

DIGITAL RADIO CONTROLLED WATCH

Models
RCW -101
RCW -103
RCW -303
RCW -305

Online Product Registration

<http://www.simacorp.com>

sima.



INTRODUCTION

Congratulations on your purchase of the Sima RCW. Before you begin using the RCW, please read this manual carefully and keep this manual for further information.

ABOUT NIST

The RCW utilizes a highly sensitive radio receiver to automatically set the time and date. The National Institute of Standards and Technology (NIST) measures each second of time as 9,192,631,770 vibrations of a Cesium 133 atom in a vacuum. The measurement of the Cesium 133 atom is accurate to one second every one million years. The time is then transmitted from Fort Collins, CO to the rest of the United States (US). NIST is the official time used by the US; it governs ship movements, radio stations, and space flights. The RCW

also automatically adjusts for daylight saving time, leap years, and leap seconds. For more details about the NIST Clock, please visit www.NIST.gov

AUTOMATIC TIME SETTING

The RCW receives the NIST signal automatically at 3:00AM every night. Once the NIST signal is received the watch will display the official U.S. time. The time and date are set automatically for Eastern Standard Time, which will need to be adjusted if you are located in a different time zone. If the signal cannot be received, the RCW also can be set manually.

BEFORE USING THE RCW

The time zone that you are located in must be selected. Setting the correct time zone will allow the watch to set itself to the correct time.

This watch should be set manually for the first time. After that, the watch will automatically adjust itself to maintain accurate time.

SETTING THE TIME ZONE

The RCW will automatically set the time and date when a NIST signal is received successfully. However, you will still have to set the correct time zone.

(Note: The RCW will not automatically adjust to a new time zone if you are traveling. You must change the time zone setting to continue to keep the exact time.)

TIME ZONE SETTING

1. Press the **MODE** button three times and the time zone will be displayed.
2. Press and hold the **SET** button for three seconds or until the offset hours digits begin to flash.
3. Press the **RECEIVE** button to increase or press the **LIGHT** button to decrease the hour-offset.
4. For standard time: (Eastern = -5) (Central = -6) (Mountain = -7) (Pacific = -8)
5. Press the **SET** button once to return to normal operation.

MANUAL TIME AND DATE SETTING

1. Press and hold the **SET** button for three seconds and "12" or "24" will blink on the LCD.

Press the **RECEIVE** or **LIGHT** button to change the setting from 12 to 24 or 24 to 12.

2. Press the **SET** button to advance to the year setting.

Press the **RECEIVE** button to increase the year or **LIGHT** button decrease the desired year.

3. Press the **SET** button to advance to the month setting.

Press the **RECEIVE** button to increase the month or **LIGHT** button decrease the desired month.

4. Press the **SET** button to advance to the day of the month.

Press the **RECEIVE** button to increase the day or **LIGHT** button to decrease the day of the month.

5. Press the **SET** button to advance to the day of week.

Press the **RECEIVE** button to increase

or the **LIGHT** button to decrease the day of the week.

6. Press the **SET** button to advance to hours.

Press the **RECEIVE** button to increase the hour or the **LIGHT** button to decrease the hour.

7. Press the **SET** button to advance to minutes.

Press the **RECEIVE** button to increase the minute or the **LIGHT** button to decrease the minute.

8. Press the **SET** button to advance to seconds.

Press the **RECEIVE** button or the **LIGHT** button to reset the seconds to "00".

9. Press the **SET** button one more time to return to normal operation.

BUTTONS AND FUNCTIONS

RECEIVE BUTTON

Pressing and holding the **RECEIVE** button for five seconds activates the manual signal receiver.

Pressing the **RECEIVE** button while in manual setup will increase the digits displayed on the LCD.

Press and hold the **RECEIVE** button to increase the numbers at a faster rate.

LIGHT

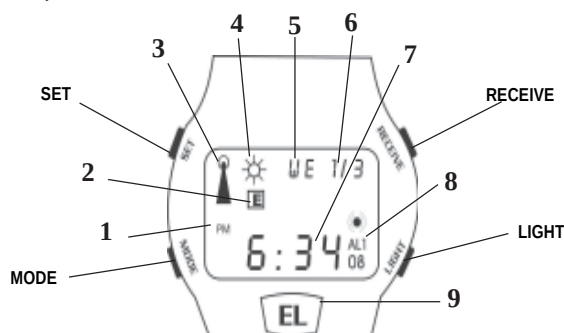
Pressing the **LIGHT** button activates the RCW backlight.

Pressing the **LIGHT** button while in manual setup decreases the digits displayed on the LCD.

Press and hold the **LIGHT** button to decrease the numbers at a faster rate.

WATCH DISPLAY ICONS & BUTTONS

- | | |
|------------------------------------|---------------------------------|
| 1. AM/PM Indicator | 6. Month & Day |
| 2. Time Zone indicator | 7. Hours: Minutes: Seconds |
| 3. NIST Reception | 8. Alarm Indicators (AL1 + AL2) |
| 4. Daylight Saving Time Indicator, | 9. EL - Light (RCW 101 only) |
| 5. Day of Week | |



SET

Pressing and holding the **SET** button for three seconds enters the manual setup mode. Different settings can be accessed by pressing the **SET** button repeatedly.

MODE

Press the **MODE** button to enter the alarm-setting menu.

EL (RCW-101 only)

Pressing the **EL** button will activate the RCW backlight.

SETTING ALARM 1 & ALARM 2

The RCW has two alarms that can be activated, AL1 and AL2. Pressing any button will turn the alarm sound off once activated. If no button is pushed, it will automatically shut off after two minutes.

- 1) Press the **MODE** button once for AL1, twice for AL2. The icon will blink on the right side of the LCD.
- 2) Press and hold the **SET** button for three seconds. The hour section of the clock will begin blinking.
- 3) Press the **RECEIVE** button to increase the hour or the **LIGHT** button to decrease the hour.
- 4) Press the **SET** button to move to the minute section of the clock.
- 5) Press the **RECEIVE** button to increase the minute or the **LIGHT** button to decrease the minute.
- 6) Press the **SET** button to advance to the ON / OFF setting.
- 7) Press the **RECEIVE** button to set the alarm to ON or OFF.
- 8) The RCW will return to normal operation in approximately 15 seconds.

SIGNAL SEARCH

AUTOMATIC SEARCH

The RCW is designed to receive the NIST signal automatically every night at 3:00AM. The RCW will synchronize the time and date with the NIST broadcast signal from Fort Collins, CO. **Note: You must set the watch manually the first time for it to auto synch during the night.**

RECEPTION STATUS

If the NIST broadcast is successfully received, the tower icon in the upper left corner of the LCD will remain "on" all day. The RCW will search for the signal again at 3:00AM.

If the reception was not successful, the tower icon will be "off" which means that the signal was not received in the past 24 hours. The RCW will automatically search at 3:00AM everyday to update its time. (Note: If the tower icon is not "on" in the upper left corner, follow the instructions in the **MANUAL SIGNAL SEARCH** section).

MANUAL SIGNAL SEARCH

When the tower icon is not present in the upper left hand corner of the LCD the NIST signal has not been received in the previous 24 hours. The RCW searches for the NIST transmission at 3:00AM every night; which is the best time to receive the signal. In the event that your RCW does not have the tower icon displayed the **RECEIVE** button can be pressed to attempt to receive the signal.

1. Press and hold the **RECEIVE** button for ten seconds to activate the signal receiver. The tower icon will begin to

flash for up to ten minutes.

2. Do not press any buttons during the manual signal search time.

SIGNAL STRENGTH

While the RCW is searching for the NIST signal the tower will have rings that blink around it to display the strength of the signal being received. If the tower only displays one ring around the tower icon, the reception is poor in the area that you are located. Move to a different area and attempt to receive the signal again.

If the RCW is receiving a strong signal, three rings will be displayed around the tower icon. However, even when a strong signal is received the RCW may not automatically adjust the time due to RF interference.

TIME CHANGE ADJUSTMENT

If the RCW receives the NIST signal at 3:00AM during the fall or springtime change, it will automatically adjust to the correct Daylight Saving Time. During Daylight Savings time, each time the signal is received, the "sun" icon will also be displayed with the tower.

(Note: If you live in an area that does not observe the daylight savings time change, you will have to manually change the time zone setting ahead one time zone as this feature cannot be turned off).

TROUBLESHOOTING

At times the RCW may be placed in a location where the NIST signal reception becomes difficult due to interference. Interference can be due to electrical appliances such as televisions, refrigerators, computers, fluorescent lamps, or natural events such as thunderstorms. It is important that you do not leave your watch on a metallic surface and keep it away from any sources of electromagnetic interference.

If you continue to have unsuccessful NIST signal reception, you may want to place your watch near a window where it shows a strong reception signal. The NIST signal will usually be received at approximately 3:00AM when the signal reception is the strongest.

CARE OF YOUR WATCH

- Never attempt to open the case or remove the back-cover, as the watch contains no components that are user serviceable.
- Never swim with the RCW or submerge it under water. Should water or condensation appear in the watch, take the RCW to a jeweler to check immediately as water can corrode electronic parts inside the watch.
- Avoid exposing the watch to long periods of extreme temperatures. Normal operation between of the RCW is 0° C- 50° C/32° F-122° F.

- The RCW is designed to withstand impact under normal use only. The RCW is not designed for rough usage or to be dropped onto hard surfaces.
- Keep your RCW away from the strong electromagnetic fields and static electricity.
- Clean the RCW with a soft cloth only.

SERVICE

The RCW is only to be opened by an experienced jeweler. The user should never open the RCW.

BATTERY REPLACEMENT

The RCW requires CR2025 battery. Your RCW is a delicate instrument and requires special tools for changing the battery; therefore, Sima strongly recommends that qualified personnel only change the battery. Automatic reception of the NIST signal will activate once the battery is replaced.

LIMITED WARRANTY

Sima Products Corp. ("Sima") warrants that if the accompanying product proves to be defective to the original purchaser in material or workmanship within 90 days from the original retail purchase, Sima will, at Sima's option, either repair or replace same without charge (but no cash refund will be made).

What you must do to enforce Warranty:

You must deliver, mail or ship the product, together with both the original bill of sale and this limited Warranty statement as proof of warranty coverage to:

Sima Products Corp.
Attention: Customer Service
140 Pennsylvania Ave. Bldg. #5
Oakmont, PA 15139

Sima Products Corporation shall have no liability for any damages due to lost profits, loss of use or anticipated benefits, or other incidental, consequential, special or punitive damages arising from the use of, or the inability to use, this product, whether arising out of contract, negligence, tort or under any warranty, even if Sima Products Corporation has been advised of the possibility of such damages. Sima Products Corporation's liability for damages in no event shall exceed the amount paid for this product. Sima Products Corporation neither assumes nor authorizes anyone to assume for it any other liabilities.

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