

CITIZEN®

取扱説明書

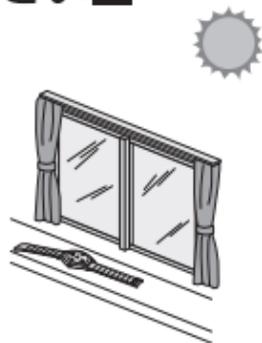
■この時計は日本の標準電波を受信する電波時計です■

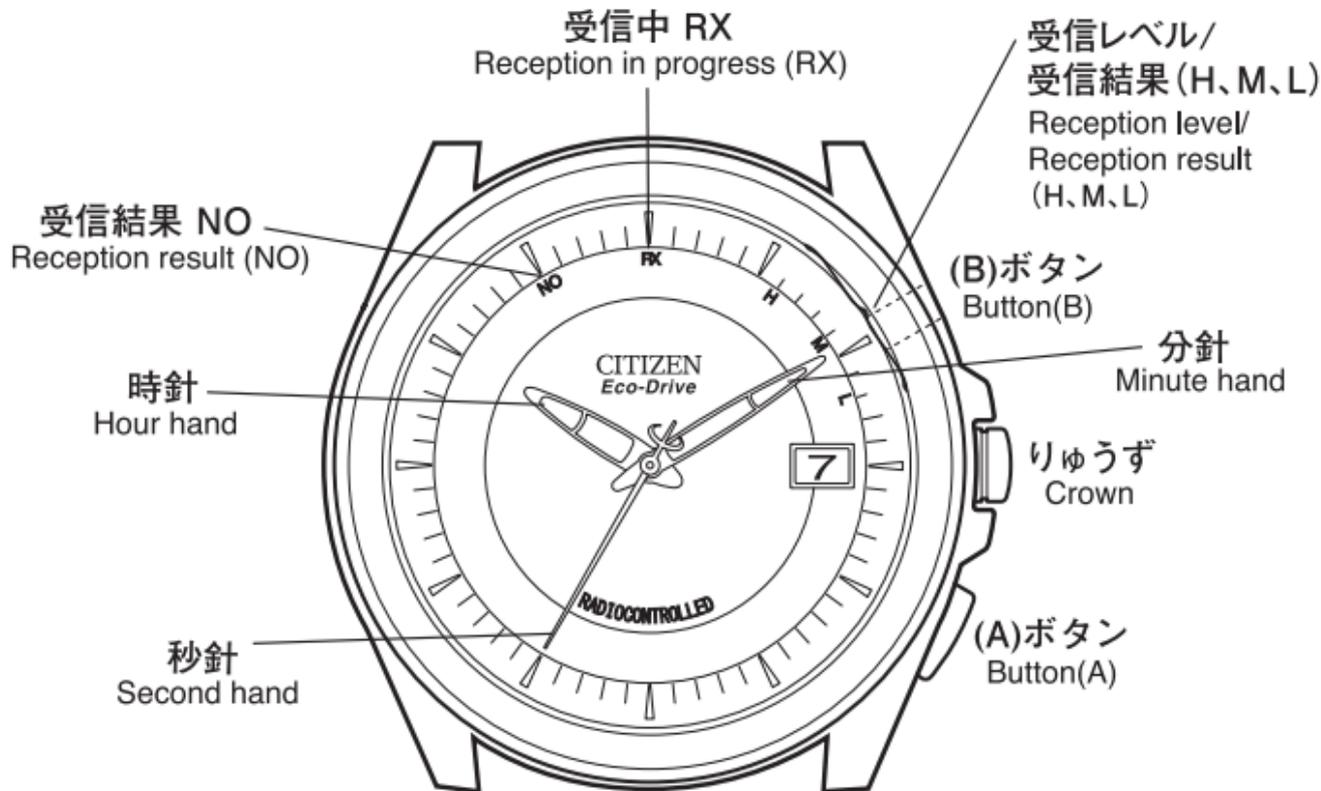
この時計は、自動的に電波の強い局を選んで受信する**受信局自動選択機能**や、毎日午前2時に受信をし、受信ができなかった場合は、再度午前4時に自動的に受信を行い、時刻と日付を合わせる**定時受信機能**、いつでも任意に電波を受信して時刻と日付を合わせる**強制受信機能**を備えた電波時計です。

- 電波は日本の標準電波のみを受信します。(海外の電波は受信できません)
- 電波時計は、人体や医療機器への影響は一切ありませんので、安心してご使用ください。

■十分に光を当てて充電してからご使用ください■

ご使用中に時計の秒針が2秒毎に運針している場合は、充電不足をお知らせしています。『13. D 充電時間の目安』を参考に充電してからご使用ください。特に冬場は衣類等で時計が隠れ、光が当たりにくくなりますので、月に一度は直射日光に当てて充電してください。快適にご使用いただくためには、常に充電を心がけてご使用いただくことをおすすめいたします。





*お買い上げいただいた時計と取扱説明書のイラストは異なる場合があります。

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

この取扱説明書をお読みいただく際は、左ページの時計図を開いた状態でお読みください

When reading this instruction manual please keep the watch diagram at left folded out and in view.



この時計の修理について

この時計は、バンドを除くすべての修理は「メーカー修理」となります。修理、点検の際は弊社お問い合わせ窓口へご依頼ください。

Repairs

All part of this watch, excluding the band, are to be repaired only at CITIZEN. Please have all inspections and repairs performed at a Citizen Consumer Help Desk or Customer Support Center.

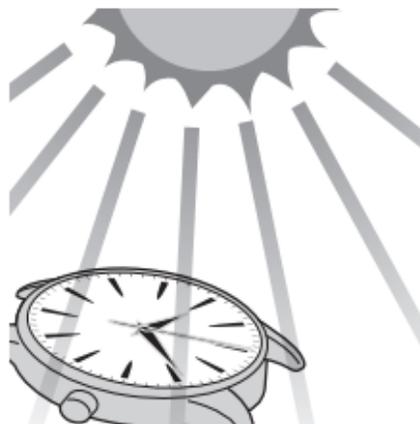
This watch is a radio wave watch that receives Japan standard radio waves

This watch is equipped with an Automatic Tuning Function that receives radio waves by automatically selecting the station with the strongest signal, a Regular Automatic Reception Function that sets the time and date by automatically receiving radio waves at 2:00 AM, or at 4:00 AM when radio waves are unable to be received at 2:00 AM, each day, and a Free Reception Function that allows you set the time and date by arbitrarily receiving radio waves at any time.

- Standard time waves can only be received in Japan. (Radio waves cannot be received overseas.)
- This radio wave watch can be used without concern over effects on the body or medical devices.

Please fully charge your watch before use by exposing it to light

If the second hand of the watch is moving at 2-second intervals during use, this means that the watch is insufficiently charged. Use the watch after charging by referring to "General Reference for Charging Times". Since the watch may be covered by clothing and so forth particularly during the winter preventing it from being exposed to light, charge the watch once a month by exposing to direct sunlight. In order to ensure that the watch is used comfortably, it is recommended to try to keep the watch charged at all times.



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.

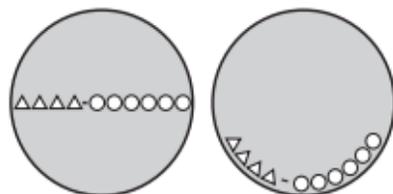
Visit the Citizen website (<http://www.citizenwatch-global.com/>) to view visual guides for operation of your watch. Some models may be equipped with external features (calculation scale, tachymeter, etc.). Visual guides for operation of such external features can also be found on the website.

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, “ $\triangle\triangle\triangle\triangle$ ” 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.

● **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.

● **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.

<Protective Stickers>

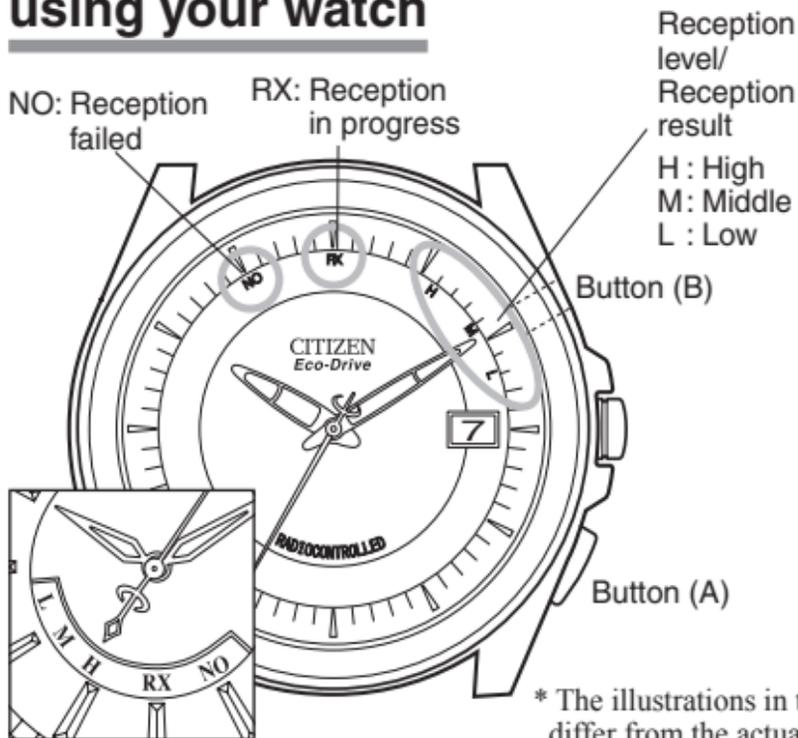
Be sure to remove any protective stickers that may be on your watch (case back, band, clasp, etc.). Otherwise, perspiration or moisture may enter the gaps between the protective stickers and the parts, which may result in a skin rash and/or corrosion of the metal parts.

<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.

Please check the following before using your watch



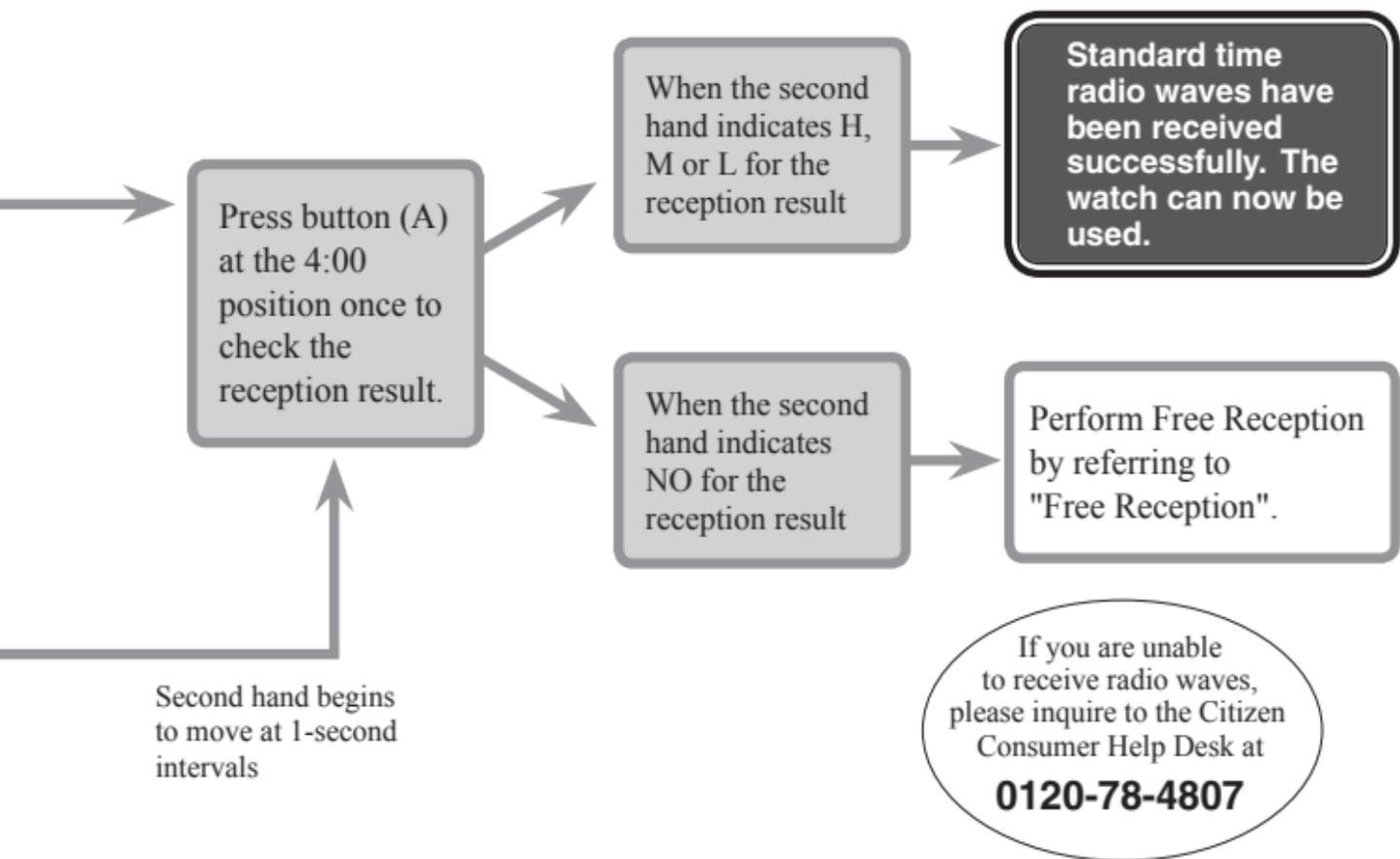
* The illustrations in this instruction manual may differ from the actual appearance of your watch.

Check the movement of the second hand.

Second hand moving at 1-second intervals

Second hand moving at 2-second intervals or stopped

Charge the watch sufficiently by placing it in direct sunlight as indicated in "D. General Reference for Charging Times". (P.92)

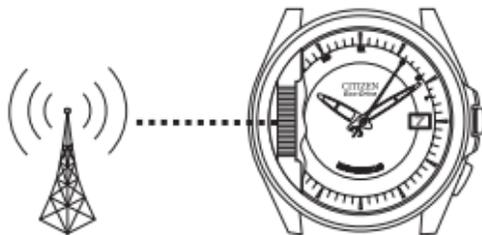


Please Remember the Following About Receiving Radio Waves

Regular Automatic Reception (Automatic reception of radio waves)

- **Regular automatic reception does not require any buttons to be pressed.**

Radio waves are received at 2:00 AM each day, or radio waves are automatically attempted to be received again at 4:00 AM when they are unable to be received at 2:00 AM, to set the time.



<Reception Procedure>

- **Take the watch off of your wrist, face the 9:00 position (location of the reception antenna) towards the radio wave transmitter station and place the watch in a stable location that allows radio waves to be received easily such as near a window.**

<Confirmation of Reception>

You can check the reception result anytime after the regular automatic reception time.

- **Press button (A) once.**
 - If the second hand points to "H, M or L", this indicates that radio waves have been received.
 - If the second hand points to "NO", this indicates that radio waves were unable to be received. If the reception result is "NO", refer to the next page for the procedure for performing free reception.

Free Reception (Manual reception of radio waves)

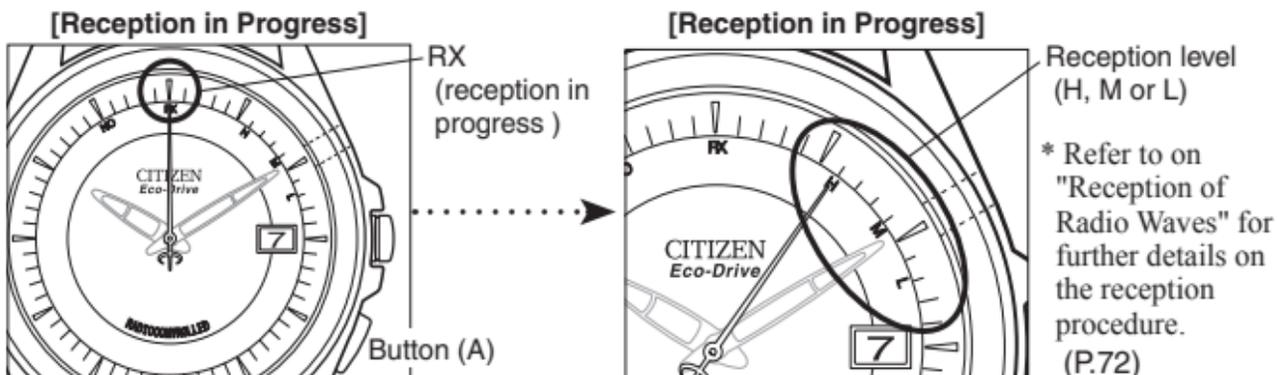
● This function allows radio waves to be received at any time.

Perform free reception when the reception environment has changed and radio waves are unable to be received by Regular Automatic Reception.

<Reception Procedure>

● Take the watch off of your wrist, face the 9:00 position towards the radio wave transmitter station and place the watch in a stable location that allows radio waves to be received easily such as near a window. Do not move the watch during radio wave reception.

1. Press button (A) for at least 2 seconds, and release your finger after the second hand has stopped at the RX (12:00) position.
2. The second hand then moves from RX to H, M or L to indicate that reception is in progress.
3. When reception is completed, the second hand returns from H, M or L and resumes 1-second interval movement (within a maximum of 15 minutes).



General Reference for Receiving Areas

This watch is provided with an automatic tuning feature that automatically selects the station to be used for reception of standard time radio waves. A general reference for the areas where the watch can receive standard time radio waves is as follows. However, reception status in these areas may vary due to the times of sunrise and sunset, seasonal changes, weather conditions (presence of lightning, etc.). Since this map only provides a general reference of the standard receiving areas, it may not apply in some particular locations even within the range shown in the map.

<Radio wave transmitter station>

- Mt. Ohtakadoya standard radio wave transmitter station (Fukushima Station)
- Mt. Hagane standard radio wave transmitter station (Kyushu Station)

In Japan, standard time radio waves are broadcast continually, 24-hours a day, but may occasionally be interrupted for maintenance purposes. To confirm standard time radio wave transmission status, refer to the Japan Standard Time (JST) Project, on the website of the National Institute of Information and Communications Technology (<http://jyy.nict.go.jp/>).

The standard time radio wave has no effect on the human body or medical equipment.

**Rough receivable range
Radius of about 900km**



Mt. Hagane standard radio wave transmitter station
• Transmitting frequency: 60 KHz

Fukuoka
Saga

Osaka

● Tokyo

Fukushima

Mt. Ohtakadoya standard
radio wave transmitter station
• Transmitting frequency: 40 KHz

The standard time radio waves transmitted from the two standard radio wave transmitter stations in Japan are managed and operated by the National Institute of Information and Communications Technology based on a cesium atomic clock reported to have an error of only one second in 100,000 years.

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1. Features

- ◎ This watch is a radio wave watch that automatically corrects the time and date by automatically selecting the radio wave transmitter station having the optimum reception environment and receiving a standard time radio wave (time information) transmitted from two radio wave transmitter stations located in Fukushima and Kyushu.
- ◎ This watch is also an Eco-Drive radio wave watch provided with a photoelectric power generation function that converts light energy into electrical energy to drive the watch. It is also equipped with a power save function that reduces the power consumption of the watch when light does not shine onto the watch dial.
- ◎ This watch is equipped with a time difference correction function that is convenient when using the watch overseas. This function lets you easily set the watch to the local time when traveling to a region or country in a different time zone.
- ※ However, this watch receives Japanese radio waves only. If no radio waves are received, the watch operates within the product's accuracy range.

2. 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.

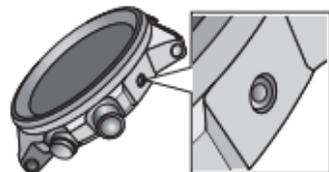
<Screw down crown and screw down push button>

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.

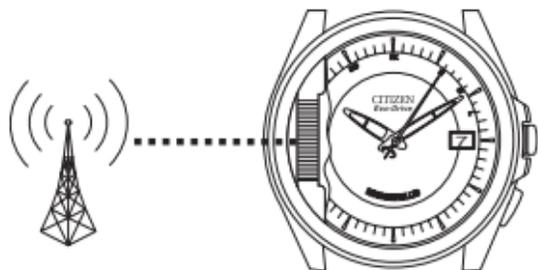


Radio Wave Reception

3. For Good Reception

This watch incorporates an antenna for receiving radio waves inside the watch case (at the 9:00 position). For good reception, remove the watch from your wrist and place the watch in a stable location that facilitates reception of radio waves such as near a window with the 9:00 position of the watch facing in the direction of the radio wave transmitter station. Do not move the watch while receiving radio waves.

The reception level varies depending on the environment in which the watch is used. Try receiving radio waves while changing the orientation or location of the watch several times while referring to H, M or L that indicates the reception level of the watch. Find the location and direction where radio waves are received easily as indicated by H or M for the reception level.



4. Locations Where Reception May Be Difficult

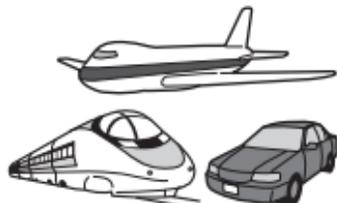
It may not be possible to properly receive radio waves at locations susceptible to generation of radio wave noise or under environmental conditions that cause difficulty in receiving radio waves.



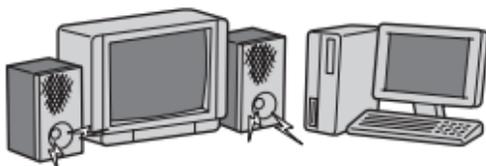
- ◆ Locations subject to extremely high or low temperatures



- ◆ Near high-tension wires (power lines), railroad overhead wires or airports (communication facilities)



- ◆ In a car, train or airplane



- ◆ Near household electric appliances or OA equipment such as TV sets, refrigerators, personal computers, fax machines, etc.



- ◆ Near a cellular telephone in use



- ◆ Inside a reinforced concrete building, between tall buildings or in valleys between mountains or underground

5. Reception of Radio Waves

There are three ways to receive radio waves consisting of **Automatic Regular Reception, Free Reception** and **Recovery Automatic Reception**. Always make sure to remove the watch from your wrist to receive radio waves. When reception is completed, each hand automatically moves forward or backward to the received time.

Regular Automatic Reception (Automatic reception of radio waves)

- ◎ Place the watch in a stable location where radio waves can be received easily such as by a window with the 9:00 position of the watch facing in the direction of the radio wave transmitter station. Radio waves are automatically received at 2:00 AM every day, or if they are unable to be received at that time, are automatically received at 4:00 every day.

Free Reception (Manual reception of radio waves)

- ◎ This function allows you receive radio waves at any time.

Step 1) Continuously depress button (A) for about 2 seconds, and release when the second hand has rapidly advanced to "RX" (12:00 position) and stopped.

Step 2) Place the watch in a stable location where radio waves can be received easily such as by a window with the 9:00 position of the watch facing in the direction of the radio wave transmitter station.

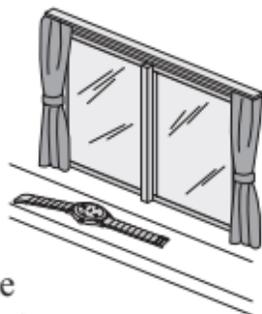
- The second hand then moves from RX to H, M or L indicating that radio waves are being received.
- When reception is completed, the second hand moves from H, M or L and returns to 1-second interval movement.

The reception result can be confirmed by referring to "5. B. Confirmation of Reception Result". (P.75)

Recovery Automatic Reception

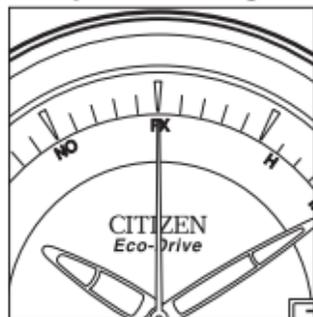
◎ After the watch has stopped as a result of being insufficiently charged, radio waves are received once automatically when the watch is sufficiently recharged by exposing to light. Try to keep the watch charged at all times so that it does not become insufficiently charged.

- * When the watch is receiving the radio wave signal, all of the hands will stop. To check the time, hold button (A) for 2 seconds to cancel radio wave reception. The hands will then return to the current time.



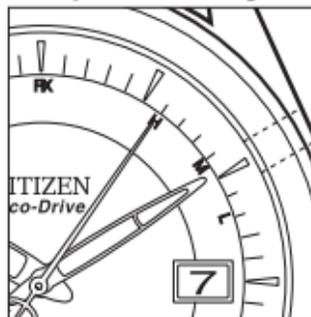
A. Position of the Second Hand During Reception

[Reception in Progress]



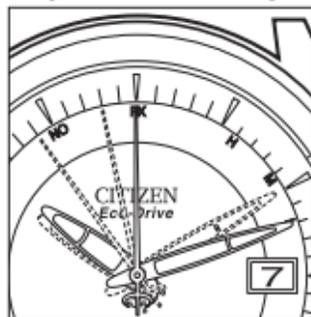
- ◆ Second hand moves to RX and stops.

[Reception in Progress]



- ◆ Second hand moves from RX to reception level H, M or L and reception of radio waves begins.

[Completion of Reception]



- ◆ If radio waves have been received properly, the second hand returns to 1-second interval movement, and each hand is automatically corrected to the correct time.

<Time Required for Receiving Radio Waves>

It takes from about 2 to 15 minutes to receive radio waves depending on the weather and radio wave noise conditions on that day.

[NOTE] The second hand may make one revolution and indicate the reception level again if the transmitter station has changed while reception is in progress or radio wave reception has been interrupted by changes in the reception environment and so forth. Do not move the watch until the second hand returns to 1-second interval movement.

B. Confirmation of Reception Result

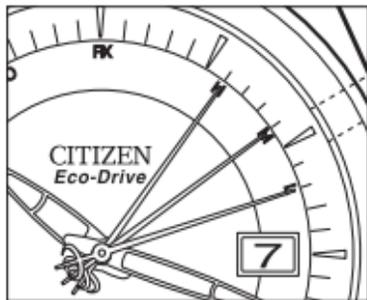
◎ This function allows you to check whether radio wave reception has been successful or failed.

Step 1) Press button (A) once. The second hand rapidly moves to H, M, L or NO to indicate the reception result.

Step 2) The second hand automatically returns to normal hand movement after the reception result has been displayed for 10 seconds. The second hand can also be returned to 1-second interval movement by pressing button (A) while the reception result is displayed.

- If the second hand indicates NO for the reception result, try receiving radio waves by free reception after finding a location and direction where radio waves are received easily.

H, M and L indicate the reception level, and have no effect on performance.



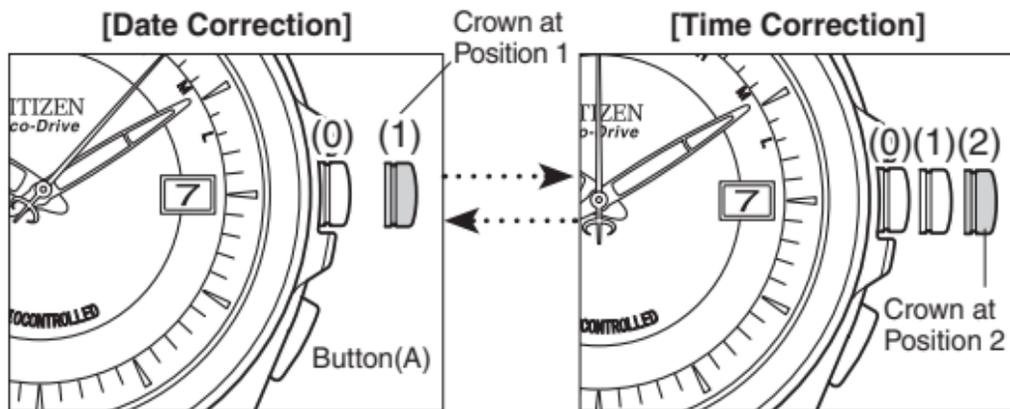
Reception level	Reception level and reception status
H	Radio wave was received or is being received under very good reception conditions.
M	Radio wave was received or is being received under good reception conditions.
L	Radio wave was received or is being received under not very good reception conditions.
NO	When reception has failed

<The time display may shift slightly depending on the reception environment and internal watch processing even if radio waves are properly received.>

Manually Setting the Time and Date

6. Setting the Time

The time and date are corrected automatically when this watch receives radio waves. The time and date can also be set manually when using the watch overseas or other locations where radio waves do not reach. Regular automatic reception or free reception can then be performed after returning to a location where radio waves can be received.



◆ The month, year (no. of years elapsed from most recent leap year) and date can be corrected.

◆ The minute and hour hands can be corrected.

◎ The operation for correcting the minute hand and hour hand can be switched by pressing button (A) once. The minute hand or hour hand being corrected at that time moves to the left and right to indicate that the watch has entered the correction mode.

<Time Correction Procedure>

Step 1) Pull the crown out to Position 2.

- The second hand rapidly moves to the 0 seconds position and stops.

Step 2) Turn the crown to set the minute hand.

- ① Turning the crown to the right (by 1 click) causes the second hand to make one revolution in the clockwise direction and the minute hand to advance by 1 minute.
 - ② Turning the crown to the left (by 1 click) causes the second hand to make one revolution in the counter-clockwise direction and the minute hand to go back by 1 minute.
- Continuously turning the crown (by 2 clicks or more) causes the second and minute hands to move continuously by one hour.
 - Turn the crown to the left or right to interrupt continuous movement of the hands.

Step 3) Press button (A) once and turn the crown to set the hour hand.

- ① Turning the crown to the right (by 1 click) causes the hour hand to rotate in the clockwise direction and advance by 1 hour.
 - ② Turning the crown to the left (by 1 click) causes the hour hand to rotate in the counter-clockwise direction and go back by 1 hour.
- Continuously turning the crown (by 2 clicks or more) causes hour hand to move continuously.

[NOTE] The date changes at 12:00 AM. Please pay attention to AM and PM.

Step 4) Return the crown to the normal position (0) in synchronization with a telephone time signal or other time service to finish the procedure.

7. Setting the Date

<Viewing the Month and Year (no. of years elapsed from the most recent leap year)>

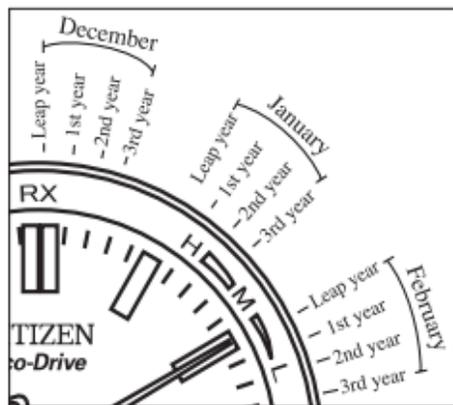
☆ **Viewing the Month:**

January zone: Between 1:00 and 2:00

February zone: Between 2:00 and 3:00

⋮

December zone: Between 12:00 and 1:00



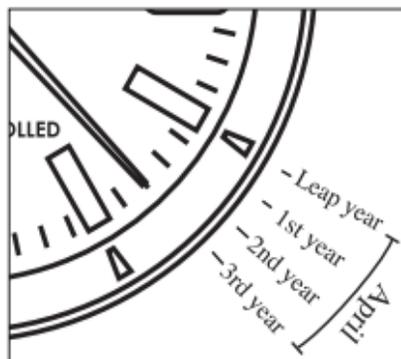
Examples:

April 2015

Read the number of elapsed years from the most recent leap year from the Quick Reference Chart.

• Align the second hand at 23 seconds (April zone between 4:00 and 5:00)

- Align the second hand at 23 seconds (April zone between 4:00 and 5:00)



☆ **Viewing the Elapsed Year:**

Leap year: Starting point of each month zone

1st year after most recent leap year:

1st graduation of each month zone

2nd year after most recent leap year:

2nd graduation of each month zone

3rd year after most recent leap year:

3rd graduation of each month zone

<Quick Reference Chart for Number of Years Since Leap Year>

Year	Elapsed year	Year	Elapsed year	Year	Elapsed year
2014	2nd year	2018	2nd year	2022	2nd year
2015	3rd year	2019	3rd year	2023	3rd year
2016	Leap year	2020	Leap year	2024	Leap year
2017	1st year	2021	1st year	2025	1st year

(Until February 28, 2100)

<Date Correction Procedure>

Step 1) Pull the crown out to Position 1.

- The watch enters the date correction mode, and the second hand moves to the position of the month and elapsed year stored in the memory of the watch and stops.

Step 2) Turn the crown to set the date.

- ① Turning the crown to the right (by 1 click) advances the date by 1 day.
- ② Turning the crown to the left (by 1 click) moves the date back by 1 day.

[NOTE] Pay attention to AM and PM when setting the date. Refer to "6. Setting the Time".

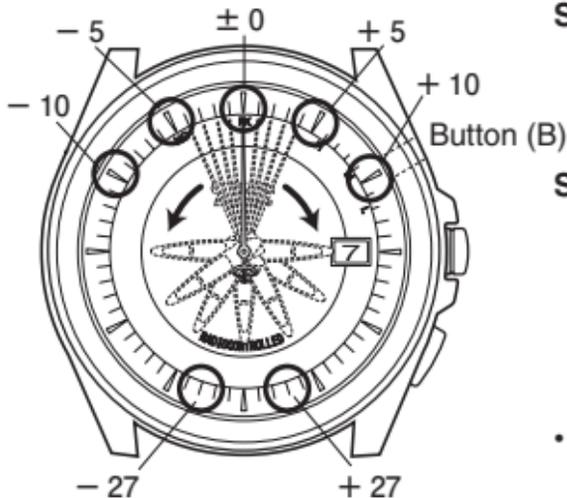
Step 3) Press button (A) once and turn the crown to set the month and elapsed year.

- ① Turn the crown to the right (by 1 click) to align the second hand at the position corresponding to the month and elapsed year.
- ② Turning the crown to the left (by 1 click) causes the second hand to move backward.
- Ⓞ The operation for correcting the date, month and elapsed year can be switched by pressing button (A) once. The date wheel or second hand being corrected at that time moves to the left and right to indicate that the watch has entered the correction mode.

Step 4) Return the crown to the normal position (0) to finish the procedure.

8. Time difference correction procedure

- This function lets you set a time difference in 1 hour units for the local time when traveling to a region or country in a different time zone.



Step 1) Press button (B) once. The second hand indicates the time difference. The zero seconds position of the second hand indicates a time difference of ± 0 hours.

Step 2) Turning the crown (by 1 click) to the right without pulling it out causes the second hand to advance by 1 hour in a single step. Turning the crown to the left causes the second hand to go back by 1 hour in a single step.

- The second hand indicates Japan standard time at the 0 seconds position. The time difference can be set to ± 27 hours based on Japan standard time.

Step 3) After setting the time difference, the setting mode is canceled and the second hand returns to 1-second interval movement either when button (B) is pressed once or when none of the buttons are pressed for 10 seconds.

Checking and Correcting the Reference Position

9. Automatic Hand Correction Function (Hand Reference Position Automatic Correction Function)

What is the Automatic Hand Correction Function ? (Hand Reference Position Automatic Correction Function)

This function checks the hand positions at predetermined intervals to determine if the hand reference positions are correct, and if they are detected to have shifted out of position, rapidly corrects the second and minute hands to keep the correct time.

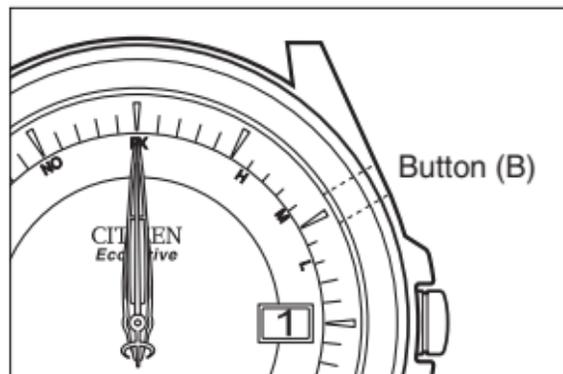
Shock Detection Function

This function prevents the second and minute hands from shifting when the watch is subjected to shocks.

If the watch should happen to be subjected to a strong impact or placed in an environment subjected to magnetism or static electricity, the correct time may not be displayed even if radio waves are received. If this happens, check the reference position. Refer to "10. Checking the Reference Position" on the following page.

10. Checking the Reference Position

Radio wave watches display the standard time and date received on the basis of a hand reference position of "12:00:00" and a date of the "1st".



- Check that the reference position is displayed correctly.
Continuously depress button (B) for about 5 seconds or more with the crown at the normal position, and release once the second hand has begun to move either forward or backward. All of the hands and the date wheel move rapidly and stop at the reference position stored in the memory of the watch.

Indication of correct reference position:
Time: 12:00:00 Date: 1st

*If the hands and date are not in the reference position, the correct date and time will not be displayed even if radio waves are received. If they deviate from the reference position, see "11. Adjusting the Reference Position Manually" on the next page, and correct the position.

11. Manually Correcting the Reference Position

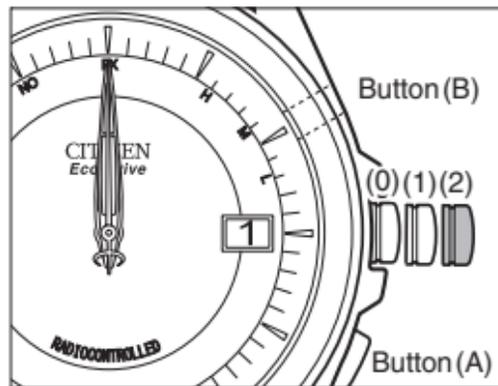
Correct the reference position if the date wheel does not indicate the "1st" or the hands do not indicate "12:00:00".

<Correcting the Reference Positions of the Date, Hour Hand, Minute Hand and Second Hand>

Step 1) Press button (B) for 5 seconds or more, release when the second hand begins to move rapidly and then pull the crown out to Position 2.

Step 2) Align the date at "1".

- ① Continuously turning the crown (by 2 clicks or more) causes the data to change continuously.
 - Turn the crown to the left or right to stop the date from changing.
- ② When a "1" appears in the center of the date window on the watch dial, turn the crown to the left or right to stop the date from changing.



Step 3) Press button (A) once and turn the crown to set the hour hand.

- ① Turning the crown to the right (by 1 click) causes the hour hand to advance by 1 step while turning to the left causes it to go back by 1 step.
- ② Continuously turning the crown (by 2 clicks or more) causes the hour hand to move continuously.
- ⊙ Each time button (A) is pressed, hour hand, second hand and the date move left and right in that order to indicate that the watch is in the correction mode.

Step 4) Press button (A) once and turn the crown to set the minute and second hands.

- ① Turning the crown to the right (by 1 click) causes the second hand to advance rapidly by 1 minute, while turning it to the left causes the second hand to move back by 1 minute.
- ② Continuously turning the crown (by 2 clicks or more) causes the second hand to rotate rapidly, and the minute hand moves continuously in coordination with the second hand.

Step 5) After setting the reference position, return the crown to the normal position (0) and press button (B) once to return each hand and the date wheel to the current time and date.

- Although this completes the procedure for setting the reference position, perform free reception if the watch does not indicate the current time.

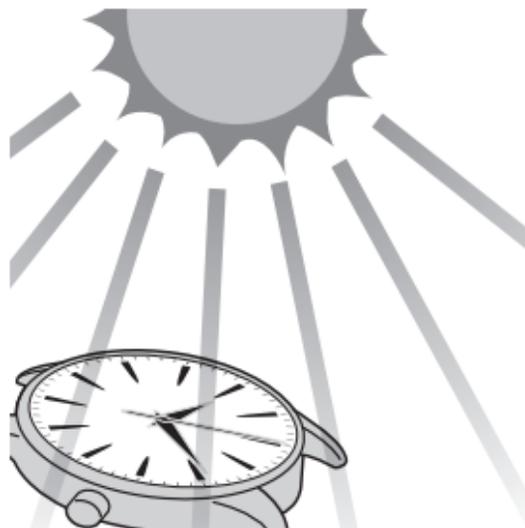
Eco-Drive

12. Charging your watch

Once fully charged, this watch will continue to keep the correct time for about 6 months (about 7 months for the H11A) during normal use.

**<For Optimum Use of this Watch>
In order to use this watch
comfortably, try to store the watch
in a bright location at all times.**

- ◆ When not wearing your watch, try to place it next to a window or other bright location that allows the dial to be exposed to sunlight. This will keep the watch charged and enable it to continue to run properly at all times.



- ◆ Charge the watch by exposing the watch dial to direct sunlight or light from a fluorescent lamp.
- ◆ If you usually wear long sleeves, the watch may be covered thereby preventing it from being exposed to light resulting in the watch becoming insufficiently charged. It is recommended to charge the watch once a month by exposing to direct sunlight.

13.Unique Functions of Eco-Drive Watches

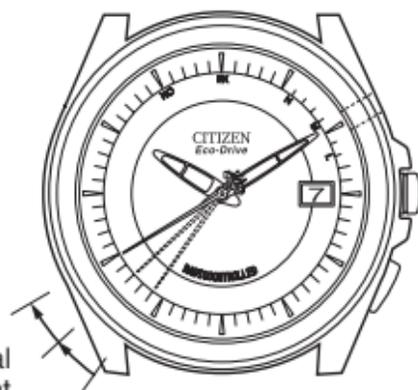
○ When the watch becomes insufficiently charged, the display changes as shown below.

[Normal Display]



When the watch becomes insufficiently charged due to not exposing the dial (solar cell) to light

[Insufficient Charge Warning Display]



Second hand begins 2-second interval movement

***1 If the watch has stopped as a result of being insufficiently charged:**

- A minimum of about 30 minutes are required until recovery automatic reception, even if the watch is exposed to light.

***2 If recovery automatic reception has failed:**

- Since the time is incorrect even if the second hand is moving at one second intervals, first set the time and date manually or by free reception before using the watch.

[Recovery Automatic Reception]

If insufficient charge warning
(2-second interval movement
continues for 2 days or more)

**Watch stops due
to being
insufficiently
charged**

When sufficiently
charged by exposing
the dial (solar cell)
to light *1



When reception is successful *2

Radio waves are received once
automatically when charged

A. Power Save Function

When the watch is stored in the place where its solar cell is continuously not exposed to light for 1 week or more, the watch enters the power save mode and some features of the watch will be deactivated.

<Canceling Power Save>

The power save function is canceled automatically when the watch dial is exposed to light.

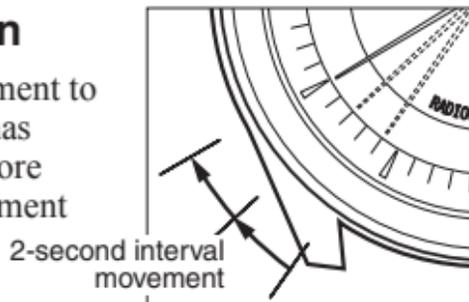
- When the power save function is canceled, each hand rapidly returns to the current time and the second hand begins one-second interval movement.
- Two-second interval movement begins if the watch is insufficiently charged. When this happens, sufficiently charge the watch so that it returns to one-second interval movement.

[Note]

Although the watch will continue to be accurate to within the time accuracy range in the power save mode, when the power save function is canceled, be sure to perform free reception before using.

B. Insufficient Charge Warning Function

The second hand changes from 1-second interval movement to 2-second interval movement to indicate that the watch has become insufficiently charged. After about 2 days or more have passed since the start of two-second interval movement without light shining onto the watch, the watch stops as a result of being insufficiently charged.



[Note] During two-second interval movement, regular automatic and free reception are not available, and the time cannot be corrected manually.

- ◆ If the watch becomes insufficiently charged while radio wave reception, confirmation of reception result, time difference correction or checking or setting the reference position is in progress, the operation is interrupted and the watch returns to the time prior to the operation being performed. The watch begins 2-second interval movement at this time. Try to keep the watch charged at all times to prevent it from becoming insufficiently charged.

C. Overcharging Prevention Function

This function eliminates any worry regarding effects on the rechargeable cell, timekeeping accuracy, performance or functions of the watch no matter how much the watch is charged.

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

D. General Reference for Charging Times

* Below are the approximate times required for charging when exposing the watch dial to light continuously.

Please use this table as a reference only.

Environment	Illuminance (lx)	Charging Time (approx.)		
		To work for one day	To start working normally when the cell is discharged	To become fully charged when the cell is discharged
Outdoors (sunny)	100,000	5 minutes	40 minutes	16 hours
Outdoors (cloudy)	10,000	12 minutes	1.5 hours	40 hours
20 cm from a fluorescent lamp (30W)	3,000	40 minutes	2.5 hours	150 hours
Interior lighting	500	4 hours	17 hours	—

* If the second hand is moving in 2-second intervals, refer to “To fully charge” and fully charge.

* If the second hand is moving in 2-second intervals, the watch cannot be operated.

Charge the watch until the second hand moves at 1-second intervals.

E. Eco-Drive 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 that it will continue to run properly.

<Replacement of Rechargeable Cell>

- Because the watch uses a rechargeable cell, you do not need periodical cell replacement.
However, power consumption may increase after using for an extended period of time due to deterioration, and the power may run out earlier than expected. To avoid this, we recommend that you have your watch inspected (Charge basis) periodically.

Troubleshooting

<Radio Wave Reception Function>

Try checking the following when you think a problem has occurred.

Problem	Check Items	Corrective Actions
Watch does not begin reception	<ul style="list-style-type: none">● Does the second hand move to "RX: Reception in progress"?	<ul style="list-style-type: none">● Refer to "5. Receiving the Radio Waves."
Time does not match telephone time service even though radio waves can be received	<ul style="list-style-type: none">● Has the reference position been set correctly?	<ul style="list-style-type: none">● Check the reference position. If the reference position is not correct, refer to "11. Manually Correcting the Reference Position" and reset the reference position.

Problem	Check Items	Corrective Actions
<p>Unable to receive radio waves (even within a receivable area)</p>	<ul style="list-style-type: none"> ● Are there objects that block radio waves or generate noise nearby ? ● Are radio waves attempted to be received away from a window ? 	<ul style="list-style-type: none"> ● Try receiving radio waves while facing the 9:00 position of the watch towards a transmitter station while avoiding objects that block radio waves or generate noise. Try changing the direction, location and angle of the watch several times to find the location near a window at which radio waves are received easily. Refer to "4. Locations where Reception may be Difficult" in the section on Radio Wave Reception.
	<ul style="list-style-type: none"> ● Has the watch been moved while the second hand is indicating RX or a reception level of H, M or L during reception ? 	<ul style="list-style-type: none"> ● Wait until reception is completed (until it returns to normal hand movement) before moving the watch.

Precautionary Items and Usage Limitations

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.

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	—	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 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

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.

- 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.
- 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.

<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.



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 paint.
- The paint may not glow and/or may dissipate quickly if exposure to light was not sufficient.

Warranty and Service

<Free Guarantee>

In the case a malfunction has occurred during the course of normal use while the watch is still under warranty, the watch will be repaired free of charge in accordance with the conditions of the warranty included with this manual.

<Stock Period of Repair Parts>

Our standard period for stocking repair parts for each model is generally seven years. When an exterior part such as the watch case, glass, dial, hand, crown or band is damaged, a spare part with different appearance may sometimes be used.

<Repair Period>

Repairs can be performed on your watch within the repair parts stock period even after the free guarantee has expired. However, you will be charged for these repairs. Please take the watch to the shop where you purchased it and ask whether it can be repaired because the repair period varies according to the conditions of use, environment and so forth. Moreover, there are cases in which it is difficult to restore the watch to its original accuracy when decreased accuracy has resulted from long-term use.

<Change of Address or Receiving as a Gift>

In the event that you have moved or have received your watch as a gift, and are not able to bring your watch to the shop where it was purchased for servicing, please consult Customer Support Center.

<Periodic Inspection(Charge Basis)>

- Water resistance

As the water resistance will be reduced over time, you should have your watch inspected and its water resistance verified every 2-3 years (charge basis) to extend its life and ensure safety. To maintain its water resistance, it is recommended to request us to replace the packings and other parts of your watch.

- Disassembling for internal cleaning (repair)

You should have your watch disassembled and its internal components cleaned periodically to extend its life. Lubrication oils are used to reduce wearing of moving parts such as gears. However, over time the lubrication oils will degrade and wear will increase, eventually resulting in malfunction. Please have your watch undergo internal cleaning once every 5 years as a guide.

<Request to customers>

All parts of this watch, except for the band, are to be repaired only at CITIZEN. This is because special technologies and equipment are required to perform repairs, inspections and adjustments. Please make requests for repairs to Customer Support Center when having your watch repaired.

<Other Inquiries>

If you have any questions regarding the way warranty, repairs or other matters, please inquire at the shop where you purchased your watch or Customer Support Center.

Specifications

1. **Caliber No. :** H11A, H110, H111, H113, H119
(excludes H112, H115, H116 and H117)

	Operation time	Power saving	Warning period
H11A	7 months	30 months	2 days
H110 H111 H113 H119	6 months	24 months	2 days

2. **Type :** Analog solar-powered watch
3. **Timekeeping accuracy:** Not during reception (when not receiving radio waves)
Within ± 15 seconds per month on average (when worn at normal temperatures of $+5^{\circ}\text{C}$ to $+35^{\circ}\text{C}$ and when not receiving radio waves)
4. **Operating temperature range :** -10°C to $+60^{\circ}\text{C}$
5. **Display functions :**
- Time: Hours, minutes, seconds
 - Date

6. Additional functions :

- Solar power function
- Radio wave receiving function (regular automatic reception, free reception, recovery automatic reception)
- Automatic transmitter station selection function (for use exclusively with Japan standard time radio waves)
- Reception in progress display function (RX)
- Reception level display function (H, M, L)
- Reception result confirmation function (H, M, L or NO)
- JIS type 1 magnetic resistance
- Shock detection function
- Automatic hand correction function
- Perpetual calendar
- Time difference monitoring function
- Time difference correction function
- Reference position confirmation/correction function
- Power save function (reduces power consumption)
- Insufficient charge warning function (2-second interval movement)
- Overcharging prevention function

Perfex
パーフェックス

7. Battery : Rechargeable cell (lithium button cell), 1 pc.

* Specifications are subject to change without notice.

HAR03 ⑧

CT038

CT039

CT089

EX036

<http://citizen.jp/>

Cal.H11A

Cal.H110

Cal.H111

Cal.H113

Cal.H119