LA CROSSE®
TECHNOLOGY

Wireless Professional
Weather Station

SET UP GUIDE

MODEL: 328-1414

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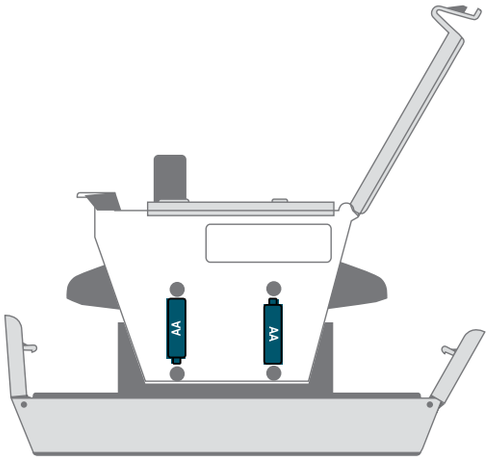
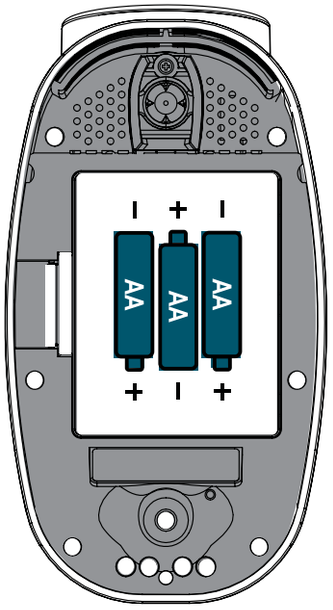
Initial Setup

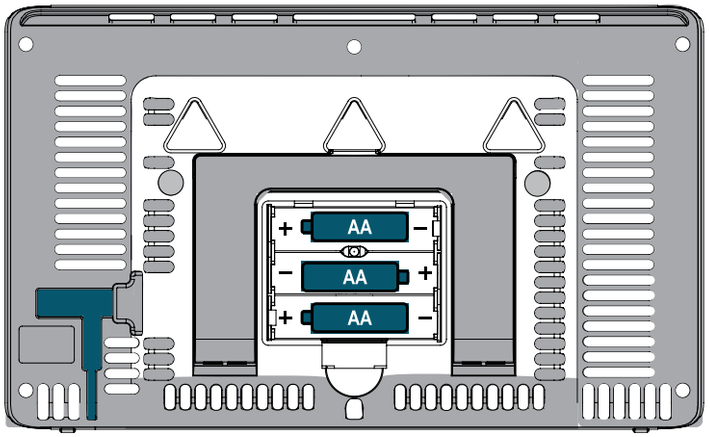
Power Up



Inside of Rain Sensor
Model No. **TX145R**



Bottom of Breeze Sensor
Model No. **TX145WSDTHv3**



Back of Station
Model No. **328-1414**

1. Remove the top Funnel and install 2 “AA” batteries into your Rain Sensor’s Battery Compartment.

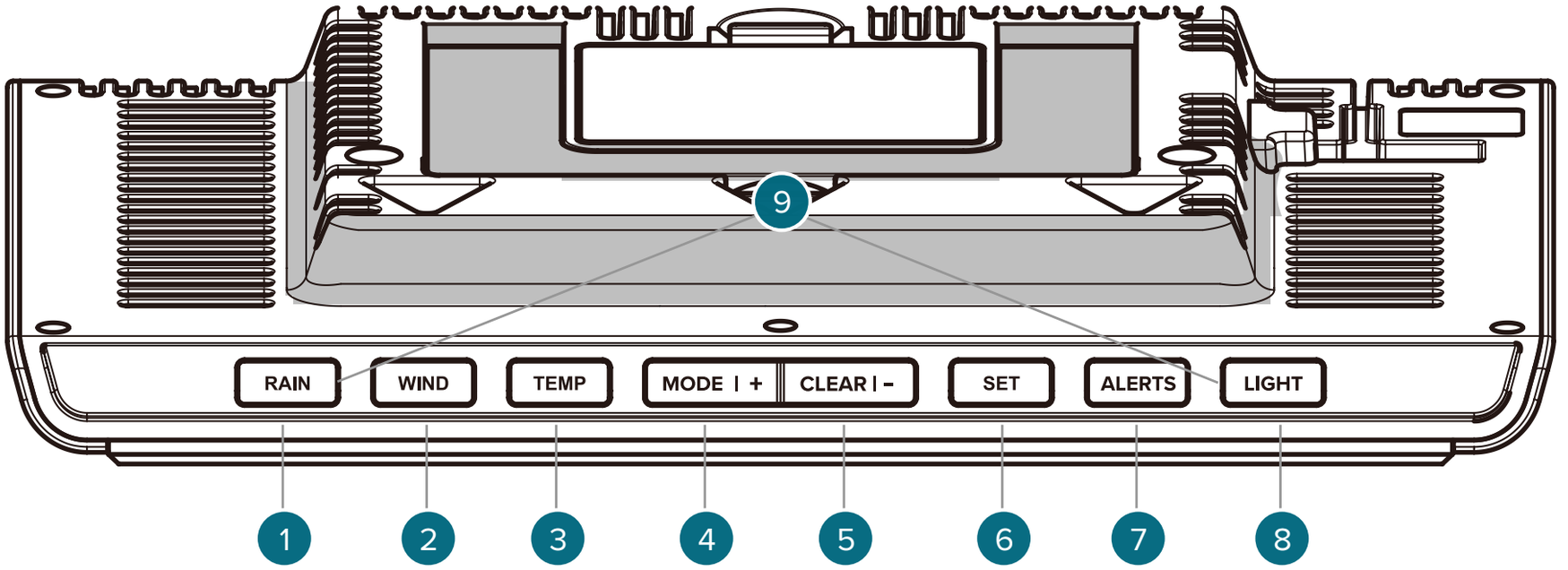
2. Install 3 “AA” batteries into your Breeze Sensor’s Battery Compartment.

3. Install the power cord into an outlet, and then into the back of the weather station. For backup, install 3 “AA” batteries into the Battery Compartment.

Note: Power cord is required for constant backlight. Display will come on for 10 seconds at a time after a button push if only powered via batteries.

Note: After all parts have been powered on, the station will begin searching for your outdoor sensors. These should automatically connect within the next 10 minutes.

Buttons



1. RAIN

Press to view Rain History. While viewing, hold the **CLEAR | -** button to delete the history reading. Hold to search for Rain Sensor.

2. WIND

Press to view Wind Speed History. While viewing, hold the **CLEAR | -** button to delete the history reading. Hold to search for Breeze Sensor.

3. TEMP.

Press to view Temperature and Humidity History. While viewing, hold the **CLEAR | -** button to delete the history reading. Hold to search for TH sensor.

4. MODE | +

Press to change viewing 24-hour Rainfall data, Pressure data or auto-scroll between both options.

5. CLEAR | -

Press to view add-on TH sensor reading. While viewing, hold to delete add-on TH sensor.

6. SET

Hold to enter Settings Menu. Press to start or stop search for Atomic Time Signal.

7. ALERTS

Hold to enter Alert Settings. Press **MODE | +** or **CLEAR | -** button to arm/disarm alerts.

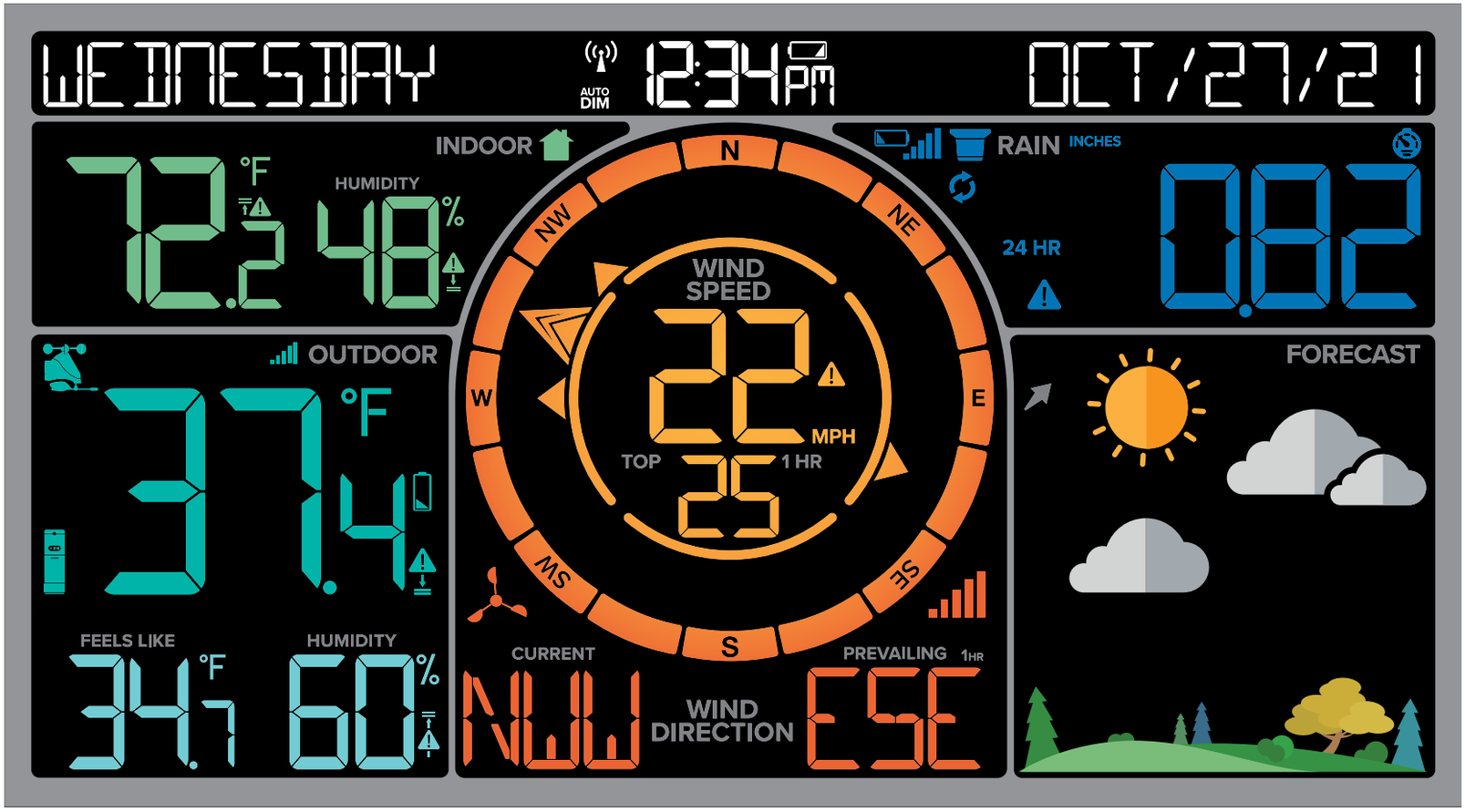
8. LIGHT

Press to adjust backlight. Hold to enter auto-dim settings.

9. RAIN and LIGHT

Hold together to Factory Reset your station. All history will be lost.

LCD Display Icons



Atomic Time

Low Battery

Auto Dim

Breeze Sensor Temp/Humidity

Add-on Sensor Temp/Humidity

Pressure

Alerts

Wind Direction

Rain

Sensor Reception

Prevailing Direction

Auto-scroll

MODE | + | CLEAR | - | SET

Station Settings

1. Hold the **SET** button to enter the Settings Menu.
2. Use the **MODE | +** or **CLEAR | -** button to adjust the values, and the **SET** button to confirm and move to the next setting.
3. You may exit the menu at any time by pressing the **LIGHT** button.

Settings Menu Order

- Greeting
- Language
- Beep ON/OFF
- Atomic ON/OFF
- DST:
  Automatic/Always ON/Always OFF
- Time Zone
- 12/24 Hour Time
- Hour
- Minutes
- Year
- Month
- Date
- Month/Date or Date/Month
- Fahrenheit/Celsius
- Temp Decimal / No Decimal
- Wind Speed Units (MPH or KMH)
- Wind Direction (Letters or Degrees)
- Rainfall Inches or Millimeters

Daylight Saving Time (DST) Options

Automatic: Changes in Spring & Fall
Always ON: No change to in Fall
Always OFF: No change in Spring

Atomic Time Signal

The station will only search for the atomic signal at UTC 7:00, 8:00, 9:00, 10:00, and 11:00.

- Press the **SET** button to start or stop a signal search.
- The tower Icon will flash while searching, and be solid when the signal is received.
- More WWVB info at: bit.ly/AtomicTime

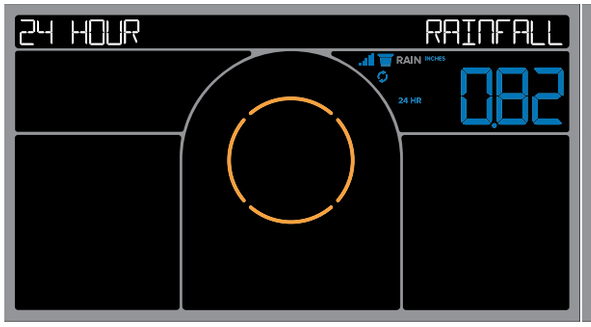
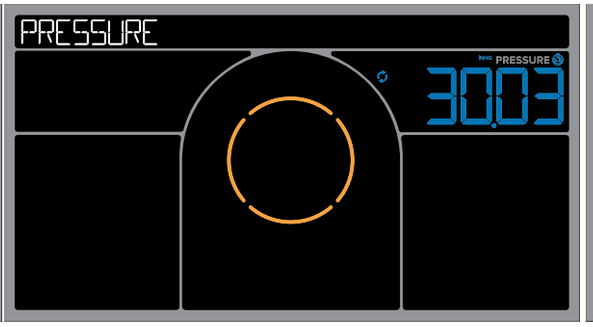
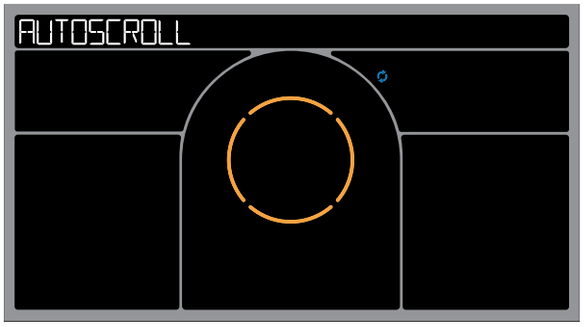
Time Zone Options

Atlantic, Eastern, Central, Mountain, Pacific, Alaska, & Hawaii

Weekday will set automatically after year, month, & date settings are adjusted.

View Pressure & Rain Readings

- Pressure and Rainfall readings share the same display area on your station.

24-HOUR Rain	Pressure	Auto-scroll both readings
		

Select Pressure or 24-Hour Rain to display:

- Press the **MODE | +** button to toggle between Pressure and 24-hour Rain readings.
- The Pressure or Rain icon will show to indicate which reading you are viewing.
- When the Auto-scroll Icon is displayed, the station will toggle between current Pressure and Rain readings.
- To stop the auto-scroll, press the **MODE | +** button until the Auto-scroll Icon disappears.

Pressure is displayed.

Rain is displayed.

Auto-scroll between Pressure and Rain readings.

Sensor Reception

RAIN | MODE | +

Rain History Readings

1. Press and release the **RAIN** button to view different rainfall history readings. When viewing Monthly Rain, press the **MODE | +** button to view the current month and the past eleven months of rain history.

2. When the Auto-scroll Icon  is displayed, the station will toggle between all Rain History readings. To stop the auto-scroll, press the **RAIN** button until the Auto-scroll Icon disappears.

Rain History:

1 HOUR: Last one-hour rainfall. Example: current time is 6:49, 1HR rain is accumulated total between 5:50 and 6:49. Updates every 5 minutes.

24 HOURS: A running total for the past 24 hours of accumulated rain. This will update at the top of each hour.

7 DAYS: Rainfall from the last 7 consecutive 24HR readings. Updates each day at midnight.

MONTH: Current Month Total (Jan. 1 to Jan. 31). This will reset to zero & the start of each new calendar month.

YEAR: Current year (January 1-December 31). This will reset to zero at the start of each new calendar year.

TOTAL: Total rainfall since powered on or reset.

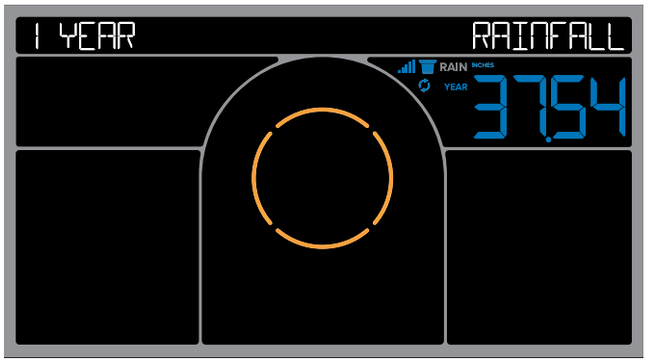
RAIN

Reset Rain Records

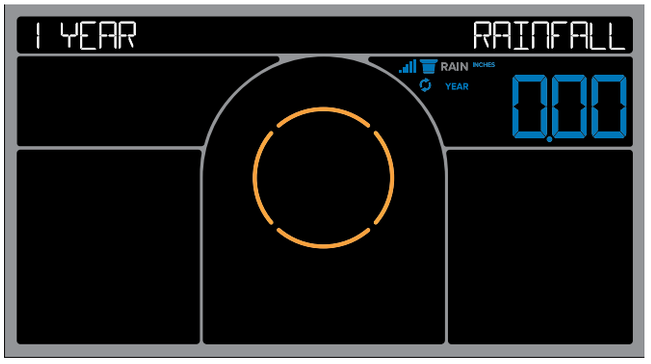
1. Press and release the **RAIN** button to view indiviual Rainfall Records.
2. Hold the **CLEAR | -** button to reset the rainfall record you are viewing to zero.

RAIN **CLEAR | -**

1 Year Rainfall



1 Year Rainfall Reset



Positioning the Rain Sensor

For Accurate Measurements

- Mount the Rain Sensor in an open area at least 3 feet above the ground for accurate rainfall readings.
- Ensure the sensor is level and mounted horizontally.
- Make sure the base of your Rain Sensor is not in a depression. The Rain Sensor has drainage holes in the bottom to allow it to self-empty.
- View sensor mounting video at: bit.ly/Rain_SensorMounting

Search for Rain Sensor

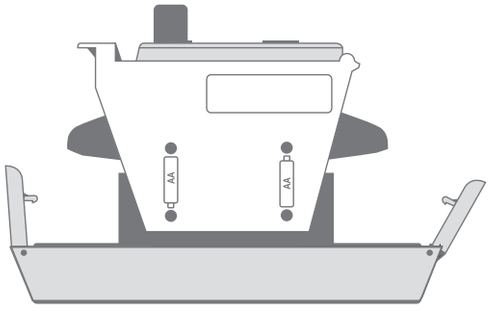
RAIN

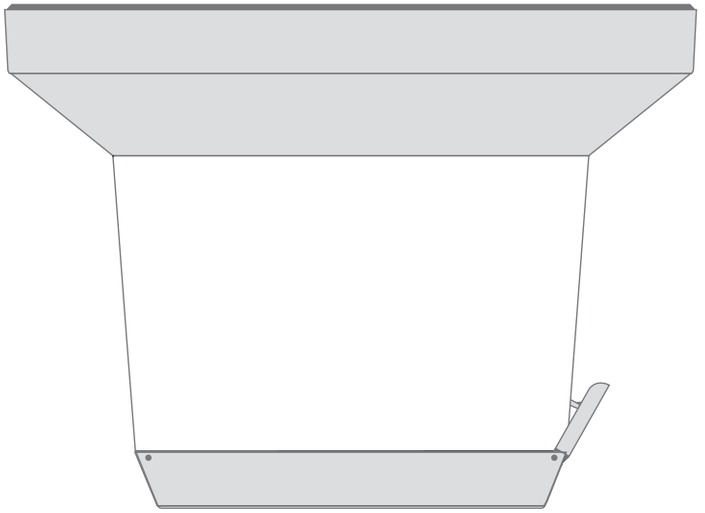
- Hold the **RAIN** button to search for the Rain Sensor.
- The Reception Indicator will animate while searching and be solid once connected.

Cleaning and Storage

Cleaning Your Rain Sensor

- Leaves, grass, and other debris may need to be removed periodically from the funnel of your Rain Sensor.
- Insects or dirt may also get inside your Rain Sensor and restrict the movement of the rocker.
- Open the locking tabs on the side of the Rain Sensor to remove the funnel. This allows you to clean the funnel and the inside of the Rain Sensor.



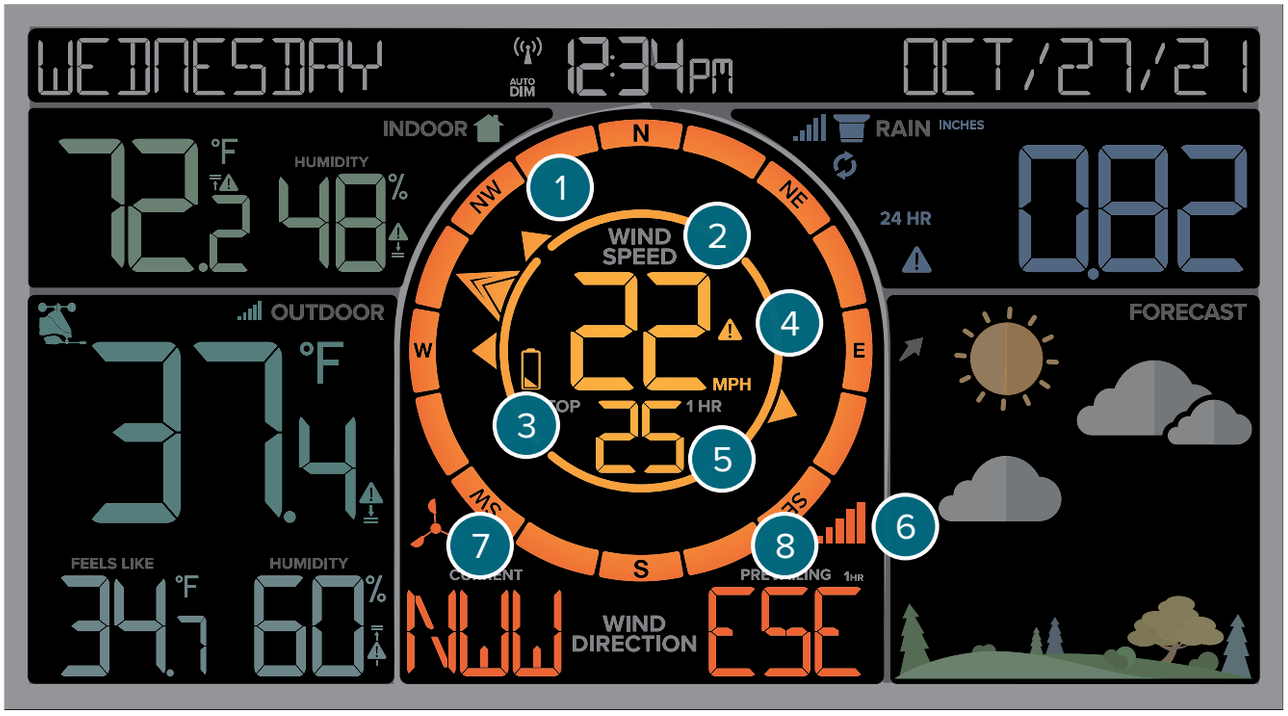


Winter Storage Options

- Remove batteries and store in a safe place.
- Remove batteries and cover in place.
- Leave outside, uncovered. While the Rain Sensor **cannot** accurately record snowfall, when the snow melts the water will be counted as rain.
- The Rain Sensor is self-emptying, so water will not freeze inside.
- This Rain Sensor is designed for outdoor use and will withstand temperatures below freezing.

WIND

Viewing Wind Readings



1. COMPASS ROSE

Displays cardinal direction with animated arrows (16 directions total).

2. CURRENT WIND SPEED

The top wind speed in the past 31 seconds.

3. LOW BATTERY ICON

Appears when the Breeze Sensor batteries need to be replaced.

4. WIND SPEED ALERT

Appears if a wind speed alert is set & active.

5. TOP WIND SPEED

The top wind speed in the past 60 minutes.

6. RECEPTION INDICATOR

Indicates if the station is receiving data from the sensor.

7. WIND DIRECTION

Choose between cardinal points (letters) or degrees in the Settings Menu.

8. PREVAILING DIRECTION

Prevailing Wind Direction over the past hour.

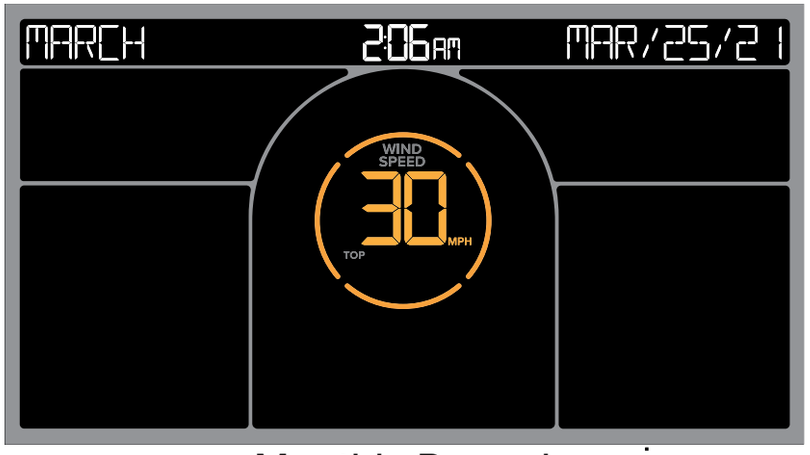
Wind Speed Records

Viewing Wind Speed Records

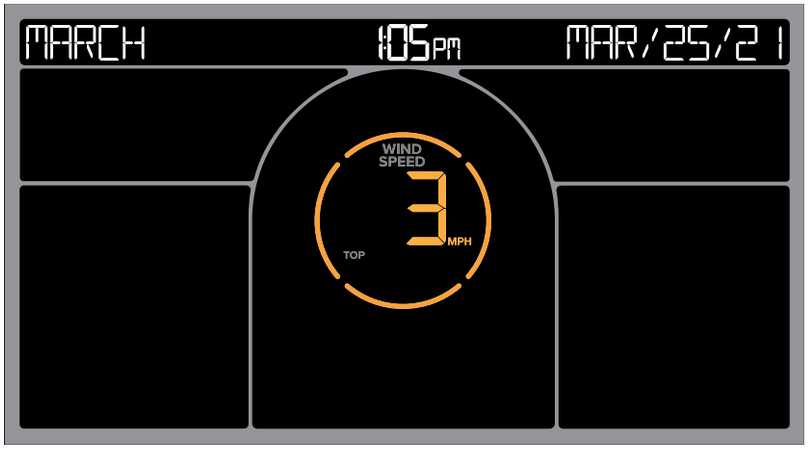
WIND

1. Press and release the **WIND** button to toggle through wind speed records with time and date stamps.

The wind speed records include: Past 24 hours, 7 days, 1 month, & 1 year.



Monthly Record



Monthly Record Reset

Reset Wind Speed Records

WIND CLEAR | –

1. Press the **WIND** button to view wind speed records.

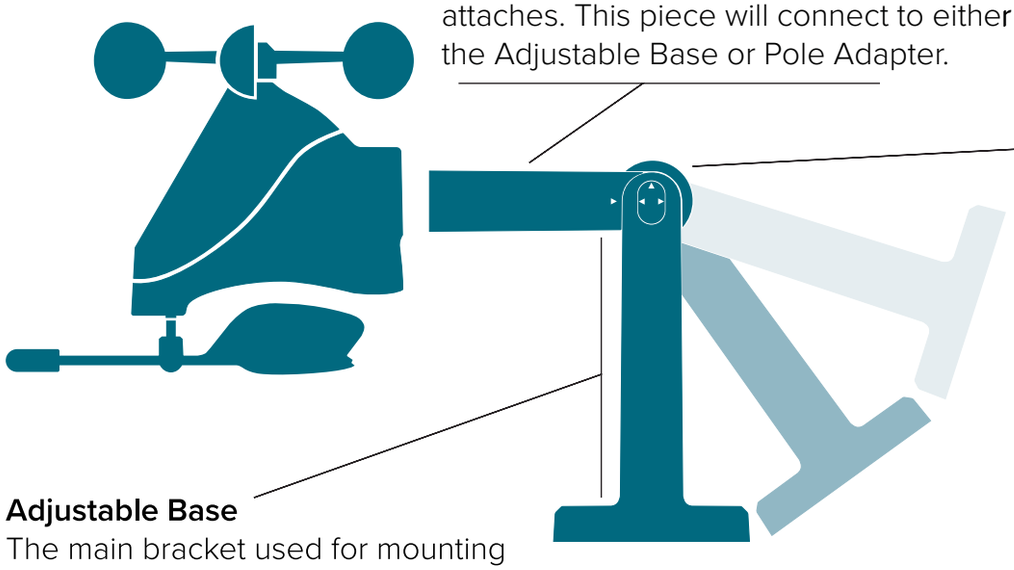
2. Hold the **CLEAR | -** button to reset individual records to current readings.

Positioning the Breeze Sensor

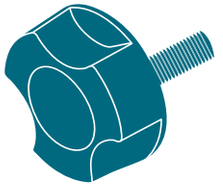
For Accurate Measurements

- Ensure the Breeze Sensor is is mounted level with the Solar Panel facing directly to the South. This will help optimize battery life and transmit correct wind direction.
- Ideally, the Breeze Sensor should be mounted on the tallest object in your area. Avoid positioning the sensor 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, Wind Vane, and Battery Compartment are securely fastened.
- The Breeze Sensor should be mounted with the Wind Cups on the top.

Included Mounting Accessories



Mast
The horizontal conduit where the sensor attaches. This piece will connect to either the Adjustable Base or Pole Adapter.



Hand Screw
Used to lock down and secure the Mast to the Adjustable Base or Pole Adapter.

Alignment Arrows
These Arrows provide exact 90 or 180 degree angles when aligned with the arrow on the Mast.

Adjustable Base
The main bracket used for mounting onto flat surfaces or with added U-bolts (sold seperately). The grooves and Hand Screw allow the bracket to secure to angled surfaces while still ensuring the Mast and sensor are level.

Pole Adapter
Used in place of the Adjustable Base for mounting on top of cylindrical conduits.

1-Inch Maximum Pole Diameter

WIND

Basic Installation Options

Fence posts, poles, decks, and even mailboxes are all common mounting options due to their convenience. Many users prefer these types of locations as the data they provide is accurate from their ground level perspective. However, because wind in these spots is often affected by obstructions, the readings may differ compared to local reporting stations.

1A Adjustable Base

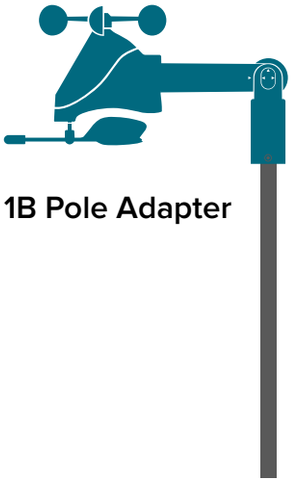
Basic Assembly

1A. Mount the Adjustable Base onto a flat surface using the four provided screws.

1B. Secure the Pole Adapter to a cylindrical conduit using the two provided screws.

2. Insert the Mast into the Breeze Sensor and tighten the provided screws on the sides.

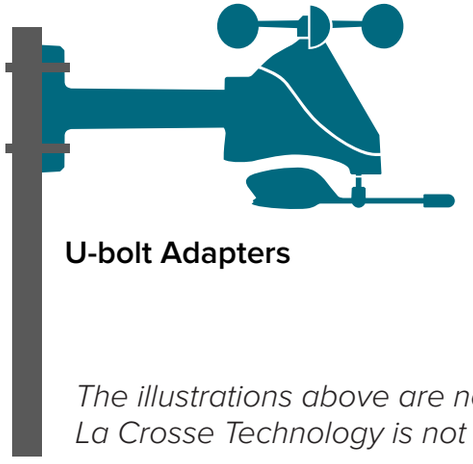
3. Use the Hand Screw to attach the Mast to either the Adjustable Base or Pole Adapter. Ensure the sensor is level, facing south, and securely fastened at all mounting points.



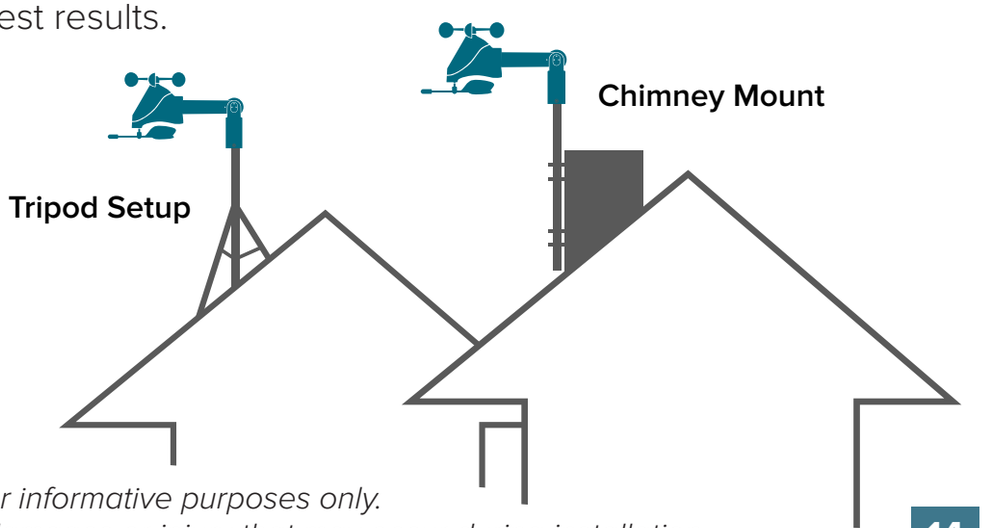
1B Pole Adapter

Advanced Installation Options

Some advanced installation options include tripods, wall mounts, eave cross 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. Please note that these advanced options will require additional equipment and possibly professional help for best results.



U-bolt Adapters



Tripod Setup

Chimney Mount

The illustrations above are not to scale and are for informative purposes only.
La Crosse Technology is not responsible for any damages or injury that may occur during installation.

TEMPERATURE & HUMIDITY

Viewing Temperature & Humidity Readings

1. INDOOR TEMPERATURE

Current Indoor Temperature.

2. INDOOR HUMIDITY

Current Indoor Humidity.

3. WIND ICON

Indicates the Temperature/ Humidity readings are from the Breeze Sensor.

4. RECEPTION INDICATOR

Indicates if the station is receiving data from the sensor.

5. OUTDOOR TEMPERATURE

Current Outdoor Temperature.

6. LOW BATTERY INDICATOR

Appears when the sensor battery needs to be replaced.

7. TH SENSOR ICON

Indicates Temperature/ Humidity readings are from add-on TH sensor.

8. “FEELS LIKE” TEMP

Based on current temperature & wind speed (heat index & wind chill).

9. OUTDOOR HUMIDITY

Current Outdoor Humidity.

Temperature & Humidity Records

View Temperature/Humidity Records

Press and release the **TEMP** button to toggle through temperature/humidity records with time and date stamps.

Temperature/Humidity Records Order

- Outdoor High Temperature
- Outdoor Low Temperature
- Outdoor High Humidity
- Outdoor Low Humidity
- Indoor High Temperature
- Indoor Low Temperature
- Indoor High Humidity
- Indoor Low Humidity
- “Feels Like” High Temperature
- “Feels Like” Low Temperature
- Dew Point

Resetting Individual Temperature & Humidity Records

1. Press the **TEMP** button to view the individual temperature and humidity records you would like to reset.

2. Hold the **CLEAR | -** button until dashes appear on the LCD.

3. This reading is now reset to your current temperature or humidity value.

“Feels Like” Temperature

This reading indicates both Wind Chill and Heat index values when conditions are met.

- **Wind Chill:** When temprature is below 50°F (10°C) and there is 5 MPH (8KPH) sustained wind speed.
- **Heat Index:** When temperature is above 80°F (27°C).
- **Current Temperature:** When the temperature is between 51°F (10.5°C) and 79°F (26.1°C) the readings will remain the same as the outdoor value regardless of wind speed.

ALERTS

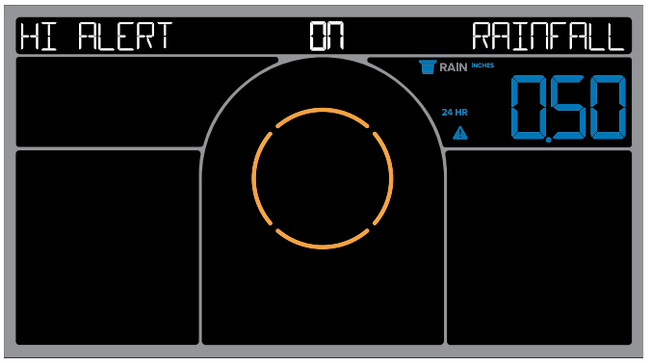
Set Alerts

MODE | + | CLEAR | – | ALERTS

1. Hold the **ALERTS** button to enter Alert Settings.
2. Use the **MODE | +** or **CLEAR | -** button to Arm/Disarm Alerts, and to adjust Alert Values when flashing.
3. Press the **ALERTS** button to move to next alert.

Alert Setting Order

- High Wind Speed
- 24 Hour Rainfall
- Low Pressure
- Outdoor High Temperature
- Outdoor Low Temperature
- Outdoor High Humidity
- Outdoor Low Humidity
- Indoor High Temperature
- Indoor Low Temperature
- Indoor High Humidity
- Indoor Low Humidity



Active Alert

- When the alert value is reached, the station will beep 5 times each minute until out of the alert range.
- The flashing Alert Value and Indicator will let you know if it is a High or Low Alert.
- Press any button to silence the alert. The Alert Value and Indicator will continue to flash while in the alert range.

Alert Indicators

Wind, Rain or Pressure Alert

High Alert

Low Alert

Viewing Your Forecast Data

Seasonal Trees

The foliage scene in the forecast section changes seasonally. The dates are pre-programmed.

Spring (March 20th to June 20th)

Summer (June 21st to Sept. 20th)

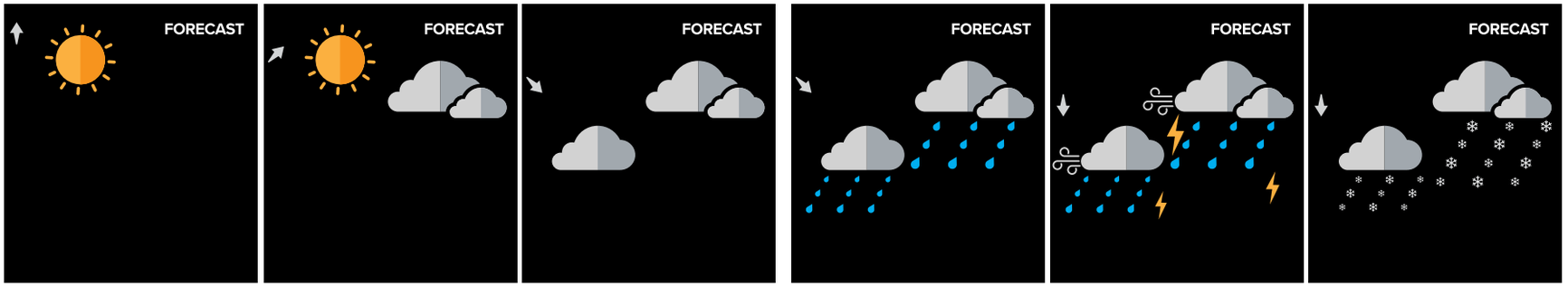
Fall (Sept. 21st to Dec. 20th)

Winter (Dec. 21st to March 19th)

Forecast Icons

Your station will use changes in barometric pressure to predict your weather to come in the next 12 hours. This is represented by the 6 forecast scenes below.

Watch our Forecast Icons Video for more details:
bit.ly/forecast_vid



SUN | PARTLY SUNNY | CLOUDY | RAIN | T-STORM | SNOW

Note: The Forecast Icons may not represent your current weather. They are a future prediction of the weather to come over the next 12 hours.

Trend Arrows

The Trend Arrows represent the change in pressure over the past 3 hours.

Pressure is rising | Pressure is steady | Pressure is falling

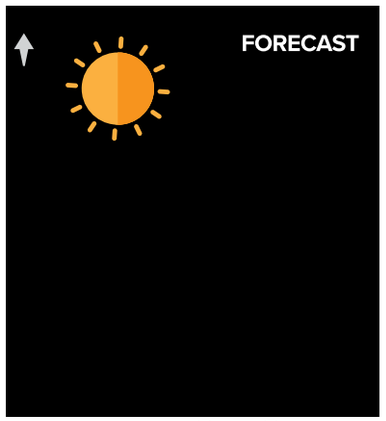
FORECAST

Day/Night Forecast

- From 7am to 6:59pm the forecast will show a Sun Icon when the forecast is Sunny or Partly Sunny.

- From 7pm to 6:59am the forecast will show a Moon Icon when the forecast is Sunny or Partly Sunny.

Note: The Moon Icon does not change to provide Moon Phase. The Moon Icon indicates nighttime only.



7am to 6:59pm

7pm to 6:59am

BACKLIGHT & AUTO-DIM

Adjustable Backlight

- Press the **LIGHT** button to adjust the backlight intensity.
- There are 4 brightness levels, plus an off option.

Auto-Dim Settings

Program your display to automatically dim during preselected times.

1. Hold the **LIGHT** button to enter the Auto-Dim Settings Menu.
2. Press the **MODE | +** or **CLEAR | -** button to turn the Auto-Dim feature on or off. Press **LIGHT** to confirm.
3. Press the **MODE | +** or **CLEAR | -** button to adjust the starting hour. Press **LIGHT** to confirm.
4. Press the **MODE | +** or **CLEAR | -** button to adjust the stopping hour. Press **LIGHT** to confirm and exit.

Note: Only the hour can be set.

Add-on Temperature & Humidity Sensor

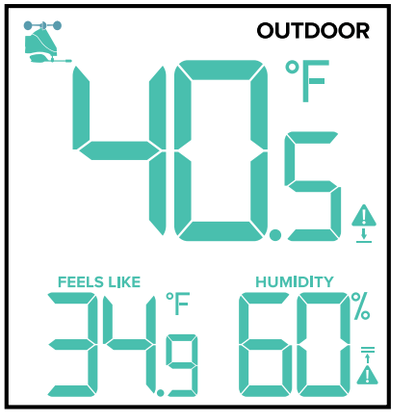
If you feel the temperature & humidity is not reading correctly from your Breeze Pro Sensor, you can add a separate sensor to your system.

Scan the QR code or visit: bit.ly/328-1414_parts to find a list of compatible add-on sensors.

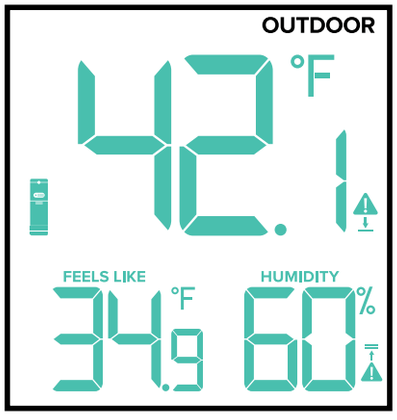
Adding a Separate Temperature & Humidity Sensor

1. Press the **CLEAR | -** button and the Outdoor Temperature will begin to flash.
2. Hold the **CLEAR | -** button to to delete the Temp/Humidity connection from your Breeze Sensor. Your station will start to search for a new signal.
3. Install new batteries into the add-on sensor and press the **TX** button inside its battery compartment. The LED light on the sensor will flash.
4. The sensor should connect almost instantly with its data appearing on screen. The icon will appear when an add-on TH sensor is being used.

Temperature & Humidity from the Breeze Sensor



Temperature & Humidity from an add-on TH Sensor



SUPPORT

Low Battery Indicator

- By Wind, replace batteries in the Breeze sensor.
- By Time, replace batteries in the Station.
- By Rain, replace batteries in the Rain sensor.
- By Outdoor Temperature, replace batteries in the Add-On TH sensor.

Sensor Search

- Hold the **RAIN** button to search for the Rain sensor.
- Hold the **WIND** button to search for the Breeze sensor.
- Hold the **TEMP** button to search for the Add-on TH sensor.

Factory Restart

- Hold the **RAIN** and **LIGHT** buttons together for several seconds to reset the station.
- All records will be lost.

Warnings

⚠ WARNING: CHOKING HAZARD—Small Parts

Not for children under 3 years old.

We're Here to Help

If you require additional support, get in touch with our friendly customer support team based in La Crosse, WI.

Our knowledgable customer support team is available Mon-Fri: 8am-6pm CST

Phone: 1.608.782.1610

Email: bit.ly/contact_techsupport

Self-Help: bit.ly/328-1414_support

Scan for Manuals and FAQs.

Stay in Touch

Ask questions, watch setup videos, and provide feedback on our social media outlets.

SPECIFICATIONS

WEATHER STATION (328-1414)

- **Indoor Temp. Range:** 32°F to 122°F (0°C to 50°C)
- **Indoor Humidity Range:** 10 to 99%RH
- **Relative Pressure Range:** 23.62 to 32.48 InHg (800 to 1100 hPa)
- **Power Requirements:** 5-volt power adapter (included) AC6: GPU280500150WAOO
  Input: 5.0VAC 150mA.
  Optional: 3 “AA” LR6 Batteries (not included)

The plug on the power adapter is intended to serve as the disconnect device, the socket-outlet shall be installed near the equipment and shall be easily accessible.

- **Station Dimensions:** 8.98” L x 1.00” W x 5.43” H (22.8cm L x 2.6cm W x 13.8cm H)
- **Language Options:**
  English, Spanish, French, and German
  (Translation Available for Menus & Calendar)

BREEZE SENSOR (TX145WSDTHv3)

- **Wind Speed Range:** 0 to 111 mph (0 to 178 kMh)
- **Degrees of Wind Direction:** 360° with 16 Cardinal Directions
- **Outdoor Temp. Range:** -40°F to 140°F (-40°C to 60°C)
- **Outdoor Humidity Range:** 10 to 99%RH
- **Transmission Range:** 330 feet (100 meters)
- **Power Requirements:** 3 “AA” batteries (not included)
- **Update Interval:** Every 31 Seconds
- **Sensor Dimensions:**
  - **With Bracket:** 11.97” L x 6.25” W x 9.76” H (30.41cm L x 15.88cm W x 24.8cm H)
  - **Without Bracket:** 7.94” L x 6.25” W x 6.99” H (20.17cm L x 15.88cm W x 17.75cm H)

RAIN SENSOR (TX145R)

- **Rainfall Range:** 0-9999mm (0-393.6 in)
- **Transmission Range:** 330 feet (100 meters)
- **Power Requirements:** 2 “AA” batteries (not included)
- **Update Interval:** Every 45 Seconds
- **Sensor Dimensions:**
  7.16” L x 5.24” W x 5.04” H
  (18.2 cm L x 13.3 cm W x 12.8 cm H)

CARE + MAINTENANCE

Battery Replacement Instructions

When batteries of different brand or type are used together, or new and old batteries are used together, some batteries may be over-discharged due to a difference of voltage or capacity. This can result in venting, leakage, and rupture and may cause personal injury.

- Always purchase the correct size and grade of battery most suitable for the intended use.
- Always replace the whole set of batteries at one time, taking care not to mix old and new ones, or batteries of different types.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed correctly with regard to polarity (+ and -).
- Remove batteries from product during periods of non-use. Battery leakage can cause corrosion and damage to this product.
- Remove used batteries promptly.
- For recycling and disposal of batteries, and to protect the environment, please check the internet or your local phone directory for local recycling centers and/or follow local government regulations.

WARRANTY INFO

La Crosse Technology, Ltd. provides a **1-year limited time warranty** (from date of purchase) on this product relating to manufacturing defects in materials & workmanship.
La Crosse Technology, Ltd, 2830 S. 26th St., La Crosse, WI 54601

For Full Warranty Details, Visit: www.lacrossetechnology.com/pages/warranty

CALIFORNIA RESIDENTS

⚠ **WARNING:** This product can expose you to chemicals including acrylonitrile, butadiene, and styrene, which are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to: www.P65Warnings.ca.gov

FCC STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Caution!
Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

LA CROSSE®
TECHNOLOGY