

## SPECIFICATIONS

Range: -58.0 to 158.0 °F / -50.0 to 70.0 °C

Resolution: 0.1°

Update Rate: 10 seconds

Battery: 2 each AAA (1.5V)

Probe Supplied:

**Model 4306--** Supplied with dual bottle sensors and cables. Designed for use in refrigerators and freezers, the bottle sensors are filled with a patented nontoxic glycol solution that is GRAS (Generally Recognized As Safe) by the FDA (Food and Drug Administration) eliminating concerns about incidental contact with food or drinking water. The solution filled bottle simulates the temperature of other stored liquids. Velcro® and a magnetic strips are provided to mount the bottle to the inside of a refrigerator/freezer. The micro-thin probe cable permits refrigerator/freezer doors to close on it. **(Do not immerse bottle sensors in liquid).**

**Model 4307--** Supplied with dual standard probe sensors with cables. Designed for use in air and liquids, the sensor and cable may be completely immersed. Probe sensors may be mounted using the supplied suction cup holders.

## SETTING THE TIME-OF-DAY

1. Press and release the TIME/DATE button until the display shows the time-of-day (indicated by HR, MIN and SEC on the display).
2. Press and hold the TIME/DATE button for three (3) seconds (the hours digits will flash). Press the MODE button to advance the hours.
3. With the desired hours on the display, press the TIME/DATE button (the minutes digits will flash). Press the MODE button to advance the minutes.
4. With the desired minutes on the display, press the TIME/DATE button (the seconds digits will flash). Press the MODE button to advance the seconds.
5. With the desired seconds on the display, press the TIME/DATE button. The time-of-day will be saved.

**Note:** While in the setting mode, if no button is pressed for ten (10) seconds, the unit automatically exits from the setting mode.

## SETTING THE DATE

1. Press and release the TIME/DATE button until the display shows the date (indicated by Month, Date, and Year on the display).
2. Press and hold the TIME/DATE button for three (3) seconds (the Year digits will flash). Press the MODE button to advance the year.
3. With the desired year on the display, press the TIME/DATE button (the Month digits will flash). Press the MODE button to advance the month.
4. With the desired month on the display, press the TIME/DATE button (the Date digits will flash). Press the MODE button to advance the date.
5. With the desired date on the display, press the TIME/DATE button. The date will be saved.

**Note:** While in the setting mode, if no button is pressed for ten (10) seconds, the unit automatically exits from the setting mode.

## VIEWING THE DATE

To view the date, press the TIME/DATE button, the current date will appear on the display. After approximately ten (10) seconds the display will automatically return to the time-of-day display.

## DISPLAYING °F OR °C

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

## DISPLAYING SENSOR 1 OR SENSOR 2

Press the S1/S2 button to display the desired temperature sensor reading. The corresponding S1 or S2 indicator will appear at the top left corner of the display. When switching between sensors, the display will show "-- ." for approximately 2 seconds.

## MINIMUM AND MAXIMUM MEMORY

There are four points that are automatically recorded into memory:

- *Minimum (MIN) Sensor 1 (S1) Temperature Achieved with time-of-day and date achieved*
- *Maximum (MAX) Sensor 1 (S1) Temperature Achieved with time-of-day and date achieved*
- *Minimum (MIN) Sensor 2 (S2) Temperature Achieved with time-of-day and date achieved*
- *Maximum (MAX) Sensor 2 (S2) 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 THE MINIMUM/MAXIMUM MEMORIES

1. Press the S1/S2 button to display the desired temperature sensor.
  2. Press the MODE button, the minimum temperature achieved by that sensor along with the time-of-day the temperature was achieved will appear on the display (indicated by MIN on the display).
  3. To toggle the display between the time-of-day/date achieved, press the TIME/DATE button.
  4. Press the MODE button a second time, the maximum temperature achieved by that sensor along with the time-of-day the temperature was achieved will appear on the display (indicated by MAX on the display).
  5. To toggle the display between the time-of-day/date achieved, press the TIME/DATE button.
- Note:** If no button is pressed for ten (10) seconds, the unit automatically returns to the current temperature/time-of-day display mode.
6. To exit from the memory display mode, press and release the MODE button until MIN, MAX, LO, HI no longer appears on the display, or simply do not press any button for ten (10) seconds.

## CLEARING THE MINIMUM/MAXIMUM MEMORIES

**When clearing the min/max memory, all four memories (S1 Min/Max and S2 Min/Max) are cleared simultaneously, regardless of which sensor or memory value is being displayed.**

1. Press the MODE button to enter the memory display mode (indicated by MIN or MAX appearing on the display).
2. Press the CLEAR button to clear the temperature memories. The display will show all dashes and will then display the current probe temperature and time-of-day.

## ALARMS

Both temperature sensor (S1/S2) alarm limits may be set in 1° increments. Sensor 1 and Sensor 2 alarm limits are set independent of each other.

With the alarm enabled (🔔), the unit will sound an alarm 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. Example: If Sensor 1 is being displayed, but Sensor 2 reaches an alarm condition, the alarm will sound and the display will automatically change to display the Sensor 2 temperature.

## SETTING THE TEMPERATURE ALARM LIMITS

1. Press the S1/S2 button to display the desired temperature sensor.
2. Press the MODE button 3 times (LO will appear on the display).
3. Press and hold the SET button for three (3) seconds. The low alarm set point will flash on the display.
4. To set the low temperature alarm limit (LO), press the MODE button to advance the display until the desired low temperature is displayed. Press and hold the MODE button to rapidly advance the display.
5. With the desired low temperature alarm limit on the display, press the SET button (the high alarm limit (HI) will flash on the display).
6. To set the high temperature alarm limit (HI), press the MODE button to advance the display until the desired high temperature is displayed. Press and hold the MODE button to rapidly advance the display.

7. With the desired high temperature alarm limit on the display, press the SET button (the current temperature and time-of-day will appear on the display).

**Note:** While in the setting mode, if no button is pressed for ten (10) seconds, the unit automatically exits from the setting mode.

Repeat the above steps to set the second sensor's alarm limits.

#### VIEWING THE TEMPERATURE ALARM LIMITS





1. Press the S1/S2 button to display the desired temperature sensor.
2. Press the MODE button 3 times, the low temperature alarm limit will appear on the display (indicated by LO appearing on the display).
3. Press the MODE button again, the high temperature alarm limit will appear on the display (indicated by HI appearing on the display).
4. Press the MODE button a final time to return to the current temperature/time-of-day display mode.

#### Note:

1. If no button is pressed for ten (10) seconds, the unit automatically returns to the current temperature/time-of-day display mode.
2. The time-of-day displayed when viewing the LO/HI alarm limits is the current time-of-day and has no relationship to when an alarm condition was achieved. The unit does not record the time-of-day/date that the alarm condition was initially achieved.


Repeat the above steps to view the second sensor's alarm limits.

#### ENABLE/DISABLE ALARMS

To enable the alarm to activate when a temperature measured is outside the alarm limits, press and release the  button until "" appears on the display. Each successive press of the  button will enable () or disable the alarm.

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

#### ALARM SOUNDING

With the alarm enabled () the unit will sound an alarm and the 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). If the alarm is sounding based on the low alarm limit, "LO" will flash on the display. If the alarm is sounding based on the high alarm limit, "HI" will flash on the display.

The alarm will sound regardless of which sensor is being displayed. Example: If Sensor 1 is being displayed, but Sensor 2 reaches an alarm condition, the alarm will sound and the display will automatically change to display the Sensor 2 temperature.

The unit will continue to alarm and flash the corresponding "LO" or "HI" until the temperature being displayed is within the alarm limits. Once the temperature being displayed is within the alarm limits, the alarm will stop sounding and the corresponding "LO" or "HI" will no longer flash; however, the red LED will continue to flash to indicate an alarm condition has occurred. To stop the flashing LED, the LED must be manually stopped.

To silence an alarm manually, press any button. When manually silenced, the corresponding "LO" or "HI" will continue to flash on the display until the temperature is within the alarm limits. The red LED will also continue to flash until manually stopped.

To manually stop the flashing LED, once the temperature has returned to a non-alarm value, press and hold the CLEAR button for three (3) seconds.

#### RESET BUTTON

The RESET button, located on the back of the unit, may be used to simultaneously reset the memory and alarm limits for both sensors and reset the time-of-day and date. Pressing the RESET button has the same affect as removing the batteries from the unit.

To reset the unit, use a pointed object to press the RESET button. When the reset button is pressed, the following will occur:

- The display go blank.
- The display will show all segments for approximately 4 seconds.
- The minimum/maximum memory will be cleared for both sensors.
- The alarm limits for both sensors will be returned to the factory default value.
- The time-of-day and date will be cleared to 12:00:00 and 01/01/01.

#### 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 in the direction of the arrow. 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 has the same affect as pressing the RESET button. (See the "RESET BUTTON" section.)

#### WARRANTY, SERVICE, OR RECALIBRATION

For warranty, service, or recalibration, contact:

#### CONTROL COMPANY

Control Company is ISO 9001:2008 Quality-Certified by DNV and ISO/IEC 17025:2005 accredited as a Calibration Laboratory by A2LA.



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Woburn, MA 01801

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