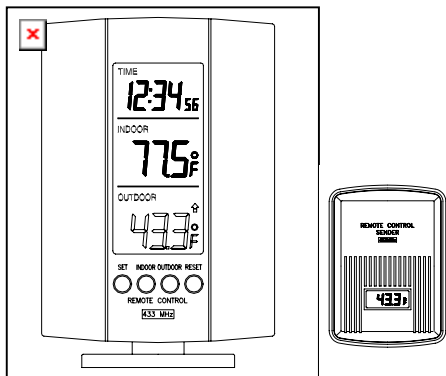


# WS-7054U

## Wireless 433 MHz Temperature Station

### Instruction Manual



## TABLE OF CONTENTS

<b>Topic</b>	<b>Page</b>
<b>Inventory of Contents</b>	1
<b>Additional Equipment</b>	1
<b>Quick Setup</b>	2
<b>Detailed Setup Guide</b>	
Battery Installation	3-6
Remote Control Sender	3-4
Indoor Temperature Station	5-6
Setting the Time	7-8
Selecting Units of Measurement	8
<b>Features</b>	
Indoor Minimum and Maximum Temperatures	9
Outdoor Minimum and Maximum Temperatures	10-11
Resetting the Indoor Minimum and Maximum Temperatures	11-12
Resetting the Outdoor Minimum and Maximum Temperatures	12
Reading the Temperature Trend	13
<b>Mounting</b>	

Remote Control Sender	13-16
Indoor Temperature Station	16-18
<b>Using Multiple Remote Control Senders</b>	
Setup of Multiple Units	18-21
Viewing Remote Control Senders	21-22
Features of the Multiple Remote Control Senders	22-23
<b>Troubleshooting</b>	24-28
<b>Maintenance and Care Instructions</b>	28-29
<b>Specifications</b>	29-31
<b>Warranty Information</b>	31-33
<b>FCC DISCLAIMER</b>	34

# INVENTORY OF CONTENTS

1. The Indoor Temperature Station (Figure 1)
2. The Outdoor Remote Control Sensor (TX3U) and mounting bracket. (Figure 2)
3. 3 each, 1/2" Philips screws.
4. One strip of double sided adhesive tape.
5. Instruction Manual and Warranty Card.

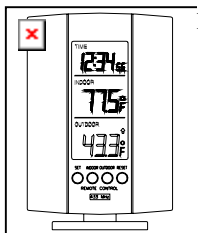


Figure 1

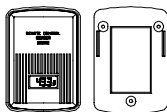


Figure 2

## ADDITIONAL EQUIPMENT (not included)

1. 1 Philips screwdriver.
2. 1 Flat screwdriver.
3. 2 Fresh AA 1.5V batteries.
4. 2 Fresh AAA 1.5V batteries.

## QUICK SETUP

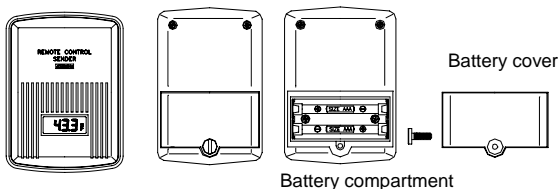
1. Insert two AAA batteries into the Remote Control Sender.
2. Insert two AA batteries into the Indoor Temperature Station.
3. Wait 5-6 minutes, or until the outdoor temperature is displayed in the OUTDOOR LCD (Liquid Crystal Display) of the Indoor Temperature Station.
4. Set the Time (See complete instructions for details).
5. Mount units.

**Note:** The Remote Control Sender transmits a signal every 3 minutes. After the batteries have been installed, the Indoor Temperature Station searches for these signals for a duration of 6 minutes. If there is no temperature reading in the OUTDOOR LCD after 6 minutes, make sure the units are within range of each other, or repeat battery installation process.

# DETAILED SETUP GUIDE

## I. BATTERY INSTALLATION

### A. REMOTE CONTROL SENDER



1. Remove the mounting bracket. The bracket snaps on and off with minimal effort.
2. Remove battery cover. To do this, remove the flathead screw located in the lower-central position of the unit. The rubber weather-seal creates a tight seal for the battery cover, and does not allow the

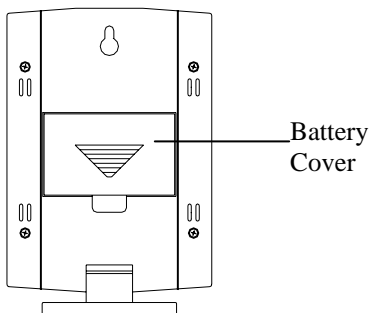
battery cover to fall away from the unit. Place the screw partially back into the hole and angle it slightly, so the threads grab the battery cover. With the screw, pull the battery cover off.

3. Observing the correct polarity, install 2 AAA batteries. The batteries will fit tightly—make sure they do not spring free, or start-up problems may occur.
4. Check the LCD screen of the Remote Control Sender to see if there is a temperature reading. If there is no reading check the polarity of the batteries or replace with new batteries.
5. Observing that the rubber weather-seal is in place; replace battery cover, screw, and mounting bracket.

## B. INDOOR TEMPERATURE STATION

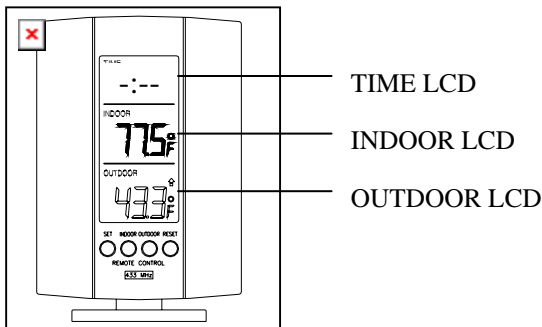
**Note:** After the batteries are installed, **DO NOT** press any buttons. This may interfere with the signals, causing temperatures to register incorrectly.

1. Remove the battery cover on the backside. To do this, push up and pull out.

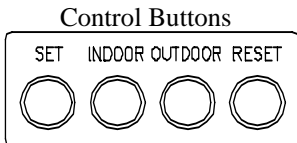




2. Observing the correct polarity, install 2 AA batteries.
3. Replace battery cover.
4. Wait 5-6 minutes or until both indoor and outdoor temperatures are shown on the Indoor Temperature Station.
5. The Indoor Temperature Station should now show: “-:- -” in the TIME LCD, and temperatures in the INDOOR and OUTDOOR LCD’s.



## II. TIME



### A. SETTING THE TIME

1. Press and hold the *SET* button for 1 second. “12h” will appear in the TIME LCD.
2. Use the *INDOOR* button to select either 12h time or 24h time (12h is an AM—PM mode, and 24h is military time).
3. Press the *SET* button 2 times, “TIME” will flash in the upper left corner.
4. Press the *INDOOR* button to set the hours, and press the *OUTDOOR* button to set the minutes.

5. Press the *SET* button to activate the clock.

**Note:** There is only a “PM” display, which appears under “TIME.” If there is no display here it is AM. Make sure you set the time accordingly.

### III. UNITS OF TEMPERATURE MEASURE

#### A. SELECTING UNITS OF MEASUREMENT

1. Press and hold the *SET* button for 1 second.
2. Press the *SET* button again. “°F” will appear in the TIME LCD.
3. Press the *INDOOR* button to shift between °F and °C.
4. Press the *SET* button twice to activate settings.

## IV. FEATURES

### A. INDOOR MINIMUM AND MAXIMUM TEMPERATURES

1. Press and hold the *INDOOR* button for 1 second. “MIN” appears in the INDOOR LCD and the recorded minimum temperature is displayed.
2. Press and hold the *INDOOR* button for 1 second. “MAX” appears in the INDOOR LCD and the recorded maximum temperature is displayed.

**Note:** When first setting-up the minimum and maximum temperatures may be the same as the current temperatures.

3. To return to the current temperature, press and hold the *INDOOR* button for 1 second.

## **B. OUTDOOR MINIMUM AND MAXIMUM TEMPERATURES**

1. Press and hold the *OUTDOOR* button for 1 second. “MIN” appears in the OUTDOOR LCD. The “OUTDOOR MIN,” and “TIME” displays will flash. The recorded minimum temperature is displayed in the OUTDOOR LCD, and the time it was recorded is displayed in the TIME LCD. After 15 seconds the “OUTDOOR MIN,” and “TIME” will stop flashing. However, the minimum outdoor temperature will continue to be displayed.
2. Press and hold the *OUTDOOR* button for 1 second. “MAX” appears in the OUTDOOR LCD. The “OUTDOOR MAX,” and “TIME” displays will flash. The recorded maximum temperature is

displayed in the OUTDOOR LCD, and the time it was recorded is displayed in the TIME LCD. After 15 seconds the “OUTDOOR MAX,” and “TIME” will stop flashing, and the maximum outdoor temperature will continue to be displayed.

3. To return to current temperature, press and hold the *OUTDOOR* button for 1 second.

## **V. RESETTING THE MINIMUM AND MAXIMUM TEMPERATURES**

### **A. INDOOR**

1. To reset both the minimum and maximum temperatures—press and continue to hold the *INDOOR* button, while you press and hold the RESET button. When the



temperatures are reset release the buttons.

2. To return to the current indoor temperature, press and hold the *INDOOR* button two times, holding for 1 second each.

## **B. OUTDOOR**

1. To reset both the minimum and maximum temperatures—press and continue to hold the *OUTDOOR* button, while you press and hold the *RESET* button. When the temperatures are reset release the buttons.
2. To return to the current outdoor temperature, press and hold the *OUTDOOR* button two times, holding for 1 second each.

## **VI. READING THE TEMPERATURE TREND**

- A. The temperature trend indicator is displayed in the OUTDOOR LCD.
1.  Indicates that the temperature is rising.
  2.  Indicates that the temperature is dropping.
  3. The absence of an arrow indicates that the temperature is stable.

## **VII. MOUNTING**

### **A. THE REMOTE CONTROL SENDER**

**Note:** To achieve a true temperature reading, avoid mounting where direct sunlight can reach the Remote Control Sender. We recommend that you mount the Sender on a North-facing wall. The sending range is 80ft; obstacles such as



walls, concrete, and large metal objects can reduce the range. Place both units in their desired location before permanently mounting the Remote Control Sender. There should be a change of temperature in the OUTDOOR LCD within 6 minutes.

The Remote Control Sender can be mounted in two ways:

- with the use of screws or,
- using the adhesive tape.

# **1. MOUNTING WITH THE SCREWS**

- a) Remove the mounting bracket from the Remote Control Sender (figure 2).
- b) Place mounting bracket over desired location. Through the three screw holes of the bracket, mark the mounting surface with a pencil.

- c) Where marked, drill holes into mounting surface using an appropriate size drill bit.
- d) Screw mounting bracket onto the mounting surface. Ensure that the screws are flush with the bracket.

## **2. MOUNTING WITH ADHESIVE TAPE**

- a) 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.
- b) Remove the protective strip from one side of the tape. Adhere the tape to the designated area on the back of the mounting bracket.

- c) Remove the protective strip from the other side of the tape. Position the Remote Control Sender in the desired location, ensuring that the Indoor Temperature Station can receive the signal.

## **B. THE INDOOR TEMPERATURE STATION**

**Note:** Before mounting the Indoor Temperature Station make sure that it is able to receive signals from the Remote Control Sender.

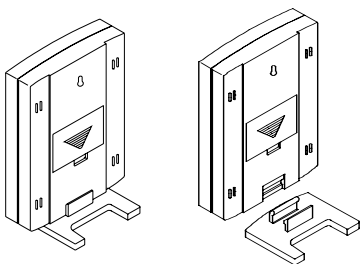
The Indoor Temperature Station can also be mounted in two ways:

- with the table stand or,
- on the wall with the use of a wall hanging screw (not included).

## 1. USING THE TABLE-STAND

- a) The Indoor Temperature Station comes with the table stand already mounted. If you wish to use the table-stand all that is required is to place the Indoor Temperature Station in an appropriate location.

## 2. WALL MOUNTING



- a) Remove the table stand. To do this, pull down on the stand from the rear and rotate forward.
- b) Fix a screw (not included) into the desired wall, leaving approximately  $\frac{3}{16}$  of an inch (5mm) extended from the wall.
- c) Place the Indoor Temperature Station onto the screw using the hanging hole on the backside. Gently pull the Station down to lock the screw into place.

## **VIII. USING MULTIPLE REMOTE CONTROL SENDERS**

Your WS-7054U Indoor Temperature Station can receive signals from five different Remote Control Senders (The TX3U features temperature data transmission and the TX3UP

offers the same plus a 10' probe to insert in a pool, spa, soil, etc.). Assign a number to each Remote Control Sender (i.e. #1 will be for outdoors, #2 will be for the basement, etc.). This will help you determine which temperature, from which Sender, you are reading on the Indoor Temperature Station.

**Note:** When setting up multiple units it is important to insert batteries **first** into all the Remote Control Senders, and in numeric sequence. **Second** install batteries into the Indoor Temperature Station. Transmission problems will arise if this is not done correctly and if the total time for set-up exceeds 6 minutes.

## A. SETUP OF MULTIPLE UNITS

1. It is necessary to remove the batteries from all existing units in operation.
2. Remove the battery covers to all Remote Control Senders. See section **I.A.2.**
3. Place all Remote Control Senders in sequential order.



#1



#2



#3

4. In sequential order, install batteries. (Refer to instructions in **I.A.3** through **I.A.5**).

5. Install batteries into the Indoor Temperature Station. (Refer to instructions in **I.B.**).
6. Follow directions in section **II.A** to set the time, section **III.A** to select Fahrenheit or Celsius, and section **VII. A** to mount.

## **B. VIEWING MULTIPLE REMOTE CONTROL SENDERS ON THE INDOOR TEMPERATURE STATION**

1. To view the temperature of a different Remote Control Sender, press the *RESET* button.
2. In the OUTDOOR LCD a 

1
---

 should shift and become a 

2
---

 This indicates that you are now reading the temperature of the Remote Control Sender you designated as #2.



3. Repeat step 1 to view the 3<sup>rd</sup>, 4<sup>th</sup>, and 5<sup>th</sup> (depending on how many are set up) temperatures sent by the Remote Control Senders. Continue to press *RESET* until you return to the first Remote Control Sender.

### **C. VIEWING THE FEATURES OF MULTIPLE REMOTE CONTROL SENDERS**

1. Press the *RESET* button to select the Remote Control Sender you wish to view.
2. To view the OUTDOOR MINIMUM AND MAXIMUM TEMPERATURES, follow directions in section **IV.B.** While, in this mode press the *RESET* button to toggle through different Remote Control Senders and view

their minimum and maximum temperatures.

3. To reset the OUTDOOR MINIMUM AND MAXIMUM TEMPERATURES, follow step 1 above and the directions in sections **V.A.** through **V.B.** This will reset the minimum and maximum for only the selected Remote Control Sender.

## TROUBLESHOOTING

Problem	Solution
“--. -” appears in the OUTDOOR LCD of the Indoor Temperature Station.	Batteries may be inserted wrong in Remote Control Sender—correct the polarity
	The batteries may be weak—replace with new batteries.
	The Remote Control Sender may be out of its 80 foot (25m) range—bring the units closer together.

<p>“--.” appears in the OUTDOOR LCD of the Indoor Temperature Station. (continued)</p>	<p>Obstacles such as walls, concrete, metal window frames, or large metal objects, may be obstructing signal transmission from the Remote Control Sender—Relocate the Remote Control Sender, within range, where there are no obstructions.</p>
	<p>Other equipment in vicinity operating on 433MHz may interfere with signal—turn off other equipment or relocate Indoor Temperature Station, wait a few minutes for signal to be found.</p>
	<p>Temperature exceeds range of the Remote Control Sender—see specifications for range.</p>

No temperature in the LCD of the Remote Control Sender.	The batteries may be inserted wrong or weak—check the polarity of batteries or replace with new batteries.
	Remote Control Sender out of its 80 foot (25m) range—bring the units closer together.
	If problem persists contact La Crosse Technology for replacement.
The LCD of the Indoor Temperature Station is blank.	Check for proper battery installation.
	The batteries may be weak—replace with new batteries.

<p>The LCD of the Indoor Temperature Station is blank. (continued)</p>	<p>Contact La Crosse Technology for replacement.</p>
<p>Temperature is “incorrect”</p>	<p>Temperatures can vary depending on the location of the Remote Control Sender. The thermometers are not 100% accurate (the WS-7054U is accurate to +/- 2 °F). If you are sure the temperature is wrong (the unit reads 110 °F, when it is actually 70 °F) reset entire system by removing all batteries and following set-up instructions. If this does not solve the problem, contact La Crosse Technology for replacement.</p>

Problem not covered under the warranty (ie. Dropped unit into water).	Call La Crosse Technology to order replacement part. We will accept Visa, MasterCard, Discover, or prepayments by check.

## **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.
- Do not subject the units to unnecessary heat or cold by placing them in the oven or freezer.

- Opening the casings invalidates the warranty. Do not try to repair the unit. Contact La Crosse Technology repairs.

## SPECIFICATIONS

Transmitting Frequency	433MHz
<b>Recommended Operating Temperature</b>	
Indoor Temperature Station	32 °F to 122 °F (0 °C to 50 °C)
Remote Control Sender	14 °F to 140 °F (-10 °C to 60 °C)
<b>Measuring Temperatures</b>	
Temperature Station: Indoor	-20.2 °F to 156.2 °F with 0.2 °F resolution. (-29.0 °C to 69.0 °C with 0.1 °C resolution).
Temperature Station: Outdoor	-21.8 °F to 156.2 °F with 0.2 °F resolution. (-29.9 °C to 69.0 °C with 0.1 °C resolution).
Remote Control Sender	-21.8 °F to 156.2 °F



	with 0.2 °F resolution. (-29.9 °C to 69.0 °C with 0.1 °C resolution).
<b>Accuracy</b>	
Indoor	+/- 2 °F (+/- 1 °C).
Outdoor	+/- 2 °F (+/- 1 °C).
Transmitting range of the Remote Control Sender	Maximum 80 feet (25m).
<b>Temperature check</b>	
Indoor Temperature Station: Indoor	Every 10 seconds.
Indoor Temperature Station: Outdoor	Three times in 10 minutes.
Remote Control Sender (LCD)	Once every minute.
<b>Batteries—(Alkaline recommended)</b>	
Remote Control Sender	2 x AAA, 1.5V
Indoor Temperature Station	2 x AA, 1.5V

Battery life expectancy for both units	Approximately 1 year.
<b>Dimensions: (L x W x H)</b>	
Indoor Temperature Station	3.51 x 1.19 x 4.88 in. (excluding table stand) (90 x 30.5 x 125 mm).
Remote Control Sender	2.18 x 0.94 x 3.12 in. (56 x 24 x 80 mm).

## WARRANTY INFORMATION

La Crosse Technology provides a 1-year warranty on this weather station. This warranty covers any defects due to faulty workmanship or materials. Contact La Crosse Technology immediately upon discovery of any defects covered by this warranty.

**Before sending** the Weather Station in for repairs, **contact La Crosse Technology**. The Weather Station will be repaired or replaced with the same or similar model.

This warranty does not cover any defects resulting from improper use, unauthorized repairs, faulty batteries, or the Weather Station's inability to receive a signal due to any source of interference.

LA CROSSE TECHNOLOGY WILL NOT ASSUME LIABILITY FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, OR OTHER SIMILAR DAMAGES ASSOCIATED WITH THE OPERATION OR MALFUNCTION OF THIS WEATHER STATION. 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 not allow the exclusion of consequential or incidental damages so the above exclusion of limitation may not apply to you.

For warranty work, technical support, or information contact La Crosse Technology at:

La Crosse Technology  
1116 South Oak Street  
La Crescent, MN 55947

Phone: (507) 895-7095

Fax: (507) 895-8000

e-mail: [support@lacrossetechnology.com](mailto:support@lacrossetechnology.com)

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

## **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, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Freq. 433.92 MHz  
La Crosse Technology  
Made in China  
WS7054U

