

# CITIZEN®

## INSTRUCTION MANUAL



***Eco-Drive***®

Thank you for your purchase of this Citizen watch.

Before using the watch, read this instruction manual carefully to ensure correct use.

After reading the manual, store it in a safe place for future reference.

Visit the Citizen website (<http://www.citizenwatch-global.com/>) to view visual guides for operation of your watch.

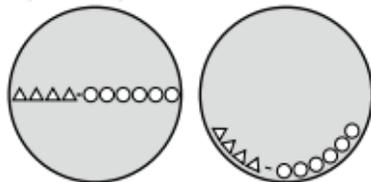
Some models may be equipped with external features (calculation scale, tachymeter, etc.). Visual guides for operation of such external features can also be found on the website.

#### To check the movement number

A case number—4 alphanumeric characters and 6 or more alphanumeric characters—is engraved on the case back. (Figure on the right)

The first 4 characters of the case number represent the movement number of the watch. In the example on the right, "△△△△" is the movement number.

#### Engraving position example



The engraving position may differ depending on watch model.

## Safety precautions (IMPORTANT)

This manual contains instructions that should be strictly followed at all times not only for optimal use, but to prevent any injuries to yourself, other persons or property.

We encourage you to read the entire booklet (especially, pages 22 to 31) and understand the meaning of the following symbols:

- Safety advisories are categorized and depicted in this manual as follows:

 <b>DANGER</b>	Highly likely to cause death or serious injury.
 <b>WARNING</b>	Can cause serious injury or death.
 <b>CAUTION</b>	Can or will cause minor or moderate injury or damage.

## Safety precautions (IMPORTANT)

- Important instructions are categorized and depicted in this manual as follows:

	Warning (caution) symbol followed by instructions that should be followed or precautions that should be observed.
	Warning (caution) symbol followed by prohibited matters.

# Before using this watch

## ■ Protective stickers

Be sure to remove any protective stickers that may be on your watch (case back, band, clasp, etc.) Otherwise, perspiration or moisture may enter the gaps between the protective stickers and the parts, which may result in a skin rash and/or corrosion of the metal parts.

## ■ Band adjustment

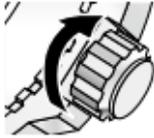
We recommend seeking the assistance of an experienced watch technician for sizing of your watch. If adjustment is not done correctly, the bracelet may unexpectedly become detached leading to loss of your watch or injury. Consult an authorized service center.

## How to use a specially designed crown/push button

Some models are equipped with a specially designed crown and/or push button to prevent accidental operation. Please refer to the following chart for use.

### Screw down crown and screw down push button

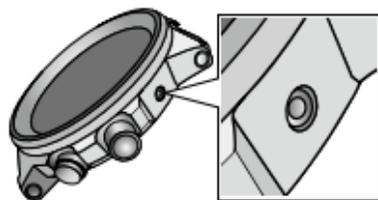
Unlock the crown prior to operate your watch.

	Unlock	Lock
Screw down crown	 <p>Rotate the crown counterclockwise until it releases from the case.</p>	 <p>Push the crown in to the case. With gentle pressure towards the case, rotate the crown clockwise to secure it to the case. Be sure to tighten firmly.</p>
Screw down push button	 <p>Rotate the locking screw counterclockwise, and loosen until it stops.</p>	 <p>Rotate the locking screw clockwise, and tighten firmly.</p>

## Before using this watch

---

### Recessed buttons



Press the button with a narrow-tipped object such as a wooden toothpick.

# Contents

Product Features .....	8
Component Identification .....	9
Recharging your watch.....	10
Setting the Time .....	14
Setting the Date .....	16
Using the Chronograph .....	18
Eco-Drive watch handling precautions .....	22
Water resistance .....	24
Precautionary items and usage limitations .....	26
Specifications.....	32

## Product Features

This watch includes a rechargeable cell. This cell is fed electricity by a solar cell in which light energy is converted to electrical energy.

### **Eco-Drive**

The watch operates by converting sunlight into electrical energy, which is stored in a rechargeable battery. The rechargeable battery is a clean energy source that does not contain mercury or other harmful substances. When the watch is fully charged, it will operate continuously for approximately 7 months.

### **Quick Start Function**

A watch that has stopped due to an insufficiently charged cell will start operating immediately when exposed to light.

### **Insufficient Charge Warning Function**

Special hand movement to let you know when the reserve energy is getting low.

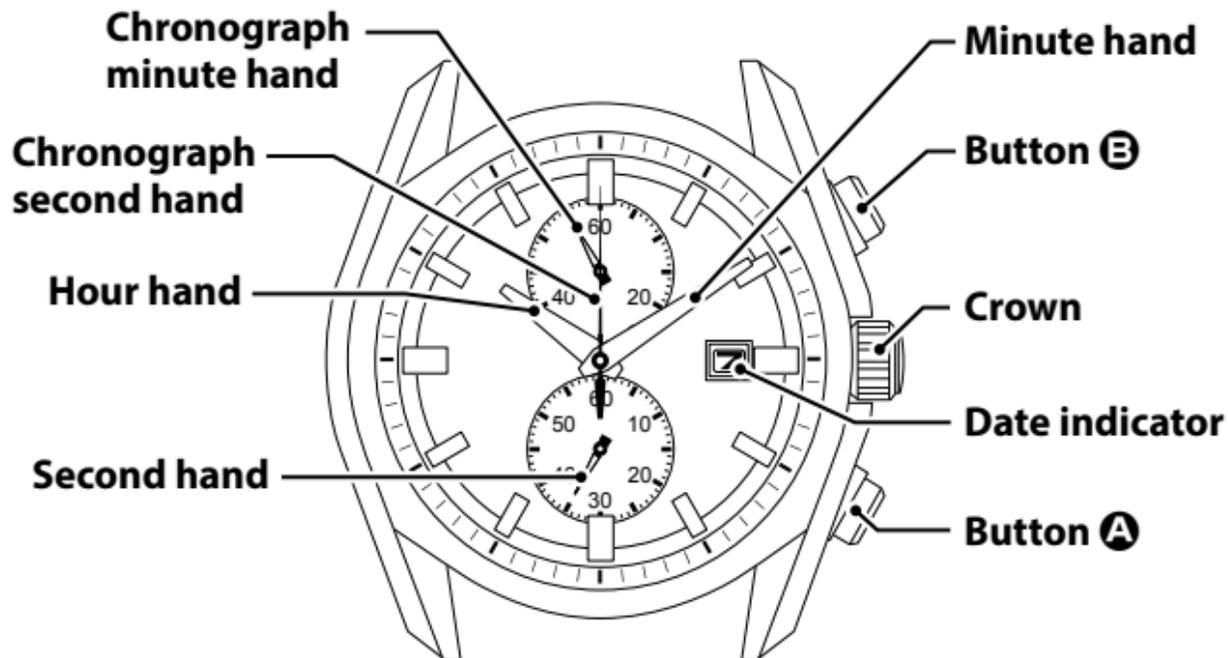
### **Overcharge Prevention Function**

This protects the rechargeable cell from overcharging. This provides worry free enjoyment, not matter how much light your watch is subjected to.

### **Chronograph**

This feature enables elapsed time measurement (stopwatch.) You can measure time in activities such as walking, jogging, bicycle riding, etc.

# Component Identification



• The illustrations shown in this manual may differ from the actual watch you have purchased.

## Recharging your watch

This watch uses a built-in rechargeable cell to store electrical energy. Charge the watch by exposing the dial to light such as direct sunlight or fluorescent lamps.

### **■ To ensure optimal operation, be sure to perform the following.**

- Charge the watch in direct sunlight (outdoors) once a month for 5 to 6 hours.
- When you take your watch off, be sure to place it in a location where the dial can receive light. An ideal location might be a window sill where it can receive direct sunlight.



Wearing clothes that cover the watch may inhibit sufficient light from reaching the watch face, resulting in insufficient charging.

Avoid charging the watch under high temperature conditions (approximately 60°C/140°F or more).

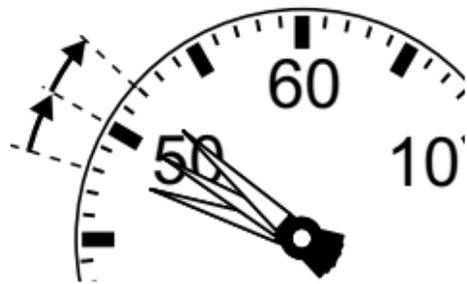
## Recharging your watch

---

### ■ If the reserve power becomes insufficient (Insufficient Charge Warning Function)

When the rechargeable cell charge reaches a low power state, the Insufficient Charge Warning Function engages. This causes the second hand to move in two-second intervals (two-second interval movement). Be sure to immediately fully charge your timepiece by exposing it to light.

- Two-second interval movement continues for some 7 days until the watch stops completely due to battery depletion.



When the watch is operating in the two-second interval mode (low power/insufficient charge warning), you cannot operate chronograph.

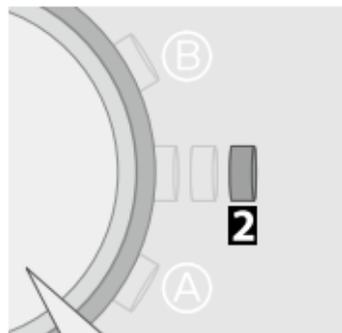
## Charging time by environment

Below are the approximate times required for charging when exposing the watch dial to light continuously. Please use this table as a reference only.

Environment	Illuminance (lx)	Charging time (approx.)		
		To work for one day	To start working normally when the cell is discharged	To become fully charged when the cell is discharged
Outdoors (sunny)	100,000	2 minutes	25 minutes	8.5 hours
Outdoors (cloudy)	10,000	11 minutes	3.5 hours	45 hours
20 cm (7-7/8 inches) from a fluorescent lamp (30W)	3,000	35 minutes	11 hours	150 hours
Interior lighting	500	3.5 hours	80 hours	—

- This watch will run for approximately 7 months from a **full charge** without further exposure to light.

# Setting the Time

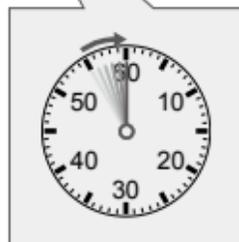


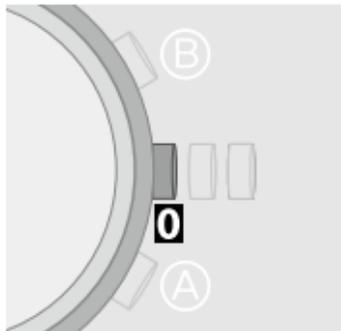
## 1 Pull the crown out to position **2**.

Pull out the crown just as the second hand is at the reference position (page 18) in order to accurately align to the second.

## 2 Rotate the crown to set the time.

Move the minute hand ahead of the correct time by 5 "minutes" and then return the hand to the correct "minutes". This will minimize the effect of gear play and will provide more accurate hand movement.

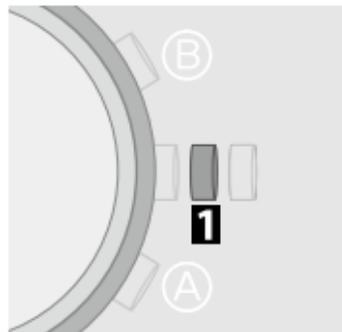




### 3 Press the crown back into its normal position.

Be sure to secure if the watch has a screw down crown.  
Water may enter your watch.

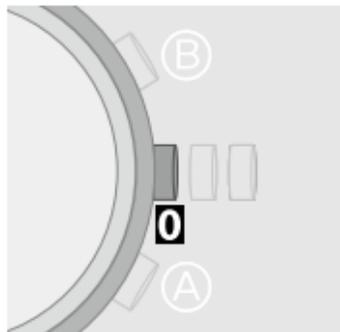
## Setting the Date



**1 Pull the crown out to position **1**.**

**2 Rotate the crown counterclockwise to set the date.**

The date does not change when you rotate the crown to the right.



### 3 Press the crown back into its normal position.

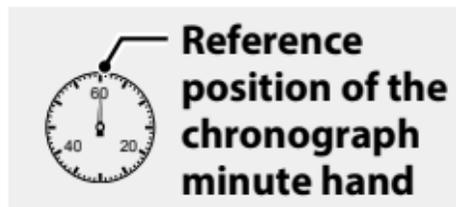
- The date must be manually adjusted for months shorter than 31-days. You will need to adjust the date at the start of March, May, July, October and December.
- Do not adjust the date between 9 p.m. and 1 a.m. If you change the date during this time, the date may not change the following day.

# Using the Chronograph

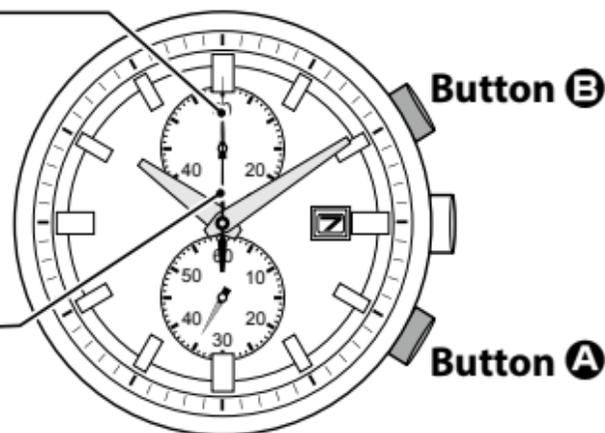
The chronograph second hand is normally placed at 12 o'clock position. Once the measurement starts, it can measure up to 60 minutes in units of 0.2 seconds.

<Reference position>

Chronograph minute hand



Chronograph second hand



The chronograph minute/second hands may become misaligned if the watch is subjected to a strong knock. If the position cannot be corrected by using the reset procedures outlined on page 19, please contact an authorized service center.

## Time measurement start/stop

- 1 To start the chronograph, press and release the upper right button **E** to commence time measurement.**
- 2 To stop the chronograph, press and release the upper right button **E** again.**
- 3 To recommence timing from the stopped position, press and release the upper right button **E** again.**

## Reset

To reset the chronograph after stopping time measurement, press and release the lower right button **A**.

- Pressing and releasing the lower right button **A** during chronograph operation will cause timing to stop and the chronograph to reset.
- The chronograph does not function if the crown is pulled out to position **2**. The chronograph resets if the crown is pulled out to position **2** during measurement.

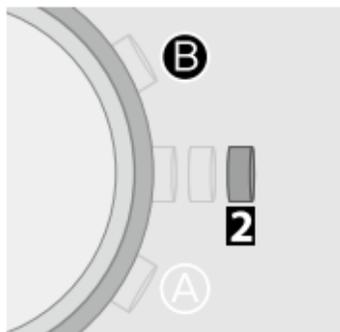
## Using the Chronograph

---

### ■ When the chronograph second hand does not return to the reference position

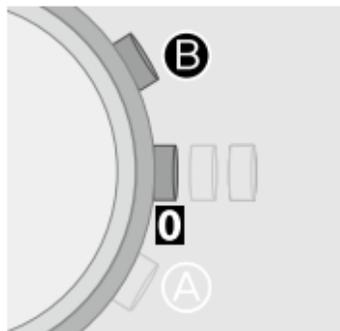
If the chronograph second hand does not return to reference position even when reset, perform the following procedures to align the chronograph second hand with the reference position.

- Time is stopped while aligning with the reference position. Set the time after aligning.



**1 Pull the crown out to position 2.**

**2 Press and hold the upper right button  for 3 seconds or more. The watch is now set to correct the reference position.**



**3 Press and release the upper right button **B** to adjust the position of the chronograph second hand.**

Press once → Second hand moves ahead one graduation at a time.

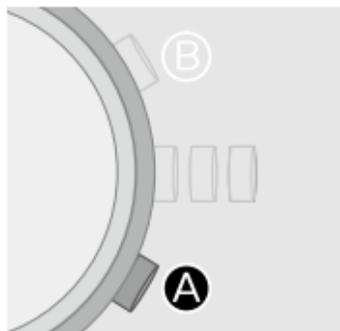
Press and hold down → Second hand advances rapidly.

- If the second hand does not move even when the upper right button **B** is pressed, perform Step 1 of the page on the left.

**4 Press the crown back into its normal position.**

**5 Press and release the lower right button **A** to adjust the position of the chronograph minute hand.**

- The chronograph minute hand moves together with the second hand when correcting the second hand. Reset the minute hand.



## Eco-Drive watch handling precautions

### <Always Make Sure to Recharge Frequently>

- Please note that if you wear long sleeves, the watch may stop as a result of being covered by your sleeve and blocked from the light.
- When you take off the watch, try to place it in as bright a location as possible. This will ensure optimal operation.

### **CAUTION** Recharging Precautions

- Do not charge the watch at a high temperature (about 60°C/140°F or higher) as doing so may cause the movement to malfunction.

#### Examples:

- Charging the watch too close to a light source which generates a large amount of heat such as an incandescent lamp or halogen lamp.
  - \* When charging under an incandescent lamp, be sure to leave 50 cm (19-11/16 inch) or more between the lamp and the watch to avoid exposing the watch to excessive heat.
- Charging the watch in a location where the temperature may become extremely high such as on the dashboard of a vehicle.



### <Replacement of Rechargeable Cell>

- This watch utilizes a special rechargeable cell that does not require regular replacement. However power consumption may increase after using the watch for a number of years due to wear of internal components and deterioration of oils. This may cause stored power to be depleted at a faster rate. For optimal performance, we recommend having your watch inspected (chargeable to the owner) by an authorized service center to ensure operation is within factory specifications.



#### **WARNING Handling of Rechargeable Cell**

- The rechargeable cell should never be removed from the watch.  
If for any reason it becomes necessary to remove the rechargeable cell from the watch, keep out of the reach of children to prevent accidental swallowing.  
If the rechargeable cell is accidentally swallowed, consult a doctor immediately.
- Do not dispose of the rechargeable cell with ordinary garbage. Please follow the instructions of your municipality regarding collection of batteries to prevent the risk of fire or environmental contamination.



#### **WARNING Use Only the Specified Battery**

- Never use a battery other than the rechargeable cell specified for use in this watch.  
Although the watch structure is designed so that it will not operate when another type of battery is installed, if a silver battery or other type of battery is installed in the watch and the watch is recharged, there is the risk of overcharging which may cause the battery to rupture.  
This can cause damage to the watch and injury to the wearer.  
When replacing the rechargeable cell, always make sure to use the designated rechargeable cell.

# Water resistance

## **WARNING** Water Resistance

- Refer to the watch dial and the case back for the indication of the water resistance of your watch. The following chart provides examples of use for reference to ensure that your watch is used properly. (The unit “1bar” is roughly equal to 1 atmosphere.)
- WATER RESIST(ANT) ××bar may also be indicated as W.R.××bar.
- Non-water resistant models are not designed to come into contact with any moisture. Take care not to expose a watch with this rating to any type of moisture.

Name	Indication	Specification
	Dial or Case back	
Non-water resistant watch	—	Non-water resistant
Everyday-use water resistant watch	WATER RESIST(ANT)	Water-resistant to 3 atmospheres
Upgraded everyday-use water resistant watch	WATER RESIST(ANT) 5 bar	Water-resistant to 5 atmospheres
	WATER RESIST(ANT) 10/20 bar	Water-resistant to 10 or 20 atmospheres

- Water resistance for daily use (to 3 atmospheres) means the watch is water resistant for occasional accidental splashing.
- Upgraded water-resistance for daily use (to 5 atmospheres) means that the watch may be worn while swimming, but is not to worn while skin diving.
- Upgraded water-resistance for daily use (to 10/20 atmospheres) means that the watch may be worn while skin diving, but not while scuba or saturated diving using helium gas.

Water-related use				
 <p>Minor exposure to water (washing face, rain, etc.)</p>	 <p>Swimming and general washing work</p>	 <p>Skin diving, marine sports</p>	 <p>Scuba diving using an air tank</p>	 <p>Operate the crown or button when the watch is wet</p>
<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>OK</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>OK</b>	<b>OK</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>
<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>NO</b>	<b>NO</b>

# Precautionary items and usage limitations

## **CAUTION** To Avoid Injury

- Be particularly careful when wearing your watch while holding a small child, to avoid injury.
- Be particularly careful when engaged in strenuous exercise or work, to avoid injury to yourself and others.
- Do NOT wear your watch while in a sauna or other location where your watch may become excessively hot, since there is the risk of burns.
- Be careful when putting on and taking off your watch, since there is a risk of damaging your fingernails, depending on the manner in which the band is fastened.
- Take off your watch before going to bed.

## **CAUTION** Precautions

- Always use the watch with the crown pushed in (normal position). If the crown is of the screw lock-type, make sure it is securely locked.
- Do NOT operate the crown or any push buttons when the watch is wet. Water may enter the watch causing damage to vital components.
- If water enters the watch or the watch fogs up and does not clear up even after a long time, consult your dealer or an authorized service center for inspection and/or repair.

## Precautionary items and usage limitations

- Even if your watch has a high level of water resistance, please be careful of the following.
  - If your watch is immersed in sea water, rinse thoroughly with fresh water and wipe with a dry cloth.
  - Do not pour water from a tap directly onto your watch.
  - Take off your watch before taking a bath.
- 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, push button, etc.) may come off.



### **CAUTION** When Wearing Your Watch

#### <Band>

- Leather, genuine skin and rubber (urethane) bands will deteriorate over time due to perspiration, body oils and dirt. Be sure to replace the band periodically.
- The durability of a leather band may be affected when wet (fading, peeling of adhesive), owing to the properties of the material. Moreover, wet leather may cause a rash.
- It is recommended to take off the watch if it gets wet, even if the watch itself is water-resistant.
- Do Not wear the band too tightly. Try to leave enough space between the band and your skin to allow adequate ventilation.
- The rubber (urethane) band may be stained by dyes or soil present in or on clothing or other accessories. Since these stains may not be removable, caution is required when wearing your watch with items that tend to easily transfer color (articles of clothing, purses, etc.). In addition, the band may be deteriorated by solvents or moisture in the air. Replace with a new one when it has lost elasticity or become cracked.

## Precautionary items and usage limitations

---

- Please request adjustment or repair of the band in the following cases:
  - You notice an abnormality with the band due to corrosion.
  - The pin of the band is protruding.
- We recommend seeking the assistance of an experienced watch technician for sizing of your watch. If adjustment is not done correctly, the bracelet may unexpectedly become detached leading to loss of your watch or injury.  
Consult an authorized service center.

### <Temperature>

- The watch may stop or the function of the watch may be impaired in extremely high or low temperature. Do not use the watch in places where the temperature is outside the operating temperature range as stated in the specifications.

### <Magnetism>

- Analog quartz watches are powered by a step motor that uses a magnet. Subjecting the watch to strong magnetism from the outside can cause the motor to operate improperly and prevent the watch from keeping time accurately. Do not allow the watch to come into close proximity to magnetic health devices (magnetic necklaces, magnetic elastic bands, etc.) or the magnets used in the latches of refrigerator doors, clasps used in handbags, the speaker of a cell phone, electromagnetic cooking devices and so on.

## Precautionary items and usage limitations

---

### <Strong Shock>

- Avoid dropping the watch or subjecting it to other strong impact. It may cause malfunctions and/or performance deterioration as well as damage to the case and bracelet.

### <Static Electricity>

- The integrated circuits (IC) used in quartz watches are sensitive to static electricity. Please note the watch may operate erratically or not at all if exposed to intense static electricity.

### <Chemicals, Corrosive Gasses and Mercury>

- If paint thinner, benzene or other solvents or products containing these solvents (including gasoline, nail-polish remover, cresol, bathroom cleaners and adhesives, water repellent, etc.) are allowed to come into contact with the watch, they may discolor, dissolve or crack the materials. Be careful when handling these chemicals. Contact with mercury such as that used in thermometers may also cause discoloration of the band and case.

### <Protective Stickers>

- Be sure to remove any protective stickers that may be on your watch (case back, band, clasp, etc.) Otherwise, perspiration or moisture may enter the gaps between the protective stickers and the parts, which may result in a skin rash and/or corrosion of the metal parts.

## Precautionary items and usage limitations

---



### **CAUTION** Always Keep Your Watch Clean

- Rotate the crown while it is pressed in fully and press the buttons periodically so they do not become stuck due to accumulations of foreign matter.
- The case and band of the watch come into direct contact with the skin in the same manner as undergarments. Corrosion of the metal or unnoticed soiling such as that caused by perspiration and dirt can soil sleeves and other portions of clothing. Keep your watch clean at all times.
- The case and band of the watch come into direct contact with the skin. If you think there is something wrong, discontinue wearing the watch immediately and consult your physician. In the case of accumulation of sweat or dirt on a metal band or case, clean thoroughly using a brush and neutral detergent. In the case of a leather band, wipe clean using a dry cloth.
- Leather bands may become discolored by perspiration or dirt. Always keep your leather band clean by wiping with a dry cloth.

## Caring for Your Watch

- Wipe any dirt or moisture such as perspiration from the case and crystal with a soft cloth.
- For a metallic, plastic or rubber (urethane) watchband, wash any dirt off with water. Remove the small amounts of dirt trapped between the crevices of the metallic band with a soft brush.
- For a leather band, wipe off dirt using a dry cloth.
- If you will not be using your watch for an extended period of time, carefully wipe off any perspiration, dirt or moisture and store in a proper location, avoiding locations subject to excessively high or low temperatures and high humidity.

### <When Luminous Paint is used for your watch>

The paint on the dial and hands helps you with reading the time in a dark place. The luminous paint stores light (daylight or artificial light) and glows in a dark place.

It is free from any radioactive substance or any other material harmful to a human body or environment.

- The light emission gradually becomes weaker as time passes.
- The duration of the light (“glow”) will vary depending on the brightness, types of and distance from a light source, exposure time, and the amount of the luminous paint.
- The luminous paint may not glow and/or may dissipate quickly if exposure to light was not sufficient.

# Specifications

<b>Mvmnt. Cal. No.:</b>	B642
<b>Type</b>	Analog solar-powered watch
<b>Timekeeping accuracy</b>	Within +/-15 seconds per month when worn at normal operating temperatures (+5°C / 41°F and +35°C / 95°F)
<b>Operational temperature range</b>	-10°C / 14°F to +60°C / 140°F
<b>Display functions</b>	Time: Hour, minute, second Calendar: Date (does not automatically adjust for months shorter than 31-days)
<b>Additional functions</b>	Chronograph (measures up to 60 minutes in 0.2-second units), Insufficient Charge Warning Function, Overcharge Prevention Function, Quick Start Function)
<b>Maximum run time from full charge</b>	Fully charged to fully discharged: Approximately 7 months Power reserve upon Insufficient Charge Warning Function engagement: Approximately 7 days
<b>Battery</b>	Rechargeable cell 1pc

European Union directives conformance statement



Hereby, CITIZEN WATCH CO.,LTD. declares that this product is in compliance with the essential requirements and other relevant provisions of directive 2014/53/EU and all other relevant EU directives.

You can find your product's Declaration of Conformity at "<http://www.citizenwatch-global.com/>".

Model No.CA7 \*

Cal.B642

CTZ-B8195