Advanced Weather Station
with Wireless Sensor Set
& Mounting Package
Model: WMR100 / WMR100A

USER MANUAL

CONTENTS

INTRODUCTION

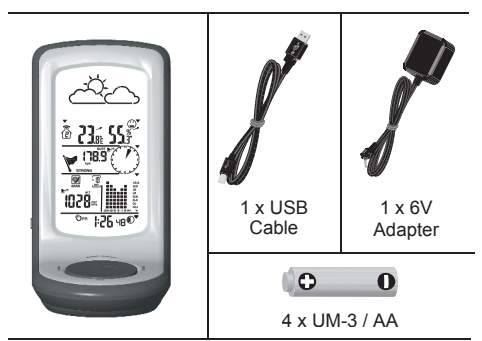Thank you for selecting the Oregon Scientific™ Weather Station (WMR100 / WMR100A).

The base station is compatible with other sensors. To purchase additional sensors, please contact your local retailer.

Sensors with this logo 3.0 are compatible with this unit.

NOTE Please keep this manual handy as you use your new product. It contains practical step-by-step instructions, as well as technical specifications and warnings you should know about.

PACKAGING CONTENTS

1 x USB Cable	1 x 6V Adapter
4 x UM-3 / AA	
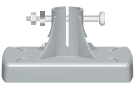
The "Virtual Weather Station" software and manual are available for download at this address:

http://www2.oregonscientific.com/assets/software/wmr100.exe

WIND SENSOR

1 x Wind Vane

1 x Top Pole

1 x Wind Sensor with "T-Shaped" Connector

1 x Wind Direction Indicator

2 x Round U-Shaped Bolts	2 x Rectangular Base Legs		
3 x Pins	3 x Tension Strings	1 x Mid-Pole	1 x Bottom Pole
4 x Screws (Type A)	2 x Screws (Type B)		
4 x UM-3 / AA	1 x Cone-Shaped End	1 x Plastic Support Base	

RAIN GAUGE

1 x Rain Collector	1 x Filter	2 x UM-3 / AA
4 x Screws (Type C)	6 x Washers	

OVERVIEW

1. **MEMORY / 🔔 ON/OFF:** Read the max / min memory record; activate / deactivate alarms
2. **ALARM:** View and set alarms for barometer, temperature, humidity, rainfall and wind speed
3. **MODE:** Switch between the different display modes / settings
4. **Rotating dial:** Rotate left or right to increase or decrease the values of the selected reading
5. **SELECT:** Switch between the different areas

1. AC adapter socket
2. **RESET:** Returns unit to default settings
3. **SEARCH:** Searches for sensors or for the radio-controlled clock signal
4. **UNIT:** Selects unit of measurement
5. Battery compartment
6. WMR100 only – **EU / UK** radio signal
7. USB connector

LCD DISPLAY
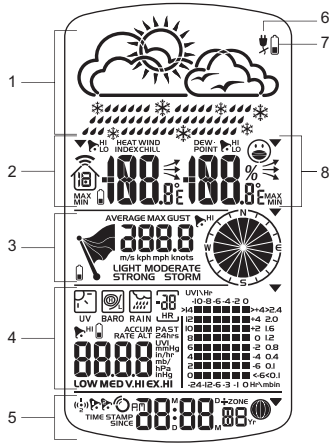
1. Weather Forecast Area
2. Temperature / Heat Index / Wind Chill Area
3. Wind Speed / Wind Direction Area
4. UVI / Barometer / Rainfall Area
5. Clock / Alarm / Calendar / Moon Phase Area
6. AC adapter icon - displays when unplugged
7. Low battery icon for base station
8. Humidity / Dew Point Area

Temperature / Heat Index / Wind Chill Area
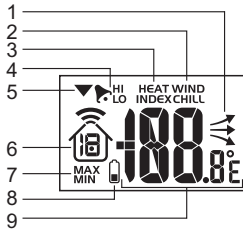
1. Temperature trend
2. Wind Chill level - temperature is showing
3. Heat Index level - temperature is showing
4. HI / LO temperature, HI Heat Index and LO Wind Chill alarms are set
5. Selected area icon
6. Indoor / Outdoor channel temperature and humidity is displayed
7. MAX / MIN temperature
8. Outdoor sensor battery is low
9. Temperature (°C / °F)

Wind Speed / Wind Direction Area
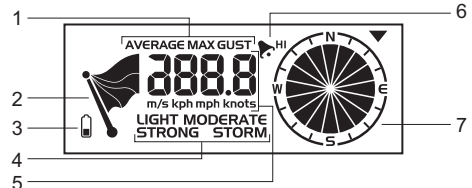
1. Wind speed levels: AVERAGE / MAX / GUST
2. Wind speed level indicator
3. Outdoor wind sensor battery is low
4. Wind speed level description
5. Gust wind or wind speed reading (m / s, kph, mph or knots)
6. HI gust wind alarm is set
7. Wind direction display

UVI / Barometer / Rainfall Area
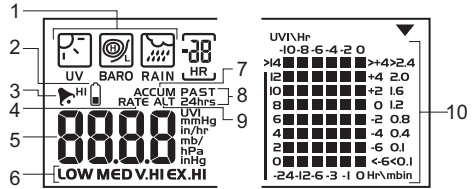
1. UVI / barometer / rainfall readings is showing
2. Outdoor UV / rain sensor battery is low
3. UV / barometer / rainfall alarm is set
4. Rain rate is showing
5. UVI / barometric pressure (mmHg, inHg or mb / hPa) / rainfall readings (in / hr or mm / hr)
6. UVI level indicator
7. Accumulated rainfall is showing
8. Past 24hrs rainfall is showing
9. Altitude is showing
10. UVI / barometric pressure / rainfall historical bar chart display

Clock / Alarm / Calendar / Moon Phase Area
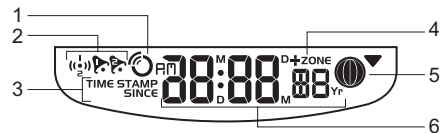
1. Clock radio reception
2. Alarm 1 and 2 are displayed and set
3. Timestamp is displayed
4. Offset time zone
5. Moon phase
6. Time / date / calendar

Humidity / Dew Point Area
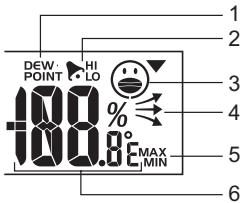
1. Dew point level - Temperature is showing
2. HI / LO humidity and Dew Point alarms are set
3. Comfort levels
4. Humidity trend
5. MAX / MIN humidity
6. Humidity reading

WIND SENSOR
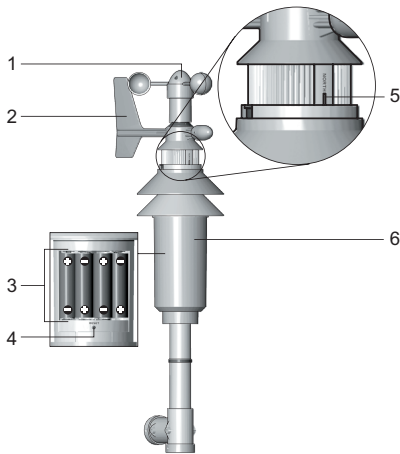
1. Wind vane measuring the wind speed
2. Wind direction sensor
3. Battery compartment
4. **RESET** hole
5. North indicator
6. Plastic sleeve protecting the batteries

RAIN GAUGE

Base and funnel
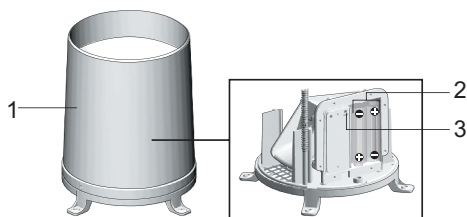
1. Rain gauge
2. Battery compartment
3. **RESET** button

Tipping bucket rain gauge
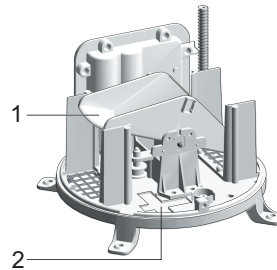
1. Funnel
2. Level indicator

GETTING STARTED

SET UP REMOTE WIND SENSOR

The wind sensor can take 3 readings:

• The wind speed and directions
• The outdoor temperature (Channel 1 only)
• The outdoor relative humidity (Channel 1 only)

The sensor is battery operated and is capable of transmitting data to the base station wirelessly within an approximate operating range of 100 meters (328 feet).

NOTE For best results, ensure that the wind direction indicator on the wind sensor points to the North to enable an accurate reading. The sensor also should be positioned in an open area away from trees or other obstructions.

To set up the wind sensor main body on the steel pole:

1. Assemble the wind direction pointer on the top of the wind sensor.
2. Use the screw (Type B) to fix.
3. Assemble the wind vanes on the top of the wind pointer.
4. Use the screw (Type B) to fix.
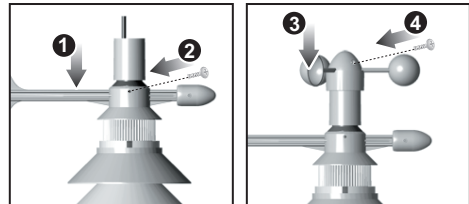
5. Hold the wind sensor upright and rotate the protective sleeve to the left to unlock.

6. Slide the sleeve down to open the battery compartment.

7. Insert batteries (4 x UM-3 / AA) in the compartment, matching the polarity (+ / -) and press **RESET**.

8. Slide the protective sleeve up to close the compartment.

9. Rotate the sleeve to the right to lock.
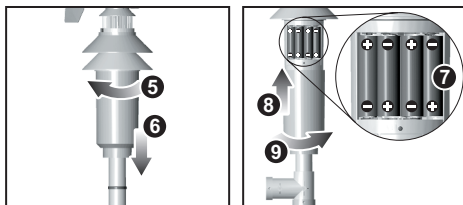
To set up the steel pole support:

1. Assemble the "cone shape" guiding end with the bottom steel pole.

2. Screw the guiding end clockwise at the bottom of the pole.

3. Remove the cover hole from the plastic base.
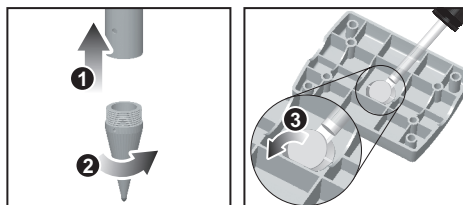
4. Insert the plastic base onto the steel pole until the screw hole aligns with the support.

5. Use the screw that is already attached on the base, with the washers and bolts to fix.

6. Use the guiding end to start inserting the steel pole at a perpendicular angle into the ground.

   WARNING Make sure that there are NO electric cables / power lines, gas / water pipes in the area where you are placing the steel pole. Do not place the pole into a hard rocky type of ground as it may bend or break the pole. It should be inserted into soft soil.

7. Place a wooden block on the top of the pole. With a hammer, hit the wooden block to insert the pole at a perpendicular angle to the ground until reaching the base.
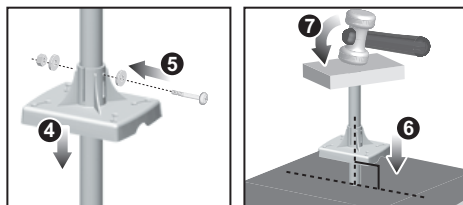
8. Assemble the mid-pole on top of the bottom pole.

9. Use the screw to fix.

10. Assemble the top pole to the mid-pole.

11. Use the screw to fix.
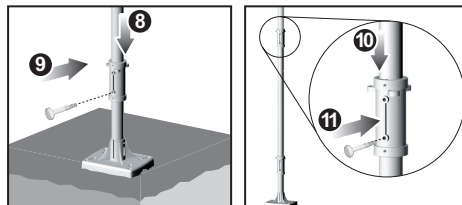
12. Assemble the wind sensor main body on top of the pole. Use the screw (Type A) to fix.

13. Open the battery compartment.

14. Using a compass, rotate the wind direction part until the **NORTH** indicator points to the "North".

15. Press **RESET**.

16. Close the battery compartment.
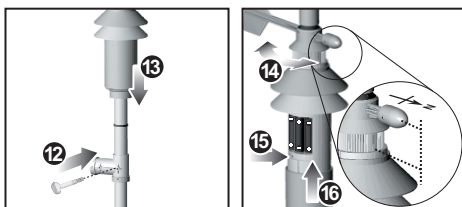
17. Insert the 2 rectangular base legs into the ground to firmly fix the pole.

18. To keep the pole stable, use the 3 pins to firmly fix the tension strings to the ground.
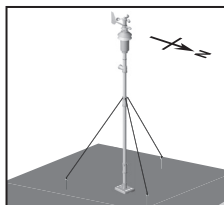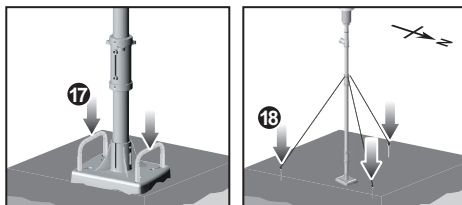
To set up the wind sensor main body on an existing pole:

1. Remove the screw that fixes the plastic connector at the end of the top pole.

2. Slide down the plastic connector.

3. Detach plastic base from the bundled steel pole if previously installed.

4. Assemble it at the end of the top pole using the screw that is already attached on the base, with the washers and bolts to fix.
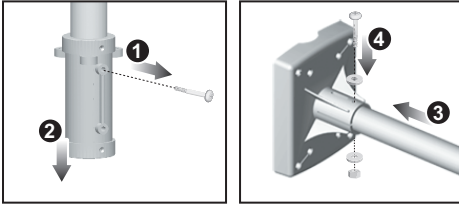
5. Mount the plastic base on an existing pole.

6. Using the 2 U-bolts, secure the base on the pole using the 4 washers and bolts.

7. Assemble the wind sensor main body horizontally to the pole.

8. Use the screw to fix.

9. Open the battery compartment.
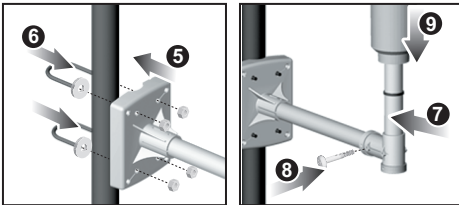
10. Using a compass, rotate the wind direction part until the **NORTH** indicator points to the "North".

11. Press **RESET**.

12. Close the battery compartment.

13. Rotate the sleeve to the right to lock.
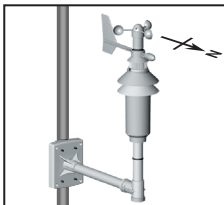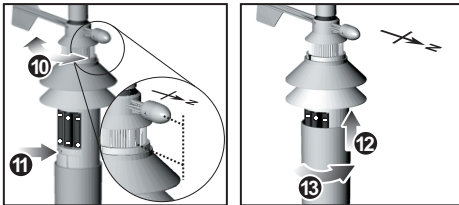
SET UP REMOTE RAIN GAUGE

The rain gauge collects rain and takes readings of the total rainfall over a period of time. The sensor can remotely transmit data to the base station.

The base station and rain gauge should be positioned within effective range: about 100 meters (328 feet) in an open area.

The rain gauge should be mounted horizontally about 1 meter (2-3 feet) from the ground in an open area away from trees or other obstructions to allow rain to fall naturally for an accurate reading.

To set up the sensor:

1. Slide the cover up and insert the batteries (2 x UM-3 / AA), matching the polarity (+ / -).
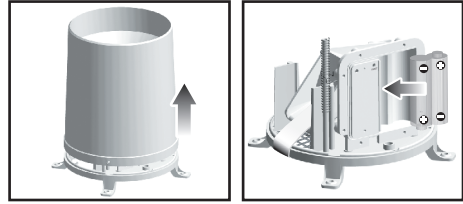
2. Remove the tape.
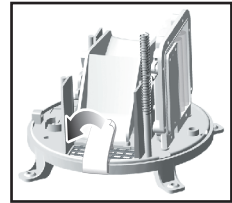
3. Put a few drops of water on the cross at the base of the funnel to check the horizontal level.
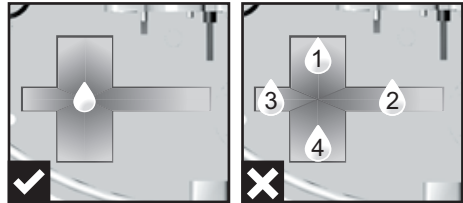
If water remains on 1-4, the gauge is not horizontal.

4. If necessary, adjust the level using the screw.
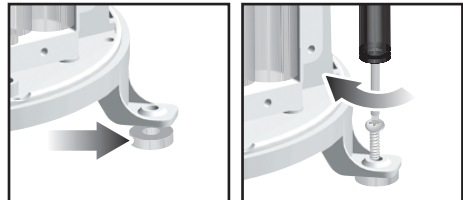
NOTE For best results, ensure the base is horizontal to allow maximum drainage of any collected rain.

SET UP BASE STATION

NOTE Install batteries in the remote sensor before the base station matching the polarities (+ and -).
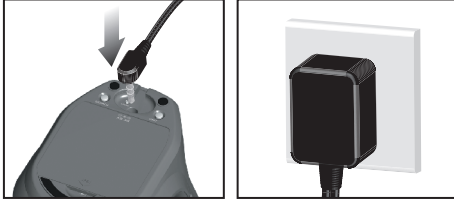
For continuous use, please install the AC adapter. The batteries are for back-up use only.

NOTE Please make sure the socket-outlet is installed near the equipment and is easily accessible.
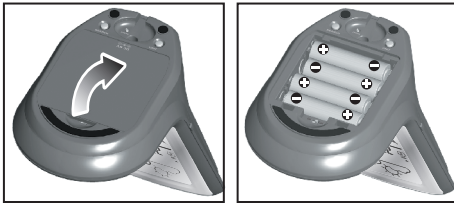
Install the base station batteries (4 x UM-3 / AA) matching the polarity + and -. Press **RESET** after each battery change.

NOTE Do not use rechargeable batteries. It is recommended that you use alkaline batteries with this product for longer performance.

The battery icon indicator may appear in the following areas:

AREA	MEANING
Weather Forecast Area	Battery in the base station is low. will show when AC adapter is disconnected.
Temperature / Heat Index / Wind Chill Area	The displayed channel indicates the outdoor sensor for which battery is low.
Wind Speed / Wind Direction Area	Battery in the wind sensor is low.
UVI / Barometer / Rainfall Area	Battery in the UV / Rain sensor is low.

BASE STATION

CHANGE DISPLAY / SETTING

To change the display and settings, use the following buttons on the rotating dial: **SELECT**, **MEMORY / ON/OFF**, **MODE** and **ALARM**.
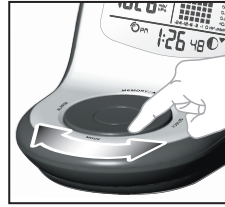
In addition, the **UNIT** and **SEARCH** buttons located at the bottom of the base station allows pre-setting of the remote sensor channels and the measurement units for display.

TIP To exit from the setting mode, push any button. Alternatively, the base station will automatically exit after 30 seconds.

CLOCK RECEPTION

This product is designed to synchronize its calendar clock automatically once it is brought within range of a radio signal:

WMR100:

• DCF-77 generated from Frankfurt, Germany for Central Europe

• MSF-60 generated from Rugby, England

The radio signal range is 1500 km (932 miles).

WMR100A:

• WWVB-60 generated from the atomic clock in Fort Collins, Colorado

The radio signal range is 3219 km (2000 miles).

WMR100 only - slide the **EU / UK** switch to the appropriate setting based on your location. Press **RESET** whenever you change the selected setting.

The reception icon will blink when it is searching for a signal. If the radio signal is weak it can take up to 24 hours to get a valid signal reception.

 indicates the status of the clock reception signal.

ICON	MEANING
	Time is synchronized. Receiving signal is strong
	Time is not synchronized. Receiving signal is weak

To enable (and force a signal search) / disable the clock radio reception (clock synchronization):

1. Press **SELECT** to navigate to the Clock / Calendar / Alarm Area. will show next to the Area.

2. Press and hold **SEARCH**.

 appears when it is enabled.

NOTE For best reception, the base station should be placed on a flat, non-metallic surface near a window in an upper floor of your home. The antenna should be placed away from electrical appliances and not be moved around when searching for a signal.

CLOCK / CALENDAR

To manually set the clock:

(You only need to set the clock and calendar if you have disabled the clock radio reception.)

1. Press **SELECT** to navigate to the Clock Area. ▼ will show next to the Area.
2. Press and hold **MODE** to change the clock setting. The setting will blink.
3. Rotate the dial left or right to decrease or increase the setting value.
4. Press **MOD**E to confirm.
5. Repeat steps 1 to 5 to set the time zone offset hour (+ / -23 hours), 12 / 24 hour format, hour, minute, year, date / month format, month, date and weekday language.

 NOTE If you enter +1 in the time zone setting, this will give you your regional time plus 1 hour.

 NOTE The weekday is available in English, French, German, Italian or Spanish.

To change the clock display:

1. Press **SELECT** to navigate to the Clock Area. ▼ will show next to the Area.
2. Press **MODE** to toggle between:
- Clock with Seconds
- Clock with Weekday
- Calendar

CLOCK ALARM

The clock has 2 alarms that can be set to sound with a beep.

ICON	MEANING
	Alarm 1 or 2 is displayed
	Alarm 1 or 2 is activated
No icons	No alarm is set

To set an alarm:

1. Press **SELECT** to navigate to the Clock Area. ▼ will show next to the Area.
2. Press **ALARM** to toggle between alarm 1 and alarm 2 display.
3. When you've selected the alarm you wish to change, press and hold **ALARM**. The alarm setting will blink.
4. Rotate the dial left or right to change the setting.
5. Press **ALARM** to confirm.

To activate / deactivate an alarm:

1. Press **SELECT** to navigate to the Clock Area. ▼ will show next to the Area.
2. Press **ALARM** to toggle between alarm 1 and alarm 2 .
3. Press **MEMORY / ON/OFF** to activate or deactivate the alarm. or appears when the alarm is activated.

MOON PHASE

The Calendar must be set for this feature to work (see Clock / Calendar section).

ICON	DESCRIPTION
	New moon
	Waxing crescent
	First quarter
	Waxing gibbous
	Full moon
	Waning gibbous
	Third quarter
	Waning crescent

AUTO SCANNING FUNCTION

To activate the outdoor temperature and humidity auto-scan function:

1. Press **SELEC**T to navigate to the Temperature or Humidity Area. ▼ will show next to the Area.
2. Press and hold **MODE** to activate auto-scan. The temperature and humidity display will scroll from indoor to ch1 through to ch10.
3. Press **MEMORY / ON/OFF** or **MODE** or **ALARM** to stop the auto-scan.

 NOTE Channel 1 is used for the outdoor temperature and humidity sensor in the remote wind sensor. Additional temperature and humidity sensors can use other channels.

WEATHER FORECAST

The weather display in the top part of the screen shows the current weather and the weather forecast for the next 12-24 hours within a 30-50 km (19-31 mile) radius.

Weather Forecast Area

ICON	DESCRIPTION
	Sunny
	Partly cloudy

ICON	DESCRIPTION
	Cloudy
	Rainy
	Snowy

TEMPERATURE AND HUMIDITY

The weather station displays indoor and outdoor readings for:

1. Current, minimum and maximum temperatures and relative humidity.
2. Comfort level indicator and trend line.
3. Heat index, wind chill and dew point level.

The weather station can connect up to 10 remote sensors.

 NOTE Channel 1 is dedicated for outdoor temperature and humidity in the wind sensor.

 shows which remote sensor's data you are viewing. appears when indoor data is displayed.

The timestamp records the date and time when storing the temperature and humidity readings in memory.

To select the temperature measurement unit:

Press **UNIT** (at the bottom of the base station) to select **°C / °F**.

 NOTE The unit of all temperature related displays will be changed simultaneously.

To view readings from indoor / outdoor sensors (1-10) for temperature and humidity:

1. Press **SELECT** to navigate select the Temperature or Humidity Area. will show next to the Area.
2. Rotate the dial left or right to select the channel.

To view minimum and maximum temperature or humidity:

1. In the Temperature or Humidity Area, press **MODE** repeatedly to cycle through the readings for:
- Current Temperature
- Heat Index
- Wind Chill
- Dew Point
- Humidity

2. For each of the above readings, press **MEMORY / ON/OFF** repeatedly to toggle respectively between:
- Current / MAX / MIN temperature
- Current / MAX heat index
- Current / MIN wind chill
- Current / MAX / MIN dew point
- Current / MAX / MIN humidity

The timestamp is displayed accordingly in the Clock Area.

To clear the memories and timestamp for the temperature, heat index, wind chill, humidity and dew point readings:

In the Temperature or Humidity Area, press and hold **MEMORY / ON/OFF** to clear the readings.

To change the high / low temperature, heat index, wind chill, humidity and dew point alarms:

1. In the Temperature or Humidity Area, press **ALARM** repeatedly to toggle between high / low alarms for temperature, heat index, wind chill, humidity and dew point readings.
2. Press and hold **ALARM** to enter the alarm setting.
3. Rotate the dial left or right to set the desired values.
4. Press **ALARM** to confirm the setting.

To activate / deactivate the high / low temperature, heat index, wind chill, humidity and dew point alarms:

1. In the Temperature or Humidity Area, press **ALARM** repeatedly to select the desired alarm.
2. Press **MEMORY / ON/OFF** to activate or deactivate the alarm.

 NOTE The dew point advises at what temperature condensation will form. The wind chill factor is based on the combined effects of temperature and wind speed.

TEMPERATURE AND HUMIDITY TREND

The trend lines are shown next to the temperature and humidity readings. The trend is shown as follows:

TREND ICON	DESCRIPTION
	Rising
	Steady
	Falling

COMFORT LEVEL

The Comfort Zone icon indicates how comfortable the climate is based on current temperature and humidity measurements:

ICON	DESCRIPTION
	Comfortable
	Neutral
	Uncomfortable

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WIND DIRECTION / SPEED

The base station provides wind speed and wind direction information.

To read the wind direction find the compass point the ▼ is pointing to.

The timestamp records the date and time when storing the wind speed readings.

To select the wind speed unit:

Press **UNIT** (at the bottom of the base station) to switch between:

• Metres per second (m / s)

• Kilometers per hour (kph)

• Miles per hour (mph)

• Knots (knots)

388.8
m/s kph mph knots

The wind level is shown by a series of icons:

ICON	LEVEL	DESCRIPTION
	N/A	<2 mph (<4km/h)
	Light	2-8 mph (3~13 km/h)
	Moderate	9-25 mph (~14-41 km/h)
	Strong	26-54 mph (~42-87 km/h)
	Storm	>55 mph (>88 km/h)

To display the AVERAGE and GUST wind:

1. Press **SELECT** to navigate to the Wind Speed and Wind Direction Area. ▼ will show next to the Area.

2. Press **MODE** to toggle between AVERAGE and GUST wind readings.

To display the maximum speed and direction for gust wind:

In the Wind Speed and Wind Direction Area, press **MEMORY / ON/OFF** to toggle between wind speed / MAX GUST wind readings. The timestamp is displayed accordingly in the Clock Area.

To clear the memories and timestamp for the wind readings:

In the Wind Speed and Wind Direction Area, press and hold **MEMORY / ON/OFF** to clear the readings.

To change the high gust wind speed alarm:

1. In the Wind Speed and Wind Direction Area, press and hold **ALARM** to enter the high gust wind alarm setting.

2. Rotate the dial left or right to set the desired values.

3. Press **ALARM** to confirm the settings.

To activate / deactivate the high gust wind speed alarm:

1. In the Wind Speed and Wind Direction Area, press **ALARM** repeatedly to select the desired alarm.

2. Press **MEMORY / ON/OFF** to activate or deactivate the alarm.

UVI / BAROMETER / RAINFALL

The weather station works with one UV sensor and one rain gauge. The station is capable of storing and displaying the hourly history data for the last 10 hours of UV index, and 24 hours of rainfall and barometric pressure readings.

UVI	BAROMETER	RAINFALL
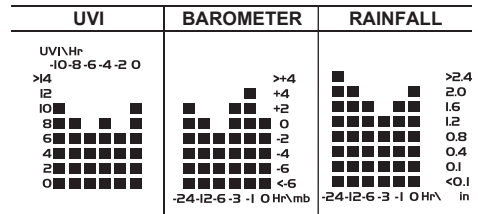
The bar chart display shows the current and historical data for the UV index, barometric pressure and rainfall readings.

To view the UV / Barometer / Rainfall readings:

1. Press **SELECT** to navigate to the UV / Barometer / Rainfall Area. ▼ will show next to the Area.

2. Press **MODE** to toggle between UVI / Barometer / Rainfall readings. The corresponding icon will appear:

UVI	BAROMETER	RAINFALL
UV	BARO	RAIN

3. Rotate the dial left or right to view the historical data for the selected area. The corresponding historical readings are showing.

NOTE The number shown in the HR icon indicates how long ago each measurement was taken (e.g. 2 hours ago, 3 hours ago, etc.).

To select the measurement unit for the barometer or rainfall readings:

In the UV / Barometer / Rainfall Area, press **UNIT** (at the bottom of the base station) to switch between:

• For barometer: Millimeters of mercury **(mmHg)**, inches of mercury **(inHg)**, millibars per hectopascal **(mb / hpa)**.

• For rainfall: Millimeters **(mm)**, inches **(in)**, inches per hour **(in / hr)** or millimeters per hour **(mm / hr)**.

UV INDEX

The UV index levels are as follows:

UV INDEX	DANGER LEVEL	ICON
0-2	Low	LOW
3-5	Moderate	MED
6-7	High	HI
8-10	Very high	V.HI
11 and above	Extremely high	EX.HI

To change the high UV alarm:

1. In the UV / Barometer / Rainfall Area and UVI reading display. Press and hold **ALARM** to enter the high UV alarm setting.
2. Rotate the dial left or right to set the desired values.
3. Press **ALARM** to confirm the settings.

To activate / deactivate the high UV alarm:

1. In the UV / Barometer / Rainfall Area and UVI reading display, press **ALARM** repeatedly to select the desired alarm.
2. Press **MEMORY / ON/OFF** to activate or deactivate the alarm.

BAROMETER

To change the barometer alarm:

1. In the UV / Barometer / Rainfall Area and Barometer reading display. press and hold **ALARM** to enter the Barometer alarm setting.
2. Rotate the dial left or right to set the desired values.
3. Press **ALARM** to confirm the settings.

To activate / deactivate the barometer alarm:

1. In the UV / Barometer / Rainfall Area and Barometer reading display, press **ALARM** repeatedly to select the desired alarm.
2. Press **MEMORY / ON/OFF** to activate or deactivate the alarm.

To set the altitude level compensation for the Barometer readings:

1. In the UV / Barometer / Rainfall Area and Barometer reading display. Press and hold **MODE** to enter the altitude setting.
2. Rotate the dial left or right to set the desired values.
3. Press **MODE** to confirm the setting.

RAINFALL

To view the current hour, accumulated or last 24 hours rainfall history:

In the UV / Barometer / Rainfall Area and Rainfall reading display, press **MEMORY / ON/OFF** repeatedly to toggle between current, past 24 hours or accumulated rainfall. The clock line will change to display the start time when the accumulated rainfall is displayed. The icon SINCE appears and the start date is showing.

To toggle between rainfall & rain rate display:

In the UV / Barometer / Rainfall Area and Rainfall reading display, press and hold **MODE**.

To reset the accumulated rainfall and timestamp:

In the UV / Barometer / Rainfall Area and Rainfall reading display. Press and hold **MEMORY / ON/OFF** to reset the accumulated rainfall to '0' and to set the timestamp to current date and time.

To change the HI rainfall rate alarm:

1. In the UV / Barometer / Rainfall Area and Rainfall reading display, press and hold **ALARM** to enter the Rainfall alarm setting.
2. Rotate the dial left or right to set the desired values.
3. Press **ALARM** to confirm the settings.

To activate / deactivate the HI rainfall rate alarm:

1. In the UV / Barometer / Rainfall Area and Rainfall reading display, press **ALARM** repeatedly to select the desired alarm.
2. Press **MEMORY / ON/OFF** to activate or deactivate the alarm.

WEATHER ALARMS

Weather alarms are used to alert you of certain weather conditions. Once activated, the alarm will go off when a certain criterion is met.

Alarms can be set for:

- Indoor and outdoor high/low temperatures, dew point and high/low humidity
- High Heat Index
- High Gust Wind
- Low wind chill
- High UV
- Pressure drop
- High rain rate

See the relevant section for how to set the alarm.

To silence any alarm: Press any button or rotate the dial.

CONNECTION TO PC

The weather station is capable of connecting to a PC computer using the USB connection. The "Virtual Weather Station" software can read the latest weather data collected from the base station. Please download the software from the following website:

http://www2.oregonscientific.com/assets/software/wmr100.exe

For full details see the "Virtual Weather Station" software instructions.

PC System requirements

The minimum system requirements for use of the "Virtual Weather Station" software is:

•   Operating system: Microsoft Windows 98 or above
•   Processor: Pentium II 166Mhz or above
•   RAM: Min. 64Mb
•   Hard disk free space: Min. 30Mb

To connect the base station to the computer:
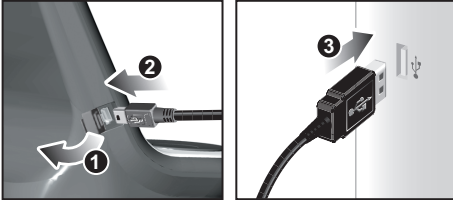
1. Uncover the USB point on the side of the base station.
2. Plug in the USB cable.
3. Plug in the other end of the cable in the computer.

BACKLIGHT

Press any button or rotate the dial to activate the backlight.

RESET

Press **RESET** to return to the default settings.

ACCESSORIES – SENSORS

This product can work with up to 10 sensors at any one time to capture outdoor temperature, relative humidity or UV readings in various locations. Optional wireless remote sensors such as those listed below can be purchased separately. For more information, please contact your local retailer.

•   Thermo-hygro THGR800 (3-Ch)
•   Thermo-hygro THGR810 (10-Ch)
•   UV UVN800

TROUBLESHOOTING

PROBLEM	SYMPTOM	REMEDY
Barometer	Strange readings	Set unit
Calendar	Strange date / month	Change language
Clock	Cannot adjust clock	Disable radio-controlled clock
	Cannot auto-synch	1. Adjust batteries 2. Press **RESET** 3. Manually activate radio-controlled clock

PROBLEM	SYMPTOM	REMEDY
Temp	Shows "LLL" or "HHH"	Temperature is out-of-range
Remote sensor	Cannot locate remote sensor	1. Check batteries 2. Check if sensors are within range

PRECAUTIONS

This unit is engineered to give you years of satisfactory service if you handle it carefully. Here are a few precautions:

•   Placement of this product on wood surfaces with certain types of finishes, such as clear varnish, may result in damage to the finish. Consult the furniture manufacturer's care instructions for direction as to the types of objects that may safely be placed on the wood surface. Oregon Scientific shall not be responsible for any damage to wood surfaces from contact with this product.
•   Do not cover the ventilation holes. Make sure items that are nearby such as newspapers, tablecloths, curtains etc cannot accidentally cover the ventilation holes.
•   Do not immerse the unit in water. If you spill liquid over it, dry it immediately with a soft, lint-free cloth.
•   Do not clean the unit with abrasive or corrosive materials. This may scratch the plastic parts and corrode the electronic circuit.
•   Do not subject the unit to excessive force, shock, dust, temperature or humidity, which may result in malfunction, shorter electronic life span, damaged battery and distorted parts.
•   This product may malfunction if electrostatic discharge or radio interference appears in the environment and / or affects the ac power line. The unit will revert to normal operation when interference stops.
•   Do not tamper with the unit's internal components. Doing so will invalidate the warranty on the unit and may cause unnecessary damage. The unit contains no user-serviceable parts.
•   Only use fresh batteries as specified in the user's instructions. Do not mix new and old batteries as the old ones may leak.
•   Do not dispose this product as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
•   Due to printing limitations, 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.

NOTE The technical specifications for this product and the contents of the user manual are subject to change without notice.

SPECIFICATIONS

BASE STATION

Dimensions (L x W x H)	143 x 89 x 165 mm (5.6 x 3.5 x 6.5 inches)
Weight	300g (0.66 lbs) without battery

INDOOR BAROMETER

Barometer unit	mb/hPa, inHg and mmHg
Measuring range	700 – 1050mb/hPa
Accuracy	+/- 10 mb/hPa
Resolution	1mb (0.0 inHg)
Altitude setting	Sea level User setting for compensation
Weather display	Sunny, Partly Cloudy, Cloudy, Rainy and Snowy
Memory	Historical data and bar chart for last 24hrs

INDOOR TEMPERATURE

Temp. unit	°C / °F
Displayed range.	0°C to 50°C (32°F to 122°F)
Operating range.	-30°C to 60°C (-4°F to 140°F)
Accuracy	0°C - 40°C: +/- 1°C (+/- 2.0°F) 40°C - 50°C: +/- 2°C (+/- 4.0°F)
Comfort	20°C to 25°C (68°F to 77°F)
Memory	Current, min and max temp. Dew Point w/ min and max
Alarm	Hi / Lo

INDOOR RELATIVE HUMIDITY

Displayed range	2% to 98%
Operating range	25% to 90%
Resolution	1%
Accuracy	25% - 40%: +/- 7% 40% - 80%: +/- 5% 80% - 90%: +/- 7%
Comfort	40% to 70%
Memory	Current, min and max
Alarm	Hi / Lo

RADIO-CONTROLLED / ATOMIC CLOCK

Synchronization	Auto or disabled
Clock display	HH:MM:SS
Hour format	12hr AM/PM or24hr
Calendar	DD/MM or MM/DD
Weekday in 5 languages	(E, G, F, I, S)
Battery	4 x UM-3 (AA) 1.5V batteries
AC adapter	6V

REMOTE WIND SENSOR UNIT

Weight	556 g (1.23 lbs) without battery
Wind speed unit	m/s, kph, mph, knots
Speed accuracy	2 m/s ~ 10 m/s (+/- 3 m/s) 10 m/s ~ 56 m/s (+/- 10%)
Direction accuracy	16 positions
Transmission of wind speed signal	Approx. every 14 seconds
Memory	Max speed gust

OUTDOOR TEMPERATURE

Temp. unit	°C / °F
Displayed range.	-50°C to 70°C (-58°F to 158°F)
Operating range.	-30°C to 60°C (-4°F to 140°F)
Accuracy	-20°C – 0°C: +/- 2°C (+/- 4.0°F) 0°C - 40°C: +/- 1°C (+/- 2.0°F) 40°C - 50°C: +/- 2°C (+/- 4.0°F) 50°C - 60°C: +/- 3°C (+/- 6.0°F)
Comfort	20°C to 25°C (68°F to 77°F)
Memory	Current, min and max temp. Dew Point w/ max and min Wind chill temp. and min

RELATIVE HUMIDITY

Displayed range.	2% to 98%
Operating range.	25% to 90%
Resolution	1%
Accuracy	25% - 40%: +/- 7% 40% - 80%: +/- 5% 80% - 90%: +/- 7%
Comfort	40% to 70%
Memory	Current, min and max

RF TRANSMISSION

RF frequency	433MHz
Range	Up to 100 meters (328 feet) with no obstructions
Transmission	Approx. every 60 seconds
No. of Channel	1 for Wind/ Rain/ UV and 10 for Temp. / Humidity
Battery	4 x UM-3 (AA) 1.5V

REMOTE RAIN GAUGE

Dimensions (L x W x H)	107 x 87 x 56 mm (4.2 x 3.4 x 2.2 inches)
Weight	134 g (0.3 lbs) without battery
Rainfall unit	Mm/hr and in/hr
Range	0 mm/hr – 999 mm/hr
Resolution	1 mm/hr
Accuracy	< 15 mm/hr: +/- 1 mm 15 mm to 9999 mm: +/- 7%
Memory	Past 24hrs, hourly and accumulated from last memory reset
Battery	2 x UM-3 (AA) 1.5V

ABOUT OREGON SCIENTIFIC

Visit our website (www.oregonscientific.com) to learn more about Oregon Scientific products such as digital cameras; MP3 players; children's electronic learning products and games; projection clocks; health and fitness gear; weather stations; and digital and conference phones. The website also includes contact information for our Customer Care department in case you need to reach us, as well as frequently asked questions and customer downloads.

We hope you will find all the information you need on our website, however if you're in the US and would like to contact the Oregon Scientific Customer Care department directly, please visit:

www2.oregonscientific.com/service/default.asp

OR

Call 1-800-853-8883.

For international inquiries, please visit:

www2.oregonscientific.com/about/international.asp

EU-DECLARATION OF CONFORMITY

Hereby, **Oregon Scientific**, declares that this Weather Station with Wireless Rain and Wind sensors model WMR100 is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC. A copy of the signed and dated Declaration of Conformity is available on request via our Oregon Scientific Customer Service.

COUNTRIES RTTE APPROVAL COMPLIED

All EU countries, Switzerland CH

and Norway N

FCC STATEMENT

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

 WARNING Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

 NOTE This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

• Reorient or relocate the receiving antenna.

• Increase the separation between the equipment and receiver.

• Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

• Consult the dealer or an experienced radio / TV technician for help.

DECLARATION OF CONFORMITY

The following information is not to be used as contact for support or sales. Please call our customer service number (listed on our website at www.oregonscientific.com), or on the warranty card for this product) for all inquiries instead.

We

Name: Oregon Scientific, Inc.

Address: 19861 SW 95th Ave., Tualatin, Oregon 97062 USA

Telephone No.: 1-800-853-8883

declare that the product

Product No.: WMR100A

Product Name: Professional Weather Station

Manufacturer: IDT Technology Limited

Address: Block C, 9/F, Kaiser Estate, Phase 1,41 Man Yue St., Hung Hom, Kowloon, Hong Kong

is in conformity with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference.

2. This device must accept any interference received, including interference that may cause undesired operation.

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Oregon
SCIENTIFIC

Advanced Weather Station
with Wireless Sensor Set
& Mounting Package
Model: WMR100 / WMR100A

USER MANUAL

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