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1. Features

This watch is a solar-powered watch that contains a solar cell in its face that drives the watch by converting light energy into electrical energy. It is equipped with features including a 24 hour display and chronograph function that allows measurement of time in 1 second units up to 60 minutes.

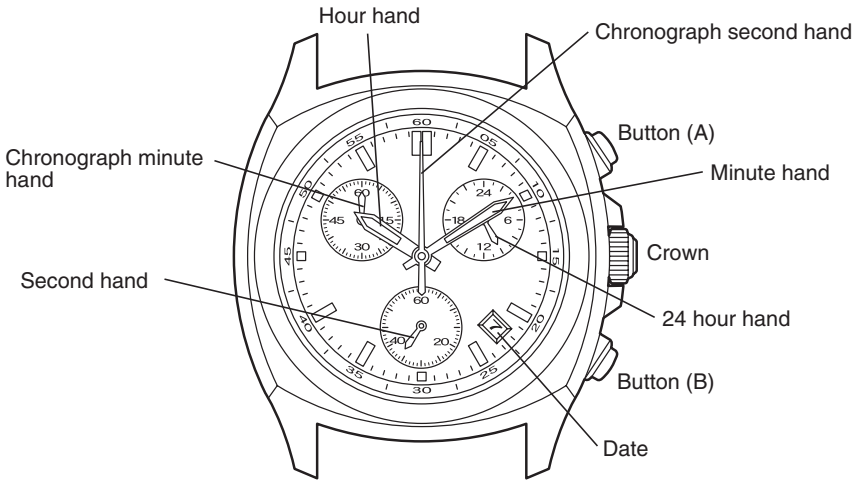
2. Before Using

This watch is a solar-powered watch. Please fully charge the watch before using by exposing it to light.

A secondary battery is used in this watch to store electrical energy. This secondary battery is a clean energy battery that does not contain mercury or other toxic substances. Once fully charged, the watch will continue to run for about five months without additional charging.

<Proper Use of this Watch>
To use this watch comfortably, make sure to recharge it before it stops running completely. Since there is no risk of overcharging (Overcharging Prevention Feature), it is recommended that the watch be recharged everyday.

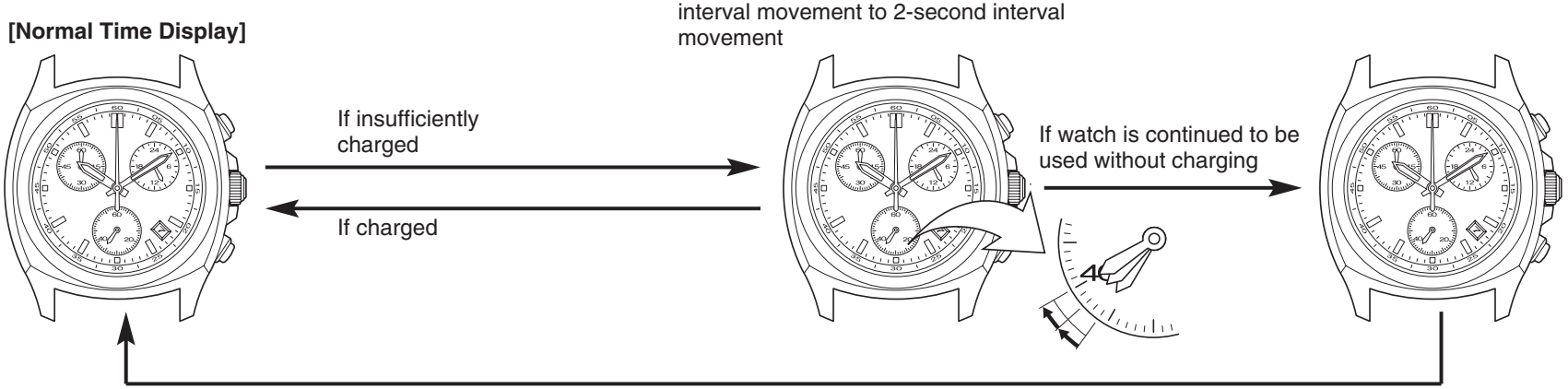
3. Displays and Buttons



The design varies depending on the model.

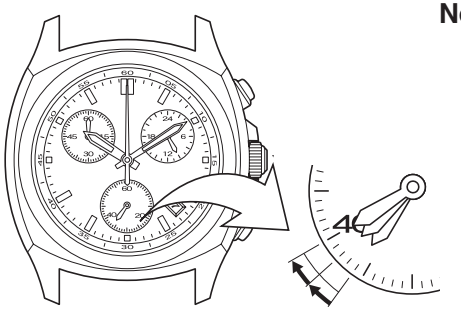
4. Functions Unique to Solar-Powered Watches

When the watch becomes insufficiently charged, the following warning features will be activated to inform the wearer that the watch is insufficiently charged.



The watch hands resume 2-second interval movement when the watch is charged by exposing to light. However, the time is incorrect as a result of the watch having stopped due to being insufficiently charged. Sufficiently charge the watch until it resumes 1-second interval movement and reset the time before use.

[Insufficient Charging Warning Feature]
When the capacity of the secondary battery decreases as a result of light not shining on the solar cell, the second hand switches from 1-second interval movement to 2-second interval movement (insufficient charging warning feature). Although the watch continues to keep time accurately at this time, the watch stops after about 5 days have elapsed after the second hand has switched to 2-second interval movement. When this happens, charge the watch by exposing it to light until the second hand returns to 1-second interval movement.



2-second interval movement

Notes:
- During chronograph measurement, measurement stops and the chronograph second hand is reset to the 0 seconds position.
- The chronograph minute hand stops at any arbitrary position. Return it to the 0 minutes position by pressing button (B).

[Quick Start Feature]
If the watch has stopped as a result of being insufficiently charged, the second hand will begin 2-second interval movement and the watch will begin to run about 10 seconds after the watch is exposed to light (approx. 500 lx). (The time until the hands begin to move varies depending on the model.) Please note, however, that the watch will stop again if the watch is blocked from the light and is not sufficiently charged.

[When the Watch has Stopped due to Insufficient Charging]
When the capacity of the secondary battery decreases as a result of the solar cell not being exposed to light, the watch will stop due to being insufficiently charged. The Quick Start Feature will be activated and the hands will begin to move if the solar cell is exposed to light. Sufficiently charge the watch by exposing to light so that it returns to the normal time display (1-second interval movement).

Note: • The time is incorrect when the watch has stopped as a result of being insufficiently charged even if the watch starts to run. Reset the watch to the correct time before using.

[Overcharging Prevention Feature]
The overcharging prevention feature is activated when the secondary battery is fully charged so that it is not charged further.

5. General Reference for Charging Times

Recharging time varies according to the watch model (such as the color of the dial). The times in the table below should therefore only be used as a rough reference.

* Charging time refers to the amount of time during which the watch is continuously exposed to light.

Illuminance (lx)	Environment	Charging time		
		One day usage	Charging time from the stopped state to normal hand movement (1-second interval movement)	Full charge time
500	Inside an ordinary office	3 hours	30 hours	-----
1.000	Under a fluorescent lamp (30 W) at a distance of 60-70 cm (24-28 in)	2 hours	14 hours	-----
3.000	Under a fluorescent lamp (30 W) at a distance of 20 cm (8 in)	30 minutes	5 hours	80 hours
10.000	Outdoors, cloudy	9 minutes	2 hours	25 hours
100.000	Outdoors, summer and sunny under direct sunlight	3 minutes	16 minutes	11 hours

Full charge time: Time to fully recharge the watch after it has stopped.
One day usage: Time required for recharging the watch to run for 1 day with normal hand movement (1-second interval movement).

6. Handling Precautions

<Try to Keep the Watch Charged at All Times>
Please note that if you wear long sleeves, the watch can easily become insufficiently charged as a result of the watch being covered and not being exposed to light. The watch will continue to run properly if it is placed in as bright a location as possible even when not being worn.

Charging Precautions
- Allowing the watch to reach high temperatures during recharging can damage the watch. Avoid recharging in locations that can reach high temperatures (about 60°C /140°F or higher).

  Examples:
  - Charging by placing the watch in close proximity to a light source that easily becomes hot such as an incandescent lamp or halogen lamp.
  - Charging the watch in a location that can easily become hot such as on an automobile dashboard

- When charging using the light from an incandescent lamp, charge while being careful that the watch does not become excessively hot by placing at a distance of at least 50 cm (20in) from the lamp.

Handling of Secondary Battery
- Please do not attempt to remove the secondary battery from the watch.
- If the secondary battery has been unavoidably removed, store it in a location out of the reach of small children to prevent accidental swallowing.
- If the secondary battery should happen to be swallowed, please consult a physician and seek medical attention immediately.

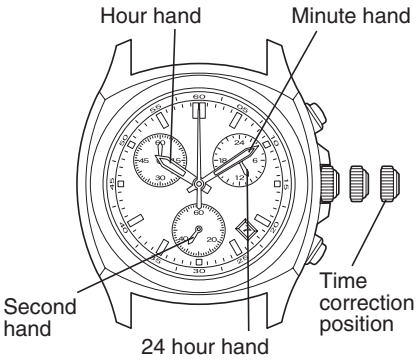
Only Use the Specified Secondary Battery
- Never use a secondary battery other than the secondary battery used in this watch. Although the watch is designed not to operate if another type of secondary battery is installed, since this may result in overcharging that can cause the secondary battery to rupture, there is the risk of both damage to the watch and injury to the wearer.
- Only use the specified secondary battery when replacing the secondary battery.

7. Replacing the Secondary Battery

Unlike ordinary silver-based batteries, the secondary battery used in this watch does not have to be periodically replaced since it is able to be charged and discharged repeatedly.

8. Setting the Time and Date

In the case the crown is of the screw-lock type, loosen the screw by turning the crown to the left before operating the crown, and after having returned the crown to the normal position following operation, turn it to the right while pushing it in to securely retighten it.

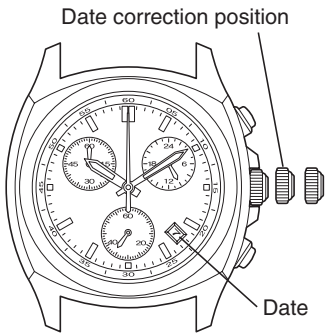


[Setting the Time]

1. Pull the crown out to the time correction position when the second hand has reached the 0 seconds position.
2. Turn the crown to set the time.
   - The 24 hour hand moves in conjunction with the hour hand. Pay attention to AM and PM when setting the time.
3. Securely return the crown to the normal position in synchronization with a telephone or other time service.

[Hint for Accurately Setting the Time]
After stopping the second hand at the 0 seconds position, turn the minute hand 4-5 minutes past the correct time and then turn it back to the correct time. The time on the watch can then be set to the correct time by pushing in the crown in synchronization with a time service tone.

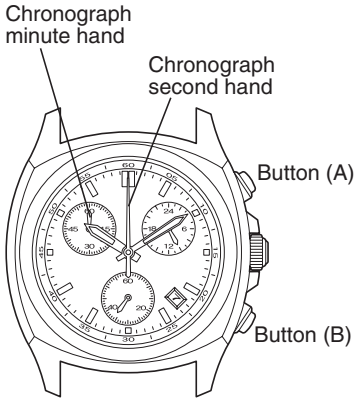
[Setting the Date]



1. Pull the crown out to the date correction position.
2. Turn the crown to the right to set the date.
   - The crown turns freely and the date does not change if the crown is turned to the left.
   - If the date is set while the time on the watch is between the hours of about 9:00 PM and 1:00 AM, the date may not change on the following day. If this happens, set the date after temporarily moving the hands to a time other than between the above times.
   - The date is based on a 31-day calendar. The date must be changed from the last day of the month to the first day of the following month for those months not having 31 days (months having 30 days and February).
   - The date changes at around 12:00 AM.
3. Once the date has finished being set, return the crown to the normal position.

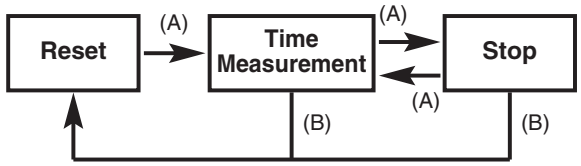
9. Using the Chronograph

The chronograph function of this watch is able to measure and display elapsed time up to 59 minutes, 59 seconds in 1 second units. After 60 minutes have elapsed, each of the chronograph hands automatically stop at the 12:00 position.



[Chronograph Timing]

1. Start timing by pressing button (A).
   - The chronograph is repeatedly started and stopped by pressing button (A).
2. Pressing button (B) resets the chronograph to 0 seconds.



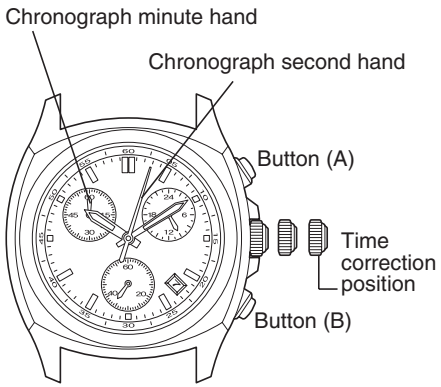
Note: • Do not subject the chronograph to strong impacts while chronograph timing is in progress. Subjecting the watch to a strong impact during chronograph timing or when the chronograph has stopped automatically after 60 minutes have elapsed can cause the chronograph minute hand to shift out of position. If this happens, press button (B) to reset to the 12:00 position before using the chronograph again.

10. Zero Positioning of Chronograph Second Hand

When resetting the chronograph, if the chronograph second hand does not return to the 0 seconds position or if the chronograph second had has shifted out of position due to strong impact, perform zero positioning of the chronograph second hand according to the procedure described below.

- In the case the crown is of the screw-lock type, loosen the screw before operating the crown.
- The zero positioning procedure cannot be performed while the insufficient charging warning feature is activated (while the second hand is moving at 2-second interval movement due to the watch being insufficiently charged). Sufficiently charge the watch and check that the second hand is moving at 1-second interval movement before performing the zero positioning procedure.

[Chronograph Second Hand Zero Positioning]



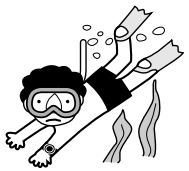
1. Pull the crown out to the time correction position.
2. 1) Press button (A) for 3 seconds or more and release it, the watch enters the chronograph second 0 position correction mode.
   2) Press button (A) to position the chronograph second hand at the 0 position.
   - The chronograph second hand can be advanced one second at a time (in the clockwise direction) each time button (A) is pressed.
   - The chronograph second hand can be advanced rapidly by depressing button (A) continuously.
3. Once the chronograph second has been positioned at the 0 position, reset the time and return the crown to the normal position.
4. Press button (B) to check that the chronograph minute hand has been reset to the 0 position.

11. Precautions

CAUTION: Water-resistance performance
There are several types of water-resistant watches, as shown in the following table.

The unit "bar" is roughly equal to 1 atmosphere.
* WATER RESIST(ANT) xx bar may also be indicated as W.R. xx bar.

For correct use within the design limits of the watch, confirm the level of water-resistance of your watch, as indicated on the dial and case, and consult the table.

Indication		Specifications	Examples of use				
Dial	Case (case back)		 Minor exposure to water (washing face, rain, etc.)	 Moderate exposure to water (washing, kitchen work, swimming, etc.)	 Marine sports (skin diving)	 Scuba diving (with air tank)	 Operation of the crown or button with moisture visible
WATER RESIST or no indication	WATER RESIST(ANT)	Water-resistant to 3 atmospheres	**OK**	**NO**	**NO**	**NO**	**NO**
WR 50 or WATER RESIST 50	WATER RESIST(ANT) 5 bar or WATER RESIST(ANT)	Water-resistant to 5 atmospheres	**OK**	**OK**	**NO**	**NO**	**NO**
WR 100/200 or WATER RESIST 100/200	WATER RESIST(ANT) 10bar/20 bar or WATER RESIST(ANT)	Water-resistant to 10/20 atmospheres	**OK**	**OK**	**OK**	**NO**	**NO**

- 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 used for skin diving; however, it is not designed for scuba or saturated diving using helium gas.

CAUTION

- Be sure to use the watch with the crown pressed in (normal position). If your watch has a screw-lock type crown, be sure to tighten the crown completely.
- Do NOT operate the crown or button with wet fingers or when the watch is wet. Water may enter the watch and compromise water-resistance.
- If the watch is used in seawater, rinse with fresh water afterward and wipe with a dry cloth.
- If moisture has entered the watch, or if the inside of the crystal is fogged up and does not become clear within a day, immediately take the watch to your dealer or Citizen Service Center for repair. Leaving the watch in such a state will allow corrosion to form inside.

- If seawater enters the watch, place the watch in a box or plastic bag and immediately take it in for repair. Otherwise, pressure inside the watch will increase, and parts (crystal, crown, buttons, etc.) may come off.

CAUTION: Keep your watch clean.

- Leaving dust and dirt deposited between the case and crown may result in difficulty in pulling the crown out. Rotate the crown while in its normal position, from time to time, to loosen dust and dirt and then brush it off.
- Dust and dirt tend to be deposited in gaps in the back of the case or band. Deposited dust and dirt may cause corrosion and soil your clothing. Clean the watch occasionally.

Cleaning the Watch

- Use a soft cloth to wipe off dirt, perspiration and water from the case and crystal .
- Use a soft, dry cloth to wipe off perspiration and dirt from the leather band.
- To clean a metal, plastic, or rubber watchband, wash away dirt with mild soap and water. Use a soft brush to remove dust and dirt jammed in the gaps in the metal band. If your watch is not water-resistant, take it to your dealer.

NOTE: Avoid using solvents (thinner, benzine, etc.), as they may mar the finish.

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.
To keep your watch water-resistant, the packing needs to be replaced regularly.
Other parts need to be inspected and replaced if necessary.
Ask for Citizen geuine parts upon replacement.

12. Specifications

1. Caliber No.: H50*
2. Type: Analog solar-powered watch
3. Timekeeping accuracy: Within ±15 seconds per month on average (when worn at normal temperatures of +5°C to +35°C/41°F to 95°F)
4. Crystal oscillator: 32,768 Hz
5. Operating temperature range: -10°C to +60°C/14°F to 140°F
6. Display functions
- Time: 24 hours, hours, minutes, seconds
- Calendar: Date (with rapid correction feature)

7. Additional functions:
- Chronograph (display and measurement of elapsed time up to 59 minutes, 59 seconds in 1 second units)
- Insufficient charging warning feature
- Overcharge prevention feature
- Quick start feature

8. Continuous running times:
- Fully charged to stopped without charging: About 5 months (continuous running time differ depending on which frequency at which the chronograph is used and so forth)
- 2-second interval movement to stopped: About 5 days

9. Battery: Secondary battery

* Specifications are subject to change without notice.