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# SEIKO

H851

空気潜水用防水ダイバーズウオッチ 取扱説明書 DIVER'S WATCH FOR AIR DIVING INSTRUCTIONS

そのほかの言語の取扱説明書は、パソコンやスマートフォンから当社ホームページ内の「カスタマーサービス」>「取扱説明書ダウンロード」にアクセスいただき、ご覧ください。

Please refer to the Instruction Manuals of other languages by accessing "Customer Service"→ "Instruction" on our Website from PC or Smartphone.

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https://www.seikowatches.com/

Keep this manual handy for easy reference.

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 it.

- \* Length adjustment service for metallic bands is available at the retailer from whom the watch was purchased. If you cannot have your watch repaired by the retailer from whom the watch was purchased because you received the watch as a gift, or you moved to a distant place, please contact 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.
- \* If your watch has a protective film for preventing scratches, make sure to peel it off before using the watch. If the watch is used with the film on it, dirt, sweat, dust, or moisture may be attached to the film and may cause rust.

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### **M** WARNING

#### Make sure to read the following instructions before use and strictly observe them.

#### **↑** WARNING

When diving, never carry out operations other than those specified in this instruction manual. Mishandling of the product and misunderstanding of the displayed content may lead to a fatal or serious accident.

The diver's watch is an auxiliary instrument which mainly displays the passage of time and does not ensure the safety of a user. Use this watch while using the equipment (residual pressure gauge, water depth meter, etc.) required for safe diving.

#### **M** WARNING

Never use this watch for "saturation diving" using helium gas.

#### **↑** WARNING

Do not dive using this product unless you have been properly trained in scuba diving, acquired the requisite experience and techniques for safe diving, thoroughly familiarized yourself with the operation and handling of this product, and inspect all functions of this product prior to each dive.

#### **∧** CAUTION

Make sure to read the following instructions before use and strictly observe them.

#### **↑** CAUTION

Inspect the following items before diving (excluding saturation diving):

- The watch is normally operating.
- The remaining battery level is sufficient and the mainspring is sufficiently wound.
- The rotating bezel turns smoothly. (The bezel rotation must not be too loose or too tight.)
- · Screws of the crown and other parts are reliably tightened.
- No abnormalities such as flaws or cracks exist on the band or glass.
- The band is reliably fixed (with spring bar, buckle or other parts.)
- \* If any abnormality is observed in the above items, do not use this watch for diving.

#### **⚠** CAUTION

Do not operate the crown or buttons underwater.

#### **⚠** CAUTION

As the use environment of the diver's watch may affect not only the case or band but also the internal mechanism of the watch, we recommend that you periodically request an overhaul for inspection and adjustment approximately once every three to four years.

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# **Handling cautions**

#### **↑** WARNING

Please note that there is a risk of serious consequences such as severe injury if the following safety regulations are not strictly observed.

#### Immediately stop wearing the watch in following cases:

- O If the watch body or band becomes edged by corrosion etc.
- O 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 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. 45 Replacement of the secondary battery requires professional knowledge and skill. Please ask the retailer from whom the watch was purchased for replacement of the secondary battery. Installation of an ordinary silver oxide battery can generate heat that can cause bursting and ignition.

Please note that there is a risk of minor injury or material damage if the following safety regulations are not strictly observed.

**⚠** CAUTION

#### Avoid the following places for wearing or keeping the watch:

- O Places where volatile agents (cosmetics such as polish remover, bug repellent, thinners etc.) are
- O Places where the temperature drops below 5°C or rises above 35°C for a long time

5 Solar Charging Function

How to charge the battery ...... 37 Power saving/sleep function ...... 41 6 TO PRESERVE THE QUALITY OF YOUR

Performance and type ...... 43 Magnetic resistant performance ...... 47 How to use the diver adjuster ...... 51 How to use the diver extender ...... 53 

- O Places affected by strong magnetism or static O Dusty places electricity
- O Places affected by strong vibrations O Places of high humidity

#### 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

- O For adjusting the length of the metallic band, specialized knowledge and expertise are necessary. Therefore, in such a case, contact the retailer from whom the watch was purchased. If you attempt to adjust the metallic band, injury may occur to your hand or fingers, or parts of the band may be
- O Do not disassemble or tamper with the watch.
- O 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.
- Olf 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.

OT WO

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#### **⚠ WARNING**

Never use the watch, in saturation diving using helium gas.

#### **↑** WARNING

While diving, never operate the watch in any other manner than set forth in the instruction

#### **∕** WARNING

Before using the diver's watch, you have to be properly trained in various types of diving and possess the requisite experience and skill to dive safely. When diving, strictly abide by the rules of diving.

Do not leave moisture, sweat and dirt on the watch for a long time.

**↑** CAUTION Please note that there is a risk of minor injury or material damage if the following safety

Do not turn or pull out the crown when the watch is wet.

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.

\* 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

Do not wear the watch while taking a bath or a sauna.

Water may get inside of the watch.

SEIKO CUSTOMER SERVICE CENTER.

Steam, soap or some components of a hot spring may accelerate the deterioration of water resistant performance of the watch.

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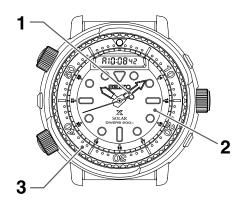
# Precautions for diving (Please make sure to observe the following.)

# ■ Before diving

Before diving, check the following:

\* "Names of the parts and their functions" → P. 17

- The time is correctly set.
- The seconds hand is moving at one-second intervals. If the hand is moving at twosecond intervals or it is stopped, place the dial under light to charge the battery.
  - \* "Charging the battery" → P. 37
- The rotating bezel turns smoothly. (The bezel rotation must not be too loose or too tight.)
  - \* "How to use the rotating bezel" → P. 21



The crown and button screws are firmly tightened.

regulations are not strictly observed.

- \* "Screw down crown" → P. 18 \* "Screw lock type button" → P. 19
- There are no visible cracks or scratches on the crystal or watch band.
- The band is firmly attached to the watch (with spring bars, clamp or other parts.)



#### **⚠** CAUTION

If there are any malfunctions, contact the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER.

# ■ While diving

Please observe the following cautions for use.



The watch can be used for air diving within the water Do not operate the crown or buttons underwater. resistant range displayed on the dial.





Take care not to bump the watch against hard objects such as rocks.



Bezel rotation may become slightly harder in the water but this is not a malfunction.

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### **■** Structure of the case

In the following types of models, take care of the following issues in usage.

The bezel or protective outer case is securely fastened to the watch with setscrews. Never loosen the setscrews.





\* The above illustration is provided as an example, therefore it may not be exactly the same as your watch.

#### **⚠** CAUTION

Never loosen the setscrews used to fix the bezel or protective outer case.

Doing so may cause damage or result in further loosening.

\* If you find that the setscrews have become loose or are functioning abnormally, consult the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER.

■ After diving

Please follow the care instructions below after diving.





Rinse the watch in fresh water to wash out all seawater and wipe it thoroughly dry to prevent rust. Avoid pouring running water onto the watch directly from a faucet. Put some water into a bowl first, and then soak the watch in the water to wash it.

#### **A** CAUTION

Depending on the environment where a diver's watch is used, its inner parts or movement as well as its case or band may be affected. We recommend that you have your watch overhauled regularly once every 3 or 4 years.

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### **Characteristics**

■ Water resistant

This watch is equipped with water resistant performance to be used performance for air diving...in water for a long period of time with scuba diving tanks. (It cannot be used for saturation diving that uses helium gas.)

■ Time and calendar function.....The calendar is a fully automatic calendar with dates from 2001 to

2100. The day and date are displayed on the digital display screen.

→ P. 30

■ Local time display function..... You can display your home time on the analog display and the local time on the digital display.

→ P. 32

→ P. 34

■ Alarm function...... The watch is equipped with a daily alarm function that sounds every day at the set time (hour/minute).

→ P. 37

■ Solar charging function........ The watch charges by converting light that shines on the solar panel on the dial into electrical energy. After the battery is fully charged, the watch will operate for about six months even if the dial is not exposed to light.

■ Power save/sleep function..... If the dial is not exposed to light and the crown and buttons are not operated for a certain period of time, the power save function activates to limit the consumption of unnecessary energy.

→ P. 41

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→ P. 39

"Screw lock type button" → P. 19 (3) Button (A)

"Screw lock type button" → P. 19

# (4) Analog display

- Hour hand
- Minute hand
- · Seconds hand

#### (5) Crown

"Screw down crown" → P. 18

#### (6) Rotating bezel

"How to use the rotating bezel" → P. 21

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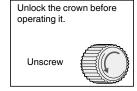
# Screw down crown

The screw down crown features a mechanism that can securely lock the crown when it is not being operated in order to prevent any operational errors and to improve its water resistant performance.

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

#### [To unlock the crown]

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



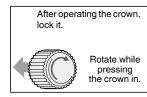
Crown locked



Crown unlocked

[To lock the crown]

toward the watch body until it stops.



Turn the crown clockwise while gently pressing it in

\* When locking the crown, turn it slowly with care, ensuring that the screw is properly engaged. Be careful not to push it in forcefully, as doing so may damage the screw hole in the case.

# Screw lock type button

The screw lock type button features a mechanism that can securely lock the button when it is not being operated in order to prevent any operational errors and to improve its water performance.

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

**Button locked** 

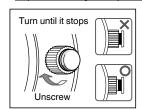
#### [To unlock the button]

Turn the button ring clockwise. Turning the button ring until you can see the entire check line and it stops will enable you to operate the button.

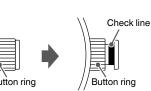
#### To lock the button

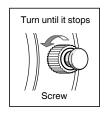
Button unlocked

Turn the button counterclockwise until it stops.









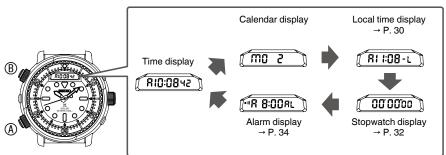
- \* If the screw or button get dirty, they may not operate properly. "Daily care" → P. 42
- \* Note that if you turn the button ring more than you need to, the screw lock button may be difficult to return to its original position.
- \* Before you go diving, check that both buttons are properly locked.
- \* Do not use the buttons when the watch is wet or when you are underwater.

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EN 18

# **Switching modes**

When you press Button (A), the digital display changes.



- \* If you hold down Button (A), the display will change to the time regardless of what is being displayed.
- \* If the operation confirmation sound is set, a sound will play every time you change the display. (For details on the operation confirmation sound, see P. 29.)
- \* You can check the battery level by holding down Button (B) unless the digital display is showing the stopwatch. → P. 39

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HOW TO USE

#### [One-Way rotating bezel]

As the evaluation of the remaining air in your cylinder is based on the information of the elapsed time of the dive, the rotating bezel for a diver's watch is designed to rotate only counterclockwise, so that the watch is prevented from displaying the elapsed time shorter than it actually is.

#### **⚠** CAUTION

Make sure that you check the correct remaining amount of air in your cylinder before diving. Use the display of the elapsed time by the rotating bezel only as a guide during diving.

# How to use the rotating bezel

By setting the rotating bezel beforehand, the elapsed time since the start of an event can be measured.

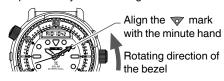
At the start of the event, for which Example: When you start diving at 10:10 am. you want to measure the elapsed time (for example, when you start diving), rotate the bezel so that the mark on the bezel is aligned with the minute hand.

\* The rotating bezel is designed to rotate only counterclockwise. Do not forcibly rotate it clockwise.

"[One-Way rotating bezel]" → P. 22

Read the graduation on the rotating bezel to which the minute hand is pointing.

The graduation on the rotating bezel to which the minute hand is pointing indicates the elapsed time.



Example: After 20 minutes has elapsed



\* The above illustration is provided as an example, therefore it may not be exactly the same as your watch.

# How to set the time and date

The times on the digital and analog displays are linked.

You can set the analog display time by setting the digital display time.

\* If the digital display time and the analog display time are out of sync, the standard hand position is misaligned. Set the standard hand position. → P. 26

Unlock the crown and button.

"Screw down crown" → P. 18

\* "Screw lock type button" → P. 19

Press Button (A) to show the time on the digital display.

Pull out the crown.

The hands on the analog display will stop and "seconds" on the digital display will start flashing.

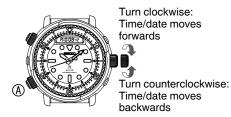




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7

#### Turn the crown to set the time and calendar.



\* When you press Button (A), the flashing item that can be set changes.



- \* When setting the seconds, select "Seconds" and turn the crown to set the seconds in accordance with the time signal service.
- \* If you turn the crown while 30 to 59 seconds are shown on the seconds display, one minute is added to the time and the second digits are immediately reset to "00".
- \* The telephone time signal service is helpful for setting the seconds hand exactly.
- \* Setting the date automatically sets "Day".

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How to Set the Time and Date

# ■ How to set the standard hand position

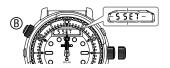
If the standard hand position on the analog display is misaligned, you will need to correct it.

Unlock the crown and button.

- "Screw down crown" → P. 18
- \* "Screw lock type button" → P. 19
- Press Button (A) to show the time on the digital display.
- Pull out the crown.



- Hold down Button (B).
  - All hands will move to the 12 o'clock position and "S SET" will start flashing on the digital display.
  - \* The hand to be aligned to the standard position moves slightly to indicate that it is ready to be aligned.



## Push the crown back in to the normal position.

The hands on the analog display move to the set time and the watch starts to function.



#### Lock the crown and button.

- "Screw down crown" → P. 18
- "Screw lock type button" → P. 19
- \* This watch is equipped with a fully automatic calendar function. As the day of the week, day, month, and year from 2001 to 2100 have been programmed in the automatic calendar, you do not need to manually adjust odd and even months and leap years during this period.

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## Check that the standard hand position is not misaligned.

- \* If the hand is misaligned, turn the crown to align the hand to the 12 o'clock position.
- \* If you are aligning the seconds hand to the standard position, it will not move if you turn the crown counterclockwise.
- \* Pressing Button (A) enables you to switch to the hand that is to be aligned to the standard position.



# Push the crown back in to the normal position.

\* The hands on the analog display move to the current time and the watch starts to function.



**7** Lock the crown and button.

- \* "Screw down crown" → P. 18
- \* "Screw lock type button" → P. 19

# ■ Listening to the Alarm Tone and Setting the Time Signal Service/Operation Confirmation Sound

#### Listening to the alarm tone

When the digital display is showing the time, holding down Button 8 and Button 8 at the same time enables you to listen to the alarm tone.

The alarm symbol will start flashing



#### Setting the time signal service/ operation confirmation sound

When the digital display is showing the time, pressing Button (a) and Button (b) at the same time enables you to set and turn off the time signal service/operation confirmation sound.

Time signal service symbol



\* The alarm tone will sound at this time, but this is not an error.

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How to Set the Time and Date

# How to set local time

In addition to the time shown on the time display, you can set another time as the local time. This is useful for when you travel overseas.

Unlock the crown and button.

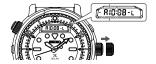
\* "Screw down crown" → P. 18
\* "Screw lock type button" → P. 19

Press Button (A) to show the local time on the digital display.

3 Pull out the crown.

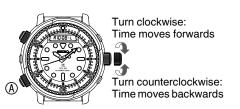
\* "Hour" on the digital display will start flashing.





Turn the crown to set the time.

\* When you press Button (A), the flashing item that can be set changes.



Push the crown back in to the normal position.



C Lock the crown and button.

- \* "Screw down crown" → P. 18
- \* "Screw lock type button" → P. 19

# How to use the stopwatch

The stopwatch can count up to a maximum of 99 hours, 59 minutes, 59 seconds in increments of 1/100 seconds

The stopwatch can count in increments of seconds after 60 minutes has passed.

\* The light will not turn on when the watch is in stopwatch display.

Unlock the button.

\* "Screw lock type button" → P. 19

**?** Press Button (A) to show the stopwatch on the digital display.



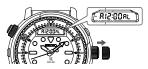
EN 32

# How to use the alarm

You can set the alarm to sound every day at a set time.

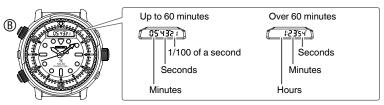
- Unlock the crown and button.
  - \* "Screw down crown" → P. 18
  - \* "Screw lock type button" → P. 19
- **2** Press Button (A) to show the alarm on the digital display.
- ? Pull out the crown.
  - \* "Hour" on the digital display will start flashing.





## 3 Press Button ® to start the stopwatch.

- \* The stopwatch starts or stops when you press Button (B).
- \* Hold down Button (B) to reset the stopwatch time.
- \* If you press Button (A) to change the digital display while the stopwatch is functioning, it will continue to function
- \* If the stopwatch exceeds the maximum count time, it will automatically stop and be reset.

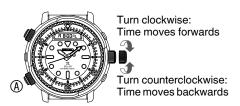


\* Lock the button once you have finished using the stopwatch. "Screw lock type button" → P. 19

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#### Turn the crown to set the time.

\* When you press Button (A), the flashing item that can be set changes.



**5** Push the crown back in to the normal position.

\* The alarm will automatically be turned on.



- C Lock the crown and button.
  - \* "Screw down crown" → P. 18
  - \* "Screw lock type button" → P. 19

#### ■ When you want to turn the alarm on or off

When the digital display is showing the alarm, pressing Button A and Button B at the same time enables you to turn the alarm tone on or off.



#### ■ Stopping an activated alarm

The alarm will sound for 10 seconds at the set time.

To stop the activated alarm, press any button on the watch.

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## ■ Guide to charging times

Charge the watch using the times below as a guide.

Battery level indication	BATT 0 (All off)	BATT 1	BATT 2 - BATT 3	BATT 4 - BATT 6	BATT 7 - BATT 10	Charge time for one day's use
		Α	pprox. 10 hou	rs		
Outside on a		Approx.	8 hours			Approx.
sunny day	A	Approx. 4 hour	s			2 minutes
	Approx.	2 hours		•		
		A	pprox. 95 hou	rs		
Window sill on a		Approx.	80 hours			Approx.
sunny day	Approx. 40 hours			20 minutes		
	Approx.	15 hours				
		Approx. 310 hours				
Window sill on a	Approx. 255 hours			Approx.		
cloudy day	Approx. 135 hours			60 minutes		
	Approx.	50 hours		•		
Inside under a fluorescent light	Approx. 2	220 hours				Approx. 4 hours

# **Charging the battery**

# ■ How to charge the battery

Expose the dial to light to charge the watch.



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





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

- The watch is concealed under a sleeve.
- The watch is used or stored under conditions where it cannot be exposed to light for a long time.
- \* Be careful to make sure that the watch does not get hot when it is charging. (The operating temperature range is 0 °C to +50 °C.)
- \* When you first start using the watch or starting it after it stopped due to a lack of charge, charge the watch sufficiently using the table on P. 38 as a guide.

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### **■** Battery level

#### Two-second hand movement

When the battery level is low, the seconds hand will move every two seconds, which is called "two-second hand movement".

If the battery charge is completely depleted after that, the watch stops.

If "two-second hand movement" occurs, sufficiently charge the battery. → P. 37

\* During two-second hand movement, the light will not function and the alarm tone/operation confirmation sound will stop.

#### Battery level

You can check the battery level by holding down Button B unless the digital display is showing the stopwatch.



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TO PRESERVE THE QUALITY OF YOUR WATCH

#### If the battery level falls to "BATT 6" or below, try to charge the battery.

	Battery level indication	Restrictions on operations and functions	What should you do?	
1	BATT 10 - BATT 7		Use the watch normally.	
2	BATT 6 - BATT 4	None.	Try to charge the battery. → P. 37	
3	BATT 3 - BATT 2		Sufficiently charge the battery until it reaches ①. → P. 37	
4	BATT 1	The light will not turn on. The alarm tone/operation confirmation sound will stop.	After charging the battery, use the watch normally.	
(5)	BATT 0 (All off)	* All function pottings will be report and the standard band position data will also be last		

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# **Daily care**

#### The watch requires good daily care

- Do not wash the watch when its crown is in 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.

Do not pour running water directly from a faucet onto the watch. Put some water into a bowl first, and then soak the watch in the water to wash it.

\* If your watch is rated as "Non-water resistant" or "water resistant for everyday life", do not wash the watch. "Performance and type" → P. 43

#### 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 screw down crown.

"Screw down crown" → P. 18

## **■** Power saving/sleep function

If the dial is not exposed to light and the buttons are not operated for a certain period of time, the power save function activates.

#### Power save mode

If the dial is not exposed to light and the buttons are not operated for more than two hours, power save mode will be enabled.

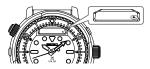
When the watch is in power save mode, the "PS" symbol will flash.

#### Sleep mode

If the dial is not exposed to light and the buttons are not operated for about three days, sleep mode will be enabled.

When the watch is in sleep mode, the "SL" symbol will flash.

\* During sleep mode, the stopwatch count will be reset and the alarm tone will be turned off.



#### Turning off the power save/sleep function

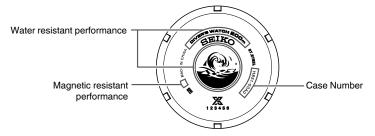
Performing one of the following operations will turn off the power save/sleep function:

- Expose the watch to light
- Operate any button
- · Pull out or push in the crown

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# Performance and type

The case back shows the caliber and performance of your watch



- Water resistant performance
- Case Number

The number to identify the type of your watch.

- Magnetic resistant performance
  Refer to pages P. 47 and P. 48.
- \* The above illustration is provided as an example, therefore it may not be exactly the same as your watch.

#### Lumibrite

#### If your watch has Lumibrite

Lumibrite is a luminous paint that absorbs the light energy of sunlight and lighting apparatuses 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.

- \* 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.

#### <Brightness levels>

Condition		Illumination
Sunlight	Fine weather	100,000 lux
Suringrit	Cloudy weather	10,000 lux
Indoor (Window-side during	Fine weather	more than 3,000 lux
daytime)	Cloudy weather	1,000 to 3,000 lux
uayume)	Rainy weather	less than 1,000 lux
Lighting apparetus (40 wett devlight	Distance to the watch: 1 m	1,000 lux
Lighting apparatus (40-watt daylight fluorescent light)	Distance to the watch: 3 m	500 lux (average room luminance)
ndorescent light)	Distance to the watch: 4 m	250 lux

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#### \* 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."

\* For the required time to fully charge the battery, see "Guide to charging times" → P. 38.

#### **↑** WARNING

#### ■ 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°C.

#### **Power Source**

The battery used in this watch is a special secondary battery, which is different from ordinary batteries.

Unlike an ordinary silver oxide battery, the secondary battery does not require periodic replacement.

The capacity or charging efficiency may gradually lower due to long-term use or operating environment.

In addition, long-term use may shorten the charge duration due to wear, contamination, lubricant deterioration of mechanical parts, etc. Request repair when the performance lowers.

#### **↑** WARNING

#### ■ Notes on replacing the secondary battery

- Do not remove the secondary battery from the watch.
   Replacement of the secondary battery requires professional knowledge and skill.
   Please ask the retailer from whom the watch was purchased for replacement of the secondary battery.
- Installation of an ordinary silver oxide battery can generate heat that can cause bursting and ignition.

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TO PRESERVE THE QUALITY OF YOUR WATCH

TO PRESERVE THE QUALITY OF YOUR WATCH

# Magnetic resistant performance

Affected by nearby magnetism, a watch may temporarily gain or lose time or stop operating.

Diver's watches feature magnetic resistant performance which is equivalent to or above JIS Class 1.

<u></u> DANGER		
Indication on the case back	Condition of use	
No indication	Keep the watch more than 5 cm away from magnetic products. (JIS level-1 standard)	
	Keep the watch more than 1 cm away from magnetic products. (JIS level-2 standard)	

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

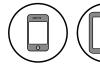
The built-in motor is provided with a magnet, which may be influenced by a strong external magnetic field.

TO PRESERVE THE QUALITY OF YOUR WATCH

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









Smartphone, cellular phone, tablet terminal (speaker)

AC adapter

Bag (with magnet buckle)

AC-powered

shaver



Magnetic cooking

device







necklace (speaker)

Magnetic health pillow

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PRESERVE THE QUALITY OF YOUR WATCH

6

#### 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.

#### Silicone band

- · As for material characteristics, the band is easily dirtied, and may be stained and discolored. Wipe off dirt with a wet cloth or cleaning tissue.
- · Unlike bands of other materials, cracks may result in the band being cut. Take care not to damage the band with an edged tool.

Notes on skin irritation and allergy	Skin irritation caused by a band may result from various factors such as al metals or leathers, or skin reactions against friction on dust or the band its	
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.	

## 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 result in a rash or cause a yellowish or gold stain on the lower sleeve edge of shirts.
- · Wipe off moisture, sweat or soil with a soft cloth as soon as possible.
- To clean the soil around the joint gaps of the band, wipe it out in water and then brush it off with a soft
- (Protect the watch body from water splashes by wrapping it up in plastic wrap etc.) Clean it off with a soft cloth.
- Because some titan bands 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 band, or the clasp
- If a pin is poking out, personal injury may result. In such a case, refrain from using the watch and request

# How to use the diver adjuster

If your watch's metallic band has the Diver Adjuster function, the length of the band can be easily adjusted.

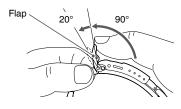
It is very useful when you wear the watch over a wet suit or winter clothing.

Lift up the flap approximately 90° until it stands upright, and then press the flap down further approximately 20° and lightly hold it.

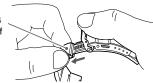
· When doing so, take care not to push the flap forcibly. Although you may feel slight resistance, doing this requires only a light force.

Lightly pull the band on the 6 o'clock side of the watch along the curved line of the band to pull out the slider.

- Doing this requires only a light force. Take care not to pull the band forcibly.
- The slider can be pulled out approximately 30 mm. Take care not to pull it out more than this limit.

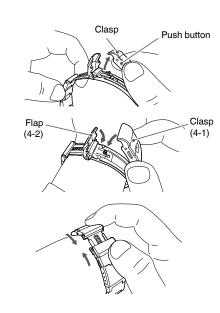


Band on the 6 o'clock side of the watch



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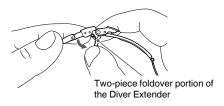
- While pressing the push button, lift up the clasp to release the buckle, and place the watch on your wrist.
- Close the clasp (4-1) first and then, the flap (4-2).
- **5** Hold both sides of the band to adjust the length of the slider until it fits snugly around your wrist.



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#### Open the two-piece foldover portion of the Diver Extender in the direction of the arrow.

- · Some force is required to open the foldover portion, and it will click when it is opened.
- Slide the upper cover of the Diver Extender in the direction of the arrow, and then, pull it up to extend the two-piece foldover portion to the full extent.
- Place the watch on your wrist, and close the clasp (5-1) first and then, the flap (5-2).
  - \* To fold up the Diver Extender, reverse the procedure above. When the two-piece folder portion of the Diver Extender is folded up completely, it also clicks in the same manner as when it is opened.



Upper cover of the Diver Extender



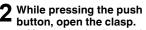


## How to use the diver extender

If your watch's metallic band has the Diver Extender function, the length of the band can be easily

It is very useful when you wear the watch over a wet suit or winter clothing.

Lift up the flap.



· After opening the clasp, push the flap back to the normal position for safety's sake.



Clasp Push button

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TO PRESERVE THE QUALITY OF YOUR WATCH

# After sales service

#### Notes on guarantee and repair

- · Contact the retailer from whom the watch was purchased or SEIKO CUSTOMER SERVICE CENTER for repair or overhaul.
- · Within the guarantee period, present the certificate of guarantee to receive repair services.
- Guarantee coverage is 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 with functional parts

· 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.

TO PRESERVE THE QUALITY OF YOUR WATCH

#### Inspection and adjustment by disassembly and cleaning (overhaul)

- · Periodic inspection and adjustment by disassembly and cleaning (overhaul) is recommended approximately once every 3 to 4 years in order to maintain optimal performance of the watch for a long time. According to use conditions, the oil retaining condition of your watch mechanical parts may deteriorate, abrasion of the parts may occur due to contamination of oil, which may ultimately lead the watch itself to stop. Furthermore, the digital display may go out due to liquid leaking.
- The power transmission gear of the movement of this watch constantly receives force. To ensure that this mechanism works properly all the time, washing parts, changing oil, adjusting accuracy, checking functions and replacing consumable parts on a regular basis are important. The first overhaul after the purchase of your watch is particularly important for preserving long-time use of your watch. According to use conditions, the oil retaining condition of your watch mechanical parts may deteriorate, abrasion of the parts may occur due to contamination of oil, which may ultimately lead the watch itself to 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.

#### **↑** CAUTION

Depending on the environment where a diver's watch is used, its inner parts or movement as well as its case or band may be affected. We recommend that you have your watch overhauled regularly once every 3 or 4 years.

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# **Troubleshooting**

Troubles	Possible causes	Solutions	Referen ce
The watch stops operating.  The seconds hand is moving at two-second intervals.	The power is completely depleted or low.  If you wear the watch every day and this occurs, the most likely cause is the watch is hidden by your sleeves or other clothing when you wear it and it is not sufficiently exposed to light.	Sufficiently charge the battery until the seconds hand moves every second. When you wear the watch, try to make sure that the watch is not hidden by your sleeves or other clothing. Additionally, when you take the watch off, try to place it in a bright place.	P. 37
Even if the watch is charged until "BATT 10" after it stops, the seconds hand does not move in one-second intervals. Or it does not work.	The internal watch system is unstable.	See "How to reset the system" → (P. 61) and follow the procedure.	P. 61

#### Internal watch light (LED)

The watch uses a technique to uniformly diffuse light from a light emitting diode (LED) with a light guide plate.

\* If the battery is nearing the end of life and voltage decreases, illumination (brightness) will decrease.

#### Liquid crystal panel

After the liquid crystal panel in this watch has been used for seven years, the contrast will decrease and the numbers will be hard to read. Please get it replaced at the retailer from whom the watch was purchased. They will replace it for a fee.

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Troubles	Possible causes	Solutions	Referen ce
The watch temporarily gains/ loses time.	The watch has been left in extremely high or low temperatures for a long time.	If the watch returns to room temperature, the accuracy will return to its original state. If it does not return to its original state, contact the retailer from whom the watch was purchased.	-
	The watch has been left close to an object with a strong magnetic field.	Correct this condition by moving and keeping the watch away from the magnetic source, and reset the time. If this action does not correct the condition, contact the retailer from whom the watch was purchased.	-
The buttons do not work (Nothing happens when they are pressed)	The power is low.	Sufficiently charge the battery until the seconds hand moves every second.	P. 37

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TROUBLESHOOTING

Troubles	Possible causes	Solutions	Referen ce
The digital display time and the analog display time are out of sync.	The watch has been left close to an object with a strong magnetic field or it received a strong shock or vibrations.	Set the standard hand position on the analog display again.	P. 26
The date changes at 12 o'clock noon.		Set "Hour" for the time correctly.	P. 23
Blur in the display persists.	Small amount of water has got inside the watch due to deterioration of the gasket, etc.		-

<sup>\*</sup> For a solution to a problem other than listed above, contact the retailer from whom the watch was purchased.

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# **Specifications**

Cal.	H851
1.Features	Three-hand (hour, minute, and seconds) analog display and digital display
2. Frequency of crystal oscillator	32,768 Hz (Hz = Vibrations per second)
3. Loss/gain (daily rate)	Monthly average loss/gain ± 15 seconds
	Only if worn on the wrist in a temperature range of 5°C to 35°C.
4. Operational temperature range	-10°C to +60°C (the display function is 0°C to +50°C)
5. Driving system (analog)	Three step motors
6. Display (digital)	FE (field effect) nematic liquid crystals
7. Power source	Rechargeable battery: 1
8. Duration	Approx. six months (if the watch is not exposed to light after a full charge, the stopwatch is used an hour a day, the light is used once a day (two seconds), the alarm is used once a day (10 seconds), and power save mode is engaged for six hours a day)
9. Light (digital)	Internal light: LED
10. Electronic circuits	Oscillation, division, drive: C-MOS LSI (1), LED circuit: C-MOS IC (1)

<sup>\*</sup> The specifications are subject to change without prior notice due to product improvements.

# How to reset the system

If the watch does not work, the seconds hand does not return to one-second movement even if the battery is sufficiently charged, or the watch operates irregularly, performing a system reset will return the watch to normal.

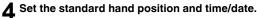
#### ■ Unlock the crown.

\* "Screw down crown" → P. 18

# 2 Pull out the crown.

# **3** Hold down Button (a) and Button (b) at the same time for more than 10 seconds

- All hands will move to the 12 o'clock position, the digital display will turn off, and the system will reset. When you let go of the buttons, time and date setup will appear on the digital display.
- The time and date will be shown as 1/1/2019, Tuesday, 12:00:00 am.



- "How to set the time and date" → P. 23
- "How to set the standard hand position" → P. 26





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Product: Combination Quartz Solar watch

Model: H851

# $C \in$

This product is in compliance with the essential requirements and other relevant provisions of the RoHS Directive (2011/65/EU).