Ambient Weather WS-0262A WiFi Wireless Thermo-Hygrometer User Manual

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1. Introduction

Thank you for your purchase of the Ambient Weather WS-0262 WiFi Wireless Thermo-Hygrometer. The following user guide provides step by step instructions for installation, operation and troubleshooting. To download the latest manual and additional troubleshooting tips, please visit:

http://ambientweather.wikispaces.com/ws0262

2. Getting Started

The Ambient Weather WS-0262 WiFi Wireless Thermo-Hygrometer consists of an indoor display console (receiver + WiFi transmitter) and an indoor / outdoor thermo-hygrometer.

2.1 Parts List

QTY	Item
1	Display Console Dimensions (LxHxW): 67.5 x 90 x 26.8 mm (2.65 x 3.54 x 1.06”)
1	Thermo-hygrometer transmitter (WH32E) Dimensions (LxHxW): 122 x 40 x 18 mm (4.80 x 1.57 x 0.71”)
1	5V DC Adaptor
1	User manual

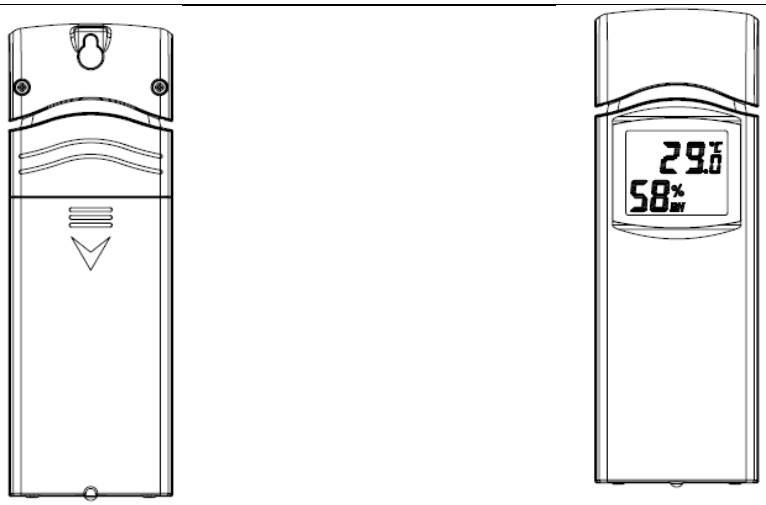
2.2 Indoor / Outdoor Thermo-Hygrometer Setup

Note: To avoid permanent damage, please take note of the battery polarity before inserting the batteries.

1. Remove the battery door on the back of the sensor (Figure 1a).
2. Insert 2 x AA batteries
3. After inserting the batteries, the remote sensor will display temperature and humidity on the display, as shown in Figure 1b.
4. Close the battery door.

Note: We recommend lithium batteries for cold weather climates, but alkaline batteries are sufficient for most climates. We do not recommend rechargeable batteries. They have lower voltages, do not operate well at wide temperature ranges, and do not last as long, resulting in poorer reception.

Note: The outdoor humidity is displayed on the remote sensor, on the Internet (AmbientWeather.net and Wunderground.com) but not displayed on the receiver to reduce the cost of the console.



(a) (b)

Figure 1

2.3 Sensor Placement

It is recommended you mount the remote sensor outside on a north facing wall, in a shaded area, at a height at or above the receiver. If a north facing wall is not possible, choose a shaded area, under an eve.

Direct sunlight and radiant heat sources will result in inaccurate temperature readings. Although the sensor is weatherproof, it is best to mount in a well-protected area, such as an eve.

1. Use a screw or nail to affix the remote sensor to the wall, as shown in Figure 2.
2. Hang the remote sensor up on string or zip tie, as shown in Figure 3.

Note: Make sure the sensor is mounted vertically and not lying down on a flat surface. This will insure optimum reception. Wireless signals are impacted by distance, interference (other weather stations, wireless phones, wireless routers, TVs and computer monitors), and transmission barriers, such as walls. In general, wireless signals will not penetrate solid metal and earth (down a hill, for example).

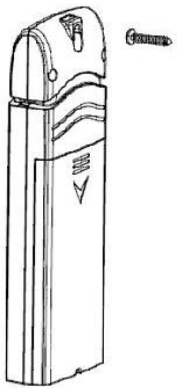


Figure 2

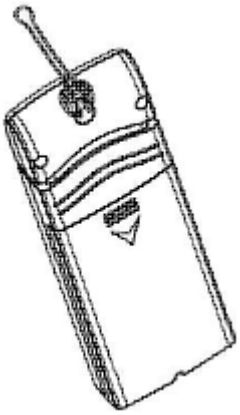


Figure 3

2.4 Best Practices for Wireless Communication

Wireless communication is susceptible to interference, distance, walls and metal barriers. We recommend the following best practices for trouble free wireless communication.

1. **Electro-Magnetic Interference (EMI)**. Keep the console several feet away from computer monitors and TVs.
2. **Radio Frequency Interference (RFI).** If you have other 915 MHz devices and communication is intermittent, try turning off these other devices for troubleshooting purposes. You may need to relocate the transmitters or receivers to avoid intermittent communication.
3. **Line of Sight Rating.** This device is rated at 300 feet line of sight (no interference, barriers or walls) but typically you will get 100 feet maximum under most real-world installations, which include passing through barriers or walls.
4. **Metal Barriers.** Radio frequency will not pass through metal barriers such as aluminum siding. If you have metal siding, align the remote and console through a window to get a clear line of sight.

The following is a table of reception loss vs. the transmission medium. Each "wall" or obstruction decreases the transmission range by the factor shown below.

Medium	RF Signal Strength Reduction
Glass (untreated)	5-15%
Plastics	10-15%
Wood	10-40%
Brick	10-40%
Concrete	40-80%
Metal	90-100%

2.5 Display Console

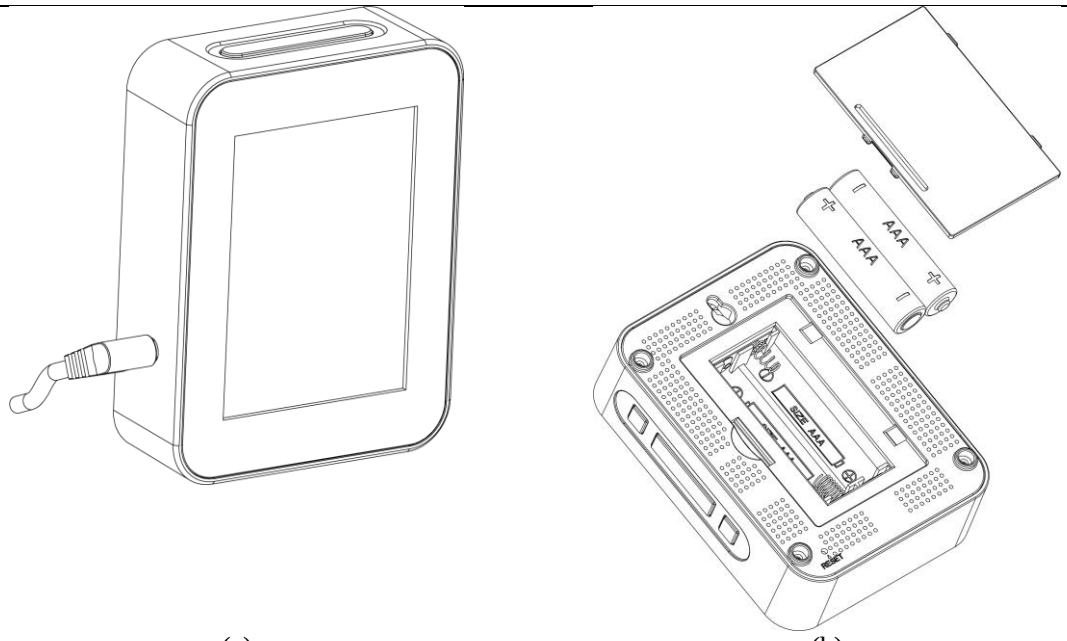
(1) Connect the display console power jack to AC power adapter with the included power adapter, as shown in Figure 4a.

(2) Remove the battery door on the back of the console, and insert 2xAAA batteries per Figure 4b.

(3) Wait several minutes for the remote sensor to synchronize with the display console. Make sure the remote sensor is powered up and about 5 to 10 feet away while waiting for synchronization. The remote search icon 

will be present while searching.

Do not touch any buttons until the remote sensor reports in, otherwise the remote sensor search mode will be terminated and the search icon will turn off. When the remote sensor has been received, the console will automatically switch to the normal mode, and all further settings can be performed.



(a) (b)

Figure 4

2.6 Display Console Probe

The display console includes a 90 cm (about 3 feet) dry probe to accurately measure air temperature, since the console generates heat. The probe should not be touching any surface to accurately measure air temperature.

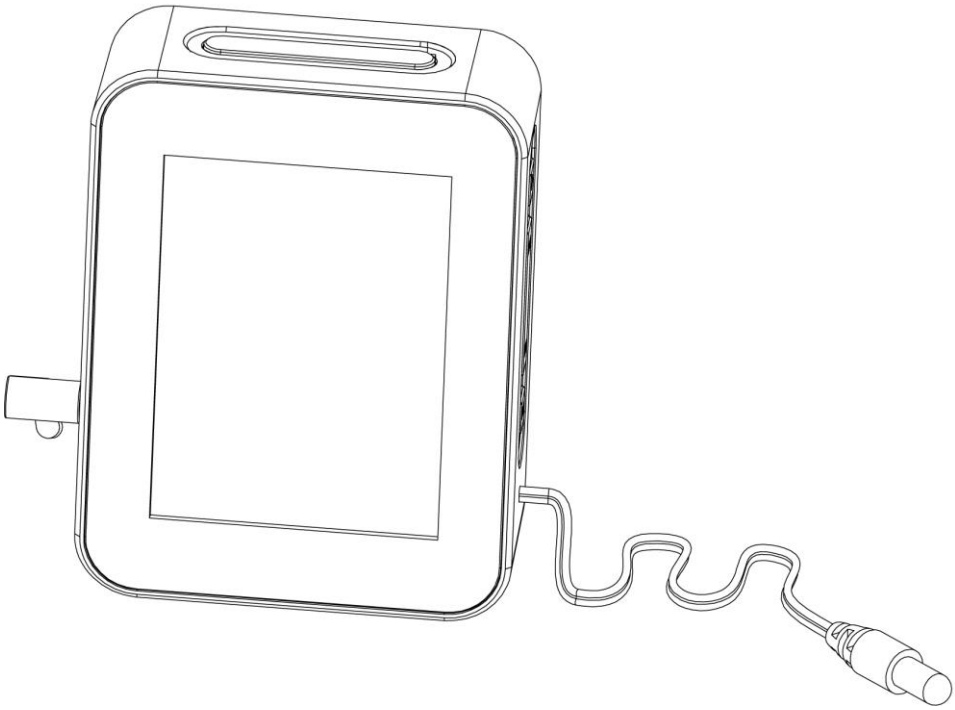


Figure 5

3. Display Console Operation

3.1 Screen Display

The display console home screen layout is shown in Figure 6.

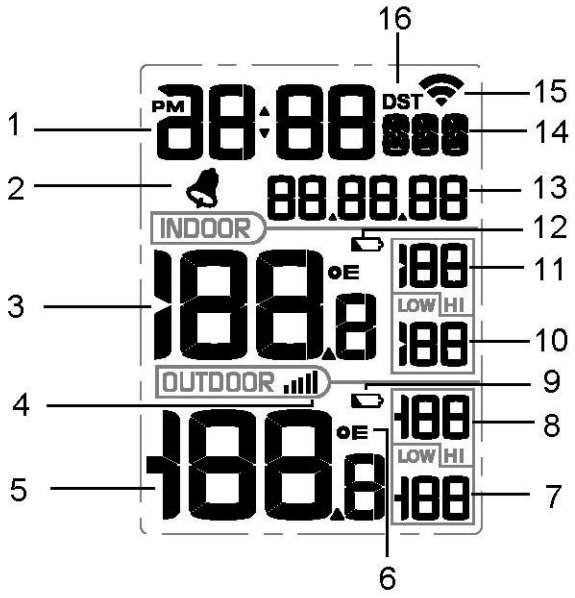


Figure 6

No	Description	No	Description
1	Time	10	Indoor low battery indicator
2	Alarm icon	11	Low indoor temperature
3	Indoor temperature	12	High indoor temperature
4	RF icon	13	Outdoor low battery indicator
5	Outdoor temperature	14	Date
6	Outdoor temperature unit (C/F)	15	Week
7	Low outdoor temperature	16	WIFI icon
8	High outdoor temperature	17	DST

3.2 Console Initialization

After the console is connected to AC power, the console will display the software version number two seconds after power up, as shown in Figure 7.

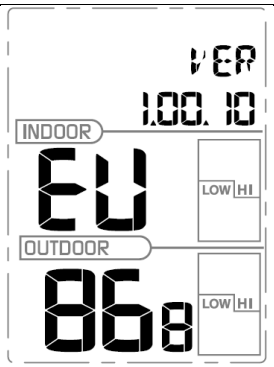


Figure 7

The console will display all of the LCD segments for three seconds after power up as shown in Figure 8, the indoor conditions will immediately update, and the outdoor sensor array will register within a few minutes.

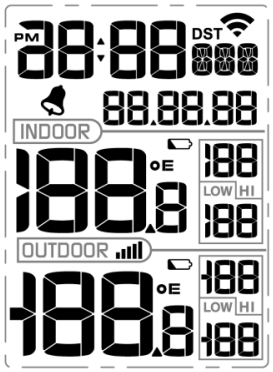
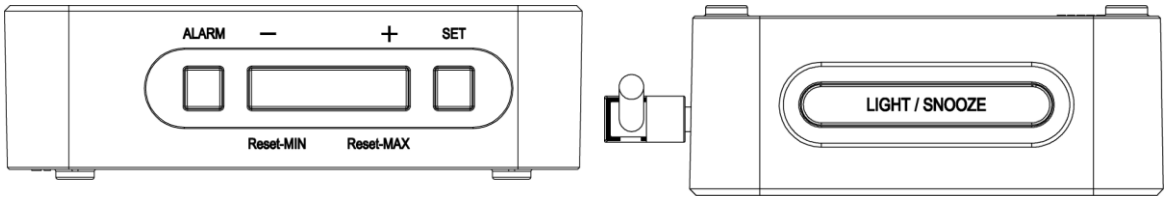


Figure 8

3.2.1 Button Operation

The operation buttons are on the side and top of the console, as shown in Figure 9:

(a) ALARM, -/Reset-MIN, +/Reset-MAX, SET
(b) LIGHT / SNOOZE



(a) Side View (b) Top View

Figure 9

The console has 5 buttons at the bottom for easy operation:

Key	Description
SET	Press and hold the **SET** button for two seconds to enter Set Mode.
+ / Reset-MAX	• Press the **+ / Reset-MAX** button for five seconds, and the maximum indoor and outdoor temperature will reset to the current value on the display console. • While in **SET** mode, press to increase the value. Press and hold for two seconds to increase the value rapidly.
- / Reset-MIN	• Press the **- / Reset-MIN** button for five seconds, and the minimum indoor and outdoor temperature will reset to the current value on the display console. • While in **SET** mode, press to decrease the value. Press and hold for two seconds to decrease the value rapidly.
ALARM	• Press and release the **ALARM** button to enter alarm mode. • Press and hold the **ALARM** button for two seconds to enter the alarm setting mode.
LIGHT/SNOOZE	• When connected to AC power, press and hold for three seconds to turn on backlight permanently. With the backlight turned on, press and hold for five seconds to turn off the backlight. • When powered by batteries, press to turn on the backlight for 3 seconds.

3.3 Set Mode

Press and hold the **SET** button for two seconds to enter the SET Mode. To proceed to the next setting, press (do not hold) the **SET** button.

To exit the SET mode at any time, press the **LIGHT / SNOOZE** button.

Figure 10 summarizes the set mode sequence and commands.

Command	Mode	Description	Settings
SET + 2 seconds	BEEP	Turns on or off the beep with each keystroke.	Press **+/Reset-MAX** to toggle OFF and ON
SET	DST	Observe Daylight Savings Time (set to **OFF** in Arizona and Hawaii, **ON** everywhere else)	Press **+/Reset-MAX** to toggle OFF and ON
SET	ZON	Time Zone (TZ)	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease (reference Figure 11).
SET	12H	12/24 Hour Format	Press **+/Reset-MAX** to toggle between 12 hour (12h) and 24 hour (24h) format
SET	HR	Hour of Day	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	MIN	Minute of Day	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	M-D	Month Day Format	Press **+/Reset-MAX** to toggle between M-D (month/day) format and D-M (day/month) format
SET	Y	Year	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	M	Month of Year	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	D	Day of Month	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	°F	Temperature Units of Measure	Press **+/Reset-MAX** to toggle between °F and °C
SET	Exit Set Mode		

SET + 2 seconds means press and hold the SET button for two seconds.
SET means press the SET button.

Figure 10

3.3.1 Time Zones

The following table summarizes time zones around the world.

Hours from GMT	Time Zone	Cities
-12	IDLW: International Date Line West	---
-11	NT: Nome	Nome, AK
-10	AHST: Alaska-Hawaii Standard CAT: Central Alaska HST: Hawaii Standard	Honolulu, HI
-9	YST: Yukon Standard	Yukon Territory
-8	PST: Pacific Standard	Los Angeles, CA, USA
-7	MST: Mountain Standard	Denver, CO, USA
-6	CST: Central Standard	Chicago, IL, USA
-5	EST: Eastern Standard	New York, NY, USA
-4	AST: Atlantic Standard	Caracas
-3	---	São Paulo, Brazil
-2	AT: Azores	Azores, Cape Verde Islands
-1	WAT: West Africa	---

Hours from GMT	Time Zone	Cities
0	GMT: Greenwich Mean WET: Western European	London, England
1	CET: Central European	Paris, France
2	EET: Eastern European	Athens, Greece
3	BT: Baghdad	Moscow, Russia
4	---	Abu Dhabi, UAE
5	---	Tashkent
6	---	Astana
7	---	Bangkok
8	CCT: China Coast	Bejing
9	JST: Japan Standard	Tokyo
10	GST: Guam Standard	Sydney
11	---	Magadan
12	IDLE: International Date Line East NZST: New Zealand Standard	Wellington, New Zealand

Figure 11

3.3.2 Auto Set Time

When the console is connected to WiFi and the Internet, the time will automatically set.

3.3.3 Setting Time Alarm

To view the alarm time, press the **ALARM** button.

Press and hold the **ALARM** button for two seconds to enter the ALARM Set Mode. To save and proceed to the next alarm setting, press (do not hold) the **SET** button.

To exit the alarm mode at any time, press the **LIGHT / SNOOZE** button.

The time alarm will sound for 120 seconds, and can be disabled by pressing the **LIGHT / SNOOZE** button.

Figure 12 summarizes the alarm mode sequence and commands.

Command	Mode	Settings
ALARM + 2 seconds	Turns alarm ON or OFF	Press **+/Reset-MAX** to toggle OFF and ON When the alarm is on, the alarm time icon will appear.
SET	Alarm Hour	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	Alarm Minute	Press **+/Reset-MAX** to increase or **-/Reset-MIN** to decrease
SET	Exit alarm settings mode.	

ALARM + 2 seconds means press and hold the ALARM button for two seconds.
SET means press the SET button.

Figure 12

3.4 Max/Min Mode

The minimum and maximum temperature values are displayed on the console for the past 24 hours.

3.4.1 Viewing Max/Min Values

Press the **+ / Reset-MAX** button for five seconds, and the maximum indoor and outdoor temperature will reset to the current value on the display console.

Press the **- / Reset-MIN** button for five seconds, and the minimum indoor and outdoor temperature will reset to the current value on the display console.

3.5 Resynchronize Wireless Sensor

Press and hold the **+/Reset-MAX** and **-/Reset-MIN** buttons at the same time for five seconds, and the display will search for a new transmitter for three minutes. Dashes will be displayed in the outdoor temperature field.

Alternately, you can power down and up the console by removing AC power and batteries.

3.6 Backlight Operation

3.6.1 With AC Adapter

The backlight can only be continuously on when the AC adapter is permanently on. When the AC adapter is disconnected, the backlight can be temporarily turned on.

Press the **LIGHT SNOOZE** button to adjust the brightness between High, Low and Off.

3.6.2 Without AC Adapter

To reduce power consumption, the console will sleep on battery power only, and will not send data to the Internet.

To temporarily turn on the back light for 15 seconds, press the **LIGHT SNOOZE** button.

4. Live Internet Publishing

The WS-2902 sends data to three free hosting services:

Hosting Service	Website	Description
Ambient Weather	AmbientWeather.net	AmbientWeather.net is the most user friendly design for monitoring your data across different platforms. Quickly view detailed information with our animated expandable modules. Supports email and text alerts.
Weather Undergound	WeatherUndeground.com	Weather Underground is a free weather hosting service that allows you to send and view your weather station data real-time, view graphs and gauges, import text data for more detailed analysis and use iPhone, iPad and Android applications available at Wunderground.com. Weather Underground is a subsidiary of The Weather Channel and IBM.

Weather Cloud	WeatherCloud.net	Weathercloud is a real-time weather social network formed by observers from around the world.

The WS-2902 weather station sends data to the Internet using your WiFi connection.

4.1 Connecting the Weather Station Console to WiFi

Note: The WiFi feature only works when plugged into AC power due to higher energy requirements.

Note: WiFi only supports and connects to 2.4 GHz routers. If you own a 5 GHz router, and it is a dual band router, you will need to disable the 5 GHz band, and enable the 2.4 GHz band.

To connect the weather station to WiFi, you must first download the application from one of the following choices:

- Apple App Store
- Google Play Store

1. From your mobile device, visit the Apple App Store or Google Play Store and search for the "**AmbientTool**" application with the Ambient Weather Logo . Download this application to your mobile device.

2. Run the AmbientTool application, and select **Add Device**, as shown in Figure 13.

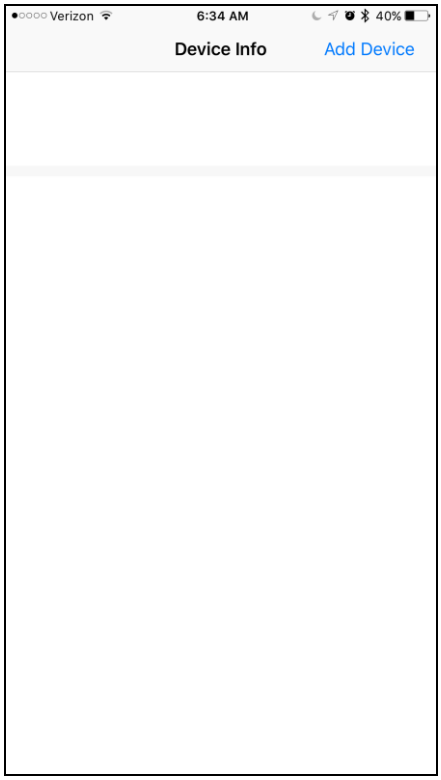


Figure 13

3. Make sure your mobile device is connected to your WiFi network. Enter the password for your router, and select **Save**, as shown in Figure 14.

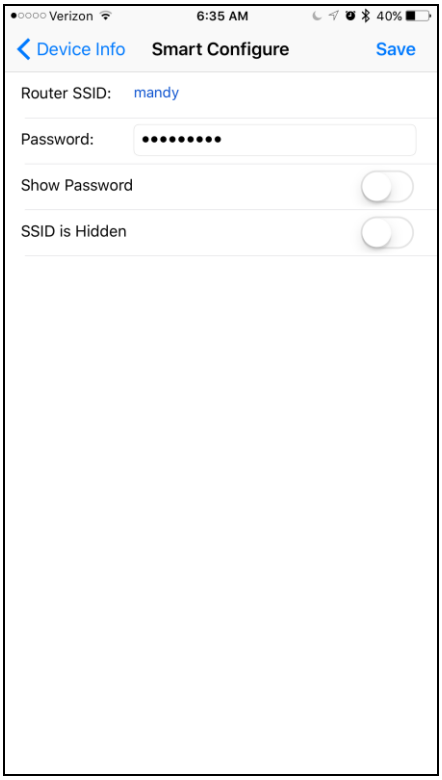


Figure 14

4. Reference Figure 15. If the WiFi icon is not flashing rapidly, (1) press and hold the **SET** and **ALARM** buttons at the same time for four seconds. (2) The WiFi icon will begin flashing rapidly, indicating the console is searching for your WiFi network.

   Wi-Fi icon :
   1) Slow Flash – connected to WiFi but not the Internet
   2) Fast Flash – configure WiFi from AmbientTool application
   3) Solid – Connected to WiFi and the Internet
   4) Not displayed – Not connected to WiFi or Internet

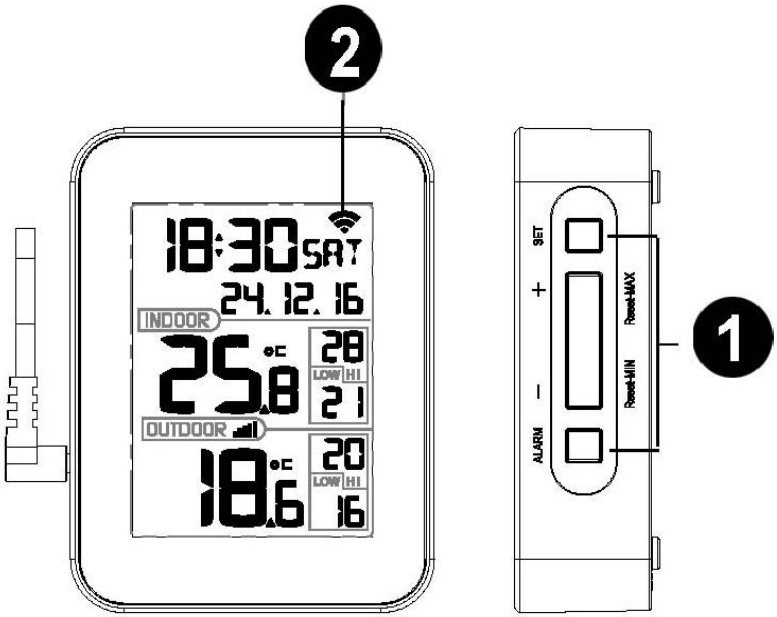


Figure 15

5. Once the console has connected to your WiFi network, the devices MAC address and IP address will be displayed, as shown in Figure 16.

Figure 16

6. Click on the device in the list, which takes you to the Upload panel.
7. Click on the server to switch between the various supported servers (the supported subject to change).

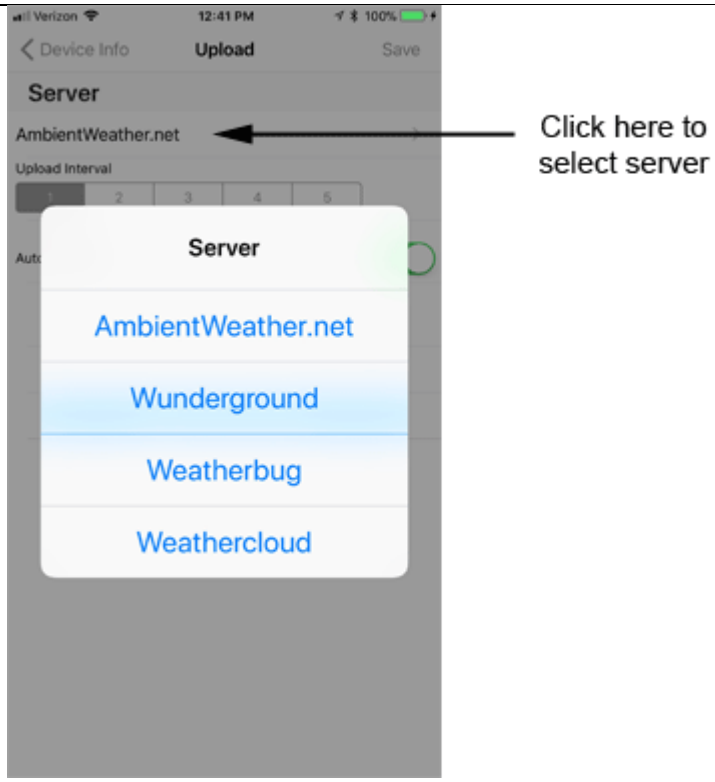


Figure 17

8. For AmbientWeather.net, enter an upload timer (1 to 5 minutes). Make a note of the console MAC address (Figure 16), which is required to register at AmbientWeather.net.

   Reference Figure 18. Enter an upload interval and select the Auto upload switch to **On**.

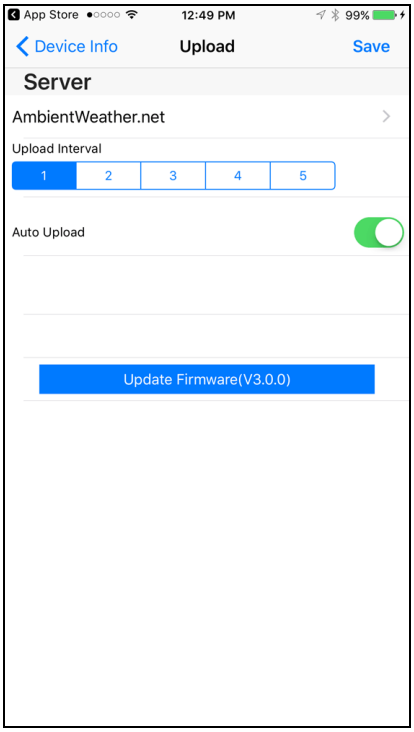


Figure 18

Enter your Wunderground.com or WeatherCloud.net Station ID, Password and StationNum (see Section 5).

Note: Wunderground.com refers to the Password as the "Station Key".

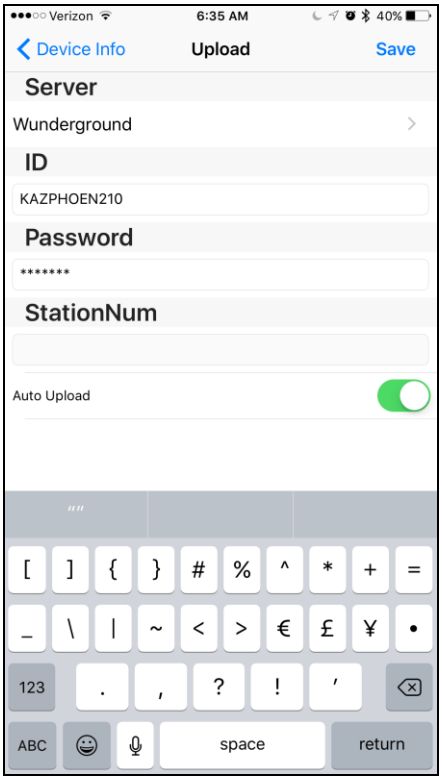


Figure 19

5. Registering with Weather Servers

Please note that you can send data to all cloud services at the same time.

5.1 AmbientWeather.net

Visit: www.AmbientWeather.net to create an account and select Add Device, as shown in Figure 20.

Figure 20

Next, enter the MAC address found on Ambient Tools (Figure 16). Note that this is an example only and your MAC address will be different.

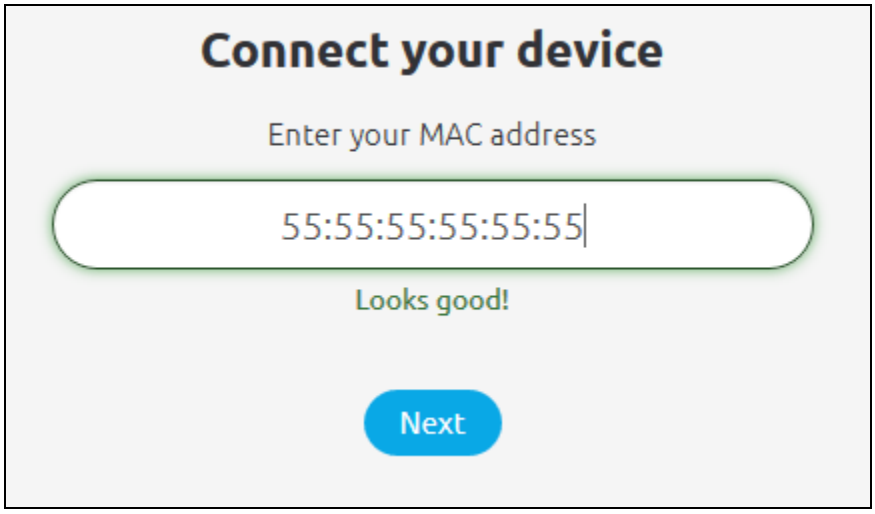


Figure 21

Register an account on AmbientWeather.net (email address and password).

Once registered, select the dashboard to view your data, as shown in Figure 22.

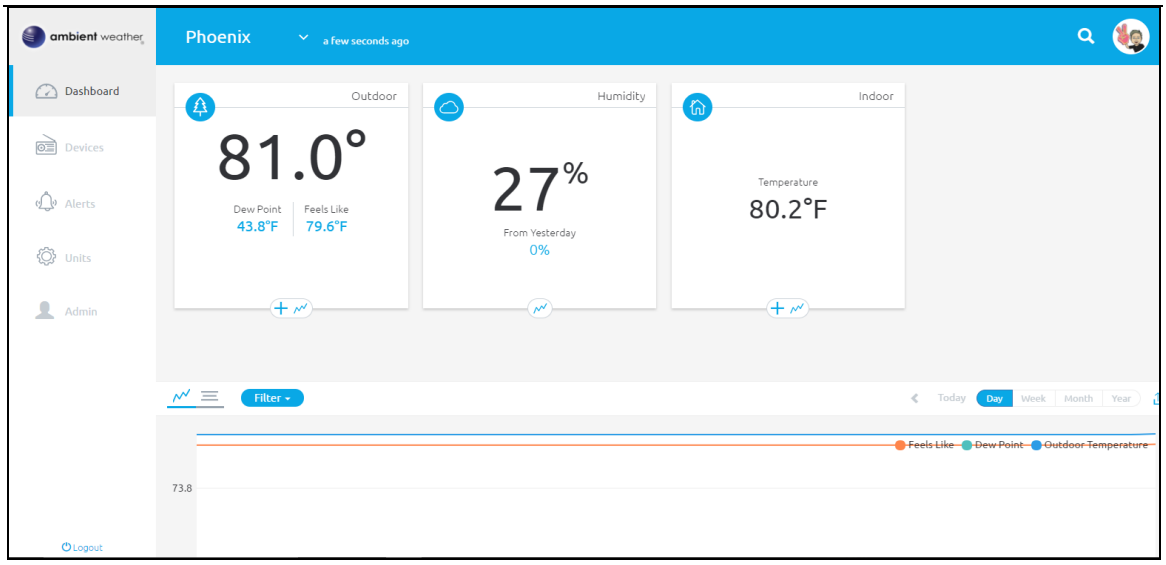
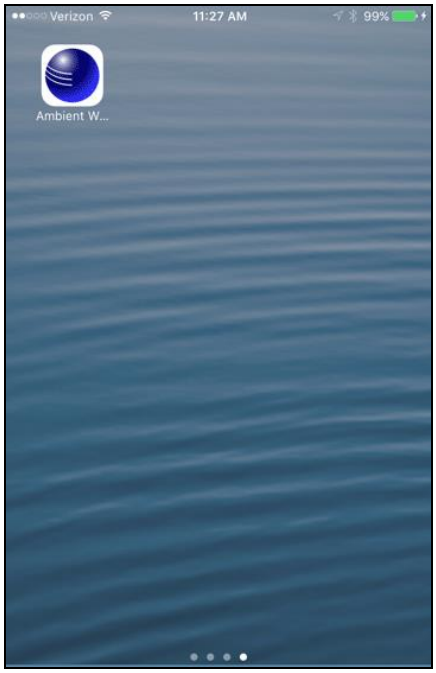


Figure 22

AmbientWeather.net is a responsive design and mobile friendly, so there is no need for a mobile app. Simply open your mobile devices web browser, browse to AmbientWeather.net, and bookmark your dashboard. If you save the bookmark to your desktop, it will automatically save the Ambient Weather icon, as shown in Figure 23.



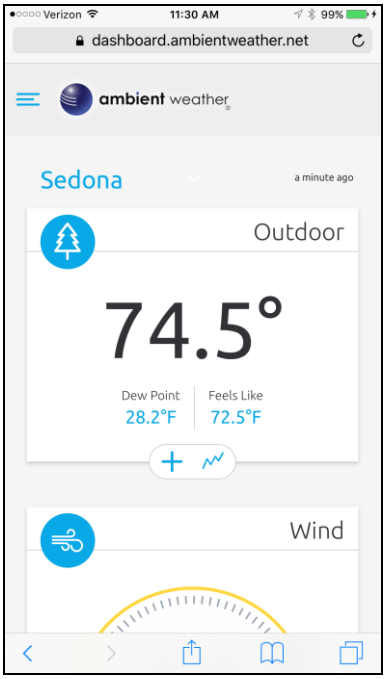


Figure 23

5.1.1 IFTTT

The AmbientWeather.net service connects to IFTTT, the platform that allows devices and services to work together seamlessly.

Here are a few things you can do with IFTTT:

- Turn off your Rachio sprinklers when it rains, there is too much wind, or below freezing.
- Close your Hunter blinds when the sun is too intense.
- Close your garage door when it is too windy.
- Blink your hue lights when it starts raining.
- Connect to other web services, such as Gmail, Facebook, Instagram, or Pinterest.

For more information on IFTTT and how it can work for you, visit:

https://ifttt.com/ambient_weather

5.1.2 Amazon Alexa

The Ambient Weather skill allows you to get real-time, and past weather information generated by the devices they have set up at AmbientWeather.net.

Enable the skill and get started: say "Alexa, ask Ambient Weather for a weather report.". This will provide you with your outdoor weather report, but you can ask for your indoor weather report as well by saying, "Alexa, ask Ambient Weather about the indoor conditions."

You can also ask for a report about a specific day, month or year. Just say "Alexa, ask Ambient Weather about the weather yesterday." or "Alexa, ask Ambient Weather about the weather in May".

For more information on Amazon Alexa, visit:

https://www.amazon.com/dp/B074PGCM1D/

5.1.3 Works with Google Assistant

The Ambient Weather Google Assistant app provides Ambient Weather personal weather station owners with the ability to get real-time, and past weather information generated by the devices they have set up at AmbientWeather.net

Link your account to get started: say 'hey google, Ambient Weather... weather report.' This will provide you with your outdoor weather report. You can ask for your indoor weather report as well by saying, ' indoor conditions'.

You can also link the Ambient Weather app by downloading the Google Assistant.

Here are some sample commands:

- Weather Report
- Outdoor conditions
- Indoor conditions
- Yesterdays weather
- Conditions for October 15, 2017
- Conditions for September 2017
- Conditions for 2016

For more information and to enable this app, visit:

https://assistant.google.com/services/a/id/668e6f3369f27209/

5.2 WeatherUnderground.com

5.2.1 Registering through the PC or Mac Website

Note: The Weather Underground website is subject to change.

1. Visit Wunderground.com, and select the Join link in the upper right and corner and create a Free Account.
2. From the menu, Select **More | Add a Weather Station**, or visit: https://www.wunderground.com/personal-weather-station/signup

3. Click **Send Validation Email**. Respond to the validation email from Wunderground (it may take a several minutes).

4. Revisit **More | Add a Weather Station**, or visit: https://www.wunderground.com/personal-weather-station/signup again and enter all of the information requested.

5. Once registered, you receive a station ID and password. Make a note of this. You will need to enter it into your weather station web interface shown in Figure 19 (Figure 24 is an example and your station ID and password will be different.

Congratulations. Your station is now registered with Wunderground!

You are almost done. Now go to your weather station software and add the following:

Your Station ID:

KAZPHOEN424

Your Station Key/Password:

mdreeley

Figure 24

Note: Your station ID will have the form: KSSCCCC###, where K is for USA station (I for international), SS is your state, CCCC is your city and ### is the station number in that city.

In the example above, KAZPHOEN424 is in the USA (K), State of Arizona (AZ), City of Phoenix (PHOEN) and #424.

5.2.2 Registering through the Android or iPhone App

Although we recommend registering your weather station on the Wunderground.com website, you can register directly through the app.

1. Select the Register link from the app, as shown in Figure 25.

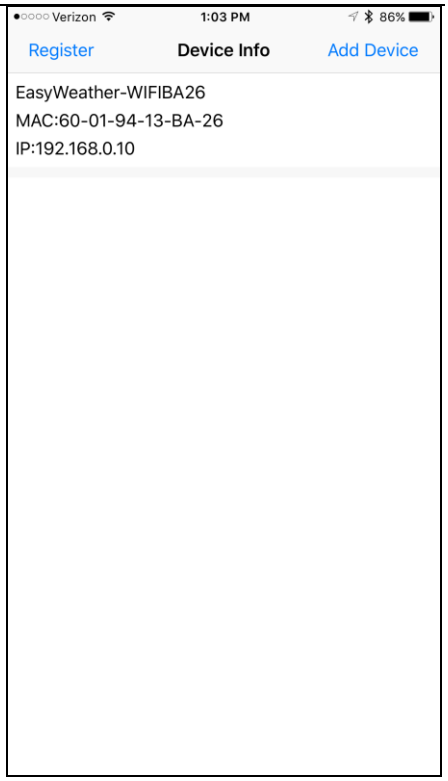


Figure 25

1. **Create a Wunderground.com account.** Enter your email address and password, as shown in Figure 26.

2. **Create a Weather Station Name**. This is a unique description that identifies your station location or neighborhood to users. An example would be Pacifica Seaside Cliffs, Shadow Rock, or Dawson's Ranch), as shown in Figure 26.

3. **Select your Weather Station Location**. Press the Current GPS Location button (if your device locator is turned on), or manually enter your longitude and latitude.

   Enter a negative latitude if you live in the Southern Hemisphere (example, South America or Australia),

   Enter a negative longitude if you live in the Western Hemisphere (example, USA or Canada).

4. **Select Agree** to agree to the Wundergrounnd terms and conditions of sale.

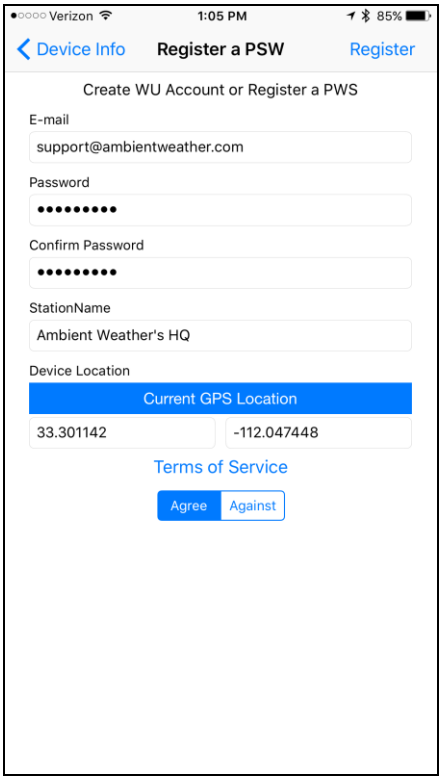


Figure 26

5. Enter the Station ID (ID), Station Key (Password) and Station Number (StationNum) into the Ambient Tool. Leave the StationNum field blank.

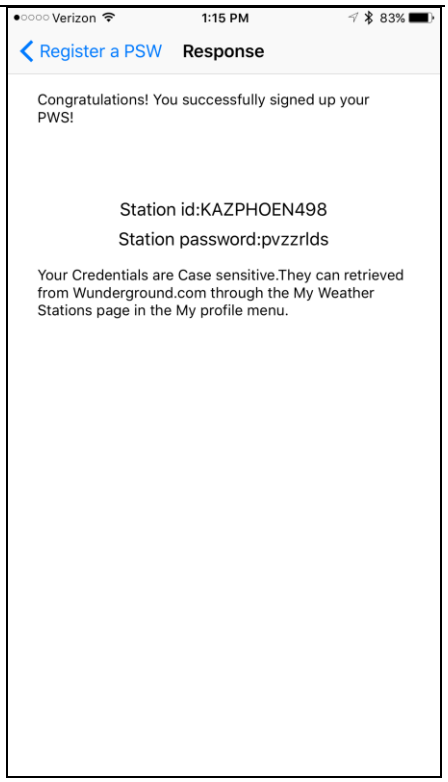


Figure 27

5.3 WeatherCloud

1. Visit WeatherCloud.net and enter a Username, Email and Password.

Figure 28

2. Respond to the validation email from WeatherCloud (it may take a few minutes).

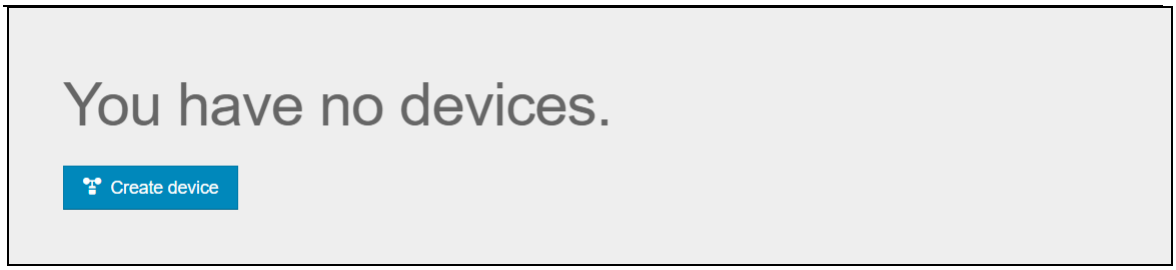


Figure 29

3. Select **Create Device** and enter your weather station information. After registering your station, make a note of the following:

- Weathercloud ID
- Key

Enter the Weathercloud ID (ID), Key (password) into the Ambient Tool. Leave the Station Number (StationNum) blank.

6. Glossary of Terms

Term	Definition
Accuracy	Accuracy is defined as the ability of a measurement to match the actual value of the quantity being measured.
Dew Point	The dew point is the temperature at which a given parcel of humid air must be cooled, at constant barometric pressure, for water vapor to condense into water. The condensed water is called dew. The dew point is a saturation temperature. The dew point is associated with relative humidity. A high relative humidity indicates that the dew point is closer to the current air temperature. Relative humidity of 100% indicates the dew point is equal to the current temperature and the air is maximally saturated with water. When the dew point remains constant and temperature increases, relative humidity will decrease.
Heat Index	The Heat Index, sometimes referred to as the apparent temperature, is a measure of how hot it really feels when relative humidity is factored with the actual air temperature. To find the Heat Index temperature, look at the Heat Index chart below. As an example, if the air temperature is 96°F and the relative humidity is 65%, the heat index (how hot it feels) is 121°F. IMPORTANT: Since heat index values were devised for shady, light wind conditions, exposure to full sunshine can increase heat index values by up to 15°F. Also, strong winds, particularly with very hot, dry air, can be extremely hazardous. The Heat Index Chart shaded zone above 105°F shows a level that may cause increasingly severe heat disorders with continued exposure or physical activity. Heat Index is not calculated below 80°F.

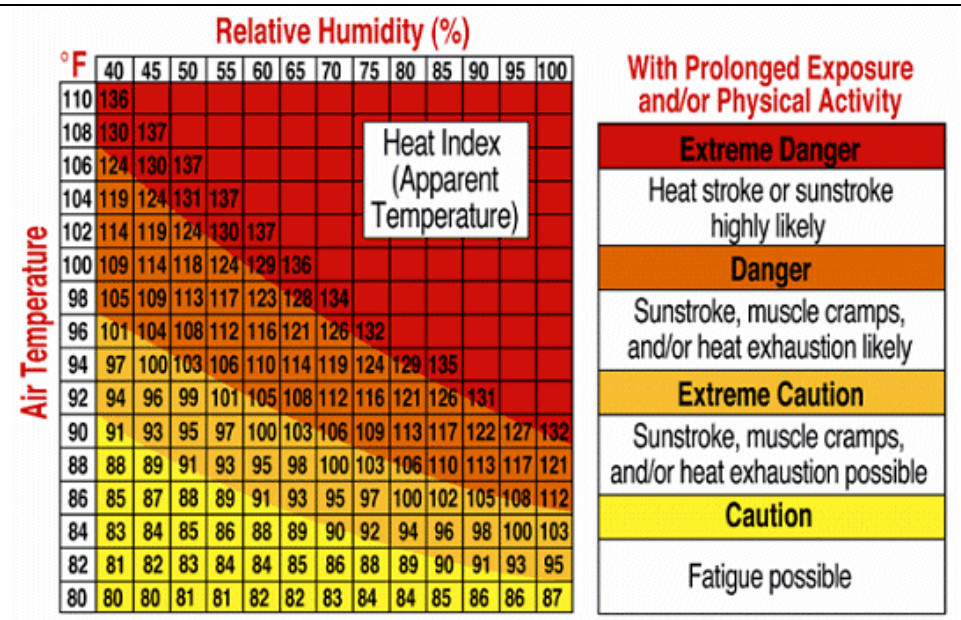
Term	Definition
	
Hygrometer	A hygrometer is a device that measures relative humidity. Relative humidity is a term used to describe the amount or percentage of water vapor that exists in air.
Range	Range is defined as the amount or extent a value can be measured.
Resolution	Resolution is defined as the number of significant digits (decimal places) to which a value is being reliably measured.
Thermometer	A thermometer is a device that measures temperature. Most digital thermometers are resistive thermal devices (RTD). RTDs measure changes in temperature as a function of electrical resistance.

Figure 30

7. Specifications

7.1 Wireless Specifications

- Line of sight wireless sensor array RF transmission (in open air): 330 feet, 100 feet under most conditions
- Line of sight WiFi RF transmission (in open air): 80 feet
- Update Rate: Outdoor Sensor: 48 seconds, Indoor Sensor: 64 seconds
- Sensor Array RF Frequency: 915 MHz
- WiFi Console RF Frequency: 2.4 GHz

7.2 Measurement Specifications

The following table provides the specifications for the measured parameters.

Measurement	Range	Accuracy	Resolution
Indoor Temperature	-14 to 140 °F -10 to 60 °C	± 1.8 °F ± 1 °C	0.1 °F 0.1 °C
Outdoor Temperature	-40 to 149 °F (lithium batteries) -23 to 140 °F (alkaline batteries)	± 2 °F	0.1 °F
Outdoor Humidity	10 to 99%	± 5% (only guaranteed between 20 to 90%)	1 %

Figure 31

7.3 Power Requirements

- Base station : 5V DC Adaptor (included)
- Base station: 2 x AAA batteries (not included)
- Outdoor sensor array: 2xAA batteries (not included)
- About 12-24 months for thermometer-hygrometer sensor (use lithium batteries in cold weather climates)

8. Troubleshooting Guide

If your question is not answered here, you can contact us as follows:

1. Email Support: support@ambientweather.com
2. Technical Support: 480-346-3380 (M-F 8am to 4pm Arizona Time)

Problem	Solution
Wireless remote (thermo-hygrometer) not reporting in to console. There are dashes (--.-) on the display console.	If any of the sensor communication is lost, dashes (--.-) will be displayed on the screen. To reacquire the signal, reference Section 3.5. The maximum line of sight communication range is 300 feet and 100 feet under most conditions. Move the sensor closer to the display console. If the sensor is too close (less than 5'), move the sensor away from the display console. Make sure the remote sensor LCD display is working on both the console and the remote sensor. Install a fresh set of batteries in the remote thermo-hygrometer. For cold weather environments, install lithium batteries. Make sure the remote sensor is not transmitting through solid metal (acts as an RF shield), or earth barrier (down a hill). Move the display console around electrical noise generating devices, such as computers, TVs and other wireless transmitters or receivers.

Problem	Solution
	Move the remote sensor to a higher location. Move the remote sensor to a closer location.
Temperature sensor reads too high in the day time.	Make certain that the sensor array is not too close to heat generating sources or strictures, such as buildings, pavement, walls or air conditioning units.
Data not reporting to Wunderground.com	1. Confirm your password or key is correct. It is the password you registered on Wunderground.com. Your Wunderground.com password cannot begin with a non-alphanumeric character (a limitation of Wundeground.com, not the station). Example, $oewkrf is not a valid password, but oewkrf$ is valid. 2. Confirm your station ID is correct. The station ID is all caps, and the most common issue is substituting an O for a 0 (or visa versa). Example, KAZPHOEN11, not KAZPH0EN11 3. Make sure the date and time is correct on the console. If incorrect, you may be reporting old data, not real time data. 4. Make sure your time zone is set properly. If incorrect, you may be reporting old data, not real time data. 5. Check your router firewall settings. The console sends data via Port 80.
No WiFi connection	1. Check for WiFi symbol on the display. If wireless connectivity is successful the WiFi icon will be displayed in the time field. 2. Make sure your modem WiFi settings are correct (network name, and password). 3. Make sure the console is plugged into AC power. The console will not connect to WiFi when powered by batteries only. 4. The console only supports and connects to 2.4 GHz routers. If you own a 5 GHz router, and it is a dual band router, you will need to disable the 5 GHz band, and enable the 2.4 GHz band. 5. The console does not support guest networks.

Figure 32

9. Liability Disclaimer

Please help in the preservation of the environment and return used batteries to an authorized depot. The electrical and electronic wastes contain hazardous substances. Disposal of electronic waste in wild country and/or in unauthorized grounds strongly damages the environment.

Reading the “User manual” is highly recommended. The manufacturer and supplier cannot accept any responsibility for any incorrect readings and any consequences that occur should an inaccurate reading take place.

This product is designed for use in the home only as indication of weather conditions. This product is not to be used for medical purposes or for public safety information.

The specifications of this product may change without prior notice.

This product is not a toy. Keep out of the reach of children.

No part of this manual may be reproduced without written authorization of the manufacturer.

Ambient, LLC WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT.

10. FCC Statement

Statement according to FCC part 15.19:
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.
2. This device must accept any interference received, including interference that may cause undesired operation.

Statement according to FCC part 15.21:
Modifications not expressly approved by this company could void the user's authority to operate the equipment.
Statement according to FCC part 15.105:
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.

11. Warranty Information

Ambient, LLC provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and only to the original purchaser of this product. To receive warranty service, the purchaser must contact Ambient, LLC for problem determination and service procedures.

Warranty service can only be performed by a Ambient, LLC. The original dated bill of sale must be presented upon request as proof of purchase to Ambient, LLC.

Your Ambient, LLC warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (lack of reasonable and necessary maintenance); (3) damage resulting from failure to follow instructions contained in your owner's manual; (4) damage resulting from the performance of repairs or alterations by someone other than an authorized Ambient, LLC authorized service center; (5) units used for other than personal use (6) applications and uses that this product was not intended (7) the products inability to receive a signal due to any source of interference or metal obstructions and (8) extreme acts of nature, such as lightning strikes or floods.

This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.

