Instruction Manual
HI 150 Series
Thermometers

HI 150

5.0 °C

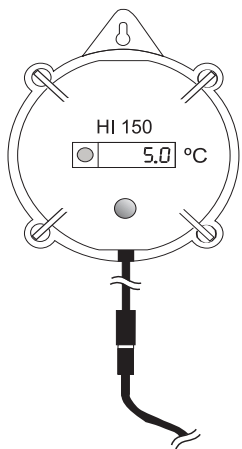**HANNA** instruments

www.hannainst.com

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.

GENERAL DESCRIPTION

HI 150 is an indicator with a relay output and built-in LED Alarm Signal for temperature monitoring.

Constructed in a compact casing and with a molded eye, **HI 150** can be installed on the QC bench or wherever necessary to control the ambient temperature of food chain, from the storage room to the delivery point.

The housing has been completely sealed against vapors and humidity.

The measurement range goes from -20 to 60ºC with an accuracy of ±0.5ºC. The stainless steel encapsulated sensor is positioned right on the outer body of the thermometer to provide a rapid response.

In order to ensure that temperature control is never interrupted, **HI 150** runs permanently on a 12 VDC power supply. Temperature is constantly displayed on a large LCD so that the operator can easily check it at any time.

HI 150 also offers a unique alarm control: any value from 0 to 50.0ºC (**HI 150-00**) or -20 to 20ºC (**HI 150-10**) can be selected as setpoint through a trimmer located on the back of the meter. Should the temperature vary from this selected setpoint, the red LED blinks and the relay is activated to warn of an abnormality or to switch on a system. The alarm LED is well visible from a distance.

This alarm relay is a cost-saving feature with a tremendous potential that can help in automating the temperature control. It can also be used as a forewarning that the refrigeration or air conditioning unit is malfunctioning, or that a door has been left open, or point to any other mishaps, common in a busy workplace.

HI 150 is a convenient and inexpensive way to ensure that temperature never varies too much from acceptable levels. It frees workers from manually checking of the temperature and immediately signals if and when an abnormality arises.

SPECIFICATIONS

HI150-00

Range	-20.0 to 60.0ºC
Resolution	0.1ºC
Accuracy	±0.5ºC
Setpoint	Selectable from 0.0 to 50.0 ºC
Hysteresis	±0.5ºC around setpoint
Alarm	LED blinks and alarm relay is activated when measured temperature is lower than the setpoint
Relay	Through contacts inside the meter
Sensor	Incorporated, encapsulated stainless steel
Environment	-20 to 60ºC; RH 100%
Power supply	External 12 VDC (included)
Dimensions	86 x 94 x 33mm (3.4 x 3.7 x 1.3")
Weight	150g (5.2oz.)

HI150-10

Range	-20.0 to 60.0ºC
Resolution	0.1ºC
Accuracy	±0.5ºC
Setpoint	Selectable from -20.0 to 20.0 ºC
Hysteresis	±0.5ºC around setpoint
Alarm	LED blinks and alarm relay is activated when measured temperature is higher than the setpoint
Relay	Through contacts inside the meter
Sensor	Incorporated, encapsulated stainless steel
Environment	-20 to 60ºC; RH 100%
Power supply	External 12 VDC (included)
Dimensions	86 x 94 x 33 mm (3.4 x 3.7 x 1.3")
Weight	150g (5.2oz.)

FUNCTIONAL DESCRIPTION

HI 150

5.0 °C
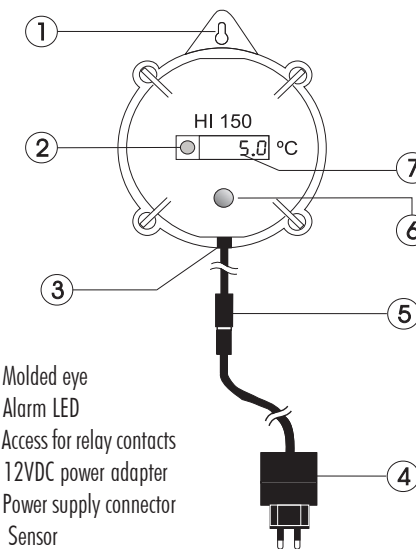
1. Molded eye
2. Alarm LED
3. Access for relay contacts
4. 12VDC power adapter
5. Power supply connector
6. Sensor
7. Liquid Cristal Display

OPERATIONAL GUIDE

TAKING MEASUREMENTS

• Turn the meter on by connecting the 12 VDC power adapter to the meter and to the mains.

• A value will appear on the LCD to indicate the temperature. Wait for a few minutes for the display to stabilize.
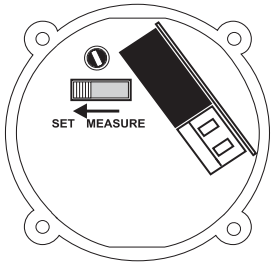
ADJUSTING THE SETPOINT

With the **HI 150**, you can select your own setpoint and be alerted with a visual LED alarm when an abnormal situation arises.
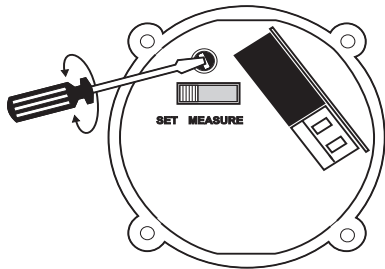
• Unscrew and remove the rear panel and gasket seal to access the MEASURE/SET switch.
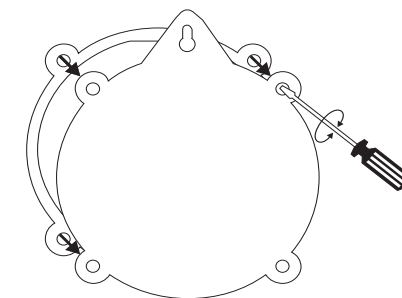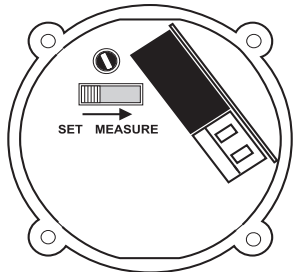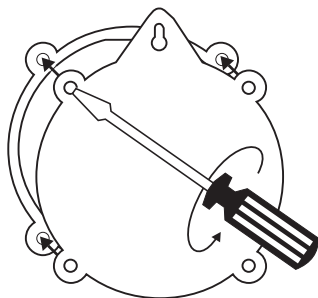
- Move the switch to the left (SET Mode).

- With a small screwdriver adjust the setpoint trimmer to display the desired value in the 0 to 50ºC or -20 to 20ºC range (based on the model).

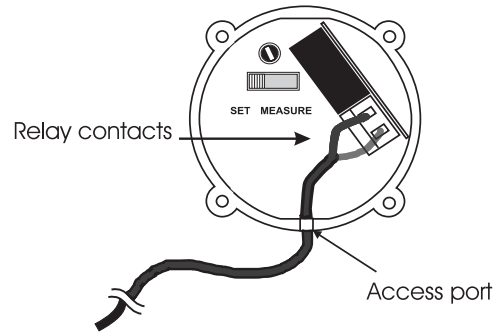- Make sure the switch is moved back to the right (MEASURE Mode).

- Replace the rear panel and the gasket, ensuring the unit is properly closed.

- To utilize the relay function open the casing as explained for setpoint calibration.

  After wiring close the casing properly. The relay wires should pass through the access hole.

Relay contacts

Access port

- Whenever the temperature reading reaches the setpoint (considering the hysteresis), the alarm LED blinks and relay is activated.

HI 150

5.0 ºC
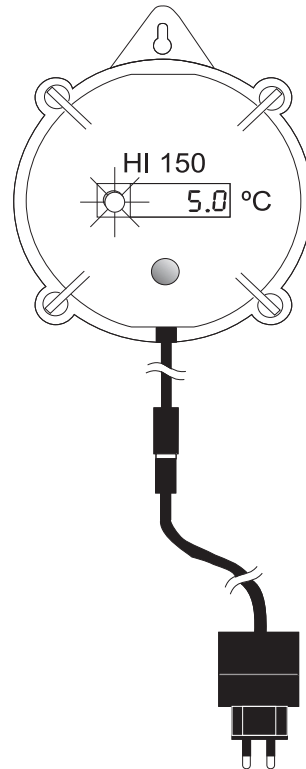
HI 150-00/10 thermometer is warranted for one year against defects in workmanship and materials when used for their intended purpose and maintained according to instructions. **The sensor are warranted for a period of one year also.** This warranty is limited to repair or replacement free of charge.

Damages due to accident, 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. 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 Number from the Customer Service department and then send it with shipment costs prepaid. When shipping any instrument, make sure it is properly packaged for complete protection.

Hanna Instruments reserves the right to modify the design, construction and appearance of its products without advance notice.

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 interferences to radio and TV equipment.

The metal band at the end of the probe is sensitive to electrostatic discharges. Avoid touching this metal band at all times.

During operation, ESD wrist straps should be worn to avoid possible damage to the probe by electrostatic discharges.

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

To avoid electrical shock, do not use these instruments when voltages at the measurement surface exceed 24 VAC or 60 VDC.

Use plastic beakers to minimize any EMC interferences.

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

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