PULSAR

CAL. NX04
DUO-DISPLAY QUARTZ

- Time/calendar display
- Demonstration function
- World time
- Stopwatch
- Regular alarm
- Single-time alarm
- Illuminating light
  (Electroluminescent panel)
CROWN/BUTTONS AND DISPLAYS

Date
Day
Hour hand
Minute hand
Second hand
Hour
Minutes
Seconds

CROWN

a: Normal position        b: Extended position
A With each press, the mode in the digital display changes in the following order:

TIME/CALENDAR ➔ WORLD TIME ➔ STOPWATCH ➔ REGULAR ALARM

C Press in TIME/CALENDAR mode to show SINGLE-TIME ALARM mode.

TIME/CALENDAR ➔ SINGLE-TIME ALARM

D With each press in the TIME/CALENDAR mode, the display changes in the following order:

Time/Calendar ➔ Calendar ➔ Blank
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.
TIME/CALENDAR MODE

- Before setting the analogue time, be sure to set the digital time.

DIGITAL TIME/CALENDAR SETTING

- Once the time/calendar of your area is set in the TIME/CALENDAR mode, the times of the 27 cities covered in the WORLD TIME mode will be set automatically.

Press to show TIME/CALENDAR mode.
Press for 2 to 3 seconds to show TIME/CALENDAR SETTING display.

* The world map and a city mark appear, and the part of the map representing the city flashes.
Press to select the digits/segments to be adjusted (flashing).

Press to set the flashing digits/segments.

Press to return to TIME/CALENDAR mode.
A convenient way of using the TIME/CALENDAR mode

When you travel around different time zones, the time and calendar of the place you visit can easily be shown in the TIME/CALENDAR mode.

1 Pull out when the second hand is at the 12 o’clock position.

2 Turn to set the hour and minute hands to the time shown in the digital display.

3 Push back in to the normal position when the second digits count “00” in the digital display.
1 Press button A for 2 to 3 seconds in the TIME/CALENDAR mode to show the TIME/CALENDAR SETTING display.

2 Press button D repeatedly to select the city representing the place you are visiting.

3 Press button A to return to the TIME/CALENDAR mode, and then, adjust the hands to the digital time.

**DEMONSTRATION FUNCTION**

- The watch shows the modes and displays in order.

Press for 2 to 3 seconds in TIME/CALENDAR mode to start the demonstration.

* The modes and displays are shown for 2 seconds in the following order:

  Time/calendar display \(\Rightarrow\) Calendar display \(\Rightarrow\) WORLD TIME mode
  
  ➤ Blank display \(\Rightarrow\) REGULAR ALARM mode \(\Rightarrow\) STOPWATCH mode
  
* To stop the demonstration, press any of the buttons. The watch will return to the TIME/CALENDAR mode.
WORLD TIME MODE

- The times of 27 cities in different time zones throughout the world can be displayed together with the time difference between the selected city and your area.
- Daylight saving time can be set for each city.

Press to show WORLD TIME mode.
Press to select the desired city.

* With each press of button C and D, the flashing segments of the map move rightward and leftward, respectively.
* If a selected time zone has no city mark set for the watch, “– – – – –” will be displayed in place of a city mark.
DISPLAYING THE DAYLIGHT SAVING TIME

1. Press button C or D to select the desired city.
2. Press button A for 2 to 3 seconds to show the DAYLIGHT SAVING TIME SETTING display.
   * A flashing “DST” mark appears.
3. With each press of button D, the standard time and daylight saving time of the selected city are alternately shown.
4. Press button A to return to the WORLD TIME mode.
# Time differences

 UTC = coordinated universal time

<table>
<thead>
<tr>
<th>City mark</th>
<th>City name</th>
<th>UTC ± (hours) [standard time]</th>
<th>UTC ± (hours) [daylight saving time]</th>
</tr>
</thead>
<tbody>
<tr>
<td>(-11)*</td>
<td>–</td>
<td>–11:00</td>
<td>–10:00</td>
</tr>
<tr>
<td>HNL</td>
<td>Honolulu</td>
<td>–10:00</td>
<td>–09:00</td>
</tr>
<tr>
<td>ANC</td>
<td>Anchorage</td>
<td>–09:00</td>
<td>–08:00</td>
</tr>
<tr>
<td>LAX</td>
<td>Los Angeles</td>
<td>–08:00</td>
<td>–07:00</td>
</tr>
<tr>
<td>DEN</td>
<td>Denver</td>
<td>–07:00</td>
<td>–06:00</td>
</tr>
<tr>
<td>CHI</td>
<td>Chicago</td>
<td>–06:00</td>
<td>–05:00</td>
</tr>
<tr>
<td>NYC</td>
<td>New York</td>
<td>–05:00</td>
<td>–04:00</td>
</tr>
<tr>
<td>CCS</td>
<td>Caracas</td>
<td>–04:00</td>
<td>–03:00</td>
</tr>
<tr>
<td>RIO</td>
<td>Rio de Janeiro</td>
<td>–03:00</td>
<td>–02:00</td>
</tr>
<tr>
<td>(-2)*</td>
<td>–</td>
<td>–02:00</td>
<td>–01:00</td>
</tr>
<tr>
<td>(-1)*</td>
<td>–</td>
<td>–01:00</td>
<td>+00:00</td>
</tr>
<tr>
<td>UTC</td>
<td>–</td>
<td>+00:00</td>
<td>–</td>
</tr>
<tr>
<td>LON</td>
<td>London</td>
<td>+00:00</td>
<td>+01:00</td>
</tr>
<tr>
<td>PAR</td>
<td>Paris</td>
<td>+01:00</td>
<td>+02:00</td>
</tr>
<tr>
<td>CAI</td>
<td>Cairo</td>
<td>+02:00</td>
<td>+03:00</td>
</tr>
<tr>
<td>City mark</td>
<td>City name</td>
<td>UTC ± (hours) [standard time]</td>
<td>UTC ± (hours) daylight saving time</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------</td>
<td>------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>JRS</td>
<td>Jerusalem</td>
<td>+02:00</td>
<td>+03:00</td>
</tr>
<tr>
<td>JED</td>
<td>Jeddah</td>
<td>+03:00</td>
<td>+04:00</td>
</tr>
<tr>
<td>THR</td>
<td>Tehran</td>
<td>+03:30</td>
<td>+04:30</td>
</tr>
<tr>
<td>DXB</td>
<td>Dubai</td>
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<td>+05:00</td>
</tr>
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<td>KBL</td>
<td>Kabul</td>
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<td>+05:30</td>
</tr>
<tr>
<td>KHI</td>
<td>Karachi</td>
<td>+05:00</td>
<td>+06:00</td>
</tr>
<tr>
<td>DEL</td>
<td>Delhi</td>
<td>+05:30</td>
<td>+06:30</td>
</tr>
<tr>
<td>DAC</td>
<td>Dhaka</td>
<td>+06:00</td>
<td>+07:00</td>
</tr>
<tr>
<td>RGN</td>
<td>Yangon</td>
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<td>+07:30</td>
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<tr>
<td>BKK</td>
<td>Bangkok</td>
<td>+07:00</td>
<td>+08:00</td>
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<td>HKG</td>
<td>Hong Kong</td>
<td>+08:00</td>
<td>+09:00</td>
</tr>
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<td>TYO</td>
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<td>+09:00</td>
<td>+10:00</td>
</tr>
<tr>
<td>ADL</td>
<td>Adelaide</td>
<td>+09:30</td>
<td>+10:30</td>
</tr>
<tr>
<td>SYD</td>
<td>Sydney</td>
<td>+10:00</td>
<td>+11:00</td>
</tr>
<tr>
<td>NOU</td>
<td>Nouméa</td>
<td>+11:00</td>
<td>+12:00</td>
</tr>
<tr>
<td>WLG</td>
<td>Wellington</td>
<td>+12:00</td>
<td>+13:00</td>
</tr>
</tbody>
</table>

* For the time zones with “**” mark in the table above, “--- --- ---” will be displayed in place of a city mark.
The stopwatch can measure up to 23 hours, 59 minutes and 59 seconds in 1/100 second increments for the first hour and in 1 second increments thereafter.
STOPWATCH OPERATION

Press button A to show the STOPWATCH mode.

Accumulated elapsed time measurement

<table>
<thead>
<tr>
<th>Start</th>
<th>Stop</th>
<th>Restart</th>
<th>Stop</th>
<th>Reset</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
<td>C</td>
</tr>
</tbody>
</table>
**REGULAR ALARM MODE**

A. Press to show REGULAR ALARM mode.

B. Press for 2 to 3 seconds to show REGULAR ALARM SETTING display.

* The hour digits start flashing.

C. Press to select the digits to be adjusted (flashing).

D. Press to set the digits.
Press to return to REGULAR ALARM mode.

* The alarm mark appears and the regular alarm is automatically engaged.

Engagement/disengagement of the regular alarm

- With each press of button C in the REGULAR ALARM mode, the regular alarm is engaged and disengaged alternately.

* At the designated time, the alarm rings for 20 seconds and stops. To stop it manually, press any of the buttons.
**SINGLE-TIME ALARM MODE**

- The single-time alarm can be set to ring only once at the designated time. As it rings, it is automatically disengaged.
- The alarm time can be set in 1 minute increments starting from the current time.

Press in TIME/CALENDAR mode to show SINGLE-TIME ALARM mode.

Press to set the desired alarm time.

Press to return to TIME/CALENDAR mode.
* The alarm rings at the designated time for 20 seconds. To stop it manually, press any of the buttons.

- To cancel the alarm time you have set, press buttons C and D at the same time or press button C or D to set the alarm time to the current time in the SINGLE-TIME ALARM mode.

**ILLUMINATING LIGHT (Electroluminescent panel)**

Press in any mode.

* The digital display is evenly illuminated for 3 seconds.
NOTES ON USING THE WATCH

CROWN/BUTTONS AND DISPLAYS

- If the watch is left untouched in the WORLD TIME mode, it will automatically return to the TIME/CALENDAR mode in 1 to 2 minutes.

TIME/CALENDAR MODE

[DIGITAL TIME/CALENDAR SETTING]

- The calendar automatically adjusts for odd and even months including February of leap years from 2000 to 2050.
- Once the year, month and date have been set, the day of the week is automatically set.
- Before setting the time/calendar, be sure to select the city representing your area. (For the city marks and cities they represent, see “Time differences”.)

- **Setting the seconds:**
  - With the second digits flashing, press button D in accordance with a time signal. The second digits are reset to “00” and start immediately.
  - When the seconds count any number from “30” to “59” and button D is pressed, one minute is added and the seconds are reset to “00”.

- **12-/24-hour indication setting:**
  - Changeover between 12- and 24-hour indications is made alternately with each press of button D.
  - The flashing digits except the seconds and 12-/24-hour indication move quickly if button D is kept pressed.
When setting the hour digits in the 12-hour indication, check that AM/PM is properly set. Only the “PM” mark is displayed. For the AM setting, there is no indication. In the 24-hour indication, “24” is displayed.

If the watch is left untouched in the TIME/CALENDAR SETTING display with the digits/segments flashing, it will automatically return to the TIME/CALENDAR mode in 1 to 2 minutes.

**Note on unusual display:**
While in the TIME/CALENDAR SETTING display with the digits flashing, all the segments of the display will light up if both buttons C and D are pressed at the same time. This is not a malfunction. Press button A, C or D to return to the TIME/CALENDAR mode, and then set the time/calendar again.

**ANALOGUE TIME SETTING**
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.

**WORLD TIME MODE**
To display the times of the cities covered in the WORLD TIME mode properly, it is necessary to select the city representing your area and set the correct time in the TIME/CALENDAR mode. (See “TIME/CALENDAR MODE”.)

**DISPLAYING THE DAYLIGHT SAVING TIME**
When the daylight saving time is set for the city selected in the TIME/CALENDAR mode, the current time is advanced by one hour.

If the watch is left untouched in the DAYLIGHT SAVING TIME SETTING display with the daylight saving time mark flashing, it will automatically return to the WORLD TIME mode in 1 to 2 minutes.
STOPWATCH MODE
- Restart and stop of the stopwatch can be repeated by pressing button C.
- Even if the STOPWATCH mode is changed to another while the measurement is in progress, it continues counting properly. After the stopwatch is used, however, be sure to reset it as the battery energy is consumed enormously to shorten the battery life.

REGULAR ALARM MODE
[REGULAR ALARM SETTING]
- The flashing digits move quickly if button D is kept pressed.
- If the watch is left untouched in the REGULAR ALARM SETTING display with the digits flashing, it will automatically return to the REGULAR ALARM mode in 1 to 2 minutes.
- When the time function is displayed in the 24-hour indication, the regular alarm is also displayed in the 24-hour indication.
- When setting the hour digits in the 12-hour indication, check that AM/PM is properly set. Only the “PM” mark is displayed. For the AM setting, there is no indication. In the 24-hour indication, “24” is displayed.
- Regular alarm test: The regular alarm can be tested by keeping button C pressed in the REGULAR ALARM mode. After the alarm is tested, press button C to engage/disengage the regular alarm.

SINGLE-TIME ALARM MODE
[SINGLE-TIME ALARM SETTING]
- When button C or D is pressed to set the single-time alarm, the single-time alarm mark “1-AL” is displayed and the single-time alarm is automatically engaged.
ILLUMINATING LIGHT (Electroluminescent panel)

- The display remains illuminated if button B is kept pressed.
- When button B is pressed in the calendar or blank display of the TIME/CALENDAR mode, the time/calendar display is shown while the display is illuminated.
- The electroluminescent panel loses its luminance as the battery voltage gets lowered. Also, its luminance level decreases gradually with use.
- When the illuminating light becomes dim, replace the battery with a new one. If the light remains dim after the battery is replaced, have the electroluminescent panel replaced with a new one by the retailer from whom the watch was purchased. It will be replaced at cost.
- While the illuminating light is used, the watch gives out a slight noise. However, this is not a malfunction.

With each press of button C or D, one minute is advanced or moved back, respectively. The digits move quickly by keeping the respective buttons pressed.
- If the watch is left untouched in the SINGLE-TIME ALARM mode, it will automatically return to the TIME/CALENDAR mode in 20 to 30 seconds.
- The single-time alarm rings differently from the regular alarm.
- To check the alarm time you have set, press button C in the TIME/CALENDAR mode to show the SINGLE-TIME ALARM mode.
BATTERY CHANGE

Battery life : Approx. 2 years

Battery : SEIKO SR626SW, 1 piece
(for analogue display)
SEIKO SR41W, 1 piece
(for digital display)

- The battery life may be less than 2 years if the alarm is used for more than 10 seconds a day and/or the illuminating light more than once (for 3 seconds) a day.
- Even if either of the two batteries has run down, replace both of them with new ones.
- As the batteries are inserted at the factory to check the function and performance of the watch, their actual lives once in your possession may be less than the specified period.
- When the batteries expire, be sure to replace them as soon as possible to prevent any malfunction.
- We recommend that you contact an AUTHORIZED PULSAR DEALER for battery replacement.

- Necessary procedure after battery change
  After the battery is replaced with a new one or if an abnormal display (broken digits, etc.) appears, follow the procedure below to reset the IC.
Press and hold buttons A, B, C and D at the same time for 2 to 3 seconds. When the buttons are released, “12:00'00" a.m., Jan. 1st, 2000, SAT” will be displayed and “UTC” will be selected in the WORLD TIME mode.

* Before using the watch, set the time/calendar and then, the alarm.

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**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.

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.
* 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 50°C (122°F) or below −5°C (+23°F) may cause a slight time loss or gain or battery leakage or shorten the battery life. However, the above conditions will be corrected when the watch returns to normal temperature.
**Magnetism**

The analogue unit of your watch will be adversely affected by strong magnetism, though the digital unit will not be affected. Keep the watch 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.

**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.
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.

**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.

**STATIC ELECTRICITY**

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