

WS-9160UV2 FAQs

We are weather enthusiasts like you and know proper running equipment is important. These FAQs provide valuable information on setup, positioning, and troubleshooting your station. We recommend Adobe Reader version 10 or greater available at: <http://get.adobe.com/reader>

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BATTERIES: WHAT DO I NEED TO KNOW ABOUT BATTERIES?

- Good fresh batteries are important for best performance in your sensors and as backup in your clock.
- Batteries with an expiration date of 2028, were manufactured in 2018.
- We recommend batteries with an expiration date 6 years in advance of the current year for best performance.
- A minimum voltage of 1.48 v per battery is required for best performance.
- Lithium batteries may be used in outdoor sensors. Alkaline batteries for the clock.

HARDWARE: SENSORS AND STATION

Your **WS-9160UV2** station comes with:
TX141-Bv3 433MHz RF.

WHAT ARE THE POWER REQUIREMENTS FOR THIS STATION?

TX141-Bv3: 2 “AA” batteries

WS-9160UV2: 2 “AA” batteries

SETUP: HOW DO I SETUP MY STATION?

1. Insert 2 “AA” batteries into your sensor and station.
2. Enter Basic Settings.
3. Allow up to 10 minutes for sensors to connect.
4. Place your sensors outside in appropriate locations.

MOUNTING: WHERE DO I MOUNT/POSITION MY SENSOR?

- Watch sensor mounting video: http://bit.ly/TH_SensorMounting
- Place your thermo-hygro sensor at least 6 feet off the ground.
- For accurate temperature readings your sensor needs to be shaded from the sun and in a well ventilated area. Trapped moisture will cause inaccurate readings.
- Mount your sensor vertically to allow moisture to drain out the bottom.
- Preferred location is on a north facing wall under an eave or deck rail.
- Avoid placing near a metal roof that will cause it to read high on sunny days.
- Avoid other sources of heat such as soffit vents, and window or door frames.
- For accurate humidity readings, avoid placement near vegetation and lakes or other bodies of water when possible.
- Maximum transmission distance from your thermos-hygro sensor to your station, in open air is 330 feet (100 meters).
- Insert the mounting screw through the front of the transmitter and into the wall. Tighten the screw to snug (do not over tighten).

WHERE TO I PLACE MY STATION?

Your station is designed for flexible placement on a desk or countertop or close the stand to position on the wall.

- Best reception occurs when only one wall is between your station and each sensor outside.
- Position you station six feet from other electronics and wireless devices. If you suspect RF (radio frequency) interference, simply move your weather station a few feet.

HOW DO I MANUALLY SET THE TIME?

Note: Only press or hold one button at a time.

1. Hold the SET button to enter the Settings Menu.
2. Use the + or - button to adjust values.
3. Press the SET button to confirm and move to next item or exit.

Settings Menu Order:

- Hello
- Language (English, Español, Français, Deutsch)
- Beep ON/OFF
- 12/24 Hour Format
- Hour
- Minutes
- Year
- Month
- Date
- Month/Date, Date/Month
- Fahrenheit/Celsius
- Thank you

Language: The language selected in this menu will control other menu items as well as your full weekday readout.

Weekday: The Weekday will set automatically when your Year, Month and Date are set.

To begin:

1. On startup or if you hold the SET/TIME button for 2 seconds to enter setting mode. **HELLO**, will show for two seconds, then automatically move to language. **ENGLISH** will show. Press the + or - button to change to another language (Español, Français or Deutsch). Press the SET/TIME button to select Beep ON/OFF.
2. Press SET to confirm and move to beep sound ON/OFF. **BEEP ON** will show. ON flashes. Press the + or - button to turn the button beep sound off.
3. Press SET to confirm and move to 12/24 hour. The **12Hr** will flash and **FORMAT** will show. Press the + or - button to choose 12 hour or 24 hour time format.
4. Press SET to confirm and move to the hour. The **HOUR** will flash. Press the + or - button to choose the hour.
5. Press SET to confirm and move to the minutes. The **MINUTES** will flash. Press the + or - button to choose the minutes.

6. Press SET to confirm and move to the year. The **YEAR** will show. **2020** will flash. Press the + or - button to change the year.
7. Press SET to confirm and move to the month. The **MONTH** will show. Month number will flash. Press the + or - button to change the month.
8. Press SET to confirm and move to the date. **DATE** will show. Date number will flash. Press the + or - button to change the date.
9. Press SET to confirm and move to Month/Date or Date/Month format. **MONTH/DATE** will flash. Press the + or - button to change to DATE/MONTH.
10. Press SET to confirm and move to the temperature unit. **FAHRENHEIT** will show. °F will flash. Press the + or - button if you prefer °C (Celsius).
11. Press SET to confirm and exit. THANK YOU will show for 2 seconds.

Note: After 10 seconds with no button press, station returns to normal time display.

WEEKDAY: HOW DO I CORRECT THE DAY OF THE WEEK?

- The day of the week will set when the Year, Month, and Date are set. If your day of the week is incorrect, yet the month and date are correct, please go the [program menu](#) and check the YEAR setting.

DOES THIS STATION HAVE 12 HOUR AND 24 HOUR TIME OPTIONS?

- Yes, you can select 12 hour or 24 hour time format in the [program menu](#).

HOW DO I CHANGE THE CALENDAR DISPLAY?

- Press and release the CALENDAR button to change date display or to not show the Calendar.
- Station will stay on selection.

WHY DOESN'T THE TEMPERATURE/HUMIDITY READINGS ON MY STATION MATCH THE WEATHER REPORT?

- Your temperature and humidity readings are from your sensor at your location. Your local reporting station can be miles away so readings will differ.

WHAT DOES A READING OF "HI" OR "LO" MEAN?

- If your outdoor temperature reading shows "HI" or "LO", check that your [batteries](#) are good.
- Overpowered or underpowered batteries can cause this reading.
- If batteries are good, replace the outdoor sensor.
- If your temperature is fine but your humidity is reading "HI" or "LO" or dashes, your humidity may be below 10% Relative Humidity. Your sensor does not read below 10% humidity.

WHAT DOES “NO” MEAN?

- If any sensor loses connection to the station for any reason, the station will show **NO** after 30 minutes.
- The station will search for 3 minutes every hour to reconnect with sensor.
- Hold the **SENSOR** button 2 seconds to search for the sensors.
- Icon will flash while searching for sensor. Outdoor area will show dashes during the search. When sensor is received the icon will be solid.
- If no sensor received, icon disappears after 3 minutes of searching if sensor is not found.
- **NO** will again show.



WHY DOES MY TEMPERATURE READING COME AND GO?

- RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g., moister climates).
- If a sensor goes out, please wait 2-4 hours for it to reconnect on its own. Please be patient – these stations can reconnect on, after many hours out.
- RF (radio frequency) communication is not always 100% on. Certain temporary conditions can cause it to go out for a time (e.g., 100% humidity).

If a miss happens:

- If sensor loses connection to the station for any reason, the station will show NO after 30 minutes.
- The station will search for 5 minutes every hour to reconnect with sensor.
- Be sure you have good [batteries](#). Manually search for your sensor.

Try this:

- Bring your sensor within 10 feet of your station and make sure it is connected to the station.
- After 15 minutes move the sensor into the next room with a wall between the sensor and the station for 1 hour.
- If there is no loss of signal in that hour, move the sensor just outside.
- Continue moving the sensor back to its original location.
- If you lose connection, look for sources of [interference](#).

WHAT IS DISTANCE | RESISTANCE | INTERFERENCE?

Distance:

- The maximum transmitting range in open air is over 330 feet (100 meters) between each sensor and your station.
- Consider the signal path from your station to each sensor as a straight line.
- Consider the distance the station is from other electronics in the home.

Resistance:

- Each obstacle: walls, windows, vegetation, stucco, concrete, and large metal objects will reduce the effective signal range by about one-half.
- Mounting your sensors on a metal fence can significantly reduce the effective signal range.

Interference:

- Consider electronics in the signal path between the sensors and your station.
- Simple relocation of the sensors or the station may correct an interference issue.
- Windows can reflect the radio signal.
- Metal will absorb the RF (radio frequency) signal.
- Stucco held to the wall by a metal mesh will cause interference.
- Transmitting antennas from: ham radios, emergency dispatch centers, airports, military bases, etc. may cause interference.
- Electrical wires, utilities, cables, etc. may create interference if too close.

CAN I CHANGE BATTERIES IN MY SENSORS WITHOUT LOSING DATA?

We designed this station for convenience, so that a simple change of batteries does not lose data or require you to power down your station.

- When Battery Indicator shows in the Outdoor Sensor area, replace batteries in your Outdoor Sensor.
- Then hold the SENSOR button for 3 seconds and your station will search for your sensor.

FACTORY RESET: HOW DO I FACTORY RESET MY STATION?

To factory reset your station:

1. Hold the DATE and RAIN buttons together for 5 seconds.
2. When your station resets it will look for all sensors. Allow at least ten minutes to reacquire the sensors.

HOW DO I VIEW MY HI AND LO MIN/MAX READINGS?

Your high and low temperature and humidity readings are recorded with time and date of occurrence. Each time a new high or low reading is recorded, that reading with time and date of occurrence will show.

Press and release the **MIN/MAX** button to toggle MIN/MAX readings with time/date stamp. These readings will be from the time the station was setup. Time and date of the Min or Max reading will show.

Order:

- Indoor Minimum Temperature Record
- Indoor Maximum Temperature Record
- Outdoor Minimum Temperature Record
- Outdoor Maximum Temperature Record

HOW DO I RESET MIN/MAX READINGS?

Reset MIN/MAX Readings (each reset individually):

- Press the MIN/MAX button to view individual readings.
- Hold the MINUS button for five seconds to reset the individual value.

HOW DO I VIEW HUMIDITY?

- Press the HUMIDITY button to view Humidity readings for a brief time. Then the station will return to temperature readings.

CAN I ADD SENSORS?

This station can read an add-on **Rain Sensor** to read in the Time Area. It can also read up to two additional Temperature Humidity Sensors.

Add Sensors

1. Install batteries into your add-on Rain or Temperature/Humidity sensor(s).

Note: For Temp/Humidity sensors, be sure to select different channels (2 or 3) before you insert batteries.

2. Hold the SENSOR button until the Reception Indicator starts to animate. This will start a search for your sensors.
3. Your sensor(s) should connect within the next few minutes.

View Add-on Sensors:

- Press the RAIN button to view Rain readings and history (in the Time area).
- Press the SENSOR button to toggle through readings from sensors 1, 2 or 3.

Auto-scroll TH sensors:

- When multiple sensors are connected the customer can view individual sensors or auto-scroll through all three channels.
- The auto-scroll indicator will lose one segment every 1 second, for 5 seconds then switch to the next channel.
- To stop the Auto Scroll, press the SENSOR button until the icon disappears. The station will stay on the last sensor displayed.



View Rain Readings:

- When the optional Rain sensor is connected, it will provide full complement of rain readings.
- Press the RAIN button to view rain readings. Station will stay on display viewed.
- Press the TIME/SET button to return to Time/Date view.

When station has Time displayed and rain starts, RAIN NOW will automatically show until there has been 15 minutes without rain.

- **RAIN NOW:** The Time display will automatically change to RAIN NOW reading at the start of a new rain event. RAIN NOW will continue to display until there has been no additional rainfall for **15** minutes. Then Time will again display.
- **RAIN 1 HR:** Last one hour rain fall (12 consecutive 5 minutes rainfall accumulated total). Example: current time is 6:49, 1HR rain is accumulated total between 5:50 to 6:49. Updates every 5 minutes.

- **RAIN 24 HRS:** Based on past 24 hours accumulated rain total. At each full hour, 1 hour rainfall is recorded. This is a running total.
- **RAIN 7 DAYS:** Accumulated last 7 consecutive 24HR rain. At each day 0:00, 24HR rain is recorded. Not a subject to the calendar. Be sure time is set.
- **MONTH: Current Month.** Ex: January 1-January 31. At the first month calendar day 0:00, month rain is reset to 0. Accumulated rain from 1st of xx (month) to current day xx (month). Current month will show in date area.
Note: Press and release the RAIN button to view MONTH Rainfall History records. Press and release the PLUS (+) button to toggle through the past 12 monthly history readings.
- **RAIN YEAR: Current year** January 1-December 31 total. Example: current is date is Nov. 10, 2018. Year rain is Jan 1, 2020 –Oct 31, 2020 month totals, plus the current month (Nov 1-10) rain. Current Year will show in time display.
- **RAIN TOTAL:** Total rainfall since powered on or reset.

Purchase Extra Sensors

Visit lacrossetechnology.com/products/WS-9160Uv2#parts to find and purchase compatible add-on sensors.