

RT8100MAT MAX/MIN Recording Thermometer

Instrument Operation

The RT8100MAT is a two-channel alarm thermometer that records the date and time of Min and Max readings for both channels. The left display shows current temperature information on the selected channel. The right display shows time and date information.

When the reading is higher or lower than the programmed alarm limit, the alarm on the RT8100MAT will sound, HI or LOW will flash, and the red light will blink. Pressing any button will stop the audible alarm. The HI or LO indicator will flash until the reading is within limits. The red light will continue to blink to indicate that an alarm has been triggered.

Setup and Installation

1. Open the battery cover and install the batteries observing the correct polarity. Replace the battery cover.
2. Select the desired temperature unit (°F or °C) using the slide switch on the back.
3. Fully extend the probe wires.
4. Attach the thermometer using the magnets on the back or the flip out desk stand.
5. Attach the sensors to the desired location with the suction cups or sensor holders.
6. Peel the clear protective sheet from the display.

Time and Date Display

1. Press TIME/DATE to switch the display to show the current time or date.
2. The date display will switch back to time display if idle for 10 seconds.

Set the Time

1. In time display mode, press and hold SET for about 3 seconds to enter time setting and the hour digits will flash.
2. Press \blacktriangle to adjust the digits to current hour.
3. Press SET once to confirm and start minute setting; the MIN digits will flash.
4. Press \blacktriangle to adjust the digits to current minute.
5. Press SET once to confirm and start second setting; the SEC digits will flash.
6. Press \blacktriangle to adjust the digits to current second.
7. Press SET again to finish time setting and return to normal display.

Set the Date

1. In date display mode, press and hold SET for about 3 seconds to enter date setting and the year digits will flash.
2. Press \blacktriangle to adjust the digits to the last two digits of current year.
3. Press SET once to confirm year setting and then start month setting; the Month digits will flash.
4. Press \blacktriangle to adjust the digits to current month.
5. Press SET once to confirm month setting and then start date setting; the Date digits will flash.
6. Press \blacktriangle to adjust the digits to current date.
7. Press SET again to finish date setting and return to normal display.

Switch Channel Display

Press S1/S2 once to switch the display for channel S1 or S2 reading.

Minimum / Maximum Reading Memory

1. Press MODE once to display the minimum measured reading of the selected channel and the time display will show when this minimum reading was recorded.
2. Press TIME/DATE will show the date for the minimum measured reading.
3. Press MODE once to display the maximum measured reading and the time display will show when this maximum reading was recorded.
4. Press TIME/DATE will show the date for the maximum measured reading.
5. Press MODE three times to return to normal display.
6. To clear the minimum and maximum reading memories, press CLEAR once during displaying the minimum or maximum reading. **All readings of both channels and time stamps will be reset to current readings and time.**
7. Clear the memory once before taking new minimum or maximum readings.

Low / High Alarm Setting

1. Select the desired channel, S1 or S2.
2. Press MODE three times to enter low / high alarm setting and the LO icon will be on.
3. Press and hold SET for about 3 seconds and the LO digits will flash.
4. Press \blacktriangle to input the desired low limit.
5. Press SET to confirm low alarm limit and start high alarm limit setting. The HI icon will be on and the digits will flash.
6. Press \blacktriangle to input the desired high limit.
7. Press SET to confirm high alarm limit and finish the setting.
8. The alarm will sound when the reading is lower or higher than the alarm limit. Press any button to stop the alarm sound. The HI or LO icon will continue to flash until the reading is within the limits.

Alarm On / Off

Press \blacktriangle to switch alarm limit off or on.

Alarm Indicator

When the reading exceeds the alarm limit the red alarm LED will continue flashing to indicate that an alarm has been triggered until the alarm is cleared. Press and hold CLEAR for about 3 seconds to cancel.

Note

1. Do not operate the thermometer in the environmental temperature lower than 0°C / 32°F or higher than 50°C / 122°F otherwise incorrect readings or damage to the thermometer may result.
2. If the thermometer is not in use for a long period of time then remove the batteries from battery compartment to avoid battery leakage.

Specifications

Measuring Range	-58 to 158°F / -50 to 70°C
Display Accuracy	±1.8°F / 1°C
Display Resolution	0.1°
Display Reading Update	10 seconds
Program Alarm Resolution	1°
Time Accuracy	±3 seconds per day
Time and Date Display Format	12-hour and month/day/year format
Effective Calendar Period	2000 to 2099
Battery	1.5 volt, type AAA or equivalent x 2 pieces (included)
Probe Cord Length	39.4 inches / 1,000 mm.
Display Size	3.5 (W) x 0.63 (H) inches 90 (W) x 16 (H) mm
Product Size	5.3 (W) x 1.77 (H) x 0.9 (D) inches 135 (W) x 45 (H) x 23 (D) mm
Included Accessories	1) 1.5 volt, type AAA battery x 2 pieces 2) Suction cups x 2 pieces



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Made in China