

## Wireless Rate-of-Rise Heat Sensor Installation Instructions

### Introduction

The Interlogix HDX series wireless heat sensors use electronic processing to detect both heat and freeze conditions using a learn mode wireless transmitter all in one unit. The micro-processor trips the transmitter when the temperature at the sensor location reaches a fixed temperature of 135°F (57°C), 200°F (94°C), 41°F (5°C), depending on the model installed, or senses a rate of rise at 12°F to 15°F (6.7 to 8.3°C)



Figure 1

### Models

- HDX-135** Wireless 135°F (57°C) Rate-of-Rise Heat Sensor
- HDX-200** Wireless 200°F (93°C) Rate-of-Rise Heat Sensor
- HDX-135Z** \*Wireless 135°F (57°C) Rate-of-Rise Heat & Freeze Sensor

\* The HDX-135Z sensor has two independent ID #'s for heat and freeze, the sensor will alarm at a fixed 135°F (57°C) temperature or a 12° to 15°F (6.7 to 8.3°C) rate of rise, or when the sensor reaches 41°F (5°C), the sensor will restore at 50°F (10°C).

### Installation

Use the following installation guidelines:

- Heat sensors should be installed to provide property protection. Reliance should not be placed on heat sensors for life safety. Where life safety is involved, smoke sensors must also be installed.
- The sensors allow for normal temperature fluctuations, however, ceiling temperatures should not exceed 100°F (38°C)
- Mount the sensor in a central location of the area to be protected, either on the ceiling or on a wall.
- If mounting on a ceiling, the sensor must be at least 4 in. (10 cm) away from any walls.
- If mounting on a wall, the top of the sensor must be within 4 to 6 in. (10 to 15 cm) of the ceiling.

- The UL maximum spacing allowance of the sensor is 50 x 50 ft. (15 x 15 m). Refer to the NFPA Standard 72 for application requirements.
- Do not mount the sensor close to devices that change temperature rapidly, such as ovens, heat vents, furnaces, or boilers.

### Enrolling

The panel must learn (program) the sensor ID codes in order to respond to sensor signals. For complete programming information, refer to the specific control panel documentation.

Note: The HDX-135Z sensor has two ID numbers, one for heat the other for freeze. Each number is programmed separately.

To add the sensor to panel memory:

1. Place the panel in program mode.
2. Proceed to the Learn Sensors menu. When the panel prompts you for a sensor group number, with Simon XT/XTi, Concord, and Advisor panels program the zone to use sensor group 26. With NetworX and Ultrasync panels program the zone to use sensor group 8.
3. Select the desired sensor number. When the panel prompts you to trip the sensor, remove and reinsert the battery (or remove battery pull tab) until the panel beeps, indicating successful programming.
4. When programming for the HDX-135Z model for freeze detection remain in program mode.
  - Simon XT/XTi, Concord, and Advisor panels select sensor group 29.
  - NetworX panels program the zone to use sensor group 22.
  - Ultrasync panels program sensor type to “24-Hour Audible” and sensor option to “Low Temp”. Also check box for “Disable Internal Reed”.
5. Hold down the tamper switch (Figure 2), then remove and reinsert the battery to learn in the freeze portion of the sensor.

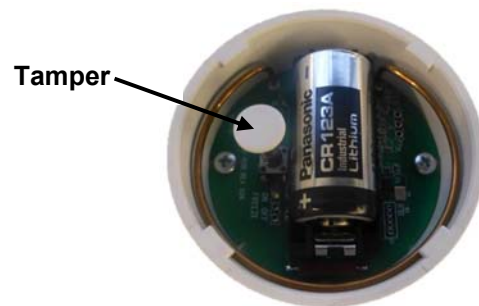


Figure 2: Tamper

6. Exit Program Mode

## Mounting the Sensor

1. Locate the base mounting holes and mount the base to the wall or ceiling with the appropriate hardware (Figure 3)
2. Attach the sensor to the mounting base

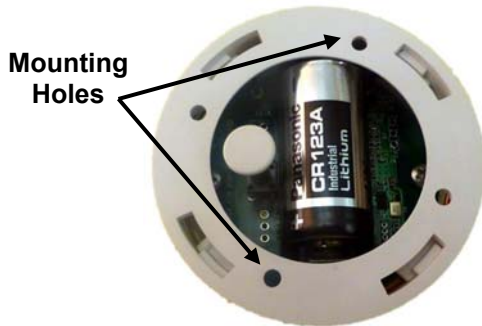


Figure 3: Mounting Holes

## Testing

1. Before permanently securing the sensor to the wall or ceiling, test the sensor from the installation location using one of the following methods.
2. Place the panel in sensor test mode.
3. Plug in a portable hair dryer.
4. Hold the hair dryer about 12 to 18 in. away from the sensor, aiming it at the side of the sensor.
5. Listen for the appropriate number of beeps from interior sirens and speakers (refer to the specific panel documentation).
6. To test the freeze sensor, use either freeze spray or place an ice cube in a plastic bag and hold against the sensor until the device trips.
7. Listen for the appropriate number of beeps from interior sirens and speakers

## Magnet Test

Note: Notify central station before any live testing to avoid fire response. The magnet test allows the sensor to send an actual alarm signal to the control panel, if a magnet is held against the housing for 15 seconds.



Figure 4: Magnet Mark

1. With the sensor permanently mounted, place a magnet against the mark located on the sensor body. (Figure 4)
2. Hold the magnet in place for about 15 seconds
3. The control panel should respond by sounding the fire alarm (Heat and Freeze Alarm)
4. Disarm control panel to silence alarm

## Replacing the Batteries

Battery life depends on how often the sensor transmits signals, but is more dependent on the temperature of the installation environment. When the battery voltage gets low, the sensor transmits a low battery signal to the panel. The panel then activates trouble beeps to notify the customer that the sensor battery must be replaced. Pressing the Status button identifies the sensor with the low battery.

Replace the battery immediately when this condition occurs, using the following battery: **Panasonic CR123A 3V**

## Battery Disposal

The batteries used in this sensor are lithium batteries and are not reusable. Be sure to properly dispose of used lithium batteries according to your local hazardous waste disposal laws.

## Specifications

Minimum Rate of Rise rating	12° to 15°F (6.7° to 8.3°C)
Operating temperature	135°F (57°C): 32 - 100°F (0 - 37°C)
	200°F (94°C): 32 - 150°F (0 - 66°C)
UL max. Ambient ceiling	100°F/150°F (37.8°C / 65.6°C)
Storage Temperature	-30 to 167°F (-34 to 75°C)
Relative Humidity	0 to 95% noncondensing
Detection range	up to 2500 sq. ft.
Frequency	319.5 MHz (crystal-controlled)
Expected Battery Life	10 years
Standby Current	Less than 0.9 µA
Supervision Interval	62-68 minutes
Enclosure Dimensions	Diameter: 2.29" (58.25mm)
	Height: 1.28" (32.4mm)
Regulatory	UL 521 Heat Detectors for Fire Protective Signaling Systems
	UL 985 Household Fire Warning System Units
	CAN/ULC-S530 Heat Actuated Fire Detectors for Fire Alarm Systems
	CSFM Category 7270
	FCC: 15.109 Class B, 15.231
	Industry Canada: ICES-003, RSS-210

## Contact Information

Visit us online at [www.interlogix.com](http://www.interlogix.com).

For technical support, see [www.interlogix.com/support](http://www.interlogix.com/support)

## Product Ordering

### Model

HDX-135	Wireless 135°F (57°C) Rate-of-Rise Heat Sensor
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## FCC / IC Statement

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:

- 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.

This device complies with Industry Canada licence-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.

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes: (1) cet appareil ne doit pas provoquer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles pouvant causer un mauvais fonctionnement de l'appareil.

In accordance with FCC requirements of human exposure to radio frequency fields, the radiating element shall be installed such that a minimum separation distance of 20 cm is maintained from the general population.

**FCC: Place ID number here**

**IC: Place ID number here**

This Class B digital apparatus complies with Canadian ICES-3B.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

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