MAX MODE

Press the MAX key to enter the MAX mode. The thermometer then records and updates the maximum values and the MAX annunciator appears on the display. Press the MAX key again to exit the MAX recording mode.
In the MAX mode, press HOLD key to stop the recording, press HOLD again to resume recording.

BACKLIGHT MODE

Press the Backlight key to turn on the LCD backlighting function. The LCD backlighting will auto-off after the Backlight key is released approximately 5 seconds.

TC (TEMPERATURE COMPENSATOR) – CHECKING MODE

Press and hold the “Tc” key to enter the temperature compensator-checking mode. The thermometer will display inside temperature.

OPERATOR MAINTENANCE

WARNING
TO AVOID POSSIBLE ELECTRICAL SHOCK, DISCONNECT THE THERMOCOUPLE CONNECTORS FROM THE THERMOMETER BEFORE REMOVING THE COVER

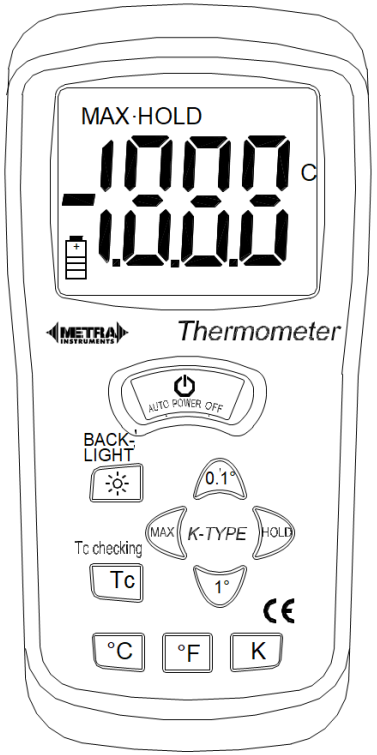
BATTERY REPLACEMENT

The battery symbol appears on the lower right of the LCD when the 9V battery needs to be replaced. Replace the 9V battery as follows:

1. Turn the meter off and disconnect the temperature probe.
2. Remove the rubber holster that surrounds the entire meter by pulling it over the top of the meter.
3. Remove the small Phillips head screw on the rear of the meter.
4. Open the battery compartment and replace the 9V battery.
5. Re-assemble the meter before operating.

OPERATING INSTRUCTIONS

DIGITAL THERMOMETER
Ref. No. 650.235



INTRODUCTION

This instrument is a portable 3,5 digits, compact-sized digital thermometer designed to use external K-type thermocouple as temperature sensor. Temperature indication follows National Bureau of Standards and IEC584 temperature/voltage tables for K-type thermocouples. One K-type thermocouples is supplied with the thermometer.

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 voltages at the measurement surface exceed 24v ac or 60v dc.

WARNING

To avoid damage or burns. Do not make temperature measurements in microwave ovens.

CAUTION

Repeated sharp flexing can break the thermocouple leads. To prolong lead life, avoid sharp bends in the leads, especially near the connector.
The ⚠ symbol on the instrument indicates that the operator must refer to “Input protection” in this manual.

SPECIFICATIONS ELECTRICAL

Temperature Scale:	Celsius (°C), Fahrenheit (°F) or Kelvin (K) user-selectable
Measurement Range:	-50°C to 1300°C, -58°F to 2000°F, 223K to 2000K
Resolution:	1°C or 1°F, 0.1°C or 0.1°F, 1 K
Accuracy:	Accuracy is specified for operating temperatures over the range of 18°C to 28°C and 64°F to 82°F, for 1 year, not including thermocouple error.
	±2°C ..... -50°C to 0°C
	±4°F..... -58°F to 32°F
	±5K..... 223K to 273K
	±(0.5% rdg+1°C) ..... 0°C to 1000°C
	±(0.8% rdg+1°C) ..... 1000°C to 1300°C
	±(0.5% rdg+2°F) ..... 32°F to 2000°F
	±(1.0% rdg+2K) ..... 273K to 2000K
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:	60V dc or 24V rms ac maximum input voltage on any combination of input pins.
Reading rate:	2.5 times per second.
Input Connector:	Accepts standard miniature thermocouple connectors (flat blades spaced 7.9mm, center to center).

ENVIRONMENTAL

Ambient Operating Range:	0°C to 50°C (32°F to 122°F)
Storage Temperature:	-20°C to 60°C (-4°F to 140°F)
Relative Humidity:	0% to 80% (0°C to 35°C) (32°F to 95°F)
	0% to 70% (35°C to 50°C) (95°F to 122°F)

GENERAL

Display:	3,5 digit liquid crystal display (LCD) with maximum reading of 1999
Battery:	Standard 9V battery (NEDA 1604, IEC 6F22)
Dimensions:	162 mm (H) x 76 mm (W) x 38.5 mm (D)
Weight:	210 g

OPERATING INSTRUCTIONS

Select the temperature scale.
Readings are displayed in either degrees Celsius (°C), degrees Fahrenheit (°F) or degrees Kelvin (K). 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 on °C, °F or K key.
Select the display resolution.
The thermometer allows two choices of resolution:

High resolution:	0.1°C or 0.1°F
Low resolution:	1°C or 1°C

OVERLOAD DISPLAY (1)

The digital display will indicate 1 when the input exceeds the measurement range selected.
If measuring above 199.9°, change the resolution to 1°. Be certain to seat the thermocouple connector properly and that the leads are not broken.

HOLD MODE

Press the HOLD key to enter the Data Hold mode, the “HOLD” annunciator is displayed. When HOLD mode is selected, the thermometer held the present readings and stops all further measurements.
Press the HOLD key again cancels HOLD mode, causing the thermometer to resume taking measurements.