## WS-9250U-IT 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 for indoor displays such as Weather stations.
- ✓ 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 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.
- ✓ Outdoor Transmitters: Use Alkaline batteries (or Lithium for temperatures below - 20°F/-28.8°C)
- ✓ Weather station: Use Alkaline batteries. Overpowered or underpowered batteries may cause loss of indoor readings, missing segments, dim display etc.

## Weather Station Factory Restart

- ✓ Remove all batteries from outdoor sensor and weather station.
- ✓ Press one of the buttons on the weather station at least 20 times to clear all memory.
- ✓ Verify that the weather station is blank before proceeding (there may be lines painted on the screen).
- ✓ Leave both units without power for 15 minutes (very important).
- ✓ Insert fresh batteries into the outdoor sensor.
- ✓ Insert fresh batteries into the weather station.
- ✓ Keep the outdoor sensor 5-10 feet from the weather station.
- ✓ When RF connection is established, the temperature will appear on the station. Allow the outdoor sensor and weather station to sit together for 15 minutes to establish a strong connection.
- ✓ Do not press buttons for 15 minutes.
- ✓ For optimum 915MHz transmission, the outdoor transmitter should be a distance of no more than 330 feet (100 meters, open air) from the Weather station.
- ✓ See the section on <u>mounting</u> and <u>distance/resistance/interference</u> for details on mounting the outdoor transmitter.

# Outdoor Temperature Transmitter Compatible Outdoor Transmitters

- ✓ A TX37U-IT outdoor transmitter comes packaged with this Weather station.
- ✓ The TX37U-IT and TX45U-IT (915MHz) transmitters are compatible with this Weather station.

### Fahrenheit/Celsius

✓ This station reads Fahrenheit only.

## MIN/MAX Records

VIEW: Press and release the MIN/MAX key.

- Once to show the MAX indoor temperature data.
- Twice to show the MIN indoor temperature data.
- Three times to show the MAX outdoor temperature data with the recorded time and date
- Four times to show the MIN outdoor temperature data with the recorded time and date
- A five times to return to normal display with current data.

RESET: Hold the MIN/MAX button for 5 seconds to reset both indoor and outdoor min/max data.

## Flashing Outdoor Temperature

- ✓ The outdoor Temperature reading will flash when the connection is first lost or intermittent between the weather station and the outdoor transmitter.
- ✓ <u>Distance/Resistance</u> is generally the cause of intermittent connection or loss of connection between the transmitter and the weather station.
- ✓ Check the <u>position</u> of the weather station. Turn the weather station 90 degrees towards the outdoor transmitter for better reception.
- ✓ Try the <u>quick connect</u> or <u>factory restart</u>.
- ✓ Batteries often resolve the connection issue.

## Dashes shown for Outdoor Temperature

- ✓ Dashes means the connection is lost between the weather station and the outdoor transmitter.
- ✓ <u>Batteries</u> often resolve the connection.
- ✓ <u>Distance/Resistance</u> can cause loss of connection between the transmitter and the weather station.
- ✓ Reorientation of the weather station 90 degrees towards the outdoor transmitter may provide better reception.
- ✓ Try the <u>factory restart</u>.

## Inaccurate Outdoor Temperature Reading

- ✓ The outdoor transmitter reads the environment. When mounted in the home it will read inside temperature.
- ✓ When the transmitter reads high during the day but not at night it is a positioning problem.
- ✓ **Side-by-side test**: Bring the outdoor transmitter 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. See the section on <u>accuracy</u> for details.
- ✓ If the transmitter 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.

## Intermittent Outdoor Temperature

- ✓ RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g. moister climates). If transmitter signal is lost, please wait 2-4 hours for the signal to reconnect on its own.
- ✓ Move the outdoor transmitter to a closer location.
- ✓ **Freezer test**: Confirm the weather station is reading the correct outdoor transmitter. Place the transmitter in the freezer for an hour and watch the temperature drop on the weather station.
- ✓ **Indoor distance test**: Please complete the <u>restart</u> with transmitter and weather station 5-10 feet apart and inside to establish a strong connection.
- ✓ After 15 minutes if there is a reading in the outdoor temperature area, move the transmitter to another room with one wall between the transmitter and the weather station. Observe to see if the Temperature remains on consistently for 1-hour
- ✓ If the temperature remains on while in the house then it is likely a <u>distance/resistance</u> issue. Move the transmitter to different locations outside to find a location where the temperature reading will hold.
- ✓ <u>Distance/Resistance</u> can cause loss of transmitter signal.
- ✓ Check <u>Batteries</u>.

## Outdoor Temperature Is Stuck or OFL

- ✓ The last outdoor reading may remain (not change) for several hours when connection is lost.
- ✓ The outdoor temperature reading will flash when the connection is first lost or intermittent between the weather station and the outdoor transmitter.
- ✓ Check <u>batteries</u>. Overpowered or underpowered batteries can cause this reading.
- ✓ Replace outdoor transmitter.

## Outdoor Transmitter Fell and No Longer Works

- ✓ If there is no physical damage to the outdoor transmitter, the fall may not have caused internal damage.
- ✓ An outdoor transmitter that has fallen into a puddle or other standing water or snow may have water damage.
- ✓ Transmitters are water resistant, not waterproof.
- ✓ A fall can shock the transmitter or the batteries in the transmitter.
- ✓ Batteries that have fallen on a hard surface may be damaged and unable to function properly.
- ✓ Complete a <u>restart</u> with fresh batteries.
- ✓ Use <u>batteries</u> dated at least six years in advance of the current year.

## Outdoor Transmitter 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 <u>distance</u> and resistance between the transmitter and weather station.

  Transmitters 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 transmitter.
- ✓ Battery life is over 24 months when using reputable battery brands for both Alkaline and Lithium batteries.

## Mounting | Positioning Outdoor Transmitter

- ✓ Mount outdoor temperature transmitters vertically and under a bit of an overhang.
- ✓ Protect the outdoor transmitter from standing rain or snow, and from the overhead sun, which can cause it to read incorrectly. Generally, mounting under an eave or deck rail works well.
- ✓ Construct a small roof or box for the transmitter if you do not have an overhang. Please be sure the box is vented.
- ✓ Mount the transmitter on the North side to prevent sun from causing incorrect readings.
- ✓ Mount at least 6 feet in the air for a strong signal.
- ✓ Outdoor transmitters are water resistant but not water proof.
- ✓ Avoid more than one wall between the transmitter and the Weather station.
- ✓ Do not mount near electrical wires, transmitting antennas or other items that will <u>interfere</u> with the signal.
- ✓ RF (radio frequency) signals do not travel well through moisture or dirt.
- ✓ Place the outdoor transmitter and the Weather station in the desired shaded locations, and wait approximately 1-hour before permanently mounting the transmitter to ensure that there is proper reception.
- ✓ Do not mount the transmitter on a metal fence. This significantly reduces the effective range.

#### **MOUNT**

- ✓ Choose a location for the transmitter that is within <u>range</u> of the weather station and under an overhang for accuracy.
- ✓ Install one mounting screw into a wall leaving approximately ½ inch (12.7mm) extended.
- ✓ Place the transmitter onto the screw, using the hanging hole on the backside.
- ✓ Gently pull the transmitter down to lock the screw into place.

**Note**: Always ensure that the transmitter locks onto the screw before releasing.

## Distance | Resistance | Interference

#### Distance:

- ✓ The maximum transmitting range in **open air** is over 330-feet (100 meters) between the outdoor transmitter and the weather station.
- ✓ Consider what is in the signal path between the weather station and the transmitter.
- ✓ Consider the distance the weather station is located away from other electronic 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 transmitter and the weather station (330 feet 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 transmitter on a metal fence. This significantly reduces the effective range.

#### Interference:

- ✓ Consider items in the signal path between the transmitter and the weather station.
- ✓ Sometime a simple relocation of the transmitter or the weather station will correct the interference issue.
- ✓ Windows can reflect the radio signal.
- ✓ Metal will absorb the RF (radio frequency) signal.
- ✓ Stucco is held to the wall by a metal mesh.
- ✓ Transmitting antennas (ham radio, emergency dispatch center, airports, military base etc.)
- ✓ Electrical wires (utilities, cable etc.)
- ✓ Vegetation is full of moisture and reduces signal.
- ✓ Dirt: Trying to receive a signal through a hill is difficult.

## **Weather Station**

#### 12-Hour Time Format

✓ Only has 12 hour time format.

## Power Requirements

✓ 2-AA alkaline batteries power the weather station

## Does the Weather station Have a Backlight?

- ✓ No, this weather station does not have a backlight.
- ✓ Generally, an a/c power cord is required for products to have a backlight.
- ✓ This weather station does not use a/c power cord.

#### Weather Forecast

Forecast icons such at sun, sun with clouds, and clouds with rain are predicting what you will see 6-12 hours in the future not what you see currently. All forecasting is 75% accurate.

- ✓ Sun means pressure is raising and weather should be improving not that it would be sunny.
- ✓ Sun with clouds means pressure is steady.
- ✓ Clouds with rain mean pressure is falling not that you will have rain or snow.

**Note:** After set up, readings for Weather Forecasts should be disregarded 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 therefore result in a more accurate forecast.

## Dashes, OFL or Stuck Indoor Temperature

- ✓ This is generally a power related issue.
- ✓ <u>Batteries</u> may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Insert fresh alkaline batteries with correct polarity.
- ✓ If the indoor temperature is still dashes or OFL, the weather station may need replacement.

## Inaccurate Indoor Temperature Reading

- ✓ **Side-by-side test**: Bring the outdoor transmitter in the house and place it next to the weather station for 2 hours.
- ✓ Compare indoor and outdoor temperature. The temperature should be within 4 degrees to be within tolerance. See the section on <u>accuracy</u> for details.
- ✓ Look for heat sources such as sunlight, door or window frames, or reflected heat of cold.

## Manually Set Time | Date: Program Menu

Press and hold the SET key for 5 seconds to enter the manual setting mode.

- 1. **CONTRAST**: LCD and a number will flash. Press and release the PLUS button to adjust the contrast. Press and release the SET key to continue to the next item.
- 2. **DST**: dSt and ON or OFF will flash. Press and release the PLUS button to turn Daylight Saving Time on or off. Press and release the SET key to continue to the next item.
- 3. **HOUR**: The Hour will flash. Press and release the PLUS button to adjust the hour. Press and release the SET key to continue to the next item.
- 4. **MINUTES**: LCD and a number will flash. Press and release the PLUS button to adjust the minutes. Press and release the SET key to continue to the next item.
- 5. **YEAR**: The year will flash. Press and release the PLUS button to adjust the year (the year will only show in the program menu). Press and release the SET key to continue to the next item.
- 6. **MONTH**: The Month will flash. Press and release the PLUS button to adjust the month. Press and release the SET key to continue to the next item.
- 7. **DATE**: The Date will flash. Press and release the PLUS button to adjust the date (day of the week will set itself). Press and release the SET key to confirm and exit the program menu.

#### Sunrise | Sunset location

Press and hold the SUN key for 5 seconds to enter the location for sunrise/sunset times. Please use the location most directly in a North/South direction of your location if you location is not listed in the manual.

- 1. **COUNTRY**: The country will flash USA or CAN. Use the PLUS button to select the country. Press and release the SUN key to continue.
- 2. **STATE**: The state abbreviation will flash. Use the PLUS button to select the state. Press and release the SUN key to continue.
- 3. **CITY**: The city abbreviation will flash. Use the PLUS button to select city closest to your location. If no city location is close, use a city aligned to the north or south of your location for most accurate times. Press the SUN key to confirm selection. The station will show dashes briefly while calculating the sunrise/sunset times for the chosen location.
- 4. If the Sunrise/Sunset time is off a few minutes, this is normal. If it is off by 1 hour please check the DST setting in the program menu.

## Display options

Press and release the SUN button to toggle between the displays of:

- Hours of sunlight
- Location
- Month, Date (the year will not show on the display).
- Seconds

## Weather Station Has Missing Segments

- ✓ This is generally a power related issue.
- ✓ <u>Batteries</u> may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the weather station unpowered for 1-2 hours.
- ✓ Insert 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.
- ✓ This film will be easy to peel off the LCD.
- ✓ With all power removed the weather station should be blank.
- ✓ If numbers still appear, please check for scratch guard.
- ✓ Check that the batteries are installed correctly.
- ✓ This is generally a power related issue.
- ✓ <u>Batteries</u> may be overpowered or underpowered. Remove batteries from the weather station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.
- ✓ Insert fresh alkaline batteries into the weather station.

## Weather Station Display Is Frozen

✓ 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. This can make the weather station display appear "frozen".

- ✓ With all power removed the weather station should be blank.
- ✓ If numbers still appear, please check for scratch guard.
- ✓ Check that the batteries are installed correctly.
- ✓ This is generally a power related issue.
- ✓ <u>Batteries</u> may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.
- ✓ Insert fresh alkaline batteries into the weather station.

## Weather Station is Blank: No Letters, Numbers or Dashed Lines

- ✓ Check that the batteries are installed correctly.
- ✓ <u>Batteries</u> may be overpowered or underpowered. Remove batteries from weather station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.
- ✓ Insert fresh alkaline batteries into the weather station.