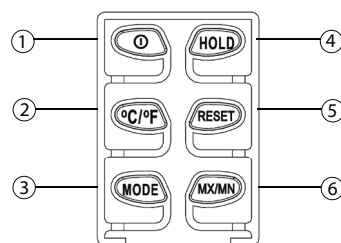


Introduction

Thank you for purchasing your REED 8706 Psychrometer / Thermo-Hygrometer. Please read the following instructions carefully before using your instrument. By following the steps outlined in this manual your meter will provide years of reliable service.

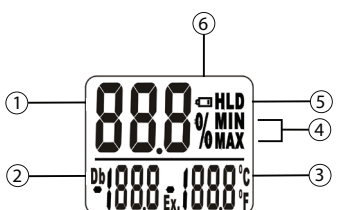
Instrument Description

1. Power Button
2. Unit of Measure Button
3. MODE Button
4. HOLD Button
5. RESET Button
6. MX/MIN Button



Display Description

1. Relative Humidity Measurement Reading
2. Dry Bulb Measurement Reading
3. External Probe Temperature Reading
4. Maximum and Minimum Indicator
5. Data Hold Indicator
6. Battery Status Indicator



Features

- Simultaneous display of %RH, temperature and dew point or wet bulb
- Optional external probe (87P6) for contact/differential temperature measurement
- Max/Min/Avg readings
- Fast response
- Data Hold Function
- User selectable °F/°C
- Low battery indicator and auto shut-off

Specifications

Temperature

Measuring Range	-4 to 158°F (-20 to 70°C)
Accuracy	±1.0°F (0.6°C)
Resolution	0.1°F/°C

Contact Temperature (Probe sold separately)

Measuring Range	-4 to 122°F (-20 to 50°C)
Accuracy	±1.0°F (0.6°C)
Resolution	0.1°F/°C

Dew Point

Measuring Range	-109 to 122°F (-78 to 50°C)
Resolution	0.1°F/°C

Wet Bulb

Measuring Range	-69 to 122°F (-21 to 50°C)
Resolution	0.1°F/°C

Humidity

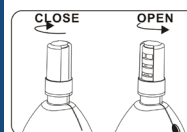
Measuring Range	0-100% RH
Accuracy	±3% RH
Resolution	0.1% RH

General Specifications

Display	LCD
Data Hold	Yes
Min	Yes
Max	Yes
Auto Shut-off	Yes (5 mins/off)
Low Battery Indicator	Yes
Power Supply	2 AAA Batteries
Product Certifications	CE
Operating Temperature	-4 to 158°F (-20 to 70°C)
Storage Temperature	14 to 140°F (-10 to 60°C)
Operating Humidity Range	10-80%
Dimensions	7 x 1.9 x 1" (179 x 48 x 25mm)
Weight	3.3 oz (95g)

Operating Instructions

WARNING: Failure to open the sensor protection cap will result in inaccurate readings. Do not plug in an external probe while the meter is on. Doing so may cause an ER 5 error. If the error occurs, press the **RESET** button to clear it.



Power ON/OFF

Press the **ⓘ** button to turn the power on or off. The meter will perform a short self-test when turned on.

How to Take Air Temperature and Humidity Measurements

1. Hold the probe in the area you want to test.
2. Wait for the readings to stabilize.
3. Relative Humidity will be shown on the top display.
4. Press the **MODE** button to switch the bottom-left display between Air Temperature (Db) and Dew Point (DP).
5. The bottom-right display will show the Wet Bulb (WB) temperature.

Using an External Type K Probe

1. Plug in the probe while the meter is off.
2. Power the meter on.
3. Press the **RESET** button to change the reading on the bottom-right display. This button will switch between External (EX) type K temperature and Wet Bulb (Wb).

Selecting temperature units of measure (C/F)

Press and hold the **°C/°F** button to switch between Celsius and Fahrenheit.

Data Hold

1. Press the **HOLD** button once to freeze the current readings on the screen. HLD will appear in the top-right corner.
2. To resume normal operation and see live readings, simply press the **HOLD** button again.

MAX/MIN

1. To see the minimum readings: Press and hold the **MN/MX** button until MIN appears on the display.
2. To see the maximum readings: Press and hold the **MN/MX** button again until MAX appears on the display.
3. To return to the current readings: Press and hold the **MN/MX** button until MIN or MAX disappears.
4. To clear the stored readings: Press and hold the **RESET** or **MN/MX** button for at least two seconds.

WARNING: To avoid an error code ("Ex"), make sure the probe is firmly plugged in before turning on the meter. Do not unplug the probe while checking the MIN/MAX values.

Auto-Power Off

The meter automatically turns off after 5 minutes to save battery. To disable this function:

1. While the meter is off, press and hold the **HOLD** button.
2. Press the **ⓘ** button while still holding the **HOLD** button.
3. Release both buttons when the letter "n" appears on the display.
4. The meter is now in "Non-Sleep Mode" and will not automatically power off.

Calibration Procedure

WARNING: To exit the calibration procedure without saving data, press the **ⓘ** button at any point before step 4. The Auto Power Off function is disabled during calibration. For the most accurate results, perform calibration at 23 °C. If the reading is outside of 75.3±0.5% at the end of the process, the calibration has failed. Refer to the troubleshooting section.

1. While the meter is OFF, place the sensor probe into the 33% salt bottle.
2. Press and hold the **ⓘ** and **°C/°F** buttons for more than one second to enter calibration mode. The display will flash 32.8% and then show a stable reading after approximately 30 minutes. The flashing will stop when this step is complete.
3. Move the sensor to the 75% salt bottle. Press and hold the **MN/MX** button for more than one second to begin the second part of the calibration. The display will flash 75.3%.
4. After approximately 30 minutes, the flashing will stop. The calibration is now complete, and the data has been saved.

Battery Replacement

When the low battery icon appears on the LCD display, the batteries will need to be replaced.

- Open the battery cover on the back of the meter.
- Remove the old batteries.
- Insert two new AAA batteries, ensuring they are installed with the correct polarity.
- Insert the battery cover back into place.

Product Support

If you have any questions on your product, please contact your authorized REED distributor or REED Instruments Customer Service by phone at 1-877-849-2127 or by email at info@REEDInstruments.com.

Please visit www.REEDInstruments.com for the most up-to-date manuals, datasheets, product guides and software.

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