



Radio-controlled Outdoor Wall Clock with Thermometer Model: JM888

USER MANUAL

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INTRODUCTION

Thank you for selecting the Oregon Scientific™ JM888 Radio-controlled Outdoor Wall Clock with Thermometer as your product of choice.

This product is splash-proof and targeted for outdoor usage, ideal for places such as a golfcourse clubhouse, pool-side terrace, restaurant patio, garden shed, outdoor terrace, veranda or balcony.

This device is designed to give you many years of reliable service, including the following conveniences:

- Radio-controlled calendar clock*
- Local temperature display
- Optional UVI display (with UV sensor UVR138 - purchased separately)

*Automatically synchronizes the current time and date when it is brought within range of the radio signal DCF77 generated from Frankfurt, Germany for Central Europe or MSF60 generated from Rugby, England .

NOTE Keep this manual handy as you use your new product. It contains practical step-by-step instructions, safety and care information, technical specifications and warnings you should know. Read the manual thoroughly, and keep it in a safe place in case you need to refer to it.

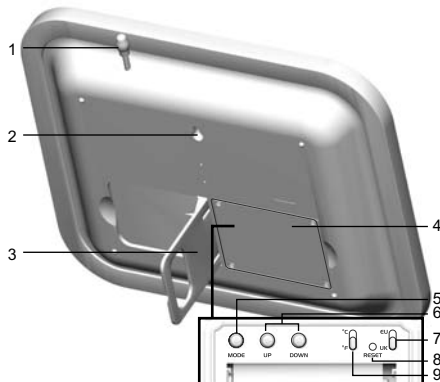
KEY FEATURES

FRONT VIEW



1. Rubber ring
2. **Transparent cover lens**

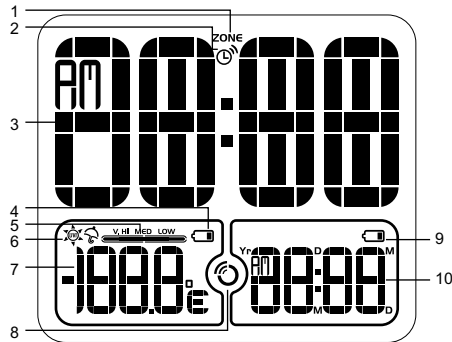
BACK VIEW



1. **Temperature sensor**
2. Wall-mount recess hole - For mounting the unit to a wall
3. Table stand - Can be pulled out and used to stand the unit on a flat surface
4. Battery compartment - The unit uses 2 AA/UM-3 1.5V batteries for power
5. **MODE** button - Toggles between the clock display modes and can manually adjust current time and date
6. **UP / DOWN** buttons - To adjust settings up or down one notch or to enable/disable RF radio reception
7. **EU / UK** switch - Slide to select your nearest radio signal base i.e. England or Germany
8. **RESET hole** - Returns all settings to default values
9. **°C / °F** switch - Slide to select between °C / °F display format



LCD DISPLAY SYMBOLS



1. Time zone
2. Hourly chime indicator
3. Time display
4. Low battery icon for UV sensor
5. UV (Ultraviolet) index level indicator
6. UV Index
7. Local temperature / UV index display - Displays currently monitored temperature / UV index
8. Radio reception signal - Indicates the condition of radio reception
9. Low Battery - Appears when power is low
10. Current date display - Displays current date

GETTING STARTED

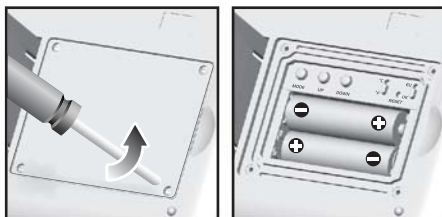
UNPACKING THE PRODUCT

When you unpack your clock, make sure to keep all the packing materials in a safe place, in case you need to later transport or return it for servicing.

In the box, you will find:

- Clock unit
- Batteries
- User manual

BATTERIES



To load the batteries:

1. Locate the battery compartment.
2. Unscrew the four small screws from the battery compartment.
3. Install the batteries by matching the correct polarity. Always use the correct battery type (2 x UM-3 AA-sized 1.5V batteries).

WARNING Reversing the polarity may damage the product.

NOTE Replace the batteries whenever the low battery icon is shown, the display is dim, or the display does not illuminate when the power is on. Replace all the batteries at the same time - it is dangerous to mix old and new batteries.

NOTE If the battery voltage level is low, the "low battery" icon will be displayed.

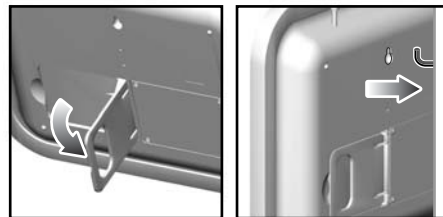
PLACEMENT OF UNIT

You can either mount the main unit on a wall or make it stand on a flat surface.

Table stand - The unit is already equipped with a table stand. Simply pull out the table stand and rest the main unit on a flat surface.

Wall mount - The main unit can be mounted onto a wall using a No. 6 screw (3.0mm).

1. Position and nail the screw into the place where you would like to hang your main unit.
2. Leave ample space between the wall and the screw head while testing to make sure the nail is secure.
3. Fit the unit's wall-mount recess hole onto the screw head.



NOTE ON WHERE TO PLACE THE UNIT

This unit is designed for outdoor usage.

When the unit is relocated from one place to another in extreme temperatures (e.g. from a very hot area to a very cold one), water condensation may occur on the lens at the front. This will not affect the functions of the unit. In this case, leave the unit in the same location for 2-3 hours and the water condensation will disappear.

The temperature sensor is located at the top of the unit. When the unit is placed under direct sunlight, the accuracy of the temperature display may be affected.


TIP It is suggested to put the unit under shade from direct sunlight.

TEMPERATURE DISPLAY

After battery installation, the unit immediately reads and displays the surrounding temperature.

RADIO RECEPTION

This product is designed to synchronize its calendar clock automatically once it is brought within range of the radio signal.

NOTE When the unit is receiving the signal, the  radio reception symbol will start to blink. Generally, complete reception takes around 2 to 10 minutes, depending on the strength of the signal.

To select the most suitable radio signal for your location, slide the **EU / UK** switch to the appropriate setting. Press **RESET** whenever you have changed the selected setting.


NOTE This **EU / UK** switch is located inside the battery compartment at the back of the unit.


RADIO RECEPTION DESCRIPTION

Even though there are areas that may have more difficulty in receiving a signal, the radio-controlled clock contains accurate quartz movement and will retain precise timing if the signal is missed on a rare occasion.

NOTE Reception can be affected by a number of factors. For best reception, place the device away from metal objects and electrical appliances. Other causes for signal interference include electrical transmission tower, steel reinforced construction, and metal siding. Reception is ideal when placed near a window.

ENABLING / DISABLING RECEPTION

To manually disable the reception of the radio clock signal, press and hold the **DOWN** button for 2 seconds. (The  radio reception signal will not appear on the LCD display).

To enable the radio reception signal, press and hold the **UP** button for 2 seconds. (The  radio reception signal will reappear on the LCD display).

SETTING THE CLOCK MANUALLY

To adjust the clock settings manually without automatic RF synchronization, remember to disable the radio reception first.


CLOCK SETTING MODE

To set the clock manually:

1. Press and hold the **MODE** button for 2 seconds. The clock area will blink.
2. Select the time zone offset (+/- 23 hours), 12/24 format, hour, minute, year, calendar format (M/D or D/M), month, day, language, and hourly chime on/off.
3. Press **UP** or **DOWN** to change the setting.
4. Press **MODE** to confirm.

NOTE If no key pressed after 1 minute, it will automatically return to local time display mode.

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

NOTE The hourly chime function when set to ON will beep once at the beginning of every hour. The  chime icon will also show on the display.

UV MEASUREMENT (WITH OPTIONAL UVR138)

With the optional UVR138 Ultra-Violet Radiation Sensor (which can be purchased separately), the ultra-violet Index (UVI) can be displayed on this unit.

This UV sensor measures the sun's ultra-violet radiation and transmits readings back to the main unit. It is splash proof and should be placed in an area with maximum exposure to the sun.

It can also be used with Oregon Scientific's new line of weather monitoring tools. Please consult the user manual of the UVR138 for more details and instruction.



GETTING STARTED

The sensor range is up to 30 meters (100 feet) with no obstructions.

SEARCHING AND DISPLAYING THE UV DATA

To begin searching for remote signals from the UV sensor, press and hold both the **UP** and **DOWN** buttons simultaneously for more than 2 seconds. (The lower left corner of the display will toggle between the temperature and the UV reading when a UVI reading from a UV sensor is detected).

NOTE The UV sensor must be activated beforehand. Please refer to the UVR138 user manual for more information.

UV INDEX DISPLAY

UV Index	Level	Icon Display
0 ~ 2	Low	
3 ~ 5	Medium	
6 ~ 7	High	
8 ~ 10	Very high	
11 ~ 25	Extremely high	

NOTE When the index is calculated to be higher than 25, **“HH”** will blink.

TEMPERATURE READINGS

The temperature display range is from -20°C to +60°C. The temperature beyond these limits will show **“LLL”** or **“HHH”**.

CHANGING CELSIUS TO FAHRENHEIT

To change Celsius to Fahrenheit:
Simply slide the switch at the back of the clock from **°C** to **°F**. (This switch is located inside the battery compartment).

THE RESET HOLE

If the clock behaves strangely or stops responding, insert and press a blunt stylus into the clock's **RESET hole** to reset the **unit's** settings. (This is located inside the battery compartment).

DEFAULT SETTINGS

All segments of the LCD will be turned on for 3 seconds and a beep sound will be given out. Then it will start RF reception.

- The clock settings are: PM12:00, 1st January 2004, RF enabled, English.
- The clock **displays** in 24 / 12 hour mode depending on the selection of the radio signal **EU/UK**.

SAFETY & CARE INSTRUCTIONS

SAFETY PRECAUTIONS

Please observe the following safety precautions when setting up and using this product:

- LCD panel - The LCD panel is made of glass, and may break if the unit is dropped or impacted.
- Heat sources - Keep the product away from heat sources such as radiators, stoves, heaters, and other heat-generating products.

CARING FOR YOUR PRODUCT

To ensure you receive the maximum benefit from using this product, please observe the following guidelines:

- Cleaning - Use a damp cloth. Do not use liquid cleaning agents, benzene, thinner, or aerosols.
- Ventilation - The vents and other openings are designed for ventilation, and should not be blocked or covered.
- Blocking the vents can cause the product to overheat, and can damage the unit.
- Repair - Do not attempt to repair the product or modify the circuitry by yourself. Contact the retailer or a qualified repairman if the product requires servicing. Only use replacement parts that are recommended by the manufacturer.
- Do not scratch hard objects against the LCD display as this may cause damage.

TROUBLESHOOTING GUIDE

BASIC FUNCTIONS

This section includes a list of frequently asked questions for problems you may encounter. If your device is not operating as you think it should, check here before arranging for servicing.

Problem: Radio antenna is not displayed on the LCD screen.

Symptom: The RF signal cannot be received.

Check this: Obstacles (either electromagnetic interference or objects) are barring the signal from reaching the main unit.

Remedy: Move the unit away from any sources of interference, including other electronic devices.

Problem: Low-battery signal is displayed on the LCD screen.

Symptom: Batteries of the unit are low.

Check this: Check LCD display of the unit.

Remedy: Install new batteries into the unit.

Problem: Clock time is not correctly set.

Symptom: No radio signal reception.

Check this: Electromagnetic interference or objects are barring reception. Orientation or placement of main unit is not optimum for receiving the RF signal.

Remedy: Place the main unit far away from PCs, phones, and other electronic equipment.

Problem: Operation is not normal.

Symptom: Certain functions do not perform.

Check this: Device requires reset.

Remedy: Reset the unit with a blunt stylus pressed against the **RESET** hole.

SPECIFICATIONS

Width x height x depth:

260 x 220 x 45mm (10.24 x 8.66 x 1.77 inches)

Weight:

776g (1.71 lbs) (without batteries)

RF Frequency System:

DCF77 (EU) or MSF60 (UK)

Display:

Hour Format:

12hr am/pm (MSF format)

24hr (DCF format)

Date format user-selectable

DD-MM or MM-DD

Day-of-week display

In English, French, German, Spanish, and Italian

Power supply

2 x UM-3 / AA 1.5V batteries

Temperature unit

°C or °F

Temperature measuring range

-20 °C to 60 °C (-4 °F to 140 °F)

WARNINGS

To ensure you use your product correctly and safely, read these warnings and the entire user manual before using the product.

The warnings given here provide important safety information and should be observed at all times.

WARNINGS

- Do not attempt to repair the product yourself. Contact the retailer or our customer service department if it requires servicing.
- Take precautions when handling all battery types. They can cause injuries, burns, or property damage as a result of contact with conducting materials, heat, corrosive materials or explosives. Remove the batteries before storing the product for long periods of time.
- The product is a precision instrument. Never attempt to take this device apart. There is a serious danger of powerful electric shocks.
- Do not immerse the device in water.
- Do not, under any circumstances, touch the exposed electronic circuitry of the device as there is a danger of electric shock should it become exposed.
- Take special care when handling a damaged LCD display, as the liquid crystals can be harmful to your health.
- Do not use or store the device, including the remote sensor, in locations that may adversely affect the product such as rain, snow, desert, and magnetic fields.



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Visit our website (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'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:
<http://www2.oregonscientific.com/about/international/default.asp>

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 60950-1: 2001**

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



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



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