# **Atomic Radio Controlled Front-Light Watch** (World Dual Band)



#### **Main Features:**

### Global Signals available USA(WWVB), Germany(DCF), UK(MSF) and Japan (40/60Khz) upon request

- Super Bright Night Light at 12 o'clock to light up the watch face
- US and World Time Zone setting
- With Manual Signal Reception Reception success and failure indication
- With watch reset
- Battery: CR2025 battery included

### Introduction

Congratulations on your purchase of the Atomic Time (Radio Controlled) Top-Light 3 Hands analog Watch. Be sure to read this instruction manual before using the watch for the first time. After reading the instruction manual, keep it for future reference.

Your Atomic Time (Radio Controlled) Watch is a Dual World Band Radio Control Watch.

It incorporates a highly sensitive radio receiver that receives time signals from Germany, continental USA, UK and Japan (60Khz only) according to your Time Zone setting on the Watch

Your Atomic (Radio Centrolled) Time Watch recalls the Atomic Clock (which measures each second of time as 9.192.631.770 vibrations of a cesium 133 Atom in a vacuum) and gives time, which is accurate to 1 second every million years. Your Radio Controlled Watch even accounts automatically for Daylight Saving Time.

#### **Automatic Time Setting**

Your Atomic Time (radio controlled) watch recalls the available Atomic Clock signal automatically at 3:00AM every night according to your Time Zone setting (go to Time Zone setting for details). After reception of signal it will show the official local time on the watch. Everything is done automatically

# **Quick Setup Guide**

## Step 1:

# Check the Second-hand position:

Make sure the second hand's position is correct before use.

During transit, the second hand may be shifted, so press S1 (the Top button) twice to check if the second-hand stops at either 6 or 12 o'clock position (half second deviation should be acceptable). If the second-hand does not pause at 6 or 12 o'clock position, go to "Synchronize Watch Hands" that can be found in the Troubleshooting to reset watch hands.

### Step 2:

Time Zone Settting (for USA user only)

If you find your watch's pre-set time zone is different from your current time zone, please follow the following step to set the time zone:

Time Zone	Second-Hand Position
Eastern	11 o'clock
Central	10 o'clock
Mountain	8 o'clock
Pacific	7 o'clock

- Press and Holding S3 (the lower button) for 3 seconds the second-hand will move and pause at 12 o'clock for 2 seconds and then spins to its pre-set time zone, which 1. should be either 7, 8, 10 or 11 o'clock.
- 2. Next, press \$1 (the upper button) one at a time to move the second-hand to point at the Time Zone you want, (If your watch has been set to the right Time Zone when you check it, just leave the watch alone for around one minute until the second hand starts moving regularly).
- 3 Then, press S3 (the lower button) once to confirm the new setting. The second hand will be fast spinning to set the time to new time zone.

\*\*It may take up to minutes to 40 minutes for the watch to be set

### Step 3:

# **First Time Use:**

Please leave your watch near the window for 24 to 48 hours to receive radio signal. For the best possible reception, put your watch in a flat, face down position

There are other functions provided by your Atomic watch. You may go through them as you wish but as long as you have gone through the "Quick Setup", your watch is ready to go for daily usage!

#### CAUTION!

DO NOT push any button while the second hand stopped or fast spinning. Wait until the second moves regularly.

### IM-RCW-1LED-MFJ-01

### S1 (Pusher button):

- Press S1 once to turn on the Front-Light for 5 seconds (the light turns off after 10 seconds). The super-bright LED located at the 12 o'clock position lights up the watch face for your easy reading at night
- Press S1 while the Top-light is turned-on to show signal reception OK or Fail. The LED light turns off when the watch shows the signal reception status. (When LED light is
- turned on and before it turns off, pressing S1 will turn off the LED and let the hand to show reception OK or Fail) Holding S1 to manually search for the radio signal

#### S2 (the lower hidden button):

- Press and Holding S2 (the lower button) for 3 seconds to show current Time Zone setting
- Press S2 once to show AM or PM.

#### Crown

Pull-out the crown and then set hands to 12:00:00 (Go to "Synchronize Watch Hands" or "Reset the Watch" for details)

#### **Reception Status Check**

You can check your watch Radio Controlled reception status by caring out the following procedures.

- Push S1 twice while the watch is in the time keeping mode
- If the reception was successful, the second-hand will pause at 12 o'clock
- If the reception was failed, the second-hand will pause at 6 o'clock 1.

Don't push any button after the second hand has stopped. Wait until your watch runs again.

#### Travel around the World

Your watch is able to receive time signals from USA and UK. If no local time signal is present, your watch will continue to work using the last received signal as a reference.

#### When you go aboard

Your watch is able to pick up signal from other radio signal transmitters automatically according to your Time Zone setting when you are living or visiting these countries. When you go aboard or go back home from aboard, make sure you use this Time Zone Setting function to set the right Time Zone on your watch. Or, the watch will show you the wrong time and/or not able to pick up the Atomic Time signal.

#### **Time Zone Setting**

Check the current Time Zone:

Follow the following steps to check the current Time Zone setting of the watch.

- Press and Holding S2 (the lower button) for 3 seconds while the watch is in the time keeping mode
- The second-hand will pause at the 12 o'clock for 2 seconds and then spins to show the current Time Zone. 2.

#### Remark

- If the second hand does not pause exactly at 12 o'clock when S2 is Press and Holding for 3 seconds the watch hands are shifted and the watch is not able to show you the correct Time Zone. Go to "Synchronize Watch Hands" for detail to correct the watch hands shifting problem. 2
- If you just want to check the Time Zone and have no intention to change it to a new Time Zone, just leave the watch alone until it resumes running normally.

#### Change the watch to a new Time Zone

- Press and holding S2 for 3 seconds while the watch is in the time keeping mode. The second-hand will pause at 12 o'clock for 2 seconds and then stop at the current Time Zone. Press S1 button once at a time to set the desired country's time zone. Refer to the "Table of world time zone against second hand position"
- After the Time Zone is set, push S2 to confirm. 3

After confirmation, the second hand will stop at 3 or 9 o'clock position followed by fast running of all the hands will then set the right time automatically according to the new time zone. Just wait until your watch runs normal again (running time vary from minute to 40 minutes depends on the Time Zone Setting).

Table of world Time Zone against Second-Hand position

JTC	Time Zone	Second-hand position
)	London	Second-hand point to (12 o'clock)
1	Cape Verde	00:00:59
2	Mid-Atlantic	00:00:58
3	Greenland	00:00:57
4	Santiago	00:00:56
5	USA(Eastern)	Second-hand point to (11 o'clock)
-6	USA(Central)	Second-hand point to (10 o'clock)
7	USA(Mountain)	- Second-hand point to (8 o'clock)
8	USA(Pacific)	Second-hand point to (7 o'clock)
9	Alaska	00:00:29
10	Hawaii	00:00:28
11	Samoa	00:00:27
12	Kwajalein	00:00:26
UTC	Time Zone	Second hand position
)	London	Second-hand point to (12 o'clock)
+1	Berlin, Paris, Madrid	Second-hand point to (1 o'clock)
+2	Istanbul	00:00:06
-3	Moscow	00:00:07
4	Abu Dhabi	00:00:08
-5	Islamabad	00:00:09
6	Dhaka	00:00:10
+7	Bangkok	00:00:11
+8	Beijing, HK	00:00:12
19	Tokyo, Seoul	Second-hand point to (4 o'clock)
-10	Sydney	00:00:21
+11	Guam	00:00:22
+12	New Zealand	00:00:23



## Manual Signal Reception

Use this feature to manually search for the radio signal

- 1. Hold S1 for more than 6 seconds until the second-hand stops. This shows that the watch is in the "Manual Signal Reception mode". Put the watch in a location where signal reception is possible example near a window. The watch is not able to get signal if it is wearing on your wrist
- 2 Now your watch is trying to pick up radio signal. The watch takes about 4 to 20 minutes to pick up radio signal. Wait until the watch has finished the signal receiving procedure. Correct time will be shown after the reception has successfully been received.

After reception, the watch will show the time again after the fast running of the second-hand has stopped. Signal reception is always good during night-time then during daytime. If the watch was unsuccessful to receive signal during daytime, just leave the watch near a window with facedown manner overnight and check it again the next morning.

### AM/PM Status Check:

You can check the AM/PM of your watch:

- Press S2 once while the watch is in the time keeping mode to show the AM/PM
- When the second hand stops at 9 o'clock this represents the AM time.
- 3 When the second hand stops at 3 o'clock this represents the PM time.

Don't push any button after the second hand has stopped. Wait until your watch runs again.

### Watch position for Radio Signal Reception

Your watch should not be placed in either of the positions marked with the "X". Depending on the material of your watch it should be placed by a window during signal reception or it will not be able to get the best reception results.

#### Wrong positions for Metal Case with metal Band

- Never let the metal band touching the case-back as it will affect signal reception.
- Never put the watch by its side, as it will not able to get signal on this position.



Never let the metal band touch the case back as it will effect the signal reception

For Metal watch with metal band

Watch with elastic plastic band: As shown on Fig. B

As shown on Fig. A Put the watch face-down on a wooden table

Put the watch face-down on a wooden table

Put the watch face-up on a wooden table

Insert some non-metallic material, such as a roll of paper or a towel in between the case-back and the metal band.



Never put the watch by its side as it will

not able to get signal on this position



Fig.B Plastic watch

## WOODEN TABLE Fig.C Leather band watch

### TROUBLESHOOTING

Plastic Watch with leather band:

As shown on Fig. C

### Watch Not Receiving Time Signal

Reason for not being able to receive the Time Signal includes:

- Watch is not put near a window to get signal Watch is not put on a table with Face-Down when getting signal
- -Being outside of USA or UK
- -Being incorrectly position your watch during signal reception. Go to "Watch position for Radio Signal Reception" for details
- -Being in a building area
- -Metal objects blocking the radio signal
- -Interference by computer monitor or TV

Ensure the watch is left by a window with position according to the "Watch position for Radio Signal Reception". You may have to try different windows in the house to see which is best. You can test this using reception status test described earlier. Please note that reception is always better at night. If your watch is unable to make contact with the radio signal, it will continue to function in the same way as a standard watch. The time will then be corrected the next time your watch receives the time signal.

### Second hand runs 2 steps every 2 seconds

When battery is low, the second hand runs 2 steps every 2 seconds showing you that the battery is low but the time is correct. But the spotlight function and signal reception function will be disabled. This is not a malfunction. The watch stops when battery becomes too low and returns to normal when the battery voltage goes to normal. Please replace the watch with a new battery. You need to initiate the watch after a new battery is replaced. Go to "After Battery Replacement" for details.

#### Second-hand is incorrect

Your watch is a very delicate and precise instrument. Although uncommon, sometimes hard knocks or vibrations can cause the hands to move irregularly, and therefore display the incorrect time, although the internal clock is keeping accurate time. You may notice this if when checking for a successful/failure reception and the second hand does not pause at exactly the 12 or 6 (half second deviation is acceptable) or the second hand does not pause at 12 o'clock when checking the Time Zone, the 12 or 6 o'clock reference point has changed and the watch hands need to be reset. Please go to "Synchronize Watch Hands" for details.

### Hour is wrong while Minute is correct

If your Time Zone setting is incorrect, your watch will show you the wrong time. You need to manually set it to the right Time Zone. Go to "Time Zone Setting" for details.

# Both Hour and minute are wrong

If hour and minute are always incorrect then you need to reset the watch. This could happen after a battery replacement and the watch is not manually set to 12:00:00 or cause by any unexpected reasons. Go to "Reset the Watch" for details.

#### Watch Stop after Pull out the crown

Your watch does not run after the stem is pulled out. Please push-in the stem and the watch hands runs to match internal time automatically after the crown is pushed in.

### Synchronize Watch Hands

- Wait until the second hand just stop at 12 o'clock and pull out the middle crown (S1) immediately so that the second hand stops at 12 o'clock position.
- Turn the crown to set Hour and Minute hands to 12 o'clock. Do not push-in the crown after all hands are set to stop at 12:00:00, then hold S2 for 5 seconds and then,
- Push-in the crown
- The watch spins to match the internal time and resume normal running when the time matching is finished. When the watch resume normal running, the watch hands match with 5 the internal time-keeping of the watch.

### BATTERY CHANGE:

When the battery level is low, the signal reception function will be stopped and your watch runs one step every 2 seconds until battery becomes empty. When you see this it is time to change a new battery for the watch

Your watch uses a CR1620 type battery; you should find a trained jeweller or watch specialists to change the replacement battery to avoid any damage to the watch. Open the watch at the back. Carefully remove the bottom, make sure you do not lose the waterproof seal Pick up the battery spring carefully. Take out the battery and insert a new one (watch the polarity!"+"up). Now push the battery spring down. Before you put the case-back on again, make sure the waterproof seal is correctly in place.

#### After battery replacement

- After battery replacement, the second hand starts to run when the crown is pushed-in
- Wait until the second hand just stop at 12 o'clock and pull out the middle crown (S1) immediately so that the second hand stops at 12 o'clock position. 2
- Turn the crown to set Hour and Minute hands to 12 o'clock. Now all hands are set to 12:00:00. 3.
- Push-in the crown. You watch stop running after the crown is pushed in.
- 5 Place your watch near a window to get signal. The watch will start to update its first signal. It will continue updating signal for the coming 24 hours if the first signal reception is not successful. After receiving a valid time signal, and the hands move on to the correct time. 6.
- After the watch is able to set the time automatically, you need to set Time Zone according to the following instructions:
  - Set USA Time Zone if you are a USA user. Go to "Time Zone Setting" for details.

# Reset the watch

Remark:

You can reset the watch as below:

If the watch does not show you the right time after battery replacement, please reset your watch according to the "Reset the watch" as below.

- While the watch is running step by step, pull out the middle crown (S1) when the second hand just stop at 12 o'clock so that the second hand stops at 12 o'clock position.
- Turn the crown to set Hour and Minute hands to 12 o'clock. Now all hands are set to 12:00:00. 3 Do not push-in the crown after all hands stop at 12:00:00, now press S2 5 times and then,
- Push-in the crown. The watch does not run after the crown is pushed in.
- Place your watch near a window to get signal. The watch will start to update its first signal. It will continue updating signal for the coming 24 hours if the first signal reception is 5. not successful. After receiving a valid time signal, and the hands move on to the correct time.
- 6. After the watch is able to set the time automatically and runs normally, you need to set Time Zone if you find the preset time zone of the watch is different from your current time zone. Please go to "Time Zone Setting" and "Change the watch to a new Time Zone" for details

#### REMARK:

- Anytime when the crown is pulling out, the watch hands stops while the internal clock is still running. After you push-in the crown, the watch will fast spin to match the internal time automatically
- When the watch is fast spinning, don't pull out the crown. If the crown is pull out while the watch is fast spinning, the second hand will stop. After you push-in the crown, the 2 watch will resume spinning to match the internal time.



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