

**MODEL: WT-951
WWVB—RADIO CONTROLLED WATCH**

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 at 60 kHz. The signal can be received up to 2,000 miles away through the internal antenna in the watch. However, due to the nature of the Earth’s Ionosphere, reception is very limited during daylight hours. The Watch will search for a signal every night when reception is best. The WWVB radio station derives its signal from the NIST Atomic clock in Ft. Collins, 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. This watch is regulated by the WWVB transmitter.

SET-UP GUIDE, FEATURES, AND OPERATIC



I. ACTIVATION

TIME ZONE key

The Radio-Controlled watch is programmed and shipped in a battery-saving mode. The LCD (Liquid Crystal Display) displays “OFF” and must be activated before set-up can begin. Your watch may not be in this mode; if not all you need to do is set your time zone (the correct time may or not be shown).

1. Press the *TIME ZONE* button briefly to activate the WWVB reception search. The LCD lights up briefly and will then display “-:--” and the watch will begin to search for the WWVB signal. If a signal is found, a “tower” icon will flash; if no signal is present, no icon will flash.



2. Within six minutes, the watch will either set to the exact time and date (Eastern is the default), or will display “-:--”.

Do not press the *TIME ZONE* button while the watch is searching for the WWVB signal, which normally takes 6-10 minutes. However, the optimal time for WWVB reception is between midnight and 6:00 a.m., reception may not occur until this time period. When the WWVB search is complete the time and date will automatically be displayed in the LCD. If the watch is not within range of WWVB signals for an extended period of time it will still continue to operate as a highly accurate quartz controlled clock.

II. TIME ZONE SELECTION

The default Time Zone is Eastern Time (EST, also GMT-5). There are 25 Time Zones to choose from. The selection will cycle from GMT-5 to GMT-12, then GMT+12 to GMT +1, then GMT, then GMT-1 to GMT -5.

1. Hold down the *TIME ZONE* button for 2 seconds, or until a Time Zone abbreviation and “ZONE” flash in the LCD, and release.
2. Repeatedly press the *TIME ZONE* button until the appropriate Time Zone is displayed.
3. Wait 6 seconds for the automatic time-out to exit the Time Zone selection mode.



“Hawaii Time displayed (GMT-10)”

Atlantic Time (ATL): GMT-4	Alaska Time (ALA): GMT-9
Eastern Time (EST): GMT-5	Hawaii Time (HAW): GMT-10
Central Time (CST): GMT-6	
Mountain Time (MST): GMT-7	
Pacific Time (PST): GMT-8	Greenwich Mean Time (GMT): GMT

III. DAYLIGHT SAVING TIME (DST)

Through the WWVB signals, the watch automatically adjusts for Daylight Saving Time.

IV. SHUTDOWN AND RESETTING

This procedure will clear all information. Follow the above sections (I, II) to activate the watch again.

1. Hold down the *TIME ZONE* button for 6 seconds. The LCD will cycle from normal display, to Time Zone display, and back to normal display. The final display will be “OFF.”

V. MANUALLY ACTIVATING THE WWVB SEARCH

At any time after the Time Zone has been selected, and during the normal operating mode:

1. Hold down the *TIME ZONE* button for 4 seconds (the LCD will display the time zone then will revert back to normal view). The WWVB tower icon will appear in the upper right corner of the LCD, indicating that the watch is searching for a WWVB signal.

Note: It is important not to hold the *TIME ZONE* button down long enough to shutdown or reset the watch.

VI. LOW BATTERY INDICATOR

The watch is supplied with, and powered by a high quality 3V lithium battery with a life expectancy of over 2 years. There is a low-battery indicator that appears between the minutes and the date when the battery is low. The battery should be replaced within 2 months of the appearance of the low-battery indicator.

VII. MAINTENANCE AND CARE

Under normal conditions, the watch is shock resistant, however avoid excessive “rough” treatment of the watch as this may cause serious damage. Clean the watch with a soft dry cloth, or with one moistened with a mild soap solution. Do not use any chemical cleaning solutions, these may cause permanent damage to the watch’s surface. While the watch is water resistant to 100 feet, do not submerge in water for extended periods of time.

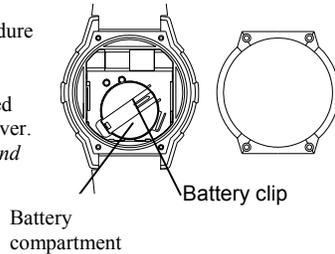
1. ADJUSTING THE STRAP

The leather strap is adjustable to fit most all wrist sizes. It is also replaceable with a properly sized band available at a local watch or department store. The strap is held in place by a pin on each side.

VIII. REPLACING THE BATTERY

The battery can either be replaced by a qualified jeweler or watch repair shop, or by the user. Any damage resulting from this procedure is not covered under warranty.

1. Remove the four screws located on the back and remove the cover. *Be sure the watch movement and gasket do not come out of the case.*
2. Remove the old battery by gently prying up the battery clip.
3. Insert a new battery of the type “CR1620” 3 Volt Lithium Cell battery
4. Please dispose of the old battery properly.



TROUBLESHOOTING

Problem:	No WWVB signal (indicated by the absence of the WWVB tower icon).
Solution:	1) Check the selected Time Zone. If it is set between GMT+1 and GMT +12, the WWVB signal will not be received. Change the Time Zone. 2) Move watch 10 feet (3 meters) away from any interfering sources, i.e. electrical appliances (refrigerators, TV’s, computers), metal surfaces or objects. 3) To help with overnight reception, place watch in a window with the band inline with the general direction of Ft. Collins, Colorado. 4) There are a few places the signal is very weak (Los Angeles area, Some parts of Florida and New York City). Since the watch has a much smaller receiver than our other clocks, it is possible no reception can be made. Please inform La Crosse Technology in this case.
Problem:	The watch displays “-:--” and no date
Solution:	1) The watch entered the power off mode and was reactivated. No signal has been located, and no time is set. Once the watch receives the time signal successfully (usually at night), it will display the correct time and date (Eastern Time zone is the default).
Problem:	The hour or minute is incorrect, even though the tower icon is on (indicating a successful reception of the WWVB time signal the previous night) and it is set to the proper time zone.
Solution:	1) Electrical interference caused the time signal to be improperly received. Be sure the watch is at least six feet from any source of electrical activity (television, computer). Overnight it should correct itself. 2) You may need to perform a reset; follow the directions outlined in section IV.

Note: For all questions not answered contact La Crosse Technology (contact information is below).

WARRANTY INFORMATION

La Crosse Technology provides a 1-year warranty on this watch. Contact La Crosse Technology immediately upon discovery of any defects covered by this warranty. Before sending the watch in for repairs, contact La Crosse Technology. The watch 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 watch’s 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 WATCH. 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, 190 Main Street, La Crescent, MN 55947
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THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND THIS DEVICE MUST ACCEPT INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.