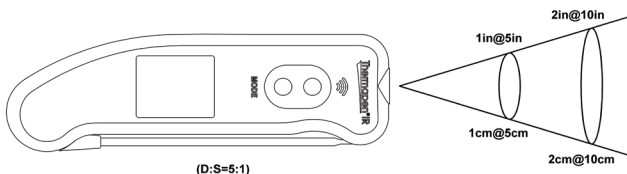# ThermoWorks

Thermapen® IR

Operating Instructions

INSTRUMENT OPERATION – Thermapen IR is both a non-contact infrared (IR) and a penetration probe thermometer.

IR MODE (Probe in closed position) – Aim the instrument at an object while pressing the Scan button 📶. The target's surface temperature will be displayed. The 📶 symbol will appear in the display and the instrument will continue to measure while the Scan button is held down. When the Scan button is released 'HOLD' is displayed and the reading is automatically held for 30 seconds after which the thermometer will turn off.

PROBE MODE – Unfold the probe and insert the tip into the medium or substance to be measured. The instrument will take a few seconds to stabilize. The instrument is turned off by folding the probe until fully located into the rubber probe retainer. 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.

MEASUREMENT ZONE/TARGET DISTANCE – The measurement zone is proportional to the distance the Thermapen IR is away from the target. Thermapen IR is equipped with a 5:1 lens. If the target is 5 inches away, the measurement zone will be 1 inch across.

(D:S=5:1)

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, when 'HOLD' is displayed, press the Mode button to show the maximum or minimum values of the readings previously taken. These values are lost when the instrument goes into sleep mode after 30 seconds, or if the probe is opened. If the Scan button is pressed while viewing Max/Min values, the instrument immediately measures and reverts back into Hold mode when released. Please note: Max/Min is only available in IR mode.

INSTRUMENT CONFIGURATION – Thermapen IR has two settings menus that are accessed depending on the mode in use. Settings in Probe Mode apply to both IR and Probe measurements while settings in IR mode are specific to infrared. While in settings the LCD will be locked to horizontal rotation.

°C/°F – While in Probe mode press and hold the Mode button for 3 seconds to enter the Instrument settings menu. The display will show 'CorF', press the Scan button to change between °C and °F. Press the Mode button twice to save and exit - 'End' is displayed.

RESOLUTION – While in Probe mode press and hold the Mode button for 3 seconds to enter the Instrument settings menu. Press the Mode button again to display the resolution (either 1° or 0.1°). Press the Scan button to change the resolution setting and then press the Mode button to save and exit - 'End' is displayed.

EMISSIVITY – Thermapen IR is supplied with a default emissivity setting of 0.95, that can be adjusted between 0.10 and 1.00 when in IR mode. To adjust, press the scan button to turn on IR mode. Hold down the Mode button for 3 seconds to enter the IR settings menu. Press the Scan button to increase the value in 0.01 steps or hold the Scan button down to increase the value in 0.1 steps. Once you have set the required emissivity press the Mode button twice to save and exit - 'End' is displayed.

For information relating to the emissivity of specific materials, please visit www.thermoworks.com. Please note: Non-contact infrared thermometers are not recommended for measuring the temperature of shiny or polished metals.

AMBIENT – While in IR mode press and hold the Mode button for 3 seconds to enter the IR settings menu. Press the Mode button again to view the ambient temperature. To exit the menu, press the Mode button once more - 'End' is displayed.

LCD ERROR MESSAGES (PROBE & IR MODES) – If the ambient temperature falls outside the operational range, then either 'Ambient Lo' or 'Ambient Hi' will be displayed. This will continue until the ambient temperature has returned within the limits. The instrument should be allowed plenty of time (minimum 30 minutes) to stabilize 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.

AUTO OFF/SLEEP MODE – The instrument will automatically switch off after 30 seconds. The timer is reset with any button push in IR mode or with any movement in Probe mode. While in a settings menu the sleep interval is 10 minutes.

WAKE – When in Probe mode the instrument will wake from sleep when movement is detected.

BATTERY REPLACEMENT – A battery symbol ' 🔋 ' indicates that the batteries will need replacing. The instrument continues to measure accurately but we recommend that the batteries be changed as soon as possible. To replace the batteries, undo the retaining screw and lift the battery cover. Remove the batteries by pulling the battery retaining clip back while holding the instrument 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. Finally, 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 cotton swab dipped in isopropyl alcohol. Allow the lens to fully dry before using it. The thermometer should be stored between –4 to 140°F.

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

PRODUCT WARRANTY - This instrument carries a two-year warranty against defects in either components or workmanship. During this period, products that prove to be defective will, at the discretion of ThermoWorks, be either repaired or replaced without charge. This warranty does not apply to probes, where a six-month period is offered. Full details of liability are available within ThermoWorks' Terms & Conditions of Sale at www.thermoworks.com/product-warranty.

ACCESSORIES

WALL MOUNT BRACKET
Model: 10203

PROTECTIVE LEATHER WALLET
Model: 830-110-LX

MAGNETIC SILICONE BOOT
Model: 830-485

2 YEAR WARRANTY

Biomaster
PROTECTED

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