User Manual

Mains Powered Heat Alarm

GTHEAT

1. Important Safeguards and Warnings

The manual will help you to use the device properly.
Read the manual carefully before using the device, and retain it for future reference.

Operation Requirements

⚠ **WARNING**
Never ignore any alarm. Failure to respond may lead to serious injury or death.

⚠ **CAUTION**
• Make sure that the power supply of the device works properly before use.
• Use the device according to the operating environment.
• Only use the device within the rated power range.
• Transport, use and store the device under allowed humidity and temperature conditions.
• Prevent liquids from splashing or dripping on the device. Make sure that there are no objects filled with liquid on top of the device to avoid liquids flowing into it.
• The heat alarm is designed to detect and indicate temperature rise, but it cannot detect gas,smoke or flames.

Installation Requirements

⚠ **WARNING**
• Failure to properly install and operate this device will prevent proper operation of the device and will prevent its response to fire hazards.
• The device must be installed by a qualified electrician in accordance with AS/NZS 3000

⚠ **CAUTION**
• Observe all safety procedures and wear required protective equipment provided for your use while working at heights.
• Ground the earthing portion ⏚ of the device to improve its reliability.
• Do not expose the device to direct sunlight or heat sources.

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• Make sure the application scenario conforms to installation requirements. Contact your lplaxce of purchase, or GT High Performance Smoke Alarms if there is any problem.
• All installation and operations shall conform to your local electrical safety requirements, fire protection regulations, and other relevant regulations.

Maintenance Requirements
• Do not clean the device with any cleaning products.
• Do not paint the device. Paint will seal the vents and interfere with the sensor's ability to detect smoke.

2. Introduction
2.1 Product Information
The mains-powered heat alarm (hereinafter referred to as the device) is designed to continuously monitor temperature. Using a high-precision thermistor and an intelligent algorithm, it triggers an alarm when a predetermined temperature is reached. It is ideal for smoky, dusty, or humid areas that may trigger false smoke alarms, e.g. kitchens where cooking fumes are present, and roof cavities, garages and sheds where there may be lots of dust. Heat alarms can monitor these areas for a fire, with less risk of a false alarm. The heat alarm can be interconnected via a hardwired or wireless network (using optional GTRFM wireless interconnected module). Up to 24 alarms can be interconnected via hardwiring, wireless, or a mixture of both (for the wireless option, a wireless interconnected module must be fitted to each alarm - these modules are sold separately). Once one device triggers an alarm, the alarm signal will be pushed to every alarm in the interconnected network and they will all trigger an alarm together.
The alarm is specified for Class A1 detection, intended for internal environments where the ambient temperature is lower than 50 °C. It will sound a warning when the ambient temperature in a room is between 54 °C and 65 °C.

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4.2 Installation Position
⚠ CAUTION
This device is intended for use in ordinary indoor locations of family living units. Construction and layout of individual dwellings will vary, so this should be regarded as a reference only. For further guidance, please check with your local fire authority.
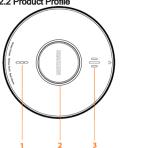

Figure 4-1 Overall layout
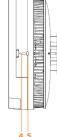
Where in the room should the device be installed?
• Heat alarms should be sited on the ceiling, ideally in the centre of the room.
• Site alarms at least 300mm (12") from walls, light fittings, or other obstructions. Install your heat alarm no further than 5.3 m from the farthest wall or from a door to any room where a fire might start, and no further than 5.3 m from the next heat alarm.
• Alarms should not be sited within or too close to a bathroom door as steam and moisture can affect them.
• Avoid the area close to fluorescent lights as the flickering light may trigger the alarm or affect its operation.
• Ensure the alarm is outside any dead air spaces that occur in corners or spaces where airflow may be blocked.
• When a heat alarm is installed in peaked and sloped ceilings, install it a maximum of 150 mm vertically down form the apex of the slope.
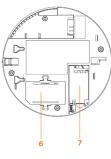• The alarm should have its vents easily accessible for testing and maintenance.

⚠ **WARNING**
Heat alarms should not be wall mounted.

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2.2 Product Profile

1 2 3 4 5 6 7

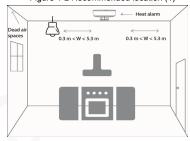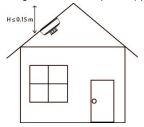| No	Name	Introduction
1	LED Indicator	• Standby Green LED flashes once per minute • Alarm: Red LED flashed once per second, the buzzer beeps once per second • Fault: Yellow LED flashes twice per minute, and the buzzer beeps twice per minute
2	Test/Silence Button	• Verify normal operation • Stop the alarm sound
3	Buzzer	Alarm Sound: 85 d8 (A) at 3 m (9.84 ft) ISO 7731
4	Alarm Removal Latch	Remove the alarm from the mounting plate
5	Communication LED Indicator	• Interconnection successful: Blue LED flashes • Pairing with wireless gateway: Blue LED flashes quickly • Pairing successful: Blue LED flashes slowly
6	RF Module Port	Extension port for optional Wireless Interconnect module. - (GTRF).
7	Battery Compartment	9 V alkaline battery (user-replaceable)

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Figure 4-2 Recommended location (1)

Figure 4-3 Installation position (2)

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3. Technical Information

Specification	Introduction
Detection Type	Temperature
Detection Class	Class A1 fire detection (+54 °C to +65 °C)
Supply Voltage	110 - 250 V AC, 50/60 Hz
Battery Back-up	10-year rechargeable lithium battery (non-replaceable) Replaceable 9 V alkaline battery (HT5MB model only)
Sampling Period	10 s
Sensor Type	Thermistor
Alarm Method	Visual and audible alarm
Alarm Type	Heat alarm, fault warning, low battery warning
Alarm at Temperature Range	+54 °C to +65 °C (+ 129 °F to + 149 °F)
Alarm Volume	85 dB (A) at 3 m (9.84 ft) according to ISO 7731
Operating Temperature	-10 °C to +55 °C (+ 14 °F to + 131 °F)
Operating Humidity	< 95% RH (non-condensing)
Silencing Function	Yes
Silence by IR Remotes	Supported (any working IR remote controller)
Indicator Light	Alarm, fault and operation indicator
Maximum Number of Interconnected Units	24 hardwire interconnected / 24 wirelessly interconnected with optional WisuLink RF interconnect module
Dimensions	< Ø148.6 mm x H55.5 mm (Ø5.85" x H2.19")
Weight (with battery)	310 q (0.68 lb)
Casing	PC+ABS
Installation	Ceiling Mount
Certification	AS 3786:2014 + A1:2015 + A2:2018, RCM, ActivFire®

4. Device Installation
4.1 Installation principle
The advice here follows the guidance in the building code of Australian, state and territory building regulation and AS 1670.1 in general (for further information, refer to the relevant standards).
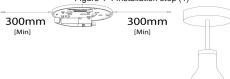
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4.3 Installation Steps
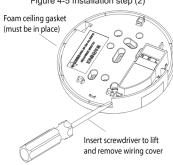Follow the below steps to install the device properly.
Step 1: Choose a suitable place to install your heat alarm, complying with the advice in the previous section, and disconnect the AC mains
Step 2: Mark the positions for self-tapping screws aligning the power cable positions

Figure 4-4 Installation step (1)

300mm [Min]   300mm [Min]

Step 3: Insert a screwdriver to lift off the wiring cover
Figure 4-5 Installation step (2)

Foam ceiling gasket (must be in place)
Insert screwdriver to lift and remove wiring cover

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The wiring must be connected to the terminal block on the mounting plate as follows:
• L: Live - connect to the house wire coloured brown or marked L
• N: Neutral - connect to the house wires coloured blue or marked N
• IC: Interconnect - connect all circuit terminals for alarm interconnection (see Section 5 Interconnection) Wiring must be installed in compliance with AS/NZS 3000

⚠️ **Warning**
Mixing (or poorly terminating the Live and Neutral connections may damage all alarms. Please use wires of the same colour throughout the premises for L, N and Interconnect.

Step 4: Fix the mounting plate to the ceiling with self-tapping screws. Ensure all mounting plates are oriented in the same direction.
Step 5: Connect the power cables to the terminal block and tighten the screws.
1) If the mains wires are recessed, bring the wires through the rear hole in the mounting plate
2) If the mains wires are mounted on the surface, take out the removable section for wiring
If you are not using surface wiring, the removable section must be left in place for electrical safety reasons.
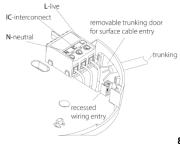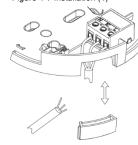
Figure 4-6 Installation (3)　　　　　　Figure 4-7 Installation (4)

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Step 6: Install the wiring cover, write the installation date, and ensure that the alarm is properly aligned with the mounting plate before sliding it on according to the corresponding direction as shown in the mounting plate.
Figure 4-8 Installation step (5)

Step 7: Connect the mains power to the alarm circuit. Verify that the green LED indicator on the front of the alarm illuminates.
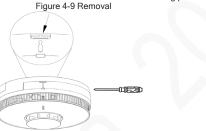**Step 8**: Press and hold the **Test/Silence** button for 10 seconds, the alarm beeps. Check that the other interconnected alarms also beep within this period. Release the **Test/Silence** button, the buzzer stops beeping immediately.

4.4 Removal Steps
Locate the arrow and slot above it on the front face of the alarm.
Step 1: Insert a flat-bladed screwdriver horizontally about 10 mm into the centre of the slot.
Step 2: Push the lower half of the alarm away from the inserted screwdriver.
Step 3: Hold the lower half of the alarm and remove it from the mounting plate.
Figure 4-9 Removal

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5. Interconnection
Heat alarms should always be interconnected with smoke alarms or multi-sensor alarms to provide adequate early warning of fires. Once one device triggers an alarm, all interconnected devices will also alarm. This device can be interconnected with other GT High Performance interconnected alarms to construct a hybrid system containing Carbon Monoxide (CO), Heat and Smoke Alarms. A maximum of 24 GT high performance CO / Heat / Smoke Alarms can be interconnected.
Prerequisite: Make sure all alarms are powered to ensure a successful interconnection.

⚠️ **Warning**
• **Ensure** all wiring is firmly connected, otherwise, the interconnection will fail or device malfunction may occur.
• All installation and operation shall conform to your local electrical safety requirements, fire protection regulations and other relevant regulations.
• This product must be installed by a licenced electrician in accordance with AS/NZS 3000.
• Do not connect the device to any alarm manufactured by different company, as device damage may result and create a fire or electric shock hazard.
• Warranty will be void if interconnected to any other brand or make of alarm

How to interconnect
To interconnect alarms, connect all the IC terminals together.

⚠️ **Warning**
• The interconnecting wire (minimum 0.75 mm^2 cable) must be treated as if it were Live. It should be insulated and sheathed.
• Wiring must comply with AS/NZS 3000.
• Do not exceed 250 m of connecting wire per circuit.
Figure 5-1 Interconnection

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6. Test and Maintenance
After the installation of the device or regular maintenance, a test must be carried out to confirm that the device is operating properly. If any device defects are detected during the testing process, please refer to the "Frequently Asked Questions" and "Maintenance" section and retest the device. If it fails to complete the test successfully, please return the device to the place of purchase for repair, or scan the QR code on page 13 of this booklet.

6.1 For a single heat alarm
Test: Press the **Test/Silence** button, the buzzer will beep once and the red LED indicator will flash once, and then the buzzer will beep continuously for two cycles, and the red LED indicator will flash twice.
Silence/Pause the alarm: When the temperature reaches a predetermined threshold, the LED indicator flashes and the buzzer beeps (85 dB). Press the **Test/Silence** button to temporarily mute the alarm sound for 9 minutes. If a false alarm is triggered, pressing the **Test/Silence** button on the device will stop the alarm sound.

6.2 For interconnected heat alarms
Test: Press the **Test/Silence** button on any interconnected heat alarm until other interconnected heat alarms in the network start to beep. The initiating device will beep continuously with the red LED indicator flashing. After receiving a signal, other interconnected devices in the network start beeping with the indicator lights flashing red and yellow alternately. Release the **Test/Silence** button on the initiating interconnected device, and it will stop flashing and beeping, the interconnected devices following soon.
Silence/Pause the alarm: Once the initiating device triggers an alarm, the device beeps with the red LED indicator flashing. After several seconds, other interconnected devices receive the alarm signal and will go into alarm mode with the red LED indicator flashing and the buzzer beeping.
• Press **Test/Silence** button on the initiating device - all interconnected devices are muted
• Press **Test/Silence** button on any other interconnected device - only that device is muted, but the initiating device keeps beeping.
⚠️**CAUTION**
You can silence this device with an infrared remote controller by pressing any button on it and the device will pause the alarm. The alarm will automatically exit silence mode after 9 minutes. Avoid receiving unintentional signals from other infrared sources (such as external remote control signals), which may cause abnormal alarm silence.

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⚠️ **WARNING - NEVER IGNORE ANY ALARM**
If an alarm is sounding, it is warning you of a potentially hazardous situation. Do not ignore it. Ignoring the alarm may result in injury or death. If your heat alarm activates and you are not absolutely certain of the source of fire, get everyone out of the house immediately.

6.3 Maintenance
To keep your device in good working condition, please follow these requirements.
• Simulate fire alarm test: Test the device once a week.
Under normal working conditions, press the **Test/Silence** button to ensure that the device can work normally. If there is a malfunction, please repair it in time. After cleaning, please install the device and test again.
• Clean the shell: Clean the device at least once per year (recommended).
• Keep the device free of dust or inserts by gently vacuuming the shell with a soft brush attachment when required. Avoid cleaning solutions on the device to prevent the possibility of contaminating the sensor.
• Do not paint the device. Paint will seal the vents and interfere with the sensor's ability to work normally.

7. Frequently Asked Questions

Problem	Solution
Your heat alarm does not sound during testing	• If testing immediately after first activating the alarm, you should allow a few seconds for the alarm to settle before testing. • Make sure you push the test button firmly.
Your heat alarm chirps intermittently	• Check to location of your heat alarm (see "Installation Position"). • Clean the heat alarm (see "Test and Maintenance").
The LED indicator flashes red and the alarm sounds one beep every 60 seconds	• The device is under low battery condition, please replace the device immediately. • Please contact technical support for advice

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8. Disposal
Waste electrical products should not be disposed of your other household waste. Please dispose in an environmentally - friendly manner, and strictly follow the local regulations regarding the disposal or recycling of the electrical device.
⚠️ **WARNING**
Do not burn or dispose of in fire.

9. Warranty and Contact
If you need after-sales service, please contact your place of purchase, or scan the QR code below.

Australian Importer: Smoke Alarms Australasia Pty Ltd
Address: PO Box 545 Bulimba Qld 4171

For more information, please scan the QR code or visit
https://www.gtsmokealarms.com.au

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