

Table of Contents

1. Your Watch	9
2. Before Use.....	12





Solar Power

24. Solar Power Function..... 92

25. Characteristics of the Eco-Drive Watch



Congratulations and Thank You for your selection of a CITIZEN Eco-Drive watch. To get the most out of your purchase, please be sure to read this manual and keep it on hand for reference.

Once fully charged by exposure to light, your watch will give you years of enjoyment and reliability.

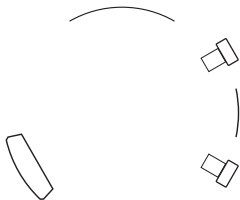
Notice

All repairs performed on this watch are to be performed at the CITIZEN. When desiring to have your watch repaired or inspected, please contact the Authorized Citizen Service Center either directly or through the store where you purchased your watch.

Please use this watch after it has been sufficiently charged by exposure to light.

If the second hand of the watch is moving at two-second intervals, this indicates the watch is insufficiently charged. To ensure proper operation, the watch should be fully charged by placing the watch under direct sunlight for about eight (8) hours. We recommend the watch keep a high charge level to ensure optimum operation. Charge your watch as indicated in “Guide to Charging Time” **(p. 100)**.

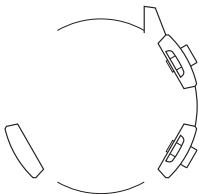
NYC
70



<World Time Function>

Important Points Regarding Radio Wave Reception

2. Before Use



Check the movement of the second hand.

The second hand is moving at 1-second intervals.

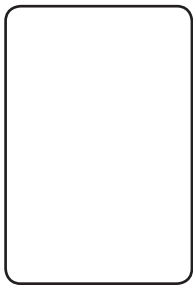
The second hand is moving at 2-second intervals or is stopped.

[Insufficient charging]

Charge level indicator

[Fully charged]

Charge the watch sufficiently by placing it in direct sunlight as indicated in "Guide to Charging Time" (p. 100).



1.

4. Radio Signal Reception

On Demand Reception (Manual Reception)

- **Signals can be received at any time.**

<Storing Your Radio Controlled Watch>

If the watch has received insufficient light for charging or has been kept in a dark location for an extended period of time (one week or more), the Power Save Feature of the watch is activated and the hands of the watch stop. Even though the watch will not show movement, the correct time is kept in memory. When the watch is in the Power

6. Display during Reception

[Reception in progress]

7. Confirming Reception Status

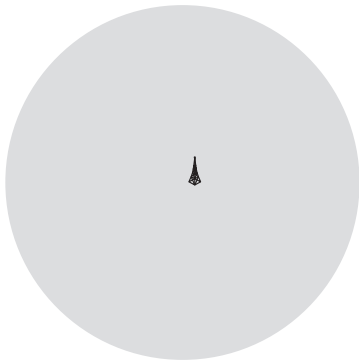
- The result of the radio wave reception can be confirmed.

- * The time display may shift slightly depending on the reception environment and internal watch processing even if radio waves are properly received.
- * H, M and L indicate the reception status and are not connected to the performance of the watch.
- If NO is indicated, find a location or direction where the reception is better and perform on demand reception again. **(p. 20)**

JPN: JJY (Japan) Automatically selects one of the two transmitters

Fukushima Transmitter: Radius of approximately 1,500 km from the transmitter

USA: WWVB (USA) Fort Collins: Radius of approximately 3,000 km from the transmitter



[Cities and the standard time radio wave assignment]

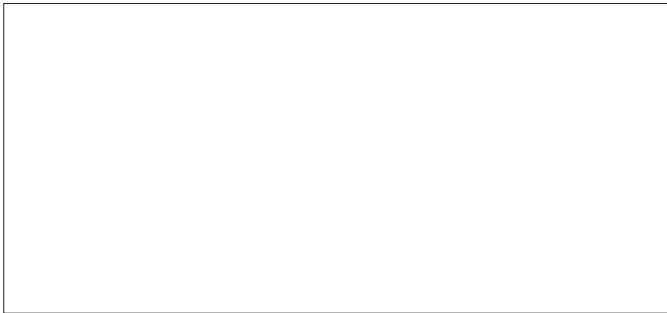
- The received standard time radio waves shown in “Table of UTC Time Differences” are assigned one of the following four radio wave

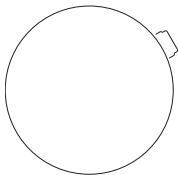
[Table of UTC Time Differences]

- Set to TME mode and press the upper right button (B) repeatedly while the crown is in position 1 to display in sequence in digital display 1 the table's city names from top to bottom, and press the lower right button (A) to display in sequence the city names from bottom to top.
- Radio waves are only received from the assigned transmitters.
(Example: When TYO is displayed in digital display 2, radio waves other than the Japan radio wave cannot be received.)
- Refer to the "Received standard time radio wave" item for the radio wave that is received in each city.
"EUR" | Europe radio wave, "CHN" | China radio wave, "JPN" | Japan radio wave,
"USA" | USA radio wave

*"Eqwptkgu"qt"tgikqpu"oc{"ejcpig"vkog"|qpgu"hqt"xctkqwu"tgcuppu\

--	--	--





14. Setting the Time (TME)

3. Pull the crown out to position 2 to enter the time correction status.
 - The second hand will move to the 12:00 position and stop.
 - The home city display of digital display 2 will go off.
 - The correction status for the daylight saving time setting is entered and ON or OF flashes. (There is no daylight saving time ON or OF setting for UTC.)
 - Press the lower right button (A) to switch between setting (ON) and canceling (OF) the daylight saving time.
 - When daylight saving time is set, the time moves forward by one hour.
 - Each time the upper right button (B) is pressed, the correction location changes. The new correction location will begin flashing.
4. Press the upper right button (B) to enter the second correction status.
 - Press the lower right button (A) to return to 0 seconds.
5. Press the upper right button (B) to enter the minute correction status.
 - Turn the crown to correct the time. Turn to the right to move forward and to the left to move back.
 - Turn the crown continuously to move quickly. To stop, turn the crown to the left or right.

6. Press the upper right button (B) to enter the hour correction status.
 - Turn the crown to correct the time. Turn to the right to move forward and to the left to move back.
 - Turn the crown continuously to move quickly.
7. Press the upper right button (B) to enter the 12H/24H correction status.
 - Press the lower right button (A) to switch between the 12-hour clock and 24-hour clock.

- When the time is set for one of the



15. Setting the Calendar (CAL)

4. Each time the upper right button (B) is pressed, the correction location changes. The new correction location will begin flashing.

- When the date is set for one of the cities, the dates for all the other cities are also corrected automatically.
- The year can be set between 2000 and 2099.

16. Using the Timer (TMR)

- The timer can be set from 1 minute up to 99 minutes, in 1-minute units. After the end of measurement, the time-up tone sounds for about 5 seconds and the watch returns to the timer initial setting status. (Auto return function)
- Press the lower right button (A) during measurement to return to the initial set time and start measurement again. (Flyback function)
- Radio waves cannot be received during timer measurement.

<Setting the timer>

1. Pull the crown out to position 1 and turn to align the mode hand with TMR (timer mode).
2. Pull the crown out to position 2 to enter the timer setting status.
 - SET is displayed in digital display 2 and the minute display in digital display 1 flashes.



3. Turn the crown to set the time.
 - Turn to the right to increase the time and turn to the left decrease the time.
 - Turn the crown continuously to move quickly.
To stop, turn the crown to the left or right.
4. After completing the settings, return the crown to the normal position.
 - Digital display 2 changes to RES (reset).

<Using the timer>

1.





19. Using the World Time Alarm (AL-1 and 2)

- An alarm can be set for the set city time.

-

20. Using the Receive Setting (RX-S)

[Daylight saving time reception setting]

- Select whether to update the time with the daylight saving time from the received radio wave. Refer to “Using Daylight Saving Time” (p.46) for details on daylight saving time.

AU (Auto): The time is updated with the daylight saving time from the received radio wave.

- * The timing for changing to daylight saving time can vary depending on the city or region. There may be cases when the time is not changed on the appropriate date.
- * If AU is selected, when daylight saving time data is received for the daylight saving time

4. Press the upper right button (B) to enter the automatic reception setting status.

<Resetting procedure>

- 1.

—

6. Adjusting the UTC hands (hour hand and minute hand)

(1) Press the upper right button (B) to display UTC in the digital display.

(2)

3. Flying distance calculation

Problem: What is the flying distance traveled in 40 minutes at a speed of 210 knots?

Solution: Align the 21 on the outside scale with the SPEED INDEX () of the inside scale. The 40 of the inside scale is now pointing to 14, and the answer is 140 nautical miles.

4. Fuel consumption rate calculation

Problem: If 120 gallons of fuel are consumed in 30 minutes' flying time, what is the fuel consumption rate?

Solution: Align the 12 of the outside scale with 30 of the inside scale. The SPEED INDEX () now points to 24, and the answer is 240 gallons per hour.

6. Maximum flying hours

Problem: With a fuel consumption rate of 220 gallons per hour and a fuel supply of 550 gallons, what is the maximum number of flying hours?

Solution: Align the 22 of the outside scale with the inside scale's SPEED INDEX () of the inside scale. The 55 of the outside scale is now aligned with 2:30, and the answer is 2 hours and 30 minutes.

B.

To keep working normally for one day ...

The charging time to run the watch for one day with normal movement.

To charge fully when the rechargeable cell is empty ...

The time for full charging after the watch has stopped due to an insufficient charging.

[Caution] A fully charged battery will run the watch for about 6 months without further charging. During power saving mode, the correct time continues to be kept inside the watch for approximately three and a half years.

E. Handling Your Eco-Drive Watch

WARNING Handling the rechargeable cell

Do not remove the rechargeable cell from the watch yourself, unless unavoidable. If you must remove the battery, store it out of reach of children to avoid accidental ingestion. If the rechargeable cell is ingested, consult a doctor immediately. Do not throw away with regular trash.

CAUTION Charging precautions

Do not charge the watch in a high-temperature environment (about 60°C / 140°F or more).

Overheating while charging can cause the watch exterior to become discolored, the watch to deform or the movement to be damaged.

Example:

- Charging close to incandescent lighting, halogen lamps, or other lighting sources that easily become hot.

Problem**Check**

**Radio signals
cannot be
received.**

-

**The time is not
correct.**

Problem

**The time is not
correct.**

Problem**Check**

- Is the charge level indicator pointing at level 0?
- Charge the watch sufficiently until the charge level indicator reaches level 3, as indicated in “Guide to Charging Time”.

The watch has stopped.

The watch does not work even after charging.

Problem

**The second hand
is moving in
2-second
intervals.**

**The hands moved
forward quickly at
the moment that
the watch was
removed from a
desk or drawer.**

**The hands or
digital displays**



NO

OK

OK

NO

NO

OK

NO

NO

NO

NO

NO

NO

WARNING: Water-resistance performance

- Water-resistance for daily use (to 3 atmospheres): This type of watch is water-resistant to minor exposure to water. For example, you may wear the watch while washing your face; however, it is not designed for use underwater.
- Upgraded water-resistance for daily use (to 5 atmospheres): This type of watch is water-resistant to moderate exposure to water. You may wear the watch while swimming; however, it is not designed for use while skin diving.
- Upgraded water-resistance for daily use (to 10/20 atmospheres): This type of watch may be

CAUTION: Operating environment

- Use the watch within the operating-temperature range specified in the instruction manual.
Using the watch where temperatures are outside the specified range, may result in deterioration of functions or even stoppage of the watch.
- Do NOT use the watch in places where it is exposed to high temperature, such as in a sauna.
Doing so may result in a skin burn.
- Do NOT leave the watch in a place where it is exposed to high temperature, such as the glove compartment or dash-board of a car.
Doing so may result in deterioration of the watch, such as deformation of plastic parts.
- Do NOT place the watch close to a magnet.
Timekeeping will become inaccurate if you place the watch close to magnetic health equipment such as a magnetic necklace or a magnetic latch of a refrigerator door or handbag clasp or the earphone of a mobile phone. If this has occurred, move the watch away from the magnet and reset the time.
- Do NOT place the watch close to household appliances that generate static electricity.
Timekeeping may become inaccurate if the watch is exposed to strong static electricity, such as is emitted from a TV screen.
- Do NOT subject the watch to a strong shock such as dropping it onto a hard floor.

- Avoid using the watch in an environment where it may be exposed to chemicals or corrosive gases.

If solvents, such as thinner and benzine, or substances containing such solvents come in contact with the watch, discoloration, melting, cracking, etc. may result. If the watch comes in contact with mercury used in thermometers, the case, band or other parts may become discolored.

Periodical inspections

Your watch needs inspection once in every two or three years for safety and long use.

- Daylight saving time on/off
 - Calendar: Month, date, day of week (perpetual calendar until December 31, 2099)
- 6. Additional functions**
- Radio signal reception function (automatic reception, on demand reception, recovery automatic reception)
 -

- Time difference set by user
- Zone set function (city name display SET/OFF)
- Home time (analog) and world time (digital) switching function
- LED lights
- Power saving function 1
- Power saving function 2
- Reference position checking/adjustment function
- Solar power function
- Insufficient charge warning function (2-second interval movement)
- Overcharging prevention function
- Antimagnetic watch
- Impact detection function
- Hand correction function

Model No.