Thank you very much for choosing a SEIKO watch. For proper and safe use of your SEIKO watch, please read carefully the instructions in this booklet before using.

Keep this manual handy for easy reference.

※ Length adjustment service for metallic bands is available at the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER. The service may also be available on a chargeable basis. The service may also be available at other retailers, however, some retailers may not undertake the service.
Handling cautions

WARNING
To indicate the risks of serious consequences such as severe injuries unless the following safety regulations are strictly observed.

- Immediately stop wearing the watch in following cases.
  - If the watch body or band becomes edged by corrosion etc.
  - If the pins protrude from the band
  - Immediately consult the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER.

- Keep the watch and accessories out of the reach of babies and children.
Care should be taken to prevent a baby or a child accidentally swallowing the accessories.
If a baby or a child swallows the battery or accessories, immediately consult a doctor, as it will be harmful to the health of the baby or child.

- Do not remove the secondary battery from the watch.
  ※ About the secondary battery → Power source P.116
Replacement of the secondary battery requires professional knowledge and skill. Please ask a watch retailer for replacement of the secondary battery.
Installation of an ordinary silver oxide battery can generate heat that can cause bursting and ignition.

CAUTIONS
To indicate the risks of light injuries or material damages unless the following safety regulations are strictly observed.

- Avoid wearing or storing the watch in the following places.
  - Places where volatile agents (cosmetics such as polish remover, bug repellent, thinners etc.) are vaporizing
  - Places where the temperature drops below 5°C or rises above 35°C for a long time
  - Places of high humidity
  - Places affected by strong magnetism or static electricity
  - Dusty places
  - Places affected by strong vibrations

- If you observe any allergic symptoms or skin irritation
  Stop wearing the watch immediately and consult a specialist such as a dermatologist or an allergist.

- Other cautions
  - Replacement of the metal band requires professional knowledge and skill. Please ask a watch retailer for replacement of the metal band, as there is a risk of hand or finger injury and fear of losing parts.
  - Do not disassemble or tamper with the watch.
  - Keep the watch out of the reach of babies and children. Extra care should be taken to avoid risks of any injury or allergic rash or itching that may be caused when they touch the watch.
  - When disposing of used batteries, follow the instructions of your local authorities.
  - If your watch is of the fob or pendant type, the strap or chain attached to the watch may damage your clothes, or injure the hand, neck, or other parts of your body.

CAUTION
Do not use the watch in scuba diving or saturation diving.
The various tightened inspections under simulated harsh environment, which are usually required for watches designed for scuba diving or saturation diving, have not been conducted on the water-resistant watch with the BAR (barometric pressure) display. For diving, use special watches for diving.

WARNING
Avoid wearing or storing the watch in the following places.

- Do not wear the watch while taking a bath or a sauna.
  Be aware of a risk that a water resistant watch may lessen its water resistant performance because of deterioration of the adhesive on the glass or gasket, or the development of rust on stainless steel.

- Do not pour running water directly from faucet.
The water pressure of tap water from a faucet is high enough to degrade the water resistant performance of a water resistant watch for everyday life.

- Do not turn or pull out the crown when the watch is wet.
  Water may get inside of the watch.
  ※ If the inner surface of the glass is clouded with condensation or water droplets appear inside of the watch for a long time, the water resistant performance of the watch is deteriorated. Immediately consult the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER (listed on the end of a book).

- Do not leave moisture, sweat and dirt on the watch for a long time.
  Steam, soap or some components of a hot spring may accelerate the deterioration of water resistant performance of the watch.
Features

This solar radio-controlled watch is equipped with the world time function.
- By selecting a time zone, the watch can automatically display the local time in a different time zone around the world.
- The watch indicates the precise time by automatically receiving radio signals on official standard frequencies. (The watch can receive official standard frequencies from Japan, China, and the U.S.A.)

World Time Function........... By selecting a time zone, the watch can display the local time in the selected time zone area.

Radio Signal Receiving Function... The watch maintains the precise time by automatically receiving radio signals on official standard frequencies. Manual reception of radio signals is also possible. The watch can receive official standard frequencies from Japan, China, and the U.S.A (select the receiving station using the world time function).

Display Function of Radio Signal Reception Results... The movement of the second hand indicates radio signal reception results (Yes/No).

Solar Rechargeable Battery......... A solar cell underneath the dial converts any form of light into “electrical energy” to power the watch and the power is stored in a secondary battery. Once fully charged, the watch continues to run for approximately six months.

Energy Depletion Forewarning Function... The movement of the second hand indicates when the battery should be charged.

Power Save Function.................. The Power Save mode is activated when the watch is left without an adequate light source to reduce energy consumption.

Automatic Hand Alignment Function... Affected by magnetism or other external sources, when the hand alignments are deviated, the watch automatically corrects the hand alignments.

Display and button operation

About This Product

Display Function of Radio Signal Reception Level........... The movement of the second hand indicates the radio signal reception level during radio signal reception attempts. (Only when the watch is receiving radio signals by manual operation.)

→ P.119

Solar Rechargeable Battery............. A solar cell underneath the dial converts any form of light into “electrical energy” to power the watch and the power is stored in a secondary battery. Once fully charged, the watch continues to run for approximately six months.

→ P.102

Energy Depletion Forewarning Function... The movement of the second hand indicates when the battery should be charged.

→ P.104

Power Save Function.................. The Power Save mode is activated when the watch is left without an adequate light source to reduce energy consumption.

→ P.105

Automatic Hand Alignment Function... Affected by magnetism or other external sources, when the hand alignments are deviated, the watch automatically corrects the hand alignments.

→ P.126
How to use Button A and B

Buttons A and B are recessed in the watchcase to improve the design and to prevent erroneous operation. Please refer to the following figures for how to press the buttons.

- When pressing Buttons A and B at the same time
  Make sure to confirm "How to use Buttons A and B" as shown above before pressing the buttons. First, press Button B, and press Button A while pressing Button B so as to press them successfully.
  - Both Buttons A and B have a hollow
    Press the buttons using an object with a long tapered tip holding the watch as shown in the figure so that the watch does not move.
  - Button A does not have a hollow, and Button B has a hollow
    Press Button A with your finger and Button B using an object with a long tapered tip.

About This Product
1. Crown
   There are two types of crowns, a normal crown and a screw-lock crown. Check the crown on your watch.

<table>
<thead>
<tr>
<th>Normal crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pull out the crown and operate it.</td>
</tr>
<tr>
<td>Turn the crown clockwise.</td>
</tr>
<tr>
<td>The crown turns.</td>
</tr>
<tr>
<td>The crown does not turn.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Screw-lock type crown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unlock the crown before operating it.</td>
</tr>
<tr>
<td>After operating the crown, lock it.</td>
</tr>
<tr>
<td>Screw</td>
</tr>
<tr>
<td>Un螺丝</td>
</tr>
</tbody>
</table>

- If your watch has a screw-lock crown, the crown screws into the watch to prevent malfunction and increase water resistance.
- Be careful not to screw the crown in by force as it may damage the slots of the crown.

2. Before use
   When the movement of the second hand shows an energy depletion state, the battery requires charging.

   - The second hand moves at one-second intervals.
     The watch is sufficiently charged.
   - The second hand moves at two-second intervals.
     The energy depletion forewarning function is activated. → P.104
     Charge the battery sufficiently.
   - The second hand moves at five-second intervals.
     The power save function is activated. → P.105
     Check the movements of the second hand after releasing the power save mode.
   - The second hand is stopped.
     The watch completely stops operating.
     As the charged energy is depleted, charge the battery sufficiently.

   - If the second hand does not move at one-second intervals even after fully charging the battery → "Charging the solar battery" in Troubleshooting on P.131

Before Use
2. Checking the time and date
   The hands of this watch cannot be moved by turning the crown. When adjusting the time and date, refer to the following pages.

   - When the time and date are correct
     Use the watch without adjustment.
   - When either the time or date is incorrect
     How to set the time zone → P.86
     How to set the date → P.86

   - When the radio signal can be received
     Setting the time and date by receiving a radio signal → P.91
     About reception conditions → P.93
     Environments in which it is difficult to receive a radio signal → P.93
   - When a radio signal cannot be received
     Manually set the time → P.122-123
     Manually set the date → P.124-125

   - If either the time or date is incorrect, even though a radio signal was received successfully → "Misalignment of the time and hand positions" in Troubleshooting on P.132 and "Misalignment of the date" in Troubleshooting on P.133
How to use the world time function

- World time function
  - The local time in a different time zone can be displayed by selecting a time zone among 25 regions around the world.

In the Time Zone Setting mode, the second hand indicates the selected time zone.

- If the time zone is set to Japan, China, and the U.S.A, the watch displays the precise time and date by receiving radio signals, provided that the watch is within the radio signal reception range.
  - The watch is unable to receive radio signals outside the reception range.
  - About reception conditions  P.93
  - How to select the time zone  P.86
  - Time zone display and time difference table  P.88

Example: How to display the local time in Honolulu (How to set the time zone to HNL (Honolulu))
When the time zone is selected, the date is automatically adjusted in conjunction with the time.

Local time in Japan: 6th., 10 o'clock, 8 minutes, and 42 seconds
Local time in Honolulu: 5th., 15 o'clock, 8 minutes, and 42 seconds

How to select the time zone (How to display the local time around the world)

Within 10 seconds after procedure 1. is completed, start the operation of procedure 2.
  - If the watch is left untouched for 10 seconds after the second hand stops, the watch automatically returns to the TIME display mode. If this happens, restart the operation from procedure 1.

1. Keep pressing down Button B (for 3 seconds) until the second hand stops.
  - The second hand starts to move and stops pointing to the currently selected time zone.

2. Within 10 seconds after carrying out procedure 1., press Button A or B to set the second hand to point at the target time zone index.
  - With each pressing of the button, the second hand moves to the adjacent time zone index.

The radio signal transmitting station can be changed by selecting the time zone. When selecting a time zone for regions other than the radio signal reception ranges, the radio signal reception function will not work.
  - When setting Daylight Saving Time (DST), add one hour to the time zone of a desired area.

3. Wait for ten seconds after the movement of the hour and minute hands stop. (The time zone adjustment mode is finished.)
  - The second hand starts to move.
  - The watch automatically adjusts the date as necessary.

※ While the date is moving, neither the buttons nor the crown can be operated.
The time can be adjusted on a 1-hour basis by use of the time difference adjustment function. When adjusting to a local time with a time difference of 15 minutes or 30 minutes, the watch has an accuracy of a normal quartz watch in that case. (Monthly rate: ±15 seconds)

How to manually set the time P.122
How to Set the Time (Radio Signal Reception)

**Automatic reception and manual reception**

- **Automatic reception**
  This watch sets the time and date by automatically receiving a radio signal at a fixed time. It automatically receives a radio signal before 2:00 AM, 3:00 AM and 4:00 AM.
  - When the watch successfully receives a radio signal, it will stop automatic reception.
  - Place the watch in a place where it can easily receive a radio signal such as near a window.
  - While the watch is receiving radio signals, do not move it.
  → To Improve radio signal reception  P.98

- **Manual reception**
  When this watch cannot automatically receive a radio signal due to a difficult receiving environment, it is possible to receive signals arbitrarily at any time.
  → How to conduct manual reception  P.119
  ※ If the time zone is set to a region other than Japan, China, and the U.S.A, the signal reception function will not work. → Time zone display and time difference table  P.88
  ※ Radio Signal reception results depend on the receiving condition. → Environments in which it is difficult to receive a radio signal on P.99
  ※ This watch is unable to receive radio signals outside a reception range → About reception conditions on P.99
  ※ If either the time or date is incorrect, even though a radio signal was received successfully. → "Misalignment of the time and hand positions" in Troubleshooting on P.132 and "Misalignment of the date" in Troubleshooting on P.133

**Radio signal reception range**

- **Japan (JJY)**
  The reception range from each transmitting station is approximately 1,500 km (1,500 km radius of each transmitting station).
  → Whether the watch succeeds in receiving radio signals or not depends on the receiving conditions.
  → Environments in which it is difficult to receive a radio signal P.99

- **China (BPC)**
  The reception range from the transmitting station is approximately 1,500 km (1,500 km radius of the transmitting station).
  BPC is operated by NTSC.
  Shangqiu National Time Service Center
  Frequency: 68.5kHz
  ※ NTSC: National Time Service Center
  ※ The watch may be able to receive radio signals outside a reception range if the receiving conditions are favorable.
  ※ The watch may fail to receive radio signals depending on the reception conditions (weather, geographic locations, radio disturbances such as tall buildings, and orientation of the watch).
  → Environments in which it is difficult to receive a radio signal P.99

- **the U.S.A (WWVB)**
  The reception range from the transmitting station is approximately 1,500 km (1,500 km radius of the transmitting station). There are four time zones within the reception range.
  WWVB is operated by NIST.
  Fort Collins transmitting station
  Frequency: 60 kHz
  ※ NIST: National Institute of Standards and Technology
  ※ The watch may be able to receive radio signals outside a reception range if the receiving conditions are favorable.
  ※ The watch may fail to receive radio signals depending on the reception conditions (weather, geographic locations, radio disturbances such as tall buildings, and orientation of the watch).
  → Environments in which it is difficult to receive a radio signal P.99

**About reception conditions**

This watch receives standard radio signals from Japan (2 stations), China, and the U.S.A.
When you set the watch to each time zone, the official standard frequencies the watch receives will be automatically changed accordingly to the selected time zone. → How to select the time zone P.86

- **Radio signal reception range:**
  - China (BPC)
  - Japan (JJY)
  - the U.S.A (WWVB)
How to check the reception results

About reception result display
The second hand indicates the latest radio signal reception results (Yes/No) for five seconds.

1. Press Button A once and release it.
The second hand indicates the reception results.

2. Check if the reception was successful (within five seconds).
- If the reception was successful: The second hand points to Y (the 10-second position)
- If the reception failed: The second hand points to N (the 20-second position)

※ When 5 seconds have elapsed or if Button A is pressed, the watch returns to the TIME display mode.

If a reception was successful: The second hand points to Y
- A radio signal has been received successfully. Use the watch without any adjustments.
  ※ If either the time or date is incorrect, even when successfully receiving a radio signal
  → “Misalignment of the time and hand positions” on P.132 and “Misalignment of the date” on P.133 in Troubleshooting

If reception has failed: The second hand points to N.
- Place the watch in a place where it can easily receive a radio signal, or change its direction. Even within the radio signal reception range, this watch may fail to receive a radio signal depending on the condition (due to the influence of weather, geographical features, buildings, or direction).
  → In this case, refer to Environments in which it is difficult to receive a radio signal on P.99.
  This watch is unable to receive radio signals outside a reception range
  → About reception conditions on P.93
- Make sure that the time zone is correctly selected before attempting radio signal reception.
  If the time zone is set to a region other than Japan, China, or the U.S.A, the signal reception function will not work. Check the time zone setting → How to select the time zone on P.86
- Attempt to receive a radio signal in a different time period (in the case of manual reception).
  Receiving environments differ according to time periods even at the same place.
  Due to radio signal characteristics, the watch is able to easily receive radio signals during nighttime hours.
  → How to manually set the time P.122
  → How to manually set the date P.124

To Improve radio signal reception
- Place the watch in a place where it can easily receive a radio signal such as near a window.
The antenna is embedded at the 9 o’clock position of the watch. Turning the antenna toward the outside of a window or the direction facing transmitting stations helps improve radio signal reception.
  ※ Locations of transmitting stations → Radio Signal Reception Range Indication P.93-95
- Do not move the watch while it is receiving radio signals.
  To enhance the reception of radio signals, do not move the watch or do not change the orientation of the watch while it is receiving radio signals.
  ※ If the button or crown is operated while the watch is receiving a radio signal, the reception will be cancelled.
- The place where the watch is put before going to bed
  Place the watch next to a window facing in the direction of a transmitting station before bedtime because automatic reception is performed late at night. Also, please search for a place to easily receive radio signals when attempting manual reception.

Environments in which it is difficult to receive a radio signal
- Close to home electrical appliances such as TV’s, refrigerators or air conditioners
- Close to OA devices such as mobile phones, personal computers or fax machines
- Close to steel desks or other furniture made of metal
- In places generating radio interference, such as construction sites or places with heavy traffic.
- Close to overhead power lines, TV stations, train cables.
- Inside a building, between tall buildings, underground.
- Inside a vehicle, train, or airplane

Avoid putting the watch in such places when it receives radio signals.
• The watch may display the wrong time if it fails to receive radio signals properly because of interference. The watch may also fail to receive radio signals properly depending on the location or radio wave receiving conditions. In this case, move the watch to another place where it can receive radio signals.

• When the watch is out of reception range, its accurate quartz movement (loss / gain: ±15 seconds per month on average) will continue to keep the time.

• The time signal transmission may be stopped during maintenance of the facilities of each transmitting station or because of a lightning strike. In such a case, see each station’s website for further information or contact SEIKO CUSTOMER SERVICE CENTER.

• Websites of transmitting stations (as of December 2017)
  Japan: NICT (Japan Standard Time Group) http://www.jjy.nict.go.jp/
  China: NTSC http://www.ntsc.ac.cn

How to Set the Time (Radio Signal Reception)

CAUTIONS

1. How to charge the watch

Expose the dial to light to charge the watch.

About charging

To ensure optimal performance of the watch, make sure that the watch is kept sufficiently charged at all time.

※ When charging the watch, make sure that the watch is not heated to a high temperature. (The operational temperature range is between -10 °C and +60 °C.)

※ When first using the watch or starting to use the watch after it has stopped because of the energy depletion, sufficiently charge the watch referring to the table on the page at the right.

1. Standard charging time

For an approximate time required to charge the watch, refer to the table below.

<table>
<thead>
<tr>
<th>Illumination lx (LUX)</th>
<th>Light source</th>
<th>Condition (Example)</th>
<th>Time required for fully charging the watch</th>
<th>Time required for charging the watch to start moving at one-second intervals</th>
<th>Time required for charging the watch to run for one day</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>Incandescent light 60W 60cm</td>
<td></td>
<td>--</td>
<td>--</td>
<td>5 hours</td>
</tr>
<tr>
<td>700</td>
<td>Fluorescent light General offices</td>
<td></td>
<td>--</td>
<td>90 hours</td>
<td>30 minutes</td>
</tr>
<tr>
<td>1,000</td>
<td>Fluorescent light 30W 70cm</td>
<td></td>
<td>90 hours</td>
<td>24 hours</td>
<td>24 minutes</td>
</tr>
<tr>
<td>3,000</td>
<td>Fluorescent light 30W 20cm</td>
<td></td>
<td>120 hours</td>
<td>24 hours</td>
<td>24 minutes</td>
</tr>
<tr>
<td>5,000</td>
<td>Fluorescent light 30W 15cm</td>
<td></td>
<td>120 hours</td>
<td>--</td>
<td>24 minutes</td>
</tr>
<tr>
<td>10,000</td>
<td>Fluorescent light 30W 5cm</td>
<td></td>
<td>240 hours</td>
<td>24 hours</td>
<td>24 minutes</td>
</tr>
<tr>
<td>10,000</td>
<td>Sunlight Cloudy day</td>
<td></td>
<td>240 hours</td>
<td>8 hours</td>
<td>9 minutes</td>
</tr>
<tr>
<td>100,000</td>
<td>Sunlight Sunny day (Under the direct sunlight on a summer day)</td>
<td></td>
<td>8 hours</td>
<td>8 hours</td>
<td>9 minutes</td>
</tr>
</tbody>
</table>

The figures of “Time required for charging the watch to start moving at one-second intervals” are estimations of time required to charge the stopped watch by exposing it to light until it moves at steady one-second intervals. Even if the watch is partially charged for a shorter period, the watch will resume one-second-interval movement. However, it may shortly return to two-second-interval movement. Use the charging time in this column as a rough guide for sufficient charging time.

※ The second hand movement indicates the remaining amount of energy. "1. Checking the charging status" P.82

※ The required charging time slightly varies depending on the model of the watch.
### About energy

#### Energy depletion forewarning function

The energy depletion forewarning function is activated when the energy stored in the watch runs low. In such a case, the second hand moves at two-second intervals. If the watch continues to be in the state of two-second interval movement, the watch switches to five-second interval movement, followed by a completely stopped state. If the energy depletion forewarning function is activated, charge the watch sufficiently.

How to charge the watch · P.102

Standard charging time · P.103

※ Neither the buttons nor the crown can be operated while the second hand moves at two-second or five-second intervals (this is not a malfunction).
※ While the second hand moves at five-second intervals, the hour and minute hands, as well as the date, stop operating.
※ While the second hand moves at five-second intervals, the watch is unable to receive radio signals automatically. After the watch is charged sufficiently and the second hand returns to normal one-second interval movement, conduct the manual reception of radio signals to set the watch to the correct time. (Refer to Automatic reception and manual reception on P.92.)

#### Power save function

This watch is equipped with a power save function which can suppress energy consumption when it is left without receiving an adequate light source for a certain length of time.

There are two types of power save mode.

- Power Save 1: When the watch is exposed to a state without receiving an adequate light source for 72 hours or longer.
- Power Save 2: When the watch is in an insufficient charging state for a long time.

<table>
<thead>
<tr>
<th>Condition</th>
<th>Power Save 1</th>
<th>Power Save 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Situations</td>
<td>The second hand stops pointing at the 15-second position, and the hour and minute hands, as well as the date, also stop.</td>
<td>The second hand points at the 45-second position, and the hour and minute hands, as well as the date, also stop.</td>
</tr>
<tr>
<td>How to handle the situation</td>
<td>The watch conducts manual radio signal receiving.</td>
<td>The watch does not conduct automatic radio signal receiving.</td>
</tr>
</tbody>
</table>

Situation: When the watch is exposed to a light source for over five seconds, or when a button is pressed, it displays the current time again after the second hand is rapidly advanced.

### Daily care

- The watch requires good daily care
  - Do not wash the watch when its crown is at the extended position.
  - Wipe away moisture, sweat or dirt with a soft cloth.
  - After soaking the watch in seawater, be sure to wash the watch in clean pure water and wipe it dry carefully.
  - If your watch is rated as “non-water resistant” or “water resistant for daily use,” do not wash the watch. → Performance and type P.106.

- Water resistance P.107.

- Turn the crown from time to time
  - In order to prevent corrosion of the crown, turn the crown from time to time.
  - The same practice should be applied to a crown. (No need to pull out the screw lock type crown.) → Crown P.81

### Performance and type

The case back shows the caliber and performance of your watch.

- Water resistant performance Refer to P.107
- Caliber number The number to identify the type of your watch

Magnetic resistant performance Refer to P.108

※ The figure above is one example. Performance of your watch is different from the above sample.

### Water resistance

Refer to the table below for the description of each degree of water resistant performance of your watch before using.

(Refer to "P.109")

<table>
<thead>
<tr>
<th>Indication on the case back</th>
<th>Water resistant performance</th>
<th>Condition of use</th>
</tr>
</thead>
<tbody>
<tr>
<td>No indication</td>
<td>Non-water resistant</td>
<td>Avoid drops of water or sweat</td>
</tr>
<tr>
<td>WATER RESISTANT</td>
<td>Water resistance for everyday life</td>
<td>The watch withstands accidental contact with water in everyday life.</td>
</tr>
<tr>
<td>WATER RESISTANT 5 BAR</td>
<td>Water resistance for everyday life at 5 barometric pressures</td>
<td>Not suitable for swimming</td>
</tr>
<tr>
<td>WATER RESISTANT 10 (20) BAR</td>
<td>Water resistance for everyday life at 10 (20) barometric pressures</td>
<td>The watch is suitable for sports such as swimming.</td>
</tr>
</tbody>
</table>

WARNING: The watch is suitable for diving not using an air cylinder.
Affected by nearby magnetism, a watch may temporarily gain or lose time or stop operating.

※ When the hand positions deviate to display incorrect time as a result of influence of magnetism, this watch automatically corrects the hand alignment itself. (Refer to P.126)

### Magnetic resistance

The built-in motor is provided with a magnet, which may be influenced by a strong external magnetic field.

### Examples of common magnetic products that may affect watches

- Smartphone, cellular phone, tablet terminal (speaker)
- AC-powered shaver
- Magnetic cooking device
- Magnetic necklace
- Magnetic health pillow
- AC adapter
- Bag (with magnet buckle)
- Portable radio (speaker)

### Notes on the length of the band

- Adjust the band to allow a little clearance with your wrist to ensure proper airflow. When wearing the watch, leave enough room to insert a finger between the band and your wrist.

### Notes on skin irritation and allergy

- Skin irritation caused by a band has various reasons such as allergy to metals or leathers, or skin reactions against friction on dust or the band itself.

### Band

The band touches the skin directly and becomes dirty with sweat or dust. Therefore, lack of care may accelerate deterioration of the band or cause skin irritation or stain on the sleeve edge. The watch requires a lot of attention for long usage.

#### Metallic band
- Moisture, sweat or soil will cause rust even on a stainless steel band if they are left for a long time.
- Lack of care may cause a yellowish or gold stain on the lower sleeve edge of shirts.
- To clean the soil around the joint gaps of the band, wipe it out in water and then brush it off with a soft toothbrush.
- Protect the watch body from water splashes by wrapping it up in plastic wrap etc.
- Because some titan bracelets use pins made of stainless steel, which has outstanding strength, rust may form in the stainless steel parts.
- If rust advances, pins may poke out or drop out, and the watch case may fall off the bracelet, or the clasp may not open.
- If a pin is poking out, personal injury may result. In such a case, refrain from using the watch and request repair.

#### Leather band
- A leather band is susceptible to discoloration and deterioration from moisture, sweat and direct sunlight.
- Do not expose the watch to direct sunlight for a long time.
- Please take care when wearing a watch with light-colored band, as dirt is likely to show up.
- Refrain from wearing a leather band watch other than Aqua Free bands while bathing, swimming, and when working with water even if the watch itself is water-resistant enforced for daily use (10-BAR water resistant).

#### Polyurethane band
- A polyurethane band is susceptible to discoloration from light, and may be deteriorated by solvent or atmospheric humidity.
- Especially a translucent, white, or pale colored band easily adsorbs other colors, resulting in color smears or discoloration.
- Wash out dirt in water and clean it off with a dry cloth.
- Protect the watch body from water splashes by wrapping it up in plastic wrap etc.
- When the band becomes less flexible, have the band replaced with a new one. If you continue to use the band as it is, the band may develop cracks or become brittle over time.

### Notes on skin irritation and allergy

- Skin irritation caused by a band has various reasons such as allergy to metals or leathers, or skin reactions against friction on dust or the band itself.
Special clasps

There are 3 types of special clasps as described below:

If the clasp of the watch you purchased is one of them, please refer to the indications.

A Type → P.113

B Type → P.114

C Type → P.115

To Preserve the Quality of Your Watch

1. Lift up the clasp to release the buckle.

2. Open the flap.

3. Take the pin out of the adjustment hole, adjust the size of the strap by sliding it back and forth, and then put the pin back into the appropriate adjustment hole.

4. Close the flap.

- Do not push the flap in too hard.

- When fastening the clasp, insert the tip of the band into the movable loop and fixed loop, and then, securely tighten the clasp.

A Type

How to wear or take off the watch

1. Press the button on both sides of the flap; pull the buckle up. The band will automatically come out of the loop.

2. Place the tip of the band into the moveable loop and fixed loop, and fasten the clasp by pressing the frame of the buckle.

How to adjust the length of the leather band

1. With pressing buttons on both sides of the flap, pull the leather band out of the moveable loop and fixed loop. Then open the clasp.

2. Press the push buttons again to unfasten the flap.

3. Pull the pin out of an adjustment hole of the band. Slide the band to adjust its length and find an appropriate hole. Place the pin into the hole.

4. Fasten the flap.

- Do not push the flap in too hard.

B Type

How to wear or take off the watch

1. Press the button on both sides of the flap; pull the buckle up. The band will automatically come out of the loop.

2. Place the tip of the band into the moveable loop and fixed loop, and fasten the clasp by pressing the frame of the buckle.

How to adjust the length of the leather band

1. With pressing buttons on both sides of the flap, pull the leather band out of the moveable loop and fixed loop. Then open the clasp.

2. Press the push buttons again to unfasten the flap.

3. Pull the pin out of a adjustment hole of the band. Slide the band to adjust its length and find an appropriate hole. Place the pin into the hole.

4. Fasten the flap.

- Do not push the flap in too hard.

C Type

1. Press the button on the buckle, and lift to open the clasp.

2. Pull the pins out of the adjustment holes on the band. Slide the band to the appropriate length. Push the pins into the new holes on the band. Fasten the buckle.
To Preserve the Quality of Your Watch

The battery used in this watch is a special secondary battery, which is totally different from ordinary silver oxide batteries. Unlike other disposable batteries such as dry-cell batteries or button cells, this secondary battery can be used over and over again by repeating the cycles of discharging and recharging. However, for various reasons such as long-term use or usage conditions, the capacity or recharging efficiency of the secondary battery may gradually deteriorate. Worn or contaminated mechanical parts or degraded oils may also shorten recharging cycles.

The capacity or the recharging efficiency of the secondary battery may gradually deteriorate, and the watch may stop. As the parts such as gasket may deteriorate, water-resistant performance may be impaired due to intrusion of perspiration and moisture. Please contact the retailer from whom the watch was purchased for inspection and adjustment by disassembly and cleaning (overhaul) for replacement of parts, please specify "SEIKO GENUINE PARTS." When asking for inspection and adjustment by disassembly and cleaning (overhaul), make sure that the gasket and push pin are also replaced with new ones. When your watch is inspected and adjusted by disassembly and cleaning (overhauled), the movement of your watch may be replaced.

Power source

Lumibrite

Lumibrite is a luminous paint that is completely harmless to human beings and natural environment, containing no noxious materials such as radioactive substance. Lumibrite is a newly-developed luminous paint that absorbs the light energy of the sunlight and lighting apparatus in a short time and stores it to emit light in the dark. For example, if exposed to a light of more than 500 lux for approximately 10 minutes, Lumibrite can emit light for 3 to 5 hours. Please note, however, that, as Lumibrite emits the light it stores, the luminance level of the light decreases gradually over time. The duration of the emitted light may also differ slightly depending on such factors as the brightness of the place where the watch is exposed to light and the distance from the light source to the watch. The above comments are applied to the watch with Lumibrite.

In general, when coming from a place that is bright to a place that is dark, it takes human eyes some time to adapt to the darkness making it difficult to see objects initially. (Dark adaptation)

Lumibrite is luminous paint that stores and emits light, which is harmless to human beings and the environment, containing no toxic materials such as radioactive substances.

NOTICE

PEOPLE WITH EPILEPSY

Lumibrite is composed of materials that are harmless to human beings and the environment, containing no noxious materials such as radioactive substance.
3. Leave the watch untouched for several minutes. (For twelve minutes at the longest)

When the second hand starts moving in one-second intervals, the reception is completed.

Reception takes some time. (12 minutes at the longest)
※ It depends on the radio signal conditions.

<Display before completing the reception>
The second hand indicates the reception level. (Updated every minute)

<table>
<thead>
<tr>
<th>Receiving Level</th>
<th>High: (H)</th>
<th>Low: (L)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display</td>
<td>Radio signal condition</td>
<td>Easy to receive</td>
</tr>
</tbody>
</table>
※ In conjunction with the second hand movement, the minute hand advances by one minute.

4. When the second hand starts moving in one-second intervals, check if the signal reception was successfully conducted.

Upon completion of the signal reception, check if the reception was successful.
→ About reception result display: P.96
※ During movement of the data, neither the buttons nor the crown can be operated.

<If the reception has failed>
The second hand indicates the reception result by pointing to N.
Reception result: N

After five seconds, the watch returns to the TIME display mode.
→ If reception has failed: The second hand points to N. P.97

When the watch is unable to receive radio signals, refer to the following pages for remedies.

• When the watch cannot receive radio signals within the signal reception range.
  → At trouble Reception of a radio signal: P.131
  If the above remedies do not solve the problem, set the time and date referring to the “How to manually set the time” section below.
  → How to manually set the time: P.122
  → How to manually set the date: P.124
  ※ For the signal reception range, refer to Radio About reception conditions: P.93.

• To use the watch outside the reception range
  Set the watch to the time zone of the place where you use the watch.
  → How to select the time zone: P.86
  When the watch is unable to display the correct time and date, even if the time zone is selected, manually set the time and date.

How to manually set the time

When the watch is used continuously in conditions in which the watch may be unable to receive a radio signal, it can be manually adjusted.
→ About reception conditions: P.93
  ※ When using the watch again in regions in which the watch is able to receive a radio signal, it is recommended to perform “Manual reception.”
  → Automatic reception and manual reception: P.92
  ※ When adjusting the time, the date will be accordingly adjusted.

※ When the watch is unable to receive a radio signal, it can move depending on normal quartz movement (accuracy of loss / gain: ±15 seconds per month).
※ When the watch receives a radio signal after manual adjustment of the time, it displays the received time.

When the watch is unable to receive radio signals

1. Pull out the crown to the second click.
   → The second hand moves to point to the 0-second position and the watch enters the manual time setting mode.

2. Press Button A to set the time.
   → One minute Advance
     Press the button once and then release it.
   → Continuous Advance
     When the button is kept pressed for two seconds or longer, the hand will start to move. Press the button again to stop.
※ Turning the crown will not move the hand.

3. Push the crown back in simultaneously with a time signal.
   → Operation has been completed.
   The watch resumes its normal movement.
How to manually set the date

If you use the watch outside the radio signal reception range or in conditions where the watch cannot receive radio signals, the date will not be automatically adjusted. In such a case, especially on the first day after a month that has less than 31 days, the watch requires manual date setting.

1. Pull out the crown to the first click. This initiates the mode for manually adjusting the date.

To use the watch in a radio signal receivable condition again, conduct automatic signal reception to set the time. → Automatic reception and manual reception P.92

If the watch receives radio signals after the date is manually adjusted, it displays the date received from radio signals. ※ When the watch receives radio signals after the date is manually adjusted, it may display a different date from the one set manually. → How to correct the preliminary positions P.127

2. Press Button A to set the date.
   - To advance one day Press the button once and release.
   - To advance rapidly Keep pressing down the button for longer than 2 seconds. Press the button once again to stop.
   - Turning the crown will not move the hand.
   - While the date is moving, the button cannot be operated.
   - The date can only move forward. It cannot move backward.

3. Push the crown back. The operation is now completed.

How to correct the preliminary positions

■ Setting the preliminary position of the date
   The preliminary position of the date is the "1st." The preliminary positions of the hour and minute hands are "0:00 AM."

When the preliminary positions are incorrect, the correct time and date cannot be displayed even if the watch receives radio signals. In such a case, by correcting the preliminary positions, the loss or gain of the time or date can be corrected.

When the numerical number of the date is not located at the center of the window, it can be corrected by the same procedures as mentioned above.

To correct the preliminary positions, perform the operation on the next page.

Setting the preliminary position of the date, hour and minute hands

The preliminary position of the date is the "1st." The preliminary positions of the hour and minute hands are "0:00 AM."

When the preliminary positions are incorrect, the correct time and date cannot be displayed even if the watch receives radio signals. In such a case, by correcting the preliminary positions, the loss or gain of the time or date can be corrected.

When the numerical number of the date is not located at the center of the window, it can be corrected by the same procedures as mentioned above.

To correct the preliminary positions, perform the operation on the next page.

Preliminary position

When the watch is unable to display the precise time or date, even if it successfully receives a radio signal with the correct time zone setting, the preliminary position may be misaligned. The preliminary position may be misaligned due to the following reasons.

- In the case of a strong impact: misalignment of the time and date may occur when dropping or hitting the watch.
- In the case of a magnetic influence: misalignment of the time and date may occur when bringing the watch close to an object which generates magnetism.

Examples of common magnetic products that may affect watches P.109

When comparing the state of "Misaligned Preliminary Hand Position" to that of a weight scale, it is like "a scale which is unable to display the correct weight because its needle is not set to the zero position before weighing."

■ Automatic Hand Position Adjustment Function (Function to automatically adjust the preliminary position of the hour and minute hands)

The hour, minute, and second hands have an "Automatic Hand Position Adjustment Function," which automatically corrects an incorrect preliminary position. Automatic Hand Position Adjustment Function activates once a minute for the second hand and at 12:00 both for the AM and PM for the hour and minute hands.

This function works when the preliminary hand position is misaligned due to external factors such as a strong impact or magnetic influence. It does not work to adjust accuracy of the watch or slight deviations which may occur during the manufacturing process.

The preliminary position of the hour and minute hands can also be manually adjusted. → Setting the preliminary position of the date P.127

Setting the preliminary position of the date

Since the preliminary position of the date is not automatically adjusted, it must be adjusted manually.

Setting the preliminary position of the date P.127

※ Unlock the crown before operating it and then, relock it after completing the operation. → P.81

※ Turning the crown will not move the hand.
※ While the date is moving, the button cannot be operated.
※ The date can only move forward. It cannot move backward.

※ The date can only be adjusted independently of the time.
※ To use the watch in a radio signal receivable condition again, conduct automatic signal reception to set the time. → Automatic reception and manual reception P.92

※ When the watch receives radio signals after the date is manually adjusted, it displays the date received from radio signals. ※ When the watch receives radio signals after the date is manually adjusted, it may display a different date from the one set manually. → How to correct the preliminary positions P.127

※ When the watch receives radio signals after the date is manually adjusted, it displays the date received from radio signals.
At trouble

<table>
<thead>
<tr>
<th>Condition</th>
<th>Solutions</th>
<th>Reference pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>The second hand moves at two-second intervals.</td>
<td>The energy depletion forewarning function is activated. (P. 104)</td>
<td>P. 104</td>
</tr>
<tr>
<td>The second hand moves at five-second intervals.</td>
<td>The power save function has been activated. (P. 105)</td>
<td>--</td>
</tr>
<tr>
<td>The stopped second hand pointing to the 15-second position started operating.</td>
<td>The power save function has been activated. (P. 105)</td>
<td>P. 102</td>
</tr>
<tr>
<td>The stopped second hand pointing to the 45-second position started operating.</td>
<td>The automatic power position adjustment function was activated. (P. 128)</td>
<td>--</td>
</tr>
<tr>
<td>The watch hands advance rapidly unless a button is pressed. The watch resumes its normal movement.</td>
<td>The automatic power position adjustment function has been activated. (P. 105)</td>
<td>--</td>
</tr>
</tbody>
</table>

Troubleshooting

1. Keep pressing down Button A and B (for 3 seconds) at the same time until the second hand stops pointing to the 13-second position.
   - The watch enters the preliminary position setting mode for date.
   - The date will start to move and stop at the preliminary position.
   - When the button is pressed intermittently, the hand will slightly advance.
   - Keep pressing down the button for longer than 2 seconds. Press the button once again to stop.
   - When the button is pressed intermittently, the hand will slightly advance.

2. Within 10 seconds after the date stops, press Button B to set the date to “1.”
   - Make sure that the numerical number “1” is located at the center of the date window.

3. Keep pressing down Button A (for 2 seconds) until the second hand stops pointing to the 0-second position.
   - The watch enters the preliminary position setting mode for hour and minute hands.
   - The hour and minute hands are already indicating the correct time, move on to procedure 4.

4. Press Button B once and release it.
   - The hour and minute hands start to move and stop pointing at “00:00 am.”

5. After completing the operation, leave the watch untouched for 10 seconds.
   - The watch automatically exits the preliminary position setting mode, and the second, hour and minute hands start moving.
   - When the watch returns to the TIME display mode, check if the time and date are correct.

Troubleshooting

1. Do not pull the crown out.
2. Press Button B with your finger or with an object with a long tapered tip. → P. 80
3. While the date is moving, the button cannot be operated.
4. If “1” is already displayed in the date window, move on to procedure 3.
5. First, press Button B, and subsequently press Button A while holding down Button B as to press both of them successfully.
6. If the time and date are not correct, manually set them.

Condition | Solutions | Reference pages
---|---|---
When the watch is unable to receive a radio signal | The reception results have failed and the second hand points to N (the watch does not receive a radio signal). | P. 98 |
When the watch is unable to receive a radio signal | The time required for charging the watch depends entirely on the amount of exposed light the watch receives. Refer to “Standard charging time” to charge the watch. | P. 103 |
Transmitting stations may have stopped transmitting radio signals for some reason (Transmission stop). Check the website of each transmitting station for further information concerning a transmission stop. Attempt to receive a radio signal again after a while. | Reselect the time zone able to receive the radio signal. | P. 86 | P. 93 |
Place the watch where it is able to easily receive a radio signal. | Do not move the watch while it is receiving a radio signal. Because it takes time to receive a radio signal successfully, leave the watch untouched for 12 minutes at the longest. | P. 98 | P. 119 |
Reselect the time zone able to receive the radio signal. | The built-in IC of the watch has fallen into an unstable condition. Refer to “In case of an abnormal movement” to reset the built-in IC. | P. 134 |
### Condition: The watch temporarily gains or loses time.

1. Place the watch where it is able to receive a radio signal more easily. 
2. Conduct manual reception if necessary. 

Reference page: P.119

### Condition: The watch displays an incorrect time due to even though it displays the precise time of minutes and seconds.

- The reception results are successful, but the precise time is not displayed.
- The second hand position is not correctly aligned in "the reception results display" or "the reception level display."

1. No crown or button operation is needed, since the automatic hand position adjustment function will be activated to align the hand positions. Automatic Hand Position Alignment Function activates once a minute for the second hand and at 12:00 both for the AM and PM for the hour and hand hours. It can be manually adjusted, when you hurry up.
2. If the watch still gains or loses time, refer to "in case of an abnormal movement" to perform procedures.
3. If the watch cannot resume normal movement even after conducting the above mentioned procedures, consult the retailer from whom the watch was purchased.

Reference page: P.86

### Condition: In case of an abnormal movement

In the case that the watch moves abnormally or that the watch does not move at one-second intervals even after fully charging the battery, perform the procedures from 1. to 3. and then set the preliminary positions and select the time zone.

#### How to reset the built-in IC

1. Pull out the crown to the second click. 
   - The second hand stops at the 0-second position.
2. Keep pressing down Button A and B at the same time for 3 seconds, and then release them.
   - Within 5 seconds after releasing the buttons, the second hand makes a full rotation and stops pointing to the 0-second position. Then the hour and minute hands will start to move and stop pointing to 12 o'clock 0 minutes.
3. When all the hands stop pointing to 12 o'clock 0 minutes and 0 seconds, push the crown back.

   - The second hand starts moving from 12 o’clock 0 minutes and 0 seconds.
   - After the built-in IC is reset, the watch is set to the time zone LON.
   - After completion of a system reset, perform the following operations:
     - How to correct the preliminary positions → P.127 - 129
     - How to select the time zone → P.86 - 87
     - How to adjust the time (forced reception method) → P.119 - 120

### Condition: Set the date to the preliminary position "1" (the 1st).

Reference page: P.127

### Condition: The crown or buttons cannot be operated.

- Sufficiently charge the watch until it starts moving at one-second intervals.
- When the date hand is moving right after a setting is carried out by a crown or button operation, after the date stops, the crown and buttons can be operated.

Reference page: P.102

### Condition: operation.

- You get lost in the middle of the operation.
  1. If the crown is pulled out, push it back in.
  2. The watch will resume its normal one-second intervals within 9 minutes.
  3. Start the setting procedure from the beginning.

Reference page: -

### Others

- But on the dial glass persists
- Contact the retailer from whom the watch was purchased.

Reference page: -

※ For the solution of troubles other than the above, consult the retailer from whom the watch was purchased.

### Specifications

1. Basic feature  
   - Basic watch with three hands (hour, minute and second hands), date display
2. Frequency of crystal oscillator  
   - 32,768 Hz (Hz = Hertz... Cycles per second)
3. Loss/gain (monthly rate)  
   - Loss / gain ±15 seconds on a monthly rate (Except the case when the watch is used without an automatic time setting by receiving a radio signal and when it is worn on the wrist within a normal temperature range between 5°C and 35°C).
4. Operational temperature range  
   - Between −10℃ and +60℃
5. Driving systems  
   - Step motor (Hour and minute hands, second hand, and the date)
6. Power source  
   - Secondary battery, 1 piece
7. Duration of operation  
   - Approximately six months (Fully charged, and the Power Save is not activated).
   - If Power Save is activated after it is fully charged, the watch continues to run for approximately one and a half years at maximum.
8. Time setting by receiving the JUY-LF radio signal  
   - Automatic reception (before 2:00 AM, 3:00 AM and 4:00 AM)
   - Reception attempts depend on the radio signal receiving conditions.
   - After having received a radio signal, the watch will start to move depending on the quartz movement until the next reception.
   - Manual reception is also available.
9. IC (Integrated Circuit)  
   - Oscillator, frequency divider and driving circuit C-MOS-IC, 3 pieces

※ The specifications are subject to change without prior notice for product improvement.