

308-2316 FAQs

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BATTERIES

- ✓ Half of all warranty issues can be resolved with fresh batteries of the appropriate voltage.
- ✓ We suggest name brand alkaline batteries.
- ✓ Use batteries dated at least six years in advance of the current year. Batteries dated earlier than six years from now may still work, but may be unstable in performance.
- ✓ Alkaline batteries manufactured this year will have an expiration date 10 years in the future. Battery technology has improved and batteries will maintain voltage longer in storage. However, the environment the batteries reside in for the 10 years can deplete the power.

- ✓ Good name brand Alkaline batteries make less noise, which reduces the chance of RF (radio frequency) interference from the battery compartment. A minimum voltage of 1.48V for each battery is necessary for proper performance.

WEATHER STATION FACTORY RESTART

The factory restart resets the weather station to its defaults and clears all power from the station. This brings to close to "out of the box" as possible to best reconnect.

1. Remove batteries from the Thermo-hygro (outdoor) sensor and the weather station. Press any button on the weather station 20 times.
2. Let all units sit without batteries for 15 minutes.
3. Disconnect and reconnect the Wind and Rain sensor cables (be sure they click into place).

Note: It is important that the sensors be 5-10 feet from the weather station during the restart.

4. Install batteries into weather station and thermo-hygro sensor.
5. Do not press any other buttons for AT LEAST 10 minutes while the station completes its startup sequence.

WWVB Signal Search: The thermo-hygro sensor will transmit weather data within the first 24 seconds. Then, the sensor will start radio controlled time (WWVB) reception. During the time reception period (maximum 5 minutes), no weather data will be transmitted. The LED indicator will be blink 5 times once WWVB signal is received. Weather data will send again once the WWVB search finished. If the WWVB time signal is not received, the thermo-hygro sensor will search every 2 hours until received. Weather data will send normally when not in search mode.

QUICK CONNECT

- ✓ When only changing batteries in the outdoor sensor only, allow up to 3 hours for the weather station to aquire the signal again.
- ✓ If you do not receive a reading from all your sensors after 3 hours, please try the factory reset.

POWER REQUIREMENTS

- ✓ 2-AA batteries power the thermo-hygro sensor
- ✓ 3-AA Alkaline batteries for the weather station
- ✓ Wind and rain sensor are corded, and receive power from the thermos-hygro sensor.

COMPATIBLE SENSORS

- ✓ TX231TH Thermo-hygro
- ✓ TX231W Wind
- ✓ TX231R Rain
- ✓ The above 433MHz sensors will read to this weather station.

THERMO-HYGRO SENSOR

DASHES SHOWN FOR OUTDOOR TEMPERATURE/HUMIDITY

- ✓ Dashes means the connection is lost between the weather station and the outdoor sensor.
- ✓ Batteries often resolve the connection.
- ✓ Distance/Resistance can cause loss of connection between the sensor and the weather station.
- ✓ Reorientation of the weather station 90 degrees towards the thermo-hygro sensor may provide better reception by the antenna.
- ✓ Replace the batteries in the thermo-hygro sensor and wait three hours.

INACCURATE OUTDOOR TEMPERATURE/HUMIDITY

- ✓ The thermo-hygro sensor reads the environment. When the sensor reads high during the day but not at night it is a mounting problem.
- ✓ **Side-by-side test:** Bring the thermo-hygro sensor in the house and place it next to the weather 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 the weather station then try a different location outside.
- ✓ Look for heat sources such as sunlight, door or window frames, or reflected heat.

OUTDOOR TEMPERATURE/HUMIDITY IS STUCK OR OFL

- ✓ Check batteries. Overpowered or underpowered batteries can cause this reading.
- ✓ Replace outdoor sensor.

INTERMITTENT OUTDOOR TEMPERATURE/HUMIDITY

- ✓ RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g. moister climates). If sensor signal is lost, please wait 2-4 hours for the signal to reconnect on its own.
- ✓ Move the remote sensors to a location closer to the weather station.
- ✓ Check for wireless devices in the signal path between the sensors and the weather station.
- ✓ Indoor distance test: Please complete the factory restart with sensors and weather station 5-10 feet apart and inside to establish a strong connection.
- ✓ If there is a reading in the outdoor temperature area after 15 minutes, move the sensors to another room with one wall between the sensor and the weather station. Observe to see if the remote readings remain on consistently for 1 hour.
- ✓ If the remote reading remains on while in the house then it is likely a distance/resistance issue.
- ✓ Move the sensor to different locations outside to find a location where the remote readings will hold.

- ✓ Distance/Resistance can cause loss of sensor signal.
- ✓ Check Batteries.

THERMO-HYGRO SENSOR DRAINS BATTERIES QUICKLY

- ✓ Test a new set of Alkaline batteries. 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 the distance and resistance between the sensor and weather station. Sensors at the end of the range may work while batteries are fresh but not after they drain a bit.
- ✓ Check for leaking batteries, which may damage the sensor.

THERMO-HYGRO SENSOR STOPS WORKING WHEN TEMPERATURE IS HOT

- ✓ Thermo-hygro sensors show dashes or OFL when the temperature reaches a certain degree, but returns to normal readings when the temperature cools down, please check:
- ✓ Batteries: At higher temperatures, batteries can overheat causing sensor failure. Older and weaker batteries are more likely to fail in hot weather. Try a fresh set of batteries to see if the issue is resolved.
- ✓ Distance/resistance: When the Thermo-hygro sensor is at the edge, of the distance range, and the temperatures are very hot and the batteries loose strength and the connection may be lost.

HUMIDITY SHOWS OFL BUT TEMPERATURE WORKS

- ✓ The humidity low range is 10% RH. If your local humidity is below 10% you will see this reading.
- ✓ Complete a restart with fresh batteries.
- ✓ Replace the thermo-hygro sensor.

FAHRENHEIT/CELSIUS

- ✓ Enter the program menu to select temperature in Fahrenheit (°F) or Celsius (°C).

WIND SENSOR

- ✓ The wind sensor transmits through the thermo-hygro sensor, which then transmits to the weather station.
- ✓ The thermo-hygro sensor powers the wind sensor.

CUPS SPINNING SLOW OR NOT SPINNING

- ✓ Check for debris or ice in cups.
- ✓ 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.

REPLACE WIND CUPS

Replace wind cups:

- ✓ Firmly grasp the wind cups and pull straight off the sensor.
- ✓ Check to be sure that you have a metal magnet in the wind cups.
- ✓ Check that there is a round metal bearing in the wind cups or on the stem of the sensor where the cups attach.
- ✓ Install the new cups onto the wind sensor and press firmly.

WIND SPEED IS 0.00

- ✓ Check that the wind cups attach to the sensor. Occasionally they can come off.
- ✓ Check that the cups seat properly by pushing on the center of the cups.
- ✓ Check that the cups spin freely.

WIND READING IS INTERMITTENT OF SHOWS DASHES

- ✓ RF (radio frequency) interference is normal; the occasional outage is possible.
- ✓ Check for sources of RF (radio frequency) interference such as Ham radio or electric transformers nearby.
- ✓ Move the weather station away from cordless phones, wireless routers, etc.
- ✓ Check the environment for unusual moist/humid conditions (moisture reduces RF (radio frequency) signal in electronics).
- ✓ Distance/Resistance can cause loss of sensor signal.
- ✓ Relocate the wind sensor closer to the thermo-hygro sensor.
- ✓ Mounting on a metal or white PVC pole may cause RF interference or static.
- ✓ Please note if there are certain times of the day or night that the unit lose signal. Details are helpful in resolving the problem.
- ✓ Check that batteries are fresh in the thermo-hygro sensor.
- ✓ Complete a factory restart.

WIND SPEED IS INACCURATE

- ✓ Check the unit of measure (MPH, KM/H or M/S).
- ✓ Check to see if the weather 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.
- ✓ Check that your batteries are fresh in the thermo-hygro sensor and the weather station.

WIND READING IS OFL

- ✓ Check the batteries in the thermo-hygro sensor.
- ✓ Check the wind cord for nicks and cuts.
- ✓ Replace wind sensor.

UNDERSTANDING WIND READINGS

Wind Speed or Wind Gust display:

- ✓ Press and release the **SET** button three times. The Wind Speed number will flash.
- ✓ Press the + or **MIN/MAX** buttons to display Wind Speed or Wind Gust.

Wind Gust: A sudden, brief increase in speed of the wind. The duration of a gust is usually less than 20 seconds.

- ✓ The wind gust is from a collection of wind speed data points over time. Peak Gust for example, is calculated against the previous and next sample and may not be the same as maximum wind speed reported.

Wind Speed: Measure of wind in varying speeds throughout the entire day.

- ✓ The wind sensor "samples" wind speed every 12 seconds and then sends the average and peak of these samples to the thermo-hygro sensor.
- ✓ The thermo-hygro sensor updates to the weather station every 48 seconds.

WIND AREA IS BLANK (NO DASHES OR NUMBERS)

- ✓ Check that other areas of the weather station read properly. There may be a problem with the weather station.

WIRELESS RAIN SENSOR

RAIN READINGS

The rain readings are running totals from now, and back the given time frame:

- ✓ 1 hour = The rain over the past 1 hour
- ✓ 24 hour = The rain over the past 24 hours (**Not** a midnight to midnight reading)
- ✓ Weekly = The rain over the past 7 days (**Not** a Monday-Sunday reading)
- ✓ Monthly = The rain over the past 30 days (**Not** a calendar month)
- ✓ Total = Total since the startup of weather station, until reset.

To view different rainfall readings:

1. Press and release the **SET** button **four times**. The Rain number will flash.
2. Press the + button to change the rainfall display.

RESET RAIN

Rainfall Reset (resets all current rain readings):

1. Press and release the **SET** button four times. The Rain number will flash.
2. Press the + or **MIN/MAX** buttons to select Total Rain.
3. Hold the SET button for 3 seconds to reset all current rain readings to 0.00.

Note: The MIN/MAX rainfall readings with time and date stamp will not change.

RAIN READINGS

For all measurements, it is important time and date are set correctly on your weather station.

The rain readings are running totals from now, and back the given time frame:

- ✓ 1 hour = The rain over the past 1 hour
- ✓ 24 hour = The rain over the past 24 hours (Not a midnight to midnight reading)
- ✓ Weekly = The rain over the past 7 days (Not a Monday-Sunday reading)
- ✓ Monthly = The rain over the past 30 days (Not a calendar month)
- ✓ Total = Total since the startup of weather station, until reset.

TO VIEW DIFFERENT RAINFALL READINGS:

- ✓ Press and release the **SET** button four times. The Rain number will flash.
- ✓ Press the + or **MIN/MAX** buttons to change the rainfall display.

RAIN READS 0.00

- ✓ Check the funnel and the inside of the rain sensor for insect nests or debris that may cause loss of rocker motion.
- ✓ Check the batteries in the thermos-hygro sensor.
- ✓ Check the cord connection between the rain sensor and the thermo-hygro sensor.
- ✓ Mount the rain sensor level and check that the mounting screws are not too tight (this is the most common issue).
- ✓ Use the eraser end of a pencil to manually tip the rocker of the rain sensor 10 times (five each way).
- ✓ Wait at least 2 minutes for all the rain to collect.
- ✓ Check the total rain on the weather station for a reading.

RAIN READS DASHES

The weather station and rain sensor are not connected.

- ✓ Check that the wind and temperature are still working. If wind and temperature are not working either, then it may be a thermos-hygro sensor or weather station issue.
- ✓ Check the batteries in the thermo-hygro sensor.
- ✓ Check the cord connection between the rain sensor and the thermo-hygro sensor.
- ✓ Distance/Resistance can cause loss of sensor signal.

- ✓ Orient the weather station 90 degrees towards the rain sensor for better reception.

RAIN READS OFL

- ✓ OFL indicates that the weather station is receiving a signal from the sensor.
- ✓ The weather station will read OFL if it has counted more inches of rain (from testing, interference, etc.) than it is designed to read (0" to 393.7" (0 to 9999 mm)).
- ✓ Check for sources of interference such as other wireless rain sensors, ham radios or large electrical transformers. This may cause rain to add up when there is no rain.

RAIN AREA (NO NUMBERS OR DASHES)

- ✓ Check that other areas of the weather station read properly. There may be a problem with the weather station.

RAIN READS LOW

- ✓ Low rain readings indicate the rain sensor and weather station are connected.
- ✓ Check that the pin the rocker tips on is all the way to the back and 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 and that the mounting screws are not too tight (most common issue).
- ✓ Check the batteries in the thermo-hygro sensor.
- ✓ Check the cord connection between the rain sensor and the thermo-hygro sensor.

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 2 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 Sensor mounted slowly pour water into the funnel to tip the rocker of the rain sensor 10 times (five each way). Wait at least 2 minutes for all the rain to collect.

- ✓ Compare these tests. If they are the same, then the 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.

RAIN READS 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 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 2 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 Sensor mounted slowly pour water into the funnel to tip the rocker of the rain sensor 10 times (five each way). Wait at least 2 minutes for all the rain to collect.

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

ALARMS: TIME, TEMP, HUMIDITY, PRESSURE, WIND, RAIN

All alarms are found in Alarm Mode.

ALARM MODE- Do not press any buttons for 30 second to start from normal display mode.

1. Press the ALARM button once to enter HI Alarm mode (**HIAL** will show in the date display). Press twice to enter LO Alarm mode. (**LOAL** will show in the date display).
2. Press the SET button to select an alarm value to change.
3. Press the + or MIN/MAX buttons to adjust the values.
4. After adjusting alarm values press the ALARM button to activate or deactivate individual alarms.

High Alarms:

- ✓ Time alarm (hour then minutes)
- ✓ Indoor humidity high alarm
- ✓ Indoor temperature high alarm
- ✓ Outdoor humidity high alarm
- ✓ Outdoor temperature high alarm
- ✓ Wind chill high alarm
- ✓ Dew point high alarm
- ✓ Pressure high alarm
- ✓ Wind speed high alarm
- ✓ Gust speed high alarm
- ✓ 1Hour rain high alarm
- ✓ 24 hour rain high alarm

Low Alarms:

- ✓ Time alarm (hour then minutes). This is the same as Hi Alarm for the time alarm. There is only one time alarm.
- ✓ Indoor humidity low alarm
- ✓ Indoor temperature low alarm
- ✓ Outdoor humidity low alarm
- ✓ Outdoor temperature low alarm
- ✓ Wind chill low alarm
- ✓ Dew point low alarm
- ✓ Pressure low alarm

ACTIVATE/DEACTIVATE ALARMS

1. Press the ALARM button to enter HI Alarm or LO Alarm mode. (HIAL or LOAL will show in the date display).
2. Press the SET button to select an alarm value to change.
3. With alarm value flashing, press the ALARM button to activate or deactivate individual alarms.
4. When active (ON) the alarm icon will show.
5. When the alarm is inactive (OFF) the alarm icon will not show.

When an alarm sounds and flashes:

- ✓ Alarm will sound for two minutes.
- ✓ Press any button to silence the alarm.
- ✓ The alarm will flash until the weather condition is no longer valid. The alarm will flash even when sound is silenced.
- ✓ When the alarm threshold is met, the alarm will reactivate automatically.
- ✓ Deactivate the alarm or set it to a new value to avoid repeated alarms.

MOUNTING/POSITIONING

First, set everything up in the house to be sure it works before mounting the sensors outside. For best performance, mount the Rain and the Wind Speed/Thermo-hygro sensors together. Do not lengthen or shorten the sensor cords.

For best performance mount the Rain and the Wind Speed/Thermo-hygro sensors together.

Do not lengthen or shorten the sensor cords.

Placement:

1. Place the sensors in an open area at least 6 feet above ground.
2. Avoid obstructions that will block wind and rain. Allow a 50 foot clearance or more from tall buildings, trees etc. When the sensors are installed next to a tall building, the wind and rain will not be accurate.
3. The rain sensor will need to be cleaned periodically.
4. Batteries need to be changed every two years.
5. Mount the sensors at least 6' from any building, structure, ground, or roof top that may provide radiant heat.
6. Mount the sensors within range (600 feet open air) of the weather station. Each wall, window, tree etc., can cut that signal by half.
7. Place the weather station at least six feet from radio interference such as PCs, radios or TV sets. Do not have wireless devices in the signal path between the sensors and the weather station.

The weather station has pull out stands to sit or to recline on a desk. Or the weather station may be wall mounted

The Wind speed/Thermohygro sensor and the rain sensor may be mounted on a wooden pole (not included) with the U-bolts (included) or mounted on a flat surface.

Mount on a Pole:

1. Select a wooden pole (not included) on which to mount the sensors. The pole should not be more than 0.75 inches in diameter.
2. Firmly place the bottom of the thermo-hygro sensor into the plastic mounting bracket. Use a short bolt and nut to secure in place. Do not over tighten.
3. Check the wind and rain cord are secured to the correct ports. Slide the wind speed sensor and shower proof cover over the thermo-hygro sensor.
4. Attach the rain sensor to the plastic mounting bracket and secure with a long set screw. Check that that rain sensor is level. Do not over tighten.
5. Attach the rain sensor mounting bracket to the wooden pole with the included U-bolts. Do not over tighten.

Note: Attach the rain sensor lower than the wind/TH sensor so that rain water does not follow the cord into the port of the TH sensor.

6. Attach the wind speed/thermo-hygro sensor mounting bracket to the wooden pole with the included U-bolts. Do not over tighten.

Mount on a Flat Surface:

1. Firmly place the bottom of the thermo-hygro sensor into the plastic mounting bracket. Use a short bolt and nut to secure in place. Do not over tighten.
2. Check the wind and rain cord are secured to the correct ports. Slide the wind speed sensor and shower proof cover over the thermo-hygro sensor.
3. Place two screws through the plastic mounting bracket to secure to a flat surface. Do not over tighten.
4. Place two screws through the rain gauge to secure to a flat surface. Do not over tighten the screws. Use the bubble level on the top of the rain sensor to be sure it is level.

Note: The plastic mounting bracket is not used for the rain sensor when mounting on a flat surface.

DISTANCE/RESISTANCE/INTERFERENCE

Distance:

- ✓ The maximum transmitting range in open air is over 600 feet (180 meters) between the thermo-hygro sensor and the weather station.
- ✓ Consider what is in the signal path between the weather station and the sensor.
- ✓ Consider the distance the weather station is from other electronics in the home.

Resistance:

- ✓ Obstacles such as walls, windows, stucco, concrete, and large metal objects can reduce the range.
- ✓ When considering the distance between the sensor and the weather station (600 feet, 180 meters open air) cut that distance in half for each wall, window, tree, bush or other obstruction in the signal path.
- ✓ Closer is better.
- ✓ Do not mount the sensors on a metal fence. This significantly reduces the effective range.

Interference:

- ✓ Consider items in the signal path between the sensor and the weather station.
- ✓ Simple relocation of the sensor 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.
- ✓ Vegetation is full of moisture and reduces signal.
- ✓ Dirt: Receiving a signal through a hill is difficult.

WEATHER STATION

12-HOUR OR 24-HOUR TIME FORMAT

- ✓ Time display: 12-hour or 24-hour format.
- ✓ Default is 12-hour time.
- ✓ Use the Program Menu to switch time formats.

POWER REQUIREMENTS

- ✓ 3-AA Alkaline batteries power the weather station.

MANUALLY SET TIME: PROGRAM MENU

- ✓ Hold the **SET** button to enter time set mode.
- ✓ Press the + or **MIN/MAX** buttons to adjust the values.
- ✓ Press the **SET** button to confirm adjustments and move to the next item.

1. TIME ZONE: The time zone number will flash. Press and release the + or MIN/MAX buttons to select a different Time Zone (North American time zones are negative numbers): -4=Atlantic, -5 = Eastern, -6= Central, -7= Mountain, -8= Pacific, -9= Alaska, -10=Hawaiian time zone. Confirm with the SET button and move to DST.
2. DAYLIGHT SAVING TIME: DST will flash and the word ON. Press and release the + or MIN/MAX buttons to turn this to OFF if you do not observe DST. Confirm with the SET button and move to 12/24 hour time.
3. 12/24 HOUR TIME: 12H will flash. Press and release the + or MIN/MAX buttons to select 24H. Confirm with the SET button and move to the hour.
4. HOUR: The hour will flash. Press and release the + or MIN/MAX buttons to select the correct hour. Confirm with the SET button and move to the minutes.
5. MINUTES: The minutes will flash. Press and release the + or MIN/MAX buttons to adjust the minutes. Confirm with the SET button and move to the year.
6. YEAR: The year will flash. Press and release the + or MIN/MAX buttons to select the correct year. Confirm with the SET button and move to the month.
7. MONTH: The month will flash. Press and release the + or MIN/MAX buttons to select the correct month. Confirm with the SET button and move to the date.
8. DATE: The date will flash. Press and release the + or MIN/MAX buttons to select the correct date. Confirm with the SET button and move to F/C.

9. Note: The Day of the Week will set automatically when the year, month and date are set.
10. FAHRENHEIT/CELSIUS: °F will flash. Press and release the + or MIN/MAX buttons to select Fahrenheit or Celsius. Confirm with the SET button and move to Air Pressure Unit.
11. INCHES OR MERCURY (InHg) or HECTO PASCAL (hPa): InHg will flash. Press and release the + or MIN/MAX buttons to select InHg or hPa. Confirm with the SET button and move to Relative Air Pressure Setting.
12. RELATIVE AIR PRESSURE NUMBER: The Pressure number will flash. Press and release the + or MIN/MAX buttons to set the relative pressure number to a local report. Confirm with the SET button and move to Pressure Sensitivity (Forecast Icons).
13. PRESSURE SENSITIVITY: The number 3 will flash in the pressure area. Press and release the + or MIN/MAX buttons to change the pressure sensitivity if your forecast icons are not changing appropriately. Confirm with the SET button and move to Storm Warning Threshold.
14. Note: The lowest number is used near the coastline, the highest number is for the desert, and middle number is for everywhere else.
15. STORM WARNING THRESHOLD: The number 5 will flash in the pressure area. Press and release the + or MIN/MAX buttons to set the storm warning threshold to flash a low pressure warning. Confirm with the SET button and move to Wind Speed Units.
16. WIND SPEED UNITS: The Wind Speed number will flash. Press and release the + or MIN/MAX buttons to select KM/H, MPH, M/S, KNOTS, or BFT. Confirm with the SET button and move to Rainfall Units.
17. RAINFALL UNITS: The Rainfall number will flash. Press and release the + or MIN/MAX buttons to select inches or mm. Confirm with the SET button and exit.

CHANGE DISPLAY

- ✓ Change on the displayed views using Quick Display Mode.
- ✓ You can reset all current rain readings in Quick Display Mode as well.

QUICK DISPLAY MODES

Outdoor Temperature, Wind Chill or Dew Point display:

1. Press and release the SET button once. The Outdoor Temperature area will flash.
2. Press the + or MIN/MAX buttons to display Outdoor Temperature, Wind Chill or Dew Point.

Relative or Absolute Pressure display:

3. Press and release the SET button twice. The Pressure Number will flash.
4. Press the + or MIN/MAX buttons to select Relative or Absolute Pressure.

Wind Speed or Wind Gust display:

5. Press and release the SET button three times. The Wind Speed number will flash.
6. Press the + or MIN/MAX buttons to display Wind Speed or Wind Gust.

Rainfall 1 hour, 24 hour, weekly, monthly, and total rain (since reset):

7. Press and release the SET button four times. The Rain number will flash.
8. Press the + or MIN/MAX buttons to display rainfall as 1 hour, 24 hour, weekly, monthly or total readings.

Rainfall Reset (reset all current rain readings):

9. Press and release the SET button four times. The Rain number will flash.
10. Press the + or MIN/MAX buttons to select Total Rain.
11. Hold the SET button for 3 seconds to reset all current rain readings to 0.00.

Note: The MIN/MAX rainfall readings with time and date stamp will not change.

PRESSURE INACCURATE

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. The unit can set it to a known value from the local reporting station.

FORECAST ICONS INACCURATE

The weather forecasting feature is estimated to be 70% accurate. The weather forecast is based solely upon the change of air pressure over time.

The icons are predicting 12-24 hours in the future, not current conditions. It may be sunny out your window, but the pressure is falling so the forecast station will show clouds with rain icon.

The SUNNY icon indicates clear weather, even when displayed during the night-time. The icons displayed forecast the weather in *terms of getting better or worse, and not necessarily sunny or rainy* as each icon indicates.

Note: After initial set-up, disregards icons for weather forecasts for the next 48-60 hours. This will allow sufficient time for the weather station to collect air pressure data at a constant altitude and result in a more accurate forecast.

ALARMS

All alarms are accessed in Alarm Mode.

ALARM MODE- Do not press any buttons for 30 second to start from normal display mode.

Press the ALARM button once to enter HI Alarm mode (HIAL will show in the date display).

Press twice to enter LO Alarm mode. (LOAL will show in the date display).

2. Press the SET button to select an alarm value to change.
3. Press the + or MIN/MAX buttons to adjust the values.
4. After adjusting alarm values, press the ALARM button to activate or deactivate individual alarms.

High Alarms:

- ✓ Time alarm (hour then minutes)
- ✓ Indoor humidity high alarm
- ✓ Indoor temperature high alarm
- ✓ Outdoor humidity high alarm

- ✓ Outdoor temperature high alarm
- ✓ Wind chill high alarm
- ✓ Dew point high alarm
- ✓ Pressure high alarm
- ✓ Wind speed high alarm
- ✓ Gust speed high alarm
- ✓ 1 Hour rain high alarm
- ✓ 24 hour rain high alarm

Low Alarms:

- ✓ Time alarm (hour then minutes). This is the same as Hi Alarm for the time alarm. There is only one time alarm.
- ✓ Indoor humidity low alarm
- ✓ Indoor temperature low alarm
- ✓ Outdoor humidity low alarm
- ✓ Outdoor temperature low alarm
- ✓ Wind chill low alarm
- ✓ Dew point low alarm
- ✓ Pressure low alarm

ACTIVATE/DEACTIVATE HI AND LOW ALARMS

1. Press the ALARM button to enter HI Alarm or LO Alarm mode. (HIAL or LOAL will show in the date display).
2. Press the SET button to select an alarm value to change.
3. With alarm value flashing, press the ALARM button to activate or deactivate individual alarms.
4. When active (ON) the alarm icon will show.
5. When the alarm is inactive (OFF) the alarm icon will not show.

When an alarm sounds and flashes:

- ✓ Alarm will sound for two minutes.
- ✓ Press any button to silence the alarm.
- ✓ The alarm will flash until the weather condition is no longer valid. The alarm will flash without sound.
- ✓ When the alarm threshold is met, the alarm will reactivate automatically.
- ✓ Deactivate the alarm or set it to a new value to avoid repeated alarms.

VIEW/RESET MIN/MAX VALUES

All minimum and maximum records with time and date of occurrence are viewed in MIN/MAX Mode.

MAX/MIN MODE- Do not press any buttons for 30 second to start from normal display mode.

1. Press the MIN/MAX button once to enter MAX mode. Press twice to enter MIN mode.
2. Press the + button to view individual MAX or MIN values with time and date stamp.

3. **RESET:** When viewing individual MAX/MIN values with time and date stamp, press the SET button to reset that record to current value date and time.
4. Press the HISTORY button to exit MAX or MIN mode.

Maximum Records with time and date stamp:

- ✓ Indoor humidity maximum
- ✓ Indoor temperature maximum
- ✓ Outdoor humidity maximum
- ✓ Outdoor temperature maximum
- ✓ Wind chill temperature maximum
- ✓ Dew point temperature maximum
- ✓ Pressure maximum
- ✓ Wind speed maximum
- ✓ Gust speed maximum
- ✓ 1Hour rain maximum
- ✓ 24 hour rain maximum
- ✓ Week rainfall maximum
- ✓ Month rainfall maximum

Minimum Records with time and date stamp:

- ✓ Indoor humidity minimum
- ✓ Indoor temperature minimum
- ✓ Outdoor humidity minimum
- ✓ Outdoor temperature minimum
- ✓ Wind chill temperature minimum
- ✓ Dew point temperature minimum
- ✓ Pressure minimum

WEATHER HISTORY

A 24-hour snapshot of all data, is stored by the weather station in three-hour increments. View the 24-hour history in History Mode.

- ✓ Press the HISTORY button to enter history mode. The letters HIS will show in the date area.
- ✓ Press the + button to view records over the past 24 hours at increments of -3 hours, -6 hours, -9 hours, -12 hours, -15 hours, -18 hours, -21 hours, -24 hours.
- ✓ Press the HISTORY button to exit history mode.

WEATHER STATION HAS MISSING SEGMENTS

- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.
- ✓ Describe the portions of letters or numbers missing.

WEATHER STATION IS DIM

- ✓ Most weather stations have a gray background. Place the weather station at eye level. Is it still dim?
- ✓ Weather stations that sit in the sunlight can develop a cloudy film over time.
- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.

WEATHER STATION HAS DISTORTED DISPLAY

- ✓ On a brand new weather station, check for thin plastic films of printed scratch guard that may be on the upper and lower screen of the weather station. This thin piece of plastic has printed numbers for store displays.
- ✓ With all power removed, the weather station should be blank.
- ✓ If numbers still appear, please check for scratch guard.
- ✓ Check that the batteries connect correctly.
- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered.
- ✓ Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the batteries out of the weather station for 2 hours.

WEATHER STATION IS BLANK: NO LETTERS, NUMBERS OR DASHED LINES

- ✓ Check that the batteries connect correctly.
- ✓ Batteries may be overpowered or underpowered.
- ✓ Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the batteries out of the weather station for 2 hours.