PULSAR

CAL. VD50

1/10 SECOND RETROGRADE CHRONOGRAPH

TIME/CALENDAR

- Hour, minute and second hands
- Date displayed in numerals

STOPWATCH

- Measures up to 60 minutes in 1/10 second increments.
SCREW DOWN CROWN
[for models with screw down crown]

Unlocking the crown
1. Turn Crown counterclockwise until you no longer feel the threads turning.
2. Crown can be pulled out.

Locking the crown
1. Push Crown back in to normal position.
2. Turn Crown clockwise while pressing it lightly until tight.

DISPLAY AND CROWN/BUTTONS

- Hour hand
- STOPWATCH minute hand
- Second hand
- STOPWATCH 1/10-second hand
- Minute hand
- a: Normal position
- b: First click
- c: Second click
- Date
- STOPWATCH second hand
ADJUSTING THE STOPWATCH HAND POSITION

Before setting the time, be sure to check that the STOPWATCH hands are in the “0” position when the stopwatch is reset (for resetting the stopwatch, see “STOPWATCH”).

* If any of the STOPWATCH hands do not return to the “0” position when the stopwatch is reset, follow the procedure below to reset the hands.

A Press repeatedly to reset the STOPWATCH 1/10 second hand to the “0” position.

B Press repeatedly to reset the STOPWATCH second and minute hands to the “0” position.

CROWN Push back in to normal position.

TIME/CALENDAR SETTING

1 Pull out to first click, and turn clockwise until the previous day’s date appears.
2 Pull out to second click when Second hand is at the 12 o’clock position.
3 Turn clockwise until the desired date appears.
4 Turn to set Hour and Minute hands.
5 Push back in to normal position in accordance with a time signal.
The stopwatch can measure up to 60 minutes in 1/10 second increments.

The measured time is indicated by the STOPWATCH hands that move independently of the center hands.

Before using the stopwatch, be sure to check that the crown is set at the normal position and that the STOPWATCH hands are reset to the "0" position.

* If the STOPWATCH hands do not return to the "0" position when the stopwatch is reset, follow the procedure in "ADJUSTING THE STOPWATCH HAND POSITION" to reset the hands.

Movement of the STOPWATCH 1/10 second hand

- After the measurement exceeds 1 minute, the STOPWATCH 1/10 second hand stays at the "0" position while the stopwatch is counting.
- When the measurement is stopped, the hand moves to indicate the elapsed 1/10 seconds.
NOTES ON OPERATING THE WATCH

ADJUSTING THE STOPWATCH HAND POSITION
- The STOPWATCH minute hand moves correspondingly with the STOPWATCH second hand.
- The STOPWATCH hands move quickly if the respective buttons are kept pressed.

TIME/CALENDAR SETTING
- It is necessary to adjust the date on the first day after a 30-day month and February.
- Do not set the date between 9:00 p.m. and 1:00 a.m., as the date may not change properly. If it is necessary to set the date during that period of time, first change the time to any time outside of this period, set the date, and then reset to the correct time.
- Do not press any button when the crown is at the second click position, as this will move the STOPWATCH hands.
- When setting the hour hand, be sure to check that AM/PM is correctly set. The watch is designed so 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 not, the time is set for the P.M. period.

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

BATTERY CHANGE
- Battery life: Approx. 2 years
- Battery: SEIKO SR920SW
- If the stopwatch is used for more than 2 hours a day, the battery life may be less than the specified period.
- As 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.

• 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.
Battery life indicator

When the battery nears its end, the 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 second hand is moving at two-second intervals.

Necessary procedure after battery change

After the battery is replaced with a new one, or in case any of the hands should move improperly, follow the procedure below to reset the STOPWATCH hands to “0” position.

- Pull out to second click.
- Press and hold simultaneously for 2 seconds or longer.
- Press repeatedly to set the STOPWATCH 1/10 second hand to the “0” position.
- Press repeatedly to set the STOPWATCH second and minute hands to the “0” position.
- Turn to set the time.
- Push back in to normal position.

* The STOPWATCH second hand turns counterclockwise, and then returns to where it was.
* The STOPWATCH minute hand moves correspondingly with the STOPWATCH second hand.
* The STOPWATCH hands move quickly if the respective buttons are kept pressed.

We recommend that you contact an AUTHORIZED PULSAR DEALER for battery replacement.
**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.
- Never short-circuit, tamper with or heat the battery, and never expose it to fire. The battery may burst, become very hot or catch fire.

**CAUTION**

- The battery is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery.

---

**TO PRESERVE THE QUALITY OF YOUR WATCH**

**WATER RESISTANCE**

- **Non-water resistant**
  
  If "WATER RESISTANT" is not inscribed on the case back, your watch is not water resistant, and care should be taken not to get it wet as water may damage the movement. If the watch becomes wet, we suggest that you have it checked by an AUTHORIZED PULSAR DEALER or SERVICE CENTER.

- **Water resistance (3 bar)**
  
  If "WATER RESISTANT" is inscribed on the case back, your watch is designed and manufactured to withstand up to 3 bar, such as accidental contact with splashes of water or rain, but it is not designed for swimming or diving.

- **Water resistance (5 bar)***
  
  If "WATER RESISTANT 5 BAR" is inscribed on the case back, your watch is designed and manufactured to withstand up to 5 bar and is suitable for swimming, yachting and taking a shower.

- **Water resistance (10 bar/15 bar/20 bar)***
  
  If "WATER RESISTANT 10 BAR", "WATER RESISTANT 15 BAR" or "WATER RESISTANT 20 BAR" is inscribed on the case back, your watch is designed and manufactured to withstand up to 10 bar/15 bar/20 bar and is suitable for taking a bath, shallow diving, but not for scuba diving. We recommend that you wear a PULSAR Diver's watch for scuba diving.

**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.
- Never short-circuit, tamper with or heat the battery, and never expose it to fire. The battery may burst, become very hot or catch fire.

**CAUTION**

- The battery is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery.
Before using the water resistance 5, 10, 15 or 20 bar watch in water, be sure the crown is pushed in completely. Do not operate the crown when the watch is wet or in water. If used in sea water, rinse the watch in fresh water and dry it completely.

When taking a shower with the water resistance 5 bar watch, or taking a bath with the water resistance 10, 15 or 20 bar watch, be sure to observe the following:

- Do not operate the crown when the watch is wet with soapy water or shampoo.
- If the watch is left in warm water, a slight time loss or gain may be caused. This condition, however, will be corrected when the watch returns to normal temperature.

NOTE:
Pressure in bar is a test pressure and should not be considered as corresponding to actual diving depth since swimming movement tends to increase the pressure at a given depth. Care should also be taken on diving into water.

### TEMPERATURES

Your watch works with stable accuracy within a temperature range of 5°C and 35°C (41°F and 95°F). Temperatures over 60°C (140°F) may cause battery leakage or shorten the battery life. Do not leave your watch in very low temperatures below -10°C (-14°F) for a long time since the cold may cause a slight time loss or gain. However, the above conditions will be corrected when the watch returns to normal temperature.

### MAGNETISM

Your watch will be adversely affected by strong magnetism. Keep it away from close contact with magnetic objects.

### SHOCKS & VIBRATION

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

### CHEMICALS

Be careful not to expose the watch to solvents, mercury, cosmetic spray, detergents, adhesives or paints. Otherwise, the case, bracelet, etc. may become discolored, deteriorated or damaged.

### CARE OF CASE AND BRACELET

To prevent possible rusting of the case and bracelet caused by dust, moisture and perspiration, wipe them periodically with a soft dry cloth.

### PERIODIC CHECK

It is recommended that the watch be checked once every 2 to 3 years. Have your watch checked by an AUTHORIZED PULSAR DEALER or SERVICE CENTER to ensure that the case, crown, buttons, gasket and crystal seal remain intact.

### PRECAUTION REGARDING CASE BACK PROTECTIVE FILM

If your watch has a protective film and/or a sticker on the case back, be sure to peel them off before using your watch.