

CITIZEN®

INSTRUCTION MANUAL



Eco-Drive®



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.

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

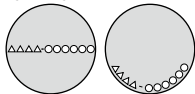
Some models may be equipped with external features (calculation scale, tachymeter, etc.). Visual guides for operation of such external features can also be found on the website.

To check the movement number

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

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

Engraving position example






The engraving position may differ depending on watch model.

Safety precautions (IMPORTANT)

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



We encourage you to read the entire booklet (especially, pages 76 to 85) 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
 CAUTION	Can or will cause minor or moderate injury or damage

Safety precautions (IMPORTANT)

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

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

Before using this watch

After unpacking, the following must be done before using the watch:

◆ **Checking the power reserve →Page 19**

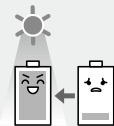
Check the charge level of the watch.

◆ **Setting the World Time →Page 22**

Select the city for which you want to indicate the time and date.

◆ **Checking the time signal reception →Page 57**

Check the result of the time signal reception.



This watch has a rechargeable cell which is charged by exposing the dial to light.

Expose the dial to light regularly to charge the watch.
For details of charging, see pages 12 to 21.

◆ **Protective Stickers**

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

◆ **Band adjustment**

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





Before using this watch

◆ How to use a specially designed crown/push button

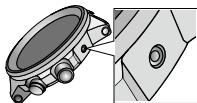
Some models are equipped with a specially designed crown and/or push button to prevent accidental operation. Please refer to the following chart for use.

Screw down crown and screw down push button

Unlock the crown prior to operate your watch.

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

Recessed buttons



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

Table of contents

Features	10
Component identification	11
Charging your watch.....	12
Setting the World Time	22
Setting Summer Time (SMT)	31
Setting the Alarm Time	43
Notes on the time signal reception	48
Checking the time signal reception.....	57
Receiving the time signal manually (On demand reception)	59
Adjusting the time/calendar manually	61
Checking and correcting the current reference position	66

Troubleshooting	70
Eco-Drive (solar powered) watch handling precautions	76
Water resistance	78
Precautionary items and usage limitations	80
Specifications.....	86

Features

"Radio controlled watch"

Receives a time signal from one of the five signal stations located in four regions and automatically adjusts the time and calendar.



"Eco-Drive"

No need for periodical changing of rechargeable cells. The watch is charged by light.



"Perpetual calendar"

No need for date correction at the end of each month.

The leap year is also updated automatically.



"World Time"

Easy to see the time and calendar of cities all over the world.



"Dual time"

Times of two time zones can be shown at the same time.

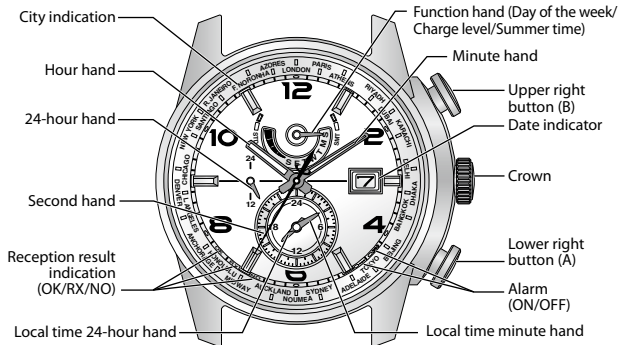


"Alarm"

An alarm sounds when the set time is reached.

* "Eco-Drive" is Citizen original technologies.

Component identification



* The illustrations in this instruction manual may differ from the actual appearance of your watch.

* A solar cell is placed under the dial.

Charging your watch

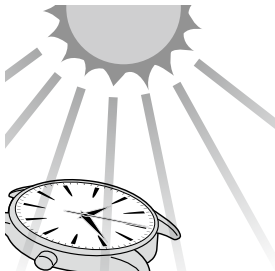
This watch has a rechargeable cell which is charged by exposing the dial to light, such as direct sunlight or fluorescent lamps.

After taking off the watch, put it in a location where the dial is exposed to bright light, such as by a window.

The watch can be charged effectively when the dial is exposed to sunlight as shown in the figure.

For optimal performance, be sure to:

- Charge the watch by exposing it to direct sunlight for five to six hours at least once a month.
- Avoid leaving the watch in a dark place for long periods of time.



Charging your watch

- Set the watch to the Manual Power Save mode when not using for a long time.
→ Page 17
- If the watch is obscured from light by long sleeves frequently, supplemental charging may be needed to ensure continual operation.
- Do not charge the watch at high temperature (about 60°C/140°F or higher).

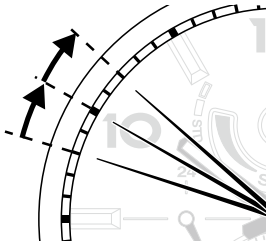
Charging your watch

◆ 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.

- When the watch is sufficiently charged, the second hand will move normally.
- If you do not charge the watch for 2 days or longer after the insufficient charge warning movement has begun, the watch will be depleted of all power and stop.

The time and date are correctly shown even when the watch is in the two-second interval movement. However, watch settings cannot be done. Also, an alarm operation is not available.



◆ Charging time by environment

Below are the approximate times required for charging when exposing the watch dial to light continuously. This table is for general reference only and does not represent exact charging times.

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	5 minutes	40 minutes	30 hours
Outdoors (cloudy)	10,000	11 minutes	1 hour	40 hours
20 cm (7-7/8 inches) from a fluorescent lamp (30W)	3,000	40 minutes	2.5 hours	130 hours
Interior lighting	500	4 hours	14 hours	920 hours

Maximum run time from full charge: Approx. 6 months (in normal operation), approx. 8 months (with power save feature)

Charging your watch

◆ Power save feature

When the watch is not exposed to light for 30 minutes or longer, such as when you set the watch in a dark place, the second hand automatically stops to save the power.

However, the watch continues to work internally.

- When the crown is in position 1 or 2, the power save feature will not activate.
- To operate the power save feature manually, set the watch to the manual power save mode. → Page 17

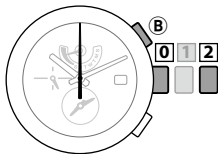
◆ To cancel the power save feature

The power save feature is cancelled in the following conditions and the second hand moves to the current time position:

- The watch dial is exposed to light to start charging
- The crown is pulled or any button is operated

◆ Manual power save feature

The manual power save feature is used to reduce the power consumption with manual operation.



1. Pull the crown out to position 2.

The hour and minute hands of the Local time move to indicate the alarm time.

2. Press and hold the upper right button B for two or more seconds.

The second hand moves to the 0 second position and the entire hands stop and the manual power save operation starts.

- Even though all the hands stop at the manual power save operation, the watch operation continues within the watch memory.
- The watch does not receive a radio signal automatically at the manual power save operation.

Charging your watch

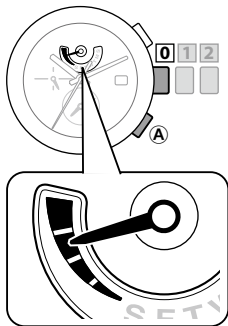
◆ To cancel the manual power save feature

1. Ensure that the crown is in position .

The manual power save feature is cancelled and the hands move to indicate the current time.

◆ Checking the power reserve

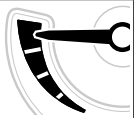



Checking the current power reserve.



1. Ensure that the crown is in position **0** .
2. Press and release the lower right button **A** .
The function hand shows the power reserve level.
 - For details of the power reserve level indication, refer to the next page.
3. Press and release the lower right button **A** to finish the check procedure.
 - Normal operation will resume if the button is not pressed for approx. 10 seconds.

Charging your watch

The power reserve level

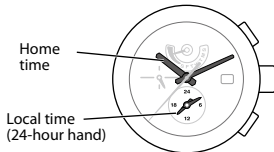
Level	3	2	1	0
Power reserve level				
Approximate duration of operation at each level	Approx. 180 to 130 days	Approx. 130 to 30 days	Approx. 30 to 2 days	Approx. 2 days
	Power reserve is sufficient for all features and functions. Optimal performance is achieved at this level.	Power reserve is sufficient for all operations at this level.	Power reserve is getting low. The watch should be fully charged to ensure optimal performance.	Power reserve is not sufficient for normal operation. The watch must be fully charged.
The watch must be charged immediately.				

- When the power reserve level is 1 or 0, the function hand shows the power reserve level.
- When the power reserve level is 0, the time and date are correctly shown. However watch setting and alarm operation is not available.

Setting the World Time

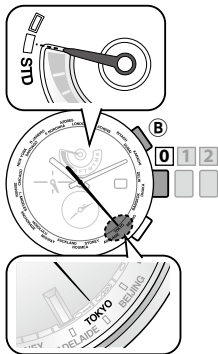
The watch can indicate the time and date of any of the 26 cities in the world you choose.

- When using the watch in an area not listed in the table below, select and set the city with the same time difference.
- This watch can indicate 2 different times (home time and Local time) at the same time. Home time is the main time indication (time where you live). Local time is the time of other location than the home time.



Local time is shown by the 24-hour hand.
Keep this in mind when checking.

◆ Checking the Home time / Local time

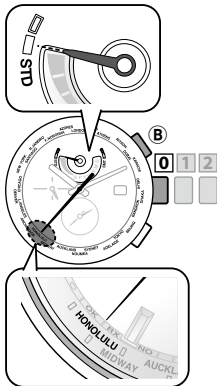


1. Ensure that the crown is in position **0**.
2. Press and release the upper right button **B**.

The second hand indicates the current city settings of the home time and the function hand indicates the summer time information.

- Setting Summer time → Page 31
- Second time zone checking continued on the next page.

Setting the World Time



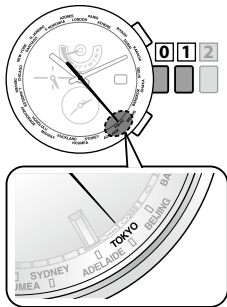
3. Press and release the upper right button (B) .

The second hand indicates the current city settings of the second time zone and the function hand indicates the summer time information.

The second hand indication changes every time the upper right button (B) is pressed:

- ① Home time city → ② Local time city →
- ③ Second hand for normal time keeping operation → (back to ①)
- Normal operation will resume if the button is not pressed for approx. 10 seconds.

◆ Setting the home time / Local time



1. Pull the crown out to position 1 .

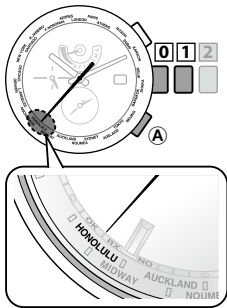
The second hand indicates the current city settings of the home time and the function hand indicates the summer time information.

2. Rotate the crown to select the city for which you want to indicate the time and date.

Select the home time city

- Move the second hand to select the city by referring to "second hand position" in the city indication table.
- continued on page 26

Setting the World Time



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

The second hand indicates the current city settings of the Local time and the function hand indicates the summer time information.

- The home time city and the Local time city switches every time the lower right button (A) is pressed.

4. Rotate the crown to select the city for which you want to indicate the time and date.

Select the Local time city

5. Push the crown in to position 0 to finish the setting.

◆ City indication table

Abbreviation	City indication or second hand position			Time difference	Signal from...
LON	*	LONDON	0 sec.	0	Germany
PAR	*	PARIS	2 sec.	+1	
ATH	*	ATHENS	4 sec.	+2	
RUH		RIYADH	7 sec.	+3	
DXB		DUBAI	9 sec.	+4	
KHI		KARACHI	11 sec.	+5	China
DEL		DELHI	14 sec.	+5.5	
DAC		DHAKA	16 sec.	+6	
BKK		BANGKOK	18 sec.	+7	
BJS/HKG		BEIJING/HONGKONG	21 sec.	+8	

* See note on page 29

Setting the World Time

Abbreviation	City indication or second hand position		Time difference	Signal from...
TYO	TOKYO	23 sec.	+9	Japan
ADL	ADELAIDE	25 sec.	+9.5	
SYD	SYDNEY	28 sec.	+10	
NOU	NOUMEA	30 sec.	+11	
AKL	AUCKLAND	32 sec.	+12	
MDY	MIDWAY ISLANDS	35 sec.	-11	USA
HNL	HONOLULU	37 sec.	-10	
ANC	** ANCHORAGE	39 sec.	-9	
LAX	** LOS ANGELES	42 sec.	-8	
DEN	** DENVER	44 sec.	-7	
CHI	** CHICAGO	46 sec.	-6	
NYC	** NEW YORK	49 sec.	-5	

* See note on page 29

Setting the World Time

Abbreviation	City indication or second hand position		Time difference	Signal from...
SCL	SANTIAGO	51 sec.	-4	USA
RIO	RIO DE JANEIRO	53 sec.	-3	
FEN	FERNANDO DE NORONHA	56 sec.	-2	Germany
PDL	* AZORES	58 sec.	-1	

- The city indications displayed on the watch may be different, depending on the model.
- For a city indicated by */**, the summer time indication and the standard time indication are linked together. See page 42 for the details.
- The time difference in the table above is based on UTC.
- The time difference may change depending on the country or area.

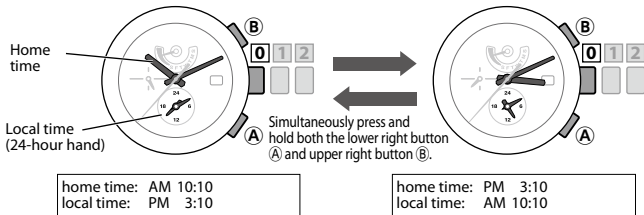
Setting the World Time

◆ Function for switching the home time and the local time

The time and the calendar indications can be switched between the home time and the local time.

1. Ensure that the crown is in position **0**.
2. Simultaneously press and release both the lower right button **A** and the upper right button **B**.

A confirmation sound operates and the home time and the local time are exchanged.



Setting Summer Time (SMT)

◆ Setting Summer Time (SMT)

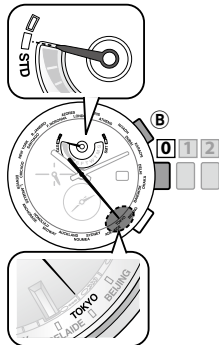
Summer Time is a system adopted in some countries/areas to gain an extra hour of daylight during summer by advancing clocks by one hour. In an area where the summer time is in effect, the time signal contains a summer time check signal. This watch automatically updates the SMT / STD time setting when receiving the summer time information in the radio signal.

- The summer time setting can be manually set to OFF if you live in an area that does not observe summer time. See pages 38 to 41
- The summer time can be manually set to ON if you live outside the radio signal receiving area. See pages 38 to 41

- The summer time rules may change depending on the country or area.
- The summer time period varies based on country or area.

Setting Summer Time (SMT)

◆ Checking the summer time setting



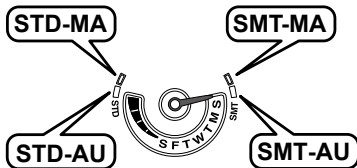
1. Ensure that the crown is in position **0** .
2. Press and release the upper right button **B** .
The second hand indicates the current city settings of the home time and the function hand indicates the summer time information.
 - Check the setting referring to the table on page 34.

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

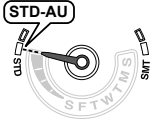

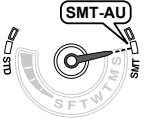
The second hand indicates the current city settings of the local time and the function hand indicates the summer time information.

- Normal operation will resume if the button is not pressed for approx. 10 seconds.

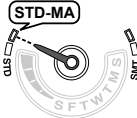
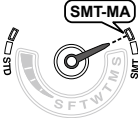
There are four modes of the summer time setting.



Setting Summer Time (SMT)

STD-AU	SMT-AU
Standard Time (STD)	Summer Time (SMT)
Automatic (AU)	
<p>The current time is updated based on the summer time information included in the radio signal received.</p> <p>The summer time settings automatically activates (SMT-AU) upon receiving the summer time information in the radio signal. (automatic switching mode)</p>	<p>The summer time information is indicated based on the summer time information included in the radio signal received. When the watch receive the summer time OFF, it automatically switches to the normal time indication (STD-AU).</p>
<div><div><p>Enable Standard Time (OFF)</p></div><div><p>Automatic switching</p></div><div><p>Enable Summer Time (ON)</p></div></div>	

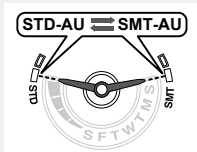
Setting Summer Time (SMT)

STD-MA	SMT-MA
Standard Time (STD)	Summer Time (SMT)
Manual (MA)	
The time is shown regardless of the summer time information reception.	The summer time information is indicated regardless of the summer time information the summer time information received in during radio reception.
<p>Enable Standard Time (OFF)</p> 	<p>Enable Summer Time (ON)</p> 

- Switching the SMT / STD of the summer time. See page 38
- Switching the setting of the summer time between automatic and manual. See page 40

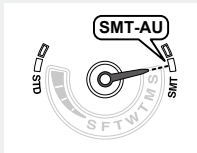
Setting Summer Time (SMT)

To automatically enable Summer Time (SMT) when using the watch in an area where the time signal can be received:



Set the summer time setting to automatic (the summer time setting (SMT / STD) is updated automatically upon receiving the radio signal)

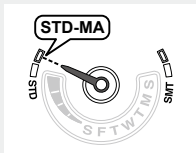
To enable Summer Time (SMT) manually when the time signal can not be received:



Set the summer time SMT when you want to do so.

Setting Summer Time (SMT)

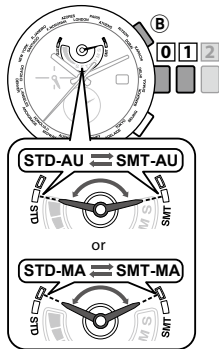
To prevent the watch from automatically enabling Summer Time (SMT) through signal reception:



Set the Summer Time (SMT) setting to manual and set the summer time STD.

Setting Summer Time (SMT)

◆ Manually changing summer time setting between SMT and STD



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

The second hand indicates the current city settings of the home time and the function hand indicates the summer time information.

2. Press the upper right button **B** to set the summer time **SMT** or **STD**.

Each time you press the upper right button **B** , the function hand indication switches between

STD-AU ↔ SMT-AU or

STD-MA ↔ SMT-MA and the summer time

setting of the home time switches between **SMT** and **STD**.

- continued page 39

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

The second hand indicates the current city settings of the local time and the function hand indicates the summer time information.

4. Press and release the upper right button (B) to set the summer time SMT or STD.

Each time you press the upper right button (B) , the function hand indication switches between

STD-AU ↔ SMT-AU or

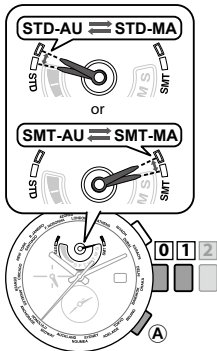
STD-MA ↔ SMT-MA and the summer time setting of the local time switches between SMT and STD.

- This procedure is same as the setting SMT / STD of the summer time of the home time.

5. Push the crown in to position (0) to finish the setting.

Setting Summer Time (SMT)

◆ Setting the summer time automatically / manually



1. Pull the crown out to position 1 .

The second hand indicates the current city settings of the home time and the function hand indicates the summer time information.

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

Each time you press and release the lower right button (A) , the function hand indication switches between

STD-AU ↔ STD-MA or

SMT-AU ↔ SMT-MA and the summer time setting of the home time switches between automatic and manual.

- continued page 41

Setting Summer Time (SMT)

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

The second hand indicates the current city settings of the local time and the function hand indicates the summer time information.

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

Each time you press the lower right button (A) , the function hand indication switches between

STD-AU ↔ STD-MA or

SMT-AU ↔ SMT-MA and the summer time setting of the local time switches between automatic and manual.

- This procedure is same as the setting automatic / manual of the summer time of the home time.

5. Push the crown in to position (0) to finish the setting.

Setting Summer Time (SMT)

◆ The time shown for each city

The watch shows and stores Summer Time/standard time in common for the following cities/time differences in each area so you do not need to change them for each city/time differences.

- If you show the standard time manually for a city/time differences, the watch always shows the standard time for that city/time difference regardless of the time shown for others in the same area.

Areas receiving the signal from USA	
City	Time difference
Anchorage/ANC	-9
L.Angeles/LAX	-8
Denver/DEN	-7
Chicago/CHI	-6
New York/NYC	-5

Areas receiving the signal from Germany	
City	Time difference
London/LON	0
Paris/PAR	+1
Athens/ATH	+2
Azores/PDL	-1

For cities/time differences other than those listed above, the time shown last is stores for each.

Setting the Alarm Time

◆ Using the alarm

The alarm function uses a 24 hour clock. Once the alarm has been set, the alarm sounds for 15 seconds when the set time is reached once a day.

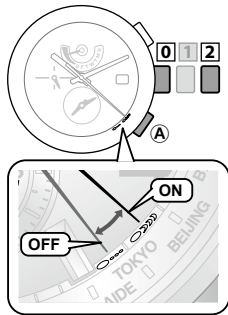
The alarm time corresponds to the home time. The alarm time cannot be set to correspond to the local time.

Example:

If the current home time zone is Tokyo with the alarm set at 6 o'clock a.m., and the user changes the home time zone to Bangkok, the alarm will sound at 6 o'clock a.m., Bangkok time.

Setting the Alarm Time

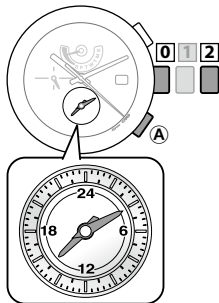
◆ Switching the alarm between ON and OFF



1. Pull the crown out to position **2** .
The second hand indicates ON/OFF of the alarm.
The function hand indicates the power reserve level.
2. Press and release the lower right button **(A)** to set the alarm ON or OFF.
The second hand indicates ON / OFF of the alarm.
Each time the lower right button **(A)** is pressed, the alarm settings switches between ON and OFF and the second hand moves between the **Alarm ON (Confirmation sound)** and **Alarm OFF**.
3. Push the crown in to position **0** to finish the setting.

◆ Setting the Alarm Time

The alarm time is set by the 24-hour hand in the local time indication and the minute hand.



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

The hour and minute hands of the local time move to indicate the alarm time.

2. Rotate the crown to adjust the alarm time.

- When you rotate the crown quickly, each hand will move continuously. To slow down and stop them, slightly rotate the crown.

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

Setting the Alarm Time

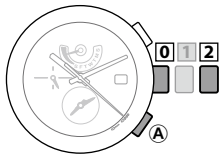
- The alarm will not be turned ON automatically after setting the alarm time. Set the alarm ON referring to the "Switching the alarm between ON and OFF".
- When the hour and minute hands of the home time are close to the local time indication, they automatically move to avoid interfering the alarm setting.
- When the power reserve level is 0, the alarm does not sound.

◆ Stopping the alarm

The alarm sounds for 15 seconds when the crown is in the position **0** . To stop the alarm, press either **(A)** button or **(B)** button.

If the alarm is not stopped at during the alarm sounds, the alarm automatically stops after 15 seconds.

◆ Alarm sound monitor



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

The hour and minute hands of the local time move to indicate the alarm time.

2. Press and hold the lower right button **A** for two or more seconds.

The alarm sound is played back while pressing **A** button.

Notes on the time signal reception

There are three ways to receive the time signal:

The second hand indicates the reception result (OK/NO). (See page 57)

Methods	Explanations
Automatic reception	Receives the signal at 2:00 a.m. every day. If reception is unsuccessful, the watch tries to receive at 3:00 a.m.
On demand reception	Starts receiving the signal when you want to adjust the time and date. (See page 59.)
Recovery automatic reception	Automatically receives the signal once after charging when the watch stops due to insufficient charge.

Notes on the time signal reception

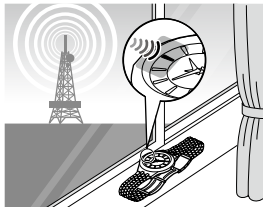
- Even when this watch receives the time signal successfully, the accuracy of the displayed time will be dependent on the reception environment and internal processing.
- If the watch is not able to receive the signal, it will operate normally within an accuracy range of ± 15 seconds per month.

Notes on the time signal reception

◆ When receiving the time signal

Remove the watch and place it on a stable surface where it can receive the signal better, such as next to a window.

- The reception antenna is located at the 9:00 position of the watch. Place the watch with the 9:00 position facing toward the station.
- Do not move the watch during time signal reception.
- The watch will not receive the time signal when in a low charge state as indicated by the second hand moving in two second increments (the insufficient charge warning). Fully charge the watch before reception.



◆ Note on the time signal

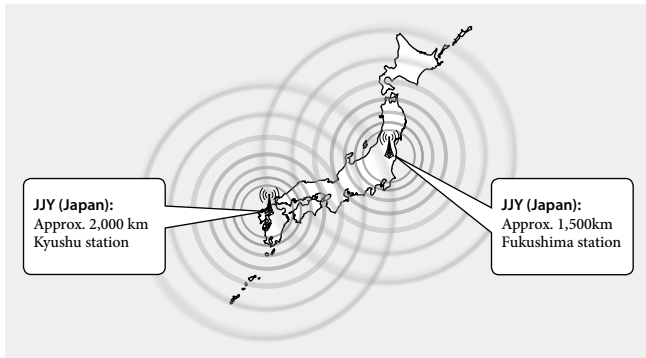
This watch receives the time signal from one of the five signal stations located in four regions, and automatically corrects the time and date.

The signal stations are as follows:

Signal stations	Kind of the time signal
Fukushima station, Japan	JJY
Kyushu station, Japan	
Fort Collins station, Denver, Colorado, USA	WWVB
Mainflingen station, Southeast Frankfurt, Germany	DCF77
Shangqiu station, Henan, China	BPC

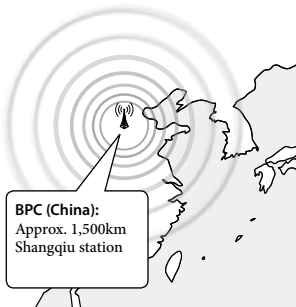
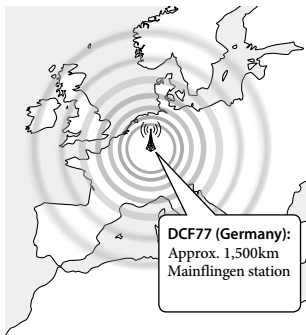
- Refer to the maps on pages 52 to 54 to see the locations of the signal stations and their approximate reception area.

Notes on the time signal reception





Notes on the time signal reception



◆ Poor reception areas

It may be difficult to receive the time signal properly under certain environmental conditions or in areas susceptible to radio noise.

- Extremely hot or cold locations



- Inside vehicles



- Near electrical equipment or office appliances



- Near high-tension electrical lines, railway overhead wires or communication facilities



- Inside reinforced concrete buildings, between tall buildings, mountains, or underground



- Near mobile phones that are in use



Notes on the time signal reception

◆ When signal reception is poor

High-tension electrical lines or other structures near your house may block the path to the signal station. This may result in a poor environment for receiving the time signal.

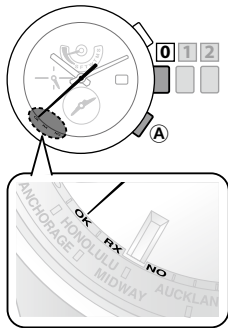
With reference to pages 52 to 54, search for a better place for reception.

Then, attempt to receive the time signal following the procedure on page 59.

- If the window contains a wire netting in it, open the window or change the location for better reception.

Checking the time signal reception




Check the result of the last signal reception.



1. Ensure that the crown is in position **0** .
2. Press and release the lower right button **(A)** .
The second hand moves and indicates the reception result.
 - For details on the reception result, see the next page.
3. Press and release the lower right button **(A)** to finish the check procedure.
 - Normal operation will resume if the button is not pressed for approx. 10 seconds.

Checking the time signal reception

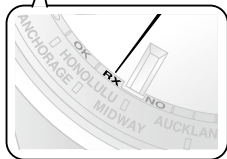
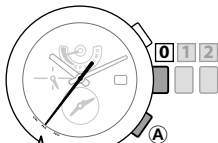
◆ Time signal reception result

Indication			
Result	OK	NO	RX
Meaning	Radio Reception was successful.	Radio reception failed. The time and data/ calendar have not been corrected.	Radio reception in process. Do not move the watch.

- For details on time signal reception, see page 48.

Receiving the time signal manually (On demand reception)

You can adjust the watch by receiving the time signal any time when the time and date are not correct or the reception result is "NO."



- The signal station is different depending on the city set. Confirm the current city setting.

1. Ensure that the crown is in position **0**.
2. Press and hold the lower right button **A** for two or more seconds.

The result of the last signal reception is displayed, then a confirmation sound operates and on-demand reception starts. (2-15 minutes)

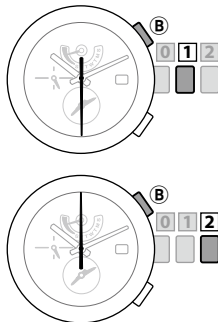
- The second hand points to "RX".
- The watch will not receive the time signal when in a low charge state as indicated by the second hand moving in two second increments (the insufficient charge warning).

Receiving the time signal manually (On demand reception)

- If your current location is outside the reception area of the time zone chosen, the watch will not receive a radio signal. Change the time zone to one within the radio reception area of your locale.
- Press and hold the lower right button (A) for two or more seconds to cancel the signal reception.
- The reception operation is complete when normal time indication resumes.

Adjusting the time/calendar manually

Manually adjust the time/calendar when the watch cannot receive the time signal.



1. Pull the crown out to position 1 .

Rotate the crown clockwise or counterclockwise until the second hand indicates the time zone nearest your current location. The hour, minute and 24-hour hands will rotate to the current time set in memory for the chosen timezone.

Press and release the upper right button (B) to turn summer time ON or OFF. Be sure to pay attention to SMT-AU (automatic update) or SMT-MA (manual update) position.

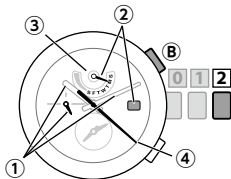
2. Press and hold the upper right button (B) for two or more seconds.

The second hand moves to the 30-second position.

3. Pull the crown out to position 2 .

The second hand moves to the 0 second position indicating the time and calendar may be manually adjusted.

Adjusting the time/calendar manually

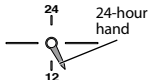


4. Press and release the upper right button (B) to select the correction target.

Each time you press and release the upper right button (B), the correction target changes as follows and the corresponding hand slightly moves.

- ① Time (minutes/hours/24 hour time) → ② date →
③ day of the week → ④ year and month → back to ①

① Time



The minute, hour, 24-hour hands move in conjunction with one another.

② Date



When the function hand turns five times, the date proceeds by one.

③ Day of the week



The function hand shows the day of the week.

④ Year and month

Adjusting the time/calendar manually

5. Rotate the crown to adjust each setting.

- If you spin the crown quickly, the hands for the time and date will move continuously. To slow down and stop them, slightly rotate the crown.
- To move the date forward or backward by one day, slightly rotate the crown.
- The leap year and month are indicated by the minute hand. Refer to the charts on pages 64 and 65 for proper month and leap year setting.

6. Repeat procedures 4 and 5.

A few minutes may have elapsed during setting of the calendar and the minutes may need correction.

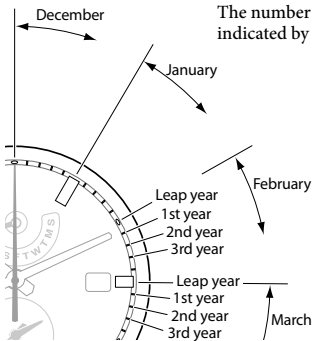
7. Push the crown in to position **0** to finish the setting.

The second hand starts moving from the 0 second position, and time/calendar indication will resume.

- For the most accurate setting, push the crown when referring time source.
- The date changes at approximately 0:00 am. It takes about five seconds for the displayed date to completely change.

Adjusting the time/calendar manually

◆ Month and year indications



The number of years and months since the leap year is indicated by minute marks.

[Month]

December: between 12:00 and 01:00

January: between 01:00 and 02:00

February: between 02:00 and 03:00

[Year]

Leap year:

Hour marker in each month

1st year since leap year:

1st min. marker in each month

2nd year since leap year:

2nd min. marker in each month

3rd year since leap year:

3rd min. marker in each month

Adjusting the time/calendar manually

You can get the actual year from the number of years passed from the leap year by referring to the following table:

Indication of the second hand	Passed year	Year
Hour marker	Leap year	2016, 2020, 2024
1st min. marker	1st year	2013, 2017, 2021
2nd min. marker	2nd year	2014, 2018, 2022
3rd min. marker	3rd year	2015, 2019, 2023

Checking and correcting the current reference position

◆ What is the reference position?

This is base position for all the hands to indicate the time and date. If the reference positions of the hand and calendar are not at the correct position, the time, calendar and other functions will not be correctly indicated.

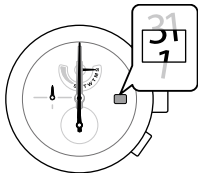
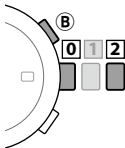


Figure: Correct reference positions

- Function hand: Sunday
- Other hands: All point in the 12 o'clock direction.
- Date: Between "31" and "1"

Checking and correcting the current reference position

◆ Checking and correcting the current reference position



1. Ensure that the crown is in position **0** .
2. Press and hold the upper right button **B** for ten seconds.

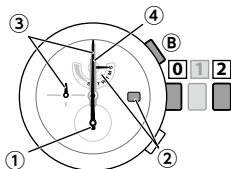
All hands and the date indicator move to indicate the current reference position.

Correct the reference position by taking the following steps if the position is not accurate.

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

This will enable you to correct the reference position.

Checking and correcting the current reference position



4. Press and release the upper right button (B) to select the correction target.

Each time you press and release the upper right button (B), the correction target changes as follows and the corresponding hand slightly moves.

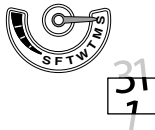
- ① Local time / minute hand, 24-hour hand →
- ② Function hand / date →
- ③ Minute hand/hour hand/24-hour hand →
- ④ Second hand → back to ①

① Local time / minute hand, 24-hour hand



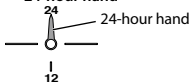
The minute hand and 24-hour hand move in conjunction with each other.

② Function hand / date



The function hand and date indication move in conjunction with each other.

③ Minute hand/hour hand/24-hour hand



The minute, hour, 24-hour hands move in conjunction with one another.

④ Second hand

Checking and correcting the current reference position

5. **Rotate the crown to correct the reference position of the active hand/ indication.**
 - When you rotate the crown quickly, each hand will move continuously. To stop them, slightly rotate the crown.
6. **Push the crown in to position **0** to finish the correction.**
7. **Press and release the upper right button **B** to return to current time indication.**

Troubleshooting

If you have a problem with your watch, check the table below.

Problems with time signal reception.

Symptoms	Remedies	Page
Reception is unsuccessful in a receivable area.	Push the crown in to position 0 .	—
	Avoid things likely to interfere with the time signal and place the watch with the 9:00 position facing toward the station.	50, 55
	Do not move the watch until the reception has finished.	50
	When the second hand moves once every two seconds, the watch cannot receive the time signal. Charge the watch.	14
The correct time and date are not indicated after successful reception.	Check and correct the current reference position.	67
	Check the city setting.	22
	Check the summer time setting.	31

The hands do not work properly.

Symptoms	Remedies	Page
The second hand moves once every two seconds.	Charge the watch.	14
All hands stop moving.	Push the crown in to position [0] .	—
	Charge the watch by exposing it to direct sunlight until the second hand starts moving once every one seconds. After charging, signal reception automatically starts. (Recovery automatic reception)	14, 48
The function hand is not indicating the day of the week.	When the watch is insufficiently charged, the function hand automatically indicates the power reserve level 1 or 0. Charge the watch.	12
The hands start turning rapidly as you take the watch out of the case.	The watch is canceling the power save feature. Wait until the rapid movement stops.	16
The second hand is stopped at the 0-second position and push buttons cannot be operated.	When the crown is in the position [2] , the watch may be in the manual power save feature. Push the crown back to the position [0] to resume the current time indication.	17

Troubleshooting

The time and/or date is incorrect.

Symptoms	Remedies	Page
The time and/or date is incorrect.	Check the city setting.	22
	Change the summer time setting.	31
	Check and correct the current reference position.	67
	Receive the time signal to adjust the time and date.	59
	Set the time and date manually.	61
The date changes at approximately 12:00 p.m.	(24-hour hand) Check and correct the current reference position.	67
	Receive the time signal to adjust the time and date.	59
	Adjust the time manually.	61

Others

Symptoms	Remedies	Page
The hands do not move even if the watch is charged.	Charge the watch by exposing it to direct sunlight for five to six hours. If the problem is not solved after fully charging, and following the all reset and reference procedures, contact your nearest Citizen Authorized Service Center for further assistance.	12
An alarm does not sound.	When the watch is in the two-second interval movement due to insufficient charging, an alarm does not operate. Charge the watch.	14
	The alarm feature is not set to "ON".	44

◆ All Reset

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

Check before performing All Reset.

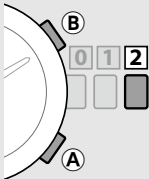
After performing All Reset, you need to configure all the settings again. Set the watch again by following the procedures outlined below:

- 1. Correct the reference position.** See page 67.
- 2. Set the city.** See page 22.
 - To set Summer Time, see page 31.
- 3. Set the time.**

To adjust the time by receiving the time signal, see page 59. To adjust the time manually, see page 61.

◆ Performing the All Reset

Perform this operation after checking the contents of the previous page in this manual.



1. Pull the crown out to position **2**.
2. Press and hold both the lower right button **A** and the upper right button **B** for four or more seconds.

All Reset will be performed.

The settings will be reset as follows:

The settings after All Reset

- **The reference positions of each hand**: the position which the crown is in the position 0 (0 o'clock, 0 minute, 0 second)
- **Calendar**: Leap year, January 1/Sunday
- **City**: LON (London)
- **Summer Time**: Normal time (all cities are set to STD-AU)
- **Switching of Summer Time**: Auto
- **Alarm time**: 0 o'clock 0minute
- **Alarm ON / OFF**: OFF

Eco-Drive (solar powered) watch handling precautions

<Always Make Sure to Recharge Frequently>

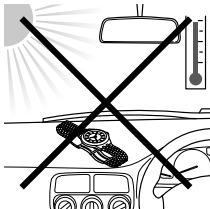
- Please note that if you wear long sleeves, the watch may stop as a result of being covered by your sleeve and blocked from the light.
- When you take off the watch, try to place it in as bright a location as possible. This will ensure optimal operation.

CAUTION Recharging Precautions

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

Examples:

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



Eco-Drive (solar powered) watch handling precautions

<Replacement of Rechargeable Cell>

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



WARNING Handling of Rechargeable Cell

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



WARNING Use Only the Specified Battery

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

Water resistance



WARNING






Water Resistance

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

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

Water resistance

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

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

Precautionary items and usage limitations

CAUTION To Avoid Injury

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

CAUTION Precautions

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

Precautionary items and usage limitations

- Even if your watch has a high level of water resistance, please be careful of the following.
 - If your watch is immersed in sea water, rinse thoroughly with fresh water and wipe with a dry cloth.
 - Do not pour water from a tap directly onto your watch.
 - Take off your watch before taking a bath.
- If seawater enters the watch, place the watch in a box or plastic bag and immediately take it in for repair. Otherwise, pressure inside the watch will increase, and parts (crystal, crown, push button, etc.) may come off.



CAUTION

When Wearing Your Watch

<Band>

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

Precautionary items and usage limitations

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

<Temperature>

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

<Magnetism>

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

Precautionary items and usage limitations

<Strong Shock>

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

<Static Electricity>

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

<Chemicals, Corrosive Gasses and Mercury>

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

<Protective Stickers>

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

Precautionary items and usage limitations



CAUTION Always Keep Your Watch Clean

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

Precautionary items and usage limitations

Caring for Your Watch

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

<When Luminous Paint is used for your watch>

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

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

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

Specifications

Model	H82*	Type	Analog solar-powered watch
Timekeeping accuracy (without reception)	Within ± 15 seconds per month when worn at normal operation temperatures (between $+5^{\circ}\text{C}/41^{\circ}\text{F}$ and $+35^{\circ}\text{C}/95^{\circ}\text{F}$)		
Operating temperature range	$-10^{\circ}\text{C}/14^{\circ}\text{F} \sim +60^{\circ}\text{C}/140^{\circ}\text{F}$		
Display functions	<ul style="list-style-type: none"> • Home time: Hours, minutes, seconds, 24-hour time • Local time: Hours, minutes • Calendar: Date, day of the week 		
Maximum run time from full charge	<ul style="list-style-type: none"> • Fully charged to fully discharged: Approximately 8 months (with power save feature) Approximately 6 months (without power save feature) • Power reserve upon insufficient charge warning function: Approximately 2 days <p>* Maximum run time shown is effective under following conditions.</p> <ul style="list-style-type: none"> • An alarm operates once per day. • Automatic radio reception is performed once per day. 		
Battery	Rechargeable cell (lithium button cell), 1pc.		

Additional functions	<ul style="list-style-type: none">• Solar power function • Overcharging prevention function• Power reserve: 4 levels• Insufficient charge warning function (two-second interval movement)• Energy saving function (power save feature)• Receiving time signal (automatic, on demand, automatic recovery) Signal stations: Japan (East/West)/USA/Germany/China * When the time difference is corrected, the signal station is switched.• Indicating the state of reception (RX, OK or NO)• Indicating the result of the last reception• Automatic selection of time signal stations• Summer Time (SMT / STD, Auto/Manual)• Alarm • Dual time• City setting (26 cities)• Home time / local time• Perpetual calendar (until February 28th, 2100)• Antimagnetic performance/Impact detection function/Automatic hand correction function• Checking and correcting the reference position
-----------------------------	--

Specifications are subject to change without prior notice.



This product follows the provisions of EMC(2004/108/EC)
amended by the Directive 93/68/EEC

EMC EN61000-6-1:2007
 EN61000-6-3:2007

Model No.AT9*・FC0*

Cal.H820

CTZ-B8175