

Cal. 5M45

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You are now the proud owner of a SEIKO KINETIC® Cal. 5M45. For best results, please read the instructions in this booklet carefully before using your SEIKO KINETIC®. Please keep this manual handy for ready reference.

Sie sind jetzt stolzer Besitzer einer SEIKO KINETIC® Cal. 5M45. Bitte lesen Sie diese Bedienungsanleitung vor der Verwendung Ihrer SEIKO KINETIC® sorgfältig durch, um die optimale Nutzung dieser Uhr zu gewährleisten. Heben Sie diese Bedienungsanleitung gut auf, um jederzeit wieder nachlesen zu können.

Vous voici l'heureux propriétaire d'une montre SEIKO KINETIC® Cal. 5M45. Pour en obtenir de bonnes performances, veuillez, avant d'utiliser votre montre SEIKO KINETIC®, lire attentivement les explications de ce mode d'emploi que vous conserverez pour toute référence ultérieure.

Grazie per aver acquistato questo orologio SEIKO KINETIC® Cal. 5M45. Per ottenerne i migliori risultati leggere attentamente le istruzioni di questo libretto prima di passare all'uso dell'orologio stesso. Tenere poi il manuale a portata di mano, per ogni eventuale futura, ulteriore consultazione.

Usted es ahora un honrado poseedor del SEIKO KINETIC® Cal. 5M45. Para obtener de él los mejores resultados, lea las instrucciones del presente folleto con cuidado antes del uso de su reloj SEIKO KINETIC®. Guarde este manual para fácil referencia.

Você pode sentir-se orgulhoso de possuir um SEIKO KINETIC® Cal. 5M45. Para obter de ele os melhores resultados, leia atentamente as instruções contidas neste opúsculo antes de usar o seu SEIKO KINETIC®. Conserve este manual para referências futuras.

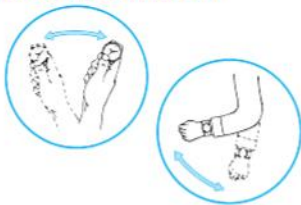
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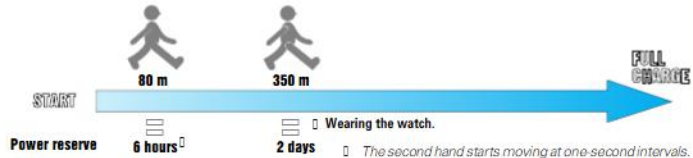
□ For the care of your watch, see "TO PRESERVE THE QUALITY OF YOUR WATCH" in the attached Worldwide Guarantee and Instruction Booklet.

HOW TO CHARGE AND START THE WATCH

- Swing the watch from side to side.
* Swing rhythmically at a rate of twice a second.
- Charge the KINETIC electricity storage unit sufficiently.
- Set the time/calendar and put on the watch.



POWER RESERVE ACCUMULATED WHILE YOU ARE WALKING



The illustration provides only a general guideline of the relationship between the power reserve and the distance you walk. Actual amount of power reserve differs from person to person.

POWER RESERVE INDICATOR

- Press the button at the 2 o'clock position.

	5 seconds	10 seconds	20 seconds	30 seconds
QUICK MOVEMENT OF SECOND HAND				
POWER RESERVE	Between 6 and 48 hours	Between 2 and 4 days	Between 4 and 7 days	More than 7 days

- The second hand will resume normal movement after the indicated 5, 10, 20 or 30 seconds have elapsed.

FULL CHARGE OF THE KINETIC ELECTRICITY STORAGE UNIT

- When the KINETIC electricity storage unit is fully charged, the watch will keep operating for a maximum of **12 to 14 days** without recharging the storage unit.

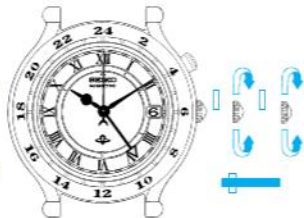
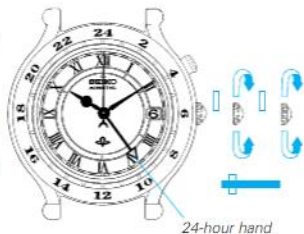
ENERGY DEPLETION FOREWARNING FUNCTION

- When the second hand starts moving at two-second intervals instead of the normal one-second intervals, the watch will run down in approximately **6 hours**. In this case, swing the watch from side to side to charge the KINETIC electricity storage unit sufficiently.

OPERATION FOR CAL. 5M45

▢ TIME/CALENDAR SETTING

- 1 Pull out Crown to the second click and set 24-hour and Minute hands to the desired time.
- 2 Push back Crown completely.
- 3 Pull out Crown to the first click and set the desired date.
* Turn Crown clockwise to advance Date and counterclockwise to move it back. Date changes one day by turning Hour hand two full circles.
- 4 Set Hour hand to the desired time.
- 5 Push back Crown.



▢ DUAL TIME SETTING

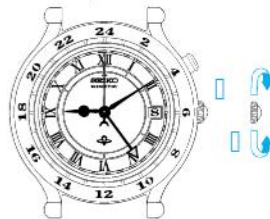
- 1 Pull out Crown to the second click and set 24-hour and Minute hands to the time of a desired area.
- 2 Push back Crown completely.
- 3 Pull out Crown to the first click and set the current date of your area.

- 4 Set Hour hand to the current time of your area.
- 5 Push back Crown.

▢ TIME DIFFERENCE ADJUSTMENT DURING TRIP

The Hour hand can be set independently of other hands. Therefore, when you are traveling around different time zones, the time and date of the place you visit can easily be shown on the watch only by turning the Hour hand.

- 1 Pull out to the first click and set Hour hand and date to the time and date of the place you visit.
- 2 Push back Crown.
* 24-hour hand indicates the time back home.



▢ HOW TO CALCULATE THE TIME DIFFERENCE BETWEEN TWO CITIES

▢ Ex.) When you move from Rome to New York:

- [A] Rome Time : +1 hour from GMT
[B] New York Time : -5 hours from GMT

So the time difference between Rome and New York is:

$$[B] - [A] = (-5) - (+1) = -6 \text{ (hours)}$$

You should move the Hour hand back 6 hours.

TIME DIFFERENCES

GMT = Greenwich Mean Time

(As of October, 1995)

GMT ± (hours)	Major cities in respective time zones	GMT ± (hours)	Major cities in respective time zones
0	London*, Casablanca, Dakar	+12	Wellington*, Fiji Islands
+1	Paris*, Rome*, Amsterdam*, Frankfurt*, Berlin*, Tripoli*	-11	Midway Islands
+2	Cairo*, Athens*, Istanbul*, Kiev*, Cape Town	-10	Honolulu
+3	Moscow*, Mecca, Nairobi	-9	Anchorage*
+4	Dubai	-8	Los Angeles*, San Francisco*, Vancouver*, Dawson (Canada)*
+5	Karachi, Tashkent	-7	Denver*, Edmonton (Canada)*
+6	Dacca	-6	Chicago*, Mexico City
+7	Bangkok, Phnom Penh, Jakarta	-5	New York*, Washington, D.C.*, Montreal*
+8	Hong Kong, Manila, Beijing, Singapore	-4	Caracas, Santiago (Chile)*
+9	Tokyo, Seoul, Pyongyang	-3	Rio de Janeiro*, Buenos Aires*
+10	Sydney*, Guam, Khabarovsk*	-2	
+11	Nouméa (New Caledonia), Solomon Islands	-1	Azores*, Cape Verde Islands

□ The cities marked with "*" (asterisk) use daylight saving time (summer time).

NOTES FOR USING THE WATCH

HOW TO CHARGE AND START THE WATCH

- To charge the KINETIC electricity storage unit efficiently, swing the watch from side to side, making an arc of about 20 cm.
- No additional benefit is obtained by swinging the watch more quickly or with greater vigor.
- When the watch is swung, the oscillating weight in the generating system rotates to drive the mechanism. As it rotates, it gives out a sound, which is not a malfunction.
- The watch is equipped with a system to prevent overcharge. Even if it is further swung after being fully charged, no malfunction will result.
- Provided with an instant-start function, the watch may start operating after it is swung several times. For details, see "INSTANT-START FUNCTION" on page 11.
- Wear the watch daily for at least 10 hours.
- Even if the watch is worn on your arm, it will not be charged while your arm is not in motion.

POWER RESERVE INDICATOR

- The power reserve indicator provides only a general guideline of the duration within which the watch keeps operating without needing to be charged.
- To allow easy reading of the second hand, press the button when the second hand is at the 12 o'clock position.
- You can immediately press the button again to recheck the power reserve one more time. To do so a third time, however, wait until the second hand resumes normal movement before pressing the button again.
- When the second hand moves at two-second intervals, the power reserve is very low and the indicator does not function.
- Immediately after the watch is swung to charge the KINETIC electricity storage unit, the second hand may not properly indicate the power reserve. Please check after putting the watch on your wrist.

▣ **Remarks on the reserve power of the KINETIC electricity storage unit:**

Even while the second hand is stopped by pulling out the crown, current continues being consumed by the built-in IC. Therefore, pulling out the crown will not save the energy stored in the KINETIC electricity storage unit.

▣ **Precaution on see-through case-back models:**

If your watch has a glass case back, do not expose the case back to strong light such as direct sunlight or an incandescent light at close range, as this may temporarily increase the power consumption of the watch circuit, thus reducing the power reserve in the KINETIC electricity storage unit. This condition, however, will be corrected when the case back is turned away from the light.

ENERGY DEPLETION FOREWARNING FUNCTION

- ▣ The watch remains accurate even while the second hand is moving at two-second intervals.

OPERATION FOR CAL. 5M45

- ▣ To set the exact time, pull out the crown to the second click when the second hand is at the 12 o'clock position and push it back in to the normal position in accordance with a time signal.
- ▣ When setting the minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact minute.
- ▣ When setting the hour hand, check that AM/PM is correctly set. The watch is so designed that the calendar 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 calendar changes, the time is set for the A.M. period. If the calendar does not change, the time is set for the P.M. period.
- ▣ It is necessary to adjust the date at the end of February and 30-day months.
In this case, pull out the crown to the first click and turn the hour hand 2 full circles for each day by turning the crown. Then set the current time again.

TIME DIFFERENCES

- ▣ The time differences and the use of daylight saving time (summer time) may change in some areas or countries when they are so decided by the countries concerned.

INSTANT-START FUNCTION

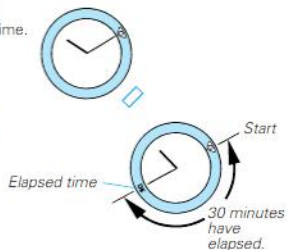
- ▣ When a long time has passed since the watch stopped, you can get it started quickly with only a few swings.
- ▣ This function is available as long as:
- 1 the watch previously had more than **4 days** of power reserve before it stopped.
 - 2 it has been left untouched for 1 to 4 weeks.
- ▣ After the watch starts operating, put it on your wrist so that it will be charged further until the second hand moves at one-second intervals.
- ▣ If the second hand continues moving at two-second intervals after the watch is put on your wrist, swing it from side to side until the second hand starts moving at one-second intervals, and then, put it on your wrist.

HOW TO OPERATE THE SCREW LOCK TYPE CROWN (for models with screw lock type crown)

- ▣ **To unscrew the crown:**
Turn the crown counterclockwise. (Then, pull it out for time/calendar setting)
- ▣ **To screw in the crown:**
With the crown at the normal position, turn it clockwise while pressing it.

ROTATING BEZEL (for models with rotating bezel)

- The rotating bezel can show up to 60 minutes of elapsed time.
- **How to use:**
 - 1 Turn the rotating bezel to align its "0" mark with the minute hand.
 - 2 Read the number on the rotating bezel that the minute hand points to.
- For some models, the rotating bezel rotates only counterclockwise.

**SPECIFICATIONS**

- | | | |
|---|--|--|
| 1 | Frequency of crystal oscillator | 32,768 Hz (Hz = Hertz ... Cycles per second) |
| 2 | Loss/gain (Monthly rate) | Less than 15 seconds at normal temperature range (5°C ~ 35°C) (41°F ~ 95°F) |
| 3 | Operational temperature range | -10°C ~ +60°C (14°F ~ 140°F) |
| 4 | Driving system | Step motor |
| 5 | Time and calendar indication | |
| | Time indication | 4 hands (hour, minute, second and 24-hour hands) |
| | Calendar indication | Date is displayed. |
| 6 | Additional function | Power reserve indicator, energy depletion forewarning function, instant-start function and overcharge prevention function. |
| 7 | Duration of charge | |
| | Full charge | A maximum of 12 to 14 days |
| 8 | KINETIC electricity storage unit | Button type, 1 piece |
| 9 | IC (Integrated Circuit) | C-MOS-IC, 1 piece |
- * The specifications are subject to change without prior notice for product improvement.