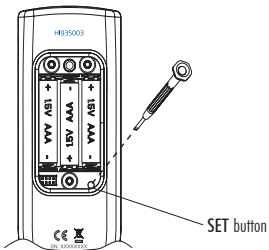


# HI935003 K-type Thermometer



## Meter Setup

Enter Setup Mode to change the temperature unit (°C or °F) or to adjust the auto-off time. To enter the Setup Mode, press the SET button located inside the battery compartment.



- Use the ON/OFF button to switch between "°C" or "°F". Long press the ON/OFF button once to save and continue to auto-off settings.



- Use the ON/OFF button to cycle through the following Auto-Off choices: 8 minutes ("d08", default value), 60 minutes ("d60") or OFF ("d---"). Long press the ON/OFF button once to save and continue to normal operation.



8 minutes



60 minutes



Disabled

Each model is provided with an auto-off feature, which switches the meter off after a certain period of non-use, to save battery life.

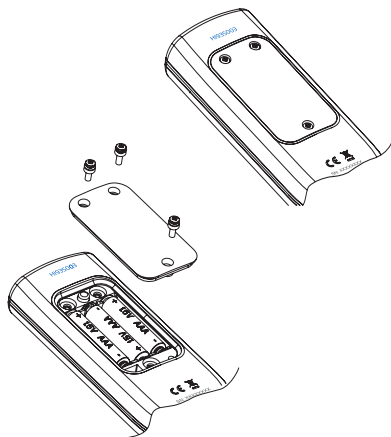
## Battery Replacement

The battery tag blinks to warn the user when the remaining battery percentage is less than 10%.

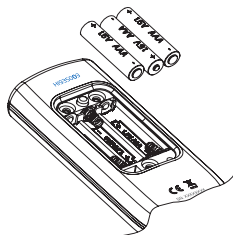


If the display shows battery level "00%", the battery charge is not enough to provide the accuracy, the Battery Error Prevention System (BEPS) turns the meter off.

Immediately replace the batteries with new ones. The batteries are accessed by opening the battery cover on the back of the instrument.



Replace the three 1.5V AAA alkaline batteries located in the battery compartment, observing the indicated polarity.



Replace the battery cover making sure that the gasket is in place.

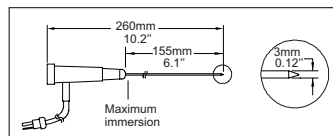
## Temperature Probe and Accessories

All Hanna Instruments temperature probes have passed factory tests and are ready-to-use. These probes make it possible to switch from one probe to another, within the K-type Thermometer family, without requiring recalibration.

HI766 series is the K-type probe family. It offers various models with different shapes and lengths for the different needs of the users in his application. It is only necessary to plug the probe, doesn't require calibration.

- For example: HI766C Penetration Probe
- HI766E1 Liquid and Semi-solid Probe
- HI766D Probe for Air and Gas

For all the K-type probes and other accessories please refer to Hanna catalog.



HI766C  
Penetration Probe

## Warranty

The meter is warranted for a period of two years against defects in workmanship and materials when used for their intended purpose and maintained according to instructions. This warranty is limited to repair or replacement free of charge. Damage due to accidents, misuse, tampering or lack of prescribed maintenance is not covered. If service is required, contact your local Hanna Instruments Office. If under warranty, report the model number, date of purchase, serial number and the nature of the problem. If the repair is not covered by the warranty, you will be notified of the charges incurred. If the instrument is to be returned to Hanna Instruments, first obtain a Returned Goods Authorization (RGA) number from the Technical Service department and then send it with shipping costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.


## Recommendations

Before using this product, make sure it is entirely suitable for your specific application and for the environment in which it is used. Any variation introduced by the user to the supplied equipment may degrade the meters' performance. For yours and the meter's safety do not use or store the meter in hazardous environments.

## Certification

All Hanna Instruments conform to the CE European Directives.  RoHS compliant

**Disposal of Electrical & Electronic Equipment.** The product should not be treated as household waste. Instead hand it over to the appropriate collection point for the recycling of electrical and electronic equipment which will conserve natural resources.

**Disposal of waste batteries.** This product contains batteries, do not dispose of them with other household waste. Hand them over to the appropriate collection point for recycling. 

Ensuring proper product and battery disposal prevents potential negative consequences for the environment and human health. For more information, contact your city, your local household waste disposal service, the place of purchase or go to [www.hannainst.com](http://www.hannainst.com).

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# Thank You

Thank you for choosing a Hanna Instruments product. Please read this instruction manual carefully before using this instrument.

For technical support, contact your local Hanna office or email us at [tech@hannainst.com](mailto:tech@hannainst.com).

To find your local Hanna office or for additional information on Hanna products, visit [www.hannainst.com](http://www.hannainst.com)

## Preliminary Examination

Remove the meter from the packing material and examine it carefully to make sure that no damage has occurred during shipment. If noticeable damage is evident, contact your local Hanna Instruments Office.

Each meter is supplied with:

- Alkaline batteries: 1.5V AAA (3 pcs.)
- Instruction manual
- Quality certificate

*Note: Save all packing material until you are sure that the instrument functions correctly. All defective items must be returned in the original packaging with the supplied accessories.*

## Intended use

The thermometer is waterproof and is rated IP65.

The meter is designed for the measurement of industrial, domestic as well as farm and field temperatures.

This K-type thermometer coupled with proper probe is suitable for the measurement of air temperature, as well as for the measurement of flat or rounded surfaces and internal temperature of liquids, solids and semi-solids.

Hanna Instruments has designed a series of K-type thermocouple probes dedicated to these specific uses.

Please refer to the probe section of this manual for more information on the available probes.

## General Description

The process variable temperature plays a very important function to the world around us.

Hanna Instruments manufactures thermometers with very good accuracy, including features such as CAL Check readings, Battery Error Prevention System, auto-off capability, and long battery life.

The HI935003 thermometer utilizes a K-Type thermocouple replaceable style probe and provides a large range of temperature measurements, with a resolution of decimal point.

## Specifications

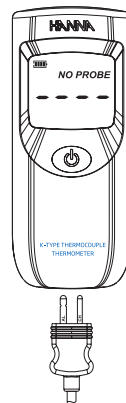
Range*	-50.0 to 199.9 °C ; 200 to 300 °C -58.0 to 399.9 °F ; 400 to 572 °F
Resolution	0.1 °C (-50.0 to 199.9 °C) 1 °C (200 to 300 °C) 0.1 °F (-58.0 to 399.9 °F) 1 °F (400 to 572 °F)
Meter Accuracy @ 23.0°C ±5°C	±0.4 °C (-50.0 to 300 °C) ±0.7 °F (-58.0 to 572 °F)
Battery type/life	1.5V AAA (3 pcs.) approx. 3500 hours of continuous use
Auto-Off	user selectable: 8 min, 60 min or disabled
Environment	Rated operating condition: -20 to 50 °C (-4 to 122 °F)
	Limiting condition: -30 to 50 °C (-22 to 122 °F)
	Storage and transportation condition: -40 to 70 °C (-40 to 158 °F)
	Relative Humidity 100 %
Dimensions	140 x 57 x 28 mm (5.5 x 2.2 x 1.1")
Weight	178 g (6.27 oz.)

\*The measurement range may be limited by probe type, and applies to the probe shaft.

## Meter Overview

### Main features:

- Meter Calibration Check feature
- Remaining battery life indication/low battery detection
- Auto-off capability
- Waterproof casing IP65



Interchangeable  
K-type Thermocouple

## Operational Guide

Each meter is supplied with batteries. Remove the battery cover, unwrap the supplied batteries and install them while paying attention to their polarity (see the "Battery replacement" section for more details).

### TAKING MEASUREMENTS

Connect a suitable temperature probe to the meter.

To switch the meter ON, press the ON/OFF button on the front of the meter. If it does not turn on, make sure that the batteries are properly installed in their place.

At start-up the thermometer displays all LCD segments for a few seconds, followed by the percentage indication of the remaining battery life. It then enters CAL Check mode followed by measurement mode.



*Note: The full display can be frozen by keeping the ON/OFF button pressed.*



### CALIBRATION CHECK

The meter is provided with an automatic CAL Check feature at start-up, which allows the user to check the meter calibration status.

If the meter is calibrated, the display will stabilize and show "0.0 °C" ( $\pm 0.3$  °C) for a few seconds.



### MEASUREMENT

If a temperature probe is plugged in, the meter displays the measured temperature.



If the measurement is unstable, the meter will display  $\infty$  symbol until the measurement becomes stable.

If the reading is slightly beyond the measurement range, the meter flashes the closest full-scale value.



To switch the meter OFF, press the ON/OFF key.

If no temperature probe is plugged in, or the signal is interrupted the display shows blinking dashes and the "NO PROBE" message is displayed.

### WARNING MESSAGES

#### NO PROBE message

Blinking dashes and the "NO PROBE" message are displayed if the temperature probe is not plugged in or the signal is interrupted.



#### DAMAGED PROBE message

When the readings are very far from the measurement range, the probe may be damaged. The display shows blinking dashes and "NO PROBE" message is displayed.

### CALIBRATION CHECK ERROR MESSAGE

If during CALIBRATION CHECK the meter displays more than  $\pm 0.3$  °C, then an "Err" message is displayed.



Contact your local Hanna Instruments Office for recalibration.