Thank you for your purchase of this Citizen watch.

Before using the watch, read this instruction manual carefully to ensure correct use.

After reading, be sure to store this manual in a safe place should it be needed for future reference.

* The case has different features depending on the model.
  Details of model specific features may not be outlined in this manual. See http://www.citizenwatch.jp/support/default.htm

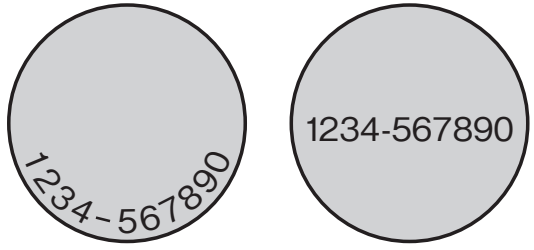
To determine the movement number

Your watch features a case number engraved on the case back (refer to figure to the right).

The first four characters of the case number represent the movement caliber number of the watch.

In the example on the right, “1234” is the movement number.

Engraving position example



The engraving position may differ depending on watch model.

Safety Precautions

This manual may contain certain safety advisories. Your watch should be used in accordance with these advisories at all times to ensure optimal enjoyment of your watch and to prevent injury to yourself, other persons and/or damage to property.

▪ Safety advisories are categorized and depicted in this manual as follows:

⚠DANGER	Highly likely to cause death or serious injury
⚠WARNING	May cause serious injury or death
⚠CAUTION	May 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 and/or precautions that should be observed.
	Warning (caution) symbol followed by prohibited use and/or operation advisory.

<Notes before use - Protective stickers>

Your watch may feature protective coverings.

If the watch is worn without first removing these stickers, 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.

For this reason, please be sure to peel off the stickers before wearing the watch.

Features

- This watch receives **radio signals** transmitted in the USA and Germany for specific timezones only.
- **Eco Drive** that converts light to the energy for driving the watch.
- **City selection function** that allows the watch to be set to the time and date in any of the four cities in U.S.A. - New York, Chicago, Denver, Los Angeles - and London.
- **Alternate time zone** that can be set in 15 minute increments (alternate time zone is not radio controlled).
- **Chronograph function** that can measure time up to 59 minutes 59 seconds in 1-second steps.
- **Alarm function** that can be set based on a 24-hour clock.
- **Perpetual calendar function** that eliminates the need to correct the date at the end of each month.

* Eco Drive is Citizen proprietary technology.

Before using the watch

The followings must be done before using the watch:

● **Checking the power reserve → page 12**
Check the charge level of the watch.

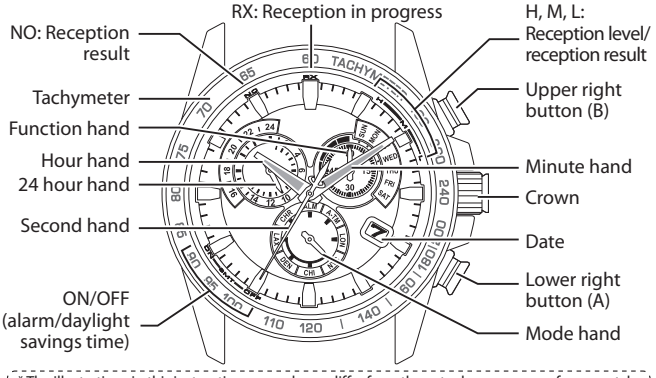
● **Selecting a time zone (city) → page 16**
Select the city for which you want to indicate the time and date.

● **Checking the radio signal reception → page 14**
Check the result of the radio signal reception.

Table of contents

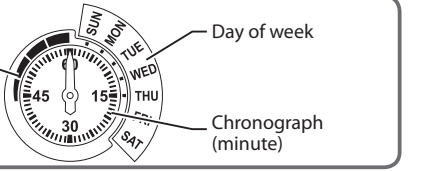
Component identification 8
Checking the power reserve 12
Checking the radio signal reception 14
Selecting a time zone (city) 16
Notes on the radio signal reception 18
On-demand reception—manual signal reception activation 24
Using the alternate time mode 26
During the Daylight Saving Time season 28
Using the chronograph function 32
Using the alarm 34
Recharging your watch 38
Adjusting the time/calendar manually 42
Checking and correcting the current reference (0) position 46
Troubleshooting 50
Resetting the watch to the default settings 54
Solar-powered watch handling precautions 56
Water resistance 60
Precautions and usage limitations 63
Maintenance 68
Information 69
Specifications 70

Component identification

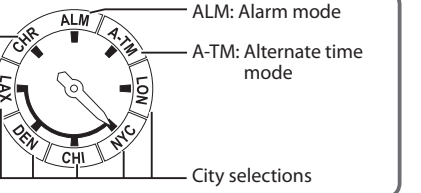


* The illustrations in this instruction manual may differ from the actual appearance of your watch.

● **Function hand**



● **Mode hand**



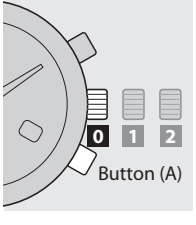
● How to use the screw down crown and screw down push button

Some models feature a screw down crown and/or screw down push button. Locking the crown and/or button prevents accidental operation. These must be unlocked prior to using certain features of your watch such as setting the time or date.

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

Checking the power reserve

Modes supporting this function: [LAX] [DEN] [CHI] [NYC] [LON] [A-TM]



Check the power reserve level as follows:

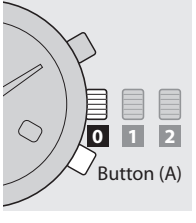
1. **Ensure that the crown is in position 0 .**
2. **Press and release the lower right button (A).**
   The function hand and the 2:00 sub dial indicates the charge level (refer to table on page 13)
3. **Press and release the lower right button (A) to exit power reserve checking.**
   The watch will resume normal operation.
   • The watch will resume normal operation automatically after 10 seconds even without pressing and releasing.

Charge level	Level 0	Level 1	Level 2	Level 3
Charge indicator (function hand) position				
Estimated remaining time to stop	**Approx. 3 days**	**Approx. 3 to 30 days**	**Approx. 30 to 220 days**	**Approx. 220 to 310 days**
Remark	The charge level is insufficient. Charge the battery immediately.	The charge level is not sufficient. Charge the battery wherever possible.	The charge level is good. Use the watch without worrying about the charge level.	The watch is fully charged. Use the watch without worrying about the charge level.

Note: the power reserve indicator does not move in a "smooth" linear fashion. It will "jump" levels based on reserve power level.

Checking the radio signal reception

Modes supporting this function: [LAX] [DEN] [CHI] [NYC] [LON]



To check result of previous radio reception time update:

1. **Ensure that the crown is in position 0 .**
2. **Press and release the button (A).**
   The second hand moves and indicates the reception result.
   - The relationships between the second hand positions and the reception results are shown on the next page.
3. **Press and release the button (A) to exit.**
   The watch will resume normal operation.
   - The watch will resume normal operation automatically after 10 seconds even without pressing the button.

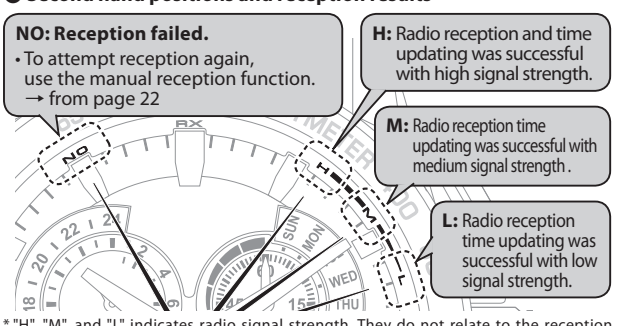
● Second hand positions and reception results

NO: Reception failed.
- To attempt reception again, use the manual reception function.
→ from page 22

H: Radio reception and time updating was successful with high signal strength.

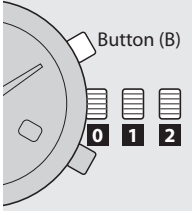
M: Radio reception time updating was successful with medium signal strength .

L: Radio reception time updating was successful with low signal strength.



* "H", "M", and "L" indicates radio signal strength. They do not relate to the reception performance of the watch.
* If you change the city shown after radio reception, the indication will reflect "NO".

Selecting a time zone (city)



To select a time zone (city):

1. **Pull the crown out to position 1.**
   The second hand moves to the 30 seconds position.
2. **Rotate the crown to select the city.**
   - Align the mode hand to any of LAX, DEN, CHI, NYC, and LON.
   - Whenever you select a city, the watch indicates the time and date in that city.
   - To use the watch in a city other than the above five cities, set the time using the alternate time mode (A-TM). → pages 26 and 27
3. **Pull the crown out to position 2.**
   The second hand moves and indicates the current daylight savings time setting.
   - To change the daylight savings time setting, press and release the upper right button (B) until a tone signal sounds. → pages 28 to 31
4. **Push the crown in to position 0.**
   The watch resumes normal operation. (The current time is indicated.)

Example: Setting to New York



● Table of radio controlled time zones (city)

- The cities listed in the table below may be abbreviated or spelled out, depending on the model.
- The signal station is changed depending on the selected city.
- When you use the watch in a place which is not shown in the table below, set the time using the alternate time mode (A-TM).
- The time difference in the table below is based on the coordinated universal time (UTC).
- The stored setting for the presence of daylight savings radio signal is common to all regions in each radio signal zone.

Indication	City name	Time difference	Signal from...
LON	London	0	Germany
NYC	New York	–5	U.S.A.
CHI	Chicago	–6	
DEN	Denver	–7	
LAX	Los Angeles	–8	

* Transmitter stations →pages 20 to 21

- The time in each city is calculated from the time difference from UTC.
- When the watch receives radio signal in a city or you correct the time of a city manually, the times in all other cities are corrected accordingly based on the time differences. (This also applies to A-TM.)

Notes on the radio signal reception

Modes supporting this function: [LAX] [DEN] [CHI] [NYC] [LON]

■ Receiving the radio signal

There are three ways to receive the radio signal.

This watch also incorporates a function to check last radio reception results.

→ pages 14 and 15

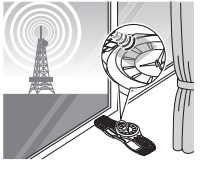
Reception method	Explanations
Automatic reception	Receives the signal at 2:00 a.m. every day. If reception is unsuccessful, the watch tries to receive at 3:00 a.m. and 4:00 a.m.
On demand reception	Receive the signal manually when you want to adjust the time and date. → page 24
Recovery automatic reception	Receives the signal automatically after charging when the watch stops due to insufficient charge.

- These reception operations take place only when the crown is in the closed position **0** and the watch is not moved.
- When the watch is in a low power state (second hand moving in two second intervals), radio reception will not be attempted.

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

■ During radio reception:

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



- The reception antenna is located at the 6:00 position of the watch. Place the watch with the 6:00 position facing toward the station.
- While the watch is receiving radio signals (the second hand indicates RX, H, M, or L), do not move the watch as a successful update will not be acheived.

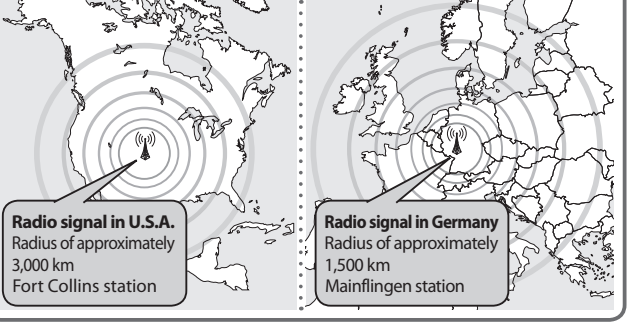
■ Note on the radio signal

This watch receives the radio signal from the two signal stations located in U.S.A. or Germany and automatically adjusts the time and date.
The receivable signal stations are listed as follows:

Signal stations	Kind of the radio signal
Fort Collins station, Denver, Colorado State, U.S.A.	WWVB
Mainflingen station, southeast Frankfurt, Germany	DCF77

● Station locations and reception ranges

* The distance values below are given only for information purpose. The actual reception condition may differ depending on the environment and climate.



■ When signal reception is poor

Radio signal reception may be affected by the surrounding environment. High-tension wires nearby or windows containing wire meshes make it difficult to receive radio signal. In this case, you should find another suitable place considering the location of the transmitter station in your region. Then, place the watch at a window facing to the station and attempt manual reception. → pages 24 and 25

If the window contains wire screens, open the window or change the location of the watch.

■ Poor reception areas

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

- **Extremely hot or cold locations**



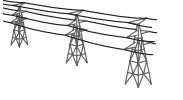
- **Inside vehicles**



- **Near electrical equipment or office appliances**



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



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

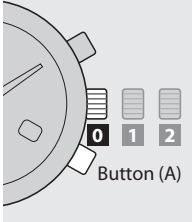


- **Near mobile phones that are in use**



On-demand reception—manual signal reception activation

Modes supporting this function: [LAX] [DEN] [CHI] [NYC] [LON]



Manual reception updating may be attempted at anytime. However results will vary based on location, time of day, weather, etc.

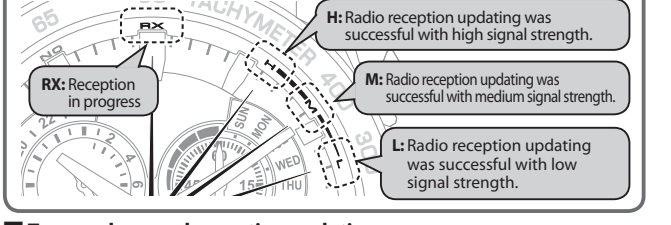
- The watch will not start to receive if the second hand is moving once every two seconds (this is the insufficient charge warning). Fully charge the watch before attempting on-demand reception.
- Not all areas can receive a signal. Be sure you are not in such an area and confirm the city is selected for your time zone. → pages 16 and 17

1. **Push the crown in to position 0 .**
2. **Press and hold the lower right button (A) for 2 seconds or more, then release.**
   The second hand points to RX, a tone will sound, and the watch enters radio reception mode. As soon as the reception level is identified, the second hand points to either H, M, or L. → Refer to the next page.

When the reception has finished, a tone sounds, and the second hand restores the normal operation.

- It will take 2 to 15 minutes to finish reception.

● Second hand positions and reception results



■ To cancel manual reception updating

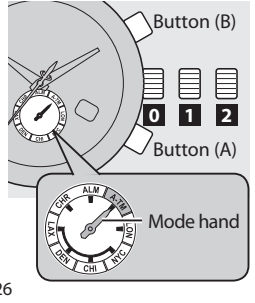
Press and hold the lower right button (A) for 2 seconds or more, then release.
This cancels manual reception updating and the watch resumes normal operation.

Using the alternate time mode

Modes supporting this function: [A-TM]

The alternate time mode allows you to set the time in any region other than the featured five cities in 15 minute increments.

- The alternate time mode (A-TM) is not radio controlled and operates as a "normal" watch with accuracy of +/- 15 seconds per month.



■ Setting the alternate time

1. **Pull the crown out to position 1.**
2. **Rotate the crown to align the mode hand to [A-TM].**
   The hour/minute/second hands indicate the A-TM time currently set in memory.
3. **Pull the crown out to position 2.**
   The second hand moves to indicate the current daylight savings time setting.
   - Pressing and releasing the upper right button (B) will activate or deactivate the daylight savings time setting (SMT) with a tone. → pages 28 to 31

4. **To set the alternate time:**
   - Rotate the crown clockwise to advance the time in one hour increments.
   - Rotate the crown counterclockwise to decrement the time in one hour increments.
   - Pressing in releasing the lower right button (A) will advance the time in 15-minute increments. Note: the time will not decrement in 15 minute increments.
   - Be sure to set the correct AM or PM time by referring to the 24-hour indicator at the 10:00 subdial.
   - The calendar is also changed to the corresponding date and day of the week.
   - Rotating the crown quickly will engage the rapid advance feature. To cancel the rapid advance feature, turn the crown one click.
5. **Return the crown to position 0 to finish the setting.**

■ Time differences that can be set in the alternate time mode

In the alternate time mode, you can set any time difference within the following range relative to the London time.

Daylight savings time OFF	-26 hours to +26 hours
Daylight savings time ON	-25 hours to +27 hours

■ Daylight savings time

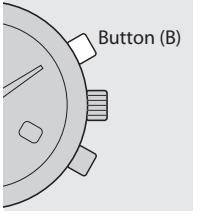
When the daylight savings time is set to ON while the watch operates in the alternate time mode, the indicated time is increased by 1 hour.

During the Daylight Saving Time season

Some areas observe Daylight Saving Time.

- Daylight Saving Time rules will vary depending on the country or region within a country.

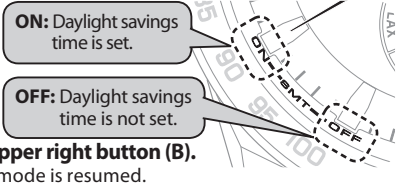
When the watch receives a successful radio signal update for the 5 cities, the Daylight Saving Time setting is automatically updated, provided the user has not manually turned OFF overridden the Daylight Saving Time setting. If you live in an area that does not receive a radio signal, you will need to update the Daylight Saving Time setting manually. → Page 30



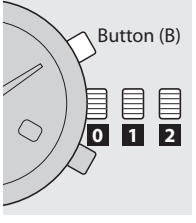
■ Checking the daylight savings time setting

While the watch is in the time display mode or A-TM mode and the crown is set at position **0**, perform the following steps.

1. **Press and release the upper right button (B).**
   The second hand moves and points to the current setting for daylight savings time (ON or OFF).



2. **Press and release the upper right button (B).**
   The current time display mode is resumed.
   - Even if the button is not pressed, the current time display mode is resumed automatically after about 10 seconds.



■ To manually change the Daylight Saving Time setting

1. **Pull the crown out to position 1.**
2. **Rotate the crown to choose the city.**
   → pages 16 and 17
3. **Pull the crown out to position 2.**
4. **Press and release the upper right button (B) to change the daylight savings time setting to ON or OFF.** →page 29
5. **Return the crown to position 0 to finish the setting.**

● Precautions for setting the daylight savings time to ON/OFF

When manually changing the Daylight Saving Time from OFF to ON to OFF, this engages the manual override built into the watch. This manual override precludes Daylight Saving Time from being automatically adjusted during the radio signal update. If this function is not desired, the only way to cancel the manual override is to do the all reset and 0-Positioning outlined. → page 54

● Sharing of daylight savings time setting

- The Daylight Saving Time / standard time is shared by multiple cities and regions within the range of each transmitter station (Germany or U.S.A.). Whenever radio signal is received from each station, the setting is updated automatically.
- If you manually set the watch to the standard time in a city, the watch will always indicate the standard time for that city without synchronizing with other cities.

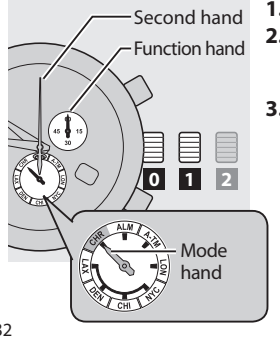
■ If you live in an area that does not observe Daylight Saving Time

Change the daylight savings time setting to OFF manually. Then, as long as the city is selected, the setting remains OFF and the watch ignores the daylight savings time update direction included in the radio signal.

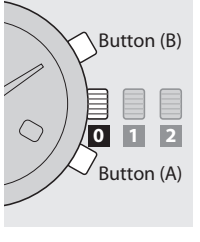
Using the chronograph function

Modes supporting this function: [CHR]

The chronograph is able to measure time up to 59 minutes 59 seconds in 1-second units. It is reset to 0 after reaching 59 minutes 59 seconds.



1. **Pull the crown out to position 1.**
2. **Rotate the crown to align the mode hand to the CHR (chronograph) position.**
3. **Return the crown to position 0.**
   The second hand and function hand move to the 0 position respectively.
   - The second hand changes to the chronograph second hand and moves in 1-second steps after a time measurement is started.
   - The function hand (2:00 sub dial) changes to the chronograph minute hand and moves in 1-minute steps after a time measurement is started.



■ Starting time measurement

Press and release the upper right button (B).

The chronograph starts measurement.

- The chronograph stops and starts whenever you press and release the upper right button (B).
- Pulling the crown out during chronograph operation will stop and reset the chronograph.

■ Resetting the chronograph

While the chronograph is stopped, press and release the lower right button (A).

The chronograph resets to 0 minute 0 second.

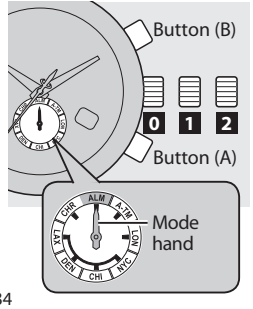
- During measurement, the chronograph will not be reset even if you press the button (A).

- Radio signal cannot be received in the chronograph mode.
- After you have completed chronograph use, be sure to reset your watch to one of the time modes. → pages 16 to 17, or 26 to 27

Using the alarm

Modes supporting this function: [ALM]

The alarm function uses a 24-hour clock. Once the alarm has been set, the alarm sounds for 15 seconds when the set time is reached once a day. The alarm can be used in one of the five cities as well as the alternate time mode. The alarm does not operate while the watch is in the alarm [ALM] setting mode.

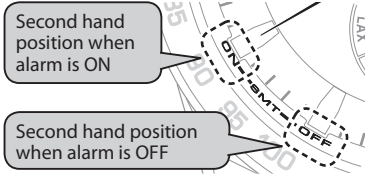


■ Setting the Alarm Time

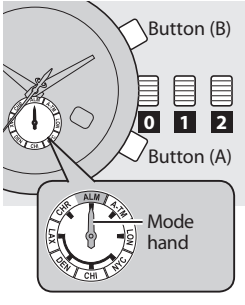
1. **Pull the crown out to position 1.**
2. **Rotate the crown to align the mode hand to the ALM (alarm) position.**
   The hands move to the currently set alarm time.
3. **Pull the crown out to position 2.**
4. **Rotate the crown to set the desired alarm time.**
   - Rotating the crown clockwise causes the minute hand to advance by 1 minute.
   - Rotating the crown counterclockwise causes the minute hand to go back by 1 minute.

   - Check AM and PM with the 24-hour hand (10:00 sub dial) to set the correct AM or PM time.
   - Rotating the crown quickly engages the quick advance feature for the minute and hour hands. To stop the rapid advancement, turn the crown one click in either direction.

5. **Press and release the upper right button (B) to turn the alarm ON or OFF.**
   - Whenever you press and release the button (B), a tone sounds and the second hand moves to indicate the alarm is turned ON or OFF.

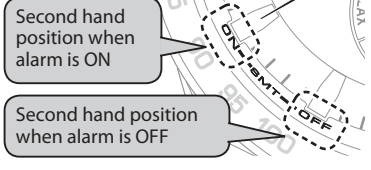


6. **Push in the crown in to position 1 .**
7. **Rotate the crown to select a city or the alternate [A-TM] time.**
   - The alarm will operate according to the city time currently selected.
8. **Return the crown to position 0 to complete alarm time setting.**



■ Setting the alarm to ON or OFF

1. **Pull the crown out to position 1.**
2. **Rotate the crown to align the mode hand to ALM (alarm).**
3. **Press and release the upper right button (B).**
   • Pressing and releasing the upper right button (B) changes the alarm settings between ON and OFF.



4. **Rotate the crown to select a city or [A-TM].**
   • While the watch is in the alarm mode, the alarm will not sound.
5. **Return the crown to position 0 to finish the setting.**

■ Stopping the alarm

While the alarm is sounding, press and release either the upper right button (B) or lower right button (A), or pull out the crown.

■ Alarm sound monitor

While the watch is in the [ALM] mode and the crown is set at position **0**, press the button (A). The alarm sound is played back. The alarm sounds for 5 seconds. To stop the alarm in the interim, press the button (A) or (B).

• While the hands are moving from another mode to the ALM mode, you cannot play back the alarm sound.

Recharging your watch

This watch has a rechargeable cell which is charged by exposing the dial to light such as direct sunlight or fluorescent lamps.
For optimal performance, be sure to keep your watch charged at all times. When not wearing your watch, place it near a window or other light source to ensure the dial receives light sufficient for charging.
In addition, to use this watch comfortably, follow the instructions below.

- **Expose the watch with the dial facing towards direct outdoors sunlight (not through a window) for five to six hours at least once a month.**
- **Before storing the watch in a dark place for an extended period of time, be sure to charge it fully.**

- When the watch is regularly covered with long sleeves, it may not be charged sufficiently. Try to keep the watch exposed to light sufficient for charging.
- Do not charge the watch at a high temperature (about 60˚C/140˚F or higher).

■ Charging time by environment

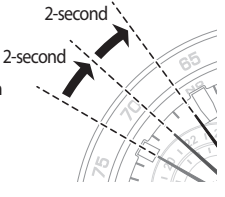
Below are the approximate times needed for charging when exposing the watch dial to light continuously. Please use this table as a reference only.

Environment	Illuminance (lx)	Charging time to work for one day	Charging time to start working normally (second hand moves in 1-second steps) when the rechargeable cell is empty	Charging time to the fully charged state when the rechargeable cell is empty
Under direct sunlight or cloudy weather (not through a window)	10,000 to 100,000	3 to 12 min.	2 to 3.5 hours	35 to 70 hours
20 cm (7-7/8 inches) away from a fluorescent lamp (30 W)	3,000	40 min.	7.5 hours	210 hours
Interior lighting	500	4 hours.	50 hours	—

- When the battery is fully charged, the overcharge protection function stops the charging so that the watch performance and secondary battery are not adversely affected by overcharge.

Your watch will run for approximately 10 months from a full charge or up to 1.5 years with the power save feature engaged (based on a full charge). After the second hand starts moving once every two seconds, it will last for approximately 3 days.

■ When the watch reaches a low charge state — insufficient charge warning function



When the power reserve becomes low, the second hand moves once every 2 seconds — This is the insufficient charge warning function. Charge the watch by exposing the dial to light sufficient for charging.

- After the watch is fully charged, the second hand will resume normal operation.
- If you have not charged the watch for 3 days or more since the insufficient charge warning movement began, the watch will run out power and stop.

Even when the second hand moves once every 2 seconds, the current time and date are indicated. However, no other functions or radio signal reception will operate under a lower power state.
A Radio signal cannot be received in the 2-second step operation mode.

■ Power save feature

When the watch is continuously not exposed to light for 30 minutes or more, for example being stored in a case, the second hand is automatically stopped to reduce the power consumption. The hour and minute hands operate continuously.

- When the crown position is **1** or **2**, the power save feature will not activate.
- The power save feature can not be activated manually.

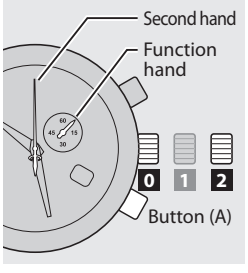
■ To cancel the power save feature

Expose the watch dial to light to start charging. The power save feature is cancelled and the second hand moves to the current time position.

- When the crown is pulled or any button is operated, the power save feature is cancelled and the watch enters the mode corresponding to the position of the mode hand (6:00 sub dial).

Adjusting the time/calendar manually

Modes supporting this function: [LAX] [DEN] [CHI] [NYC] [LON]



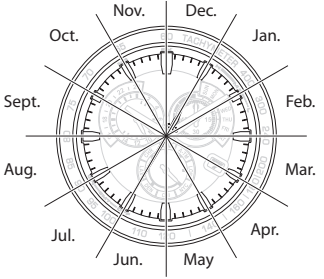
1. **Pull the crown out to position 2.**
2. **Press and release the lower right button (A).**
   The second hand moves to the 0 second position.
3. **Rotate the crown to adjust the hour and minute.**
   - You can correct the time in 1-minute steps.
   - The 24-hour hand (10:00 sub dial) moves in conjunction with the hour hand. Be sure to pay attention to the 24-hour hand to set the proper AM or PM time.
4. **Press and release the lower right button (A).**
   The function hand (2:00 sub dial) moves slightly.
5. **Rotate the crown to adjust the date.**
   - Every five turns of the function hand advances the date by one day.

6. **Press and release the lower right button (A).**
   The second hand points to the current month and year.
7. **Rotate the crown to adjust the month and leap year.**
   - The month and leap year are indicated by the second hand. → pages 44 and 45
   - To correct the month and leap year, make sure to rotate the crown clockwise. You cannot change them in the reverse direction.
8. **Press and release the lower right button (A).**
   The function hand (2:00 sub dial) moves slightly.
9. **Rotate the crown to adjust the day of the week.**
10. **Return the crown to position 0 to finish the setting.**
    The current time and date are indicated.
    - The watch operates assuming the moment when the crown is returned to position 0 as 00 seconds.

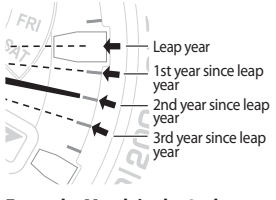
When adjusting minute/hour/date, you may activate the rapid advance feature by quickly rotating the crown several "clicks". To stop the rapid advance feature, rotate the crown one click in either direction.

■ Month and leap year indications

When the time and date are corrected manually, the elapsed years from the most recent leap year and the month are indicated at the position of the second hand. By setting the elapsed years from the most recent leap year and the month correctly, the watch will automatically update the date.

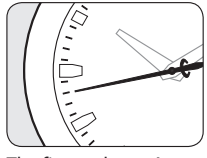


The position of the second hand shows the month.

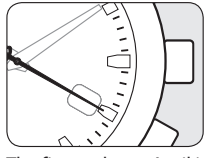


Example: March in the 2nd year since the leap year

The first three minute marks after the hour mark denote the number of years since a leap year.



The figure shows August in the 3rd year since the recent leap year.



The figure shows April in the leap year.

Quick reference chart for number of years passed since leap year

Indication of the second hand	Passed year	Year
Hour marker	Leap year	2012, 2016, 2020
1st min. marker	1st year	2013, 2017, 2021
2nd min. marker	2nd year	2014, 2018, 2022
3rd min. marker	3rd year	2011, 2015, 2019

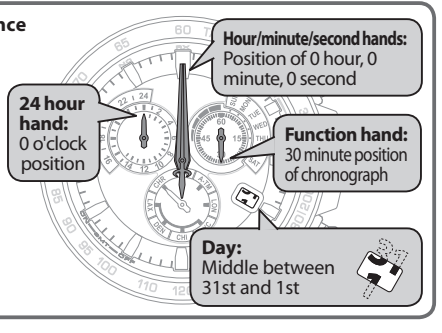
Checking and correcting the current reference (0) position

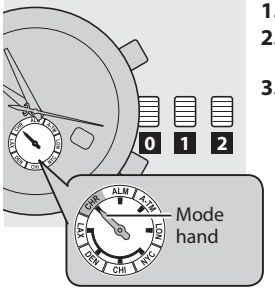
Modes supporting this function: [CHR]

If the time, date or chronograph hands do not indicate properly, the correct reference (0) positions may not be set.

● What is the reference (0) position?

The base position for all the hands to indicate the time and date (refer to the figure on the right). If the time and date indications are off from the correct reference (0) position, the watch will not indicate the time and date correctly.



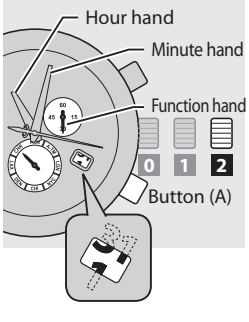


1. **Pull the crown out to position 1.**
2. **Rotate the crown to align the mode hand to CHR (chronograph) mode.**
3. **Pull the crown out to position 2.**

   All hands and the date indicator move to indicate the current reference (0) position set in memory.

   • No operations are available while the hands and date indicator are moving.

Reference (0) position	Next operation
Correct	Return the crown to position 0 to exit the check. (You do not need to correct the reference position.)
Incorrect	Correct the reference positions. (Proceed to the step 4 on the next page.)

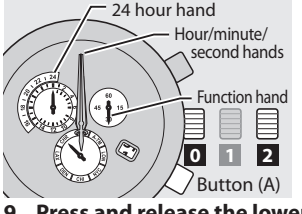


4. Press and release the lower right button (A).
The function hand (2:00 position) moves slightly.

5. Rotate the crown to align the date indicator to the middle between 31st and 1st.
The function hand (2:00 position) and the date indicator move synchronously.

6. Rotate the crown to align the function hand to the 30 minute position of the chronograph.
- The function hand and the date indicator move synchronously. After adjusting the function hand, confirm that the date indicator comes to the middle between 31st and 1st.
- You may activate the rapid advance feature by quickly rotating the crown several "clicks". To stop the rapid advance feature, rotate the crown one click in either direction.

7. Press and release the lower right button (A).
The hour and minute hands move slightly.



8. Rotate the crown to align the hour and minute hands to 0 hour, 0-minute and the 24-hour hand to '24' (straight up).
- You may activate the rapid advance feature by quickly rotating the crown several "clicks". To stop the rapid advance feature, rotate the crown one click in either direction.

9. Press and release the lower right button (A).
The second hands moves slightly.

10. Rotate the crown to align the second hand to 0 second.
- You may activate the rapid advance feature by quickly rotating the crown several "clicks". To stop the rapid advance feature, rotate the crown one click in either direction.

11. Return the crown to position 0 to complete the (0) positioning.

- In the chronograph mode, radio signal cannot be received.
- After checking or correcting the reference positions, set the mode hand to a city or A-TM to resume the time display mode.

Troubleshooting

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

● Problems with radio signal reception.

Symptoms	Remedies	Pages
Reception is unsuccessful in a receivable area.	Push the crown in to position **0** (closed position next to the case).	–
	Be sure the watch is in the city setting.	16, 17
	Avoid things likely to interfere with the radio signal and place the watch with the 6:00 position facing toward the station.	19, 23
	Do not move the watch until the reception is finished.	19
	When the second hand moves once every 2 seconds (low power state), the watch cannot receive the radio signal. Fully charge the watch.	39, 40

Symptoms	Remedies	Pages
The correct time and date are not indicated after successful reception.	Check the city setting.	16, 17
	Check and correct the current reference (0) position.	46 to 49

● The hands do not work properly.

Symptoms	Remedies	Pages
The second hand moves once every 2 seconds.	This indicates a low charge state. Fully charge your watch.	39, 40
All hands stop moving	Set the crown to position **0** in each time display mode.	–
	Charge the watch under direct sunlight until the second hand starts moving in 1-second steps.	39
The hands start turning rapidly as you take the watch out of the case.	The watch is canceling the power save feature. Wait until the rapid movement stops.	41

● The time and/or date is not correct.

Symptoms	Remedies	Pages
The time and/or date is wrong.	Check the city setting.	16, 17
	Check and correct the current reference (0) position.	46 to 49
	Attempt manual radio signal updating.	24, 25
	Set the time and date manually.	42 to 45
Daylight Saving Time is incorrect.	Select ON manually or receive the radio signal.	24, 25, 30, 31
The time is wrong even though the city is chosen and the signal reception was successful.	Check the indicated time (Daylight Saving Time or standard time) and change it if necessary.	28 to 31
	Check and correct the current reference (0) position.	46 to 49

● Others

Symptoms	Remedies	Pages
The watch does not function, even after fully charging and setting.	Charge the watch by exposing it to direct sunlight for five to six hours. If, after fully charging and setting your watch, it continues to malfunction, contact your nearest Authorized Citizen Service Center listed in your warranty booklet.	39

Resetting the watch to the default settings

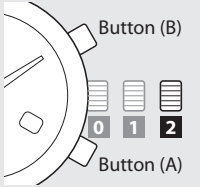
Modes supporting this function: [CHR]

If the watch operation is unstable due to strong impact or static electricity, or other malfunction occurs, you will need to set the watch to default settings.

- Resetting the watch causes all customized settings and data to be cleared.
- Be sure to charge the watch fully before resetting it. →page 39
- If you reset the watch while the charge level is insufficient, the watch remains stopped. In this case, charge the watch and then perform the subsequent operations. → page 39
- After resetting, make sure to check and correct the reference positions. → pages 46 to 49

Once reset, the watch settings are changed as follows.

- Date : January 1st (leap year)
- Time : 0 hour, 0 minute, 0 second in London
- Daytime savings time : OFF (automatic changeover) for all city settings



1. **Pull the crown out to position 1 .**
2. **Rotate the crown to align the mode hand to [CHR].**
   The second hand moves to the 0 second position and the hour and minute hands move slightly. The settings are reset to the defaults.
3. **Pull the crown out to position 2 .**
4. **Press the buttons (A) and (B) simultaneously and release them.**
   The second hand moves to the 0 second position and the hour and minute hands move slightly. The settings are reset to the defaults.

After resetting, always perform the following operations.

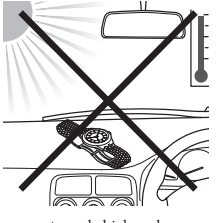
1. **Correct the reference (0) positions.** →pages 46 to 49
2. **Select a city.** →pages 16 and 17
3. **Correct the time and date.**
   - Correct by manually receiving radio signal → pages 24 and 25
     * In the alternate time (A-TM) mode, radio signal cannot be received.
   - Manually correct → pages 42 to 45

Solar-powered watch handling precautions

<Always be Sure to Expose Your Watch to Light Regularly>

- Your watch enjoys regular exposure to light. Wearing in situations that prevent light exposure such as long shirt or coat sleeves will prevent your watch from receiving light sufficient for charging. In these instances, supplemental charging may be needed.
- When you take your watch off, try and place it in a bright location. This will ensure your watch receives light for charging and will continue to operate properly. Storing your watch in dark places for extended periods of time may cause the stored energy to become depleted and your watch to stop.

⚠ CAUTION Recharging Precautions



- Do not charge your watch at high temperatures (60°C/140°F) as this may cause damage to sensitive components and the watch to malfunction.

  Examples:

  - Charging the watch too close to a light source which generates a large amount of heat such as an incandescent lamp or halogen lamp.
    - * When charging your watch under an incandescent lamp, be sure to leave 50 cm (19-11/16 inches) distance between the lamp and the watch to avoid excessive heat. Never use a halogen lamp for recharging as these generate excessive heat.
  - Charging the watch in a location where the temperature may become extremely high such as on the dashboard of a vehicle.

<Replacement of Rechargeable Cell>

- Your watch features a cell that does not need regular replacement.
  However, after an extended period of time, power consumption may increase due to deterioration of lubrication in the movement. This may result in shorter than expected run time. Be sure to have your watch regularly inspected by an Authorized Service Center.
  Note: Regular maintenance is not covered under the terms of the warranty.

⚠ 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 Rechargeable Cell

- Never install a conventional battery in your watch. Only use the specified rechargeable cell.
  Your watch is designed to operate only with the original type of rechargeable cell. It is not designed to run or be used with a conventional type of battery. Installing such a battery may result in overcharging which may cause the battery to burst. This can cause damage to the watch and injury to the wearer.
  If for any reason the rechargeable cell needs replacement, be sure to use only the original type rechargeable cell. We recommend contacting your nearest Authorized Service Center for this service.

Water resistance

⚠ WARNING Water Resistance

- Refer to the watch dial and the case back for the indication of the water resistance of your watch. The following chart provides examples of use for reference to ensure that your watch is used properly.
  (The unit "1bar" is roughly equal to 1 atmosphere.)
- WATER RESIST(ANT) ××bar may also be indicated as W.R.××bar.

Name	Indication	Specification	Water-related use				
	Dial or Case back		 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
Non-water resistant	———	Non-water resistant	**NO**	**NO**	**NO**	**NO**	**NO**
Everyday-use water resistant watch	WATER RESIST(ANT)	Water-resistant to 3 atmospheres	**OK**	**NO**	**NO**	**NO**	**NO**
Upgraded everyday use water-resistant watch	WATER RESIST(ANT) 5 bar	Water-resistant to 5 atmospheres	**OK**	**OK**	**NO**	**NO**	**NO**
	WATER RESIST(ANT) 10/20 bar	Water-resistant to 10 or 20 atmospheres	**OK**	**OK**	**OK**	**NO**	**NO**

Water resistance

- Non-water resistant watches cannot be used underwater or in environments in contact with water.
- Water-resistance for daily use (to 3 atmospheres) means that the watch may be worn while washing your face or in the rain, but is not to be immersed in water.
- 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.
- For a metallic, plastic or rubber 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. If your watch is not water resistant, be sure not to get the case of the watch wet.

Precautions and usage limitations

⚠ CAUTION To Avoid Injury

- Be particularly careful when wearing your watch while holding a small child, to avoid injury.
- Be particularly careful when engaged in strenuous exercise or work, to avoid injury to yourself and others.
- DO NOT wear your watch while in a sauna, jacuzzi or other location where it may become excessively hot. This may result in burns to the wearer and/or malfunction of your watch.
- Be careful when putting on or taking off your watch since there is a risk of pinching your skin or damaging your fingernails depending on the manner in which the band is fastened.

⚠ CAUTION Precautions

- Always wear your watch with the crown pushed in to the normal position. If your crown is a screw down type, be sure it is properly screwed down (locked) to the case.
- Do not operate the crown or any buttons when the watch is wet. This may allow the entrance of moisture and cause damage to sensitive components.
- If water enters the watch or the watch fogs up and does not clear up even after a long time, consult Authorized Service Center for inspection and/or repair.
- If a watch of upgraded water resistance for daily use is immersed in sea water or subjected to excessive perspiration, thoroughly rinse with fresh water and wipe completely dry with a soft cloth.
- 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, buttons, etc.) may come off.

⚠ CAUTION When Wearing Your Watch

<Band>

- The durability of a leather, cloth, or natural skin strap may be affected by moisture and perspiration. Moreover, wet leather may cause a rash. Be sure to keep your strap dry and clean.
- It is recommended to take off the watch if it gets wet, even if the watch itself is water-resistant.
- Do not wear your watch too tightly. Try to leave enough space between the watch and your skin to allow adequate ventilation.

- A rubber type strap may become stained by dyes or soils found in clothing and other accessories. Since these stains may become permanent, take caution when wearing your watch with items that may transfer color (articles of clothing, purses, dyed bracelets, etc.).
- Solvents, moisture and perspiration may cause the strap to deteriorate. Be sure to replace a strap that has become dried, brittle, or cracked to prevent loss due to strap failure.

<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.

<Static Electricity>

- The integrated circuits (IC) used in quartz watches are sensitive to static electricity. Please note that the watch may malfunction if exposed to intense static electricity.

<Magnetism>

- Analog type quartz watches are powered by a motor that utilizes a small magnet. The operation of this motor can be disturbed if the watch is subjected to magnetic items resulting in the malfunction of the watch. Do not allow the watch to come into close proximity to magnetic items such as “health” bracelets or necklaces, coin trays, latches found in cabinets and refrigerators, certain clasps of handbags and cell phone pouches, cell phone speakers, certain sporting accessories, MRI equipment, etc.

<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.

<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 in contact with the watch, they may cause discoloration, deterioration and damage materials of the watch. Be careful when handling these chemicals. Contact with mercury such as that used in thermometers may also cause discoloration of the band and case.

⚠ 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.
  Note: Do not operate the crown or any buttons when the watch is wet.
- 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 in to direct contact with the skin. This may result in unnoticed accumulations of dirt and foreign matter caused by normal wear. Accumulated matter may cause rust, discoloration, and premature wear. Be sure to regularly clean your watch with a soft cloth. If severe accumulations occur, you may need to have your case and/or bracelet professionally cleaned.
- In some instances, accumulations of dirt and foreign matter may cause skin reactions. This may also occur due to certain allergies beyond our control. If this occurs, immediately discontinue use of your watch and consult your physician.
- Leather, cloth, and other natural skin straps may become discolored or brittle from moisture, perspiration and/or accumulated dirt. To maximize the life of your strap, be sure to keep your leather band clean and dry by wiping it with a soft cloth each day.

⚠ CAUTION Caring for Your Watch

- Wipe any dirt or moisture such as perspiration from the case and crystal with a soft 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.

Maintenance

Daily maintenance

- 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.
- Wipe off dirt, perspiration, and water from the case and glass with a clean soft cloth occasionally.
- To clean a metal, plastic, or rubber watchband, wash away dirt with water. Use a soft brush to remove dust and dirt stuck in the gaps in a metal band.
- Do not use a polishing type of cloth as this may damage the surface and certain treatments.
- Do not use solvents (thinner, benzine, etc.), as they may damage the finish.

Periodical inspections

Your watch needs an inspection once every two or three years for safety and longer usage. To keep your watch water-resistant, the gaskets and other components need to be replaced regularly. Other parts need to be inspected and replaced if necessary.
Always ask for genuine Citizen parts upon replacement.

Information

The radio signal

The radio signal is broadcast almost continuously 24-hours a day, but may occasionally be interrupted due to maintenance. The broadcasting conditions of the radio signal can be checked on the station web site.

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

Luminous Feature

Your watch may feature luminous treatment to the dial and hands to aid you in reading the watch in dimly lit environments. This luminous treatment stores light from both natural and artificial sources. It is free from any radioactive substance or any other material that may be harmful to the environment or human body.

- The light emission of the luminous material gradually decreases as time passes.
- The duration and amount of light emitted will vary depending on the brightness, type of and distance from the light source, exposure time and amount/size of luminous treatment.
- When not exposed to a light source, light emission from the luminous treatment will start off bright and gradually diminish over a period of hours. The duration of visible light emission will vary with type of and duration of light exposure as well as size of luminous features of your watch.

Specifications

Model	E650	Type	Analog solar-powered watch
Timekeeping accuracy (without the radio signal reception)	Within ±15 seconds per month when worn at normal operation temperatures (between +5˚C/41˚F and +35˚C/95˚F)		
Operating temperature range	–10˚C/14˚F to +60˚C/140˚F		
Display functions	• Time: Hours, minutes, seconds, 24-hour time • Calendar: date, day of the week • Charge level: 4 grades		
Continuous operation times	• Fully charged to fully discharged: Approx. 1.5 year (from full charge with power save feature engaged) Approx. 10 months (Normal use condition: power save feature operates for 7.5 hours per day) • From insufficient charge warning display until stop: Approx. 3 days		
Battery	Rechargeable cell, 1pc.		

Additional functions	• Solar power function • Power reserve indication • Overcharging prevention function • Insufficient charge warning function (2-second interval movement) • Energy saving function (power save feature) • Receiving radio signal (automatic, on demand, automatic recovery) • Confirming reception status (RX) • Indicating the reception level (H, M, L) • Indicating the result of the last reception (H, M, L, NO) • City setting (five cities) • Alternate time function (time difference correction: 15 minute steps) • Daylight savings time setting function (ON or OFF) • Chronograph function (60 minute timing, 1 second steps) • Alarm function (24 hour clock alarm) • Reference position check and correction function • Perpetual calendar (until February 28th, 2100)