

Technical Support and E-Warranty Certificate www.vevor.com/support

## **METEOROLOGICAL STATION**

MODEL:YT60234

We continue to be committed to provide you tools with competitive price.

"Save Half", "Half Price" or any other similar expressions used by us only represents an estimate of savings you might benefit from buying certain tools with us compared to the major top brands and doses not necessarily mean to cover all categories of tools offered by us. You are kindly reminded to verify carefully when you are placing an order with us if you are actually saving half in comparison with the top major brands.



## METEOROLOGICAL STATION

MODEL:YT60234



## **NEED HELP? CONTACT US!**

Have product questions? Need technical support? Please feel free to contact us:



This is the original instruction, please read all manual instructions carefully before operating. VEVOR reserves a clear interpretation of our user manual. The appearance of the product shall be subject to the product you received. Please forgive us that we won't inform you again if there are any technology or software updates on our product.

## **SAFETY PRECAUTIONS**

WARNING! Please read and understand all safety precautions, operating instructions, and care/maintenance instructions before operating this appliance. Keep this manual for future reference.

- This product is not a toy. Keep out of the reach of children.
- This product is designed for use in the home only as an indication of weather conditions.
- This product is not to be used for medical purposes or for public information.
- Do not clean the unit with abrasive or corrosive materials.
- Do not place the appliance near open flames or heat sources. Fire, electric shock, product damage, or injury might occur.
- Only use fresh new batteries in the product. Do not mix new and old batteries together.
- Do not disassemble, alter, or modify the product.
- Only use attachments or accessories with this product specified by the manufacturer.
- Do not submerge the unit in water. Dry the product with a soft cloth if liquid spills on it.
- Do not subject the unit to excessive force, shock, duct, extreme temperature, or humidity.
- Do not cover or block the ventilation holes with any objects.
- This weather station of this product is intended to be used indoors only.
- This product is only suitable for mounting at a height less than 6.6 ft. (2 m).
- Do not tamper with the unit's internal components. Tampering with the product will void the warranty.
- Batteries are not included. When inserting batteries, make sure that the positive and negative polarities match with the markings in the compartment.
- Do not mix standard, alkaline, and rechargeable batteries together.
- Leaving a battery exposed to extremely high temperatures in the surrounding environment can result in an explosion or leakage of flammable liquid or gas.
- Leaving a battery exposed to extremely low air pressure in the surrounding environment can result in an explosion or leakage of flammable liquid or gas.

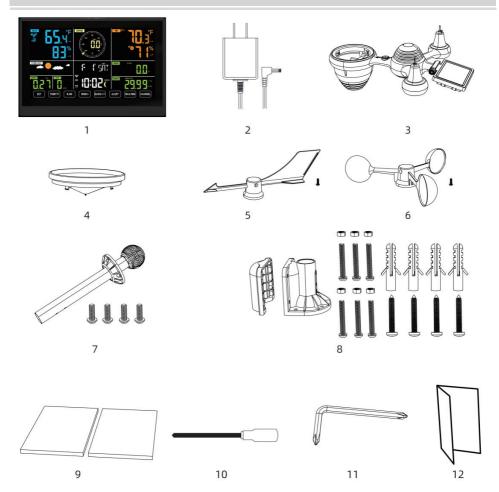
## TIPS FOR SENSOR SITE SELECTION

- Rain collector must be cleaned every few months.
- Sensor should be installed at least 5' (1.5 m) away from any building or structure.
- Choose a location in an open space under direct sunlight with no obstructions.
- The sensor should remain in the line of sight and within 492' (150 m) of the weather station for consistent, steady transmission.
- Keep your sensor and weather station away from household appliances that operate on the same frequency. The console and sensor should be at least 3'-7' (1 - 2 m) away from such interferences.

## **PRODUCT FEATURES**

- Colorful and big digit display with super bright backlight.
- 9 functional buttons: SET, TEMP/ALARM, RAIN, WIND/+, BARO/-/, ALERT, MAX/MIN, CHANNEL, LIGHT/ SNOOZE
- Time automatically sychronizes to the internet.
- Alarm with snooze function.
- Daylight Saving Time (DST) function.
- Time zone: GMT ±12.
- Moon Phase.
- Indoor & outdoor temperature (°C/°F) & humidity readings with trend.
- Hourly, Daily, Weekly, Monthly, Total rainfall and Rainfall rate in the past hour.
- Average wind speed, gust wind speed and wind direction displays.
- Absolute and relative Barometric pressure displays with trend.
- Light intensity and UV index display.
- Weather index display: Feel likes, Wind Chill, Heat index, Dew point.
- Weather Forecasting.
- Max/Min reading.
- Weather alert settings.
- Upload weather data to Weather Underground and/or Weathercloud via a Wi-Fi router.
- 4-level brightness of the backlight.

## **PACKAGE CONTENTS**



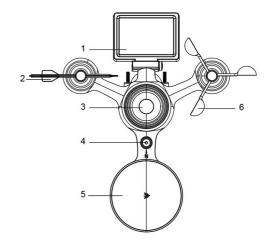
- 1 Weather station
- 2 Adapter
- 3 Wireless 7-in-1 outdoor sensor
- 4 Funnel
- 5 Wind direction vane with 1 screw
- 6 Wind speed cups with 1 screw
- 7 Mounting pole with 4 screws
- 8 Mounting brackets with 6 screws
- 9 Rubber pads X 2
- 10 Screwdriver 1
- 11 Screwdriver 2
- 12 User guide

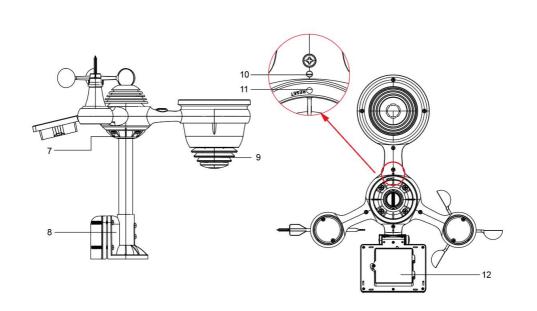
## NOTE: 4 extra screws for wind direction vane and wind speed cups.

## **PRODUCT OVERVIEW**

## **WIRELESS 7-IN-1 OUTDOOR SENSOR**

- (1) Solar panel
- (2) Wind direction vane
- (3) UV/light sensor
- 4 Bubble level gradienter
- (5) Rain collector
- 6 Wind speed cups
- 7 Mounting pole
- (8) Mounting brackets
- (9) Hygro-thermo sensor
- ① LED: Flashes when the unit transmits a reading
- 1 RESET button
- Battery door





## **WEATHER STATION**



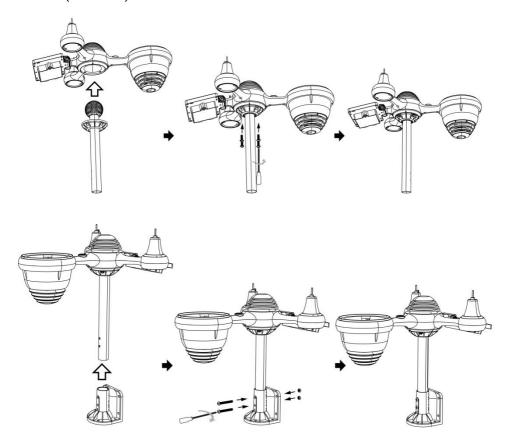
- (1) Outdoor temperature/humidity reading, weather index
- 2 Wind direction & speed
- 3 Indoor temperature/humidity reading
- (4) Weather forecast
- 5 Time & date, moon phase, Weekday
- 6 Light intensity
- (7) UV index
- (8) Rain
- (9) Barometer
- 10 SET button
- 11 TEMP/ (ALARM) button
- 12 RAIN button
- 13 WIND/+ button
- 14 BARO/-/ 🛜 (Wi-Fi) button
- 15 ALERT button
- 16 MAX/MIN button
- (17) CHANNEL button
- 18 ZzLIGHT/ SNOOZE button
- (9) Battery compartment (3.6 V Ni-MH rechargeable battery pack)

## SETTING UP THE WIRELESS 7-IN-1 OUTDOOR SENSOR

The wireless 7-in-1 outdoor sensor measures wind speed, wind direction, rainfall, UV, light intensity, temperature, and humidity.

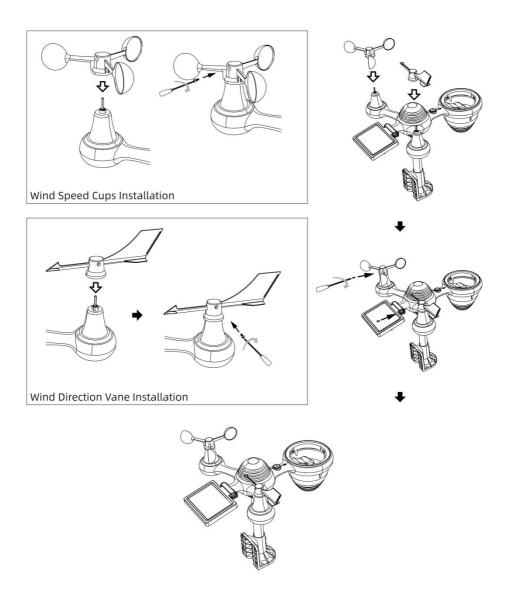
## INSTALLING THE MOUNTING POLE AND BRACKET

• Secure the sensor onto a mounting pole and bracket (included) using the screws (included).



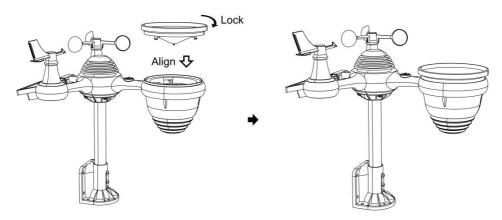
## INSTALLING WIND SPEED CUPS AND WIND DIRECTION VANE

- Align the screw holes in the wind speed cups with the flat, vertical side of the metal rod.
- Insert the wind speed cups in the metal rod and screw them on tight to lock it in place.
- Align the screw holes in the wind direction vane with the flat, vertical side of the metal rod.
- Insert the wind direction vane in the metal rod and screw them on tight to lock it in place.



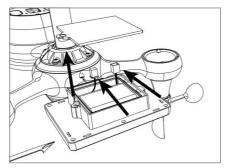
## **SETTING UP RAIN COLLECTOR**

- Align the notches on the funnel with the lock grooves inside the rain collector.
- Insert the funnel in the rain collector and screw them on tight to lock it in place.

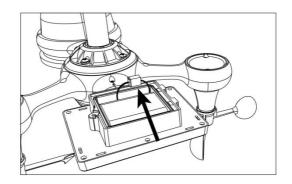


## **INSTALLING THE BATTERIES**

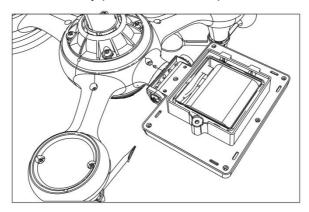
• Unscrew the battery door at the bottom of the 7-in-1 outdoor sensor using screwdriver 1.



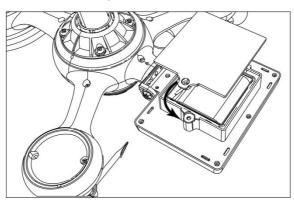
• Connect the cable of the rechargeable battery pack (included) to the cable located in the battery compartment.



Adjust the connected cables so they fit comfortably in the compartment.
 Then, insert the battery pack into the compartment.

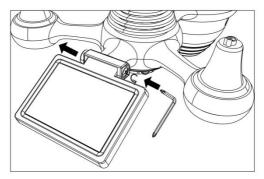


Close and fasten the battery door back on the compartment.

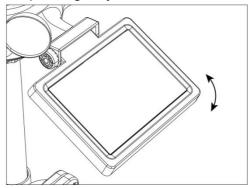


## **ADJUSTING THE SOLAR CELL**

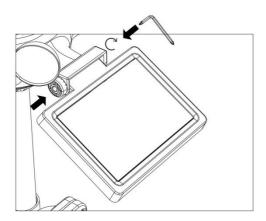
• Loosen the screw at the joint so the gear on the other side of the joint pushes out. The solar cell should now be in an unlocked position.



• Adjust the vertical angle of the solar cell to get the most optimal usage out of the solar cell depending on your location.



• Push the gear inward and tighten the screw until the gears lock in place.



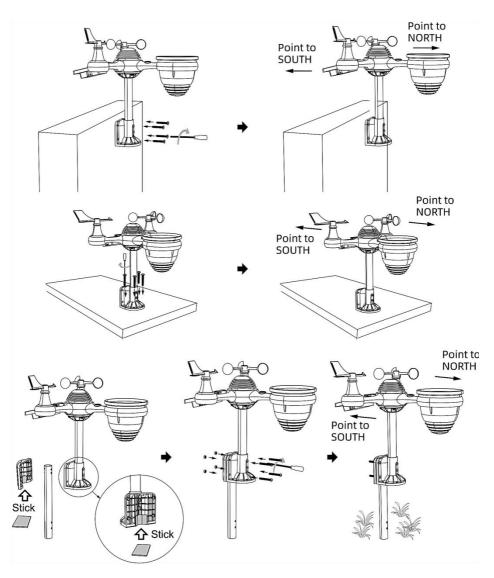
When adjusting the solar cell set it to an angle closest to your latitude. View chart below to get an idea of how you should angle your solar cell.

Latitude Proximity	Solar Cell Angle Selection	
If your location is close to 84°	84°	0°
If your location is close to 63°	63°	21°
If your location is close to 42°	42°	42°
If your location is close to 21°	21°	63°
If your location is close to 0°	0°	· ·

### MOUNTING THE WIRELESS 7-IN-1 OUTDOOR SENSOR

- Pick a location for the 7-in-1 outdoor sensor that is open with no obstructions.
- Tighten the mounting brackets to a surface/wall using four tapping screws (included), or tighten the mounting pole to your existing mounting pole with four φ5 Bolts and M5 Nuts assembly.
- Add rubber pads onto the mounting bracket before fastening the mounting bracket on the sensor.
- Make sure the rain collector faces north and the solar panel faces south before fastening the screws (included).
- Please ensure that the sensor is fixed particularly tightly, otherwise windy conditions cause the transmitter to shake and thus misread the

### rainfall data.



# POINTING THE WIRELESS 7-IN-1 OUTDOOR SENSOR TO SOUTH (OPTIONAL)

The outdoor wireless weather sensor is calibrated to be pointed north for maximum accuracy. However, for your convenience, if you are a user located in the Southern Hemisphere, you can use the sensor with the rain

collector pointing south.

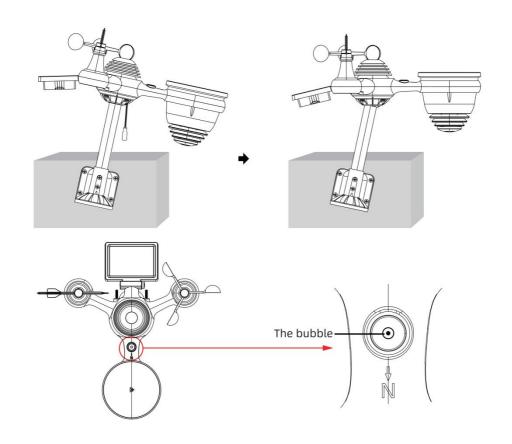
- 1.) Mount and install the wireless weather sensor with the rain collector pointing South, instead of North. (Please refer to MOUNTING THE WIRELESS 7-IN-1 OUTDOOR SENSOR.)
- 2.) Select "STH" for south hemisphere in the clock setting mode. (Please refer to "setting the clock")

NOTE: Changing the hemisphere setting will automatically switch the direction of the moon phases on display.

Pointing the wireless weather sensor toward the south will allow maximum sunlight on the solar panel, especially during the winter season in the Southern Hemisphere.

### ADJUSTING THE 7-IN-1 WIRELESS SENSOR LEVEL

- Use the bubble level indicator to make sure the wireless outdoor sensor is completely level. If the sensor is not level, the gain gauge, UV and Light intensity will not measure properly.
- To adjust the level of wireless outdoor sensor, loose the screws of the mounting pole. Adjust the level of the wireless outdoor sensor in order to make sure the bubble is in the center of the bubble level indicator.
- Tighten the screw of the mounting pole again.



## **SETTING UP THE WEATHER STATION**

### **POWERING UP THE WEATHER STATION**

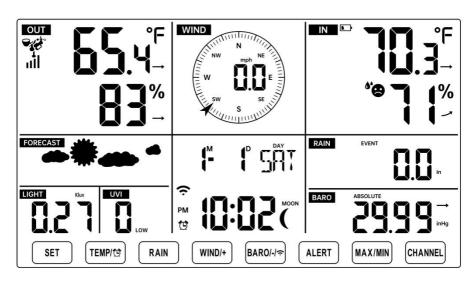
- Plug the power adapter into the power jack located in the back of the weather station. Insert 3 new AAA alkaline batteries (not included) for backup.
- Once the weather station is turned on, it will automatically enter pairing mode.

## PAIRING THE WIRELESS 7-IN-1 SENSOR

• Once your weather station powers on, it should automatically search for and connect to the wireless sensors. If the weather station does not connect within the first 5 minutes, refer to the following section,

### "RE-PAIRING SENSOR".

- You will see the icon of an antenna scrolling in the temperature and humidity (outdoor) section of the display.
- Once the pairing process completes, the antenna icon will appear solid (not flashing), and the readings for outdoor temperature and humidity, wind speed, wind direction, UV, light intensity, and rainfall will appear in their designated sections of the LCD display



NORMAL TIME DISPLAY

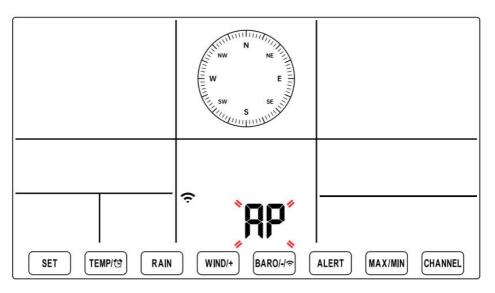
### **RE-PAIRING SENSOR**

• If the connection fails or the weather station is reset, then press and hold the (CHANNEL) button over 2 seconds to enter pairing mode, and the weather station will re-register all the sensors that have already been registered to it before, (i.e., the weather station will not lose the connection of the sensors that you'd paired up before.)

### SETUP INSTRUCTION

## SETTING UP WI-FI CONNECTION AND WEATHER SERVER CONNECTION

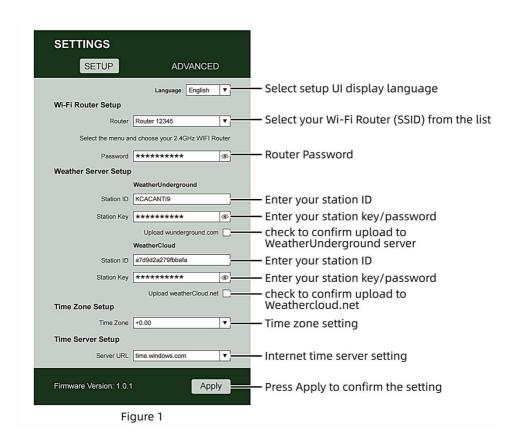
Press and hold [BARO/-/ button over 3 seconds, the weather station LCD display will show the letter "AP" that it has entered Access Point (AP) mode. At this time it will be ready for the Wi-Fi settings to be adjusted.



## Use your smartphone, tablet, or computer to connect to the weather station via Wi-Fi by following these steps:

- On PC, open your Wi-Fi network settings. On Android™ or iOS devices, go to settings menu and then select Connections/WI-FI to open the network settings.
- Locate the weather station SSID from the list. It should appear as
   WWS-XXXXXX (where all the X's are integers) in the list. Tap on the
   SSID to connect. This step will take several seconds.
- Once you are connected to the weather station, open up your internet or mobile web browser, and enter the following address into the

- address bar: http://192.168.1.1 to access the weather station web interface. (Make sure to include the http:// or else the web browser may interpret the address as a search query). We recommend using the latest version of reputable web browsers.
- Enter the following information into the web-interface (Figure 1). Make sure all of the information is entered prior to selecting Save. If you choose not to upload Wunderground.com, or upload weathercloud.net, leave the check boxes unchecked.



### NOTE:

Time zone Setup (default : 0h). To automatically set the time display to your time-zone, change the time zone in Time server setup section of the SETUP page from '0:00' (default) to your time zone (e.g.+1:00

## for Germany).

5.) If all of the information you entered is correct, press "**Apply**" to confirm (Figure 1). If it does not, check your web interface information again.

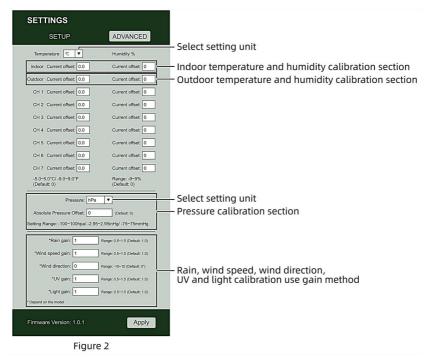
### NOTES:

When the Wi-Fi setup is complete, your computer or mobile device will return to the default Wi-Fi connection. If it does not, simply open your device's wireless network settings and manually reconnect.

While in AP mode, you can press and hold the [BARO/-/ ] button over 3 seconds to exit AP mode. The weather station will simply restore the previous AP settings.

### **CALIBRATION**

Once you are connected via Wi-Fi to the weather station and have opened the setting page at http://192.168.1.1, clicking "ADVANCED" will open the following page (Figure 2).



- 1) You may enter or change the offset and gain values for different measurement parameters.
- 2) Once you have completed your calibrations, press the "APPLY" button.
- 3) The current offset value will update to show the value that you entered (instead of the default value). If you want to change the value, you can enter a new value in the box beside the number (as in step 1). To update the value again, press "APPLY" button .

### NOTE:

We do not recommend calibration of most values with the exception of Relative Pressure, which must be correctly calibrated to reflect your distance above sea level to account for altitude effects.

### WI-FI CONNECTION STATUS

When the weather station successfully connects to your Wi-Fi router, the

Wi-Fi signal will appear on the LCD display. If the Wi-Fi signal



is not stable or the weather station is trying to connect to the router, the icon will flash. If the icon disappears, it means the weather station is not connected to the Wi-Fi router.

* 🗢 *	÷	
Flashing: the weather station is	Solid: the weather station has been	
attempting to connect to your wireless	connected to your wireless router.	
router.		

### NOTE:

If you own a dual band router (2.4GHz and 5.0GHz), make sure you connect to the 2.4GHz band, otherwise it will fail to connect the weather station to Wi-Fi.

### TIME SERVER CONNECTION STATUS

After the weather station has connected to the internet, it will attempt to connect to the internet time server to obtain the UTC time. Once the connection succeeds and the weather station's time has been updated. The icon "SYNC" will appear on the LCD.

To display the correct time for your specific time zone, you will need to change the time zone in the CLOCK setting mode from 00 (default) to your time zone (eg. -5 for EST). If you don't know your time zone, you can look it up online.

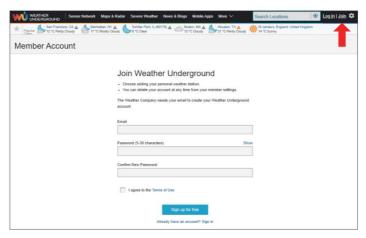
#### NOTE:

The time will automatically synchronize to the internet per hour.

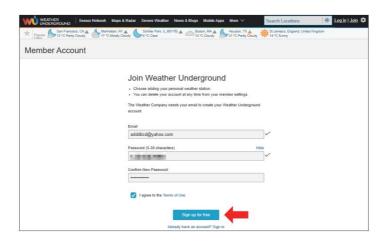
### CREATE AND SYNC YOUR WEATHER SERVER ACCOUN

### CREATE WEATHER UNDERGROUND ACCOUNT

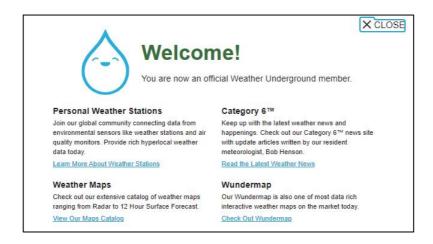
1.) Visit: https://Wunderground.com, and select the "**Join**" in the upper right and corner and create a Free Account.



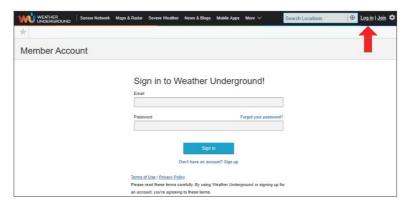
2.) Enter a Username, Email and Password (It is your Login password for the website not your email password. So no privacy will be exposed). Click Sign up for free.



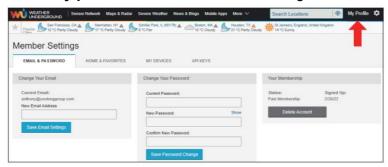
3.) After registration is done successfully, it will be shown below the message.



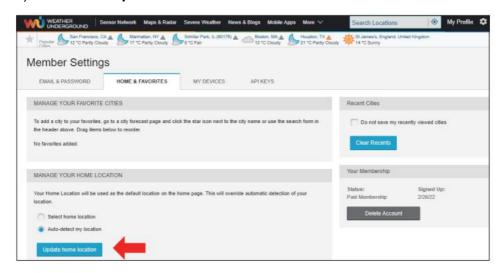
4.) Click "Login" and enter the email address and password you just registered.



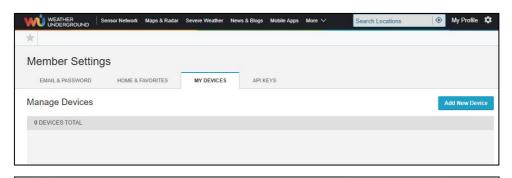
5.) Click "My profile" and enter Member settings.

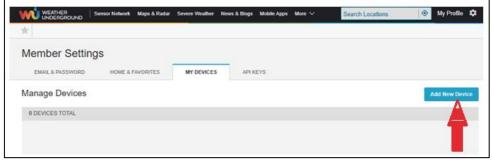


## 6.) Click "Update home location".

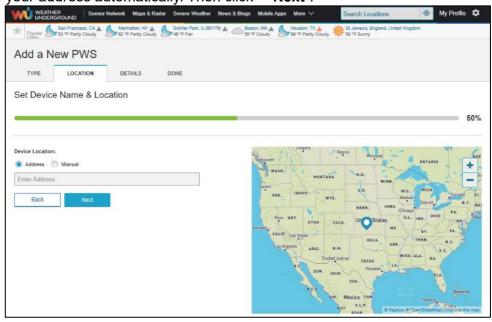


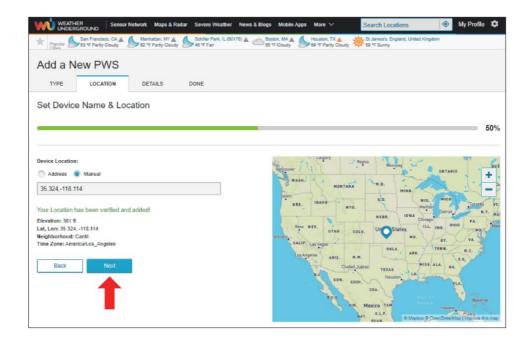
7.) Click "My Devices", and click "Add New Device".





8.) Select address by inputting an address or select Manual to position your address automatically. Then click "**Next**".

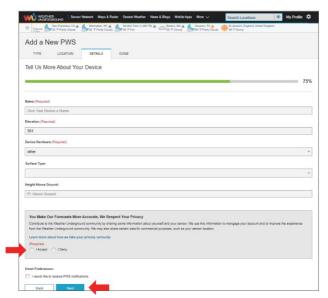




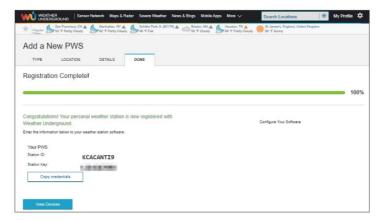
9.) Enter the weather information. Blanks with red (required) must be filled in.

### NOTE:

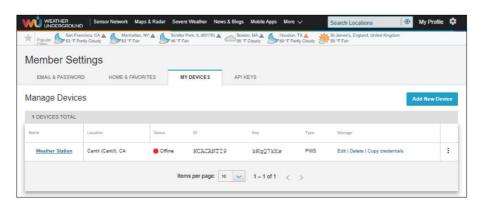
You can select "other" of the Device Hardware.



- 10.) Once complete this session, click "I Accept" and "Next".
- 11.) After registering successfully, please record your Weather Underground ID and Key information for later setup use.



12.) As shown below, registration is done successfully.



### CREATE YOUR WEATHERCLOUD ACCOUNT

1.) Visit Weathercloud website at https://weathercloud.net/, and enter a Username, Email and Password and click "Sign up". Following the instructions to create an account.

NOTE: This is best done on a computer desktop or laptop. (It is your Login password for the website not your email password. So no privacy will be exposed).



- 2.) When it is successful, an email will be received in your registered mailbox.
- 3.) Open your mail and log in to the web address in the mail. Click "Activate your Weathercloud account".



# Welcome to Weathercloud!

Your account has been successfully activated.

Click here to sign in using your new credentials.



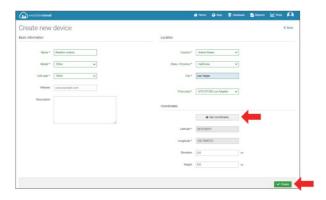
- 4.) Click "here" to enter the homepage of the Weathercloud website.
- 5.) Enter the email address and password you just registered to enter the Weathercloud website.



6.) Click "Create device" to add a weather station device.



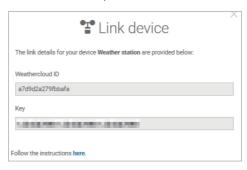
7.) Enter all the requested information into the Create New Device page. Blanks with red \*must be filled in.



#### NOTE:

You can select "other" of the Model number and Link type in the above blanks. Click "Get coordinates" to identify your location on the map, then click "Done" to confirm.

- 8.) Once you have completed this section, click "Create".
- 9.) After registering successfully, please record your Weathercloud ID and Key information for later setup use.



### VIEW YOUR WEATHER DATA IN WEATHER UNDERGROUND

To view your weather station data live via PC or mobile web browser, visit http://www.wunderground.com, and then enter the Station ID you were provided during account setup in the search box. Your weather data will show up on the next page.

### VIEW YOUR WEATHER DATA IN WEATHERCLOUD

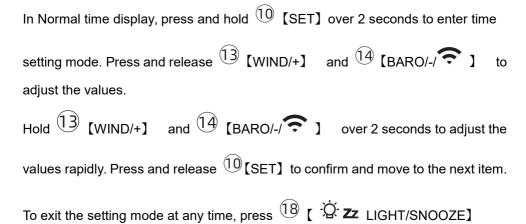
- 1.) To view your weather station data live via PC or mobile web browser, visit http://www.weathercloud.net and sign into the account you created.
- 2.) Click on the tab at the top of the page titled Devices.
- 3.) Click on the Settings menu at the top right of the page, and select the option View.
- 4.) Click on either Current, Wind or Evolution to view your weather station's data.

## **OPERATING INSTRUCTIONS**

### **CLOCK**

button.

## **Setting the Clock**



## **Setting Order**

- 1. BEEP On/Off
- 2. NTP On/Off
- 3. Time Zone
- 4. DST On/Off
- 5. M-D/D-M Date Format
- 6. Year
- 7. Month
- 8. Day
- 9. 12/24 Hour Format
- 10. Hour 11. Minute
- 12. Temperature Unit
- 13. Pressure Unit
- 14. Relative Pressure Calibration
- 15. Light Intensity Unit
- 16. Rainfall Unit
- 17. Wind Speed Unit
- 18. Hemisphere
- 19. End of setting
- 1.) Press and hold (10) [SET] button entering the settings. Beep ON flashes.

  Press (13) [WIND/+] or (14) [BARO/-/ ? ] to change between Beep on and Beep off . Press (10) [SET] to select NTP on/off .
- 2.) When NTP ON flashes, press (WIND/+) or (BARO/-/ ) to change between NTP on and NTP off . Press (SET) to select time zone.

- 3.) When Time Zone flashes, press (WIND/+) or (BARO/-/ It to set time zone. Press (SET) to select DST on/off.
- 4.) When DST ON flashes, press (WIND/+) or (BARO/-/ It to change between DST on and DST off . Press (SET) to select date format.
- 5.) When M--D flashes, press (WIND/+) or (BARO/-/ ) ] to switch between M-D and D-M date format. Press (SET) to select year.
- 6.) When year flashes, press (13) [WIND/+] or (14) [BARO/-/ ? ] to adjust the calendar year. Press (10) [SET] to select month.
- 7.) When month flashes, press (WIND/+) or (BARO/-/ ) to adjust the calendar month. Press (SET) to select day.
- 8.) When Day flashes, press (WIND/+) or (BARO/-/ Ito adjust the calendarday. Press (SET) to select 12/24-hour format.
- 9.) When 12 H flashes, press (WIND/+) or (BARO/-/ Ito change between 12 hour and 24 hour format. Press (SET) to select hour.

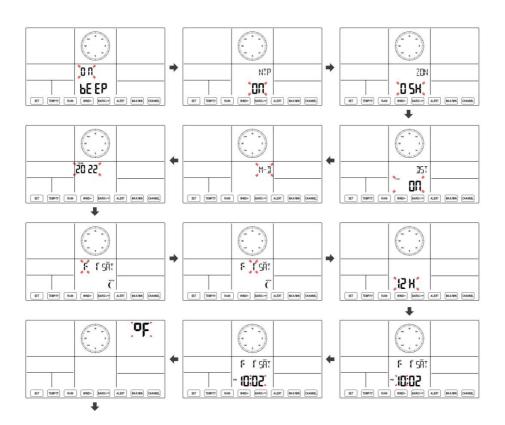
  10.) When hour flashes, press (WIND/+) or (BARO/-/ Ito adjust the hour. Press (SET) to select minute.

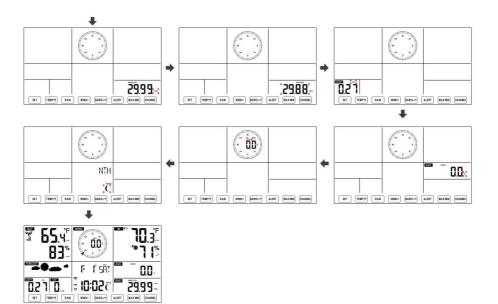
11.) When minute flashes, press (13) [WIND/+] or (14) [BARO/-/ ? ] to adjust the minute. Press (10) [SET] to select temperature unit. 12.) When F flashes, press (13) [WIND/+] or (14) [BARO/-/ ? ] to change between  $^{\circ}$ F and  $^{\circ}$ C . Press  $^{\circ}$ D [SET] to select pressure unit. 13.) When pressure unit flashes, press (13) [WIND/+] or (14) [BARO/-/ ? ] between hPa, inHq and mmHq. Press (10) [SET] to select relative to change pressure calibration. 14.) When Relative Pressure flashes, press (13) [WIND/+] or (14) [BARO/-/ ] to adjust the relative pressure. Press (10) [SET] to select Light intensity unit. 15.) When Light intensity unit flashes, press (13) [WIND/+] or (14) [BARO/-/ ] to change unit between Klux, fc and w/m2 . Press (10) [SET] to select rainfall unit. 16.) When Rain unit flashes, press (WIND/+) or (BARO/-/ ) to change unit between in and mm. Press (10) [SET] to select windspeed unit. 17.) When Wind speed unit flashes, press (13) [WIND/+] or (14) [BARO/-/ 17] to change unit between in and mm. Press (10) [SET] to select hemisphere. 18.) When NTH flashes, press (13) [WIND/+] or (14) [BARO/-/ > Ito change

hemisphere between NTH (northern) and STH (southern). Press (10) [SET] to save and exit the setting. It will return to the normal mode display.

NOTE: If there is no valid operation within 20 seconds, it will automatically return to the normal display mode from the setting mode. While adjusting settings, you can press

18 [ - \(\hat{\textsup}\) = ZZ LIGHT/SNOOZE] button to return to normal display mode.





#### **Moon Phase**

The display console calculates the moon phase according to your time, date, and time zone. The table below explains the corresponding phases and their icons for both the Northern and Southern hemispheres.

Northern Hemisphere Icons	Moon Phase	Southern Hemisphere Icons
	New Moon	
	Waxing Crescent Moon	
	First Quarter Moon	
	Waxing Gibbous Moon	
	Full Moon	
0	Waning Gibbous Moon	
	Third Quarter Moon	
	Waning Crescent Moon	

# **Setting the Alarm**

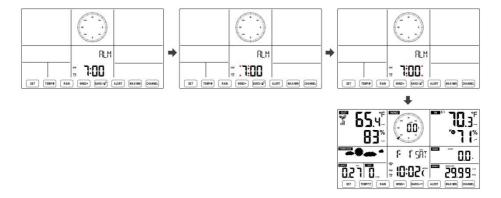
- In normal time display, press (SET) button to switch display alarm time (alarm time mode).
- In alarm time display, press and hold (10 [SET] button over 2 seconds to enter alarm setting mode. Hour of alarm starts to flash.
- Press (WIND/+) button or (BARO/-/ ) button to set required alarm hours. Hold (WIND/+) button or (BARO/-/ ) button to

adjust alarm hours quickly.

- Press 10 [SET] button to select minute of Alarm. Minute of alarm starts to flash.
- Press (3) [WIND/+] button or (14) [BARO/-/ ? ] button to set required alarm minutes. Hold (13) [WIND/+] button or (14) [BARO/-/ ? ] button to adjust alarm minutes quickly.
- Press (SET) button to save all settings and exit to normal display mode.

NOTE: If there is no valid operation within 20 seconds, it will automatically return to the normal display mode from the setting mode. While adjusting settings, you can press

18 [-Д- ZzLIGHT/SNOOZE] button to return to normal display mode.



## **Deactivate/Activate Alarm**

• In alarm time display, press (TEMP/ (TEMP)) button to select the Alarm on or off.

- If the alarm is on, its corresponding alarm icon will be shown on the display.
- When the alarm is ringing, press any buttons except (18) [-Q-zz

LIGHT/SNOOZE] button to stop the alarm signal. It is not necessary to reactivate the alarm. It will ring again this time next day.

#### **Snooze Function**

When the alarm rings, press 2 ZZLIGHT/SNOOZE button to pause the alarm. The snooze indicator icon ZZ keep flashing. The alarm will resume after 5 minutes.

## **TEMPERATURE**

## **Temperature/Humidity Trend**

Tendency arrows allow you to quickly determine of temperature and humidity are rising and falling in a one-hour update period.

Temperature Trend

Temperature has	Temperature has not	Temperature has
risen > 1°C/2°F in the past	changed more than	fallen < 1°C/2°F in the past
hour	1°C/2°F in the past hour	hour
1		
	<del></del>	

## **Humidity Trend**

Humidity has	Humidity has not	Humidity has
risen > 3% in	changed more than 3% in	fallen < 3% in
the past hour	the past hour	the past hour
7	<b>→</b>	7

#### **Indoor Comfort Index**

The indoor comfort displays a pictural representation based on the indoor air temperature and humidity levels to determine the approximate comfort level.

8	•	<b>6.</b> ⊜
Too cold	Comfortable	Too hot

#### **PRESSURE**

## **Barometer Pressure Display**



In normal mode, press (BARO/-/ ) button switch between absolute and relative pressure.

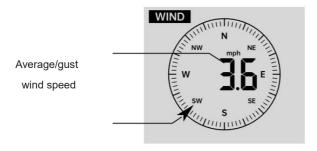
Absolute	The absolute atmospheric pressure of your location.
Relative	The relative atmospheric pressure is based on the sea level.

#### **Pressure Trend**

Tendency arrows allow you to quickly determine if pressure is rising or falling in a one-hour update period.

risen > 2hpa/0.06inHg in	more than 2hpa/0.06inHg	fallen > 2hpa/0.06inHg in
the past hour	in the past hour	the past hour
and past nour	- A	the past floar

# WIND Wind Display



Real time wind direction indicator

## **Selecting Wind Display Mode**

In normal display mode, press (WIND/+) button to switch between current average wind speed, gust wind speed and wind direction.

# RAIN Rainfall Display



The Rainfall shows information regarding the rainfall and rain rate.

## Select the Rainfall Display Mode

In normal display mode, press (12) [RAIN] button to switch between Rain Rate, Rain Event, Rain Hourly, Rain Daily, Rain Weekly, Rain Monthly and Rain Total.

#### Increments of Rain Definition

Rain Rate: current rainfall rate in the past hour.

Rain event: continuous rain, and resets to zero if rainfall accumulation is

less than 10mm (0.039 in) in a 24-hour period.

**Daily Rain:** Total rainfall since midnight (00:00)

Weekly Rain: Total rainfall for the current calendar week, and resets on

Sunday morning at midnight (Sunday thru Saturday)

Monthly Rain: Total rainfall for the current calendar month, and reset on

the first day of the Month.

Total Rain: Total rainfall since the last reset.

#### Reset the Total Rainfall Record

In normal display mode, press and hold (12) [RAIN] button over 2 seconds to reset the rain record.

#### NOTE:

Resetting the weekly rain also resets the daily rain.

Resetting the monthly rain also resets the daily and weekly rain.

Resetting the total rain also resets the monthly, weekly and daily rain.

#### **WEATHER**

#### Weather Index

When reading the Weather Index display, you can press temp. TEMP. Dutton to cycle through different weather indexes in the following order:

Feels Like > Heat Index > Wind Chill

#### **Feels Like**

The Feels Like temperature index determines what temperature it actually feels like outside, taking into account factors like wind speed, pressure, temperature and humidity.

#### Wind Chill

Wind Chill is determined by a combination of the wireless weather sensor's temperature and wind speed data.

NOTE: Only when the temperature is below  $50^{\circ}\text{F}(10^{\circ}\text{C})$  and the wind speed is over 4.8km/h (3mph), will display the wind chill value, otherwise it will display "--.-".

#### **Heat Index**

The Heat Index is determined by the wireless weather sensor's temperature and humidity readings.

#### **Dew Point**

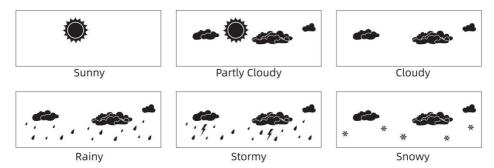
The dew point is the temperature at which a given parcel of humidity air must be cooled, at constant barometric pressure, for water vapor to condense into water. The condensed water is called dew. The dew point is a saturation temperature.

The Dew Point temperature is determined by the temperature and humidity data from the wireless weather sensor.

#### **Weather Forecast**

The built-in barometer can notice atmospheric pressure changes, and based on the data collected, can predict the weather conditions.

There are 6 weather icons --- Sunny, Partly Cloudy, Cloudy, Rainy, Stormy and Snowy.



#### NOTE:

The accuracy of a general pressure-based forecast is about 65-70%. Forecasts are not guaranteed.

It may not necessarily reflect the current situation.

#### Ice Alert

When outdoor temperature is lower than 1°C/33.8°F, the snowflake icon

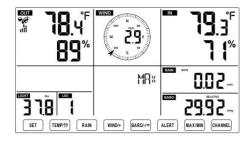


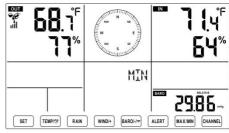
will appear on the LCD display.

#### MAX/MIN

In normal display mode, press (16) [MAX/MIN] button switching between maximum and minimum value.

NOTE: If there is no valid operation within 10 seconds, it will automatically return to the normal display mode.





#### To View the Accumulated MAX/MIN

- Display Feel like, Wind Chill, Heat Index, Dew Point Max/Min Values
- 1.) When the max values are displayed, press (1) [TEMP/ (2)] button to interchange viewing the Outdoor temperature  $\rightarrow$  Feel like  $\rightarrow$  Wind Chill  $\rightarrow$  Heat Index  $\rightarrow$  Dew Point  $\rightarrow$  Outdoor temperature.
- 2.) When the min values are displayed, press (1) [TEMP/ (2)] button to interchange viewing the outdoor temperature  $\rightarrow$  Feel like  $\rightarrow$  Wind Chill  $\rightarrow$  Heat Index  $\rightarrow$  Dew Point  $\rightarrow$  Outdoor temperature.
- Display Wind Speed, Wind Gust Max Values

When the max values are displayed, press (13) [WIND/+] button to interchange viewing between the AVERAGE and GUST wind speeds.

 Display Rain Rate, Daily Rain, Weekly Rain and Monthly Rain Max Values

When the max values are displayed, press  $\bigcirc$  [RAIN] button to interchange viewing Rain Rate  $\rightarrow$  Daily Rain  $\rightarrow$  Weekly Rain  $\rightarrow$  Monthly Rain.

- Display Absolute and Relative pressure Max/Min Values
- 1.) When the max values are displayed, press (BARO/-/ button to interchange viewing between Absolute and Relative pressure.
- 2.) When the min values are displayed, press [BARO/-/ ] button to interchange viewing between Absolute and Relative pressure.
- Display indoor and other channels sensor temperature & humidity Max/Min values
- 1.) When the max values are displayed, press (CHANNEL) button to interchange viewing indoor and paired outdoor sensor(s) temperature and humidity.

2.) When the min values are displayed, press  $\bigcirc$  [CHANNEL] button to interchange viewing indoor and paired outdoor sensor(s) temperature and humidity.

NOTE: If other channel sensors were paired, it could show the other channel's max/min temperature and humidity values. If other channel sensors were not paired, it would only show current indoor max/min temperature and humidity values.

#### To Clear the MAX/MIN Data Record

- To clear the max value, press and hold (MAX/MIN) button over 2 seconds while max values are displayed.
- To clear the min value, press and hold (16) [MAX/MIN] button over 2 seconds while min values are displayed.

# HI/LO ALERT SETTING To View the Alert Setting

• In normal display mode, press (15) [ALERT] button switching between Hi alert and Low alert setting value.



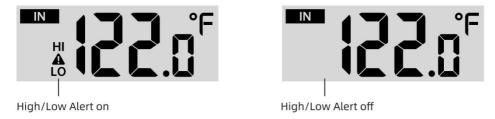


## To Set the Alert

In normal display mode, press and hold (15) [ALERT] button over 2

seconds to enter the alert setting mode.

- Press (WIND/+) button and (BARO/-/ ) button to adjust the value up or down, then press (TEMP/ ) button to turn on/off the alert.
- Press (15) [ALERT] button to confirm and jump to next setting.
- The icon
   A or LO will display when the alert is on.



• To exit the alert setting mode at any time, press [8] [-\hat{Q}-

**ZZ**LIGHT/SNOOZE] button. The Hi/Lo alert setting order is shown below:

Alert Setting Order	Setting Range	Display Section	Default
Indoor Temperature Hi Alert	-14.1°F-122°F	Indoor	122℉(50℃)
Indoor Temperature Lo Alert	(-9.9℃–50℃)	temperature &	14.1℉(-9.9℃)
Indoor Humidity Hi Alert	1%–99%	Humidity	80%
Indoor Humidity Lo Alert	170-9970	riairiiaity	40%
Outdoor Temperature Hi Alert	<b>-40</b> °F−158°F	Outdoor	104°F (40°C)
Outdoor Temperature Lo Alert	(-40℃–70℃)	temperature &	32℉(0℃)
Outdoor Humidity Hi Alert	1%–99%	Humidity	80%
Outdoor Humidity Lo Alert	170-9970	Trairilaity	40%
	0–50m/s		17m/s
High Average Wind Speed Alert	2–180 km/h	Wind Speed	62km/h
Trigit Average Willia Speed Alert	1–111mph	Willia Opeea	38mph
	1–97 knots 0-60 bft		33 knots 20bft
	0–50m/s		17m/s
	2-180 km/h		62km/h
High Wind Gust alert	1–111mph	Wind Speed	
	1–97 knots	,	38mph
	0-60 bft		33 knots 20bft

	1 hpa-10hpa		3hpa
Pressure Drop Alert	0.03~0.3 inHg	Barometer drop	0.09inHg
·	0.7~7.5mmHg		2.2mmHg
Lligh Dain Data clart	1mm/hr–1000mm/hr	Rainfall Rate	101mm/hr
High Rain Rate alert	(0.04 in/hr-39 in/hr)	Railliali Rate	(4 in/hr)
High Doily Boin clort	1mm-1000mm	Rainfall Rate	101mm
High Daily Rain alert	(0.03 in-39.37 in)	Railliali Rate	(4 in)
UV index High Alert	1-15	UV Index	10
	1 Klux-200.0 Klux		100 Klux
Light Intensity High Alert	7-1580 W/M <sup>2</sup>	Light Intensity	790 W/M <sup>2</sup>
	0-185Kfc	Light Intensity	92 Kfc

#### To Silence the Hi/Lo Alert Alarm

Press the **ZZ**LIGHT/SNOOZE button on top of the display console to silence the alarm, or it will automatically turn off after one minute.

NOTE: Once the alert is triggered, the alarm will sound for one minute and the associated alert icon and weather readings will flash. If the alert alarm automatically shuts off after one minute instead of being manually shut off, the associated alert icon and readings will continue flashing until the reading is out of the alert range. The weather alert alarm will go off once the readings fall into alert range again.

# BACKLIGHT

# **Display Backlight**

With DC Adapter

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

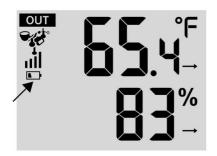
Without DC Adapter

Press 18 [-Q- ZzLIGHT/SNOOZE] button temporarily turn on the

backlight for 15 seconds.

#### LOW BATTERY INDICATOR

If the low battery indicator icon is displayed in the outdoor temperature and humidity section or the corresponding CH section of the LCD console display, this indicates that the batteries in your wireless weather sensor(s) are running low and should be replaced. Make sure to replace all batteries at the same time.





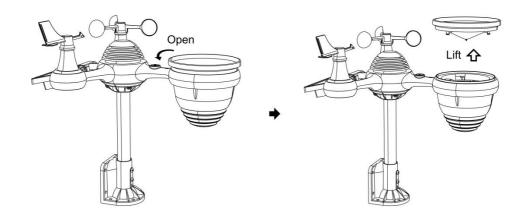
#### **FACTORY RESTART**

If there is malfunction, the Factory Restart is a great way to return your station to "out of the box" condition.

- 1.) Remove all power (batteries and DC adapter) from outdoor sensors and weather station.
- 2.) Follow the operation "**SETTING UP THE WEATHER STATION**" to start the pair the sensor.

#### CARE AND MAINTENANCE

1.) Clean the rain gauge every 3 months. Rotate the funnel counterclockwise and lift to expose the rain gauge mechanisms, and clean with a damp cloth. Remove any dirt, debris, and insects. If bug infestation is an issue, spray the sensor lightly with insecticide.



- 2.) Clean the Light Intensity/ UV sensor and solar panel every 3 months with damp cloth.
- 3.) When replacing the batteries, apply a corrosion preventive compound on the battery terminals.

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# **SPECIFICATION**

WEATHER STATION		
General Specifi cations		
Dimension	7.5 x 5 x 1.1inch (191.6 x 127 x 28.8mm)	
Power source	AC-DC 5V, 1A adapter (included)	
Battery	3 x AAA battery (not included)	
Support sensors	1 x 7-in-1 sensor (included)	
Wi- Fi Communication Speci	fications	
Wi-Fi Standard	802.11 b/g/n	
Wi-Fi operation frequency	2.4GHz	
Supported devices for	Build-in Wi-Fi with WAP mode smart device, including	
setup UI	laptops, computers, smart phones and smart pads	
Recommend web browser		
for setup UI	Latest Version of any web browser that supports HTML 5	
Time Function Specifications		
Time display	HH: MM	
Hour format	12 hour or 24 hour	
Date display	DD/MM or MM/DD	
Time synchronization method	Synchronizes with atomic clock	
Time zones	GMT±12	
DST	ON/OFF	
Barometer Display & Functi	•	
Barometer units	hPa, inHg and mmHg	
Measuring range	600 – 1100 hPa (relative setting range 930 – 1050hPa)	
	700 -1100 hPa±5 hPa/600 -696 hPa±8 hPa	
Accuracy	20.67 $-$ 32.48 inHg±0.15 inHg/17.72 -20.55inHg ±0.24 inHg 525 -825 mmHg±3.8 mmHg/450 -522 mmHg±6 mmHg Typical at 77 $^{\circ}$ F (25 $^{\circ}$ C)	
Weather forecast	Sunny, Partly Cloudy, Cloudy, Rainy, Stormy and Snowy	
Display mode	Current	
Memory mode	Daily Max/ Min	
Alert	Pressure change alert	
_	Display & Function Specifications	
Temperature unit	℃ and ℉	
Indoor Display range	-14.1°F – 122°F (-9.9°C – 50°C)	
Outdoor Display range	-40°F − 158°F (-40°C − 70°C)	
	50−122°F ± 1.8°F / 10−50°C ± 1°C	
In/Out accuracy	-4 - 50°F ±2.7°F / -20 − 10°C ± 1.5°C	
	others : ±3.6°F / ±2°C	
Display mode	Current	
Memory mode	Daily Max/ Min	
Alert	High/Low temperature alert	
	1 -	

Indoor/ Outdoor Humidity Display & Function Specifications		
Humidity unit	%	
Display range	1 – 99%	
In/Out accuracy	40 − 80% RH ± 5% RH @77°F(25°C)	
	Others: ± 8% RH @77°F(25°C)	
Display mode	Current	
Memory mode	Daily Max/ Min	
Alert	High/Low humidity alert	
Wind Speed and Direction Dis	play & Function Specifications	
Wind Speed unit	mph, m/s, km/h, knots	
Display range	0 -112mph, 50m/s, 180km/h, 97 knots	
Speed accuracy	<5m/s: ±0.5m/s, >5m/s: ±10% (whichever is greater)	
Display mode	Gust/ Average	
Memory mode	Daily Gust/Average	
Alert	High Wind Speed Alert (Gust/Average)	
Wind direction	16 directions	
Rain Display & Function Spec	ifications	
Unit of rainfall	mm, in	
Range of rainfall	0 – 12999mm (0 – 511.7 in)	
Accuracy of rainfall	±7%	
Display mode	Current	
Memory mode	Daily Max	
Rainfall display mode	Hourly/ Daily/ Weekly/ Monthly/ Total Rainfall	
Alert	High Daily Rainfall alert	
UV Index Display & Function Specifications		
Display range	0 - 16	
Display mode	Current	
Memory mode	Daily Max	
Alert	High UVI alert	
Light Intensity Display & Function Specifications		

Light Intensity unit	Klux, Kfc and W/m²	
Display range	0 – 200 Klux	
Display mode	Current	
Memory mode	Daily Max	
Alert	High Light intensity alert	
Weather Index Display & Fu	unction Specifi cations	
Weather Index mode	Feels like, wind chill, heat index and dew point	
Display mode	Current	
Memory mode	Daily Max/min	
WIRELESS 7-IN-1 OUTDOOR SENSOR		
Dimensions	16 x 13.8 x 14.4 inch (408 x 396 x 367 mm)	
Main power	3.6V Ni-MH rechargeable battery pack	
Backup power	Solar power	
Weather data	temperature, humidity, wind speed, wind direction, rainfall, UVI and light intensity	
RF frequency	915MHz	
RF transmission range	492ft (150m)	
Transmission interval	Every 20 seconds for UV, light intensity, wind speed, temperature, humidity and rain data and wind direction data	
Operation temp	-40°F to 140°F/-40°C to 60°C	
Additional tools required for sensor	Yes	

# **TROUBLESHOOTING**

Problem	Solution
	The wireless sensor may have initiated properly, and the data is registered by the weather station as invalid, and the weather station must be reset.
	With an open-ended paperclip, press the RESET button for 3 seconds to complete the display of the voltage. LED will flash every 20 seconds.
	If LED does not flash every 20 seconds, take out the batteries and wait 5 minute, while covering the solar panel to drain the voltage.
Wireless sensor does	Put batteries back in and resync the weather station and resync the weather station (Refer to Page 18 RE-PAIRING SENSOR) with the wireless sensor about 10 feet (3m) away .
not communicate the weather station	The LED of the wireless sensor will flash every 20 seconds. If the LED is still not flashing every 20 seconds, replace the new batteries in the wireless sensor.
	If the batteries were recently replaced, check the polarity. If the wireless sensor is flashing every 20 seconds, proceed to the next step.
	There may be a temporary loss of communication due to reception loss related to interference or other location factors,
	Or batteries may have been changed in the wireless sensor and the weather station has not been reset. The solution may be as simple as powering down and up the weather station (remove DC power and batteries), wait 30 seconds, and reinsert DC power and batteries).
Indoor and Outdoor temperature do not agree	Allow up to one hour for the wireless sensors to stabilize due to signal filtering. The indoor and outdoor temperature sensors should agree within $\pm 4^{\circ}F$ ( $\pm 2^{\circ}C$ ) (the sensor accuracy is $\pm 2^{\circ}F$ ( $\pm 1^{\circ}C$ )
	Use the calibration feature to match the indoor and outdoor temperature to a known source.
Temperature sensor reads too high in the daytime	Make certain that the wireless sensor is not too close to heat generating sources or strictures, such as buildings, pavement, walls, or air conditioning units.

Problem	Solution			
Rain gauge reports rain when it is not raining.	An unstable mounting solution (sway in the mounting pole) may result in the tipping bucket incorrectly incrementing rainfall. Make sure you have a stable, level mounting solution. (Refer to page 16 ADJUSTING THE 7-IN-1 WIRELESS SENSOR LEVEL)			
Wi-Fi does not display on the weather station	Check your router for problems.  1.) Check Wi-Fi symbol on the display. If wireless connectivity is successful, the Wi-Fi icon will be displayed in the time filed.  2.) Make sure your modem Wi-Fi settings are correct (network name, and password)  3.) Make sure the weather station is plugged into DC power. The weather station will not connect to Wi-Fi when powered by batteries only.  4.) The console only supports and connects to 2.4GHz routers. If your own a 5GHz router, and it is a dual band router, you will need to disable the 5Ghz band, and enable the 2.4GHz band.  5.) The weather does not support guest networks.			
Data not reporting to www.wunder ground.com or www.weather cloud.net	1.) Confirm your password or key is correct. It is the password you registered on Wunderground.com.  Wunderground.com. Your underground.com password cannot begin with non-alphanumeric characters (a limitation of Wunderground.com, not the station). For example, \$worknet is not a valid password, but worknet\$ is valid)  2.) Confirm your station ID is correct. The station ID is all caps, and the most common issue is substituting and O for a 0 (or vice versa). Example, KCAPHOEM12, not KCAPHOEM12.  3.) Make sure the data and time are correct on the weather station. 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 weather station sends data via Port 80.			

### **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.
- 2. This device must accept any interference received, including interference that may cause undesired operation.

#### 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 — 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 the equipment does not 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 the 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.

WARNING: Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### Made In China



**Technical Support and E-Warranty Certificate** www.vevor.com/support