

2800 Series Frequently Asked Questions

Note: The links below will work in most pdf viewers to skip to the topic area. We recommend Adobe Reader version 10 or greater: <http://get.adobe.com/reader/>

Hardware Display/Sensor Issues

Weather Station Factory Reset

- [Complete System Factory Reset](#)

Batteries

Mounting Outdoor Sensors

Distance/Resistance

Thermohygro Sensor

- [Outdoor temperature shows dashes](#)
- [Intermittent temperature and/or humidity](#)
- [Outdoor temperature shows OFL \(outside factory limits\)](#)
- [Outdoor temperature and/or humidity are inaccurate](#)

Wind Sensor

- [Wind cups slow or not spinning](#)
- [Wind cups or directional vane are broken](#)
- [Wind direction works but speed is 0.00](#)
- [Wind reading is dashes or intermittent](#)
- [Wind reading is blank](#)
- [Wind sensor shows OFL \(outside factory limits\)](#)
- [Wind speed is inaccurate](#)
- [Wind direction is dashes](#)
- [Wind sensor is frozen](#)

Rain Sensor

- [What are the 5 time interval boxes shown?](#)
- [View 1-Hour, 24-hour, etc.](#)
- [Set rain alarms manually on the display](#)
- [Reset rain total](#)
- [Rain count is not accurate](#)

Display Functions

- [Program Menu](#)

- [Change Modes](#)
- [Data storage capacity](#)
- [Alarm on/off](#)
- [Alarm manual set](#)
- [Min/Max settings](#)
- [Pressure reads incorrect](#)
- [Pressure shows dashes or OFL](#)

Software Issues

HeavyWeather Pro

- [HeavyWeather software download errors](#)
- [PC System Requirements – HeavyWeather Pro](#)
- [Sync USB stick to display](#)
- [Why does USB stick require resync?](#)
- [Weather station cannot be found](#)
- [Please start WV5 communication service](#)
- [History storage capacity](#)
- [High rain shows in software](#)
- [How to delete history data](#)
- [Export history data to Excel](#)
- [Upload data with Publisher](#)
- [HeavyWeather and a Mac](#)
- [Compatible 3rd party software](#)

La Crosse Alerts PC Software – Remote Monitoring

- [Optional use of your weather station](#)
- [La Crosse Alerts Website](#)

HARDWARE DISPLAY/SENSOR ISSUES

COMPLETE SYSTEM FACTORY RESET

NOTE: If any of the weather station trouble-shooting steps fail, you may need to do a full system factory set.

A **Factory Reset** will erase the connection between the Display and all sensors, to ensure a fresh connection is established. **Place the Wind sensor in the full sun or under a lamp for 24-hours before you reset to be sure it is charged.** Have the display and all sensors 5-10 feet apart with nothing in between for this restart (allow 30 minutes to complete).

SHUT DOWN COMPONENTS:

- **ENTER DISPLAY PROGRAM MENU:** Press and hold the SET button until you enter the program menu. Press and release the SET button until you see 'rES oFF' flashing.
- **FACTORY RESET ON:** Use the ▲UP ARROW key or ▼DOWN ARROW key to turn **rES on**.
- **CONFIRM & COUNTDOWN:** Press the SET key to confirm and a countdown timer will begin counting down from 127. When the timer displays **dOnE**, **remove the batteries from the display.**
- **REMOVE BATTERIES FROM THERMOHYGRO AND RAIN:** While the batteries are out of the display, also **remove the batteries from the Thermo-hygro sensor and the Rain sensor.**
- **GENTLY PRESS THE RESET BUTTON ON THE WIND SENSOR:** Cover the solar panel of the Wind sensor for 15 seconds and while covered, gently press the reset button (use the tool in the little hole) on the bottom of the Wind sensor. This should ensure the wind sensor is turned **off**.
- **Wait 15 minutes.**

POWER UP COMPONENTS:

- **INSTALL BATTERIES INTO THERMOHYGRO AND RAIN:** Insert the batteries into the Thermo-hygro sensor and Rain sensor. Check polarity with the markings on the battery cover and inside the battery compartment.
- **RESTART THE WIND SENSOR:** Gently press the reset button on the bottom of the Wind sensor one time with the solar panel exposed to light in order to activate the sensor.
- **ALLOW THE SENSORS TO RUN FOR TWO MINUTES.**
- **INSTALL BATTERIES INTO DISPLAY:** After the sensors have run for 2 minutes, insert the batteries into the Display. Check polarity with the markings inside the battery compartment. **Watch the lower left corner of the display on start up and record the firmware version of this display (3 digit number).** *If you contact support, we may ask for the firmware number.*

- **15 MINUTES:** Wait 15 minutes (without pressing buttons) for the outdoor weather data to display. If the outdoor data displays dashes, after waiting for 15 minutes, repeat this restart.

BATTERIES

Batteries remain the #1 warranty issue we see. We advise the use of batteries dated 6 or more years in advance of the current year. Good name brand batteries make less noise, which reduces the chance of RF interference from the battery compartment. If you have a voltmeter that reads numerically, a minimum voltage of 1.48V for each battery is necessary for proper performance. Batteries dated earlier than 6 years from now may still work, but may be unstable in performance.

MOUNTING OUTDOOR TEMPERATURE SENSOR

Please test all sensors in the house before mounting. Tip the rain gauge; blow on the wind sensor to be sure everything reads properly. Allow the sensors to run for 2 minutes before installing batteries into the display. View all data on the display.

AVOID: Transmitting antennas, using PVC pipe (unless electrical grade), and other sources of interference.

DO: 915 mhz functions best when all outdoor components have a minimum mount height of 6 feet above any horizontal surface.

WIND SENSOR:

- ❖ **WIND:** Place the Wind sensor as high as possible to install it. In most cases 6 ft above the peak of the roof (or more) is required for accurate readings. (Avoid tall trees or other obstructions that may block or reflect the wind). A 50-foot clearance in all directions is best. For more information on wind speed and obstructions, check this site:
<http://www.talentfactory.dk/en/tour/wres/obst.htm>
- ❖ Wind cups should be below the mastholder.
- ❖ Ideally the Wind sensor should have a direct line of sight to the Thermohygro sensor.
- ❖ **DIRECTION:** Please note the proper Direction when mounting. The wind sensor has N,**S**, E, W indications on the barrel. The solar panel should be facing **South** for best light.

NOTE: Be sure not to overtighten the U bolts to mast, as the mastholder may crack.

TIP: Most meteorological recording stations have sensors mounted 33 ft or higher above ground.

RAIN GAUGE:

- ❖ **RAIN:** Install the Rain gauge on a level platform that is stationary. If the gauge isn't level it will read low, and if it isn't stationary, wind will cause it to read rain that is not falling.
- ❖ Ideally the Rain sensor should have a direct line of sight to the Thermohygro sensor.
- ❖ On the bottom of the sensor there are 4 screw holes that can be used to mount the gauge. First remove the cover. Push down and twist counter clockwise, then pull the cover off. This will give you access to the screw holes.

NOTE: Be sure not to screw the rain sensor down too tightly as that will result in a low or inaccurate reading.

TIP: Use only 2 screws (across from each other to stabilize) that are just snug not tight. If mounted on a piece of wood, the wood can swell when wet causing the mounting screws to become too tight.

- ❖ Place the Rain gauge 6ft (or more) above the ground. This will prevent dirt from clogging the gauge.

NOTE: You may need to periodically clear debris such as leaves, spider nests etc from the rain gauge, so be sure it is accessible.

THERMOHYGRO SENSOR:

- ❖ **THERMOHYGRO:** Place the Outdoor sensor vertically, in a well-shaded area that is protected from direct rainfall and sun. The sensor will read high if exposed to the sun. If the sensor gets too wet it will not read accurate humidity. Light incidental exposure to water typically will not harm the sensor.
- ❖ See the [Distance/Resistance](#) cautions.
- ❖ A good location is under the eaves on the north side of the house. A small roof or box can be built for it if there is have an overhang. Please be sure it is well vented.
- ❖ Ideally the Wind & Rain sensors should have a direct line of sight to the Thermohygro sensor. It is important that all sensors are on the same side of the house.
- ❖ It is best to mount the sensor with screws as tape can fail causing the sensor to fall. Tape is great for positioning until the best location for the sensor to maintain contact with the display is determined.

NOTE: Do not place sensor in a plastic bag.

DISTANCE/RESISTANCE

- ❖ Distances listed as supported on packages are based on line-of-sight testing, which means no obstructions and optimal conditions.
- ❖ Each barrier reduces the estimated distance by up to 50%.

- ❖ Some barriers are impenetrable (e.g. concrete).
- ❖ Avoid having more than 1 wall, window, tree, etc between the Display and the Thermohygro sensor. UV coated windows may actually reflect the signal causing loss of contact. Stucco walls can absorb the signal.
- ❖ Beware of the “intermittent” obstacle – e.g. the delivery truck that parks between your sensors twice a week at 3 PM.

THERMOHYGRO SENSORS

OUTDOOR TEMPERATURE SHOWS DASHES

- ❖ Dashes mean the display has lost connection with the outdoor sensor.
- ❖ [Batteries](#) are the most common problem.
- ❖ [Distance/Resistance](#) can cause loss of sensor signal.
- ❖ It may be helpful to orient the Display 90 degrees towards the Thermohygro sensor for better reception.
- ❖ Sensors operating at 915MHz work best when **elevated at least 6 feet.**

TRY THIS FIRST:

- Remove the batteries from the Thermohygro and Rain sensors for 2 minutes. Replace the batteries in the Thermohygro and Rain sensors.
- After 3 minutes press and hold the UP ARROW on the display until it beeps. Wait 10 minutes. If you do not receive a reading from all your sensors, please try the [complete factory reset](#).

NOTE: It can take [several tries to get the Wind and the Rain to connect](#). Please install batteries in the Rain and Thermohygro sensors, then key the Wind sensor and [allow them to operate in line-of sight of each other for 2 minutes before](#) powering up the display.

INTERMITTENT TEMPERATURE AND/OR HUMIDITY

- ❖ RF 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 it's own. Please be patient – these stations can reconnect after many hours out.
- ❖ RF 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:

The sensors try for 20 minutes to reconnect. After 20 minutes, the thermo-hygro stops trying for an hour (to preserve battery life). After the 1-hour break, the thermo-hygro sensor will start another 20-minute re-connect cycle.

- ❖ [Distance/Resistance](#) can cause loss of sensor signal.
- ❖ Check [batteries](#). This is our primary warranty issue.

OUTDOOR TEMPERATURE SHOWS OFL (OUTSIDE FACTORY LIMITS)

Check [batteries](#). This is our primary warranty issue. Overpowered or underpowered batteries can cause this reading.

Replace the sensor.

OUTDOOR TEMPERATURE AND/OR HUMIDITY ARE INACCURATE

Side-by-side test. Bring the sensor in the house and place it next to the display for 2-hours. Compare indoor and outdoor temperature and humidity. The temperatures should be within 4 degrees to be considered within tolerance. The humidity should be within 4% to be considered within tolerance.

If the sensor reads correctly while next to the display then try a different location outside. Look for heat sources such as sunlight, door or window frames, or reflected heat.

WIND SENSOR

WIND CUPS SLOW OR NOT SPINNING

- ❖ Check for debris or ice in wind cups.
- ❖ Be sure the wind cups are mounted below mast.
- ❖ Check the mounting location to be sure the wind is not being blocked from reaching the sensor. The pole the mast is mounted on should not be more than 1-¼ inch thick. In most cases, the sensor needs to be 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 up firmly on the center of the cups to reseal them. Occasionally they can drop a bit.

WIND CUPS OR DIRECTIONAL VANE ARE BROKEN

Replace the wind directional vane:

- Gently remove the piece of plastic in the top center of the vane to reveal the screw that holds the vane to the sensor.
- Remove the screw.
- Gently pull the vane straight up and off of the sensor.
- Carefully place the new vane on the sensor; notice the groove to seat it properly.
- Insert screw through the vane to the sensor and tighten properly.

NOTE: do not over tighten.

- Complete a restart to connect sensor to the display.

TIP: In the Southern Hemisphere the wind sensor still needs to face **South** to charge properly. You cannot remove the directional vane, turn it backwards and seat properly again.

Replace wind cups.

- In the bottom center of the wind cups is a plastic lock pin. Gently pry the lock pin out of the wind cups.
- Firmly grasp the wind cups and pull straight off the sensor.
- Check to be sure that the unit has a metal magnet in the wind cups.
- Check to be sure there is a metal bearing in the wind cups or on the stem of the sensor where the cups attach.
- Look at the new wind cups and be sure there is a bearing and magnet in place.
- Install the cups onto the wind sensor and press firmly.
- Insert a new lock pin into the cups and push firmly until the lock pin is flush with the bottom of the cups.

WIND DIRECTION WORKS BUT SPEED IS 0.00

Check that the wind cups are still attached to the sensors. Occasionally they can come off.

WIND READING IS DASHES OR INTERMITTENT

- ❖ RF interference is normal; the occasional outage is possible.
- ❖ Check for sources of RF interference such as Ham radio or electric transformers nearby. In the house look to see if the Display is near a cordless phone or wireless router etc.
- ❖ Check the environment for unusual moist/humid conditions (it is a known fact that 'moist' reduces RF signal in electronics).

- ❖ Check that the wind sensor is receiving plenty of sunlight. Bring it in and place under a lamp for 24-hours if needed.
- ❖ [Distance/Resistance](#) can cause loss of sensor signal.
- ❖ Try relocating the Wind sensor closer to the Thermohygro sensor. Ideally the Wind and TH sensor should be on the same side of the building and in line-of-sight of each other.
- ❖ Mounting on a metal or white PVC pole may cause RF interference or static.
- ❖ Watch if there are certain times of the day or night that the unit loses signal. Details are helpful in resolving the problem.

TRY THIS FIRST:

- Cover the solar panel of the Wind sensor for 15 seconds while gently pressing the reset button on the bottom of the Wind sensor. This should assure the wind sensor is turned **off**.
- Remove the batteries from the Thermohygro and Rain sensors for 2 minutes.
- After 2 minutes replace the batteries in the Thermohygro and Rain sensors.
- Gently press the reset button on the bottom of the Wind sensor, with the solar panel exposed to light.
- After 3 minutes press and hold the UP ARROW on the display until it beeps. Wait 10 minutes. If you do not receive a reading from all your sensors please try the [factory reset](#).

NOTE: It can take [several tries to get the Wind and the Rain to connect](#). Please install batteries in the Rain and Thermohygro sensors , then key the Wind sensor and **allow all sensors to operate in line-of sight of each other for 2 minutes before** powering up the display.

WIND READING IS BLANK

Check that other areas of the display read properly. If other areas also fail, you may have a problem with the Display.

WIND SENSOR SHOWS OFL (OUTSIDE FACTORY LIMITS)

- ❖ Place the wind sensor under a light source for 24-hours.
- ❖ Note if there are certain times of the day or night this occurs.
- ❖ Check the solar panel for damage or breakdown.

WIND SPEED IS INACCURATE

- ❖ Check the unit of measure (MPH, KMH, or M/S).
- ❖ How far away is the recording station used to compare wind speed? Wind speed can be different in just a few feet.

- ❖ Check to see if the unit receives the same repetitive wind speed from the sensor multiple times.
- ❖ Check to confirm the direction is working correctly.
- ❖ Mounting on a metal or white PVC pole may cause RF interference or static and inaccurate readings.
- ❖ Check that the cups turn freely. Check for insects or debris preventing free movement.
- ❖ Be sure the cups are mounted below the mast.
- ❖ Check that the cups have not dropped. Push up firmly in the center of the cups to seat properly.
- ❖ Be sure the Wind sensor solar panel is receiving plenty of light. The wind sensor should be facing **South**.
- ❖ Check the location of the sensor mounting and the surrounding area for obstructions. In most cases, the sensor needs to be 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.
- ❖ It is helpful to send pictures if you need to contact customer support.

WIND DIRECTION IS DASHES

If the speed is working then the wind sensor is bad.

WIND SENSOR IS FROZEN

- ❖ Bring the sensor in the house for 2-3 days. The sensor will need to thaw out and dry out to prevent refreezing.
- ❖ The wind sensor will need to have 40-degree temperatures for 3 days to thaw and dry when mounted.
- ❖ The wind sensor does not often freeze as it is always moving.

RAIN SENSOR

WHAT ARE THE 5 TIME INTERVAL BOXES SHOWN?

NOTE: It is important that Time and Date are set on the station.

- ❖ The **1-hour** and **24-hour** rain records in real time with a short delay. As the rain stops falling, the 1-hour and 24-hour rainfall totals will slowly count backwards to zero.
- ❖ You cannot reset the 1-hour, 24-hour, weekly or monthly rain.
- ❖ The 1-hour rain reflects rain that has fallen from **current time and back 1-hour**. This is not a midnight to midnight or 7 to 7 system.
- ❖ The 24-hour rain reflects the rain that has fallen from **current time and back 24-hours**. This is not a midnight to midnight or 7 to 7 system.

- ❖ **Weekly** rain reflects the rain that has fallen from 12AM Monday through 11:59PM Sunday of the **previous** week. This will always be a week behind and update 12AM Mondays. A Monday start is common internationally.
- ❖ **Monthly** rain reflects the **previous month's** rain and will update 12AM the first day of the month.
- ❖ **Total rain** will remain until you manually reset this value. Total rain reflects the rain from time of set-up until you reset the total rain.

VIEW 1-HOUR, 24-HOUR, ETC.

Press and release the ▼DOWN ARROW to select the rainfall value to display.

SET RAIN ALARMS MANUALLY ON THE DISPLAY

In the normal display mode, press and release the ALARM key until you see the **Rainfall** amount in 24-hour period alarm.

- Press and hold the SET button for 2 seconds and the selected value will flash. Press and release the ▲UP ARROW key or ▼DOWN ARROW key to set the alarm value.

NOTE: Hold the arrow key in to change the value faster.

- Press the ALARM key to confirm the setting. The digit will stop flashing.

RESET RAIN TOTAL

In either Mode 1 or Mode 2 display, press and release the MIN/MAX button until the display shows the total rainfall value.

To reset the rainfall reading, press the UP ARROW button. The total rainfall amount will reset to 0, and the time updated to current time.

NOTE: Until the first rainfall total reset is performed, the time and date of the total rainfall are displayed as '- - -. --. ----'. After the rainfall total is reset, the rainfall total display will indicate the date and time of the last rainfall total reset.

RAIN COUNT IS NOT ACCURATE

PLEASE CHECK THE SOFTWARE VERSION: Updates are available for download at: <http://www.lacrossetechnology.com/support/software.php>. Please read the release notes to ensure you have the correct version for your weather station.

- ❖ Check that the unit of measure (inches or mm) is correct.

Complete a Manual Tip Test and a Water Tip Test and compare them:

Manual Tip test: Write down the Total Rain reading or reset the Rain Total to 0.00. Use the eraser end of a pencil to manually tip the rocker of the rain sensor 10 times (five each way). Wait at least 30 minutes for all the rain to collect.

Water Tip Test: Write down the Total Rain reading or reset the Rain Total to 0.00. With Rain Gauge mounted slowly pour water into the funnel to tip the rocker of the rain sensor 10 times (five each way). Wait at least 30 minutes for all the rain to collect.

Compare these tests. If they still read **high**, or low, then contact support.

- Please provide the firmware version of the display (remove the batteries, reinsert batteries and the firmware version - 222, 332, etc. will display in the lower left corner).
- Please provide the exact model of the TH sensor (TX59U-IT or TX59UN-1-IT).

If the tests read **low**, dismount the rain gauge and retest. One of the most common problems with low rain is that the gauge is mounted too tight.

- ❖ Check that the pin the rocker tips on is pushed in all the way and that the rocker tips freely.
- ❖ Check the funnel and inside of Rain Gauge for insect nests or debris that may cause lack of motion.
- ❖ Check for sources of RF interference such as Ham radio electric Transformers, or other rain gauges nearby. In the house look to see if the Display is near a cordless phone or wireless router etc.

DISPLAY FUNCTIONS

PROGRAM MENU

There are 5 function keys located on the unit: SET, UP ARROW, DOWN ARROW, ALARM, and MIN/MAX. Begin by holding the SET button until the display flashes. When you press and release the SET button after each step, you will move to the next step.

CONTRAST: Press and hold the SET button. LCD and a number from 1-8 will flash. To adjust the Contrast of the LCD display press and release the UP ARROW or DOWN ARROW button. Press and release the SET button.

HOURL: The Hour will flash. Press and release the UP ARROW or DOWN ARROW button until the correct Hour is shown. WATCH the AM/PM.

NOTE: When in the 12h mode, there is only a 'PM' display, which appears under the word TIME. During the 'AM' hours this area will be blank. When the correct hour shows, press and release the SET button once.

MINUTES: The Minutes will flash. Press and release the UP ARROW or DOWN ARROW button until the correct Minutes display. Press and release the SET button once.

12/24-HOUR TIME: A 12h or 24h will flash. To change between 12h and 24h, press and release the UP ARROW or DOWN ARROW button. Press and release the SET button once.

NOTE: When in 24-hour time the Date will display Day first, then Month.

YEAR: The Year will flash. Press and release the UP ARROW or DOWN ARROW button to set the correct Year. Press and release the SET button.

MONTH: The Month will flash. Press and release the UP ARROW or DOWN ARROW button to set correct Month. Press and release the SET button.

DATE: The Date will flash. Press and release the UP ARROW or DOWN ARROW button to set the correct Date. Press and release the SET button.

FAHRENHEIT/CELSIUS: Degrees Fahrenheit or Celsius will flash in the Wind chill, Indoor and Outdoor temperature areas. Press and release the UP ARROW or DOWN ARROW button to change between Fahrenheit and Celsius. Press and release the SET button once.

WIND SPEED UNIT: Wind Speed units will flash. Press and release the UP ARROW or DOWN ARROW button to select from mph, m/s, knots, Beaufort, or km/h. Press and release the SET button once.

RAIN UNIT: Rainfall Inches or Millimeters will flash. Press and release the UP ARROW or DOWN ARROW button to select in or mm. Press and release the SET button once.

PRESSURE UNIT: The Air Pressure units (inHg or hPa) will flash. Press the UP ARROW or DOWN ARROW button to select inHg or hPa. The Default setting is inHg. Press and release the SET button.

RELATIVE PRESSURE SETTING: The Relative Air Pressure will flash. Press the UP ARROW or DOWN ARROW button to adjust the Relative Air Pressure.

NOTE: Refer to the local weather station for an appropriate setting. It is important that this setting be adjusted for local conditions to ensure forecast accuracy. Press and release the SET button.

FORECAST SENSITIVITY: Now the Forecast Sensitivity will flash. The default setting of .09 works well in most areas of the country, however in areas with relatively constant pressure this should be set to .06, (within 30 miles of the coast) and in areas with significant pressure changes this should be set to 0.12 (within 30 miles of the desert). Press the UP ARROW or DOWN ARROW key to adjust. Press and release the SET button.

STORM ALARM SENSITIVITY: The Storm Alarm Sensitivity will flash. The default setting of .15 works well in most areas, however the unit may need to adjust this level up or down depending on local conditions. Use the UP ARROW or DOWN ARROW button to adjust then press and release the SET button.

STORM ALARM: AON or AOFF will flash. This will turn the Storm Alarm ON and Storm Alarm OFF. Use the UP ARROW or DOWN ARROW button to toggle the Storm Alarm ON and OFF, then press and release the SET button.

WIND DIRECTION DISPLAY: The Dash in the Wind Compass will flash. Use the UP ARROW or DOWN ARROW button to select the Wind Direction to be displayed in degrees (dash) or letters NNW. Press and release the SET button.

FACTORY RESET: Res off will be displayed. Use the UP ARROW or DOWN ARROW button to select on if you wish to Factory Reset the Weather Center. If you do **not** wish to restart the weather center, be sure the Res off is showing and press and release the SET button to complete the program menu.

NOTE: To Factory Reset the weather center, select **Res on** and press the SET button to confirm. The station will begin to count down numbers in the date area. When it is complete it will say Done. Then remove the batteries and follow the Restart up procedure.

CHANGE MODES

MODES: Press and release SET button to toggle between the display of Mode 1 or Mode 2:

MODE 1:

- Wind Speed
- Outdoor Temperature
- 24 hr. Pressure History Graph

MODE 2:

- Wind Gust
- Dew Point Temperature
- 72 hr. Pressure History Graph

UP ARROW:

- Press and release to switch between Date and Seconds displayed.
- Press and hold until the station beeps to resync with sensors.

DOWN ARROW:

- Press and release to view 1-hour, 24-hour, 1-week, 1-month or Total Rainfall.
- Press and hold to resync the display with the software.

DATA STORAGE CAPACITY

A 2800 Series display will record up to 1750 data sets that you can download to the computer. This station will not “empty” when data is downloaded. The station will continue to record and overwrite the oldest data.

ALARM ON/OFF

- Press the SET button to switch the Alarm On or Off. The alarm icon ((())) indicates the alarm is switched ON.
- When you press the SET button the alarm icon should disappear and that alarm is OFF. Press the ALARM key once.

ALARM MANUAL SET

The following 14 Weather Alarms can be adjusted in ALARM setting mode:

- High and Low pressure alarms
- High and Low indoor temperature alarm
- High and Low indoor humidity alarms
- High and Low outdoor temperature alarms
- High and Low outdoor humidity alarms
- High wind gust alarm
- Wind direction alarm
- Rainfall amount in 24-hour period alarm
- Storm Alarm (access in the program menu).

SET ALARMS

1-In the normal display mode, press and release the ALARM key until you see the value you wish to set an alarm for:

- High or Low **Pressure** alarms
- High or Low **Indoor Temperature** alarms
- High or Low **Indoor Humidity** alarms
- High or Low **Outdoor Temperature** alarms
- High or Low **Outdoor Humidity** alarms
- High **Wind Gust** alarm

- **Wind Direction** alarm
- **Rainfall** amount in 24-hour period alarm.

2-Press and hold the SET button for 2 seconds and you will see the selected value flashing. Press and release the ▲UP ARROW key or ▼DOWN ARROW key to set the alarm value.

NOTE: Hold the arrow key in to change the value faster.

3-Press the ALARM key to confirm the setting. The digit will stop flashing. Repeat these steps with each alarm value you wish to set.

ACTIVATE/DEACTIVATE ALARM:

Press the SET button to switch the Alarm On or Off. The ((())) icon indicates the alarm is switched on.

When you press the SET button the ((())) icon should disappear and that alarm is off.

Set Storm Alarm: Enter the program menu until you see:

STORM ALARM SENSITIVITY: The Storm Alarm Sensitivity will flash. The default setting of .15 works well in most areas, however you may need to adjust this level up or down depending on local conditions. Use the UP ARROW or DOWN ARROW button to adjust then press and release the SET button.

STORM ALARM: AON or AOFF will flash. This will turn the Storm Alarm ON and Storm Alarm OFF. Use the UP ARROW or DOWN ARROW button to toggle the Storm Alarm ON and OFF, then press and release the SET button.

MIN/MAX SETTINGS

The weather station records the maximum and minimum value of the various weather data with time and date stamp automatically. You can view the following by pressing the MIN/MAX key in normal display mode:

- MIN/MAX Indoor Temperature
- MIN/MAX Indoor Humidity
- MIN/MAX Outdoor Temperature
- MIN/MAX Dew Point Temperature
- MIN/MAX Outdoor Humidity
- MAX Wind Gust
- Total Rainfall

Reset the MIN/MAX weather data: To reset the MIN/MAX weather data, you need to reset each of the values independently.

Press and release the MIN/MAX button to show the desired weather data. Press ▲UP ARROW button. The stored value will reset to the current value and current time.

Reset Total Rainfall: The Total Rainfall measurement displayed shows the total rainfall accumulated since last reset of the total rainfall amount.

- Press and release the MIN/MAX button until the display shows the Total Rainfall value.
- To reset the rainfall reading, press the ▲UP ARROW button. The total rainfall amount will reset to 0, and the time updated to current time.

NOTE: Until the first rainfall total reset is performed, the time and date of the total rainfall are displayed as '- - -.---.----'. After the rainfall total is reset, the rainfall total display will indicate the date and time of the last rainfall total reset.

CAUTION: If you reset total rainfall manually on the display and synchronize with HeavyWeather Pro software, you may create confusion with a data mismatch. If you reset the display, then make a new history.dat file in the software.

PRESSURE READS INCORRECT

Enter the program menu to select the pressure unit of measure (**inHg** is common in the USA) and set the actual Relative Pressure numbers on the display. Set the display pressure to a known value from the local reporting station.

PRESSURE SHOWS DASHES OR OFL

This is generally a power related issue that is easily resolved.

- Enter the Program menu and go to rES OFF. Use the UP ARROW or DOWN ARROW button to select ON and the display will start a 2-minute count down. Remove the batteries from the display for a period of 1-hour. Press any button 20 times with power removed.
- Remove the batteries from the TH sensor and Rain gauge as well.
- After 2-hours, install batteries into the Rain gauge, then into the TH sensor and let them sit for 2-minutes.
- Then install fresh alkaline batteries into the display and let it search for the sensors for 15-minutes. Do not touch any buttons at this time.

SOFTWARE ISSUES

HEAVYWEATHER SOFTWARE DOWNLOAD ERRORS

Make sure to enter the correct URL in the browser search window. The 2800 Series software is located at: <http://www.lacrossetechnology.com/support/software.php>

Then scroll about halfway down the page to the link that reads: **Download the PC software:** Heavy Weather Pro 2800 version #. # (Note: The version and date on the download may change when a more current version is posted.)

On Internet Explorer, you may see a box titled "File Download – Security Warning". Press the **Save** button in the window and follow directions on the screen.

If Save is non-responsive, or makes reference to binary file types, etc. – you may have another application conflicting with the download. Some software applications try to auto-detect downloads to process them for you (e.g. anti-virus, anti-spyware, photo album). **Note:** The download is straight http – there are no ftp file types to set.

Check the browser for Add-Ons that may conflict with the download (these may have been installed by other applications and can be temporarily disabled). In IE8 you can select **Tools|Manage Add-ons**. For other browsers, consult the browser Help.

If you already installed more than one browser, on occasion two browsers conflict. Try uninstalling one browser.

If you have only one browser installed, try an alternate browser. Unless you are technically experienced, the operating system is best limited to its default browser (i.e. IE7 or IE8 on Windows) and one alternative. Viable alternatives are:

- Firefox: <http://www.mozilla.com/en-US/firefox/ie.html>
- Chrome: <http://www.google.com/chrome>
- Opera: <http://www.opera.com/>

If the above steps do not resolve the problem, then you will need to take a USB drive to another PC, download and save the file there. The file is too large to email and it is not cost-effective to ship CDs. Please make sure both locations have appropriate anti-virus software to protect you in carrying the software across locations.

PC SYSTEM REQUIREMENTS– HEAVYWEATHER PRO

- Windows XP (Service Pack 3, 32 bit)
- Windows Vista (Service Pack 2, 32 bit)
- Windows 7 (Service Pack 1, 64/32 bit)
- Windows 8 (64/32 bit)

SYNC USB STICK TO DISPLAY

DOWNLOAD SOFTWARE: Please download the Heavy Weather Pro 2800 Series software from Website: <http://www.lacrossetechnology.com/support/software.php>.

INSTALL USB DEVICE: Install the USB communication device; simply plug it into any available USB port on the computer where you have installed the Heavy Weather Pro software application. No driver installation is necessary because the USB device is self-registering. Once the Heavy Weather Pro software is installed and synchronized, it will automatically connect to the USB device.

NOTE: Although the USB communication device can be installed on any USB port connected to the computer, using a non-powered USB hub or extension cable increases the chance for interruptions between the USB communication device and the computer. Where obstructions are an issue, a good quality 6ft USB extension cable can be used if it is directly connected to either a powered hub or a port on the computer itself.

For best performance, we recommend that the USB device be connected to a USB port directly on the computer. An externally powered USB hub can be used, but **avoid using a self powered USB hub or extension cable longer than 6ft.** These USB extension devices cannot generate sufficient power to maintain ongoing communication.

SYNCHRONIZE: Synchronize the Weather Station to the software: Press and hold the DOWN ARROW until the station beeps. Click the Synchronize button on the software. The weather station will display '**SCn-PC**' while trying to connect. Once connected PC will show on the display. Wait a moment to see the software "come active" with current data.

WHY DOES USB STICK REQUIRE RESYNC?

If you turn off the PC or the USB ports on the computer are allowed to enter sleep mode, you will have to resync the weather station to the computer.

WEATHER STATION CANNOT BE FOUND

To repeat the synchronization process, put both the weather station and the software into synch mode again. Press the down arrow on the display, then click the Synchronize button on the 'Synchronize' message box (on the software). Please see the HeavyWeather Pro software manual for more synchronization detail.

PLEASE START WV5 COMMUNICATION SERVICE

Error: Please start the WV5 Communications Service to receive data from the weather station.

START WV5 SERVICE:

- Go to START, CONTROL PANEL, ADMINISTRATIVE TOOLS, SERVICES (not Component Services).
- Scroll down and look for **WV5 Communication**.
- If it is not "started" please 'START' the service.
- If it is "started" please "STOP" the service and "RESTART" the service (upper left of screen).
- Go to the software and select EXTRAS, then RESYNCHRONIZE and press and hold the DOWN ARROW on the display then press the SYNCHRONIZE button on the software.

HISTORY STORAGE CAPACITY

There is no set limit to the storage capacity for the history.dat file. The obvious limits are the memory in your PC (32-bit operating systems cannot handle a file over 2 GB in size) and disk space on the PC.

While a very large file is possible, we do not recommend this as it creates an "eggs in one basket" situation. We recommend you select logical dividers and make a new history.dat file at logical intervals – perhaps annually, quarterly, or monthly.

HIGH RAIN SHOWS IN SOFTWARE

PLEASE CHECK THE SOFTWARE VERSION: Updates to the software are at: <http://www.lacrossetechnology.com/support/software.php>. Please **read the Release Notes** to be sure you have the correct software version for your display.

Spikes in the rain reading on the computer can be caused by radio frequency interference or loss of signal while connected to the computer.

When the weather station is connected to the computer while loss of signal from the sensors, or a restart occurs, there can be a spike in rainfall on the computer history file, (Often 70-80 inches). This can also occur during loss of power or connection during a storm. Please close the Heavy Weather first when resetting the weather station and transmitter.

HOW TO DELETE HISTORY DATA

You can delete individual lines of history data (dataset) or delete an entire history file.

Delete Datasets:

- To delete a dataset, make sure the Current Weather window is displayed.
- Select the Data tab in the lower left corner of the Weather/Data window.
- Highlight the data set to be deleted. Press the DELETE button on your keyboard.

Warning: Double check that you are on the correct history.dat file before deleting any data.

NOTE: To delete several lines of records from a history file: highlight them and select the DELETE key on the keyboard.

Delete History File:

History.dat: This original filename contains the accumulated uploads of data from the display. Since the display's storage limit is 1,750 records, history.dat can aggregate uploads over a long time.

To delete a complete history file, find the appropriate file on the computer. RIGHT-CLICK the History File Name and select DELETE. See below to find the history file on the operating system.

Windows 7: Open **Computer**, then click on Drive C: (or the appropriate drive on which the operating system is installed). Select Users and open the folder with the <user name>. Select the **My Documents** folder and open the **HeavyWeather** folder. All history.dat files are stored in the History folder.

Vista: Open **Computer**, then click on Drive C: (or the appropriate drive on which the operating system is installed). Select Users and open the folder with the <user name>. Select the **Documents** folder and open the **HeavyWeather** folder. All history.dat files are stored in the History folder.

Windows XP: Open **My Computer**, then click on Drive C: (or the appropriate drive on which the operating system is installed). Select **Documents and Settings** and open the folder with the <user name>. Select **My Documents** and open the **HeavyWeather** folder. All history.dat files are stored in the History folder.

NOTE: Downloading the history to the computer does not remove it from the display unit. The display unit will keep all data and overwrite the older data over time. Each time you download, all data in the display will be downloaded. The software reconciles these differences.

NOTE: Create a new history file by using the application menu options. Go to **Extras, Options**, and click the square button at the end of Recording History file. Type a new filename and click ok.

NOTE: Smaller files are easier to manage and less prone to risk; therefore most users make a new history.dat file on some convenient regular basis (e.g. annually).

EXPORT HISTORY DATA TO EXCEL

To import into Excel® (exact results vary by version):

- In Heavy Weather Pro, double-click the **history file name** from the left hand column that you wish to export, (click View, History Files).
- Go to FILE and select EXPORT AS TEXT. Create a file name in the pop up box. Please note the location of this file. **Ex.** C:\Program Files\HeavyWeather\January.
- Open Excel®. Select **File, Open**. When the open box appears, on the bottom under FILES OF TYPE select TEXT FILES.
- On the top where it says LOOK IN, select the file location. Ex. C:\Program Files\HeavyWeather
- With the Heavy Weather folder open, you should see the text file you just created (January).
- Select that file and a 3-step Wizard will appear. On the first screen choose DELIMITED. Then select 'Next'.
- On the second screen under Delimiters select SEMICOLON.
- Click 'Next', and the last box will appear. You do not need to change anything unless you would like the date formatted differently. Click finish. The data should appear in Excel. You may need to adjust the cell width.

NOTE: You may use data exports with any spreadsheet or database application. If your results vary, consult your spreadsheet application's manual for instructions. We are not responsible for software from other publishers.

UPLOAD DATA WITH PUBLISHER

NOTE: You will not be able to report Absolute Pressure as the 2800 Series does not record this feature. If your default template has this value, you need to remove it (field and label) or the upload will error.

- Open Heavy Weather Publisher and select or create the Image to upload or e-mail. Be sure you are receiving current information from the weather station and the Heavy Weather basic program.
- Select the EXPORT tab on the right and click on the TEST button on the lower right. This will open up a Test web page with the Publisher Image. If this does not appear you will need to contact the Internet Service Provider to determine the connection issue.

- If the Test is successful, fill in the required fields and **Save**. Then click on the box in front of the image to upload and it should queue.

HEAVYWEATHER AND A MAC

We do not support the Mac for the 2800 Series software, including Windows running in virtualization mode on a Mac. We are aware some users succeed, but the most common challenge reported is coordinating the USB port use correctly with the virtual environment. There may be differences related to drivers, etc. that prevent connection.

A single exception are users involved using the La Crosse Alerts feature. Data uploads must be from a Windows PC, but a Mac browser may be used to monitor and manage your data.

COMPATIBLE 3RD PARTY SOFTWARE

Disclaimer: *We neither test nor support third party software for the 2800 Series. We can only refer you to options for those with special needs. Contact your vendor for assistance.*

Weather Display <http://www.weather-display.com/index.php>. Is a 3rd party program compatible with the 2800 Series (via the currdat.lst file updated by Heavy Weather Pro software)

Weather Underground Heavy Weather uploader (WUHU): http://home.comcast.net/~wuhu_software/. This is a 3rd party program that works with the 2800 Series by uploading the Heavy Weather Pro currdat.lst file to Weather Underground and CWOP.

Virtual Weather Station: <http://www.ambientweather.com/virtualstation.html>. This third party program is compatible with the 2800 Series (via the currdat.lst file updated by Heavy Weather Pro software)

LA CROSSE ALERTS PC SOFTWARE – REMOTE MONITORING

OPTIONAL USE OF YOUR WEATHER STATION

1. **Standalone weather station** – no computer or USB transceiver required.
2. **Computer-connected weather station** - Connect the USB transceiver to your computer for use with Heavy Weather Pro PC software. Download and install the latest version of the Heavy Weather Pro PC software at <http://www.lacrossetechnology.com/alerts/pws/software>.
3. **Computer-connected weather station with remote monitoring and alerts** – Connect the USB transceiver to your computer for use with Heavy Weather Pro PC software. Download and install the latest versions of the

Heavy Weather Pro and **La Crosse Alerts PC software** at
<http://www.lacrossetechnology.com/alerts/pws/software>.

LA CROSSE ALERTS WEBSITE

Use of the website requires registration and a service Activation Card. All help for the website is online at <http://www.lacrossealerts.com>.