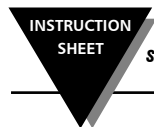


**HH804
HH804U
DUAL INPUT RTD DIGITAL THERMOMETER**



M4730/0410

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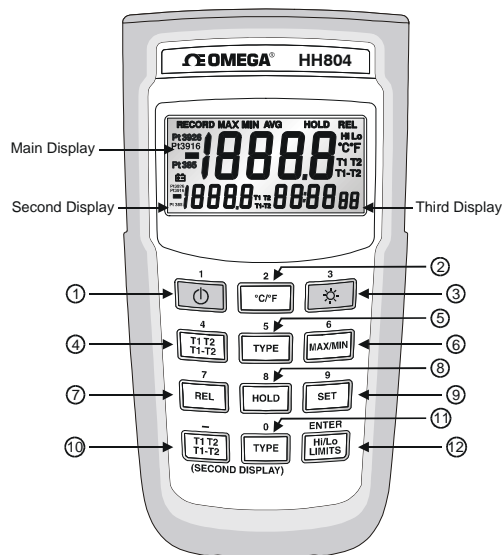
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INTRODUCTION

This instrument is a 4½ digit, compact-sized portable digital thermometer designed to use external 100Ω Platinum RTD as temperature sensor. Temperature indication follows Reference Temperature/Resistance Tables (Pt385 for European Curve, Alpha=.00385. Pt3926 for American Curve, Alpha=.003926. Pt3916 for Japan Curve, Alpha=.003916.)

SAFETY INFORMATION

It is recommended that you read the safety and operation instructions before using the thermometer.

WARNING
To avoid electrical shock, do not use this instrument when working voltages at the measurement surface over 24V AC or DC.

WARNING
To avoid damage or burns, do not make temperature measurement in microwave ovens.

SPECIFICATIONS

ELECTRICAL
Temperature Scale: Celsius or Fahrenheit user-selectable
Measurement Range:
Pt385(100Ω) -200°C to 800°C, (-328°F to 1472°F)
Pt3916/Pt3926(100Ω) -200°C to 630°C, (-328°F to 1166°F)
Resolution: 0.1°C or 0.2°F
Accuracy:
Accuracy is specified for operating temperatures over the range of 18°C to 28°C (64°F to 82°F), for 1 year, not including RTD probe error.
±(0.05% rdg + 0.2°C) on °C scale
±(0.05% rdg + 0.4°F) on °F scale
Temperature Coefficient:
0.1 times the applicable accuracy specification per °C from 0°C to 18°C and 28°C to 50°C (32°F to 64°F and 82°F to 122°F).
Input Protection:
24V dc or 24V ac rms maximum input voltage on any combination of input pins.
Maximum Differential Common Mode Voltage (Maximum Voltage between T1 and T2 during measurement):
1 volt.
Reading Rate: 1 time per second.
Input Connector:
Accepts for RTD 3 wires or 4 wires subminiature 4-Prong type connectors (flat blades spaced 7.9mm, center to center).

ENVIRONMENTAL

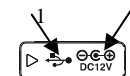
Ambient Operating Ranges:
0°C to 50°C (32°F to 122°F) <80% R.H.
Storage Temperature:
-20°C to 60°C (-4°F to 140°F) <70% R.H.

GENERAL

Display: 4½ digit liquid crystal display (LCD) with maximum reading of 19999.
Overload: “----.” or “OL” is display.
Battery: 1.5V x 4 PCS (SIZE AAA) UM-4 R03.
Battery Life: 200 hours typical with carbon zinc battery.

Reading Rate: 1 time per second.
Auto power off: 30 minutes, press power key to resume operation.
Dimensions: 160mm(H) x 83mm(W) x 38mm(D).
Weight: Approx. 260g including batteries.
Wire Communication Protocol:
19200 baud rate. (HH804U)

External Connections: (HH804U)
1. USB Port
2. DC power JACK(12V)



OPERATING INSTRUCTIONS

1. “⏻” Power Button
The “⏻” key turns the thermometer on or off. In the SET mode cannot be powered off. Exit SET mode to power off.
APO function mode
Press “⏻” power key for more than 6 seconds to disable the auto-power function. The display will show “APO OFF”.

2. °C/°F Selecting the Temperature Scale (Main display)

Reading the main displayed in either degrees Celsius(°C) or degrees Fahrenheit(°F). When the thermometer is turned on, it is set to the temperature scale that was in use when the thermometer was last turned off. To change the temperature scale, press the “°C/°F” key.

3. “☀” Display Back-Light
Press the “☀” key to turn on or turn off the Back-Light.

4. “T1 T2/T1-T2” Main display Input Selection
The input selection indicates which input is selected for main display; T1 probe, T2 probe or the difference between the two probes (T1-T2). When the thermometer is turned on, it is set to T1, when main display input selected T1, then T1 input can select alternate of probe by pressing Pt385/Pt3926/Pt3916 key switch.

5. “TYPE”(Pt385/Pt3926/Pt3916) Input RTD Probe Select (only Main display)
The “TYPE” key switches the T1 input to select the Pt385, Pt3926 or Pt3916 RTD probe as input, when main display input selected T1. When the thermometer is turned on, it is set to the probe selected that was in use when the thermometer was last turned off.

6. “MIN/MAX” with Time record mode (only Main display)
Press “MIN/MAX” key to enter the MIN MAX Recording mode, (displays the Maximum reading with time, Minimum reading with time and Average reading stored in record mode). In this mode the automatic power-off feature is disabled and “⏻” key, “°C/°F” key, “REL” key, “SET” key, “Hi/Lo Limits” key and main display “T1 T2 T1-T2” key, “TYPE” key are disabled. The beeper emits a tone when a new minimum or maximum value is recorded.
Press “MIN/MAX” key to cycle through the MAX, MIN and AVG readings. If an overload is recorded, the averaging function is stopped. In this mode, press the “HOLD” key to stop the recording of readings, all values are held, press again to restart recording.

