

# WS-8115U

## Atomic Digital Wall Clock with Time with Seconds, Month, Date, Day, & IN/OUT Temperature



by La Crosse Technology®  
La Crosse Technology, Ltd.  
[www.lacrossetechnology.com](http://www.lacrossetechnology.com)  
2809 Losey Blvd. S.  
La Crosse, WI 54601  
Phone 608-782-1610

### Table of Contents

Table of Contents .....	1
Congratulations .....	2
Features: .....	2
Setup Information: .....	3
The Outdoor Temperature Sensor.....	4
Positioning the Temperature Sensor:.....	4
To wall mount the Temperature Sensor:.....	4
WWVB (Atomic Time) Radio signal: .....	4
Setup of Time and Display Options: .....	5
1. Set the Time Zone:.....	5
2. Set Daylight Saving Time ON/OFF: .....	6
3. Set Language:.....	6
5. Set Time Manually - Minute: .....	6
6. Set Date Manually - Year: .....	6
7. Set Date Manually - Month:.....	6
8. Set Date Manually - Date:.....	6
9. Set Date Manually - Day of Week: .....	6
10. Set 12 or 24 Hour Time Mode:.....	7
11. Set Temperature Mode - °F or °C: .....	7
Daylight Saving Time.....	7
Setting the Daily Alarms: .....	7

About the Daily Alarms: .....	8
Automatic Snooze function:.....	8
Online Resources .....	8
Care and Maintenance .....	8
Battery Replacement .....	9
The Low Battery Icons: .....	9
Specifications .....	10
Power Requirements .....	10
FCC Statement.....	10
Warranty Information .....	11

## Congratulations

You have purchased an atomic digital Atomic Clock from La Crosse Technology®, providing the world's most accurate time at a glance, plus wireless outdoor temperature.

This product offers:



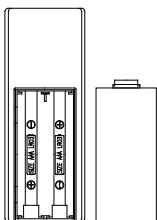
**INSTANT TRANSMISSION** is the state-of-the-art new wireless transmission technology, exclusively designed and developed by LA CROSSE TECHNOLOGY. **INSTANT TRANSMISSION** offers you an immediate update (every 8 seconds!) of all your outdoor data measured from the transmitters: follow your climatic variations in real-time!

## Features:

- WWVB Radio Controlled Clock (Atomic Clock)
- Time in 12/24 hour format
- Manual time setting option
- Time Zone setting: +/- 12 Hours from GMT
- Daylight Saving Time(DST) On/Off
- Continuous calendar up to year 2054
- Date and weekday displayed and set automatically with the time
- Temperature display in °F or °C
- Snooze function (10 minutes)
- Indoor thermometer
- Wireless Outdoor Temperature Sensor
- Battery - Atomic Clock: 2 X "AA" size 1.5V (not included)
- Battery - Wireless Outdoor Temperature Sensor: 2 X "AAA" size 1.5V (not included)

- Low battery icons for display and sensor

## Setup Information:



The Temperature Sensor uses 2 x AAA, IEC LR3, 1.5V battery. To install and replace the batteries, please follow the steps that follow:

- Position the Atomic Clock and the Outdoor Sensor five to six feet apart with nothing

between them.

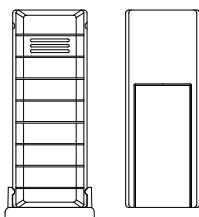
- Insert batteries into the Wireless Outdoor Temperature Sensor **first** - it is important that you **do not** insert the batteries into the Atomic Clock yet.
- You must insert the batteries into the Atomic Clock within **3** minutes of inserting the batteries into the Sensor.
- Slide out the battery compartment lid at the bottom of the Outdoor Sensor.
- Insert the batteries into the Outdoor Sensor **first**, observing the correct polarity (see markings inside battery compartment). Replace the battery holder on the unit.
- Immediately after and within **3** minutes, insert the batteries into the Atomic Clock, observing the correct polarity (see markings inside battery compartment). Replace the battery cover. The Atomic Clock uses 2 x AA batteries ( IEC LR6, 1.5V ).
- The outdoor temperature and the signal reception icon 📶 should be displayed on the Atomic Clock. If this does not happen after 3 minutes, the batteries will need to be removed from both units and re-inserted, following the instructions above.

**Note:** In the event of changing batteries in any of the units, all units need to be reset by following the setting up procedures. This is because a random security code is assigned by the Sensor at start-up and this code must be received and stored by the Atomic Clock in the first 3 minutes of power being supplied to it

**Note:** If the signal reception is not successful on the first frequency (915MHz) for 22 seconds, the frequency is changed to 920MHz and the learning is tried another 22 seconds. If still not successful

the reception is tried for 22 seconds on 910MHz. This will also be done for re-synchronization.

## The Outdoor Temperature Sensor



- Remote transmission of outdoor temperature to Temperature Station by 915 MHz
- Shower proof casing
- Wall mounting case
- Mount in a sheltered

place. Avoid direct rain and sunshine.

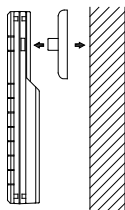
- Under the eaves of your home is an ideal place.

### Positioning the Temperature Sensor:

The Sensor is supplied with a holder that may be attached to a wall with the two screws supplied. The Sensor can also be positioned on a flat surface by securing the stand to the bottom to the Transmitter.

#### Note:

Before permanently fixing the Sensor wall base, place all units in the desired locations to check that the outdoor temperature reading is receivable. If the signal is being received, the signal reception icon 📶 will be displayed on the Atomic Clock. In



event that the signal is not received, relocate the Sensor or move it slightly as this may help the signal reception. To ensure a good connection, there should be a distance of no more than 200 feet between the final position of the Atomic Clock and the Sensor.

### To wall mount the Temperature Sensor:


1. Secure the bracket onto a desired wall using the screws and plastic anchors.
2. Clip the remote temperature sensor onto the bracket.

## WWVB (Atomic Time) Radio signal:

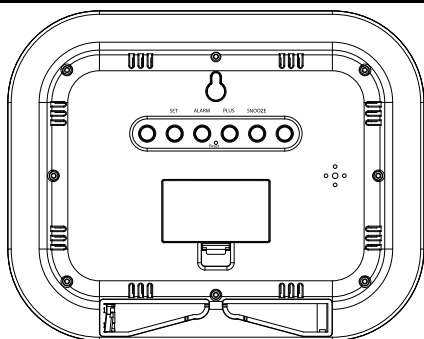
- The clock must receive the WWVB Radio Signal to automatically set the time, date and weekday.
- The clock automatically starts the WWVB on the top of the hour between the hours of 12:00 AM and 6:00 AM.
- If this synchronization attempt is successful the radio tower icon 📶 appears on the display.

The radio tower icon  will disappear if the signal reception is unsuccessful.

### About WWVB (Atomic Time) Radio Signal Reception:

- A continuously displayed radio tower icon  indicates that the WWVB signal was received successfully during the last attempt. If the clock attempts to receive the WWVB signal and is unsuccessful, the tower icon will not be continuously displayed on the LCD.
- We recommend a minimum distance of 8 feet (2.5 meters) to all sources of interference, such as televisions or computer monitors
- Radio reception is weaker in rooms with concrete walls (e.g.: in cellars) and in offices. In such environments, place the system close to the window.

### Setup of Time and Display Options:



*Above: Back view of Atomic Clock showing buttons and battery compartment.*

**Note:** The "SET" button is used to enter SET mode. The display will exit SET mode automatically after 10 seconds of inactivity. If the display exits SET mode while you are following the setup instructions, press the "SET" button the indicated number of times to return to the portion of the SET mode desired.

#### 1. Set the Time Zone:

Press the "SET" button and the Time Zone display will flash. Use the "PLUS" button to select the correct Time Zone setting from the available selections below:

- -1,-2,-3: Other time zones
- -4: **ATL** - Atlantic
- -5: **EST** - Eastern (default setting)
- -6: **CST** - Central
- -7: **MST** - Mountain

- -8: **PST** - Pacific
- -9: **ALA** - Alaska
- -10,-11,-12,12,11,10,9,8,7,6,5,4,3,2,1: Other time zones
- 0: - Greenwich Mean Time (GMT)

## 2. Set Daylight Saving Time ON/OFF:

Press the “**SET**” button a second time and **DST** will flash. Press the “**PLUS**” button to toggle Daylight Saving Time on (“**On**”) or off (“**OFF**”). See “**Daylight Saving Time**” on page 7 for more information.

## 3. Set Language:

Press the “**SET**” button a third time and the **Language Abbreviation** will flash. Press the “**PLUS**” button to switch the Language to be displayed. The three-letter abbreviation for the day of the week will display in the bottom of the LCD while the setting flashes above.

- **US**: English (default setting)
- **F**: French (Français)
- **E**: Spanish (Español)
- **d**: German (Deutsch)

**Note:** Manual time and date settings are **optional**.

In most cases, the time and date will set automatically via WWVB radio signal. If placement for the display does not allow for WWVB reception due to interference, you will need to set the time and date manually.

## 4. Set Time Manually - Hour:

Press the “**SET**” button a fourth time and the **Hours** digits will flash. Use the “**PLUS**” button to set the correct hour.

## 5. Set Time Manually - Minute:

Press the “**SET**” button a fifth time and the **Minutes** digits will flash. Use the “**PLUS**” button to set the correct minute.

## 6. Set Date Manually - Year:

Press the “**SET**” button a sixth time and the **Year** digits will flash. Use the “**PLUS**” button to set the correct year.

## 7. Set Date Manually - Month:

Press the “**SET**” button a seventh time and the **Month** digits will flash. Use the “**PLUS**” button to set the correct month.

## 8. Set Date Manually - Date:

Press the “**SET**” button an eighth time and the **Date** digits will flash. Use the “**PLUS**” button to set the correct date.

## 9. Set Date Manually - Day of Week:

Press the "**SET**" button a ninth time and the **Day of Week** abbreviation will flash. Use the "**PLUS**" button to set the correct day of week.

**10. Set 12 or 24 Hour Time Mode:**

Press the "**SET**" button a tenth time and the **12 or 24 Hour Time Mode** digits will flash. Use the "**PLUS**" button to set the time mode to either a 12 or 24 hour clock.

**11. Set Temperature Mode - °F or °C:**

Press the "**SET**" button an eleventh time and the **Temperature Mode** abbreviation will flash. Use the "**PLUS**" button to set the temperature mode to °F or °C.

## Daylight Saving Time

- The National Institute of Standards and Technology and WWVB encode a special DST "bit" in the WWVB transmission for DST.
- Your La Crosse Technology® clock will read this information (only if "DST" is set to "On") and automatically advance the time one hour in the spring and back an hour in the fall.
- Arizona and Indiana: If you live in an area that does not recognize DST you must de-activate Daylight Saving Time by setting "DST" to "OFF"
- See "**Set Daylight Saving Time ON/OFF**" on page 6 for instructions.

## Setting the Daily Alarms:

- **To turn the alarm on:**  
Press the "**ALARM**" button. The LCD will display the alarm icon ((●)).
- **To set the Alarm Time - Hour:** Press and hold down the "**ALARM**" button for 2 seconds until the hours digits flash. Use the "**PLUS**" button to set the hour. Press the "**ALARM**" button to confirm your setting and move to setting the minutes.
- **To set the Alarm Time - Minutes:** The Minutes digits of the Alarm Time will flash. Use the "**PLUS**" button to set the minutes. You can hold the "**PLUS**" button in to speed up the setting of minutes by using five minute increments. Press the "**ALARM**" button to confirm your minutes setting and to end the setting procedure.
- To activate or deactivate the daily alarms, briefly press the "**ALARM**" button once. When the alarm is active the clock displays the alarm

icon (•) below the word "ALARM". When deactivated, the alarm icon (•) does not display.

### ***About the Daily Alarms:***

- After 30 seconds without pressing any button the clock switches automatically from alarm setting mode to normal clock mode.
- The alarm will sound for 85 seconds if not deactivated. You can deactivate it by pressing any button. The alarm will be repeated automatically after 24 hours.
- The alarm uses 3 different patterns of tone, beginning gently and increasing in intensity, known as a "Crescendo Alarm". The effect is to provide increasing levels of alarm to ensure waking while providing a gentle alarm to lighter sleepers.

### **Automatic Snooze function:**

- While the alarm is sounding, press the "**SNOOZE**" button to activate the snooze function. The alarm icon (•) flashes on the display until the alarm sounds again when the Snooze period is over (10 minutes).
- Pressing the "**SNOOZE**" button moves the alarm back by 10 minutes and the alarm will restart at this time.
- The Snooze function can be interrupted by pressing any button.

### **Online Resources**

Visit the WS-8115U page online at:

<http://www.lacrossetechnology.com/8115>

### **Care and Maintenance**

- Extreme temperatures, vibration and shock should be avoided as these may cause damage to the unit and give inaccurate readings.
- Precautions shall be taken when handling the batteries. Injuries, burns, or property damage may be resulted if the batteries are in contact with conducting materials, heat, corrosive materials or explosives. The batteries shall be taken out from the unit before the product is to be stored for a long period of time.
- Immediately remove all low powered batteries to avoid leakage and damage. Replace only with new batteries of the recommended type.



- When cleaning the display and casings, use a soft damp cloth only. Do not use solvents or scouring agents as they may mark the LCD and casings.
- Do not submerge the unit in water. Furthermore, fix all parts in place where the units are adequately protected against moisture and rain.
- Special care shall be taken when handling a damaged LCD display. The liquid crystals can be harmful to user's health.
- Do not make any repair attempts to the unit. Return them to their original point of purchase for repair by a qualified engineer. Opening and tampering with the unit may invalidate their guarantee.
- Never touch the exposed electronic circuit of the device as there is a danger of electric shock should it become exposed.
- Do not expose the units to extreme and sudden temperature changes, this may lead to reduce their accuracy.
- Batteries are the single largest cause of customer support cases. Please use plain Alkaline batteries testing no less than 1.48 on a voltmeter or with an expiration date 7 years in the future.

## Battery Replacement

- If you notice that the LCD appears faint or that WWVB time reception is not working properly, try a fresh set of batteries before contacting customer support.

### The Low Battery Icons:

- When the batteries need to be replaced in the Wireless Outdoor Sensor, the LCD will display the "TX" icon. **TX**
- When the batteries need to be replaced in the Atomic Clock, the LCD will display the "RX" icon. **RX**



We recommend that you replace the batteries in all units regularly to ensure optimum accuracy of these units. Please see the battery life in the specifications

below.

Help us to keep our environment clean. Return used batteries to an authorized depot.

## Specifications

- **Battery Life - Atomic Clock:** Up to 24 months
- **Battery Type - Atomic Clock:** 2 X AA (IEC LR6, 1.5V)
- **Battery Life - Wireless Outdoor Temperature Sensor:** Up to 12 months - 2 X
- **Battery Type - Wireless Outdoor Temperature Sensor:** 2 X AAA (IEC LR3, 1.5V)
- **Indoor thermometer measurement range:** 14.2°F to 99.9° F (-9.9°C to 37.8°C)
- **Indoor temperature update interval:** every 16 seconds
- **Wireless Outdoor Temperature Sensor measurement range:** -39.8° F to 139.8° F (-39.9° C to 59.9° C)
- **Outdoor temperature update interval:** every 8 seconds
- **Wireless Outdoor Temperature Sensor transmission range:** 200 feet.
- **Dimensions - Atomic Clock:** 8.95" L x 1.20" W x 7.20" H
- **Dimensions - Wireless Outdoor Temperature Sensor:** 1.27" L x 0.55" W x 3.41" H

## Power Requirements

**Note:** Rechargeable batteries are not recommended due to the wide variation in performance between brands and types. Please use only fresh Alkaline batteries.

- Atomic Clock: 2 "AA" Alkaline Batteries (not included)
- Wireless Outdoor Temperature Sensor: 2 "AAA" Alkaline Batteries (not included)

## FCC Statement

FCC ID: OMO-TX38U

This device complies with part 15 of the FCC rules. Operation is subject to the following 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. 915 MHz

La Crosse Technology

Model: TX38-IT-N

## 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.

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:

Hours: Mon-Fri. – 8:00 AM to 6:00 PM Central

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

La Crosse Technology, Ltd

2817 Losey Blvd. S.

La Crosse, WI 54601

Phone: 608.782.1610

Fax: 608.796.1020

For information on other La Crosse Technology® products,

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

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.