

# 327-1418BW FAQs

We are weather enthusiasts like you and know proper running equipment is important. These FAQs provide valuable information on setup, positioning, and troubleshooting of your station. We recommend Adobe Reader version 10 or greater available at: <http://get.adobe.com/reader>

## CONTENTS

327-1418BW FAQs .....	1
CONTENTS .....	1
BATTERIES: What do I need to know about batteries? .....	2
HARDWARE: Sensors and Station.....	2
What are the power requirements for this station? .....	2
SETUP: How do I setup my station?.....	2
MOUNTING: Where do I mount/position my sensor?.....	2
Where to I place my station? .....	4
How do I manually set the time? .....	4
WEEKDAY: How do I correct the day of the week? .....	6
Does this station have 12 hour and 24 hour time options?.....	6
How do I change the Calendar Display? .....	6
How do I view THE INDOOR Temperature? .....	6
How do I view my HI and LO Temperature/Humidity Readings?.....	6
How do I RESET HI/LO Temperature/Humidity Readings?.....	7
Why doesn't the temperature/humidity readings on my station match the weather report? .....	7
How do I interpret the Current Wind Readings?.....	7
Help me understand the Wind History Readings.....	7
How do I reset the Wind History Readings? .....	8
. How Often does my Wind Sensor Update? .....	8
Can I set Alerts?.....	9
What does a reading of "HI" or "LO" mean? .....	9
What does "NO" mean? .....	9
Why do my sensor readings come and go?.....	10
What is Distance I Resistance I Interference? .....	10
Can I change THE BATTERIES in my sensors without losing data?.....	11
FACTORY RESET: How do I factory reset my station?.....	11

Can I add sensors?..... 11  
How do I reset the Rain History Readings?..... 12

## BATTERIES: WHAT DO I NEED TO KNOW ABOUT BATTERIES?

- Good fresh batteries are important for the best performance in your sensors and as backup in your station.
- Batteries with an expiration date of 2029, were manufactured in 2019.
- We recommend batteries with an expiration date 6 years in advance of the current year for best performance.
- A minimum voltage of 1.48 v per battery is required for the best performance.
- Lithium batteries may be used in outdoor sensors. Alkaline batteries for the station.

## HARDWARE: SENSORS AND STATION

**Your 327-1418BW station comes with:**

**TX141TH-B** Temperature/Humidity sensor

**Note:** This station can read any version of the TX141TH-B sensor.

**TX145W** Glide Wind Sensor

Both sensors operate at 433MHz RF.

## WHAT ARE THE POWER REQUIREMENTS FOR THIS STATION?

**TX141TH-B:** 2 “AA” batteries

**TX145W:** 3 “AA” batteries

**327-1418BW:** 2 “AA” batteries

## SETUP: HOW DO I SETUP MY STATION?

1. Insert 3 “AA” batteries into your Glide Wind Sensor
2. Insert 2 “AA” batteries into your TH Sensor and Station.
3. Enter Basic Settings.
4. Allow up to 10 minutes for sensors to connect.
5. Place your sensors outside in appropriate locations.

## MOUNTING: WHERE DO I MOUNT/POSITION MY SENSOR?

**Temperature/Humidity Sensor:**

- Insert a mounting screw through the hole at the top to securely mount the sensor. It can also hang from the back using a nail.

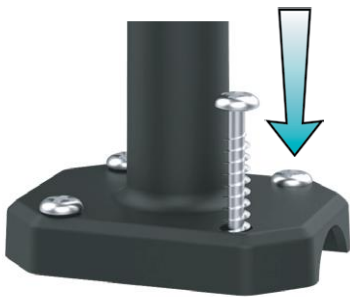
- Mount the sensor vertically in a protected well-shaded area. Keeping it out of direct weather elements such as sunlight, rain, snow, etc. will help avoid inaccurate readings.
- For additional protection against weather elements, a Sensor Weather Shield: [bit.ly/weather-shield](http://bit.ly/weather-shield) can be purchased separately.
- The maximum wireless transmission range to the station is up to 330ft (100m) in open air. This does not include walls, floors, or other large obstructions.
- For online video instructions, visit: [bit.ly/th\\_sensor\\_mounting](http://bit.ly/th_sensor_mounting)



### Glide Wind Speed Sensor:

- Ideally, the sensor should be mounted on the tallest object in your area. Avoid positioning it parallel or below eaves, rooflines, trees, or other objects that may obstruct wind readings.
- Make sure all the screws on the Mounting Bracket, Wind Cups, and Battery compartment are securely fastened.
- The sensor should be mounted with the Wind Cups on top.
- To optimize battery life, ensure the Solar Panel is facing the sun. The Solar Panel alone will not operate the sensor, batteries are required.
- For more information visit: [bit.ly/wind\\_sensor\\_mounting](http://bit.ly/wind_sensor_mounting)
- The maximum wireless transmission range to the station is up to 330ft (100m) in open air. This does not include walls, floors, or other large obstructions.

### Basic Mounting:



2. Mount the Mast to a flat surface with the four provided screws.

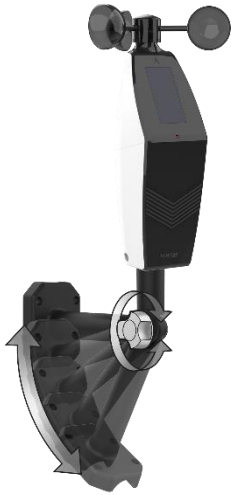


2. Place the Glide Sensor on top of the Mast. Ensure the Solar Panel is facing south.



1. Secure the Glide Sensor to the Mast by tightening the screws on the side.

## Flexible Installation



1. Install the Hand Screw to the bracket, then Secure the Glide Sensor to the Mast by tightening the screws on the side. This configuration allows you to attach the sensor to angled locations and easily adjust ensure the Mast and Sensor are level.

## Advanced Installation

Some advanced installation options include tripods, wall mounts, chimney mounts, and many others. Any of these can be combined with U-bolts for attachment onto a tall cylindrical conduit using our Adjustable Base. These options will require additional equipment and professional help for the best results.

## WHERE TO I PLACE MY STATION?

Your station is designed for flexible placement on a desk or countertop or close the stand to position on the wall.

- The best reception occurs when only one wall is between your station and each sensor outside.
- Position you station six feet from other electronics and wireless devices. If you suspect RF (radio frequency) interference, simply move your weather station a few feet.
- Use the hanging hole on the back of the station to mount on a wall.
- Use the pull out stand to place on a desk or counter.

## HOW DO I MANUALLY SET THE TIME?

**Note:** Only press or hold one button at a time during settings.

1. Hold the SET/TIME button for 2 seconds to enter settings mode.
2. Press the + or - button to adjust the flashing values.
3. Hold the + or - button to adjust quickly.
4. Press the SET/TIME button to confirm adjustments and move to the next item.
5. Press the EXIT/RAIN button at any time to exit.

## Settings Order:

- HELLO
- Beep ON/Off
- 12HR/24HR
- Hour
- Minute
- Year
- Month
- Date
- Month/Date or Date/Month
- Fahrenheit/Celsius
- Decimal ON/OFF
- Wind Speed MPH or KMH
- Rain Inches or Millimeters
- Thank You

**Weekday:** The Weekday will set automatically when your Year, Month and Date are set.

## Settings Menu

1. **On startup or if you hold the SET/TIME button for 2 seconds to enter setting mode. HELLO, will show for two seconds, then automatically move to Beep ON/OFF.** BEEP ON will flash. Press the + or - button to turn select BEEP OFF.
2. Press the SET button to select 12/24 hour time. FORMAT will show. 12HR flashes. Press the + or - button to turn select 24 hour time format.
3. Press SET to confirm and move to the hour. HOUR will show. The hour flashes. Press the + or - button to choose the hour.
4. Press SET to confirm and move to the minutes. The MINUTES will show. Minutes flash. Press the + or - button to choose the minutes.
5. Press SET to confirm and move to the year. The YEAR will show. 2023 will flash. Press the + or - button to change the year.
6. Press SET to confirm and move to the month. The MONTH will show. The Month will flash. Press the + or - button to change the month.
7. Press SET to confirm and move to the date. DATE will show. Date will flash. Press the + or - button to change the date.
8. Press SET to confirm and move to the Month/Date or Date/Month. MONTH/DATE will show. Press the + or - button to change to DATE/Month.
9. Press SET to confirm and move to the temperature unit. FAHRENHEIT will show. °F will flash. Press the + or - button if you prefer °C (Celsius).
10. Press SET to confirm and select Decimal ON or Off. DECIMAL ON will flash. Press the + or - button to select DECIMAL OFF.
11. Press SET to confirm and move to Wind Speed units. WIND SPEED will show. MPH will flash. Press the + or - button to select KMH.

12. Press SET to confirm and move to the rain units. RAIN INCH will show. Press the + or - button to select MM.
13. Press SET to confirm. THANK YOU shows for 2 seconds, then exit the setting menu.

**Note:** After 10 seconds with no button press, the station returns to normal time display.

### WEEKDAY: HOW DO I CORRECT THE DAY OF THE WEEK?

- The day of the week will set when the Year, Month, and Date are set. If your day of the week is incorrect, yet the month and date are correct, please go the program menu and check the YEAR setting.

### DOES THIS STATION HAVE 12 HOUR AND 24 HOUR TIME OPTIONS?

- Yes, you can select 12 hour or 24 hour time format in the program menu.


### HOW DO I CHANGE THE CALENDAR DISPLAY?

- Press and release the DATE button to change the calendar display or have it not shown.
- Station will stay on selection.
  - Full Weekday
  - Weekday / Month / Date
  - Month / Date / Year
  - No Date

### HOW DO I VIEW THE INDOOR TEMPERATURE?

Your stations defaults to show Outdoor Temperature first. The Indoor Temperature is in the same location.

#### **To select you Temperature View:**

1. Hold the IN/OUT button until the display changes.
2. Press and release the + or – button to select Outdoor Temperature, Indoor Temperature or Auto-scroll both temperatures.
3. When the Auto-scroll Icon  shows, the station will switch between Outdoor and Indoor Temperature every 5 seconds.

### HOW DO I VIEW MY HI AND LO TEMPERATURE/HUMIDITY READINGS?

Your high and low temperature and humidity readings are recorded with time and date of occurrence. Each time a new high or low reading is recorded, that reading with time and date of occurrence will show.

Press and release the **IN/OUT** button to toggle the HI/LO readings with time/date stamp.

These readings will be from the time the station was set up. Time and date of the HI or LO reading will show.

**Order:**

- Outdoor HI Temperature Record
- Outdoor LO Temperature Record
- Outdoor HI Humidity Record
- Outdoor LO Humidity Record
  
- Indoor HI Temperature Record
- Indoor LO Temperature Record
- Indoor HI Humidity Record
- Indoor LO Humidity Record

### HOW DO I RESET HI/LO TEMPERATURE/HUMIDITY READINGS?

**Reset HI/LO Temperature/Humidity Readings (each reset individually):**

1. Press the IN/OUT button to view the individual temperature & humidity values you would like to reset.
2. Hold the MINUS (-) button until dashes appear.
3. The reading will then reset to the current value

### WHY DOESN'T THE TEMPERATURE/HUMIDITY READINGS ON MY STATION MATCH THE WEATHER REPORT?

- Your temperature and humidity readings are from your sensor at your location. Your local reporting station can be miles away so readings will differ.

### HOW DO I INTERPRET THE CURRENT WIND READINGS?

**Wind Speed Readings:**

- **WIND SPEED:** 31 second **highest** wind speed. Within 31s cycle time, there are 10 sample data (3s for each). The largest among these 10 samples will be sent as the current wind speed.
- **Last Hour:** Top Wind Speed in the past 60-minute period, from last record (10 minutes a timestamp, total 6 records) (default record no time stamp).

### HELP ME UNDERSTAND THE WIND HISTORY READINGS.

In addition to the one hour history which is constantly shown on the station, you can view wind speed history at 24 hours, 7 days, current month, and current year.

1. Press and release the WIND button to view the maximum Wind Records values (Top Speed).
2. When viewing MONTH, use the PLUS button to toggle through the current month and past 11 months top speed.
  - **24 Hour Wind Speed** – Shows the top speed in the past 24 hours from the last record. This is a rolling 24 hour period and not a set midnight to midnight reading. This means it updates each hour to show you the past 24 hours.
  - **7 Days** - Shows the top speed in the past 7 days from the last record. This is a rolling 7 day period, not a Monday through Sunday record. Updates at midnight each day.
  - **Month** – Shows top wind speed for the current month. The record is from the first day of the month to the last day of the month. When in the middle of the month, it will show the readings from the first day of the month to the last full day. Example: If today is the 15<sup>th</sup> of the month, the top speed is from the 1<sup>st</sup> to the 14<sup>th</sup>. After midnight, the 15<sup>th</sup> will be included.  
**Note:** Press and release the PLUS (+) button to view up to 11 previous months or history.
  - **Year** – Shows top wind speed for the current year. January 1, through December 31<sup>st</sup>.

### Wind Speed Graph:

The Wind Speed Graph will fill in based on the Wind Speed from the Sensor.

**Wind Cup Animation:** If the wind speed is equal to 0, no animation. 

The wind cups icon should be animated. The icons will move at different speeds according to the actual speed reading. (High wind speed, icon rotation is faster)

## HOW DO I RESET THE WIND HISTORY READINGS?

### Your wind speed history readings are reset individually.

1. Press and release the WIND button to view the individual wind speed record you would like to reset.
2. Hold the MINUS(-) button until dashes appear.
3. The reading will then reset to the current wind speed value.

## HOW OFTEN DOES MY WIND SENSOR UPDATE?

- Within 31s cycle time, there are 10 sample data (3s for each). The largest among these 10 samples will be sent as the current wind speed.
- Any change of 0.8km Wind Speed will cause the sensor to send the top speed for those 31 seconds.
- If there is no change in wind speed, the sensor will transmit every 3 minutes to preserve battery life.



## CAN I SET ALERTS?

This station provides custom alerts for the following measurements:

- High Wind Speed
- High Feels Like Temperature
- Low Feels Like Temperature

### Set Alerts:

1. Hold then release the ALERTS button to enter the Alert Settings Menu.
2. Press and release the +/- buttons to activate/deactivate individual alerts or press the ALERTS button to skip to the next option.
3. Once activated, use the +/- buttons to adjust the values. Press and release the ALERTS button to confirm and move forward.


### Triggered Alerts:

- When an alert value is reached, the corresponding value and alert icon will flash on screen.
- The station will beep 5 times each minute until the value moves out of the alert range.
- Press any button to stop the alert sound.

## WHAT DOES A READING OF “HI” OR “LO” MEAN?

- If your outdoor temperature reading shows “HI” or “LO”, check that your batteries are good.
- Overpowered or underpowered batteries can cause this reading.
- If the batteries are good, replace the outdoor sensor.
- If your temperature is fine but your humidity is reading “HI” or “LO” or dashes, your humidity may be below 10% Relative Humidity. Your sensor does not read below 10% humidity.

## WHAT DOES “NO” MEAN?

- If any sensor loses connection to the weather station for any reason, the weather station will show **NO** after 20 minutes.
- The weather station will search for 3 minutes every hour to reconnect with sensor.
- Reception Icon will flash while searching for both sensors. Dashes will show while searching.
- When sensors are received, the icon will be  solid.
- If no sensor is received, the icon would disappear after 3 minutes of searching if sensor is not found. **NO** will again show in the sensor area.
- Hold the PLUS button to manually search for all sensors.

**Note:** If one sensor is received, the reading will show for that sensor and NO for the sensor not received.

If your sensor data is still not appearing after these steps, please contact our support staff. For additional help visit: [bit.ly/basic\\_restart](https://bit.ly/basic_restart)

## WHY DO MY SENSOR READINGS COME AND GO?

- RF (radio frequency) communication may come and go occasionally. This can be normal in some environments (e.g., moist climates).
- If a sensor goes out, please wait 2-4 hours for it to reconnect on its own. Please be patient – 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:**

- If the sensor loses connection to the station for any reason, the station will show NO after 20 minutes.
- The station will search for 5 minutes every hour to reconnect with sensor.
- Be sure you have good batteries. Manually search for your sensor.

### **Try this:**

- Bring your sensor within 10 feet of your station and make sure it is connected to the station.
- After 15 minutes move the sensor into the next room with a wall between the sensor and the station for 1 hour.
- If there is no loss of signal in that hour, move the sensor just outside.
- Continue moving the sensor back to its original location.
- If you lose connection, look for sources of interference.

## WHAT IS DISTANCE | RESISTANCE | INTERFERENCE?

### **Distance:**

- The maximum transmitting range in open air is over 330 feet (100 meters) between each sensor and your station.
- Consider the signal path from your station to each sensor as a straight line.
- Consider the distance the station is from other electronics in the home.

### **Resistance:**

- Each obstacle: walls, windows, vegetation, stucco, concrete, and large metal objects will reduce the effective signal range by about one-half.
- Mounting your sensors on a metal fence can significantly reduce the effective signal range.

### **Interference:**

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

## CAN I CHANGE THE BATTERIES IN MY SENSORS WITHOUT LOSING THE DATA?

We designed this station for convenience, so that a simple change of batteries does not lose data or require you to power down your station.

- Low Battery by Time, replace batteries in Station.
- Low battery by Outdoor Humidity, replace batteries in the TH sensor
- Low battery by Wind, replace batteries in the Glide Wind sensor.
- Low Battery by Rain, replace batteries in Rain sensor.
- Then hold the PLUS button for 3 seconds and your station will search for all sensors.



## FACTORY RESET: HOW DO I FACTORY RESET MY STATION?


### To factory reset your station:

1. Hold the ALERTS and EXIT/RAIN buttons together for 5 seconds.
2. When your station resets it will look for all sensors. Allow at least ten minutes to reacquire the sensors.

## CAN I ADD SENSORS?

This station can read an add-on **Rain Sensor** (TX145R) to read in the Time Area. Visit [bit.ly/327-1418bw\\_parts](http://bit.ly/327-1418bw_parts) to find and purchase a compatible add-on rain sensor.

### Add Sensors

1. Install batteries into your Rain Sensor.
2. Hold the PLUS (+) button on the station until the Reception Icon  starts to animate. This will start a search for all sensors.
3. Your sensor should connect within the next few minutes. Press and release the RAIN button to view rain readings.

**Note:** When a rain sensor is connected, and Time is showing, when rainfall begins the station will automatically switch to the RAIN NOW readings. This will automatically return to the Time display once there has been no additional rainfall recorded for 15 minutes.

**Note:** When Rain is displayed, press, and release the SET/TIME button to return to the Time display.

### View Rain Readings:

Press and release the EXIT/RAIN button to toggle through rain history records. The station will stay on the last history viewed. When viewing the Monthly Record, press and release the PLUS (+) button to toggle through the current and past 11 months of rainfall totals.

- **RAIN NOW:** The Time display will automatically change to RAIN NOW reading at the start of a new rain event. RAIN NOW will continue to display until there has been no additional rainfall for **15** minutes. Then Time will again display.
- **RAIN 1 HR:** Last one hour rain fall (12 consecutive 5 minutes rainfall accumulated total). Example: current time is 6:49, 1HR rain is accumulated total between 5:50 to 6:49. Updates every 5 minutes.
- **RAIN 24 HRS:** Based on past 24 hours accumulated rain total. Each full hour, 1 hour rainfall is recorded. This is a running total.
- **RAIN 7 DAYS:** Accumulated last 7 consecutive 24HR rain. At each day 0:00, 24HR rain is recorded. Not a subject to the calendar. This is a running total. Be sure the time is set.
- **MONTH: Current Month.** Ex: January 1-January 31. On the first month calendar day 0:00, month rain is reset to 0. Accumulated rain from 1<sup>st</sup> of xx (month) to current day xx (month). The current month will be shown in the date area.  
**Note:** Press and release the RAIN button to view MONTH Rainfall History records. Press and release the PLUS (+) button to toggle through the past 12 monthly history readings.
- **RAIN YEAR: Current year** January 1-December 31 total. Example: current date is Nov. 10, 2018. Year rain is Jan 1, 2023 –Oct 31, 2023, month totals, plus the current month (Nov 1-10) rain. Current Year will show in time display.
- **RAIN TOTAL:** Total rainfall since powered on or reset.

## HOW DO I RESET THE RAIN HISTORY READINGS?

1. Press and release the EXIT/RAIN button to view the individual rainfall record you'd like reset.
2. Hold the MINUS(-) button until dashes appear.
3. The reading will then reset to zero.