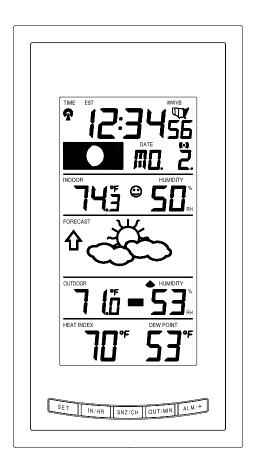
# WS-9043U Wireless 433 MHz Radio-controlled Weather Station

# **Instruction Manual**



# LA CROSSE® TECHNOLOGY technology tools for home & office

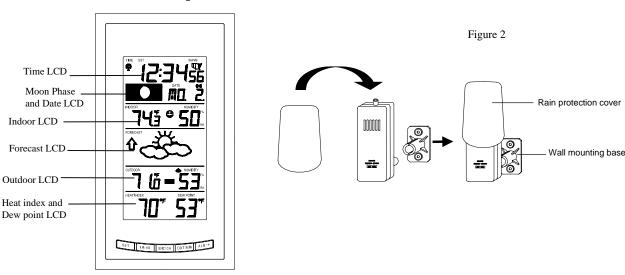
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#### INVENTORY OF CONTENTS

- 1. The WS-9043U weather station (Figure 1)
- 2. One TX4U remote temperature/humidity sensor (Figure 2)
- 3. Mounting hardware
- 4. Instruction manual and warranty card.

Figure 1



# ADDITIONAL EQUIPMENT (not included)

- 1. Three fresh AA 1.5V batteries for the indoor weather station.
- 2. Two fresh AA 1.5V batteries for the remote temperature/humidity sensor.
- 3. One Philips screwdriver for mounting.

# **ABOUT WWVB (Radio Controlled Time)**

The NIST (National Institute of Standards and Technology—Time and Frequency Division) WWVB radio station is located in Ft. Collins, Colorado, and transmits the exact time and date signal continuously throughout the United States at 60 kHz. The signal can be received up to 2,000 miles away through the internal antenna in the Weather Station. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours. The weather station will search for a signal every night when reception is best. The WWVB radio station derives its signal from the NIST Atomic clock in Boulder, Colorado. A team of atomic physicists is continually measuring every second, of every day, to an accuracy of ten billionths of a second per day. These physicists have created an international standard, measuring a second as 9,192,631,770 vibrations of a Cesium-133 atom in a vacuum. For more information on the atomic clock and WWVB please see the NIST website at <a href="http://www.boulder.nist.gov/timefreq/stations/wwvb.htm">http://www.boulder.nist.gov/timefreq/stations/wwvb.htm</a>.

# **QUICK SET-UP GUIDE**

# Hint: Use good quality Alkaline Batteries and avoid rechargeable batteries.

- 1. Have the indoor weather station and remote temperature/humidity sensor 3 to 5 feet apart.
- Batteries should be out of both the indoor weather station and remote temperature/humidity sensor units for 10 minutes.
- 3. Place the batteries into the **remote temperature/humidity sensor** first then into the **indoor weather station**.
- 4. DO NOT PRESS ANY BUTTONS FOR 15 MINUTES.

In this time the indoor weather station and remote temperature/humidity sensor will start to talk to each other and the display will show the indoor temperature/humidity, outdoor temperature/humidity, heat index and dew point. If the indoor weather station does not display all information after the 15 minutes please retry the set up as stated above. After all information has been displayed for 15 minutes you can place your sensors outdoors and set your time.

# **Important Notes on Set-up and Operation**

- The remote temperature/humidity sensor should be placed in a dry, shaded area.
- Fog and mist will not harm your remote temperature/humidity sensor but direct rain must be avoided.
- The remote temperature/humidity sensor has a range of 330 feet. Any walls that the signal will have to pass through will reduce distance. An outdoor wall or window can have up to 30 feet of resistance and an interior wall can have up to 20 feet of resistance. Your distance plus resistance should not exceed 330 ft. in a straight line.
- The remote temperature/humidity sensor transmits a signal every minute. After the batteries have been installed, the indoor weather station will search for the signal for a duration of 4 minutes. If there is no temperature or humidity reading in the OUTDOOR LCD after 4 minutes, make sure the units are within range of each other, or repeat the battery installation procedure.

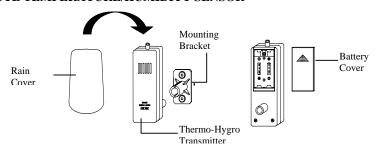
• If a button is pressed before the indoor weather station receives the signal from the remote temperature/humidity sensor, you will need to follow the battery installation procedure again.

To complete the set up of your new wireless weather station after the 15 minutes have passed please follow the steps that follow in the Detailed Set-Up Guide.

#### **DETAILED SET-UP GUIDE**

#### **BATTERY INSTALLATION**

# A. REMOTE TEMPERATURE/HUMIDITY SENSOR

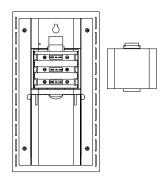


- 1. Remove the mounting bracket and Rain cover.
- 2. Remove the battery cover by sliding the cover down.
- 3. Observing the correct polarity install 2 AA batteries. The batteries will fit tightly (to avoid start-up problems make sure they do not spring free).
- 4. Replace the battery cover by sliding upwards. Be sure battery cover is on securely.
- 5. Replace the humidity hood.

#### B. INDOOR WEATHER STATION

- Remove the battery cover. To do this, insert a solid object in the space provided at the lower-central position of the battery cover, then push up and pull out on the battery cover.
- 2. Observe the correct polarity, and install 3 AA batteries.
- 3. Replace the battery cover.

**Note:** Immediately after the batteries have been installed, the LCD (Liquid Crystal Display) will flash. Within 15 seconds the indoor temperature, indoor relative humidity, and the weather icons (sun and clouds) will be displayed. If not, remove batteries for 10 seconds and reinstall. If the outdoor



temperature is not displayed within four minutes, remove batteries from both units, wait 30 seconds, and reinstall making sure to install batteries into the remote temperature sensor first. The time will show 12:00 and start searching for the WWVB signal. If it successfully receives the time signal (usually at night), it will display the correct time (default time-zone is Eastern). You will need to adjust the time zone to match your local time.

#### PROGRAM MODE

**Programming Note:** If 15 seconds are allowed to pass, or the *SNOOZE/CH* button is pressed during the programming mode, the unit will confirm/set the last information entered—the display will stop flashing and return to normal time-date readings. If you don't leave the program mode during the programming of sections IV through XI, you can advance to step 4 of the next program setting. If you do leave the program setting (or want to program a specific setting) follow each instructional step to program that setting.

# I. PROGRAMMING SEQUENCE AND DEFAULT SETTINGS

The programming sequence and default (factory) settings are as follows:

LCD Contrast	5
Time Zone	-5 (Eastern)
Daylight Saving Time	ON
Radio-controlled time reception	ON
12/24-hour time	12
Time – Hour	12
Time – Minute	:00
Year	2003
Month	1

Day	1
Snooze	10 minutes
Forecast Sensitivity	2

#### II. FUNCTION KEYS

The function keys are located on the front of the unit directly below the LCD (Liquid Crystal Display).



# II. SETTING THE LCD CONTRAST

- 1. Press and hold the SET button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.



**Note:** There are 8 LCD contrast levels to choose from—"Lcd 0" is the lightest, and "Lcd 7" is the darkest.

- 3. Press and release the *ALM/*+ button to select the level you desire.
- 4. Press and release the SET button to confirm and advance to the Time Zone setting.

#### III. TIME ZONE SETTING

- 1. Press and hold the SET button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the SET button again.
- 4. The time zone will flash in the DATE LCD.
- 5. Press and release the *ALM/*+ button to select your time zone.



Note: It is possible to select any time zone from -12 GMT to +12 GMT (for example to see the time in another country).

TIME ZONES

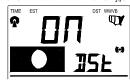
	GMT	0
	Atlantic	-4
EST;	Eastern	-5
CST;	Central	-6
MST;	Mountain	-7
PST;	Pacific	-8
ALA;	Alaska	-9
HAW;	Hawaii	-10

6. Press and release the SET button to confirm and advance to the Daylight Saving Time setting.

#### IV. DAYLIGHT SAVING TIME (DST) SETTING

- 1. Press and hold the SET button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the *SET* button twice.
- 4. "DST" will appear in the DATE LCD and either "ON" or "OFF" will flash in the TIME LCD.
- 5. Press and release the *ALM/*+ button to select DST on or off.

**Note:** "DST OFF" indicates that the feature is off and the WWVB will not change times automatically. "DST ON" indicates that the feature is on and the WWVB will change times automatically.

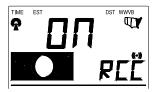


**Note:** Some locations (Arizona and parts of Indiana) do not follow Daylight Saving Time, and should select "DST OFF".

6. Press and release the SET button to confirm and advance to the radio-controlled time on/off setting.

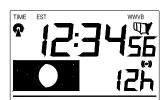
#### V. RADIO-CONTROLLED TIME ON/OFF SETTING

- 1. Press and hold the *SET* button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the *SET* button three times.
- 4. "RCC" will appear in the DATE LCD and "ON" or "OFF" will flash in the TIME LCD.
- 5. Press and release the *ALM/+* button to select radio-controlled time on or off.
- 6. Press and release the SET button to confirm and advance to the 12/24-hour time setting.



#### VI. 12 OR 24 HOUR TIME SETTING

- 1. Press and hold the *SET* button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the *SET* button four times.
- 4. "12h" or "24h" will flash in the DATE LCD.
- 5. Press and release the ALM/+ button to select 12 or 24-hour time format.



**Note:** When in the 12-hour format "P.M." will appear to the left of the hour in the time LCD between the hours of noon and midnight.

6. Press and release the SET button to confirm and advance to the time setting.

#### VII. TIME SETTING

There are two methods by which the time and date can be set:

- A) Automatically via WWVB reception, or
- B) Manually.

# A. WWVB (Remote Control Time)

This method requires you to do nothing, except wait for the signal to be received, and to select a time zone. Reception usually takes approximately 10 minutes during optimal conditions. The best conditions for reception is at night, between midnight and 6:00 am—when there is less atmospheric interference. To keep your time as accurate as possible, the indoor weather station conducts a WWVB search every night between these hours, and overrides any manually set time. The WWVB tower icon (appearing in the TIME LCD) will flash when a signal-search is in progress and a signal is being received, and will remain steady when the signal has been received. If the WWVB time has not been received after 15 minutes of battery installation, you may manually set the time or leave the time function alone (reception will occur regardless).

# B. MANUAL TIME SETTING

**Note:** When in the 12-hour format "P.M." will appear to the left of the hour in the time LCD between the hours of noon and midnight.

**Note:** Reception of the WWVB signal will automatically set the time. The reception of the signal will override any programmed time.

- 1. Press and hold the *SET* button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the *SET* button five times.
- 4. The hours digits will flash in the TIME LCD.
- 5. Press and release the *ALM/+* button to advance the hours.
- 6. Press and release the SET button to confirm the hours setting and advance to the minutes setting.
- 7. The minutes digits will flash in the TIME LCD.
- 8. Press and release the *ALM/+* button to advance the minutes.
- 9. Press and release the SET button to confirm and advance to the year setting.

#### VIII. SETTING THE YEAR, DAY AND MONTH

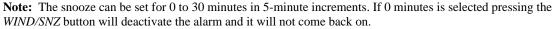
**Note:** Reception of the WWVB signal will also set the date and day. The reception of the signal will override any programmed date and day.

- 1. Press and hold the *SET* button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the *SET* button seven times.
- 4. The year will flash in the DATE LCD.
- 5. Press and release the *ALM/+* button to advance the year.
- 6. Press and release the *SET* button to confirm the year and advance to the month setting.
- 7. The month will flash in the DATE LCD.
- 8. Press and release the *ALM/*+ button to advance the month.
- Press and release the SET button to confirm the month and advance to the day setting.
- 10. The day of the month will flash in the DATE LCD.
- 11. Press and release the *ALM/*+ button to advance the day of the month.
- 12. Press and release the *SET* button to confirm and advance to the snooze setting.

#### IX. SETTING THE SNOOZE

- 1. Press and hold the SET button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the *SET* button ten times.
- 4. "Sn" will appear in the DATE LCD and a number will be flashing next to it.
- 5. Press and release the *ALM/*+ button to select the duration of the snooze.



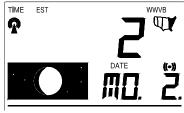


6. Press and release the SET button to confirm and advance to the forecast sensitivity setting.

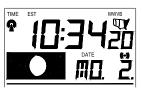
# X. SETTING THE FORECAST SENSITIVITY

**Note:** The forecast sensitivity can be adjusted to allow for areas that have a higher or lower sensitivity to changing air pressure (for example coastal areas have more pressure change than areas such as southern Arizona).

The numbers correspond to the amount of air pressure change necessary to trigger a change in the forecast icon. Areas that tend to have more air pressure change would set the sensitivity to 3, while areas that experience lower than normal air pressure change would set the sensitivity to 1.



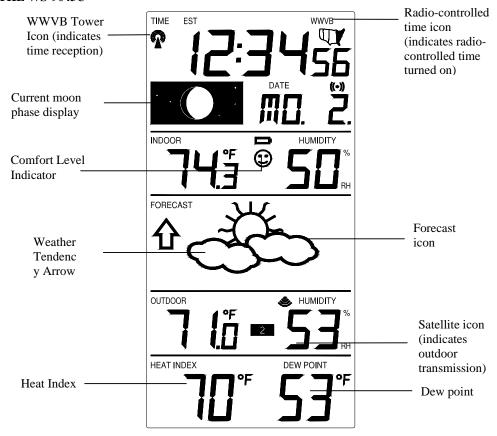
- 1. Press and hold the SET button for 3 seconds.
- 2. "LCD" will show in the TIME LCD and the number setting will flash.
- 3. Press and release the SET button eleven times.
- 4. Either "1", "2" or "3" will flash in the TIME LCD and the forecast icon and tendency arrows will flash in the FORECAST LCD.
- 5. Press and release the *ALM/+* button to select the forecast sensitivity.
- 6. Press and release the SET button to confirm the forecast sensitivity and complete the programming.







#### **FEATURES OF THE WS-9043U**



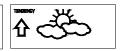
#### I. WEATHER FORECAST

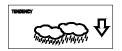
The weather forecasting feature is estimated to be 75% accurate and is for the next 12 to 24 hours. The weather forecast is based solely upon the change of air pressure over time. The WS-9043U averages past air-pressure readings to provide an accurate forecast—creating a necessity to disregard all weather forecasting for 12-24 hours after the unit has been setup, reset, or moved from one altitude to another (i.e. from one floor of a building to another floor). In areas where the weather is not largely affected by the change of air pressure, the sensitivity setting should be set to 1. In areas where the air pressure changes more rapidly (such as coastal areas) the sensitivity setting should be set to 3.

# A. WEATHER ICONS

There are 3 possible weather icons that will be displayed in the FORECAST LCD:







Sunny—indicates that the weather is expected to improve (not that the weather will be sunny). Sun with Clouds—indicates that the weather is expected to be fair (not that the weather will be sunny with clouds).

Clouds with Rain—indicates that the weather is expected to get worse (not that the weather will be rainy).

These icons indicate the expected weather change in the next 12 to 24 hours. The icon does not give an exact prediction of the weather, however it should be viewed as a generalization of the expected weather change (for example a "sunny" icon indicates the weather is expected to improve).

The weather icons change when the unit detects a change in air pressure. The icons change in order, from "sunny" to "partly sunny" to "cloudy" or the reverse. It will not change from "sunny" directly to "rainy", although it is possible for the change to occur quickly. If the symbols do not change then the weather has not changed, or the change has been slow and gradual.

#### **B. WEATHER TENDENCY ARROWS**

Other possible displays in the FORECAST LCD are 2 weather tendency arrows, one that points up (on the left side of the LCD) and one that points down (on the right side of the LCD). These arrows reflect current changes in the air pressure. An arrow pointing up indicates that the air pressure is increasing and the weather is expected to improve or remain good, an arrow pointing down indicates that the air pressure is decreasing and the weather is expected to become worse or remain poor.

#### II. INDOOR TEMPERATURE, HUMIDITY, AND COMFORT LEVEL INDICATOR

The current indoor temperature and relative humidity are displayed in the INDOOR LCD.

The comfort level indicator is located at the center of the INDOOR LCD. The indicator will display a happy face icon when the temperature is between 68°F and 78.6°F, and the humidity is between 45% and 65%. A sad face icon will be displayed when the temperature and humidity are outside the mentioned ranges.

# III. OUTDOOR TEMPERATURE AND HUMIDITY / HEAT INDEX / DEWPOINT

The temperature and humidity received from the remote temperature/humidity sensor is viewed in the OUTDOOR LCD. When there is more than one remote temperature/humidity sensor unit in operation, a "boxed" number will appear to the center of the temperature. This indicates which remote temperature sensor unit (1, 2, or 3) is currently displaying its data in the OUTDOOR LCD. (This feature is explained in further detail in section *VII—Adding Remote Temperature Sensors*). The Heat Index and Dew Point will then be calculated from the received temperature/humidity readings.

# IV. MINIMUM AND MAXIMUM TEMPERATURE, HEAT INDEX AND DEW POINT RECORDS

The WS-9043U keeps a record of the MINIMUM and MAXIMUM and date of their occurrence, for both the indoor and outdoor modes.

#### A. VIEWING THE INDOOR TEMPERATURE AND HUMIDITY RECORDS

- 1. Press and release the *IN/HR* button once. "MAX" temperature appears with the indoor temperature, indicating that the maximum temperature and the time and date of occurrence are displayed. The maximum record will display for 30 seconds before returning to the normal display mode.
- Press and release the *IN/HR* button again (once while "MAX" temperature is still displayed, twice
  otherwise). "MIN" appears with the indoor temperature, indicating that the minimum temperature and the
  time and date of occurrence are displayed. The minimum record will display for 30 seconds before
  returning to the normal display mode.
- 3. Press and release the *IN/HR* button again (once while "MIN" temperature is still displayed, 3 times otherwise). "MAX" appears with the indoor humidity, indicating that the maximum humidity and the time and date of occurrence are displayed. The maximum record will display for 30 seconds before returning to the normal display mode.
- 4. Press and release the *IN/HR* button again (once while "MAX" humidity is still displayed, 4 times otherwise). "MIN" appears with the indoor humidity, indicating that the minimum temperature and the time and date of occurrence are displayed. The minimum record will display for 30 seconds before returning to the normal display mode.
- 5. While "MIN" is still displayed press and release the *IN/HR* button again to return to the current data display. While in the record display mode, pressing any key except *SET* key will also return the display back to the current readings.

# B. VIEWING THE OUTDOOR TEMPERATURE/ HUMIDITY/ HEAT INDEX AND DEW POINT RECORDS

- 1. Press and release the *OUT/MIN* button once. "MAX" appears with the outdoor temperature, indicating that the maximum temperature, and the time and date of occurrence are displayed. The maximum record will display for 30 seconds before returning to the normal display mode.
- 2. Press and release the *OUT/MIN* button again (once while "MAX" temperature is still displayed, twice otherwise). "MIN" appears with the outdoor temperature, indicating that the minimum temperature and the time and date of occurrence are displayed. The minimum record will display for 30 seconds before returning to the normal display mode
- 3. Press and release the *OUT/MIN* button again (once while "MIN" temperature is still displayed, 3 times otherwise). "MAX" appears with the outdoor humidity, indicating that the maximum humidity, and the time and date of occurrence are displayed. The maximum record will display for 30 seconds before returning to the normal display mode.
- 4. Press and release the *OUT/MIN* button again (once while "MAX" humidity is still displayed, 4 times otherwise). "MIN" appears with the outdoor humidity, indicating that the minimum humidity and the time and date of occurrence are displayed. The minimum record will display for 30 seconds before returning to the normal display mode.
- 5. Press and release the *OUT/MIN* button again (once while "MIN" humidity is still displayed, 5 times otherwise). "MAX" appears with the heat index and, indicating that the maximum heat index, and the time and date of occurrence are displayed. The maximum record will display for 30 seconds before returning to the normal display mode.
- 6. Press and release the *OUT/MIN* button again (once while "MAX" heat index is still displayed, 6 times otherwise). "MIN" appears with the heat index, indicating that the minimum heat index and the time and date of occurrence are displayed. The minimum record will display for 30 seconds before returning to the normal display mode.
- 7. Press and release the *OUT/MIN* button again (once while "MIN" heat index is still displayed, 7 times otherwise). "MAX" appears with the dew point, indicating that the maximum dew point, and the time and

- date of occurrence are displayed. The maximum record will display for 30 seconds before returning to the normal display mode.
- 8. Press and release the *OUT/MIN* button again (once while "MAX" dew point is still displayed, 8 times otherwise). "MIN" appears with the dew point, indicating that the minimum dew point and the time and date of occurrence are displayed. The minimum record will display for 30 seconds before returning to the normal display mode.
- 9. While "MIN" is still displayed, press and release the *OUT/MIN* button again to return to the current data display. While in the record display mode, pressing any key except *SET* key will also return the display back to the current readings.

# C. RESETTING THE MIMIMUM AND MAXIMUM RECORDS

#### To reset the INDOOR records:

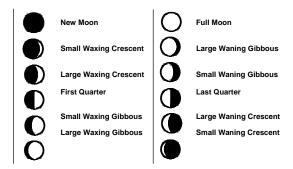
- 1. Press and release the *IN/HR* button to select the record you wish to reset, either MAX or MIN.
- 2. Press and hold the *SET* button for 5 seconds.
- 3. The record is now reset and will show the current time in the TIME LCD and current indoor temperature or humidity in the INDOOR LCD.

#### To reset the OUTDOOR records:

- 1. Press and release the *OUT/MIN* button to select the record you wish to reset, either MAX or MIN
- 2. Press and hold the SET button for 5 seconds.
- 3. The record is now reset and will show the current time in the TIME LCD and current outdoor temperature, humidity, heat index or dew point in the OUTDOOR LCD.

#### V. MOON PHASE

There are 12 moon phases shown on the indoor weather station. Thus, when the moon icon is all white, it is a full moon.



# VI. TIME ALARM

To set the time alarm:

- 1. Press and hold the ALM/+ button for 3 seconds.
- 2. The alarm time will begin to flash in the DATE LCD.
- 3. Press and release the *IN/HR* button to adjust the hour.

**Note:** When in the 12-hour mode and setting an alarm for a time between noon and midnight, "PM" will appear to the left of the alarm time in the DATE LCD.

- 4. Press and release the *OUT/MIN* button to adjust the minutes.
- 5. Press and release the *SNOOZE/CH* button to confirm the setting or wait for 15 seconds and the display will automatically return to the normal mode.

# To activate the alarm:

- 1. Press and release the ALM/+ button to toggle between the alarm time and the day and date.
- 2. When the alarm time and alarm icon are showing in the DATE LCD the alarm is activated.
- 3. When the day and date are showing in the DATE LCD the alarm is deactivated.

#### To activate the snooze:

- 1. While the alarm is sounding press and release the SNOOZE/CH button.
- 2. The snooze will be activated and the alarm will come back on after the selected time period.

#### VII. ADDING REMOTE TEMPERATURE/HUMIDITY SENSORS (OPTIONAL)

The WS-9043U is able to receive signals from 3 different remote temperature/humidity sensors. The remote temperature/humidity sensor model(s) that you choose will come with their own set of instructions—follow these instructions for a complete guide to setting up. Following are some brief instructions for the basic set-up of remote temperature/humidity sensor units with the WS-9043U. These extra sensors can be purchased through the same dealer as this unit, or by contacting La Crosse Technology directly. A TX4U will monitor temperature and humidity, a TX6U will

monitor temperature only, a TX3U will monitor temperature and display the temperature on its LCD, and the TX3UP will monitor the temperature via a probe for use in pools, spas, etc.

**Note:** When setting up multiple units it is important to remove the batteries from all existing units in operation, then to insert batteries first into all the remote temperature sensor units. Wait until the first transmitter reception is received by the indoor weather station before inserting batteries into the next transmitter and so forth. After all the transmitters reception is received, install batteries into the indoor weather station. Transmission problems will arise if this is not done correctly and if the total time for set-up exceeds 4 minutes.

#### A. SET-UP OF MULTIPLE UNITS

- 1. It is necessary to remove the batteries from all units currently in operation.
- 2. Remove the battery covers to all remote temperature/humidity sensor units.
- 3. Place all remote temperature/humidity sensor units in a numeric sequential order.
- 4. In sequential order, install batteries (follow the same battery installation procedures seen in section **I. A**) of the **Detailed Set-Up** Guide).
- 5. Install batteries into the indoor weather station.
- 6. Follow the Detailed Set-Up Guide for programming and operating instructions.

# B. VIEWING AND OPERATING WITH MULTIPLE REMOTE TEMPERATURE/HUMIDITY SENSOR UNITS

- 1. To view the temperature, humidity, heat index and dew point of a different remote temperature sensor unit, press and release the *SNOOZE/CH* button. A shift from one "boxed" number to the next should be observed in the OUTDOOR LCD.
- To view the Minimum/Maximum temperature, humidity, heat index and dew point: first select which
  remote temperature/humidity sensor to read data from (indicated by the "boxed" number), then press the
  OUT button. To view the readings from different transmitters, follow IV. B. Viewing the Outdoor
  Temperature/Humidity/Heat Index/ and Dew Records paragraph above.
- 4. To reset the Minimum/Maximum readings, select first which remote temperature/humidity sensor to read data from. Press the *OUT* button to view the outdoor MIN/MAX records. Then follow the steps in **IV. C. Resetting the Minimum and Maximum Records** paragraph above.

# **MOUNTING**

**Note:** Before permanently mounting ensure that the indoor weather station is able to receive WWVB signals from the desired location. Also, extreme and sudden changes in temperature will decrease the accuracy of the indoor weather station, and changes in elevation will result with inaccurate weather forecasting for the next 12 to 24 hours. These changes will require a 12 to 24 hour wait before obtaining reliable data. To achieve a true temperature reading, avoid mounting where direct sunlight can reach the remote temperature/humidity sensor or indoor weather station. While the remote temperature/humidity sensor is weather proof, avoid submersion in water or snow. We recommend that you mount the remote temperature/humidity sensor on an outside North-facing wall. The sending range is 330ft—obstacles such as walls, concrete, and large metal objects can reduce the range. Place both units in their desired location, and wait approximately 15 minutes before permanently mounting to ensure that there is proper reception. The indoor weather station should display a temperature and humidity in the OUTDOOR LCD within 4 minutes of setting up.

#### I. THE REMOTE TEMPERATURE/HUMIDITY SENSOR

The remote temperature/humidity sensor can be mounted in several ways:

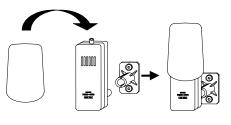
- With the use of screws
- Using adhesive tape

# A. MOUNTING WITH SCREWS

- 1) Remove the mounting bracket from the remote temperature/humidity sensor.
- 2) Place the mounting bracket over the desired location.
- 3) Through the two screw holes of the bracket, mark the mounting surface with a pencil.
- Screw mounting bracket onto the mounting surface. Ensure that the screws are tight against the bracket.
- 5) Insert the remote temperature/humidity sensor into the bracket.

#### B. MOUNTING WITH ADHESIVE TAPE

- 1) With a nonabrasive solution, clean and dry the back of the mounting bracket and the mounting surface to ensure a secure hold. The mounting surface should be smooth and flat.
- 2) Remove the protective strip from one side of the tape.
- 3) Adhere the tape to the designated area on the back of the mounting bracket.
- 4) Remove the protective strip from the other side of the tape.



5) Position the remote temperature/humidity sensor in the desired location, ensuring that the indoor weather station can receive the signal.

#### II. THE INDOOR WEATHER STATION

The indoor weather station can be mounted in several ways:

- With the use of screws
- Using its foldout stand

#### A. MOUNTING WITH SCREWS

- 1) Fix a screw (not included) into the desired wall, leaving approximately 3/16 of an inch (5mm) extended from the wall.
- Place the indoor weather station onto the screw using the hanging hole on the backside.
- 3) Gently pull the indoor weather station down to lock the screw into place.

# **B. FOLDOUT TABLE STAND:**

The foldout table stand leg is located on the backside.

- Pull the stand out from the bottom center edge of the weather station, below the battery compartment.
- Once the foldout table stand is extended, place the weather station in an appropriate location.



**NOTE:** For problems not solved, please contact La Crosse Technology.

**Problem:** No reception of WWVB time signal.

**Solution:** 1) Wait overnight for signal.

- 2) Be sure indoor weather station is at least 6 feet from any electrical devices, such as televisions, computers, or other radio-controlled clocks.
- 3) Remove batteries for five minutes, reinsert and leave the unit alone overnight without pressing buttons.
- 4) If there are still problems, contact La Crosse Technology.

**Problem:** Hour is incorrect (minute and date are correct).

**Solution:** Be sure correct time zone and daylight saving time settings are selected.

**Problem:** The LCD is faint.

**Solution:** 1) Set the LCD contrast to a higher number.

2) Replace the batteries

**Problem:** No outdoor temperature/humidity is displayed.

Solution: 1) Remove all batteries, reinsert into remote temperature/humidity sensor first, then the indoor weather station.

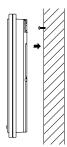
- 2) Place the remote temperature/humidity sensor closer to the display.
- 3) Be sure all batteries are fresh.
- 4) Place the remote temperature/humidity sensor and indoor weather station in position so the straight-line signal is not passing through more than two or three walls.

**Problem:** Temperatures do not match if units are placed next to each other.

**Solution:** Each temperature/humidity sensor is manufactured to be accurate to within 2 degree plus or minus and under normal conditions, so two sensors could be as much as 4 degrees different. However, the difference can be exaggerated further because the sensors are designed for different working environments. The indoor temperature sensor is less responsive to ambient air currents because of the shielding effect of the display's case. In addition, the case can act as a heat sink to absorb and store heat from external sources (i.e. handling of the case or radiant heat). Also, the much greater range of the remote temperature/humidity sensor requires a different calibration curve than the indoor range. Error is usually greater at the extreme ends of a range, making it harder to compare different ranges with different curves. Under non-

#### MAINTENANCE AND CARE INSTRUCTIONS

- Extreme temperatures, vibration, and shock should be avoided to prevent damage to the units.
- Clean displays and units with a soft, damp cloth. Do not use solvents or scouring agents; they may mark the displays and casings.
- Do not submerge in water.
- Immediately remove all low powered batteries to avoid leakage and damage.
- Opening the casings invalidates the warranty. Do not try to repair the unit. Contact La Crosse Technology for repairs.





#### **SPECIFICATIONS**

Weather data measuring range:		
Indoor Temperature:	14.1°F to 139.8°F with 0.2°F resolution "OFL" displayed if outside this range	
Outdoor Temperature and Dew Point:	-21.9°F to 157.8°F with 0.2°F resolution for Temperature; with 1°F for dew	
Outdoor Temperature and Dew Fornt.	point resolution "OFL" displayed if outside this range and "OF" for Dew Point	
Heat Index	0°F to 217°F with 1°F resolution. "OFL" displayed if outside or above the	
Heat flidex	* *	
	range "OFL" displayed if outdoor temperature is less than 0°F or greater than	
	139.8°F	
	Same as outdoor temperature if outdoor temperature is between 0°F and 64°F	
Indoor relative humidity measuring range:	1% to 99% with 1% resolution ("" displayed if outside this range)	
Outdoor relative humidity measuring range:	1% to 99% with 1% resolution (" " displayed if outside this range)	
Weather data checking interval:	1 // to 99 // with 1 // resolution ( displayed it outside this range)	
Indoor temperature checking interval:	Every 15 seconds	
Indoor temperature checking interval:		
Outdoor temperature checking interval	Every 20 seconds	
	Every 1 minute	
(remote temperature/humidity sensor):	Event 1 minute	
Outdoor humidity checking interval (remote	Every 1 minute	
temperature/humidity sensor):	France & minutes	
Outdoor temperature and humidity reception	Every 5 minutes	
(indoor weather station): Outdoor Dew Point and Heat Index	Francisco (of the control of the con	
	Every 5 minutes (after reception of temperature/humidity)	
Transmission range:	330 feet / 100 meters (in open space)	
Power Supply:	La LA VEGARA AND	
Indoor weather station:	3 x AA, IEC LR6, 1.5V	
Remote temperature/humidity sensor:	2 x AA, IEC LR6, 1.5V	
Battery life cycle:	Approximately 12 months	
Recommended battery type:	Alkaline	
Dimensions (H x W x D):		
Indoor weather station:	, , , , , , , , , , , , , , , , , , ,	
	(195 x 106 x 31mm)	
Remote temperature/humidity sensor:	4.76" x 2.36" x 2.87"	
	(121 x 60 x 73mm)	

## WARRANTY INFORMATION

La Crosse Technology, Ltd provides a 1-year limited warranty on this product against manufacturing defects in materials and workmanship.

This limited warranty begins on the original date of purchase, is valid only on products purchased and used in North America and only to the original purchaser of this product. To receive warranty service, the purchaser must contact La Crosse Technology, Ltd for problem determination and service procedures. Warranty service can only be performed by a La Crosse Technology, Ltd authorized service center. The original dated bill of sale must be presented upon request as proof of purchase to La Crosse Technology, Ltd or La Crosse Technology, Ltd's authorized service center.

La Crosse Technology, Ltd will repair or replace this product, at our option and at no charge as stipulated herein, with new or reconditioned parts or products if found to be defective during the limited warranty period specified above. All replaced parts and products become the property of La Crosse Technology, Ltd and must be returned to La Crosse Technology, Ltd. Replacement parts and products assume the remaining original warranty, or ninety (90) days, whichever is longer. La Crosse Technology, Ltd will pay all expenses for labor and materials for all repairs covered by this warranty. If necessary repairs are not covered by this warranty, or if a product is examined which is not in need or repair, you will be charged for the repairs or examination. The owner must pay any shipping charges incurred in getting your La Crosse Technology, Ltd product to a La Crosse Technology, Ltd authorized service center. La Crosse Technology, Ltd will pay reasonable return shipping charges to the owner of the product.

Your La Crosse Technology, Ltd warranty covers all defects in material and workmanship with the following specified exceptions: (1) damage caused by accident, unreasonable use or neglect (including the lack of reasonable and necessary maintenance); (2) damage occurring during shipment (claims must be presented to the carrier); (3) damage to, or deterioration of, any accessory or decorative surface; (4) damage resulting from failure to follow instructions contained in your owner's manual; (5) damage resulting from the performance of repairs or alterations by someone other than an authorized La Crosse Technology, Ltd authorized service center; (6) units used for other than home use (7) applications and uses that this product was not intended or (8) the products inability to receive a signal due to any source of interference. This warranty covers only actual defects within the product itself, and does not cover the cost of installation or removal from a fixed installation, normal set-up or adjustments, claims based on misrepresentation by the seller or performance variations resulting from installation-related circumstances.

LA CROSSE TECHNOLOGY, LTD WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS PRODUCT. THIS PRODUCT IS NOT TO BE USED FOR MEDICAL PURPOSES OR FOR PUBLIC INFORMATION. THIS PRODUCT IS NOT A TOY. KEEP OUT OF CHILDREN'S REACH.

This warranty gives you specific legal rights. You may also have other rights specific to your State. Some States do no allow the exclusion of consequential or incidental damages therefore the above exclusion of limitation may not apply to you.

For warranty work, technical support, or information contact:

La Crosse Technology 2809 Losey Blvd. S. La Crosse, WI 54601 Phone: 608.782.1610 Fax: 608.796.1020

e-mail:

sales@lacrossetechnology.com (information on other products) web: www.lacrossetechnology.com

Questions? Instructions? Please visit: www.lacrossetechnology.info/9043

# 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.

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