

## ■ This radio controlled watch receives standard radio signals broadcast from Germany.

This is a radio controlled watch; it has the Automatic reception function and On demand reception function. Every day at 3 a.m. or 4 a.m., the watch automatically receives a radio signal and adjusts the time (Automatic reception), or the signal can be received and the time adjusted at any desired time (On demand reception).

The radio controlled watch has no effect on the human body or medical equipment.

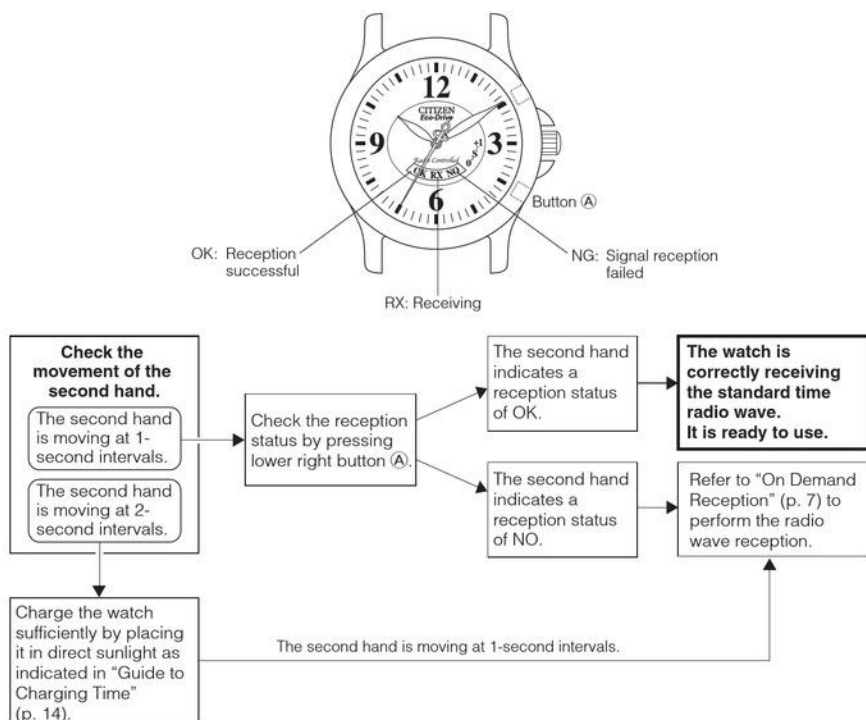
## ■ Fully charge the watch before use by exposing it to sufficient light.

The second hand will move at 2-second intervals when the watch is insufficiently charged. Charge the watch as indicated in "Guide to Charging Time" (p. 14).

**Charge the watch in direct sunlight for a long time once a month.**



## ■ Please confirm the following before using the watch.



## ■ Checking the Reference Position

Before using the watch, check that the hands are aligned with "0", similar to when setting weighing scales

- The reference position may become misaligned when the watch is exposed to strong magnetism, static electricity or impacts.

Even if radio waves are received, the correct time will not be indicated unless the watch hands are aligned to the correct reference position. Check that the hands are properly aligned with "0".



### [Examples of magnetic products that can affect the watch.]

- Health products (for example, medical necklaces and waist bands that have magnetic fields)
- Refrigerators (magnetic part of the door)
- Electromagnetic cookers
- Bags (with magnet fasteners)
- Mobile phones (speaker part)

Correct reference position  
12:00:00



Check the  
reference  
position

Reference position is  
correct

Reference position is  
incorrect

- Check that the reference position aligns correctly in the 12:00:00 position.

- (1) With the crown in the normal position, press the upper right button (B) continuously for about 5 seconds.
- (2) Release the upper right button (B) when the second hand begins to move.

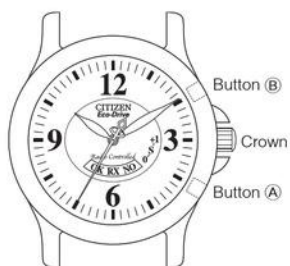
The hands will move rapidly, stopping at the reference position recorded in the watch memory.

- The hands are aligned with the 12:00:00 position.

Press the upper right button (B), or leave the watch for 2 minutes, and the hands will return to their normal movement.

- The hands are not aligned with the 12:00:00 position.  
Pull out the crown and correct the reference position. (p. 11)

## ■ Function List



Function	Button or crown operation	Hand movement
On demand reception (p. 7)	Press lower right button (A) for more than 2 seconds and release when the second hand stops in the RX position.	<ul style="list-style-type: none"> <li>The second hand will stop at RX and reception will begin.</li> </ul>
Confirm reception status (p. 8)	Press lower right button (A) once.	<ul style="list-style-type: none"> <li>The second hand will stop at OK or NO.</li> </ul>
Time difference setting (p. 10)	Press the upper right button (B) once, turn the crown to set the time difference, and press the upper right button (B) once more to complete the operation.	<ul style="list-style-type: none"> <li>The second hand will stop at the 12:00 position. (If a time difference setting has been made, it will stop at the position appropriate for the time difference.)</li> <li>The second hand at the 12:00 position indicates time difference of <math>\pm 0</math> hours. Turn the crown to set the time difference. One step of the second hand indicates a one hour time difference.</li> </ul>
Setting the summer time (p. 9)	Press the lower right button (A) once, then within 10 seconds press the upper right button (B).	<ul style="list-style-type: none"> <li>The second hand will stop at the reception status confirmation position (OK or NO).</li> <li>If the upper right button (B) is pressed, the second hand will indicate summer time setting, "0" (off) or "+1" (on).</li> <li>Turn the crown to the right to select "0" (off), or to the left to select "+1" (on).</li> <li>Press button (A) or (B) to complete the operation. If the watch is left, the hands will return to their normal movement after 10 seconds.</li> </ul>
Setting the time manually (p. 10)	Pull out the crown to position 1.	<p>Second hand, minute hand, hour hand:</p> <ul style="list-style-type: none"> <li>Turn the crown to the right to rotate the second hand clockwise once and move the minute hand ahead by 1 minute.</li> <li>Turn the crown to the left to rotate the second hand counterclockwise once and move the minute hand back by 1 minute.</li> </ul> <p>Turn the crown quickly to move the hour and minute hands continuously.</p>

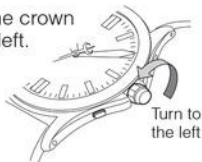


### §3. OPERATING THE CROWN

There are two models available for the crown: normal and screw lock.

#### <Operating the Screw Lock Crown>

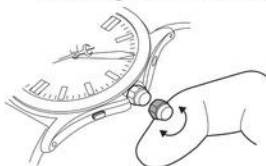
- Turn the crown to the left.



- When the screw lock is released, the crown pops out a little and stops in the normal position. After finishing the operation, lock the crown again.



#### <Moving the Hands Continuously>

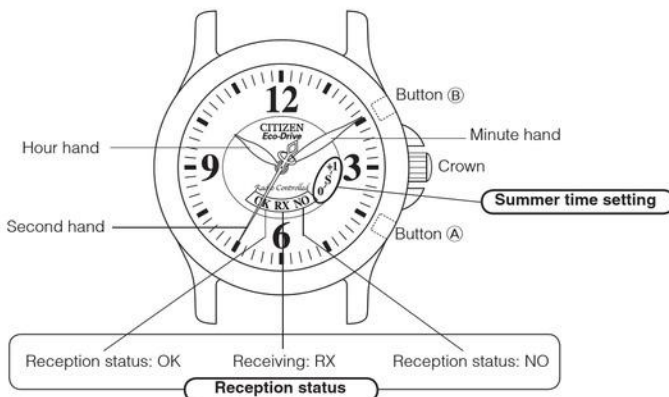


When the crown is pulled out to the position 1 and quickly turned to the left or right (more than 2 clicks), the hands will rotate continuously. To stop the continuous movement of the hands, turn the crown to the left or right by one click.

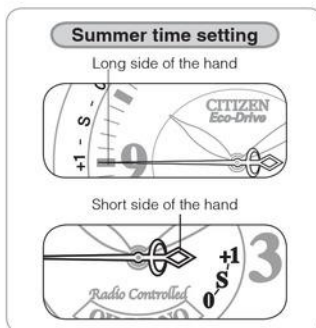
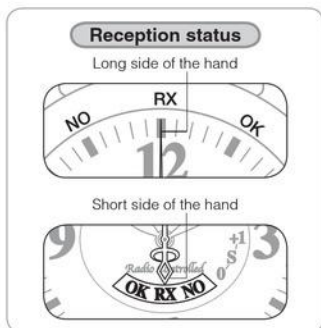
\* A gentle "click" can be felt by the fingertips.

Using the side of your finger, quickly turn the crown by two or more clicks.

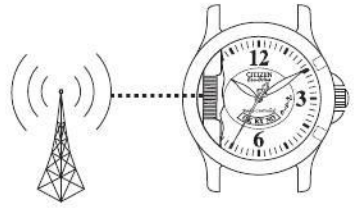
### §4. NAMES OF COMPONENTS



- Depending on the particular watch model, some indicate the reception status and daylight saving setting with the long side of the second hand, while others indicate with the short side of the second hand.



\* Depending on the particular watch model, some do not have an "S" indication.



## 5-3 Receiving the Radio Signals

### A. Automatic Reception

Place the watch in a stable location near a window where the radio signal can be easily received with the 9:00 position pointing towards the transmitter. The watch will receive the radio signals at 3 a.m. everyday. If a signal cannot be received at 3 a.m., it will try again automatically at 4 a.m.

### B. On Demand Reception (Manual Reception)

Signals can be received at any time.

Use this function when automatic reception is impossible due to changes in the reception environment.

(Depending on the weather or noise conditions, reception can take up to 15 minutes.)



The second hand stops at the RX position.

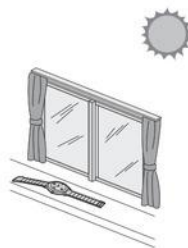
- (1) Remove the watch from your wrist and place on a stable surface near a window where the radio signal can be easily received, pointing the 9:00 position in the direction of the radio signal transmitter.
- (2) Press the lower right button (A) for more than 2 seconds and release it when the second hand stops at the RX position.
- (3) When reception is complete, the second hand will leave the RX position and return to normal movement.

Referring to "Confirming the Reception Status" (p. 8), check the reception status.

### C. Recovery Automatic Reception

If the watch stops due to insufficient charging, expose the watch to sunlight to recharge it. When the watch is recharged sufficiently, it will automatically receive the radio wave once. Please remember to keep the watch charged to prevent this situation from occurring.

- \* If the lower right button (A) is pressed for more than 2 seconds during reception, the reception will be cancelled and the hands will return to their normal movement.

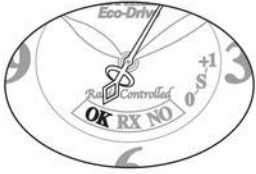



## D. Confirming the Reception Status

The reception status (reception successful or failure) can be confirmed.

- (1) Press the lower right button (A). The second hand will stop at the OK or NO position indicating the last reception status.

**Note:** Do not press the lower right button (A) for more than 2 seconds. If you do this, the second hand will move to the RX position and on demand reception will begin.

OK indication	NO indication
	
<p><b>Reception was successful.</b> The watch has been set to the correct time. * If reception was successful, but the time is not correct, refer to "Checking the Reference Position" (p. 2), and "Correcting the Reference Position" (p. 11).</p>	<p><b>Unable to receive a signal.</b> Retry reception, either on demand reception or automatic reception.</p>

- (2) Press the lower right button (A). The hands will return to their normal movement.

If the watch is left, the hands will return to their normal movement after 10 seconds.

<Even if the radio wave is received correctly, there could be a slight deviance from the correct time due to factors such as the radio wave reception environment and internal watch processing.>

## E. Reception Area Guidelines

This watch can receive the standard time signal broadcast from Germany.

The map shows the approximate reception area. Suitable reception areas may vary according to changes in conditions for the signal due to factors including time, season and weather.

The reception area on the map is only guideline, and it may be difficult to receive the radio signal even within the areas indicated on the map.

Standard time radio signal	Radio signal transmitter
DCF77	Mainflingen Transmitter, Southeast Frankfurt

The standard time radio wave this watch uses is broadcast almost continuously 24-hours a day, but may occasionally be interrupted for maintenance.

Even if reception of the standard time radio signal has failed, the watch will continue to be accurate to within  $\pm 15$  seconds per month.



DCF77 (Germany) Mainflingen: 900 km radius from the transmitter

## 5-4 Setting the Summer Time

If the watch is receiving the standard time signal broadcast from Germany, there is no need to set summer time. Use this setting if it is not possible to receive the standard time signal, or if in a region where the summer time is used and standard time signal cannot be received.

### <Setting summer time>



- (1) Press the lower right button (A). The second hand will stop at the OK or NO position.  
If the upper right button (B) is pressed within 10 seconds, the second hand will indicate daylight saving setting by moving to "0" (off) or "+1" (on).

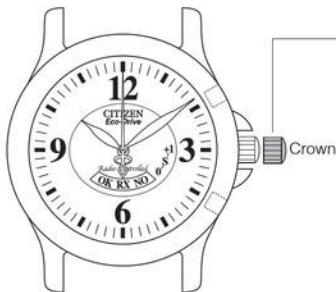
**Note:** Do not hold the lower right button (A). If you do this, the second hand will move to the RX position and on demand reception will begin.



- (2) Turn the crown to the right to select "0" (summer time off), or to the left to select "+1" (summer time on).
- (3) Press button (A) or (B) to complete the operation.  
If the watch is left, the hands will return to their normal movement after 10 seconds.

## §6. SETTING THE TIME MANUALLY

### 6-1 Setting the Time



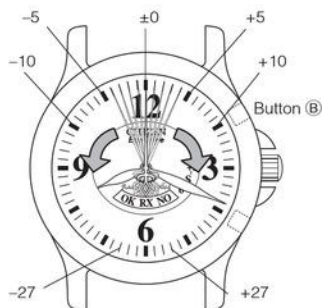
- (1) Pull out the crown. The second hand will align with the 0 seconds position.

**Note:** If the second hand does not align with the 0 seconds position, it is possible that the reference position is incorrect. Refer to "Checking the Reference Position" (p. 2), and "Correcting the Reference Position" (p. 11).

- (2) Turn the crown to set the time.  
With every click, each of the hands moves sequentially one minute at a time.  
(Turn to the right to move forward; turn to the left to move back.)  
  
Turn the crown quickly (more than 2 clicks) to move the hands continuously.  
To stop the continuous movement, turn the crown one click to the left or right.
- (3) Set the time by using a time signal and press in the crown to complete the operation.

### 6-2 Correcting the Time Difference

When traveling to a different time zone, the time difference can be set (in 1-hour units,  $\pm 27$  hours) to match the local time using the second hand.



- (1) Press the upper right button ⓑ once. The second hand will stop at the 12:00 position. The second hand 12:00 position indicates a time difference of  $\pm 0$  hours.  
\* If the time difference has already been set, this time difference is indicated.
- (2) Turn the crown without pulling it out. Turn the crown to the right by 1 click to move the second hand ahead by 1 step. Time difference of +1 hour is set. Turn the crown to the left by 1 click to move the second hand back by 1 step. Time difference of -1 hour is set.

#### Example:

When going to an area with a time difference of 5 hours, align the second hand with the 5 second position.

- (3) After setting the time difference, press the upper right button ⓑ once. The time difference will be indicated and then the hands will return to their normal movement.  
(If the watch is left for 60 seconds, the hands will return to their normal movement.)

## 6-3 Correcting the Reference Position

If the reference position does not indicate "12:00:00", the reference position must be corrected.



Correct reference position  
12:00:00

- (1) Press the upper right button (B) for more than 5 seconds, and release when the second hand begins rotating rapidly. While the hand is still moving, pull out the crown and wait until the hand stops moving.
- (2) Align the hands with the "12:00:00" reference position.  
Turn the crown one click to the right to advance the hand by one second, and one click to the left to retard it by one second.  
Turn the crown quickly (more than 2 clicks) to move the hands continuously.  
To stop the continuous movement, turn the crown one click to the left or right.

- (3) After correcting the reference position, press in the crown to record the new reference position.
  - (4) Press the upper right button (B) once. The hands will rapidly return to the current time.  
If the watch is left for 2 minutes, the hands will return to their normal movement.
- \* In the event that the time is not correct, carry out "On Demand Reception" (p. 7).

## §7. SOLAR POWER

### 7-1 Solar Power Function

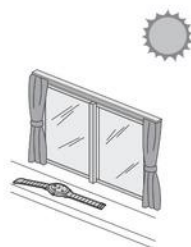
This watch uses a secondary battery to store electrical energy. When the watch is fully charged, it will maintain its accuracy for about 6 months.

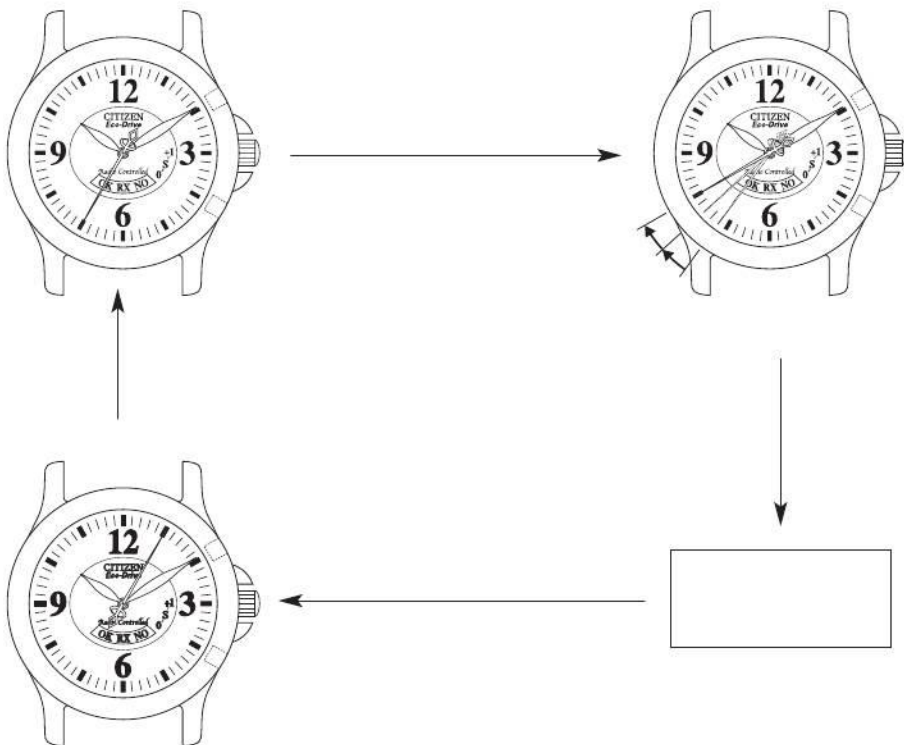
#### <Ensuring best operation of the watch>

##### Always store the watch in a bright location for best results.

- \* Placing the watch near a window where its face can receive sunlight or near another source of light when you are not wearing it will ensure that the watch is regularly charged, allowing it to maintain its accuracy.
- \* Wearing clothes with long sleeves makes it difficult for the watch to get the necessary light, resulting in insufficient charging. It is recommended that the watch be left in direct sunlight once a month to charge it.

**Note:** Do not charge on surfaces that can easily become hot, such as a car dashboard.





### <Canceling the power saving function>

The power saving function will be automatically canceled when the watch face is exposed to light.

- When power saving function is canceled, the hands will return to their normal movement.
- If the watch is insufficiently charged, the second hand will begin the 2-second interval movement. Charge the watch adequately to restore normal movement of the hands.

#### Notes:

- The power saving function cannot be canceled with crown or button operations. Cancel the power saving mode by placing the watch in light.
- After the power saving mode has been canceled, press the lower right button (A) once to check the reception status.  
If it is not showing the correct time, carry out "On demand reception" (p.7) or "Setting the Time Manually" (p. 10) before using.

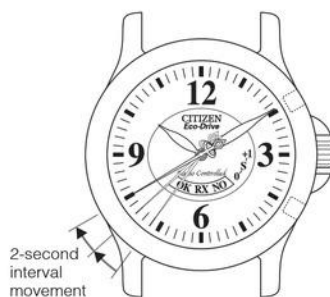
### B. Insufficient Charge Warning Function

The second hand's movement changes from 1-second intervals to 2-second intervals to show that the watch is insufficiently charged.

The watch will stop due to an insufficient charging about 2 days after starting the 2-second interval movement.

**Note:** During 2-second interval movement, automatic reception, on demand reception, time difference setting and manual time setting are unavailable.

- \* If the charging insufficiency occurs during "Radio signal reception", "Confirming reception status", "Time difference correction" or "Checking/correcting the reference position", the operation will stop automatically, the watch will return to the time before the operation, and 2-second interval movement will begin.  
Regularly charge your watch so it does not become insufficiently charged.



### C. Overcharging Prevention Function

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

No matter how much the watch is charged, it will not affect the secondary battery, timekeeping, functions or performance of the watch.



## §8. TROUBLESHOOTING

### <Radio signal reception function>

If the watch may be inoperative, consult the following chart:

Problem	Check	Remedy
The watch does not receive radio signals.	<ul style="list-style-type: none"> <li>Does the second hand align with the RX (receiving) position?</li> </ul>	<ul style="list-style-type: none"> <li>Press and hold the lower right button (A) until the second hand has reached the RX position.</li> </ul>
The watch can receive the radio signal, but it does not show the correct time. The second hand does not align accurately with the OK/RX/NO positions.	<ul style="list-style-type: none"> <li>Is the reference position set correctly?</li> </ul>	<ul style="list-style-type: none"> <li>Confirm the reference position. (p. 2) If the reference position is not correctly set, refer to "Correcting the Reference Position" and correct the reference position. (p. 11)</li> </ul>
Reception is successful, but the time is out by a factor of hours.	<ul style="list-style-type: none"> <li>Check the time difference setting.</li> </ul>	<ul style="list-style-type: none"> <li>Set the correct time difference setting. (p. 10)</li> </ul>
Radio signal cannot be received (where reception is possible).	<ul style="list-style-type: none"> <li>Are there objects nearby that could block radio signals or generate noise?</li> <li>Are you attempting to receive the radio signal in a location far from a window?</li> </ul>	<ul style="list-style-type: none"> <li>Avoiding objects that shield the radio waves and sources of radio noise, try to receive the signal with the 9:00 position of the watch pointing towards a window. Find a location such as window that is conducive to radio signal reception and change the watch location, direction and angle. (p. 6)</li> </ul>
	<ul style="list-style-type: none"> <li>Was the watch moved during reception while the second hand was aligned with the RX position?</li> </ul>	<ul style="list-style-type: none"> <li>Do not move the watch until the signal has been properly received (until normal hand movement returns).</li> </ul>

### <Eco-Drive>

Problem	Check	Remedy
<ul style="list-style-type: none"> <li>The second hand is moving at 2-second intervals.</li> <li>The watch has stopped.</li> <li>The watch does not work even after charging.</li> </ul>	<ul style="list-style-type: none"> <li>Did you charge the watch sufficiently in sunlight?</li> </ul>	<ul style="list-style-type: none"> <li>Charge the watch sufficiently, as indicated in "Guide to Charging Time". (p. 14)</li> <li>If the watch does not work even after charging, contact the Citizen Service Center.</li> </ul>
<ul style="list-style-type: none"> <li>The hands moved forward quickly at the moment that the watch was removed from a desk or drawer.</li> </ul>		<ul style="list-style-type: none"> <li>This is because the power saving mode was canceled when the watch was exposed to light, and the hands moved forward quickly to the current time. It is ready to use. (p. 12)</li> </ul>

## §9. REPAIR OF THIS WATCH

All troubles of this watch (except band troubles) shall be repaired by the manufacturer (CITIZEN SERVICE CENTER), since special technique is required for the final adjustment, check, etc. after the repair work is finished.

Accordingly, if the watch has any trouble, ask CITIZEN SERVICE CENTER for repair or adjustment.