

TABLE OF CONTENTS

About this guide	2
Product overview	3
Getting started	8
Batteries	8
Change settings	8
Remote unit setup	9
Clock	10
Alarm	12
Barometer	13
Weather forecast	14
Temperature & humidity	15
Backlight	18
Reset system	18

Safety and care	18
Warnings	18
Troubleshooting	20
Specifications	21
Additional resources	23

ABOUT THIS GUIDE

Congratulations on your selection of the Oregon Scientific Modena Wireless Weather Station (FSW-301). This powerful device bundles weather forecasting, barometric pressure monitoring, indoor and wireless outdoor temperature and humidity measurement, time keeping, and alarm features into a single tool you can use from the convenience of your home.

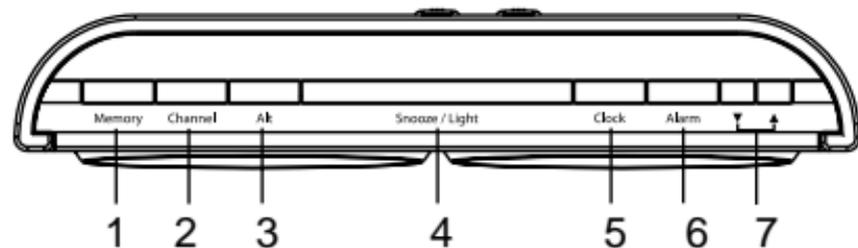
Keep this manual handy as you use your new product. It contains practical step-by-step instructions, as well as technical specifications and warnings you should know.

In this box, you will find:

- Main unit
- Remote sensor
- Batteries

PRODUCT OVERVIEW

TOP VIEW



DESCRIPTIONS

1. Memory – view memory (→ 15)
2. Channel – switch remote unit (→ 9, 15)
3. Altitude (→ 13)
4. Snooze / Light (→ 13, 18)
5. Clock (→ 10)
6. Alarm (→ 12)
7. ▲ UP / ▼ DOWN – increase / decrease setting or activate / deactivate auto-synchronization (→ 8, 11)

LEFT LCD DISPLAY



DESCRIPTIONS

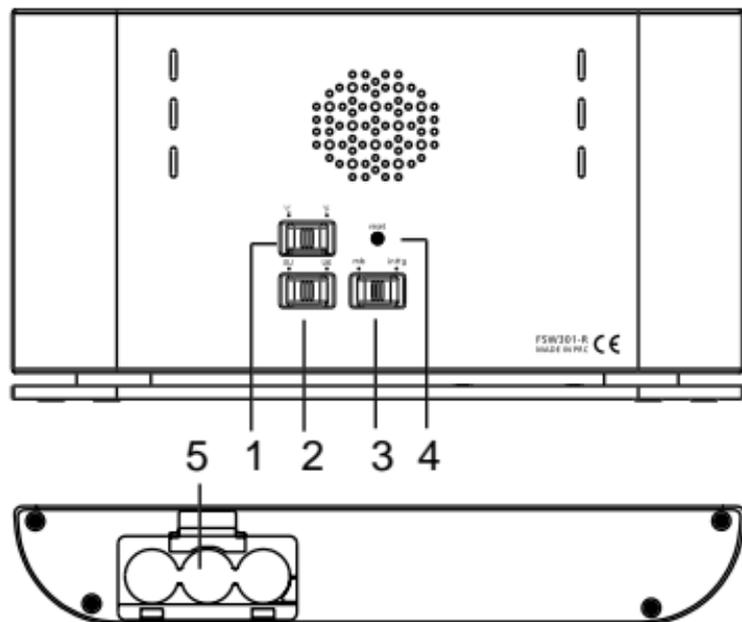
1. Low battery icon (→ 8)
2. Road conditions (→ 14)
3. Weather forecast (→ 14)
4. RF signal reception (→ 10)
5. Clock / Calendar (→ 10)
6. Alarm Status / Type (→ 12)

RIGHT LCD DISPLAY



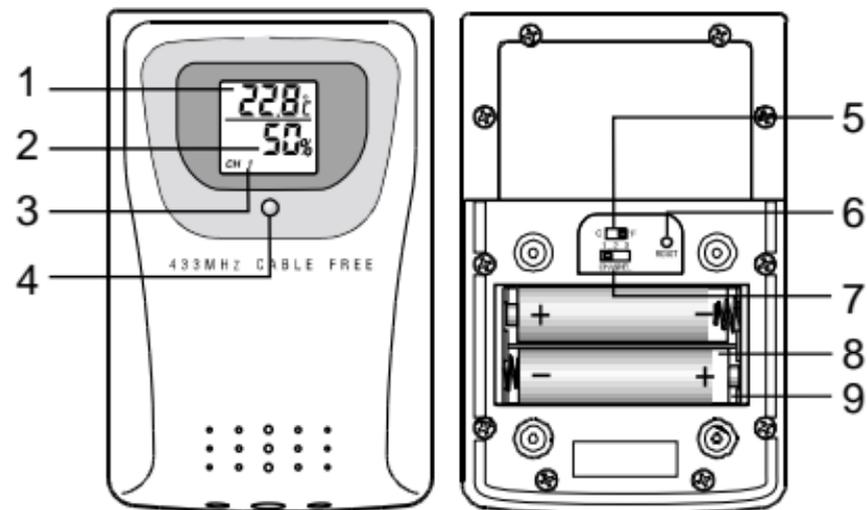
DESCRIPTIONS

1. Remote unit signal reception (→ 9, 15)
2. Temperature (→ 15)
3. Temp / Humidity trends (→ 17)
4. Remote unit low battery icon (→ 8)
5. Humidity / Comfort level (→ 17)
6. Barometer (→ 13)

BACK VIEW**DESCRIPTIONS**

1. °C/°F switch (→ 9, 16)
2. Radio format switch (→ 10)
3. Barometer unit switch (→ 13)
4. Reset button (→ 10, 18)
5. Battery compartment (→ 8)

REMOTE UNIT



DESCRIPTIONS

1. Temperature (→ 15)
2. Humidity and comfort level (→ 17)
3. Channel number (→ 9, 15)
4. LED indicator (→ 9, 15)
5. °C/°F switch (→ 9, 16)
6. Reset button (→ 18)
7. Channel switch (→ 9, 15)
8. Batteries (→ 8)
9. Battery compartment (→ 8)

GETTING STARTED

BATTERIES

Batteries for the remote and main units are supplied with this product. Replace them whenever the low battery signal () displays. Remove the battery lid on the bottom of the main unit. Use a small Phillips screwdriver to remove the remote unit compartment lid. Be sure to match the correct polarity, as shown in the battery compartment. After you change the batteries, press the **RESET** button with the point of a blunt object (such as a ball point pen).

NOTE Insert the batteries in the remote unit before you set up the main unit. Do not use rechargeable batteries.

CHANGE SETTINGS

Press and hold **CLOCK** or **ALARM** for 2 seconds to enter setting mode. Then, press **▲UP** or **▼DOWN** to change each setting. Press and hold to enter fast-setting mode. Press **CLOCK** or **ALARM** to switch between settings.

REMOTE UNIT SET UP

Up to 3 remote units can be used with this product to monitor outdoor temperature and humidity. The measurement unit (°C or °F) and channel number (1, 2, or 3) switches are located in the battery compartment, and should be set prior to installation.

NOTE Additional remote units sold separately. If you are using more than one remote unit, be sure to select a different channel number for each unit.

INSTALLATION

Mount the remote unit on a flat surface using the recess holes on the back of the unit.

For best results:

- Insert the batteries and select the measurement unit and channel number first.
- Place the unit out of direct sunlight and moisture.
- Do not place the remote unit more than 20-30 meters (60 – 90 feet) from the main (indoor) unit.

- Position the unit so that it faces the main (indoor) unit. Minimize obstructions such as doors, walls, and furniture.

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

CLOCK

This product can automatically synchronize the date and time with official time-keeping organizations in Frankfurt (Germany) and Rugby (England). When the unit is within 1500 km (932 miles) of a RF signal, the reception icon will blink during reception.

SET RADIO SIGNAL FORMAT

The **RADIO SIGNAL FORMAT** switch is located in the battery compartment. Select EU (DCF) or UK (MSF). Then, press **RESET** to reset the unit.

Reception takes 2 – 10 minutes to complete. Once complete, the icon will stop blinking.

Strong signal	Weak signal	No signal
		

NOTE For best results, place the unit away from metal or electrical objects, and near a window with a clear view to the sky.

TO DISABLE OR ENABLE AUTO-SYNCHRONIZATION

Press **▼ DOWN** for 2 seconds to disable the auto-

synchronization. The unit will not respond to radio signals until you reactivate the synchronization.

To enable auto-reception, press **▲ UP** for 2 seconds.

SET OR CHANGE THE CLOCK

Auto-synchronization must be deactivated before you manually set the clock. (→ previous section)

1. Press and hold **CLOCK** for 2 seconds to enter setting mode.
2. Select the 12/24-hour format, hour, minute, year, date/month format, month, date, and

display language. Press **▲ UP** or **▼ DOWN** to change the setting. Press **CLOCK** to confirm.

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

VIEW DAY OF WEEK, SECONDS, OR DATE

Press **CLOCK**.

ALARM

When activated, the Beep alarm starts quietly, then gradually becomes louder until it crescendos at 1 minute. It shuts off at two minutes. The LCD display lights up for the first 5 seconds.

SET ALARM

1. Press and hold **ALARM** for 2 seconds to enter setting mode.
2. Select the hour, minute, and alarm type ( for Beep Alarm or  for Ferrari Engine). Press **▲ UP** or **▼ DOWN** to change the setting. Press **ALARM** to confirm.

SNOOZE

Press **SNOOZE/LIGHT** to temporarily disable the alarm for 8 minutes. The alarm icon will blink while Snooze is activated.

TO TURN THE ALARM OFF OR ON

Press **CLOCK**, **▲ UP** or **▼ DOWN**.

To turn the alarm off completely (deactivate it for the next day), press **▼ DOWN** when the alarm time is displayed. Press **▲ UP** to activate the alarm again.

BAROMETER

This product tracks barometric pressure changes over the past 24 hours to provide the weather forecast (→ 14). Barometric changes are measured by the main (indoor) unit.

SET UNIT AND ALTITUDE

You can set the unit of measurement (mb/hPa or inHg) and altitude. Setting the altitude allows the product to take more accurate barometric measurements.

1. The **Barometer Unit** switch is located on the back of the product. Select mb/hPa or inHg.
2. To set the altitude, press and hold ALT for 2 seconds. Press ▲ **UP** or ▼ **DOWN** to change the setting. Press ALT to confirm.

WEATHER FORECAST

This product forecasts the next 12 to 24 hours of weather within a 30 to 50 km (19 - 31 mile) radius with 70 to 75 percent accuracy. The weather forecast is always displayed.

Clear	Partly Cloudy	Cloudy	Rainy
			

ROAD CONDITIONS

Based on the weather forecast, a racing wheel icon will indicate the predicted road conditions.

Dry	Slick	Very Wet
		

TEMPERATURE AND HUMIDITY

With the press of a button, you can check the current indoor or outdoor temperature, humidity percentage, comfort level, trend, and record measurements. Outdoor measurements are collected by the remote unit.

VIEW MIN / MAX / CURRENT MEASUREMENTS

Press **MEMORY**.

CLEAR MIN / MAX MEASUREMENTS

Press and hold **MEMORY** for 2 seconds until a beep sounds.

SELECT REMOTE UNIT CHANNEL

Press **CHANNEL** to switch between  CHANNEL 1, 2, 3, or indoor. Or, press and hold for 2 seconds to enter auto scan mode. If you select "Auto", the channel will change every 3 seconds. Press **CHANNEL** or **MEMORY** again to deactivate this auto function.

SENSOR SEARCHING

Simultaneously press **CHANNEL** and **MEMORY** to manually activate channel searching. The search icon will blink until the remote signal is found, or the search period times out.

Searching	Strong signal	No signal
		

NOTE Signals from household electrical appliances such as doorbells and home security systems can cause temporary reception failures between the indoor and outdoor units. This is normal and does not affect the general performance of the product. Reception will automatically resume once the interference ends.

NOTE Check the remote unit batteries if no signal is found.

SET UNIT

The °C / °F switch is located on the back of the main unit, and in the battery compartment for the remote unit. Select °C or °F.

COMFORT ZONE

The indoor and outdoor comfort zones are always shown.

Zone	Temperature	Relative Humidity
Wet	Any	>70%
Com	20 °C – 25 °C (68 °F - 77 °F)	40 – 70%
Dry	Any	<40%

TRENDS

The trend arrow for the last 30 minutes always displays. Indoor and outdoor temperature and humidity trends are shown separately.

Trend	Temperature	Relative Humidity
	+ 0.5 °C	+ 3%
	Steady	Steady
	- 0.5 °C	- 3%

BACKLIGHT

Press **SNOOZE/LIGHT** to illuminate the backlight for 5 seconds.

RESET SYSTEM

The **RESET** buttons are located on the back of the main unit, and in the battery compartment for the remote unit. Press these buttons whenever you change the batteries, or whenever performance is not behaving as expected (e.g., unable to establish radio frequency link with remote unit or automatic clock, etc.). This will return all settings to default value,

and you will lose all stored information (minimum / maximum temperature and humidity, alarm settings, etc.).

SAFETY AND CARE

Wash the unit with a slightly damp cloth and mild detergent. Avoid dropping the unit or placing it in a high-traffic location.

WARNINGS

This product is designed to give you years of service if handled properly. Observe the following guidelines:

- Never immerse the unit in water. This can cause electrical shock and damage the unit.
 - 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.
- Do not make any changes or modifications to this product. Unauthorized changes may void your right to use the product.
 - The contents of this user guide are subject to change without notice.
 - Images not drawn to scale.

TROUBLESHOOTING

Check here before contacting our customer service department.

Problem	Symptom	Remedy
Baro reading	Strange	Set altitude / unit (→13)
Calendar	Strange date / month	Change language(→11)
Clock	Cannot change clock	Disable auto-synchronization (→11)

Problem	Symptom	Remedy
Clock	Cannot auto-synch	1. Adjust. batteries. 2. Press RESET (→ 18). 3. Manually activate auto-synch (→ 11).
Temp	Shows "LLL" or "HHH"	Temperature is out-of-range.
Remote unit	Cannot locate remote unit	Check batteries (→ 8)

Problem	Symptom	Remedy
		Check location (→ 9)
	Cannot change channel	Check sensors. Only one sensor is working (→15)

SPECIFICATIONS

Main unit dimensions

L x W x H	197 x 104 x 36 mm (7.76 x 4.09 x 1.42 inches)
Weight	386 grams (0.85 lbs) with batteries

Remote unit dimensions

L x W x H	92 x 60 x 20 mm (3.6 x 2.4 x 0.8 inches)
Weight	100 grams (0.2 lb.)

Temperature

Unit	°C or °F
Indoor Range	-5 °C to 50 °C (23 °F to 122 °F)

Outdoor Range	-20 °C to 60 °C (-4 °F to 140 °F)
Resolution	0.1 °C (0.2 °F)
Comfort	20 °C to 25 °C (68 °F to 77 °F)
Memory	Minimum / maximum
Trend	+/- 0.5°C change per 30 minutes

Relative humidity

Range	25% to 95%
Resolution	1%
Comfort	40% to 70%
Memory	Minimum / maximum
Trend	3% change per 30 minutes

Barometer

Unit	mb/hPa or inHg
Range	500 to 1050 mb

	(14.77 to 31.01 inHg)
Resolution	1 mb (0.03 inHg)
Altitude	-100 to 2500 meters (-328 to 8202 feet)
Display	Rainy, cloudy, partly cloudy, sunny

Remote unit

RF frequency	433 MHz
Range	30 meters (98 feet) with no obstructions
Transmission	every 40 seconds
Channel No.	1, 2, or 3
Unit	°C or °F

Radio-controlled clock

Synchronization	Auto or disabled
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Clock display	HH:MM:SS
Hour format	12hr AM/PM (MSF format) 24hr (DCF format)
Calendar	DD/MM or MM/DD user-selectable; weekday selection in 5 languages (E, D, F, I, S)
Alarm	Ferrari Engine or Beep; 2 minute crescendo for Beep
Snooze	8 minutes
Power	
Main unit	3 x UM-3 (AA) 1.5V alkaline batteries
Remote unit	2 x UM-4 (AAA) 1.5V alkaline batteries

ADDITIONAL RESOURCES

Visit our website (www.oregonscientific.com) to learn more about your new product and other Oregon Scientific products such as digital cameras, hand-held organizers, health and fitness gear, and weather stations. The website also includes contact information for our customer service department, in case you need to reach us.

EC-DECLARATION OF CONFORMITY

This product contains the approved transmitter module TX 01 and complies with the essential requirements of Article 3 of the R&TTE 1999/5/EC Directives, if used for its intended use and that the following standard(s) has/have been applied:

Efficient use of radio frequency spectrum
(Article 3.2 of the R&TTE Directive)

applied standard(s) **EN 300 220-1(2,3):1997**

Electromagnetic compatibility
(Article 3.1.b of the R&TTE Directive)

applied standard(s) **ETS 300 683:1997**

Safety of information technology equipment
(Article 3.1.a of the R&TTE directive)

applied standard(s) **EN 60950:1997**

Additional information:

The product is therefore conform with the Low Voltage Directive 73/23/EC, the EMC Directive 89/336/EC and R&TTE Directive 1999/5/EC (appendix II) and carries the respective CE marking.

VS-Villingen / Germany August 2001

Gerhard Preis

R&TTE Representative of manufacturer

CE 0682 

COUNTRIES RTTE APPROVAL COMPLIED

All EC Countries, Switzerland 
and Norway 

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O R E G O N
S C I E N T I F I C

Ferrari

OFFICIAL LICENSED PRODUCT

**Wireless Weather Station
(Model #: FSW-301 Modena)**

User Manual