# LA CROSSE® TECHNOLOGY

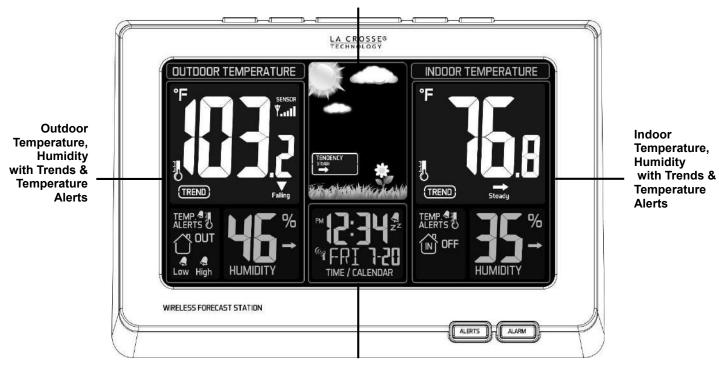
**Model:** 308-1414W/308-1414B

**Instruction Manual** 

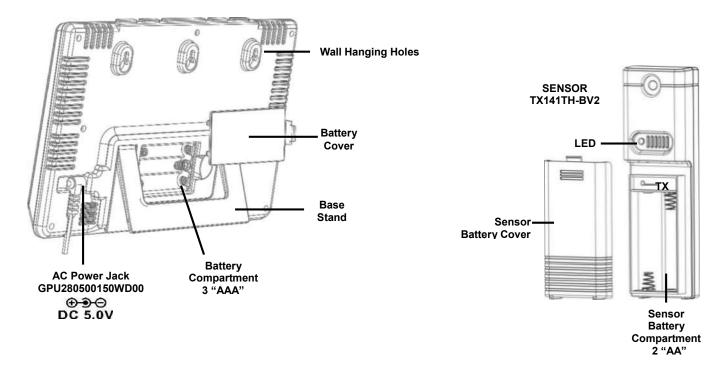
**DC:** 101614

# **WIRELESS COLOR WEATHER STATION**

#### **Color Animated Forecast with**



Time, Calendar + Alarm



# **Quick Setup**

- **Step 1:** Insert the 5 volt AC cord (included) into the wall outlet then into the weather station.
- **Step 2:** Insert the 3 *new* AAA Alkaline batteries (not included) into the weather station. Observe the correct polarity.
- **Step 3:** Insert the 2 *new* AA batteries (not included) into the TX141TH-BV2 outdoor sensor. Observe the correct polarity. The red LED will flash during transmission.

**Restart:** If the outdoor temperature is not displayed after 3 minutes, unplug the AC adapter and remove batteries from the weather station & sensor and press any button 20 times. After 15 minutes return to **Step 1** above.

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## Introduction

La Crosse Technology® introduces a Wireless Color Weather Station with precise, real-time backyard weather. Animated color forecasts with trends react to changing barometric pressure. Monitor in/out temperature trends with high and low alert settings. Measure in/out temperature and humidity with daily min/max records -- all on one easy-to-read color display with adjustable brightness.

#### **Features**

- 12/24 hr. atomic time (manual setting)
- Signal strength icon for sensor transmission
- Outdoor humidity (%RH) with trend indicator
- IN / OUT outdoor temperature (°F / °C) with trend
- Animated forecast icons
- Forecast tendency indicator
- Customize IN / OUT temp. alerts (low / high) for weather station and outdoor sensor
- Perpetual calendar (day / month / date / year)
- Indoor humidity (%RH) with trend indicator
- Indoor temperature (°F / °C) with trend
- Back light control (high / low / off)
- Time alarm
- Heat index and dew point
- Min. / max. temperature and humidity
- Mold Risk (0, LOW, MED, HI)

- Station and sensor low battery icon
- Atomic reception indicator
- Snooze / alarm icon

# **Detailed Setup: Weather Station and Outdoor Sensor**

#### STEP 1:

- Insert the 5-volt AC power adapter into the designated area on the back of the Weather station.
- Plug the AC power adapter into a wall outlet for continuous backlight (ON/OFF), and dimmer feature.

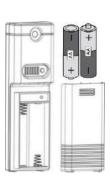
# **STEP 2:** (optional battery operation)

- Slide tab to down and pull out to remove the battery cover.
- Insert three new AAA Alkaline batteries into the back of the weather station. Observe the correct polarity (see marking inside the battery compartment).
- The weather station will light up and show indoor temperature, humidity and time.
- (Backlight will illuminate for 8 seconds when using only battery power with a press/release of the SNOOZE/LIGHT button)

#### **STEP 3:**

- Ensure that the transmitter is within 10 feet of the Weather station.
- Remove battery cover from transmitter. Slide the battery cover down and lift off the front.
- Insert two new AA batteries into the TX141TH-BV2 transmitter. Observe the correct polarity.
- Within three minutes, the Weather station will show readings in the outdoor temperature area on the LCD.

**Note:** Use Alkaline batteries (or Lithium for temperatures below -20°F/-28.8°C).



# **Button Functions**



TIME SET.

SNOOZE / LIGHT (HI-LOW-OFF)

HEAT/DEW



The weather station has 5 buttons across the top and 2 on the front.

ALERTS



## ▼ (Down) Button

#### Setting-

- Press to decrease values during setting.
- Hold 2 seconds to quickly adjust values.

#### **Default Time Display-**

- Press to display minimum temperature/humidity.
- Hold 2 seconds to clear minimum temperature/humidity memory.



## **Temperature Alert-**

Press to disarm alerts

#### TIME SET Button

## **Default Time Display-**

- Press to start or stop a WWVB time signal search
- Hold for 3 seconds to set time/calendar, etc.

# SNOOZE/LIGHT (HI-LOW-OFF) Button

# **Default Time Display-**

- Press to change the LCD backlight brightness. HI/LOW/OFF
- Press to activate backlight for 10 seconds.(without adaptor)

#### **Time Alarm-**

Press to activate the snooze function when alarming

## HEAT/DEW/SENSOR SEARCH button

# **Default Time Display-**

- Press once to view Heat Index.
- Press twice to view Dew Point.
- Hold to search for Outdoor sensor.

#### ▲ (UP) Button

# Setting-

- Press to increase the values during setting.
- Hold 2 seconds to quickly adjust values.

#### **Default Time Display-**

- Press to view maximum temperature/humidity.
- Hold 2 seconds to clear maximum temperature/humidity memory.

## **Temperature Alert-**

Press to arm alerts

#### **ALERT Button**

#### **Default Time Display-**

- Press to toggle between Outdoor High Alert, Outdoor Low Alert, Indoor High Alert and Indoor Low Alert.
- Hold to enter Alert setting

#### **ALARM Button**

## **Default Time Display-**

- Press once to show alarm time
- Hold for 2 seconds enter alarm setting mode

#### Alarm Mode-

Press to activate or deactivate time alarm.

# **Set Time, Date, Temperature Unit**

Hold the **TIME SET** button to enter time set mode.



- Press the ▼ or ▲ buttons to adjust the values.
- 2. Press the **TIME SET** button to confirm adjustments and move to the next item.

#### **Time Set Order:**

- 1. WWVB time signal (On/Off)
- 2. Time Zone 7 time zones
- 3. DST (Daylight Saving Time On/Off)
- 4. 12/24 hour time format
- 5. Hour
- 6. Minutes
- 7. Year
- 8. Month
- 9. Date
- 10.Fahrenheit/Celsius

Press the **TIME SET** button to exit, or wait 20 seconds without pressing buttons to return to the normal time display.

# WWVB Reception ON/OFF

The WWVB atomic time reception defaults to ON.

To turn the WWVB reception OFF:

- 1. Hold the **TIME SET** button for 5 seconds.
- 2. **WWVB** and **ON** will flash.
- 3. Press and release the ▼ or ▲ buttons to turn this OFF if you do not want to receive the WWVB time signal.
- 4. Confirm with the **TIME SET** button and move to the Time Zone.

WWVB ON

#### Time Zone

This station offers seven time zones listed in letter format (default is EST):



Atlantic

Eastern

Central

Mountain

Pacific

Alaska

HAT Hawaiian

TIME ZONE

AST

EST

CST

PST

AKT

- AST Atlantic Time
- EST Eastern Time
- CST Central Time
- MST Mountain Time
- PST Pacific Time
- AKT Alaskan Time
- HAT Hawaiian Time
- 1. **EST** will flash above the date.
- 2. Press and release the ▼ or ▲ buttons to select a different Time Zone.
- 3. Confirm with the **TIME SET** button and move to Daylight Saving Indicator.

## Daylight Saving Time Indicator

DST will default to the ON position as most of the country observes the DST change. If you live in an area does not observe the DST change, switch this to the OFF position.

- 1. **DST** and **ON** will flash above the date.
- 2. Press and release the ▼ or ▲ buttons to turn DST to OFF.

ON DST

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3. Confirm with the **TIME SET** button and move to 12/24 hour time format.

#### 12-hour or 24-hour Time Format

The Time may be displayed in 12-hour or 24-hour format. Default is 12-hour time.

**Note:** When in 12-hour format AM or PM will show in front of the hour.

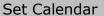
- 1. **12H** will flash in the time display.
- 2. Press and release the ▼ or ▲ buttons to select 24-hour time.
- 3. Confirm with the **TIME SET** button and move to Set Time.



#### Set Time

To set the time manually:

- 1. The **hour** digit will flash.
- 2. Press and release the ▼ or ▲ buttons to select the hour.
- 3. Press and release the **TIME SET** button to set the minutes.
- 4. The **minute's** digit will flash.
- 5. Press and release the ▼ or ▲ buttons to select the minutes.
- 6. Confirm with the **TIME SET** button and move to Set Calendar.



The date default of the weather station is 1. 1. 2014.



To set the calendar:

- 1. The **year** will flash.
- 2. Press and release the  $\nabla$  or  $\triangle$  buttons to set the year (between years 2000-2039).
- 3. Press the **TIME SET** button again to confirm and to enter the month setting.
- 4. The month will flash.
- 5. Press and release the ▼ or ▲ buttons to set the month.
- 6. Press the **TIME SET** button again to confirm and enter the date setting.
- 7. The **date** will flash.
- 8. Press and release the ▼ or ▲ buttons to set the date.
- 9. Confirm all calendar settings with the **TIME SET** button to confirm and move to select Fahrenheit/Celsius.

**Note:** The day of the week will set automatically once the year, month and date are set.

#### Fahrenheit/Celsius

- 1. °F will flash.
- 2. Press and release the ▼ or ▲ buttons to select Fahrenheit or Celsius.
- 3. Confirm with the **TIME SET** button and exit the program menu.



## **Temperature Alerts**

The weather station offers individual, programmable high and low temperature alerts.



Hold the **ALERT** button for five seconds, until the weather station beeps, to select and set temperature alert values. Each alert value will flash separately during alert set mode.



- **OUTDOOR HIGH** alert will flash. Press the ▼ or ▲ buttons to set the alert value, and press the ALERT button to confirm. Then press the **ALERT** button again switch to OUTDOOR LOW setting.
- **OUTDOOR LOW** alert will flash. Press the ▼ or ▲ buttons to set the alert value, and press the ALERT button to confirm. Then press the **ALERT** button again switch to INDOOR HIGH setting.
- INDOOR HIGH alert will flash. Press the ▼ or ▲ buttons to set the alert value, and press the ALERT button to confirm. Then press the ALERT button again switch to INDOOR LOW setting.
- INDOOR LOW alert will flash. Press the ▼ or ▲ buttons to choose the value, and press the ALERT button to confirm and exit.

**Note:** After selecting temperature alert values use the next step to turn individual alerts ON or OFF.

## Arm/Disarm Temperature Alerts

- In normal time mode, press and release the ALERT button to toggle between:
  - Outdoor HI
  - Outdoor Lo
  - 。 Indoor HI
  - 。 Indoor LO







- Press the ▲ button to arm the selected alert.
- The alert bell appears when each alarm is activated.
- Press the ▼ button to disarm the selected alert.
- OFF will show in the Alerts area if no alert is active.

# Temperature Alert Sounds

- When temperature alert sounds, the corresponding alert bell will flash.
- The alert beeps once every minute, until the temperature is out of alert range.
- Press any button to stop alert. The alert bell will still show.
- **Disarm Alert**: In normal mode, hold and release the **ALERT** button to select the alert to disarm. With HI or LO alert selected, press the ▼ button disarm alert.

# Adjust Backlight (HI-LOW-OFF)

#### When using AC power:

• Press the **HI/LOW/OFF** button to adjust the backlight:

SNOOZE / LIGHT (HI-LOW-OFF)

## When using Battery power only:

Press the HI/LOW/OFF button for 10 second backlight.

## **Time Alarm Set**

Hold the **ALARM** button for 5 seconds to enter the alarm time set mode.



- 1. The alarm hour digit will flash in the time display.
- 2. Press and release the ▼ or ▲ buttons to select the hour.
- 3. Press and release the **ALARM** button to set the minutes.
- 4. The minute digits will flash.
- 5. Press and release the ▼ or ▲ buttons to select the minutes.
- 6. Confirm with the **ALARM** button and exit.
- 7. The bell icon will show indicating the alarm is active.
- 8. The bell icon will flash when the alarm is sounding.

#### Deactivate Alarm

- 1. Press and release the **ALARM** button once to show alarm time.
- 2. Press and release the **ALARM** button to deactivate the Alarm.
- 3. The bell icon will disappear indicating the alarm is no longer active.



#### Snooze

- 1. When the alarm sounds, press the **SNOOZE/LIGHT** button to trigger snooze alarm for 10 minutes. The snooze icon **Zz** will flash by the weekday when the snooze feature is active.
- 2. To stop alarm for one day, press ALARM button, while in snooze mode. The bell icon will remain solid.

**Note**: When the alarm sounds, it continues for 2 minutes and then shuts off completely.

# **Heat Index/Dew Point**

The **HEAT/DEW** button toggles between Heat Index, Dew Point, and Mold Risk. Each feature will display for 10 seconds then return to default display if the button is not pressed again.



#### Heat Index

Heat Index combines the effects of heat and humidity. It is the apparent temperature of how hot it feels to a human being. As humidity increases, the body is unable to cool effectively; therefore, the temperature will feel warmer.

**View Heat Index:** From a normal display, press the **HEAT/DEW** button **once** and Heat Index will show in place of the outdoor temperature.

**Note:** Heat index will be the same number as the temperature until the outdoor temperature is above 80 °F (26.7°C).

# Dew Point Temperature

Dew Point Temperature is the saturation point of the air, or the temperature to which the air has to cool in order to create condensation. The higher the dew points, the higher the moisture content of the air at a given temperature.

**View Dew Point Temperature:** From a normal display, press the **HEAT/DEW** button **twice** and Dew Point will show place of the outdoor temperature.

**Note:** Dew Point is lower than the actual temperature.

## **Search for Outdoor Sensor**

• Hold the **HEAT/DEW** button to search for the outdoor sensor.



 The strength signal icon will animate until the sensor signal is received or for 3 minutes if no signal available.













# Temperature/Humidity Trend indicators

The indoor and outdoor temperature/humidity trend indicators will update every 30 minutes or less. These trends represent temperature changes over the past three hours.

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**Example:** At 1:00pm, the arrow indicates the change in temperature since 10:00am. At 1:30pm, the arrow will indicate the temperature change since 10:30am.

- Temperature has **risen** in the past 3 hours.
- Humidity has risen in the past 3 hours.



- Temperature has **not changed** in the past 3 hours.
- Humidity has **not changed** in the past 3 hours.



STEADY

- Temperature has **fallen** in the past 3 hours.
- Humidity has **fallen** in the past 3 hours.

# FALLING TREND

# MIN/MAX (View, Reset)

The Weather station provides the daily minimum and maximum temperatures each day starting at midnight (12:00 AM). The Weather station automatically resets the min/max temperatures at midnight (12:00 AM).



**View MIN data:** Press and release the ▼ button to view the minimum Indoor and Outdoor Temperatures.

**Reset MIN data:** Hold the ▼ button for five seconds and the Indoor and Outdoor Minimum Temperatures will be reset.

**View MAX data:** Press and release the ▲ button to view the maximum Indoor and Outdoor Temperatures.

**Reset MAX data:** Hold the ▲ button for five seconds and the Indoor and all Outdoor Maximum Temperatures will be reset.

**Note:** The temperature areas will show dashes briefly then return to current temperatures.

## **Animated Color Forecast Icons**

Animated forecast icons use changing atmospheric pressure to predict weather conditions for the next 12-hours with 70-75% accuracy.

## **INTELLIGENT WEATHER FORECAST**

This station learns; please allow 3 to 4 weeks for barometric calibration. This will ensure an accurate personal forecast for your location.

SUNNY PARTLY SUNNY CLOUDY RAINY STORMY SNOWY

PARTLY SUNNY CLOUDY RAINY STORMY SNOWY

- The Weather 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 Weather station builds memory, it will compare the current average pressure to the past forty day average pressure for increased accuracy. The longer the Weather station operates in one location, the more accurate the forecast icons will be.

The icons forecast the weather in terms of getting better or worse and not necessarily sunny or rainy as each icon indicates. For example, if the current weather is cloudy and the rainy icon is displayed, it does not mean that the product is faulty because it is not raining. It simply means that the air pressure has dropped and the weather is expected to get worse, but not necessarily rainy.

# Forecast Tendency Indicators (Up, Right, Down Arrows)

Working with the forecast icons, the tendency indicators let you know if the weather is improving, steady or worsening.

TENDENCY
Rising Pressure Weather is Expected to Improve

Steady Pressure Weather is Expected to Stay the Same

TENDENCY
Falling Pressure Weather is Expected to Worsen

# Manual WWVB Time Signal Search

 Press the **TIME SET** button to start or stop a manual signal search. The WWVB Icon flashes during signal search.



**For information about WWVB visit:** www.nist.gov/pml/div688/grp40/wwvb.cfm

WWVB ATOMIC ICON



# **Outdoor Positioning and Use**

- Mount the Outdoor Sensor on a north-facing wall or in any well shaded area. Under an eave or deck rail is preferred.
- The maximum wireless transmission range to the weather station is over 300 feet (91 meters) in open air, not including walls or floors.
- Be sure the outdoor sensor is mounted vertically.

# Low Battery icon

Low battery icon indicates low battery for station or sensor.

- If the icon is displayed in the Outdoor Temperature section, replace batteries in the Outdoor Sensor.
- If the icon is displayed in the Indoor Temperature section, replace batteries in the Weather Station.



<b>Specifications</b>		
Indoor		
Temperature Range:	+32°F to +122°F (0°C to 50°C)	
Humidity Range:	19%-97% (RH)	
Interval:	About every 30 seconds	
Outdoor		
Temperature Range:	-40°F to 140°F (-40°C to 60°C)	
Alkaline Batteries:	-20°F to 140°F (-29°C to 60°C)	
Lithium Batteries:	-40°F to -20°F (-40°C to -29°C)	
NOTE:	Temperatures below - 20°F (-29°C) require Lithium batteries in the outdoor sensor	
Humidity Range:	19%-97% (RH)	
Distance:	Over 300 ft. (91 meters) RF 433MHz (open air)	
Power		
Weather Station		
Primary AC Power:	5-volt AC 0.6A power adapter (included)	
AC Adapter No.:	GPU28050015WD00	
Optional/Battery Backup	Optional 3-AAA, IEC, LR3 batteries (not included)	
TX141TH-BV2 Outdoor Sensor:	2-AA, IEC, LR6 batteries (not included)	
Battery Life		
Weather Station Battery Backup:	Battery life is over 36 months when using the AC adapter for primary power	
TX141TH-BV2 Outdoor Sensor:	Battery life is over 12 months when using reputable battery brands for both Alkaline and Lithium batteries	
Dimensions		
Weather Station:	8.34" L x 1.03" W x 5.48" H (211.836 x 26.162 x 139.192mm)	
TX141TH-BV2 Outdoor Sensor:	1.57"L x 0.79"W x 5.12"H (40 x 20 x 130mm)	

# **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 the 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 correctly with regard to polarity (+and -).
- Remove batteries from equipment with is not to be used for an extended period.

- Remove expired batteries promptly.
- Do not expose to extreme temperature, vibration or shock.
- Clean with a soft damp cloth. Do not use solvents or scouring agents.
- The product is not a toy. Keep it out of reach of children.
- The product is not to be used for medical purpose or for public information. It is intended for home use only.
- The specs of this product may change without prior notice.
- Improper use or unauthorized opening of housing voids warranty.
- If the product is not working properly, change the batteries and/or check the AC cord connection.

# **Warranty Information**

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 (manuals and FAQS):

1-608-782-1610 Phone:

Online Product Support: www.lacrossetechnology.com/support

**Product Registration:** 

www.lacrossetechnology.com/support/register

**View full warranty details online at:** 

www.lacrossetechnology.com/warranty info.pdf

**Warranty Address:** 

La Crosse Technology, Ltd 2830 S. 26th St. La Crosse, WI 54601

Protected under U.S. Patents:

5,978,738 | 6,076,044 | RE43903







# **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 quarantee 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 modifications to this equipment. Such modifications could void the user authority to operate the equipment.

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