

1. BE SURE TO OBSERVE THE FOLLOWING

- The SEIKO Diver's Watch is specially designed for scuba diving, featuring an excellent water resistant quality.
- As a diver's watch is so designed and fabricated as to fully perform its functions. You can be confident in your watch.
- To enjoy long service life, you are requested to carefully read this instruction booklet and use your watch properly.

WARNING

- The watch is designed for in use scuba diving using heavy breathing apparatus. It can withstand water pressure up to a depth of 200 m. Never use the watch, however, in saturation diving using helium gas.
- While diving, never operate the watch in any other manner than set forth in the instruction manual.

CAUTION

- 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 attempt to dive using the watch unless you have thoroughly familiarized yourself with the operation and maintenance of the watch, and have tested all watch functions prior to each dive. It is absolutely essential that you observe strictly all instructions for the use and maintenance of the watch set forth in this manual.

2. PRECAUTIONS FOR DIVING

This section explains the precautions to be observed before, while and after diving. Be sure to observe each of them to enjoy safe diving.

2-1 Before diving

- There are no scratches or cracks on the band and crystal glass.
- The crown is locked tightly in place.
- The band is firmly secured to the case.
- The current time is indicated properly.
- The power reserve indicates less than 1 month that means power reserve is insufficient, so that please recharge. (Refer to "How to charge the watch")

2-2 While diving

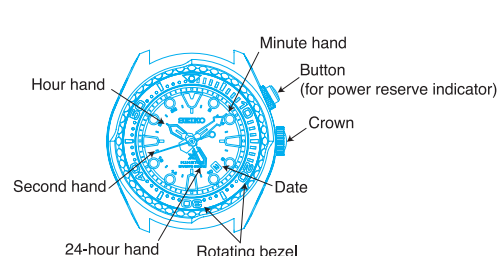
- Take care not hit the watch against hard objects such as rocks.
- While you are underwater, never unscrew the crown or pull it out.
- The rotation of the rotating bezel may get slightly harder in the water but this is not a malfunction.

2-3 After diving

- After making a dive, be sure to rinse the watch in fresh water, and wash out all seawater, soil, sand, etc.
- After cleaning the watch in fresh water, be sure to wipe it thoroughly dry to prevent possible rust on the case.
- If a grain of sand or the like sticks between the case and rotating bezel and cannot be washed out, take your watch to the watch retailer from whom it was purchased or an AUTHORIZED SEIKO DEALER.
- Be careful not to expose the watch to solvents such as alcohol and gasoline, as this will cause a malfunction.
- Please see "7. TO PRESERVE THE QUALITY OF YOUR WATCH" for general maintenance.

3. FEATURES

Unlike the conventional quartz watch powered by the button-type battery, the SEIKO DIVER SCUBA 5M85 is the diver watch that is equipped with an automatic power generating system developed by SEIKO. It generates the electrical energy to power the watch, utilizing the movement of the arm or wrist, and stores it. So, the watch does not use a battery, and the battery replacement procedures are completely eliminated. The watch features a power reserve indicator function that shows with the movement of the second hand how many days of power reserve is stored. If fully charged, the watch will keep operating for approximately 6 months.



CAUTION

- The movement of the arm while the watch is worn causes the automatic power generating system to work, and the watch is powered by the electrical energy thus generated. Therefore, the watch will not be charged while left unused.
- As a guideline of charging, it is recommended that the watch be worn on your wrist daily for more than 10 hours.
- When the energy stored is reduced to an extremely low level, the second hand starts moving at two-second interval instead of the normal one-second interval, indicating that the watch needs recharging. Please see "How to charge the watch".

4. HOW TO USE

- How to charge the watch (How to start the watch)
 - Swing the watch from side to side rhythmically at a rate of twice a second as shown in the illustration below. The second hand starts moving at two-second intervals.
 - Approximately 250 swings will reserve one day of power. The second hand starts moving at the normal one-second intervals instead of two-second intervals.
- To charge efficiently, swing the watch from side to side, drawing an arc of about 20 cm.
- Even if the watch is swung extremely quickly with vigor, it will not be charged efficiently.
- When the watch is swung, the oscillating weight in the generating system rotates to drive the mechanism. As it rotates, it gives out sound, which is not a malfunction.
- It is recommended that the watch be swung further until one day of power is reserved. If fully charged, the watch will keep operating for approximately 6 months. It is not necessary, however, to fully charge at this step. Approximately 250 swings are required to reserve one day of power.
- The current power reserve can be checked by using the power reserve indicator function. (Refer to "How to check the power reserve (How to use the power reserve indicator)")
- Immediately after the watch is swung to charge, the second hand may not operate. Indicate the power reserve in the capacitor. 10 to 15 minutes are required before proper indication.
- The watch is equipped with a system to prevent overcharge. Even if it is further swung after being fully charged, no malfunction will result.

SEIKO KINETIC ダイバースウォッチ

取扱説明書 INSTRUCTION

5M85 KINETICダイバースキューバ

この度はセイコーダイバースウォッチをお買いいただいたありがとうございます。ご使用前にこの説明書をよくお読みの上、正しくご使用いただきますようお願い申し上げます。なお、この取扱説明書はお手元にご保存が必要に応じてご覧ください。

警告

取扱いを誤った場合に、重傷を負うなどの重大な結果になる危険性が想定されることを示しています。

注意

取扱いを誤った場合に、軽傷を負う危険性や物質的損害が生じることが想定されることを示しています。

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セイコー製品について、修理その他のご相談は、「お買い上げ店」でうけたまわっています。なお、ご不明の点は下記へお問い合わせください。

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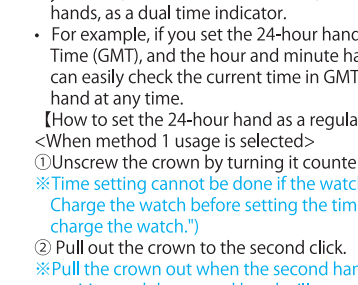
本社 〒105-8467 東京都港区虎ノ門2-8-10
http://www.seiko-watch.co.jp/

5. HOW TO SET THE TIME (The 24-hour hand can be used in two ways)

- Full charge (quick movement of the second hand by 30 seconds)
 - If the secondary battery has been fully charged, the second hand advances 30 seconds by pressing the button, meaning the watch keeps operating for approximately 6 months without being charged.
 - Immediately after the watch is swung to charge, the second hand may not operate. Indicate the power reserve in the capacitor. 10 to 15 minutes are required before proper indication.
- Two-second interval movement of the second hand (When the second hand moves at two-second intervals)
 - If you find the second hand moving at two-second interval while the watch is in use or while it is left unused, the watch may run down in 1 day. Therefore, be sure to swing the watch and recharge the watch. (See "How to charge the watch.")
 - Please note that the power reserve indicator cannot be used while the second hand is moving at two-second interval.
 - The watch remains accurate even while the second hand is moving at two-second interval.

Charge the watch until the second hand resumes the normal one-second interval movement, and then reset the time and calendar. (Refer to "How to charge the watch") The 24-hour hand can be used in two ways. Since the time setting procedure differs according to the usage, please choose the method before setting the time.

- <Method 1> Simply using the 24-hour hand to show the 24-hour time as an AM/PM indicator.
 - This is the standard usage for the 24-hour hand.
 - For example, by setting the 24-hour hand to Japan Time, you can easily check the current hour in Japan when the hour and minute hands are adjusted to indicate the time of the place where you are while traveling abroad. In such a case, Japan Time can be called Home Time, and in the following explanations, the word "Home Time" will be used for Japan Time.
- <Method 2> Using the 24-hour hand to indicate the time in a different time zone.
 - This method can be selected when setting the 24-hour hand to a different time zone area (where there is a time difference from your area) to use the 24-hour hand, and hour and minute hands, as a dual time indicator.
 - For example, if you set the 24-hour hand to Greenwich Mean Time (GMT), and the hour and minute hands to Japan Time, you can easily check the current time in GMT by using the 24-hour hand at any time.



(Example of Method 1)

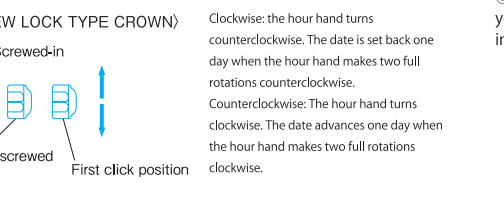
How to set the 24-hour hand as a regular 24-hour indicator

- <When method 1 usage is selected>

- Unscrew the crown by turning it counterclockwise.
- Time setting cannot be done if the watch is not working. Charge the watch before setting the time. (Refer to "How to charge the watch.")
- Pull out the crown to the second click.
- Pull the crown out when the second hand is at the 12 o'clock position and the second hand will stop on the spot.
- Turn the crown to set the 24-hour and minute hands to the

6. HOW TO SET THE DATE

- This watch is designed so that the date changes one day by turning the hour hand two full rotations in the same way as in "the time difference adjustment function." (Refer to "7. HOW TO USE THE TIME DIFFERENCE ADJUSTMENT FUNCTION.")
- The date advances one day by turning the hour hand two full rotations clockwise, while the date is set back one day by turning the hour hand two full rotations counterclockwise.
- After setting the time, it is necessary to set the date. Manual date adjustment is required on the first day after a month that has less than 31 days.
- Unscrew the crown by turning it counterclockwise.
- Pull out the crown to the first click.
- Each time the hour hand makes two full rotations by turning the crown, the date is adjusted one day.
- The date can be adjusted either by advancing it or by setting it back. Choose whichever requires fewer rotations.
- Turn the crown gently.
- Adjust to the date without changing the time, turn the hour hand in two full rotation increments.



Clockwise: the hour hand turns counterclockwise. The date is set back one day when the hour hand makes two full rotations counterclockwise. Counterclockwise: The hour hand turns clockwise. The date advances one day when the hour hand makes two full rotations clockwise.

7. HOW TO USE THE TIME DIFFERENCE ADJUSTMENT FUNCTION

- When you move to a place in a different time zone area from where you live, while traveling abroad, etc., you can conveniently set the watch to indicate the local time in the place where you are without stopping the watch.
- The time difference adjustment function is interrelated with the date display. If the time difference is correctly adjusted, the watch displays the correct date of the place where you are staying.
- <How to adjust the time difference>
- Unscrew the crown by turning it counterclockwise.
- Pull out the crown to the first click.
- Turn the crown to set the hour hand to indicate the time of the place where you are. While turning it, check that the hour hand moves in one-hour increments.
- Refer to "8. MAJOR CITIES IN THE WORLD AND TIME DIFFERENCE TABLE."
- When adjusting the time difference, make sure that AM/PM and the date are correctly set.
- Turn the crown slowly.
- When adjusting the hour hand, the other hands may move slightly. However, this is not a malfunction.
- When turning the crown clockwise to set the hour hand to indicate any time between 9:00 P.M. and midnight, keep turning until the hour hand points to 8:00 P.M., and then advance it to the desired time.
- After completing the time difference adjustment, pull the crown back in. And then, screw the crown in completely until it stops by turning it clockwise while pressing it.

8. MAJOR CITIES IN THE WORLD AND TIME DIFFERENCE TABLE

※Refer to the table below for time differences from Japan time in major cities in the world.

Names of the cities	Time difference with Japan Time
Wellington	+3 hours
Nouméa	+2 hours
Sydney	+1 hours
Tokyo	±0 hours
Beijing / Hong Kong	-1 hours
Bangkok	-2 hours
Dacca	-3 hours
Karachi	-4 hours
Dubai	-5 hours
Jeddah	-6 hours
Cairo	-7 hours

Paris / Berlin	-8 hours
London	-9 hours
Azores	-10 hours
Rio de Janeiro	-12 hours
Santiago	-13 hours
New York	-14 hours
Chicago	-15 hours
Denver	-16 hours
Los Angeles	-17 hours
Anchorage	-18 hours
Honolulu	-19 hours
Midway Islands	-20 hours

※The time differences in each city are subject to change according to the governments of the respective countries or regions. (As of April 2014)

9. HOW TO USE THE ROTATING BEZEL

- The illustration below indicates that 30 minutes have elapsed since the diving started at 10:10 ("▽" mark indicates the time when you started diving).
- How to measure the elapsed time
 - Turn the rotating bezel to set "▽" mark to the minute hand. After certain amount of time elapsed, read the graduation on the rotating bezel which the minute hand points to. The elapsed time is indicated.
 - For safety's sake, the rotating bezel rotates only counterclockwise with clicks. Therefore, accidental rotation of the bezel is prevented.



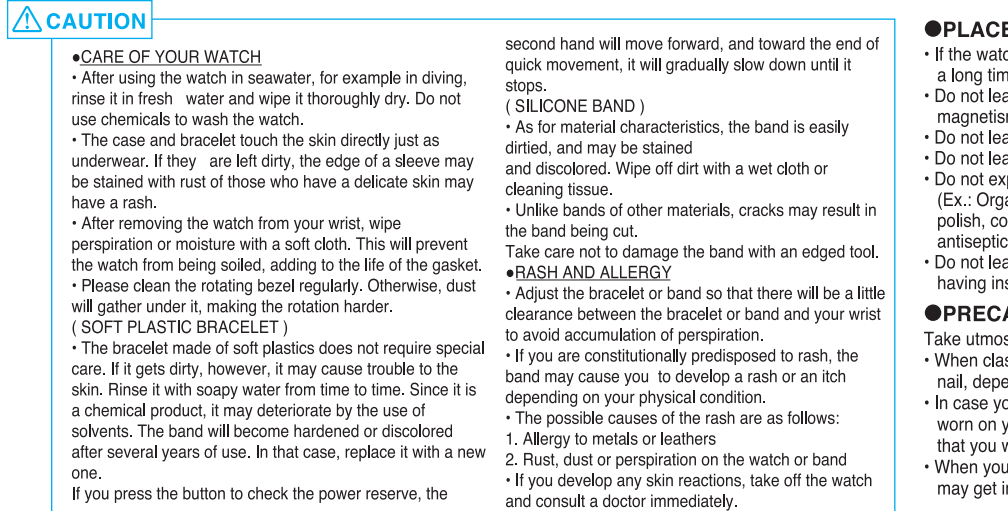
Elapsed time

10. LUMBRITE

- [IF YOUR WATCH HAS LUMBRITE]
 - LumiBrite uses externally-energized luminous material which doesn't contain any radioactive substance.
 - LumiBrite is a newly-developed luminous paint that absorbs the light energy of the sunlight and lighting apparatus in a short time and stores it to emit light in the dark.
 - For example, if exposed to a light of more than 500 lux for approximately 10 minutes, LumiBrite can emit light for 3 to 5 hours.
 - Please note, however, that, as LumiBrite emits the light it stores, the luminance level of the light decreases gradually over time. The duration of the emitted light may also differ slightly depending on such factors as the brightness of the place where the watch is exposed to light and the distance from the light source to the watch. Before diving, therefore, be sure to expose the watch to light under the condition specified above so that it fully absorbs and stores light energy. Otherwise, use the watch together with an underwater flashlight.

11 HOW TO USE THE DIVER EXTENDER

- If your watch is equipped with the Diver Extender function or the Diver Adjuster function, please read this section. It is very useful when you wear the watch over a wet suit.
- HOW TO USE THE DIVER EXTENDER
 - Upper cover of the Diver Extender
 - Flap
 - Baracoret on the 12 o'clock side of the watch
 - Two-piece foldover portion of the Diver Extender
 - Button
- HOW TO USE THE DIVER ADJUSTER
 - Lift up the flap approximately 90° until it stands upright. Do not extend the slider at this step.
 - Lightly push back the flap further approximately 20°.
 - While doing so, take care not to push the flap forcibly as more force is required to do so than to lift up the flap.
 - Lightly pull the baracoret on the 6 o'clock side of the watch along the curved line of the bracket to pull out the slider. When doing so, take care not to pull the baracoret forcibly. The slider can be pulled out approximately 5 mm. Be careful not to pull it out beyond the limit mark inscribed on it.
 - While pressing the lock button indicated by the arrow ④, lift up the clasp to release the buckle, and put on the watch on your wrist.
 - Close the clasp first and then, the flap.
 - Some force is required to open the foldover portion of the watch with fingers to reduce the length of the slider until it fits around your wrist.



1. Lift up the flap, and then, press the button to open the clasp. After opening the clasp, push the flap back to the normal position for safety's sake.

2. Open the two-piece foldover portion of the Diver Extender in the direction of the arrow, and then, pull it up to extend the two-piece foldover portion of the Diver Extender to the full.

3. Slide the upper cover of the flap, and then, pull it up to extend the two-piece foldover portion of the Diver Extender to the full.

4. Close the clasp, and then, the flap. When wearing your watch over a wet suit, extend the Diver Extender. To fold up the Diver Extender, reverse the procedure above. When the two-piece foldover portion of the Diver Extender is folded up completely, it also clicks in the same manner as it is opened.

12. PRECAUTIONS ON POWER SUPPLY

- 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. However, if the secondary battery is charged or discharged repeatedly for a long time, its life may become slightly shortened (this depends on the conditions in which the watch is used or where it is stored). The secondary battery is an environmentally friendly, clean energy storage device.
- WARNING
 - Never insert a miniature silver oxide battery instead of secondary battery.

13. TO PRESERVE THE QUALITY OF YOUR WATCH

- CARE OF YOUR WATCH
 - After using the watch in seawater, for example in diving, rinse it in fresh water and wipe it thoroughly dry. Do not use chemicals to wash the watch.
 - The case and bracelet touch the skin directly just as underwear. If they are left dirty, the edge of a sleeve may be stained with rust of those who have a delicate skin may have a rash.
 - After removing the watch from your wrist, wipe perspiration or moisture with a soft cloth. This will prevent the watch from being soiled, adding to the life of the gasket.
 - Please clean the rotating bezel regularly. Otherwise, dust will gather under it, making the rotation harder.
 - (SOFT PLASTIC BRACELET)
 - The bracelet made of soft plastics does not require special care. If it gets dirty, however, it may cause trouble to the skin. Rinse it with soapy water from time to time. Since it is a chemical product, it may deteriorate by the use of solvents. The band will become hardened or discolored after several years of use. In that case, replace it with a new one.
- PLACES TO KEEP YOUR WATCH
 - If the watch is left in a temperature below -10°C or above +60°C for a long time, it may function improperly or stop operating.
 - Do not leave the watch in a place where it is subjected to strong magnetism or static electricity.
 - Do not leave the watch where there is strong vibration.
 - Do not leave the watch in a dusty place.
 - Do not expose the watch to gases or chemicals. (Ex.: Organic solvents such as benzene and thinner, gasoline, nail polish, cosmetic spray, detergent, adhesives, mercury, and iodine antiseptic solution.)
 - Do not leave the watch in a hot spring, or do not keep it in a drawer having insecticides inside.
- PRECAUTIONS ON WEARING YOUR WATCH
 - Take utmost care in the following cases:
 - When clasping and unclasping the band, you may damage your nail, depending on the type of clasp used with the band.
 - In case you tumble and fall or bump into others with the watch worn on your wrist, you may be injured by the reason of the fact that you wear the watch.
 - When you make contact with children, especially with infants, they may get injured or develop a rash caused by allergy.
 - 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.

14. TROUBLE SHOOTING

Phenomenon	Possible cause	Remedies
The watch has stopped operating.	All the electrical energy stored in KINETIC E.S.U. has been used up.	Charge the watch referring to "HOW TO CHARGE THE WATCH."
The watch gains/loses time.	<ul style="list-style-type: none"> The watch has been left in extremely high or low temperature for a long time. The watch was brought into close contact with a magnetic object. You dropped the watch, hit it against a hard surface or wore it while playing active sports. The watch was exposed to strong vibrations. 	<ul style="list-style-type: none"> This condition will be corrected when the watch temperature returns to normal. This condition will be corrected when the watch is kept away from close contact with the magnetic source. This condition will not be corrected. Have the watch checked by the retailer from whom the watch was purchased.
Blur in the display persists.	Small amount of water has got inside the watch due to deterioration of the gasket, etc.	Consult the retailer from whom the watch was purchased.
The second hand moves at two-second interval.	The electrical energy stored in KINETIC E.S.U. has been reduced to an extremely low level.	The watch may stop operating in 1 day. Charge the watch referring to "HOW TO CHARGE THE WATCH."
When the power reserve is checked by pressing the button, the second hand will not move more than 10 seconds even if you wear the watch daily on your wrist.	You wear the watch daily but only for a short time, or you lead a relatively sedentary life, which does not involve much arm movement.	Wear the watch on your wrist as long as possible. It is recommended that the watch be worn for more than 10 hours a day at least for 5 consecutive days. The second hand will advance 10 seconds by pressing the power reserve indicator button, indicating the power reserve in KINETIC E.S.U. has been increased.
The date changes at 12 o'clock noon.	AM/PM is not properly set.	Advance the hands by 12 hours.
The rotating bezel is not turning smoothly.	Dust or soil or sand or the like may stick between the case and the rotating bezel.	Please rinse the watch in fresh water. If it cannot be washed out, take your watch to the watch retailer from whom it was purchased.

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

15. REMARKS ON AFTER-SALES SERVICING

- If the watch requires service, take it to the retailer from whom the watch was purchased. If the trouble occurs within the guarantee period, submit the certificate of guarantee together with the watch.
- For repair after the guarantee period or for any other information regarding the watch, contact the retailer from whom the watch was purchased or the "CUSTOMER SERVICE DEPARTMENT" of SEIKO WATCH CORPORATION.
- Guarantee coverage is spelled out in the certificate of guarantee. Please read it carefully and keep the certificate for ready reference.

16. REMARKS ON REPLACEMENT PARTS

- SEIKO makes it policy to usually keep a stock of spare parts for its watches for 7 years. In principle, your watch can be reconditioned within this period if used normally. (Replacement parts are those which are essential to maintaining the functional integrity of the watch.)
- The number of years that a watch is considered repairable may vary greatly depending on the conditions under which it was used, and normal accuracy may not be achieved in some cases. We recommend, therefore, that you consult the retailer from whom the watch was purchased when having them repair your watch.
- The case, dial, hands, glass and bracelet, or parts there of may be replaced with substitutes if the originals are not available.

17. SPECIFICATIONS

- Frequency of crystal oscillator.....32,768 Hz (Hz = Hertz.....Cycles per second)
 - Loss/gain (monthly rate).....Less than 15 seconds at normal temperature range (5°C -35°C)
 - Operational temperature range.....-10°C to +60°C
 - Driving system.....Stop motor
 - Power supply.....Secondary Battery, 1 pcs.
 - Expected life per charge
 - From full charge to stoppage.....Between 6 months
 - From the start of the second hand's 2-second step movement to stoppage.....Approx. 1 day
 - Power reserve indicator
 - IC (Integrated Circuit).....Oscillator, frequency divider, driving step change control circuit. C-MOS-LSI, 1 pc.
 - Power generator.....Miniature A.C. generator
 - Magnetic resistance.....JIS Class 1 antimagnetic watch (4800 A/m (60 gauss))
 - Water resistance.....200 m water resistance suitable for air diving (JIS Class 1 diver's watch)
- ※The above specifications are subject to change without notice.