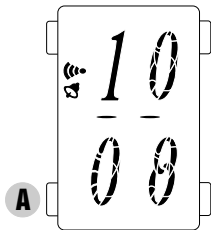


PULSAR

CAL. W510 DIGITAL QUARTZ

- Time/calendar
- Single-time alarm
- Regular alarm
- Illuminating light
(electroluminescent panel)

MODE CHANGE

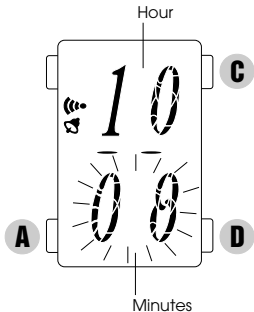


A With each press, the mode changes in the following order:



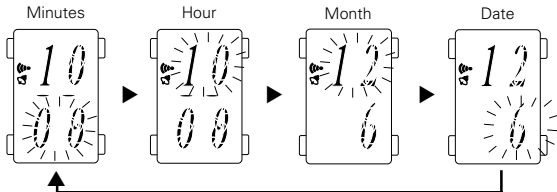
TIME/CALENDAR MODE

TIME/CALENDAR SETTING

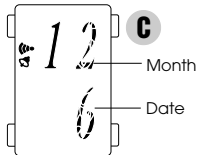


- A** Press to show TIME/CALENDAR mode.
- ▼
- A** Press for 2 to 3 seconds.
- ▼
- C** Select the digits to be adjusted.*
- ▼
- D** Set the flashing digits.
- ▼
- A** Return to TIME/CALENDAR mode.

* Selection of the digits



* If the flashing "--" is shown in the middle row of the display, the digits indicate the time, and otherwise, they indicate the calendar.



SHOWING THE CALENDAR DISPLAY

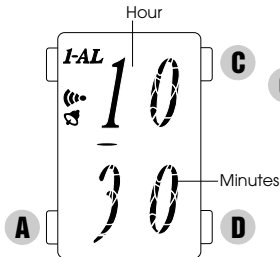
C Press and hold in TIME/
CALENDAR mode.

* While the button is kept pressed,
the month and date are displayed.

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 single-time alarm can be set in minute increments starting from the current time.

SINGLE-TIME ALARM SETTING



A

Press to show SINGLE-TIME ALARM mode.



C

or

D

Set the desired alarm time.



A

Return to TIME/CALENDAR mode.

** The single-time alarm mark "1-AL" remains displayed and the single-time alarm is engaged.*

** At the designated time, the single-time alarm rings for 20 seconds. To stop it manually, press any of the buttons.*

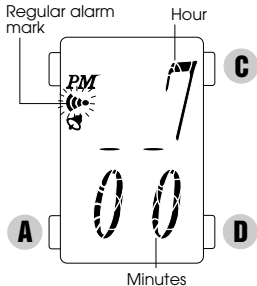
- To cancel the single-time alarm you have set, press buttons C and D at the same time in the SINGLE-TIME ALARM mode, or press button C or D to set the alarm time to the current time.

REGULAR ALARM MODE

- The regular alarm can be set to ring on a 24-hour basis.

A Press to show REGULAR ALARM mode.

REGULAR ALARM SETTING

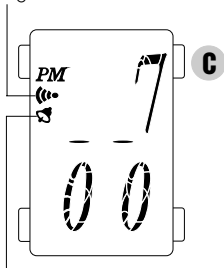


- A** Press for 2 to 3 seconds.
- C** or **D** Set the desired alarm time.
- A** Return to REGULAR ALARM mode.

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

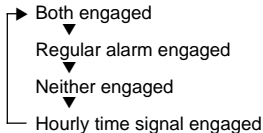
ENGAGEMENT/DISENGAGEMENT OF REGULAR ALARM AND HOURLY TIME SIGNAL

Regular alarm mark



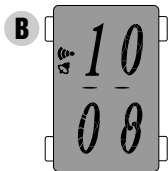
Hourly time signal mark

C With each press in REGULAR ALARM mode, the engagement/disengagement of the regular alarm and hourly time signal are made as follows:



* At the designated time, the regular alarm rings for 20 seconds. To stop it manually, press any of the buttons.

ILLUMINATING LIGHT (Electroluminescent panel)



B Turn on the illuminating light.

** The display panel is evenly illuminated for 3 seconds.*

ViViDiGi

- **ViViDiGi** is a new type of liquid crystal panel that makes possible various colors and high contrast.
 - Excellent light reflection and transmission make the display bright and clear.
 - Various color options are available.
 - Either the whole panel or the displayed data only can be illuminated.

** Features vary in different models.*

NOTES ON USING THE WATCH

MODE CHANGE

- The displayed numerals have unique forms. The positions where they are shown on the display, therefore, shift between both sides of the display, depending on the numeral shown.
- If the watch is left untouched in the SINGLE-TIME ALARM and REGULAR ALARM mode, it will automatically return to the TIME/CALENDAR mode in 2 to 3 minutes.

TIME/CALENDAR MODE

[TIME/CALENDAR SETTING]

- The calendar automatically adjusts for odd and even months except February of leap years.
 - **Setting the seconds:**
The second digits are not shown on the display. To set the seconds accurately, follow the procedure below.
 - 1) While the minute digits are flashing, set them to one minute ahead of the current minutes.
 - 2) Press button "A" in accordance with a time signal of the set minutes. The watch returns to the TIME/CALENDAR mode, and the seconds are reset to "00" and start counting immediately.
 - The flashing digits move quickly if button D is kept pressed.
- 10 ● When setting the hour digits, check that AM/PM is properly set. Only the "PM" mark

is displayed. For the AM setting, there is no indication.

- As button "A" is pressed to return to the TIME display, the second digits are automatically reset to "00" and start counting immediately. (See "● Setting the seconds" explained above)
- If the watch is left untouched with the digits flashing, it will automatically return to the TIME/CALENDAR mode in 1 to 2 minutes.
- **Note on unusual display:**

While setting the time/calendar, 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.



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" flashes for 2 to 3 seconds.
- With each press of button C or D, one minute is advanced or moved back, respectively. The digits move quickly if the respective buttons are kept pressed.
- While the digits are advanced or moved back quickly by keeping button "C" or "D" pressed, respectively, they start moving in 15-minute increments once they reach "00", "15", "30" or "45". Release the buttons as the digits nearest to the minutes you wish to set are shown, and set them in 1-minute increments by pressing button "C" or "D" repeatedly.

- If the watch is left untouched in the SINGLE-TIME ALARM mode, it will automatically return to the TIME/CALENDAR mode in 2 to 3 minutes.
- The single-time alarm rings differently from the regular alarm.

REGULAR ALARM MODE

- If the watch is left untouched in the REGULAR ALARM mode, it will automatically return to the TIME/CALENDAR mode in 2 to 3 minutes.

[REGULAR ALARM SETTING]

- With each press of button C or D, one minute is advanced or moved back, respectively. The digits move quickly if the respective buttons are kept pressed.
- While the digits are advanced or moved back quickly by keeping button "C" or "D" pressed, respectively, they start moving in 15-minute increments once they reach "00", "15", "30" or "45". Release the buttons as the digits nearest to the minutes you wish to set are shown, and set them in 1-minute increments by pressing button "C" or "D" repeatedly.
- If the watch is left untouched with the digits flashing, it will automatically return to the REGULAR ALARM mode in 1 to 2 minutes.
- 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.
- **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/hourly time signal as desired.

ILLUMINATING LIGHT (Electroluminescent panel)

- The electroluminescent panel loses its luminance as the battery voltage gets lowered. Also, its luminance level decreases gradually with use. After 120 hours of use, the level decreases by about half.
- 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.

BATTERY CHANGE

2

Years

Battery life : Approx. 2 years

Battery : SEIKO CR1620

- *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 a day.*
- *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.*
- *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 the watch becomes wet, have it checked by an **AUTHORIZED PULSAR DEALER** or **SERVICE CENTER**.

● Water resistant 5/10/15/20 bar



- Do not operate the buttons 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 resistant 5 bar watch, or taking a bath with the water resistant 10, 15 or 20 bar watch, be sure to observe the following:
 - * Do not operate the buttons 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.

* 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.

** We recommend that you wear a PULSAR Diver's Watch for scuba diving.

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



Your watch will not be affected by magnetism.

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.

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.

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, 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.

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.

LIQUID CRYSTAL PANEL



The normal life expectancy for the liquid crystal panel of the watch is approximately 5 years. After that it may decrease in contrast, becoming difficult to read. Please contact your **AUTHORIZED PULSAR DEALER** or **SERVICE CENTER** if you wish to have a new panel fitted (guaranteed one year).