HDX-135-345 Wireless Rate-of-Rise Heat Sensor Installation Instructions

Introduction

The Interlogix HDX series wireless heat detectors use electronic processing to detect temperature Rate-of-Rise and fixed heat set point conditions plus a learn mode wireless transmitter in one unit. The micro-processor trips the transmitter when the temperature at the detector location reaches a fixed temperature of 135°F (57°C) or senses a rate of rise at 12°F to 15ºF (6.7 to 8.3ºC)

Figure 1

Model

HDX-135-345 Wireless 135ºF (57ºC) Rate-of-Rise Heat Sensor, 345 MHz Wireless, Compatible with Honeywell and 2GIG Wireless Receivers

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.
- The detectors allow for normal temperature fluctuations, however, ceiling temperatures should not exceed 100°F (38°C)
- 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.

Enrolling

The HDX-135-345 is compatible with Honeywell and 2GIG wireless receivers. These panels must learn (program) the detector ID codes in order to respond to detector signals. For complete programming instructions refer to the specific control panel instruction guides.

To add the sensor to panel memory:

Honeywell™

The HDX-135-345 must be enrolled in the control panel before it can operate in the system. The heat protection zone must be enrolled as Loop 1 and “Input Type” 3 (supervised RF). Tamper is transmitted as Loop 4, but does not require programming.

1. Place the panel in program mode.
2. Enter the zone number to be programmed.
3. Enter the zone type when prompted. Program as a Fire zone type [9]
4. When prompted, enter Input Type [03] (3 on some panels) – Supervised RF Transmitter
5. Remove pull tab from sensor battery
6. When prompted for the serial number, transmit from the detector by activating (press and release) the tamper switch (Figure 2).
7. When serial number is displayed, transmit from sensor again by activating tamper switch again. The current loop number will begin to flash (4).
8. Manually change the loop number to loop number [1].
   Note: *The fire protection zone enrolled must always be Loop 1. Otherwise, fire annunciations will not be reported by the control*
9. Exit programming when complete. Test the sensor after enrolling into the system. Refer to the Testing section in this guide.

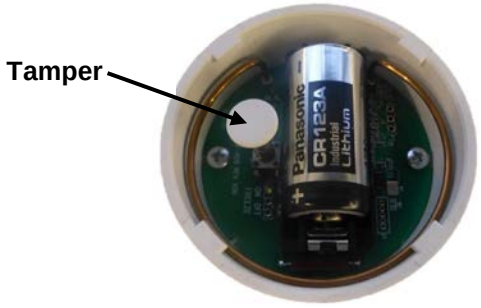

Figure 2: Tamper

2GIG®

The following procedure describes how to learn-in the HDX-135-345 heat sensor into the 2GIG control panel.

1. Select RF sensor #(01 to 48)
2. Select RF sensor type [09] Smoke/Heat
3. Select RF sensor equipment code. Enter code 0895

4. With panel in learn-in mode (press Shift then Learn) cause a tamper by pressing and then release tamper switch (Figure 2). The correct TX ID should appear. Accept by pressing OK.
5. Select RF sensor equipment age [0] New
6. Select RF sensor loop number [1]
7. Select dialer delay (enable/disable)
8. Select voice descriptors (see panel manual)
9. Select sensor reports (enable/disable)
10. Select sensor chime
11. To exit programming, click skip
12. Click end and exit. The panel takes a few seconds to reset.

Mounting the Detector

1. 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

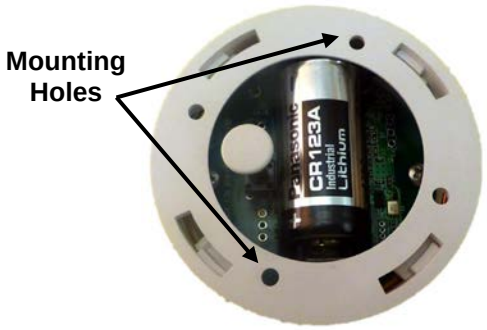

Figure 3: Mounting Holes

Testing

1. Before permanently securing the detector to the wall or ceiling, test the detector 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
6. 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
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 15ºF (6.7° to 8.3C)
Operating temperature	135°F (57°C): 32 - 100°F (0 - 37°C)
UL max. Ambient ceiling	100°F (37.8ºC)
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	345 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.
For technical support, see www.interlogix.com/support

Product Ordering

Model

HDX-135-345 Wireless 135ºF (57ºC) Rate-of-Rise Heat Sensor, 345 MHz Wireless, Compatible with Honeywell and 2GIG Wireless Receivers

Recommendation to Installer

Annual inspection and testing by a qualified technician of the rate-of-rise heat sensor is recommended to maintain satisfactory functionality of the sensor. Visual inspection of the unit should occur once per week to ensure proper operation.

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: 2ABBZ-RF-ROR-345
IC: 11817A-RFROR345

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.