



# **User Instructions**

#### **RECOMMENDED OPERATION:**

The TL1-W is a modified field version of our successful TL1-A thermometer. It features a rugged frame for reinforcement and is now designed to power off after 20 minutes of operation but can be used in continuous operation mode if desired. The TL1-W can be used anywhere a precision glass stem thermometer or other type thermometer is used.

#### **ARROWS:**

The Arrows on the left side of the screen will show you at a glance as to whether the reading is increasing, decreasing or has stabilized. Intuitively the Up Arrow symbolizes an increasing temperature, Down Arrow a decreasing temperature and no arrows a stabilized status.

#### LOW BATTERY:

The instrument will display a warning "Lo BAtt" if the battery needs to be changed.

#### **BATTERY REPLACEMENT PROCEDURE:**

Ensure that the instrument is off. Remove the top cover and carefully replace the batteries with two "AAA" type alkaline batteries making sure the batteries seat properly in the holder.

### **CALIBRATION:**

Calibration service is available from ThermoProbe Inc. and authorized distributors. Call ThermoProbe for requirements if you wish to do onsite calibration.

## **ERROR CODES:**

Two error codes have been established to provide the user information concerning the temperature sensor.

- Err Lo Short Circuit or Under Range
- Err Hi Open Circuit or Over Range

"Err Lo" - When this happens, one of two situations exists. In normal operation this represents a below range reading. The temperature being read is below the measurable specified range. If the sensor is not exposed to temperatures below the specified operating range it is possible that the sensor or the connection to the circuit board is short-circuited. Moisture on the circuit board may cause this condition.

"Err Hi" - Represents an over range reading, meaning the temperature at the sensor has risen above the measurable specified limit of the unit. Another possibility for this reading is a discontinuity in the sensor circuit. This may occur as a result of a broken sensor wire at the circuit board or damaged sensor.

On/Off button used to access the following operations:



- Single press turns instrument on
- Hold and release to:
  - Enable backlight feature
  - Power off
  - Disable "auto off"

Operation	Menu	Annunciator
One quick push	Powers ON	
Hold and Release when display reads "LigHt"	Turns on Backlight For 10 seconds	"LigHt"
Hold and Release when display reads "oFF"	Power OFF	"oFF"
Hold and Release when display reads "conn"	Continuous Operation	"oFF"

Function button used to access the following operations:



- Lowest Reading (min)
- Highest Reading (max)
- Average Reading
- °F <-> °C
- Change display resolution

Operation	Function (f)	Annunciator
One quick push	Lowest Reading (min) Average Reading Highest Reading (max)	"L" "A" "H"
Hold and Release when display reads "C-F"	°F <-> °C	"C-F"
Hold and Release when display reads "dEC"	0.X <-> 0.XX	"dEC"

Note: As soon as the TL1-W is turned on, the minimum, maximum and average data is continuously updated.

## **AUTHORIZED REPAIR:**

It is recommended that service beyond the scope of this article be presented to ThermoProbe, Inc. or one of its authorized distributors.