# WS-7212NU Wireless 433 MHz Weather Station

## Instruction Manual



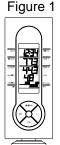
# LA CROSSE TECHNOLOGY technology tools for home & office

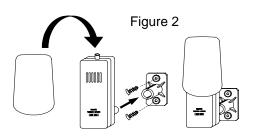
# **TABLE OF CONTENTS**

Topic	Page
Inventory of Contents	3
Additional Equipment	4
Quick Setup Guide	5-9
Function Keys	5
Detailed Set-up Guide	10-15
Battery Installation	10-12
Setting the Time	12-13
Setting °C or °F	13
Setting 12/24 Time	13
Features	14-18
Minimum and Maximum	14
Temperatures	
Resetting Minimum and Maximum	14
Temperatures	
Adding additional remote	15-17
temp/humidity sensors (optional)	
Viewing & operating multiple	17-18
remote temperature/humidity	
sensors	
Mounting	18-20
Troubleshooting	20-23
Maintenance and Care	24
Specifications	25-26
Warranty Information	27-29

#### INVENTORY OF CONTENTS

- One indoor weather station (Figure 1)
- The remote temperature/humidity sensor (TX4U) and mounting bracket. (Figure 2)
- 3. Mounting hardware.
- Instruction Manual and Warranty Card.





### ADDITIONAL EQUIPMENT

(not included)

- 1. 1 Philips screwdriver.
- 2 Fresh AA 1.5V batteries. (for indoor weather station)
- 2 Fresh AA 1.5V batteries. (for temperature/humidity sensor)

#### QUICK SET-UP GUIDE

Hint: Use good quality alkaline batteries and avoid rechargeable batteries.

#### **FUNCTION KEYS**

- "SET": Allows you to set the time, select °C or °F, and select 12 or 24 time display.
- "MIN/MAX": Allows you to view the minimum and maximum temperatures recorded.
- "+": In the set-up display, allows you to change the hours, minutes, temperature unit, and 12/24 hour time display.
- "CH": (Channel) Allows you to view temperature and humidity readings from up to 3 remote sensors. Each channel corresponds to one of the remote sensors. For more information on Channels see the "VIEWING AND OPERATING WITH

# MULTIPLE REMOTE SENSOR UNITS" section in the **Detailed Set-Up Guide**.

- Have the indoor weather station and remote temperature/humidity sensor 3 to 5 feet apart.
- Batteries should be out of all units for 15 minutes.
- Place the batteries into the remote temperature/humidity sensor first, then into the indoor weather station
  - (All remote temp/humidity sensors must be started before the indoor weather station)
- DO NOT PRESS ANY BUTTONS FOR 15 MINUTES.

In this time the indoor weather station and remote temperature/humidity sensor will start to communicate with each other, and the display will show both the indoor temperature and an outdoor temperature and humidity. If the indoor weather station does not display both the indoor temperature and the outdoor temperature and humidity after the 15 minutes please re-try the set-up as shown on page 5.

After both indoor temperature and outdoor temperature and humidity are displayed for 15 minutes you can place your remote temperature/humidity sensor outdoors and set your time.

#### **Notes on Outdoor Sensor Placement**

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 the distance of the range. 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 feet in a straight line.

To complete the set up of your indoor weather station after the 15 minutes have passed, please follow the steps below.

- Press and hold the "SET" button for 5 seconds.
- The minutes will now be flashing.
  - a. Press and release the "+" button until the correct minutes are shown.

**Note:** There is "PM" displayed to the left of the hour when between noon and midnight. During the AM hours this area will be blank.

b. When the correct minutes are shown, press and

release the "SET" button once.

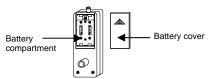
The hour will now be flashing.
 Press and release the "+"
 button until the correct hour is displayed.

Press and release the SET button once more, and you are done.

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

#### I. BATTERY INSTALLATION

### A. REMOTE TEMPERATURE/HUMIDITY SENSOR



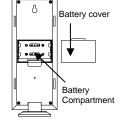
- 1. Remove the mounting bracket.
- 2. Remove battery cover
- Observing the correct polarity, install 2 AA batteries—make sure they do not spring free, or start-up problems may occur.
- Replace cover.

#### B. INDOOR WEATHER STATION

**Note:** After the batteries are installed, **DO NOT** press any buttons for 15 minutes. This may interfere with the signal, causing temperatures to register incorrectly.

- Remove the battery cover on the backside. To do this, push up and pull out.
- 2. Observing the correct polarity, install 2 AA

batteries.



- Replace battery cover.
- Wait 15 minutes or until both the indoor and outdoor temperatures are shown on the indoor weather station.

 The indoor weather station should now show: "-:- -" in the TIME LCD, indoor temperature in the INDOOR LCD and outdoor temperature and humidity in the OUTDOOR LCD.

#### II. SETTING THE TIME

- Press and hold the "SET" button for 5 seconds.
- 2. The minutes will begin to flash.
- Press and release the "+" button to advance the minutes to your desired minutes.
- Press and release the "SET" button to move to the hour setting.
- 5. The hour will begin to flash.
- 6. Press and release the "+" button to set the hour.
- Press and release the "SET" button to move to the "C/"F Temperature Setting.

**Note:** There is "PM" displayed to the left of the hour when between noon and

midnight. During the AM hours this area will be blank.

#### III. °C OR °F TEMPERATURE SETTING

- Press and release the "+" button to change from "F (Fahrenheit-Default) to "C (Celsius).
- Press and the release the "SET" button to move to the 12/24 Hour Time Setting.

#### IV. 12/24 HOUR TIME SETTING

- Press and release the "+" button to change from 12 hour time to 24 hour time (12 hour time is the default).
- Press and release the "SET" button to exit the set-up.

#### **FEATURES**

# A. MINIMUM AND MAXIMUM TEMPERATURES

Press and release the "MIN/MAX" button to toggle to the minimum temperatures, "MIN" appears at the bottom of the display and the recorded minimum temperatures are displayed.



 Press and release the "MIN/MAX" button, "MAX" appears at the bottom of the display and the recorded maximum temperatures are displayed.

# B. RESETTING THE MINIMUM AND MAXIMUM TEMPERATURES

To reset both the minimum and maximum temperatures—press and hold the "MIN/MAX" button for 5 seconds.

# C. ADDING ADDITIONAL REMOTE TEMPERATURE /HUMIDITY SENSORS (OPTIONAL)

The WS-7212U is able to receive signals from 3 different remote temperature, temperature/humidity sensors. The following are some brief instructions for the basic set-up of remote sensor units with the WS-7212U. These extra sensors can be purchased through the same dealer as this unit, or by contacting La Crosse Technology directly. A TX6 will monitor temperature only, a TX3U will monitor temperature and display the temperature on its LCD, the TX3UP will monitor the temperature via a probe for use in pools, spas, etc and the TX4U will monitor temperature and humidity.

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/humidity sensor units, and in numeric sequence. Second, 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 6 minutes.

- It is necessary to remove the batteries from all units currently in operation.
- Remove the battery covers to all remote sensor units.
- Place all remote sensor units in a numeric sequential order.
- In sequential order, install batteries (follow the same battery installation procedures seen in section "I" of the Detailed Set-Up Guide) into the

- remote sensors.
- Install batteries into the indoor weather stations.
- Follow the **Detailed Set-Up Guide** for programming and operating instructions.

# VIEWING AND OPERATING WITH MULTIPLE REMOTE SENSOR UNITS

 To view the temperature of a different remote sensor unit, press and release the "CH" button. A shift from one "boxed" number to the next should be observed in the OUTDOOR LCD.





 To view the Minimum/Maximum temperature: first select from which remote temperature/humidity sensor to read data from (indicated by the "boxed" number). Pressing and releasing the "MIN/MAX" button will toggle through the minimum and maximum indoor temperature, and the minimum and maximum outdoor temperature.

 To reset the Minimum/Maximum readings, press and hold the "MIN/MAX" button for 5 seconds.

#### MOUNTING

Note: To achieve a true temperature reading, avoid mounting in direct sunlight. We recommend that you mount the remote temperature/ humidity sensor on an outside Northfacing wall. The sending range is 330 feet; obstacles such as walls, concrete, and large metal objects will reduce the range. Place both units in their desired location temporarily to test reception capability before permanently mounting.

### A. REMOTE TEMPERATURE/ HUMIDITY SENSOR

- Remove the mounting bracket from the remote temperature/humidity sensor
- 2. Mount using either screws or adhesive tape.
- 3. Re-attach the remote temp/humidity sensor to the mounting bracket.

#### B. THE WEATHER STATION

- The indoor weather 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 weather station in your desired location.
- 2. To wall mount:
- Remove the table stand by pulling down on the stand from the rear and rotating forward.
- Fix a screw (not included) into the desired wall.

- Place the indoor weather station onto the screw using the hanging hole on the backside.
- Gently pull the indoor weather station down to lock the indoor weather station into place.

#### TROUBLESHOOTING

**NOTE:** For problems not solved, please contact La Crosse Technology via e-mail or phone, or visit our website, www.lacrossetechnology.com

**Problem:** The LCD is faint **Solution:** Replace batteries

Problem: No outdoor temperature or

humidity is displayed.

### Solution:

 First try to re-establish communication between the remote sensor and indoor weather station by moving both units to within three to five feet of each other. Wait about

- ten minutes and then check for a temperature and humidity.
- If this does not work please remove the batteries from both units and restart the system (please see Detailed Set-up on page nine through eleven).

**Note:** Please make sure when restarting the system that all batteries are fresh

 Once the system has been reset and you have a temperature and humidity reading from the sensor, temporarily place the remote temperature/humidity sensor in the previous location.

**Note:** If there is an outdoor temperature and humidity displayed when the 2 units are close together there was either too much distance between the 2 units previously or some type of interference that was causing poor reception.

- 4) If after 15 minutes the temperature and humidity are not displayed you will need to choose another location for placement of the temperature/humidity sensor.
- The best way of doing this is to move the sensor 10 feet closer to the indoor weather station.
- After moving the remote temperature/humidity sensor please wait 15 minutes to give the indoor weather station time to re-acquire the signal.

**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. It is possible for 2 temperature/humidity sensors to be as much as 4 degrees different. The difference can be exaggerated further because the temperature/humidity sensors are designed for different

working environments. The indoor sensor is less responsive to ambient air currents because of the shielding effect of the indoor weather station's case. In addition, the casing can act as a heat sink to absorb and store heat from external sources (i.e. handling of the case or radiant heat). In addition, the much greater range of the outdoor 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-laboratory conditions, it is difficult to compensate for the above factors and obtain an accurate comparison.

# 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 for repairs.

### **SPECIFICATIONS**

SPECIFICATIONS		
Transmitting	433MHz	
Frequency		
Measuring Range - Temperature		
Indoor Weather	32°F to 138.2°F with	
Station: Indoor	0.2°F resolution.	
Indoor Weather	-21.8 °F to 157.8°F	
Station:	with 0.2°F resolution.	
Outdoor		
Temp accuracy	+/- 1°F	
Measuring Range - Humidity		
Indoor Weather	1% to 99% with 1%	
Station:	resolution	
	("—" displayed when	
	outside this range)	
Temperature Checking Interval		
Indoor:	Every 10 seconds	
Outdoor:	Every 5 minutes	
Humidity Checking Interval		
Outdoor:	Every 5 minutes	
Transmitting	Maximum 330 feet	
range:	(100m) open space	

Batteries—(alkaline recommended)		
Remote	2 x AA, 1.5V	
Temperature		
/Humidity		
Sensor		
Indoor Weather	2 x AA, 1.5V	
Station		
Dimensions: (H x W x D)		
Indoor Weather	7.5" x 3" x 1.08"	
Station	(excluding table stand)	
	(190 x 75 x 27.5 mm)	
Remote	4.33" x 1.57" x 0.78"	
Temperature	(110 x 40 x 20 mm)	
/Humidity	Rain Protector	
Sensor	2.36"Ø x 4.75" high	
	(60mm∅ x 121mm	
	high)	
Battery life	Approximately 1 year	

#### WARRANTY INFORMATION

La Crosse Technology provides a 1-year warranty on this weather station. 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 stations 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 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 700 E. Main Street Spring Grove, MN 55974 Phone: 507.895.7095 Fax: 507.895.8000

e-mail:

support@lacrossetechnology.com (warranty work) sales@lacrossetechnology.com (information on other products) web:

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 WS-7212U

# FCC ID: OMO-01RX (Receiver) OMO-01TX (Transmitter)

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