SEIKO

セイコークオーツデジタル
ストップウオッチ
取扱説明書
INSTRUCTION

S140

このたびはセイコーデジタルストップウオッチ
S140をお買い上げいただきありがとうございました。
ご使用の前にこの取扱説明書をよくお読みのうえ
正しくご愛用くださいますようお願い申し上げます。
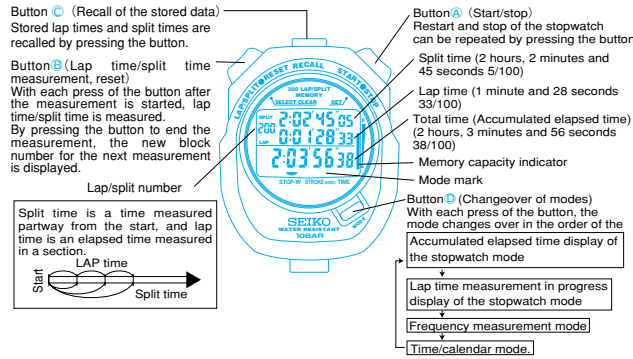なおこの取扱説明書はお手もとに保存し、必要に
応じてご覧下さい。

1 FEATURES

SEIKO Digital Stopwatch Cal. S140 features a frequency measuring function that calculates and displays the frequency of an activity per minute such as the number of strokes in rowing and swimming. It is also equipped with a memory function that stores the measurements and a large-sized three-row display panel that can display the split time, lap time and total elapsed time or lap time in progress at the same time in separate rows. In addition, the stopwatch is water resistant and withstands up to 10 bar. Therefore, it is suitable for aquatic sports or use in rainy weather.

● Frequency measuring function
The frequency of an activity per minute such as the number of strokes in rowing or swimming is automatically calculated only by measuring the time required to make three strokes.

● Large-sized three-row display panel
Total elapsed time or lap time in progress, split time and lap time are displayed at the same time, and they can be measured successively without releasing split or lap time measurement.

● Memory recall function ... Up to 300 measurement data can be stored in memory. Measurement data obtained from the start to finish of the measurement is recorded as a block without erasing the data in the previous block, and up to 100 blocks of data can be stored in memory.
This function is very useful for separately keeping the data measured at different time and date.

● Besides, the stopwatch is equipped with such convenient functions as ID No. function useful for keeping the data of individual users separately, and memory capacity indicator and fastest lap time recall functions.

● An antibacterial agent is applied to the case surface of the stopwatches.
※ It loses its antibacterial effect gradually over time and the effective period differs depending on the conditions of use.

● Time/calendar display
Year, month, date, hour, minutes and seconds can be displayed while the stopwatch and frequency measuring functions are not used.

2 HOW TO USE THE STOPWATCH ① Display and button operation

● Press button D to show the Accumulated elapsed time display of the stopwatch mode.

Button C (Recall of the stored data)
Stored lap times and split times are recalled by pressing the button.

Button B (Lap time/split time measurement, reset)
With each press of the button after the measurement is started, lap time/split time is measured. By pressing the button to end the measurement, the new block number for the next measurement is displayed.

Lap/split number

Button A (Start/stop)
Restart and stop of the stopwatch can be repeated by pressing the button

Split time (2 hours, 2 minutes and 45 seconds 5/100)

Lap time (1 minute and 28 seconds 33/100)

Total time (Accumulated elapsed time) (2 hours, 3 minutes and 56 seconds 38/100)

Memory capacity indicator

Mode mark

Button D (Changeover of modes)
With each press of the button, the mode changes over in the order of the

Accumulated elapsed time display of the stopwatch mode
↓
Lap time measurement in progress display of the stopwatch mode
↓
Frequency measurement mode
↓
Time/calendar mode.

Split time is a time measured partway from the start, and lap time is an elapsed time measured in a section.
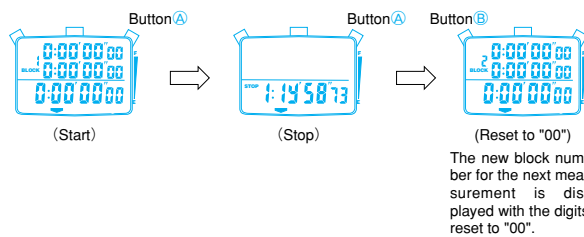

② Notes on the block of data in memory

· The SEIKO Stopwatch Cal. S143 features a "Block Memory" stopwatch operation system. The data obtained from start till finish of a race is recorded as a block and stored in memory.
· The time and date of starting the measurement of a block of data are automatically stored in memory.
· Before the measurement is started, the block number is assigned to the block of data to be measured.
· Up to 300 data can be stored in memory.
· A block of data includes at least three data. If more than one block is used to store the data, the memory may become full even before the number of lap time/split time measurements in memory amounts to 300.
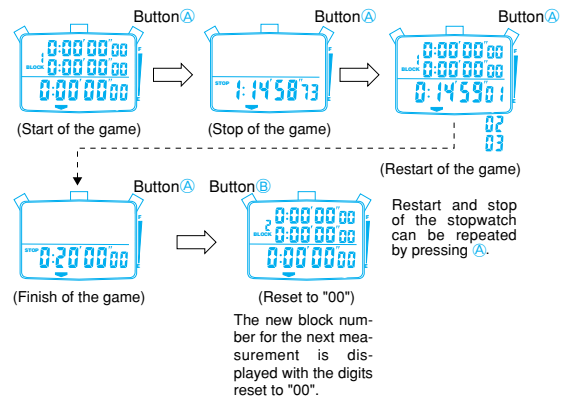
③ Standard measurement

Press the buttons in the following order: Ⓐ→Ⓐ→Ⓑ

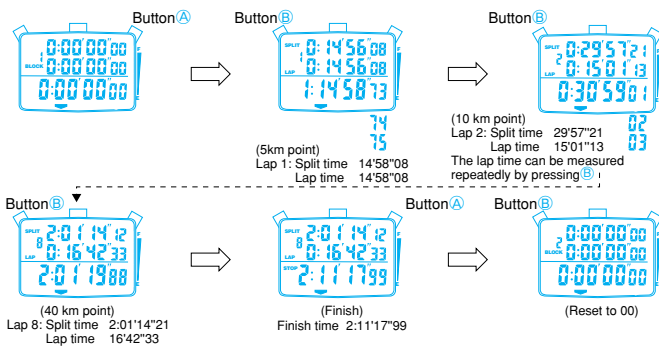(Start)   (Stop)   (Reset to "00")
The new block number for the next measurement is displayed with the digits reset to "00".

④ Accumulated elapsed time measurement

Press the buttons in the following order: Ⓐ→Ⓐ→Ⓐ···Ⓐ→Ⓑ

(Start of the game)   (Stop of the game)   (Restart of the game)
Restart and stop of the stopwatch can be repeated by pressing Ⓐ.

(Finish of the game)   (Reset to "00")
The new block number for the next measurement is displayed with the digits reset to "00".

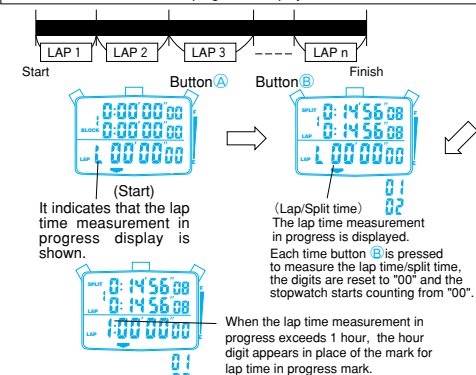# ⑤ How to measure lap time/split time (When the accumlated elapsed time display of the stopwatch mode is used, for example, in a marathon race)

Press the buttons in the following order: Ⓐ→Ⓑ→Ⓑ···Ⓑ→Ⓐ→Ⓑ

(5km point)
Lap 1: Split time 14'58"08
Lap time 14'58"08

(10 km point)
Lap 2: Split time 29'57"21
Lap time 15'01"13
The lap time can be measured repeatedly by pressing Ⓑ

(40 km point)
Lap 8: Split time 2:01'14"21
Lap time 16'42"33

(Finish)
Finish time 2:11'17"99

(Reset to 00)

⑥ How to measure lap time/split time (When the lap time measurement in progress display of the stopwatch mode is used)

Press button D to show the lap time measurement in progress display ofthe stopwatch mode

Lap time measurement in progress display··· While a lap time is being measured, the measurement in progress is displayed.

(Start)
It indicates that the lap time measurement in progress display is shown.

(Lap/Split time)
The lap time measurement in progress is displayed.
Each time button Ⓑ is pressed to measure the lap time/split time, the digits are reset to "00" and the stopwatch starts counting from "00".

When the lap time measurement in progress exceeds 1 hour, the hour digit appears in place of the mark for lap time in progress mark.

⑦ How to use the memory recall function

· The data obtained in the measurement can be recalled and displayed.
· Up to 100 blocks of data or 300 data can be stored and recalled.
· The stored data is recalled by pressing button Ⓒ. The data is recalled successively if the button is kept pressed.
· The stored data can be recalled while the stopwatch is measuring.

· Order of recalling the stored data

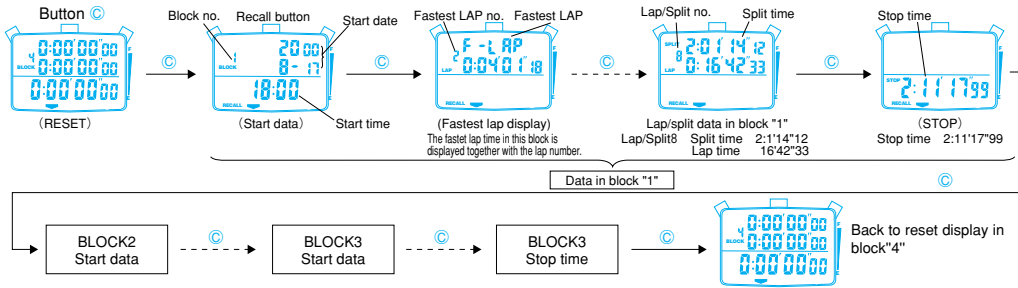|	With each press of button Ⓒ
When the stopwatch is stopped	The data is recalled starting from the oldest one.
When the stopwatch is in use	The data is recalled starting from the newest one.

· Button operation while the stored data is recalled

Display before recall	Button Ⓐ	Button Ⓑ	Button Ⓓ
Reset	Returning to the display before recall	Clearing the data in memory	Returning to the display before recall
Stopped	Returning to the display before recall	Returning to the display before recall	Returning to the display before recall
Measuring	Stopping the measurement	Measuring lap/split time	Returning to the display before recall

○When the stopwatch is reset or stopped:
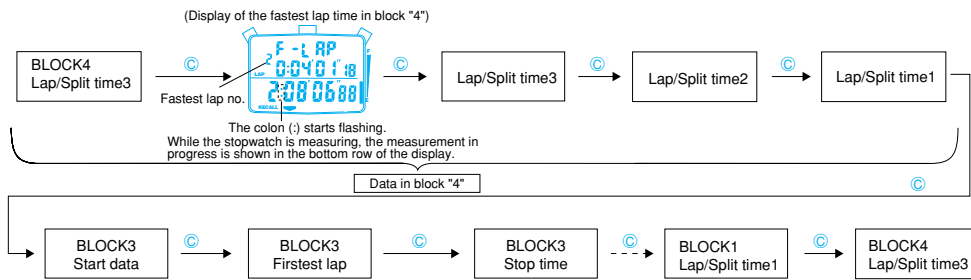The data is recalled starting from the first data in block "1".
<Ex.) When the measurement of data in block "4" has been completed with the digits reset to "00">

Button © Block no. Recall button Start date Fastest LAP no. Fastest LAP Lap/Split no. Split time Stop time

(RESET) (Start data) Start time (Fastest lap display) Lap/split data in block "1" (STOP)

The fastest lap time in this block is displayed together with the lap number.

Lap/Split8   Split time   2:1'14"12
            Lap time   16'42"33

Stop time   2:11'17"99

Data in block "1"

BLOCK2 Start data ---© → BLOCK3 Start data ---© → BLOCK3 Stop time ---© → Back to reset display in block"4"

○When the stopwatch is measuring
The data is recalled starting from the newest one.
<Ex.) When the measurement of the third lap/split time in block "4" has been completed>

(Display of the fastest lap time in block "4")

BLOCK4 Lap/Split time3 ---© → [F-LAP display] ---© → Lap/Split time3 ---© → Lap/Split time2 ---© → Lap/Split time1

Fastest lap no.

The colon (:) starts flashing.
While the stopwatch is measuring, the measurement in progress is shown in the bottom row of the display.

Data in block "4"

BLOCK3 Start data ---© → BLOCK3 Firstest lap ---© → BLOCK3 Stop time ---© → BLOCK1 Lap/Split time1 ---© → BLOCK4 Lap/Split time3

⑧How to clear the stored data (All clear of data)

・The memory clear function is useful in the following cases.
　a) When the stored data becomes unnecessary.
　b) When the residual memory is not sufficient for a new measurement.
・Once the following steps are taken to clear the data, all the stored data is erased from memory. The stored data cannot be erased one by one or block by block.

①While the stopwatch is measuring or when the digits are not reset after the end of the measurement, the stored data cannot be erased from memory. In that case, end the measurement and reset the stopwatch by following the procedure below.

②Press button© (recall button). In the memory recall display, the stored data can be erased irrespective of which data is displayed.

③Keep button ⑧ pressed for more than 1.5 seconds.

Button ⑧

(Memory clear procedure)
※When the memory clear procedure is performed, the mode mark will move toward the "RECALL" mark.

While button ⑧ is kept pressed, the display below is shown with warning beeps.
After 1.5 seconds, the stored data is erased from memory with a long beep.
All the data is erased from memory and the initial measurement display is shown.
※Unless button ⑧ is kept pressed for more than 1.5 seconds, the stored data will not be erased from memory.

(Digits reset to "00")

Button©
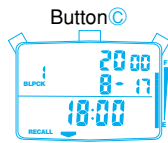
(Start data)

(Digits reset to "00")

⑨Notes on memory capacity

・The number of data in memory is shown graphically by the memory capacity indicator.
・Besides the measured lap times/split times, the start time data and block number are also retained in memory as two separate data. Therefore, a block of data includes at least three data. If more than one block is used to store the data, the memory become full even before the number of lap time/split time measurements in memory amounts to 300.

●Memory data guide during recall
While the data is recalled, a segment of the bar flashes to indicate the measurement order of the data being recalled.In the illustration below, 210 to 239 data is stored in memory and the data being recalled is between 120th and 149th data in memory.

It flashes.

●How to read the memory capacity indicator
The number of data stored in memory is displayed graphically with a 10-segment bar.
Each segment of the bar corresponds to 30 data. The segments are displayed one by one from the bottom to indicate the number of data in memory.
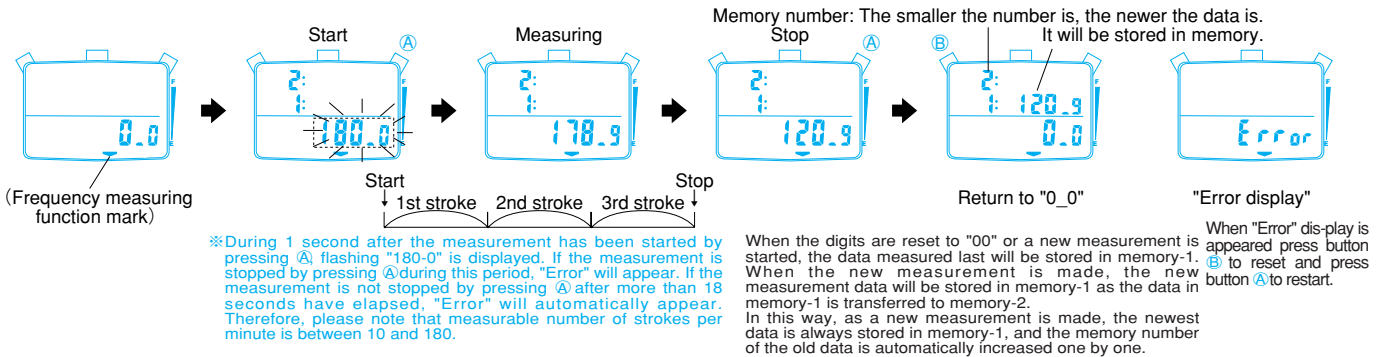
Number of data in memory

F 290～300
   270～290
   240～269
   210～239
   180～209
   150～179
   120～149
    90～119
    60～ 89
E 30～ 59
   30～ 59

When 10 or less data of memory capacity is available, the top segment starts flashing. When the memory is at its full capacity, it stops flashing and remains displayed.

30 to 59 data is stored in memory. When no segment is displayed, 0 to 29 data is stored in memory.

●When the memory reaches its full capacity:
・All the segments of the bar are displayed.
・The 301st data and those measured thereafter will be displayed but will not be stored in memory for later recall.

● Press button Ⓓ to show the frequency measuring display
● Stop the measurement after the third stroke was made. The number of strokes per minute will be displayed.
・Up to 9 data can be stored in memory. If 9 data is already stored in memory and a new measurement is made, the oldest one will be erased from memory.

Memory number: The smaller the number is, the newer the data is.
It will be stored in memory.

Start Ⓐ　　Measuring　　Stop Ⓐ　　Ⓑ

（Frequency measuring function mark）

Start　　Stop
↓ 1st stroke　2nd stroke　3rd stroke ↓

Return to "0_0"

"Error display"

※During 1 second after the measurement has been started by pressing Ⓐ flashing "180-0" is displayed. If the measurement is stopped by pressing Ⓐ during this period, "Error" will appear. If the measurement is not stopped by pressing Ⓐ after more than 18 seconds have elapsed, "Error" will automatically appear. Therefore, please note that measurable number of strokes per minute is between 10 and 180.

When the digits are reset to "00" or a new measurement is started, the data measured last will be stored in memory-1. When the new measurement is made, the new measurement data will be stored in memory-1 as the data in memory-1 is transferred to memory-2.
In this way, as a new measurement is made, the newest data is always stored in memory-1, and the memory number of the old data is automatically increased one by one.

When "Error" dis-play is appeared press button Ⓑ to reset and press button Ⓐ to restart.

● Recall of the stroke data
By pressing button Ⓒ in the same manner you recall data in the stopwatch mode, the stored stroke data can be recalled.
※The stored data cannot be recalled during the measurement.
Memory number: The smaller the number is, the newer the data is.

With each press of button Ⓒ, the stored data is recalled successively starting from the one in memory-1. When all the data is recalled, the display returns to the freguency meassurement display.
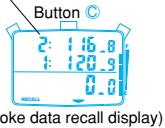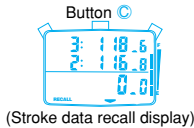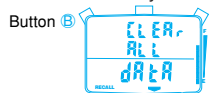
Button Ⓒ

(Stroke data recall display)

● To clear the stored data
By keeping button Ⓑ pressed for more than 1.5 seconds in the stroke data recall display, all the stored data will be erased from memory.
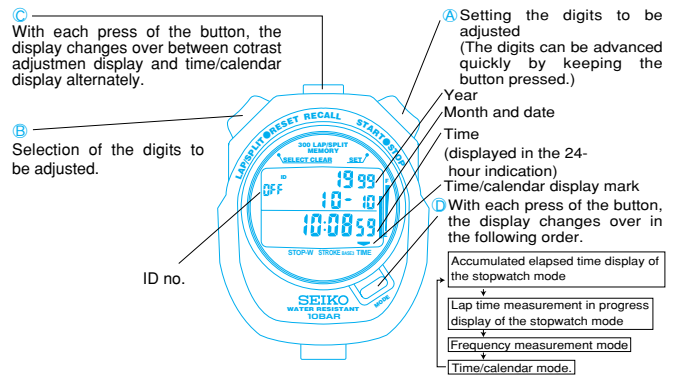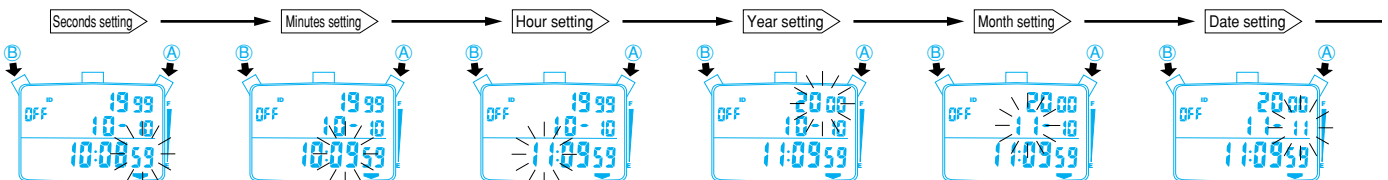Use button Ⓑ in the same manner as you clear the data in the stopwatch mode.

Button Ⓒ

(Stroke data recall display)

Button Ⓑ

（Memory clear procedure）

● Press botton Ⓓ to show the time/calendar display.

Ⓒ
With each press of the button, the display changes over between cotrast adjustmen display and time/calendar display alternately.

Ⓑ
Selection of the digits to be adjusted.

ID no.

Ⓐ Setting the digits to be adjusted
(The digits can be advanced quickly by keeping the button pressed.)
Year
Month and date
Time
(displayed in the 24-hour indication)
Time/calendar display mark
Ⓓ With each press of the button, the display changes over in the following order.

Accumulated elapsed time display of the stopwatch mode
↓
Lap time measurement in progress display of the stopwatch mode
↓
Frequency measurement mode
↓
Time/calendar mode.

②Time / calendar setting

Seconds setting ＞　　Minutes setting ＞　　Hour setting ＞　　Year setting ＞　　Month setting ＞　　Date setting ＞

Ⓑ　　Ⓐ　　Ⓑ　　Ⓐ　　Ⓑ　　Ⓐ　　Ⓑ　　Ⓐ　　Ⓑ　　Ⓐ　　Ⓑ　　Ⓐ

① Press Ⓑ and the second digits will flash.
② Press Ⓐ in accordance with a time signal to reset the second digits to "00".
※When the second digits count any number from "30" to "59" and Ⓐ is pressed, one minute is added and the second digits are reset to "00".
※The digits move quickly if Ⓐ is kept pressed. The hour, year, month and date digits can also move quickly if the button is kept pressed.

③ Press Ⓑ and the minute digits will flash.
④ With each press of Ⓐ, one minute is advanced.

⑤ Press Ⓑ and the hour digits will flash.
⑥ With each press of Ⓐ one hour is advanced.
※Hour digits are displayed in the 24-hour indication.

⑦ Press Ⓑ and the year digits will flash.
⑧ With each press of Ⓐ one year advanced.

⑨ Press Ⓑ and the month digits will flash.
⑩ With each press of Ⓐ, one month is advanced.

⑪ Press Ⓑ and the date digits will flash.
⑫ With each press of Ⓐ, one day is advanced.

● With each press of Ⓑ, the digits to be adjusted change over in the following order.

Time display | Seconds | Minutes | Hour | Year | Month | Date | ID

The digits are flashing.
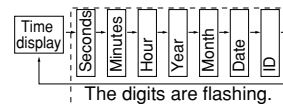
Any of the digits can be adjusted individually. Press Ⓑ to select the digits to be adjusted, and then press Ⓐ to set them.
※The year digits can be set from 1999 to 2048. The calendar adjusts automatically for add and even months including February of leap years.
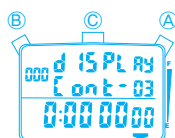
③Adjustment of the contrast of the display

・The contrast of the display can be adjusted.
①Show the time/calendar mode.

②Press button Ⓒ to show the contrast adjustment display.

ID setting ＞　　Finish of time/calendar setting

Ⓑ　　Ⓐ　　Ⓑ

⑬ When button Ⓑ is pressed, the identification number digits start flashing.
⑭ With each press of button Ⓐ, one digit is advanced. "OFF" means that no identification number is set.

⑮ After all the adjustment are completed, press Ⓑ.

Ⓑ　Ⓒ　Ⓐ

Contrast adjustment display
Button Ⓐ : Increasing the level (darker)
Button Ⓑ : Decreasing the level (lighter)

The contrast can be adjusted for 10 levels from level "1" to "10".
The display is the lightest at level "1" and the darkest at level "10".

③Press button Ⓒ or Ⓓ to return to the time/calendar mode.

After about 7 years of use digital display panel will decrease in contrast, becoming difficult to read. Have the panel replaced with a new one by the retailer from whom your watch was purchased.

②Remarks on the batteries

●NOTE ON THE BATTERY

(1)Battery Life
A new normal battery will last approximately three years.
  ※If the stopwatch is used for more than 3 hours a day, the battery life may be less than 3 years.
(2)Monitor battery
The battery in your watch may run down in less than three years after the date of purchase, as it is a monitor battery which is inserted at the factory to check the function and performance of the watch.
(3)Battery change
  ①For battery replacement, be sure to have the battery replaced with a new one at the retailer from whom the watch was purchased or at an authorized SEIKO DEALER, and request the battery for exclusive use with the SEIKO watches.
  ②If the old battery is left in the watch for a long time, a malfunction may be caused due to battery leakage, etc. Have it replaced with a new one as soon as possible.
  ③Battery replacement is charged even if it runs down within the guarantee period.

(4)BATTERY LIFE INDICATOR
When the battery nears its end, flashing battery mark "BATT" is displayed. In that case, have the battery replaced with a new one as soon as possible by the retailer from whom your stopwatch was purchased or an AUTHORIZED SEIKO DEALER. When the battery is replaced with a new one, all the stored data will be erased from memory.

⚠ WARNING	⚠ CAUTION
1.Do not remove the battery from the watch. 2.If it is necessary to take out the battery, keep it out of the reach of children. 3.If the child swallows it, consult a doctor immediately as it will adversely affect the health of the child.	1.Never short-circuit, tamper with or heat the battery, or never expose it to fire as it may explode, generate and intense heat or catch fire. 2.The battery in your watch is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery. 3.If the watch is left in a temperature below +5℃ or above +35℃ for a long time, the battery leakage may result, causing the battery life to be shortened.

③Care of your watch

⚠ CAUTION

Indication for water resistance	Condition of use / Degree of water resistance	Designed and manufactured to withstand the water usually experienced in a daily living such as splashes and rain.	Suitable for swimming, yachting and other aquatic sports as well as for works closely associated with water such as kitchen work, watrning and fishing.	Button operation when the watch is wet.	Suitable for scuba diving
●◎&WATER RESIST 又は ●WATER RESIST 10BAR	Water resistance (10 bar)	○	○	○	✕

※If your watch is water resistant (10 bar) and exposed to saltwater or pouring perspiration, rinse it fresh water and then wipe it thoroughly dry.
※As a small amount of moisture is included inside the watch, the inner surface of the glass may be temporarily blurred if the atmospheric temperature is lower than that inside the watch. This does not adversely affect the watch. However, if the blur persists for a long time, we suggest that you have your watch checked by the retainer from whom it was purchased.

④Remarks on replacement parts

●PLACES TO KEEP YOUR WATCH

· If the watch is left in a temperature below -10℃ or above +60℃ for a long time it may function improperly or stop operating.
  ※This watch is so adjusted that it will maintain stable time accuracy in normal temperatures.(5℃～35℃) It will lose or gain slightly, but it will regain high time accuracy when it returns to normal temperature.
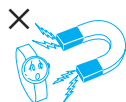
· Do not leave the watch in a place where it is subjected to strong magnetism or static elec-tricity.

· Do not leave the watch in a dusty place.

· Do not expose the watch to gases or chemicals. (Ex.: Organic solvents such as benzine 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.

⚠ CAUTION

If your watch is of the fob or pendant type, the strap or chain attached to the watch may damage your clothes, or injure the hand, neck, or other parts of your body.

●PERIODIC CHECK

· We suggest that you have your watch checked by the retailer from whom your stopwactch was purchased every 2 or 3 years or when the battery is replaced for oil condition, battery electrolyte leakage or damage due to water or sweat. After checking the watch, adjustment and repair may be required.

· 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 "SEIKO S-YARD CO, LTD.".
· Guarantee coverage is spelled out in the certificate of guarantee. Please read it carefully and keep the certificate for ready reference.

⑤Remarks on after-sales servicing

· 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.

⑥ SPECIFICATIONS

1. Frequency of crystal osillator ················ 32,768Hz (Hz＝Hertz···Cycles per second) oscillator
2. Loss/gain (monthly rate) ······················ Less than 15 seconds at normal temperature range (5℃～35℃)
3. Operational temperature range ············ －10℃～＋60℃
   Desirable temperature range of use ········ 0℃～＋50℃
4. Display system ····································· Stopwatch display Measures up to 10 hours. Hour, minutes, sec-onds, 1/100 seconds, tnree-row display of split time/lap time/total elapsed time or lap time in prooress. No. of blocks, no. of split times (0～999), 300 memory recall, BLOCK, SPLIT, LAP, STOP, RECALL, stopwatch marks, memory indicator, BATT.

   Frequency measurement display Hundreds and tens digits, units and first decimal place. Frequency measurement marks. Measures 10 to 180 stokes per minute from 1 to 18 seconds after the function is started.Memor recall. Memory marks.

   Time/calendar display Hour (24hour indication), minutes, seconds, year, month, date and calendar mark, ID no. (OFF/01～99), contrast adjustment display.

5. Display-medium ································· Nematic Liquid Crystal, FEM (Field Effect Mode)
6. Battery ·· Lithium battery SB-T74, 1 piece
7. Battery Life ·· A new normal battery will last approximately three years.
   ※If the stopwatch is used for more than 3 hours a day, the battery life may be less than 3 years.
8. Battery life indicator ··························· "BATT" mark start flashing when the battery life nears its end.
9. IC (Integrated Circuit) ························· C-MOS-LSI (Complementary Metal Oxide Silicon-Large Scale Integrated Circuit) ············· 1 piece
   ※The specifications are subject to change without prior notice, for product improvement.