

# LA CROSSE<sup>®</sup>

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# TECHNOLOGY

## Atomic Forecast Station with Moon Phase



For online video support:  
<http://bit.ly/LaxTechTalk>

Model: S84107  
Instruction Manual  
DC: 080817

# Welcome to the La Crosse Technology® family!

We hope you enjoy your new Atomic Forecast Station with Moon Phase.

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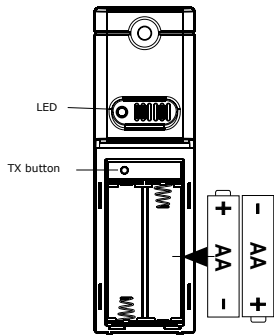
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## Let's Get Started

1. Insert 2 AA batteries into your sensor. Observe correct polarity.

· The red LED light will flash when your sensor transmits.

· The TX button lets you manually transmit a signal.

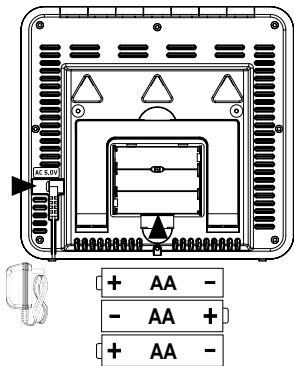


2. Insert the 5V power cord into an outlet, and then into your weather station.

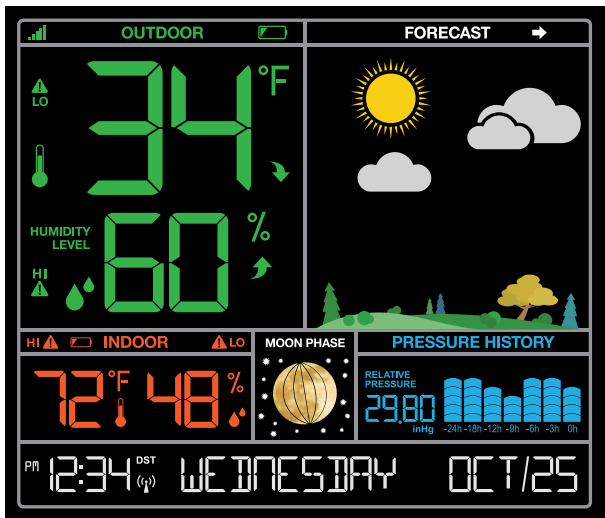
**Optional:** insert 3 AA batteries into your station for time and date backup.












3. Configure basic settings.

4. After 5 minutes, place your sensor outside in a shaded location.



## LCD Features



- |   |                      |   |                |
|---|----------------------|---|----------------|
|    | Sensor Reception     |    | Alert Icon     |
|    | Fahrenheit   Celsius |    | Low Battery    |
|   | Trend Arrows         |   | Forecast Icons |
|  | Temperature          |  | Pressure Graph |
|  | Humidity Percent RH  | <b>PM</b>   | AM   PM        |
|  | Humidity             |  | Atomic Time    |
|   |                      | <b>DST</b>  | DST Indicator  |

## Basic Settings

1. Hold the SET button for 3 seconds to enter basic settings.
2. Press and release the + or - button to adjust flashing values.  
Hold to adjust quickly.
3. Press and release the SET button to move to the next menu item or exit the basic settings menu.
4. Press the LIGHT button at any time to exit.

### **Basic Settings Order:**

- Language  
(English, Español, Français)
- Beep ON/OFF
- Atomic ON/OFF
- DST ON/OFF
- Time Zone
- 12Hr/24Hr Format
- Hour
- Minutes
- Year
- Month
- Date
- Temperature: Fahrenheit/Celsius
- Pressure units: INHG or HPA
- Pressure number setting

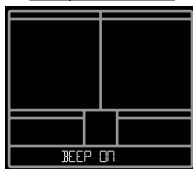
**Note:** When Español or Français are selected, the settings menu will continue in the language selected.

**Note:** If you set Atomic Time to OFF, the settings menu will skip the DST and Time Zone settings and continue with 12Hr/24Hr Format.

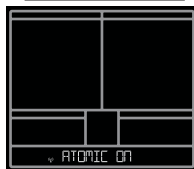
### Language



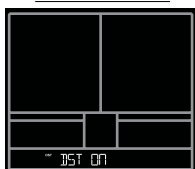
### Beep ON | OFF



### Atomic ON | OFF



### DST ON | OFF



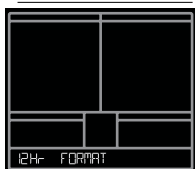
### Time Zone



### 7 Time Zones

" 1200 ATLANTIC  
" 1200 EASTERN  
" 1100 CENTRAL  
" 1000 MOUNTAIN  
" 900 PACIFIC  
" 800 ALASKA  
" 700 HAWAII

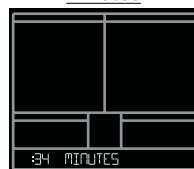
### 12/24 Hour Format



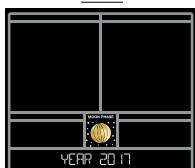
### Hour



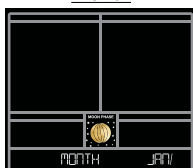
### Minutes



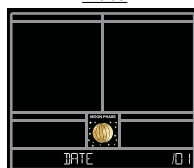
### Year



### Month

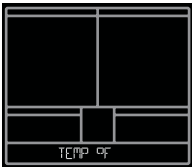


### Date



**Note:** Weekday will set automatically, when year, month and date are set.

### Fahrenheit \ Celsius



### InHg or hPa



### Pressure Number



## **Atomic Time Signal -WWVB**

- Your station will search for the atomic signal at UTC 7:00, 8:00, 9:00, 10:00, and 11:00.
- If there is no WWVB signal reception, your station will search every 2 hours until the WWVB time is received.
- The atomic time signal icon (tower) will flash while searching, and be solid when connected.
- Press and release the SEARCH button to manually search for the WWVB atomic time signal.
- For information about WWVB visit: <http://bit.ly/AtomicTime>

## **Daylight Saving Time (DST) Indicator**

- The letters DST will show when your station has received the atomic time signal and Daylight Saving Time is being observed.
- If you do not observe Daylight Saving Time, turn DST OFF in the settings menu.

## Moon Phases

The moon phase is based on the Lunar Calendar and updates when the year, month and date set (manually or by the WWVB atomic time signal).



New  
Moon



Waxing  
Crescent



First  
Quarter



Waxing  
Gibbous



Full  
Moon



Waning  
Gibbous



Last  
Quarter



Waning  
Crescent

## Seasonal Changes in Foliage

- Your weather station will change to reflect the seasons.
- The trees and foliage will change to give you a fresh look.
- The dates are programmed into your weather station for an automatic foliage change.

### Spring



March 20th – June 20th

### Summer



June 21st – Sept. 20th

### Autumn



Sept. 21st – Dec 20th

### Winter



Dec 21st – Mar 19th



## Pressure Readings

Your station provides Relative Barometric Pressure in:

- **Numbers**-programmable in the settings menu
- **History Graph**- provides pressure trend for the past 24 hours

### Pressure number:

- Your station will acclimate to the correct pressure without setting it yourself.
- You also have the option of setting the pressure number to match your local reporting station by using the settings menu.
- In the settings menu you can also select the pressure unit of Inches of Mercury (inHg default) or Hecto Pascal (hPa).

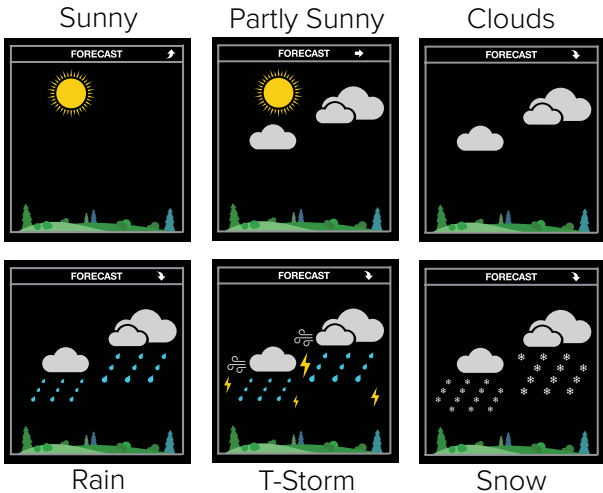


### History Graph:

- Read from left to right, your Pressure History Graph indicates the rise and fall in air pressure over the past 24 hours.
- The numbers below represent the hour in which the reading was taken. The “0h” is the current pressure level. “-3h” was the reading taken three hours ago, compared to current pressure.
- The graph will scroll continually. This cannot be turned off.

## Weather Forecast Icons

- The forecast icons are determined by your station's barometric pressure reading. Please allow 7-10 days for calibration.
- Six forecast icons use changing atmospheric pressure to predict weather conditions for the next 12-hours.
- When Outdoor temperature is below 32°F and the forecast shows RAIN or T-STORM, the station will display SNOW.



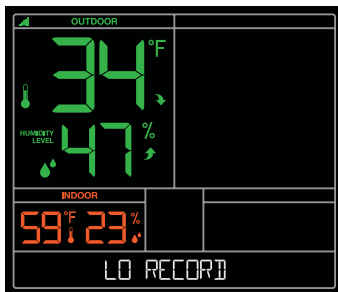
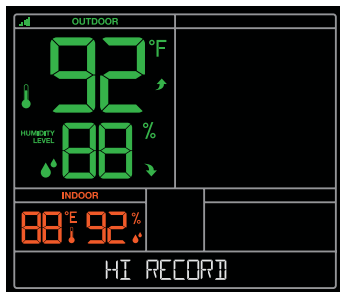
## Forecast Trend Arrows

The arrows by the word FORECAST, indicate the change in pressure over the past 3 hours.

- UP ARROW: Pressure is rising
- RIGHT ARROW: Pressure is unchanged
- DOWN ARROW: Pressure is falling

## HI | LO Temperature/Humidity

- All HI/LO temperature/humidity records reset automatically at 12:00 (midnight).
- Press the TEMP button to view HI/LO records, Heat Index and Dew Point.
  - Press once to view HI temperature/humidity records.
  - Press again to view LO temperature/humidity records.
  - Press again to view outdoor Heat Index.
  - Press again to view outdoor Dew Point.
- HI/LO records reset automatically at midnight.



## Temperature/Humidity Trend Arrows

- The UP and DOWN arrows indicate changes in temperature and humidity over the past hour.
- They update every 15 minutes and compare data from exactly one hour prior.

**Temperature:** arrow changes every 2 degrees Fahrenheit.

**Humidity:** arrow changes every 3% RH

## Set Weather Alerts

There are 8 programmable weather alerts:

- Outdoor LOW Temperature
- Outdoor HIGH Temperature
- Outdoor LOW Humidity
- Outdoor HIGH Humidity
- Indoor LOW Temperature
- Indoor HIGH Temperature
- Indoor LOW Humidity
- Indoor HIGH Humidity

**Note:** When you enter the alerts menu, you will first arm the alert you wish to set, then set the alarm value.

**Note:** If you do wish not arm the alert, simply press the ALERTS button to skip that alert and move to the next alert in the alert menu.

- Hold the ALERTS button to enter alert menu.
- Outdoor LO ALERT ON | OFF will flash.

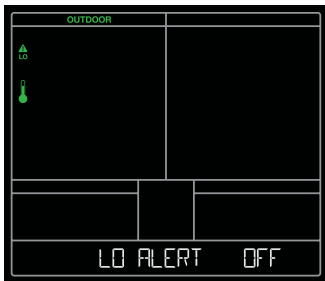
### Alert ON:

1. Press the + or - button to arm the alert. Press the ALERTS button to make the armed alerts value flash.
2. Press the + or - button to set the alert value (Hold to set quickly).
3. Press ALERTS button to move to next alert.
4. Press the LIGHT button at any time to exit.

### Alert OFF:

1. Alerts are OFF unless armed. If you do not wish to set an alert, simply press the ALERTS button again to move to the next alert.

Alert OFF: press + or- to arm



Alert ON: press + or- to adjust



## Active Alert



- The alert icon will only show when the alert is active, and will indicate HI or LO alert.
- When armed alert value is reached, station will beep 5 times, once each minute, until out of alert range.
- The flashing alert icon will indicate whether it is a LO or HI alert that is sounding.
- Press any button to stop the alert from sounding.
- The alert icon will still flash while value is in alert range.

### **Disarm Alert:**

1. Hold the ALERTS button to enter alert setting menu.
2. Press the ALERTS button until you see the alert you wish to disarm.
3. Press the + or - button to disarm the alert. The alert will not sound and the alert icon will not show.
4. Press the LIGHT button to exit.

## Backlight (3 intensity levels)

- When operating with the AC adapter, press and release the LIGHT button to adjust the backlight.
- Intensity Levels: 0% | 20% | 100%
- When operating on battery power only, press the LIGHT button to activate the backlight for 10 seconds at 100%.

## Low Battery Icon

- By indoor temperature; replace batteries in station.
- By outdoor temperature; replace batteries in the sensor.

## Sensor Search



- If your signal is lost, your station will display its LAST DATA recorded from your sensor for 10 minutes.
- After that 10 minutes if the signal does not come back, dashes will show.
- From the main screen hold the SEARCH button to search for your outdoor sensor.
- The sensor reception icon will animate while searching for your sensor.
- The icon will be solid when the sensor is connected.
- Your station will search for your missing sensor for 3 minutes every hour until signal is found.

## Station Restart

A factory restart of your station will return it to its default settings and “out of the box” condition. This may resolve connection issues with your sensor.

1. Be sure there are fresh batteries in your sensor and station.
2. Hold the ALERTS and LIGHT button together for 5 seconds to restart the station.

## Position TX141TH-Bv2 Sensor

- To mount the sensor, use the hole at the top to either hang it from the back using a nail, or insert one mounting screw through the front of your sensor.
- Mount the TX141TH-Bv2 sensor on a north-facing wall or in any shaded area. Under an eave or deck rail is preferred.
- The maximum wireless transmission range to your weather station is over 330 feet (100 meters) in open air, not including walls or floors.
- Be sure the sensor is mounted vertically, to allow moisture to drain out properly.
- Watch sensor mounting video:  
[http://bit.ly/TH\\_SensorMounting](http://bit.ly/TH_SensorMounting)





## **Position Weather Station**

- Pull out the stand and place on a flat surface.
- Or use the hanging holes on the back to mount on a wall.
- Choose a location 6 feet or more away from electronics such as cordless phones, gaming systems, televisions, microwaves, routers, etc.
- Place within range of the outdoor sensors (330 ft, 100m open air).
- Obstacles such as walls, windows, stucco, concrete, and large metal objects can reduce the range.

## **Help Us, Help You!**

If you have ideas for features or support solutions you'd like to see us make, please let us know! We truly want to make owning a La Crosse Technology product not only a practical experience, but also a fun one.

So email us at: [store@lacrossetechnology.com](mailto:store@lacrossetechnology.com)

## **Let's Be Social!**

Follow us on our social media outlets for the latest promotions, product support, and awesome giveaways.



## **Care and Maintenance**

- Do not mix old and new batteries.
- Do not mix Alkaline, Standard, Lithium, or Rechargeable Batteries.
- Always purchase the correct size and grade of battery most suitable for intended use.
- Replace all batteries of a set at the same time.
- Clean the battery contacts and also those of the device prior to battery installation.
- Ensure the batteries are installed with correct polarity (+ and -).
- Remove batteries from equipment when it is not used for an extended period of time.
- Promptly remove expired batteries.

## **Warranty and Support**

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.

Before returning a product, please contact our friendly customer support with questions or visit our online help:

Phone: 1-855-605-6888

**Online Product Support and Registration:**

[www.lacrossetechnology.com/support](http://www.lacrossetechnology.com/support)

# Specifications

## Indoor

<b>Temperature Range:</b>	32 °F to 99 °F (0 °C to 37 °C)
<b>Humidity Range:</b>	10% RH to 99%RH
<b>Relative Pressure Range:</b>	23.62 to 32.48 inHg (800 to 1100 hPa)

## Thermo-hygro Sensor

<b>Temperature Range:</b>	-40°F to 140°F (-40°C to 60°C) Note: When temperatures are colder than -22°F (30°C) it is recommended to use lithium batteries
<b>Humidity Range:</b>	10% RH to 99%RH

## Power

<b>S84107 Station:</b>	5.0 Volt 150mA power cord included (Required) AC6: GPU280500150WAOO
Optional Battery Backup:	3-AA batteries not included, backup for time and date
<b>TX141TH-Bv2 Sensor:</b>	2-AA batteries not included

## Battery Life

<b>S84107 Station:</b>	48-60 months with power cord use
<b>TX141TH-Bv2 Sensor:</b>	over 24 months with reputable batteries.

## Dimensions

<b>S84107 Station:</b>	6.89" L x 1.26" W x 6.4" H (17.5 L cm x 3.2 W cm x H-16.32 H cm)
<b>TX141TH-Bv2 Sensor:</b>	1.57" L x 0.79" W x 5.12" H (4.0cm L x 2.0cm W x 13.0cm H)

# 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 must not be co-located or operating in conjunction with any other antenna or transmitter.

**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!**

The manufacturer is not responsible for any radio or TV interference caused by unauthorized changes or modifications to this equipment. Such changes or modifications could void the user authority to operate the equipment.

This equipment must be installed and operated in accordance with provided instructions and the antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other antenna or transmitter

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