

# CITIZEN®

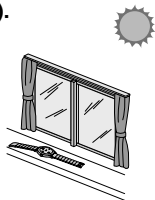
## INSTRUCTION MANUAL



***Eco-Drive***®

**■ Fully charge your watch before use by exposing it to sufficient light ■**

The second hand will move at 2-second intervals when the watch is insufficiently charged. Charge your watch as indicated in "Guide to Charging Time" (p. 22).



**\* It is recommended that the watch be exposed to direct sunlight for a long time once a month to fully charge it.**

# Table of Contents

<b>1. Your Watch</b> .....	4
<b>2. Operating the Crown</b> .....	5
<b>3. Part Names</b> .....	6
<b>4. Setting the Time and Date</b> .....	8
<b>5. Adjusting the Time and Date</b> .....	10
• Adjusting the day of week .....	10
• Adjusting the moon phase .....	10
• Adjusting the day of month and month .....	12
• Setting the Time .....	14
Solar Power	
<b>6. Solar Power Function</b> .....	16
<b>7. Characteristics of the Eco-Drive Watch</b> .....	18
• Insufficient Charge Warning Function .....	20
• Overcharging Prevention Function .....	21
• Quick Start .....	21
• Guide to Charging Time .....	22
Precautions .....	24
<b>8. Specifications</b> .....	30

# 1. Your Watch

- © This watch includes a solar cell surrounding its face and is driven by converting solar energy into electric energy.

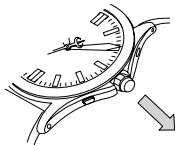
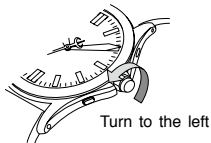
## **Other Features**

1. For the date, the numbered day of the month is indicated using a special hand, and the month and day of the week are indicated in display windows.
2. The watch is equipped with a moon phase indicator.

## 2. Operating the Crown

There are two models available for the crown: normal and screw lock.  
In the case of normal crown watch, simply pull out the crown.

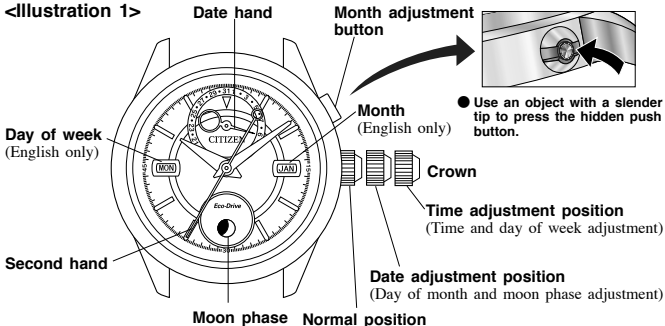
### <Operating the screw lock crown>



1. Turn the crown to the left.
2. When the screw lock is released, the crown pops out a little and stops in the normal position.
3. After finishing the operation, turn the crown to the right to lock it.

## 3. Part Names

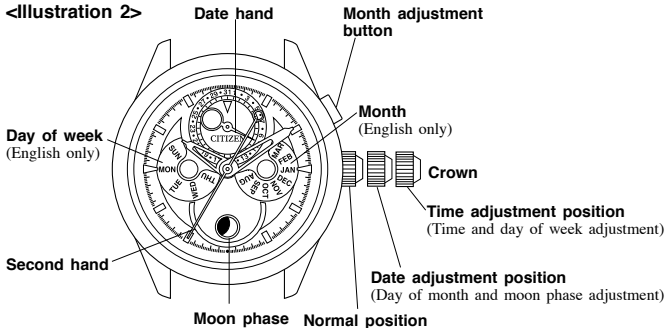
<Illustration 1>



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

This manual describes the operation procedures for watch models that have a push button at the 2:00 position and a crown at the 3:00 position.

**<Illustration 2>**



This manual describes the operation procedures for watch models of the illustration 1.

## 4. Setting the Time and Date

When adjusting both the time and date, it is convenient to make settings in the order of "day of week", "moon phase", "month and day of month", and then "time of day".

### Adjusting the day of week

- Crown in position 2
- Turn the crown to the right (The day of week begins changing at the 12:00 position. To change to the next day of week, make the hour hand go around twice.)

### Adjusting the moon phase

- Crown in position 1
- Turn the crown to the right

Confirm the day of month to be set.

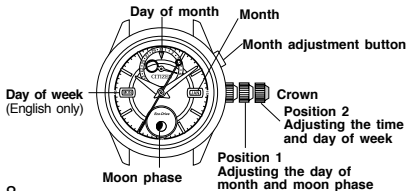
When the day of month to be set is from the 3rd to the 30th

When the day of month to be set is from the 31st to the 2nd

### Adjusting the day of month

- Crown in position 1
- Turn the crown to the left

Temporarily set the day of month to "30"





### Adjusting the day of month

- Crown in position 1
- Turn the crown to the left

Adjust to the day of month for the current day

### Adjusting the month

- Press the month adjustment button

### Adjusting the month

- The month changes each time the month adjustment button is pressed

### Adjusting the day of month

- Crown in position 1
- Turn the crown to the left

Adjust to the day of month for the current day

### Setting the time

- Crown in position 2
- Advance the minute hand and hour hand by turning the crown to the right  
Turn the crown to the left to move the hands back

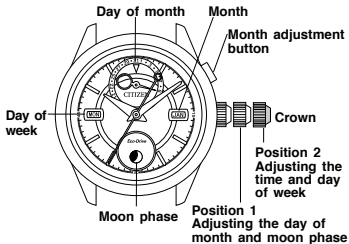


**Return the crown to the normal position.**

## 5. Adjusting the Time and Date

### Adjusting the day of week

1. Pull out the crown to position 2 (time and day of week adjustment).
2. Turn the crown to the right (clockwise) to set the day of week for the current day.
  - The day of week begins to change starting at about midnight and is finished changing by about 5:00 a.m.











### Adjusting the moon phase

1. Pull out the crown to position 1 (date adjustment position).
  2. Turn the crown to the right (clockwise) to set the moon phase for the current day.
- Look up the moon phase for today in the newspaper or another source and adjust while referring to "Viewing the moon phase".

### <Viewing the moon phase>

The moon phase indicator does not display the exact shape of the moon. Use it as a guide to estimate the moon phase.

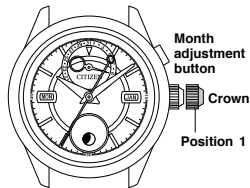
<b>New moon</b> Moon phase: Day 0 (Spring tide)	<b>First quarter moon</b> Moon phase: Approx. day 7 (Neap tide)	<b>Full moon</b> Moon phase: Approx. day 15 (Spring tide)	<b>Last quarter</b> Moon phase: Approx. day 22 (Neap tide)
			
			

\* The indicator may differ depending on the model.

### <To Set the Moon Phase Accurately>

The moon phase can be more accurately adjusted by adjusting on the day of the new moon (when the moon indicator is completely hidden on the moon phase, day 0) or full moon (when the moon indicator is straight up on the moon phase, day 15).

## Adjusting the day of month and month



1. Pull out the crown to position 1 (date adjustment position).
2. Adjust the day of month and the month.
  - The day of month rotates to the right when the crown is turned to the left.
  - Pressing the month adjustment button changes the month.

### **[When the day of month to be set is from the 3rd to the 30th]**

- ① Turn the crown to the left to set the date hand to the current day of the month.
- ② Press the month adjustment button to set the month to the current month.

### **[When the day of month to be set is the 31st]**

- ① First, temporarily set the day of month to the 30th.
- ② Press the month adjustment button to set the month to the current month.
- ③ Turn the crown to the left to set the day to the 31st for the correct day of month.

**[When the day of month to be set is the 1st or 2nd]**

- ① First, temporarily set the day of month to the 30th.
- ② Press the month adjustment button to temporarily set the month to one month before the current month.

Example: Set to December when making settings for January.

Set to February when making settings for March.

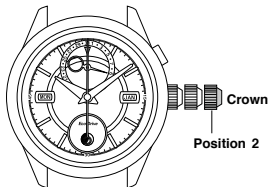
- ③ Turn the crown to the left to set the day to the 1st or the 2nd for the correct day of month.

The month changes to the current month at the same time the day of month changes from the 31st to the 1st.

**3. Return the crown to the normal position.**

- Due to the construction of the mechanism, temporary adjustment is required in order to set the correct date.

## Setting the Time



1. When the second hand reaches the 12:00 position, pull out the crown to position 2 (time adjustment position).
2. Turn the crown to the right (clockwise) to adjust the time. Adjust the time while paying attention to a.m./p.m. by noting the time at which the date changes.
3. Set the time to the time signal time, etc. and return the crown to the normal position.

### [Hints for accurate adjustment]

The time can be more accurately adjusted by first stopping the second hand at the 12:00 position, advancing 4 to 5 minutes past the time that the hour and minute hand are to be set to, and then set the current time by backing the hands into position by rotating the hands counterclockwise.

## **[NOTE]**

- ① If you adjust the day of month when a time between 9:00 p.m. and 12:00 midnight is being displayed, the day of month sometimes does not change to the next day even if the actual date changes. Avoid changing the day of month during this time period.
- ② The day of month indicated by this watch follows a 31-day cycle. To advance to the 1st of the next month after a short month (a month having 30 days or February), pull out the crown to position 1 and turn it to the left.
- ③ Avoid adjusting the month when the date hand indicates a day from the 31st to the 2nd.

To make adjustment during this period, first set the day of month outside the range of the 31st to the 2nd, and then adjust the month. Then, set the day of month that the date hand should point to.

# Solar Power

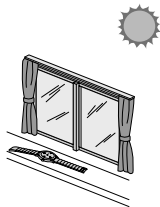
## 6. Solar Power Function

This watch uses a rechargeable cell to store electrical energy. When the watch is fully charged, it will maintain its accuracy for about 6 months.

### <Ensuring best operation of the watch>

**Always store the watch in a bright location for best results.**

- ◆ Placing the watch near a window where its face can receive sunlight or near another source of light when you are not wearing it will ensure that the watch is regularly charged, allowing it to maintain its accuracy.

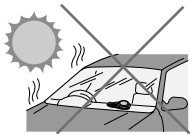




- ◆ Wearing clothes with long sleeves makes it difficult for the watch to get the necessary light, resulting in insufficient charging.  
We recommended that you charge the watch for a long time in direct sunlight once a month.

**[NOTE]**

**Do not charge on surfaces that can easily become hot, such as a car dashboard.**



## 7. Characteristics of the Eco-Drive Watch

- When the watch is insufficiently charged, the indication will be changed as follows:

### [Normal indication]

The second hand moves at 1-second intervals



The watch has been insufficiently charged because the watch face has not received sufficient light

As the battery recharges

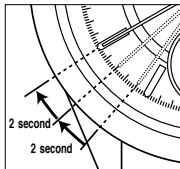
The display time will be incorrect because the watch has stopped due to insufficient charge. Adjust to the correct time.

**[Insufficient charge warning]**

The second hand moves at 2-second intervals



As rechargeable cell capacity diminishes without charging



**[Stopped status]**

The watch stops



The second hand starts moving at 2-second intervals.

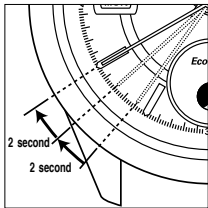
The watch must be subjected to enough light for a sufficient charge until the watch hands begin moving.

## Insufficient Charge Warning Function

When the watch is insufficiently charged, the second hand begins moving at 2-second intervals to notify you that the watch charge is insufficient.

Although the watch keeps accurate time during this period, the watch will stop completely if operation with an insufficient charge continues for approximately three or more days. Restore the 1-second interval movement of the second hand by subjecting the watch to light so that it recharges. To use the watch with complete peace of mind, be sure to fully recharge the battery even after the second hand returns to the 1-second interval movement.

Although the watch can be started again by subjecting it to light after it stops due to insufficient charge, the time given will no longer be correct, so be sure to fully charge the battery and adjust to the correct time.



## Overcharging Prevention Function

No matter how much the watch is charged, it will not affect the rechargeable cell, timekeeping, functions or performance of the watch.

When the rechargeable cell becomes fully charged by exposing the watch face to light, the overcharging prevention function is automatically activated to prevent the battery from being charged further.

## Quick Start

The watch stops if there is absolutely no charge. Subject the watch to light and the hands will start moving in about 10 seconds. (The time required for the hands to begin moving varies depending on the model and brightness of the light.)

Note, however, that the watch will stop again if the light is blocked at this time because the charge may still be insufficient.

## Guide to Charging Time

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	6 minutes	3 hours	19 hours
Outdoors (cloudy)	10,000	30 minutes	14 hours	90 hours
20 cm (7-7/8 inches) from a fluorescent lamp (30 W)	3,000	50 minutes	25 hours	150 hours
Interior lighting	500	4 hours	—	—

## **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.
  - Charging on surfaces that can easily become hot, such as a car dashboard.
- 
- ◆ When charging with incandescent lighting, halogen lamps, or other lighting sources that easily become hot, place the watch at least 50 cm (20 in) away from the source to avoid overheating.

# Precautions

## WARNING: 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.



Minor exposure to water  
(washing face, rain, etc.)

Indication		Specifications
Dial	Case (case back)	
WATER RESIST or no indication	WATER RESIST(ANT)	Water-resistant to 3 atmospheres
WR 50 or WATER RESIST 50	WATER RESIST(ANT) 5 bar or WATER RESIST(ANT)	Water-resistant to 5 atmospheres
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**



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.

Examples of use				
				
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	
<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>OK</b>	<b>OK</b>	<b>NO</b>	<b>NO</b>	

## **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 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 damage 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 genuine parts upon replacement.

## 8. Specifications

1. Cal. No. : 8730
2. Type : Analogue solar powered watch
3. Time accuracy : Average monthly deviation  $\pm 15$  seconds when used in room temperature ( $+5^{\circ}\text{C}$  to  $+35^{\circ}\text{C}$  /  $41^{\circ}\text{F}$  to  $95^{\circ}\text{F}$ )
4. Acceptable temperature range :  $-10^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  /  $14^{\circ}\text{F}$  to  $140^{\circ}\text{F}$
5. Display functions : Time: Hour, minute and second  
Date :
  - Day of week, month, and day of month display indicated by special hand
  - Moon phase indicator
6. Additional functions :
  - Insufficient charge warning function (2-second interval movement)
  - Overcharging prevention function
  - Quick start
7. Operation time : Time from a full charge until the watch stops without charging:  
About 6 months  
Time from insufficient charge warning to watch stopping due to insufficient charging: About 3 days
8. Battery : Rechargeable cell 1

\*Specifications may change without notice.

CE

Model No.BU0 \*

Cal.873 \*

CTZ-B8126 ⑤