

# 328-2314 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 the Professional 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. Hold the **LIGHT** and **ALERTS** buttons together for 5 seconds to reset the Professional weather station, clear all records, and return all settings to default.
2. The Professional weather station will fully populate, then return to a normal display and search for outdoor sensors.
3. While searching for the outdoor sensors the Wind Speed, Outdoor Temperature/Humidity and Rainfall totals will show dashes.
4. Once connected to the outdoor sensors (allow 3 minutes) the Wind Speed, Outdoor Temperature/Humidity, and Rainfall will show current readings.

**Note:** In the absence of wind or rain, these readings will show 00's, indicating sensor connection.

## BATTERY CHANGE

- ✓ After changing batteries in the Multi-Sensor, hold the **WIND** button for 3 seconds to search for the Multi-Sensor.
- ✓ After changing Batteries in the Temperature/humidity sensor, hold the **TEMP** button for 3 seconds to search for the sensor. On the sensor itself, press and release the TX button once.
- ✓ If this fails to connect the sensors to the station, bring the sensors about 5 feet from the station and complete a [Factory Restart](#).

## POWER REQUIREMENTS

- ✓ 2-AA batteries power the thermo-hygro sensor
- ✓ 3-AA batteries for the Multi-sensor (Wind, Rain, Lightning)
- ✓ 3-AAA Alkaline batteries for the Professional weather station

## COMPATIBLE SENSORS

- ✓ TX232TH-LCD Thermo-hygro
- ✓ TX231RW Wind, Rain, Lightning
- ✓ The above 915MHz sensors will read to this Professional weather station.

## THERMO-HYGRO SENSOR DASHES SHOWN FOR OUTDOOR TEMPERATURE/HUMIDITY

- ✓ Dashes means the connection is lost between the Professional weather station and the outdoor sensor.

- ✓ Batteries often resolve the connection.
- ✓ Distance/Resistance can cause loss of connection between the sensor and the Professional weather station.
- ✓ Reorientation of the Professional 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 Professional 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 Professional 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 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 a miss happens:**

- ✓ Hold the **TEMP** button for 5 seconds to search for sensor.
- ✓ The units try for 20 minutes to reconnect. After 20 minutes the thermo-hygro stops trying for an hour (to preserve battery life). After the 1-hour break, the thermo-hygro sensor will start another 20-minute re-connect cycle.
- ✓ Distance/Resistance can cause loss of sensor signal. Avoid having more than 1 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.

### 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 Professional 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.

### 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 in Fahrenheit (°F) or Celsius (°C).

### HI | LO TEMPERATURE/HUMIDITY RECORDS

**View:** Press and release the **TEMP** button to view indoor and outdoor temperature/humidity values with time and date of occurrence.

- ✓ Indoor temperature HIGH
- ✓ Indoor temperature LOW
- ✓ Indoor humidity HIGH
- ✓ Indoor humidity LOW
- ✓ Outdoor temperature HIGH
- ✓ Outdoor temperature LOW
- ✓ Outdoor humidity HIGH
- ✓ Outdoor humidity LOW

### RESET HI | LO RECORDS

1. While viewing individual values, hold the **MINUS** button for five seconds to reset the value.
2. Temperature, humidity, time and date stamp will reset to current.

### WIND CHILL | HEAT INDEX | DEW POINT

- ✓ Press **W/CHILL** button once to view Wind Chill
- ✓ Press twice to view Heat Index
- ✓ Press 3 times to view Dew Point

### WWVB ATOMIC TIME SIGNAL

- ✓ The **Temperature/Humidity Sensor** receives the Atomic Time Signal (WWVB) from Fort Collins, Colorado.
- ✓ The sensor will search for WWVB signal up to 5 minutes, then return to transmitting temp/humidity.
- ✓ The first search is 2 hours after startup.
- ✓ The atomic time search initiates every six hours until successful reception.

- ✓ The tower icon shows when sensor have received the signal.
- ✓ 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 and on the TH sensor. 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**.
3. This station offers seven time zones listed in letter format (default is EST):
  - AST Atlantic Time
  - EST Eastern Time
  - CST Central Time
  - MST Mountain Time
  - PST Pacific Time
  - AKT Alaskan Time
  - HAT Hawaiian Time
4. Check that **WWVB** 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 the Weather 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:**

[www.nist.gov/pml/div688/grp40/wwvb.cfm](http://www.nist.gov/pml/div688/grp40/wwvb.cfm)

**MULTI-SENSOR (WIND, RAIN, LIGHTNING)**

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

**WIND 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 OR WIND VANE

#### Replace wind cups:

1. Loosen the screw on side of cups
2. Remove cups
3. Install new cups
4. Tighten screw

**Note:** The screw in the wind cups will fit on the flat side of the metal stem on the sensor.

#### Replace directional vane:

1. Loosen the screw on side of vane
2. Remove direction vane
3. Install new vane
4. Tighten screw

**Note:** The directional vane attached to the stem on the sensor. The screw will tighten to the flat side of the stem for a secure fit.

### 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 Professional 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 Professional 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 Professional weather station.

#### WIND READING IS OFL

- ✓ Check the batteries.
- ✓ Replace multi-sensor.

#### MULTI-SENSOR SOLAR PANEL

The sensor is designed to operate on battery power. The solar panel alone will not operate the sensor 24/7. The solar panel extends battery life.

- ✓ The solar panel will operate the sensor with sufficient sunlight.
- ✓ Batteries are required to operate the sensor at night or days without sufficient sunlight.
- ✓ The solar panel extends the battery life.

#### UNDERSTANDING WIND READINGS

##### Wind Speed Readings-Update Every 30 seconds

- ✓ **Current Speed:** 30 second average of the wind speed.
- ✓ **Top Speed:** Highest instantaneous reading in the past 60 minutes. Updates, when a higher wind speed has occurred.

##### Wind History:

Press and release the **WIND** button to view the maximum wind history values.

- One Hour: past 60 minute period (default record no time stamp)
- 24-hour: Past 24 hour period, from last record
- 7 Days: Past 7-day period, from last record
- Month: Defined by Calendar Month i.e. January 1 - January 31
- Year: Defined by Calendar Year i.e. January 1 - December 31

#### RESET WIND HISTORY

1. While viewing individual values, hold the **MINUS** button for five seconds to reset the value.
2. Wind Speed, time and date stamp will reset to current.

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

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

#### RAIN READINGS

**Last 24 Hours:** Total rain that occurred from now, back 24 hours. 24 hour rainfall is constantly displayed.

Press and release the **RAIN** button to view rain history:

- One Hour: past 60 minute periods (default record no time stamp)
- Day: 24 hr. period from 12:00am - 11:59pm. With time stamp
- 7 Days: Past 7-day period, from last record
- Month: Defined by Calendar Month i.e. January 1 - January 31
- Year: Defined by Calendar Year i.e. January 1 - December 31
- Total: running total since station was powered up.

### REST RAINFALL HISTORY

- ✓ While viewing individual values, hold the **MINUS** button for five seconds to reset the value.
- ✓ Rainfall, time and date will return to current readings.

### RAIN READS 0.00

- ✓ Firmly pull up on the flat side of the black rain funnel to remove it from the sensor.
- ✓ 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.
- ✓ Mount the rain sensor level.
- ✓ Use the eraser end of a pencil to manually tip the rocker of the rain sensor 10 times.
- ✓ Wait at least 2 minutes for all the rain to collect.
- ✓ Check the rain area on the Professional weather station for a reading.

### RAIN READS DASHES

The Professional weather station and rain sensor are not connected.

- ✓ Check the batteries in the multi-sensor.
- ✓ Distance/Resistance can cause loss of sensor signal.
- ✓ Orient the Professional weather station 90 degrees towards the rain sensor for better reception.

### RAIN READS OFL

- ✓ OFL indicates that the Professional weather station is receiving a signal from the sensor.
- ✓ The Professional 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 Professional weather station read properly. There may be a problem with the Professional weather station.

## RAIN READS LOW

- ✓ Low rain readings indicate the rain sensor and Professional weather station are connected.
- ✓ Check 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.

### **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 Professional 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.

## CLEAN RAIN SENSOR

- ✓ Grasp the flat edge of the black rain funnel and pull up firmly to remove the funnel section.

- ✓ Gently remove debris or insects that are in the rain sensor and may prevent the rocker from moving freely.
- ✓ Press the funnel portion onto the sensor so it is firmly seated.

## ALERTS: TEMP, HUMIDITY, WIND, RAIN, LIGHTNING

The alerts menu is in the order listed below.

- ✓ Leave an alert OFF (disarmed) to skip setting that alert value.
- ✓ The alert icon will show when the alert is active.
- ✓ When armed alert value is reached, station will beep until a button is pressed.
- ✓ The flashing alert icon will indicate if is a LOW or HI alert.
- ✓ Press any button to stop the temp alert sound. The alert icon will flash while value is in alert range.

### Alert Order:

- Indoor LOW Temperature ON/OFF
- Indoor LOW Temperature Value 32°F to 122°F (0°C to 50°C)
- Indoor HIGH Temperature ON/OFF
- Indoor HIGH Temperature Value 32°F to 122°F (0°C to 50°C)
  
- Indoor LOW Humidity ON/OFF
- Indoor LOW Humidity Value 10%RH-99%RH
- Indoor HIGH Humidity ON/OFF
- Indoor HIGH Humidity Value 10%RH-99%RH
  
- Outdoor LOW Temperature ON/OFF
- Outdoor LOW Temperature Value -40°F-140°F (-40°C-60°C)
- Outdoor HIGH Temperature ON/OFF
- Outdoor HIGH Temperature Value -40°F-140°F (-40°C-60°C)
  
- Outdoor LOW Humidity ON/OFF
- Outdoor LOW Humidity Value 10%RH-99%RH
- Outdoor HIGH Humidity ON/OFF
- Outdoor HIGH Humidity Value 10%RH-99%RH
- Lightning ON/OFF
- Lightning Value 0-25 miles (0-40 kilometers)
  
- 24-hour Rainfall ON/OFF
- 24-hour Rainfall Value 0-393 inches (0-99.9mm)
  
- Top Wind Speed ON/OFF
- Top Wind Speed Value 0-111.8 (0-180kph)

### Set Alerts:

1. Hold the **ALERTS** button to enter alert set mode
2. Indoor LOW temperature alert OFF will show.
3. If you wish to set this alert value, press the + / - buttons to arm this alert ON.
4. When the alert is armed (ON) press the **ALERTS** button to set the alert value.
5. The Indoor LOW temperature alert value will flash.

6. Press the + / - buttons to change the alert value.
7. Press the **ALERTS** button to confirm and move to the next alert.
8. If you do not wish to set an alert, press the **ALERTS** button again to move to the next alert.
9. Press and release the **ALERTS** button until you get to the alert you wish to set.
10. To set the alert, first press the + / - buttons to turn the alert ON.
11. When the alert is armed (ON), press the **ALERTS** button to set the alert value. The alert value will flash.
12. Press the + / - buttons to change the alert value.
13. Press the **ALERTS** button to confirm and move to the next alert. Or press the **LIGHT** button to exit.

## ICE ALERT

The Ice alert is not programmable.

- When the outdoor temperature reaches the ice alert range, the ice alert icon will flash (no sound)
- When the temperature is above 37.4 °F (3 °C) or below 28.4 °F (-2 °C), the alert icon will not show.

## LIGHTNING DETECTION

The lightning detection sensor tracks the EMP (Electro Magnetic Pulse) emitted by a discharge up to 25 miles away.

- ✓ Indicates the *closest* discharge (miles or kilometers) to your sensor.
- ✓ This sensor is not designed to count the number of Cloud-to-Ground or Cloud-to-Cloud discharges.
- ✓ When a closer discharge occurs the number will update.
- ✓ After 60 minutes of no closer discharge, NO will be displayed.
- ✓ If additional discharges are farther away, the number displayed remains the closest discharge.
- ✓ In the [settings menu](#) you can select to display approaching distance in miles or kilometers.

**Note:** On occasion, turning on florescent lights, magnetic switches, or other electrical discharges may provide a false lightning reading.

## 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.

### TX232TH-LCD Thermo-hygro sensor:

#### Option 1

- ✓ Install one mounting screw into a wall leaving some extended.
- ✓ Place the transmitter onto the screw, gently pull the transmitter down to lock the screw into place.

#### Option 2

- ✓ Insert the mounting screw through the front of the transmitter and into the wall.
- ✓ Tighten the screw to snug (do not over tighten).
- ✓ Mount the temperature/humidity sensor on a north-facing wall or in any well shaded location. Sun will make it read high.
- ✓ Under an eave or deck rail is preferred.
- ✓ Be sure the outdoor sensor is mounted vertically to drain moisture.
- ✓ Avoid mounting under a metal roof and use stainless screws for best WWVB reception and RCC transmission.
- ✓ The maximum wireless transmission range to the Professional weather station is over 330 feet (100 meters) in open air, not

**TX231RW Multi-sensor:**

- ✓ For most accurate wind speed and rainfall readings, mount the Multi-sensor in an open area clear for 50 feet in all directions.
- ✓ Mount with the solar panel facing south so the wind direction is correct. See N, S, E W, embossed on the top of the sensor.
- ✓ Use the bubble level on the top of the sensor to ensure it is level, for accurate rainfall readings.
- ✓ The maximum wireless transmission range to the station is over 330 feet (100 meters) in open air, not including walls or trees.
- ✓ Mount sensor vertically.
- ✓ Cups should be on the top of the sensor.
- ✓ Attach to mounting surface with screws through the mounting bracket.
- ✓ The sensor can be mounted from the bottom or from the side.

**Use your own mounting pole:**

- ✓ Insert your own mounting pole into the sensor.
- ✓ Tighten screws
- ✓ Mounting bracket would not be used.

**DISTANCE/RESISTANCE/INTERFERENCE**

**Distance:**

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

### **Interference:**

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

## **MANUALLY SET TIME: PROGRAM MENU**

- ✓ The **SET** button will move through the program menu.
- ✓ The +/- buttons will adjust values.
- ✓ Press the **LIGHT** button at anytime to exit.

### **Program Menu:**

1. Hold the **SET** button two seconds to enter time set mode.
2. BEEP ON will show. Press the + / - buttons to turn the beep sound OFF.
3. Press the **SET** button to confirm adjustments and move to WWVB (Atomic Time) ON/OFF.
4. WWVB ON and the tower icon will show. Press the + / - buttons to turn the Atomic time signal OFF. You will not receive atomic time signal.
5. Press the **SET** button to confirm adjustments and move to select your time zone.
6. EST will show. Press the + / - buttons to select your time zone.
  - AST=Atlantic
  - EST=Eastern
  - CST=Central
  - MST=Mountain
  - PST= Pacific
  - AKT=Alaskan
  - HAT= Hawaiian

7. Press the **SET** button to confirm adjustments and move to DST (Daylight Saving Time Indicator) ON/OFF.
  8. DST ON and will show. Press the + / - buttons to disable the daylight saving time indicator (OFF).
  9. Press the **SET** button to confirm adjustments and move to set the hour.
  10. The Hour will show. Press the + / - buttons to adjust the hour.
  11. Press the **SET** button to confirm adjustments and move to set the minutes.
  12. The Minutes will show. Press the + / - buttons to adjust the minutes.
  13. Press the **SET** button to confirm adjustments and move to set the year.
  14. The "Y" and the two-digit year will show. Press the + / - buttons to adjust the year.
  15. Press the **SET** button to confirm adjustments and move to set the month.
  16. The "M" and a number will show. Press the + / - buttons to adjust the month.
  17. Press the **SET** button to confirm adjustments and move to set the date.
  18. The "D" and a number will show. Press the + / - buttons to adjust the date.
  19. Press the **SET** button to confirm adjustments and move to set the date format (M/D or D/M).
  20. The M/D (Month/Date) will show. Press the + / - buttons if you prefer D/M (Date/Month format).
  21. Press the **SET** button to confirm adjustments and move to select Fahrenheit or Celsius.
  22. The °F will show. Press the + / - buttons to change to Celsius.
  23. Press the **SET** button to confirm adjustments and move to select rain in Inches or Millimeters.
  24. "IN" (inches) will show. Press the + / - buttons to change to "MM" millimeters).
  25. Press the **SET** button to confirm adjustments and choose your Wind Direction display in numbers or cardinal direction (N, S, E, W).
  26. The "WD" will show on top and wind direction in numbers or letters will show below the compass rose. Press the + / - buttons to how to display your wind direction.
  27. Press the **SET** button to confirm adjustments and select wind speed in MPH or KPH.
  28. The MPH (miles per hour) will show. Press the + / - buttons if you prefer KPH (kilometers per hour).
  29. Press the **SET** button to confirm adjustments and select approaching lightening in MPH or KM.
  30. The MPH will show. Press the + / - buttons if you prefer kilometers (KM)
  31. Press the **SET** button to confirm and exit.
- Note:** Press the LIGHT button at any time to exit.

## BACKLIGHT

**A/C adapter:** The backlight is on continuously when operating the Forecast Station with the 5-volt a/c adapter.

**Note:** When the Adapter is NOT in use, the Hi/Low/Off light feature is not available.

Try this exercise in a dim room. The Professional weather station has a bright, dim and OFF setting for the backlight. Wait 15 seconds after pressing the LIGHT button to see if backlight stays on. This will assure it is not in OFF mode.

1. Be sure the AC cord is plugged in correctly to the Professional weather station and the outlet.
2. Remove the batteries.

3. Press the LIGHT button. If the backlight comes on and the display is active your AC cord works.
4. Wait 15 seconds to see if the back light stays on.
5. If the backlight goes out after 15 seconds, repeat #3.

### FORECAST ICONS INACCURATE

The Professional weather station predicts weather condition of the next 12-hours based on the change of atmospheric pressure with 70-75% accuracy.

**Note:** As weather conditions cannot be 100% correctly forecasted we are not responsible for any loss caused by an incorrect forecast.

#### **Animated Forecast Icons:**

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

**Note:** The "snow" icon appears when the temperature is below 32°F (0°C) and the forecast is rainy or stormy.

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

### WEATHER STATION HAS MISSING SEGMENTS

- ✓ This is generally a power related issue.
- ✓ Batteries may be overpowered or underpowered. Remove batteries from Professional weather station.
- ✓ Press any button 20 times. Leave the Professional 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 Professional weather stations have a gray background. Place the Professional 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 Professional weather station.
- ✓ Press any button 20 times. Leave the Professional weather station unpowered for 1-2 hours.
- ✓ Install fresh alkaline batteries with correct polarity.

#### WEATHER STATION HAS DISTORTED DISPLAY

- ✓ On a brand new Professional weather station, check for thin plastic films of printed scratch guard that may be on the upper and lower screen of the Professional weather station. This thin piece of plastic has printed numbers for store displays.
- ✓ With all power removed, the Professional 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 Professional weather station.
- ✓ Press any button 20 times. Leave the batteries out of the Professional 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 Professional weather station.
- ✓ Press any button 20 times. Leave the batteries out of the Professional weather station for 2 hours.