

# CITIZEN®

## INSTRUCTION MANUAL



***Eco-Drive***®

### **Request to Customers**

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

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# 1. Features of the Citizen Promaster 300 m Professional Diver

This watch is a diver's watch designed to withstand depths down to 300 m (water pressure equivalent to 30 atm).

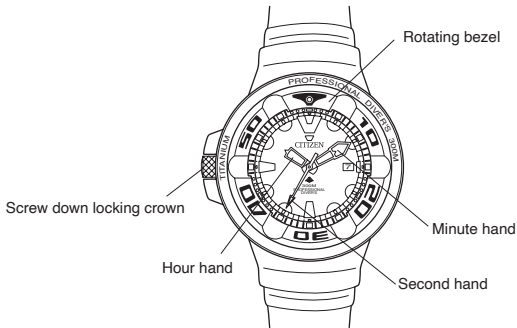
## 1. Rotating Bezel with Reverse Rotation Prevention Mechanism to Prevent Incorrect Operation

\* The rotating bezel, which is important for checking diving time, employs a reverse rotation prevention mechanism that prevents the rotating bezel from being rotated inadvertently.

## 2. Screw down locking Crown

\* The screw down locking crown can be securely locked in position through the use of a screw-locking mechanism. What is more, the use of three O-rings results in enhanced airtightness and water resistance. Furthermore, the screw down locking crown is located at the 9:00 position to prevent it from obstructing movement of the wrist or wetsuit.

## 2. Names of Components



The design may vary depending on the model.

### 3. Before Using

This watch is powered not by an ordinary battery, but by converting photo energy to electrical energy.

**Before using, expose to light and make sure the watch is sufficiently charged.  
See "8. Time Required for Charging" for reference charging times.**

A rechargeable cell is used in this watch to store electrical energy. **This rechargeable cell is a clean energy battery which does not use any toxic substances such as mercury. Once fully charged, the watch will continue to run for about 6 months (B873)/about 9 months (B874) without further charging.**

To use this watch comfortably, **make sure that the watch is always recharged before it stops.**

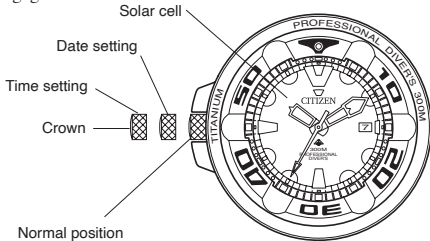
There is no risk of overcharging this watch. (Overcharge Prevention Function is provided)

**We recommend that you recharge the watch everyday.**

## 4. Setting the Time and Date

### Note:

A screw down locking crown is employed to enhance the water resistance of the watch. When operating the crown, first turn it to the left to disengage the screw lock. Once you have finished operating the crown, always make sure to return the crown to the normal position and then turn it to the right while pushing it in so that the screw lock is securely engaged.



## ■ Setting the time

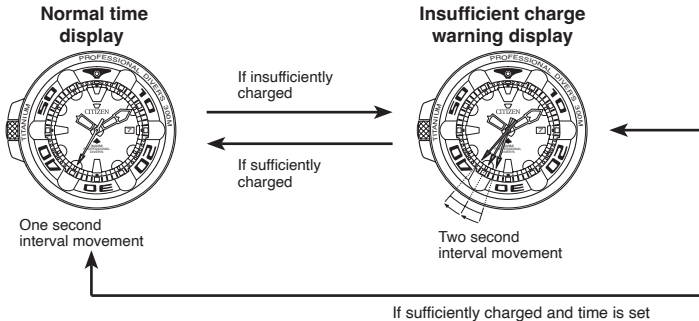
1. Stop the second hand at the 0 second position by pulling the crown out to the 2nd click.
2. Turn the crown to set the time.
3. After setting the time, firmly push the crown back in to its normal position.

## ■ Setting the date

1. Pull the crown out to the 1st click.
2. Set the desired date by turning the crown.
  - Do not adjust the date when the watch display is reading between 9:00 pm and 1:00 am, otherwise the date might not change on the following day.
  - In the case of date display models, turning the crown clockwise will result in the loose play of the crown.
  - The calendar function of this watch operates on a 31-day cycle. It is necessary to change the date to the first day of the following month manually by turning the crown for months having less than 31 days (months having 30 days and February.)
3. After you have set the date, be sure to firmly return the crown to its normal position.

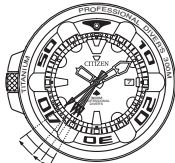
# 5. Functions of Solar Powered Watches

If the charge becomes insufficient, a warning function will operate and the display changes as shown below.



If insufficient charge continues

### Time setting warning display



If insufficiently charged  
and time is set

Hitch movement

The watch will begin to  
operate soon after it is  
exposed to light due to the  
Quick Start Function

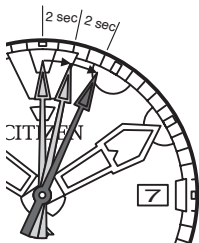
Stop

## ■ Insufficient Charge Warning Function

The second hand changes to a two second interval movement to indicate insufficient recharging.

Even in such a case, the watch keeps correct time, but about 3 to 6 days after the two second interval movement begins, the watch will stop.

After exposing the watch to light, recharging takes place and the watch returns to one second interval movement.



Two second interval movement

## ■ Quick Start Function

The watch will stop if it is completely discharged. **It will begin to operate soon after it is exposed to light.**

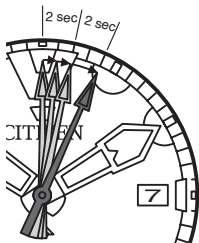
(However, the time to start may vary according to the brightness of the light.)

## ■ Time Setting Warning Function (B873)

If the watch stops, subsequent exposure to light allows the Quick Start Function to start again, and **the second hand moves with a hitch to indicate that the time is incorrect.**

In this case, quickly recharge the watch and reset the time.

Otherwise, the hitch movement will continue.



Hitch movement

## ■ Overcharge Prevention Function

**There is no risk of overcharging.**

Once the rechargeable cell is fully recharged, the overcharging prevention feature comes into operation and prevents overcharging.

## 6. Care and Handling During Charging

### ■ Notes on use

**Take care to charge your watch during use.**

Please note that if you wear long sleeves, the watch can easily become insufficiently charged because it is hidden and not exposed to light.

- When you take the watch off, place it in as bright a place as possible, and it will always continue to run properly.

### ■ Notes on recharging

- Avoid recharging at high temperatures (over about 60°C/140°F), otherwise the watch will be damaged during recharging.

(eg) Charging the watch near a light source that easily becomes hot, such as an incandescent lamp or a halogen lamp.

Charging in a place that easily becomes hot, such as a dashboard.

When you charge the watch by an incandescent lamp, place the watch about 50cm (20in.) from the light source to prevent the watch from reaching an extremely high temperature.

## 7. Replacing the Rechargeable Cell

Your watch features a cell that does not need regular replacement. However, after an extended period of time, power consumption may increase due to deterioration of lubrication in the movement. This may result in shorter than expected run time. Be sure to have your watch regularly inspected by an Authorized Service Center.

**Note:** Regular maintenance is not covered under the terms of the warranty.

### **CAUTION**

Never use another battery different from the rechargeable cell used in this watch. The watch structure is designed so that a different kind of battery other than that specified cannot be used to operate it. In case a different kind of battery such as a silver battery is used, there is the risk of it becoming overcharged and bursting, causing damage to the watch and even to the wearer.

## 8. Charging time (B873)

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	3 minutes	36 minutes	9 hours
Outdoors (cloudy)	10,000	10 minutes	2 hours	33 hours
20 cm (7-7/8 inches) from a fluorescent lamp (30W)	3,000	30 minutes	7 hours	105 hours
Interior lighting	500	3 hours	43.5 hours	---

\* To charge the rechargeable cell fully, it is recommended to expose the dial to direct sunlight. A fluorescent lamp or interior lighting does not have sufficient illumination to charge the rechargeable cell fully.

# Charging time (B874)

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	12 minutes	8.5 hours
Outdoors (cloudy)	10,000	15 minutes	2 hours	80 hours
20 cm (7-7/8 inches) from a fluorescent lamp (30W)	3,000	50 minutes	6.5 hours	250 hours
Interior lighting	500	5 hours	50 hours	---

\* To charge the rechargeable cell fully, it is recommended to expose the dial to direct sunlight. A fluorescent lamp or interior lighting does not have sufficient illumination to charge the rechargeable cell fully.

## 9. Do not Using this Watch while Diving when...

### **PROHIBITED**

Do not use your watch while diving when the following occur.

- The insufficient recharging warning feature is activated. As the battery approaches the end of its life, the second hand begins to move in 2 second increments. (When this happens, expose the watch to light so that it recharges and the second hand returns to normal movement. )
- The watch stops or exhibits any abnormal operation.

# 10. When Using for Diving

## Precautions when Using during Diving:

- \* When using a diver's watch, please make sure that you have received the proper education and training for various types of diving, and observe all rules.
- \* Please make sure to use the watch properly based on a thorough understanding of watch handling and precautions. Please note that failure to operate the watch in a manner not described in the user's manual may prevent the watch from functioning properly.

## <Before Diving>

- \* Please make sure that the crown is pushed in firmly and the screw is securely tightened.
- \* Please check that the band is securely attached to the watch.
- \* Please confirm that there are no cracks, scratches, chips or other abnormalities in the band and glass.
- \* Please check that the rotating bezel rotates properly.
- \* Please check that the time and date are set correctly.

\* Please check that the second hand is moving properly.

If the second hand is moving at two-second intervals, this means that the watch is not sufficiently charged. Sufficiently charge the watch when this occurs.

### **<During Diving>**

\* Never attempt to turn or pull out the crown underwater. This can cause defective water resistance or other malfunction.

\* Be careful to avoid bumping your watch on hard objects such as diving equipment or rocks.

### **<After Diving>**

\* Completely wash off any sea water, mud or sand adhered to the watch with pure water after checking that the crown and screw are tightened. Wipe off any excess moisture with a dry cloth.

# 11. Using the Rotating Bezel

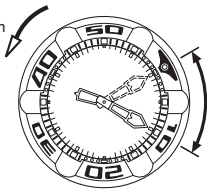
The rotating bezel can be used as a reference for elapsed time during diving or for the amount of time remaining relative to a predetermined amount of time.

## [Setting the Rotating Bezel]

- \* Only turn the rotating bezel to the left. It cannot be rotated in the opposite direction (to the right) to prevent the risk of incorrect operation.

## Determination of Elapsed Time

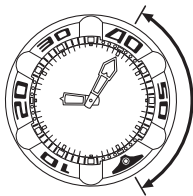
Turning  
direction



Elapsed time

- \* Align the ▼ mark on the rotating bezel with the minute hand. After a certain amount of time has elapsed, the elapsed time can be determined from the scale on the rotating bezel.

## Determination of Remaining Time

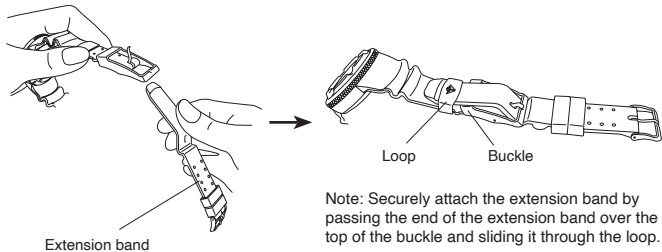


Remaining time

\* The remaining time can be determined by aligning the ▼ mark on the rotating bezel with the target time.

## 12. Adjusting length with the Extension Band (Model No.BJ8040-01E, BJ8050-08E only)

\* When wearing the watch over a wetsuit and so forth, and the length of the standard band is not long enough, attach the extension band provided to adjust the length of the band.



Note: Securely attach the extension band by passing the end of the extension band over the top of the buckle and sliding it through the loop.


# 13. 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.

Indication	Specifications	 Minor exposure to water (washing face, rain, etc.)
Dial or Case (case back)		
DIVER'S WATCH 300M	Water-resistant to 300M	<b>OK</b>

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)	Saturation diving (helium enriched environment)	Operation of the crown with moisture visible
<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>OK</b>	<b>NO</b>

## **CAUTION**

- Be sure to use the watch with the crown pressed in (normal position). If your watch has a screw-type crown, be sure to tighten the crown completely.
- Do NOT operate the crown 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.

# 14. Specifications

- |                                   |   |
|-----------------------------------|---|
| 1. Caliber No.:                   | B873/B874   |
| 2. Type:                          | Analog Quartz Watch with 3 Hands  |
| 3. Accuracy:                      | Within $\pm 15$ sec/month (within a normal temperature range of $5^{\circ}\text{C}/41^{\circ}\text{F}$ to $35^{\circ}\text{C}/95^{\circ}\text{F}$ )                             |
| 4. Quartz oscillator frequency:   | 32,768Hz  |
| 5. IC:                            | C/MOS-LSI (1 pc.)   |
| 6. Operational temperature range: | $-10^{\circ}\text{C}/14^{\circ}\text{F}$ to $+60^{\circ}\text{C}/140^{\circ}\text{F}$   |
| 7. Display features:              | Time: hour, minute, second<br>Date: date (models with date display)   |
| 8. Additional features:           | Insufficient charge warning, Quick start,<br>Time setting warning (B873), Overcharge prevention   |
| 9. Continuous operating time:     | Approx. 6 months (from full recharge to stop) (B873)<br>Approx. 9 months (from full recharge to stop) (B874)<br>Approx. 3 to 6 days (from two second interval movement to stop) |
| 10. Battery:                      | Rechargeable cell (lithium button cell), 1pc  |

\*Specifications are subject to change without prior notice.

Model No.BJ804\*・BJ805\*

Cal.B873・B874

CTZ-B8086④