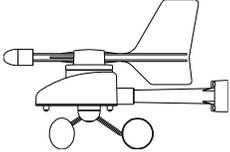
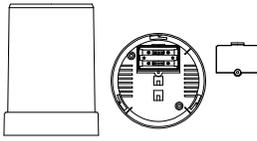
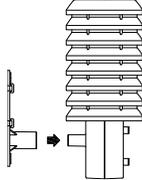
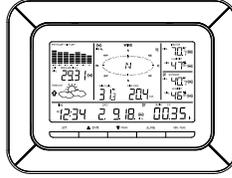


Quick Setup Guide – WS-2814U-IT Wireless Weather Station Remote monitor for home & backyard with alerts

The complete owner's manual and downloadable software required for remote monitoring and alert features are available at:
www.lacrossetechnology.com/2814

Carefully open the package and check that the following contents are complete:

Wind Sensor	Rain Sensor	Thermo-Hygro Sensor	Wireless Display	USB Transceiver
 <ul style="list-style-type: none"> • Mast holder • Right angle adaptor • 1 x U-bolts • 2 Washers + 2 Nuts • Plastic Reset Rod 	 <ul style="list-style-type: none"> • Base sensor, funnel top cover and battery cover (pre-assembled) 	 <ul style="list-style-type: none"> • Airflow cover • Wall mount adapter • Mounting screws • Plastic anchors for screws 	 <ul style="list-style-type: none"> • Foldout stand 	 <ul style="list-style-type: none"> • USB wireless interface for PC
<p><i>All items, including Wind Sensor, are Protected under U.S. Patents: 5,978,738; 6,076,044; & 6,597,990</i></p> <p><i>Wind Sensor also Protected under U.S. Patent: 6,761,065; RE42,057</i></p>	<p>Remote Monitoring & Alerts Activation Card</p> <ul style="list-style-type: none"> • IMPORTANT!! Do Not Discard • Contains the Activation Key to enable remote monitoring and alerts 		<p>PC Software (Downloads)</p> <ul style="list-style-type: none"> • Enables wireless computer connection using the USB transceiver • Enables remote monitoring & alerts • Download software from: www.lacrossetechnology.com/2814 	

SETUP INSTRUCTIONS STEP BY STEP:

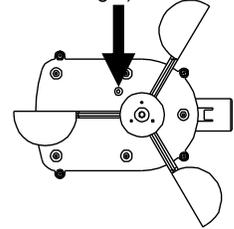
IMPORTANT: Make sure to observe the correct polarity when inserting batteries. The "+" markings on the batteries must line up with the diagrams inside the battery compartments. **Inserting the batteries incorrectly may result in permanent damage to the units.** During the setup process, place the wireless display and the outdoor sensors on a surface with 5-10 feet between each sensor and the display. **Only use Alkaline Batteries, rechargeable batteries may not work:**

STEP 1: Complete initial setup on a table with all components within 10 feet of each other.

STEP 2:

- It is important to allow sufficient light to reach the solar panel while activating the wind sensor. Make sure lights are on in the setup room and the solar panel is facing a 60W light bulb or brighter.
- Ensure the panel is not covered, and then remove the black protective foil on the solar panel. Remove the covering the reset hole.
- Use the provided plastic reset rod to gently press the reset button once in the hole on the bottom of the sensor.

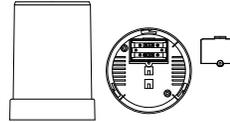
Press Reset Button on **Bottom** of Wind Sensor (Solar Panel Must Face Light)



STEP 3: Insert two "AA" size batteries into rain sensor with correct polarity.

STEP 4:

- Insert two "C" size batteries into the thermo-hygro sensor with the correct polarity.
- Allow all sensors to run for two minutes before inserting batteries in the weather station.



STEP 5:

- Insert two "C" size batteries into the wireless display with the correct polarity.
- **NOTE:** Every time the wireless display receives data from the sensors, the wireless icons ☼ will blink once and then return to solid if the last transmission was successful. A wind speed or rainfall amount that reads "0" does not mean reception failure. It means that there was no wind or rain at the time of the last measurement. The thermo-hygro sensor syncs with the wind and rain sensors and sends all outdoor sensor data to the display. The thermo-hygro sensor tries for 4 minutes to sync to the wind sensor and then 4 minutes for the rain sensor. If not successful within 4 minutes, the thermo-hygro sensor will stop looking for the other sensors.
- Wait 10 minutes for reception from all sensors before setting time and date or mounting sensors outside.

STEP 6: Set Time and Date. See "Program Menu" below.

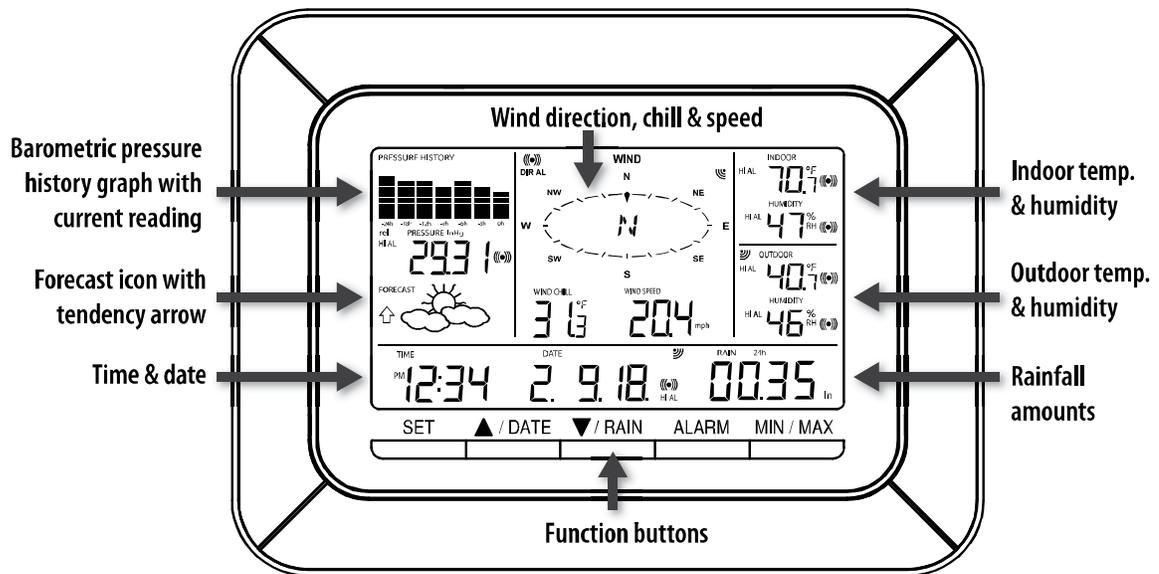
SETUP TROUBLESHOOTING: If the sensor data fails to display for any of the outdoor sensors within 10 minutes, (" - " are displayed), remove the batteries from all units for 1 minute and start the Setup procedure again at Step 1.

Program Menu:

There are 5 function keys located on the unit: SET, ▲/DATE, ▼/RAIN, ALARM, and MIN/MAX. Begin by holding the SET button until the display flashes. When you press and release the SET button after each step, you will be moved to the next step. Save changes and exit the program menu at any point by pressing the MIN/MAX button.

- **CONTRAST:** Press and hold the SET button. LCD and a number from 1-8 will flash. Press and release the ▲/DATE or ▼/RAIN button to adjust the Contrast of the LCD. Press and release the SET button to confirm and continue.
- **HOUR:** The Hour will flash. Press and release the ▲/DATE or ▼/RAIN button until the correct Hour is shown. Press and release the SET button to confirm and continue.
NOTE: When in 12h mode, there is only a 'PM' display, which appears under the word TIME. During the 'AM' hours this area will be blank.
- **MINUTES:** The Minutes will flash. Press and release the ▲/DATE or ▼/RAIN button until the correct Minutes are displayed. Press and release the SET button to confirm and continue.
- **12/24-HOUR TIME:** A 12h or 24h will flash. To change between 12h and 24h, press and release the ▲/DATE or ▼/RAIN button. Press and release the SET button to confirm and continue.
NOTE: When in 24-hour time the date will display Day first, then Month.
- **YEAR:** The Year will flash. Press and release the ▲/DATE or ▼/RAIN button to set the correct Year. Press and release the SET button to confirm and continue.
- **MONTH:** The Month will flash. Press and release the ▲/DATE or ▼/RAIN button to set correct Month. Press and release the SET button to confirm and continue.
- **DATE:** The Date will flash. Press and release the ▲/DATE or ▼/RAIN button to set the correct Date. Press and release the SET button to confirm and continue.
- **FAHRENHEIT/CELSIUS:** Degrees Fahrenheit or Celsius will flash in the Wind chill, Indoor & Outdoor temp. areas. Press and release the ▲/DATE or ▼/RAIN button to select between Fahrenheit and Celsius. Press and release the SET button to confirm and continue.
- **WIND SPEED UNIT:** Wind Speed units will flash. Press and release the ▲/DATE or ▼/RAIN button to select from **mph, m/s, knots, Beaufort, or km/h**. Press and release the SET button to confirm and continue.
- **RAIN UNIT:** Rainfall Inches or Millimeters will flash. Press and release the ▲/DATE or ▼/RAIN button to select **in** or **mm**. Press and release the SET button to confirm and continue.
- **PRESSURE UNIT:** The Air Pressure units (inHg or hPa) will flash. Press the ▲/DATE or ▼/RAIN button to select **inHg** or **hPa**. The Default setting is inHg. Press and release the SET button to confirm and continue.
- **RELATIVE PRESSURE SETTING:** The Relative Air Pressure will flash. Press the ▲/DATE or ▼/RAIN button to adjust the Relative Air Pressure. Press and release the SET button to confirm and continue.
NOTE: Refer to your local weather station for an appropriate setting. It is important that this setting be adjusted for local conditions to ensure forecast accuracy.
- **FORECAST SENSITIVITY:** The Forecast Sensitivity will flash. The default setting of .09 works well in most areas of the country, however in areas with relatively constant pressure this should be set to .06, (within 30 miles of the coast) and in areas with significant pressure changes this should be set to 0.12 (within 30 miles of the desert). Press the ▲/DATE or ▼/RAIN key to adjust. Press and release the SET button to confirm and continue.
- **STORM ALARM SENSITIVITY:** The Storm Alarm Sensitivity will flash. The default setting of .15 works well in most areas, however you may need to adjust this level up or down depending on your local conditions. Use the ▲/DATE or ▼/RAIN button to adjust. Press and release the SET button to confirm and continue.
- **STORM ALARM:** AON or AOFF will flash. This will turn the Storm Alarm ON or OFF. Use the ▲/DATE or ▼/RAIN button to toggle the Storm Alarm ON (AON) and OFF (AOFF). Press and release the SET button to confirm and continue.
- **WIND DIRECTION DISPLAY:** The Dash in the Wind Compass will flash. Use the ▲/DATE or ▼/RAIN button to select the Wind Direction to be shown in degrees (dash) or letters NNW. Press and release the SET button to confirm and continue.
- **FACTORY RESET:** Res off will be displayed. Use the ▲/DATE or ▼/RAIN button to select **on** *only* if you wish to Factory Reset the Weather Center. If you do not wish to restart the weather center, be sure the Res off is showing and press and release the SET button to complete the program menu.
NOTE: To Factory Reset the weather center, select **Res on** and press the SET button to confirm. The station will begin to count down numbers in the date area. When it is complete it will say Done. Then remove the batteries and follow the Restart up procedure.

LCD Display:



Display Modes:

Press and release SET button to toggle between the display of Mode 1 or Mode 2:

MODE 1:

- Wind Speed
- Outdoor Temperature
- 24 hr. Pressure History Graph

MODE 2:

- Wind Gust
- Dew Point Temperature
- 72 hr. Pressure History Graph

Other buttons provide multiple functions:

▲/DATE:

- Press and release to switch between Date and Seconds displayed.
- Press and hold until the station beeps to re-sync with sensors.

▼/RAIN:

- Press and release to view 1-hour, 24-hour, 1-week, 1-month or Total Rainfall.
- Press and hold to re-sync the display with the software (must use USB stick).

Rain Display:

For all measurements, it is important time and date are set correctly on your display.

- 1-HOUR RAIN:** The 1-hour rain reflects rain that has fallen from current time and back 1-hour. It updates every four minutes (15 measurements). The hour is not a fixed clock time measurement. It is literally an ongoing "last 60 minutes" timer.
- 24-HOUR RAIN:** The 24-hour rain reflects the rain that has fallen from current time and back 24-hours. This is not a midnight to midnight measurement. The day is not a fixed clock time measurement. It is literally an ongoing "last 24 hours" timer.
- WEEKLY RAIN:** The amount of rainfall of the previous week. The rainfall measurement starts counting on the second day after power up. (Eg: if the unit is powered up on Monday day time, then the weekly rainfall is updated every Tuesday after 11:59 pm (23:59))
- MONTHLY RAIN:** Monthly rain reflects the previous month's rain and will update 12AM the first day of the month.
- TOTAL RAIN:** Total rain will remain until you manually reset this value. Total rain reflects the rain from time of display set-up until you manually reset the total rain.

Note: You must start a new history file on the PC if you reset the Total Rainfall on the weather station to avoid inaccuracies.

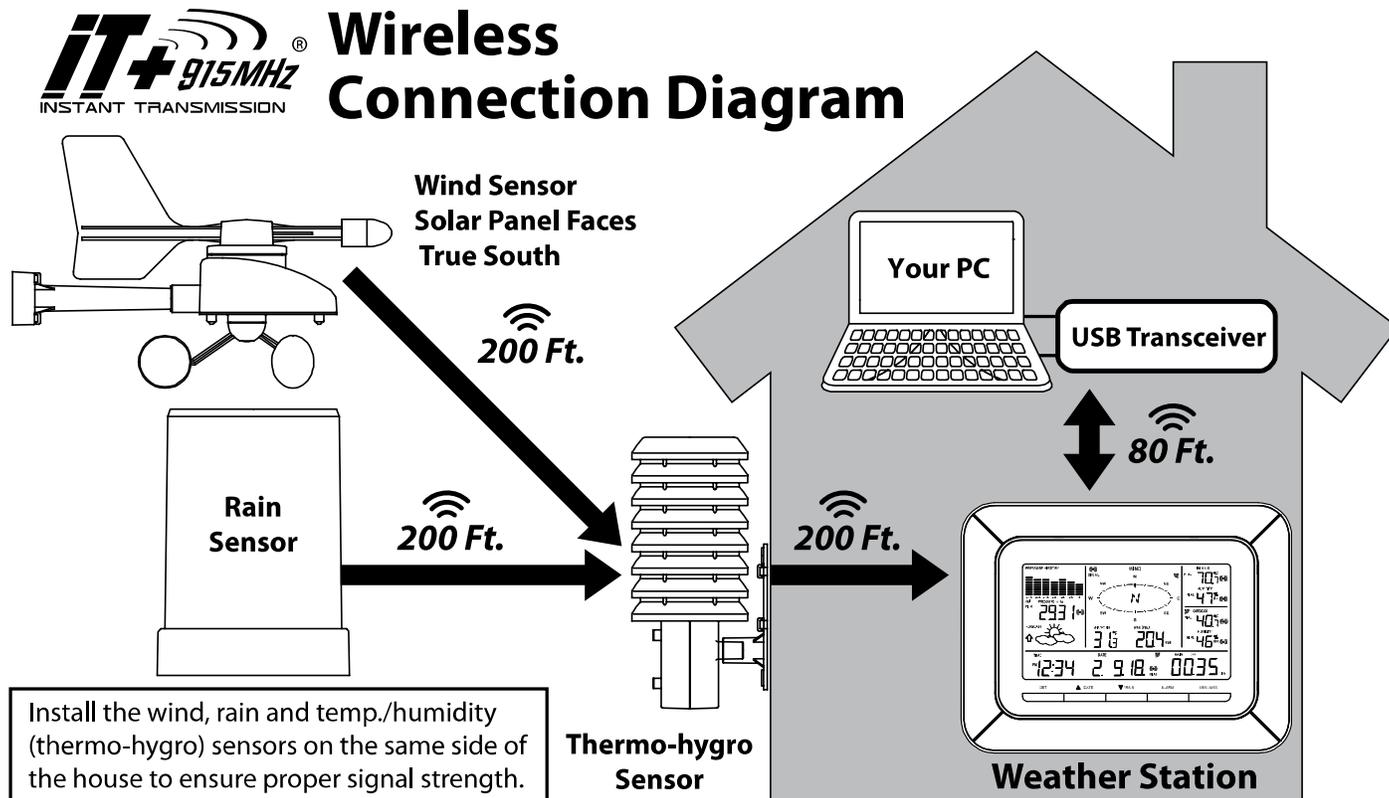
Mounting the sensors and placement of the wireless display:

IMPORTANT: Ensure that all of the sensor data can be received at the intended mounting locations before you drill mounting holes. The outdoor sensors have a wireless range of **200-feet**. Keep in mind that the **200-foot** range equates to an open-air scenario with no obstructions. Each obstruction (roof, walls, floors, ceilings, etc.) will reduce the range.

The thermo-hygro sensor measures outdoor temperature & humidity and collects the data from the wind and the rain sensors and sends all outdoor weather data to the wireless display, so the thermo-hygro sensor must be within the **200-foot** wireless range of the wireless display. This allows the wind and rain sensors to be placed relative to the thermo-hygro sensor rather than the wireless display. See the **Wireless Connection Diagram** below.

- The wind and rain sensors must be mounted within the **200-foot** wireless range of the thermo-hygro sensor and on the same side of the house. In addition, 915 MHz sensors transmit better at a minimum mount height of 6 feet.
- The wireless display must be within the **80-foot** wireless range of the USB transceiver to send weather data to the PC.

If the sensor wireless icons  drop from the display as you move them into their intended locations, the sensors may be too far from the wireless display. Try moving the wireless display or the sensors closer and wait a few minutes to see if the wireless icons  display again. If the wireless icons  are still not displayed after re-positioning the sensors or the wireless display, press and hold the ▲/DATE key for 2 seconds to re-synchronize the wireless display with the sensors.



Wind sensor

The wind sensor must be installed **with the front of the sensor (the solar panel) facing true South**, or the reported wind direction will not be accurate. Mount within the **200-foot** wireless range of the thermo-hygro sensor and on the same side of the house at a minimum height of 6 feet. The roof may or may not be an ideal mounting location. Secure the main unit to the shaft of the mast holder. Use the right-angle adaptor if the wind sensor will be mounted on a horizontal mast or surface.

Fasten the wind sensor to a suitable mast using the two U-bolts, washers and nuts included. **Note:** Mount the wind sensor onto a mast so the wind can reach the sensor unobstructed from all directions for an accurate reading. The ideal mast is between 0.62" and 1.3" in diameter. The wind sensor DOES NOT have replaceable batteries - it consumes solar power and charges the internal battery pack automatically.

Rain sensor

The rain sensor should be mounted on a level surface in an open area within the **200-foot** wireless range of the thermo-hygro sensor and on the same side of the house. Mount the rain sensor at least 6 feet off the ground level for optimum wireless transmission. The rain sensor should be accessible to allow for periodic cleaning of debris or insects.

Thermo-Hygro Sensor

The thermo-hygro sensor is "weather resistant", but not "water proof". To ensure an extended life of your sensor, mount it in a semi-covered place out of the elements. Minimum height is 6 feet; under the eaves on the North side of the house can be ideal to avoid the effects of sunlight. Mount the sensor 18" down from the eaves to ensure optimum performance. This will assure the temperature of the air coming out of the attic will not affect data collected by the sensor.

To wall mount the thermo-hygro sensor, fix the wall holder onto the desired wall using the included screws, plug the sensor firmly into the wall holder and replace the rain cover if it is not already in place. **Note:** After mounting the units, if the weather data is not received, press and hold the ▲/DATE key for 2 seconds to synchronize the wireless display to the sensors.

Computer Connection and Remote Monitoring / Alerts

You have the option of using your weather station as a:

1. **Standalone weather station** – no computer or USB transceiver required.
2. **Computer-connected weather station** - Connect the USB transceiver to your computer for use with Heavy Weather Pro PC software. Download and install the latest version of the Heavy Weather Pro PC software at <http://www.lacrossetechnology.com/2814> .
3. **Computer-connected weather station with remote monitoring and alerts** – Connect the USB transceiver to your computer for use with Heavy Weather Pro PC software. Download and install the latest versions of the **Heavy Weather Pro** and **La Crosse Alerts PC software** at <http://www.lacrossetechnology.com/2814> . **NOTE:** See the included **Activation Card** for the activation key to enable remote monitoring and alerts.

Specifications

C86324 Display: 10.46" L x 1.35" W x 7.9" H
(265.8 L x 34.4 W x 201.3 H mm)
2 "C" batteries (not included)

TX59UN-1-IT: 3.13" L x 3.54" W x 7.45" H
Thermo Hygro (79.4 L x 89.8 W x 189.3 H mm)
2 "C" batteries (not included)

TX58UN-IT Rain: 5.2" Dia. x 7.2" H
(131.6 Dia. x 182.7 H mm)
2 "AA" batteries (not included)

TX63U-IT Solar Powered Wind:
9.84" L x 5.74" W x 7.57" H
(250 L x 145.9 W x 192.3 H mm)
Integrated power-cell included

USBTRX10: 3.2" L x .89" W x .35" H
(81.8 L x 22.7 W x 9 H mm)
Powered by PC

Miscellaneous



The complete instruction manual is available at:
www.lacrossetechnology.com/2814

Le manuel d'instruction complet est disponible sur:
www.lacrossetechnology.com/2814

El manual de instrucciones completo está disponible en:
www.lacrossetechnology.com/2814

FCC DISCLAIMER

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.
(2) This device must accept any interference received,
including interference that may cause undesired operation.



Limited 1-year Warranty

Contact Support: 1-608-782-1610
Product Registration: www.lacrossetechnology.com/support/register

For warranty work, technical support, or information contact:
La Crosse Technology, Ltd
2817 Losey Blvd. S.
La Crosse, WI 54601

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