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# Wireless Weather Forecaster with Self-Setting Atomic Clock Model: BAR888RA User Manual

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## INTRODUCTION

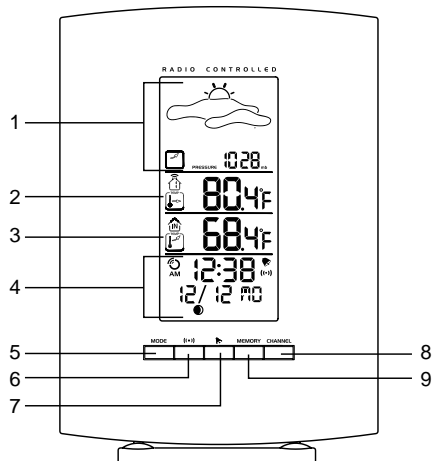
Thank you for selecting the Oregon Scientific™ **Wireless Weather Forecaster with Self-Setting Atomic Clock** (BAR888RA). This device bundles precise time keeping, weather forecast, barometric trend with altitude adjustment, and indoor and outdoor temperature features into a single tool you can use from the convenience of your home. In this box, you will find:

- Main unit
- 2 remote **sensors** (THN122N)

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.

## PRODUCT OVERVIEW

### FRONT VIEW

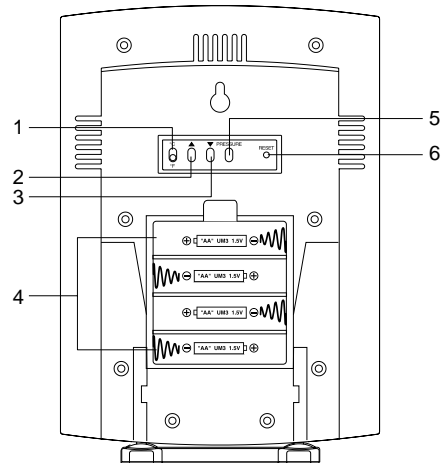




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1. Weather Forecast & Barometric Trend Area
2. Outdoor Temperature Area
3. Indoor Temperature Area
4. Clock / Alarm Area
5. **MODE**: change display / settings
6. **((•))**: view alarm status; set alarm
7. **▶**: turn alarm off for 24 hours
8. **CHANNEL**: switch remote sensor
9. **MEMORY**: view current, maximum and minimum temperature readings

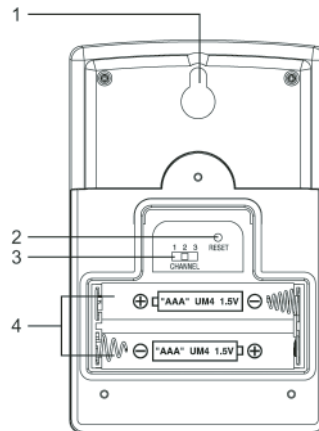
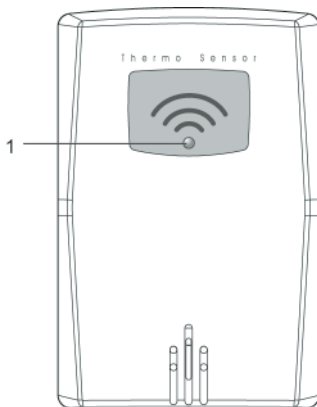
## BACK VIEW



1. °C / °F switch
2. ▲: increase setting; activate Atomic Clock  
▼: decrease setting; deactivate Atomic Clock
3. Battery compartment
4. Altitude pressure: change measurement unit (mb/hPa or inHg) and value
5. **RESET** hole

## REMOTE SENSOR (THN122N)

## 1. LED status indicator



1. **Wall mount hole**
2. **RESET** hole
3. **CHANNEL** number (1-3)
4. **Battery compartment**  
(Battery compartment cover not shown)



## GETTING STARTED


### BATTERIES


Batteries are not supplied with this product. You will need to purchase 4 X UM-3 (AA) 1.5V alkaline batteries for the main unit, and 2 X UM-4 (AAA) 1.5V alkaline batteries for the remote sensor.

Insert batteries before first use, matching the polarity as shown in the battery compartment. For best results, install batteries in the remote sensor before the main unit. Press **RESET** after each battery change.

**NOTE** It is recommended that you use alkaline batteries with this product for longer performance.

**NOTE** Do not use rechargeable batteries.

 shows when batteries are low.

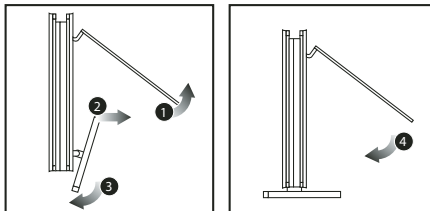
| UNIT   |  LOCATION |
|--------|--|
| Main   | Indoor Temperature Area  |
| Remote | Outdoor Temperature Area   |

### CHANGE SETTINGS

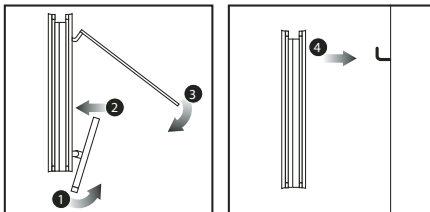
1. Press and hold **MODE** for 2 seconds to enter setting mode.
2. Press **▲** or **▼** to change settings.
3. Press **MODE** to confirm.

### TABLE STAND OR WALL MOUNT

The table stand is in the back of the product. See below for how to assemble the table stand.



To mount the product on a wall, put the stand inside the back of the unit and then place it on a wall, as shown below.



## REMOTE SENSOR (THN122N)

This product is shipped with two THN122N Thermometer Sensors that collect temperature data. Data can be collected from up to 3 sensors. Additional sensors sold separately.

### SETUP SENSOR

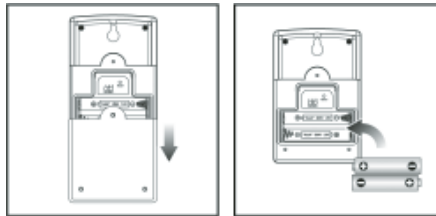
1. Open the remote sensor battery compartment with a small Phillips screwdriver.
2. Insert the batteries, matching the polarity (+ and -) as shown in the battery compartment.

| SWITCH  | OPTION  |
|---------|---|
| Channel | Channel 1-3. If you are using more than one sensor, select a different channel for each sensor. |

3. Set the channel. The switch is located in the battery compartment.
4. Place the sensor near the main unit. Press **RESET** on the sensor. Then, press and hold **MEMORY** and **CHANNEL** on the main unit to initiate signal sending between the sensor and the main unit. The reception icon on the main unit will blink for approximately 3 minutes while it is searching for the sensor. (Refer to the "Data Transmission" section for more information.)
5. Close the remote sensor battery compartment.
6. Secure the sensor in the desired location using the wall mount or table stand.



Installing the batteries:



For best results:

- Insert the batteries and select the channel before you mount the sensor.
- Place the sensor out of direct sunlight and moisture.
- Do not place the sensor more than 230 feet (70 meters) from the main (indoor) unit.
- Position the sensor so that it faces the main (indoor) unit, minimizing obstructions such as doors, walls, and furniture.
- Place the sensor in a location with a clear view to the sky, away from metallic or electronic objects.
- Position the sensor close to the main unit during cold winter months as below-freezing temperatures may affect battery performance and signal transmission.

You may need to experiment with various locations to get the best results.



## DATA TRANSMISSION

Data is sent from the sensor(s) every 40 seconds. The reception icon shown in the Temperature Area shows the status.

| ICON | DESCRIPTION  |
|------|--|
|      | Main unit is searching for sensors.  |
|      | At least 1 Channel has been found.   |
|      | Channel 1 is selected (number will change depending on the sensor you select). |
| ---  | The selected sensor cannot be found. Search for the sensor or check batteries. |

---

## SEARCH FOR SENSOR

To search for a sensor, press and hold **MEMORY** and **CHANNEL** for 2 seconds.

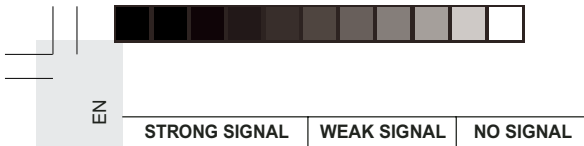
**NOTE** If the sensor is still not found, check the batteries, obstructions, and remote unit location.




**NOTE** Signals from household devices such as doorbells, electronic garage doors, and home security systems may cause temporary reception failure. This is normal and does not affect general product performance. The reception will resume once the interference ends.

## CLOCK

The **main unit** automatically synchronizes the current time and date on the clock when it is brought within range of the WWVB-60 atomic clock signal generated from Fort Collins, Colorado. For more information, please visit: [www.boulder.nist.gov/timefreq/stations/radioclocks.htm](http://www.boulder.nist.gov/timefreq/stations/radioclocks.htm). The signals are collected by the main unit when it is within **932 miles (1500 km)** of a signal.

Initial reception takes 2-10 minutes, and is initiated when you first setup the unit, and whenever you press **RESET**. Once complete, the reception icon will stop blinking. The icon is shown in the Clock Area.



| STRONG SIGNAL   | WEAK SIGNAL   | NO SIGNAL   |
|---|---|---|
|  |  |  |

To force a manual search for Atomic Clock signals, press and hold ▲ for 2 seconds. If no signal is found, check the batteries.

**NOTE** If the Atomic Clock signal is received and the hour is incorrect, use the “timezone offset” feature to adjust it to the appropriate timezone. Please see “Set Clock” section for instructions.

### TURN ATOMIC CLOCK ON / OFF

Perform this step if you cannot receive Atomic Clock signals. Press and hold ▼ for 2 seconds. Then, manually set the clock following the “Set Clock” instructions.



The signal icon indicates that the Atomic Clock feature is **ON**. No icon means that it is **OFF**.

### SET CLOCK

You only need to do this if you have disabled the Atomic Clock feature (for example, if you are too far from or cannot receive a signal).

1. Press and hold **MODE** for 2 seconds. The Clock Area will blink.



2. Select the time zone, hour, minute, year, month, day, and language. Press ▲ or ▼ to change the setting. Press **MODE** to confirm.

**NOTE** The language options are (E) English, (F) French, (D) German, (I) Italian, and (S) Spanish.

**NOTE** The time zone options are (PA) Pacific, (CE) Central, (MO) Mountain, and (EA) Eastern.

### SWITCH CLOCK DISPLAY

Press **MODE** to toggle between Clock with Seconds and Clock with Weekday display.

### ALARM

This product is equipped with a 2-minute crescendo alarm.

### VIEW ALARM SETTINGS

Press ((•)). The alarm time status will show in the Clock Area.

### SET ALARM

1. Press ((•)) to switch to alarm display.
2. Press and hold ((•)) again for 2 seconds. The alarm settings will blink.
3. Select the hour and minute. Press ▲ or ▼ to change settings. Press ((•)) to confirm.







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## ACTIVATE ALARM

Press **▶** to activate or deactivate the alarm. **▶** shows in the Clock / Alarm Area when the alarm is activated.

## SILENCE ALARM

When the alarm time is reached, the crescendo alarm will sound for 2 minutes. Press any key to turn it off until the next day.

If no button is pressed, the alarm will automatically silence after 2 minutes. It will then sound again after 8 minutes.

## BAROMETER

This product tracks barometric pressure changes over the past 24 hours to provide the weather forecast and a trend line showing the direction of barometric change. Barometric changes are measured by the main (indoor) unit.

### BAROMETRIC TREND

| TREND | DESCRIPTION |
|-------|-------------|
|       | Rising      |
|       | Steady      |
|       | Falling     |

## SET UNIT AND ALTITUDE

You can set the unit of measurement (mb/hPa or inHg) and altitude. Doing this allows the product to take more accurate barometric measurements.

1. Press **PRESSURE** to select the unit of measurement: mb / hPa or inHg.
2. Press and hold **PRESSURE** for 2 seconds.
3. Select the altitude (-328 feet to 8203 feet in increments of approximately 33). Press **▲** or **▼** to change the setting. Press **PRESSURE** to confirm.

## WEATHER FORECAST

This product forecasts the next 12 to 24 hours of weather within a **19 to 31 miles (30 to 50 km)** radius with 70 to 75 percent accuracy. The weather forecast is always displayed.

| CLEAR | PARTLY CLOUDY | CLOUDY | RAINY |
|-------|---------------|--------|-------|
|       |               |        |       |

## TEMPERATURE

This product can display current, minimum, and maximum temperature information collected by the remote sensors and main (indoor) unit.

Outdoor data is collected and displayed every 40 seconds. Indoor data is collected and displayed every 10 seconds.





### SELECT TEMPERATURE UNIT

Slide the °C / °F switch into the desired location. The switch is located in the battery compartment of the main unit. The setting for the main unit overrides the remote sensor setting.

### SELECT CHANNEL NUMBER

Press **CHANNEL** to switch between sensors 1-3.

The icon shows the selected sensor.

| KINETIC-WAVE ICON  |  |  |  |  |
|--------------------|---|---|---|---|
| Designated Display | Indoor Display  | Remote Display Channel 1  | Remote Display Channel 2  | Remote Display Channel 3  |









To auto-scan between sensors, press and hold **CHANNEL** for 2 seconds. Each sensor's data will be displayed for 3 seconds. To end auto-scan, press **CHANNEL** or **MEMORY**.

### MINIMUM / MAXIMUM RECORDS

Press **MEMORY** to toggle between current, maximum (MAX) and minimum (MIN) records. To clear the records, press and hold **MEMORY** for 2 seconds. A beep will sound to confirm that the memory has been cleared.

## MOON PHASE

The Calendar must be set for this feature to work. Press ▲ or ▼ to view the moon phase for the next or previous day. Press and hold ▲ or ▼ to scan quickly through the years (2001 to 2099).

|   |                 |
|---|-----------------|
|  | New Moon        |
|  | Waxing Crescent |
|  | First Quarter   |
|  | Waxing Gibbous  |
|  | Full Moon       |
|  | Waning Gibbous  |
|  | Last Quarter    |
|  | Waning Crescent |



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## RESET SYSTEM

The **RESET** button is located inside the main unit battery compartment. Press **RESET** when you change the batteries and whenever performance is not behaving as expected (for example, unable to establish radio frequency link with remote sensor or **atomic** clock).

**NOTE** When you press **RESET**, all settings will return to default value, and you will lose all stored information.

## SAFETY AND CARE

Clean the product with a slightly damp cloth and alcohol-free, mild detergent. Avoid dropping the product or **placing** it in a high-traffic location.

## WARNINGS

This product is designed to give you years of service if handled properly. Observe the following guidelines:

- Never immerse the product in water. This can cause electrical shock and damage the product.
- Do not subject the main unit to extreme force, shock, or fluctuations in temperature or humidity.
- Do not tamper with the internal components.
- Do not mix new and old batteries or batteries of different types.
- Do not use rechargeable batteries with this product.

- Remove the batteries if storing this product for a long period of time.
- Do not scratch the LCD display.

Do not make any changes or modifications to this product. Unauthorized changes may void your right to use the product. The technical specification of this product and contents of this user guide are subject to change without notice. Images not drawn to scale.

## TROUBLESHOOTING

Check here before contacting our customer service department.

| PROBLEM       | SYMPTOM                       | REMEDY  |
|---------------|-------------------------------|---|
| Calendar      | Strange date / month          | Change language   |
| Clock         | Cannot adjust clock           | Disable Atomic Clock  |
|               | Cannot autosynch              | 1. Adjust batteries<br>2. Press <b>RESET</b><br>3. Manually activate Atomic Clock feature |
| Temp          | Shows "LLL" or "HHH"          | Temperature is out-of-range   |
| Remote sensor | Cannot locate remote sensor   | Check batteries<br>Check location   |
|               | Cannot change channel         | Check sensors. Only one sensor is working   |
|               | Data does not match main unit | Initiate a manual sensor search   |

## SPECIFICATIONS

### MAIN UNIT DIMENSIONS

|           |   |
|-----------|---|
| L x W x H | 5.5 x 2.5 x 6.2 inches<br>(142 x 63 x 158 mm) |
| Weight    | 12.96 ounces (366 grams)<br>with battery      |

### REMOTE SENSOR DIMENSIONS

|           |   |
|-----------|---|
| L x W x H | 3.6 x 2.4 x 0.9 inches<br>(92 x 60 x 23 mm) |
| Weight    | 1.6 ounces (46 grams)<br>without battery    |

### TEMPERATURE

|               |                                      |
|---------------|--------------------------------------|
| Unit          | °F or °C                             |
| Indoor Range  | 23 °F to 122 °F<br>(-5 °C to 50 °C)  |
| Outdoor Range | -4 °F to 140 °F<br>(-20 °C to 60 °C) |
| Resolution    | 0.2 °F (0.1 °C)                      |

### BAROMETER

|            |   |
|------------|---|
| Unit       | mb/hPa or inHg                          |
| Range      | 700 to 1050 mb<br>(20.67 to 30.01 inHg) |
| Resolution | 1 mb (0.03 inHg)                        |



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|          |                                     |
|----------|-------------------------------------|
| Altitude | -328 to 8203 feet                   |
| Display  | Rainy, cloudy, partly cloudy, sunny |

### REMOTE SENSOR (THN122N)

|              |   |
|--------------|---|
| RF frequency | 433MHz                                    |
| Range        | 230 feet (70 meters) with no obstructions |
| Transmission | <b>Every</b> 40 seconds                   |
| Channel No.  | 1 - 3                                     |

### CLOCK

|               |   |
|---------------|---|
| Atomic Clock  | Auto or manual (disabled)                                 |
| Clock display | HH:MM:SS  |
| Hour format   | 12hr AM / PM  |
| Time zone     | PA (Pacific), MO (Mountain), CE (Central) or EA (Eastern) |
| Calendar      | MM/DD; weekday in 5 languages (E, D, F, I, S)             |
| Alarm         | Single alarm with 2-minute crescendo                      |

### POWER

|                     |                              |
|---------------------|------------------------------|
| Main unit batteries | 4 x UM-3 (AA) 1.5V alkaline  |
| Sensor batteries    | 2 x UM-4 (AAA) 1.5V alkaline |

## ABOUT OREGON SCIENTIFIC

Visit our website ([www.oregonscientific.com](http://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/support](http://www2.oregonscientific.com/service/support)

OR

Call 1-800-853-8883.

For international inquiries, please visit: [www2.oregonscientific.com/about/international/default.asp](http://www2.oregonscientific.com/about/international/default.asp)



## 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.



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## 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](http://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  
Fax No.: 1-503-684-3332

### declare that the product

Product No.: BAR888RA  
Product Name: **Baro w / Remote Thermo**  
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.



**Wireless Weather Forecaster with  
Self-Setting Atomic Clock  
Model: BAR888RA  
User Manual**





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