Instruction Manual

HI 8757 - HI 8758

Portable Microprocessor K-Type Thermocouple Thermometers

HANNA instruments
www.hannainst.com

WARRANTY

All Hanna Instruments **meters are warranted for two years** against defects in workmanship and materials when used for their intended purpose and maintained according to instructions.

Sensors and probes are warranted for a period of six months.

This warranty is limited to repair or replacement free of charge. Damages due to accidents, misuse, tampering or lack of prescribed maintenance are not covered.

If service is required, contact the dealer from whom you purchased the instrument. If under warranty, report the model number, date of purchase, serial number and the nature of the failure.

First obtain a Returned Goods Authorization number from the Customer Service department, then return the instrument with the Authorization # included along with shipment costs prepaid. If the repair is not covered by the warranty, you will be notified of the charges.

When shipping any instrument, make sure it is properly packaged for complete protection.

Dear Customer,

Thank you for choosing a Hanna product. This manual will provide you with the necessary information for correct operation. Please read it carefully before using the meter. If you need additional technical information, do not hesitate to e-mail us at **tech@hannainst.com**.

These instruments are in compliance with the CE directives.

PRELIMINARY EXAMINATION

Remove the instrument from the packing material and examine it carefully to make sure that no damage has occurred during shipping. If there is any noticeable damage, notify your Dealer or the nearest Hanna Office.

Note: Save all packing materials until you are sure that the instrument functions correctly. Any defective item must be returned in the original packaging together with

GENERAL DESCRIPTION

HI 8757 and **HI 8758** are Hanna microprocessor-based, K-type thermocouple thermometers specially dedicated to education.

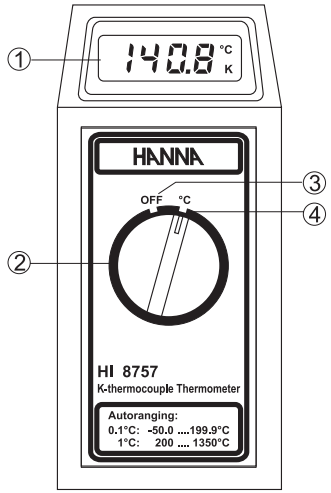
These meters perform measurements either in °C (**HI 8757**) or °F (**HI 8758**) in a wide range of temperature; readings are linearized for increased accuracy, and resolution is automatically switched from 0.1° to 1° for temperatures above 200°C (400°F).

These thermometers are also provided with battery level indication at start-up, and with the BEPS feature (Battery Error Prevention System), which automatically switches the instrument off when the battery is discharged to avoid erroneous readings due to low battery level.

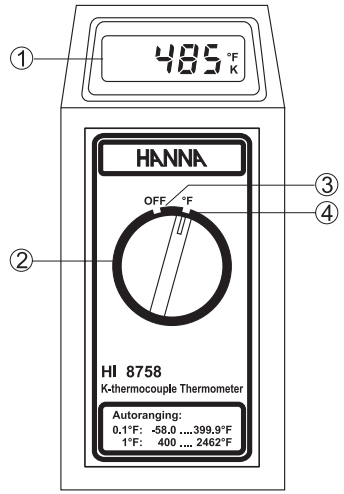
Each meter comes complete with a 9V battery and instruction manual.

FUNCTIONAL DESCRIPTION

HI 8757



HI 8758



1) LCD display
2) Rotary switch
3) OFF mode
4) Measurement mode

SPECIFICATIONS

SPECIFICATIONS	HI 8757
Range (*)	-50.0 to 199.9°C / 200 to 1350°C
Resolution (Autoranging)	0.1°C (-50.0 to 199.9°C) 1°C (200 to 1350°C)
Accuracy (@20°C/68°F)	±0.5% F.S. for 1 year, excluding probe error
Typical EMC Deviation	±0.5°C with **HI766** K-thermocouple probe
Battery Type Life	1 x 9V (IEC 6LR61) battery approx. 500 hours of continuous use
Probe	K-type thermocouple (see "Accessories")
Environment	-10 to 50°C (14 to 122°F); RH max 95% non-condensing
Dimensions	180 x 83 x 40 mm (7.1x3.3x1.6")
Weight	226 g (8 oz.)

(*) Range may be limited by probe.

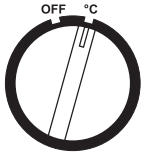
SPECIFICATIONS	HI 8758
Range (*)	-58.0 to 399.9°F / 400 to 2462°F
Resolution (Autoranging)	0.1°F (-58.0 to 399.9°F) 1°F (400 to 2462°F)
Accuracy (@20°C/68°F)	±0.5% F.S. for 1 year, excluding probe error
Typical EMC Deviation	±1°F with **HI766** K-thermocouple probe
Battery Type Life	1 x 9V (IEC 6LR61) battery approx. 500 hours of continuous use
Probe	K-type thermocouple (see "Accessories")
Environment	-10 to 50°C (14 to 122°F); RH max 95% non-condensing
Dimensions	180 x 83 x 40 mm (7.1x3.3x1.6")
Weight	226 g (8 oz.)

(*) Range may be limited by probe.

OPERATIONAL GUIDE

Remove the battery cover on the back of the thermometer. Unwrap the supplied 9V battery, connect it to the battery clip and reattach the cover.

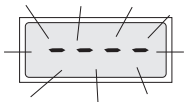
Connect the temperature probe to the connector on the top of the meter.



To switch ON, turn the rotary knob to the °C or °F position (depending on the model).

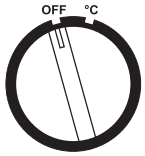
The meter displays the percentage indication of the remaining battery life for a few seconds, and then enters measurement mode.

If a temperature probe is plugged in, the meter displays the measured temperature either in °C (**HI 8757**) or °F (**HI 8758**), automatically switching to the resolution suitable to the temperature range; i.e. 0.1° up to 199.9°C (399.9°F), or 1° above.



If no probe is plugged in, or if reading is over-range, the display shows flashing dashes.

If a measurement is slightly over the range of the meter specifications, the display flashes the closest full-scale value.



To switch the thermometer OFF, turn the rotary knob to OFF.

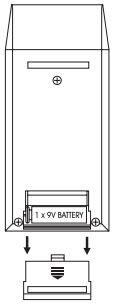
BATTERY REPLACEMENT

The instrument is powered by a 9 V battery and is provided with Battery Error Prevention System (BEPS), which turns the unit off when a low battery signal is detected.

When the battery level is less than 10%, a warning symbol blinks on the display to indicate a low battery condition.

It is recommended to replace the battery as soon as the low battery condition is detected.

Remove the cover on the meter's back by applying pressure in the indicated direction. Unplug the rundown battery and replace it with a new one.



Battery replacement must only take place in a nonhazardous area using a 9V alkaline battery.

FACTORY RECALIBRATION

All Hanna thermometers have been accurately pre-calibrated at the factory. It is generally recommended to have all thermometers recalibrated at least once a year.

For an accurate annual recalibration, contact your dealer or the nearest Hanna Service Center.

ACCESSORIES

K-TYPE THERMOCOUPLE PROBES

with integral handle, 1 m (3.3') cable & mini-connector, for several applications:

HI 766A	Roller surface, max 320°C/600°F
HI 766B	Surface, max 650°C/1200°F
HI 766B1	90º surface, max 450°C/840°F
HI 766B2	Spring-loaded, surface, max 900°C/1650°F
HI 766B3	Spring-loaded, small surface probe with insulated shaft, max 200°C/390°F
HI 766C	Penetration, max 900°C/1650°F
HI 766C1	Ultra-fast penetration, max 300°C/570°F
HI 766D	Air probe, max 300°C/570°F
HI 766E1	General purpose probe, max 900°C/1650°F
HI 766E2	General purpose probe, max 900°C/1650°F
HI 766F	High temperature, flexible wire probe without handle, max 1100°C/2000°F
HI 766F1	Flexible wire probe without handle, max 480°C/ 900°F
HI 766TR1	Penetration, max 250°C/482°F
HI 766TR2	Penetration long probe, max 250°C/482°F
HI 766TV1	Pipe clamp probe, max 200°C/390°F

with detachable handle & mini-connector (to be used in conjunction with the HI 766HD probe handle):

HI 766PA	Roller surface, max 320°C/600°F
HI 766PB	Surface, max 650°C/1200°F
HI 766PC	Penetration, max 900°C/1650°F
HI 766PD	Air, max 300°C/570°F
HI 766PE1	General purpose, max 900°C/1650°F
HI 766PE2	General purpose, max 900°C/1650°F

grill surface probe:

HI 766B4	Grill surface probe with 70 cm (27.6") cable (protected with stainless steel jacket), max 250°C/482°F
HI 7664B4S	Spare stainless steel sensor for HI766B4 probe

OTHER ACCESSORIES

HI 710002	Soft carrying case
HI 710009	Shockproof rubber boot, blue
HI 710010	Shockproof rubber boot, orange
HI 721316	RUGGED carrying case
HI 766EX	Extension cable for K-type probes
HI 766HD	Rugged thermocouple probe handle with 1m (3.3') cable fitted with mini-connector

CE DECLARATION OF CONFORMITY

HANNA instruments

CE

DECLARATION OF CONFORMITY

We

Hanna Instruments Italia Srl
via E.Fermi, 10
35030 Sarmeola di Rubano - PD
ITALY

herewith certify that the K-type thermometers:

HI 8757 and HI 8758

have been tested and found to be in compliance with EMC Directive 89/336/EEC and Low Voltage Directive 73/23/EEC according to the following applicable normatives:

EN 50082-1: Electromagnetic Compatibility - Generic Immunity Standard
IEC 61000-4-2 Electrostatic Discharge
IEC 61000-4-3 RF Radiated

EN 50081-1: Electromagnetic Compatibility - Generic Emission Standard
EN 55022 Radiated, Class B

EN61010-1: Safety requirements for electrical equipment for measurement, control and laboratory use

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A.Marsilio - Technical Director
On behalf of
Hanna Instruments S.r.l.

Recommendations for Users

Before using these products, make sure that they are entirely suitable for the environment in which they are used.

Operation of these instruments in residential areas could cause unacceptable interference to radio and TV equipment, requiring the operator to take all necessary steps to correct interference.

Any variation introduced by the user to the supplied equipment may degrade the instruments' EMC performance.

To avoid electrical shock, do not use these instruments when voltage at the measurement surface exceeds 24 Vac or 60 Vdc.

To avoid damage or burns, do not perform any measurement in microwave ovens.