signal.

The alarm condition at the detector will time out in 20 to 60 seconds or when the CO gas has cleared.
Specifications

- **Sensor Life Expectancy**: Minimum of 3 years, maximum of 6 years
- **Battery Life Expectancy**: Minimum of 2 years (normal operation) 3 V Lithium CR123-FIRE
- **Low Battery**: 2.7 V
- **Frequency Range**: 905 - 924 MHz
- **Dimensions**: 5.8” x 2.2” (14.3 cm x 6.1 cm)
- **Color**: White

**Patents**

- U.S. Patent no. 7,239,236

**Certifications**

- California State Fire Marshal (CSFM)
- FCC Part 15: CCKPC0104
- New York City 1100 Series Wireless (FDNY COA #6167)
- Industry Canada: 5251A-PC0104
- Underwriters Laboratory (UL) Listed
- ANSI/UL 2075  •  Gas and Vapor Detectors and Sensors

**INDUSTRY CANADA INFORMATION**

This device complies with Industry Canada Licence-exempt RSS standards. Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference that may cause undesired operation of the device.

This system has been evaluated for RF Exposure per RSS-102 and is in compliance with the limits specified by Health Canada Safety Code 6. The system must be installed at a minimum separation distance from the antenna to a general bystander of 7.87 inches (20 cm) to maintain compliance with the General Population limits.

**FCC 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, including interference that may cause undesired operation of the device.

The antenna used for this transmitter must be installed to provide a separation distance of at least 20 cm (7.874 in.) from all persons. It must not be located or operated in conjunction with any other antenna or transmitter.

Changes or modifications made by the user and not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

**Note:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

**Note:** The 1100 Series wireless system is a two-way supervised wireless design. It is compliant with FCC rules as they pertain to 900 MHz Spread Spectrum devices. In rare instances it has been observed that certain 900 MHz cordless telephones may occasionally experience a clicking sound on the telephone while in use. If this occurs, it may be resolved by selecting a different channel on the cordless telephone, or replacing the cordless phone with a different brand or model of 900 MHz telephone or other cordless telephone.