# W86531 Atomic Digital Wall Clock



# BY

# LA CROSSE® TECHNOLOGY

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#### Congratulations

You have purchased an atomic digital wall clock from La Crosse Technology®, providing the world's most accurate time at a glance. Now you'll never need to worry about setting your clock again.

#### **Features**

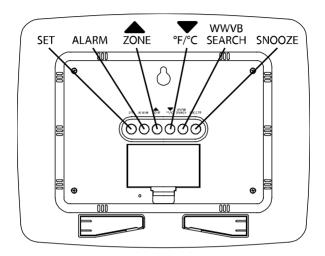
- WWVB Radio controlled Clock (Atomic Clock)
- Time in 12/24 hour format
- Manual time setting option:
   "P" Pacific, "M" Mountain,
   "C" Central and "E" Eastern
- Continuous calendar up to year 2054
- Date and weekday displayed and set automatically with the time
- Temperature display in °F or °C
- Snooze function (5 minutes)
- Indoor Thermometer: Indoor measurement range: 14.1° F to 139.8° F (-9.9°C to 59.9°C)
- Battery: 2 X "AA" size 1.5V (not included)

# Important Information

- Insert 2 new AA, LR6 1.5 volt ALKALINE batteries into the battery compartment according to the polarity marked on the case.
- When batteries are inserted, the clock will flash the display symbols and beep. The clock will then attempt to find the WWVB clock signal for up to seven minutes. The tower icon will flash on the LCD until the WWVB signal is found, and then it will stop flashing and will display continuously.
  - If the tower icon does not display continuously even after seven minutes of searching move the clock to another location and press the "WWVB SEARCH" key on the back of the clock to search again. You may need to move the clock away from sources of interference such as TV monitors or concrete walls.

 If the automatic setting process is unsuccessful, use a pointed instrument to press the "Reset" button on the back of the clock

# Manual time setting and other settings



- Press and hold down the "SET" button for 2 seconds, the 12/24 hour mode display starts to flash. Now use "▲" and "▼ "buttons to set the correct 12/24 hour mode.
- Press "SET" to confirm your setting, the Hour display starts to flash. Now use "▲" and "▼"buttons to set the correct hour.
- Press "SET" to confirm your setting, the Minute displays starts to flash. Now use "▲" and "▼"buttons to set the correct minute.
- Press "SET" to confirm your setting, the Year display 2004 starts to flash. Now use "▲" and "▼" buttons to set the correct year.
- Press SET to confirm your setting, the Month display starts to flash. Now use "▲" and "▼" buttons to set the correct month.
- Press "SET" to confirm your setting, the Date display starts to flash. Now use "▲" and "▼" buttons to set the correct date. Weekday will set itself if the clock has received the WWVB signal.

- Press "SET" to confirm your setting, the DST icon starts to flash. Now use "▲" and "▼" buttons to turn Daylight Saving Time on ("on") or off ("oF"). See "Daylight Saving Time" below for more information.
- Press "SET" to confirm your setting and to end the setting procedures, enter the clock mode.

# **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: If you live in an area that does not recognize DST you must de-activate Daylight Saving Time by setting "DST" to "oF"

# **Setting the Time Zone**

- Press the "▲" button to set the correct time zone. It will toggle the clock mode through the four available time zones in the Continental U.S. Above the seconds digits, the LCD display will indicate "P" for Pacific, "M" for Mountain, "C" for Central and "E" for Eastern.
- After 30 seconds without pressing any button, the clock switches automatically from set mode to normal time mode.

# **Setting the Daily Alarms**

- To turn the alarm on, press the ALARM button. LCD displays the "♠" icon.
- To set the Alarm Time, press and hold down the ALARM button for 2 seconds until the hours digits flash. Use the "▲" and "▼"buttons to set the required hour. Press ALARM button to confirm your setting

- The Minute display of the Alarm time starts to flash. Use the "▲" and "▼"buttons to set the required minute. Press ALARM button to confirm your 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 "A" icon after the hour. When deactivated the alarm icon does not show.

#### About the Daily Alarms

- After 30 seconds without pressing any button the clock switches automatically from setting mode to Normal clock mode.
- The alarm will sound for 2 minutes if you do not deactivate it by pressing any button. In this case the alarm will be repeated automatically after 24 hours.
- Rising alarm sound changes the frequency 4 times while the alarm signal is heard. This is known as a "Crescendo Alarm".

#### **Automatic Snooze function**

- While the alarm is sounding, press the SNOOZE button to activate the snooze function. The "A" icon appears on the display.
- This operation moves the alarm forward by 5 minutes and the alarm will restart at this time.
- The Snooze function can be interrupted by pressing any button.

# °F/°C Temperature Display

 The temperature is displayed either in °F or °C.
 Briefly pressing the "▼ "button allows you to switch between the temperature modes.

#### Reception of the WWVB Radio signal

- The clock must receive the WWVB Radio Signal to automatically set the time, date and weekday.
- The clock automatically starts the WWVB signal search after 7 minutes of any restart or changing of new fresh batteries. The radio tower icon starts to flash.
- At 1:00 am, the clock automatically carries out the synchronization procedure with the WWVB signal to correct any deviations to the exact time. If this synchronization attempt is unsuccessful (the radio tower icon in disappears from the display), the system will automatically attempt another synchronization at the next full one hour. This procedure is repeated automatically up to total 5 times.
- To start manual WWVB signal reception, press the "WWVB SEARCH" button. If no signals received within 7 minutes, then the WWVB signal search stops (the radio tower icon disappears) and will start again at the next full one-hour.
- To cancel RC reception and stop searching for the WWVB radio signal, press the "WWVB SEARCH" button once. The radio tower icon will disappear.

# About WWVB Radio Signal Reception

- A flashing radio tower icon indicates that the WWVB signal reception has started.
- 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 2.5 meters (8 feet) 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.

#### **Online Resources**

 Visit the atomic clock page online at: www.lacrossetechnology.com/W86531

#### **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 and 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.



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.

- · Do not mix old and new batteries
- Do not mix alkaline, standard, or rechargeable batteries.

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

# Troubleshooting

Visit www.lacrossetechnology.com/W86531 for additional information on troubleshooting.

If the clock receives a clear signal it will set itself perfectly. If it does not receive a signal consider the following:

- Battery The La Crosse Technology® clock must have a fresh battery to receive and process the time signal.
- Location Try a different location, ideally near a window. It should be at least six feet from computers, TVs, air conditioners, other Radio-

Controlled clocks and other electrical appliances that cause interference.

 Weather - Electrical storms between you and Colorado during the night will interfere with the WWVB signal. Although we cannot control the weather we can help you predict it (see www.lacrossetechnology.com).

#### **Specifications**

#### **Battery Life**

Up to 24 months

#### **Dimensions**

9.22" L x 1.1" W x 7.37" 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.
- 2 "AA" Alkaline Batteries (not included)

# **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

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

misrepresentation by the seller or performance variations resulting from installation-related

circumstances.

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, Ltd 2817 Losey Blvd. S. La Crosse, WI 54601

The complete instruction manual is available at: www.lacrossetechnology.com/w86531



Product Registration: www.lacrossetechnology.com/support/register



Contact Support: 1-608-782-1610

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EJINW86531L210#

Printed in China