

## Contents

Language

Page

---

*English*

*French*

*Spanish*

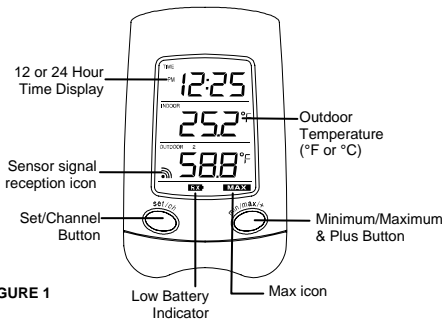
## TABLE OF CONTENTS

Topic	Page
INVENTORY OF CONTENTS	
QUICK SETUP	
DETAILED SETUP GUIDE	
BATTERY INSTALLATION	
12 OR 24 HOUR TIME DISPLAY	
TIME SETTING	
FEATURES	
MIN AND MAX TEMPERATURE	
RESETTING MIN & MAX TEMPERATURE	
ADDING ADDITIONAL THERMO-HYGRO SENSORS	
VIEWING & OPERATING WITH MULTIPLE THERMO-HYGRO SENSORS	
MOUNTING	
TROUBLESHOOTING	
MAINTENANCE AND CARE	
SPECIFICATION	
WARRANTY INFORMATION	

**This product offers:**



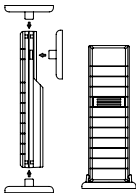
***INSTANT TRANSMISSION*** is the state-of-the-art new wireless transmission technology, exclusively designed and developed by LA CROSSE TECHNOLOGY. ***INSTANT TRANSMISSION*** offers you an immediate update (every 4 seconds!) of all your outdoor data measured from the sensors: follow your climatic variations in real-time!



**FIGURE 1**

## INVENTORY OF CONTENTS

1. Wireless Temperature Station (Figure 1)
2. Wireless Temperature Sensor (TX29) 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 2**

## **ADDITIONAL EQUIPMENT** (not included)

1. 1 Philips screwdriver.
2. 4 Fresh "AA" 1.5V Alkaline Batteries.

## QUICK SETUP

**Hint: Use good quality Alkaline Batteries; avoid rechargeable batteries.**

1. Have the Wireless Temperature Station and temperature sensor 3 to 5 feet apart.
2. Batteries should be out of both units for 5 minutes.
3. Place the batteries into the **Temperature sensor first** and next into the Wireless Temperature Station.
4. **DO NOT PRESS ANY BUTTONS FOR 5 MINUTES.**

In this time the Wireless Temperature Station and the temperature sensor will begin to communicate with each other, and the display will show both the indoor temperature and an outdoor temperature. If the Wireless Temperature Station does not display both temperatures after the 5 minutes, please retry the set up as stated above. After both indoor and outdoor temperatures are displayed for 5 minutes you can place your temperature sensor outdoors, and set your time.

The temperature sensor should be placed in a dry, shaded area (ex: under the eave of a roof). The temperature 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 will have up to 20 feet of resistance and an interior wall will have up to 10 feet of resistance. Your distance plus resistance should not exceed 330 feet in a straight line.

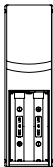
**NOTE:** Fog and mist will not harm your temperature sensor, but direct rain must be avoided.

## **DETAILED SETUP GUIDE**

### **BATTERY INSTALLATION - When one Temperature sensor is being used**

1. First, insert the batteries to the Temperature sensor (see "**Temperature sensor**" below).
2. Within 2 minutes of powering up the sensor, insert the batteries to the Temperature Station (see "**Wireless Temperature station**" below). Once the batteries are in place, all segments of the LCD will light up briefly. Following the indoor temperature and the time as 12:00 will be displayed. If they are not shown in LCD after 60 seconds, remove the batteries and wait for at least 60 seconds before reinserting them. Once the indoor data is displayed user may proceed to the next step.
3. After the batteries are inserted, the Temperature Station will start receiving data signal from the sensor. The outdoor temperature should then be displayed on the Temperature Station. If this does not happen after 2 minutes, the batteries will need to be removed from both units and reset from step 1 and the signal reception icon is no longer shown.

## TEMPERATURE SENSOR

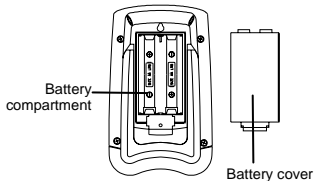


1. Remove the Battery Cover.
2. Observing the correct polarity, install 2 "AA" Alkaline Batteries—make sure they do not spring free, or start-up problems may occur.
3. Replace the Battery Cover.

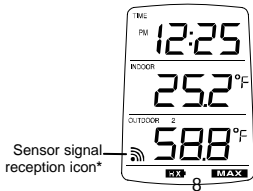
## WIRELESS TEMPERATURE STATION

**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 back of the Wireless Temperature Station.
2. Observing the correct polarity, install 2 "AA" Alkaline Batteries.
3. Replace Battery Cover.



- \*When the signal is successfully received by the Temperature Station, the icon will be switched on. (If not successful, the icon will not be shown in LCD) So the user can easily see whether the last reception was successful (icon on) or not (icon off). On the other hand, the short blinking of the icon shows that a reception is currently taking place.
- If the signal reception is not successful on the first frequency (915MHz) for 45 seconds, the frequency is changed to 920MHz and the learning is tried another 45 seconds. If still not successful the reception is tried for 45 seconds on 910MHz. This will also be done for re-synchronization.

## **SELECTING 12 OR 24 HOUR TIME DISPLAY**

1. Press and hold the set/ch button for about 5 seconds.
2. "12h" will begin to flash in the TIME section of the LCD
3. Press the min/max/+ button to toggle between "12h" and "24h" time.

### **Note:**

- Selecting 12 hour time will automatically select °F as your temperature unit.
  - Selecting 24 hour time will automatically select °C as your temperature unit.
4. Press and release the set/ch button again to enter **Time Setting**.

## TIME SETTING

1. After exiting the **12/24 Hour Setting**, the hour will begin flashing in the time display.
2. Press and release the min/max/+ button to select the desired hour.

**Note:** "PM" will appear to the left of the time display for PM hours. For AM hours, that area will remain blank.

3. Press and release the set/ch button again, and the minutes will begin to flash.
4. Press and release the min/max/+ button to select the desired minutes.
5. Press and release the set/ch button to exit the SET UP mode.

**Note:** If no buttons are pressed for 10 seconds, the Wireless Temperature Station will automatically return to the normal display.

## FEATURES

### MINIMUM AND MAXIMUM TEMPERATURES

1. Press and release the min/max/+ button, "MIN" appears at the bottom of the LCD and the recorded minimum temperatures are displayed.
2. Press and release the min/max/+ button again to view maximum recorded temperatures. "MAX" icon appears at the bottom of the LCD and the maximum temperatures are displayed.

3. Press and release the min/max/+ button once more to return to the current temperatures.

### **RESETTING THE MINIMUM AND MAXIMUM READINGS:**

User may reset the minimum and maximum temperature data to the current value by the following step:

Press and hold the min/max/+ key for about 3 seconds to reset all the minimum/maximum data of all channels and the indoor sensor to the current values in a single action.

### **ADDING ADDITIONAL REMOTE SENSORS (OPTIONAL)**

The WS-9021U is able to receive signals from 2 additional temperature sensors . The following are instructions for the set-up of temperature sensor units with the WS-9021U. These extra sensors can be purchased through the same dealer as this unit.

1. Remove all the batteries from the receiver and sensor(s) and wait 60 seconds. During these 60 seconds, press any button 20 times to discharge any excess power.
2. Insert the batteries to the first temperature sensor.
3. Within 2 minutes of powering up the first sensor, insert the batteries to the Temperature Station. Once the batteries are in place, all segments of the

LCD will light up briefly. Following the indoor temperature and the time as 12:00 will be displayed. If they are not shown in LCD after 60 seconds, remove the batteries and wait for at least 60 seconds before reinserting them.

4. The outdoor temperature from the first sensor (channel 1) should then be displayed on the Temperature station. If this does not happen and the signal reception icon is not shown, after 2 minutes, the batteries will need to be removed from both units and reset from step 1.
5. Insert the batteries to the second sensor as soon as the outdoor temperature readings from the first sensor are displayed on the Temperature station.

**NOTE: You must insert the batteries into the second sensor within 45 seconds of reception of the first sensor.**

6. The outdoor temperature from the second sensor and the "channel 2" icon should then be displayed on the Temperature station. If this does not happen after 2 minute, the batteries will need to be removed from all the units and reset from step 1.
7. Insert the batteries to the third sensor as soon as the "channel 2" icon and outdoor data are displayed on the Temperature station. Then within 2 minutes, the channel 3 outdoor data from the third sensor will be displayed and the channel icon will shift back to "1" once the third sensor is

successfully received. If this is not happen, user shall restart the setting up from step 1.

**NOTE:** You must insert the batteries into the third sensor within 45 seconds of reception of the second sensor.

**IMPORTANT:** Transmission problems will arise if the setting for multiple sensors is not followed as described above. Should transmission problems occur, it is necessary to remove the batteries from all units and start again the set-up from step 1.

### **VIEWING AND OPERATING WITH MULTIPLE REMOTE SENSOR UNITS**

1. To view the temperature of a different temperature sensor unit, press the set/ch button to select to display the outdoor temperature of the different sensors. A shift from one channel number to the next should be observed on the right side of the OUTDOOR LCD.
2. To view the Minimum/Maximum temperature: first select from which temperature sensor to read data (indicated by the channel number). Pressing and releasing the min/max/+ button will toggle through the minimum and maximum indoor temperature, and the minimum and maximum outdoor temperature.

## MOUNTING

**Note:** To achieve a true temperature reading, avoid mounting in direct sunlight. We recommend that you mount the temperature sensor on an outside North-facing wall (under the eave of a house is ideal). The remote temperature sensor should be placed in a dry, shaded area. The remote temperature sensor has a range of 330 feet. Keep in mind that the 330 feet is in open air with no obstructions and that radio waves DO NOT curve around objects. Actual transmission range will vary depending on what is in the path of the signal. Each obstruction (roof, walls, floors, ceilings, thick trees, etc.) will effectively cut signal range in half.

**Example:** A wireless weather station receiver with a 330 feet range is mounted on an interior wall, so that the signal has to pass through one interior wall, one exterior wall, and across the 10 foot width of the room between the 2 walls. The first wall will reduce the range to 165 feet, and the second wall will reduce the range to 87 feet. Factoring in the 10 foot room, this leaves a maximum of 77 feet of remaining signal range.

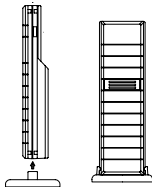
This allowance is typically enough for a frame wall with non-metallic siding; however certain materials can reduce range even further. Metal siding, stucco, and some types of glass can reduce signal range by as much as  $\frac{3}{4}$  or more, compared to the

½ reduction typical of most obstructions. It is possible to receive a signal through these materials, however maximum range will be much less due to their tendency to absorb or reflect a much larger portion of the sensor's signal.

## **TEMPERATURE SENSOR**

The Temperature has been designed to be hanged on a wall or free standing.

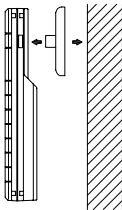
### **For Free standing:**



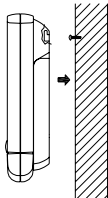
Simply attached the stand to the bottom of the unit and place onto a flat surface.



## To wall mount:



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



## WIRELESS TEMPERATURE STATION

1. The Wireless Temperature Station comes with the table stand attached to the back of the Receiver. If you wish to use the table-stand, simply place the Wireless Temperature Station in an appropriate location, and pull out on the attached stand.

2. To wall mount, push the table stand flat against the Wireless Temperature Station (if it isn't already flat). Fix a screw (not included) into the desired wall, and place the Wireless Temperature Station onto the screw using the hanging hole on the backside. Gently pull the Wireless 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](http://www.lacrossetechnology.com)

**Problem:** The LCD is faint

**Solution:** Replace batteries

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

**Solution:**

- 1) Bring any units from outside, inside and place the units 3 to 5 feet apart with nothing in-between them.
- 2) Remove the batteries from all units.
- 3) Press one of the buttons on the Wireless Temperature Station display at least 20 times to clear all memory. Verify that the display is blank before proceeding.

- 4) Using good quality alkaline batteries, place the batteries back into the outdoor temperature sensor; making sure they are installed according to the diagrams in the battery compartment.
- 5) Taking care not to press any buttons, reinstall the batteries in the Wireless Temperature Station according to the diagram in the battery compartment.
- 6) Do not press any buttons for at least 5 minutes after installing the batteries. (This is to let the units establish a good connection.)
- 7) During the course of the 5 minutes an outdoor temperature should appear on the display. You can now put your sensor(s) back outside.

## **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	915 MHz
<b>TEMPERATURE MEASURING RANGES</b>	
Indoor	14.1°F to 139.8°F with 0.2°F resolution.
Outdoor	-39.8 °F to 139.8°F with 0.2°F resolution.
<b>Transmitting range</b>	Maximum 330 feet (100m) open space
<b>TEMPERATURE CHECKING INTERVAL</b>	
Indoor	Every 15 seconds
Outdoor	Every 4 seconds
<b>BATTERIES—(Alkaline recommended)</b>	
temperature Sensor	2 x AA, 1.5V
Wireless Temperature Station	2 x AA, 1.5V

<b>DIMENSION: (H x W x D)</b>	
<b>Receiver</b>	2.76 x 1.14 x 4.54 in (70 x 29 x 115.2 mm)
<b>Temperature Sensor</b>	1.50 x 0.83 x 5.05 in (38.2 x 21.2 x 128.3 mm)
<b>Battery life</b>	Up to 24 Months

## **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 of 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 not 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, Ltd  
2809 Losey Blvd. S.  
La Crosse, WI 54601  
Phone: 608.782.1610  
Fax: 608.796.1020

e-mail:

[support@lacrossetechnology.com](mailto:support@lacrossetechnology.com)  
(warranty work)

[sales@lacrossetechnology.com](mailto:sales@lacrossetechnology.com)  
(information on other products)

web:

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



Question? Instructions? Please visit:  
[www.lacrossetechnology.com/9021](http://www.lacrossetechnology.com/9021)

All rights reserved. This handbook must not be reproduced in any form, even in excerpts, or duplicated or processed using electronic, mechanical or chemical procedures without written permission of the publisher.

This handbook may contain mistakes and printing errors. The information in this handbook is regularly checked and corrections made in the next issue. We accept no liability for technical mistakes or printing errors, or their consequences.

All trademarks and patents are acknowledged.