

# 308-1412-3TXV2 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 all sensors in the house within 5 feet of your station.
2. Remove batteries from station and all three sensors. Leave out for 15 minutes.
3. Press any button on your station 20 times.
4. After 15 minutes, insert fresh batteries into each sensor and into your station.
5. Wait 15 minutes to establish a strong connection. Place sensors outside.

## BATTERY CHANGE

- After changing batteries in your sensor, hold the SEARCH button for 5 seconds to search for all your sensors.
- If this fails to connect your sensor to your station, bring your sensor about 5 feet from your station and complete a [Factory Restart](#).

## POWER REQUIREMENTS

- 2-AA Alkaline batteries for your weather station
- 2-AA batteries for each sensor.

## COMPATIBLE SENSORS

- TX141TH-BCH (all versions) with selectable channels.  
<http://www.lacrossetechnology.com/tx141th-bch-temperature-humidity-sensor>

## THERMO-HYGRO SENSOR

### DASHES SHOWN FOR OUTDOOR TEMPERATURE/HUMIDITY/WINDSPEED

- Dashes means the unit 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 1 wall, window, tree etc., between the display and your 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 your sensor for better reception.
- Sensors operate best when elevated at least 6 feet.
- Remove the batteries from your sensor for 2 minutes. Replace the batteries in the Thermo-hygro sensor and after 5 minutes press and hold the SEARCH button for 5 seconds. Wait 10 minutes. If the unit does not receive a reading from all your sensors, please try the [factory reset](#).

### INACCURATE OUTDOOR TEMPERATURE/HUMIDITY

- The thermo-hygro sensor reads the environment. When one of your sensors reads high during the day but not at night it is often a [mounting](#) problem.
- **Side-by-side test:** Bring the thermo-hygro sensor in the house and place it next to your station for 2 hours.
- **Alternatively, place your inaccurate sensor right next to a working sensor for 2 hours.**
- Compare temperatures. The temperatures should be within 4 degrees to be within tolerance. The humidity should be within 14% to be within tolerance.
- If your sensor reads correctly when next to your station then try a different location outside.
- Look for heat sources such as sunlight, door or window frames, or reflected heat.

### OUTDOOR READINGS ARE STUCK OR 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 3 seconds to search for all three sensors.
- The lines below each channel number will flash while searching (up to 3 minutes).
- The station will search for missing sensors for 3 minutes every hour.
- The lines will be solid when the sensor is connected.
- If a sensor for a certain channel is not found, the lines below the channel indicator will not show.



- [Distance/Resistance](#) can cause loss of sensor signal. Avoid having more than 1 wall, window, tree etc., between the display and your 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 your 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 your sensor.

### HUMIDITY SHOWS DASHES, OR HI | LO 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 your sensor.

### FAHRENHEIT/CELSIUS

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

### DAILY HI | LO TEMPERATURE/HUMIDITY RECORDS

- All HI/LO temperature/humidity records reset automatically at 12:00 (midnight).
- Press the +/HI button to view indoor and outdoor HI temperature/humidity records for all three sensors.
- Press the -/LO button to view indoor and outdoor LO temperature/humidity records for all three sensors

### SENSOR AREA IS BLANK (NO DASHES OR NUMBERS)

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

### MOUNTING/POSITIONING

First, set everything up in the house to be sure it works before mounting your sensors outside. With 3 sensors you can position sensors inside and outside to meet your needs.

#### Outdoor:

- Protect your 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 sensors are water resistant, not waterproof.
- Mount outdoor temperature sensor **vertically**.
- Avoid more than one wall between the outdoor sensor and your station.
- The Hlimum 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).

### **Indoor:**

- Position away from door or window frames and away from vents.
- Be sure the sensor will not be in direct sunlight shining in a window as this will cause incorrect readings.
- Common use for extra sensors are basements, baby's room etc.
- Be sure to mount the sensor vertically.

## DISTANCE/RESISTANCE/INTERFERENCE

### **Distance:**

- The maximum transmitting range in open air is over 330 feet (100 meters) between your sensors and your station.
- Consider what is in the signal path between your station and your sensors.
- Consider the distance your 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 your sensor and your 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 your sensors on a metal fence. This significantly reduces the effective range.

### **Interference:**

- Consider items in the signal path between your sensors and your station.
- Simple relocation of your sensors or your 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

- ✓ 2-AA Alkaline batteries power your station.

## MANUALLY SET TIME: PROGRAM MENU

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

### Settings order:

- Atomic ON/OFF
- DST ON/OFF
- Time Zone
- 12H/24H
- Hour
- Minutes
- Year
- Month
- Date
- Temperature Fahrenheit/Celsius

### To begin:

1. Hold the SET button 3 seconds to select atomic time ON/OFF. **ATOMIC ON** will show. ON flashes.
2. Press +/HI or -/LO button if you do not want Atomic Time signal (OFF).  
**Note:** if ATOMIC is set to OFF; Skip DST, and Time Zone settings and go directly to 12/24 hour Format.
3. Press SET to confirm and move to the Daylight Saving Indicator. **DST ON** will show. ON flashes.
4. Press +/HI or -/LO button to turn DST OFF if you do not observe Daylight Saving Time changes.
5. Press SET to confirm and move to the Time Zone. **EASTERN** will flash.
6. Press +/HI or -/LO button to select your time zone.
7. Press SET to confirm and move to 12/24 hour time format. **FORMAT** will show. 12Hr flashes.
8. Press +/HI or -/LO button to turn select 24 hour time format.
9. Press SET to confirm and move to the hour. **SET HOUR** will show. The hour flashes.
10. Press +/HI or -/LO button to choose the hour.
11. Press SET to confirm and move to the minutes. The **MINUTES** will show. Minutes flash.
12. Press +/HI or -/LO button to choose the minutes.
13. Press SET to confirm and move to the year. The **SET YEAR** will show. 2017 will flash.
14. Press +/HI or -/LO button to change the year.

15. Press SET to confirm and move to the month. The **MONTH** will show. Month will flash.
16. Press +/HI or -/LO button to change the month.
17. Press SET to confirm and move to the date. **SET DATE** will show. Date will flash.
18. Press +/HI or -/LO button to change the date.
19. Press SET to confirm and move to the temperature unit. **TEMP °F** will show. °F will flash.
20. Press +/HI or -/LO button if you prefer °C (Celsius).
21. Press SET to confirm and exit.

## WWVB ATOMIC TIME SIGNAL

- Once batteries are installed, your station will automatically search for the atomic time signal for 5 minutes. Your station will search again at UTC 7:00, 8:00, 9:00, 10:00, and 11:00.
- If there is no WWVB reception, your station will search for the atomic time signal every 2 hours until the WWVB time is received.
- The atomic time signal icon will flash while searching. The tower icon will be solid when it has connected.
- After reception, this station will only search for the atomic signal after midnight.
- From normal time display, press and release the **SEARCH** button to search for the WWVB 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.

### 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 your station is in the correct **Time Zone**.
3. This station offers seven time zones listed in letter format (default is EASTERN):

```

ATLANTIC
EASTERN
CENTRAL
MOUNTAIN
PACIFIC
ALASKAN
HAWAIIAN

```

4. Check that **ATOMIC** is **ON**. This must be ON to receive a WWVB signal.
5. Check that the **DST** indicator is **ON** or OFF. If the indicator is OFF your station will not change into or out of Daylight Saving Time.
6. 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.

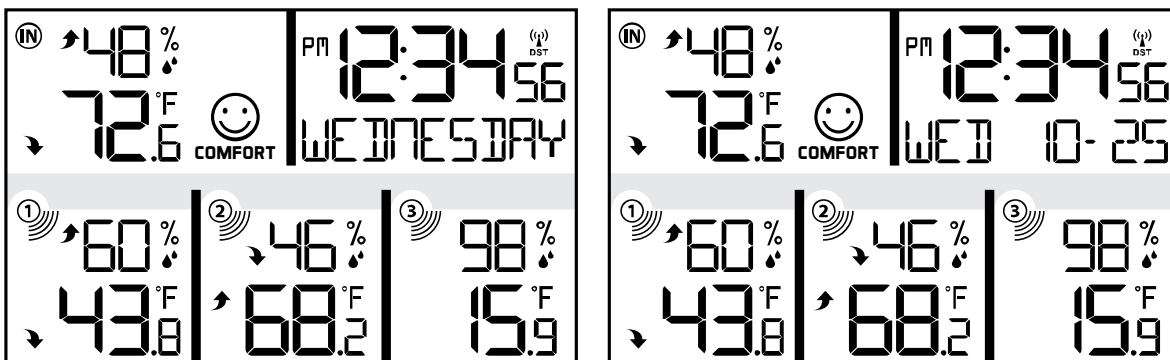
For information about WWVB visit: <http://bit.ly/AtomicTime>

## DST LETTERS DISPLAYED

- The letters **DST** below the Atomic Tower icon will show when observing Daylight Saving Time and disappear when observing Standard time.
- When DST is on, time will adjust automatically if DST ON is selected (default).

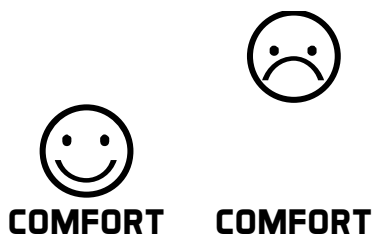
## WEEKDAY | DATE DISPLAY

- Press and release the SET/MODE button to toggle between full weekday and 3 letter weekday, month and date.



## INDOOR COMFORT STATEMENT

- When the temperature is between 66.2°F and 77°F (19 °C and 25 °C) and the humidity between 40% and 60% (comfort level range) a smiling face appears on the display.
- If the values are outside this range, a sad face appears instead.



## WRITABLE SENSOR LOCATION

- In the gray area above each sensor channel you may handwrite the location of the particular sensor.

## 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 your station for 2 hours.