CITIZEN.

INSTRUCTION MANUAL



ENGLISH FRANÇAIS ESPAÑOL DEUTSCH ITALIANO PORTUGUÊS 中文(繁体字)) 中文(简体字) 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. Be sure to visit the Citizen website at http://www.citizenwatch-global.com/ . Here you will find a variety of information such as electronic setting guides, answers to frequently asked questions, Eco-Drive recharging information and more.

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, " $\Delta \Delta \Delta$ " is the movement number.





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 **98** to **111**) and understand the meaning of the following symbols:

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

DANGER Highly likely to cause death or serious injury	
WARNING Can cause serious injury or death	
	Can or will cause minor or moderate injury or damage

 Important instructions are categorized and depicted in this manual as follows: (Following symbols are examples of Pictograms.)



Warning (caution) symbol followed by prohibited matters.

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

Features



Satellite Wave-GPS

Receives location and time information sent from GPS satellites and adjusts the time and calendar on the watch automatically.

Light-Level Indicator

Indicates current power generation amount in 7 levels. It can be used as a reference for choosing a good charging place.

Eco-Drive

Never needs a new battery. This watch is fueled by light.

World time

Indicates the time around the world by choosing one of 39 time zones.

±5-second average monthly accuracy

Keeps high accuracy without time signal reception.

Dual time

Shows two different times in parallel—home time and local time. The two times can be interchanged easily.

Chronograph

Measures up to 24 hours in 1/20 second increments.

Alarm

Sounds at the time set every day.

Perpetual calendar

No need for monthly and leap-year date correction until February 28, 2100.

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Before using this watch

This watch has a rechargeable cell which is charged by exposing the dial to light. Expose the dial to direct sunlight regularly to charge the watch. For details of charging, see page 62. • Especially, satellite signal reception is power-consuming. Be

sure to keep your watch sufficiently charged.

After unpacking, the following must be done before setting the time and calendar (page **45** or **80**).

- 1 Checking the current power reserve (page 24)
- 2 Setting the world time (page 33)
- 3 Checking leap second setting (page 73)

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.

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.

How to use a specially designed crown/button

Some models are equipped with a specially designed crown and/or push button to prevent accidental operation.

Screw down crown/button

Unlock the crown/button prior to operate your watch.

	Unlock		Lock	
Screw down crown		Rotate the crown counterclockwise until it releases from the case.	and Color	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.
Screw down push button	İ	Rotate the locking screw counterclockwise, and loosen until it stops.		Rotate the locking screw clockwise, and tighten firmly.

Recessed button

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



• Metal objects may cause marring or scratching of the button.

Component identification



- The illustrations in this instruction manual may differ from the actual appearance
 afore unstable
- 14 of your watch.



• A solar cell is under the dial.

About dual time indication

This watch is equipped with the dual time function: two times are indicated in parallel.



Changing the mode

This watch features six different modes (functions). The method to change the mode and indication for each mode are explained below.

Changing the mode



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

The second hand points to 30 second and stops.

? Rotate the crown to change the mode.

• Turn the crown so that the mode hand points to the marker of the desired mode securely.



3 Push the crown in to position **0** to finish the procedure.

The watch changes indication according to the selected mode.

Indication in each mode (when the crown is in position 0)

TME (ordinary time) mode



Hand and indication		Content	
Hour, minute and second hands		Home time	
Date indication		Date (home time)	
A	Function hand	Day of week (home time)	
B	Dual time indication	Local time	
C	Mode hand	TME	

LLI (Light-Level Indicator) mode

Mode for checking the level of power generation amount.



Hand and indication		Content	
Hour, minute and second hands		Home time	
Date indication		Date (home time)	
A	Function hand	Power reserve level	
B	Dual time indication	Local time	
C	Mode hand	LLI	



UTC (Coordinated Universal Time) mode

Mode where the dual time indication always shows UTC.



Hand and indication		Content	
Hour, minute and second hands		Home time	
Date indication		Date (home time)	
A	Function hand	Day of week (home time)	
В	Dual time indication	UTC	
C	Mode hand	UTC	

Changing the mode 🕨

CHR (chronograph) mode

• For details of use, see page 56.



Hand and indication		Content	
Hour and minute		Hour and minute of home	
ha	nds	time	
Se	cond hand	Chronograph second	
Date indication		Date (home time)	
	r	1/20 chronograph second	
A	Function hand	(only when chronograph	
	Inania	stops)	
B Dual time		Chronograph hour and	
D	indication	minute	
C	Mode hand	CHR	

ALM (alarm) mode

• For details of use, see page 58.



Hand and indication		Content	
Hour, minute and second hands		Home time	
Date indication		Date (home time)	
A	Function hand	Day of week (home time)	
В	Dual time indication	Alarm time	
C	Mode hand	ALM	

SET (set) mode

Mode for setting time and calendar manually.



	Hand and indication	Content	
Hour, minute and second hands		Home time	
Date indication		Date (home time)	
A	Function hand	Day of week (home time)	
В	Dual time indication	Local time	
C	Mode hand	SET	

Checking the power reserve and power generation amount

For details of charging, see "Charging your watch" (page 62).



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Checking the power reserve



- 1 Change the mode to [TME] or [UTC] and push the crown in to position ①.
- 2 Press and release the upper right button B.

The function hand indicates the power reserve in levels (page **26**) and the second hand indicates the current time zone setting of the home time.

- The power reserve level is always shown in the [LLI] mode.
- **3** Press and release the upper right button (B) to finish the procedure.

The second hand returns to indicate the seconds.

• The hand returns automatically in 10 seconds without pressing the button.

Indication of power reserve in levels

Level	4	3	2	1	0	
Power reserve level scale	No Children	ALL ON OFF	A CONTRACTOR	A CONTRACTOR	T S C S S S S S S S S S S S S S S S S S	
Duration (approx.)	1.5 - 1 year	1 year - 10 months	10 - 4 months	4 months - 5 days	5 days or shorter	
Meaning	Power reserve is sufficient.	Power reserve i	is OK.	Power reserve charge is getting low. started.		
	OK for normal	use.	Charge immediately.			

CAUTION

- At the power reserve level "0", the second hand starts to move once every two seconds (insufficient charge warning function, page *64*). Some functions become unavailable while this function is activated. For details, see page *65*.
- The function hand points to "OFF" and does not indicate the level of power reserve when temperature of the watch is too high or too low. (non-chargeable state)
- Check it again at a location of suitable temperature.

Checking power generation amount (Light-Level Indicator)



1 Change the mode to [LLI] and push the crown in to position 0.

The function hand indicates the power reserve in levels (page **26**).

2 Press and release the upper right button **B**.

The second hand indicates power generation amount in levels (page **29**).

- Power generation amount is measured in 1-second interval and indicated in levels.
- 3 Press and release the upper right button (B) to finish the procedure.

The second hand returns to indicate the seconds.

• The hand returns automatically in 30 seconds without pressing the button.

Indication of power generation amount in levels

The level of power generation amount means power being generated by the solar cell represented in 7 levels (0 - 6).

Level	6	5	4	3	2	1	0
Level scale of power generation amount							
Meaning	Sufficient power generation for charging.		Charge in a brighter location where the level of power generation amount reaches "5" or "6".				

CAUTION

- Light level indication will change as brightness changes. In addition, the level may vary even under the same brightness due to the entry angle of light to the dial of the watch or other elements.
- The level may also vary in the same environment depending on difference of models.
- The light level indication of "6", indicates light being received is equivalent to a cloudy outdoors (about 10,000 lux illuminance) or a brighter location.
- Use the level of power generation amount as a general reference only.

Checking the reception result of the satellite signal

- 1 Change the mode to [TME] or [UTC] and push the crown in to position ①.
- **2** Press and release the lower right button **(A)**.

The second hand indicates the result of the last reception.

OK	Reception was successful.
NO	Reception failed.

• The indication shows the result of the last reception, regardless types of received information, or information of location or time.



3 Press and release the lower right button A to finish the procedure.

The second hand returns to indicate the seconds.

• The hand returns automatically in 10 seconds without pressing the button.

About the reception result

The previous reception result is stored for 6 days and "NO" is indicated after that.

Setting the world time

This watch can indicate the time around the world according to which of 39 time zones (offsets from UTC—Coordinated Universal Time) is chosen. You can set offsets from UTC through any of the two ways below.

Method	What to set		
Obtaining location information from satellite signal (page 40)	The time zone for the home time is set automatically and time and calendar are adjusted based on the chosen zone.		
Setting the time zone manually (page 42)	The time zones for the home time and local time are set manually.		

• Summer time (DST) information is not contained in the satellite signal. Adjust the setting manually before and after the summer time (DST) period (page *52*).

Checking the time zone setting for the home time



- 1 Change the mode to [TME] or [UTC] and push the crown in to position 0.
 - Proceed to the next step after the hands stop.
- 2 Press and release the upper right button B.

The second hand points the current time zone setting of the home time and the function hand indicates the power reserve in levels (page **24**).

- See "How to read indication of the world time setting" (page 35) and "Table of time zones and representative places" (page 36).
- 3 Press and release the upper right button (B) to finish the procedure.

The second hand returns to indicate the seconds.

• The hand returns automatically in 10 seconds without pressing the button.
Setting the world time

How to read indication of the world time setting

The watch has 39 time zone markers with several representative area names. A time zone is set by pointing the second hand at one of the markers.



In the illustration on the left, the second hand points to 26 seconds and time zone setting is "+10.5".

- Time zones are represented by offsets from UTC.
- Time zone markers and area names may differ from the illustration in some models.

Table of time zones and representative places

- · Countries or regions may change time zones for various reasons.
- The information of the time zones and its applicable areas is that as of January 2018.

Time zone	Second hand	Area name	Representative area	
0	0 sec.	LON	London	
+1	2 sec.	PAR	Paris	
+2	4 sec.	ATH	Athens	
+3	6 sec.	RUH	Riyadh	
+3.5	7 sec.	_	Tehran	
+4	8 sec.	DXB	Dubai	
+4.5	9 sec.	_	Kabul	
+5	10 sec.	КНІ	Karachi	
+5.5	12 sec.	DEL	Delhi	
+5.75	13 sec.	_	Kathmandu	
+6	14 sec.	DAC	Dhaka	

Time zone	Second hand	Area name	Representative area	
+6.5	15 sec.	_	Yangon	
+7	16 sec.	ВКК	Bangkok	
+8	18 sec.	BJS (HKG)	Beijing/Hong Kong	
+8.5	19 sec.	_	yongyang	
+8.75	20 sec.	_	Eucla	
+9	21 sec.	TYO	Tokyo	
+9.5	23 sec.	ADL	Adelaide	
+10	25 sec.	SYD	Sydney	
+10.5	26 sec.	 Lord Howe Island 		
+11	27 sec.	NOU Noumea		
+12	29 sec.	AKL Auckland		
+12.75	31 sec.	- Chatham Islands		
+13	32 sec.	TBU Nukuʻalofa		



Time zone	Second hand	Area name	Representative area	
+14	34 sec.	CXI	Kiritimati	
-12	36 sec.	-	Baker Island	
-11	38 sec.	MDY	Midway	
-10	40 sec.	HNL Honolulu		
-9.5	41 sec.	 Marquesas Islands 		
-9	42 sec.	ANC	Anchorage	
-8	44 sec.	LAX	Los Angeles	
-7	46 sec.	DEN	Denver	
-6	48 sec.	CHI Chicago		
-5	50 sec.	NYC	NYC New York	
-4	52 sec.	MAO	Manaus	
-3.5	53 sec.	— St. John's		
-3	54 sec.	RIO	Rio de Janeiro	

Time zone	Second hand	Area name	Representative area	
-2	56 sec.	FEN	Fernando de Noronha	
-1	58 sec.	PDL	Azores	

• The offsets in the table are based on the standard time.

• When choosing a time zone for a country or area that observes summer time (DST) during the summer period, first apply its time zone then activate the summer time (DST) setting (page **52**).

Obtaining location information from satellite signals

It is recommended to receive the satellite signals outdoors with the wide-open sky. For details, see "Information on satellite signal reception" (page **68**).

The time zone for the home time is set automatically by obtaining location information and time and calendar are consequently adjusted based on the chosen zone.

• It may take 30 seconds - 2 minutes to obtain location information.



- 1 Change the mode to [TME] or [UTC] and push the crown in to position ①.
- 2 Press and hold the upper right button for 2 seconds until the second hand points "RX-GPS".



• Release the button as the hands points "RX-GPS". Reception starts.

After finishing the reception, the second hand indicates the new setting and returns to indicate the seconds.

 To cancel the reception, press and hold any button until the second hand returns to indicate the seconds.

About obtaining location information

The time zone may not set appropriately when location information is obtained in a border of time zones, even if the information is correct.

- You can also execute time zone setting manually. (page 42)
- The information of the time zones and its applicable areas is that as of January 2018.

Setting the time zone manually



1 Change the mode to [TME] or [LLI] and pull the crown out to position 2.

The second hand indicates the current time zone setting of the home time.

- When the mode is **[UTC**], you can only change the time zone setting of the home time.
- In this time, you can also change the setting of summer time (DST) by pressing button (A. For details, see page 52.



2 Press and release the upper right button (B).

The second hand indicates the current time zone setting of the local time.

• Each time you press button (B), the minute hand of setting target slightly moves and the target (home time/local time) of time zone setting changes alternately.

3 Rotate the crown to choose a time zone. Time indication changes.

4 Push the crown in to position ① to finish the procedure.

The second hand returns to indicate the seconds.

Interchanging the home time and local time



- 1 Change the mode to [TME] or [LLI] and push the crown in to position 0.
- 2 Press and release both the lower right button (A) and upper right button (B) simultaneously.

A confirmation tone sounds and the home time and local time interchange.

• Date and day of week indication follows the new home time after the interchange.

Receiving time information

It is recommended to receive the satellite signals under the wide-open sky. For details, see "Information on satellite signal reception" (page **68**).

You can use the three types of reception below to receive time information. You can also check the result of the previous reception (success or fail). (page **31**)

Туре	Use	Time required (approx.)	
	Normal reception for time and calendar adjustment	3 - 30 seconds	
Leap second reception (page <i>48</i>)	Reception for the leap- second-setting adjustment	36 seconds - 13 minutes	
Automatic time recontion	Reception executed automatically when some conditions are fulfilled.	3 - 30 seconds	

• Location information is not obtained while receiving time information. Execute world time setting (page **33**) beforehand.

Time reception (time required: about 3 - 30 seconds)

Reception for time and calendar adjustment.

 It may take more time for reception when difference in time is large or calendar was set manually.



- 1 Change the mode to [TME] or [UTC] and push the crown in to position 0.
- 2 Press and hold the lower right button for 2 seconds until the second hand points "RX-TME".



 Release the button as the hands points "RX-TME". Reception starts. After finishing the reception, the second hand indicates the reception result (page 31) and returns to indicate the seconds.

- To cancel the reception, press and hold any button until the second hand returns to indicate the seconds.
- The time of the local time is also corrected automatically following its time zone setting.

When the time or calendar is still incorrect even after reception

Check the settings of world time (page **33**) and summer time (DST) (page **52**). If the time is still incorrect after that, execute leap second reception (page **48**). The leap second may be updated.

• Summer time (DST) information is not contained in the satellite signal.

Leap second reception (time required: about 36 seconds - 13 minutes)

Reception for the leap-second-setting adjustment.

• You can also execute leap second setting manually. (page 73)



- 1 Change the mode to [TME] or [UTC] and push the crown in to position 0.
- 2 Press and hold the lower right button A for 7 seconds or more.
 - Release the button after the second hand points "RX-TME" and turns fully around to point "RX-TME" again. Reception starts.



After finishing the reception, the second hand indicates the reception result (page 31) and returns to indicate the seconds.

- To cancel the reception, press and hold any button until the second hand returns to indicate the seconds.
- The time of the local time is also corrected automatically following its time zone setting.

When the time or calendar is still incorrect even after reception

Check the settings of world time (page 33) and summer time (DST) (page 52).

• Summer time (DST) information is not contained in the satellite signal.

Automatic time reception

The watch starts time reception automatically when the conditions belows are fulfilled:

- The watch has not received satellite signals for 6 or more days.
- The watch dial is being exposed to strong direct sunlight for 20 seconds or more.
- The crown is in position 🗍 and the mode is [TME] or [UTC]
- The time of the home time is between 6:00AM and 6:00PM.
- The second hand does not move in two-second interval (page 64).

To cease to use automatic time reception

Set the mode to other than [TME] and [UTC] to use the watch.

About automatic time reception

Automatic time reception may be delayed in the following cases:

- The second hand started to move once every two seconds (insufficient charge warning) after the last time reception:
 - Automatic time reception is executed 6 days or more after the insufficient charge warning stopped by charging the watch.
- Time zone setting of the home time was changed: Automatic time reception is executed 6 days or more after the moment of the changing of the setting.

Setting summer time (DST)

Summer time (Daylight Saving Time: DST) is a system adopted in some countries/ areas to gain an extra daylight during summer.

This watch can display summer time (DST) or standard time according to the time zone selected.

- You can change settings of summer time (DST)/standard time indication separately for the home time and the local time.
- Summer time (DST) information is not contained in the satellite signal. Adjust
- The setting manually before and after the summer time (DST) period.
- The summer time (DST) period varies depending on the country or area.
- The summer time (DST) rules may change depending on the country or area.



1 Change the mode to [TME] or [LLI] and pull the crown out to position 2.

The function indication indicates summer time (DST) setting of the home time (**ON/OFF**) (page **54**).

• When the mode is **[UTC**], you can only change summer time (DST) setting of the home time.





2 Press and release the lower right button (A).



- Each time you press the button, the summer time (DST)
- setting (ON/OFF) changes alternately.



- **3** Press and release the upper right button **B**.
 - The function indication indicates summer time (DST) setting of the local time (**ON/OFF**).
 - Each time you press button (B), the minute hand of setting target slightly moves and the target (home time/local time) of time zone setting changes alternately.
- 4 Press and release the lower right button (A) to change summer time (DST) setting of the local time.
- **5** Push the crown in to position **1** to finish the procedure.

The second hand returns to indicate the seconds.

Using the chronograph

The chronograph on this watch can measure up to 23 hours 59 minutes 59.95 seconds in 1/20 second increments.



1 Change the mode to [CHR] and push the crown in to position 0.

The chronograph hands move to indicate 0.00 second.

- 2 Start measurement.
 - See the next page for the method of measurement.
 - Pulling out the crown will stop and reset the chronograph.

3 Change the mode to [TME] and push the crown in to position 1 to finish the procedure.

The second hand returns to indicate the seconds.



- After 24 hours of continuous chronograph operation, the chronograph automatically stops and is reset.
- The hour hand, minute hand and date indication indicate the time of the home time.

Using alarm

The alarm time is based on the home time.

- The alarm is set in a 24-hour format.
- Take care when changing the time zone setting of the home time after setting alarm.

Checking the alarm setting



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1 Change the mode to [ALM] and push the crown in to position 0.

The dual time indication indicates the current alarm time setting.



2 Press and release the lower right button (A).

The second hand indicates the current alarm setting (**ALM ON/OFF**).

Using alarm 🕨





- Alarm setting indication (**ALM ON/OFF**) stops in 10 seconds and returns to indicate the seconds automatically. Pressing button (A) also ends the indication.
- \bullet Press and hold button B for 2 seconds or more to monitor the alarm sound.
- 3 Change the mode to [TME] and push the crown in to position 1 to finish the procedure.

The second hand returns to indicate the seconds.

Changing alarm setting



1 Change the mode to [ALM] and pull the crown out to position 2.

The dual time indication indicates the current alarm time setting and the second hand shows the current alarm setting (**ALM ON/OFF**).

• The hour and minute hands may automatically move to provide a clear view of the alarm time setting.



2 Rotate the crown to set the alarm time.

• If you rotate the crown quickly a few times, the hand will move continuously. To stop the rapid movement, rotate the crown in either direction.



- 3 Press and release the lower right button A to set the alarm setting (ALM ON/OFF).
 - \bullet Each time you press button (Å), the setting alternates between ALM ON and ALM OFF.
- 4 Change the mode to [TME] and push the crown in to position ① to finish the procedure.

The second hand returns to indicate the seconds.

Charging your watch

This watch has a rechargeable cell which is charged by exposing the dial to light, such as direct sunlight or fluorescent lamps (refer to page **66** for charging guidelines). For optimal performance, be sure to:

- Put the watch in a location where the dial is exposed to bright light such as by the window even when it is not used.
- Expose its dial to direct sunlight for 5 or 6 hours at least every half-a-month.
- Avoid leaving it in dark places for long periods of time.



CAUTION

- This watch contains a large-capacity rechargeable cell for performing powerconsuming satellite signal reception. This large capacity cell takes more time to charge than those found in other Eco-Drive watches.
- If the surrounding temperature falls below 0°C (32°F) or exceeds 40°C (104°F), the "**Charge suspension temperature detection function**" will activate and charging will not be possible.
- Do not charge the watch at a high temperature (about 60 $^{\rm o}{\rm C}$ (140 $^{\rm o}{\rm F})$ or higher) as doing so may cause movement malfunction.
- If the watch is obscured from light by long sleeves frequently, supplemental charging may be needed to ensure continual operation.
- The watch stops charging automatically after finishing (overcharging prevention function). The function prevents damage to performance of the watch and rechargeable cell due to overcharging.

When the watch reaches a low charge state (insufficient charge warning function)

When the power reserve becomes low, the second hand moves once every two seconds. This is the insufficient charge warning function. Be sure to fully charge your watch immediately as outlined on page **66**.

• When the watch is sufficiently charged, the second hand will move normally.



 If you do not charge the watch for 5 days or longer after the insufficient charge warning movement has begun, the watch will be depleted of all power and stop.

CAUTION

• If you do not charge the watch for 30 days after it has stopped, recharging will not be possible (over discharge detection function).

Consult an authorized service center if no hands start to move even after charging

a stopped watch for one day or more exposing to direct sunlight.

During the insufficient charge warning state

The time and date is indicated correctly.

• In any mode other than [UTC], indication is the same as that in the [TME] mode.

Operations below are available:

- Checking power generation amount
- · Setting the world time
- · Adjusting the time and calendar manually
- All Reset

You cannot execute operations other than above such as obtainment of location information or reception of satellite signals.

Charging time by environment

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

	Illuminance (Ix)	Charging time (approx.)			
Environment		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	4 minutes	5.5 hours	50 hours	
Outdoors (cloudy)	10 000	25 minutes	40 hours	270 hours	
20 cm (8 inches) away from a fluorescent lamp (30W)	3 000	1.5 hours	150 hours	-	
Interior lighting	500	8 hours	-	-	

• Exposing to direct sunlight is recommended to charge your watch. A fluorescent lamp or interior lighting does not have sufficient illumination to charge the rechargeable cell efficiently.

Power save function

The hour, minute and second hands stop automatically to save power when the dial of the watch has not been exposed to light for a long time.

- The watch is still running internally to keep the time and calendar correctly even after the power save function has activated.
- The alarm will not sound while the power save function is activated.
- The power save function is not activated when the position of the crown is]] or [2].
- The power save status ends and the hands return to indicate the current time as the watch is operated or the dial is exposed to light and power generation starts.

Duration without additional charging after charging the watch fully

About 1 year and 6 month in normal use.

- When using functions in the frequency below: time reception every 6 days, chronograph 1 hour a day and alarm once a day.
- The watch will keep running internally for up to 5 years with the power save function.

Information on satellite signal reception

This watch receives time information from satellites to indicate the time and calendar.

It also obtains location information from them to indicate time appropriate in the area where it is actually used.

For receiving the satellite signal

Satellite signal reception is power-consuming. Be sure your watch has a sufficient charge before executing reception.

- The average monthly accuracy of this watch is ±5 seconds even if a satellite signal is not received.
- Use the function to see the result of the previous reception (success or fail) (page **31**) effectively to try to execute reception in best frequency.

Cautions regarding receiving the satellite signal

Do not perform signal reception while operating a vehicle as doing so is extremely dangerous.

- If the second hand is moving once every two seconds (insufficient charge warning function), you cannot perform satellite signal reception. Charge the watch sufficiently before attempting signal reception.
- Even when this watch receives the signal successfully, the accuracy of the displayed time will be dependent on the reception environment and internal processing.
- The automatic correction feature of this watch is supported until 28/2/2100.
- Summer time (DST) information is not contained in the satellite signal. Adjust the setting manually before and after the summer time (DST) period.(page 52)

When receiving the satellite signal

As shown in the picture below, make sure you are in an area with few surrounding trees, buildings, or other objects which may obstruct the satellite signal. Face the dial towards the sky and perform signal reception.

- For successful reception there should be a clear view of the sky as depicted in the illustration when attempting to receive the satellite signal.
- Reception may fail due to the positions of satellites when you try to receive their signals.


Receiving signals indoors near a window

Place the watch near a window with a wide view of the sky and orient the dial in an obliquely upward direction to the sky.

 Signal reception from some satellites is required for obtaining location information. It is possible that location information cannot be obtained while time information can be received in the same place.

Outdoor signal reception is recommended for obtaining location information.

• It may be difficult to receive satellite signals through special types of window glass.



Poor reception areas

It may be difficult to receive the satellite signal under certain environmental conditions or in certain areas.

Areas with obstructions above the watch	Nearby objects which emit magnetism or electrical interference
 Indoors or underground Areas surrounded by tall buildings or trees When the weather is cloudy or rainy, or during a thunderstorm etc. 	 High-voltage electric cables, railway lines / overhead cables, airports, and transmission facilities. Electrical appliances and OA equipment Mobile telephones in the process of calling/ transmitting Mobile telephone base stations etc.

Checking and adjusting leap second setting

This watch displays the time by applying the leap second to the International Atomic Time information received from satellites.

The leap second may be applied once a few years and the leap second setting on the watch is automatically adjusted when it is applied.

Check and adjust the leap second setting manually following the steps below when it is not adjusted automatically.

For details on leap seconds, you can find a list of leap seconds at the website of IERS (INTERNATIONAL EARTH ROTATION & REFERENCE SYSTEMS SERVICE):

http://hpiers.obspm.fr/eop-pc/earthor/utc/TAI-UTC_tab.html



- Change the mode to [SET] and pull the crown out to position 2.
 The second hand stops.
- 2 Press and hold upper right button (B) for 2 seconds or more.

Using the "0:00:00" position as the starting point, the minute and second hands indicate the leap second setting.





- **3** Turn the crown to adjust the setting if the leap second is not correct.
 - Adjustable range is from 0 to -90 seconds.
- 4 Change the mode to [TME] and push the crown in to position ① to finish the procedure.

The second hand returns to indicate the seconds.

Checking and adjusting the rollover number setting

In order for this watch to correctly process the week information* received from the satellite, a rollover number for each time period is set. The rollover numbers are normally updated automatically.

If the rollover number setting is incorrect, the time and date may not be indicated accurately. Check the rollover number setting and adjust it if it is incorrect.

* Called "Week number". Weeks are represented with numbers from 0 to 1023 (approx. 20-year cycle).



Table of rollover number and time period

Time period (Coordinated Universal Time, GMT)	Rollover number
22/8/1999 (Sun) 0:00 -	0
7/4/2019 (Sun) 0:00 -	1
21/11/2038 (Sun) 0:00 -	2
7/7/2058 (Sun) 0:00 -	3
20/2/2078 (Sun) 0:00 -	4
6/10/2097 (Sun) 0:00 - 22/5/2117 (Sat) 23:59	5



- Change the mode to [SET] and pull the crown out to position [2]. The second hand stops.
- 2 Press and hold upper right button (B) for 2 seconds or more.

The second and minute hands indicate the leap year setting.

3 Press and hold the upper right button (B) for 7 seconds or more.

The second hand indicates the current rollover number setting.



Indication of the rollover number



4 Turn the crown to adjust the setting if it is not correct.

- Adjustable range is from "0" to "5".
- See "Table of rollover number and time period" (page 77) and set the correct rollover number.

Change the mode to [TME] and push the crown in to position ① to finish the procedure.

The second hand returns to indicate the seconds.

Adjusting the time and calendar manually

You can set the time and calendar of the home time manually.

- Execute world time setting (page 33) beforehand.
- The time of the local time is corrected automatically following its time zone setting after setting the home time manually.



1 Change the mode to [SET] and pull the crown out to position 2.

The second hand stops.

2 Press and hold the lower right button (A) for 2 seconds or more.

The minute hand slightly moves and time and calendar become adjustable.



- **3** Press and release the lower right button (A) repeatedly to change the hand/indication to be corrected.
 - Each time you press button (A), the target changes as follows:
 - Hour and minute \rightarrow date \rightarrow year/month \rightarrow day of week \rightarrow (back to the top)
 - The hands and indications slightly moves when they become adjustable.



4 Rotate the crown to adjust the hand/indication.

- Hour, minute and date move in conjunction with one another. Be sure to set the proper AM or PM time. Change of date indication shows it just became AM.
- Year and month are indicated with the second hand. Set them referring to page **84**.
- Date indication changes to the next as the function hand rotates 5 times.
- When you rotate the crown quickly a few times, the hand/ indication will move continuously. To stop the rapid movement, rotate the crown in either direction.
- 5 Repeat steps 3 and 4.



6 Push the crown in to position ① in accordance with a reliable time source.

The second hand starts moving from 0 second.

7 Change the mode to [TME] to finish the procedure.

Month and year indications

Set the year and month with the position of the second hand.

"Month" corresponds to one of the 12 zones shown in the figure below. Each number means month.



"Year" corresponds to the years since leap year and indicated with markers in the zone of each month.



Adjusting the time and calendar manually

	Actual year		Years since leap year	Second hand position		
2016	2020	2024	2028	2032	0 (Leap year)	Hour marker
2017	2021	2025	2029	2033	1	1st min. marker
2018	2022	2026	2030	2034	2	2nd min. marker
2019	2023	2027	2031	2035	3	3rd min. marker



Examples: Position of the second hand when setting July 2018

You can find that the years since leap year of 2018 is "2" from the table and the second hand must be set to the 2nd minute marker of July zone.

Troubleshooting

Checking and correcting the reference position

If the time or calender is not shown correctly even after proper reception of the time signal, check whether the reference position is correct.

• If the hands and indication do not reflect the correct reference position, the time and calendar will not be indicated accurately even if the signal is received.

What is the reference position?

The base position of all hands and calendar to properly indicate the various functions of this watch.

- Hour, minute and second hands: 0 hour 00 minute 0 second
- Date indication: midway between "31" and "1"
- Function hand: "0.0" (just upright)
- Dual time indication: 0 hour 00 minute





1 Change the mode to [CHR] and pull the crown out to position 2.

The second hand, function hand and dual time indication point to 0 position and stop.

2 Press and hold the lower right button (A).

The hands and date start to move to the current reference positions stored in memory.

- · Release the button as the hands start to move.
- Some hands show special movement to adjust their position.
- **3** Check the reference positions of them referring to the illustration of the previous pages.

	Push the crown in to position ① to finish the procedure. Set the mode to [TME] after that.
Wrong	Proceed to step 4 in the next page and correct the reference position.



4 Press and release the lower right button (A).

The function hand slightly moves and the hand and date indication become adjustable.

- 5 Press and release the lower right button (A) repeatedly to change the hand/indication to be corrected.
 - Each time you press the button, the target changes as follows:

Function hand/date indication \rightarrow Dual time indication

- \rightarrow Hour and minute hands \rightarrow Second hand \rightarrow (Back to the top)
- The hands slightly moves when selected to show they become adjustable.



6 Rotate the crown to adjust the hand/indication.

- When you rotate the crown quickly a few times, the hand/ indication will move continuously. To stop the rapid movement, rotate the crown in either direction.
- 7 Repeat steps 5 and 6.
- 8 Push the crown in to position 0.
- 9 Change the mode to [TME] to finish the procedure.

Symptom and Remedies

Symptom	Remedies	Page
Problems with sate	ellite signal reception	
	Check whether the mode is [TME] or [UTC].	-
	When the second hand moves once every two seconds, the watch cannot receive the signals. Charge the watch.	65
Reception is unsuccessful.	Avoiding places where the satellite signal may be obstructed and objects which emit noise, face the dial towards the sky and start reception.	72
	Remove the watch from your wrist and try again.	-
	If the remedies above do not solve the problems, consult an authorized service center.	-

Troubleshooting 🕨

Symptom	Remedies	Page
Problems with sate	ellite signal reception (continued)	
Automatic time reception does not work correctly.	Check whether the mode is [TME] or [UTC].	50
	Check the world time setting.	33
The correct time and calendar are not indicated after successful reception.	Check the summer time (DST) setting.	52
	Execute leap second reception if the time and calendar is still incorrect even after executing time reception.	48
	Check and adjust the settings of leap second and rollover number.	73, 76
	Check and correct the reference position.	86



Symptom	Remedies	Page
Movement of a hand s	eems strange	
Indication is incorrect.	Check the mode.	17
The power reserve is not indicated.	Charging may be stopped (non-chargeable state). Check it again at a location of suitable temperature.	27
The second hand moves once every two seconds.	Charge the watch.	62
The second hand does not move.	Push the crown in to position $\boxed{0}$ in any mode other than [CHR].	-
No hands move.	Charge the watch in direct sunlight until the second hand moves normally.	66
ino nanus move.	If the remedies above do not solve the problems, consult an authorized service center.	-

Troubleshooting 🕨

Symptom	Remedies	Page
Time/calendar is abno	ormal.	
	Check the world time setting.	33
	Check the summer time (DST) setting.	52
Time/calendar is incorrect.	Receive the satellite signal to adjust the time and calendar.	45
	Check and correct the reference position.	86
	Adjust the time and calendar manually.	80
Time is incorrect though	Check the summer time (DST) setting.	52
the world time setting is correct and reception	Check and correct the leap second setting.	73
of the satellite signal succeeded.	Check and correct the reference position.	86



► Troubleshooting

Symptom	Remedies	Page
Charging and other	r problems	
	If the surrounding temperature falls below 0°C (32°F) or exceeds 40°C (104°F), the "Charge suspension temperature detection function" will activate and charging will not be possible.	62
The watch does not work even though it is charged.	If the "Over discharge detection function" is activated, charging is not possible. If the watch does not work after exposing the dial to direct sunlight for more than one day, it is possible that the rechargeable cell has over discharged. Consult an authorized service center.	64

Troubleshooting 🕨

Symptom	Remedies	Page
Charging and other	r problems (continued)	
The watch stops immediately after it is charged.	Charge the watch for 2 to 3 days in direct sunlight. If the second hand starts moving once every two seconds the watch is being charged correctly. Continue charging even when the second hand starts moving normally. If no change can be seen, consult an authorized service center.	-
Do not want to receive satellite signals.	Change to any mode other than [TME] and [UTC]. Automatic time reception is ceased.	51



Resetting the watch — All Reset

When the watch does not work properly, you can reset all the settings. If the power reserve is insufficient, charge the watch first.

Be sure to perform the following operations after All Reset.

1. Correct the reference positions.

After All Reset, the watch is in the reference position adjustment mode. Refer to step 4 and after on page **88**.

2 Set the world time.

Obtaining location information: See page **33**. When you set it manually, execute also time and calendar setting (page **45** or **80**).



- 1 Change the mode to [CHR] and pull the crown out to position 2.
- 2 Press and hold buttons (A) and (B) at the same time for 4 seconds or more and release them.

Alarm sounds as the buttons are released and the hands move to their current reference position.

The setting values after All Reset		
Calendar	January of leap year (5-second position)	
World time	Time zone (offset) 0 (LON), London	
Reception result	NO	
Summer time (DST)	OFF at all time zones	
Alarm setting	OFF	
Alarm time	0:00AM	
Leap seconds	No change after All Reset	
Rollover number		

Eco-Drive watch handling precautions

<Always Make Sure to Recharge Frequently>

- For optimal performance, your watch should remain fully charged.
- Long sleeves may inhibit light transmission to your watch. This may result in your watch loosing charge. In these cases supplemental charging may be necessary.
- When you take off the watch, place it in a bright location to ensure optimal performance.

▲ 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 (20 inches) 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 periodical 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 every 2-3 years for proper operation and condition check.

MARNING 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.

MARNING 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 conventional watch 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/or 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 "lbar" is roughly equal to 1 atmosphere.)
- WATER RESIST(ANT) ××bar may also be indicated as W.R.××bar.

	Indication	
Name	Dial or Case back	Specification
Non water-resistant		Non water-resistant
Everyday use water-resistant watch	WATER RESIST	Water-resistant to 3 atmospheres
TT	W. R. 5 bar	Water-resistant to 5 atmospheres
Upgraded everyday use water- resistant watch	W. R. 10/20 bar	Water-resistant to 10 or 20 atmospheres

Water resistance 🕨

	Water-related use						
					Operate the		
Minor exposure to water (washing face, rain, etc.)	Swimming and general washing work	Skin diving, marine sports	Scuba diving using an air tank	Saturation diving using helium gas	crown or button when the watch is wet		
NO	NO	NO	NO	NO	NO		
ОК	NO	NO	NO	NO	NO		
ОК	ОК	NO	NO	NO	NO		
ОК	ОК	ОК	NO	NO	NO		

Water resistance

- 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.
- 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.

Precautionary items and usage limitations

A 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.

A 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.
- 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 bands and rubber (urethane) bands will deteriorate over time due to perspiration dirt. Because of the natural materials, leather band will be worn, deformed, and discolored over time. It is recommended 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.
- Do not stain a leather band with substances containing volatile materials, bleach, alcohol (including cosmetics). Discoloration and premature aging may be occurred. Ultraviolet light such as direct sunlight may cause discoloration or deformation.
- 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.

A CAUTION When Wearing Your Watch (continued)

- · 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.

<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.

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. Corrosion of the metal
 or accumulated foreign matter may result in black residue coming from the bracelet when
 exposed to moisture or perspiration. Be sure to keep your watch clean at all times.
- Be sure to periodically clean the bracelet and case of your watch to remove accumulated dirt and foreign matter. In rare circumstances, accumulated dirt, foreign matter may cause irritation with the skin. If you notice this, discontinue wearing the watch and consult your physician.
- Be sure to periodically clean foreign matter and accumulated materials from the metal band, synthetic rubber strap (polyurethane) and/or metal case using a soft brush and mild soap. Be careful not allow moisture on the case if your watch is not water resistant.
- 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 metallic, plastic or synthetic rubber (polyurethane) band, clean it with soap and a soft toothbrush. Be sure to thoroughly rinse the band after cleaning to remove any soap residue.
- 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 will appear bright at first and then diminish 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 paint.
- The paint may not glow and/or may dissipate quickly if exposure to light was not sufficient.

Specifications

Model	F950	Туре	Analog solar-powered watch		
Timekeeping accuracy (without reception)	Average monthly accuracy: ± 5 seconds when worn at normal operating temperatures between $+5^{\circ}C$ ($41^{\circ}F$) and $+35^{\circ}C$ ($95^{\circ}F$)				
Operating temperature range	-10°C (14°F) to +60°C (140°F)				
Display functions	Calendar	ours, minutes : Date, day o e: Hour, min	week • Power generation		
Maximum run time from full charge	 When fully charged, the watch runs without additional charging in normal use: Approximately 1.5 years (When saving power: Approximately 5 years) Power reserve upon insufficient charge warning function: Approximately 5 days 				
Battery	Rechargeable cell (lithium button cell), 1pc.				

Specifications

Specifications and contents of this booklet are subject to change without prior notice.

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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.CC4* Cal.F950 CTZ-B8199①