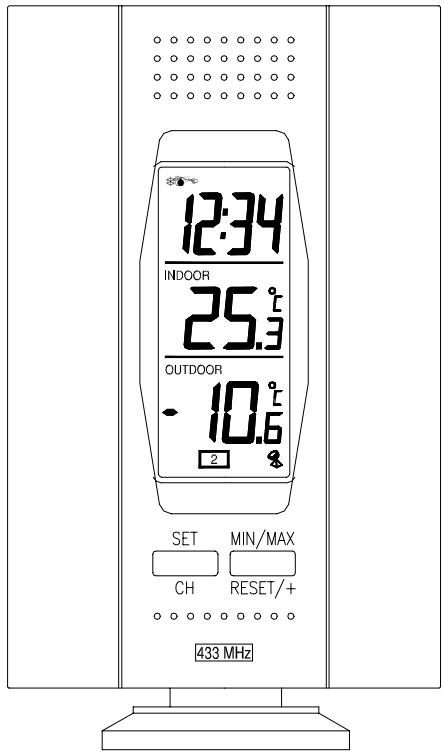
WS-7013U
Wireless 433 MHz
Temperature Station

Instruction Manual



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INVENTORY OF CONTENTS

1. The indoor temperature station (Figure 1)
2. The remote temperature sensor (TX6U) 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

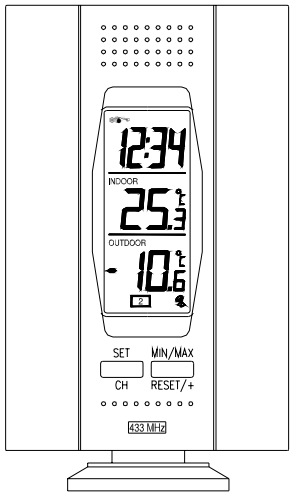
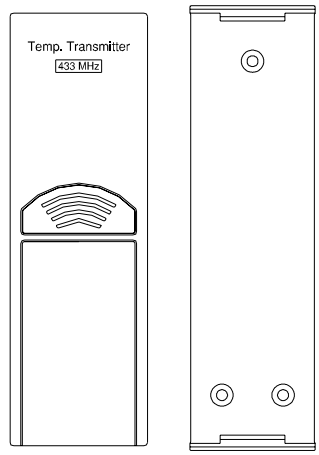


Figure 2



ADDITIONAL EQUIPMENT

(not included)

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

QUICK SETUP

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

1. Have the indoor temperature station and remote temperature sensor 3 to 5 feet apart.
2. Batteries should be out of both units for 10 minutes.
3. Place the batteries into the **remote temperature sensor** first then into the indoor temperature station.

(All remote temperature sensors must be started before the indoor temperature station)

4. DO NOT PRESS ANY BUTTONS FOR 10 MINUTES.

In this time the indoor temperature station and remote temperature sensor will start to talk to each other and the display will show both the indoor temperature and an outdoor temperature. If the indoor temperature station does not display both temperatures after the 10 minutes please retry the set up as stated above. After both indoor and outdoor temperatures are displayed for 10 minutes you can place your remote temperature sensor outdoors and set your time.

The remote temperature sensor should be placed in a dry, shaded area. The remote temperature sensor has a range of 80 feet. Any walls that the signal will have to pass through will reduce distance. An outdoor wall or window will have 20 to 30 feet of resistance and an interior wall will have 10 to 20 feet

of resistance. Your distance plus resistance should not exceed 80 ft. in a straight line.
NOTE: Fog and mist will not harm your remote temperature sensor but direct rain must be avoided.

To complete the set up of your indoor temperature station after the 10 minutes have passed please follow the steps below.

1. Press and hold the *"SET"* button for 5 seconds.
   Note: A "12h" or "24h" will appear on the top line. ("12h" for AM/PM, "24h" for military time)
   a. To change between "12h" and "24h" press and release the *"MIN/MAX"* button.

b. When you have your choice shown on the display press and release the *"SET"* button once.

2. Degree Fahrenheit will now show.
    a. To change between Fahrenheit and Celsius, press and release the *"MIN/MAX"* button.
    b. When you have your choice shown on the display press and release the *"SET"* button once.
3. An hour will now be flashing.
    a. Press and release the *"MIN/MAX"* button until the correct hour is shown.

    Note: When in the 12h mode there is "PM" displayed under the word TIME when in the

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

b. When the correct hour is shown, press and release the “SET” button once.

4. A minute will now be flashing.

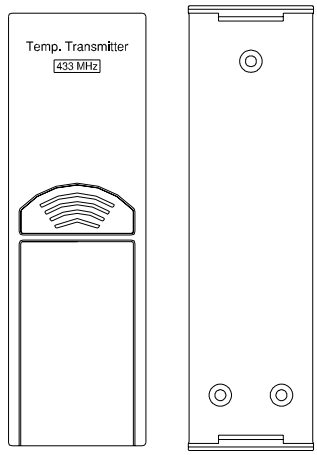
   a. Press and release the *“MIN/MAX”* button until the correct minutes are displayed.

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

DETAILED SETUP GUIDE

I. BATTERY INSTALLATION

A. REMOTE TEMPERATURE SENSOR

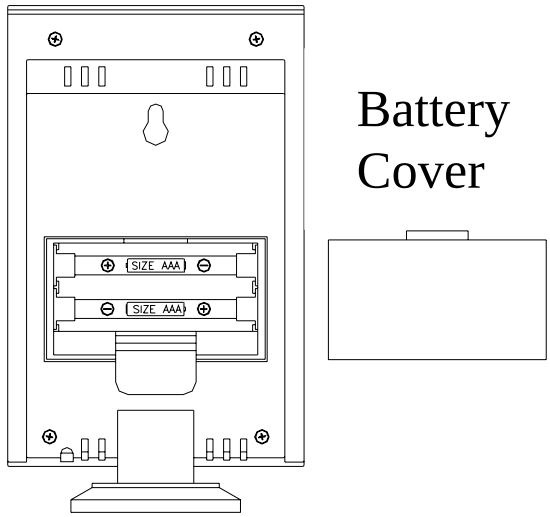


1. Remove the mounting bracket.
2. Remove battery cover
3. Observing the correct polarity, install 2 AA batteries—make sure they do not spring free, or start-up problems may occur. Replace cover.

B. INDOOR TEMPERATURE STATION

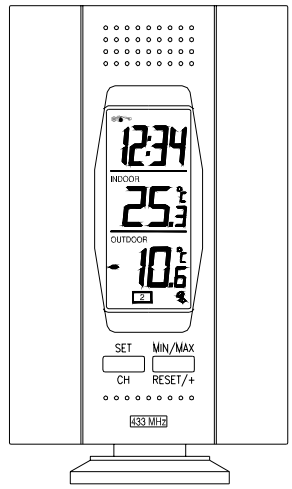
Note: After the batteries are installed, **DO NOT** press any buttons. This may interfere with the signals, causing temperatures to register incorrectly.

1. Remove the battery cover on the backside. To do this, push up and pull out.
2. Observing the correct polarity, install 2 AAA batteries.
3. Replace battery cover.



4. Wait 5-6 minutes or until both the indoor and outdoor temperatures are shown on the indoor temperature station.

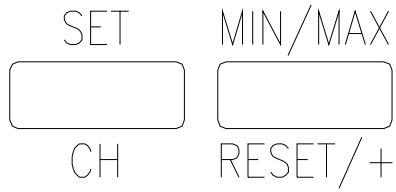
5. The indoor temperature station should now show: “-:- -” in the TIME LCD, and temperatures in the INDOOR and OUTDOOR LCD’s.



II. TIME

A. SETTING THE TIME

1. Press and hold the “*SET*” button for 5 second, “12h” will appear in the TIME LCD.



2. Press and release the “*MIN/MAX*” button to select either 12h time (am/pm) or 24h time

3. Press and release the "*SET*" button 2 times, the hour will flash in the upper left corner.
4. Press and release the "*MIN/MAX*" button to set the hours
5. Press and release the "*SET*" button to move to the minute setting
6. Press and release the "*MIN/MAX*" button to set the minutes.
7. Press and release the "*SET*" button to activate the clock.

Note: When in 12h mode, 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 5 second until "12h" or "24h" appears in the TIME LCD.
2. Press and release the "*SET*" button again, "°F" will appear in the TIME LCD.
3. Press and release the "*MIN/MAX*" button to shift between °F and °C.
4. Press and release the *"SET"* button twice to activate settings.

IV. FEATURES

A. MINIMUM AND MAXIMUM TEMPERATURES

1. Press and release the "*MIN/MAX*" button, "MIN" appears in the temperature LCD's and the recorded minimum temperatures are displayed.
2. Press and release the "*MIN/MAX*" button to toggle to the maximum temperatures. The time of occurrence of the value for outdoor temperature will also flash.

B. RESETTING THE MINIMUM AND MAXIMUM TEMPERATURES

1. To reset both the minimum and maximum temperatures—press and hold the "*RESET/+*" button for 4 seconds.

C. ADDING ADDITIONAL REMOTE TEMPERATURE SENSORS (OPTIONAL)

1. The WS-7013U is able to receive signals from 3 different remote temperature sensors. Following are some brief instructions for the basic set-up of remote temperature sensor units with the WS-7013U. 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, 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, 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.***

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

6. Install batteries into the indoor temperature station.
7. Follow the Detailed Set-Up Guide for programming and operating instructions.

D. VIEWING AND OPERATING WITH MULTIPLE REMOTE TEMPERATURE SENSOR UNITS

1. To view the temperature of a different remote temperature sensor unit, press and release the *"CH"* button. A shift from one "boxed" number to the next should be observed in the OUTDOOR LCD.
2. To view the Minimum/Maximum temperature: first select from which remote temperature sensor to read data (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.

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

V. MOUNTING

Note: To achieve a true temperature reading, avoid mounting in direct sunlight. We recommend that you mount the remote temperature sensor on an outside North-facing wall. The sending range is 80ft; obstacles such as walls, concrete, and large metal objects will reduce the range. Place both units in their desired location before permanently mounting.

A. REMOTE TEMPERATURE SENSOR

1. Remove the mounting bracket from the remote temperature sensor
2. Mount using either screws or adhesive tape.
3. Reattach the remote temperature sensor to the mounting bracket.

B. THE TEMPERATURE STATION

1. 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. To wall mount, remove the table stand. To do this, pull down on the stand from the rear and rotate forward.
   a) Fix a screw (not included) into the desired wall, and place the indoor temperature station onto the screw using the hanging hole on the backside. Gently pull the indoor temperature station down to lock the screw 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 is displayed.
Solution:
1) Remove all batteries, reinsert into remote temperature sensor first, and then into the indoor temperature station.
2) Place remote temperature sensor closer to the indoor temperature station.
3) Be sure all batteries are fresh.
4) Place remote temperature sensor and indoor temperature 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 sensor is manufactured to be accurate to within 1 degree plus or minus and under normal conditions; so two temperature sensors could be as much as 2 degrees different. However,

the difference can be exaggerated further because the temperature sensors are designed for different working environments. The indoor 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). In addition, the much greater range of the outdoor temperature 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

Transmitting Frequency	433MHz
Measuring Temperatures	
Indoor Temperature Station: Indoor	32°F to 156.2°F with 0.2°F resolution. (0°C to 69.0°C with 0.1°C resolution)

Indoor 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)
Temp accuracy	+/- 1°F (+/- .5°C)
Transmitting range	Maximum 80 feet (25m) open space
Temperature check	
Indoor	Every 10 seconds
Outdoor	Three times in 10 minutes
Batteries—(Alkaline recommended)	
Remote Temperature Sensor	2 x AA, 1.5V
Indoor Temperature Station	2 x AAA, 1.5V

Dimensions: (L x W x H)	
Indoor Temperature Station	2.75 x .92 x 4.3 in. (excluding table stand) (90 x 23.6 x 110 mm)

Remote Temperature Sensor	1.57“ x 0.9“ x 5.04“ (40 x 23 x 128 mm)
Battery life	Approximately 1 year

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 ground return shipping charges to the owner of the product to a USA address only.

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:
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-7013U

FCC ID: OMO-01RX (Receiver),
OMO-01TX (sensor)

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 INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.