EN

+ECO Clima Control
Model: RMR500ES / RMR500ESU / RMR500ESA

USER MANUAL

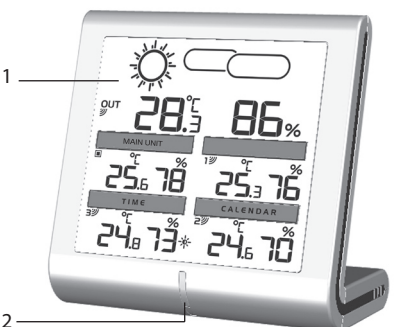
CONTENTS

EARTH FRIENDLY

Oregon Scientific™ proudly presents +ECO Clima Control, an environmental-friendly weather-monitoring clock that converts solar energy into its source of power via a solar panel. Convenient and easy to use, you only need to lift the solar panel and face it directly towards the sun for a few hours in order to receive the amount of energy necessary to power the device.

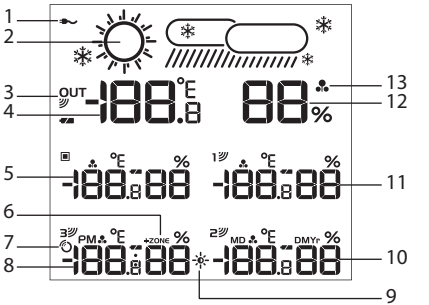
OVERVIEW

FRONT VIEW (FIG 1)



1. LCD Display
2. LED indicator

LCD DISPLAY (FIG 2)



1. AC/DC power adaptor icon
2. Weather forecast icon
3. Outdoor sensor reception icon
4. Outdoor temperature display for THGN500*
5. Temperature/humidity display for main unit environment
6. Time zone
7. Clock signal reception indicator
8. Clock display (or temperature/humidity display for optional sensor)
9. Sunlight icon
10. Calendar display (or temperature/humidity display for optional sensor)

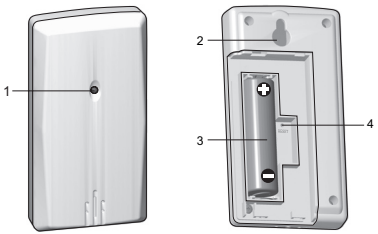
11. Temperature/humidity display for THGR122N remote sensor
12. Outdoor humidity display for THGN500*
13. Mold alert

* This product is designed to display the temperature and humidity reading of THGN500 in the outdoor temperature/humidity area only.

BACK VIEW (FIG 3)

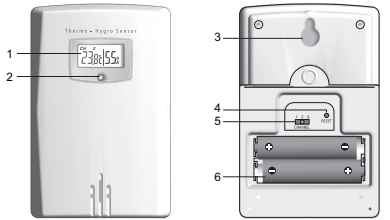
1. Solar panel
2. ⏲ : Toggle between clock, calendar and temperature/humidity displays; enter setting mode
3. ▲ : Increase values in setting mode; activate clock signal reception
4. ▼ : Decrease values in setting mode; deactivate clock signal reception
5. ☼ : Activate backlight
6. **RESET**: Reset unit to default settings
7. **°C / °F**: Select temperature unit
8. Power adaptor jack

OUTDOOR SENSOR - THGN500 (FIG 4)



1. LED status indicator
2. Wall mount hole
3. Battery compartment
4. **RESET** hole

REMOTE SENSOR - THGR122N (FIG 5)



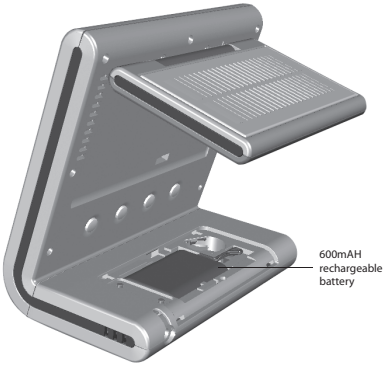
1. LCD display
2. LED status indicator
3. Wall mount hole
4. **RESET** hole
5. **CHANNEL** switch
6. Battery compartment

GETTING STARTED

SOLAR PANEL

This product uses a 600mAH rechargeable battery which should be charged via the solar panel. For the battery's first charge, it is strongly advised to charge it for at least 12 hours by lifting and positioning the solar panel in such a way that it faces sunlight directly.

IMPORTANT The solar panel should be lifted and positioned at no more than 90°.



When the rechargeable battery is nearly flat, the LED indicator on the main unit and ☼ will flash. Expose the solar panel directly to sunlight for approximately 5 to 6 hours to charge the battery. Normally, the battery life will last for 2 months.

TIPS

- For best results when charging the battery, avoid placing the product behind glass windows, but expose the solar panel directly to sunlight.
- Do not scratch the solar panel's surface or wipe it with strong detergent.
- Do not expose the solar panel to rain, snow or moisture.

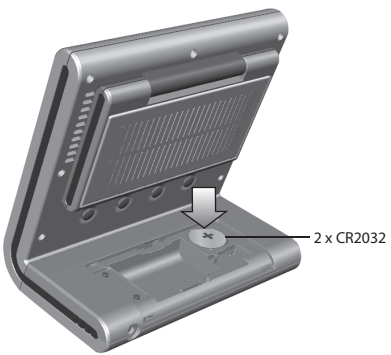
- The duration of the rechargeable battery's charging or operating time is determined by either the intensity of sunlight or the positioning of the solar panel towards the sun.

BACKUP POWER

CR2032 batteries

In the case when the rechargeable battery is flat or nearly flat, the 2 pieces of CR2032 batteries can act as backup power supply for the main unit.

1. Remove the battery compartment.
2. Insert the batteries, matching the polarities.
3. Press **RESET** after each battery change.



LOCATION	MEANING
Outdoor temperature/ humidity area (THGN500)	Outdoor sensor battery low
Main unit environment area	CR2032 batteries low
Remote sensor area (THGR122N)	Remote sensor batteries low
Clock and calendar area (or optional sensors area)	Optional sensors batteries low

Power adaptor (not included)

The power adaptor can also be used for charging the rechargeable battery. When connected to the main unit, will be displayed.

NAME TAGS

Name tags can be inserted in the main unit as in Fig. 1.

There are 10 name tags provided in this package, with 7 blank tags and 3 tags printed as "MAIN UNIT", "TIME" and "CALENDAR". You can write in the blank tags the name of the location where THGR122N and other optional sensors are installed.

NOTE If optional sensors are installed, "CALENDAR" and "TIME" tags will be replaced.

REMOTE SENSORS

This product can work with up to 4 sensors at any one time to capture temperature and relative humidity readings in various locations.

2 remote sensors (THGN500 and THGR122N) are provided in this package, while 2 more optional wireless remote sensors can be purchased separately.

Optional wireless remote sensors such as those listed below can be purchased separately:

- THGR122N / THGN122N
- THGN132N
- THGR228N / THGN228N
- THGR238N / THGN238N

To set up the remote sensor:

1. Open the battery compartment and insert batteries, matching the polarity.
2. Select a channel then press **RESET**.
3. Close the battery door.
4. Place the remote sensor within 30 m (98 ft) from the main unit.

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

To search for a sensor:

Press and hold ▲ + ▼ at the same time.

The remote sensor reception icon will show the following status:

ICON	DESCRIPTION
OUT → OUT	Main unit is searching for sensor(s).
OUT → OUT → OUT → OUT	A channel has been found.
OUT	The sensor cannot be found.

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

CLOCK AND CALENDAR

NOTE If optional sensors are installed:

- clock and calendar display will be replaced by temperature/humidity readings.
- press ⏲ to toggle between clock and temperature/humidity display, or calendar and temperature/humidity display.

CLOCK RECEPTION

This product is designed to synchronize its clock automatically with a clock signal.

RMR500ES:

EU: DCF-77 signal: within 1 500 km (932 miles) of Frankfurt, Germany.

RMR500ESU:

UK: MSF-60 signal: within 1 500 km (932 miles) of Anthorn, England.

RMR500ESA:

WWVB-60 signal: within 3200 km (2000 miles) of Fort Collins, Colorado.

To enable / disable clock signal reception:

Press and hold ▲ to enable or ▼ to disable clock 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. If signal reception is unsuccessful, place your unit next to a window, press and hold ▲ to force another signal search.

Clock signal reception indicator:

STRONG SIGNAL	WEAK / NO SIGNAL
	

MANUALLY SET CLOCK

To set the clock manually, disable the clock signal reception first.

1. Press and hold ⏲.
2. Press ▲ or ▼ to change the settings. The settings order is: time zone, 12/24 hr format, hour, minute, year, calendar mode (month – day / day – month), month and day.
3. Press ⏲ to confirm.

RMR500ES / RMR500ESU: Time zone sets the clock +/- 23 hours from the received clock signal time. If you have deactivated the clock signal reception, do not set a value for time zone.

RMR500ESA: Select the time zone: (0) Pacific, (+1) Mountain, (+2) Central or (+3) Eastern.

TEMPERATURE AND HUMIDITY

To toggle temperature unit:

Press **°C / °F**.

NOTE "HH.H" or "LL.L" will be displayed when the received temperature is out of the specified temperature range.

MOLD ALERT

This product features moisture alert function for the prevention of mold. If the humidity is over 60%, the mold alert icon ♣ will flash, and will stop flashing if the humidity is less than 60%.

WEATHER FORECAST

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

	Sunny
	Partially Cloudy
	Cloudy
	Rainy
	Snowy

BACKLIGHT

Press ☼ to activate LED backlight for 5 seconds.

RESET

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

SPECIFICATIONS

TYPE	DESCRIPTION
MAIN UNIT	
L x W x H	130 x 80 x 130 mm (5.1 x 3.15 x 5.1 in)
Weight	400 g (14.11 oz) without battery
Signal frequency	433 MHz
Temperature range	-5°C to 50°C (23°F to 122°F)
Humidity range	25% - 95%
Power	600mAH rechargeable battery; 6V AC/DC adaptor (not included); 2 x CR2032 batteries (for backup)
REMOTE UNIT (THGN500)	
L x W x H	50 x 22 x 96 **mm** (1.9 x 0.9 x 3.8 in)
Weight	63 **g (2.22 oz) without battery**
Signal frequency	433 MHz
Number of channel	1
Transmission range	30 m (100 ft) unobstructed
Temperature range	-20°C to 60°C (-4°F to 140°F)
Humidity range	25% - 95%
Power	1 x UM-3 (A**A) 1.5 V battery**
REMOTE UNIT (THGR122N)	
L x W x H	92 x 60 x 20 **mm** (3.6 x 2.4 x 0.79 in)
Weight	63 **g (2.22 oz) without battery**
Signal frequency	433 MHz
Number of channel	3
Transmission range	30 m (100 ft) unobstructed
Temperature range	-20°C to 60°C (-4°F to 140°F)
Humidity range	25% - 95%
Power	2 x UM-4 (AA**A) 1.5 V battery**

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 and not as normal household waste.
- 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.

NOTE Features and accessories will not be available in all countries.For more information, please contact your local retailer.

ABOUT OREGON SCIENTIFIC

Visit our website (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.asp

For international inquiries, please visit:

www2.oregonscientific.com/about/international.asp

EU-DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that this +ECO Clima Control (model: RMR500ES / RMR500ESU / RMR500ESA) 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 APPROVED COMPLIED
All EU countries, Switzerland CH
and Norway N

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 visit our website at www2.oregonscientific.com/service for all enquiries.

We

Name:	Oregon Scientific, Inc.
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declare that the product

Product No.:	RMR500ES / RMR500ESU / RMR500ESA
Product Name:	+ECO Clima Control
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.