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/.

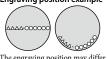
Here you will find a variety of information such as electronic setting guides, answers to frequently asked questions, Eco-Drive recharging information and more.

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, " $\triangle \triangle \triangle$ " 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:

| <u></u> ∴ DANGER | Highly likely to cause death or serious injury |
|-------------------------|--|
| ⚠ WARNING | Can cause serious injury or death |
| A CAUTION | Can or will cause minor or moderate injury or damage |

Safety precautions (IMPORTANT)

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

| 1 | 8 |
|-------------|---|
| \triangle | Warning (caution) symbol followed by instructions that should be followed or precautions that should be observed. |
| \Diamond | 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
 For optimal performance, ensure your watch is fully charged prior to use.
- ◆ Setting the World Time →Page 22
 Select the city or time difference 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 direct sunlight 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 do not recommend attempting to adjust the watch band yourself. Special expertise and experience is required for proper adjustment. If not adjusted correctly, the band may become detached leading to loss of your watch. For band adjustment, we recommend you consult the retailer from where the watch was purchased or your nearest Authorized Citizen Service Center.

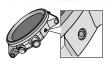
Specially designed crown/push button

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

How to use a screw down crown and screw down push button Unlock the crown prior to operate your watch.

| | | Unlock | | Lock |
|------------------------------|---------------|---|------------|---|
| Screw down crown | of the second | Rotate the crown counterclockwise until it releases from the case. | # (| 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 | | Rotate the locking screw counterclockwise, and loosen until it stops. | | Rotate the locking screw clockwise, and tighten firmly. |

How to use 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 Daylight Saving 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 |

Table of contents

| 70 |
|----|
| 76 |
| 78 |
| 80 |
| 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"

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



"Perpetual calendar"

Once set, the date will automatically adjust for months shorter than 31 days as well as leap years.



"Dual time"

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



"Alarm"

An alarm sounds when the set time is reached.





- * The illustrations in this instruction manual may differ from the actual appearance of your watch.
- * A solar cell is placed under the dial.

^{* &}quot;Eco-Drive" is Citizen's proprietary technology.

Charging your watch

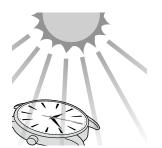
This watch has a rechargeable cell which is charged by exposing the dial to light, such as direct sunlight or fluorescent lamps.

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).

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.

| | | Charging time (approx.) | | | |
|--|---------------------|-------------------------|---|---|--|
| Environment | Illuminance (lx) | 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)

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

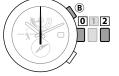
◆ To cancel the power save feature

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 Secondary (dual) time move to indicate the alarm time.

2. Press and hold the upper right button

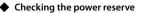
(B) for two or more seconds.

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

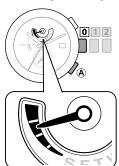
- Even though all the hands stop at the manual power save operation, the watch operation continues within the watch memory.
- The watch does not receive a radio signal automatically at the manual power save operation.

- ◆ To cancel the manual power save feature
- 1. Ensure that the crown is in position 0.

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



Checking the current power reserve.



- 1. Ensure that the crown is in position ①.
- 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,
- 3. Press and release the lower right button (A) to finish the check procedure.

refer to the next page.

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

The power reserve level indications

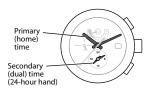
| Level | 3 | 2 | 1 | 0 | |
|--|--|---|--------------------------------------|--------------------|--|
| Power reserve level | | | | R/S | |
| | Approx. 180 to 130 days | Approx. 130 to 30 days | Approx. 30 to 2 days | Approx. 2 days | |
| Approximate duration of operation at each level | Power reserve is sufficient for all features and functions. Optimal performance is achieved at this | Power reserve is sufficient for all operations at this level. | for all getting low. The not suffici | | |
| | level. | | The watch must be ch | arged 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 pre-programmed cities.

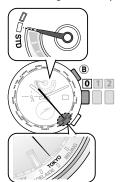
- When using the watch in an area not listed in the table below, select and set the city with the same time difference.
- This watch can indicate 2 different times (primary (home) time and Secondary (dual) time) at the same time. Primary (home) time is the main time indication (time where you live).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



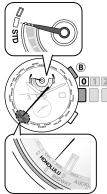
Secondary (dual) time is shown by the 24-hour hand. Keep this in mind when checking.

Setting the World Time

Checking the Primary (home) time / Secondary (dual) time



- 1. Ensure that the crown is in position 0.
- Press and release the upper right button (B).
 The second hand indicates the current city settings of the primary (home) time and the function hand indicates the davlight saving time information.
 - Setting Daylight saving time → Page 31
 - Second time zone checking continued on the next page.

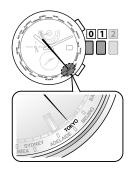


3. Press and release the upper right button (B).

The second hand indicates the current city settings of the second time zone and the function hand indicates the daylight saving time information. The second hand indication changes every time the upper right button (B) is pressed:

- ① Primary (home) time city → ② Secondary (dual) 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 primary (home) time / Secondary (dual) time



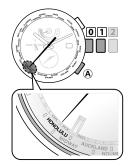
1. Pull the crown out to position 1.

The second hand indicates the current city settings of the primary (home) time and the function hand indicates the daylight saving time information.

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

Select the primary (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



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

The second hand indicates the current city settings of the Secondary (dual) time and the function hand indicates the daylight saving time information.

• The primary (home) time city and the Secondary

- The primary (home) time city and the Secondary (dual) time city switches every time the lower right button (A) is pressed.
- Rotate the crown to select the city for which you want to indicate the time and date.

 Select the Secondary (dual) 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 | |
| PAR | * | PARIS | 2 sec. | +1 | |
| ATH | * | ATHENS | 4 sec. | +2 | Germany |
| RUH | | RIYADH | 7 sec. | +3 | |
| DXB | | DUBAI | 9 sec. | +4 | |
| KHI | | KARACHI | 11 sec. | +5 | |
| DEL | | DELHI | 14 sec. | +5.5 | |
| DAC | | DHAKA | 16 sec. | +6 | China |
| BKK | | BANGKOK | 18 sec. | +7 | |
| BJS/HKG | | BEIJING/HONGKONG | 21 sec. | +8 | |

^{*} See note on page 29

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

^{*} See note on page 29

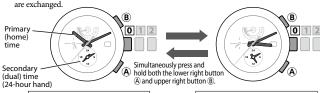
| Abbreviation | (| City indication or second hand position | | Time difference | Signal from |
|--------------|---|---|---------|-----------------|-------------|
| SCL | | SANTIAGO | 51 sec. | -4 | USA |
| RIO | | RIO DE JANEIRO | 53 sec. | -3 | USA |
| FEN | | FERNANDO DE NORONHA | 56 sec. | -2 | Cormony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

- The city indications displayed on the watch may be different, depending on the model.
- For a city indicated by */**, the daylight saving 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.
- $\bullet\,$ The time difference may change depending on the country or area.

Setting the World Time

- ◆ Function for switching the primary (home) time and the secondary (dual) time The time and the calendar indications can be switched between the primary (home) time and the secondary (dual) 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 primary (home) time and the secondary (dual) time



primary (home) time: AM 10:10 secondary (dual) time: PM 3:10

primary (home) time: PM 3:10 secondary (dual) time: AM 10:10

Setting Daylight Saving Time (SMT)

Setting Daylight Saving Time (SMT)

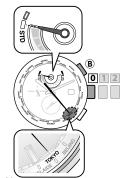
Daylight Saving Time is a system adopted in some countries/areas to gain an extra hour of daylight during summer by advancing clocks by one hour. In an area where the daylight saving time is in effect, the time signal contains a daylight saving time check signal.

This watch automatically updates the SMT / STD time setting when receiving the daylight saving time information in the radio signal.

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

- $\bullet\,$ The daylight saving time rules may change depending on the country or area.
- \bullet The daylight saving time period varies based on country or area.

Checking the daylight saving time setting



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

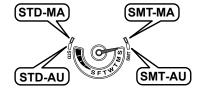
 The second hand indicates the current city settings of the primary (home) time and the function hand indicates the daylight saving time information.
 - · Check the setting referring to the table on page 34.

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

The second hand indicates the current city settings of the secondary (dual) time and the function hand indicates the daylight saving time information.

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

There are four modes of the daylight saving time setting.



Setting Daylight Saving Time (SMT)

| | STD-AU | SMT-AU |
|---|--|---|
| Standard Time (STD) | | Daylight Saving Time (SMT) |
| | Automa | ntic (AU) |
| The current time is updated based on the daylight saving time information included in the radio signal received. The daylight saving time settings automatically activates (SMT-AU) upon receiving the daylight saving time information in the radio signal. (automatic switching mode) | | The daylight saving time information is indicated based on the daylight saving time information included in the radio signal received. When the watch receive the daylight saving time OFF, it automatically switches to the normal time indication (STD-AU). |
| | Enable Standard Time (OFF) STD-AU Auto | Enable Daylight Saving Time (ON) SMT-AU matic |

switching

Setting Daylight Saving Time (SMT)

| STD-MA | SMT-MA |
|--|---|
| Standard Time (STD) | Daylight Saving Time (SMT) |
| Manua | al (MA) |
| The time is shown regardless of the daylight saving time information reception. | The daylight saving time information is indicated regardless of the daylight saving time information the daylight saving time information received in during radio reception. |
| Enable Standard Time (OFF) | Enable Daylight Saving Time (ON) |
| STD-MA | (SMT-MA) |
| To sent the sent to the sent t | S F T M |

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

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



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

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

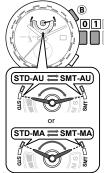


Set the daylight saving time SMT when you want to do so. To prevent the watch from automatically enabling Daylight Saving Time (SMT) through signal reception:



Set the Daylight Saving Time (SMT) setting to manual and set the daylight saving time STD.

▶ Manually changing daylight saving time setting between SMT and STD



- 1. Pull the crown out to position 1.
 - The second hand indicates the current city settings of the primary (home) time and the function hand indicates the daylight saving time information.
- 2. Press the upper right button ® to set the daylight saving time SMT or STD.

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

STD-AU ↔ SMT-AU or

STD-MA ↔ SMT-MA and the daylight saving time setting of the primary (home) time switches between SMT and STD

continued page 39

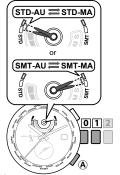
- 3. Press and release the lower right button (A).
 The second hand indicates the current city settings of the secondary (dual) time and the function hand indicates the daylight saving time information.
- 4. Press and release the upper right button ${}^{\textcircled{}}\!\!\!\!\!B}$ to set the daylight saving time SMT or STD.

Each time you press the upper right button, the function hand indication switches between $STD-AU \leftrightarrow SMT-AU$ or

STD-MA ↔ **SMT-MA** and the daylight saving time setting of the secondary (dual) time switches between SMT and STD.

- This procedure is same as the setting SMT / STD of the daylight saving time of the primary (home) time.
- 5. Push the crown in to position ① to finish the setting.

Setting the daylight saving time automatically / manually



 Pull the crown out to position 1.
 The second hand indicates the current city settings of the primary (home) time and the function hand indicates the daylight saving 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 ↔ SMT-AU or STD-MA ↔ SMT-MA and the daylight saving

time setting of the primary (home) time switches between automatic and manual.

continued page 41

Press and release the lower right button (A).The second hand indicates the current city settings of the secondary (dual) time and the

function hand indicates the daylight saving 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 ↔ SMT-AU or

STD-MA ↔ **SMT-MA** and the daylight saving time setting of the secondary (dual) time switches between automatic and manual.

- This procedure is same as the setting automatic / manual of the daylight saving time of the primary (home) time.
- 5. Push the crown in to position 0 to finish the setting.

Setting Daylight Saving Time (SMT)

◆ The time shown for each city

The watch shows and stores Daylight Saving 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

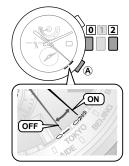
Using the alarm

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 primary (home) time. The alarm time cannot be set to correspond to the secondary (dual) time.

Example:

If the current home time zone is Tokyo with the alarm set at 6 0'clock a.m., and the user changes the primary (home) time zone to Bangkok, the alarm will sound at 6 o'clock a.m., Bangkok time.

Switching the alarm between ON and OFF

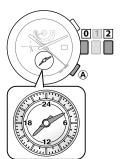


- Pull the crown out to position 2.
 The second hand indicates ON/OFF of the alarm.
 The function hand indicates the power reserve level.
 Press and release the lower right button @ to
 - set the alarm ON or OFF.

 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.
- Push the crown in to position to finish the setting.

Setting the Alarm Time

The alarm time is set by the 24-hour hand in the secondary (dual) time indication and the minute hand.



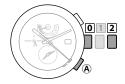
- 1. Pull the crown out to position 2.
 - The hour and minute hands of the secondary (dual) time move to indicate the alarm time.
- 2. Rotate the crown to adjust the alarm time.
- When you rotate the crown quickly, each hand will move continuously. To slow down and stop them, slightly rotate the crown.
- 3. Push the crown in to position ① to finish the setting.

- 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 primary (home) time are close to the secondary (dual) 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 $\boxed{0}$. To stop the alarm, press and release 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



- Pull the crown out to position 2.
 The hour and minute hands of the secondary (dual) 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.

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.



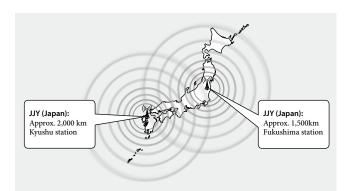
Note on the time signal

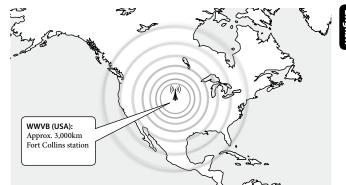
This watch receives the time signal from one of the five signal stations located in four regions, and automatically corrects the time and date.

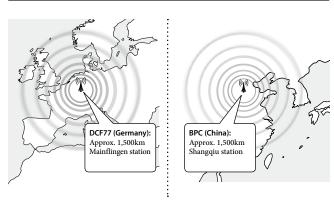
The signal stations are as follows:

| Signal stations | Kind of the time signal | |
|---|-------------------------|--|
| Fukushima station, Japan | YIL | |
| 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.







♦ 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



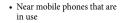
• Inside vehicles



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









Notes on the time signal reception

When signal reception is poor

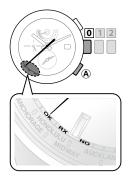
High-tension electrical lines or other structures near your house may block the path to the signal station. This may result in a poor environment for receiving the time signal.

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.

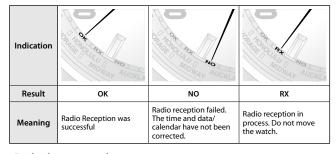


- 1. Ensure that the crown is in position 0.
- 2. Press and release the lower right button (a).

 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

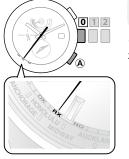
Time signal reception result



• 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".

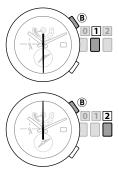
- . The watch will not receive the time signal when in a low charge state as indicated by the second hand moving in two second increments (the insufficient charge warning).

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.
- 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.



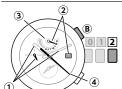
- 1. Pull the crown out to position 1.
 - Rotate the crown clockwise or counterclockwise until the second hand indicates the time zone nearest your current location. The hour, minute and 24-hour hands will rotate to the current time set in memory for the chosen timezone.
 - Press and release the upper right button ® to turn daylight savings time ON or OFF. Be sure to pay attention to SMT-AU (automatic update) or SMT-MA (0manual 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 \rightarrow 4 year and month \rightarrow back to 1







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.

Month and year indications

December January ***** February Leap year 1st year 2nd year 3rd year Leap year -1st year 2nd year March rd vear

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 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.

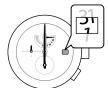


Figure: Correct reference positions

- · 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



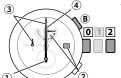
- 1. Ensure that the crown is in position ①.
- 2. Press and hold the upper right button (B) for ten seconds.

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) Secondary (dual) time / minute hand, 24-hour hand -
 - 2 Function hand / date → Minute hand/hour hand/24-hour hand →

 - (4) Second hand → back to (1)

1) Secondary (dual) time / (2) Function hand / date minute hand, 24-hour hand



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

3 Minute hand/hour hand/ 24-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.

The minute hand and

24-hour hand move in

conjunction with each other.

Troubleshooting

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

Problems with time signal reception.

| Symptoms | Symptoms Remedies | |
|---------------------------|---|--------|
| | Push the crown in to position 0. | _ |
| Reception is unsuccessful | Avoid things likely to interfere with the time signal and place the watch with the 9:00 position facing toward the station. | 50, 55 |
| in a receivable area. | 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. Fully charge the watch. | 14 |
| The correct time and date | Check and correct the current reference position. | 67 |
| are not indicated after | Check the city setting. | 22 |
| successful reception. | Check the daylight saving time setting. | 31 |

Troubleshooting

The hands do not work properly.

| Symptoms | Remedies | |
|--|--|--------|
| The second hand moves once every two seconds. | Fully charge the watch. | 14 |
| | Push the crown in to position $\boxed{0}$. | _ |
| All hands stop moving. | Fully 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. Fully charge the watch. The watch is canceling the power save feature. Wait until the rapid movement stops. | |
| The hands start turning rapidly as you take the watch out of the case. | | |
| The second hand is stopped at the 0-second position and push buttons cannot be operated. | When the crown is in the position $\boxed{2}$, the watch may be in the manual power save feature. Push the crown back to the position $\boxed{0}$ to resume the current time indication. | 17 |

Englis

Troubleshooting

Troubleshooting

The time and/or date is incorrect.

| Symptoms | Remedies | Page |
|--|--|------|
| | Check the city setting. | 22 |
| | Change the daylight saving time setting. | 31 |
| The time and/or date is incorrect. | 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 |
| | Check and correct the current reference position. | 67 |
| The date changes at approximately 12:00 p.m. | 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. | Fully 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, 93 |
| An alarm does not sound. | When the watch is in the two-second interval movement due to insufficient charging, an alarm does not operate. Fully charge the watch. | 14 |
| | The alarm feature is not set to "ON". | 44 |

Troubleshooting

All Reset

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

Check before performing All Reset.

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

- 1. Correct the reference position. See page 67.
- 2. Set the city. See page 22.
 - · To set Daylight Saving 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.

Troubleshooting

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.

The settings will be reset as follows:

- 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 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 : LON (London) Citv

Davlight Saving Time

: Normal time (all cities are set to STD-AU)

• Switching of Daylight Saving 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.

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.

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 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 "ibar" 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 | | Mi to v |
|----|---|--------------------------------|--|--|------------|
| | Name | Dial or Case back | | | fa |
| | 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 | | |
| 'n | | | | | |

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

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

(Nation When Wearing Your Watch

<Band>

etc.) may come off.

- 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 do not recommend attempting to adjust the watch band yourself. Special expertise and experience
 is required for proper adjustment. If not adjusted correctly, the band may become detached leading to
 loss of your watch.

For band adjustment, we recommend you consult the retailer from where the watch was purchased or 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.

<u>^</u>

CAUTION Always Keep Your Watch Clean

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

Caring for Your Watch

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

<When Luminous Paint is used for your watch>

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

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

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

Specifications

| Model | H82* | Type | Analog solar-powered watch |
|--|---|------|----------------------------|
| Timekeeping accuracy (without reception) | Within ±15 seconds per month when worn at normal operation temperatures (between +5°C/41°F and +35°C/95°F) | | |
| Operating temperature range | -10°C/14°F~+60°C/140°F | | |
| Display functions | Primary (home) Time: Hours, minutes, seconds, 24-hour time Secondary (dual) time: Hours, minutes Calendar: Date, day of the week | | |
| Maximum run time from full charge | 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 Maximum run time shown is effective under following conditions. An alarm operates once per day Automatic radio reception is performed once per day. | | |
| Battery | Rechargeable cell (lithium button cell), 1pc. | | |

Specifications

| Additional functions | Solar power function Power reserve: 4 levels Insufficient charge warning function (two-second interval movement) 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 result of the last reception Automatic selection of time signal stations Daylight Saving Time (SMT / STD, Auto/Manual) Alarm - Dual time City setting (26 cities) Primary (home) time / secondary (dual) time Perpetual calendar (until February 28th, 2100) Checking and correcting the reference position |
|----------------------|--|
|----------------------|--|

Specifications are subject to change without prior notice.