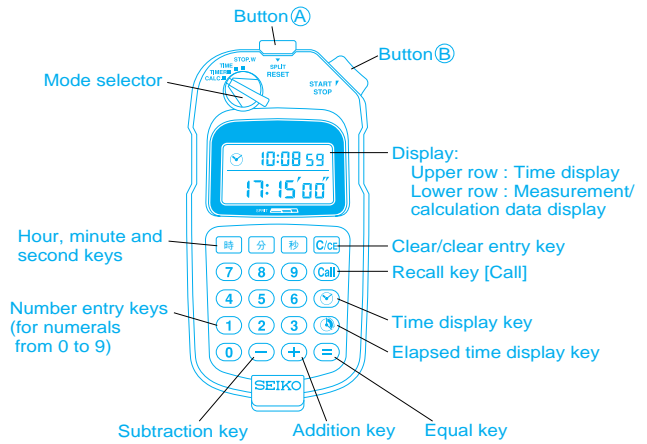# SEIKO

セイコーストップウオッチ
サウンドプロデューサー

取扱説明書
INSTRUCTION

S351

このたびはセイコーストップウオッチサウンドプロデューサー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、必要に応じてご覧ください。
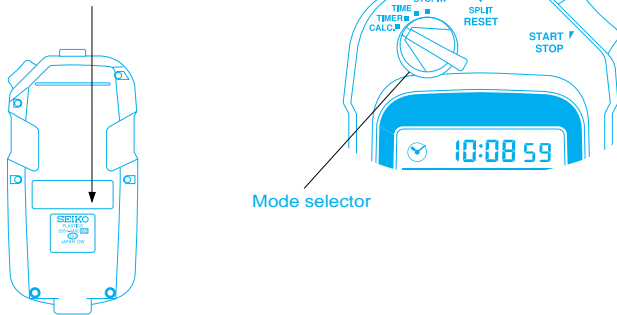
■FEATURES

- The SEIKO Cal. S351 features timer and stopwatch functions designed for broadcasting use.
  It is also equipped with a convenient function to calculate times entered in the sexagesimal form.

1. Addition and subtraction of times can be made simply by entering the hour, minute and second digits with the number entry and time (hour, minute and second) keys.
   can be used as the starting time in the timer and stopwatch functions.

2. The timer can be set for up to 99 hours, 59 minutes and 59 seconds in one second increments.
   Show the time elapsed from the end of the countdown with "—" sign.
   While the timer is counting down, the time elapsed from the start of the countdown can also be displayed.

3. The stopwatch can measure up to 100 hours in one second increments.
   After 100 hours, it will start counting again from "0" repeatedly.
   Split time measurement is also possible.

4. Changeover between 12- and 24-hour indications is possible.

5. The watch will not give out any beeping sound such as sound for button operation confirmation, as it will disturb the broadcast.
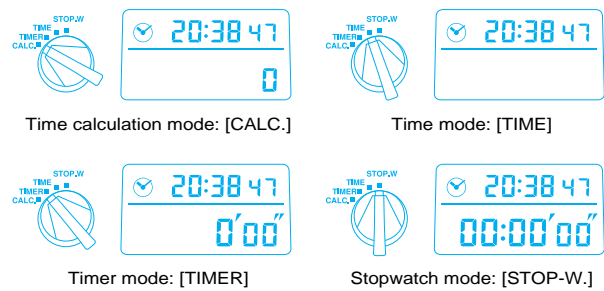
Button Ⓐ
Button Ⓑ
Mode selector

Display:
Upper row : Time display
Lower row : Measurement/calculation data display

Hour, minute and second keys
Clear/clear entry key
Recall key [Call]
Number entry keys (for numerals from 0 to 9)
Time display key
Elapsed time display key

Subtraction key **Addition key** **Equal key**

■CHANGEOVER OF MODES

- The watch is provided with 4 modes.
- The mode can be changed by turning the mode selector.

＊The rear center of the watch is dented so that a name sticker or the like can be attached.

Mode selector

Positions of the mode marks for the mode selector

Time calculation mode: [CALC.]   Time mode: [TIME]

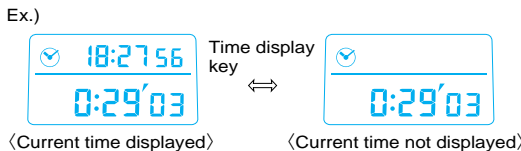Timer mode: [TIMER]   Stopwatch mode: [STOP-W.]

The timer and stopwatch continue counting even if the mode is changed to another.

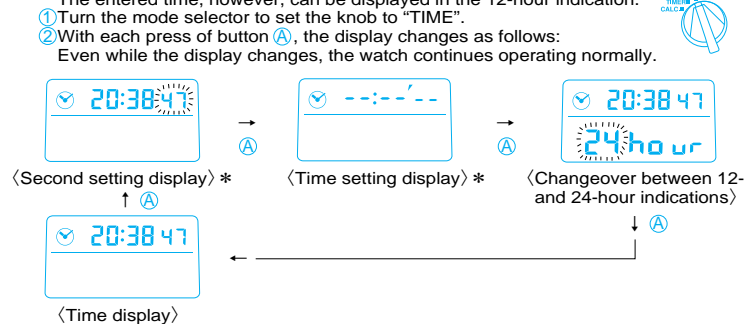# ■HOW TO SET THE TIME 「TIME」

| Current time display |

- In the time calculation, timer and stopwatch modes, the current time can be shown in the upper row of the display as required. With each press of the time display key, the current time appears and disappears alternately.

Ex.)

Time display key ⟺

〈Current time displayed〉   〈Current time not displayed〉

Notes:
- The current time can be displayed in any modes other than the time.
- Once the current time is displayed in one mode, it will also be displayed in the other modes.
- In the time mode, the current time is always displayed and will not disappear even if the time display key is pressed.

- Use the number entry and time keys to set the desired time.
- The time you wish to set should be entered in the 24-hour indication.
  The entered time, however, can be displayed in the 12-hour indication.
① Turn the mode selector to set the knob to "TIME".
② With each press of button Ⓐ, the display changes as follows:
  Even while the display changes, the watch continues operating normally.

〈Second setting display〉＊   〈Time setting display〉＊   〈Changeover between 12- and 24-hour indications〉
↑ Ⓐ

〈Time display〉

Note: If the watch is left untouched with the second digits flashing or with "--:-- --" or "24 hour" displayed, the display will automatically return to the TIME in 1 to 2 minutes.

③ In the time setting display, set the desired time using the number entry and time keys.
Ex.) To set 10:00 a.m.:
[1] [0] [時 (HOUR)] [0] [分 (MINUTE)] [0] [秒 (SECOND)]
Or
[1] [0] [0] [0] [0]

＊In the first method, entering the minute and second digits is not necessary if they are "0".

Notes:
- The time can be entered either by using the number entry and time keys or by using the number entry keys alone according to the time you wish to set. (For details, see "Entry of times" in "■ HOW TO USE THE TIME CALCULATION MODE".)
- If a wrong number has been entered, press the clear/clear entry key and enter the correct one.
- The hour should be entered in the 24-hour indication. (If it is 2:00 p.m., for example, enter "14" instead of "2".)
- Any digits left unentered will be regarded as "0". (See "■ HOW TO USE THE TIME CALCULATION MODE".)

④Press button Ⓑ in accordance with a time signal. The display will return to the TIME and the seconds will start immediately from the set time.

Notes:
- If the entered time exceeds "23:59 59", the display will return to the time setting display.
- If digits greater than "60" are entered for the minutes or seconds and button Ⓑ is pressed, one hour or minute will be added, respectively.
- If the watch is set to show the time in the 12-hour indication, the set time will be displayed in the 12-hour indication, though it should be entered in the 24-hour indication.
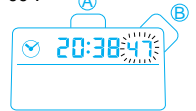- When the time is not newly set and button Ⓑ is pressed, the display will show the time set previously.

(Time set previously)

--:--'-- → 10:08'59
            Ⓑ
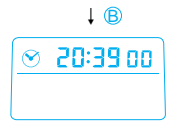
Second setting   (Second setting can be made easily if the time displayed is less than 30 seconds ahead of or behind the correct time.)
- Follow the procedure below to reset the second digits to "00".
①In the time mode, press button Ⓐ to show the second setting display.

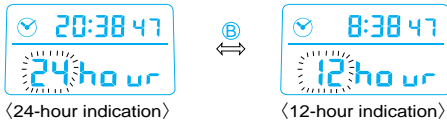②Press button Ⓑ in accordance with a time signal. The second digits are reset to "00".

Notes:
- When the second digits read any number from "30" to "59" and button Ⓑ is pressed, one minute is added and the seconds are reset to "00".
- If the time is more than 30 seconds ahead of or behind the correct time, show the time setting display to set the correct time.
- When button Ⓑ is pressed, the watch will return to the time mode.

⊘ 20:38 47

↓ Ⓑ

⊘ 20:39 00

Changeover between 12-and 24-hour indications
- As the 24-hour indication system is commonly used in the broadcasting stations, the watch is so designed that the time should be entered only in the 24-hour indication.
- It is also possible, however, to show the time in the 12-hour indication.

①In the time mode, press button Ⓐ three times to show the display for changeover between 12-and 24-hour indications.
②With each press of button Ⓑ, the display changes over between the 12- and 24-hour indications alternately.

⊘ 20:38 47
24-ho ur
〈24-hour indication〉

⇔ Ⓑ

⊘ 8:38 47
12-ho ur
〈12-hour indication〉

Notes:
- Once the desired time indication has been selected in the time mode, the current time will be displayed in the selected indication in all modes.
- When the 12-hour indication is selected, there is no mark displayed to distinguish between "AM" and "PM".

■HOW TO USE THE TIME CALCULATION MODE   「CALC.」

- The addition and subtraction of times can be made simply by entering the hour, minute and second digits.
- Up to ±99 hours 59 minutes and 59 seconds can be entered for calculation.
- The time can be entered either by using the number entry and time keys or by using the number entry keys only.
- The calculation result can be stored and recalled for use in the timer and stopwatch modes as the starting time.

Entry of times
To enter the time digits, use the number entry and time keys as described below.

●Follow either of the two methods below.
〈Entry with the number entry keys only〉
- Use the number entry keys from [0] to [9] to enter the desired time.
- This method is useful for entering time with a few digits.
〈Entry with the number entry and time keys〉
- Use the time keys ([時 (HOUR)], [分 (MINUTE)] and [秒 (SECOND)]) together with the number entry keys to enter the desired time.
- This method is useful for entering time having blank digits, for instance, "2 hours".

Notes:
- Before entering time, press the clear /clear entry key to reset the digits to "0".
- The two methods above cannot be used in combination to enter the time. See the following cases as examples.
〈Case 1〉 To enter "2 hours and 15 minutes": Once you have entered [2] and [時 (HOUR)] for the hour digits, you should not enter [1], [5], [0] and [0] but should enter [1], [5] and [分 (MINUTE)].
〈Case 2〉 To enter "2 hours and 15 minutes": Once you have entered [2], [1], [5], you should not enter [分 (MINUTE)] but should enter [0] and [0].
- To set the starting time in the timer and stopwatch modes, also use either of the two methods above.

⊘ 10:08 59
17:15'00"

[時] [分] [秒] [C/CE]
[7] [8] [9] [Call]
[4] [5] [6] [⊘]
[1] [2] [3] [🔔]
[0] [−] [+] [=]

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●Detailed explanation of entry methods
Turn the mode selector to set the knob to "CALC.".
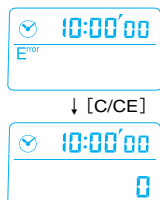①Entry with the number entry keys only
- Use the number entry keys to enter numbers in the order of hour, minute and second digits, entering [0] for the blank digits.

Ex. 1) 2 hours 15 minutes 10 seconds
[2] [1] [5] [1] [0]
Ex. 2) 15 minutes 2 seconds
[1] [5] [0] [2]
Ex. 3) 10 hours 8 seconds
[1] [0] [0] [0] [0] [8]

- Enter from the upper digits in order.
- Start entering from the digits having numbers. It is not necessary to enter [0] and [0] for the hour digits.
- Enter [0] for the blank digits.

Notes:
- If a wrong number has been entered, press the clear/clear entry key and enter the correct one.
- If a number greater than 60 is entered for the minute or second digits, one hour or minute is added when [+], [−] or [=] is entered. (In this case, " ˝ " mark will be displayed.)
- When a calculation result exceeds 99 hours 59 minutes and 59 seconds, the error mark "Error" is displayed, To clear the error mark, press the clear/clear entry key. The digits are reset to "0".

⊘ 10:00'00
Error

↓ [C/CE]

⊘ 10:00'00
0

② Entry with the number entry and time keys
・ After entering numbers, enter the time digit ([時(HOUR)],[分 (MINUTE)] or [秒 (SECOND)]).
  This method is useful for entering time having blank digits.
  Ex. 1) 2 hours 15 minutes and 10 seconds
    [2] [時 (HOUR)] [1] [5] [分 (MINUTE)] [1] [0] [秒 (SECOND)] →In this case, the entry can be made more easily
                                                              with the previous method using the number entry
              Entry of [秒 (SECOND)] can be eliminated.   keys only.
                                          (When [秒 (SECOND)] is entered, "″" will be displayed.)
  Ex. 2) 15 minutes and 2 seconds
    [1] [5] [分 (MINUTE)] [2] [秒 (SECOND)]→Start entering from the digits having numbers.
                          ↑
              Entry of [秒 (SECOND)] can be eliminated.
  Ex. 3) 10 hours and 8 seconds
    [1] [0] [時 (HOUR)] [0] [8] [秒 (SECOND)]→It is not necessary to enter [分 (MINUTE)].
                          ↑
  Notes: Entry of [秒 (SECOND)] can be eliminated.
  ・ If a wrong number has been entered, press the clear/clear entry key and enter the correct one.
  ・ If more than three numbers are entered in succession without pressing the time keys, the time keys will not work,
    and the entry of the remaining digits should be made according to the method using the number entry keys only.
  ・ If a number greater than 60 is entered for the minute or second digits, one hour or minute is added when [＋], [－]
    or [＝] is entered. (In this case, "″" mark will be displayed.)
  ・ When a calculation result exceeds 99 hours 59 minutes and 59 seconds, the error mark "Error" is displayed.
    To clear the error mark, press the clear/clear entry key. The digits are reset to "0".

Addition
① Standard calculation
  ・ Enter a time, [＋], another time and [＝].
    Ex.) (3 minutes and 25 seconds)＋(2 minutes and 1 second)＝:
    [3] [2] [5] [＋] [2] [0] [1] [＝]
② Successive addition
    Ex.) (1 minute and 15 seconds)＋(34 seconds)＋‥＋(15 minutes and 3 seconds)＝:
    [1] [1] [5] [＋] [3] [4] [+]., [+][1] [5] [3] [＝]

Subtraction
① Standard calculation
    Ex.) (4 minutes and 18 seconds)－(1 minute and 54 seconds) =:
    [4] [1] [8] [－] [1] [5] [4] [＝]
② Successive subtraction
    Ex.) (2 hours)－(1 hour and 36 minutes)－‥－(8 seconds)＝:
    [2] [時 (HOUR)] [－] [1] [時 (HOUR)] [3] [6] [分 (MINUTE)] [－] ‥ [－] [8] [＝]

Combined calculation of addition and subtraction
・ The addition and subtraction procedures described above can be carried out successively.
    Ex.) (1 hour and 4 minutes)＋(25 seconds)－(7 minutes and 37 seconds) ‥＋(9 minute) ＝
    [1] [時 (HOUR)] [4] [分 (MINUTE)] [＋] [2] [5] [－] [7] [3] [7] ‥ [＋] [9] [分 (MINUTE)] [－]

Correction of wrong entries
① When a wrong number has been entered but [＋] [－] or [＝] key is not pressed:
    Press the clear/clear entry key and enter the correct one.
    Ex.) (3 minutes and 25 seconds)＋(2 minutes and 1 second):
    [3] [2] [5] [＋] [3] [0] [1]
        To correct "3" to "2" :
    [C/CE] [2] [0] [1] [＝]
Note:
    If no arithmetic operation key is pressed after a wrong number has been entered,
    it can be corrected easily using the clear/clear entry key. If an arithmetic operation
    key is pressed after a wrong entry, however, the entry cannot be undone. In that
    case, press the clear/clear entry key to cancel the calculation, and then, reenter
    the times from the beginning. In the case of the example above, enter the times
    from "3 minutes and 25 seconds" again.
② If a wrong arithmetic operation key is pressed:
    Press the correct one immediately after the wrong key is pressed.
    Ex.) (3 minutes and 25 seconds)＋(2 minutes and 1 second):
   [3] [2] [5] [－]
        If you noticed the mistake at this point, press the proper key immediately
        after the wrong one.
    [＋] [2] [0] [＝]

How to use the calculation result in other modes   (Timer and stopwatch modes)
・ The calculation result obtained in the time calculation mode is automatically stored in memory and
  can be recalled and used as the strarting time in the timer and stopwatch functions.
① After a calculation is completed, change the mode to the timer or stopwatch before a new calcula-
  tion is made.
  (Turn the mode selector to change the mode.)
② If the timer or stopwatch is counting, press the buttons to stop and reset it.
  Then, press the recall key. The calculation result will be recalled and displayed.
③ Press button Ⓑ to start the timer or stopwatch.
  (For details, refer to "■ HOW TO USE THE TIMER" and "■ HOW TO USE THE STOPWATCH".)

Notes:
  ・ If the calculation by pressing arithmetic operation keys, the time entered in the time calculation
    mode cannot be stored and recalled in the timer or stopwatch modes. In that case, the calculation
    result obtained previously will be displayed by pressing the recall key. Check the displayed time
    before starting the timer or stopwatch.
  ・ When calculations are made successively, the calculation result stored in memory is renewed
    each time a calculation is made.
  ・ If the error mark "Error" is displayed after a calculation, the memory is cleared completely, and
    the previous calculation result will also be erased from memory. Therefore, "0" will be displayed
    when the recall key is pressed.

・ The calculation result stored in memory will be retained unless a new calculation is made or
  unless the error mark is displayed after a calculation.
・ The calculation result in memory cannot be displayed in the time calculation mode.
・ The calculation result in memory cannot be erased by pressing the clear/clear entry key.

Remarks on the calculation
・ If the calculation result is more than 99 hours 59 minutes and 59 seconds or less than-99
  hours 59 minutes and 59 seconds, the error mark "Error" will be displayed and no digits will
  be shown if the number entry key are pressed. In that case, press the clear/clear entry key to
  reset the digits to "0".
・ If the error mark is displayed, the calculation result retained in memory will be erased and "0"
  will be displayed by pressing the recall key in the timer or stopwatch mode.
・ If the mode selector is turned to change the mode from the time calculation mode to another
  during or after a calculation, entered time or calculation result shown on the display will be
  erased and "0" will be displayed when the mode is returned to the time calculation.

・The timer can be set for up to 99 hours, 59 minutes and 59 seconds in one second increments.
・Once the timer is set, the set time is stored in memory and can be used repeatedly unless it is canceled.
・The timer can be set either by entering a time with keys or by recalling the calculation result obtained in the time calculation mode.
・The remaining time is displayed in one second increments, and the time elapsed from the start of the countdown can also be displayed while the elapsed time display key is kept pressed.
・After the set time is up, the timer continues counting to show the time elapsed from the end of the countdown, with "—" sign attached before the digits, for example, "0", "—1", "—2", and so on.

Mode selector
Button Ⓐ
Button Ⓑ

10:08 59
17:15′00″

時	分	秒	C/CE
7	8	9	Call
4	5	6	⊙
1	2	3	🕐
0	—	+	=

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Timer setting

①Turn the mode selector to set the knob to "TIMER".
②If the timer is counting, press button Ⓑ to stop the timer and then press Ⓐ to reset it. (The time set previously will be displayed.)
③Press the clear/clear entry key, and then, use the number entry and time keys to enter the desired time. The timer can also be set by pressing the recall key to recall the calculation result obtained in the time calculation mode.
 Ex. 1) To set 3 minutes and 15 seconds:
  [C/CE] [3] [1] [5]　Or　[C/CE] [3] [分 (MINUTE)] [1] [5]
  (For details, refer to "■ HOW TO USE THE TIME CALCULATION MODE".)

Ex. 2) To recall the calculation result:
  [C/CE] [Call]
  The calculation result obtained in the time calculation mode will be displayed.
Notes:
・Even if the clear/clear entry key is not pressed, the time can be entered and set for the timer.
・A negative calculation result obtained in the time calculation mode can be displayed for the timer by pressing the recall key. The timer, however, will not count down the time.
・The arithmetic operation keys ([+], [—] and [=]) does not work in the timer mode.

Timer operation

To start or stop the timer, press button Ⓑ. Restart and stop of the timer can be repeated by pressing the button. The timer restarts counting down from the time shown on the display.
Notes:
 ・When the timer is stopped, "STOP" and "″" marks are displayed.
 ・While the timer is counting down, "″" mark is not displayed.
 ・When a negative time (a time having a minus sign) is set for the timer and button Ⓑ is pressed to start the timer, the error mark "Error" is displayed. In that case, press the clear/clear entry key to reset the digits to "0′ 00″ " and enter a proper time.
②After the set time is up, the timer continues counting down to show the time elapsed from the end of the countdown, with "—" sign attached before the digits, for example, "0", "—1", "—2", and so on.
③When the timer is stopped and button Ⓐ is pressed, the timer is reset and the time previously set is displayed. The set time can be used repeatedly unless it is canceled.

Notes:
・By pressing the clear/clear entry key after the timer is reset, the set time stored in memory is canceled and the digits are reset to "0′ 00″ ".
・The timer counts down up to 100 hours in total from the start of the countdown and stops. If the timer is set to count down 5 minutes and continues counting down after the set time is up, for example, it will automatically stop when "-99:55′ 00″ " is displayed.
 Press button Ⓐ or Ⓑ to reset the timer. The time previously set, "5′ 00″ " will be shown.
〈To check the time elapsed from the start of the countdown〉
 While the elapsed time display key is kept pressed, the time elapsed from the start of the countdown is displayed.
・When the elapsed time key is released, the remaining time is displayed again.
・While the elapsed time display key is kept pressed, the time shown on the display increases in one second increment.
・While the timer is stopped, the time elapsed from the start of the countdown is displayed while the elapsed time display key is kept pressed.

■HOW TO USE THE STOPWATCH 「STOP-W.」

・The stopwatch can measure up to 99 hours 59 minutes and 59 seconds in one second increments. After 100 hours, it will start counting again from "0" and continues counting.
・Split measurement is possible.
・The stopwatch can be set to count from a desired time up to 99 hours 59 minutes and 59 seconds in one second increment.
・The starting time can be set by entering a time with the number entry and time keys or by recalling the calculation result obtained in the time calculation mode.
①Turn the mode selector to set the knob to "STOP-W.".
②If the stopwatch is counting, press button Ⓑ to stop it and then press button Ⓐ to reset it.

20:38 47
0:00′00″

Standard measurement

・To start and stop the measurement, press button Ⓑ. Restart and stop of the stopwatch can be repeated by pressing the button. The accumulated elapsed time measurement is possible.

Start　Stop　Restart　Stop · · · ·　Stop　Reset
 Ⓑ　　Ⓑ　　Ⓑ　　　Ⓑ　　　 Ⓑ　　Ⓐ

Restart and stop of the stopwatch can be repeated by pressing button Ⓐ.

Split time measurement

・The split time measurement function is convenient in checking the elapsed time while the measurement is in progress.

　　　　　　　　Split
Start　Split　release · · · ·　Stop　Reset
 Ⓑ　　Ⓐ　　Ⓐ　　　　　Ⓑ　　Ⓐ

Measurement and release of the split time can be repeated by pressing button Ⓐ.

To start the measurement from the desired time

・By entering a desired time, the stopwatch can count from the set time instead of "0", for example, 3 minutes and 15 seconds. In that case, the stopwatch displays the elapsed time added by the set time.
・The starting time can also be set by recalling the calculation result obtained in the time calculation mode.
①If the stopwatch is counting, press button Ⓑ to stop it and then press button Ⓐ to reset it.
②Press the number entry and time keys to enter the desired time, or press the recall key to recall the calculation result obtained in the time calculation mode.
 Ex. 1) To set 3 minute and 15 seconds:
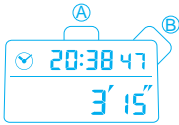 [C/CE] [3] [1] [5]
   or
  [C/CE] [3] [分 (MINUTE)] [1] [5]
 (For details, refer to "■ HOW TO USE THE TIME CALCULATION MODE".)

 Ex. 2) To recall the calculation result:
  [C/CE] [Call]
  The calculation result will be displayed.

③After the starting time setting is completed, press button Ⓑ to start the stopwatch. For the stopwatch operation, refer to the stopwatch operation explained above.

Notes:
· When the stopwatch is stopped, "STOP" and " ″ " marks are displayed.
· While the stopwatch is counting, " ″ " is not displayed.
· While the split time is measured, "SPLIT" and " ″ " are displayed. If button Ⓑ is pressed while the split time is measured, the measurement is stopped and the total elapsed time is displayed in place of the split time.
· A negative calculation result obtained in the time calculation mode can be set as the starting time with the recall key. If button Ⓑ is pressed to start the stopwatch, however, the error mark "Error" is displayed and the stopwatch will not start counting. Press the clear/clear entry key to reset the digits to "0:00′ 00″ " and then enter a proper starting time.
· The set staring time is not stored in memoty, and it will be canceled once the stopwatch is started.
· The arithmetic operation keys [＋] [－] and [＝] do not work in the stopwatch mode.

■NOTES ON THE BATTERIES

[Battery for the stopwatch]

BATTERY LIFE

A new normal battery will last approximately three years.

＊If the timer is used more than 10 times a day, the battery life may be less than the specified period.

＊The battery in your watch may run down in less than the specified period after the date of purchase, as it is a monitor battery inserted at the factory to check the functions and performance of the watch.

＊The battery in your watch will therefore be replaced with a new one only at cost even if it runs down within the guarantee period.

BATTERY LIFE INDICATOR

When flashing " ▬▶ " mark appears in the upper left of the display, replace the battery with a new one as soon as possible. Otherwise, the watch may stop operating in 2 to 3 days. We suggest that you have the battery replaced by a retailer from whom your watch was purchased or a SEIKO dealer.

＊Even though the flashing " ▬▶ " mark is displayed, time accuracy is not affected.

BATTERY CHANGE

When replacing the battery, be sure to take your watch to the retailer from whom your watch was purchased or an AUTHORIZED SEIKO DEALER , and specify the " SEIKO genuine SB battery ".

If an old battery is kept inside the watch for a long time, electrolyte leakage may occur and a malfunction may be caused. Be sure to replace the battery as soon as it runs down to prevent any possible malfunction.

＊When a battery is taken out of a watch, it must be kept at a place beyond the reach of an infant. In case it is swallowed by an infant, consult a doctor immediately.

■CARE OF YOUR STOPWATCH

WATER RESISTANT

Being equipped with the number entry and other keys as used in calculators, your watch is not water resistant according to the water resistance standard for watches. It can withstand, however, the accidental contact with splashes of water or rain. If the watch is wet, wipe it thoroughly dry with a soft dry cloth or the like.

ANTI-SHOCK

Light activities will not affect your watch, but be careful not to drop your watch or hit it against hard surfaces, as this way cause damage.

＊As a small amount of moisture is included inside the stopwatch , the inner surface of the glass may be temporarily blurred if the atmospheric temperature is lower than that inside the stopwatch . This does not adversely affect it . However , if the blur persists for a long time, we suggest that you have the stopwatch checked by the retailer from whom it was purchased.

ANTI-MAGNETIC

Magnetism will not affect the watch

TEMPERATURE

Your watch is designed to work with stable accuracy between normal temperature range of 5°C and 35°C .

Do not leave your watch in direct sunlight or very high temperatures for a long time.
• The display may become black, but this condition will be corrected when the watch returns to normal temperature .

Do not leave the watch in a very low temperature, as this may cause :
1) A slight time loss or gain.
2) The change of digits to become slow
(with accuracy remaining normal.)

The adove conditions will be corrected when the watch returns to normal temperature.
＊If the watch is left in temperatures over 60℃ or below-10℃ for a long time,the watch may stop operating, battery leakage may be occurred, or the battery life may be shortened.

■LIQUID CRYSTAL PANEL ■TO PRESERVE THE QUALITY OF YOUR STOPWATCH

CHEMICALS

As plastic materials are used for the watch case, be careful not to expose the watch to solvents (such as alcohol and gasoline), cosmetic spray, detergent, adhesives or paints, as the case, bracelet, etc. will be discolored, deteriorate or deform through the chemical action.

STATIC ELECTRICITY

The IC (Integrated Circuit) used in your watch will be affected by static electricity, which may disturb the display. Keep your watch away from close contact with suchobjects as TV screens which emit strong static electricity.

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 or an AUTHORIZED SEIKO DEALER. The panel will be replaced at cost.

CHECK

It is recommended that the stopwatch be checked every time the battery for the stopwatch is replaced with a new one or once every 2 to 3 years . We suggest that you have your watch checked by a SEIKO DEALER when the battery is replaced, for oil condition, battery electrolyte leakage or damage due to water or sweat. After checking the watch, adjustment or repair may be required.

＊Be sure to have the gasket and push-pin replaced with new ones by a SEIKO DEALER after the watch is adjusted or repaired.

＊Specify "SEIKO GENUINE PARTS" when replacing the parts.

■SPECIFICATIONS

1. Frequency of crystal oscillator·················32,768 Hz (Hz＝Cycles per second)
2. Loss/gain (monthly rate)··························Less than 0. 0006% or 15 seconds at normal tem-
                                                perature range (5°C～ 35°C)
3. Operational temperature range···············－10°C ～ ＋60°C (For the display···0°C～＋50°C)
4. Display medium···································Nematic Liquid Crystal, FEM (Field Effect Mode)
5. Battery··Miniature lithium battery SB-T751, 1 piece
6. Battery life indicator····························Flashing " ▱ " mark is shown on the display.
7. IC (Integrated Circuit)···························C-MOS-LSI, 1 piece
8. Display system
   Time calculation mode·······················Current time (hour, minutes and seconds),
                                                calculation data (hour, minutes and seconds) and
                                                "Error" mark
   Timer mode··································Current time (hour, minutes and seconds),
                                                remaining time (hour, minutes and seconds), "STOP"
                                                and "Error" marks
   Time mode···································Current time (hour, minutes and seconds) and "Error"
                                                mark
   Stopwatch mode·····························Current time (hour, minutes and seconds), measured
                                                time (hour, minutes and seconds), "SPLIT", "STOP"
                                                and "Error" marks

   ＊The specifications above are subject to change without prior notice, for product improvement.