## HDX-200-433

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

### Introduction

The HDX-200-433 wireless heat detector uses electronic processing to detect both heat and freeze conditions plus a wireless transmitter (433MHz) in one unit. The microprocessor trips the transmitter when the temperature at the detector location reaches a fixed temperature of 200°F (93°C), or senses a rate of rise at 12°F to 15°F (6.7 to 8.3°C)



Figure 1

Models HDX-200-433

Wireless 200°F (93°C) Rate-of-Rise Heat Detector

#### Installation

Use the following installation guidelines:

- Heat detectors 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.
- Mount the detector in a central location of the area to be protected, either on the ceiling or on a wall.
- If mounting on a ceiling, the detector must be at least 4 in. (10 cm) away from any walls.
- If mounting on a wall, the top of the detector must be within 4 to 6 in. (10 to 15 cm) of the ceiling.
- The UL maximum spacing allowance of the detector is 50 x 50 ft. (15 x 15 m). Refer to the NFPA Standard 72 for application requirements.
- Do not mount the detector close to devices that change temperature rapidly, such as ovens, heat vents, furnaces, or boilers.

### **Programming**

The panel must program the detector ID code in order to respond to detector signals.

Note: For complete programming information, refer to the specific control panel documentation.

To add the sensor to panel memory:

- 1. Place the panel in program mode.
- Proceed to the section in programming for enrolling wireless sensors.
- 3. When the panel prompts enter the senor ID# or trip the sensors tamper

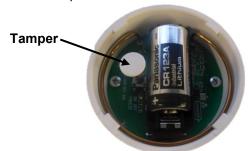


Figure 2: Tamper

4. Exit Program Mode

## **Mounting the Detector**

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



Figure 3: Mounting Holes

### **Testing**

- Before permanently securing the detector to the wall or ceiling, test the detector from the installation location using one of the following methods.
- 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

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#### **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
- The control panel should respond by sounding the fire alarm
- 4. Disarm control panel to silence alarm

# Replacing the Batteries

Battery life depends on how often the detector transmits signals, but is more dependent on the temperature of the installation environment. When the battery voltage gets low, the detector transmits a low battery signal to the panel. The panel then activates trouble beeps to notify the customer that the detector 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**

Rate of Rise rating	12° to 15°F (6.7° to 8.3C)
UL max. Ambient ceiling	150°F (65.6°C)
Storage Temperature	-30 to 167°F (-34 to 75°C)
Relative Humidity	0 to 95% noncondensing
Maximum UL Spacing	50ft (15.2m) x 50ft (15.2m)
Frequency	433MHz (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)

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

FCC: 2ABBZ-RF-ROR-433 IC: 11817A-RFROR433

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. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. This device complies with 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. 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 provoguer d'interférences et (2) cet appareil doit accepter toute interférence, y compris celles pouvant causer un mauvais fonctionnement de l'appareil

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