

Anywhere Weather Kit
Model: LW301/LW301U/LW301A

Anywhere Weather Kit Basic
Model: LW302/LW302U/LW302A

USER MANUAL

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INTRODUCTION

LW301/302

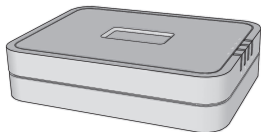
Thank you for selecting the Oregon Scientific™ Anywhere Weather Kit (LW301) or Kit Basic (LW302). Either one can collect weather data via a weather sensor receiver from different accessorial sensors, and then send the data back to Oregon Scientific Internet server via Internet-connected hub through Internet. It also provides a solution for the user to have a weather station connection that can be remote accessed from their mobile device, such as smartphone or tablet PC.

NOTE Please 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 about.

PACKAGING CONTENTS

COMMUNICATIONS SET

LW301/302



1 x Internet-connected hub



1 x Power adapter
(May vary in
different countries)

1 x Weather sensor receiver

1 x receiver connection cable

1 x LAN cable

WIND SENSOR

LW301

1 x Wind Sensor (WGR800)
(1 x Wind Vane above
and
1 x Anemometer below)

1 x sensor connector

2 x AA UM-3 1.5V batteries

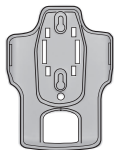
4 x Screws (Type A)

1 x Round U-bolt

TEMPERATURE & HUMIDITY SENSOR LW301/302



1 x Temperature /
Humidity Sensor
(THGR800)



1 x wall mount
bracket



1 x Table stand



2 x AAA UM-4
1.5V battery

RAIN GAUGE LW301



1 x Rain Collector
(PCR800)



4 x Screws
(Type C)




2 x AA UM-3
1.5V batteries



6 x Washers

ACCESSORIES – SENSORS LW301/302

You can expand the system by adding up to 8 sensors at any one time to capture outdoor temperature and relative humidity in various locations.

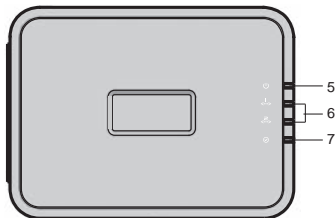
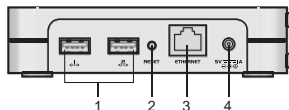
Optional wireless remote sensors with this logo  such as those listed below are also compatible with the weather sensor receiver. For more information of these sensors, please contact your local retailer.*

- THGN801 (Wireless Temp. & Humidity Sensor)
- THGR/THGN800 (Thermometer & Humidity Sensor with 3 Channels)
- THGR/THGN810 (Thermometer & Humidity Sensor with 10 Channels)
- UVN800 (Ultra-violet Index Sensor)
- PCR800 (Wireless Rain Gauge)
- THWR800 (Wireless Floating Temperature Sensor)

* **Features and accessories will not be available in all countries.**

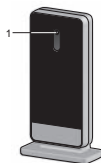
OVERVIEW

INTERNET-CONNECTED HUB LW301/302



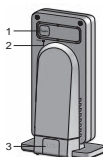
1. / Receiver connection socket (1 or 2)
2. **RESET** hole: return to default settings
3. **ETHERNET** socket: connect LAN cable
4. Power adaptor socket
5. : power indicator
6. / indicators: Receiver connection cable (1 or 2) is plugged
7. : data is being transferred

WEATHER SENSOR RECEIVER LW301/302



Front View:

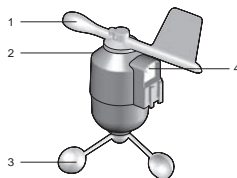
1. **LED status indicator**: Blinks during search; continuous light indicates a successful connection



Back View:

1. **SEARCH**: Initiate search for remote sensors
2. **RESET**: return to default settings
3. **USB** socket: Upload records to Internet-connected hub

WIND SENSOR LW301



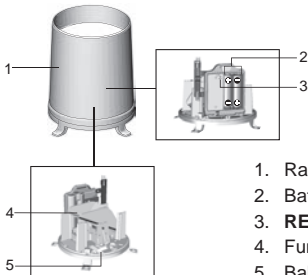
1. Wind direction
2. Wind vane casing
3. Anemometer
4. Solar power socket

OUTDOOR TEMPERATURE / HUMIDITY SENSOR LW301/302



1. LCD screen
2. LED status indicator
3. **RESET** hole
4. **°C / °F**:
select temperature unit
5. **CHANNEL** switch
6. Battery compartment

RAIN GAUGE LW301



1. Rain gauge
2. Battery compartment
3. **RESET**
4. Funnel
5. Balance indicator

GETTING STARTED

The provided sensors are battery operated. Each is capable of transmitting data to the weather sensor receiver wirelessly within an approximate operating range of 100 meters (328 feet).

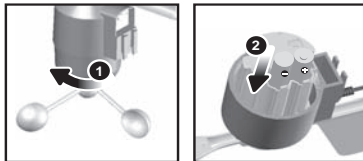
NOTE

- Use disposable alkaline batteries for longer usage and consumer grade lithium batteries in temperatures below freezing. Do not use rechargeable batteries.
- Batteries should not be exposed to excessive heat such as sunshine or fire.

SET UP REMOTE WIND SENSOR LW301

The wind sensor takes wind speed and direction readings.

To insert batteries:



1. Unscrew the anemometer from the wind sensor carefully.
2. Insert batteries matching the polarities (+ / -) and replace the anemometer. Press **RESET** after each battery change.

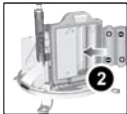
SET UP REMOTE TEMPERATURE / HUMIDITY SENSOR LW301/302

1. Slide to open the battery compartment cover.
2. Slide channel switch to select a channel (1, 2, 3). Ensure you use a different channel for each sensor.
3. Place the batteries in the compartment following the polarity label +/-.
4. Press **RESET** after each battery change.
5. Align the cover flat against the battery compartment, then slide it until it clicks into place to lock the cover.

NOTE Ensure to set at least one sensor to be channel one, the data of channel one will be shown on **LIVE** page in the application (page 8).

SET UP RAIN GAUGE LW301


The rain gauge collects rain and takes rainfall readings.



1. Remove screws and slide the cover off in an upwards motion.
2. Place the batteries in the compartment following the polarity label +/- . Press **RESET** after each battery change.
3. Remove the fibre tape.

SET UP WEATHER SENSOR RECEIVER LW301/302

For continuous use, connect the weather sensor receiver to Internet-connected hub using receiver connection cable provided.

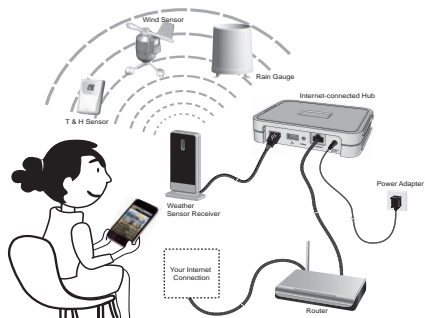
1. Using provided LAN cable, connect one end to the **ETHERNET** socket on the Internet-connected hub and the other end to the router.
 2. Using provided receiver connection cable, connect one end to the receiver connection socket (1 or 2) on the Internet-connected hub and the other end into the USB socket on the weather sensor receiver. on the weather sensor receiver.
- 
3. Plug the large end of the power adapter into a power outlet not controlled by a wall switch. Plug the small end of the power adapter into the power socket on the Internet-connected hub.
 4. Once connected, the weather sensor receiver will send the data to the Internet-connected hub via receiver connection cable.

LED Light	Meaning
Continuously on	Connection successful
Fast blink	Searching
Slow blink	Lost link
Protracted blink	No device found

INTERNET-CONNECTED HUB INSTALLATION LW301/302

Connect the Internet-connected hub to be a system as shown below. If you purchased model LW302 product and want to add more weather sensors, please contact your local retailer or visit our website at www.oregonscientific.com.

NOTE The power adapter of the Internet-connected hub is intended to be correctly oriented in a vertical position. The prongs are not designed to hold the plug in place if it is plugged into a ceiling, under-the-table or cabinet outlet.



NOTE If the network you use is restricted, please contact the technical staff of that organization for support.

DOWNLOAD APPLICATION LW301/302

1. Download the 'Anywhere weather' application from your device, such as smartphone or tablet PC. The application is available in Apple App Store (iOS version) or Google Play Store (android version).
2. For your first time use, tap **REGISTER** to fill out the fields and select **DONE**.
3. After registration, enter email address and password again then tap **LOGIN**.



REGISTER A WEATHER STATION LW301/302

1. Once you login to the application, the below display is shown. Click + to register a weather station.



- On **REG. STATION** page, fill out all fields (you can find **MAC ADDR.** and **REG CODE** at the bottom of the Internet-connected hub).
- The map displays your location. You can make a zoom by simply tap-and-drag the map by your two fingers at a time. Once you find out the specific location for your new station, press and hold until a red pin appears on the map. (Tap the red pin again, you can see **New Station** message pops up). Tap **DONE** to confirm the selection.
- Once successful, **LIVE** page with real-time weather data will pop up. If application fails to connect to a station, the display goes back to **REG.STATION** page again.



NOTE The default temperature and humidity data on **LIVE** page is from your channel 1 of temperature and humidity sensor.

NOTE The weather icon represents the weather situation for the next 12 hours, not the real-time situation.

NOTE Please save a copy of your **MAC ADDR.** and **REG CODE** for preventing the label faded or damaged that cannot be recognized for registration in the future.

VERIFY CONNECTION LW301/302

Before proceeding to install sensors outside, please verify communication and transfer of data.

Enter **MY WEATHER** page, then tap **HISTORY** profile.

To search for a sensor:

Press and hold **SEARCH** (located at the back of the weather sensor receiver).

NOTE Unit will search only for already registered sensor or new sensor reset within last 30 minutes. To register a new sensor, reset sensor prior to search.

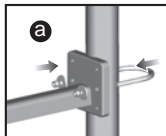
TIP The transmission range may vary depending on many factors. Sensors should be positioned in an open area away from trees or other obstructions. Relocate your sensor to various locations to have better reception.

MOUNTING / PLACING OF SENSORS

WIND SENSOR LW301

Secure the sensor connector in the desired location:

- Align the back of the sensor connector to an existing pole. Secure in place by inserting the ends of the U-bolt into the holes on the sensor connector and securing it with washers and bolts.

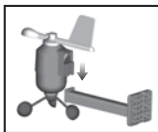
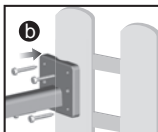


OR

- b. Insert 4 type A screws into the holes of the sensor connector. Screw firmly into place, i.e. fence.

Align the wind vane flat against the small end of the sensor connector, and then slide it until it clicks into place to lock the cover.

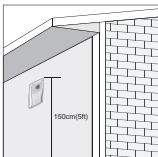
IMPORTANT Ensure that the wind sensor is pointing north to enable it to record accurate readings.



TEMPERATURE & HUMIDITY SENSOR LW301/302

TIP Ideal placements for the sensor would be in any location on the exterior of the home at a height of not more than 1.5 m (5 ft) and which can shield it from direct sunlight or wet conditions for an accurate reading.

Secure the sensor in the desired location using the wall mount bracket or table stand.



RAIN GAUGE LW301

The rain gauge should be mounted horizontally about 1 meter (3 feet) from the ground in an open area away from trees or other obstructions to allow rain to fall naturally for an accurate reading.

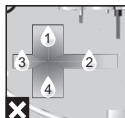
To ensure a level plane:

Put a few drops of water on the cross at the base of the funnel to check the horizontal level.

Water will pool to the centre of the cross when the rain gauge is level.

If water remains on 1-4, the gauge is not horizontal.

If necessary, adjust the level using the screw.



NOTE For best results, ensure the base is horizontal to allow maximum drainage of any collected rain.

TIP Erase all testing data from application before formal use.



VIEW READINGS ON SERVER LW301/302

For your convenience, data is uploaded onto our weather server. User can go to www.oregonscientific.com to check the data.

RESET LW301/302

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

SPECIFICATIONS

WEATHER SENSOR RECEIVER

Dimensions	149 x 198 x 47 mm
(L x W x H)	(5.9 x 7.8 x 1.9 inches)
Weight	510 g (1.12 lbs) without battery

INDOOR BAROMETER

Barometer unit	mb/hPa, inHg and mmHg
Measuring range	700 – 1050mb/hPa
Accuracy	+/- 10 mb/hPa
Resolution	1mb (0.0 inHg)
Altitude setting	Sea level User setting for compensation
Weather display	Sunny, Clear night, Partly Cloudy, Cloudy, Cloudy at night, and Rainy

REMOTE WIND SENSOR UNIT

Dimensions	178 x 76 x 214 mm
(L x W x H)	(7 x 3 x 8.4 inches)
Weight	100 g (0.22 lbs) without battery
Wind speed unit	m/s, kph, mph, knots
Speed accuracy	2 m/s ~ 10 m/s (+/- 3 m/s) 10 m/s ~ 56 m/s (+/- 10%)
Direction accuracy	16 positions
Transmission of wind speed signal	Approx. every 14 seconds
Memory	Max speed gust
Battery	2 x UM-3 (AA) 1.5V batteries

OUTDOOR TEMPERATURE & HUMIDITY UNIT RELATIVE TEMPERATURE

Dimensions	115 x 87 x 118 mm
(L x W x H)	(4.5 x 3.4 x 4.6 inches)
Weight	130 g (0.286 lbs) without battery
Temp. unit	°C / °F
Displayed range	-50°C to 70°C (-58°F to 158°F)
Operating range	-30°C to 60°C (-4°F to 140°F)
Accuracy	-20°C – 0°C: +/- 2°C (+/- 4.0°F) 0°C - 40°C: +/- 1°C (+/- 2.0°F) 40°C - 50°C: +/- 2°C (+/- 4.0°F) 50°C - 60°C: +/- 3°C (+/- 6.0°F)

Comfort	20°C to 25°C (68°F to 77°F)
Memory	Current, Min and Max temp. Dew Point w/ Max and Min Wind chill temp. and min

RELATIVE HUMIDITY

Displayed range	2% to 98%
Operating range	25% to 90%
Resolution	1%
Accuracy	25% - 40%: +/- 7% 40% - 80%: +/- 5% 80% - 90%: +/- 7%
Comfort	40% to 70%
Memory	Current, Min and Max
Battery	2 x UM- 4 (AAA) 1.5V batteries

RF TRANSMISSION

RF frequency	433MHz
Range	Up to 100 meters (328 feet) with no obstructions
Transmission	Approx. every 60 seconds
No. of Channel	1 for Wind/ Rain/ UV and 8 for Temp. / Humidity

REMOTE RAIN GAUGE

Dimensions	107 x 87 x 56 mm
(L x W x H)	(4.2 x 3.4 x 2.2 inches)
Weight	134 g (0.3 lbs) without battery
Rainfall unit	Mm/hr and in/hr
Range	0 mm/hr – 999 mm/hr
Resolution	1 mm/hr
Accuracy	< 15 mm/hr: +/- 1 mm 15 mm to 9999 mm: +/- 7%
Memory	Past 24hrs, hourly and accumulated from last memory reset
Battery	2 x UM-3 (AA) 1.5V

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) to learn more about Oregon Scientific products.



For any enquiry, please contact our Customer Services at (info@oregonscientific.com).

EU-DECLARATION OF CONFORMITY

Hereby, Oregon Scientific, declares that Anywhere Weather Kit (model: LW301) or Anywhere Weather Kit Basic (model: LW302) 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 
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), 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. & Name: LW301/LW301U/LW301A
(Anywhere Weather Kit)
LW302/LW302U/LW302A
(Anywhere Weather Kit Basic)

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, and 2) This device must accept any interference received, including interference that may cause undesired operation.