

328-96087-328-1414BW 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 **328-96087-328-1414BW** station comes with:

TX145WSDTHv2 Sensor with Wind Speed, Wind Direction, Temperature and Humidity

TX145R Rain Sensor

Transmission for both sensors is at 433MHz RF.

WHAT ARE THE POWER REQUIREMENTS FOR THIS STATION?

TX145WSDTHv2: 3 "AA" batteries

TX145R: 2 "AA" batteries

328-96087-328-1414BW: 3 "AA" batteries

All batteries are sold separately.

SETUP: HOW DO I SETUP MY STATION?

1. Insert batteries into your sensors 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 SENSORS?

TX145WSDTHv2 Breeze Sensor:

- Place your wind 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.
- Mount your sensor in a vertical position with the wind cups on top.
- Maximum transmission distance from your multi-sensor to your station, in open air is 400 feet (121.92meters).
- Use the included mounting bracket or your own mounting pole (no more than 1 inch outer diameter to fit). Secure to the sensor with screws provided. Tighten the screws to snug (do not over tighten).
- Solar panel must face South to charge the battery and provide correct Wind Direction.
- General Wind Sensor mounting video: http://bit.ly/wind_sensor_mounting

TX145R:

- Mount the Rain Sensor horizontally and ensure it's level.
- The sensor should be mounted more than 3 feet above ground.
- Your Rain sensor needs to be in an open area for accurate readings.
- Make sure the base of your Rain Sensor is not in a depression.
- This Rain Sensor has drainage holes in the bottom to allow it to self-empty.
- View sensor mounting video at: bit.ly/Rain_SensorMounting

WHERE TO I PLACE MY STATION?

Your station is designed for flexible placement on a desk or countertop, or to position on the wall. When the stand is closed, it provides wall mounting holes.

- 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.
- 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.

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.

WEATHER STATION READINGS HOW DO I INTERPRET THE CURRENT WIND READINGS?

- **NOW Wind Speed** - is the highest current wind speed at the last record. (31 seconds)
- **1 Hr. Top Speed** – is the highest wind speed reading in the past hour.
- **Compass Rose:**
 - The Compass Rose displays the cardinal directions with visual indicators.
 - The large diamond on the rose indicates the wind direction.
 - The smaller triangles should be display next to the big triangle to create more emphasis to the direction and let the user know that the direction variates constantly.
- **Wind Speed Trend Indicators:**
 - The Wind Speed Trend Indicator shows trends in wind speed over the past 60 minutes.
 - The Trend Arrows will update every 15 minutes based on the “Now” Wind Speed readings from the past 60 minutes.

HELP ME UNDERSTAND 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.

- **1 Hour Top Speed**- Updates each hour and shows the highest wind speed in the past 60 minutes.
- **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 reading. This means it updates each hour to show you the past 24 hours.
- **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 15th of the month, the top speed is from the 1st to the 14th. After midnight, the 15th will be included.
Note: Press and release the PLUS (+) button to view up to 11 previous months or history.
- **Year** – Shows top wind speed for the current year. January 1, through December 31st.

WIND SPEED ALERT

Set Wind Alert:

1. Hold the WIND ALERT button 2 seconds to enter alert set mode. WIND SPEED ALERT and the Number will flash. Use the + or – buttons to set. Hold the + or – buttons to scroll quickly.
2. Press and release WIND ALERT button to save and exit.
3. Wind Alert is armed when set.

Activate/Deactivate Wind Speed Alert:

1. Press the WIND ALERT Button to activate or deactivate the wind speed alert.
2. WIND SPEED ALERT ON or OFF will show for 2 seconds.

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 OFTEN DOES MY WIND SENSOR UPDATE?

- Your Breeze Wind Sensor checks for any change in Wind Speed every 31 seconds, with samples every 3 seconds within that 31 seconds.
- Any change of 0.8km Wind Speed will cause the sensor to send the top speed for that 31 seconds.

- If there is no change in wind speed, the sensor will transmit every 3 minutes to preserve battery life.

Note:

The Breeze Pro Sensor will operate accurately at temperatures down to -40F. However, the solar panel needs to be exposed to maximum sunlight and clear of snow to maintain the internal super capacitor charge for severe cold weather operation. To extend operation during low sunlight and extreme cold the transmission interval will be reduced.

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: Dew Point does not have a time/date of occurrence.

HOW DO I RESET THE TEMPERATURE/HUMIDITY READINGS?

Your temperature and humidity readings are reset individually.

1. Press and release the TEMP button to view the reading you wish to reset.
2. Hold the MINUS (-) button for 5 seconds to reset individual temperature or humidity value to current temperature, humidity, time and date.
3. Press and release the LIGHT button to exit.

HOW OFTEN DOES MY TEMP/HUMIDITY SENSOR UPDATE?

- Your Wind/TH Sensor checks for any change every 31 seconds.
- Any change of +/- 0.5°C, or Hum +/- 2% RH will cause the sensor to send a reading.
- If there is no change in temperature or humidity, the sensor will transmit every 3 minutes to preserve battery life.

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.

TIME: DOES THIS STATION HAVE ATOMIC TIME?

- **Standalone station:** When operating as a standalone station, the time needs to be set manually on this station.
- **Connected to the La Crosse View™ app:** When operating as a connected station the time and date will update from the Internet. Your station checks with the View Weather Server at least 4 times per day.

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 2 seconds to enter settings mode.
2. Press the + or - button to adjust the flashing values.
3. Hold the + or - button to adjust quickly.
4. Press the SET button to confirm adjustments and move to the next item.
5. Press the LIGHT button at any time to exit.

Settings Order:

- Language (English, Spanish, French, German)
- Greeting HELLO SETUP TIME
- 12HR/24HR
- Hour
- Minute
- Year
- Month

- Date
- Fahrenheit/Celsius
- Pressure: InHg / hPa
- Pressure number setting
- Wind Speed MPH or KMH
- Wind Direction Letters or Degrees
- THANK YOU

Note: Units in the settings menu reflect how sensors will show on the station and which units are shown in Data Stream. This includes the Extra sensors. I.E. When Fahrenheit is selected- Fahrenheit on station and in Data Stream.

Full Program Menu:

1. Hold the SET button for 2 seconds to enter setting mode. ENGLISH will show. Press the + or - button to change to another language (Español, Français or Deutsch).
2. Press SET button and the Greeting (HELLO SETUP TIME) will show for two seconds, then automatically move to 12/24 hour time. 12/24 HOUR FORMAT will show. 12HR flashes. Press the + or - button to turn select 24 hour time format.
3. Press SET to confirm and move to the hour. HOUR will show. The hour flashes. Press the + or - button to choose the hour.
4. Press SET to confirm and move to the minutes. The MINUTES will show. Minutes flash. Press the + or - button to choose the minutes.
5. Press SET to confirm and move to the year. The YEAR 2019 will show. Year will flash. Press the + or - button to change the year.
6. Press SET to confirm and move to the month. The MONTH will show. The Month will flash. Press the + or - button to change the month.
7. Press SET to confirm and move to the date. DATE will show. Date will flash. Press the + or - button to change the date.
8. Press SET to confirm and move to the temperature unit. TEMP °F FAHRENHEIT will show. °F will flash. Press the + or - button if you prefer °C (Celsius).
9. Press SET to confirm and move to pressure units. BAROMETRIC PRESSURE will show. INHG will flash. Press the + or - button to select HPA.
10. Press SET to confirm and move to adjust pressure number. BAROMETRIC PRESSURE will show. Pressure number will flash. Press the + or - button to adjust pressure number.
11. Press SET to confirm and move to pressure units. WIND SPEED will show. MPH will flash. Press the + or - button to select KMH.
12. Press SET to confirm and move to the pressure number. WIND DIR LETTERS will show. NNE will flash. Press the + or - button to select DEGREES.
13. Press SET to confirm. THANK YOU shows for 2 seconds, then exit the setting menu.

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

BACKLIGHT: DOES THIS STATION HAVE A BACKLIGHT?

Yes, your station has a backlight with 5 levels of intensity.

- Press and release the LIGHT button to adjust the backlight intensity or to turn it off.

- Intensity levels: 0% (OFF) | 1.5% | 20% | 50% | 100%

BATTERY: WHAT DO THE BATTERY ICONS MEAN?

- A battery icon will appear near your WIND reading when you need to charge the battery in your wind sensor.
- A battery icon will appear near your TIME reading when you need to change batteries in your station.

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

- When operating **as a standalone** station, 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 to 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](#).

FORECAST ICONS: WHAT DO THE FORECAST ICONS MEAN?

Standalone Station: When operating as a standalone station, the forecast icons predict weather condition 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 Icons for standalone station:

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

Note: The “snow” icon 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.

Note: As the Station builds memory, it will compare the current average pressure to the past forty day average pressure for increased accuracy. The longer the Station operates in one location the more accurate the forecast icons will be.

FACTORY RESET: HOW DO I FACTORY RESET MY STATION?

- A factory reset will delete all sensor ID numbers and if connected, remove all 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 WIND ALERTS and LIGHT 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.

Note: If operating connected, you will need to reconnect to Wi-Fi from the app.

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.

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


- The thermo-hygro sensor reads the environment. Since your Temperature/Humidity readings come from the Wind/TH sensor they may occasionally be inaccurate if the sunlight hits the sensor.
- If this is a common occurrence you can purchase an LTV-TH2 sensor and replace the Temperature/Humidity Reading from the Wind/TH sensor.

HOW TO REPLACE THE TH READING FROM THE WIND TH SENSOR WITH AN LTV-TH2?

The new Wind Speed, Wind Direction Sensor with Temperature/Humidity may cause inaccurate temperature readings in some locations. Because of this, you have the option to remove the TH sensor reading (from the LTV-WSDTH01) and adding an additional TH sensor to read in the OUTDOOR area of the display.

1. Press SENSOR button once Station ID will show.
2. Press SENSOR button again ID **WTH123 THW SENSOR** will show.
3. Hold the MINUS (-) button for 5 seconds while viewing ID to delete ID WTH123.

To add a separate LTV-TH2 sensor:

- After deleting the TH sensor built into the Wind Sensor (ID: WTH123), press the SENSOR button on the station to view ID, then press the + (PLUS) button to search.
- Press the TX button on the add-on sensor.
- Sensor Icon  will show to indicate reading is coming from separate TH 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.
- 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.

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 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 dashes 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](#).

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 [program menu](#) 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 reseal them.
- Cups are replaceable.

CAN I REPLACE MY WIND CUPS?

Occasionally, 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.

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

The 0.00 means your wind sensor is connected to your station.

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

WIND DASHES: WHY ARE THERE DASHES FOR WIND READINGS?

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

- My first thought is always to check that my [batteries](#) are good. If it has been working and now is not, low batteries are the most common connection problem.
- Is the WIND/TH sensor receiving full sunlight on the solar panel? Is the switch ON?
- Next, check your [distance, resistance and interference](#). 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 cause 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.
- Press the SENSOR button until you see your sensor ID. Hold the PLUS (+) button for 3 seconds and your station will search for your individual sensor.
- 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.

HOW DO I CHARGE THE WIND SENSOR?

Your sensor comes fully charged. Be sure to remove the Isolation Tab from the battery and move the ON/OFF switch to ON.

If your sensor is not receiving full sunlight on the solar panel for several days, the signal may weaken or fail.

To recharge the battery:

1. Place wind sensor with solar panel in the full sun.
2. If signal is dashes, turn sensor OFF for 24 hours to allow the battery to charge.
3. After 24 hours turn sensor on and allow 10 minutes to reconnect to station.
4. If possible, place sensor in an area where the solar panel can receive full sun.

WIND AND TEMP INTERMITTANT: WHY DO MY READINGS 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).
- Check that your sensor is receiving full sun on the solar panel.

If a miss happens:

- If your wind sensor loses connection to the station for any reason, the station will show dashes after 30 minutes.
- The station will search for 5 minutes every hour to reconnect with wind sensor.

Try this:

- Bring your wind sensor within 10 feet of your station and make sure it is connected to the station.
- After 15 minutes move the wind 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 wind sensor just outside.
- Continue moving the wind sensor back to its original location.
- If you lose connection, look for sources of [interference](#).

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.
- 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.