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 at other retailers, however, some retailers may not undertake the service.
Features

After purchase, 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 the specified zone in two time zones simultaneously.

World Time Function
- By choosing a time zone, the watch displays the local time in the specified zone.
- In addition to the main time zone, the time in another region can be displayed in a 24-hour format using the sub dial located at 6 o'clock position.

Dual Time Display
- The watch maintains the precise time automatically by receiving radio signals on the standard frequencies.
- The watch can receive official standard times from Japan, People's Republic of China and the United States of America.

How to use button B

- To prevent accidental input and to optimize design, some models may have a button B, which cannot be easily pressed using your finger. Refer to the table below on how to press the button B.

Button A
- Normal position: To select the time zone
- Moving up: To move the crown
- Moving down: To move the crown

Button B
- The operation method of the button varies with the functions being used. Follow the instructions of each section of this booklet.

Crown
- Screw lock type crown
- The watch features a screw-lock mechanism that can securely lock the crown when not being operated in order to prevent any operational errors and to improve its water resistance property.

- It is necessary to unlock the screw lock type crown before operating it.
- Once you have finished operating the crown, make sure to relock it.

- The hands of the watch cannot be moved by turning the crown. So when adjusting the time, date and day, refer to the following pages regarding the procedures.

Display and button operation

How to use button B

- Turn the outer ring (to a 60-second position).
- Press the button with your finger.
- After finishing the operation, make sure to lock the outer ring by turning clockwise.

- Turning the outer ring clockwise (downward) to unscrew it.

Crown locked
- Unscrew

Crown unlocked
- After operating the crown, lock it.

Before use

Checking the charging status

- The movement of the second hand indicates radio signal reception results (Yes/No).
- The movement of the second hand indicates the radio signal reception level during radio signal reception attempts.
- When the watch is receiving radio signals by manual operation.

- 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 nine months.

- The movement of the second hand indicates when the battery should be charged.

- The watch automatically corrects the hand alignments.

About This Product

1. Features
2. How to use button B
3. Crown
4. Before use
5. Display and button operation
6. Checking the charging status
7. Checking the time, date and day
8. Screw lock type crown

Display of Radio Wave Reception Result

Display of Radio Wave Reception Level

- Manual reception
- Standard Frequencies Transmitting Station Display
- Checking the reception result

How to use button B

- You can also press the outer half of the button with your finger.

- It is necessary to unlock the screw lock type crown before operating it.

- When the hands of the watch cannot be moved by turning the crown.

- The battery requires charging.

- The battery charge level is at an increased level.

- The energy depletion forewarning function is activated.

- The energy depletion forewarning function is activated.

- The power save function is activated.

- The watch completely stops operating.

- The watch moves the second hand.
How to use the world time function

World time function
- The main watch can be easily set to display the local time in different time zones by selecting a time zone among 24 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 or the United States, the watch displays the precise time, date and day of the week 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. → Radio Signal Reception Range P.124

When using the watch in Japan, set the time zone to [TYO (Tokyo)], so that the watch can receive radio signals.

When using the watch in China, set the time zone to [BS (Beijing)], so that the watch can receive radio signals.

When using the watch in the United States, set the time zone to either [LAX (Los Angeles)], [DEN (Denver)], [CHI (Chicago)] or [NYC (New York)], so that the watch can receive radio signals of the United States.

- How to select the time zone P.112 → Time zone display and time difference table P.114

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 and day of the week are automatically adopted in conjunction with the time of the main watch.

The time of the sub dial remains unchanged. → About sub dial P.120

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.

Within 10 seconds after carrying out the procedure 1, press the Button A or B to set the second hand to point at the target time zone index.

Within 10 seconds after carrying out the procedure 1, press the Button A or B to set the second hand to point at the target time zone index.

Keep pressing down the Button A (4 seconds) until the second hand stops.

The second hand starts to move and stops pointing to the currently selected time zone.

To press the Button B, use an object with a long tapered tip. → P.116

Within 10 seconds after carrying out the procedure 1, press the 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.

Example: How to display the local time in Honolulu

When the time zone is selected, the date and day of the week are automatically adopted in conjunction with the time of the main watch.

The time of the sub dial remains unchanged. → About sub dial P.120

Within 10 seconds after carrying out the procedure 1, press the Button A or B to set the second hand to point at the target time zone index.

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Example: How to display the local time in Honolulu

When the time zone is selected, the date and day of the week are automatically adopted in conjunction with the time of the main watch.

The time of the sub dial remains unchanged. → About sub dial P.120

Time zone display and time difference table

In the Time Zone Setting mode, set the second hand to point at the target time zone index referring to this table below.

The arrow indicates examples of the shifts of time zone index while the Daylight Saving Time is being observed.

To set the Daylight Saving Time, select the time zone index next to the target time zone (+1 hour), which is indicated by the arrow under the time zone index.

※ The time zones with a △ mark in the receivable radio signals column are the time zones which should be selected while the Daylight Saving Time is being observed in Tokyo (Japan) or New York (USA).

※ Each indication may differ depending on the model (design) of the watch. (As of April 2014)

Daylight Saving Time (Summer Time) is in effect in some time zones indicated with a "★" mark. (As of July 2010)

What is a time zone?
There are time differences around the world based on "Coordinated Universal Time (UTC)." There are 24 regions (Time Zones) around the world with a time difference of one hour. This system has been adopted internationally by setting the total time difference around the world as 24 hours.

In addition, Daylight Saving Time (Summer Time) is individually adopted in some regions.

*(What is UTC (Coordinated Universal Time)?)
UTC is the universal standard time coordinated through international agreement. It is used as the official time around the world. UTC is determined by adding a leap second to GMT (Greenwich Mean Time), which is determined through astronomical measurement, in order to keep the precise time.

*(What is summer time (DST)?)
Summer time is daylight saving time. Advancing the watch one hour to prolong daylight during longer daylight hours in summer. Daylight saving time has been adopted in about 80 countries, mainly in Europe and North America. The adoption and duration of daylight saving time vary depending on the country.

※ Time differences between regions and daylight saving time may change due to circumstances of a country or region.

In some regions, time zones that differ from UTC by half or quarter-hour time differences are established. (For example, some parts of India)
About dual time display

Equipped with the main watch and sub dial, the watch can simultaneously indicate the local times in two regions.

Example: How to display the local time in Honolulu by the main watch, and the local time in Japan by the sub dial.

**Main watch: Local time (Honolulu)**
- Honolulu time: 15 hours, 15 minutes and 42 seconds
- Date: 5th
- Day of the week: Sunday

**Sub dial: Home time (Japan)**
- Japan time: 10 o’clock 8 minutes (24-hour indication format)
- About sub dial: P.120

Setting the time, date and day by receiving a radio signal

**Mechanism of radio signal reception**

The radio-controlled watch displays the precise time, date and day by automatically receiving and synchronizing itself with the radio signal of an official standard frequency.

**Transmitting Station**

Cesium Atomic Clock

Radio-controlled watch

Receive radio signals through the antenna inside the watch

Analyze time information

Display the current time, date and day

Time signal transmitted by a standard frequency is based on a super accurate "Cesium Atomic Clock" that may have a 1 second loss or gain per one hundred thousand years.

**About reception conditions**

The watch can receive standard frequencies of Japan (two stations), People's Republic of China, and the United States of America. When you set the watch to a time zone in Japan, China or the United States, the official standard frequencies the watch receives will be automatically changed accordingly to the selected time zone. → Setting the Time Zone: P.112

**Radio signal reception range: JAPAN (J J Y)**

When the time zone is set to TYO (Tokyo)), the watch can receive radio signals of Japan.

J J Y is operated by the National Institute of Information and Communications Technology (NICT). J J Y is transmitted from two stations in Japan. Each station transmits J J Y in a different frequency.

Fukuoka (Ohtakadoya-yama transmitting station: 40 kHz)

Kagoshima (Hagane-yama transmitting station: 60 kHz)

The reception range from each transmitting station is approximately 1,000 km (1,000 km radius of each station).

- If the condition is good in a range beyond 1,000 km, there can be the case that the watch cannot receive radio signals.
- Even within the radio signal reception range, radio signal reception may be obstructed depending on the reception conditions such as weather, geographical features, surrounding buildings or directions.
- Conditions in which the watch may be unable to receive radio signals: P.132
Radio signal reception range: People’s Republic of China (BPC)

When the time zone is set to BJST (Beijing), the watch can receive radio signals of China.

BPC is operated by NTSC, Chinese Academy of Sciences National Time Service Center.
Shangqiu City, Henan Province
Shangqiu Low-Frequency Time-Code Time Service Station (68.5 kHz)

The reception range from the transmitting station is approximately 1,500 km (1,500 km radius of Shangqiu transmitting station).
- If the condition is good in a range beyond 1,500 km, there can be the case that the watch can receive radio signals.
- Even within the radio signal reception range, radio signal reception may be destructed depending on the reception conditions such as weather, geographical features, surroundings buildings or directions.
- Conditions in which the watch may be unable to receive radio signals: P.132

Radio signal reception range: United States of America (WWVB)

When the time zone is set to either [LAX (Los Angeles)], [DEN (Denver)], [CHI (Chicago)] or [NYC (New York)], the watch can receive radio signals of the United States.

WWVB is operated by NIST, Fort Collins radio station (60kHz), Denver, Colorado
- NIST: National Institute of Standards and Technology

The reception range from the transmitting station is approximately 1,500 km (1,500 km radius of Fort Collins radio station).
- If the condition is good in a range beyond 1,500 km, there can be the case that the watch can receive radio signals.
- Even within the radio signal reception range, radio signal reception may be destructed depending on the reception conditions such as weather, geographical features, surroundings buildings or directions.
- Conditions in which the watch may be unable to receive radio signals: P.132

About reception result display

The second hand indicates the latest radio signal reception results (Yes/No) for five seconds, and then indicates the transmitting station from which the watch received the latest radio signals.

Press the Button A once and release it.

The second hand indicates the reception results.

If the reception was successful: The second hand points to Y
- A radio signal has been received successfully. Use the watch without any adjustments.

If the 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.

This watch is unable to receive radio signals outside a reception range — Radio signal reception range indication on P.126.
- 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 United States, the signal reception function will not work. Check the time zone setting — How to select the time zone on P.112.

To receive a radio signal in a different time period (in the case of manual reception).
- Receiving environments differ according to time periods and the same places.
Due to radio signal characteristics, the watch is able to easily receive radio signals during nighttime hours.

- If you use the watch in a place or region outside the radio signal reception range or when the watch cannot successfully receive radio signals, manually set the time, date and day of the week.
- How to manually set the time — P.160
- How to manually set the date — P.162
- How to manually set the day of the week — P.165

Radio signal reception range: People’s Republic of China (BPC)

How to Set the Time (Radio Signal Reception)

How to Set the Time (Radio Signal Reception)

About reception result display

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- How to manually set the day of the week — P.165

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When the time zone is set to either [LAX (Los Angeles)], [DEN (Denver)], [CHI (Chicago)] or [NYC (New York)], the watch can receive radio signals of the United States.

WWVB is operated by NIST, Fort Collins radio station (60kHz), Denver, Colorado
- NIST: National Institute of Standards and Technology

The reception range from the transmitting station is approximately 1,500 km (1,500 km radius of Fort Collins radio station).
- If the condition is good in a range beyond 1,500 km, there can be the case that the watch can receive radio signals.
- Even within the radio signal reception range, radio signal reception may be destructed depending on the reception conditions such as weather, geographical features, surroundings buildings or directions.
- Conditions in which the watch may be unable to receive radio signals: P.132

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- How to manually set the time — P.160
- How to manually set the date — P.162
- How to manually set the day of the week — P.165

Environments in which it is difficult to receive a radio signal

- Close to high electrical plants or heavy current such as TV, refrigerator or air conditioners.
- Close to overhead power lines. 
- Close to free-standing or high voltage power lines. 
- Inside a building, between tall buildings on each floor.
- Inside a vehicle, train, or skate.
- In places generating radio interference, such as steel plants or places with heavy traffic.
- Inside a building, between tall buildings or underground.
- Inside a building, near power plants or radio wave receiving stations.
- Near TV towers, train cables.
- Inside a building, parallel to steel frames or other metal

Conditions in which the watch may be unable to receive 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 reception 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 July 2010)
- Japan : NICT (Japan Standard Time Group) http://www.ietl.nict.go.jp/
- China : NTSC http://www.ntscc.ac.cn
- The Unitedstates of America : NIST http://www.nist.gov/physlab/div847/grp40/wwvb.cfm

CAUTION
About charging

How to charge the watch

Expose the dial to light to charge the watch.

Under the following situations, the energy of the watch is likely to be depleted, resulting in stoppage of the watch.

- The watch is covered by a sleeve.
- The watch is in an area under strong electromagnetic field or light, which cannot be exposed to light for charging.
- The watch is exposed to light of insufficient intensity (less than 1 x LUX).
- Charging is not possible due to insufficient temperature conditions.

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

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

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

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.
- The same practice should be applied to a screw lock type crown.

The turn of the crown from time to time

- In order to prevent corrosion of the crown, turn the crown from time to time.

Water resistance

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

(Refer to "P.139")

<table>
<thead>
<tr>
<th>Condition 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 resistance</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>The watch is suitable for sports such as swimming.</td>
</tr>
<tr>
<td>WATER RESISTANT 10 (±) BAR</td>
<td>Water resistance for everyday life at 10 (±) barometric pressures</td>
<td>The watch is suitable for diving not using an air cylinder.</td>
</tr>
</tbody>
</table>

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

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 modes.

Standard charging time

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

<table>
<thead>
<tr>
<th>Illumination 1 x (LUX)</th>
<th>Light source</th>
<th>Condition (Example)</th>
<th>Time required for fully charging the watch</th>
<th>Time required to charge the watch to start moving at one-second interval movement</th>
<th>Time required to charge the watch to start moving at two-second intervals</th>
</tr>
</thead>
<tbody>
<tr>
<td>500</td>
<td>transient</td>
<td>60W 60cm</td>
<td>—</td>
<td>6 hours</td>
<td>—</td>
</tr>
<tr>
<td>700</td>
<td>fluorescent</td>
<td>General offices</td>
<td>—</td>
<td>4 hours</td>
<td>—</td>
</tr>
<tr>
<td>1000</td>
<td>fluorescent</td>
<td>30W 70cm</td>
<td>40 hours</td>
<td>3 hours</td>
<td>—</td>
</tr>
<tr>
<td>3000</td>
<td>fluorescent</td>
<td>30W 20cm</td>
<td>230 hours</td>
<td>6 hours</td>
<td>1 hour</td>
</tr>
<tr>
<td>5000</td>
<td>fluorescent</td>
<td>30W 50cm</td>
<td>4 hours</td>
<td>35 minutes</td>
<td>—</td>
</tr>
<tr>
<td>10000</td>
<td>fluorescent</td>
<td>30W 15cm</td>
<td>60 hours</td>
<td>15 minutes</td>
<td>15 minutes</td>
</tr>
<tr>
<td>10000</td>
<td>fluorescent</td>
<td>30W 5cm</td>
<td>60 hours</td>
<td>15 minutes</td>
<td>15 minutes</td>
</tr>
</tbody>
</table>

The figures of “Time required for charging the watch to start moving at two-second intervals” are estimations of time required to charge the stopped watch by exposing it to light at 1 hour of slightly advanced intervals. Even if the watch is partially charged to one-second interval movement, the watch will remain on 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 to sufficient charging time.

- The second hand movement indicates the remaining amount of energy.
- “Checking the Charging Status” (P.128)
- The required charging time slightly varies depending on the model of the watch.

Performance and type

The case back shows the caliber and performance of your watch

Water resistant performance:

Water resistant performance: Refer to "P.140"

Magnetic resistant performance: Refer to "P.142"

Caliber number:

The number to identify the type of your watch

- The figure above is one example. Performance of your watch is different from above sample.
Magnetic resistance

Affected by nearby magnetism, a watch may temporarily gain or lose time or stop operating. (a) When the watch becomes magnetized and its accuracy deteriorates to an extent exceeding the specified rate under normal use, the watch needs to be demagnetized. In this case, you will be charged for demagnetization and accuracy readjustment even if it happens within the guarantee period. The reason why a watch is affected by magnetism.

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

<table>
<thead>
<tr>
<th>Magnetic resistance</th>
<th>Condition of use</th>
</tr>
</thead>
<tbody>
<tr>
<td>No indication</td>
<td>Keep the watch more than 1 cm away from magnetic products.</td>
</tr>
<tr>
<td></td>
<td>Keep the watch more than 5 cm away from magnetic products. (JIS level-1 standard)</td>
</tr>
<tr>
<td></td>
<td>Keep the watch more than 1 cm away from magnetic products. (JIS level-2 standard)</td>
</tr>
</tbody>
</table>

If the watch becomes magnetized and its accuracy deteriorates to an extent exceeding the specified rate under normal use, the watch needs to be demagnetized. In this case, you will be charged for demagnetization and accuracy readjustment even if it happens within the guarantee period.

The reason why a watch is affected by magnetism.

To Preserve the Quality of Your Watch

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 yellow 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 stainless steel 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.

- Polyurethane band
  - A polyurethane band is susceptible to discoloration and deterioration from moisture, sweat and direct sunlight.
  - To ensure proper air flow, when wearing the watch, leave enough room to insert a finger between the band and your wrist.
  - A leather band is susceptible to discoloration and deterioration from metals or leathers, or skin reactions against friction on dust or the band itself.
  - When fastening the clasp, insert the tip of the band into the movable loop and fixed loop, and then, securely tighten the clasp.

- Leather band
  - A leather band is susceptible to discoloration and deterioration from moisture, sweat and direct sunlight.
  - 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).

Special clasps

There are 3 type 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

- Lift up the clasp to release the buckle.
- Pull the pin out of the adjustment hole, adjust the side of the strap by sliding it back and forth, and then put the pin back into the appropriate adjustment hole.

B Type

- How to wear or take off the watch
  - Press the button on both sides of the flap, pull the buckle up. The band will automatically come out of the loop.
  - Place the tip of the band into the movable loop and fixed loop, and fasten the clasp by pressing the frame of the buckle.

C Type

- How to adjust the length of the leather band
  - With pressing buttons on both sides of the flap, pull the leather band out of the movable loop and fixed loop. Then open the clasp.
  - Fasten the flap.

Examples of common magnetic products that may affect watches

- Cellular phone (speaker)
- AC adapter
- Bag (with magnet buckle)
- AC-powered shaver
- Magnetic cooking device
- Portable radio (speaker)
- Magnetic necklace
- Magnetic health pillow

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

To Preserve the Quality of Your Watch

19.11.6  11:31:39 AM

Power source

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. Poor or contaminated mechanical parts or degraded oils may also shorten recharging cycles. If the efficiency of the secondary battery decreases, have the watch repaired.

● Replacement parts

- SEIKO makes it a policy to typically keep a stock of replacement parts for this watch for 7 years. Replacement parts are those which are essential to maintaining the functional integrity of the watch. Please keep in mind that if original parts are not available, they may be replaced with substitutes whose outward appearance may differ from the originals.

After-sale service

● Notes on guarantee and repair

- Contact the retailer the watch was purchased from or SEIKO CUSTOMER SERVICE CENTER for repair or overhaul.
- Within the guarantee period, present the certificate of guarantee to receive repair services.
- Guarantee covers its provided in the certificate of guarantee. Read carefully and retain it.
- For repair services after the guarantee period has expired, if the functions of the watch can be restored by repair work, we will undertake repair services upon request and payment.

● Replacement parts

- SEIKO makes it a policy to typically keep a stock of replacement parts for this watch for 7 years. Replacement parts are those which are essential to maintaining the functional integrity of the watch. Please keep in mind that if original parts are not available, they may be replaced with substitutes whose outward appearance may differ from the originals.

How to conduct manual reception (Receiving a radio signal manually)

1. Put the watch down.

Place the watch where it can easily receive radio signals.

- To improve radio signal reception: P131
- The watch is in direct and close proximity to the radio waves of the broadcasting station.

2. Press and hold Button A until the second hand moves to the 0-second position (for four seconds).

After the second hand moves to the 0-second position and stops, the watch will start to receive radio signals.

- If the time zone is set to a region other than Japan, China or the United States, the second hand will not move to the 0-second position. The manual reception function will not work. Check if the time zone is correctly set.
- Check the time zone setting. How to select the Time Zone: P112

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. (Displayed every minute)

- Reception Level:
  Easy to receive ▶ Hard to receive

- In conjunction with the second hand movement, the minute hand advances by one minute.

4. When the second hand starts moving in a proper interval, check if the signal reception is successfully completed.

Upon completion of the signal reception, check if the reception was successful.

- About Reception Result Display: P126
- During movement of the date or day, both the buttons nor the crown can be operated.

<If the reception has failed>

The second hand indicates the reception result and stops in 0. Reception result: N

- After five seconds, the watch returns to the TIME display mode.

If you have Lumibrite

Lumibrite

Lumibrite is a luminous paint that is completely harmless to human beings and natural environment, containing no hazardous materials such as radioactive substances. 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 light of more than 500 lux for 10 minutes, about 10 minutes can emit light for 3.5 hours.) Please note: However, if the Lumibrite on the watch is exposed to light of less than 1,000 lux for a long time, it will become dull in color which might affect the luminous performance. Lumibrite is harmless to human beings and the environment, containing no toxic materials such as radioactive substances.

○ Overcharge prevention function

When the secondary battery is fully charged, the overcharge prevention function is automatically activated to avoid further charging. There is no need to worry about damage caused by overcharging no matter how much the secondary battery is charged in excess of the “time required for fully charging the watch.”

- Refer to “Standard charging time” on P.135 to check the time required for fully charging the watch.

■ Notes on charging the watch

- When charging the watch, do not place the watch in close proximity to an intense light source such as lighting equipment for photography, spotlights or incandescent lights, as the watch may be excessively heated resulting in damage to its internal parts.
- When charging the watch by exposure to direct sunlight, avoid places that easily reach high temperatures, such as a car dashboard.
- Always keep the watch temperature under 60℃.
- When charging the watch, do not place the watch in close proximity to an intense light source such as lighting equipment for photography, spotlights or incandescent lights, as the watch may be excessively heated resulting in damage to its internal parts.
- When charging the watch by exposure to direct sunlight, avoid places that easily reach high temperatures, such as a car dashboard.
- Always keep the watch temperature under 60℃.
- When charging the watch, do not place the watch in close proximity to an intense light source such as lighting equipment for photography, spotlights or incandescent lights, as the watch may be excessively heated resulting in damage to its internal parts.
- When charging the watch by exposure to direct sunlight, avoid places that easily reach high temperatures, such as a car dashboard.
- Always keep the watch temperature under 60℃.
Troubleshooting

When the watch is unable to receive radio signals

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

- How to manually set the time
- How to manually set the date
- How to manually set the day of the week

If the above remedies do not solve the problem, set the time, date or day referring to the "How to Manually Set the time, date or day" section below.

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.
   - When the crown is a screw lock type, unlock it. → P.107
   - Pull out the crown to the second click.
   - When the watch enters the manual time setting mode, the reception results will be indicated as "N", since the reception results data will be lost.

2. Press Button A or B to set the time.
   - Continuous Alarm
   - When Button is kept pressed for two seconds or longer, the hard will start to ring. Press Button again to stop.
   - Press the Button B with your finger or with an object with a long tapered tip. → P.106
   - Turning the crown will not move the hand.
   - The point in which the date changes at 0:00 AM (12:00 PM). Adjust the time taking into consideration that it is set during the AM and PM.

3. Push the crown back in simultaneously with a time signal.
   - Operation has been completed. The watch resumes its normal movement.

4. Press the Button B to set the date.
   - To advance rapidly
   - Keep pressing down the button for longer than 3 seconds. Press the button once again to stop.
   - Press the button once and release.
   - Both the main watch and the sub dial continues to operate.
   - Unlock the crown. → P.107

5. Push the crown back.
   - The operation is now completed.
   - The second hand rotates until it points to the 20-second position and stops.
   - Both the main watch and the sub dial continue to operate.
   - Unlock the crown. → P.107
   - 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.

How to manually set the day of the week

1. Pull out the crown to the first click.
   - The second hand rotates until it points to the 0-second position and the watch enters the manual time setting mode.
   - Both the main watch and the sub dial continue to operate.
   - Unlock the crown. → P.107

2. Keep pressing down the Button A (for 3 seconds) until the second hand moves to point to the 55-second position.
   - Button A for 3 seconds
   - The watch enters the manual date setting mode.

3. Keep pressing down the Button B (for 3 seconds) until the second hand moves to point to the 13-second position.
   - Button B for 3 seconds
   - The day of the week can be adjusted independently of the time or date.
   - To use the watch in a radio signal receivable condition again, conduct automatic signal reception to set the day of the week.
   - Automatic Reception and Manual Reception P.123

When the watch is unable to display the correct time, date or day of the week even if the time zone is selected, manually set the time, date or day of the week.

Radio signal reception Q & A

Q: What is the best way to receive a radio signal?
A: A standard frequency depends on the distance from each transmitting station, geography (including buildings, etc.), and weather. Ideally, place the watch at the side of a window in the direction of each transmitting station before bedtime because automatic reception is performed during late night. Also, please search for a place to easily receive radio signals to attempt manual reception.
Troubleshooting

When the watch is unable to display the precise time date or day 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 having a strong impact: Misalignment of the time and date may occur when dropping or hitting the watch.
- In the case of strong magnetic influence: Misalignment of the time and date may occur when bringing the watch close to an object which generates magnetic. Example of common magnetic products that may affect watches.

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 strong impact or magnetic influence. It does not work to adjust accuracy of the watch in slight deviations which may occur during the manufacturing process.

Setting the preliminary position of the date and the day

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

Setting the preliminary position of the date, day hand, hour and minute hands (Continued)

Within 20 seconds after procedure ① is completed and the date stops, start the operation from procedure ②.

If the watch is left untouched for 20 seconds after the date stops, the watch automatically returns to the TIME display mode. If this happens, restart the operation from procedure ①.

How to correct the preliminary positions

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

The preliminary position of the date is the "1st." The preliminary position of the day hand is "M." (Monday)

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

When the preliminary positions are incorrect, the correct date, day of the week or time cannot be displayed even if the watch receives radio signals.

In such a case, by correcting the preliminary positions, wrong date or day indication, loss or gain of the time 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.

How to manually set the time

Keep pressing down the Button A (for 3 seconds) until the second hand stops pointing to the 55-second position.

The watch enters the preliminary position setting mode.

The time will start to move and stop at the preliminary position.

Do not pull the crown out.

Press the Button B with your finger or with an object with a long tapered tip.

---

Keep pressing down the Button A and B (for 4 seconds) at the same time until the second hand stops pointing to the 15-second position.

The watch enters the preliminary position setting mode for date.

The date will start to move and stop at the preliminary position.

Press the Button B with your finger or with an object with a long tapered tip.

---

Keep pressing down the Button A (for 3 seconds) until the second hand moves to point to the 55-second position.

The watch enters the manual day of the week setting mode.

Press the button once and release.

Keep pressing down the button for longer than 2 seconds.

Press the crown again to stop.

Press the Button B with your finger or with an object with a long tapered tip.

---

Press the Button B to set the day of the week.

The watch enters the preliminary position setting mode for hour and minute hands.

If the hour and minute hands are already indicating the correct time, move on to the procedure ③.

To advance rapidly,

Press the Button B with your finger or with an object with a long tapered tip.

---

Press the Button B to set the day of the week.

The hour and minute hands start to move and stop pointing at "00 am."

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, date and day of the week are all correct.

If the time, date and day of the week are not correct, manually set them.

Adjusting the time and date by receiving a radio signal

How to conduct manual reception

How to manually set the time

How to manually set the day of the week

---

Keep pressing down the Button A (for 3 seconds) until the second hand stops pointing to the 55-second position.

The watch enters the preliminary position setting mode.

Keep pressing down the Button A for 3 seconds.

Do not press the crown.

Press the Button B with your finger or with an object with a long tapered tip.

---

Press the Button B once and release it.

The hour and minute hands start to move and stop pointing at "00 am."

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, date and day of the week are all correct.

If the time, date and day of the week are not correct, manually set them.

Adjusting the time and date by receiving a radio signal

How to conduct manual reception

How to manually set the time

How to manually set the day of the week
### Troubleshooting

#### Reference pages

1. Troubleshooting
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### Hand Position

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<tr>
<td>The second hand moves at two-second intervals.</td>
<td>The energy depletion forecasting function is activated. (P.136)</td>
<td>Fully charge the watch so that the second hand may move at one-second intervals.</td>
<td>P.134</td>
</tr>
<tr>
<td>The second hand moves at five-second intervals.</td>
<td>If the second hand moves at two or five-second intervals while you wear the watch everyday, the watch is in a condition where it cannot acquire sufficient light.</td>
<td>Be careful not to conceal the watch under a sleeve, etc., while wearing it. When taking off the watch, place it in as bright a location as possible.</td>
<td></td>
</tr>
<tr>
<td>The stopped second hand pointing to the 15-second position started operating.</td>
<td>When the watch is not exposed to adequate light for a certain period of time, the power save function to limit energy consumption is automatically activated.</td>
<td>Wait until the current time is displayed.</td>
<td></td>
</tr>
<tr>
<td>The stopped second hand pointing to the 45-second position started operating.</td>
<td>The power save function has been activated. (P.137)</td>
<td>1. Fully charge the watch so that the second hand may move at one-second intervals.</td>
<td></td>
</tr>
<tr>
<td>The stopped second hand pointing to the 30-second position started operating.</td>
<td>The power save function has been activated. (P.137)</td>
<td>2. After that, if the watch displays the incorrect time, receive a radio wave as needed.</td>
<td></td>
</tr>
<tr>
<td>The hand advances rapidly unless a button is pressed.</td>
<td>The stopped second hand pointing to the 90-second position started operating.</td>
<td>No operation is needed (this is not a malfunction).</td>
<td></td>
</tr>
<tr>
<td>The hand advances rapidly unless a button is pressed.</td>
<td>The stopped second hand pointing to the 120-second position started operating.</td>
<td>No operation is needed (this is not a malfunction).</td>
<td></td>
</tr>
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</table>

#### Reception of a Radio Signal

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</thead>
<tbody>
<tr>
<td>The watch is unable to receive a radio signal.</td>
<td>The watch was moved while it was receiving a radio signal. (It takes 10 minutes at the utmost to receive a radio signal successfully.)</td>
<td>Do not move the watch while it is receiving a radio signal.</td>
<td>P.131</td>
</tr>
<tr>
<td>The watch is unable to receive a radio signal.</td>
<td>The watch was left where the radio signal was weak or where it was unable to receive a radio signal. (P.132).</td>
<td>Place the watch where it is able to easily receive a radio signal.</td>
<td>P.131</td>
</tr>
<tr>
<td>The reception results have failed and the second hand points to N (the watch does not receive a radio signal).</td>
<td>Transmitting stations may have stopped transmitting radio signals for some reason (Transmission stop).</td>
<td>Check the website of each transmitting station for further information concerning a transmission stop. Attempt to receive a radio signal again after a while.</td>
<td>P.133</td>
</tr>
<tr>
<td>The selected time zone is out of the radio signal reception range.</td>
<td>1. Check if the selected time zone is within the radio signal reception range. If not, change the time zone to the one within the radio signal reception range.</td>
<td>Refer to “Standard Charging Time” to charge the watch.</td>
<td></td>
</tr>
<tr>
<td>The watch was exposed to adequate light.</td>
<td>2. When the watch is not displaying the precise time, receive a radio signal again if necessary.</td>
<td>Refer to “In Case of an Abnormal Movement” to reset the built-in IC.</td>
<td></td>
</tr>
</tbody>
</table>

#### Charging of the Solar Battery

<table>
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<th>Solutions</th>
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</tr>
</thead>
<tbody>
<tr>
<td>The watch was exposed to an inadequate light.</td>
<td>The amount of exposed light is too weak. The time for charging the watch is not sufficient.</td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>The watch was moved while it was receiving a radio signal.</td>
<td>The built-in IC of the watch has fallen into an unstable condition.</td>
<td>Refer to “In Case of an Abnormal Movement” to reset the built-in IC.</td>
<td></td>
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</tbody>
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#### Misalignment of the Hand Positions

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</thead>
<tbody>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The watch fails to receive a radio signal correctly as a result of external influence (incorrect reception).</td>
<td>1. Place the watch where it is able to receive a radio signal more easily.</td>
<td>P.131 P.156</td>
</tr>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The watch has been left in an extremely high or low temperature place for a long time.</td>
<td>2. If the watch still gains or loses the time conduct manual reception if necessary.</td>
<td></td>
</tr>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The time zone is not correctly set.</td>
<td>3. If the watch cannot resume normal movement even after conducting the above mentioned procedures, consult the retailer from whom the watch was purchased.</td>
<td></td>
</tr>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The selected time zone is out of the radio signal reception range.</td>
<td>1. When the watch returns to a normal temperature, it will display the precise time as before.</td>
<td>P.134 P.123</td>
</tr>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The time zone is not correctly set.</td>
<td>2. If the watch still gains or loses the time, consult the retailer from whom the watch was purchased.</td>
<td></td>
</tr>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The hand positions were misaligned as a result of external influence. The hands are out of the preliminary position as a result of external influence.</td>
<td>1. Fully charge the watch so that the second hand may move at one-second intervals.</td>
<td>P.168</td>
</tr>
<tr>
<td>The watch temporarily gains or loses time.</td>
<td>The second hand is out of the preliminary position as a result of external influence.</td>
<td>2. After that, if the watch displays the incorrect time, receive a radio wave as needed.</td>
<td>P.160</td>
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#### Misalignment of the Date

<table>
<thead>
<tr>
<th>At trouble</th>
<th>Possible cause</th>
<th>Solution</th>
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</thead>
<tbody>
<tr>
<td>Misalignment of the date</td>
<td>The reception results are successfully, but the date is not correctly displayed.</td>
<td>Set the date to the preliminary position “1” (the 1st).</td>
<td>P.169</td>
</tr>
<tr>
<td>Misalignment of the day</td>
<td>The reception result is correct, but the date is not correctly displayed.</td>
<td>Check if the day is set to the correct preliminary position “M” (Monday). If not, correct the preliminary position for day.</td>
<td>P.169</td>
</tr>
<tr>
<td>Wrong display of the sub dial</td>
<td>The sub dial is set to the point of the hand which cannot display the time.</td>
<td>Reset the time for sub dial.</td>
<td>P.120</td>
</tr>
<tr>
<td>Operation</td>
<td>The stored electric power is running short.</td>
<td>Sufficiently charge the watch until it starts moving at one-second intervals.</td>
<td>P.134</td>
</tr>
<tr>
<td>Others</td>
<td>The crown or buttons cannot be operated.</td>
<td>After the date stops, the crown and buttons can be operated.</td>
<td></td>
</tr>
</tbody>
</table>
In case of an abnormal movement

- How to reset the built-in IC (from ① to ③)
  1. Pull out the crown to the second click.
  2. Press the Button B with your finger tip or with an object with a long tangent on IP (06).
  3. If your watch has a screw lock type crown, unlock it. → P.1107

- Setting the date to the “1st” (④, ⑤)
  4. Within 20 seconds after procedure 6 is completed, start the operation of procedure 9.
  5. Keep pressing down the Button A and B (for 4 seconds) at the same time with the second hand stops pointing to the 13-second position.
  6. Make sure that the numerical number “1” is located at the center of the date window.
  7. To advance rapidly
     - Keep pressing down the button as long as you want to advance the numerical number.

- Setting the time zone (⑧ to ⑩)
  8. Within 10 seconds after procedure 8 is completed, press the Button A or B to set the second hand to point to the target time zone.
  9. To fine-tune
     - Keep pressing down the button as long as you want to advance the day hand.

Specifications

1. Basic feature
   - Basic watch with three hands (hour, minute and second hands), date display, Retrograde day indicator, Sub dial with 2 hands (Hour and Minute hands) and second hand.
2. Frequency of crystal oscillator
   - 32,768 Hz (Hz = Hertz ... Cycles per second)
3. Loss / gain (monthly rate)
   - ±15 seconds on a monthly rate (Except the case when the watch is worn on the wrist within a normal temperature range between 5℃ and 35℃).
4. Operational temperature range
   - Between −10℃ and +60℃
5. Driving systems
   - Step motor (Hour and minute hands, second hand, and the date, day and hour and minute hands for sub dial)
6. Power source
   - Secondary battery, 1 piece
7. Duration of operation
   - Approximately nine months (Fully charged, and the Power Save is not activated).
   - When the watch is left untouched for 10 seconds after the second hand stops, the watch automatically exits the Time Zone Setting mode.
8. Water resistance
   - 1000 m (10 bars)
9. Set the Daylight Saving Time
   - By setting the Built-in IC or by using the manual setting method.

How to conduct manual reception → P.156

When the watch is unable to receive radio signals, you can manually set the time, date and day of the week. How to manually set the data → P.160

The operation is completed when the time, date and day of the week are set.

When the watch is unable to receive radio signals, you can manually set the time, date and day of the week. How to manually set the data → P.160

The operation is completed when the time, date and day of the week are set.