## V40A-PRO 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: <a href="http://get.adobe.com/reader">http://get.adobe.com/reader</a>

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# GENERAL INFORMATION 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 weather station.
- Batteries with an expiration date of 2020, were manufactured in 2010.
- We recommend batteries with an expiration date more than 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 station.

#### HARDWARE: SENSORS AND STATION

#### This V40A-PRO weather station comes with:

LTV-WR1 Multi-sensor that reads, Wind Speed, Wind Direction and Rainfall.

LTV-TH3 Thermo-hygro sensor that reads Temperature and Humidity.

#### POWER: WHAT ARE THE POWER REQUIREMENTS FOR THIS STATION?

LTV-WR1: 3-AA batteries LTV-TH3: 2-AA batteries

V40A-PRO: 5 volt power cord (required) and 3-AA batteries for optional backup of your time

and

date. Battery operation only will not update sensor or Wi-Fi data. Power cord is required.

**Note:** Batteries are not included. 5 Volt power cord is included.

#### POWER INPUT: WILL THIS STATION WORK IN OTHER COUNTRIES??

• Your power cord input is 100-240V 0.3A 50/60Hz, and can work in other countries if the proper plug adapter is used (not included).

Note: There is no guarantee this will work in other countries.

• As a standalone station-, you can use this anywhere.

However the La Crosse View<sup>™</sup> app was designed to work with the National Weather Service (NWS) and National Institutes of Standards and Time (NIST) in the USA. Because of this, we cannot guarantee that any "connected" features will work in another country.

#### SETUP: HOW DO I SETUP MY WEATHER STATION?

### Your station is a fully functional standalone station.

- 1. Install batteries into each sensor (any order).
- 2. Install power cord into wall outlet, and into the station. Install batteries into the station if you wish.
- 3. Let sensors and station sit within 10 feet of each other for several minutes to lock the sensor signals to the display.

Once the sensors are connected, you can choose to connect to the La Crosse View<sup> $\mathrm{M}$ </sup> app or continue to use as a standalone station. You can always connect later if you choose. Click <u>here</u> for instructions for connecting your station to the La Crosse View<sup> $\mathrm{M}$ </sup> app.

## MOUNTING: WHERE DO I MOUNT/POSITION MY SENSORS?

Both of your sensors read independently to your weather station. This provides freedom to position each sensor in the best location available.

#### LTV-WR1:

The solar panel is designed to extend the life of your batteries. The multi-sensor is designed to operate on battery power. The solar panel alone will not operate the sensor 24/7.

- Batteries are required to operate the sensor at night or days without sufficient sunlight.
- For correct wind direction, the solar panel should face south. The letters S, E, W and N are embossed on the top of the sensor to assist in proper positioning.
- Place your multi-sensor two times higher than any large object within 50 feet. Wind does not pass through hard objects, it is distorted by them. If your sensor is too close you will measure the air turbulence and not actual wind speed.
- Place away from trees. Wind passing through trees moves slower than wind in open areas.
- Since this is also a rainfall sensor, you will need to use the bubble level on top of your multisensor to ensure it is level.
- Rain sensors occasionally need to have leaves and other debris removed for accurate rain readings.
- Maximum transmission distance from your multi-sensor to your weather station, in open air is 400 feet (121.92meters).
- Use the included mounting bracket or your own mounting pole (no more than one inch outside diameter). Secure to the sensor with screws provided. Tighten the screws to snug (do not over tighten).

#### LTV-TH3:

• 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 in a well vented area.
- Mount your sensor vertically to allow moisture to drain out the bottom.
- Preferred location in 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.
- Place your sensor in a well-vented area. Trapped moisture will cause inaccurate readings.
- Maximum transmission distance from your thermo-hygro sensor to your weather station, in open air is 400 feet (121.92meters).
- Insert the mounting screw through the front of the transmitter and into the wall. Tighten the screw to snug (do not over tighten).

#### SOUTHERN HEMISPHERE: MOUNTING THE MULTI-SENSOR

- For the system to work correctly, the Multi-Sensor's solar panel must face south for correct wind direction readings. Not to worry, the sensor should still get plenty of sunlight even in the southern hemisphere and facing south.
- The wind directional vane is not reversible.
- Keep in mind, that the solar panel does not run the sensor on its own; it simply extends the life of your batteries. So be sure to face it south so your direction is correct!

## WHERE TO I PLACE MY WEATHER STATION?

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

- Position within reach of an outlet that is always active. Some outlets in living rooms and in bedrooms may only be active when the light switch is on.
- This weather station must operate with the 5 volt power cord in order to receive sensor updates and/or to update Wi-Fi data when connected. Operation on battery power will only maintain time/date settings if you need to move your weather station.
- Best reception occurs when only one wall is between your weather station and each sensor outside.
- Position you weather station six feet from other electronics and wireless devices. If you suspect RF (radio frequency) interference, simply move your weather station a few feet.

#### WHAT IS DISTANCE | RESISTANCE | INTERFERENCE?

#### Distance:

- The maximum transmitting range in open air is over 400 feet (121.92 meters) between each sensor and your weather station.
- Consider the signal path from your weather station to each sensor as a straight line.
- Consider the distance the weather 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 weather station.
- Simple relocation of the sensors or the weather 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.

## GET CONNECTED: YOUR LA CROSSE VIEW™ APP

Enjoy the added benefits of on-the-go monitoring when you are connected via your mobile device. For support and guidance of your La Crosse View™ app, please visit: www.lacrossetechnology.com/lacrosseviewsupport

#### DOWNLOAD APP: WHERE DO I FIND THE LA CROSSE VIEW™ APP?



 Visit the App Store or Google Play Store to download the free La Crosse View<sup>™</sup> app on your mobile device.





## HOW DO I CONNECT?

Confirm that your mobile device is connected to a 2.4 GHz Wi-Fi Network before you connect your station. Some routers have 5.0GHZ for media streaming and 2.4GHZ for everything else.

### Check your station:

• When connecting to the app, ensure the Wi-Fi Indicator indicator is blinking. SEE APP should be

flashing. If it is not hold the + and – button together.

**Note:** Weather station power cord use is required. Battery operation only, will not update sensor or Wi-Fi data.

### Launch the app:

• Open the app on your iOS or Android device.

#### Follow instructions in the app:

- Your La Crosse View<sup>™</sup> app will walk you through creating an account and connecting your station to the
- Internet. Once connected, your time, date, and local forecast information will update instantly on your weather station's screen.

#### APP REQUIREMENTS: WHAT ARE THE REQUIREMENTS TO CONNECT?

The La Crosse View<sup>™</sup> app is compatible with both iOS and Android mobile devices. Before connecting, be sure to check a few things:

- Confirm that your mobile device is connected to a 2.4GHz (802.11 b/g/n) Wi-Fi band before trying to connect your station to the La Crosse View™ app. The station itself cannot accept 5GHz Wi-Fi bands that most dual-band routers offer.
- Weather station power cord use is required for Wi-Fi connection.
  - o IOS Requirements: Mobile device with iOS 9.0 (or higher) with cellular or Wi-Fi service
  - Android Requirements: Mobile device with Android OS 5.0 (or higher) with cellular or Wi-Fi service

Note: You cannot use the app on a laptop or desktop computer.

#### Tips:

- Do not use public Wi-Fi networks.
- Your weather station and mobile device must be within 10 feet of each other during setup.
- Hold the PLUS and MINUS buttons together for 3 seconds to have your station search for your Wi-Fi.

#### WHY DOES MY WIFI INDICATOR KEEP FLASHING?

If your WiFi indicator is still flashing after you have successfully connected to your app, it is likely that you "opted out" of using NWS Weather and Internet time services. Your Wi-Fi indicator will continue to flash for up to one hour.

If you opted out in error, go to Main Menu Add/Edit Devices to "opt in":

- 1. Open your app and select DEVICES from the Navigation bar.
- 2. On the devices screen, tap your weather station's info icon.
- 3. Uncheck the OPT OUT box an input a time zone and zip code.

  Note: if you are not in the USA, select a USA zip code closest to your location.

- 4. Press SAVE.
- 5. Wait a few minutes for your station to receive Internet Time and NWS weather.
- 6. Your Wi-Fi indicator should be solid.

#### WHY DO I ONLY SEE MY INDOOR READINGS ON MY APP?

• After scanning your station and connecting to the app, you will need to scan the bar code ID on each sensor to add to the app.

## Open your La Crosse View™ app to add sensors.

- From Main Menu select "Devices" under "Add/Edit"
- On Edit Devices page select "ADD DEVICE"
- Scan Device ID Scan the Bar Code on your sensor or choose "ADD MANUALLY" to type in the number on the bar code. Select "CONTINUE".
- On Confirm Device page Confirm the sensor image and select "YES"
- On Enter Device and Location Names page enter Device Name and select a location or enter a Location Name for your sensor. Select "DONE".

#### APP BENEFITS: WHAT ARE THE BENEFITS OF USING AN APP?

- Monitor your backyard weather from anywhere with Internet connection.
- Set alerts, view graphs, share your home's weather data with family and friends who have a free La Crosse View™ app account.
- Personalize your app with your own photos, and receive push notifications.
- Expanded forecast indicators from the National Weather Service (NWS).
- Add extra sensors that will read to your app.

# STATUS MESSAGES: WHAT IS THE MEANING OF THESE MESSAGES ON MY STATION?

Your weather station has built in connection status messages for your convenience.

- "ALL OK" Your station is connected to the app.
- "LOST WIFI" Your station has lost connection with your Wi-Fi network.
- o Check your power cord connection (power cord required to connect)
- o When trying to reestablish your station's Wi-Fi connection, be sure your mobile device is on the same 2.4GHz network you want your station to use.
- o Check your network connection.
- o Hold the + and buttons together for 3 seconds to search for Wi-Fi. SEE APP should show.

<sup>&</sup>quot;Opting Out" will result in your Wi-Fi indicator flashing for up to one hour.

"SEE APP" – Your station has lost connection with your app.

- The Wi-Fi router connection is working.
- Check your connection to the La Crosse View<sup>™</sup> app. Select your station, and then choose "Connect Wi-Fi" from the app menu. Reenter your Wi-Fi network's login information.
- Is there an update to install?

"NO NWS" - This indicates and error on the NWS server. There is nothing you can do for this.

- NWS Expanded Forecast, will not update or show.
- The NWS will resolve this.
- Very rare to have this error.

**Note:** When you first connect to the La Crosse View<sup>™</sup> app, "NO NWS" may alternate with "ALL OK" for a few seconds until the station establishes contact with the NWS server.

#### CAN I MOVE MY STATION TO A NEW HOUSE?

- Yes, it is very easy to move your station to a new location. You will simply need to connect to the new Wi-Fi.
- If you change your Wi-Fi network, simply go into the La Crosse View™ app, select your station, and then choose "Connect Wi-Fi" from the app menu. Here, you will just need to enter your new Wi-Fi network's login information.

**Note:** If switching to a new Wi-Fi network, your station may take up to 3 minutes to reacquire all sensor information.

#### ADD SENSORS: HOW CAN I ADD SENSORS TO MY LA CROSSE VIEW™ APP?

Check for compatible sensors to purchase at www.lacrossetechnology.com/V40A-PRO

**Note:** The number of sensors or stations you can add will be limited by the memory of your mobile device.

#### Open your La Crosse View<sup>™</sup> app to add sensors.

- 1. From Main Menu select "Devices" under "Add/Edit"
- 2. On Edit Devices page select "ADD DEVICE"
- 3. Scan Device ID Scan the Bar Code on your sensor or choose "ADD MANUALLY" to type in the number on the bar code. Select "CONTINUE".
- 4. On Confirm Device page Confirm the sensor image and select "YES"
- 5. On Enter Device and Location Names page enter Device Name and select a location or enter a Location Name for your sensor. Select "DONE".
- Repeat steps 1-5 for any additional sensors you wish to add.
- Allow a few minutes for the new sensors to report to the app.

#### CAN I CONNECT TO WEATHER UNDERGROUND?

Yes, your station will connect to Weather Underground.

Note: You will not be able to add additional sensors to Weather Underground.

- Video support at: https://www.youtube.com/watch?v=87unKfbxd9c
- Start at 7:54 minutes for video instructions.

#### Tips:

- For your security, this app will **only** work on protected WiFi networks.
- Open public networks that require a browser sign in will not work.

## WIND | RAIN | TEMPERATURE | HUMIDITY READINGS

## READINGS: HOW DO I INTERPRET THE CURRENT WIND READINGS?

- Wind Speed is the top wind speed at the last reading.
- Top Speed is the highest wind speed reading in the past hour.
- Wind Direction The wind direction shown in the compass rose, can be shown in degrees or in letters. Use the program menu to choose how to view your wind direction.

**Note:** Wind direction indicates where the wind is coming from. If the wind direction shown on your station is showing south, the wind is coming from the south. When you listen to a weather report they will use terms like "wind is from the west at 7 mph".

#### HOW DO I INTERPRET THE WIND HISTORY READINGS?

In addition to the one hour history which is constantly shown on the station, you can view wind speed history at 24 hours, 7 days, current month, and current year.

Press and release the WIND button to toggle through the Wind Speed History times.

- 24 Hour Wind Speed Shows the top speed in the past 24 hours from the last record. This is a rolling 24 hour period and not a set midnight to midnight readings.
- **7 Days** Shows the top speed in the past 7 days from the last record. This is a rolling 7 day period, not a Monday through Sunday record. Updates at midnight each day.
- Month Shows top wind speed for the current month. Record is from the first day of the month to the last day of the month. When in the middle of the month, it will show the readings from the first day of the month to the last full day. Example. If today is the 15<sup>th</sup> of the month, the top speed is from the 1<sup>st</sup> to the 14<sup>th</sup>. After midnight, the 15<sup>th</sup> will be included.
- Year Shows top wind speed for the current year. January 1, through December 31st.

#### HOW DO I RESET THE WIND HISTORY READINGS?

Your wind speed history readings are reset individually.

- 1. Press and release the WIND button to view the history reading you wish to reset.
- 2. Hold the MINUS button for 5 seconds to reset that value to current wind speed.
- 3. Press and release the LIGHT button to exit.

#### HOW DO I INTERPRET THE RAIN READINGS?

You have the option to have the rainfall timeframe you prefer, to be shown on the station all the time. Simply press and release the RAIN button to select:

- One Hour Shows rainfall in the past 60 minutes. This is a rolling value for the past 60 minutes and not a set time. As time passes without rain, this values will count down to zero.
- Day- This is your rainfall from midnight to midnight and automatically resets every night.
- 24 Hours Shows rainfall in the past 24 hours as a rolling value that updates every hour to show the past 24 hours. As time passes without rain, this values will count down to zero.
- **7 Days** Rainfall for the past 7 days. This is a rolling 7 day period, not a Monday through Sunday record. Updates at midnight each day. As time passes without rain, this values will count down to zero.
- Month Record is from the first day of the month to the last day of the month. When in the middle of the month, it will show the readings from the first day of the month to the last full day. Example. If today is the 15<sup>th</sup> of the month, the top speed is from the 1<sup>st</sup> to the 14<sup>th</sup>. After midnight, the 15<sup>th</sup> will be included.
  - o Press and release the MINUS button to view the past 11 months of rainfall history.
  - o Press and release the PLUS button to move forward to the current month.
- Year Shows rainfall for the current month and the past 11 months combined.
- Total Shows all rainfall from the time the station was setup until the station was powered down or the value was reset. The total rainfall can show years' worth of data.

#### HOW DO I RESET THE RAIN READINGS?

Your rainfall readings are reset individually.

- 1. Press and release the RAIN button to view the history reading you wish to reset.
- 2. Hold the MINUS button for 5 seconds to reset that rain value to zero.
- 3. Press and release the LIGHT button to exit.

#### HOW DO I VIEW MY HI AND LO TEMPERATURE/HUMIDITY 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.

To view your HI | LO records, simply press and release the TEMP button.

#### Viewing order:

- Outdoor HI Temperature
- Outdoor LO Temperature
- Outdoor HI Humidity

- Outdoor LO Humidity
- Indoor HI Temperature
- Indoor LO Temperature
- Indoor HI Humidity
- Indoor LO Humidity
- Feels Like HI
- Feels Like LO
- Dew Point

Note: Feels Like temperature and Dew Point do not have a time/date of occurrence.

## HOW DO I RESET MY HILLO READINGS?

Your HI I LO Temperature /humidity readings are reset individually.

- 4. Press and release the TEMP button to view the history reading you wish to reset.
- 5. Hold the MINUS button for 5 seconds to reset that value to current temperature or humidity and current time/date. This is the new HI or LO record.
- 6. Press and release the LIGHT button to exit.

#### WHAT IS FEELS LIKE AND DEW POINT TEMPERATURE?

Feels Like temperature indicates both Wind Chill and Heat index on stations with wind speed

- Feels Like Temperature shows Wind Chill: When the temperature is below 50°F, and generally a 5 mph sustained wind speed, the Feels like Temperature is showing Wind Chill.
- Feels Like temperature shows Heat Index: When the temperature is *above 80°F*, the Feels like temperature is showing the Heat Index.
- Feels Like temperature shows Current Temperature: When temperature is between 51°F and 80°F, the Feels like temperature will *remain the same* as the outdoor temperature regardless of humidity or wind speed.

#### ALERTS: HOW DO I SET ALERTS ON MY STATION?

There are 10 programmable alerts to set on this station. Each alert is defaulted to OFF until you choose to set and arm the alert.

#### Alerts:

- Outdoor LOW Temperature
- Outdoor HIGH Temperature
- Outdoor LOW Humidity
- Outdoor HIGH Humidity
- Indoor LOW Temperature
- Indoor HIGH Temperature

- Indoor LOW Humidity
- Indoor HIGH Humidity
- 24 Hour Rainfall
- HIGH Wind speed (Current speed)

You will need to arm each alert you wish to set.

- 1. Hold the ALERTS button for 3 seconds to enter alert set mode. The Outdoor LOW temperature and OFF will show.
- 2. Use the PLUS or MINUS button to arm the alert if you wish to set the value.
- 3. Press and release the ALERTS button and the alert value will flash. Use the PLUS or MINUS button to adjust the value.
- 4. Press and release the ALERTS button to move to the next alert.
- 5. Continue steps 2-4 to view or set all of the alerts.

**Note:** To skip one or more alerts, simply press and release the ALERTS button until you see the alert you wish to set. The follow steps 2-4 above.

#### WHAT HAPPENS WHEN AN ALFRT VALUE IS REACHED?

- When armed alert value is reached, station will beep 5 times each minute, until out of the alert range.
- The flashing alert indicator will indicate the type of alert.
- Press any button to stop the alert from sounding.
- The alert indicator will continue flashing while value while value is in alert range.

#### HOW DO I SILENCE OR TURN OFF AN ALERT?

**Silence Alert Beeps:** To silence an active alert press any button. The alert will stop beeping but the indicator will flash.

#### Disarm Alerts:

- 1. Hold the ALERTS button 3 seconds to enter alert set mode.
- 2. Press and release ALERTS button until you see the alert you wish to disarm.
- 3. Press the PLUS or MINUS button to disarm the alert. The alert text goes from ON to OFF.
- 4. Press the LIGHT button to exit.

#### TIME: DOES THIS STATION HAVE ATOMIC TIME?

- When operating as a standalone station, the time needs to be set manually on this station.
- When operating as a connected station the time will update from the National Institutes of Standards and Time (NIST).

#### HOW DO I MANUALLY SET THE TIME?

## When operating as a standalone station, you can manually adjust your station's settings:

- 1. Hold the SET button for 3 seconds to enter settings menu.
- 2. Press and release the + or buttons to adjust the flashing values. Hold to adjust quickly.
- 3. Press and release the SET button to confirm and move to the next item.

Note: Press and release the LIGHT button any time to exit settings

## Settings order:

- Beep ON/OFF
- •12H/24H Time
- •Hour
- Minutes
- Year
- Month
- Date
- •Temperature Fahrenheit/Celsius
- •Wind Direction (letters or degrees)
- •Wind Speed (MPH | KMH)
- •Rainfall unit (Inches | MM)
- •SEE APP (connection prompt for app, no actual function)

#### Full Program Menu:

- 1. Hold the SET button for 3 seconds to enter settings. BEEP ON will show. Press and release the PLUS or MINUS button if you want the Beep sound OFF.
- 2. Press and release the SET button to confirm and move to select 12/24 hour time format. 12Hr FORMAT will show. Press and release the PLUS or MINUS button if you want 24 hour time format.
- 3. Press and release the SET button to confirm and move to the hour. 12: and HOUR will show. Press and release the PLUS or MINUS button to adjust the hour.
- 4. Press and release the SET button to confirm and move to the minutes. : 00 and MINUTES will show. Press and release the PLUS or MINUS button to adjust the minutes.
- 5. Press and release the SET button to confirm and move to the year. 2017 and YEAR will show. Press and release the PLUS or MINUS button to adjust the year.
- 6. Press and release the SET button to confirm and move to the month. JAN and MONTH will show. Press and release the PLUS or MINUS button to adjust the month.
- 7. Press and release the SET button to confirm and move to the date. /01 and DATE will show. Press and release the PLUS or MINUS button to adjust the date.
- 8. Press and release the SET button to confirm and move to select Fahrenheit or Celsius. TEMP °F will show. Press and release the PLUS or MINUS button to select Celsius (°C).
- 9. Press and release the SET button to confirm and move to the wind direction in degrees or letters. WIND DIR will show. Press and release the PLUS or MINUS button to select wind direction in degrees or letters.
- 10. Press and release the SET button to confirm and move to wind speed in mph or kmh. WIND MPH will show. Press and release the PLUS or MINUS button to select KMH.

- 11. Press and release the SET button to confirm and move to select rainfall in inches or millimeters. RAIN IN will show. Press and release the PLUS or MINUS button to select MM.
- 12. Press and release the SET button to confirm and SEE APP will show. This is a reminder to connect to the La Crosse View™ app. This is not required when operating as a standalone station. There is no actual function when you see this. Press the LIGHT button to exit.

#### WHY DO "SEE APP" OR "LOST WIFI" SHOW ON MY STATION?

When operating as a standalone station, you will occasionally see the words SEE APP or LOST WIFI.

- SEE APP is a prompt to connect to the La Crosse View<sup>™</sup> app. Using the app is not required.
- LOST WIFI again refers to your station searching for a WIFI connection to connect to the La Crosse View™ app.
- These statements should only flash for a few minutes then disappear.
- They may show again for a few minutes if you restart the station or press and release the SET button.
- When connected you will have these and other status messages. These are described under below when talking about connected status messages.

#### BACKLIGHT: DOES THIS STATION HAVE A BACKLIGHT?

Yes, your station has a backlight with 5 levels of intensity. Power cord use is required for this station to receive updates from the sensors.

- Press and release the LIGHT button to adjust the backlight intensity or to turn it off.
- Intensity levels: 0% (OFF) | 5% | 20% | 50% | 100%

#### CAN LOPERATE THIS STATION ON BATTERY POWER ONLY?

- No, the power cord is required for the sensors to update.
- When you operate as a connected station, the power cord is required to maintain Wi-Fi connection and sensor updates.

#### LOW BATTERY: WHAT DO THE BATTERY INDICATORS MEAN?

- A battery indicator will appear near the word WIND when you need to change <u>batteries</u> in your wind sensor.
- A battery indicator will appear near the word OUTDOOR when you need to change batteries in your thermo-hygro sensor.
- See how to change batteries under troubleshooting.

## 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 <u>program menu</u> 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 <u>program menu</u>.

## WHY DOES THE STATION SHOW DIFFERENT COLOR TREES?

The trees and foliage color will change seasonally to provide variety to your station. Programmed dates in the weather station tell the trees when to change automatically.

**Spring:** March 20th – Jun 20th

Summer: Jun 21st - Sep 20th



Autumn: Sep 21st - Dec 20th



Winter: Dec 21st – Mar 19th





#### FORECAST INDICATORS: WHAT DO THE FORECAST INDICATORS MEAN?

**Standalone Station:** When operating as a standalone station, the forecast indicators predict weather conditions over the next 12-hours based on the change of atmospheric pressure with about 70-75% accuracy. As weather conditions cannot be 100% correctly forecasted we are not responsible for any loss caused by an incorrect forecast.

#### Forecast Indicators for standalone station:

- Sunny
- Partly Sunny
- Cloudy
- Rain
- T-Storm
- Snow

**Note:** The "snow" indicator appears when the temperature is below 32°F (0°C) and the forecast is rainy or stormy.

- Your station calibrates barometric pressure based on its location over time to generate an accurate, personal forecast. Please allow 7-10 days for barometer calibration.
- The forecast station samples the barometric pressure every twelve minutes. These samples are averaged hourly and daily then stored in nonvolatile memory. The three hour pressure indicator change is based off of the last four average hourly readings.

• IMPORTANT: As the Weather station builds memory, it will compare the current average pressure to the past forty day average pressure for increased accuracy. The longer the Weather station operates in one location the more accurate the forecast indicators will be.

Connected Station: When your station is connected to the La Crosse View<sup>™</sup> app you will see an additional 8 forecast indicators from the National Weather Service (NWS). Your forecast will update multiple times per day. The forecast indicators predict weather condition for the next 3-6 hours.

#### Additional forecast indicators when connected:

- Windy
- Light Rain
- Severe T-Storm
- Light Snow
- Wintry Mix
- Blizzard
- Ice
- Fog
- 1. Your weather station checks with the NWS several times per day.
- 2. Different stations may show different aspects of the NWS based on when they update from the NWS.

**Note:** the NWS can update their website at any time.

- Weather Forecast Indicators (Sun, Rain, etc.): Predicting weather in the next 3-6 hours.
- · Chance of Precipitation: Forecast for 12 hour period
- HI I LO Temperature: Forecast of daytime maximum temperature and overnight minimum temperature

## **TROUBLESHOOTING**

#### HOW DO 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.

- If you have a low battery indicator on your station, you need to replace the batteries in the sensor indicated.
- Simply install fresh <u>batteries</u> into your sensor then hold the SENSOR button for 3 seconds and your station will search for your sensors.

# BAR CODE: WHY ARE THERE BARCODES ON MY SENSORS AND ID NUMBERS ON MY STATION?

- Did you know that your sensors will "lock" into your station?
- This ensures that the sensor readings are from your sensor and not a neighbor.

- When you press and release your SENSOR button you will see your station ID, your thermo-hygro sensor ID, and your multi-sensor ID.
- The sensor ID on the station should match your first six numbers on the barcode of that sensor.
- These sensors will remain locked to your station until you manually delete them.
- The barcodes are also important identifiers for the La Crosse View<sup>™</sup> app if you choose to connect.

## HOW DO I DELETE SENSOR ID NUMBERS?

In the rare event you need to replace your sensor, you will first need to delete the old sensor ID from your station.

- 1. Remove batteries from your old sensor.
- 2. Press and release the SENSOR button to view your sensor ID number.
- 3. While viewing your sensor ID, hold the MINUS button for 5 seconds to delete your old sensor ID. Dashes will show for the ID number.
- 4. Your station will automatically begin searching for the new sensor.
- 5. Install batteries in your new sensor and allow up to three minutes for your new sensor readings and ID to appear on your station.

#### FACTORY RESET: HOW DO I FACTORY RESET MY STATION?

- A factory reset will delete all sensor ID numbers. This will not clear Wi-Fi connections.
- Basically this is a great way to return your station to "out of the box" condition.
- This is more effective than removing all power for clearing out the station.
- All history records will be removed, so write down anything you want to keep.

#### To factory reset your station:

- 1. Hold the ALERTS and LIGHT buttons together for 5 seconds.
- 2. When your station resets it will look for all sensors. Allow at least three minutes to reacquire the sensors.

**Note:** if operating connected, you will need to reconnect to Wi-Fi from the app. Click <u>here</u> for details.

# DASHES TEMP/HUMIDITY: WHY DOES MY THERMO-HYGRO SENSOR SHOW DASHES ON THE STATION?

Dashes indicate the connection is lost between your station and the outdoor sensor.

- My first thought is always to check that my <u>batteries</u> are good. If it has been working and now is not, low batteries are the most common connection problem.
- Next, check your <u>distance</u>, <u>resistance</u> and <u>interference</u>. If everything was working previously at the same location, this is likely not the issue. However sometimes there is new growth on

- trees or bushes that causing another barrier. Radio Frequency (RF) signal does not travel well through foliage due to the moisture content.
- Occasionally adding a new wireless electronic device to the home will cross the signal path for the sensor. If this occurs try moving your station a few feet or turning the station 90 degrees for a better angle to receive the sensor signal.
- When you have good batteries, and good location, hold the SENSOR button for three seconds to search for your sensors. If you regain connection while the sensor is mounted, great. If you do not regain connection, bring the sensor within 10 feet of the station and search again.

## WHY DON'T MY TEMPERATURE/HUMIDITY READINGS MATCH THE WEATHER REPORT?

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

# TEMP ACCURACY: WHY DOES MY THERMO-HYGRO SENSOR READ INACCURATELY?

- The thermo-hygro sensor reads the environment. If your sensor reads high during the day but not at night it is a mounting problem.
- Press and release the SENSOR button to view the thermo-hygro sensor ID number. Compare to the barcode on your sensor to be sure they match.
- Side-by-side test: Bring the thermo-hygro sensor in the house and place it next to your station for 2 hours.
- Compare indoor and outdoor temperature. The temperatures should be within 4 degrees to be within tolerance. The humidity should be within 14% to be within tolerance.
- If the sensor reads correctly when next to your station then try a different location outside.
- Look for heat sources such as sunlight, door or window frames, or reflected heat that may cause inaccurate readings.
- If your temperature is reading low, and location is not an issue, you may have a bad sensor.

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

- If your outdoor temperature reading shows "HI" or "LO", check that your batteries are good.
- Overpower 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.

## TEMP INTERMITTANT: WHY DOES MY TEMP/HUMIDITY 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 patience 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 weather station for any reason, the weather station will show dashes after 30 minutes.
- The weather station will search for 5 minutes every hour to reconnect with sensor.
- Be sure you have good <u>batteries</u>. 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.

#### WHY AM I GOING THROUGH BATTERIES QUICKLY?

- Test a new set of <u>batteries</u>. Write down the date of installation and the voltage of the batteries.
- When the batteries fail, please note the date and voltage again. This is helpful in determining the problem.
- Check for leaking batteries, which may damage the sensor.

#### HOW DO I CHANGE BETWEEN FAHRENHEIT AND CELSIUS?

- On your sensor, open the battery cover and press the F/C button. This will change the temperature display on the sensor only.
- On your station enter the <u>program menu</u> to select Fahrenheit or Celsius temperature display on the station.

#### WHY ARE MY WIND CUPS NOT SPINNING?

- Check for debris or ice preventing cups from moving.
- Check mounting location. Look for obstructions that prevent the wind from reaching the sensor.
- In most cases, the wind sensor needs to be 4-6ft above the highest point on the roof in order to clear nearby obstructions and read accurately.
- A 50-foot clearance in all directions is best.
- Push down firmly on the center of the cups to reseat them.
- Cups are replaceable.

#### CAN I REPLACE MY WIND CUPS AND/OR WIND VANE?

You may have a bad storm with hail or debris that will damage your wind cups. These are easily replaced.

#### Replace wind cups:

- 1. Loosen the screw on side of cups
- 2. Remove cups
- 3. Install new cups
- 4. Tighten screw

**Note:** The screw in the wind cups will fit on the flat side of the metal stem on the sensor.

#### Replace directional vane:

- 1. Loosen the screw on side of vane
- 2. Remove direction vane
- 3. Install new vane
- 4. Tighten screw

**Note:** The directional vane attached to the stem on the sensor. The screw will tighten to the flat side of the stem for a secure fit.

## 0.00 WIND READING: WHY DO I ONLY SEE 0.00 FOR WIND SPEED?

The 0.00 means your multi-sensor is connected to your station.

- Check that the cups spin freely. Something may be preventing movement.
- Are vour wind cups unbroken? After a storm it is good to check this.
- Check that your wind direction changes.

#### DASHES FOR WIND: WHY ARE THERE DASHES FOR WIND AND RAIN READINGS?

Dashes indicate the connection is lost between your station and the multi-sensor sensor.

- My first thought is always to check that my <u>batteries</u> are good. If it has been working and now is not, low batteries are the most common connection problem.
- Next, check your <u>distance</u>, <u>resistance</u> and <u>interference</u>. If everything was working previously at the same location, this is likely not the issue. However sometimes there is new growth on trees or bushes that causing another barrier. Radio Frequency (RF) signal does not travel well through foliage due to the moisture content.
- Occasionally adding a new wireless electronic device to the home will cross the signal path for the sensor. If this occurs try moving your station a few feet or turning the station 90 degrees for a better angle to receive the sensor signal.
- When you have good batteries, and good location, hold the SENSOR button for three seconds to search for your sensors. If you regain connection while the sensor is mounted, great. If you do not regain connection, bring the sensor within 10 feet of the station and search again.

WIND INTERMITTANT: WHY DO MY WIND AND RAIN READINGS COME AND GO?

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   these stations can reconnect on, after many hours out.
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#### If a miss happens:

- If multi-sensor loses connection to the weather station for any reason, the weather station will show dashes after 30 minutes.
- The weather station will search for 5 minutes every hour to reconnect with multi-sensor.
- Be sure you have good batteries. Manually search for your sensor.

#### Try this:

- Bring your multi-sensor within 10 feet of your station and make sure it is connected to the station.
- After 15 minutes move the multi-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 multi-sensor just outside.
- Continue moving the multi-sensor back to its original location.
- If you lose connection, look for sources of <u>interference</u>.

#### WIND ACCURACY: WHY IS MY WIND SPEED INACCURATE?

- What are you comparing your wind speed to? Your local reporting station is miles from your location and should not be used for comparison.
- Check the unit of measure (MPH, or KMH).
- Check to see if your station receives the same repetitive wind speed recording from the sensor multiple times.
- Confirm the direction is working correctly.
- Check that the cups turn freely.
- Check for obstructions that prevent clear wind flow to the cups.
- Check mounting. In most cases, the wind sensor needs to be 6 feet or more above the highest point on the roof in order to clear nearby obstructions and read accurately. A 50-foot clearance in all directions is best.
- It is helpful to send pictures of the sensor mounting, if you need to contact customer support.

#### LOW RAIN: WHY IS MY RAINFALL READING LOW?

- Low rain readings indicate the rain sensor and weather station are connected.
- Check that the rocker tips freely.
- Check the funnel and the inside of the rain sensor for insect nests or debris that may cause loss of rocker motion.
- Be sure to mount the rain sensor level by checking the bubble level on top of the sensor.

## Complete Tip Test:

Write down the Total Rain reading or reset the Rain Total to 0.00. With Rain Sensor mounted slowly pour water into the funnel to tip the rocker of the rain sensor 10 times. Wait at least 2 minutes for all the rain to collect. Repeat three times.

• Compare these tests. If they are the same, then your rain is reading correctly. If the rain readings are different, repeat the test 3 times to avoid human error. Then look for causes such as mounting too tight or debris clogging the funnel.

#### HIGH RAIN: WHY IS MY RAINFALL READING HIGH?

- Check for sources of RF (radio frequency) interference such as other wireless rain sensors, ham radios or electric transformers.
- Keep the weather station six feet from cordless phones or wireless routers etc.

### Complete a Tip Test:

Write down the Total Rain reading or reset the Rain Total to 0.00. With Rain Sensor mounted slowly pour water into the funnel to tip the rocker of the rain sensor 10 times. Wait at least 2 minutes for all the rain to collect. Repeat three times.

• Compare these tests. If they still read high then contact support.

#### HOW CAN I CLEAN THE RAIN SENSOR?

- 1. Remove rain funnel (pull flat side firmly upward).
- 2. Gently remove debris or insects inside the rain sensor.
- 3. Clear debris from drain vents.
- 4. Clear debris from the rain funnel.
- 5. Reinstall the rain funnel.

**Note:** Do not oil the rain sensor.