

## Temperature Extremes Sensor (model 64604/08) User Guide



The Temperature Extremes Sensor has been designed to detect two specific temperature thresholds, 'high' and 'low' and in addition, to monitor a rate of temperature rise (the speed at which the temperature changes).

The 'high' temperature threshold (95°F (35°C)) and temperature rise detection are primarily used to indicate excessive temperatures occurring, for example, within the kitchen.

The 'low' temperature threshold (36°F (2°C)) will alarm before potential freezing hazard environmental changes occur and will warn of possible water pipe bursts due to the cold temperature.

The Installer will position the Temperature Extremes Sensor to protect against either high or low temperature conditions. Refer to installation section for details.

If the Temperature Extremes Sensor detects a high or low temperature or a set rate of rise in temperature then an alarm call will automatically be made by the receiving equipment to a control centre. An alarm call will also be made if the Temperature Extremes Sensor detects that its battery is getting low.

### General Maintenance.

The Temperature Extremes Sensor should be cleaned approximately every six months to ensure that the enclosure remains free of dust, cobweb and grease. The Temperature Extremes Sensor can be dusted with a dry cloth or vacuumed. A test alarm should be made following cleaning by activating the test switch. It is recommended that a test call is made at regular intervals. **DO NOT USE WATER OR A DAMP CLOTH**

### Battery Replacement

None of the batteries in the unit can be replaced by the user.



**The product is NOT a Fire Detector.**



**The product must not be used as a Fire Alarm**



**The product must not be used as a Smoke Detector.**



**The Temperature Extremes Sensor can only activate its alarm when it detects low or high temperatures. Please see the following page for these temperature settings. This alarm will not detect smoke, flame or gas.**



**Reliance should not be placed on the Temperature Extremes Sensor product for life safety or property protection.**

## Installation Guide - Location of the Temperature Extremes Sensor

The Temperature Extremes Sensor is intended for indoor use only.

The Temperature Extremes Sensor will operate only between 14° F to 131° F (-10° C to +55° C)

The Temperature Extremes Sensor can be positioned on a ceiling (maximum recommended height 8'6"/2.6m) or a wall.

It is recommended that the Temperature Extremes Sensor be fitted to the ceiling when monitoring temperature rates of rise and the fixed upper temperature.

The Temperature Extremes Sensor must be positioned at an approximate central point on the ceiling, away from any door or window and at least 6' (1.8 m) from the wall that the back of the cooker is fitted to. It should also be clear of any light fitting. The Temperature Extremes Sensor, in any event must be mounted at least 12" (30cm) away from a wall or corner.

If the ceiling is not practical or, the mounting surface may become considerably warmer or cooler than the room, such as a poorly insulated ceiling, the Temperature Extremes Sensor may be mounted on the wall. It should be mounted away from a window or door and between 6" and 12" (15 and 30cm) down from the ceiling / wall intersections.

It is recommended that the Temperature Extremes Sensor be fitted to the wall when monitoring cold conditions. For monitoring cold conditions the Temperature Extremes Sensor must be located in close proximity (for example within 50cms) to the area or item being protected, preferably away from any draught and avoiding locations that could expose it to accidental damage, i.e. being knocked or kicked.

Ensure that the Sensor location offers a good radio transmission path to the receiving equipment. This is not normally a problem; however ensure that the Temperature Extremes Sensor is not mounted on or next to a metallic surface or structure (cabinet).

The radio transmission path must be verified by holding the Sensor in the desired position and pressing the test switch, accessible through one of the Sensor's vents. An alarm call will be sent to the receiving equipment. These calls can be cancelled at the receiving equipment. Receipt of this call will confirm adequate placement of the Temperature Extremes Sensor.

Note that the Temperature Alarm Sensor must first be programmed into the receiving equipment prior to this test. Refer to the Commissioning section.

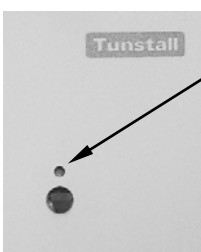
If the receiving equipment is relocated within the room at any subsequent time, then the radio transmission path from the Temperature Extremes Sensor must always be verified.

## Installation of the Temperature Extremes Sensor

Prior to installation ensure that the Temperature Extremes Sensor has been programmed to the receiving equipment. Refer to commissioning instructions.

Fit the three AAA Alkaline supplied batteries to the Temperature Extremes Sensor in the **correct orientation**. Depiction of the correct battery orientation is moulded into the battery holder. (This must be undertaken prior to programming the receiving equipment) The Temperature Extremes Sensor is fixed to a flat surface (wall or ceiling) using the two screws provided. Two wall fixings (rawl plugs) are also provided, if required.

The boxed TES contains four enclosure screws, four corner caps, four mounting feet, two rawl plugs and two wood screws. Two enclosure screws directly screw the base to the top. The other two enclosure screws fix the mounting feet to the enclosure. Two corner caps fit on the corners where there are no mounting feet.



Test Switch

Ensure that the base is fixed securely to the mounting surface using the screws provided.

**Whenever the unit is opened, ensure that the rubber pad in the base locates over the batteries.**

## Battery Replacement



Three AAA size alkaline cells are used to supply power to the temperature sensor sub-assembly. These batteries can be replaced every 18 months.

The AAA size batteries within the Temperature Extremes Sensor must be replaced within 21 days of a 'TES Auto Low Batt' alarm being received by the Control Centre.

All three AAA batteries must be replaced at the same time. Battery replacements must be of the same type i.e. alkaline type, size AAA, IEC identification LR03.

Varta LR03, Duracell MN2400 or Panasonic AM-4PI are acceptable batteries.

Re-chargeable batteries **must not** be used.

To replace the batteries:



1. Remove the Temperature Extremes Sensor from the wall or ceiling. Remember the correct orientation for refitting.
  2. Lever off the two corner screw covers and remove the four enclosure fixing screws holding the base to the enclosure lid and remove the base. Remember which corners have the mounting feet fitted.
  3. Replace all three batteries with the replacements as listed, taking care to observe the correct battery polarity.
  4. Replace the four enclosure screws (two have mounting feet), refit the screw covers and fit the Temperature Extremes Sensor back in its original position.
5. Ensure the Temperature Extremes Sensor is operating correctly by making a test call, utilising the Test Switch, through to the Control Centre.

## Commissioning

This section covers the commissioning of the Temperature Extremes Sensor and is provided for the Tunstall Engineer or, suitably trained representative. It covers the ancillary equipment required to make the end to end system operation.

### Programming the receiving unit

Follow the instructions for your receiving unit to enter programming and registration mode.

The Temperature Extremes Sensor can be activated by depressing the Test Switch (refer to the illustration – use a paper clip or wire of less than 2mm diameter) for less than two seconds.

Exit from programming mode.

#### Notes:

For the 'TES Auto Low Batt' message to be brought to the operator's attention the PNC3 Vision software release must be 5.60 or greater and the Line Interface Module (LIM) Firmware must be 052V1R5.61 or greater. TT92 protocol **MUST** be enabled.

## NOTICES

The 312 Temperature Extremes sensor has been approved to the following applicable standards.

### ***New Zealand and Australia Approvals***

AS/NZ 4268:2003

N72



### ***Canada***

RSS210 issue 6 sept 2005

IC 1231A-6460408A

This equipment meets the applicable Industry Canada Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada Technical Specifications were met. It does not imply that Industry Canada approved the equipment.

### ***USA - FCC Approvals***

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.

**Flood detector**  
**(Part Number 64604/08)**  
FCC ID: G2X-6460408A

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:  
(1) This device may not cause harmful interference, and  
(2) This device must accept any interference received, including interference that may cause undesired operation.

#### Warning

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.