You are now the proud owner of a SEIKO Analogue Quartz Watch Cal. Y182. 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.

Siete ora in possesso di un orologio SEIKO Analogico al Quarzo Cal. Y182. 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.
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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 ANALOGUE QUARTZ
Cal. Y182

FEATURES

TIME/CALENDAR
- Hour & minute hands with small second hand
- Date displayed in numerals

STOPWATCH
- Measures up to 30 minutes in 1/5 second increments.
- Can measure repeatedly up to 6 hours.

ALARM
- Can be set on a 12-hour basis with small alarm hands.

TACHYMETER
- For models with tachymeter scale
DISPLAY AND CROWNS/BUTTONS

There are three buttons and two crowns.

STOPWATCH minute hand

STOPWATCH 1/5 second hand

Minute hand (MAIN TIME)

A

Hour hand (MAIN TIME)

Second hand (MAIN TIME)

ALARM hour hand

ALARM minute hand

CROWN 1

CROWN 2

a: Normal position  b: First click  c: Second click
DATE SETTING

1 Pull out to **first click**.
2 Turn clockwise until the date for the previous day appears.
3 Pull out to **second click** and turn until the desired date appears.
4 Push back in to **normal position**.

NOTES

1 Do not set the date between 9:00 p.m. and 3:00 a.m. Otherwise, the date may not change properly.
   * If it is necessary to set the date during that time period, first change the time to any time outside this period, set the date and then reset the correct time.
2 It is necessary to adjust the date at the end of February and 30-day months.
TIME SETTING

1. Pull out to second click when Second hand is at the 12 o’clock position.
2. Turn to set Hour and Minute hands.
3. Push back in to normal position in accordance with a time signal.

NOTES

1. When setting Hour hand, check that AM/PM is correctly set.
   * The watch is so designed that the date changes once in 24 hours. Turn the hands past the 12 o’clock marker to determine whether the watch is set for the A.M. or P.M. period. If the date changes, the time is set for the A.M. period. If the date does not change, the time is set for the P.M. period.

2. When setting Minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.
ALARM

- Alarm time is set on a 12-hour basis.
- ALARM hands move independently of MAIN TIME hands.

ALARM SETTING

1 Adjustment of ALARM hands

- After the main time is adjusted, follow the procedure below, and then set the alarm.

* The following procedure is necessary only after the main time is adjusted.

1 Adjustment of ALARM hands

1. Pull out to second click.
2. Turn clockwise or counterclockwise to set ALARM hands to the current time (MAIN TIME).
3. Push back in to normal position.
2 Alarm time setting

* Once ALARM hands are adjusted to the main time, alarm time setting can be made only by following the procedure below.

1 When setting ALARM minute hand to the current time in 2, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.

2 Alarm hands move quickly if Button C is kept pressed.

3 If CROWN 2 is pulled out to first click within 1 minute after being pushed back in to normal position in 3, the alarm sounds.
ALARM ENGAGEMENT/DISENGAGEMENT

• Alarm engagement

CROWN 2 Pull out to first click.

[Alarm engaged]

Designated alarm time

Current time

• Alarm disengagement

CROWN 2 Push back in to normal position.

[Alarm disengaged]

NOTES

1. Alarm rings at the designated time for 20 seconds.
   * To stop it manually, press Button A, B or C, or push CROWN 2 back in to normal position.

2. If CROWN 2 is pulled out to second click, the designated alarm time is canceled with a warning beep.
   * In that case, set ALARM hands to MAIN TIME again, push CROWN 2 back in to normal position, and then, pull it out to first click and set the desired alarm time again. However, if CROWN 2 is pushed back in to normal position before the warning beep stops, the designated alarm time will not be canceled.
STOPWATCH

- Stopwatch measures up to 30 minutes in 1/5 second increments.
- After 30 minutes, it will start counting again from “0” repeatedly up to 6 hours.

STOPWATCH OPERATION

**Before using the stopwatch:**
- Check that CROWNS 1 and 2 are set at normal position.
- Press **Button B** to reset STOPWATCH hands to “0” position.
  * If the hands do not return to “0” position, follow the procedure in “ADJUSTING THE HAND POSITION” (page 15).
1 Standard measurement

* Measurement and release of split time can be repeated by pressing Button B.

2 Accumulated elapsed time measurement

* Restart and stop of stopwatch can be repeated by pressing Button A.

3 Split time measurement

* Measurement and release of split time can be repeated by pressing Button B.
**4 Measurement of two competitors**

1. If **CROWN 1** is pulled out to second click, STOPWATCH hands are reset to “0” position.
2. If **CROWN 2** is pulled out to first or second click, STOPWATCH hands are reset to “0” position.
3. When stopwatch has been reset and **Button A** is pressed before the hands reach “0” position, stopwatch still starts counting when **Button A** is pressed.
TACHYMETTER
(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.

Ex. 1: STOPWATCH second hand: 20 seconds
Tachymeter scale: “180”

“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
ADJUSTING THE HAND POSITION

If STOPWATCH hands will not return to the 12 o’clock position when the stopwatch is reset or when the battery is replaced with a new one, follow the procedure below.

Pull out to *second click*.

Press repeatedly to reset STOPWATCH minute hand to the 12 o’clock position.

Press repeatedly to reset STOPWATCH second hand to the 12 o’clock position.

Push back in to *normal position*.

**NOTES**

1. Hands move quickly if the respective buttons are kept pressed.
2. After adjusting the hand position, set the main time.
RESETTING THE BUILT-IN IC

- In case any of the hands should move improperly, follow the procedure below to adjust the hand movement.

1. Pull out to **second click**.
2. Press simultaneously.
3. Push back in to **normal position**.

**NOTE**
Before using the watch again, be sure to adjust the position of STOPWATCH hands and set the main time and alarm.
BATTERY LIFE INDICATOR

- When the battery nears its end, the small second hand moves at two-second intervals instead of normal one-second intervals to indicate that the battery needs to be replaced with a new one.

  * If the alarm is used while the second hand is moving at two-second intervals, the watch may stop operating. Therefore, if you see the second hand moving at two-second intervals, replace the battery with a new one as soon as possible.

BATTERY CHANGE

The miniature battery which powers your watch should last approximately 2 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 SR927W battery.

**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

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<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>1</td>
<td>Frequency of crystal oscillator .......... 32,768 Hz (Hz = Hertz ... Cycles per second)</td>
</tr>
<tr>
<td>2</td>
<td>Loss/gain (monthly rate) .................. Less than 20 seconds at normal temperature range (5°C ~ 35°C) (41°F ~ 95°F)</td>
</tr>
<tr>
<td>3</td>
<td>Accuracy of alarm ......................... ±1 minute</td>
</tr>
<tr>
<td>4</td>
<td>Operational temperature range .......... –5°C ~ +50°C (23°F ~ 122°F)</td>
</tr>
<tr>
<td>5</td>
<td>Driving system ............................. Step motor, 4 pieces</td>
</tr>
<tr>
<td>6</td>
<td>Display system ............................. Three hands (Hour, minute and small second hands)</td>
</tr>
<tr>
<td></td>
<td>Time ........................................ Three hands (Hour, minute and small second hands)</td>
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<tr>
<td></td>
<td>Date ........................................ Displayed in numerals.</td>
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<tr>
<td></td>
<td>Stopwatch ................................. Minute and 1/5 second hands</td>
</tr>
<tr>
<td></td>
<td>The stopwatch can measure up to 30 minutes in 1/5 seconds.</td>
</tr>
<tr>
<td></td>
<td>Alarm ....................................... Small hour and minute hands</td>
</tr>
<tr>
<td></td>
<td>The alarm is set on a 12-hour basis.</td>
</tr>
<tr>
<td>7</td>
<td>Battery ..................................... SEIKO SR927W, 1 piece</td>
</tr>
<tr>
<td>8</td>
<td>IC (Integrated Circuit) ..................... C-MOS-LSI</td>
</tr>
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* The specifications are subject to change without prior notice for product improvement.