308-1417V3 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 reset will return your weather station to its default settings. This will clear all previous recorded history, so you may want to write down data before taking this step.

1. Bring your sensor within five feet of your weather station. Ensure you have fresh batteries in the sensor.
2. Hold the ALERTS and PRESSURE button together for 5 seconds to restart the station.
3. Allow up to 3 minutes for sensor signal to reacquire.

BATTERY CHANGE

- After changing batteries in the sensor, hold the SEARCH button for 5 seconds to search for the sensor.
- If this fails to connect the sensor to the station, bring the sensor about five feet from the station and complete a Factory Restart.

POWER REQUIREMENTS

- 2-AA batteries power the thermohygro sensor
- 3-AA Alkaline batteries for your weather station

COMPATIBLE SENSOR

✓ TX141TH-B (all versions) is the compatible sensor for this station.

THERMO-HYGRO SENSOR
DASHES SHOWN FOR OUTDOOR TEMPERATURE/HUMIDITY

- Dashes means you have lost connection between the display and the outdoor sensor.
- Batteries are the most common problem.
- Distance/Resistance can cause loss of sensor signal. Avoid having more than one wall, window, tree etc., between the display and the sensor. UV coated windows may actually reflect the signal. Stucco walls will absorb the signal.
- It may be helpful to orient the weather 90 degrees towards the sensor for better reception.
- Sensor operate best when elevated at least 6 feet.

- Remove the batteries from the sensor for 2 minutes. Replace the batteries in the Thermohygro sensor and hold the SEARCH button for five seconds. Wait 10 minutes. If the unit does not receive a reading from the sensor, please try the factory reset.

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 your weather station then try a different location outside.
- Look for heat sources such as sunlight, door or window frames, or reflected heat.

OUTDOOR READINGS ARE STUCK OR SHOW HI OR LO

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

INTERMITTENT SENSOR READINGS

- RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g. moister climates).
- If a sensor goes out, please wait 2-4 hours for it to reconnect on its own. Please be patience – these stations can reconnect on, after many hours out.
- RF (radio frequency) communication is not always 100% on.
- Certain temporary conditions can cause it to go out for a time (e.g. 100% humidity).
- IF the signal is lost, the RX will display the LAST DATA recorded from sensor for 10 minutes.
- After that 10 minutes if the signal does not come back then display dashes "--".
- After 30 minutes, start looking for the RF signals automatically.

If a miss happens:

- Hold the SEARCH button for 5 seconds to search for sensor.
- Distance/Resistance can cause loss of sensor signal. Avoid having more than one wall, window, tree etc., between the display and the sensor. UV coated windows may actually reflect the signal. Stucco walls will absorb the signal.
- Check batteries. This is our primary warranty issue.

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 your weather station. Sensor 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.

HUMIDITY SHOWS DASHES 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 sensor.

FAHRENHEIT/CELSIUS

- Enter the program menu to select in Fahrenheit (ºF) or Celsius (ºC).

HI | LO TEMPERATURE/HUMIDITY RECORDS

- All HI/LO temperature/humidity records reset automatically at 12:00 (midnight).
- From normal display, press and release the **TEMP** button to view indoor and outdoor HI/LO temperature/humidity records and outdoor Heat Index and Dew Point.
  - Press once to view HI indoor and outdoor temperature/humidity records.
  - Press again to view LO indoor and outdoor temperature/humidity records.
  - Press again to view outdoor Heat Index.
  - Press again to view outdoor Dew Point.

SENSOR 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.

ALERTS: TEMP, HUMIDITY

Set Alerts:

• Hold the ALERTS button to enter alert setting menu.
• Outdoor LO ALERT ON | OFF will flash.

Alert ON:

1. Press the + or - button to arm the alert. Press the ALERTS button to move to alert value.
2. When the alert is armed (ON) the alert value will flash
3. Press the + or - button to set the alert value (Hold to set quickly).
4. Press ALERTS button to move to next alert.
5. Press the SEARCH button at any time to exit.

Alert OFF:

1. Alerts are OFF unless armed. If you do not wish to set an alert, simply press the ALERTS button again to move to the next alert.

Alert Setting Order:

• Outdoor LOW Temperature
• Outdoor HIGH Temperature

• Outdoor LOW Humidity
• Outdoor HIGH Humidity

• Indoor LOW Temperature
• Indoor HIGH Temperature

• Indoor LOW Humidity
• Indoor HIGH Humidity

Active Alert:

• The alert icon will only show when the alert is active, and indicate HI or LO.
• When armed alert value is reached, station will beep 5 times, once each minute, until out of alert range.
• The flashing alert icon will indicate whether it is a LO or HI alert.
• Press any button to stop the alert sound.
• The alert icon will still flash while value is in alert range.

Disarm Alert:

1. Hold the ALERTS button to enter alert setting menu.
2. Press the ALERTS button until you see the alert you wish to disarm.
3. Press the + or - button to disarm the alert. The alert will not sound.
4. Press the SEARCH button to exit.

MOUNTING/POSITIONING

First, set everything up in the house to be sure it works before mounting the sensor outside.

TX141-Bv2 sensor: Watch sensor mounting video: http://bit.ly/TH_SensorMounting

Place the outdoor sensor in the desired shaded location and the weather station in the home. Wait approximately one hour before permanently mounting the outdoor sensor to ensure that there is proper reception.

POSITION

Outdoor:

- Protect the outdoor sensor from standing rain or snow and from the overhead sun, which can cause it to read incorrectly.
- Mounting under an eave or deck rail works well.
- If you choose, you can construct a small roof or box for the outdoor sensor. Be sure a box has vents.
- Mount the outdoor sensor on the North side where to prevent sun from causing incorrect readings.
- Mount at least 6 feet in the air for a strong RF (radio frequency) signal.
- Do not mount the outdoor sensor on a metal fence. This significantly reduces the effective range.
- Outdoor sensor are water resistant, not waterproof.
- Mount outdoor temperature sensor vertically.
- Avoid more than one wall between the outdoor sensor and the weather station.
- The maximum transmitting range in open air is over 330 feet (100 meters).
- Obstacles such as walls, windows, stucco, concrete and large metal objects can reduce the range.
- Do not mount near electrical wires, transmitting antennas or other items that will interfere with the signal.
- RF (radio frequency) signals do not travel well through moisture or dirt.

MOUNT

Option 1:

- Install one mounting screw (not included) into a wall.
- Place the outdoor sensor onto the screw (hanging hole on the backside).
- Gently pull down to lock the screw in place.

Option 2:

- Insert the mounting screw through the front of the outdoor sensor and into the wall.
- Tighten the screw to snug (do not over tighten).

DISTANCE/RESISTANCE/INTERFERENCE

Distance:

- ✓ The maximum transmitting range in open air is over 330 feet (100 meters) between the 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 (330 feet, 100 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 sensor 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 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

- ✓ The **SET** button will move through the program menu.
- ✓ The **+ or -** button will adjust values.
- ✓ Press the **PRESSURE** button at any time to exit.

Program Menu:

- Language (English, Español, Francais)
- Beep On/Off
- Atomic time signal (On/Off)
- DST (Daylight Saving Time On/Off)
- Time Zone
- 12/24 Hour time format
- Hour
- Minutes
- Year
- Month
- Date
- Fahrenheit/Celsius

The **SET** button will move through the program menu. To change a value use the **+ or -** button.

1. Hold the SET button five seconds so that ENGLISH appears. Press and release the + or – button if you wish to change the language. Confirm with the SET button and move to Beep sound on/off.
2. BEEP and the word ON will flash. Press and release the + or - button to turn this to OFF to avoid beep sounds when pressing a button. Confirm with the SET button and move to atomic time (ATOMIC ON/OFF).
3. ATOMIC and the word ON will flash. Press and release the + or - button to turn this to OFF if you do not wish atomic time reception. Confirm with the SET button and move to time zone.
   Note: If OFF is selected, you will skip DST & Time Zone and move next to 12/24 hour time format.
4. DST will flash and the word ON. Press and release the + or - button to turn this to OFF if you do not observe DST. Confirm with the SET button and move to Time Zone.
5. EASTERN will flash. Press and release the + or - button to select a different Time Zone: Confirm with the SET button and move to the 12/24 hour time.
6. 12HR will flash. Press and release the + or - button to select the correct hour. Confirm with the SET button and move to the hour
7. The hour will flash. Press and release the + or - button to select the correct hour. Confirm with the SET button and move to the minutes.
8. The minutes will flash. Press and release the + or - button to adjust the minutes. Confirm with the SET button and move to the year.
9. The year will flash. Press and release the + or - button to select the correct year. Confirm with the SET button and move to the month.
10. The month will flash. Press and release the + or - button to select the correct month. Confirm with the SET button and move to the date.
11. The date will flash. Press and release the + or - button to select the correct date. Confirm with the SET button and move to F/C.
    Note: The Day of the Week will set automatically when the year, month and date are set.
12. °F will flash. Press and release the + or - button to select Fahrenheit or Celsius. Confirm with the SET button and exit.

• The relative air pressure number is programmable:
  23.62 to 32.48 InHg (800 to 1100 hPa).
• If not manually programed, please allow 7-10 days for the station to acclimate to your location. After this time, you should begin to see accurate pressure graph readings automatically displayed on your station's screen.

Program Pressure Number:

1. Hold the PRESSURE button to set pressure number.
2. PRESSURE will show and Pressure Value will flash.
3. Press the + or - button to adjust the flashing pressure value.
4. Hold the + or - buttons to adjust quickly.
5. Press the PRESSURE button to confirm adjustments and exit.
6. Press the SEARCH button at any time to exit.

Select Pressure Units (InHg or hPa):

Inches of Mercury (InHg) is common in the USA.
• Press the PRESSURE button to toggle the pressure reading between Inches of Mercury and Hectopascal.
• The letters, INHG or HPA will show for 3 seconds.
• Station will stay on measurement selected.

WWVB ATOMIC TIME SIGNAL

- The weather station receives the Atomic Time Signal (WWVB) from Fort Collins, Colorado.
- The station will automatically search for the atomic time signal at UTC 7:00, 8:00, 9:00, 10:00, and 11:00.
- Press the SEARCH button to search manually, for the atomic time signal.
- Please be sure you have selected your time zone from the list in the Settings menu.
- When the Atomic time signal is received, the station will set to the time zone selected. Default is Eastern Time.
- The WWVB time signal can be received up to 2,000 miles away from Boulder Colorado. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours. The Radio-controlled display will search for a signal every night when reception is best.

- Allow up to 5 nights for the change from Daylight Savings Time to Standard Time and vice-versa to occur, depending on your location and atmospheric conditions.

For best signal reception, follow these steps:

1. Check for a **Tower Icon** showing on the display near the time. The tower icon indicates successful reception of the WWVB signal in the past 24-hours.
2. Check that the Weather Station is in the correct **Time Zone**. This station offers seven time zones listed in letter format (default is EST):
   - Atlantic
   - Eastern
   - Central
   - Mountain
   - Pacific
   - Alaskan

- Hawaiian

3. Check that **ATOMIC** is **ON**. This must be ON to receive a WWVB atomic time signal.
4. Check that the **DST** indicator is **ON**. If the indicator is OFF the weather station will not change into or out of Daylight Saving Time.
5. Batteries dated earlier than 6 years from now may still work, but may be unstable in performance. **Note:** Without proper batteries, the antenna will have a harder time picking up the signal.

- For information about WWVB visit: http://bit.ly/AtomicTime

FORECAST ICONS INACCURATE

The forecast icons are determined by the station's barometric pressure reading. Please allow 7-10 days for barometric calibration. Six forecast icons use changing atmospheric pressure to predict weather conditions for the next 12-hours with 70-75% accuracy.
When Outdoor temperature is below 32˚F and the forecast is RAIN or T-STORM, the station will display SNOW.

Forecast Icons:

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

- The weather station calibrates barometric pressure based on its location over a period of time to generate an accurate, personal forecast. Please allow 7-10 days for barometer calibration.

- The station samples the barometric pressure every twelve minutes. These samples are averaged hourly and daily then stored in nonvolatile memory. The three-hour pressure icon change is based off the last four average hourly readings.

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

BAROMETRIC PRESSURE

- A sensor in the forecast station, not the outdoor sensor, reads the Barometric Pressure. A significant difference in pressure inside and pressure outside would create a vacuum.
- The numeric pressure value adjusts automatically as the forecast station reads changes in air pressure.
- La Crosse Technology products will not read pressure correctly above 6200 ft. in elevation.
- Loss of Pressure is often a power-related problem, and it can be resolved by following these steps:
  - Remove power from the display for 2 hours. Press any button 20 times with power removed.

- Install fresh batteries into the display unit. After 5 minutes, check to see if the pressure and indoor temperature are working correctly.
- Overpowered and underpowered batteries can cause problems.

PRESSURE HISTORY GRAPH

- The far right set of bars is the current pressure or the "zero mark".
- Each set of bars to the left represent the change from the zero mark for that period. There are a limited number of bars for each period.
- Each bar on the graph represents a value of 0.03 hPa (Hecto Pascal).
- Occasionally a low front will come through that drops the pressure several bars in a short time.
- When this occurs, the graph appear to lose all bars for a given time period. This is due to the graph having a limited number of bars per period. The unit will notice that the numeric pressure is still showing correctly. The graph will correct itself within 1-2 days.

Note: The graph will scroll continually. This cannot be turned off.

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 the weather station.
- ✓ Press any button 20 times. Leave the batteries out of the weather station for 2 hours.