Heat Detector

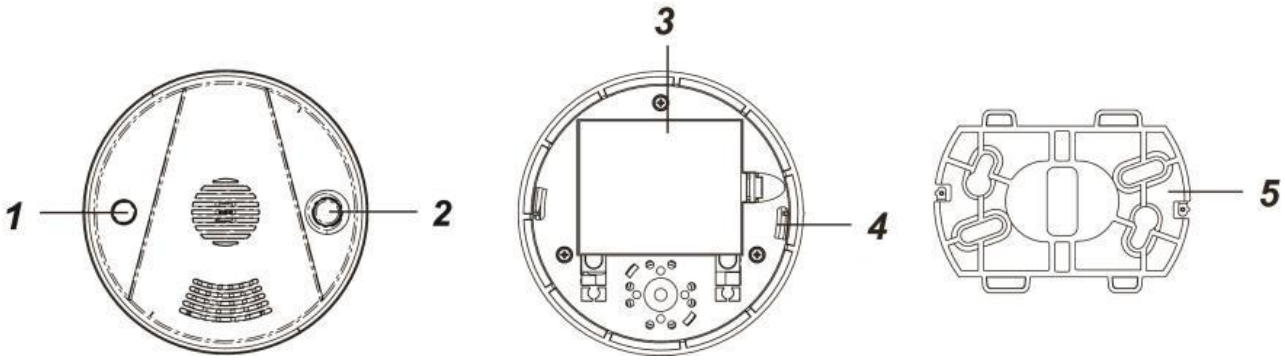


HD-9 series are a heat detector with both rate-of-rise and fixed temperature sensors insides. It provides capacities of monitoring the rate of any rise in temperature and detecting a household temperature that may lead to a fire disaster. It is idea for applications for the environment affected by heat, such as kitchen.

The Heat Detector is designed to detect two temperature conditions. It signals an alarm if temperature increases by 8.3 °C per minute. The alarm is also activated if the temperature exceeds the threshold temperature of 57.3°C. The intelligent design allows appropriate action to be taken and eliminates fire hazards.

The HD-9 Series including the following models:

HD-9S / HD-9S-F1: This model is identified as Smoke Detector in the Control Panel device list. HD-9H / HD-9H-F1: This model is identified as Heat Detector in the Control Panel device list.



1. Red LED

- While the batteries are inserted, if the inserted battery is low or temperature sensor is out of order, the RED LED will light on.
- When HD-9 is reporting an alarm, the RED LED will light on for 2 seconds.
- When the Heat Detector has low battery, the LED will flash once every 30 sec.
- During normal operation, if Heat Detector is out of order or the under low battery condition, the LED will flash once every 60 sec with one beep.

2. Test Button

The Test Button is pressed in the following situations:

- Press once to transmit a learn code and HD-9 will emit two-tone beep ） To test if the Heat Detector is functioning normally.
- To silence the alarm

3. Battery compartment

4. Mounting Hole

5. Mounting Bracket

Battery

- 3 "**AA**" Alkaline batteries are used to supply power.
- When the Heat Detector is under low battery condition, a low battery signal will be transmitted along with regular signal transmissions. If the battery voltage is low, HD-9 will emit one beep and the LED will flash once every 30 sec and inform the Control Panel regularly.
- When changing batteries, after removing the old batteries, press the Test button twice to fully discharge before inserting new batteries.

Supervison

- After installation, the Heat Detector will automatically transmit Supervisory Signals periodically to the Control Panel at intervals of 30 to 50 min. randomly.

- If the Control Panel has not received the signal from the Heat Detector for a preset period of time, the Control Panel will indicate it on its display to show that particular Heat Detector is experiencing an out-of-signal problem.

Temperature Detection

- The Heat Detector will activate alarm when either of the following condition is met:
    - The temperature rises over 57.3 °C.
    - The temperature rises more than 8.3 °C per minute

When alarm is activated, the Heat Detector will transmit alarm signal, raise alarm with built-in buzzer and flash LED rapidly for 10 seconds.

- After the alarm is activated, the Heat Detector will recheck temperature every 10 seconds. If temperature is still over alarm threshold, the alarm will continue and the Heat Detector will resend alarm signal every 2 minutes.
- After alarm activation, the Heat Detector will stop alarming and transmit a restore signal when:
- If the alarm is activated by high temperature (over 57.3°C), the temperature must drop below 49°C for Heat Detector to stop alarming.
- If the alarm is activated by rate-of-rise (more than 8.3°C per minute), the temperature must drop below 49°C and 4°C under alarm trigger temperature for Heat Detector to stop alarming.

Alarm Silence

- Once the alarm is sounding, pressing the Test button will put the Heat Detector into Alarm Silence mode for 10 minutes. and the alarm will be stopped temporarily.
- During the 10-minute Alarm Silence period, the LED will flash every second.
- After the 10-minute period is over, the Heat Detector will sound a 2-tone beep and returns to normal operation mode. If the temperature is still over the alarm threshold, the Heat Detector will sound the warning alarm again. If the temperature has dropped below alarm threshold, the Heat Detector will transmit a restore signal.

Testing the Heat Detector

Press the Test button on Heat Detector to test Heat Detector function.

- If the Heat Detector functions normally, the LED will turn on shortly and sound a two-tone beep.
- If the buzzer sounds two-tone beep for 3 times, it means the "**Temperature Sensor**" on the Heat Detector is out-of-order.
- If the LED doesn't light and no beep is sounded, it means the Heat Detector is out-of-order.

Learning

Step 1 Insert the 3 "**AA**" batteries into the battery compartment according to correct polarity shown on the battery holder.

Step 2 When batteries are inserted, the Heat Detector will sound 2-tone beeps, and the Red LED will flash once.

Step 3 Put the Control Panel into **Learning** mode, refer to Control Panel manual for detail.

Step 4 Press the Learn/Test Button on the Heat Detector to transmit signal to the Control Panel. The Red LED will turn on shortly and the Heat Detector will sound a 2-tone beep.

Step 5 Refer to the operation manual to finish learning process.

Installation Guideline

It is recommended that the Heat Detector should be installed in following locations, at the center area of the ceiling.

- Kitchen and garage – The smoke presence in these locations prevented Smoke Detector deployment. Therefor these locations should be protected by Heat Detector.
- Chemical storage – Fire caused by chemical material may burn very quickly with extreme heat yet little smoke. In this case the Heat Detector will be able to react more quickly than Smoke Detector.

Installation

Step 1 Test the Heat Detector's signal transmission range. Enter the Control Panel into Walk Test mode and put the Heat detector at desired mounting location, then press the Learn/Test button to transmit signal to Control Panel. If the panel can receive signal normally, proceed to mount the Heat Detector. If the signal could not be received, Relocate the Heat Detector and repeat Walk Test until Heat Detector signal could be received normally.

Step 2 Use the mounting bracket as template, mark the two mounting holes, drill holes in mounting location and insert wall plugs if needed.

Step 3 Screw the mounting bracket into marked location with the two hooks facing downward

Step 4 Use the mounting bracket as template, mark the two mounting holes, drill holes in mounting location and insert wall plugs if needed.

Step 5 Locate the single line mark on the detector and line it up with one of the hook of the bracket. Fit the Smoke Detector onto the hooks on the bracket, then rotate the detector counter-clockwise to lock into place. The installation is now complete.

