

CDX-135Z

Wireless Smoke/CO Detector with Heat and Freeze Sensor Installation Manual



Attention: Please take a few minutes to thoroughly read this guide which should be saved for future reference.

The CDX-135Z wireless smoke and carbon monoxide detector with heat and freeze sensor is compatible with the following Interlogix learn mode panels: Simon®XT, Simon XTI, Concord®4 (firmware version 4.7 or higher), Advisor®One and UltraSync

Description

The Interlogix CDX-135Z supervised photoelectric smoke and carbon monoxide (CO) detector with heat and freeze sensors is a self-diagnostic Learn Mode wireless sensor with wireless interconnection, 10-yr sealed battery and sensor life, built-in sounder, diagnostic/status LED, integrated fixed temperature and rate-of-rise heat sensor and a pre-freeze condition sensor.

The CDX-135Z uses a 319.5MHz transmitter for communication to the control panel and a 915MHz transmitter for interconnection communication between networked detectors. Up to 24 detectors can be a part of the same interconnected network. The dual transmitter design ensures interconnection integrity is maintained independent of control panel status. Because of this unique design the CDX-135Z is multi listed to UL 217, UL268, UL2034 and UL2075 requirements.

The combination alarm combines the detection capabilities of a photoelectric sensor with that of an electrochemical sensor, which is used to detect CO. The highly accurate electrochemical CO sensor uses sophisticated onboard microprocessor to effectively

track CO level over time. The detector has a test feature that allows for testing with real CO gas.

The CDX-135Z uses a 10-year sealed-in lithium battery ensuring continuous operation over the 10 year life of the detector. This eliminates worry about battery removal or unauthorized deactivation of alarm. The self-activation feature activates the detector when attached to the mounting bracket. At the end of detector life, the unit will chirp and send communication back to control panel, indicating the detector is in need of replacement.

⚠ WARNING: After ten years from initial power up, this alarm will beep two times every 30 seconds to indicate that it is time to replace the detector. Replace the alarm immediately. It will not detect CO in this condition.

To help identify the date to replace the unit, a label has been affixed to the side of the alarm. Write the "Install date" in the space provided, and then write in the "Replace by" date (10 years from initial power up) in permanent marker on the label prior to installing the unit.

Two labels have been provided at the back of this installation manual that have important information on what to do in case of a CO alarm. Place one label next to the alarm after it is mounted, and one near a fresh air source such as a door or window.

Recommended Locations for Detectors

- Locate detectors in all sleeping areas. Try to monitor the exit path as the bedrooms are usually farthest from the exit. If more than one sleeping area exists, locate additional detectors in each sleeping area.
- Locate additional detectors to monitor any stairway as stairways act like chimneys for smoke and heat.
- Locate at least one detector on every floor level.
- Locate a detector in every bedroom.
- When mounting a detector on the ceiling, locate it at a minimum of 4" (10 cm) from the side wall.
- When mounting the detector on the wall, use an inside wall with the top edge of the alarm at a minimum of 4" (10 cm) and a maximum of 12" (30.5 cm) below the ceiling.

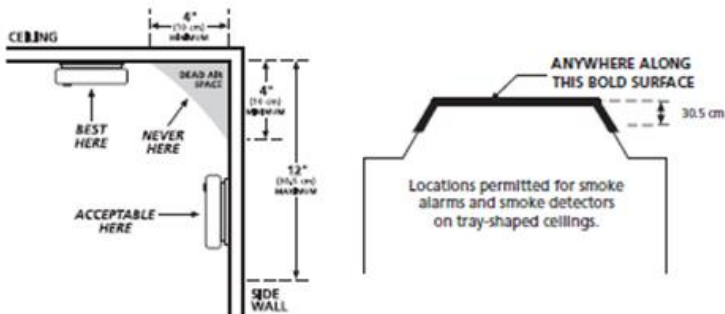


Figure 1

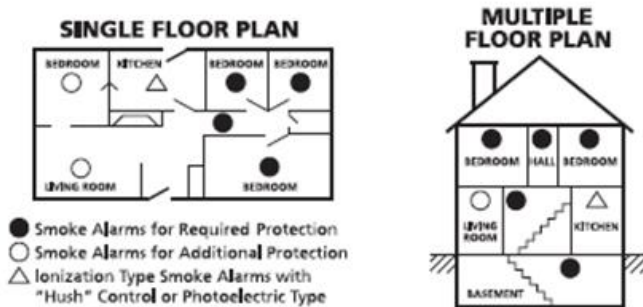


Figure 2

Locations to Avoid

- In the garage. Products of combustion are present when you start your automobile.
- Normal cooking may cause nuisance alarms. If a kitchen detector is desired, it should have an alarm silence feature or be a photoelectric type.
- In an area where the temperature may fall below 32°F (0C) or rise above 100°F (37.8C), such as garages and unfinished attics.
- Detectors should not be installed within 3 ft (.9m) of the door to a bathroom containing a tub or shower, forced air supply ducts used for heating or cooling, ceiling or whole house ventilating fans, or other high air flow areas.
- Do not install near vents, flues, chimneys or any forced/unforced air ventilation openings.
- Do not install near fans, doors, windows or areas directly exposed to the weather.

This model is powered by a non-replaceable, long life sealed lithium battery system, and includes SMART HUSH™ control to temporarily silence nuisance alarms.

INSTALLATION / ACTIVATION / ENROLLMENT

⚠ WARNING: THIS DETECTOR SHOULD BE INSTALLED BY A CERTIFIED TECHNICIAN.

⚠ WARNING: FAILURE TO PROPERLY INSTALL AND ACTIVATE THIS DETECTOR WILL PREVENT PROPER OPERATION AND RESPONSE TO HAZARDS.



If you are installing detectors and will use the wireless interconnect function, proceed to the next section "WIRELESS INTERCONNECT". If you are not using the wireless interconnect function, then proceed with the following two steps.

1. After selecting the proper location for the detector, attach the mounting bracket (trim plate) to the wall or ceiling. To ensure aesthetic alignment of the detector with the hallway, or wall, the "A" line on the mounting bracket (trim plate) must be parallel with the hallway when ceiling mounted, or horizontal when wall mounted.
2. Install the detector fully on the mounting bracket (trim plate) by rotating the detector in a clockwise direction.

NOTE: Installing the detector on the mounting bracket (trim plate) will automatically activate the battery. The power up sequence is indicated by the LED ring slowly blinking GREEN one time.

NOTE: Detectors will emit a series of slow RED LED blinks as the unit searches for a wireless network. If you are intending to use the detectors without the wireless interconnect function, ignore these notifications, and the wireless interconnect function will eventually turn off (~15 minutes OR to immediately close the network, push the Test/Hush button until two beeps are heard (approximately 4 seconds) and then release the button.

- Network closed sound on each detector confirms network has been closed. GREEN LED flashes once every 60 seconds to indicate normal operation.

NOTE: The battery activation is a one-time feature. After activation, the battery cannot be turned off, and can only be discharged at the end of unit life. If the detector is removed from the mounting plate, the battery will remain active. See Permanently Disable Detector / Discharge Battery section to de-energize the detector.

WIRELESS INTERCONNECT

A maximum of 24 compatible devices may be interconnected in a multiple station arrangement. The interconnect system should not exceed the NFPA interconnect limit of 12 smoke detectors and/or 18 detectors total (smoke, CO, smoke/CO combination, heat, etc.).

WIRELESS INTERCONNECT MODEL COMPATIBILITY

The following Interlogix model can be interconnected using wireless interconnect:

- SDX-135Z
- Maximum distance between wireless interconnect models is 300 feet in open air.

Set up a Wireless Detector Network (Wireless Interconnect)

Creating a wireless interconnect network is a simple process, with intelligent "self-enrollment" features.

1. Remove all wireless detectors from their packaging (suggest using a table and activating all detectors in a group).

2. Power on all detectors by attaching the detectors onto the mounting bracket (trim plate) to activate the battery, or by carefully turning the activation wheel with a screwdriver. See Figure 3.

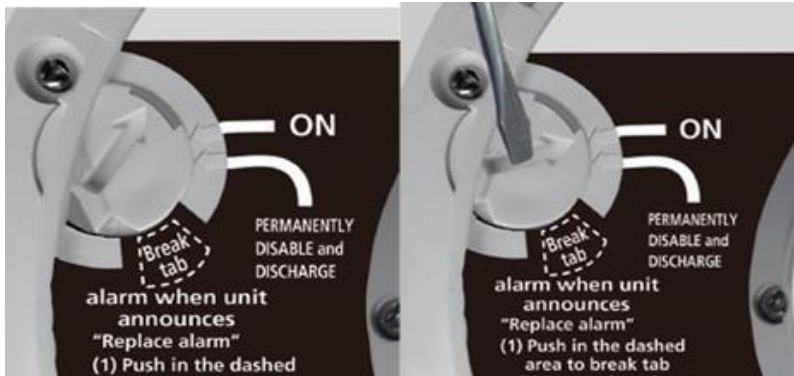


Figure 3

- The GREEN LED will fade on and off once, then the RED LED will begin fading on/off every 3 seconds.

NOTE: If no further steps are taken within 15 minutes of initial power up, the wireless function will turn off. The unit will then perform as a standard single station detector.

NOTE: At any time during wireless setup, if you have a problem, reset the unit's wireless settings as described in section "Resetting a Detector's Wireless Settings"

3. Push and hold the Test/Hush button on any one detector until two beeps are heard (approximately 4 seconds) and then release the button. This detector will automatically create a new wireless network.
 - A brief series of quick GREEN LED blinks will occur and then the GREEN LED will fade on/off every second on the button-pushed detector (network creator).
4. Wait for the other wireless detectors to join the wireless network.
 - A brief series of quick GREEN LED blinks will occur and then the GREEN LED will fade on/off approximately every 3 seconds.

NOTE: At this point, you can push/release the test button once on any detector, and the RED LED will flash the number of enrolled detectors.

5. Wait for the network setup to timeout (approximately 15 minutes), OR to immediately close the network, push the Test/Hush button until two beeps are heard (approximately 4 seconds) and then release the button.
 - Network closed sound on each detector confirms network has been closed. GREEN LED flashes once every 60 seconds to indicate normal operation.
6. After selecting the proper location for your detector, attach the mounting bracket to the wall or ceiling. To ensure aesthetic alignment of the detector with the hallway,

or wall, the "A" line on the mounting bracket must be parallel with the hallway when ceiling mounted, or horizontal when wall mounted.

- Install the detector fully on the mounting bracket (trim plate) by rotating the detector in a clockwise direction. **NOTE:** The detector will mount to the bracket in 4 positions (every 90 degrees).

7. The detector is now activated. After installation / activation, test your alarm as described in Operation and Testing section.

Adding Detectors to an Existing Wireless Interconnected Network

For various reasons, you might want to add additional detectors to your existing wireless interconnection network.

1. Remove the new detector from its packaging.
2. Place and hold a magnet for four seconds on the cover of an existing detector in the network at the designated location per figure 4. The detector will beep once when the magnet is detected, then the detector will beep twice and the button will start flashing the RED LED rapidly to indicate the proper mode has been entered to reset the wireless interconnect settings.
3. Push and hold the test button on any existing detector until two beeps are heard (approximately four seconds), and then release the button.
 - The button-pushed detector will cause the GREEN LED to fade on/off on each existing detector to signal that the wireless interconnection network has been opened.

NOTE: From this point, you have fifteen (15) minutes to power up the new detector.

3. Power up the new wireless unit by twisting the detector onto the mounting bracket (trim plate) to activate the battery, or by carefully turning the activation wheel with a screwdriver. See Figure 3.
 - The new unit's RED LED will fade on/off every three seconds as it searches for the network.
 - A slow GREEN LED fading on/off confirms the new unit has found and joined the existing wireless interconnection network.
4. Wait fifteen (15) minutes for the network setup to timeout, OR to immediately close the network, push and hold the test button until two beeps are heard (approximately four seconds), and then release the button.
 - GREEN LED flashes once every 60 seconds on the new detector to indicate normal operation.
5. After selecting the proper location for your detector, attach the mounting bracket to the wall or ceiling. To ensure aesthetic alignment of the detector with the hallway, or wall, the "A" line on the mounting bracket must be parallel with the hallway when ceiling mounted or horizontal when wall mounted.

- Install the detector fully on the mounting bracket (trim plate) by rotating the detector in a clockwise direction. NOTE: The detector will mount to the bracket in four positions (every 90 degrees).

6. The detector is now activated. After installation / activation, test your alarm as described in Operation and Testing section.

Resetting a Detector's Wireless Interconnect Settings

If you experience a delay or problem during wireless interconnection setup, you might need to start over as if the detector is first removed from its packaging. Also, this "out-of-box" mode can be used to attempt to reset/clear a network error condition.

1. Place and hold a magnet for 4 seconds on the cover at the designated location per Figure 4. The detector will chirp once when the magnet is detected, then the detector will chirp twice and the button will start flashing the RED LED rapidly to indicate the proper mode has been entered to reset the wireless settings.



Figure 4

2. Press and hold the Test/Hush button for approximately eight seconds while the RED LED is rapidly flashing. After four seconds, two beeps will occur (do not release the button). After eight seconds, three beeps will occur. The button can now be released.
3. Observe two cycles of RED LED on/off, one cycle of GREEN LED on/off
4. The RED LED will begin fading on/off every three seconds.
5. If no further steps are taken within 15 minutes of resetting the detector to "Out-of-Box" mode, the RED LED will fade on/off for approximately 30-40 seconds, and the interconnect function will turn off. The detector will then perform as a standard standalone alarm.

Enrolling a Detector with a Panel

The following section provides a general guideline for programming (enrolling) the unit into control panel memory. Refer to the panel documentation for complete programming details.

1. Set the control panel to into installer programming mode
2. When requested to broadcast a signal from the detector to the panel, remove the detector from the mounting bracket (trim plate). A tamper message will be transmitted for smoke, CO, and freeze devices.
3. After waiting approximately 1 minute, reinstall the detector on the mounting bracket (trim plate). The unit will start chirping rapidly if not re-installed on the trim plate after 3 minutes.
4. Exit from installer programming mode

NOTE: Each enrollment type (smoke, CO and Freeze) is programmed with a unique TX ID when manufactured. Labels included on the outside and inside of the packaging provide these IDs. The unique ID is enrolled into the control panel at the time of installation. Use these IDs where appropriate in the specific panel being used enrollment instructions.

Verify programming and unit-to-panel communication

Before mounting, verify that the desired unit location provides good RF communication to the panel.

To verify programming and RF communication

1. Put the panel into Dealer Sensor Test mode (refer to the specific panel installation instructions)
2. Take the detector to the desired mounting location.
3. Press and release the Test button. A quick beep will confirm the button has been pushed.
4. Listen for the appropriate response from system sirens to determine signal integrity from the unit to the panel (refer to the specific panel installation instructions)
5. Exit from Dealer Sensor Test mode.


Operation and Testing

OPERATION

The smoke alarm takes precedence when both smoke and carbon monoxide are present.

Smoke/heat alarm pattern is three long beeps, 1.5 seconds pause, three long beeps, repeating

Carbon monoxide alarm pattern is four quick beeps repeating every 5 seconds

 WARNING: CARBON MONOXIDE ALARM ACTIVATION INDICATES THE PRESENCE OF CARBON MONOXIDE (CO) AT HIGH CONCENTRATIONS WHICH CAN KILL YOU.

If the CO condition that caused the alarm in the first place continues, the initiating alarm unit will reactivate in alarm mode. If the unit goes into alarm mode again within six minutes, it is sensing high levels of CO which can quickly become a dangerous situation.

If the CO alarm reactivates within a 24 hour period, call a qualified appliance technician to investigate sources of CO from fuel burning equipment and appliances, and to inspect for proper operation of equipment.

If problems are identified during this inspection, have the equipment serviced immediately. Note any combustion equipment not inspected by the technician and consult the manufacturer's instructions, or contact the manufacturer directly for more information about CO safety and the equipment. Make sure that motor vehicles are not, or have not been, operating in a garage attached or adjacent to the residence.

The detector is operating once it is activated and testing is complete. When products of combustion (smoke or CO) are sensed, the unit sounds a loud 85dB alarm. See Detector Visual and Audible Indicators table. In high levels of CO, the unit will go into alarm in a shorter period of time than at low levels of CO.

The CO sensor meets the alarm response time as follows:

At 70 PPM, the unit must alarm within 60-240 minutes.


At 150 PPM, the unit must alarm within 10-50 minutes.

At 400 PPM, the unit must alarm within 4-15 minutes.

TESTING (PUSH TO TEST BUTTON)

Test your detector every three months by pressing and releasing the test button quickly. A quick beep will confirm the button has been pushed.

See Detector Visual and Audible Indicators table. The alarm will sound if the electronic circuitry, horn, speaker, and battery are working. If the alarm does not sound, the detector must be replaced.

 WARNING: DUE TO THE LOUDNESS (85+ DECIBELS) OF THE ALARM, ALWAYS STAND AN ARM'S LENGTH (ABOUT 2.5 FT. (0.7M)) AWAY FROM THE UNIT OR USE EAR PROTECTION WHEN TESTING.

Weekly testing is required to ensure proper operation. Erratic or low volume sound (or no sound) coming from your detector may indicate a defective alarm and it should be

returned for service. See Permanently Disable Detector/Discharge Battery section to determine how to prepare the unit for shipment or disposal.

⚠ WARNING: DO NOT USE AN OPEN FLAME TO TEST YOUR DETECTOR. YOU COULD DAMAGE THE DETECTOR OR IGNITE COMBUSTIBLE MATERIALS AND START A STRUCTURE FIRE.

FUNCTIONAL SMOKE TEST

The smoke test verifies that the unit activates when detecting smoke, that the transmitted signal is received by the receiver/panel, and that the panel reports the alarm to the central monitoring station. The smoke test should be performed annually. A canned smoke testing agent must be used for the functional smoke test

NOTE: Use Interlogix brand of Smoke! In A Can part number SM-200.

1. Wait at least 90 seconds after installation to test the smoke detector.
2. Make sure the GREEN LED is flashing for normal operation (one GREEN LED blink every 60 seconds).
3. From a distance of 2 - 4 feet (0.6 – 1.2m), aim spray for 1 – 2 seconds at the vents or side of the detector.
4. The alarm will sound within 1 – 10 seconds if the detector functions properly.
5. Press the Test/Hush button to quiet the sounder.
6. Contact the central monitoring station to verify they received the alarm report.
7. Alert the central monitoring station when you are finished testing.

NOTE: An alternative method for performing a functional smoke test in the field is to hold a smoldering punk or cotton wick close to the detector and direct the smoke into the vent openings until an alarm is indicated.

CO INSPECTION AND FUNCTIONAL GAS TEST

A canned CO testing agent must be used for the CO functional gas test. Contact a local supplier for canned CO gas – Solo C6™ CO Detector Tester.

NOTE: Cans of Solo C6™ CO Detector Tester can be sourced from the manufacturer per the following contact information:

Product Code: Solo C6-024
SDi, 1345 Campus Parkway, Suite A18, Wall Township, NJ 07753 USA
Tel: (732) 751-9266, Fax: (732) 751-9241
Email: sales@sdifire.com, Web: www.sdifire.com

1. Wait at least 20 minutes after installation to test the CO detector.

2. Make sure the GREEN LED is flashing for normal operation (one GREEN LED blink every 60 seconds).
3. Set the control panel to sensor test mode
4. To expedite testing, by-pass the CO accumulator circuit by placing the detector in "System Test Mode". Start System Test mode by placing magnet next to reed switch (Figure 4) and hold it for four seconds until unit chirps twice and the RED LED begins blinking rapidly.
5. Remove the magnet away from the reed switch.
6. Within 10 second after the magnet is removed press and release Test Button then within 2 seconds:
7. Press and hold the Test/Hush button until the unit beeps three times (approximately 8 seconds), and then release the button. The unit will enter the functional CO Gas test mode within 5 seconds. The GREEN LED will blink periodically (1 second rate) indicating that the alarm is in functional test mode.
8. Apply UL approved CO test agent to the testing port (Figure 5). When CO is detected, the unit will activate a CO alarm.



Figure 5

9. To exit functional gas test mode:
 - a. Press and release the Test button or wait for a two minute timeout.
 - b. The alarm will reset and then return to normal operating mode.
10. At the control panel, exit sensor test mode.

SMOKE/CO DETECTOR MEMORY

If a detector experiences a smoke or CO alarm event, and then stops alarming, the unit will give a visual (LED) indicator that a previous alarm has occurred within the last hour. See the Detector Visual and Audible Indicators table.

AMBIENT LIGHT SENSING

In low light ambient conditions, the GREEN LED will reduce in brightness and intensity. This detector samples the ambient light conditions of its location and, if possible, determines a Night/Day cycle. A valid Night/Day cycle will delay the conditions that require that the detector be replaced (Low Battery or end of Unit Life) or Network Error chirps at night until the next Day cycle begins. Once the unit goes into End of Unit Life or Network Error, the chirps can only be silenced by pressing the Test/Hush button. After 7 days of End of Unit Life chirps, the chirps can no longer be silenced by pressing the Test/Hush button. Low Battery chirps cannot be silenced. See Troubleshooting Guide.

⚠ WARNING: REPLACE DETECTOR AS SOON AS POSSIBLE WHEN AN END OF UNIT LIFE OR LOW BATTERY MODE.

If the detector cannot determine a valid Night/Day cycle because the detector is located in either a constantly dark or lighted location, Low Battery, End of Unit Life, and Network Error chirps will not be inhibited. If the unit is moved to a location that is not constantly dark or lighted, it will determine a Night/Day cycle because the unit continuously samples ambient light conditions.

Detector Visual and Audible Indicators

Operational Mode	Visual Indication	Audible Indication	Action:
Normal Operation	One GREEN LED blink every 60 seconds.	None	None
Carbon Monoxide (CO) Alarm	On all alarming detectors, the RED LED blinks per a Temporal T4 Pattern Temporal T4 alarm pattern is four quick blinks repeating every 5 seconds On the detector initiating the CO Alarm only, the GREEN LED will blink every second.	Alarm per Temporal T4 Pattern Temporal T4 alarm pattern is four quick beeps repeating every 5 seconds.	Carbon Monoxide has been detected. Follow the instructions at the beginning of this User Guide under the section "What to do when the alarm sounds, CO alarm activation"

Operational Mode	Visual Indication	Audible Indication	Action:
Smoke/Heat (Fire) Alarm	<p>On all alarming detectors, the RED LED blinks per a Temporal T3 Pattern</p> <p>Temporal T3 alarm pattern is three long blinks, 1.5 second pause, three long blinks, repeating.</p> <p>On the detector initiating the Smoke/Heat Alarm only, the GREEN LED will blink every second.</p>	<p>Alarm per Temporal T3 Pattern</p> <p>Temporal T3 alarm pattern is three long beeps, 1.5 second pause, three long beeps, repeating.</p>	Smoke/fire has been detected. Follow the instructions at the beginning of this User Guide under the section "What to do when the alarm sounds, Smoke/Heat alarm activation"
Freeze Warning	One RED LED blink every 20 seconds.	None	None. Flashing continues while condition exists.
Tamper Condition	One RED LED blink every 30 seconds.	Detector chirps once when tamper condition is first sensed, then the detector will chirp every 30 seconds after a 3 minute delay.	Reattach detector to its trim plate, otherwise flashing and chirping will continue while condition exists.
Fault Mode/Fatal Error	One AMBER LED blink every 5 seconds.	Detector chirps every 30 seconds.	Flashing/chirping continues while condition exists. Remove detector from service. If fatal error cannot be cleared, permanently discharge and decommission the detector.
System Test Mode	Rapidly flashing RED LED for 10 seconds duration	1 detector chirp when magnet detected, 2 detector chirps when System Test mode enabled	Hold magnet next to button for 4 seconds as described in User Guide.
Local Detector Test (button press when no alarm condition is present)	Flashes RED, AMBER, GREEN, then current protocol	Temporal T3 and T4 patterns	Allow completion of test or perform button press to cancel before end of countdown - return to normal operation

Operational Mode	Visual Indication	Audible Indication	Action:
System Detector Test (button press in System Mode when no alarm condition is present)	Flashes RED, AMBER, GREEN, then current protocol on each detector in the network	Temporal T3 and T4 patterns	Allow completion of test or perform button press to cancel before end of countdown - return to normal operation
Smoke/Heat or CO Alarm Memory (detector has experienced an alarm event within the last hour)	Alternating flashing RED and AMBER LEDs. 1 second RED/1 second AMBER/8 seconds OFF, repeating for 1-hour	None	Press test button to clear alarm memory, or allow 1 hour time out to return to normal operation. Note - pressing the test button will

Alarm Nuisance and Hush

This detector is designed to minimize nuisance alarms. Cigarette smoke will not normally cause the unit to alarm, unless the smoke is blown directly into the detector.

Combustion particles from cooking may set off the alarm if it is located too close to a cooking appliance. Large quantities of combustible particles are generated from spills or when broiling. Using the fan on a range hood which vents to the outside (non-recirculating type) will also help prevent nuisance alarms from occurring by removing these combustible products from the kitchen.

If the source of a smoke alarm (3 long beeps) is immediately known, you can use the Hush feature to silence the alarm for approximately 8 - 10 minutes. If no fire is present, check to see if one of the reasons listed in "Locations to avoid" may have caused the alarm. If a fire is discovered, get out and call the fire department.

SMART HUSH™ CONTROL AND LOCATE FEATURE

HUSH

The SMART HUSH™ control is extremely useful in a kitchen area or other area prone to nuisance alarms. The SMART HUSH™ feature has the capability of temporarily desensitizing the detectors(s) for approximately 8 - 10 minutes. This feature is to be used only when a known alarm condition, such as smoke from cooking, activates an alarm. Pushing the Test/Hush button on any initiating detector (GREEN LED flashing every second), will silence that unit if smoke is not too dense. (In an interconnected system, all compatible units will also silence.) The smoke alarm will automatically reset after approximately 8-10 minutes and sound the alarm if particles of combustion are still present.

LOCATE

This wireless model includes a feature to help you locate the initiating detector(s) in a wireless interconnect system. During a known smoke alarm event, pushing the Test/Hush button on any non-initiating detector will silence ALL wireless units EXCEPT the initiating detector(s) for two minutes.

After two minutes, all units will resume interconnect alarm if the initiating detector has not been located and silenced.

NOTE: Depending on detector locations and the location of the smoke source, it is possible for more than one detector to detect the smoke source and become an "initiating" alarm unit.

⚠ WARNING: THE LOCATE FEATURE CAN BE USED FOR CO ALARM EVENTS ALSO, BUT IT IS IMPOSSIBLE TO DETERMINE THE SOURCE OF A CO ALARM USING SIGHT OR SMELL. ALWAYS CONSIDER A CO ALARM EVENT AS DANGEROUS, AND REMEMBER TO FOLLOW THE STEPS OUTLINED IN THIS INSTALLATION MANUAL, "WHAT TO DO WHEN THE ALARM SOUNDS, CO ALARM ACTIVATION".

NOTE: Hush and Locate features are dependent on the type of models enrolled in the wireless interconnect system. Non-wireless models cannot be enrolled in the wireless interconnect system and therefore cannot receive the wireless Locate feature; they will continue to alarm until the initiating unit is Hushed or the Smoke/CO condition clears.

NOTE: The SMART HUSH™ feature and Locate feature can be used repeatedly until the air has been cleared of the condition causing the alarm.

NOTE: Dense smoke will override the SMART HUSH™ feature and sound a continuous alarm.

⚠ Caution: Before using the alarm SMART HUSH™ feature, identify the source of the smoke and be certain safe conditions exist.

Battery

NOTE: This detector is powered by a non-replaceable, sealed lithium battery system. No battery installation or replacement is necessary for the life of the detector.

NOTE: Constant exposure to high or low humidity or temperatures may reduce battery life.

⚠ WARNING: DO NOT ATTEMPT TO OPEN THE DETECTOR FOR ANY REASON! DO NOT TRY TO REPAIR THE DETECTOR YOURSELF. NO SERVICEABLE PARTS INCLUDED.

LOW BATTERY

This detector is equipped with a low battery monitor circuit. If the battery capacity can no longer provide adequate power for all alarm functions, the low battery condition will occur. See Troubleshooting Guide.

The detector battery must be discharged and the detector must be replaced within 7 days of the first occurrence of the "Low Battery Warning" to provide continuous alarm protection. Reference the "Permanently Disable Detector/Discharge Battery" section below for battery discharging instructions.

Permanently Disable Detector/Discharge Battery

⚠ WARNING: DISCHARGING THE DETECTOR BATTERY IS PERMANENT. ONCE THE DETECTOR BATTERY HAS BEEN DISCHARGED, IT CANNOT BE REACTIVATED!

- **ONCE DISCHARGED, THE DETECTOR WILL NO LONGER DETECT SMOKE OR CO.**
- **ONCE THE DETECTOR BATTERY IS DISCHARGED, THE BATTERY IS DEPLETED AND THE ALARM WILL NO LONGER FUNCTION.**
- **ONCE THE DETECTOR BATTERY HAS BEEN DISCHARGED, THE DETECTOR CANNOT BE MOUNTED ONTO THE MOUNTING PLATE OR REACTIVATED.**

⚠ WARNING: FAILURE TO DISCHARGE ALARM BATTERY AS INSTRUCTED PRIOR TO DISPOSAL MAY CREATE POTENTIAL FOR LITHIUM BATTERY RELATED FIRE OR HAZARD.

To Permanently Disable Detector / Discharge Battery:

1. Rotate the detector counterclockwise to remove it from the mounting plate.
2. Push in the dashed area with a screwdriver to break tab.

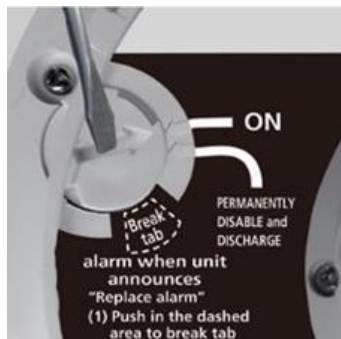


Figure 6

3. After the tab is broken, use the screwdriver to turn the slotted arrow to the "Permanently Disable Detector/Discharge Battery" location. This will disable the detector, stop the low battery or end of unit life "chirps" and render the detector safe for disposal by draining the battery. Reference FIGURE 6.

Troubleshooting Guide

Trouble Condition	Visual Indication	Audible Indication	Action:
Fault Mode/Fatal Error	One AMBER LED blink every 5 seconds.	Detector chirps every 30 seconds.	<p>1. Push the Test/Hush button once to attempt to reset the detector.</p> <p>The RED LED will blink out an Error Code (number of blinks) when the Test/Hush button is pushed/released once. Report the number of blinks to Customer Service, if needed.</p> <p>2. Clean your detector. See Section 12, "Cleaning Your Detector" for instructions.</p>
Network Error	One AMBER LED blink every 5 seconds.	Detector chirps every 30 seconds.	<p>1. Push the Test/Hush button once to silence the audible indication for 24 hours at a time.</p> <p>The RED LED will blink out an Error Code (number of blinks) when the Test/Hush button is pushed/released once. Report the number of blinks to Customer Service, if needed.</p> <p>2. Following instructions in Section 4.3, "Resetting a Detector's Wireless Settings", then attempt to rejoin the network by following the instructions in Section 4.2, "Adding Another Detector to an Existing Wireless Network Between Detectors (Wireless Interconnect)".</p> <p>*If the error persists, remove, discharge, and replace the detector as soon as possible.</p>

Trouble Condition	Visual Indication	Audible Indication	Action:
Low Battery	One AMBER LED blink every 5 seconds.	Detector chirps every 60 seconds.	1. Push the Test/Hush button once to silence the audible indication for 24 hours at a time. Remove, discharge, then dispose of detector. Replace as soon as possible.
End of Detector Life	One AMBER LED blink every 5 seconds.	Double detector chirp every 30 seconds.	The RED LED will blink out an Error Code of 9 blinks. Start of EOL will be delayed if Night Detect is active.
Hush (for Low Battery, Network Error, End of Life)	One AMBER LED blink every 5 seconds.	Chirp temporarily silenced for 24 hours.	Push the Test/Hush button to initiate Hush.
Sensor Cleanliness Level (Clean-Me Indication)	AMBER LED Clean-Me blink sequence after TESTING (PUSH TO TEST BUTTON) temporal pattern per Section 5, "Operation and Testing"	None	1. Push the Test/Hush button to initiate detector test. Following the temporal patterns, the AMBER LED will blink the cleanliness status of the detector: 0-1: Unserviceable fault; remove, discharge, and replace the detector. 2-3: Insensitive; requires cleaning per Section 12, "Cleaning Your Detector" 4-7: Normal Sensitivity 8-9: Too sensitive, requires cleaning per Section 12, "Cleaning Your Detector".

Alarm Fault - # of LED Blinks (short duration blinks)

CO Sensor Test - 2

CO Sensor Short - 4

CO Calibration - 6

Push to Test - 7

Memory - 8

Life Expiration - 9

Smoke Chamber - 10

Interconnect Supervision - 13

Smoke Drift Compensation - 14

Wireless Faults - # of LED Blinks (long duration blinks)

Fault Coordinator - 2

Fault RFD - 3

CCI Supervision - 4

RFD Check In - 5

RFD Time Sync - 6

General Carbon Monoxide (CO) Information

Carbon monoxide (CO) is a colorless, odorless, and tasteless poison gas that can be fatal when inhaled. CO inhibits the blood's capacity to carry oxygen.

POSSIBLE SOURCES OF CARBON MONOXIDE

Inside your home, appliances used for heating and cooking are the most likely sources of CO. Vehicles running in attached garages can also produce dangerous levels of CO.

CO can be produced when burning any fossil fuel: gasoline, diesel, propane, natural gas, oil and wood. It can be produced by any fuel-burning appliance that is malfunctioning, improperly installed, or not ventilated correctly, such as:

Furnaces/boilers, gas ranges/stoves, gas clothes dryers, water heaters, portable fuel burning space heaters, fireplaces, wood-burning stoves and certain swimming pool heaters. Blocked chimneys or flues, back drafting and changes in air pressure, corroded or disconnected vent pipes, or a loose or cracked furnace heat exchanger can also release CO into your building. Vehicles and other combustion engines running in an attached garage and using a charcoal/gas grill or hibachi in an enclosed area are all possible sources of CO.

The following conditions can result in transient CO situations:

Excessive spillage or reverse venting of fuel-burning appliances caused by outdoor ambient conditions such as: Wind direction and/or velocity, including high gusts of wind, heavy air in the vent pipes (cold/humid air with extended periods between cycles), negative pressure differential resulting from the use of exhaust fans, simultaneous operation of several fuel-burning appliances competing for limited internal air, vent pipe connections vibrating loose from clothes dryers, furnaces/boilers, or water heaters, obstructions in, or unconventional, vent pipe designs which can amplify the above situations, extended operation of unvented fuel-burning devices (range, oven, fireplace, etc.), temperature inversions which can trap exhaust gases near the ground, car idling in an open or closed attached garage, or near a home.

CO SAFETY TIPS

Every year, have the heating system, vents, chimney and flue inspected and cleaned by a qualified technician. Always install appliances according to manufacturer's instructions and adhere to local building codes. Most appliances should be installed by professionals and inspected after installation. Regularly examine vents and chimneys for improper connections, visible rust, or stains, and check for cracks in furnace heat exchangers. Verify that the color of flame is blue on pilot lights and burners. A AMBER or orange flame is a sign that the fuel is not burning completely and may be releasing CO. Teach all household members what the alarm sounds like and how to respond. Fire Departments, most utility companies and HVAC contractors will perform CO inspections, some may charge for this service. It's advisable to inquire about any applicable fees prior to having the service performed. Interlogix will not pay for, or reimburse the owner or user of this product, for any repair or dispatch calls related to the alarm sounding.

SYMPTOMS OF CO POISONING

Initial carbon monoxide poisoning symptoms are similar to the flu with no fever and can include dizziness, severe headaches, nausea, vomiting and disorientation. Everyone is susceptible but experts agree that unborn babies, pregnant women, senior citizens and people with heart or respiratory problems are especially vulnerable. If symptoms of carbon monoxide poisoning are experienced seek medical attention immediately. CO poisoning can be determined by a carboxyhemoglobin test.

The following symptoms are related to CARBON MONOXIDE POISONING and should be discussed with ALL members of the household:

1. **Mild Exposure:** Slight headache, nausea, vomiting, fatigue (often described as “Flu-like” symptoms).
2. **Medium Exposure:** Severe throbbing headache, drowsiness, confusion, fast heart rate.
3. **Extreme Exposure:** Unconsciousness, convulsions, cardio respiratory failure and death.

The above levels of exposure relate to healthy adults. Levels differ for those at high risk. Exposure to high levels of carbon monoxide can be fatal or cause permanent damage and disabilities. Many cases of reported carbon monoxide poisoning indicate that while victims are aware they are not feeling well, they become so disoriented they are unable to save themselves by either exiting the building, or calling for assistance. Also, young children and household pets may be the first affected. Familiarization with the effects of each level is important.

Cleaning Your Detector

YOUR DETECTOR SHOULD BE CLEANED AT LEAST ONCE A YEAR


You can clean the detector by using a vacuum cleaner hose and vacuuming through the openings around the perimeter of the detector. The outside of the detector can be wiped with a damp cloth. Use only water to dampen the cloth, use of detergents or cleaners could damage the detector.

If the detector is in fault mode and the RED LED is blinking a fault code of 10 flashes (after a Test/Hush button push), the detector may be in need of cleaning. After cleaning, press the Test/Hush button. If the fault does not clear, the alarm needs to be replaced.

- Never use detergent or other solvents to clean the detector.
- Avoid spraying air freshener, hair spray, or other aerosols near the detector.
- Do not paint the detector. Paint will seal the vents and interfere with the sensor's ability to detect smoke and CO.

- Never attempt to disassemble the detector to clean inside. This action will void your warranty.
- The following substances can affect the CO sensor and may cause false readings and damage to the sensor: Methane, propane, isobutane, iso-propanol, ethyl acetate, hydrogen sulfide, sulfide dioxides, alcohol based products, paints, thinner, solvents, adhesives, hair spray, after shave, perfume, and some cleaning agents.
- Move the detector and place in another location prior to performing any of the following:
 - Staining or stripping wood floors or furniture
 - Painting
 - Wall papering
 - Using adhesives

Storing the detector in a plastic bag during any of the above projects will protect the sensors from damage. When household cleaning supplies or similar contaminants are used, the area must be well ventilated.

 WARNING: REINSTALL THE DETECTOR AS SOON AS POSSIBLE TO ASSURE CONTINUOUS PROTECTION.

Good Safety Habits

NFPA (NATIONAL FIRE PROTECTION ASSOCIATION)

The National Fire Protection Association's Standard 72, reads as follows:

Where required by other governing laws, codes, or standards for a specific type of occupancy, approved single and multiple-station smoke alarms shall be installed as follows:

- (1) In all sleeping rooms and guest rooms
- (2) Outside of each separate dwelling unit sleeping area, within 21 ft (6.4 m) of any door to a sleeping room, with the distance measured along a path of travel
- (3) On every level of a dwelling unit, including basements
- (4) On every level of a residential board and care occupancy (small facility), including basements and excluding crawl spaces and unfinished attics
- (5) In the living area(s) of a guest suite
- (6) In the living area(s) of a residential board and care occupancy (small facility)


SMOKE DETECTION – ARE MORE SMOKE DETECTORS DESIREABLE?

The required number of smoke detectors might not provide reliable early warning protection for those areas separated by a door from the areas protected by the required smoke alarms. For this reason, it is recommended that the householder consider the use of additional smoke detectors for those areas for increased protection. The

additional areas include the basement, bedrooms, dining room, furnace room, utility room, and hallways not protected by the required smoke detectors. The installation of smoke detectors in attics (finished or unfinished), garages, or within 6' of a heating or cooking appliance is not normally recommended, as these locations occasionally experience conditions that can result in improper operation.

CALIFORNIA STATE FIRE MARSHALL

Early warning fire detection is best achieved by the installation of fire detection equipment in all rooms and areas of the household as follows: A smoke detector installed in each separate sleeping area (in the vicinity, but outside the bedrooms), heat or smoke detectors in the living rooms, dining rooms, bedrooms, kitchens, hallways, attics, furnace rooms, closets, utility and storage rooms, basements and attached garages.

 WARNING: ANY CHANGES OR MODIFICATIONS MADE TO THIS PRODUCT NOT EXPRESSLY AUTHORIZED BY THE MANUFACTURER COULD VOID THE USER'S RIGHT TO OPERATE THIS DEVICE.

CONTACT INFORMATION

For contact information, visit us online at www.interlogix.com.
For technical support, see www.interlogix.com/support

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PLACED ON THE MARKET BY:

UTC Fire & Security Americas Corporation, Inc.
3211 Progress Drive, Lincolnton, NC, 28092, USA

Made in China

Specifications

Power	3V DC non-replaceable sealed lithium batteries
Smoke sensor	Photoelectric
CO sensor	Electrochemical
Temperature sensor	NTC Thermistor
Battery life	10 years
Detector life	10 years
Audible alarm	85dB at 10' @ 3.2±0.5 KHz pulsing alarm
Smoke/heat	Temporal T3 pattern
CO	Temporal T4 pattern
Dimensions	Ø 5.6 ± 0.01in. x 2.3 ± 0.04in. (Ø142.3 ± 0.3mm x 59.0 ± 1.0mm)
Smoke Sensitivity	0.97 to 3.67 %/ft. obscuration
CO Alarm Response Time	70 PPM: 60 – 240 minutes 150 PPM: 10 – 50 minutes 400 PPM: 4 – 15 minutes
Rate-of-Rise (ROR) heat detection	15°F/min (8.3C/min) monitoring above 85°F (29.4C)
Fixed temperature heat detection	135°F (57.2C) ± 5°F (2.8C)
Freeze warning	41°F (5C) ± 5°F (2.8C)
Storage temperature	-4 to 140°F (-20 to 60C)
Operating environment	
Temperature	32 to 100°F (0 to 37.8C)
Relative humidity	0 to 95% noncondensing
Regulatory Listings	UL217, UL268, UL2034, UL2075 CAN/ULC-S531, CSFM, FCC, IC

Product Ordering

Model	Description
CDX-135Z	Wireless Interconnected Combination Smoke and Carbon Monoxide Detector with Heat and Freeze Sensor, Sounder, UL 217, UL 268, UL 2034, UL 2075, ULC S531
Accessories	
SM-200	Smoke! In A Can (canned smoke) for functional testing of smoke detectors
SM-EXT1	Extension tube for Smoke! In A Can

Regulatory Information

This device complies with FCC Part 15 and Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1) l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

RF EXPOSURE

All transmitters regulated by IC must comply with RF exposure requirements listed in RSS-102 - Radio Frequency (RF) Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands). Currently this device is approved for use for when 20 cm can be maintained between the antenna and users. Specific Absorption Rate (SAR) evaluation is required if the separation distance between the user and/or bystander and the antenna and/or radiating element of the device is less than or equal to 20 cm. Exceptions are listed in RSS-102. Note that integration < 20 cm will require further certification with IC such as a Multiple listing and Class IV Permissive Change application.

Tous les émetteurs régulés par Industrie Canada doivent être conformes à la notice RSS-102 d'Industrie Canada concernant la Conformité des appareils de radiocommunication aux limites d'exposition humaine aux radiofréquences (toutes bandes de fréquences). Ce produit est ainsi approuvé pour une utilisation d'au moins 20 cm entre l'antenne et toute personne à proximité. Une évaluation du Débit d'Absorption Spécifique (DAS) est requise si cette distance de séparation est inférieure ou égale à 20 cm. Des exceptions sont toutefois répertoriés dans la notice RSS-102. Mais il est souligné que l'utilisation d'un dispositif à moins de 20 cm nécessite une

certification supplémentaire avec Industrie Canada, comme un complément d'information et l'application à la notice de Changement Permissif de Classe IV.

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:

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

Changes or modifications not expressly approved by UTC Fire and Security could void the user's authority to operate the equipment.

FCC: SAK25609702

IC: 7145A-25609702

Alarm Procedure

For questions concerning this detector please contact Product Support at 1-855-286-8889. Our internet address is www.interlogix.com/support.

For your convenience, write down the following information. If you call Product Support, these are the first questions you will be asked.

Alarm Model Number: <small>(located on back of detector)</small>	
Date Code: <small>(located on back of detector) The National Fire Protection Association (NFPA) and the manufacturer recommend replacing this alarm ten years from the date code.</small>	
Date of Purchase:	
Where Purchased:	

WHAT TO DO WHEN THE ALARM SOUNDS

Smoke/heat alarm pattern is three long beeps, 1.5 second pause, three long beeps, repeating.

Carbon monoxide (CO) alarm pattern is four quick beeps repeating every 5 seconds.