

# Cal. 8T67

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You are now the proud owner of a SEIKO Analogue Quartz Watch Cal. 8T67. For best results, please read the instructions in this booklet carefully before using your SEIKO Analogue Quartz Watch. Please keep this manual handy for ready reference.

Sie sind jetzt Besitzer einer SEIKO Analog-Quarzuhr Kal. 8T67. Bitte lesen Sie diese Bedienungsanleitung vor Verwendung der Uhr sorgfältig durch und heben Sie sie gut auf.

Vous voici l'heureux propriétaire d'une montre quartz analogique SEIKO Cal. 8T67. Pour obtenir d'excellentes performances de cet article SEIKO, veuillez lire attentivement cette brochure que vous conserverez pour toute référence ultérieure.

Siete ora in possesso di un orologio SEIKO Analogico al Quarzo Cal. 8T67. Per ottenere i migliori possibili risultati dal Vostro orologio, leggere attentamente le istruzioni di questo manuale prima di utilizzare il Vostro orologio SEIKO analogico al quarzo. Conservare poi il manuale stesso per ogni qualsiasi eventuale futuro riferimento.

Enhorabuena por su adquisición de un reloj SEIKO analógico de cuarzo Cal. 8T67. Para óptimo resultado, lea detenidamente las instrucciones de este folleto antes de usar el reloj. Guarde este manual para consulta posterior.

Você pode sentir-se orgulhoso de possuir um Relógio SEIKO Quartz Análogo Cal. 8T67. Para obter os melhores resultados, leia atentamente as instruções contidas neste opúsculo antes de usar o seu Relógio SEIKO Quartz Análogo. Queira conservar este manual para referências futuras.

Теперь Вы являетесь обладателем часов Аналоговые Кварцевые часы Калибра 8Т67. Перед использованием их, для достижения лучших результатов, пожалуйста, внимательно ознакомьтесь с данной инструкцией и обязательно сохраните ее.

閣下現在已經擁有一隻，機件編號為 8T67 的精工牌指針式石英錶。在使用您的精工牌指針式石英錶以前，務請注意閱讀這本小冊子中的各項說明，並請將手冊妥加保管，以便隨時參考。

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☆ *For the care of your watch, see "TO PRESERVE THE QUALITY OF YOUR WATCH" in the attached Worldwide Guarantee and Instruction Booklet.*

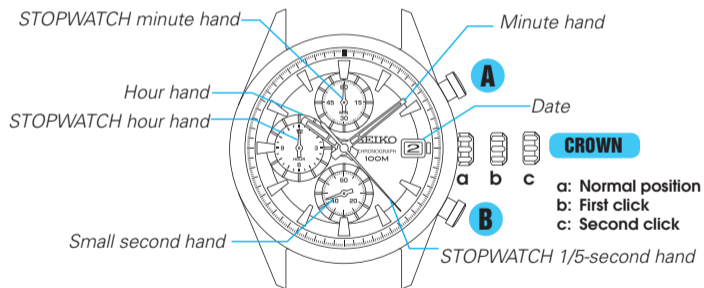
# SEIKO CAL. 8T67

## ■ TIME/CALENDAR

Hour, minute, and small second hands

## ■ STOPWATCH

Measures up to 12 hours in 1/5 second increments.



\* Some models may have a screw lock type crown. If your watch has a screw lock type crown, refer to "SCREW LOCK TYPE CROWN".

## SCREW LOCK TYPE CROWN

- ◆ Some models may have a screw-lock mechanism that can securely lock the crown by screw when they are not being operated.
- ◆ Locking the crown will help to prevent any operational errors and enhance the water resistant quality of the watch.
- ◆ It is necessary to unlock the screw lock type crown before operating it. Once you have finished operating the crown, make sure to relock it.

### ● How to use the screw lock type crown

Keep the crown securely locked unless you need to operate it.

[How to unlock the screw lock type crown]

Turn the crown counterclockwise.

The crown is unlocked and can be operated.



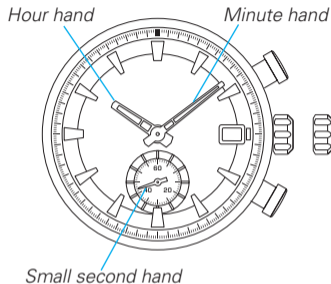
[How to lock the screw lock type crown]

Once you have finished operating the crown, turn it clockwise while gently pressing it in toward the watch body until it stops.



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

## SETTING THE TIME



### CROWN

Pull out to second click when the small second hand is at the 12 o'clock position.

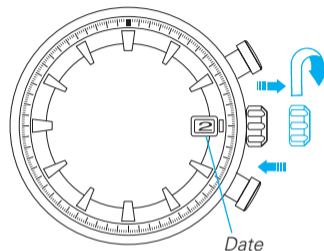
Turn to set the hour and minute hands.

Push back into normal position in accordance with a time signal.

1. When the stopwatch is or has been measuring, if the crown is pulled out to the second click, the stopwatch will continue the current measurement.
2. When setting the hour hand, be sure to check that AM/PM is correctly set. The watch is so designed that the date changes once in 24 hours.
3. When setting the minute hand, first advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.

## SETTING THE DATE

- Before setting the date, be sure to set the time.



### CROWN

Pull out to first click.

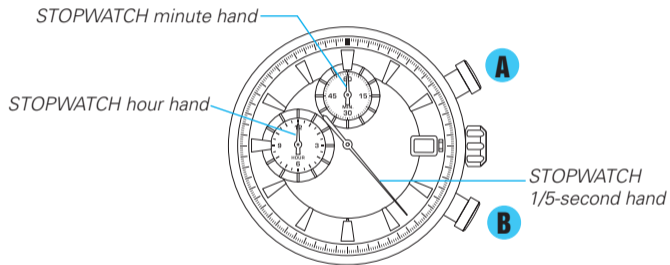
Turn clockwise until the desired date appears.

Push back in to normal position.

1. Date setting should always be carried out after the time is correctly set.
2. Manual date adjustment is required on the first day after a month that has less than 31 days: February, April, June, September and November.
3. Do not set the date during any time between 9:00 P.M. and 3:00 A.M. Date setting during this time period may cause failure of date change on the following day.

## STOPWATCH

- The stopwatch can measure up to 12 hours in 1/5-second increments.
- After measuring 12 hours, the stopwatch will automatically stop.



- ☆ Before using the stopwatch, be sure to check that the STOPWATCH hands are reset to the "0" position.

### <How to reset the stopwatch>

**While the STOPWATCH hands are moving**

1. Press Button A to stop the stopwatch.
2. Press Button B to reset the stopwatch.

**While the STOPWATCH hands are stopped**

1. Press button B to reset the stopwatch.

#### Standard measurement



#### Accumulated elapsed time measurement



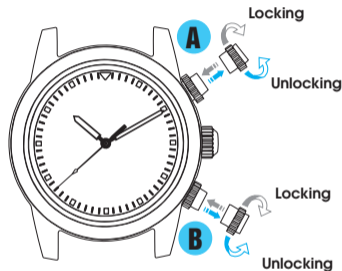
\* Restart and stop of the stopwatch can be repeated by pressing button A.

1. You may feel that the buttons of the watch are harder to press compared with those of conventional watches. This is due to the special construction needed for the stopwatch function, and, therefore, is not a malfunction.
2. While the stopwatch is measuring, pressing button B will reset the stopwatch. Be careful not to press button B by mistake.

## SECURITY LOCK BUTTON OPERATION

(for models with security lock button)

### SECURITY LOCK OF PUSH-BUTTON A & B



#### Unlocking the push-button

- Turn Security Lock Button counterclockwise until you no longer feel the threads turning.
- The button can be pushed in.

#### Locking the push-button

- Turn Security Lock Button clockwise until you no longer feel the threads turning.
- The button cannot be pushed in.

## TACHYMETER

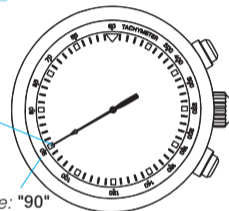
(for models with tachymeter scale on the dial)

### To measure the hourly average speed of a vehicle

- 1 Use the stopwatch to determine how many seconds it takes to go 1 km or 1 mile.
- 2 Tachymeter scale indicated by STOPWATCH second hand gives the average speed per hour.

Ex. 1

STOPWATCH  
second hand:  
40 seconds



Tachymeter scale: "90"

"90" (tachymeter scale figure) x 1 (km or mile)  
= 90 km/h or mph

- Tachymeter scale can be used only when the time required is less than 60 seconds.

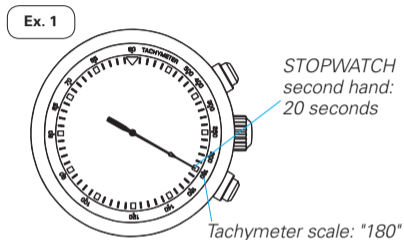
Ex. 2: If the measuring distance is extended to 2 km or miles or shortened to 0.5 km or miles and STOPWATCH second hand indicates "90" on tachymeter scale:

"90" (tachymeter scale figure) x 2 (km or mile) = 180 km/h or mph

"90" (tachymeter scale figure) x 0.5 (km or mile) = 45 km/h or mph

## To measure the hourly rate of operation

- 1 Use the stopwatch to measure the time required to complete 1 job.
- 2 Tachymeter scale indicated by STOPWATCH second hand gives the average number of jobs accomplished per hour.



"180" (tachymeter scale figure) x 1 job  
= 180 jobs/hour

Ex. 2: If 15 jobs are completed in 20 seconds:

"180" (tachymeter scale figure) x 15 jobs = 2700 jobs/hour

## TELEMETER

(for models with telemeter scale on the dial)

- The telemeter can provide a rough indication of the distance to the source of light and sound.
- The telemeter indicates the distance from your location to an object that emits both light and sound. For example, it can indicate the distance to the place where lightning struck by measuring the time elapsed after you see a flash of lightning until you hear the sound.
- A flash of lightning reaches you almost immediately while the sound travels to you at a speed of 0.33 km/second. The distance to the source of the light and sound can be calculated on the basis of this difference.
- The telemeter scale is graduated so that the sound travels at a speed of 1 km in 3 seconds.\*

\*Under the condition of temperature of 20° C (68° F)



**CAUTION**

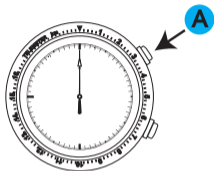
The telemeter provides only a rough indication of the distance to the place where lightning struck, and therefore, the indication cannot be used as the guideline to avoid the danger of lightning. It should also be noted that the speed of the sound differs depending on the temperature of the atmosphere where it travels.

## HOW TO USE THE TELEMETER

Before beginning, check that the stopwatch has been reset.

### START

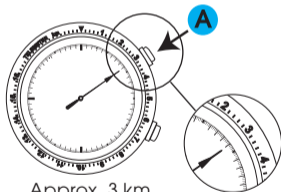
(Flash of light)



- 1 Press button A to start the stopwatch as soon as you see the light.

### STOP

(Crash of thunder)



- 2 When you hear the sound, press button A to stop the stopwatch.
- 3 Read the telemeter scale that the stopwatch second hand points to.

*\*Please note that the stopwatch second hand moves in 1/5 second increments and does not always point exactly to the graduations of the telemeter scale. The telemeter scale can be used only when the measured time is less than 60 seconds.*

## BATTERY CHANGE

**3  
Years**

The miniature battery which powers your watch should last approximately **3 years**. However, because the battery is inserted at the factory to check the function and performance of the watch, its actual life once in your possession may be less than the specified period. When the battery expires, be sure to replace it as soon as possible to prevent any malfunction. For battery replacement, we recommend that you contact an AUTHORIZED SEIKO DEALER and request **SEIKO SR936SW** battery.

*\* If the stopwatch is used for more than 1 hour a day, the battery life may be less than the specified period.*

*\* After the battery is replaced with a new one, set the time/calendar.*

### ● Battery life indicator

When the battery nears its end, the small second hand moves at two-second intervals instead of normal one-second intervals. In that case, have the battery replaced with a new one as soon as possible.

*\* The watch remains accurate while the small second hand is moving at two-second intervals.*




**WARNING**

- **Do not remove the battery from the watch.**
- **If it is necessary to take out the battery, keep it out of the reach of children. If a child swallows it, consult a doctor immediately.**


**CAUTION**

- **Never short-circuit, heat or otherwise tamper with the battery, and never expose it to fire. The battery may burst, become very hot or catch fire.**
- **The battery is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery.**

## SPECIFICATIONS

- |   |                                       |  |
|---|---------------------------------------|--|
| 1 | Frequency of crystal oscillator ..... | 32,768 Hz (Hz = Hertz ... Cycles per second)   |
| 2 | Loss/gain (monthly rate) .....        | ±15 seconds at normal temperature range (between 5° C and 35° C) (between 41° F and 95° F) |
| 3 | Operational temperature range .....   | Between -10° C and +60° C (between 14° F and 140° F)                                       |
| 4 | Driving system.....                   | Step motor, 2 pieces   |
| 5 | Display system                        |  |
|   | Time/calendar.....                    | Hour, minute and small second hands<br>Date is displayed in numerals                       |
|   | Stopwatch .....                       | Stopwatch hour, minute and 1/5-second hands<br>Measures up to 12 hours                     |
| 6 | Battery .....                         | SEIKO SR936SW, 1 piece   |
| 7 | IC (Integrated Circuit) .....         | C-MOS-IC, 1 piece  |

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