

Electronic Thermo-Hygrometer

MODEL: EM913R

USER'S MANUAL

INTRODUCTION

Thank you for purchasing the Oregon Scientific thermo-hygrometer. This thermo-hygrometer has been designed specifically with performance and ease of use in mind. As with all Oregon Scientific products, this thermo-hygrometer is made to the highest quality standards using precision electronic components and should give you many years of trouble free use.

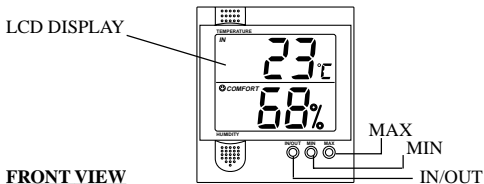
Please read the User's Guide carefully before use to ensure you get the best out of your new thermo-hygrometer.

FEATURES

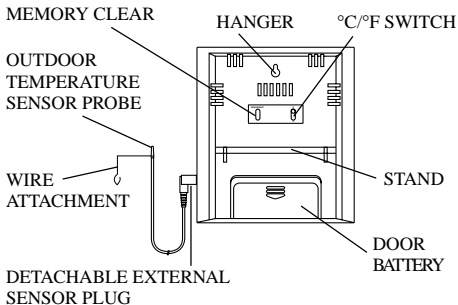
- Electronic Thermo-Hygrometer with large size display.
- Display shows indoor or outdoor temperature and indoor relative humidity simultaneously.
- Comfort indicators to show indoor condition on both temperature and humidity factors.
- Memory function to recall and display the previous maximums and minimums reading of temperatures and relative humidity.
- Temperature compensation feature assures accurate relative humidity measurement without affecting by temperature change.
- Detachable external sensor probe.

- User selectable °C or °F temperature units of measure.
- Wall mounting and table standing feature.

DESCRIPTION OF PARTS



FRONT VIEW



BACK VIEW

INSTALLING AND REPLACING OF BATTERY

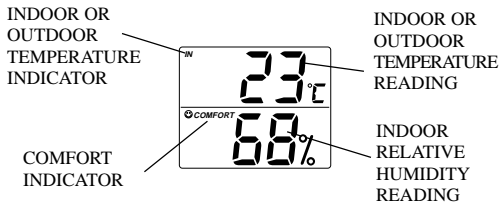
The Thermo-Hygrometer uses one piece UM-4 or 'AAA' size battery(1.5V DC)

Follow these steps to install or replace the battery

1. Slide the battery door in the direction of the arrow
2. Insert the battery as indicated by the polarity symbols (+ and -) marked inside the battery compartment.
3. Replace the battery door.

Notes: After you install or replace the battery, it takes time for sampling once again both the temperature and humidity data. The display will show full segment for 1 to 2 seconds, then shows the updated temperature and humidity reading.

Display and Functions



GENERAL OPERATION

This Thermo-Hygrometer will measure / display indoor temperature (the air temperature measured by the sensor built inside the unit) or outdoor temperature (the air temperature measured by the detachable external sensor probe) and indoor relative humidity (the relative humidity measured by the sensor built inside the unit)

It can be set to display the indoor/outdoor maximum or minimum temperature and indoor relative humidity recorded.

Note:

When the outdoor temperature is over the measuring range, flashing digit '-50' (°C) / '-58' (°F) appears on the display (below -50 °C / -58 °F) or '70' (°C) / '158' (°F) appears on the display (above +70 °C / +158 °F)

When the indoor temperature is over the operating range, fades out on the display (below 0 °C / +32 °F) or blacks out on the display (above +50 °C / +122°F).

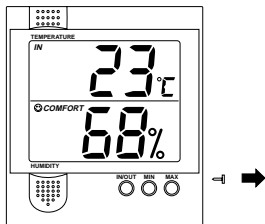
This Thermo-Hygrometer will continue to record the indoor / outdoor maximum, indoor / outdoor minimum temperature and humidity changes, whether displaying current, maximum or minimum temperature readings.

HOW TO SELECT THE INDOOR OR OUTDOOR TEMPERATURE DISPLAY

The unit can display the indoor temperature or outdoor temperature reading. For changing display between indoor and outdoor by pressing the [IN/OUT] button to update the temperature display.

Note :

The **'IN'** indicator will be displayed whenever the temperature display relates to indoor temperature and the **'OUT'** indicator will be displayed whenever the temperature display relates to outdoor temperature.



1. Remove the protecting cap from the sensing port.
2. Plug the external probe into the sensor jack and push the **[IN / OUT]** button to toggle to the outdoor display. The **'OUT'** indicator appears from outdoor to indoor.

Push the **[IN / OUT]** button once to toggle the reading to the indoor display. The **'IN'** indicator is displayed.

(It's up to end user's desire to remove or keep the external sensor probe to the main unit.)

HOW TO RECALL / CLEAR THE STORED TEMPERATURE AND HUMIDITY MEMORIES

The Thermo-Hygrometer will automatically record the maximum / minimum temperature and relative humidity reading. You can recall / clear those reading as follows:




Maximum	Button to press	Displays
Current temperature/humidity		23 °C 68 %
Recall the maximum temperature/humidity	Press [MAX] button once	MAX 28 °C MAX 78 % (“MAX” indicator, maximum temperature and humidity displayed)
In case, clear the maximum temperature / humidity	Press [MEMORY CLEAR] button once	MAX 23 °C MAX 68 % (display update as the current temperature and humidity reading)
Return to current temperature / humidity	Press [MAX] button once again, while at maximum temperature and humidity display	23 °C 68 % (“MAX” indicator disappear)

Minimum	Button to press	Displays
Current temperature / humidity		23 °C 68 %
Recall the minimum temperature/ humidity	Press [MIN] button once.	MIN 18 °C MIN 58 % ("MIN" indicator, minimum temperature and humidity displayed)
In case, clear the minimum temperature / humidity	Press [MEMORY CLEAR] button once	MIN 23 °C MIN 68 % (display update as the current temperature and humidity)
Return to current temperature / humidity	Press [MIN] button once again, while at minimum temperature and humidity display	23 °C 68 % ("MIN" indicator disappear)

You may like to clear the memory occasionally, so to record the maximum / minimum at a specified period.

HOW TO READ THE RELATIVE HUMIDITY AND COMFORT INDICATORS

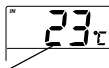
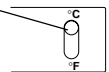
The unit shows the indoor relative humidity and such reading is temperature compensated. At the same time, the comfort indicators – **COMFORT**, **WET** or **DAY** will tell you if the current indoor environment is comfortable, too wet or too dry. The comfort indicators will appear on the display when the following conditions are satisfied :

Indicator Displays on the unit	Temperature Range (indoor)	Humidity Range	Shows that the Current indoor Environment
COMFORT 	20°C to 25°C (68 °F to 77°F)	40% RH to 70%RH	Idea range for both relative humidity and temperature
WET 	Full Range	Over 70% RH	Contain excess moisture
DRY 		Below 40% RH	Contain inadequate moisture
No Indicator	Below 20°C (68 °F) or Higher than 25°C (77 °F)	40%RH to 70%RH	No comment

HOW TO SELECT THE TEMPERATURE UNITS OF MEASURE

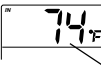
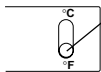
The switch on the back of the Thermo-Hygrometer allows you to select between degrees Celsius and Fahrenheit. Set the switch to °C for selecting Celsius and to °F for selecting Fahrenheit.

°C' POSITION



READING IN °C

°F' POSITION



READING IN °F

LOW BATTERY SIGNAL INDICATION

If the voltage of the battery becomes low, the 'BATT' indicator will be display at the top right corner of the display . Replace the battery when the 'BATT' indicator is displayed.

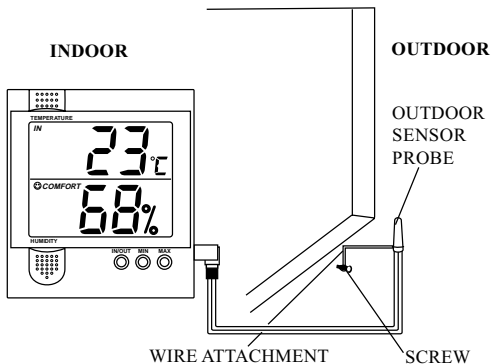
HOW TO REST THE UNIT

If you Thermo-Hygrometer doesn't operate properly, take out the battery from the unit for 4 to 5 seconds, then reinstall the battery.

MOUNTING THE OUTDOOR TEMPERATURE SENSOR PROBE

You can mount the outdoor temperature sensor probe by following steps :

1. Drive a screw into the wall at the location you choose for the sensor probe ,to fix the wire attachment to the wall.
2. Route the sensor probe cable through a window .
3. Locate sensor probe into wire attachment.



Note :

Locate the sensor probe away from direct sunlight and heavy precipitation.

FREE STAND AND WALL MOUNTING

Table Stanting :

Flip out the plastic stand on the rear of the Thermo-Hygrometer for table standing. Stand the Thermo-Hygrometer on a flat surface.

Wall Mount:

Follow these steps to mount the Thermo-Hygrometer on a wall.

1. Drive a screw into the wall at the location you choose until the head extends 3.5 mm from the wall.
2. Locate into the hanger slot on the back of the Thermo-Hygrometer until it locks into place.

Notes:

For accurate measurement, you should mount the Thermo-Hygrometer in an area where air can flow freely around it.

MAINTENANCE

When handled properly, this unit is engineered to give you years of satisfactory service. Here are a few product care instructions:

1. Do not immerse the unit in water. If the unit comes in contact with water, dry it immediately with a soft lint-free cloth.
2. Do not clean the unit with abrasive or corrosive materials. Abrasive cleaning agents may scratch the plastic parts and corrode the electronic circuit.
3. Do not subject the unit to excessive: force, shock, dust, temperature, or humidity. Such treatment may result in malfunction, a shorter electronic life span, damaged batteries, or distorted parts.

4. Do not tamper with the unit's internal components. Doing so will terminate the unit's warranty and may cause damage. The unit contains no user-serviceable parts.
5. Only use new batteries as specified in this instruction manual. Do not mix new and old batteries as the old batteries may leak.
6. Read this instruction manual thoroughly before operating the unit.

SPECIFICATIONS

Operating temperature	: 0°C to 50°C (32°F to +122°F)
Temperature measuring range (unit)	: 0°C to 50°C (32°F to +122°F)
(probe)	: -50°C to 70°C (-58°F to +158°F)
Temperature resolution (unit/probe)	: 1°C(2°F)
Humidity measuring range	: 25 to 95%RH at 25°C (77°C)
Resolution of humidity	: 1%RH
Sensor wire length	: 3 meter
Dimension	: 117 x 107 x 20.5 mm (H x W x D)
Weight	: 174 g (Without battery)

CUSTOMER ASSISTANCE

Should you require assistance regarding this product and its operation, please contact our customer care department at 541-868-8205 or via email at helpme@oscientific.com.

WARRANTY

This product is warranted to be free of manufacturing defects for a period of 1 year from date of retail purchase. Defective product should be directed to the place of retail purchase for exchange. Should this not be possible, contact our customer care department for assistance and a return material authorization. No returns may be made without a return authorization. Please retain your retail receipt as you may be asked to provide a copy of it for proof of date purchased.

This warranty does not cover product subjected to abuse, misuse, accidental damage or tampering.

CAUTION

- The content of this manual is subject to change without further notice.
- Due to printing limitation, the displays shown in this manual may differ from the actual display.
- The contents of this manual may not be reproduced without the permission of the manufacturer.