



## ThermoWorks Thermopen User Manual

[Home](#) » [ThermoWorks](#) » ThermoWorks Thermopen User Manual 





**Pro-Surface Thermopen®**



**Air Thermopen®**  
**Operating Instructions**

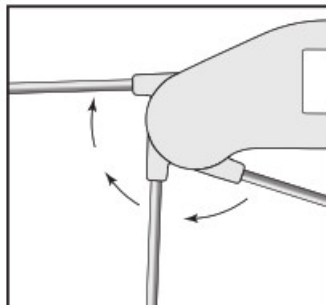
## Contents

- [1 INSTRUMENT OPERATION](#)
- [2 INSTRUMENT CONFIGURATION](#)
- [3 SPECIFICATIONS](#)
- [4 Documents / Resources](#)
  - [4.1 References](#)
- [5 Related Posts](#)

## INSTRUMENT OPERATION

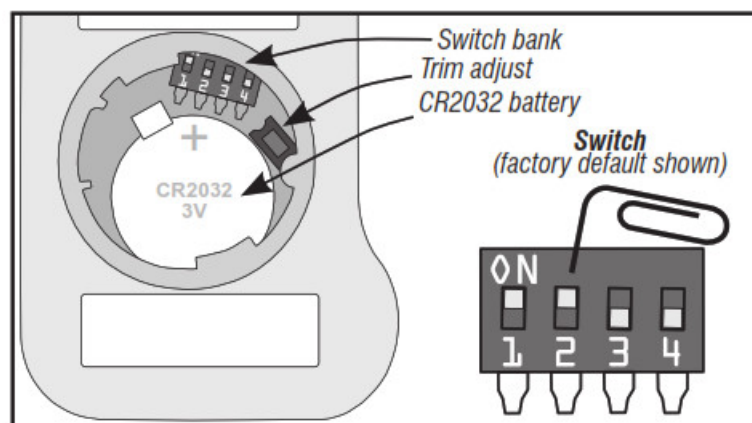
The instrument is switched on by unfolding the probe until the display shows the temperature. The unit is turned off by folding the probe back into the side of the unit. The probe should not be rotated more than 180 degrees as damage will occur. It is recommended to store the probe, in the closed position, when not in use.

Apply the tip of the probe to the substance, surface or area to be measured. The probe should be allowed adequate time to stabilize to the temperature of the item to be measured.



## INSTRUMENT CONFIGURATION

This instrument has four user-selectable slide switches (switch bank), adjustable with a paperclip, and a single push button 'Trim Adjust' which is located under the battery cover.



### Switch 1 – Units

Changes the instrument's display units between (°F) Fahrenheit and (°C) Celsius. The factory default is °F or switch set farthest from batteries. To change to °C, move the switch to the position closest to the batteries.

### Switch 2 – Resolution

Changes the instrument's display resolution between 1°(F or C) and 0.1°(F or C). The factory default is 1° resolution or switch set farthest from the batteries. To change to 0.1° the resolution, move the switch to the position closest to the batteries.

### Switch 3 – Auto-Off

Enables or disables the auto-off function. If the auto-off function is enabled (factory default), the unit will automatically turn off after 10 minutes to preserve battery life. If disabled, the unit will remain on until the probe is folded away and turned off by the user. The factory default is auto-off enabled or switches set closest to the batteries.

To disable the auto-off function move the switch to the position farthest from the batteries.

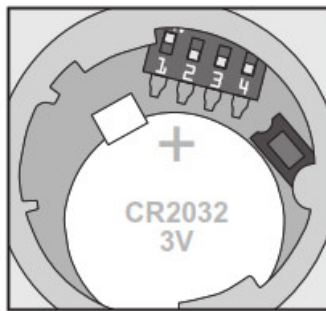
#### **Switch 4 – Trim Adjust**

If the ThermoPen is within specification, we do not recommend using the Trim Adjust. It should not be needed in normal use. This mode allows the user to set an offset that will add or subtract up to 3.6°F (2.0°C) to all readings of the ThermoPen. It can therefore be used to tune the calibration. For detailed instructions visit [www.thermoworks.com](http://www.thermoworks.com).

**INSTRUMENT CLEANING** – Clean the instrument regularly with an anti-microbial probe wipe or spray cleaner on a paper towel to avoid potential food-borne bacteria growth.

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

**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, remove the battery cover using a coin (U.S. quarter works best). Using firm but even downward pressure, rotate the battery cover to the open position. Remove the batteries by pulling the battery retaining clip back while holding the unit upside down. Replace both batteries, positive side up, replace the cover.



**ERROR MESSAGES** – ‘Lo’ will be displayed if you are measuring below the instrument’s range. ‘Hi’ will be displayed if you are measuring above the instrument’s range. ‘Err’ will be displayed if the probe develops a fault. If the error message remains, contact ThermoWorks Technical Support at (801) 756-7705 or email [techsupport@thermoworks.com](mailto:techsupport@thermoworks.com).

**EMC/RFI** – Instrument performance may be affected if operated within a high-frequency radio field, such as near a mobile phone, or if subjected to an electrostatic shock.

#### **Recommendations for improving surface temperature measurements (Pro-Surface ThermoPen):**

1. Surface readings may be affected by airflow, sensor contact with the surface being measured, the surface type, surface inconsistencies, and measuring area cleanliness.
2. Make sure that the flat bottom area of the probe tip maintains constant and flat contact with the surface being measured.
3. Apply firm pressure. Allow sufficient time for the reading to stabilize.
4. Clean the surface before taking measurements.
5. Readings may be enhanced with a small amount of cooking oil to establish better thermal contact with the sensing area.
6. Surface temperatures may vary along hot surfaces. It is recommended to test in multiple locations.

**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](http://www.thermoworks.com/product-warranty).

#### **ACCESSORIES**

	WALL MOUNT BRACKET Model: 10203
	SILICONE BOOT Model: 830-260
	MAGNETIC GLOW-IN-THE-DARK SILICONE BOOT Model: 830-265

## SPECIFICATIONS

Range	−56.2 to 572.0°F (−49.9 to 299.9°C)
Resolution	0.1° or 1° – user selectable
Accuracy	±0.72°F (−58 to 392°F), ±1.8°F (392 to 572°F) ±0.4°C (−49.9 to 199.9°C), ±1°C (200 to 299.9°C)
Sensor Type	Type K thermocouple
Operating Range	−4 to 122°F (−20 to 50°C)
Battery	2 x 3-volt CR2032 lithium coin cell
Battery Life	1500 hours
Display	0.55" (14mm) LCD
Dimensions	0.75 H x 1.85 W x 6.1 D inches(19 H x 47 W x 153 D mm)
Weight	0.25lb. (97g)

For warranty, service, and technical assistance, please contact ThermoWorks' Technical Support at (801) 756-7705 or email at [techsupport@thermoworks.com](mailto:techsupport@thermoworks.com).



Made in the UK



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[www.thermoworks.com](http://www.thermoworks.com)

## Documents / Resources

	<p><a href="#">ThermoWorks Thermapen</a> [pdf] User Manual Pro-Surface Thermapen, Air Thermapen, P-11-033-02-g, 547-115, 830-265, 830-260, 10203</p>
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## References

-  [Professional Thermometers from the Temperature Experts | ThermoWorks](#)
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[Manuals+.](#)