

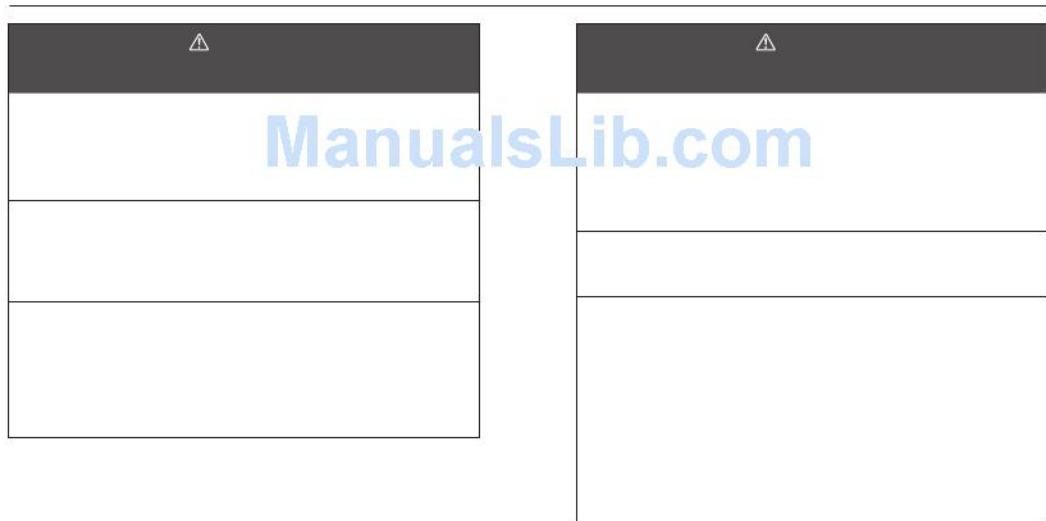
SEIKO

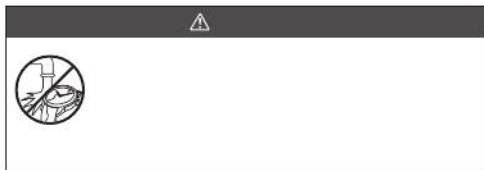
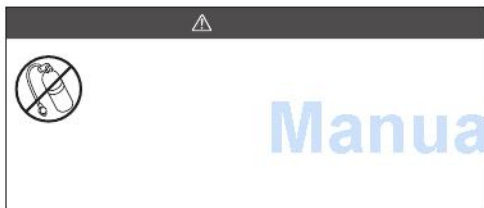
ASTRON

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SOLAR



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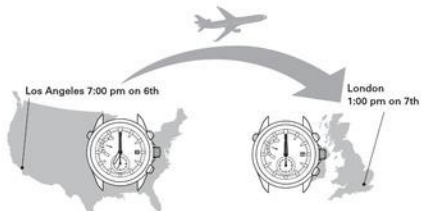
The following functions are included

When the region or time zone where the watch is used is changed

Adjust the time zone.

The watch displays the precise local time.

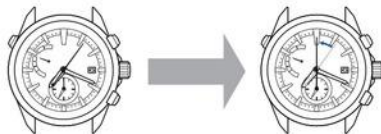
- Time zone adjustment P. 14 – 16
- Time Zone P. 28
- Time zone display and list of time zones around the world P. 9



To set only the time

The watch displays the precise time of the time zone that is set by operation of "manual time adjustment."

- How to manually adjust the time P. 21 – 22
- Check the time zone setting P. 16



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*

Names of the parts



Indicator hand display and reception result display

Display of charging status

Hand position	F (full)	Level position (middle)	E (low)
Display			

Check the charging status. → P. 10
How to charge the watch → P. 11

Display of in-flight mode (✕)

Hand position	In-flight mode (✕) status	Reset in-flight mode *It is displayed only while the in-flight mode is set.
Display		

In-flight mode (✕) → P. 19

Display of Daylight Saving Time (DST)

Hand position	ON	OFF
Display		

Check Daylight Saving Time (DST) → P. 17
Set Daylight Saving Time (DST) → P. 18

Display of receiving process

Receiving process	1 (time adjustment)	4+ (time zone adjustment)	Receiving leap second data
Display			

Check the reception result → P. 24
Automatic time adjustment → P. 23
Manual time adjustment → P. 21 – 22

Receive leap second data → P. 30
Time zone adjustment → P. 14 – 16



Display of reception result



- Y ... Reception successful (12-second position)
- N ... Reception failed (18-second position)

[Checking the reception result] → P. 24






*Position of each display may differ depending on the model (design).

Continued on the following page

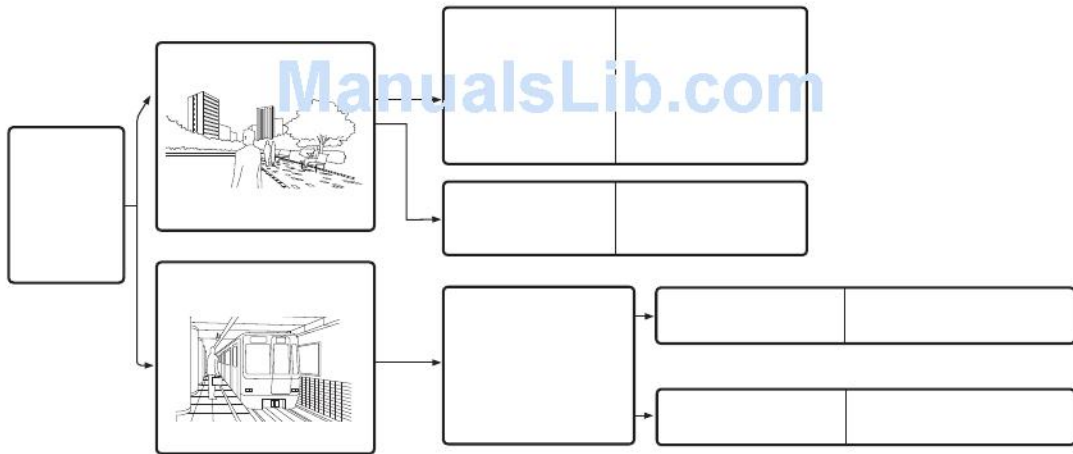


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		x	x





Place where GPS signals can be easily received/Place where GPS signals cannot be received

There are places where GPS signals can be easily received and places where GPS signals cannot be received.

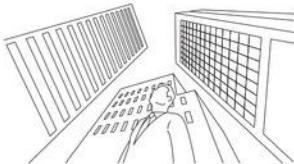
○ Easy to receive

- Outdoors under an open sky with good visibility



△ Difficult to receive

- The smaller the sky, the more difficult it is to receive GPS signals. In addition, it will also be difficult to receive GPS signals, if there is something that obstructs the GPS signals during reception (in particular, during time zone adjustment).



- Examples:
- Between tall buildings
 - Near wooded area
 - Station/Airport
 - Indoors with windows
 - *GPS signals cannot be received depending on window glass type. Refer to the "X Cannot receive."

✕ Cannot receive

- The sky cannot be seen or only part of the sky can be seen.
- There is something hindering the reception.



- Examples:
- Indoors without windows
 - Underground
 - During passage of a tunnel
 - Through special glass with thermal emission shield effect, etc.
 - Close to equipment generating noise or performing wireless communications



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How to adjust the time zone

1 Go to a place where GPS signals can be easily received

Move to the outdoors under an open sky with good visibility.



→ Place where GPS signals can be easily received/Place where GPS signals cannot be received P. 13

2 Continue to press Button B (6 seconds), and then release it when the second hand moves to the 30-second position.

* Although the second hand moves to the 0-second position 3 seconds after pressing Button B, continue to press it.

When the second hand has reached the 30-second position, reception is started. The indicator hand points to "4+."



* While the indicator hand points to "E" or λ , reception is not started even with operation for reception.

When the hand points to "E," charge the watch by expose to light.

→ How to charge the watch P. 11

Check whether the watch is able/unable to receive GPS signals

→ Check the charging status P. 10

When the hand points to λ , reset the in-flight mode (λ).

→ How to reset in-flight mode (λ) P. 19

3 Direct the watch face upward and wait

* Please note that it may be difficult to receive GPS signals while you are in motion.



It takes a maximum of 2 minutes to complete reception.

* It depends on the receiving conditions.

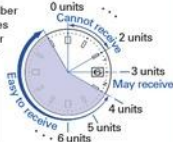
<Display during reception (= satellites acquisition status)>

The second hand indicates ease of receiving (= number of GPS satellites from which GPS signals are received).

* The larger the number of acquired satellites there are, the easier it is to receive GPS signals.



Second hand position 25-second
Number of satellites 5 units



* Even when the hand points to 4 units or more, reception may not be allowed.

* To cancel the reception, press Button A.

Press Button A.



4 When the second hand points to "Y" or "N," reception is completed.

The reception result is displayed for 5 seconds.

Then, the hour and minute hands move, and the time and date are adjusted. (The time zone is also adjusted to the local time zone.)

Reception result display	Y: Successful	N: Failed
Display		
State	Use the watch as it is.	→ When the reception result is displayed as "N" P. 42

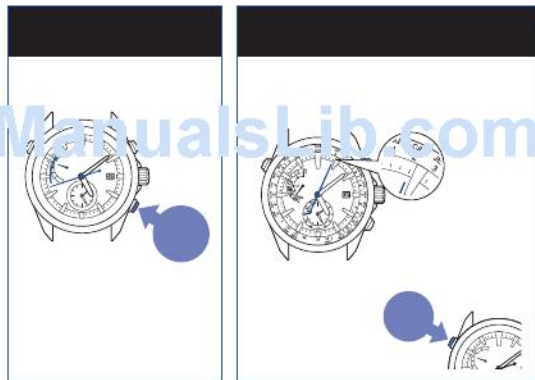
Check that the reception is successful after the watch returns to the time display mode.

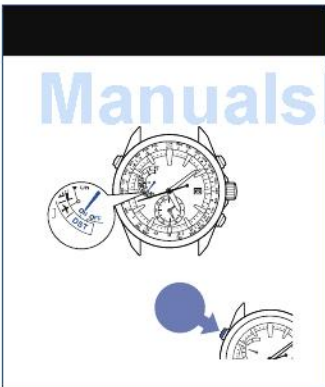
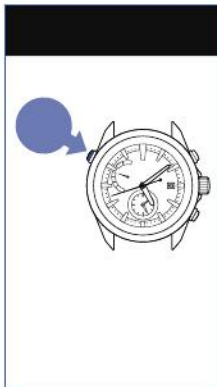
→ Check that the reception was successful P. 24

→ Check the time zone setting P. 16

* During movement of the date, the buttons and crown cannot be operated.

* Manually set Daylight Saving Time (DST).
→ Set Daylight Saving Time (DST) P. 17 - 18





Set Daylight Saving Time (DST)

Turn ON Daylight Saving Time (DST)

Daylight Saving Time (DST) can be manually set.

Start operation of ② within approximately 5 seconds after operation of ①.

* When the state of ① continues for approximately 5 seconds or longer, the watch automatically returns to the time display mode. When the watch has returned to the time display mode, restart operation from ①.

* Daylight Saving Time (DST) is not automatically changed.

* ON/OFF of the DST is not automatically changed over even with operation of time zone adjustment/manual time zone setting.

When traveling to a region where Daylight Saving Time (DST) is not adopted from a region where it is adopted, turn off the DST setting.

1 Press Button A

The indicator hand moves to indicate the current Daylight Saving Time (DST) setting.

<When Daylight Saving Time (DST) setting is OFF>



2 Continue to press Button C (3 seconds) within 5 seconds after operation of ①

The indicator hand moves to point to "ON," and the hour and minute hands advance by one hour.



3 When the hour and minute hands stop moving, the DST setting mode is automatically completed after approximately 5 seconds.

The watch returns to the time display mode. The indicator hand returns to display the charging status.

* The time at which the watch returns to the time display mode varies depending on the position of the indicator hand.

* The watch returns to the time display mode even by pressing button A within five seconds after the hour and minute hands stop moving.



Turn OFF Daylight Saving Time (DST)

Carry out operation of ① to ③ in the state where Daylight Saving Time (DST) setting is ON.

In operation of ②, adjust the indicator hand to the "OFF" position as shown in the figure at the right. The hour and minute hands return by one hour.



When boarding (in-flight mode (✈))

■ In-flight mode (✈)

Set to the in-flight mode (✈) where the reception may influence operation of other electronics devices in an airplane, etc. In the in-flight mode (✈), the GPS signal reception (time zone adjustment, manual time adjustment, and automatic time adjustment) does not work.

< In-flight mode (✈) >

The indicator hand points to ✈.



■ Set to the in-flight mode (✈).

Start operation of ② within 5 seconds after operation of ①.

* When 5 seconds or longer have elapsed after operation of ①, the watch automatically returns to the time display mode. When the watch returned to the time display mode, restart operation from ①.

1 Press Button B and then release it.

The second hand indicates the reception result (Y or N), and the indicator hand points to the type of reception (1 or 4+).



2 Continue to press Button C (3 seconds) within approximately 5 seconds after operation of ①.

The second hand stops at the 40-second position, and the indicator hand points to ✈.

< In-flight mode (✈) state >

The indicator hand points to ✈.



3 In-flight mode (✈) setting automatically ends after 5 seconds

The watch returns to the time display mode.

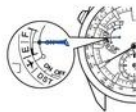
When the in-flight mode (✈) is brought about, the indicator hand points to ✈ even after the watch has returned to the time display mode.

→ To set the watch to the local time of the destination in an airplane, etc. (Manual time zone setting) P. 20

■ Reset the in-flight mode (✈).

Carry out operation of ① to ③.

In ②, when the indicator hand points to "● ON" in the figure at the right, the in-flight mode (✈) can be reset.



* When the in-flight mode (✈) is reset, the indicator hand indicates the charging status.

To set the watch to the local time of the destination in an airplane, etc. (Manual time zone setting)

Manual time zone setting

In places where the time zone cannot be adjusted, the time zone can be set manually.

→ Place where GPS signals can be easily received/Place where GPS signals cannot be received P. 13

Set the time zone with reference to the "Time zone display and list of time zones around the world P. 9," to set the watch to the local time and date.

* Refer to "Set Daylight Saving Time (DST) P. 17 ~ 18," to set Daylight Saving Time (DST).

How to manually set the time zone

- 1 Continue to press Button C (3 seconds), and when the second hand has stopped, release it.

The second hand moves to display the currently set time zone.

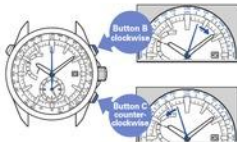


* If the time for pressing is short, the watch will enter operation for checking the time zone setting (P. 16), so make certain to press the button for 3 seconds.

- 2 Press Button B or Button C to adjust the second hand to the time zone of the destination

When the button is pressed once, the second hand moves to the next zone.

* For the relationship between the position of the second hand and the time zone, refer to the "Time zone display and list of time zones around the world P. 9."



< Display of the indicator hand >

Displays ON/OFF setting of Daylight Saving Time (DST).

	DST	ON	OFF
Display			

* If Daylight Saving Time (DST) is not correct, change over ON/OFF with reference to "Set Daylight Saving Time (DST) P. 17 ~ 18" after operation of ③.

- 3 When the hour and minute hands stop moving, press Button A

The second hand starts moving.

* During movement of the date, the buttons and crown cannot be operated.

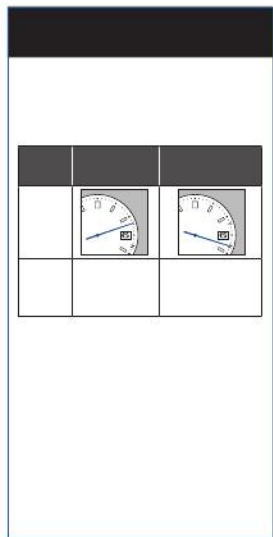
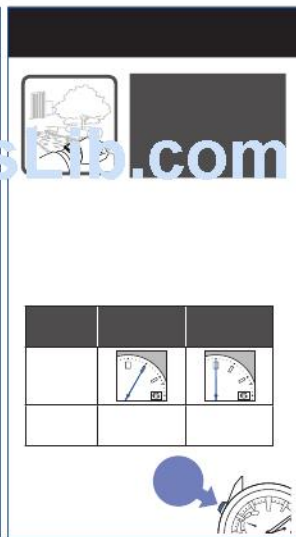
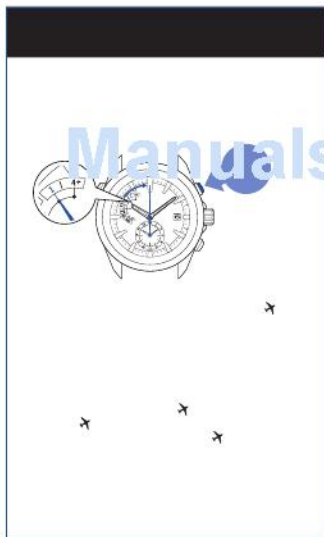


* If the second hand is stopped for one minute or longer, the watch will automatically return to the time display mode.

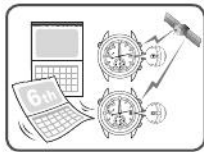


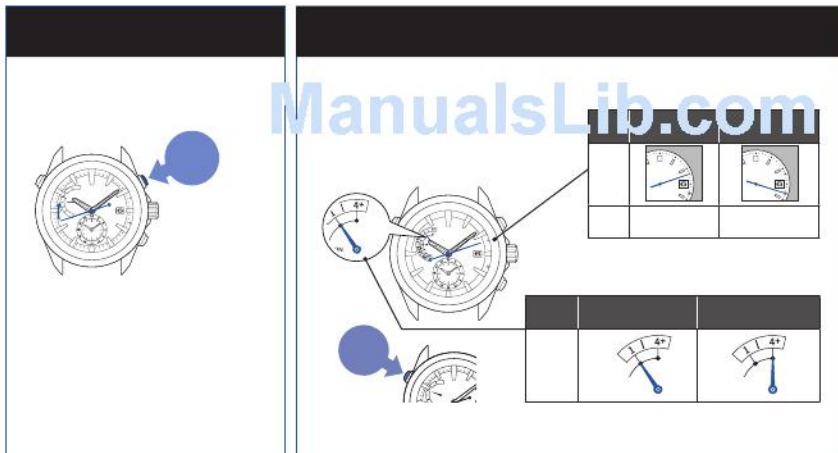
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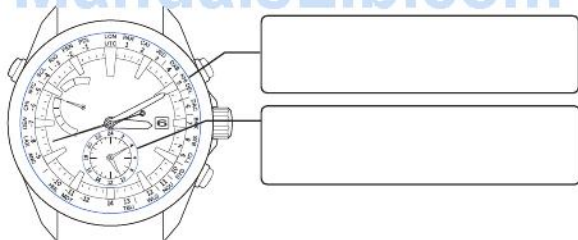


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How to set the sub-dial

- The sub-dial displays the time in a 24-hour system.
 - Even when the time zone of the dial is changed, the time of the sub-dial is not changed.
- The sub-dial moves independently from the dial.

1 Unlock the crown

Unlock the crown

Turn the crown counterclockwise (downward) to unscrew it. Now the crown can be operated.



Unscrew

Crown locked Crown unlocked



→ Screw-lock type crown P.34

2 Pull out the crown to the first click

The watch enters the time setting mode of the sub-dial.
(Hands on the main-dial keep moving.)



Pull out to the first click

3 Press Button B or Button C to set the time



Press once to advance 1 minute

Press once to set back 1 minute

When the button is kept pressed for 2 seconds or longer, the sub-dial hour/minute hands will start to move continuously, and when it is pressed again, they stop moving.

4 Push the crown back in

Operation has been completed.



Push back in

* Lock the crown

Turn the crown clockwise (upward) while gently pressing it in toward the watch body until it stops.

While pressing the crown in



Screw



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Time zone

Time zone

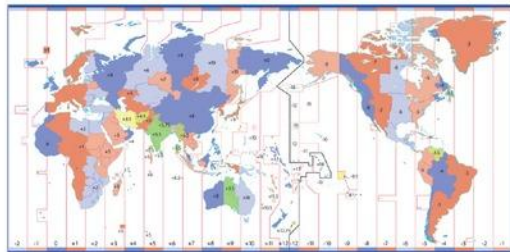
Based on Coordinated Universal Time (UTC), the standard time commonly used is adopted by countries and regions around the world. The standard time is determined by each country or region, and the region where the same standard time is adopted is referred to as the time zone, and presently, the time zone is divided into 39 zones. Further, Daylight Saving Time (DST) is individually adopted in countries and regions.

Coordinated Universal Time (UTC)




UTC is the universal standard time coordinated through an international agreement. This is used as the official time for recording time around the world. The time obtained by adding a leap second to the "International Atomic Time (TAI)" determined based on the atomic clock around the world and coordinated in order to compensate for deviations from universal time (UT) which is astronomically determined is the UTC.

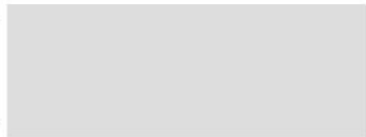
* Each time zone is based on data as of January 2012.

* Please be advised that regions for which the time zone is changed thereafter cannot be reflected.

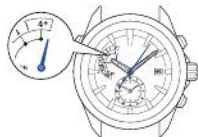


* The time differences and use of daylight saving time in each city are subject to change according to the governments of the respective countries or regions.





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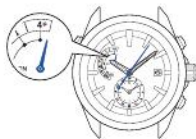
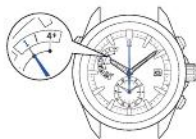




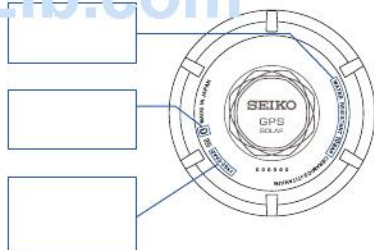
		



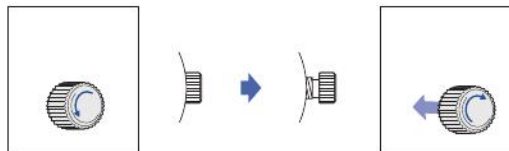
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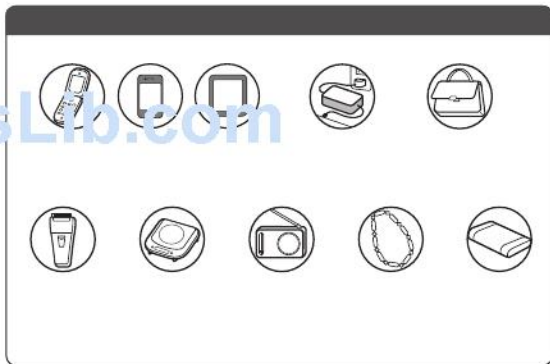
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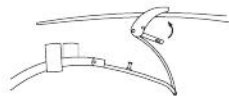
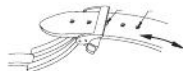
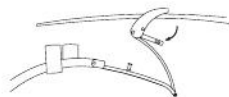
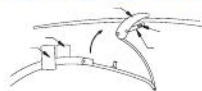
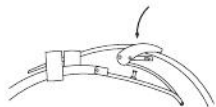
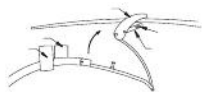


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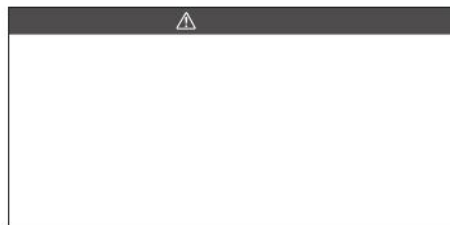


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How to manually set the time

- When using the watch again under a condition in which the watch is able to receive GPS signals, receive GPS signals to set the time.
- When adjusting the time, the date will be accordingly adjusted.

1 Unlock the crown

Unlock the crown

→ Screw-lock type crown P.34



Unscrew

2 Pull out the crown to the second click

The second hand moves to the 13-second position and stops.



3 Continue to press Button A (3 seconds) and then release it when the hand moves to the 0-second position

The second hand moves to stop at the 0-second position. The watch enters the manual time setting mode.



- * When the watch enters the manual time setting mode, the reception result will be displayed as "N," since the reception results data will be lost.

4 Press Button B or Button C to set the time



- * The hands will not move by turning the crown.
- * The point in which the date changes is at 0:00 AM (12:00 PM). Set the time taking into consideration AM or PM.

5 Push the crown back (in simultaneously with a time signal)

Operation has been completed. The watch resumes its normal movement.



- * Lock the crown.

While pressing the crown in



- * Even if GPS signals cannot be received, the watch can be used with the same accuracy as a normal quartz watch. (at loss/gain ± 15 seconds per month on average)
- * If the watch receives GPS signals after manual time setting, it displays the received time.

How to manually set the date

When the date is not automatically changed under a condition in which the watch is unable to receive GPS signals (when changing from months with 30 days or less to months with 31 days), set the date manually.

- The date can be set independently regardless of the time.
- When using the watch again under a condition in which the watch is able to receive GPS signals, receive GPS signals to set the time and date.
→ [How to adjust the time zone P. 14 - 16](#)
- * When the date is not correct even when the watch has successfully received GPS signals, the preliminary position of the date may be misaligned.
→ [Adjust the preliminary positions of the date, indicator hand and hour/minute hands P. 45 - P. 47](#)

1 Unlock the crown

Unlock the crown

→ [Screw-lock type crown P. 34](#)



Unscrew

2 Pull out the crown to the second click

The second hand moves to the 12-second position and stops.



3 Press Button B or Button C to set the date



- * When the watch enters the manual time setting mode, the reception result will be displayed as "N," since the reception results data will be lost.
- * The date will not move by turning the crown.
- * During movement of the date, the buttons cannot be operated.

4 Push the crown back in

Operation has been completed.



* Lock the crown.

While pressing the crown in



Screw



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❑ Preliminary position of this watch

The preliminary position of the date is "1" (1st).

The preliminary position of the indicator hand is between "E" (low) and λ .

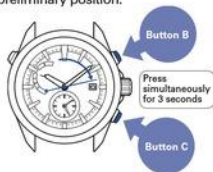
The preliminary position of the hour/minute hands is "00:00 am."



❑ Adjust the preliminary position of the date, indicator hand, and hour/minute hands

1 Continue to press Button B and C simultaneously (3 seconds), and then release it when the second hand moves to the 13-second position

The watch enters the mode to adjust the preliminary position of the date. The date moves, and stops at the preliminary position.



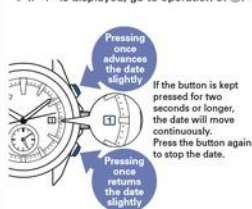
* Never pull the crown out.

- * When the date is continuously stopped for 1 minute or longer, the watch returns to the time display mode. When the watch has automatically returned to the time display mode, restart operation.
- * During movement of the date, the buttons cannot be operated.

2 Press Button B or C to set the date to "1."

Adjust the date so that the position of "1" will locate at the center of the window.

* If "1" is displayed, go to operation of ③.



3 Continue to press Button A (2 seconds) and release it when the second hand moves to the 55-second position

The watch enters the mode to adjust the preliminary position of the indicator hand.



- * If no operation is performed for more than 1 minute or when Button A is pressed once, the watch returns to the time display mode. When the watch has returned to the time display mode, restart operation.

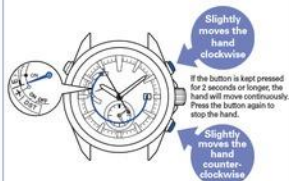
Continued on the following page

4 Press Button B or C to adjust the indicator hand as shown in the figure

Adjust the indicator hand to the position as shown in the figure.

The preliminary position of the indicator hand is between "E" (low) and \times .

* If the indicator hand points as shown in the figure, go to operation of ⑤.



* The indicator hand makes one complete turn, but this does not mean a failure.

5 Continue to press Button A (2 seconds) and release it when the second hand moves to the 0-second position.

The watch enters the mode to adjust the preliminary position of the hour/minute hands.

* If the watch displays the precise time, go to operation of ⑦.



6 Press Button B once and then release it

The hour/minute hands move, and stop at "00:00 am."



7 When operation is completed, press Button A and release it

The mode to adjust the preliminary position is completed, and the second hand and the hour/minute hands start moving.



* If no operation is performed for more than 1 minute or when Button A is pressed once, the watch returns to the time display mode. When the watch has returned to the time display mode, restart operation.

In case of an abnormal movement (resetting the built-in IC)

In the case that the watch moves abnormally or that the watch does not move at 1-second intervals even after fully charging the battery, perform the procedures from ① to ④ to re-establish normal function.

The watch can be recovered to the initial state by the system reset when trouble occurs. (② ~ ④)

After that, adjust the preliminary position of the date and indicator hand (⑤ ~ ⑥) and set the time (⑦) before use.

1 Unlock the crown

Unlock the crown

→ Screw-lock type crown P.34



Unscrew

Reset the system (② ~ ④)

2 Pull out the crown to the second click

The second hand stops at the 13-second position.



3 Continue to press Button A and C simultaneously for 2 seconds, and then release them

When the buttons are released, the second hand makes one complete turn, and stops at the 0-second position.

After that, the hour/minute hands move and stops at 00:00.



4 When the hands stop at 00:00:00, push the crown back in

The second hand moves from 00:00:00.

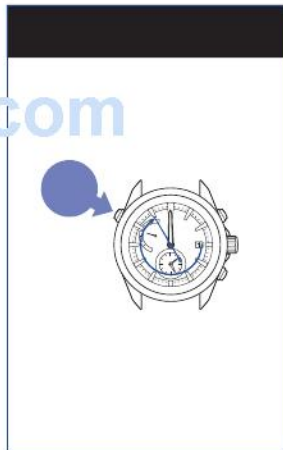
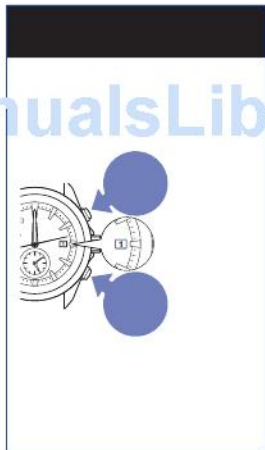
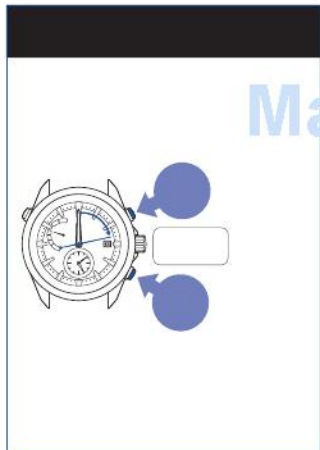


While pressing the crown in



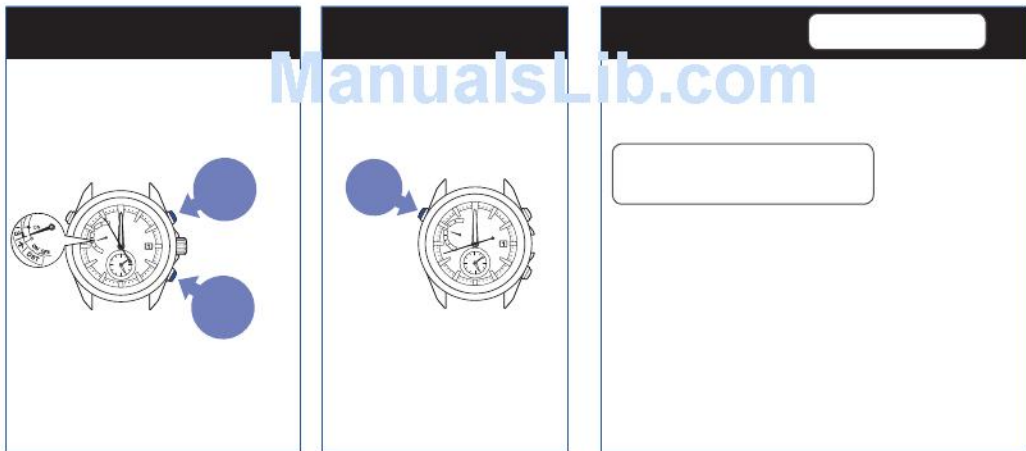
Screw


* After the system reset, the time zone is set to UTC/LON.



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