



## Touch-Control AM/FM Atomic Weather Clock with Dual Alarm Model: BARM699A

### USER MANUAL

#### INTRODUCTION

Thank you for selecting the Oregon Scientific™ Touch-Control AM/FM Atomic Weather Clock with Dual Alarm (BARM699A). The main unit can support up to 3 sensors. To purchase additional sensors, please contact your local retailer.

**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.

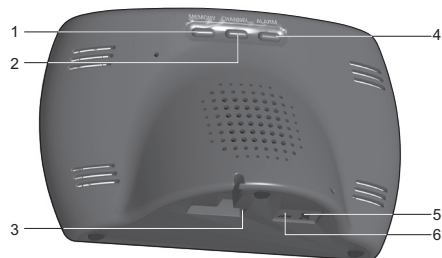
#### OVERVIEW

##### FRONT VIEW



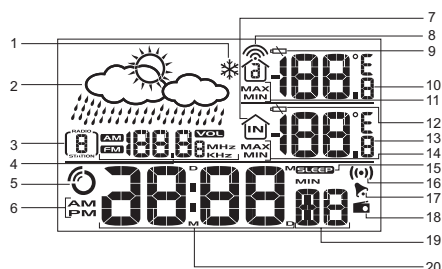
- SLEEP / SNOOZE:** Activate snooze; set the sleep timer
- RADIO ON / OFF:** Turn radio ON / OFF
- STATION:** Toggle between 16 preset radio channels; save a channel
- VOLUME ▲ / ▼:** Increase / decrease volume
- CLOCK:** Change setting / display
- AM / FM:** Toggle between AM and FM
- TUNING / SET ▲ / ▼:** Increase / decrease setting; activate / deactivate clock reception signal; change radio frequency

##### BACK VIEW



- MEMORY:** View current, maximum and minimum temperature
- CHANNEL:** Switch remote sensor display
- Adapter socket
- ALARM:** View alarm status; set alarm
- °C / °F: Select temperature unit °C / °F
- RESET:** Reset unit to default settings

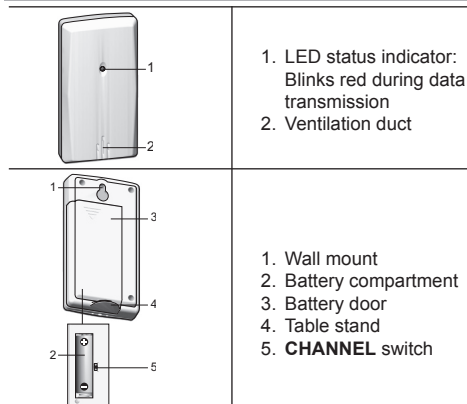
##### LCD



- Ice warning

- Weather forecast
- Preset radio station number
- AM / FM station; radio frequency in MHz or KHz and volume level
- Radio-controlled clock reception icon
- 12-hour clock
- Indoor temperature display icon
- Channel number and sensor reception status
- Sensor low battery warning
- Outdoor temperature reading
- Maximum / minimum outdoor temperature reading
- Main unit low battery warning
- Indoor temperature reading
- Maximum / minimum indoor temperature reading
- Sleep function is activated
- Alarm is displayed
- Beep alarm is set
- Radio alarm is set
- US time zone, weekday or seconds
- Time, alarm and date

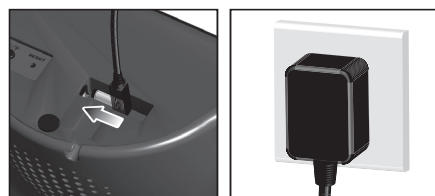
#### REMOTE SENSOR



#### GETTING STARTED

##### POWER

Plug adapter into main unit.



**NOTE** This product may malfunction when radio interference appears on the AC power line. The unit will revert to normal operation when interference stops.

**NOTE** Install the remote sensor battery and plug in the main unit. Press **RESET** after each battery change. Do not use rechargeable batteries. It is recommended that you use alkaline batteries with this product for longer performance.

shows when battery is low.

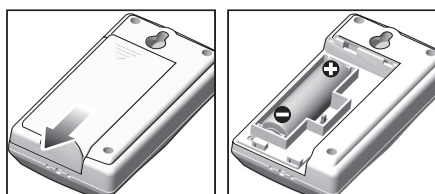
UNIT	LOCATION
Main	Indoor temperature area
Remote	Outdoor temperature area

#### REMOTE SENSOR

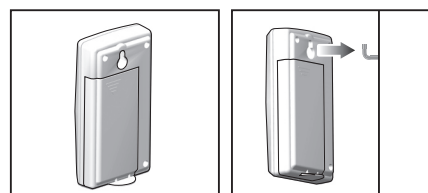
The sensor collects temperature readings approx. every 40 seconds and sends them to the main unit. The main unit can collect data from up to 3 sensors.

##### To set up the sensor:

- Slide open the battery door.
- Insert the battery, matching the polarity (+ / -).
- Select a channel. Make sure you use a different channel for each sensor.



- Close the battery compartment.
- Secure the sensor in the desired location using the wall mount or table stand.



##### For best results:

- Place the sensor out of direct sunlight and moisture.
- Do not place the sensor more than 30 meters (100 feet) 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.

The transmission range may vary depending on many factors. You may need to experiment with various locations to get the best results.

Standard Alkaline batteries contain significant amounts of water. Because of this they will freeze in low temperatures of approximately -12°C (10°F). Disposable Lithium batteries have a much lower threshold for temperature with an estimated freezing range of below -30°C (-22°F).

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).

#### SENSOR DATA TRANSMISSION

The reception icon shown in the outdoor temperature area shows the status.

ICON	DESCRIPTION
	Main unit is searching for the sensor(s)
	A channel has been found and signal is being received
	The sensor cannot be found. Search for the sensor or check the battery

##### To search for a sensor:

Simultaneously, press and hold **MEM** and **CHANNEL** for 2 seconds.

**NOTE** The sensor LED flashes when data is being sent to the main unit. If the sensor signal is still not found, check the battery, obstructions, and remote unit location.

#### LIGHT TOUCH KEY

The touch keys used in this product have a key lock function that prevents accidental changes to user settings. When the clock keys have not been used in the last minute, the key lock function is automatically activated. Press any key once to disable the key lock function and then operate the clock as usual.

#### CLOCK RECEPTION

This product is designed to synchronize its date and time automatically once it is within range of the WWVB-60 signal from the atomic clock in Boulder, Colorado.

The sensor collects the radio signals whenever it is within 3219 km (2000 miles) of a signal.

**NOTE** Initial reception takes 2-10 minutes for first set up or when **RESET** is pressed. Once complete, the reception icon will stop blinking. If the signal is weak, it can take up to 24 hours to get a valid signal.

#### RECEPTION SIGNAL

STRONG	WEAK	NO SIGNAL

##### To enable and force a signal search:

Press and hold **TUNING / SET ▲** for 2 seconds.

##### To disable the signal reception:

Press and hold **TUNING / SET ▼** for 2 seconds.

flashes when it is searching for the atomic clock signal and disappears when it is disabled.

#### CLOCK

To manually set the clock make sure the clock signal reception is disabled.

##### To manually set the clock:

- Press and hold **CLOCK** for 2 seconds.
- Press **TUNING / SET ▲ / ▼** to change the settings.
- Press **CLOCK** to confirm.
- The setting sequence is: US time zone, 12 / 24 hour format, hour, minute, year, day / month format, month, day, and display language.

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

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

##### To switch the clock display:

Press **CLOCK** to toggle between:

- Clock with seconds
- Clock with weekday
- Calendar

#### ALARM

##### To set the alarm:

- Press **ALARM** to view the alarm. will show on the display.
- Press and hold **ALARM** for 2 seconds.
- Press **TUNING / SET ▲ / ▼** to change the hour, minute, beep or radio alarm. If you select the radio alarm, press **AM / FM** and **STATION** to select the band and station respectively.
- Press **ALARM** to confirm.

##### To activate or deactivate the alarm:

Press **ALARM** when in the alarm display. or appears when the alarm is set.

##### To silence the alarm:

- Press **SNOOZE** to silence it for 8 minutes.
- OR
- Press any key except **SNOOZE** to turn the alarm off and activate it again after 24 hours.

**NOTE** or flashes when snooze is activated.

#### WEATHER FORECAST

This product forecasts the weather for the next 12 to 24 hours within a 19-31 mile (30-50 km) radius, with 70 to 75 percent accuracy.

SUNNY	PARTLY CLOUDY	CLOUDY	RAINY

#### TEMPERATURE

**To change the temperature measurement unit:**  
Press °C / °F on the bottom of the unit.

**To view outdoor sensor(s) temperature readings:**  
Press **CHANNEL**.

- shows which remote sensor's data you are viewing.
- is permanently displayed in the indoor temperature area.

##### To auto-scan between sensors:

Press and hold **CHANNEL** for 2 seconds. Each sensor's data is displayed for 3 seconds.

##### To end auto-scan:

Press **CHANNEL** or **MEMORY**.

**To toggle between current, minimum and maximum records for the selected sensor:**  
Press **MEMORY** repeatedly.

##### To clear the records:

Select the channel to clear the memory, then press and hold **MEMORY** for 2 seconds.

**NOTE** The indoor memory record will be cleared simultaneously.

#### ICE WARNING

If the channel 1 sensor falls between 3°C to -2°C (37°F to 28°F), \* will flash to warn you that the temperature is approaching freezing.

**NOTE** The alarm will automatically stop if the temperature goes outside the ice-warning range.

#### RADIO

You can save up to 16 radio stations (8 for AM and 8 for FM).

##### To turn the radio ON / OFF:

Press **RADIO**.

##### To save a station:

1. Press **RADIO** to turn the radio ON.
2. Press **AM / FM** to select radio frequency.
3. Press **TUNNING / SET** ▲ / ▼ to manually fine tune the frequency or press and hold **TUNNING / SET** ▲ / ▼ to activate auto-search.
4. Press and hold **STATION** to save the station.

#### SLEEP TIMER

##### To turn the sleep timer ON:

1. Press **SLEEP** once to activate the last setting used.
2. Press **SLEEP** to set radio sleep timer duration (120, 90, 60, 30, 15 or 0 minutes). Select "0" to disable the sleep timer.
3. Press **VOLUME** ▲ / ▼ to change the volume.

**NOTE** "SLEEP" flashes when the sleep timer is activated.

#### BACKLIGHT

Press any key to activate the backlight for 1 minute.

#### RESET

Press **RESET** to return the main unit to the default settings. Remove and then re-insert the batteries to reset the sensor.

#### PRECAUTIONS

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

- Do not use a damp cloth to clean the surface of the light touch key. If it is necessary to use a damp cloth to clean the unit, turn the power off before cleaning.
- 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 wood surface. Oregon Scientific shall not be responsible for any damage to wood surfaces from contact with this product.
- 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.
- 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.
- 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.
- Do not use rechargeable batteries.
- Remove batteries when storing the product for a long time.
- 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

TYPE	DESCRIPTION
<b>Main unit</b>	
Dimensions (L x W x D)	163 x 65.4 x 96 mm (6.4 x 2.6 x 3.8 inches)
Weight	300g (10.6 ounces)
<b>Temperature unit – °C / °F</b>	
Indoor range	-5°C to 50°C (23°F to 122°F)
Outdoor range	-30°C to 60°C (-22°F to 140°F)
Resolution	0.17°C (0.2°F)
<b>Radio clock</b>	
Synchronization	Auto or disabled
Clock display	HH:MM
Hour format	12hr AM/PM or 24hr
Calendar	DD/MM or MM/DD
Weekday in 5 languages	(E, G, F, I, S)
Alarm	2-minute beep or radio alarm with 8-minute snooze
PLL Radio	FM / AM; MHz / KHz; 16 preset channels
Sleep	120, 90, 60, 30 and 0 mins
<b>Remote unit (THN132N)</b>	
Dimensions (L x W x D)	92 x 22 x 50 mm (3.6 x 0.9 x 2.0 inches)
Weight	46 g (1.62 lbs) without battery
RF frequency	433MHz
Range	Up to 30 meters (100 feet) with no obstructions
Transmission	Approx. every 40 seconds
Channel no.	1, 2 or 3
<b>Power</b>	
Main unit	6V adapter
Remote unit	1 x UM-3 (AA) 1.5V battery

**NOTE** We recommend that you use alkaline batteries in the sensor for longer usage and lithium batteries for use in temperatures below freezing.

#### 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/default.asp](http://www2.oregonscientific.com/service/default.asp) OR call 1-800-853-8883. For international inquiries, please visit: [www2.oregonscientific.com/about/international.asp](http://www2.oregonscientific.com/about/international.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.

#### 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

#### declare that the product

Product No.: BARM699A  
Product Name: Wireless Thermometer with Self-Setting Clock and FM Radio  
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.



© 2006 Oregon Scientific. All rights reserved.  
086L004256-013