



PG9936H Wireless Heat Detector

Installation and Operating Instructions

Read this instruction sheet thoroughly before installation and use of the PG9936H

Introduction

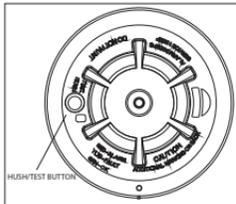
The PG9936H is a wireless heat detector with a fixed temperature and rate of rise heat sensor and an internal piezoelectric alarm.

The following versions are available:

Frequency (MHz)	Version	Region
915	PG9936H	Middle East

Compatible Devices

This detector is compatible with UL Listed IQPanel2 Wireless Control Panels using PowerG Technology.



For UL installations use this device only in conjunction with compatible IQPanel2 wireless receivers. Transmissions occur at approximately 915 MHz (912 MHz to 919 MHz).

Operation

During normal operation, the green LED flashes every 60 seconds.

The detector goes into alarm when the heat level exceeds 135 °F / 58 °C and automatically restores when the heat level falls below the threshold. The detector also goes into alarm when the temperature rapidly increases over a short period of time. During an alarm, the LED flashes once per second and the sounder emits the fire evacuation temporal 3 pattern.

Detector Trouble

If the detector has a general fault, the yellow LED blinks once every four seconds and emits a chirp every 48 seconds. After four hours, the panel displays a fire trouble message.

Detector and Status Indication

Status	LEDs	Sounder
Normal	Double Green flash every 60 seconds	Off
Heat Alarm	Red flash every 1 second	ANSI S3.41 temporal 3
Heat Test	Red flash every 1 second	ANSI S3.41 temporal 3
Test Alarm (button press)	Red flash every 1 second	ANSI S3.41 temporal 3
Detector Trouble	Yellow flash every 4 seconds	One chirp every 48 seconds
Low Battery	Yellow flash every 12 seconds	One chirp every 48 seconds (press button to hush for 12 hours)
Power-up	Red, yellow, green, flash sequence	One chirp at the end of the power-up sequence
Tamper	Red, yellow, green flash sequence every 12 seconds	Off

Tamper

Removing the detector from the mounting plate initiates a "tamper" transmission. The tamper condition is restored after the detector is mounted on the plate.

Wireless Transmissions

A supervisory message is transmitted at 128 second intervals. If the signal is not received, the control panel determines that the detector is missing.

The detector transmits the following:

- **Alarm / Alarm Restore** - Transmitted at time of occurrence.

NOTE: During an alarm condition, the detector sends an alarm event to the control panel.

When the condition is restored, the detector sends an alarm restore event to the panel and sets the alarm restore indicator. The red LED blinks once every four

seconds until the Alarm in memory is cleared. You can clear the alarm restore indicator from the control panel or press and hold the test button for five seconds.

- **Tamper / Tamper Restore** - (tamper switch activated) ten-second maximum delay on restore before transmission.
- **Low Battery** - (battery voltage falls below threshold). Battery voltage is tested & transmitted at the time of a supervisory or other transmissions.
- **Trouble** - (detector fault limit reached). Troubles are transmitted at the time of occurrence (one trouble per supervisory interval).

Batteries

The wireless heat alarm is powered by three AAA Duracell Procell PC2400 or three AAA Energizer E92 batteries (included). The detector regularly checks for a low battery. If a low battery is detected, the transmitter sends a message to the control panel, which displays the detector's ID at low battery. In addition, the yellow LED of the detector blinks every twelve seconds. The detector's sounder chirps every 48 seconds and the yellow LED continues to blink until the batteries are replaced. Pressing the hush button silences the chirps for twelve hours if no other trouble conditions exist. The batteries should be replaced with new batteries when the chirps begin.

At low battery, the test button is disabled.

NOTE: If the alarm does not sound, contact the installer or dealer for service.

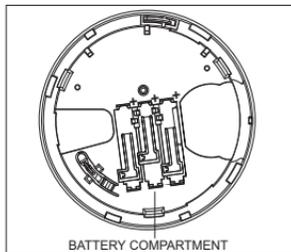
Battery Installation and Replacement

CAUTION: Risk of explosion if battery is replaced by an incorrect type. Dispose of used battery according to the manufacturer's instructions.

To replace batteries, complete the following steps:

1. Remove the detector from its mounting base by twisting the detector counterclockwise. Carefully remove batteries by lifting from the "+" end using a flathead screwdriver and dispose of them according to local regulations.
2. To ensure a proper power-down sequence, wait a minimum of 30 seconds before installing new batteries.
3. Install three new AAA batteries, available from a local Duracell or Energizer dealer, in the battery compartment. Install the batteries by inserting the "-" end first, then pushing the "+" end down. If the batteries are incorrectly inserted, carefully remove and correctly re-insert

ing them following the procedure described in step 1.



4. Re-install the detector on its mounting base by turning the detector clockwise until the mating marks align.
5. After the power-up sequence, the green LED blinks twice every 60 seconds to indicate normal operation. If the batteries are not installed correctly, the detector will not operate and the batteries may be damaged. If the detector does not power up, check that the batteries are installed correctly and fully charged.
6. Test the detector as described in this document.

CONSTANT EXPOSURES TO HIGH OR LOW TEMPERATURES OR HIGH HUMIDITY MAY REDUCE BATTERY LIFE.

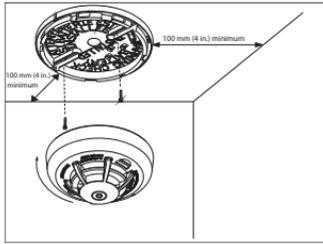
Installation Instructions

The PG9936H wireless heat detector shall be installed and used within an environment that provides the pollution degree max 2 and over voltages category II in non-hazardous locations, indoor only. The equipment is designed to be installed by SERVICE PERSONS only; (SERVICE PERSON is defined as a person having the appropriate technical training and experience necessary to be aware of hazards to which that person may be exposed in performing a task and of measures to minimize the risks to that person or other persons).

2. Mount Detector Backplate

NOTE: The alarm device should only be installed by a competent engineer or technician.

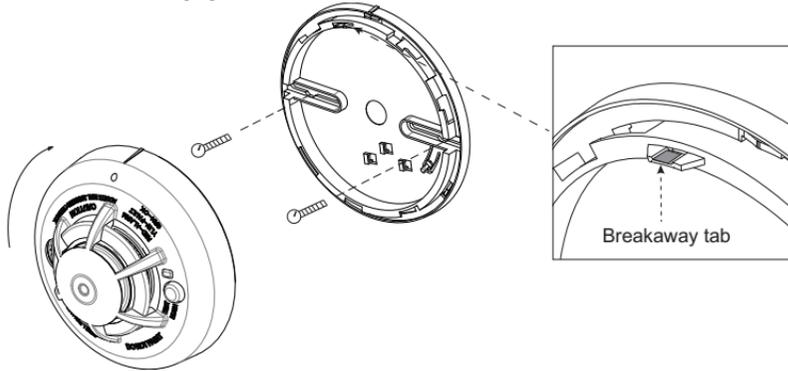
Once a suitable location is found, mount the detector backplate. Install the mounting base on the ceiling or on the wall (if local ordinances permit) using screw locations as required. Use the two screws and anchors provided. Maneuver the base so the screws are at the elbow of the screw slots and secure.



3. Mounting

Fit the detector inside the base by aligning it over the base. The detector's alignment notch should be slightly offset from the mounting base tamper release tab. Turn the detector clockwise until it clicks into place.

To activate the built-in anti-tamper lock, carefully remove the breakaway tab on the backplate as shown in the following figure.



4. Device Enrollment

The 7-digit serial number located on the back of the detector housing must be enrolled on the alarm system control panel. See the Receiver Installation Manual and follow the enrollment procedure. For placement tests, remove the detector from its backplate for one second (tamper) and then reattach. Wait at least 30 seconds for the test result before activating again.

A general description of the procedure is provided in the following flow chart:

Procedure - Auto Learn (preferred method)

1. Access the security device Auto Learn page: Settings > Advanced Settings > Installation > Devices > Security Sensors > Auto Learn Sensor.
2. Power up the device by installing the battery. A two-minute enrollment window begins and enrollment instructions are displayed on the IQPanel2 screen.
3. Click OK, then customize device settings as required.
4. Click Add New to complete enrollment.

Procedure - Manual Enrollment

1. Access the Add Security Device page: Settings > Advanced Settings > Installation > Devices > Security Sensors > Add Sensor.
2. Enter the Device ID then customize device settings as required.
3. Select Add New.
4. Power up the device (insert battery) to start the PowerG association process.

5. Test Unit

NOTE: The central monitoring station, if used, should be notified prior to the test being generated. This prevents a false alarm and an unnecessary response from the central monitoring station.

To test the detector only, press and hold the Test button for less than five seconds. The sounder chirps to indicate that the unit is functioning properly. When the button is released, the chirping ceases. To test the detector and the alarm panel together, press and hold the Test button for more than five seconds. An alarm signal is sent to the control panel.

NOTE: Allow a minimum of 20 seconds after power up and after test, alarm or tamper restore activations.

NOTE: The detector will not enter an alarm state when in one of the following states:

- Compensation Trouble
- Other internal faults that could prevent an alarm

Owner's Instructions

Testing Your Detector

Follow the test procedure described here or contact your dealer or installer for testing instructions. It is recommended to test the entire alarm system at least once a week to verify the operation of all system functions.

Detector Unit Test

To test the detector only, press and hold the Test button for less than five seconds. The sounder chirps to indicate that the unit is functioning properly. When the button is released, the chirping ceases. If this does not occur, ensure batteries are the correct type, in good condition and are installed correctly. To test the detector and the alarm panel together, press and hold the Test button for more than five seconds. An alarm signal is sent to the control panel.

Detector Test

Before you test, complete the following steps:

1. Insert the battery and then mount the detector on the backplate.
2. After the battery is inserted, wait two minutes before testing. The detector enters into Local Diagnostic Test mode for 15 minutes.
3. It is recommended to perform the Periodic Test and use either the Installer code (Installer Diagnostic mode) or the User code (User Diagnostic mode) to test.

CAUTION: The diagnostic test cannot be performed when the tamper is open.

To perform a detector test, press and hold the Test button for two seconds. When the button is released, the Red LED flashes, followed by two loud alarm beeps.

In test mode, the detector tests heat and battery functions.

If the detector is in diagnostic mode, the detector performs the diagnostic test as described below.

Diagnostic Test

The following sequence of events occur during a diagnostic test:

- A. The detector performs a link quality test.

Note: The detector must be in local or diagnostic mode to perform the link quality test.

In diagnostic mode, if you press the Test button for more than six seconds, an alarm message is sent to the panel and a Temporal-3 alarm signal is sounded. After this sequence is completed, the panel responds by sending an "Alarm in Memory" message to the device.

- B. At the end of the diagnostic test the LED blinks three times. The following table indicates the received signal strength.

LED Response	Green LED blinks	Orange LED blinks	Red LED blinks	No blinks
Reception	Strong	Good	Poor	Paired, no communication

IMPORTANT! Reliable reception must be confirmed. Therefore, "poor" signal strength is not acceptable. If you receive a "poor" signal from the device, re-locate it and re-test until a "good" or "strong" signal strength is received. For UL installations, the test results must be "strong." See the alarm systems installation guide for detailed diagnostic tests.

Owner's Maintenance

This detector is designed to require minimum maintenance. If the case is greasy, wipe gently with a soft cloth slightly dampened with soapy water.

Never disassemble the detector; there are no user serviceable parts inside the unit. You may only remove the backplate to replace batteries if not serviced by an installer. When replacing the batteries, follow the instructions specified in the Installation Instructions.

Never paint the unit. Paint may interfere with the proper operation of the unit. If you are planning renovations or repainting, take precautions to avoid dust, paint or chemical contamination to the detector.

Specifications

- **Regulatory Listings:** UL521, FCC
- **Diameter:** 5 in (125 mm)
- **Height:** 2.5 in (63 mm)
- **Weight (including battery):** 8.75 oz (243 g)
- **Color:** White
- **Audible Signal (ANSI Temporal 3):** 85 dBA minimum in alarm
- **Heat Alarm Threshold:** 135 °F (57 °C);
- **Humidity:** 15 % - 90 % RH, non-condensing
- **Approved Batteries:** 3 AAA Energizer E92 or Duracell Procell PC2400
- **Supervisory Transmission Frequency:** 128 second intervals
- **Low Battery Detection:** Low battery 14 days remaining

Limited Warranty

Digital Security Controls warrants that for a period of twelve months from the date of purchase, the product shall be free of defects in materials and workmanship under normal use and that in fulfillment of any breach of such warranty, Digital Security Controls shall, at its option, repair or replace the defective equipment upon return of the equipment to its repair depot. This warranty applies only to defects in parts and workmanship and not to damage incurred in shipping or handling, or damage due to causes beyond the control of Digital Security Controls such as lightning, excessive voltage, mechanical shock, water damage, or damage arising out of abuse, alteration or improper application of the equipment.

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Heat Detectors: Heat detectors that are a part of this system may not properly alert occupants of a fire for a number of reasons, some of which follow. The Heat detectors may have been improperly installed or positioned. Heat may not be able to reach the heat detectors, such as when the fire is in a chimney, walls or roofs, or on the other side of closed doors. Heat detectors may not detect heat from fires on another level of the residence or building.

Every fire is different in the amount of heat produced and the rate of burning. Heat detectors cannot sense all types of fires equally well. Heat detectors may not provide timely warning of fires caused by carelessness or safety hazards such as smoking in bed, violent explosions, escaping gas, improper storage of flammable materials, overloaded electrical circuits, children playing with matches or arson.

Even if the Heat detector operates as intended, there may be circumstances when there is insufficient warning to allow all occupants to escape in time to avoid injury or death.

Warning: Digital Security Controls recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this product to fail to perform as expected.

Important Information: Changes or modifications not expressly approved by Digital Security Controls could void the user's authority to operate this equipment.

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DSC recommends that the entire system be completely tested on a regular basis. However, despite frequent testing, and due to, but not limited to, criminal tampering or electrical disruption, it is possible for this SOFTWARE PRODUCT to fail to perform as expected.

Regulatory Information

This detector has a recommended service life of 10 years under normal conditions of use. Please refer to the label applied to the device indicating the recommended replacement year. For servicing the unit or replacement batteries please call the installation company that provided you with the alarm system.

This manual shall be used in conjunction with the Installation Manual of the alarm control panel. All the instructions specified within that manual must be observed.

FCC Compliance Statement

This device complies with FCC Rules Part 15 licence-exempt 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.

WARNING! To comply with FCC RF exposure compliance requirements, the device should be located at a distance of at least 20 cm from all persons during normal operation. The antennas used for this product must not be co-located in conjunction with any other antenna or transmitter.

CAUTION: Changes or modifications not expressly approved by Digital Security Controls could void your authority to use this equipment.

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:

- Re-orient 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/television technician for help.

The user may find the following booklet prepared by the FCC useful: "How to Identify and Resolve Radio/Television Interference Problems". This booklet is available from the U.S. Government Printing Office, Washington D.C. 20402, Stock # 004-000-00345-4.

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