

2. Press the SILENCE ALM button. Pressing the SILENCE ALM button will silence the alarm, the alarm will not sound again until the temperature being measured has returned to an in-range condition and then goes to an alarm condition.

#### **VIEWING ALARM EVENT VALUE DATE & TIME**

When the thermometer achieves and alarm condition, the date and time for the most recent alarm condition is stored into memory. The most recent alarm event achieved is stored for each probe (P1/P2) independently. To view the most recent alarm event:

1. Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.
2. Slide the DISPLAY switch to the ALARM position. The display will show the current temperature and the low/high alarm set value.
3. Press the EVENT DATE TIME button, the most recent alarm set value that was achieved along with the time-of-day/date the alarm occurred will appear on the display.

**Note:** The value that appears at the top of the display while displaying the event date/time, is the alarm set value that caused the alarm condition, not the actual temperature achieved while in the alarm condition. If nothing appears on the display when the EVENT DATE TIME button is pressed, this indicates that either the unit has not achieved an alarm condition, or that the alarm set values have been changed for the selected probe since the unit last achieved an alarm condition.

4. To exit from the alarm event display mode, press and release the EVENT DATE TIME button, or simply do not press any button for fifteen (15) seconds.

#### **DISPLAY MESSAGES**

LL.LL appearing on the display indicates that the temperature being measured is outside of the temperature range of the unit, or that the probe is disconnected or damaged.

#### **BENCH STAND**

The unit is supplied with a bench stand that is a part of the back of the unit. To use the bench stand, locate the small opening at the bottom back of the unit. Place your fingernail into the opening and flip the stand out. To close the stand, simply snap it shut.

#### **ALL OPERATIONAL DIFFICULTIES**

If this unit does not function properly for any reason, replace the batteries with new high-quality batteries (see the "Battery Replacement" section). Low battery power can occasionally cause any number of "apparent" operational difficulties. Replacing the batteries with new fresh batteries will solve most difficulties.

#### **BATTERY REPLACEMENT**

Erratic readings, a faint display, no display, or a battery symbol appearing on the display are all indications that the batteries must be replaced. Remove the battery cover, located on the back of the unit, by sliding it down. Remove the exhausted batteries and replace them with two (2) new AAA alkaline batteries. Make certain to insert the new batteries with the proper polarity as indicated by the illustration in the battery compartment. Replace the battery cover.

Replacing the batteries will clear the minimum/maximum memories, the high/low alarm settings, and the time-of-day/date.

**TRACEABLE®  
EXTREME  
ACCURACY  
STANDARDS  
THERMOMETER  
INSTRUCTIONS**

## SPECIFICATIONS

Range: -58.00 to 158.00 °F  
-50.00 to 70.00 °C

Accuracy:  $\pm 0.05$  °C when within  $\pm 2$  °C of the tested standard point(s);  $\pm 0.3$  °C otherwise.\*\*

Resolution: 0.01°

Update Rate: 1 second (FAST)  
10 seconds (NORMAL)

Battery: 2 each AAA (1.5V)

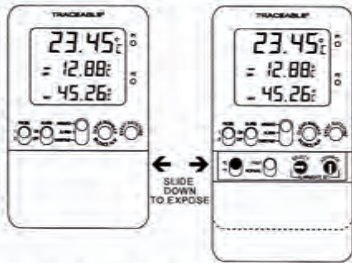
Probe Supplied: One (1) stainless steel, triple purpose probe for use in the P1 socket.

### Tested Points:

**Model 4241--** Test point of 0.00°C.  
**Model 4242--** Test point of 25.00°C.  
**Model 4243--** Test point of 37.00°C.

**Model 4244--** Test points of 0.00°C, 25.00°C and 37.00°C.

\*\*Thermometer is tested/certified with the supplied probe plugged in to the P1 socket. The specified accuracy is valid only when using the supplied probe in the P1 socket.



## SETTING THE TIME-OF-DAY/DATE

Slide the DISPLAY switch to the DATE TIME position, the display will show the time-of-day and date.

While in the time-of-day/date display, pressing the SELECT button will allow the date and time to be set. Pressing the SELECT button will cause the digits to flash in the following order Year→Month→Day→Hours→Minutes→12/24 hour time→No digits flashing (value set). Once the desired item is flashing, pressing the ADVANCE button will increment the value.

With the desired time-of-day/date appearing on the display, press the SELECT button until no digits are flashing on the display. The time-of-day/date will be saved.

**Note:** While in the setting mode, if no button is pressed for fifteen (15) seconds, the unit automatically exits from the setting mode.

## VIEWING THE TIME-OF-DAY/DATE

To view the time-of-day/date, slide the DISPLAY switch to the DATE TIME position.

## DISPLAYING °F OR °C

To display the temperature readings in Fahrenheit or Celsius, slide the °C/°F button to the desired position.

## DISPLAYING PROBE 1 OR PROBE 2

Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.

## MINIMUM AND MAXIMUM MEMORY

There are four points that are automatically recorded into memory:

- Minimum (MIN) Probe 1 (P1) Temperature Achieved with time-of-day and date achieved
- Maximum (MAX) Probe 1 (P1) Temperature Achieved with time-of-day and date achieved
- Minimum (MIN) Probe 2 (P2) Temperature Achieved with time-of-day and date achieved
- Maximum (MAX) Probe 2 (P2) Temperature Achieved with time-of-day and date achieved

## Minimum and maximum temperature memories

are **NOT programmable**. The minimum temperature recorded into memory is the minimum temperature achieved since the last time the memory was cleared. The maximum temperature recorded into memory is the maximum temperature achieved since the last time the memory was cleared. The minimum and maximum temperature memories are maintained over the period since the memory was cleared.

Minimum and maximum memories are recorded for both sensors regardless of the display mode.

## VIEWING MIN/MAX MEMORY

1. Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.
2. Slide the DISPLAY switch to the MIN MAX position. The display will show the current temperature and minimum/maximum memory for the selected probe.

## VIEWING MIN/MAX MEMORY DATE/TIME

1. Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.
2. Slide the DISPLAY switch to the MIN MAX position. The display will show the current temperature and minimum/maximum memory for the selected probe.
3. Press the EVENT DATE TIME button, the minimum temperature achieved by that probe along with the time-of-day/date the temperature was achieved will appear on the display (indicated by MIN and TIME appearing on the display).
4. Press the EVENT DATE TIME button a second time, the maximum temperature achieved by that probe along with the time-of-day/date the temperature was achieved will appear on the display (indicated by MAX and TIME appearing on the display).

**Note:** If no button is pressed for fifteen (15) seconds, the unit automatically returns to the current temperature display mode.

5. To exit from the memory display mode, press and release the EVENT DATE TIME button until MIN or MAX no longer appears on the display, or simply do not press any button for fifteen (15) seconds.

## CLEARING THE MINIMUM/MAXIMUM MEMORY

1. Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.
2. Slide the DISPLAY switch to the MIN MAX position. The display will show the current temperature and minimum/maximum memory for the selected probe.
3. Press the CLEAR MIN MAX button to clear the minimum and maximum memories for the probe being displayed.

## ALARMS

Both temperature sensor (P1/P2) alarm limits may be set in 0.1° increments. Probe 1 and Probe 2 alarm limits are set independent of each other.

With the alarm switch set to the ON position:

-The unit will sound an alarm and flash the corresponding LED (P1/P2) when the temperature measured is outside the alarm limits that have been set (equal to or lower than the low alarm set point, or equal to or greater than the high alarm set point).

-The alarm will sound regardless of which sensor is being displayed and regardless of the display mode. Example: If Probe 1 is being displayed and the DISPLAY switch is set to MIN MAX, but Probe 2 reaches an alarm condition, the alarm will sound and the P2 LED will flash.

## SETTING THE TEMPERATURE ALARM LIMITS

1. Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.
2. Slide the DISPLAY switch to the ALARM position. The display will show the current temperature and low/high alarm set points for the selected probe.
3. While in the alarm display mode, pressing the SELECT button will allow the alarm limits to be set.

Pressing the SELECT button will cause the digits to flash in the following order: Low Alarm 1st Digits→Low Alarm 2nd Digit→Low Alarm Decimal Digit→High Alarm 1st Digits→High Alarm 2nd Digit→High Alarm Decimal Digit→No digits flashing (value set).

4. Once the desired item is flashing, pressing the ADVANCE button will increment the value.
5. With the desired alarm set points appearing on the display, press the SELECT button until no digits are flashing on the display. The alarm settings will be saved.

**Note:** While in the setting mode, if no button is pressed for fifteen (15) seconds, the unit automatically exits from the setting mode.

## VIEWING THE TEMPERATURE ALARM LIMITS

1. Slide the PROBE switch to the desired position (1 or 2) to display the desired temperature sensor readings.
2. Slide the DISPLAY switch to the ALARM position. The display will show the current temperature and low/high alarm set points for the selected probe.

## ENABLE/DISABLE ALARMS

To enable the alarm to activate when a temperature measured is outside the alarm limits, slide the ALARM switch to the ON position.

When the alarm is enabled, both Probe 1 and Probe 2 alarm set points will be monitored. If either sensor reaches an alarm condition, the alarm will activate. It is not possible to enable the alarm for one sensor and disable the alarm for the other sensor.

To disable the alarm so that no alarm sounds when a temperature measured is outside the alarm limits, slide the ALARM switch to the OFF position.

## ALARM SOUNDING

With the alarm enabled, the unit will sound an alarm and the corresponding (P1/P2) red LED will flash when a temperature being measured is outside the alarm limits that have been set (equal to or lower than the low alarm set point, or equal to or greater than the high alarm set point). Until it has been acknowledged/silenced (see the 'Acknowledge/Silence An Alarm' section), the alarm will sound and corresponding (P1/P2) red LED will flash continuously for the first sixty (60) seconds. After 60 seconds, the alarm will sound and LED will flash for ten (10) seconds every minute.

If the alarm is sounding based on the low alarm limit and the probe temperature is being displayed, "LO ALM" will also flash on the display. If the alarm is sounding based on the high alarm limit and the probe temperature is being displayed, "HI ALM" will flash on the display.

The alarm will sound and corresponding LED will flash regardless of which sensor is being displayed and regardless of the display mode. Example: If Probe 1 is being displayed and the DISPLAY switch is set to MIN MAX, but Probe 2 reaches an alarm condition, the alarm will sound and the P2 LED will flash.

The unit will continue to alarm and flash the corresponding (P1/P2) red LED until the alarm has been acknowledged/silenced by either pressing the SILENCE ALM button or by sliding the ALARM switch to the OFF position (see the 'Acknowledge/Silence An Alarm' section). The unit will continue to alarm and flash the corresponding (P1/P2) red LED even if the temperature being measured returns to an in-range/non-alarm condition.

## ACKNOWLEDGE/SILENCE AN ALARM

While alarming, the alarm may be acknowledged/silenced in one of the following ways:

1. Slide the ALARM switch to the OFF position. Setting the ALARM switch to the OFF position will silence the alarm, but when it is switched back to the ON position, if the temperature being measured is still in an alarm condition, the alarm will sound. Setting the ALARM switch to the OFF position prevents any/all alarms from sounding.