



**THERMAPEN<sup>®</sup>**  
**IR BLUE**  
With *Bluetooth<sup>®</sup>*  
Wireless Technology



Operating Instructions

The Thermapen IR Blue is both a non-contact infrared (IR) and a penetration probe *Bluetooth*<sup>®</sup> thermometer.

**CONNECTION** - Use a Bluetooth Low Energy iOS or Android™ host device with a compatible app installed to make connections to the instrument. When connected, the Bluetooth symbol will show in the display.

When the Probe is connected via Bluetooth, the connection will remain for 10 seconds after the probe is closed, giving time to switch to IR Mode, keeping a continuous Bluetooth connection. After the 10 seconds the Bluetooth connection will be dropped.

Please note: No readings are stored in the instrument. When not connected, the instrument can still be used in both 'IR' and 'Probe' Mode. Readings are taken and displayed every 1 second.

### IR MODE OPERATION

(Probe in closed position)

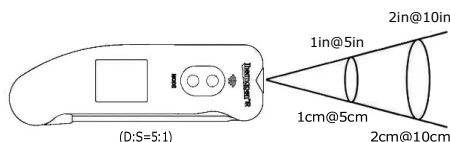
#### Not Connected

Press the SCAN button to turn on the instrument. Aim the thermometer at an object whilst pressing the scan button. The SCAN symbol will appear in the display all the time the SCAN button is held, along with the target's surface temperature. When the Scan button is released 'HOLD' is displayed along with the latest target temperature, which will remain for 60 seconds before the instrument will shut down.

#### Connected-

If a Measurement interval is set, the thermometer will measure and update its display at that rate, otherwise press the SCAN button to take a measurement.

**MEASUREMENT ZONE/TARGET DISTANCE** - The measurement zone is proportional to the distance the Thermapen IR Blue is away from the target. The Thermapen IR Blue is equipped with a 5:1 lens. If the target is 10 cm away, the measurement zone will be 2 cm across.



**EMISSIVITY** - The Thermapen IR Blue is supplied with a default emissivity of 0.95 (see Settings). For information relating to the emissivity of specific materials, please visit our website [etiltd.com/emissivity](http://etiltd.com/emissivity).

Please note: IR thermometers are not recommended for use when measuring the temperature of shiny or polished metals.

For probe mode, see overleaf.

## PROBE MODE OPERATION

### Not Connected

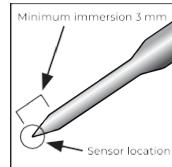
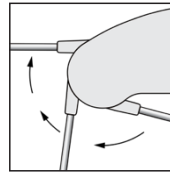
Unfold the probe and insert the tip into the medium or substance to be measured. The sensor is located at the tip of the probe, therefore the minimum depth insertion should be 3 mm.

The instrument reading in the display will take a few seconds to stabilise.

### Connected

If a measurement interval is set, it will take the temperature at that rate, but otherwise it will take the temperature every 1 second. Pressing the SCAN button forces an extra temperature reading as well. When the reading is updated, it is sent back to the host.

The probe should not be rotated more than 180 degrees as damage will occur. When not in use, it is recommended to store the probe in the closed position.



The probe tip is very sharp and therefore caution should be taken when using. Care should also be taken when closing the probe after taking hot temperatures as the probe may remain hot.

**ROTATIONAL DISPLAY** - The display will rotate through 90° steps depending on the direction the instrument is pointing so that it can be used at any angle or in either hand, in both modes.

**MAX/MIN** - In IR mode, press the Mode button to show the maximum or minimum values of the 'SCAN' previously taken. These values are lost when the instrument turns off after 60 seconds, or the probe is opened. If the Scan button is pressed whilst viewing Max/Min values the instrument immediately measures and reverts into measurement mode.

Please note: Max/Min is only available in IR mode.

**SETTINGS** - Adjustable via the app including: °C or °F, Measurement Interval, Auto-off, Emissivity, Sensor Name and High/ Low Alarm levels. All settings are stored in the instrument and are downloaded to the app on connection.

**AUTO-OFF** - If the instrument is connected to Bluetooth, the auto-off is disabled.

When in IR mode and not connected, it will auto-off after 60 seconds.

The auto-off timer will reset if any button is pressed.

To activate the instrument after auto-off, press the SCAN button.

In Probe mode and not connected, the auto-off time is set via the App.

The auto-off timer is reset by movement/button press.

To activate the instrument after auto-off, simply press any button.

**AMBIENT** - The ambient operating range is -20 to 50 °C.

**BATTERY REPLACEMENT** – The battery condition is shown in the App and in the display. When at 'Low Bat' it needs replacing. The instrument continues to measure accurately but we recommend that the batteries be changed. To replace the batteries, undo the retaining screw and lift the battery cover. Remove the batteries by pulling the battery retaining clip back whilst holding the unit upside down. Replace both batteries, placing them positive side up, and ensuring the edge of the batteries are clipped under the plastic lugs near the cover hinge. Replace cover and tighten retaining screw.

**STORAGE & CLEANING** – Clean the instrument regularly with an anti- bacterial probe wipe to avoid potential food-borne bacteria growth. The infrared sensor lens is the most delicate part of the thermometer and should be kept clean at all times. Care should be taken when cleaning the lens, using only a damp soft cloth or damp cotton swab. Allow the lens to fully dry before using it. The thermometer should be stored between -20 to 60 °C.

**WARNING:** IPA and other solvents may cause damage to the case and screen of this instrument.

#### **LCD ERROR MESSAGES**

**(PROBE & IR MODES)** – If the ambient temperature falls outside the operational range, then 'Ambient Lo' or 'Ambient Hi' will be displayed. This will continue until the ambient temperature has returned within the limits. The thermometer should be allowed plenty of time (minimum 30 minutes) to stabilise to the working/room temperature. 'Hi' or 'Lo' will be displayed when the temperature being measured is outside of the instrument's measurement range. 'Err' will be displayed if the instrument has developed a fault.

**GUARANTEE** - This instrument carries a two-year guarantee against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of ETI, be either repaired or replaced without charge. This guarantee does not apply to sensors/probes, where a six-month period is offered. The product guarantee does not cover damage caused by fair wear and tear, abnormal storage conditions, incorrect use, accidental misuse, abuse, neglect, misapplication, or modification. Full details of liability are available within ETI's Terms & Conditions of Sale at [etiltd.com/terms](http://etiltd.com/terms). In line with our policy of continuous development, we reserve the right to amend our product specification without prior notice.

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