SCIENTIFIC

Deluxe Weather Forecaster with Wireless UV Sensor

Model: BAR609HGA

USER MANUAL

Deluxe Weather Forecaster with Wireless UV Sensor

BAR609HGA

USER MANUAL

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INTRODUCTION

Thank you for selecting the Oregon Scientific[™] Deluxe Weather Forecaster with Wireless UV Sensor (BAR609HGA). This device bundles precise time keeping, UV measurement, weather forecast, barometric trend with altitude adjustment, and indoor and outdoor temperature and humidity monitoring features into a single tool you can use from the convenience of your home.

In this box, you will find:

Main unit

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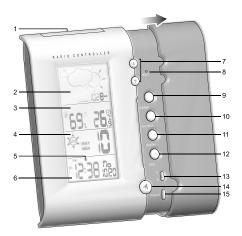
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- Thermo-Hygro sensor (THGR122NX)
- UV sensor (UVN128)

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



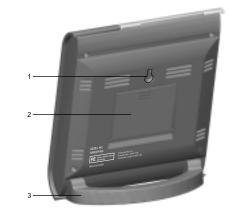
- 1. SNOOZE / LIGHT button
- 2. Weather Forecast & Barometric Area
- 3. Indoor / Outdoor Temperature & Humidity Area

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- 4. UV Index (UVI) Area
- 5. Moon Phase
- 6 Clock / Alarm Area
- 7. ▲ and ▼: increase or decrease setting / activate or deactivate Atomic Clock
- 8. RESET hole
- 9. CHANNEL: switch remote sensor
- 10.HEAT INDEX: switch between heat index, indoor / outdoor temperature and humidity displays
- 11. **MEMORY**: view current, max and min temperature, humidity and UVI
- 12.MODE: change clock display / settings
- 13.°C / °F switch
- 14. The second s
- 15.**PRESSURE**: change altitude measurement unit (mb or inHg) and altitude compensation value



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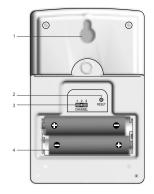


- 1. Wall mount
- 2. Battery compartment
- 3. Table stand





LCD display
 LED status indicator

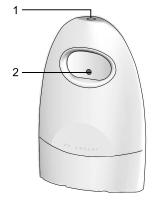


- 1. Wall mount hole
- 2. RESET
- 3. Channel number (1 3)
- 4. Battery compartment (Battery compartment cover not shown)
- 5

5



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1. Sensor

2. LED indicator



RESET hole
 Connector for stake apparatus

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GETTING STARTED

BATTERIES

Batteries are not supplied with this product. You will need to purchase the following alkaline batteries:

- Main unit 3 x UM-3 / AA 1.5V
- Remote sensor 2 x UM-4 / AAA 1.5V
- UV sensor 2 x UM-3 / AA 1.5V

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

NOTE Do not use rechargeable batteries.

shows when batteries are low.

UNIT	축 LOCATION	
Main Unit & Remote Sensor	Temperature / Humidity Area	
UV Sensor	UV Index Area	

ACCESS FRONT BUTTON PANEL

The front button panel is located inside the right portion of the main unit. Slide it right to access the buttons.

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CHANGE SETTINGS

1. Press and hold **MODE** for 2 seconds to enter setting mode.

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- 2. Press \blacktriangle or \blacksquare to change settings.
- 3. Press MODE to confirm.

TABLE STAND OR WALL MOUNT

Use the stand on the back of the product, or mount it on a wall with a nail.



THERMO-HYGRO SENSOR (THGR122NX)

This product is shipped with a THGR122NX Thermo/ Hygro Sensor that collects Temperature and Humidity data. Data can be collected from up to 3 sensors. Additional sensors sold separately.

SETUP SENSOR

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- 1. Open the sensor battery compartment with a small Phillips screwdriver.
- 2. Insert the batteries, matching the polarity 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.

- 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.

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 98 feet (30 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.

Standard Alkaline batteries contain signifcant amounts of water. Because of this they will freeze in low temperatures of approximately 10°F. Disposable Lithium batteries have a much lower threshold for temperature with an estimated freezing range of below -40°F. The Liquid Crystal Display in outdoor thermometers will remain operational to -20°F with adequate power.

Wireless ranges can be impacted by a variety of factors such as extremely cold temperatures. Extreme cold may temporarily reduce the effective range between the sensor and the base station.

If the unit's performance fails due to low temperature, the unit will resume proper functioning as the temperature rises to within the normal temperature range (i.e no permanent damage will occur to the unit due to low temperatures).

DATA TRANSMISSION

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

ICON	DESCRIPTION
∾````````````````````````````````````	Main unit is searching for sensors.
ن ^م ف ف	At least 1 channel has been found.
	Channel 1 is selected (number will change depending on the sensor you select)
shows in Outdoor Temp / Humidity Area	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

This product shows the current time, and day of week in English, French, German, Italian, or Spanish. The US Atomic Clock in Boulder, Colorado automatically updates this information unless you disable the feature. 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		
STRONG SIGNAL	WEAK SIGNAL	NO SIGNAL
<i>m</i>	ĩ	Å

To force a manual search for Atomic Clock signals, press and hold \blacktriangle 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 "time zone offset" feature to adjust it to the appropriate time zone. Please see "Set Clock section" for instructions.

TURN ATOMIC CLOCK ON / OFF

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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 section for 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 cannot receive the Atomic Clock signal, or you wish to adjust the appropriate time zone.

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

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VIEW ALARM SETTINGS

Press 🔭 . The alarm time and 🏷 status will show in the Clock Area.

SET ALARM

- 1. Press 🔭 to switch to alarm display.
- 2. Press and hold range again for 2 seconds. The alarm settings will blink.
- Select the hour and minute. Press ▲ or ▼ to change settings. Press r to confirm.

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 **SNOOZE / LIGHT** to silence it for 8 minutes. Or, press 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	
\rightarrow	Steady	
	Falling	

SET UNIT AND ALTITUDE

You can set the unit of measurement (mb 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 or inHg.
- 2. Press and hold PRESSURE for 2 seconds.
- 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

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

CLEAR	PARTLY CLOUDY	CLOUDY	RAINY
		\bigcirc	

TEMPERATURE, HUMIDITY AND HEAT INDEX

This product can display current, minimum, and maximum temperature, humidity percentage and heat index 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 on the front button panel. The setting for the main unit overrides the Thermo-Hygro sensor setting.

SELECT CHANNEL NUMBER

Press CHANNEL to switch between sensors 1-3.

The icon shows the selected sensor.

KINETIC-WAVE ICON	畲			
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.

NOTE If you use a sensor that collects only temperature data, humidity will not be shown.



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MINIMUM / MAXIMUM RECORDS

To view temperature, humidity or **UV** Index current, maximum (**MAX**) and minimum (**MIN**) records:

- 1. Press CHANNEL to select channel 1-3 or indoor.
- 2. Press **MEMORY** to view the selected channel's 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.

ICE WARNING

The temperature range at which water begins to freeze and turns to ice is approx. $37^{\circ}F$ (3°C) to $28^{\circ}F$ (-2°C). It is during this period that ice becomes most slippery, creating hazardous surface conditions dangerous for travelling.

The BAR609HGA's Ice Warning feature gives out temperature readings to warn you when the temperature is approaching freezing. If Channel 1 sensor falls between $37^{\circ}F$ to $28^{\circ}F$ ($3^{\circ}C$ to $-2^{\circ}C$), the freeze alert icon \mathbb{X} will flash on the main unit display.

HEAT INDEX

Heat index is the temperature the body feels when heat and humidity are combined. The temperature you feel does not always correspond to the actual air temperature and relative humidity. The heat index (apparent temperature) is how hot the heat-humidity combination makes you feel.

The BAR609HGA's heat index feature advises 4 levels of warning if the temperature is high.

WARNING	HEAT INDEX		MEANING
	°F	°C	
E x t r e m e danger	130 or above	54.5 or above	Strong possibility of heat stroke
Danger	105-129	40.5-53.9	Heat exhaustion likely
E x t r e m e caution	90-104	32.2-40	Possibility of heat dehydration
Caution	80-89	26.6-31.7	Possibility of heat exhaustion

- To display the heat index, press HEAT INDEX.
- To toggle between current / maximum / minimum readings, press HEAT INDEX, then press CHANNEL to select channel 1-3 or indoor, followed by MEMORY.
- To toggle between temperature / humidity and heat index display, press and hold HEAT INDEX for 2 seconds. Press HEAT INDEX again to stop this feature.

NOTE If the heat index is below 80°F / 26°C, or the desired channel is not working, the heat index will display "NA".

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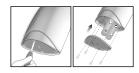
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UV SENSOR (UVN128)

The UV sensor measures the UV Index. It transmits data to the main unit every 73 seconds and has a maximum transmission range of 328 feet (100 meters).

SETUP SENSOR

1. Insert the batteries as shown.



2. Close the battery door and press **RESET** to turn the sensor on.



3. Press and hold CHANNEL and MEMORY on the main unit to initiate a signal search. The UVI sensor icon ⁽²⁾ on the main unit will flash to show it is searching for the sensor. It will stop flashing when it has found the sensor. If the main unit cannot find the sensor, "--" will appear on the LCD. 4. You can place the sensor in the ground. To do this, fix the stake into the base of the sensor.



Then place the stake into the ground up to the insertion level indicator (see point 1 below) at your desired location.





NOTE To get the most accurate readings, place the sensor in a position that has minimum obstructions (i.e. walls and doors) between it and the main unit. The sensor should be placed in an upright position, away from any shade or shadows that may affect how accurate the sensor provides readings.

UV INDEX READINGS

To interpret the UV readings on the LCD display, see the table below.

UV MESSAGE	UV INDEX	PRECAUTION
Low	1-2	Apply sunscreen
Med	3-5	Wear protective clothing
High	6-7	Wear sunglasses and protective clothing
Very high	8-10	Avoid the sun between 10am and 4pm
Extreme	11-25	Very strong rays stay indoors

MOON PHASE

The Calendar must be set for this feature to work. see set clock section:

- 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
0	First Quarter
0	Waxing Gibbous
0	Full Moon
0	Waning Gibbous
•	Last Quarter
۲	Waning Crescent

BACKLIGHT

Press **SNOOZE / LIGHT** to activate the backlight for 8 seconds.

RESET SYSTEM

The **RESET** button is located behind the front button panel for the main unit. Press **RESET** when you change the batteries and whenever performance is not behaving

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as expected (for example, unable to establish radio frequency link with 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 alcoholfree, 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 auto- synch	 Adjust batteries Press RESET Manually activate Atomic Clock feature
Temp	Shows "LLL" or "HHH"	Temperature is out-of- range
Sensor	ensor Cannot locate remote sensor	Check batteries
		Check location
Sensor	Cannot change channel	Check sensors. Only one sensor is working
	Data does not match main unit	Initiate a manual sensor search

SPECIFICATIONS

MAIN				

L x W x H	5.5 x 2.5 x 6.2 inches
	(142 x 63 x 158 mm)
Weight	12.96 ounces (366 g)

12.96 ounces (366 g) with battery

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THERMO-HYGRO SENSOR DIMENSIONS

L x W x H	3.6 x 2.4 x 0.79 inches (92 x 60 x 20 mm)
Weight	2.22 ounces (63 g) without battery

UV SENSOR DIMENSIONS

WXHXL 2.7 x 4 x 1.9 inches (67.7 x 102.5 x 47 mm) 2.89 ounces (82 g) without battery

TEMPERATURE

Weight

Unit	°F or °C
Indoor Range	-23°F to 122°F
	(-5°C to 50°C)
Outdoor Range	-22°F to 140°F
	(-30°C to 60°C)
Resolution	0.2°F (0.1°C)

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RELATIVE HUMIDITY

Range	25% to 95%
Resolution	1%
Memory	Minimum / maximum

BAROMETER

Unit	mb or inHg
Range	700 to 1050 mb (20.67 to 30.01 inHg)
Resolution	1 mb (0.03 inHg)
Altitude	-328 to 8203 feet
Display	Rainy, cloudy, partly cloudy, sunny

THERMO-HYGRO SENSOR (THGR122NX)

RF frequency	433 MHz
Range	98 feet (30 meters) with no obstructions
Transmission	Every 40 seconds
Channel No.	1-3

Atomic Clock
Clock display
Hour format
Time zone

Calendar

Alarm

HH:MM:SS 12hr AM/PM PA (Pacific), MO (Mountain), CE (Central) or EA (Eastern) MM/DD; weekday in 5 languages (E, D, F, I, S) Single alarm with 2- minute crescendo and

Auto or manual (disabled)

8-minute Snooze

POWER

Main unit batteries	3 x UM-3 (AA) 1.5V alkaline
Thermo-Hygro batteries	2 x UM-4 (AAA) 1.5V alkaline
UV Sensor	2xUM-3 (AA) 1.5V alkaline

UV SENSOR (UVN128)

UV Range Transmission

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328 feet (100 meters) Every 73 seconds

ABOUT OREGON SCIENTIFIC

Visit our website (<u>www.oregonscientific.com</u>) 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: <u>www2.oregonscientific.</u> <u>com/service/support</u> OR Call 949-608-2848.

For international enquiries, please visit: <u>www2</u>. <u>oregonscientific.com/about/international/default.asp</u>

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. Z

WARNING Changes or modifications to this unit 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.

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- 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 <u>www.oregonscientific.</u> <u>com</u>), or on the warranty card for this product) for all inquiries instead.

We

 Name:
 Oregon Scientific, Inc.

 Address:
 19861 SW 95th Place, Tualatin, Oregon 97062 USA

 Telephone No.: 1-800-853-8883
 1-503-684-3332

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declare that the product

Product No.:	BAR609HGA	
Product Name: Wireless 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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