

Operation Guide 5251 (OC)

CASIO®

ENGLISH

Congratulations upon your selection of this CASIO watch.

• Note that the product illustrations in this manual are intended for reference only, and so the actual product may appear somewhat different than depicted by an illustration.

Note that CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss suffered by you or any third party arising through the use of this product or its malfunction.

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About this manual

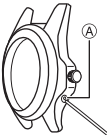


Operations are performed using the watch's crown and the (A) button.

Hand Functions

- 1 Hour Hand
- 2 Second Hand
- 3 Minute Hand
- 4 Day Indicator

This User's Guide uses numbers shown above to identify watch hands and indicators.

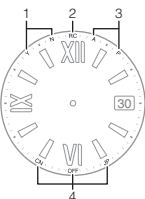


Important!

- The (A) button is designed to protect against accidental pressing. Use a thin pointed object to press the depression of the button to operate it.
- In the illustrations in this manual, the (A) button is emphasized for ease of understanding.

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About the face



The following explains the meanings of the markings on the watch's face.

1. Y (YES)/N (NO): Time calibration signal reception result
Y (YES): Successful
N (NO): Unsuccessful
• See "To check the result of the latest receive operation" (page E-21).
2. RC: Receive in progress
• See "To perform manual receive" (page E-20).
3. A (AM)/P (PM): AM and PM indications when setting the time
• See "To set the time manually" (page E-24).
4. CN (HKG, HONG KONG)/OFF/JP (TYO, TOKYO): Signal reception location
• See "Radio Controlled Atomic Timekeeping" (page E-16).

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Crown Operations

The crown can be pulled out to one of two (click) positions. Never apply undue force when pulling out the crown.

Important!

- When pulling out the crown, avoid using undue force, which creates the risk of personal injury to your fingers and fingernails, and of watch malfunction.

First click



For selecting the location setting

Second click



For configuring time, date and other settings

Note

- When you push the crown back in from the first click, the 2 Second Hand will perform movement that indicates whether the watch's battery requires charging before resuming regular timekeeping. See "Charging Guide" (page E-12).

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High-speed Forward and Reverse Movement



While the crown is pulled out, rotating it more than one full turn either way will cause the hands to start to move at high speed. For the day indicator, only high-speed forward movement is possible.

High-speed Cancel



Rotate the crown in the reverse direction of the movement or press the (A) button.

Note

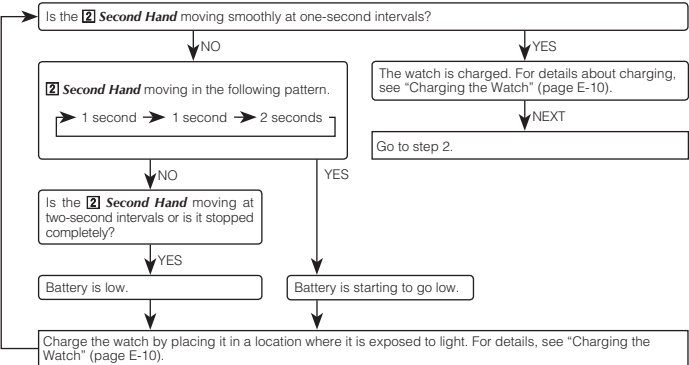
- Leaving the crown pulled out for more than two minutes without performing any operation will automatically cause the setting operation to become disabled. If this happens, press the crown back in and then pull it out again to configure settings.
- High-speed forward can be used when adjusting the current time setting, and when correcting hand or date alignment.
- High-speed reverse can be used when adjusting the current time setting, and when correcting hand alignment.

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Things to check before using the watch

1. Observe the movement of the 2 Second Hand.



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2. Check the current location settings.

Use the procedure under "Configuring Time and Date Settings" (page E-22) to configure your location settings.

Important!

- Proper time calibration signal reception and time settings depend on correct location setting. Make sure you configure these settings correctly.

3. Set the current time.

- To set the time using a time calibration signal
See "To get ready for a receive operation" (page E-18).
- To set the time manually
See "Configuring Time and Date Settings Manually" (page E-24).

The watch is now ready for use.

- For details about the watch's radio controlled timekeeping feature, see "Radio Controlled Atomic Timekeeping" (page E-16).

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Charging the Watch

The face of the watch is a solar panel that generates power from light. The generated power charges a built-in rechargeable battery, which powers watch operations. The watch charges whenever it is exposed to light.

Charging Guide



Whenever you are not wearing the watch, be sure to leave it in a location where it is exposed to light.

- Best charging performance is achieved by exposing the watch to light that is as strong as possible.



When wearing the watch, makes sure that its face is not blocked from light by the sleeve of your clothing.

- The watch may enter a sleep state (page E-14) if its face is blocked by your sleeve even only partially.

Warning!

Leaving the watch in bright light for charging can cause it to become quite hot. Take care when handling the watch to avoid burn injury. The watch can become particularly hot when exposed to the following conditions for long periods.

- On the dashboard of a car parked in direct sunlight
- Too close to an incandescent lamp
- Under direct sunlight

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- When power drops to Level 4, all functions will be disabled but the watch will continue to keep time internally for about one week. If you recharge the battery sufficiently during this period, the analog hands will move automatically to the correct setting and regular timekeeping will resume. After one week, all settings (including timekeeping) will be cleared. Recharging the battery will reset all settings to their initial factory defaults.

Charging Guide

The charging guide causes the [2] Second Hand to perform movement that gives you a rough idea of whether the watch needs to be exposed to light in order to charge the battery.

Important!

- Keep the watch in an area normally exposed to bright light when storing it for long periods. This helps to ensure that power does not run down.
- Storing the watch for long periods in an area where there is no light or wearing it in such a way that it is blocked from exposure to light can cause power to run down. Make sure that the watch is exposed to bright light whenever possible.

Power Levels

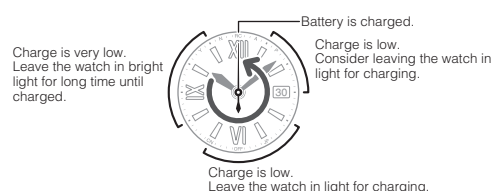


Movement indicates the current charge level.

You can get an idea of the watch's power level by observing the movement of the [2] Second Hand in the regular timekeeping.

Level	Hand Movement	Charge
1	Normal.	Battery is charged.
2	[2] Second Hand moves in the following pattern. 1 second → 1 second → 2 seconds	Battery is starting to go low.
3	[2] Second Hand moves at two-second intervals. [4] Day Indicator changes to 1 (home position).	Battery is low.
4	[2] Second Hand stopped. [1] Hour Hand and [3] Minute Hand stopped at 12 o'clock.	Battery is very low.

- To use the charging guide**
1. Pull the crown out to the first click. The [2] Second Hand will move to the currently selected location setting. Next, push the crown back in.
 - For about one second, the [2] Second Hand will perform movement that indicates whether the watch's battery requires charging.



- The current charging requirement is indicated whenever you push the crown back in from the first click.
- Failure to expose the watch to light when charging is required will cause the charge to be reduced even further.
- The charging guide is based on a calculated value (not the actual battery charge). Because of this, the battery charge may go low even if the charging guide indicates that immediate charging is not required. If this happens, expose the watch to light as soon as possible to charge the battery.

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Charging Times

Exposure Level (Brightness)	Daily Operation *1	Level Change *2			
		Level 4	Level 3	Level 2	Level 1
Outdoor sunlight (50,000 lux)	8 minutes		2 hours	25 hours	
Window sunlight (10,000 lux)	30 minutes		4 hours	93 hours	
Window sunlight on cloudy day (5,000 lux)	48 minutes		6 hours	151 hours	
Indoor fluorescent lighting (500 lux)	8 hours		59 hours	--	--

* 1 Approximate exposure each day to generate power for normal daily operation.

* 2 Approximate exposure to take power up one level.

• The above times are for reference only. Actual times depend on lighting conditions.

• For details about the operating time and daily operating conditions, see the "Power Supply" section of the Specifications (page E-36).

Power Saving

A Power Saving feature causes the watch to enter a sleep state automatically whenever it is left for a certain period in an area where it is dark.

How Power Saving works

The watch will enter the sleep state if it is left in a dark location for about one week.

- In the sleep state:
 - All hands stop at 12 o'clock.
 - Auto Receive is disabled.
 - Internal timekeeping continues to operate normally.
- The watch will not enter a sleep state between 6:00 AM and 9:59 PM. If the watch is already in a sleep state when 6:00 AM arrives, however, it will remain in the sleep state.

To recover from the sleep state

Move the watch to a well-lit area, press the (A) button, or pull out the crown to the first click.

- It can take up to eight minutes for the watch to resume normal operation after recovering from the sleep state. Do not perform any button operations during that time.

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Radio Controlled Atomic Timekeeping

This watch receives a time calibration signal and updates its time setting accordingly. However, when using the watch outside of areas covered by time calibration signals, you will have to adjust the settings manually as required. See "Configuring Time and Date Settings Manually" (page E-24) for more information.

This section explains how the watch updates its time settings when the city name selected as the current location is in Japan or China, and is one that supports time calibration signal reception.

If your location setting is this:	The watch can receive the signal from the transmitter located here:
CN (HKG, HONG KONG)	Shangqiu City (China)
JP (TYO, TOKYO)	Fukushima (Japan), Fukuoka/Saga (Japan)
OFF	No signal received

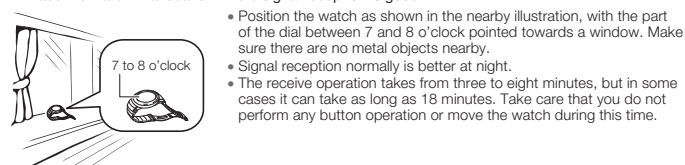
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Note

- Even when the watch is within range of a transmitter, signal reception may be impossible due to the effects of geographic contours, structures, weather, the time of year, the time of day, radio interference, etc.
- As of December 2010, China does not use Daylight Saving Time (DST). If China does go to the Daylight Saving Time system in the future, some functions of this watch may no longer operate correctly.

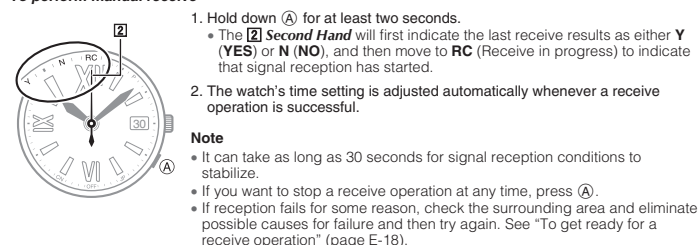
To get ready for a receive operation

- Place the watch in a location where signal reception is good.



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To perform manual receive



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Configuring Time and Date Settings

Normally time and date settings are configured automatically when a time calibration signal is received in accordance with your location setting.

Important!

- Whenever you are in an area where a signal cannot be received or if your location setting does not support signal reception, you will need to configure time settings manually. See "Configuring Time and Date Settings Manually" (page E-24).

Location Setting

Select one of the location settings shown below in accordance with your current location.

In China	CN (HKG, HONG KONG)
In Japan	JP (TYO, TOKYO)
Any other location	OFF (Receive off)

Setting the wrong location can make reception impossible or may result in incorrect time settings. See "Radio Controlled Atomic Timekeeping" (page E-16).

Important!

- When using this watch in China, set **CN (HKG, HONG KONG)** as the location.

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Approximate Reception Ranges

Japan (JJY)

The Japan time signal radio stations are located on Mt. Otakadoya in Fukushima and Mt. Hagane in Fukuoka/Saga.

The reception range of the Japanese time signals is approximately 1,000 km from each transmission station.

China (BPC)

The China time signal radio station is located in Shangqiu, Henan Province, China.

The reception range of the Chinese time signal is approximately 1,500 km from the transmission station.

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- Signal reception may be difficult or even impossible under the conditions described below.



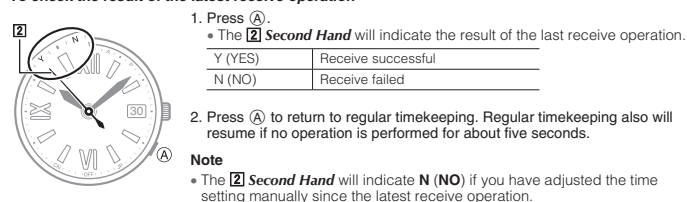
- What you should do next depends on whether you are using Auto Receive or Manual Receive.

- Auto Receive: Leave the watch over night in the location you selected in step 1. See "Auto Receive" below for details.
- Manual Receive: Perform the operation under "To perform manual receive" on page E-20.

Auto Receive

- With Auto Receive, the watch performs the receive operation each day automatically. Reception times depend on the location settings: 2:00, 3:00, and 4:00 a.m. for **JP (TYO, TOKYO)**, and 1:00, 2:00, and 3:00 a.m. for **CN (HKG, HONG KONG)**. When any receive operation is successful, none of the other receive operations for that day are performed.
- When a calibration time is reached, the watch will perform the receive operation. The receive operation is not performed if a calibration time is reached while you are configuring settings.

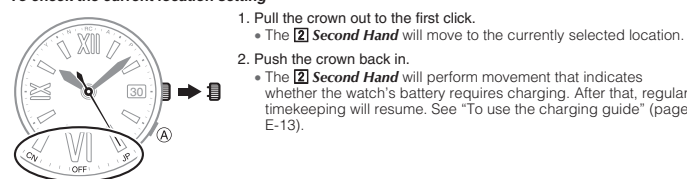
To check the result of the latest receive operation



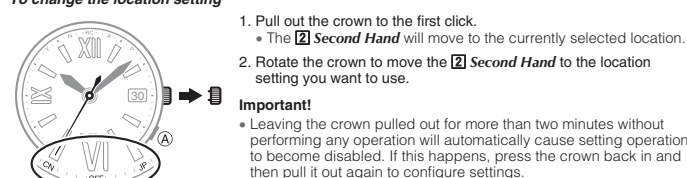
Radio-controlled Atomic Timekeeping Precautions

- Strong electrostatic charge can result in the wrong time setting.
- Even if a receive operation is successful, certain conditions can cause the time setting to be off by up to one second.
- The watch is designed to update the date automatically for the period January 1, 2000 to December 31, 2099. Updating of the date by signal reception will no longer be performed starting from January 1, 2100.
- If you are in an area where signal reception is not possible, the watch keeps time with the precision noted in "Specifications" (page E-36).
- The receive operation is disabled under any of the following conditions.
 - While the battery charge level is at Level 3 or lower (page E-11)
 - While the watch is in the function sleep state (power saving, page E-14)

To check the current location setting



To change the location setting



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3. Push the crown back in.

- The **[2] Second Hand** will perform movement that indicates whether the watch's battery requires charging. After that, regular timekeeping will resume. See "To use the charging guide" (page E-13).

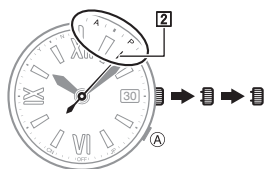
Configuring Time and Date Settings Manually

You should configure time and date settings manually when you are in an area where time calibration signal reception is not possible for some reason.

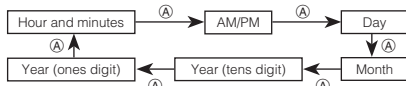
Important!

- It is recommended that you allow the watch to make time and date adjustments automatically when in an area where the time calibration signal is receivable.

To set the time manually



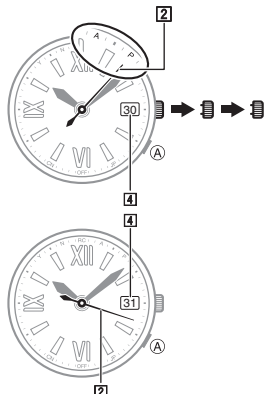
- Pull out the crown to the second click.
 - The **[2] Second Hand** will move to **A (AM)** or **P (PM)** in accordance with the current time.
 - Use **(A)** to cycle through the available settings in the sequence shown below.



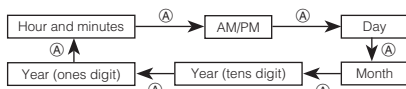
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To set the date manually



- Pull the crown out to the second click.
 - The **[2] Second Hand** will move to **A (AM)** or **P (PM)** in accordance with the current time.
 - Use **(A)** to cycle through the available settings in the sequence shown below.



2. Press (A) twice.

- The **[2] Second Hand** will align with the bottom of the **[4] Day Indicator**.

3. Rotate the crown to change the day setting.

Important!

- Note that you can change the day setting only by advancing to the next day. You cannot go back to a previous day. To change from 30 → 31 → 1 ... → 29.

2. While the hour and minutes setting is selected, rotate the crown to change the current time setting.

Note

- A high-speed movement feature (one hour maximum) is available when setting the time. See "Crown Operations" (page E-4).

3. After the time setting is the way you want, press (A) change to the AM/PM setting.

- The **[2] Second Hand** will move to **A (AM)** or **P (PM)**.

4. Rotate the crown to move the [2] Second Hand to the AM/PM setting you want.

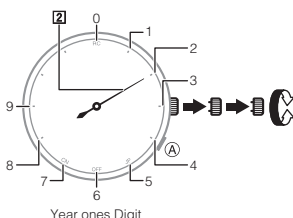
- If you want to continue on to the date setting, press **(A)** and then perform the procedure starting from step 3 under "To set the date manually" (page E-26).

5. At the top of a minute (based on the time signal on the radio, TV, etc.), push the crown back in to restart timekeeping.

- The **[2] Second Hand** will restart timekeeping from 0 seconds (12 o'clock).

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8. After the tens digit setting is the way you want, press (A).

- The **[2] Second Hand** will move to the ones digit of the current year setting.

9. Rotate the crown to move the [2] Second Hand to the year ones digit setting you want.

Note

- If you want to continue on to the time setting, press **(A)** and then perform the procedure starting from step 2 under "To set the time manually" (page E-24).

10. At the top of a minute (based on the time signal on the radio, TV, etc.), push the crown back in to restart timekeeping.

- The **[2] Second Hand** will restart timekeeping from 0 seconds (12 o'clock).

Note

- The watch automatically makes adjustments in the day setting to account for different length months and leap year.

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Adjusting the Home Positions

Strong magnetism or impact can cause the hands and/or day of the watch to be off, even if the watch is able to perform the calibration signal receive operation. The watch automatically detects and adjusts the position of the **[2] Second Hand** as required.

Note, however, that the watch does not automatically correct the positions of the **[1] Hour Hand**, **[3] Minute Hand**, or **[4] Day Indicator**. You need to correct the positions of these manually.

Adjusting Home Positions Manually

Important!

- You do not need to perform the procedure in this section if the watch is indicating the hour, minute, and day normally.



1. Pull the crown out to the first click.

2. Hold down (A) until the [2] Second Hand does one-half of a rotation (at least five seconds).

- Releasing **(A)** causes the **[3] Minute Hand** and **[2] Second Hand** to move at high speed for up to a maximum of one minute.

3. After high-speed movement of the hands stops, press (A) again.

- This causes the **[4] Day Indicator** to scroll forward at high speed and the **[2] Second Hand** to move to the bottom of the **[4] Day Indicator**. This high-speed operation takes about 1.5 minutes.

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4. If the [4] Day Indicator does not show 1 or 1 is not centered in the frame, rotate the crown to align 1 with the center of the frame.

- A high-speed movement feature (one month maximum) is also available when adjusting the home position of the **[4] Day Indicator** by operating the crown.

5. Press (A).

- This causes the hands to move at high speed for up to 10 minutes.

6. If the [1] Hour Hand, [3] Minute Hand, and [2] Second Hand are not aligned with the top of the hour (12:00:00), rotate the crown to align the hands with 12:00:00.

- A high-speed forward movement feature (12 hours maximum) and a high-speed backward movement feature (one hour maximum) are also available when adjusting the positions of the hands by operating the crown. See "Crown Operations" (page E-4).

7. Push the crown back in.

- This corrects hand and day indicator alignment of returns to normal timekeeping. It takes up to 10 minutes to return to normal timekeeping.

Note

- You can stop hand adjustment at any time by pushing the crown back in. This will return to regular timekeeping with the hands at positions reflecting any changes you made up to that point.

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Troubleshooting

Hand Movement and Position

■ The [2] *Second Hand* is moving in the pattern: 1 second → 1 second → 2 seconds.

The battery charge is starting to go low. Expose the watch to light to charge it. See "Charging the Watch" (page E-10).

■ The [2] *Second Hand* is moving at two-second intervals.

■ All of the watch's hands are stopped at 12 o'clock, and the [A] button and crown do not do anything.

The battery charge may be low. Expose the watch to light until the [2] *Second Hand* starts moving normally, at one-second intervals (page E-11).

■ The hands of the watch suddenly start moving at high speed, even when I do not perform any operation.

This could be due to any one of the following causes. In all cases, the hand movement does not indicate malfunction, and should stop shortly.

- The watch is recovering from a sleep state (page E-15).

- The time setting is being adjusted following a successful auto time calibration signal receive operation (page E-16).

■ Nothing happens when I rotate the crown.

Leaving the crown pulled out for more than two minutes without performing any operation will automatically cause the setting operation to become disabled. If this happens, press the crown back in and then pull it out again to configure settings. See "Crown Operations" (page E-4).

■ Hand movement is stopped.

The watch may have been exposed to magnetism, which will cause the hands to stop at their current positions. Pull the crown out to the first click or press a button to restart hand movement. If the indicated time is not correct, perform home position adjustment. See "Adjusting Home Positions Manually" (page E-29).

■ The current time setting is off by hours.

Your location setting may be wrong. Check your location setting and correct it, if necessary (page E-22).

■ The hands and/or day indications are off.

This could indicate that the watch has been exposed to magnetism or strong impact, which has caused problems with proper hand and day alignment. Adjust the watch's hand and day home position alignment (page E-29).

Charging

■ The watch does not resume operation after I expose it to light.

This can happen after the battery charge level drops to Level 4 (page E-11). Continue exposing the watch to light until the [2] *Second Hand* starts moving normally (at one-second intervals).

Time Calibration Signal

The information in this section applies only when CN (HKG, HONG KONG), or JP (TYO, TOKYO) is selected as the current location.

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■ The [2] *Second Hand* indicates N (NO) when I check the result of the latest receive operation.

Possible Cause	Remedy	Page
• You are wearing or moving the watch, or performing a button operation during the signal receive operation. • The watch is in an area with poor reception conditions.	Keep the watch in an area where reception conditions are good while the signal receive operation is being performed.	E-18
You are in an area where signal reception is not possible for some reason.	See "Approximate Reception Ranges".	E-17
The calibration signal is not being transmitted for some reason.	• Check the website of the organization that maintains the time calibration signal in your area for information about its down times. • Try again later.	—

■ The current time setting changes after I set it manually.

You may have the watch configured for Auto Receive of the time calibration signal (page E-19), which will cause the time to be adjusted automatically according to your currently selected location. If this results in the wrong time setting, check your location setting and correct it, if necessary (page E-22).

■ Auto Receive is not performed or I cannot perform Manual Receive.

Possible Cause	Remedy	Page
Your location setting is wrong.	Check your location setting and correct it, if necessary.	E-22
There is not enough power for signal reception.	Expose the watch to light to charge it.	E-10

■ Signal reception is being performed successfully, but the time is wrong.

Possible Cause	Remedy	Page
Your location setting is wrong.	Check your location setting and correct it, if necessary.	E-22
The watch may have been exposed to magnetism or strong impact, which has caused problems with proper hand alignment.	Adjust the watch's hand home positions.	E-29

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Specifications

Accuracy at normal temperature: ± 15 seconds a month (with no signal calibration)

Timekeeping: Hour, minutes, seconds, day

Calendar system: Full Auto-calendar pre-programmed from the year 2000 to 2099

Time Calibration Signal Reception: Auto receive up to three times a day (Remaining auto receives cancelled as soon as one is successful); Manual receive

Receiveable Time Calibration Signals:

Fukushima, Japan (Call Sign: JJY, Frequency: 40.0 kHz); Fukuoka/Saga, Japan (Call Sign: JJY, Frequency: 60.0 kHz); Shangqiu City, Henan Province, China (Call Sign: BPC, Frequency: 68.5 kHz)

Other: Power Saving; Auto second hand home position correction

Power Supply: Solar panel and one rechargeable battery

Approximate battery operating time: 5 months (no exposure to light after a full charge; one signal reception of approximately 4 minutes per day)

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