Oregon SCIENTIFIC

Easy Multi Channel Thermometer
Model: RAR621

User Manual

EN

CONTENTS

Contents **1**
Introduction **2**
Product Overview **3**
Top / Front View 3
Back View 4
LCD Display 5
Remote Sensor (THN122N) 6
Getting Started **7**
Batteries 7
Change Settings 7
Table Stand or Wall Mount 7
Remote Sensor (THN122N) **8**
Setup Sensor 8
Data Transmission 9
Search for Sensor 9
Clock **10**
Set Clock 10
Switch Clock Display 10
Alarm **10**
View Alarm Settings 10
Set Alarm 11
Activate Alarm 11
Silence Alarm 11
Temperature **11**
Select Channel Number 11
Select Minimum / Maximum Records 12
Reset System **12**
Safety & Care **12**
Warnings **12**
Troubleshooting **13**
Specifications **13**
Main Unit Dimensions 13
Remote Sensor Dimensions 13
Temperature 13
Remote Sensor (THN122N) 13
Clock 14
Power 14
About Oregon Scientific **14**
EC-Declaration of Conformity **15**

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INTRODUCTION

Thank you for selecting the Oregon Scientific™ Multi Channel Thermometer (RAR621). This device bundles precise time keeping, alarm, and temperature monitoring features into a single tool you can use from the convenience of your home.

In this box, you will find:

- Main unit
- Remote sensor
- Main unit batteries
- Remote sensor batteries

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.

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PRODUCT OVERVIEW

FRONT VIEW

The Multi Channel Thermometer features:

1. **Outdoor Temperature:** Three-channel temperature readings, (this feature is sold separately). To the right of it is the **indoor temperature**.
2. **▲ and ▼ button:** Press to increase settings.
3. **MODE button:** Press to change display / settings.
4. **CHANNEL button:** Selects one of the 3 weather channels.
5. **button:** Press to view and set times for "single" and "weekday" alarms.

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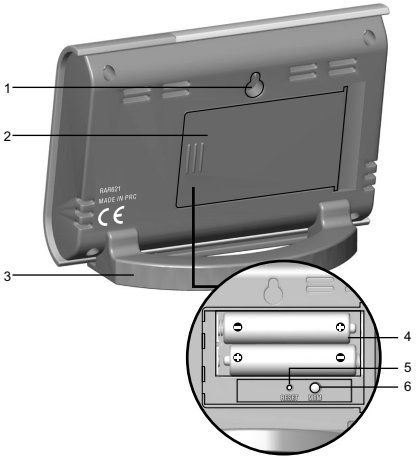
BACK VIEW



1. **Wall mount hole**
2. **Battery compartment:** Contains 2 x "AAA"UM4 1.5V batteries.
3. **Table stand**
4. **Batteries**
5. **RESET hole:** Changes all settings back to the default settings.
6. **MEM button:** Displays the maximum and minimum temperatures recently recorded.

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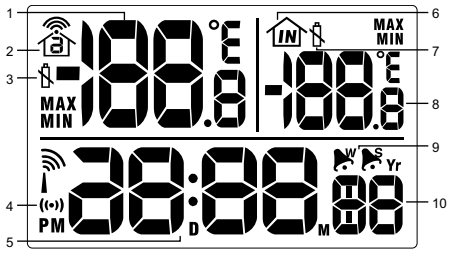
LCD DISPLAY



1. Outdoor temperature reading
2. 3 Channels: Shows 1, 2 or 3
3. Battery indicator for remote sensor
4. Alarm display indicator
5. Time or calendar
6. Indoor temperature indicator
7. Battery indicator for main unit
8. Indoor temperature reading
9. Indicates "single" or "weekday" alarm
10. Seconds or weekday

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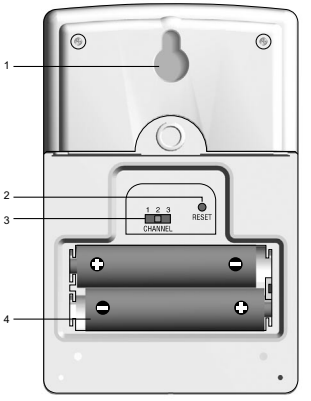
REMOTE SENSOR (THN122N)

1. LED status indicator



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

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GETTING STARTED

BATTERIES

Batteries are supplied with this product:

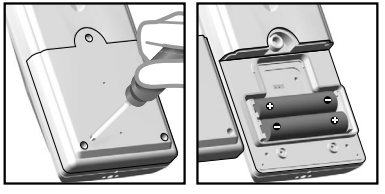
Main unit	2 x UM-4 (AAA) 1.5V batteries
Remote unit	2 x UM-4 (AAA) 1.5V batteries

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

Insert batteries before first use, matching the polarity (+ and -) 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.

shows when batteries are low.

Installing the Batteries



NOTE Do not use rechargeable batteries.

UNIT	LOCATION
Main	Indoor Temperature Area
Remote	Outdoor Temperature Area

CHANGE SETTINGS

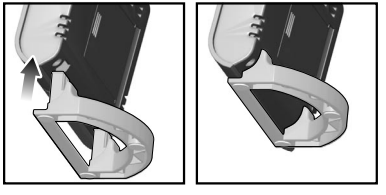
To change, time, calendar and language settings:

1. Press and hold **MODE** for 2 seconds to enter setting mode.
2. Press ▲ or ▼ to change settings. (To reach the setting you want quickly, press and hold ▲ or ▼).
3. Press **MODE** to confirm.

TABLE STAND OR WALL MOUNT

Use the stand on the back of the main unit / remote sensor, or mount it on a wall with a nail.

Attaching the Table Stand



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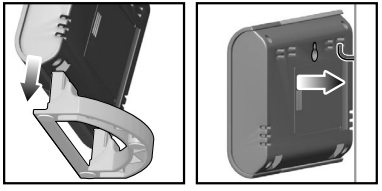
Installing the Wall Mount



REMOTE SENSOR (THN122N)

This product is shipped with a THN122N Thermometer Sensor that collects Temperature data. Data can be collected from up to 3 sensors. Additional sensors sold separately.

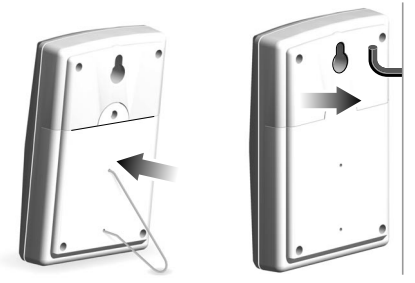
SETUP SENSOR

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 **MEM** 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 Sensor 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.

Using the stand or wall mount



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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 30 meters (98 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.

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

DATA TRANSMISSION

Data is sent from the sensor(s) every 78 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.)
--- shows in Outdoor / 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 **MEM** 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.

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CLOCK

This product has two displays: Clock with day of week in German, English, French, Italian, or Spanish, and Calendar display with month and date.

SET CLOCK

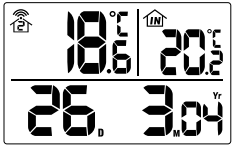
1. Press and hold **MODE** for 2 seconds. The Clock Area will blink.

2. Select the hour offset (-9 to +9), hour display format (12 or 24 hour), hour, minute, year, month, day, and language. Press ▲ or ▼ to change the setting. Press **MODE** to confirm.

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

SWITCH CLOCK DISPLAY

Press **MODE** to toggle between Calendar and Clock display with Hour Offset, Seconds, or Weekday.



ALARM

This product has 2 alarms: a Single Alarm and a Weekday Alarm. The Single Alarm can be set to go off at a specific time for a one-time event (for example, if you are napping on Saturday). The Weekday Alarm will sound at the same time Monday-Friday (but not on weekends).

VIEW ALARM SETTINGS

Press to display the Alarm settings you wish to view: Weekday W or Single S.

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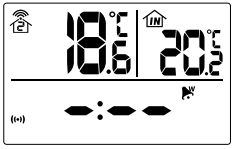
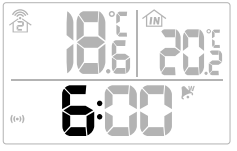
SET ALARM

1. Press to display the type of Alarm you wish to set: Weekday or Single.



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.

ACTIVATE ALARM

Press ▲ or ▼ to activate or deactivate the Alarm. "**-:--**" indicates that the alarm is deactivated.

STOP ALARM

To stop the alarm from ringing, Press .

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 78 seconds. Indoor data is collected and displayed every 10 seconds.

SELECT CHANNEL NUMBER

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

The icon shows the selected sensor.

Kinetic-wave icon	IN	1	2	3
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 **MEM**.

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NOTE For more information on the sensor see "Remote Sensor THN122N" Section.

MINIMUM / MAXIMUM RECORDS

The **MEM** button is located in the main unit battery compartment. Press **MEM** to toggle between current, maximum (MAX) and minimum (MIN) records. To clear the records, press and hold **MEM** for 2 seconds. A beep will sound to confirm that the memory has been cleared.

RESET SYSTEM

The **RESET** button is located in 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 Clock).

SAFETY & 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. Oregon Scientific will not be responsible for any deviations in the usage of the device from those specified in the user instructions or any unapproved alterations or repairs of the product. 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.

NOTE The technical specification of this product and contents of this user guide are subject to change without notice. Images not drawn to scale.

NOTE Under the environment with electrostatic discharge, the sample may malfunction and require user to rest the sample.

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TROUBLESHOOTING

PROBLEM	SYMPTOM	REMEDY
Calendar	Strange date / month	Change language
Temp Remote sensor	Shows "LLL" or "HHH"	Temperature is out-of-range
	Cannot locate remote sensor	Check batteries
		Check location
	Cannot change channel Data does not match main unit	Check sensors. Only one sensor is working
		Initiate a manual sensor search

SPECIFICATIONS

MAIN UNIT DIMENSIONS

L x W x H	103 x 48 x 75 mm (4.06 x 1.89 x 2.96 inches)
Weight	82 g (2.9 ounces) without batteries

REMOTE SENSOR DIMENSIONS

L x W x H	92 x 60 x 20 mm (3.6 x 2.4 x .79 inches)
Weight	63 grams (2.22 ounces) without battery

TEMPERATURE

Unit	°C
Indoor Range	-5°C to 50°C
Outdoor Range	-20°C to 60°C
Resolution	0.1°C

REMOTE SENSOR (THN122N)

RF frequency	433 MHz
Range	30 meters (98 feet) with no obstructions
Transmission	Every 78 seconds
Channel No.	1 - 3

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CLOCK

Clock display	HH:MM:SS
Hour format	12hr AM / PM or 24hr
Hour offset	+ / - 9 hours
Calendar	DD / MM; weekday in 5 languages (E, D, F, I, S)
Alarm	weekday and single; 2-minute crescendo

POWER

Main unit batteries	2 x UM-4 AAA 1.5V
Sensor batteries	2 x UM-4 AAA 1.5V

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

ABOUT OREGON SCIENTIFIC

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We hope you will find all the information you need on our website, however if you'd like to contact the Oregon Scientific Customer Care department directly, please visit www2.oregonscientific.com/service/support or call 949-608-2848 in the US. For international enquiries, please visit www2.oregonscientific.com/about/international/default.asp.

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EC-DECLARATION OF CONFORMITY

This product contains the approved transmitter module that complies with the essential requirements of Article 3 of the R&TTE 1999 / 5 / EC Directive, if used as intended and the following standards have been applied:

Safety of information technology equipment
(Article 3.1.a of the R&TTE Directive)
Applied Standard **EN 60950 : 2000**

Electromagnetic compatibility
(Article 3.1.b of the R&TTE Directive)
Applied Standards
ETSI EN 301 489-1-3 (Ver.1.4.1) : 2002-08

Efficient use of radio frequency spectrum
(Article 3.2 of the R&TTE Directive)
Applied Standards
ETSI EN 300 220-3 (Ver1.1.1) : 2000-09

Additional information:

The product herewith complies with the requirements of the Low Voltage Directive 73 / 23 / EC, the EMC Directive 89 / 336 / EC and carries the CE marking accordingly.

Carmelo Cubito
Agrate Brianza (MI) / Italy January 2004
Manufacturer's EU R&TTE Representative

CE

COUNTRIES RTTE APPROVAL COMPLIED
All EC countries, Switzerland (CH)
and Norway (N)

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