

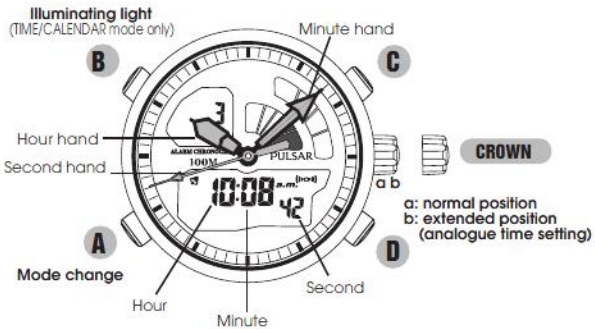
PULSAR

CAL. NX15 DUO-DISPLAY QUARTZ

- Analogue time display
- Digital time and calendar
- Chronograph
- Tachymeter
- Data recall function
- Alarm
- Illuminating light
(Electroluminescent panel)

ENGLISH

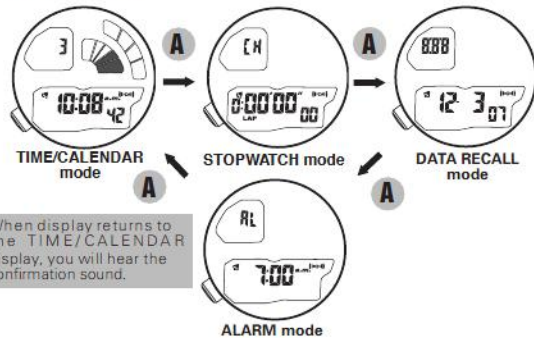
CROWN/BUTTONS AND DISPLAYS



* The analogue and digital displays are separately illustrated in the following sections of this manual for the purpose of explanation.

MODE CHANGE

A With each press, the mode in the digital display changes in the following order.



ILLUMINATING LIGHT

- B** Press to turn the illuminating light on only in the TIME/CALENDAR mode.



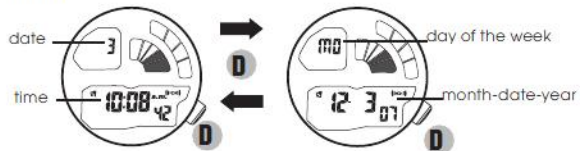
The built-in electroluminescent backlight illuminates the display for approximately 3 seconds for easy viewing in darkness.

NOTES

- ◆ The electroluminescent panel loses its luminance as the battery becomes weaker with use. Also, its luminance level decreases gradually with use.
- ◆ When the illuminating light becomes dim, replace the batteries. If the light remains dim after the batteries are replaced, have the electroluminescent panel replaced by the retailer from whom the watch was purchased.
- ◆ While the illuminating light is used, the watch gives out a slight noise. However, this is normal and not a malfunction.

CHOICE OF DISPLAY ITEM IN TIME/CALENDAR MODE

- D** Press to select the items shown on the display in TIME/CALENDAR mode.



upper row: date
lower row: time

upper row: day of the week
lower row: month-date-year

GRAPHIC DISPLAY IN TIME/CALENDAR MODE

The graphic segments are lit one by one in accordance with every one second. Once all the segments are lit, they are all turned off, and then the same graphic movement is repeated.



SCREW DOWN CROWN

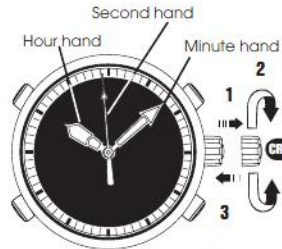
[for models with screw down crown]

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 into normal position.
- 2 Turn Crown clockwise while pressing it lightly until tight.

**TIME/CALENDAR MODE****ANALOGUE TIME SETTING**

* This illustration is simplified for the purpose of explanation.

CROWN

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

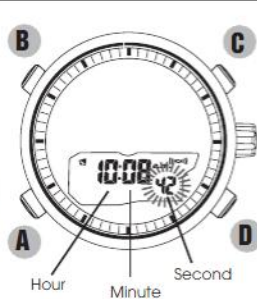
The second hand will stop on the spot.

- 2 Turn to set the hour and minute hands to the correct time.

To set the hands accurately, advance the minute hand four to five minutes ahead of the correct time, then slowly move it back to the exact minute(s).

- 3 Push back simultaneously with a time signal.

DIGITAL TIME/CALENDAR SETTING



A Press to enter TIME/CALENDAR mode.

A Press and hold for 2 to 3 seconds to show TIME/CALENDAR SETTING display.

The graphic display is turned off.
The second digits start flashing.

B Press to select the item to be adjusted (flashing).

Second ↔ Minute ↔ Hour ↔ Year
↑ 12-/24-hour indication ↓
← Date ← Month

C or D Press to set the flashing item.

A Press to confirm the settings and return to TIME/CALENDAR mode.

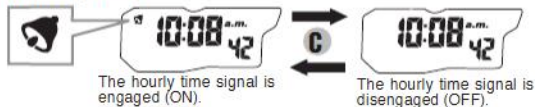
NOTES

- ◆ With each press of the button C (or D), the flashing digits increase (or decrease).
- ◆ The flashing digits except for second and 12-/24-hour indication move quickly if the button C or D is kept pressed.
- ◆ If the watch is left untouched in the TIME/CALENDAR SETTING display with the digits/item flashing, it will automatically return to the TIME/CALENDAR mode in 1 to 2 minutes.
- ◆ The calendar automatically adjusts for odd and even months including February of leap years up to 2050.
- ◆ Once the year, month and date have been set, the day of the week is automatically set.
- ◆ **Setting the second**
To reset the second digits to "00," press either button C or D in accordance with a time signal while the second digits are flashing. If button C or D is pressed while the second digits count any number between "30" and "59," one minute is added and the seconds digits are immediately reset to "00."
- ◆ **12-/24-hour indication setting**
 - When the 12-hour indication is selected, "a.m." indicator appears for the morning and "p.m." indicator appears from the afternoon.
 - When setting the hour digits in the 12-hour indication, check that AM/PM is properly set.

HOW TO SET THE HOURLY TIME SIGNAL

- The hourly time signal can be set in the TIME/CALENDAR mode. With each press of button C, the hourly time signal will be alternately engaged or disengaged. Accordingly, the hourly time signal mark will appear or disappear indicating whether the hourly time signal is ON or OFF.

Hourly time signal mark



Note on unusual display:

If all the segments of the display light up in the TIME/CALENDAR SETTING display with the digits flashing, it is normal and not a malfunction. This happens when both buttons C and D are pressed simultaneously. In such a case, press button A, C or D to return to the TIME/CALENDAR mode, and then set the time/calendar again.



STOPWATCH MODE

- The stopwatch can measure up to 9 hours 59 minutes 59 seconds and 99 in 1/100 second increments. When the measurement reaches 10 hours, the stopwatch will automatically stop and the display will be reset to "0:00'00"00."
- Up to the lap number 999 can be displayed, and the lap after that is counted from 001.
- The stopwatch is equipped with a tachymeter that can be used to calculate the average speed for a given segment by using the preset distance to travel and unit of distance. The average speed can be displayed within a range between 1 and 999 mph if "mile" is selected as the unit of distance.
- Any numeric value between 0.01 and 99.99 can be set as a distance to travel independent of unit of distance.
- The unit of distance is selectable among "mile", "km" and "n.mile (nautical mile)."
- The graphic display in the STOPWATCH mode synchronizes with a 1/10 second increment of the stopwatch measurement.
- The measured data can be recalled in DATA RECALL mode. For details, refer to "HOW TO USE THE DATA RECALL FUNCTION".

HOW TO SET THE DISTANCE TO TRAVEL AND UNIT OF DISTANCE

- Any numeric value between 0.01 and 99.99 can be set as a distance to travel independent of unit of distance.
 - The unit of distance is selectable among "mile", "km" and "n.mile (nautical mile)."
- * The table at right indicates the reciprocal relation between the unit of distance selected and the unit of speed shown on the display.

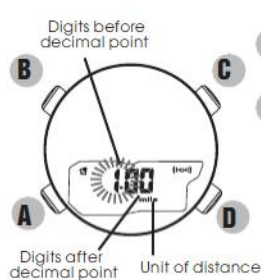
Unit of distance	Unit of speed
mile	mph
km	km/h
n.mile	knot



A Press to enter STOPWATCH mode.

D Press to reset the stopwatch.

If the stopwatch is working, press button C to stop it first. And then press button D to reset it.



A Press and hold for 2 to 3 seconds to show DISTANCE/UNIT SETTING display.

B Press to select the item to be adjusted (flashing).

Digits before decimal point
(between 0 and 99)

↓
Digits after decimal point
(between 0.01 and 0.99)

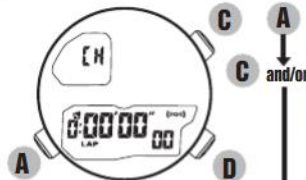
↓
Unit of distance (km, mile, n.mile)

C or **D** Press to set the flashing digits.

A Press to confirm the settings and return to STOPWATCH mode.

NOTES

- ◆ With each press of the button C (or D), the flashing digits increase (or decrease).
- ◆ The digits before decimal point and digits after decimal point move quickly if the button C or D is kept pressed.
- ◆ If the watch is left untouched in the DISTANCE/UNIT SETTING display with the digits/item flashing, it will automatically return to the STOPWATCH mode in 1 to 2 minutes.
- ◆ The settable range of the distance is between 0.01 and 99.99.
- ◆ The unit of distance is selectable in the order of "mile", "km" and "n. mile."

STOPWATCH OPERATION

Even if the STOPWATCH mode is changed to a different mode while the measurement is in progress, it continues counting properly. After using the stopwatch, be sure to stop the function in order to conserve the battery life.

A Press to enter STOPWATCH mode.

C and/or D Press to reset the stopwatch to 00'00"00 before use.

If the stopwatch is running, press the button C to stop it and then press the button D to reset it.

If the stopwatch is stopped, press the button D to reset it.

C Press to start or stop the stopwatch.

Pressing the button C will alternately start or stop the stopwatch. To take lap times, press the button D during measurement.

D Press to reset the stopped stopwatch to "00'00"00."

<Standard measurement >



<Accumulated elapsed time measurement >



<Lap/ Split time measurement >



* Upon pressing the button C to stop the stopwatch, STOP mark lights below the measured time.



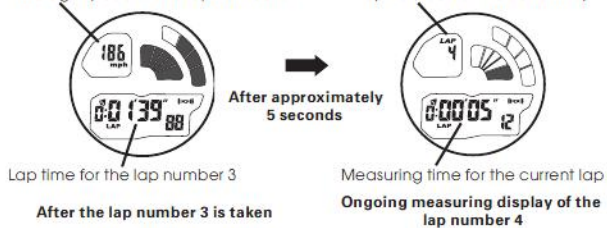
<Display after a lap time is taken >

- Approximately one second after a lap time is taken, the display changes for 5 seconds to show the calculated average speed of the lap and the lap time, and then it automatically returns to the ongoing measuring display for the current lap.
- "----" will appear on the display, if the result of the average speed calculation either exceeds 999 or falls below 1.

Example) When the lap number 3 is taken

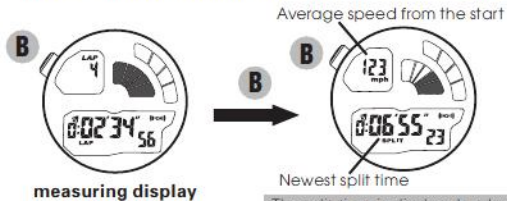
Average speed of the lap number 3

Lap number for the current lap



TO VIEW SPLIT TIME (total elapsed time from the start) DURING MEASUREMENT

- In addition to each lap data, split time (total elapsed time from the start) can be checked during measurement.
- B** During measurement, press to display the newest split time, which was recorded at the time when the newest lap time was taken.



The split time is displayed as long as the button B is kept pressed.

- * This function cannot be used if no lap has been taken since the start of measurement.




HOW TO USE THE DATA RECALL FUNCTION

- Up to 100 measurement data can be recalled.
- The measurement data can be recalled even before the measurement is finished. In that case, the measurement data will be displayed in order from the newest to the oldest.
- The "lap number," "lap time," "split time," "average speed for each lap time" and "average speed for each split time" will be presented.
- The measurement data will be stored until the next measurement is started.

HOW TO RECALL MEASURED DATA

- A** Press to show DATA RECALL mode.
-
- If the stopwatch is stopped or working, the measurement data of the newest lap number will be displayed.
 - If the stopwatch is reset, the measurement data of the lap number 1 (the oldest data) will be displayed.
 - If no lap time has been taken since the start of the measurement, "---" will be displayed.

B Press to view each component of the selected lap data.

Display			
	Lap number 1	Average speed for the lap time 1	Average speed for the split time 1
Upper row	Lap number	Average speed for lap time	Average speed for split time
Lower row	Lap time	Lap time	Split time

* The above example is the measurement data of the lap number 1, therefore, the lap time and split time are the same.

* If the result of the average speed calculation either exceeds 999 or falls below 1, "---" will appear on the display.



C or **D** Press to select the lap number of the measurement data you want to see.

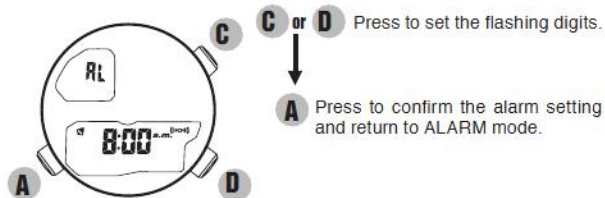
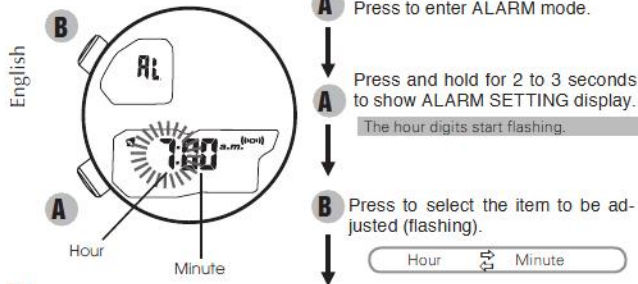
Repeat the previous step to view each component of the selected lap data.

NOTES

- ◆ With each press of the button C (or D), the lap number increases (or decreases). The lap number moves quickly if the button C or D is kept pressed, and stops at the lap number 1.

ALARM MODE

- The alarm can be set to sound once every 24 hours.
- You can preview the alarm sound by using the sound demonstration function.

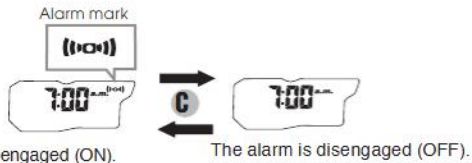


NOTES

- ◆ With each press of the button C (or D), the flashing digits increase (or decrease).
- ◆ The flashing digits move quickly if button C or D is kept pressed.
- ◆ If the watch is left untouched in the ALARM SETTING display with the digits flashing, it will automatically return to the ALARM mode in 1 to 2 minutes.
- ◆ When the 24-hour indication is selected in the TIME/CALENDAR mode, the 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.

Engagement/disengagement of the alarm

With each press of the button C in the ALARM mode, the alarm will be alternately engaged or disengaged. Accordingly, the alarm mark will appear or disappear indicating whether the alarm is ON or OFF.



The alarm is engaged (ON).

The alarm is disengaged (OFF).

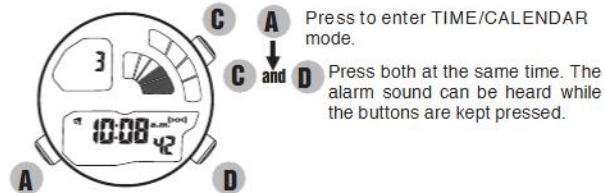
How to stop the alarm manually while sounding

The alarm sounds for 20 seconds at the designated time and automatically stops. To stop the alarm manually while sounding, press any of the buttons A, B, C, or D.

Doing this in any display can stop the alarm.

Sound Demonstration Function (Alarm sound preview)

- The alarm sound can be previewed in TIME/CALENDAR mode.



Press to enter TIME/CALENDAR mode.

Press both at the same time. The alarm sound can be heard while the buttons are kept pressed.

Using this function may change engagement or disengagement (ON or OFF) of the alarm. In such a case, refer to "Engagement/disengagement of the alarm" to reset it to the desired setting.

BATTERY CHANGE

2
Years

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 when an abnormal display (failing digits, etc.) appears, follow the procedures below to reset the built-in IC. The watch will resume its normal operation.

Press and hold buttons A, B, C and D at the same time for 2 to 3 seconds until the display becomes blank, then release all the buttons. The watch returns to its default setting, which is "12:00'00" a.m., 1-1-07, MO" with the distance to travel set for "1.00 mile." Before you begin using the watch, set the time, calendar and alarm.

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.