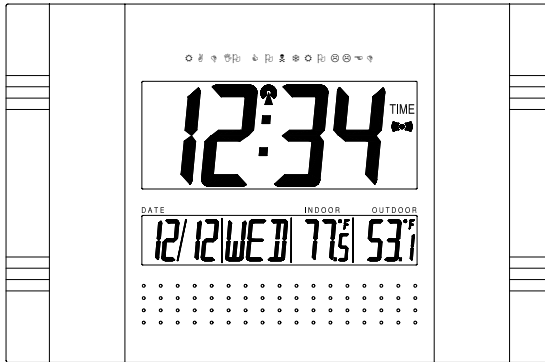


WS-8011UM
433 MHz
Radio Controlled Temperature Clock

Instruction Manual



LA CROSSE
TECHNOLOGY *tools and technology
for home and office*

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INVENTORY OF CONTENTS

- 1) WS-8011UM
- 2) TX6U remote temperature transmitter
- 3) Instruction manual and warranty card.

ADDITIONAL EQUIPMENT (not included)

- 1) Two fresh 1.5V AA batteries (for the temperature clock).
- 2) Two fresh 1.5V AA batteries (for the remote temperature transmitter).
- 3) Three wall-hanging screws.
- 4) Appropriate screwdriver for screws.

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 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 temperature clock. However, due to the nature of the Earth's Ionosphere, reception is very limited during daylight hours. The temperature clock 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 about WWVB please see the NIST website at <http://www.boulder.nist.gov/timefreq/stations/wwvb.htm>

QUICK SET-UP GUIDE

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

1. Have the indoor station and outdoor remote 3 to 5 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 temperature clock.
(All remote temperature sensors must be started before the temperature clock)
4. **DO NOT PRESS ANY BUTTONS FOR 10 MINUTES.**

In this time the temperature clock and remote temperature sensor will start to talk to each other and the temperature clock will show both the indoor temperature and an outdoor temperature. If the temperature clock 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 temperature clock after the 10 minutes have passed please follow the steps below.

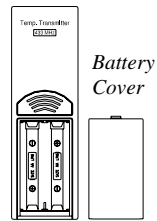
DETAILED SET-UP GUIDE

I) BATTERY INSTALLATION

Note: To avoid start-up problems make sure that the batteries do not spring free.

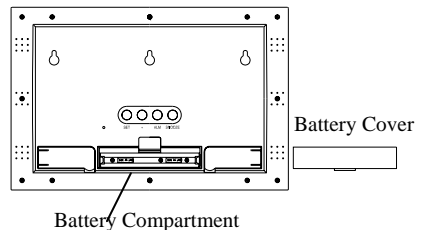
A) REMOTE TEMPERATURE TRANSMITTER

- 1) Remove the battery cover. Place your thumb over the two air-vent slots on the face of the remote temperature sensor, push down gently, and slide battery cover down and off.
- 2) Observing the correct polarity, install 2 AA batteries. The batteries will fit tightly (to avoid start-up problems make sure that they do not spring free during installation).
- 3) Replace the battery cover.

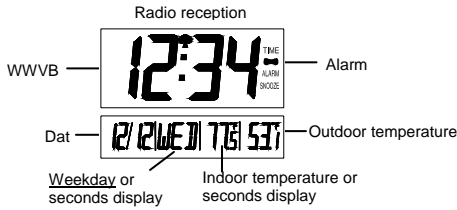


B) TEMPERATURE CLOCK

- 1) Remove the battery cover, located on the backside of the temperature clock and directly below the function buttons.
- 2) Observe the correct polarity, and install 2 AA batteries.
- 3) Replace the battery cover.



Note: After the batteries have been installed a tone will sound, and all the LCD's (Liquid Crystal Display) will briefly light up. The indoor temperature, the date as "1/ 1", the weekday as "MON", and the remote temperature will be displayed (within three minutes). Also, the time will appear as "--:--" for approximately 1 minute. The WWVB search is automatically initiated, and a tower icon appears and



flashes with the time colon (no tower icon will appear if the WWVB is too weak to be detected, and the

time display will remain on “-:--”). While the WWVB search is being conducted various numbers will appear in the time display. Within 10 minutes the temperature clock will either display the WWVB time, or discontinue the search if the time is not found. If the search is cancelled “-:--” will appear in the time LCD. The temperature clock will conduct a WWVB search every hour until the first signal is found. Once the WWVB time is found, a search is automatically conducted nightly at midnight. If the signal is found at midnight, the tower icon will remain, if not, another search will take place every hour (until 6:00 am) until the signal is found successfully. If no signal is found during this period, the tower icon will not appear and the clock will search again at 12:00 am the next night.

II) PROGRAM MODE

To enter the Program Mode hold down the “*SET*” button for 2 seconds, until “-5EST” flashes in the Date LCD. The Program Mode is laid out in a manner that allows you to program each function separately, or you can follow the instructions entirely to program the temperature clock. Complete programming is usually done for the initial set-up, and will require you to skip step 1 of programming sections C through H. Press and release the “*SNOOZE*” button at any time to exit the Program Mode, or wait approximately 15 seconds for the temperature clock to automatically return to normal operation.

A) FUNCTION BUTTONS

There are 4 function buttons located on the backside of the temperature clock. The function buttons are labeled: “*SET*”, “+”, “*ALARM*”, and “*SNOOZE*”.

B) TIME ZONE SETTING

- 1) Hold down the “*SET*” button for 2 seconds, the default (factory) setting “-5EST” will flash in the Date LCD.
- 2) Press and release the “+” button to select the appropriate time zone. There

-4ATL	Atlantic Time
-5EST	Eastern Time (default setting)
-6CST	Central Time
-7MST	Mountain Time
-8PST	Pacific Time
-9ALA	Alaskan Time
-10HAW	Hawaiian Time
-11, -12	Next two time zones West of HAW
GMT	Greenwich Mean Time
-1, -2, -3GMT	Three time zones West of GMT

are 13 time zones to choose from:

- 3) Press and release the “SET” button to confirm the time zone setting, and to advance to DST (Daylight saving time) setting.

C) DST (DAYLIGHT SAVING TIME) SETTING

Note: The DST default is “On”, meaning that the WWVB will automatically change the time according to Daylight Saving Time in the spring and fall. For areas that do not recognize DST changes (Arizona, Hawaii and parts of Indiana) turn the DST “OFF”.

- 1) Hold down the “SET” button for 2 seconds (the selected time zone will flash).
- 2) Press and release the “SET” button once more until “On” flashes in the time LCD and “DST” flashes where the Weekday normally appears.
- 3) Press and release the “+” button to turn the DST off, as will be indicated by the display of “OFF” in the time LCD.
- 4) Press and release the “SET” button to confirm the DST setting, and to advance to select the language for the weekday.

D) LANGUAGE SELECTION FOR THE WEEKDAY

- 1) Hold down the “SET” button for 2 seconds (the selected time zone will flash).
- 2) Press and release the “SET” button 2 times until the default language “US” flashes in the time LCD.
- 3) Press and release the “+” button to toggle through and to select the desired language. There are 3 languages to select from:

US	English
F	French
E	Spanish

- 4) Press and release the “SET” button to confirm the language setting, and to advance to manually set the time.

E) TIME SETTING

Note: When the WWVB signal is found, that time will over-ride the manually set time.

- 1) Hold down the “SET” button for 2 seconds (the selected time zone will flash).
- 2) Press and release the “SET” button 3 times until the hour “12” flashes in the time LCD.

- 3) Press and release the “+” button to select the hour.

Note: when setting the hour, “PM” will appear to the left of the hour display, if it is AM nothing will be displayed.

- 4) Press and release the “SET” button to confirm the hour setting, and to shift to select the minutes.
- 5) Press and release the “+” button to select the minutes.
- 6) Press and release the “SET” button to confirm the time setting and to advance to manually set the calendar.

F) CALENDAR SETTING

Note: When the WWVB signal is found, that date will over-ride the manually set date.

- 1) Hold down the “SET” button for 2 seconds (the selected time zone will flash).
- 2) Press and release the “SET” button 5 times until the default year “00” flashes in the date LCD.
- 3) Press and release the “+” button to select the year.
- 4) Press and release the “SET” button to confirm the year, and to set the month.
- 5) The default month “1” will flash.
- 6) Press and release the “+” button to select the appropriate month.
- 7) Press and release the “SET” button to confirm the month and to set the date.
- 8) The default date “1” will flash.
- 9) Press and release the “+” button to select the appropriate date.
- 10) Press and release the “SET” button to confirm the date and to set the weekday.
- 11) The default weekday “MON” (depends on selected language) will flash.
- 12) Press and release the “+” button to select the appropriate weekday.
- 13) Press and release the “SET” button to confirm the calendar settings and to advance to select either 12 or 24-hour time display.

G) 12/24-HOUR SETTING

Note: 12-hour uses AM/PM, 24-hour is also known as “military” time.

- 1) Hold down the “SET” button for 2 seconds (the selected time zone will flash).
- 2) Press and release the “SET” button 9 times until the “12” hour time display flashes in the time LCD.
- 3) Press and release the “+” button to toggle between 12 and 24 hour time.
- 4) Press and release the “SET” button to confirm the 12/24-hour time display and to advance to select either °F or °C.

H) SELECTING °F OR °C

- 1) Hold down the “*SET*” button for 2 seconds (the selected time zone will flash).
- 2) Press and release the “*SET*” button 10 times until the default “°F” flashes in the time LCD.
- 3) Press and release the “+” button to toggle between °F and °C.
- 4) Press and release the “*SET*” button to confirm the °F or °C selection and exit the program mode.

III) FEATURES & OPERATIONS

A) CHANGING DISPLAY MODE (DAY, SECONDS, AND TEMPERATURE)

There are three possible display modes to view the day, seconds, and temperature. The *month&date/weekday/indoor temperature/remot temperature is the default.*

To change the display:

- 1) Press and release the “+” button.
- 2) The display should now show the *month&date/weekday/seconds/remot temperature*
- 3) Press and release the “+” button.
- 4) The display will now show the *month&date/seconds/indoor temperature/remot temperature.*
- 5) Press and release the “+” button.
- 6) The display will return to the normal display.

B) THE ALARM

1) SETTING THE ALARM

Note: *The duration of the alarm is 85 seconds. After each of the first two 25 second periods, the rate of the alarm increases.*

- (a) Hold down the “*ALARM*” button for 5 seconds.
- (b) The “*TIME*” icon to the right of the minutes (in the time LCD) shifts to “*ALARM*” and the hour digit of the alarm flashes.
- (c) Press and release the “+” button to set the alarm hour.
- (d) Press and release the “*ALARM*” button to confirm the hour and to set the alarm minutes.
- (e) The alarm minutes flash.
- (f) Press and release the “+” button to set the alarm minutes.

- (g) Press and release the “ALARM” button to confirm and to exit the alarm setting mode.

***Note:** The alarm will be automatically set to sound when exiting the alarm-setting mode (indicated by the alarm “sound” icon to the right of the time).*

2) ACTIVATING/DEACTIVATING THE ALARM

- (a) The alarm will be automatically set to sound when exiting the alarm-setting mode (indicated by the alarm “sound” icon to the right of the time).
- (b) Press and release the “ALARM” button to activate and deactivate the alarm. The alarm “sound” icon to the right of the time will appear or disappear, and the alarm time will be displayed briefly before returning to the normal display mode.

3) ACTIVATING THE SNOOZE FUNCTION

While the alarm is sounding, press and release the “SNOOZE” button to activate the snooze function.

The alarm “sound” icon and “SNOOZE” icon (to the right of the time) will flash.

The duration of the snooze function is 10 minutes, then the alarm will resume.

4) SUSPENDING ALARM

While the alarm is sounding or the SNOOZE is active, press and release the “ALARM” button to suspend the alarm until the next day.

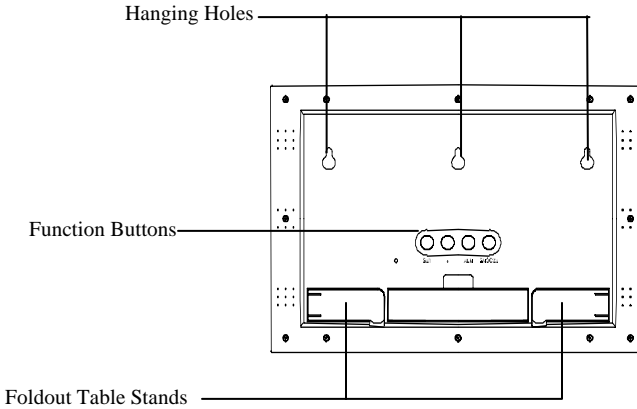
C) INDOOR TEMPERATURE

The Indoor temperature appears on the right side of the Date LCD. The temperature is checked every 10 seconds, and updated whenever there is a change.

D) REMOTE TEMPERATURE

The remote temperature will be shown on the right side of the lower LCD screen. The temperature clock receives the outdoor temperature (°F or °C) from the remote temperature sensor, and the temperature appears in the OUTDOOR LCD. The remote temperature sensor transmits a new temperature to the weather temperature clock 3 times every 10 minutes.

IV) MOUNTING

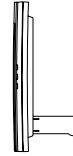


There are two possible ways to mount the temperature clock:

- use of the foldout table stands
- wall mounting

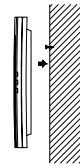
A) FOLDOUT TABLE STANDS

The Foldout table stand legs are located on the backside, at the lower corners, and on both sides of the battery cover. The hinges are towards the edges of the temperature clock and the ends (with no hinge) need to be folded out towards the edge. Once the foldout table stands are extended place the temperature clock in an appropriate location.



B) WALL MOUNTING

- 1) Using a straightedge, horizontally space at $3\text{--}15/16$ of an inch (100.58mm) three screw positions on a wall.
- 2) Install three mounting screws (not included) into a wall within transmission range—leaving approximately $3/16$ of an inch (5mm) extended from the wall.
- 3) Place the temperature clock onto the screws, using the hanging holes on the backside. Gently pull the temperature clock down to lock the screws into place.



V) THE REMOTE TEMPERATURE SENSOR

The remote temperature sensor can be mounted in two ways

- with the use of screws
- using the adhesive tape

A) MOUNTING WITH SCREWS

- 1) Remove the mounting bracket from the remote temperature sensor. The bracket should snap off easily.
- 2) Place the mounting bracket over the desired location.
- 3) Through the three screw holes of the bracket, mark the mounting surface with a pencil.
- 4) Where marked, start the screw holes into the mounting surface.
- 5) Screw mounting bracket onto the mounting surface. Ensure that the screws are flush with the bracket.
- 6) Snap the remote temperature sensor onto the mounted 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 sensor in the desired location, ensuring that the temperature clock can receive the signal.

VI) MAINTENANCE & CARE

- Extreme temperatures, vibrations, 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 and damage the displays and casings.
- Do not submerge in water.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace with new batteries only, and of recommended size.
- Opening the casings invalidates the warranty. Do not try to repair the units. Contact La Crosse Technology for Repairs.

TROUBLESHOOTING

Problem:	The LCD is faint.
Solution:	Replace the batteries.
Problem:	“OFL” appears in the indoor temperature LCD.
Solution:	<ol style="list-style-type: none"> 1) Move unit to an area with warmer or cooler surrounding temperature. 2) Current surrounding temperatures are outside measuring range.
Problem:	No reception of WWVB signal.
Solution:	<ol style="list-style-type: none"> 1) It may help reception to face the front of the temperature clock in the general direction of Ft. Collins, Colorado. 2) Wait overnight for signal. 3) Be sure the temperature clock is at least 6 feet from any electrical devices, i.e. TV sets, computers, or other radio controlled clocks. 4) Remove batteries for five minutes, reinsert and leave the unit alone overnight without pressing buttons. 5) If problems persist contact La Crosse Technology.
Problem:	Hour is incorrect (minute and date are correct).
Solution:	Be sure correct time zone and daylight saving time are selected.
Problem:	“--.” appears in outdoor temperature LCD
Solution:	<ol style="list-style-type: none"> 1) Check batteries in the remote temperature sensor. If batteries are replaced in remote temperature sensor the temperature clock must be re-started. Remove all batteries, and then follow start up procedure.
Problem:	“OFL” appears in the outdoor temperature LCD
Solution:	<ol style="list-style-type: none"> 1) Remote temperature is out of range. 2) Check batteries. 3) Interference from an outside source (cordless telephone, etc.) 4) Contact La Crosse Technology.

Note: For any questions not answered, contact La Crosse Technology with the contact information found at the end of this instructional manual.

SPECIFICATIONS FOR WS-8011UM

Temperature:	
Measuring range:	32°F to 122°F with 0.2°F resolution (indoor) -21.8°F to 140°F with 0.2°F resolution (outdoor) (0°C to 50°C with 0.1°C resolution)
Checking intervals:	Every 10 seconds indoor, 3 times in 10 minutes for remote temperature.
Power source:	
Battery type:	Station: 2 x AA, 1.5V (Alkaline) Transmitter: 2 x AA, 1.5V (Alkaline)
Battery life:	Approximately 12 months
Dimensions (L x W x H):	11.4 x 0.98 x 7.5 in (290 x 25 x 190mm)

WARRANTY INFORMATION

La Crosse Technology provides a 1-year warranty on this temperature clock. Contact La Crosse Technology immediately upon discovery of any defects covered by this warranty.

Before sending the temperature clock in for repairs, contact La Crosse Technology. The temperature clock 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 clocks 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 TEMPERATURE CLOCK. THIS PRODUCT IS NOT TO BE USED FOR MEDICAL PURPOSES OR FOR PUBLIC INFORMATION. THIS PRODUCT IS NOT A TOY. KEEP OUT OF CHILDRENS' 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
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 ID: OMO-01RX (receiver)
OMO-01TX (transmitter)**

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 UNDESIRE OPERATION.**