

**Radio Controlled Projection Clock  
with FM Radio and Outdoor  
Temperature  
Model: RRM320P  
USER MANUAL**

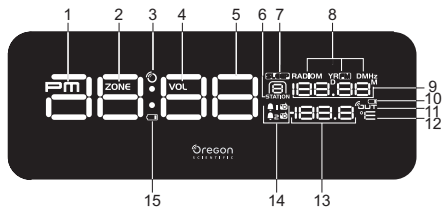
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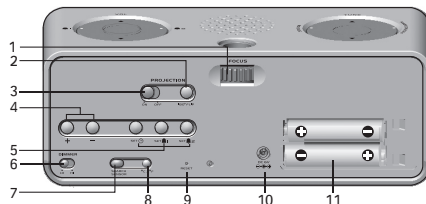
## OVERVIEW

## FRONT VIEW (FIG.1)



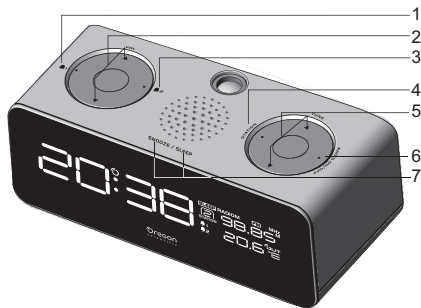
1. PM: Indicates PM (12 hour mode)
2. Time zone offset
3. Clock signal reception indicator
4. Indicates radio volume
5. Clock / Volume
6. Radio station (logged)
7. Sleep mode is ON
8. Indicates Radio mode is ON and frequency is displayed
9. Calendar / Radio frequency
10. Sensor batteries low
11. Sensor reception indicator
12. User selectable temperature units
13. Temperature
14. Beep / Radio Alarm 1 / 2
15. Main unit batteries low / no battery

## BACK VIEW (FIG.2)



1. **FOCUS Wheel:** Adjust projection focus
2. **180° FLIP:** Flip projected image 180°
3. **PROJECTION ON/OFF:** Turn projection On / Off
4. **+ / - :** Increase / decrease values of the selected setting
5. **SET / SET 1, SET 2 :** Change settings / display / View respective alarm status; set alarm
6. **DIMMER:** Select display brightness LO / HI
7. **SEARCH SENSOR:** Initiate sensor search
8. **°C / °F:** User selectable temperature units
9. **RESET:** Reset unit to default settings
10. AC / DC socket
11. Battery compartment

## TOP VIEW (FIG.3)



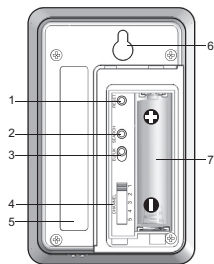
- 1. ALARM 1 ON / OFF:** Activate / deactivate Alarm 1 function
- 2. VOL ▲ / ▼:** Adjust radio volume
- 3. ALARM 2 ON / OFF:** Activate / deactivate Alarm 2 function
- 4. STATION:** Set radio station
- 5. TUNE ▲ / ▼:** Auto search / adjust radio frequency
- 6. RADIO ON / OFF:** Turn Radio On / Off
- 7. SNOOZE / SLEEP:** Alarm snooze or enable radio sleep

## REMOTE SENSOR

## FRONT VIEW



## BACK VIEW



- 1. RESET:** Reset unit to default settings
- 2. SEARCH** (RTHN318 / A / D only)
- 3. EU / UK Switch** (RTHN318D only)
- 4. Channel Switch**
- Double sided adhesive tape
- Wall mount hole
- Battery compartment

## GETTING STARTED

## REMOTE SENSOR INSTALLATION

- Slide open the battery door.
- Slide channel switch to channel 1.
- Select **EU/UK**. (RTHN318D only)

4. Insert the battery, matching the polarities (+ / -).
5. Press **RESET** after each battery change.
6. Press **SEARCH** on the sensor to start clock signal search.
7. Close the battery door.

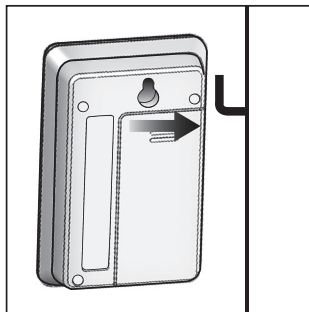
**NOTE** Install battery in the remote sensor before connecting power to the main unit.

8. Press and hold **SEARCH SENSOR** on main unit to initiate search and start receiving time and temperature data from the sensor.

**The sensor reception icon shows the status:**

ICONS	MEANING
<b>JUT</b> → <b>JUT</b>	Main unit is searching for sensor(s)
<b>JUT</b> → <b>JUT</b> → <b>JUT</b> → <b>JUT</b>	A sensor channel has been found and logged on
<b>JUT</b>	No sensor found

9. Secure the sensor in the desired location using the wall mount hole or double sided adhesive tape.



**For best results:**

- Place the sensor within 30 m (100 ft) of the main unit.
- Place the sensor out of direct sunlight and moisture.
- Position the sensor so that it faces the main 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 / 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.

**TIP** The transmission range may vary depending

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

**NOTE** Use alkaline batteries for longer usage and consumer grade lithium batteries in temperatures below freezing.

## MAIN UNIT INSTALLATION

- Plug AC/DC adaptor into socket. Make sure the adapter is not obstructed and is easily accessible to the unit.

To completely disconnect from power, the adapter should be disconnected from the main unit.

**NOTE** The main unit and adapter should not be exposed to wet conditions. No objects filled with liquid, such as vases, should be placed on the main unit and adapter.

### Memory backup:

1. Remove the battery compartment cover.
2. Insert the batteries, matching the polarities (FIG. 2).

Batteries serve as a back-up power supply. To fully utilize all features, install adapter.

**NOTE** Batteries should not be exposed to excessive heat such as sunshine or fire.

## CLOCK

### CLOCK RECEPTION



This product is designed to synchronize its clock automatically with a clock signal received from provided remote sensor.


#### To enable / disable signal reception:

Press and hold + to enable or - to disable signal reception.


**NOTE** Reception takes 2-10 minutes. If the signal is weak, it can take up to 24 hours to get a valid signal.

#### Clock signal reception indicator:

STRONG SIGNAL	NO SIGNAL
	

**NOTE** Clock reception is dependent on the successful transmission of data from remote sensor. If  is displayed, check first for sensor reception.

### MANUALLY SET CLOCK







1. Press and hold **SET** .
2. Press + or - to change the settings.

The settings order is: time-zone offset, 12/24 hr format, hour, minute, year, month-day / day-month, day and month.

Time zone offset sets the clock +/- 23 hours from the received clock signal time.

## ALARM





### To set the alarm:

1. Press **SET**  **1** or **SET**  **2** to display desired set alarm time.
2. Press and hold **SET**  **1** or **SET**  **2** to enter respective setting.
3. Press **+ / -** to set hour / minute.
4. Press **+ / -** to select beep alarm  or radio alarm .
5. If radio alarm is selected, press **+ / -** to select the radio station and **+ / -** to adjust the volume.

### To activate / deactivate alarm:

- Press  **1** **ALARM 1 ON / OFF** or  **2** **ALARM 2 ON / OFF**.

### To silence the alarm:

- Press **SNOOZE / SLEEP** to silence it for 8 minutes
- OR
- Press **SET**  **1** / **SET**  **2**,  **1** /  **2**, to turn the alarm off and activate it again after 24 hours.

## RADIO

### To activate / deactivate radio:

- Press **RADIO ON / OFF** to turn radio ON / OFF.

### To set radio station:

1. Press **RADIO ON / OFF** or **SNOOZE / SLEEP** to enter Radio Mode.
2. Press **STATION** to scroll through preset station numbers (1-8).
3. Press and hold **TUNE + / TUNE -** to auto search or press **TUNE + / TUNE -** to manually select frequency.
4. Once desired frequency has been found, press and hold **STATION** to save.

### To adjust volume:

- Press **VOL + / VOL -** when in Radio Mode.

### To adjust sleep timer setting:

1. Press **SNOOZE / SLEEP** to activate.
2. Press **SNOOZE / SLEEP** again to change the sleep time setting (120, 90, 60, 30, 15, 0 min).

## PROJECTION

This unit projects time and outdoor temperature information for your convenience.

### For continuous projection:

- Slide **PROJECTION** switch to ON when adaptor is connected, to enable / disable.

**To flip projected image by 180°:**

- Press **180° Flip**.

**To focus image:**

- Turn **FOCUS** wheel.

**NOTE** If projection is illuminated, do not look directly into the projector.

**RESET**

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

**SPECIFICATIONS****MAIN UNIT**

TYPE	DESCRIPTION
L x W x H	183 x 67 x 81mm (72 x 26.4 x 31.9in)
Weight	386 g (13.6 oz) without battery
FM	87.5 to 108 MHz
Power	6V AC adaptor 2 x UM-4 (AAA) 1.5V batteries (for backup)

**REMOTE RF CLOCK THERMO SENSOR**

TYPE	DESCRIPTION
L x W x H	117 x 80 x 171 mm (4.78 x 3.27 x 6.98 in)
Weight	241 g (8.5 oz) without battery
Temperature range	-20°C to 60°C (-4°F to 140°F)
Resolution	0.1°C (0.2°F)
Signal frequency	433 MHz
Transmission range	30 m (98 ft) unobstructed
No. of channels	5
Power	1 x UM-3 (AA) 1.5 V batteries

**PRECAUTIONS**

- Do not subject the unit to excessive force, shock, dust, temperature or humidity
- Do not cover the ventilation holes with any items such as newspapers, curtains etc.
- 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 tamper with the unit's internal components. This invalidates the warranty.
- Only use fresh batteries. Do not mix new and old batteries.

- Images shown in this manual may differ from the actual display.
- When disposing of this product, ensure it is collected separately for special treatment.
- Placement of this product on certain types of wood may result in damage to its finish for which Oregon Scientific will not be responsible. Consult the furniture manufacturer's care instructions for information.
- The contents of this manual may not be reproduced without the permission of the manufacturer.
- Do not dispose old batteries as unsorted municipal waste. Collection of such waste separately for special treatment is necessary.
- Please note that some units are equipped with a battery safety strip. Remove the strip from the battery compartment before first use.

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

## ABOUT OREGON SCIENTIFIC

Visit our website ([www.oregonscientific.com](http://www.oregonscientific.com)) to learn more about Oregon Scientific products. If you're in the US and would like to contact our 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](http://www2.oregonscientific.com/about/international)

## EU-DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that this Radio Controlled Projection Clock with FM Radio and Outdoor Temperature (model: RRM320P) 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   
and Norway 

## 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.: RRM320P  
 Product Name: Radio Controlled Projection Clock  
 with FM Radio and Outdoor  
 Temperature  
 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.