

WS-9009-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 temperature 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)
- ✓ **Temperature Station:** Use alkaline batteries. Overpowered or underpowered batteries may cause loss of indoor readings, missing segments, dim display etc.

Temperature Station Factory Restart

FACTORY RESTART:

- ✓ **RESTART DISTANCE:** For best results please bring the outdoor transmitter in the house and place 5-10 feet from the display unit.
- ✓ **REMOVE POWER:** Remove batteries from the transmitter and from the temperature station.
- ✓ **DISCHARGE ELECTRICITY:** With the power removed, press one of the buttons on the display at least 20 times to clear all memory. Please do this even if the display is blank to remove any random electricity. Verify the display is blank.
- ✓ **UNPOWERED FOR 15 MINUTES:** Let the temperature station and transmitter rest without batteries for 15 minutes.
- ✓ **IMPORTANT:** Failure to allow a temperature station to rest for 15 minutes can result in failure to connect with the outdoor transmitter or missing segments on the display.
Note: The instruction manual describes a setup for a new unit that has not had time to build up residual electricity.
- ✓ **BATTERIES:** Please be sure you are using fresh batteries testing to a minimum of 1.48, on a voltmeter that reads in numbers.
- ✓ **TRANSMITTER:** Place batteries into the outdoor transmitter first. Make sure batteries are installed according to the diagrams in the battery compartment.
- ✓ **TEMPERATURE STATION:** Install batteries into the temperature station according to the diagram in the battery compartment.
- ✓ **CONNECTION:** Allow the transmitter and display to remain 5 feet apart for 15 minutes to establish a strong connection. Do not press buttons at this time. You should see a reading on the outdoor temperature area in the first minute.
- ✓ See the section on mounting and distance/resistance/interference for details on mounting the outdoor transmitter.

Outdoor Temperature Transmitter

Compatible Outdoor Transmitters

- ✓ A TX38U-IT outdoor transmitter is compatible with this Temperature Station.

Power Requirements

- ✓ 2-AAA batteries power the outdoor transmitter.
- ✓ We recommend alkaline batteries for the transmitter.

Dashes shown for Outdoor Temperature

- ✓ Dashes means the connection is lost between the Temperature Station and the outdoor transmitter.
- ✓ Batteries often resolve the connection.
- ✓ Distance/Resistance can cause loss of connection between the transmitter and the Temperature Station.
- ✓ Reorientation of the Temperature Station 90 degrees towards the outdoor transmitter may provide better reception.
- ✓ Complete a factory restart.

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 Temperature Station for 2 hours.
- ✓ Compare indoor and outdoor temperature. The temperatures should be within 4 degrees to be within tolerance.
- ✓ If the transmitter reads correctly when next to the Temperature 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 Temperature Station is reading the correct outdoor transmitter. Place the transmitter in the freezer for an hour and watch the temperature drop on the Temperature Station.
- ✓ **Indoor distance test:** Please complete the Restart with transmitter and Temperature 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

Temperature Station. Observe to see if the temperature remains on consistently for 1-hour.

- ✓ If the temperature remains while in the house then it is likely a distance/resistance issue. Move the transmitter to find a location where the temperature reading will hold.
- ✓ Distance/Resistance can cause loss of transmitter signal.
- ✓ Check Batteries.

Outdoor Temperature Shows OFL

- ✓ OFL stands for Outside Factory Limits.
- ✓ The outdoor transmitter is sending and the Temperature Station is receiving the signal.
- ✓ Check Batteries. Overpowered or underpowered batteries can cause this reading.
- ✓ Replace outdoor transmitter.

Outdoor Temperature Changes Constantly

- ✓ You may have an additional compatible outdoor transmitter within range.
- ✓ Occasionally a neighbor will have a compatible outdoor transmitter that is within range.

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 Restart with fresh 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.

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 distance and resistance between the transmitter and temperature 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.

Fahrenheit/Celsius

- ✓ This temperature station reads in Fahrenheit only.

MIN/MAX Temperature Readings

This temperature station will show the minimum and maximum temperatures from setup until you reset the min/max temperatures or remove the batteries from the temperature station. If you wish a 24-hour min/max reading, reset the min/max temperatures at the same time each day.

View Minimum and Maximum Records: When you are in Indoor temperature mode, you will view or reset the Indoor min/max temperatures. When you are in Outdoor mode, you will view the Outdoor min/max records.

- Press the IN/OUT key to view the current Indoor/Outdoor temperature
- Press the MIN/MAX key to view the MIN record
- Press again the MIN/MAX key to view the MAX record.
- Press the MIN/MAX once more to return to current Indoor/Outdoor temperature.

Reset the Minimum and Maximum Records: To reset the indoor or outdoor MIN and MAX temperatures press and hold the MIN/MAX button for 5 seconds while in the Indoor or Outdoor mode. Temperature will then reset to the **current** values.

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 has vents.
- ✓ 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 Temperature Station.
- ✓ 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.
- ✓ Place the outdoor transmitter and the Temperature 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

- ✓ Remove the mounting bracket from the remote temperature transmitter.
- ✓ Place the mounting bracket over the desired location (wall or table).
- ✓ Through the screw holes of the bracket, mark the mounting surface with a pencil.
- ✓ Screw mounting bracket onto the mounting surface. Ensure that the screws are flush with the bracket.
- ✓ Insert the remote temperature transmitter into the bracket.

Note: Mounting with adhesive tape is not recommended as a permanent mounting solution. Only use the adhesive tape during set-up process.

Position Temperature Station

- ✓ The Temperature Station has a wide base to sit on a desk or table.
- ✓ Choose a location 6 feet or more from electronics such as cordless phones, gaming systems, televisions, microwaves, routers, baby monitors, etc., which can prevent signal reception.
- ✓ Place within range of the outdoor transmitter.
- ✓ Be aware of electrical wires and plumbing within a wall. This will interfere with signal reception.
- ✓ The maximum transmitting range in open air is 330-feet (100 meters).
- ✓ Obstacles such as walls, windows, stucco, concrete, and large metal objects can reduce the range.

Distance/Resistance/Interference

Distance:

- ✓ The maximum transmitting range in open air is over 330-feet (100 meters) between the outdoor transmitter and the Temperature Station.
- ✓ Consider what is in the signal path between the Temperature Station and the transmitter.
- ✓ Consider the distance the Temperature 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 Temperature 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 Temperature Station.
- ✓ Sometime a simple relocation of the transmitter or the Temperature Station will correct the interference issue.
- ✓ Windows can reflect the radio signal.

- ✓ Metal will absorb the RF (radio frequency) signal.
- ✓ Stucco is held up by a metal mesh that can absorb the signal...
- ✓ 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.

Temperature Station

Power Requirements

- ✓ 2-AA alkaline batteries power this Temperature Station.

Dashes, OFL or Stuck Indoor Temperature/Humidity

- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from Temperature Station.
- ✓ Press any button 20 times. Leave the Temperature Station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.
- ✓ If the indoor temperature is still dashes or OFL, the Temperature 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 Temperature Station for 2 hours.
- ✓ Compare indoor and outdoor temperature. The temperature should be within 4 degrees to be within tolerance.
- ✓ Look for heat sources such as sunlight, door or window frames, or reflected heat of cold.

Temperature Station has missing segments

- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from Temperature Station.
- ✓ Press any button 20 times. Leave the Temperature Station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.

Temperature Station is dim

- ✓ Most Temperature Stations have a gray background. Place the Temperature Station at eye level. Is it still dim?
- ✓ Temperature 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 Temperature Station.
- ✓ Press any button 20 times. Leave the Temperature Station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.

Temperature Station has distorted display

- ✓ On a brand new Temperature Station, check for thin plastic films of printed scratch guard that may be on the LCD screen of the Temperature Station. This thin piece of plastic has printed numbers for store displays. This can make the Temperature Station display appear "frozen".
- ✓ With all power removed the Temperature 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.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from Temperature Station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.

Temperature Station display is frozen

- ✓ On a brand new Temperature Station, check for thin plastic films of printed scratch guard that may be on the LCD screen of the Temperature Station. This thin piece of plastic has printed numbers for store displays. This can make the Temperature Station display appear "frozen".
- ✓ With all power removed the Temperature 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.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from Temperature Station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.

Temperature Station is blank: No letters, numbers or dashed lines

- ✓ Check that the batteries are installed correctly.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from Temperature Station.
- ✓ Press any button 20 times. Leave the batteries out of the display for 2 hours.

Temperature Station 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 for leaking batteries, which may damage the Temperature Station.
- ✓ Battery life is over 12 months when using reputable battery brands.