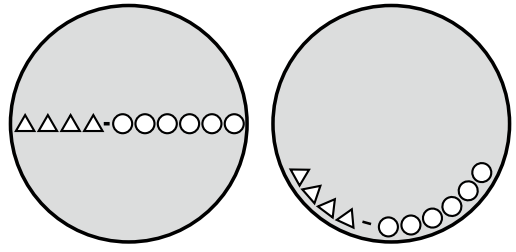
Thank you for your purchase of this Citizen watch.
Before using the watch, read this instruction manual carefully to ensure correct use.
After reading the manual, store it in a safe place for future reference.
Be sure to visit the Citizen website at http://www.citizenwatch-global.com/ .
Here you will find a variety of information such as electronic setting guides, answers to frequently asked questions, Eco-Drive recharging information and more.

To check the movement number

A case number—4 alphanumeric characters and 6 or more alphanumeric characters—is engraved on the case back. (Figure on the right)

The first 4 characters of the case number represent the movement number of the watch. In the example on the right, "△△△△" is the movement number.

Engraving position example



The engraving position may differ depending on watch model.

Safety precautions — IMPORTANT

This manual contains instructions that should be strictly followed at all times not only for optimal use, but to prevent any injuries to yourself, other persons or property. We encourage you to read the entire booklet (especially, pages ***70*** to ***83***) and understand the meaning of the following symbols:

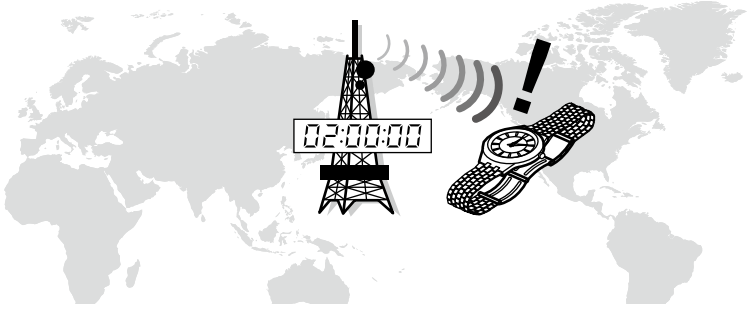
- Safety advisories are categorized and depicted in this manual as follows:

⚠ **DANGER**	Highly likely to cause death or serious injury
⚠ **WARNING**	Can cause serious injury or death
⚠ **CAUTION**	Can or will cause minor or moderate injury or damage

- Important instructions are categorized and depicted in this manual as follows: (Following symbols are examples of Pictograms.)

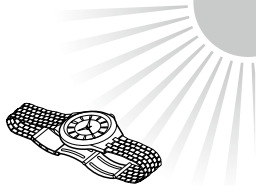
	Warning (caution) symbol followed by prohibited matters.
	Warning (caution) symbol followed by instructions that should be followed or precautions that should be observed.

Features



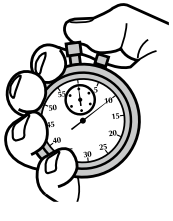
- **Radio controlled watch**
  Receives time signals from one of the five signal stations in four regions in the world and automatically adjusts the time and calendar.

- **World time**
  Easy to see the time for a second time zone, anywhere in the world.



- **Eco-Drive**
  No periodical battery replacement is needed. This watch is fueled by light.

- **Alarm**
  Sounds at the time set.



- **Chronograph**
  Measures up to 60 minutes by 1 second.

- **Perpetual calendar**
  No need for monthly and leap-year date correction until February 28, 2100.

* "Eco-Drive" is an original technology of Citizen.

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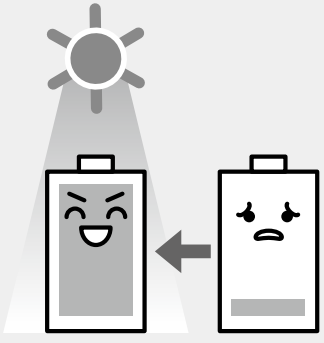
Before using this watch



This watch has a rechargeable cell which is charged by exposing the dial to light.
Expose the dial to direct sunlight regularly to charge the watch.
For details of charging, see page ***44*** -.

After unpacking, follow the steps below when starting time and calendar adjustment.

1 Checking the current power reserve (page *16*)
2 Changing the world time setting (page *24*)
3 Receiving the time signal (page *29*)

Band adjustment

We recommend seeking the assistance of an experienced watch technician for sizing of your watch. If adjustment is not done correctly, the bracelet may unexpectedly become detached leading to loss of your watch or injury. Consult an authorized service center.

Protective stickers

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

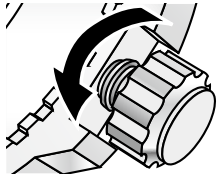
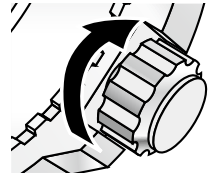
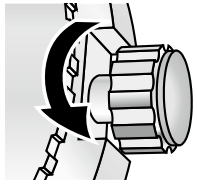
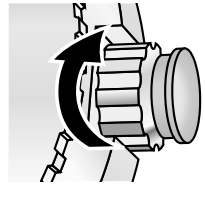
Continued on the next page ➡

How to use a specially designed crown/button

Some models are equipped with a specially designed crown and/or push button to prevent accidental operation.

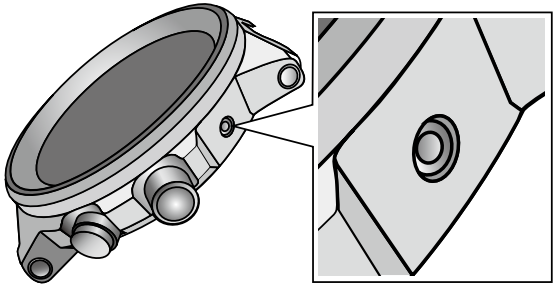
Screw down crown/button

Unlock the crown/button prior to operate your watch.

	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.

Recessed button

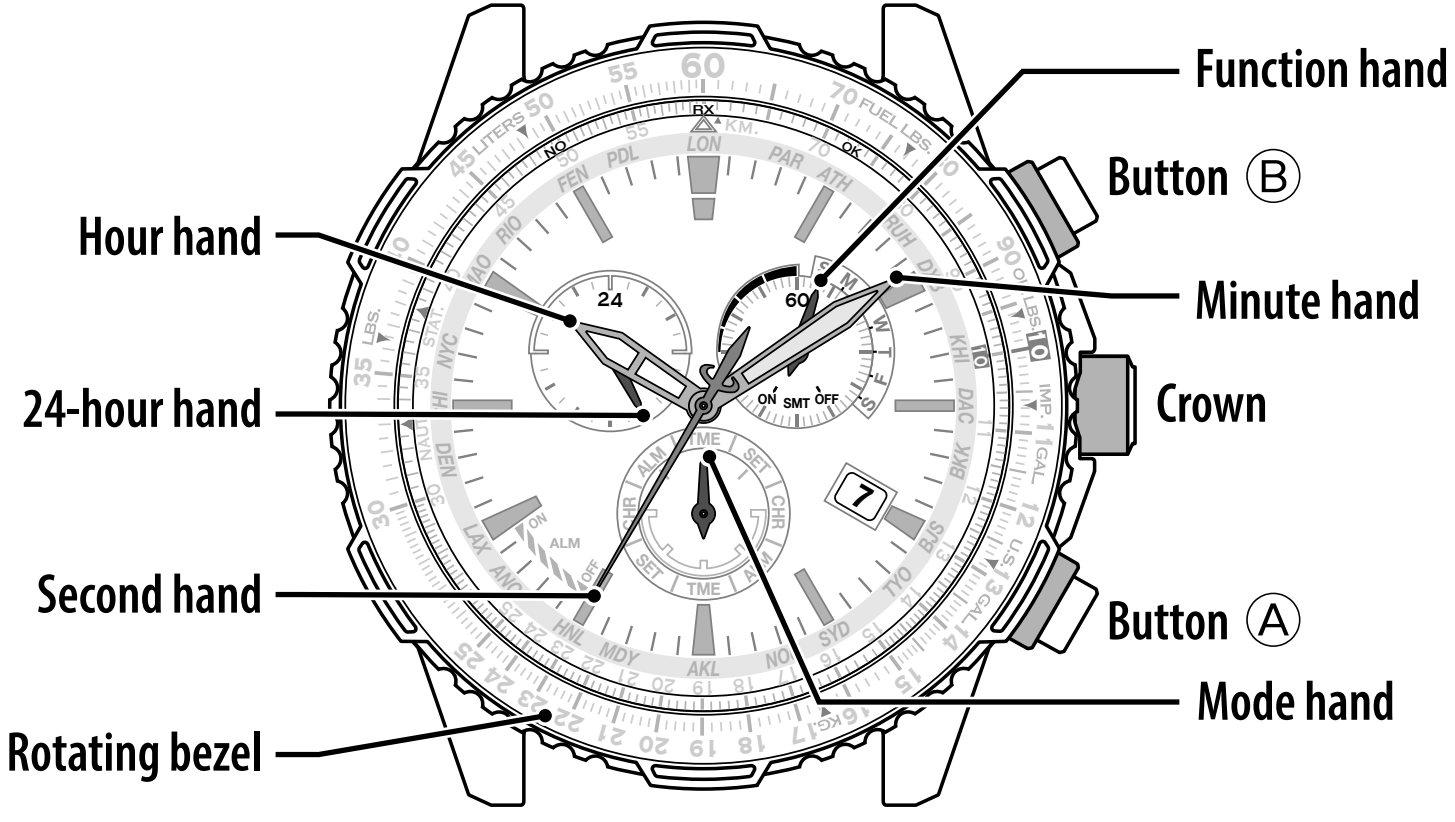
Press the button with a non-marring narrow-tipped object.



- Metal objects may cause marring or scratching of the button.

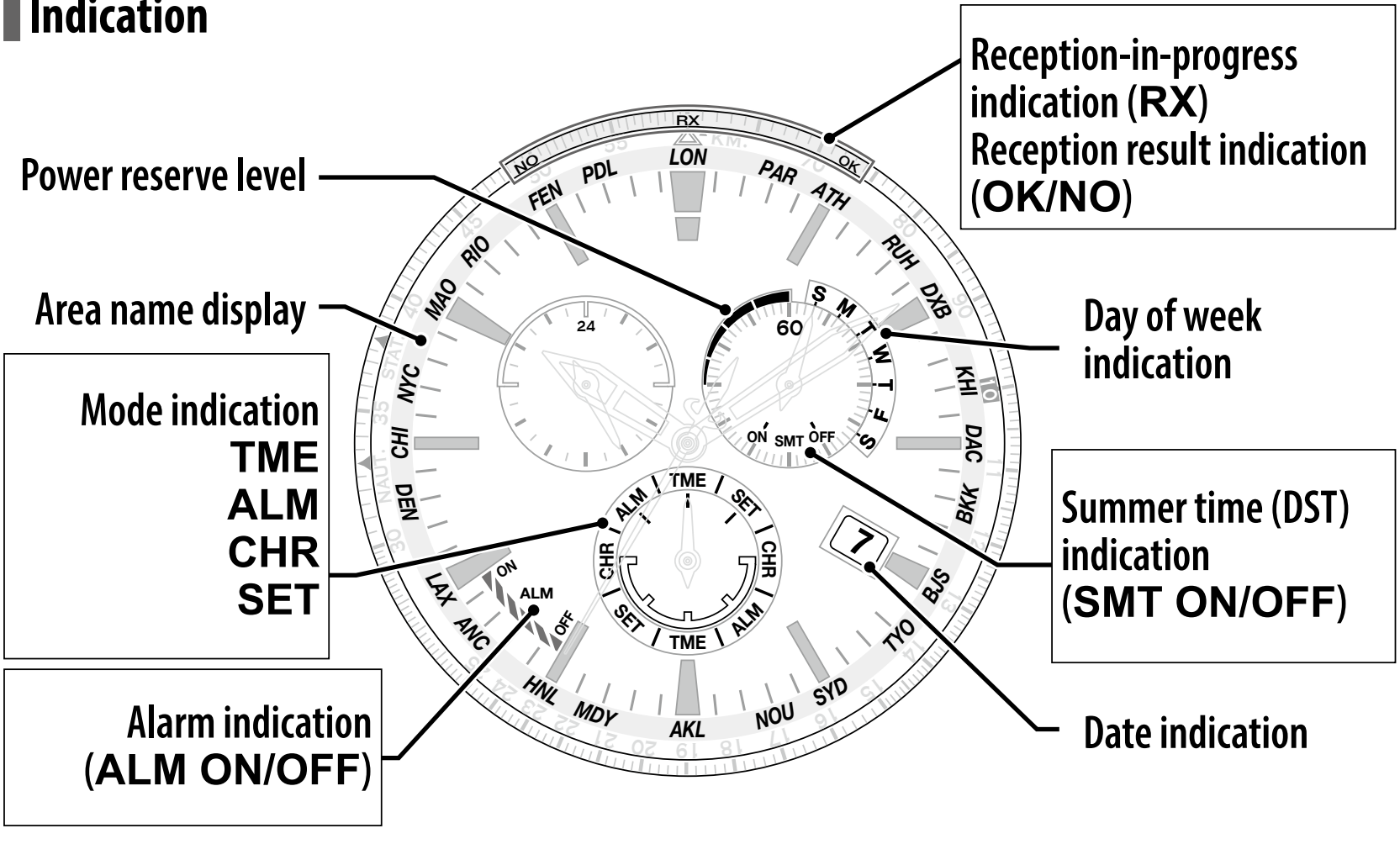
Component identification

Hands and buttons



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

Indication

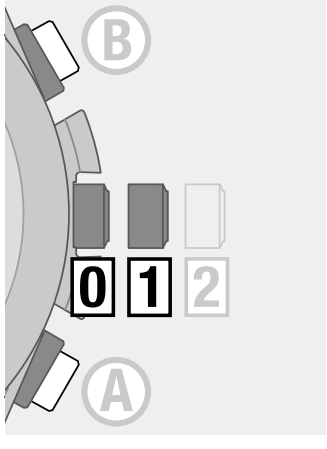


- A solar cell is under the dial.

Changing the mode

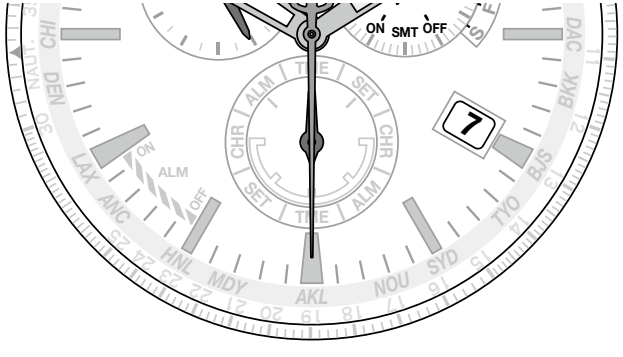
This watch features the four different modes as follows:

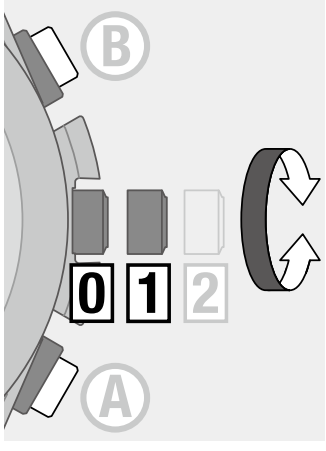
TME	Shows ordinary time.
CHR	Mode for using the chronograph.
ALM	Mode for setting the alarm.
SET	Mode for setting time and calendar manually.



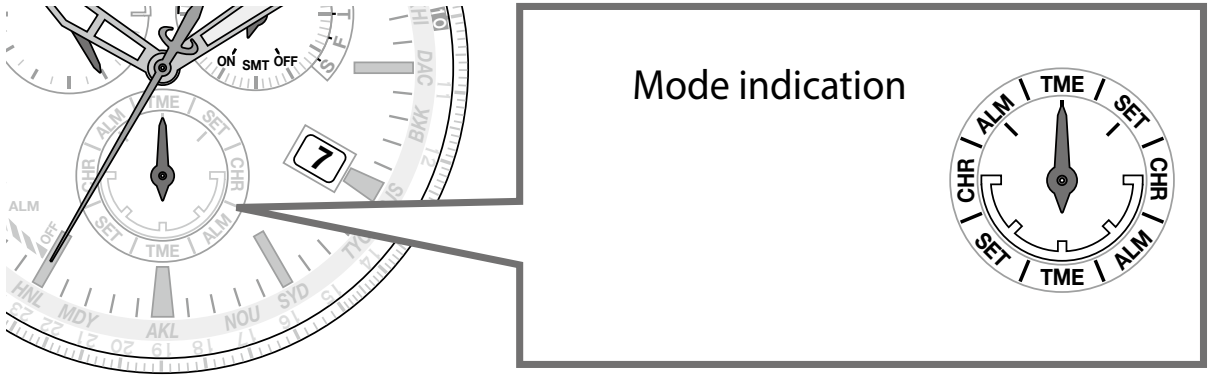
1 Pull the crown out to position 1.

The second hand points to 30 seconds and stops.





2 Rotate the crown to change the mode.



- Turn the crown so that the mode hand will point to a marker of the mode indication securely.

3 Push the crown in to position 0 to finish the procedure.

Indication of the watch changes into that of the mode selected.

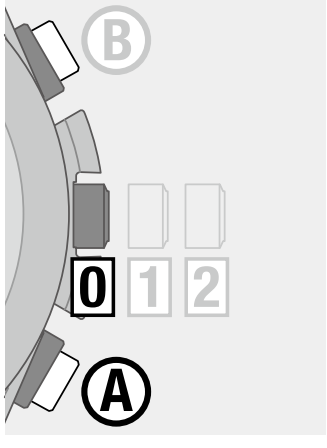
- It may take a moment to change indication.

Checking the power reserve

For details of charging, see “Charging your watch” (page *44*).

Checking the power reserve

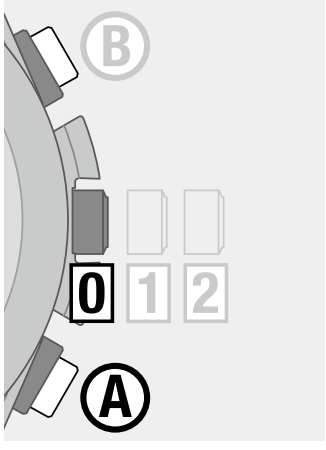
• See page *18* for instructions on how to read power reserve indication.

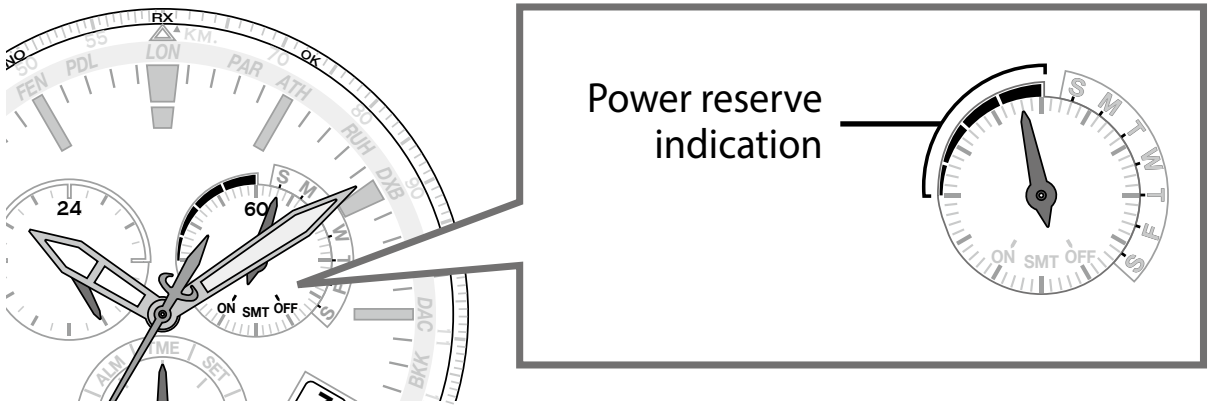


1 Change the mode to [TME] (page *14*) and push the crown in to position 0.

2 Press and release the lower right button Ⓐ.

The function hand indicates power reserve and the second hand indicates the previous reception result.

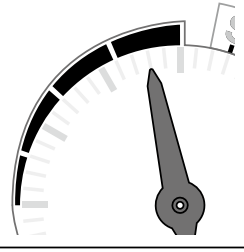
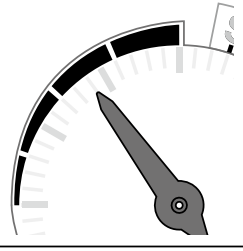
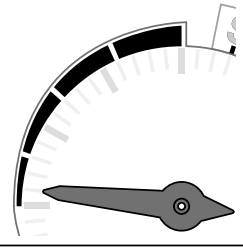




- Press button Ⓐ to return to normal indication. It returns to normal indication automatically in about 10 seconds without pressing the button.

Continued on the next page ➡

Indication of power reserve in levels

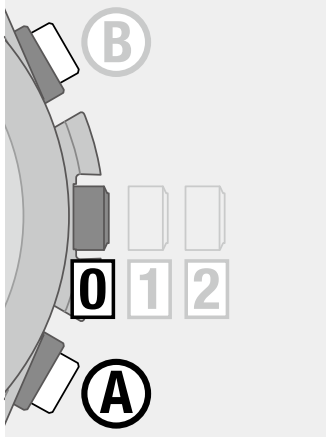
Level	3	2	1	0
Power reserve indication				
Duration (approx.)	10 - 7 months	7 - 1 month	1 month - 3 days	3 days or shorter
Meaning	Power reserve is sufficient.	Power reserve is OK.	Power reserve is getting low.	Insufficient charge warning has started.
	OK for normal use.		**Charge immediately.**	

CAUTION

- At the level “0”, the second hand starts to move once every two seconds (insufficient charge warning function, page ***46***). The function hand on the upper right sub dial always indicates the power reserve in this mode. In addition, functions other than time indication stop and become unavailable.

Checking the previous signal reception result

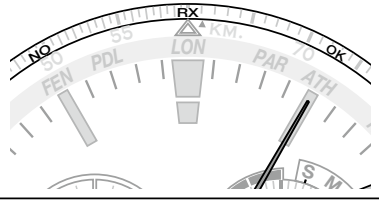
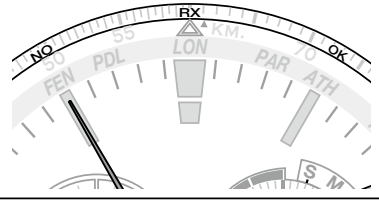
For details of signal reception, see “About signal reception” (page ***49***).

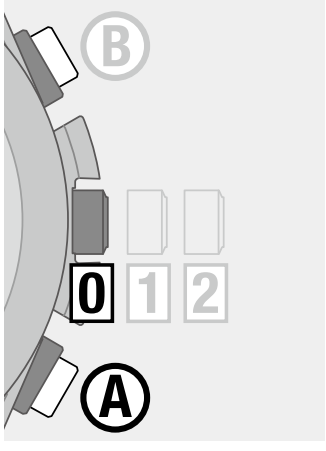


1 Change the mode to [TME] (page *14*) and push the crown in to position 0 .

2 Press and release the lower right button Ⓐ .

The function hand indicates power reserve and the second hand indicates the previous reception result.

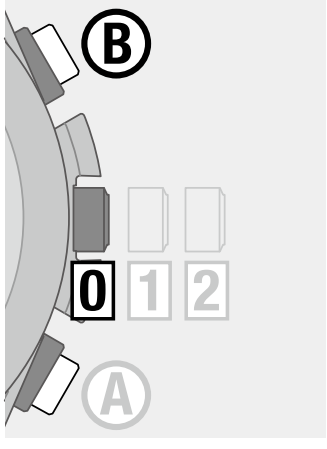
OK	NO
	
The reception was successful.	The reception failed.



- Press button Ⓐ to return to normal indication. It returns to normal indication automatically in about 10 seconds without pressing the button.

Checking the current world time setting

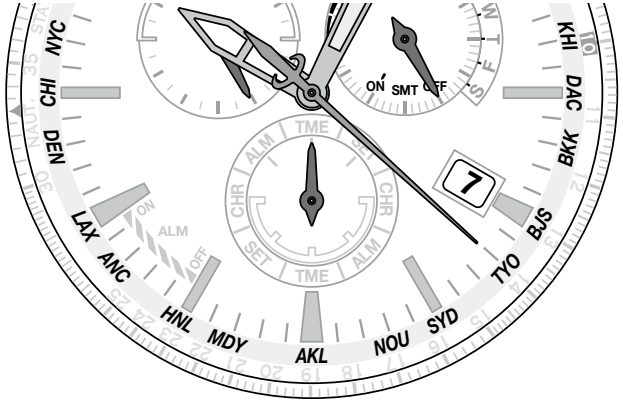
For details of the world time, see “Setting the world time” (page ***24***).



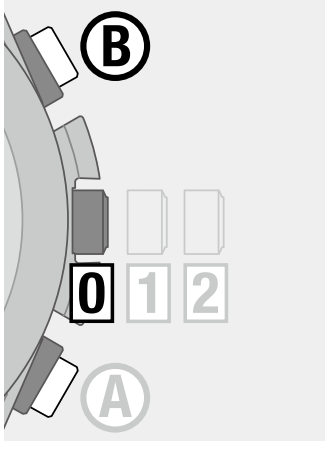
1 Change the mode to [TME] (page *14*) and push the crown in to position 0 .

2 Press and release the upper right button Ⓑ .

The second hand indicates the current time zone setting and the function hand indicates the current summer time (DST) setting (page ***32***).



Ex.:
When the time zone setting is “TYO” and the summer time (DST) setting is “SMT OFF”

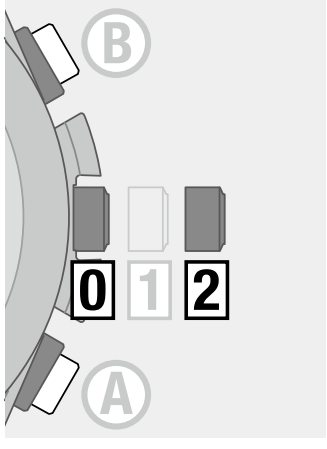


- Press button Ⓑ to return to normal indication. It returns to normal indication automatically in about 10 seconds without pressing the button.

Setting the world time

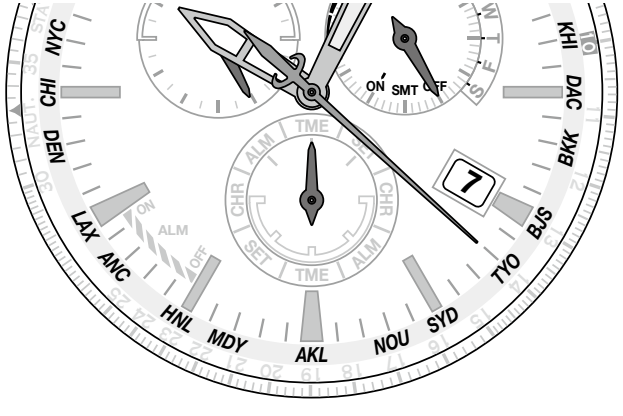
This watch can indicate the time around the world according to which of 24 time zones (offsets from UTC — Coordinated Universal Time) is chosen.

• See page ***22*** to check which time zone is currently indicated.

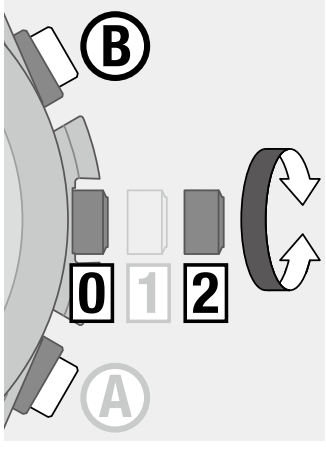


1 Change the mode to [TME] (page *14*) and pull the crown out to position 2.

The second hand indicates the current time zone setting and the function hand indicates the current summer time (DST) setting (page ***32***).



Ex.:
When the time zone setting is "TYO" and the summer time (DST) setting is "SMT OFF"



2 Rotate the crown to select an area.

The hour and minute hands start moving as you finished to select an area.

- For details of areas and time zones, see “Table of time zones and representative places” (page ***26***).
- Pressing button Ⓑ while the hands stops changes the summer time (DST) setting.

3 Push the crown in to position 0 to finish the procedure.

Continued on the next page ➡

Table of time zones and representative places

- Countries or regions may change time zones for various reasons.
- When using the watch in an area not listed in the table, select an area name in the same time zone.

Time zone	Second hand	Area name	Representative area	Signal station
0	0	**LON**	London*	Germany
+1	3	**PAR**	Paris*	
+2	5	**ATH**	Athens*	♦Germany
+3	8	**RUH**	Riyadh	
+4	10	**DXB**	Dubai	
+5	13	**KHI**	Karachi	♦China
+6	15	**DAC**	Dhaka	
+7	17	**BKK**	Bangkok	
+8	20	**BJS**	Beijing /Hong Kong	China

Time zone	Second hand	Area name	Representative area	Signal station
+9	22	TYO	Tokyo	Japan
+10	25	SYD	Sydney	◆Japan
+11	27	NOU	Noumea	
+12	30	AKL	Auckland	
-11	33	MDY	Midway	◆USA
-10	35	HNL	Honolulu	
-9	38	ANC	Anchorage**	
-8	40	LAX	Los Angeles**	USA
-7	43	DEN	Denver**	
-6	45	CHI	Chicago**	
-5	47	NYC	New York**	

Continued on the next page ➡

Time zone	Second hand	Area name	Representative area	Signal station
-4	50	**MAO**	Manaus	◆USA
-3	52	**RIO**	Rio de Janeiro	
-2	55	**FEN**	Fernando de Noronha	◆Germany
-1	57	**PDL**	Azores*	

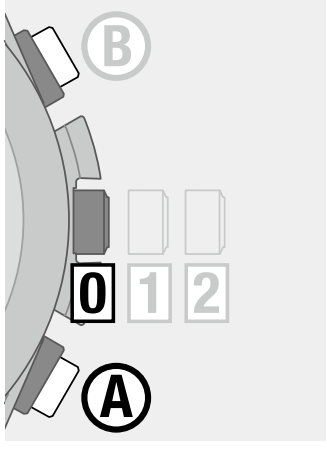
- The offsets in the table are based on the standard time.
- The areas whose "Signal station" has ◆ mark in the table are out of reception range and cannot receive its signals.
- For an area with * or **, automatic change of summer time (DST) setting are linked. For details, see "Setting summer time (DST)" (page ***32***).

Receiving the signal manually (on-demand reception)

For details of signal reception, see "About signal reception" (page *49*).

- It may take 2 - 15 minutes to receive time signals.
- Execute "Setting the world time" (page ***24***) before time signal reception.
- Executing "Setting summer time (DST)" (page ***32***) previously makes things smoother in regions utilizing summer time (DST).

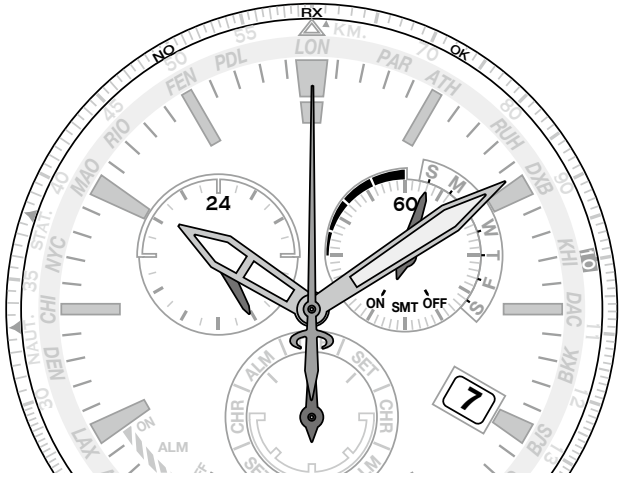
Continued on the next page ➡

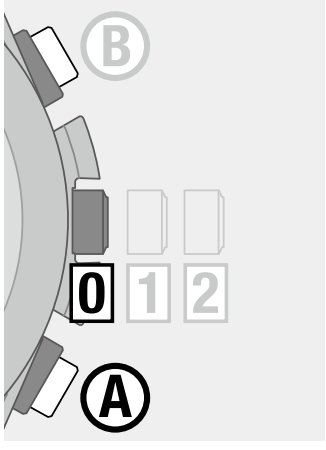


1 Change the mode to [TME] (page *14*) and push the crown in to position 0 .

2 Press and hold the lower right button Ⓐ for 2 seconds or more until the second hand points "RX".

The second hand point to "**RX**" after indicating the previous reception result and signal reception starts.





3 Put the watch in the place with good conditions for time signal reception.

- Do not move the watch as far as possible while the second hand points "**RX**".

To cancel signal reception

Pressing button Ⓐ while the second hand points "**RX**" cancels signal reception and the watch returns to normal indication.

Setting summer time (DST)

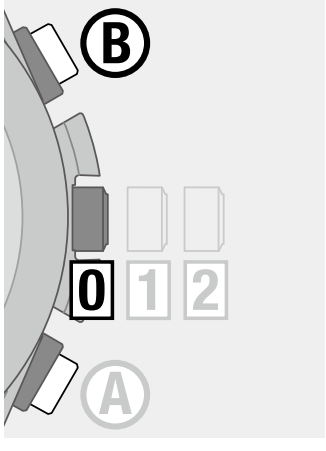
Summer time (DST: Daylight Saving Time) is a system adopted in some countries/areas to gain an extra daylight during summer.

- In regions utilizing summer time (DST), the time signal includes summer time (DST) check signal.
- The summer time (DST) period varies depending on the country or area.
- The summer time (DST) rules may change depending on the country or area.

About summer time (DST) setting

- You can set summer time (DST) on or off for each time zone.
- This watch can change summer time (DST)/standard time indication automatically when it receives time signals including summer time (DST) signals.
- You can also execute summer time (DST) setting manually.

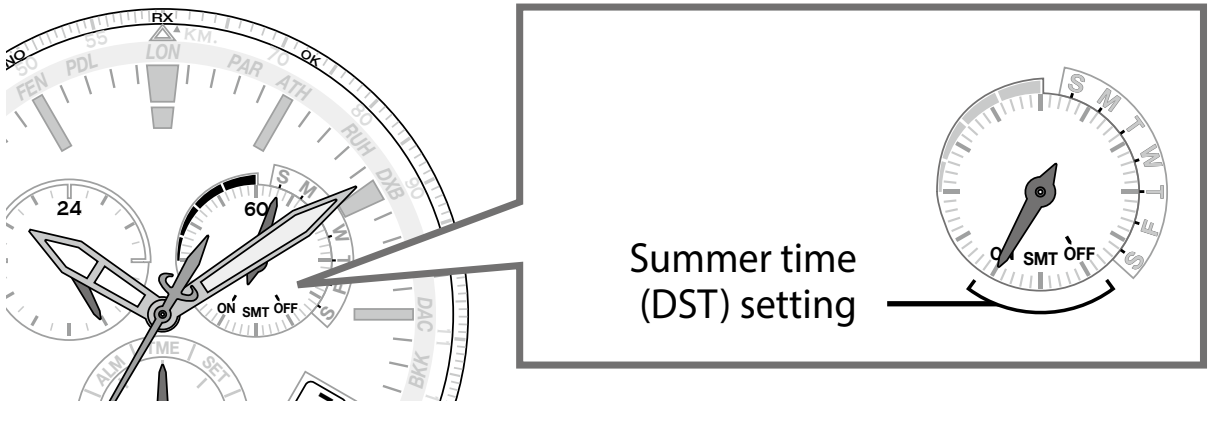
Checking the summer time (DST) setting



1 Change the mode to [TME] (page *14*) and push the crown in to position 0 .

2 Press and release the upper right button Ⓑ.

The second hand indicates the current time zone setting and the function hand indicates the current summer time (DST) setting.



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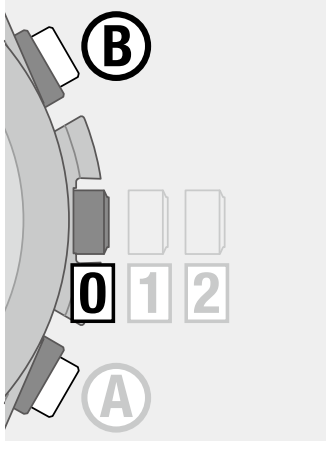
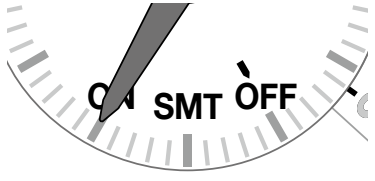
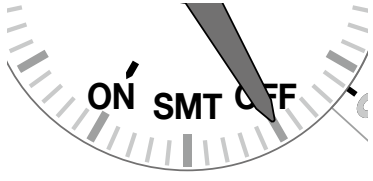
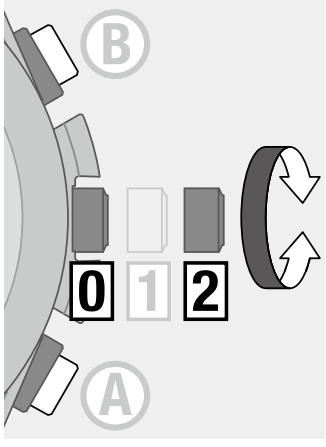


SMT ON	SMT OFF
	
Summer time (DST) is indicated.	Standard time is indicated.

- Press button Ⓑ to return to normal indication. It returns to normal indication automatically in about 10 seconds without pressing the button.

Changing the summer time (DST) setting



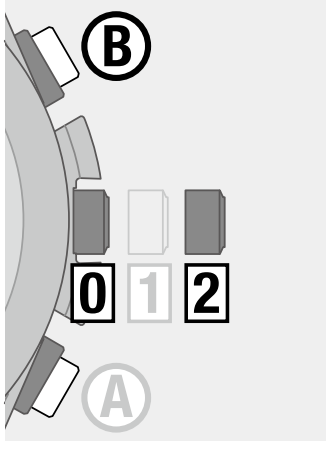
1 Change the mode to [TME] (page *14*) and pull the crown out to position 2.

The second hand indicates the current time zone setting and the function hand indicates the current summer time (DST) setting.

2 Rotate the crown to choose a time zone where you want to change the summer time (DST) setting.

The time zone changes and the hour and minute hands start moving.
The summer time (DST) setting of the chosen time zone is indicated.

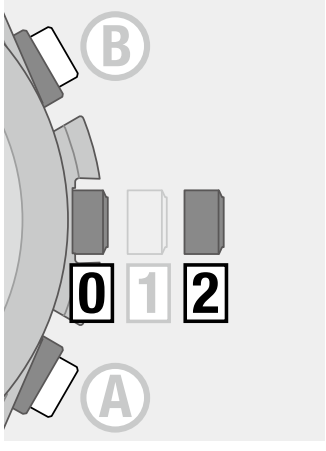
Continued on the next page ➡



3 Press and release the upper right button Ⓑ while the hands stop.

SMT ON	• Summer time (DST) is indicated. • Automatic switching of the summer time (DST) setting is activated. The summer time (DST) setting is automatically changed corresponding to reception of summer time (DST) signals.
SMT OFF	• The standard time is indicated. • Automatic switching of the summer time (DST) setting is deactivated. Summer time (DST) is not indicated even after reception of summer time (DST) signals.

- Each time you press button Ⓑ, the summer time (DST) setting of the chosen time zone changes alternately.



4 **Repeat steps 2 and 3 to execute the summer time (DST) settings of other time zones.**

5 **Push the crown in to position 0 to finish the procedure.**

Link of summer time (DST) setting

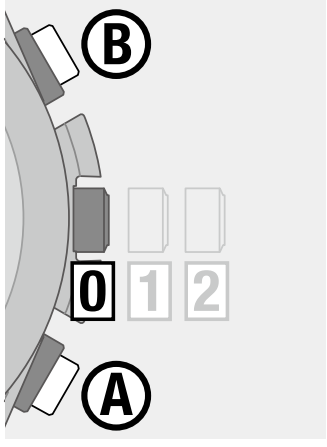
In the following groups of areas, the summer time (DST) setting of all areas in a group is automatically changed when summer time (DST) signals are received in an area of the group.

USA	**ANC, LAX, DEN, CHI, NYC**
Germany	**LON, PAR, ATH, PDL**

- The link does not work for areas where the automatic switching is turned off.

Using the chronograph

The chronograph on this watch can measure up to 60 minutes in 1 second increments.



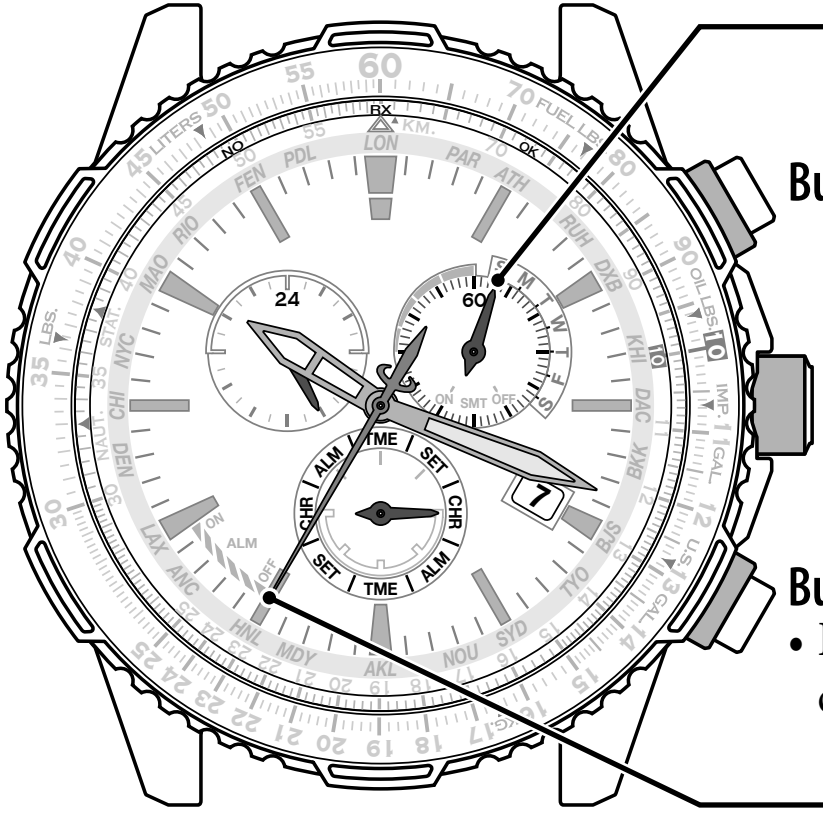
1 Change the mode to [CHR] (page *14*) and push the crown in to position 0.

0 minute 0 second is indicated.

2 Start measurement.

- See the next page for the method of measurement.
- Pulling out the crown will stop and reset the chronograph.

3 Change the mode to [TME] and push the crown in to position 0 to finish the procedure.



Chronograph minute

Button Ⓑ: Start/stop

Button Ⓐ: reset

- Press and release this button to reset the chronograph after timing.

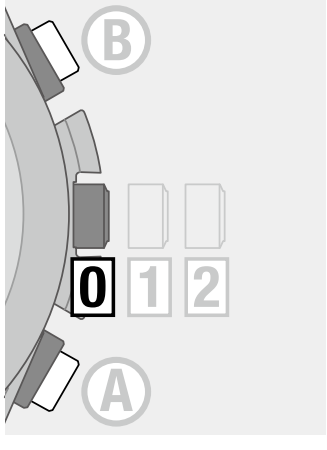
Chronograph second

- After 60 minutes of continuous chronograph operation, the chronograph automatically stops and is reset.

Using alarm

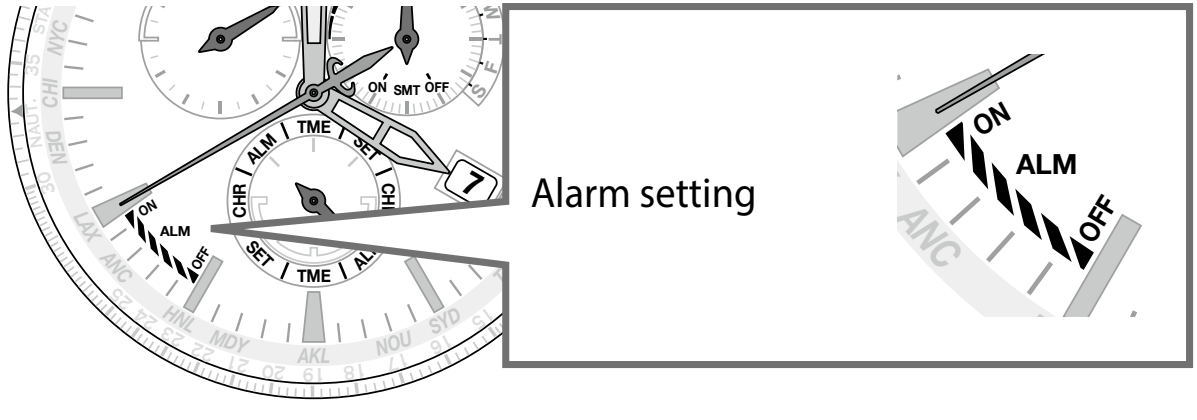
The alarm on this watch is based on the time indicated. It is based on the time of the time zone newly selected when the time zone setting of the world time is changed.

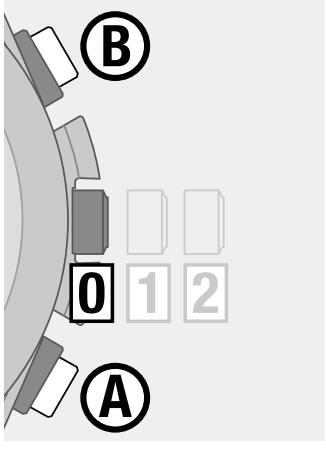
Checking alarm setting



1 Change the mode to [ALM] (page *14*) and push the crown in to position 0 .

The hour, minute and 24-hour hands indicate the alarm time currently set and the second hand shows the alarm setting.





ALM ON	Alarm sounds as the time set comes.
ALM OFF	No alarm sounds.

- Each time you press button Ⓑ, on/off of the setting changes alternately.

2 Change the mode to [TME] and push the crown in to position [0] to finish the procedure.

The hands returns to normal.

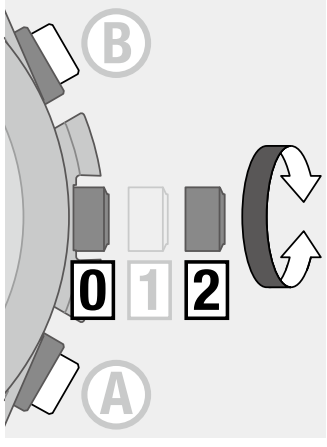
Checking the alarm

Pressing button Ⓐ in step 1 sounds the alarm for 5 seconds. Press the same button to stop the alarm sound.

Continued on the next page ➡

Changing alarm setting

• The alarm time is set in 24-hour basis.



1 Change the mode to [ALM] (page *14*) and pull the crown out to position 2 .

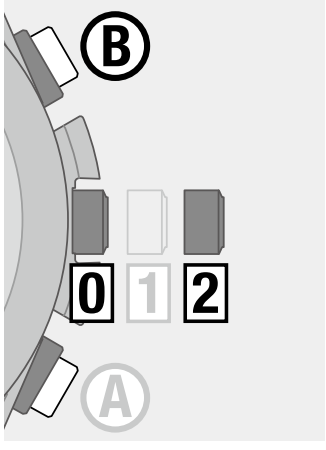
The hour, minute and 24-hour hands indicate the alarm time currently set and the second hand shows the alarm setting.

2 Rotate the crown to set the alarm time.

- Check AM/PM referring to the 24-hour hand.
- If you rotate the crown quickly a few times, the hand will move continuously. To stop the rapid movement, rotate the crown in either direction.

3 Press and release the upper right button Ⓑ to set the alarm setting to "ALM ON".

- Each time you press button Ⓑ, on/off of the setting changes alternately.



4 Change the mode to [TME] and push the crown in to position [0] to finish the procedure.

The watch returns to normal indication.

When the time set comes

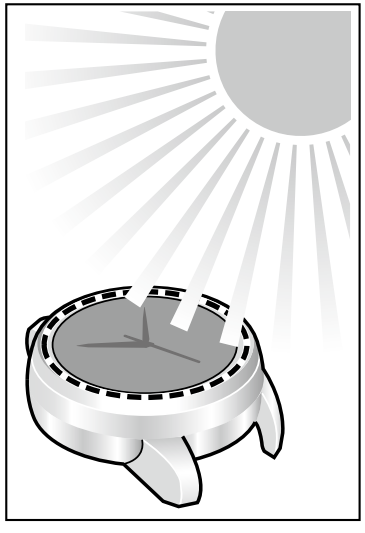
Alarm sounds for 15 seconds as the time set comes.

- Alarm does not sound when the position of the crown is not [0] and/or the mode is not [**TME**] or [**SET**].

To stop alarm

Press any of the buttons.

Charging your watch



This watch has a solar cell under the dial and stores the power generated by the cell in its built-in rechargeable cell.

The cell is charged by exposing the dial to light such as direct sunlight or fluorescent lamps.

For optimal performance, be sure to:

- **Put the watch in a location where the dial is exposed to bright light such as by the window even when it is not used.**
- **Expose its dial to direct sunlight for 5 or 6 hours at least every month.**
- **Do not leave it in dark places for long periods of time.**

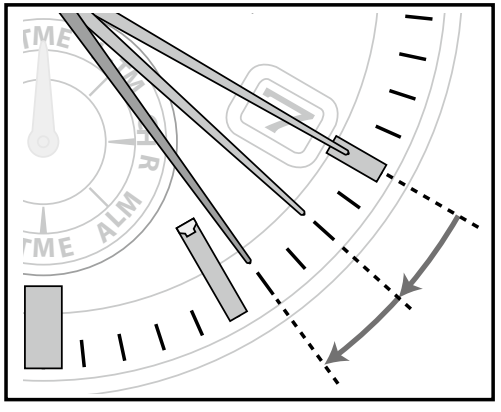
CAUTION

- Do not charge the watch at a high temperature (about 60°C (140°F) or higher) as doing so may cause movement malfunction.
- If the watch is obscured from light by long sleeves frequently, supplemental charging may be needed to ensure continual operation.

- The watch stops charging automatically after finishing (overcharging prevention function). The function prevents damage to performance of the watch and rechargeable cell due to overcharging.

Continued on the next page ➡

When the watch reaches a low charge state (insufficient charge warning function)



When the power reserve becomes low, the second hand moves once every two seconds. This is the insufficient charge warning function. Be sure to fully charge your watch immediately as outlined on page ***47***.

- When the watch is sufficiently charged, the second hand will move normally.
- If you do not charge the watch for 3 days or longer after the insufficient charge warning movement has begun, the watch will be depleted of all power and stop.

During the insufficient charge warning state

The time and date are indicated correctly.

- The indication in the [**TME**] mode is displayed in the other modes and functions in them are not available.
- The function hand on the upper right sub dial indicates the power reserve level “0” in this mode.

Charging time by environment

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

Environment	Illuminance (lx)	Charging time (approx.)		
		To work for one day	To start working normally when the cell is discharged	To become fully charged when the cell is discharged
Outdoors (sunny)	**100,000**	3 minutes	2 hours	35 hours
Outdoors (cloudy)	**10,000**	11 minutes	3.5 hours	65 hours
20 cm (7-7/8 inches) away from a fluorescent lamp (30W)	**3,000**	40 minutes	7.5 hours	–
Interior lighting	**500**	4 hours	50 hours	–

- **Exposing to direct sunlight is recommended to charge your watch.**
  A fluorescent lamp or interior lighting does not have sufficient illumination to charge the rechargeable cell efficiently.

Continued on the next page ➡

Power save function

The second hand stops automatically to save power when the watch has been kept in a dark place for a certain period of time and it cannot generate power.

- The watch works normally even while saving power.
- The alarm sounds even while saving power.
- The power save function does not operate under the following conditions:
  - The crown is in position 1 or 2.
  - The mode is [**CHR**] or [**ALM**].
  - During 2-second interval movement (insufficient charge warning status)

Canceling the power save function

The power save status ends and the hands return to normal indication as the watch is operated or the dial is exposed to light and power generation starts.

About signal reception

There are three ways to receive the time signal.

Reception method	Explanation
Automatic reception	The watch receives time signals automatically every night.
On demand reception	You can perform signal reception manually when required. (page ***29***)
Recovery automatic reception	The watch automatically receives time signals when it is charged enough after it stopped due to insufficient charge.

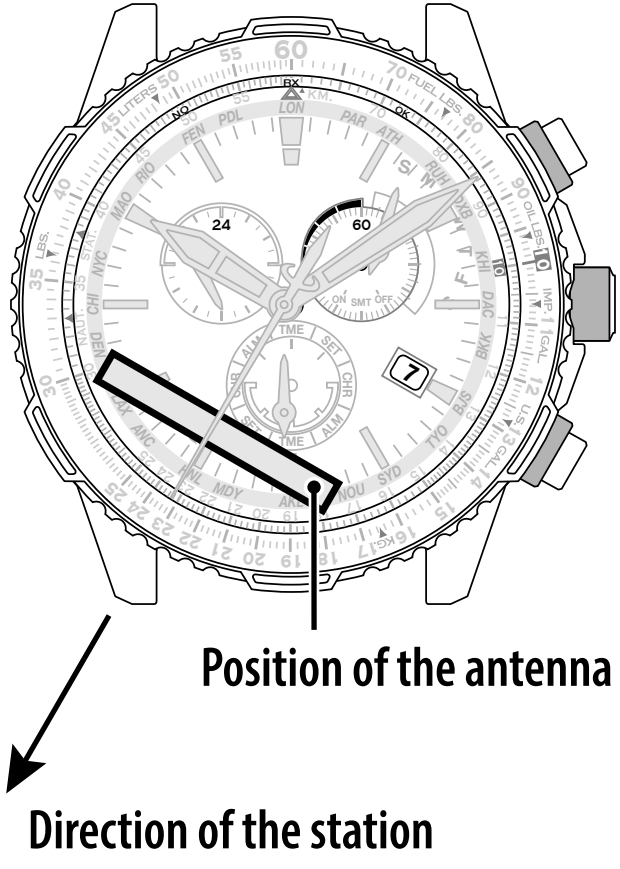
- Even when this watch receives the signal successfully, the accuracy of the displayed time will be dependent on the reception environment and internal processing.
- This watch keeps ±15-second monthly accuracy even if no time signal is received.

Continued on the next page ➡

When receiving the time signal

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

- When wire glass is used for the window, open it or change the reception place.
- The reception antenna is located at the 7:00 position of the watch. Place the watch with the 7:00 position facing toward the station.
- Do not move the watch during time signal reception.
- When the second hand is moving once every two seconds (during insufficient charge warning), time signal reception is not executed. Charge the watch before trying reception.



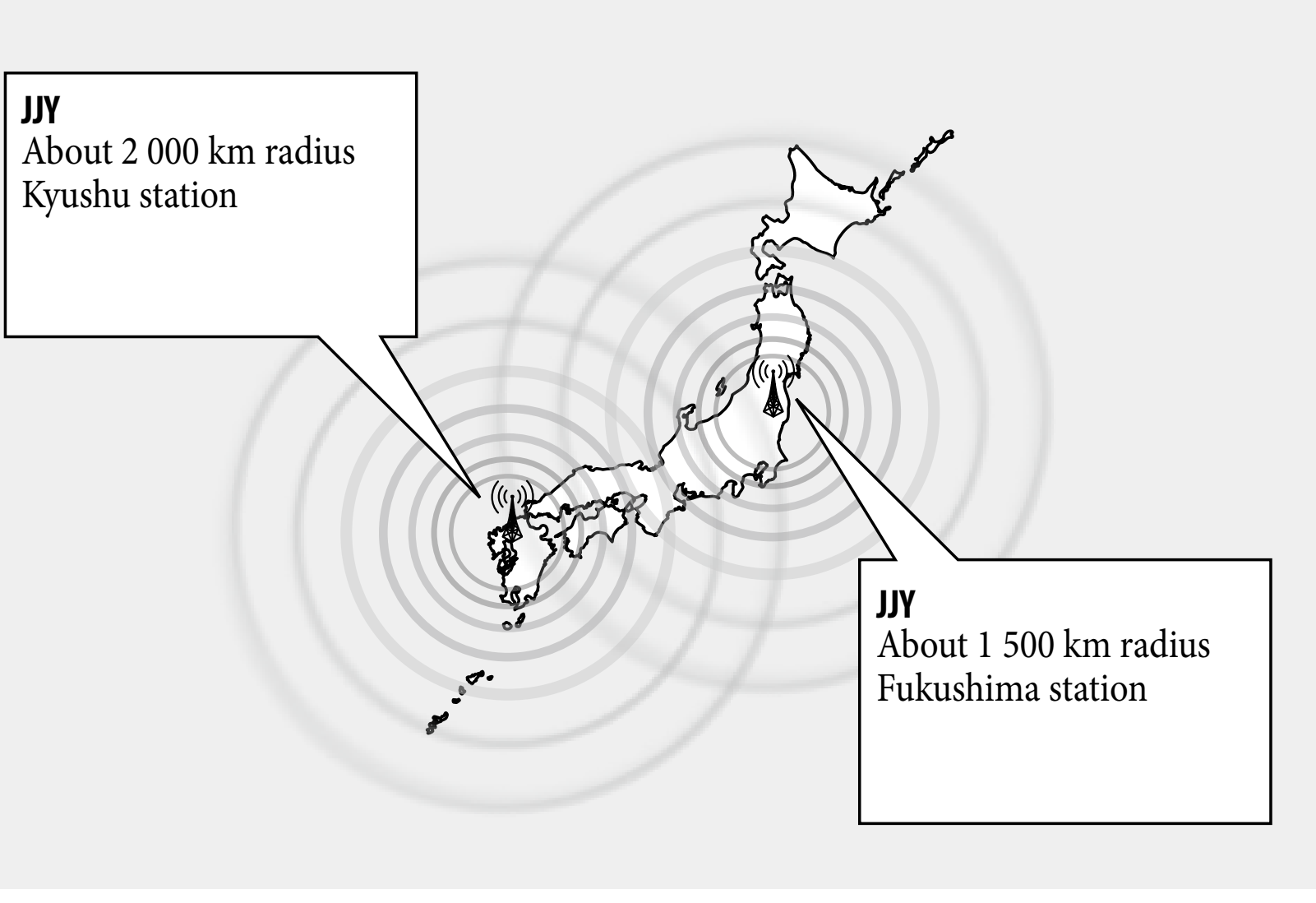
Note on the time signal

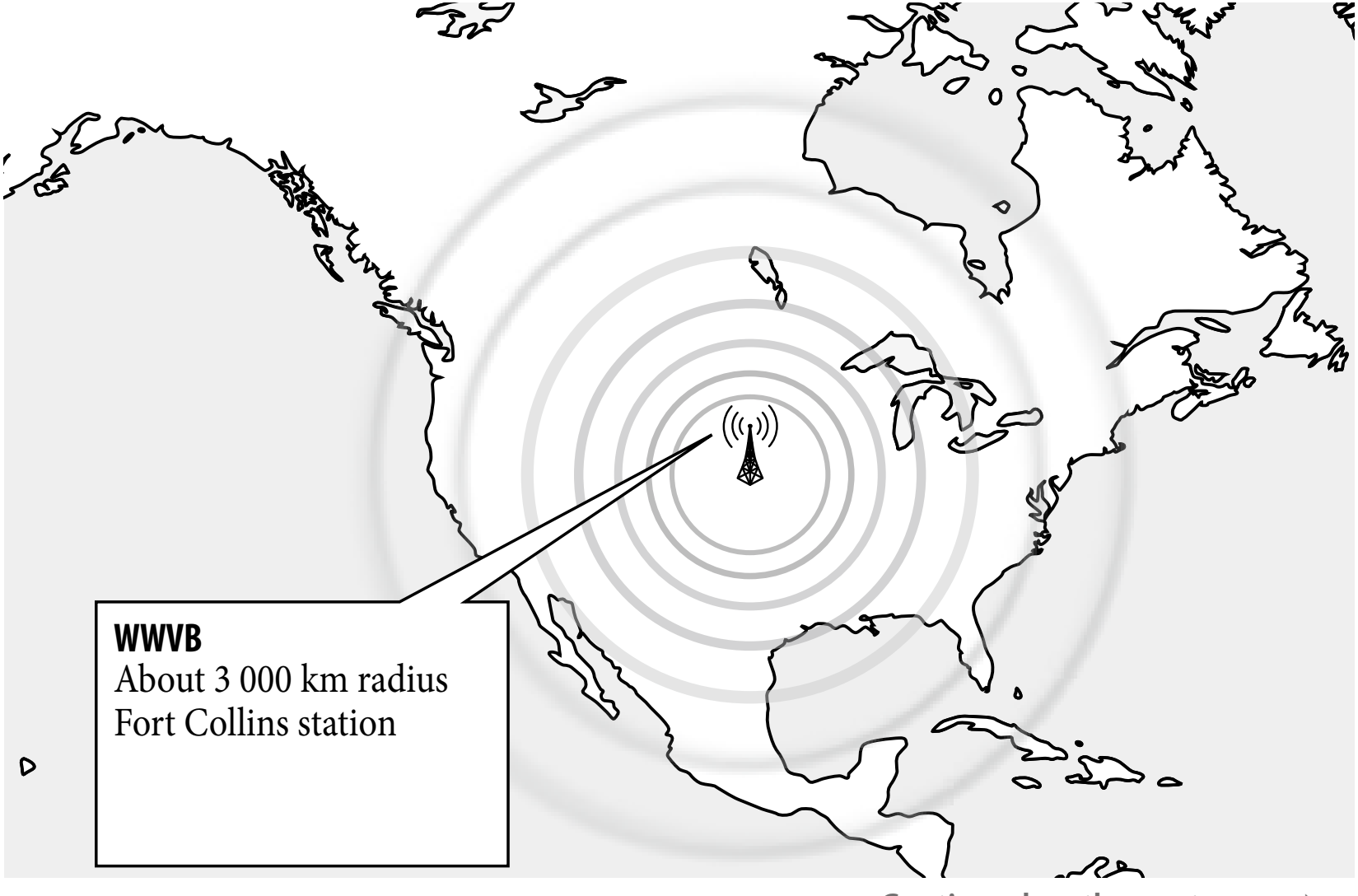
This watch receives time signals from the five signal stations located in four regions in the world. The receivable signal stations are listed as follows:

Signal stations		Kind of the time signal
Japan	Fukushima station, Japan	**JJY**
	Kyushu station, Japan	
USA	Fort Collins station, Denver, Colorado	**WWVB**
Germany	Mainflingen station, Southeast Frankfurt	**DCF77**
China	Shangqiu station, Henan	**BPC**

- Refer to the maps on following pages to see the locations of the signal stations and their approximate receivable areas.

Continued on the next page ➡


JJY
About 2 000 km radius
Kyushu station
JJY
About 1 500 km radius
Fukushima station



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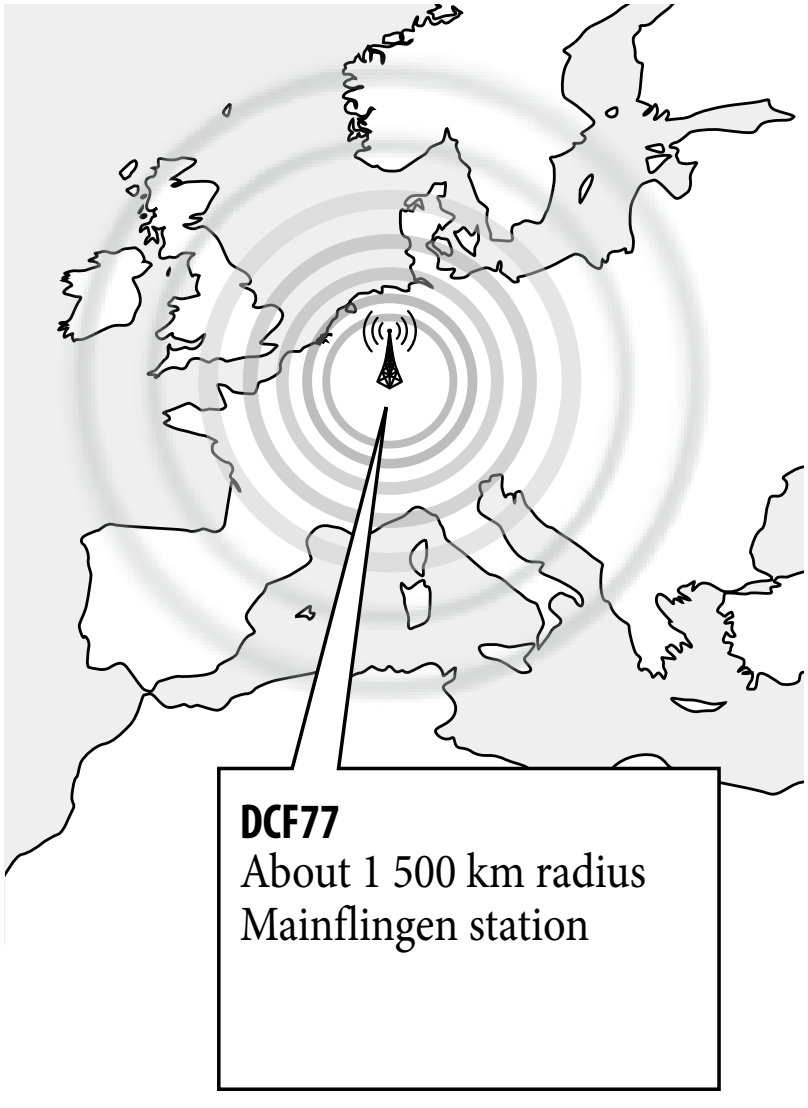
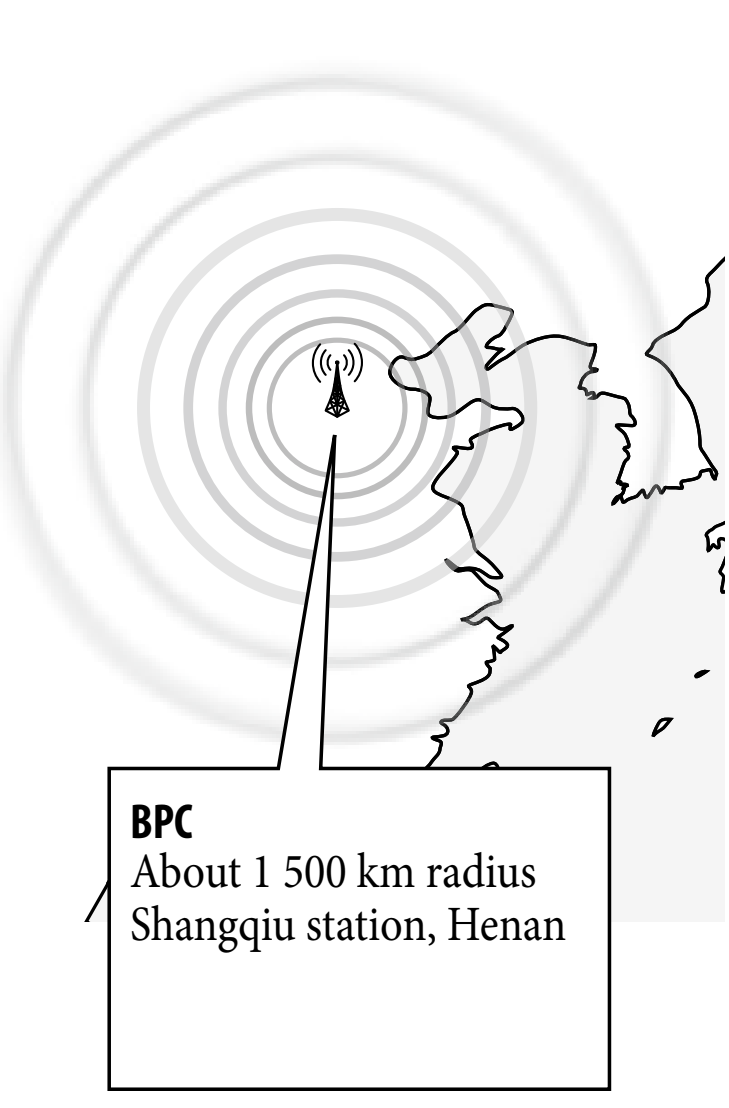


DCF77
About 1 500 km radius
Mainflingen station

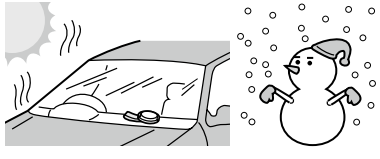


BPC
About 1 500 km radius
Shangqiu station, Henan

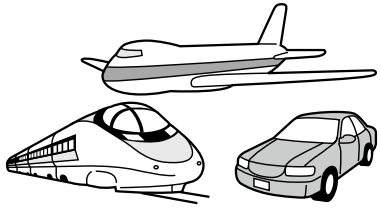
Poor reception areas

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

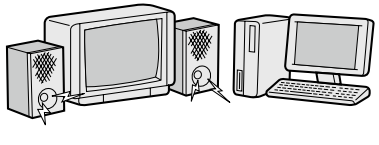
- **Extremely hot or cold locations**



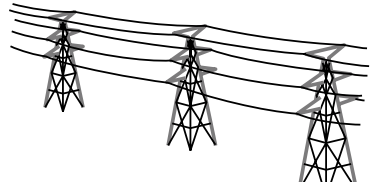
- **Inside vehicles**



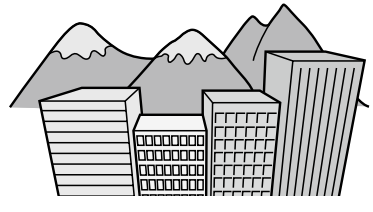
- **Electrical appliances and OA equipment**



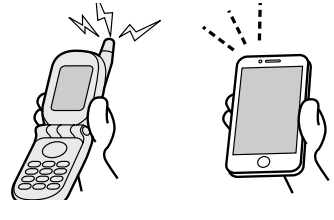
- **High-voltage electric cables, railway overhead cables, airports (transmission facilities)**



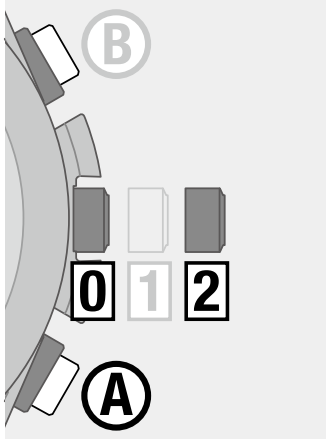
- **Inside reinforced concrete buildings, between tall buildings, mountains, or underground**



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



Adjusting the time and calendar manually



1 Change the mode to [SET] (page *14*) and pull the crown out to position 2 .

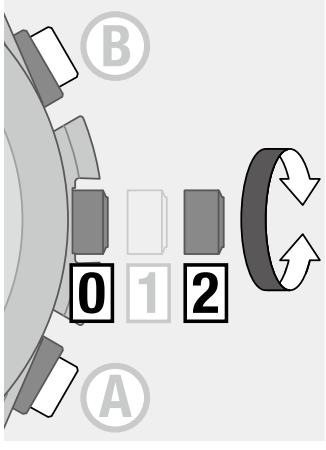
The second hand points to 0 seconds and stops.

2 Press and release the lower right button Ⓐ .

The hour and minute hands move slightly.

3 Press and release the lower right button Ⓐ repeatedly to change the hand/indication to be corrected.

- Each time you press button Ⓐ, the target changes as follows:
  Hour/minute/24-hour → **date** → **year/month** → **day of week** → (back to the top)
- The hand or indication slightly moves when selected to show it becomes adjustable.



4. Rotate the crown to adjust the hand/indication.

- The hour, minute and 24-hour hands move synchronously.
- Check AM/PM referring to the 24-hour hand.
- Year and month are indicated with the second hand. Set them referring to page ***58***.
- Date indication changes to the next as the function hand rotates 5 times.
- When you rotate the crown quickly a few times, the hands and date indication will move continuously. To stop the rapid movement, rotate the crown in either direction.

5 Repeat steps 3 and 4.

6 Push the crown in to position [0] in accordance with a reliable time source.

7 Change the mode to [TME] and push the crown in to position [0] to finish the procedure.

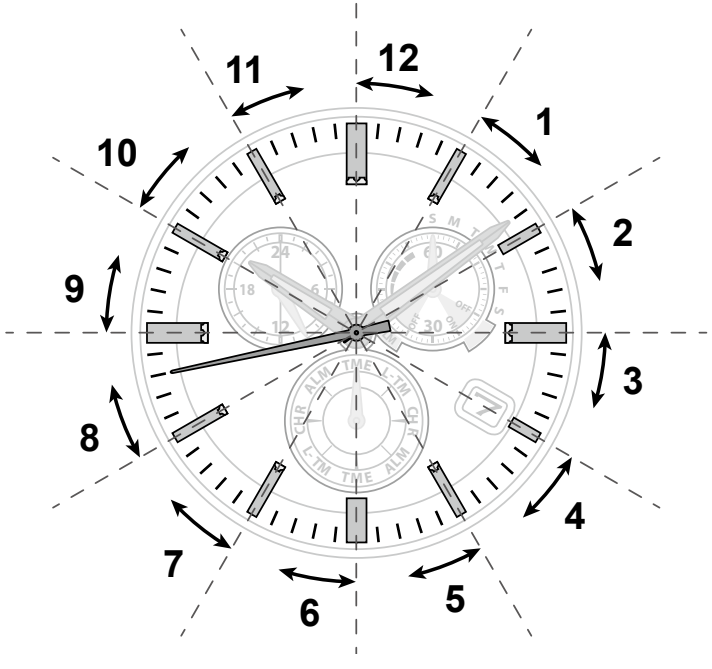
Continued on the next page ➡

Month and year indications

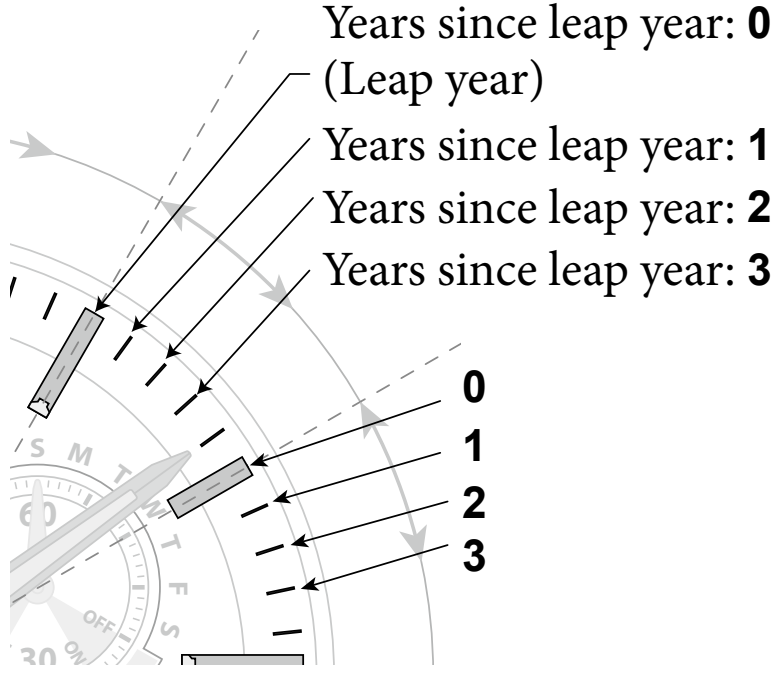
Set the year and month with the position of the second hand.

"Month" corresponds to one of the 12 zones shown in the figure below.

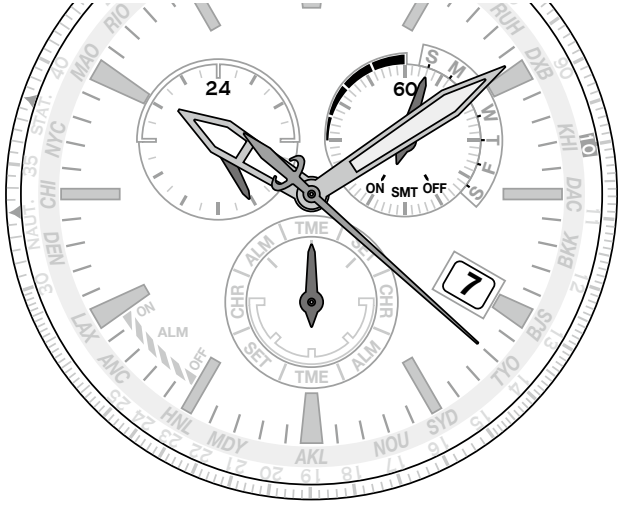
Each number means month.



"Year" corresponds to the years since leap year and is indicated with markers in the zone of each month.



Year					Years since leap year	Second hand
2016	2020	2024	2028	2032	**0** (Leap year)	Hour marker
2017	2021	2025	2029	2033	**1**	1st min. marker
2018	2022	2026	2030	2034	**2**	2nd min. marker
2019	2023	2027	2031	2035	**3**	3rd min. marker



Ex.:
Position of the second hand when setting April 2018
You can find that the years since leap year of 2018 is "2" from the table and the second hand must be set to the 2nd minute marker of April zone.

Troubleshooting

Checking and correcting the reference position

If the time or calender is not shown correctly even after proper reception of the time signal, check whether the reference position is correct.

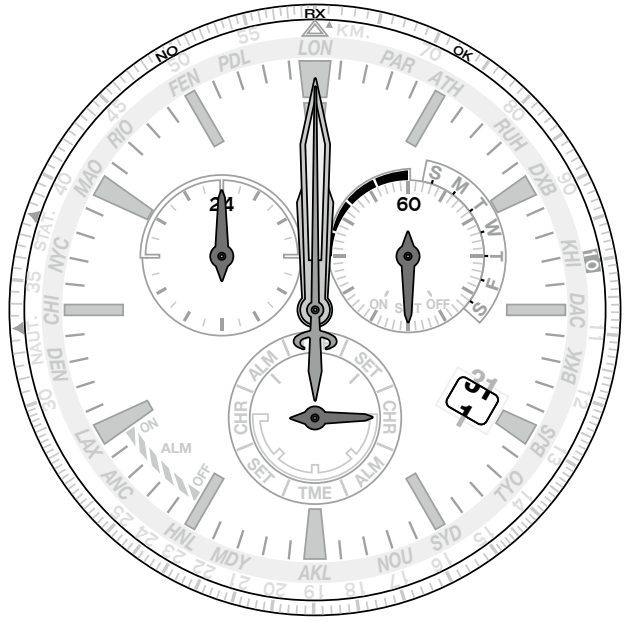
- If the hands and indication do not reflect the correct reference position, the time and calendar will not be indicated accurately even if the time signal is received.

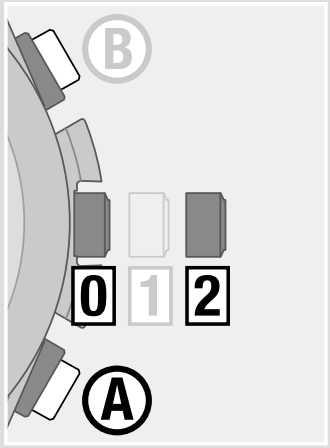
What is the reference position?

The base position of all hands and calendar to properly indicate the various functions of this watch.

- **Hour, minute and second hands: 0 hour 00 minute 0 second**
- **24-hour hand: “24”**
- **Date indication: between “31” and “1”**
- **Function hand: “30” (straight below)**

Correct reference positions





1 Change the mode to [CHR] (page *14*) and pull the crown out to position 2.

The hands and indication move to the current reference positions stored in memory and stop.

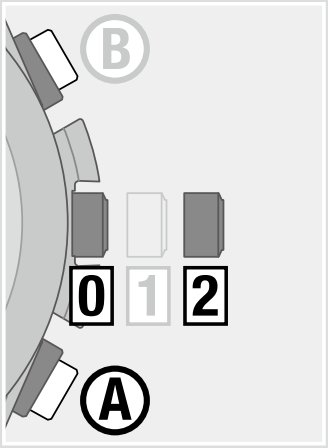
2 Check the reference positions of them referring to the illustration of the previous pages.

Correct	Push the crown in to position 0 to finish the procedure. Set the mode to [**TME**] after that.
Wrong	Proceed to step 3 and correct the reference position.

3 Press and release the lower right button Ⓐ.

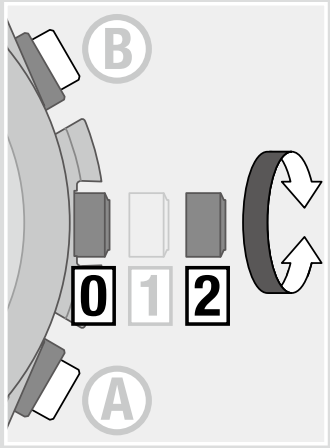
The function hands move slightly.

Continued on the next page ➡



4 Press and release the lower right button Ⓐ repeatedly to change the hand/indication to be corrected.

- Each time you press button Ⓐ, the target changes as follows.
  Function hand/date indication → **Hour/minute/24-hour hand**s → **Second hand** → (back to the top)
- The hands and indications slightly move when selected to show they become adjustable.
- The function hand points “60” (straight above) when the hour, minute, second and 24-hour hands are the targets of adjustment.



5 Rotate the crown to adjust the hand/indication.

- The hour, minute and 24-hour hands move synchronously.
- Date indication changes to the next as the function hand rotates 5 times.
- When you rotate the crown quickly a few times, the hand/indication will move continuously. To stop the rapid movement, rotate the crown in either direction.

6 Repeat steps 4 and 5.

7 Push the crown in to position [0].

8 Change the mode to [TME] to finish the procedure.

Symptom and Remedies

Symptom	Remedies	Page
Cannot receive time signals		
• Manual reception (on demand reception) cannot be executed. • Automatic reception is not executed.	Change the mode to [**TME**] and push the crown in to position 0.	***14***, ***29***
	Check power reserve. If the second hand is moving once every two seconds, you cannot perform time signal reception.	***16***
	Check the world time setting.	***24***
	Check whether the watch is in a receivable area.	***51***
	Check reception environment.	***55***
	Put the watch in an appropriate place and do not move it until reception is finished.	***50***
	Consult an authorized service center.	–

Symptom	Remedies	Page
Time/calendar is abnormal.		
Indication is incorrect even after successful reception.	Change the mode to [**TME**] and push the crown in to position 0.	***14***
	Check the world time setting.	***24***
	Check the summer time (DST) setting.	***32***
	Check and correct the reference position.	***60***
	Adjust the time and calendar manually.	***56***
The summer time (DST) setting does not change automatically.	Change the summer time (DST) setting to "**SMT ON**".	***32***
Day of week is not indicated.	Change the mode to [**TME**] and push the crown in to position 0.	***14***
	Check power reserve. When the second hand is moving once every two seconds, it is not indicated.	***16***

Continued on the next page ➡

Symptom	Remedies	Page
Movement of a hand seems strange		
The hands rotate rapidly soon after you take the watch out of a case or something similar.	The power save function is canceled. Wait until the current time is displayed.	–
The hands move in an unexpected direction.	Check the current mode.	***14***
The second hand does not move.	Check the current mode.	***14***
	Check power reserve.	***16***
The second hand moves once every two seconds.	Power reserve is low. Charge immediately.	***44***
The power reserve is not indicated.	Change the mode of the watch to [**TME**], push the crown in to position [0] and press button Ⓐ.	***16***

Symptom	Remedies	Page
Movement of a hand seems strange (continued)		
• The world time setting is not indicated. • The summer time (DST) setting is not indicated.	Change the mode of the watch to [**TME**], push the crown in to position 0 and press button Ⓑ.	***22***
	Check power reserve. When the second hand is moving once every two seconds, it is not indicated.	***16***
• No alarm sound is emitted. • Alarm sounds at an incorrect moment.	Check whether the time and calendar is correct.	**–**
	Check power reserve. When the second hand is moving once every two seconds, alarm does not sound.	***16***
	Check the alarm setting and the alarm time set.	***40***
	Check the current mode.	***14***, ***40***
	Check the world time setting.	***24***
	Check the summer time (DST) setting.	***32***

Continued on the next page ➡

Resetting the watch — All Reset

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

Be sure to perform the following operations after All Reset.

1 Correct the reference positions.

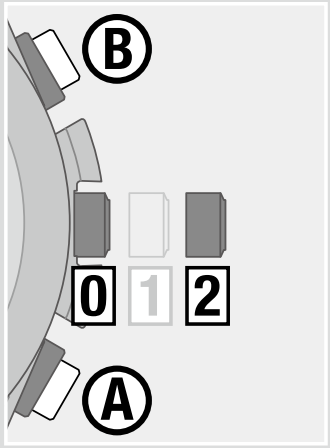
After All Reset, the watch is in the reference position adjustment mode.

Refer to step 3 and after on page ***61***.

2 Set the world time. (page *24*)

3 Adjust the time and calendar.

Adjust the time and calendar manually (page ***56***) or by receiving time signals (page ***29***).



1 Change the mode to [CHR] (page *14*) and pull the crown out to position 2 .

The hands and indication move to the current reference positions stored in memory.

- Proceed to the next step when the hands and indication stop.

2 Press and release both the lower right button Ⓐ and upper right button Ⓑ simultaneously.

As you release the buttons, the alarm sounds and all reset is executed.

The setting values after All Reset	
Time/calendar	January 1, Sunday of leap year
World time	**LON**
Summer time (DST)	**SMT OFF** at all time zones
Alarm setting	**ALM OFF**
Alarm time	0:00 AM
Reception result indication	**NO**

Eco-Drive watch handling precautions

<Always Make Sure to Recharge Frequently>

- For optimal performance, your watch should remain fully charged.
- Long sleeves may inhibit light transmission to your watch. This may result in your watch loosing charge. In these cases supplemental charging may be necessary.
- When you take off the watch, place it in a bright location to ensure optimal performance.

⚠ CAUTION Recharging Precautions

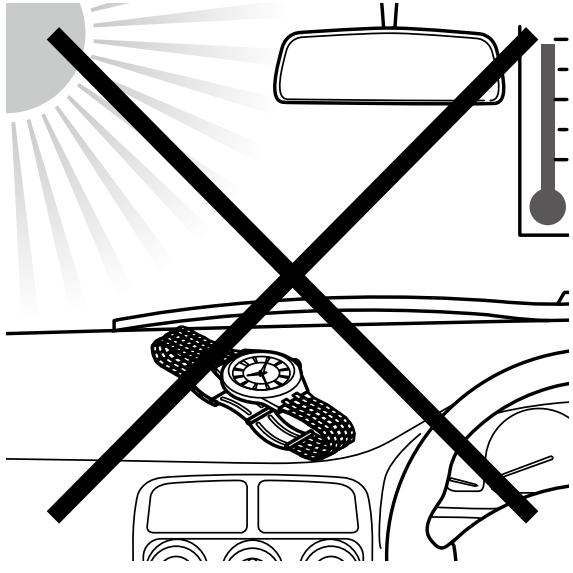
- Do not charge the watch at a high temperature (about 60 °C (140 °F) or higher) as doing so may cause the movement to malfunction.

  Examples:

  - Charging the watch too close to a light source which generates a large amount of heat such as an incandescent lamp or halogen lamp.

    * When charging under an incandescent lamp, be sure to leave 50 cm (20 inches) or more between the lamp and the watch to avoid exposing the watch to excessive heat.

  - Charging the watch in a location where the temperature may become extremely high such as on the dashboard of a vehicle.



<Replacement of Rechargeable Cell>

- This watch utilizes a special rechargeable cell that does not require periodical replacement. However power consumption may increase after using the watch for a number of years due to wear of internal components and deterioration of oils. This may cause stored power to be depleted at a faster rate.

⚠ WARNING Handling of Rechargeable Cell

- The rechargeable cell should never be removed from the watch.
  If for any reason it becomes necessary to remove the rechargeable cell from the watch, keep out of the reach of children to prevent accidental swallowing.
  If the rechargeable cell is accidentally swallowed, consult a doctor immediately.
- Do not dispose of the rechargeable cell with ordinary garbage. Please follow the instructions of your municipality regarding collection of batteries to prevent the risk of fire or environmental contamination.

⚠ WARNING Use Only the Specified Battery

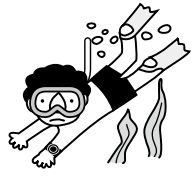
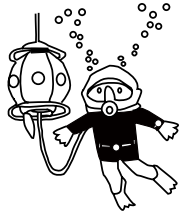
- Never use a battery other than the rechargeable cell specified for use in this watch.
  Although the watch structure is designed so that it will not operate when another type of battery is installed, if a conventional watch battery or other type of battery is installed in the watch and the watch is recharged, there is the risk of overcharging which may cause the battery to rupture.
  This can cause damage to the watch and injury to the wearer.
  When replacing the rechargeable cell, always make sure to use the designated rechargeable cell.

Water resistance

⚠ WARNING Water Resistance

- Refer to the watch dial and/or 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
	Dial or Case back	
Non water-resistant	—	Non water-resistant
Everyday use water-resistant watch	WATER RESIST	Water-resistant to 3 atmospheres
Upgraded everyday use water-resistant watch	W. R. 5 bar	Water-resistant to 5 atmospheres
	W. R. 10/20 bar	Water-resistant to 10 or 20 atmospheres

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

- Non-water resistant models are not designed to come into contact with any moisture. Take care not to expose a watch with this rating to any type of moisture.
- Water resistance for daily use (to 3 atmospheres) means the watch is water resistant for occasional accidental splashing.
- Upgraded water-resistance for daily use (to 5 atmospheres) means that the watch may be worn while swimming, but is not to worn while skin diving.
- Upgraded water-resistance for daily use (to 10/20 atmospheres) means that the watch may be worn while skin diving, but not while scuba or saturated diving using helium gas.

Precautionary items and usage limitations

⚠ CAUTION To Avoid Injury

- Be particularly careful when wearing your watch while holding a small child, to avoid injury.
- Be particularly careful when engaged in strenuous exercise or work, to avoid injury to yourself and others.
- Do not wear your watch while in a sauna or other location where your watch may become excessively hot, since there is the risk of burns.
- Be careful when putting on and taking off your watch, since there is a risk of damaging your fingernails, depending on the manner in which the band is fastened.
- Take off your watch before going to bed.

⚠ CAUTION Precautions

- Always use the watch with the crown pushed in (normal position). If the crown is of the screw lock-type, make sure it is securely locked.
- Do not operate the crown or any push buttons when the watch is wet. Water may enter the watch causing damage to vital components.
- If water enters the watch or the watch fogs up and does not clear up even after a long time, consult your dealer or an authorized service center for inspection and/or repair.
- Even if your watch has a high level of water resistance, please be careful of the following.
  - If your watch is immersed in sea water, rinse thoroughly with fresh water and wipe with a dry cloth.
  - Do not pour water from a tap directly onto your watch.
  - Take off your watch before taking a bath.
- If seawater enters the watch, place the watch in a box or plastic bag and immediately take it in for repair. Otherwise, pressure inside the watch will increase, and parts (crystal, crown, push button, etc.) may come off.

⚠ CAUTION When Wearing Your Watch

<Band>

- Leather bands and rubber (urethane) bands will deteriorate over time due to perspiration dirt. Because of the natural materials, leather band will be worn, deformed, and discolored over time. It is recommended to replace the band periodically.
- The durability of a leather band may be affected when wet (fading, peeling of adhesive), owing to the properties of the material. Moreover, wet leather may cause a rash.
- Do not stain a leather band with substances containing volatile materials, bleach, alcohol (including cosmetics). Discoloration and premature aging may be occurred. Ultraviolet light such as direct sunlight may cause discoloration or deformation.
- It is recommended to take off the watch if it gets wet, even if the watch itself is water-resistant.
- Do not wear the band too tightly. Try to leave enough space between the band and your skin to allow adequate ventilation.
- The rubber (urethane) band may be stained by dyes or soil present in or on clothing or other accessories. Since these stains may not be removable, caution is required when wearing your watch with items that tend to easily transfer color (articles of clothing, purses, etc.). In addition, the band may be deteriorated by solvents or moisture in the air. Replace with a new one when it has lost elasticity or become cracked.

⚠ CAUTION When Wearing Your Watch (continued)

- Please request adjustment or repair of the band in the following cases:
  - You notice an abnormality with the band due to corrosion.
  - The pin of the band is protruding.
- We recommend seeking the assistance of an experienced watch technician for sizing of your watch. If adjustment is not done correctly, the bracelet may unexpectedly become detached leading to loss of your watch or injury.
  Consult an authorized service center.

<Temperature>

- The watch may stop or the function of the watch may be impaired in extremely high or low temperature. Do not use the watch in places where the temperature is outside the operating temperature range as stated in the specifications.

<Magnetism>

- Analog quartz watches are powered by a step motor that uses a magnet. Subjecting the watch to strong magnetism from the outside can cause the motor to operate improperly and prevent the watch from keeping time accurately.
  Do not allow the watch to come into close proximity to magnetic health devices (magnetic necklaces, magnetic elastic bands, etc.) or the magnets used in the latches of refrigerator doors, clasps used in handbags, the speaker of a cell phone, electromagnetic cooking devices and so on.

<Strong Shock>

- Avoid dropping the watch or subjecting it to other strong impact. It may cause malfunctions and/or performance deterioration as well as damage to the case and bracelet.

<Static Electricity>

- The integrated circuits (IC) used in quartz watches are sensitive to static electricity. Please note the watch may operate erratically or not at all if exposed to intense static electricity.

<Chemicals, Corrosive Gasses and Mercury>

- If paint thinner, benzene or other solvents or products containing these solvents (including gasoline, nail-polish remover, cresol, bathroom cleaners and adhesives, water repellent, etc.) are allowed to come into contact with the watch, they may discolor, dissolve or crack the materials. Be careful when handling these chemicals. Contact with mercury such as that used in thermometers may also cause discoloration of the band and case.

<Protective Stickers>

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

⚠ CAUTION Always Keep Your Watch Clean

- Rotate the crown while it is pressed in fully and press the buttons periodically so they do not become stuck due to accumulations of foreign matter.
- The case and band of the watch come into direct contact with the skin. Corrosion of the metal or accumulated foreign matter may result in black residue coming from the bracelet when exposed to moisture or perspiration. Be sure to keep your watch clean at all times.
- Be sure to periodically clean the bracelet and case of your watch to remove accumulated dirt and foreign matter. In rare circumstances, accumulated dirt, foreign matter may cause irritation with the skin. If you notice this, discontinue wearing the watch and consult your physician.
- Be sure to periodically clean foreign matter and accumulated materials from the metal band, synthetic rubber strap (polyurethane) and/or metal case using a soft brush and mild soap. Be careful not to allow moisture on the case if your watch is not water resistant.
- Leather bands may become discolored by perspiration or dirt. Always keep your leather band clean by wiping with a dry cloth.

Caring for Your Watch

- Wipe any dirt or moisture such as perspiration from the case and crystal with a soft cloth.
- For metallic, plastic or synthetic rubber (polyurethane) band, clean it with soap and a soft toothbrush. Be sure to thoroughly rinse the band after cleaning to remove any soap residue.
- For a leather band, wipe off dirt using a dry cloth.
- If you will not be using your watch for an extended period of time, carefully wipe off any perspiration, dirt or moisture and store in a proper location, avoiding locations subject to excessively high or low temperatures and high humidity.

<When Luminous Paint is used for your watch>

The paint on the dial and hands helps you with reading the time in a dark place. The luminous paint stores light (daylight or artificial light) and glows in a dark place.
It is free from any radioactive substance or any other material harmful to a human body or environment.

- The light emission will appear bright at first and then diminish as time passes.
- The duration of the light (“glow”) will vary depending on the brightness, types of and distance from a light source, exposure time, and the amount of the paint.
- The paint may not glow and/or may dissipate quickly if exposure to light was not sufficient.

Specifications

Model	E660	**Type**	Analog solar-powered watch
Timekeeping accuracy (without reception)	Average monthly accuracy: ±15 seconds when worn at normal operating 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 • Calendar: Date, day of week		
Maximum run time from full charge	• After charged fully, the watch runs without additional charging - **when power save functions for 4 hours a day (in normal use):** Approximately 10 months - **when power save functions all the day:** Approximately 3 years • Power reserve upon insufficient charge warning function: Approximately 3 days		
Battery	Rechargeable cell (lithium button cell), 1pc.		

Additional functions	•Solar power function •Overcharging prevention function •Insufficient charge warning function (two-second interval movement) •Power reserve indication (in four levels) •Energy saving function (power save feature) •World time (24 time zones by 1 hour) •Receiving time signal (automatic, on demand, recovery automatic), Signal stations: Japan (East/West)/ USA/Germany/China	•Confirming reception status (**RX**) •Indicating the result of the last reception (**OK/NO**) •Summer Time (DST) (automatic **SMT ON/OFF**, manual **SMT OFF**) •Alarm function (**ALM ON/OFF**) •Alarm monitor function •Chronograph (up to 60 minutes in one second increments) •Perpetual calendar (until February 28th, 2100)

Specifications and contents of this booklet are subject to change without prior notice.