E-HD Fixed-Temperature/Rate-of-Rise Heat Detector Installation Sheet

Operation

The E-HD Fixed-Temperature/Rate-of-Rise Heat Detector can be configured as a rate-of-rise detector (default) or, through programming, as a fixed-temperature heat detector. When configured as a rate-of-rise detector, a rate-of-rise heat sensor can quickly detect a fast, flaming fire. When configured as a fixed-temperature heat detector, a fixed-temperature heat sensor monitors the temperature of the air in its surroundings and determines whether to initiate an alarm. The detector is capable of performing comprehensive self-diagnostics and storing the results.

LED operation

The detector provides a bicolor LED that shows its status.

Normal: Green LED flashes

Alarm/active: Red LED flashes

Installation

Refer to *Edwards Signaling Smoke and Heat Detector Application Bulletin* (P/N 3101212) for additional information on detector placement and spacing.

WARNINGS

- This detector does not operate without electrical power. As fires frequently cause power interruption, discuss further safeguards with the local fire protection specialist.

- This detector does not sense fires that start in areas where heat cannot reach the detector. Heat from fires in walls, roofs, or on the opposite side of closed doors may not reach the detector.

- This detector is intended for use with ionization and/or photoelectric smoke detectors. The heat detector by itself does not provide life safety protection.

- This detector does not detect oxygen levels, smoke, toxic gases, or flames. Use this device only as part of a broad-based, life-safety program which includes a variety of information sources pertaining to heat and smoke levels, extinguishment systems, visual and audible devices, and other safety measures.

- Independent studies recommend using heat detectors only for property protection. Never rely on heat detectors as the sole means of fire protection.

- To ensure proper operation, schedule maintenance (regular or selected) in accordance with the requirements of the authority having jurisdiction. Refer to NFPA 72 and CAN/ULC−S536.

- To ensure proper operation, store the detector within the recommended ranges. Allow the detector to stabilize to room temperature before applying power.

- Keep the dust cover (supplied) on the detector during installation and remove it prior to commissioning and service. The dust cover is not a substitute for removing the detector during new construction or heavy remodeling.

To install the detector:

1. Install and wire the detector base using the installation sheet supplied with the detector base.

2. Set the detector address. Refer to the panel technical reference manual for a list of valid addresses.

   Use a screwdriver to adjust the two rotary switches on the back of the detector. Set the left rotary switch (0 through 12) for the 10s and 100s digit and the right rotary switch for the 0 through 9 digit.

3. Connect the detector to the base by rotating the detector clockwise until it snaps into the locked position.

   The head can be removed by turning it counterclockwise.

4. If the head must lock to the base, break away the locking tab using a pair of pliers.
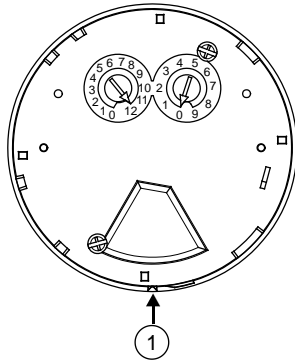
   To then remove the detector head after breaking away the locking tab, insert a small screwdriver into the slot on the side of the base and press in while simultaneously turning the detector head counterclockwise.

Figure 1: Setting detector address (address 32 shown)
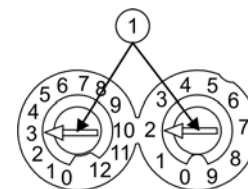
1. Insert screwdriver here

1.   Breakaway tab

Test

NFPA 72 and CAN/ULC S537 require a calibrated sensitivity test upon completion of the original installation and following any modifications or additions to the system. The detector can perform this test and generate a system sensitivity report.

To test the detector:

1.   Before initial testing, remove the dust cover from the detector and notify the proper authorities that the fire alarm system is undergoing maintenance and will be temporarily out of service.

2.   Test the detector for proper operation using a heat gun maintaining a six-inch minimum distance. Use caution as excess heat can damage the detector and detector housing.

Specifications

Communication line voltage	Maximum 20 V peak-to-peak
Normal operating current	45 µA
Alarm current	45 µA
UL/ULC fixed-temp alarm rating	135°F (57°C)
Actual alarm point	130 to 140°F (54 to 60°C)
Rate-of-rise	15°F (8°C)/min.
Compatible bases	Standard: B4U, B4U-LP Relay: RB4U Isolator: IB4U Audible: SB4U
Maximum spacing	50 ft. (15 m) centers
Maximum distance from ceiling wall-mounted	12 in. (305 mm)
Storage temperature	−4 to 140°F (−20 to 60°C)

Operating environment
    Temperature
    Humidity
	
	32 to 120°F (0 to 49°C)
	0 to 93% RH, noncondensing at 90°F (32°C)

Certification and compliance

Manufacturer	Edwards, A Division of UTC Fire & Security Americas Corporation, Inc. 8985 Town Center Parkway, Bradenton, FL 34202, USA
Year of manufacture	The first two digits of the date code (located on the product identification label) are the year of manufacture.
North American standards	Meets: UL 521, CAN/ULC-S530-M91, Follow: NFPA 72, CAN/ULC-S524

Contact information

For contact information, see our Web site: www.edwardssignaling.com.