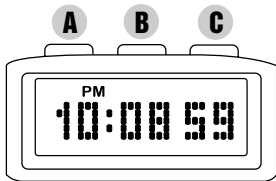


PULSAR

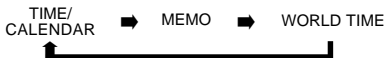
CAL. W540 DIGITAL QUARTZ

- Dot-matrix liquid crystal panel
- Time/calendar
- 5-channel memo function
- World time

MODE CHANGE



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

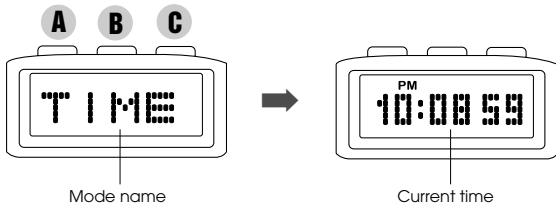


TIME/CALENDAR MODE

- Once the time/calendar of your area is set in the TIME/CALENDAR mode, the times of the 33 cities covered in the WORLD TIME mode will be set automatically.

* 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.

- A** Press to show TIME/CALENDAR mode.



TIME/CALENDAR SETTING

A Press for 1 to 2 seconds to show TIME/CALENDAR SETTING display.

A Press to select the digits to be adjusted.

Selection of the digits

Seconds	⇒	Minutes	⇒	Hour	⇒	Year
	↑↑					↓↓
12-/24-hour indication	←	City	←	Date	←	Month

B Set the flashing digits. (Increasing digits)

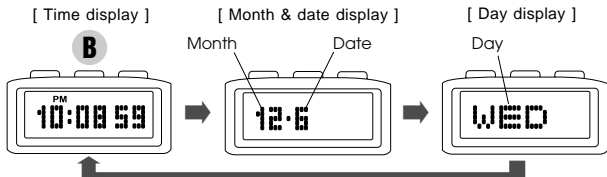
or

C Set the flashing digits. (Decreasing digits)

A Press for 1 to 2 seconds to return to TIME/CALENDAR mode.

SHOWING CALENDAR DISPLAYS

- B** With each press in TIME/CALENDAR mode, the display changes in the following order:



MEMO DEMONSTRATION

- The memo registered in the memo channel No. 1 can be shown in TIME/CALENDAR mode.

- C** Press to show the memo registered in the memo channel No. 1.

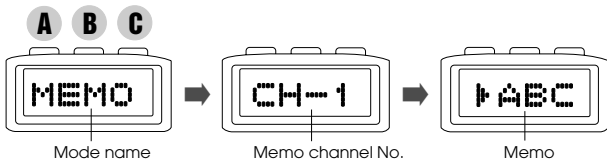
** The memo continues scrolling.*

- C** Press to return to TIME/CALENDAR mode.

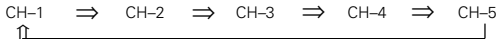
MEMO MODE

- A memo of up to 40 characters can be stored in each of the 5 memo channels.

A Press to show MEMO mode.



B Press to select the desired memo channel.



* The memo scrolls once, and then, its first three characters remain displayed.

- C** With each press, restart and stop of the scroll are made alternately.

HOW TO INPUT THE MEMO

B Press to select the desired memo channel.



A Press for 1 to 2 seconds to show MEMO INPUT display.



B With each press, the flashing character changes in order.

or

C With each press, the flashing character changes in reverse order.



A When the desired character is shown, press to register it.

** The flashing position moves rightward for the input of the next character.*



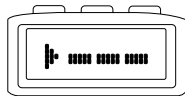
A Press for 1 to 2 seconds to return to MEMO mode.

- * To correct the characters already registered, follow the procedure below.
- 1) Press button A for 1 to 2 seconds to return to the MEMO mode.
 - 2) Press button A for 1 to 2 seconds to show the MEMO INPUT display.
 - 3) Press button A to move the flashing position so that the character you wish to correct flashes.
 - 4) Press button B or C to show the desired character, and press button A to register it.

HOW TO ERASE A MEMO

- B** Press to select the desired memo channel.
- ▼
- A** Press for 1 to 2 seconds to show MEMO INPUT display.
- ▼
- B** and **C** Press at the same time for 3 to 4 seconds.

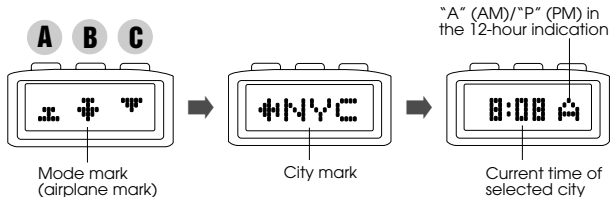
* The display flashes and then, the display shown at right appears and scrolls once to indicate that the selected memo is erased.



WORLD TIME MODE

- The time of 33 cities in different time zones throughout the world can be displayed.
- Daylight saving time can be set for each city.

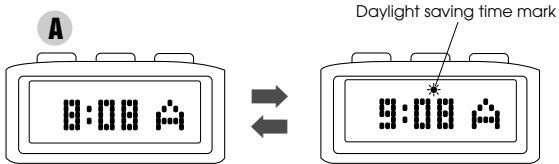
A Press to show WORLD TIME mode.



B or **C** Press to select the desired city.

CHANGEOVER BETWEEN STANDARD TIME AND DAYLIGHT SAVING TIME

- A** Press for 1 to 2 seconds. With each press, the standard time and daylight saving time of the selected city are alternately shown.



TIME DIFFERENCES

GMT = Greenwich Mean Time

(As of April 2000)

City mark	City name	GMT ± (hours)	City mark	City name	GMT ± (hours)
LON	London*	± 0	SIN	Singapore	+ 8
P A R	Paris*	+ 1	TYO	Tokyo	+ 9
M I L	Milan*	+ 1	SEL	Seoul	+ 9
B E R	Berlin*	+ 1	GUM	Guam Is.	+ 10
I S T	Istanbul*	+ 2	SYD	Sydney*	+ 10
A T H	Athens*	+ 2	NOU	Nouméa	+ 11
C A I	Cairo*	+ 2	AKL	Auckland*	+ 12
M O W	Moscow*	+ 3	HNL	Honolulu	- 10
D X B	Dubai	+ 4	YVR	Vancouver*	- 8
M L E	Male (Maldives)	+ 5	LAX	Los Angeles*	- 8
D A C	Dhaka	+ 6	PDX	Portland*	- 8
B K K	Bangkok	+ 7	CHI	Chicago*	- 6
S G N	Ho Chi Minh City	+ 7	NYC	New York*	- 5
H K G	Hong Kong	+ 8	CCS	Caracas	- 4
P E K	Beijing	+ 8	RIO	Rio de Janeiro*	- 3
T P E	Taipei (Taiwan)	+ 8	PDL	Azores Is.*	- 1
D P S	Denpasar (Bali Is.)	+ 8			

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

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

- When the mode is changed over, the mode name or mark to indicate the selected mode scrolls from the top to the bottom, and then, the display for the mode scrolls from right to left.

TIME/CALENDAR MODE

[TIME/CALENDAR SETTING]

- The calendar automatically adjusts for odd and even months including February of leap years from 2000 to 2050.
- **Setting the seconds:**
 - With the second digits flashing, press button B or C in accordance with a time signal. The second digits are reset to "00".
 - When the seconds count any number from "30" to "59" and button B or C is pressed, one minute is added and the seconds are reset to "00".
- Be sure to select the city representing your area. For the city marks and cities they represent, see "TIME DIFFERENCES" on page 11.
- Changeover between 12- and 24-hour indications are made alternately with each press of button B or C while the hour and minute digits are flashing. In the 12-hour indication, only "PM" mark is displayed. There is no indication for the AM setting and in the 24-hour indication.
- The flashing digits except the seconds and 12-/24-hour indication move quickly if button

- B or C is kept pressed.
- 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:**

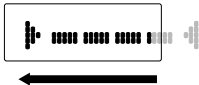
While setting the time/calendar, all the segments of the display will light up if both buttons B and C are pressed at the same time. This is not a malfunction. Press button A, B or C to return to the TIME/CALENDAR mode, and then set the time/calendar again.

[SHOWING CALENDAR DISPLAYS]

- When button B is pressed to change over the display, the selected display scrolls from right to left.
- If the watch is left untouched with the month and date or the day of the week displayed, it will automatically return to the time display in 1 to 2 minutes.

[MEMO DEMONSTRATION]

- If no memo is registered in the memo channel No. 1, the following display scrolls.



MEMO MODE

- A memo is displayed with "▶" at its beginning and "◀" at its end.

[HOW TO INPUT THE MEMO]

- 14 ● If the watch is left untouched with the digits flashing, it will automatically return to the

MEMO mode in 1 to 2 minutes.

- The flashing character changes quickly if button B or C is kept pressed.

- **Characters for the memo input and the order of appearance:**

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z 1 2 3 4 5 6
7 8 9 0 ! ? @ # + * / = % ♥ ~ ' " < > - _ : ; • , . (space)

WORLD TIME MODE

- When button B or C is pressed to select a city, the time of the selected city scrolls from right to left or from left to right, respectively.
- The city selection can be made quickly if button B or C is kept pressed.
- When the time of your area is displayed in the 24-hour indication in the TIME/CALENDAR mode, the times of the cities covered in the WORLD TIME mode are also displayed in the 24-hour indication.
- 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.

[CHANGEOVER BETWEEN STANDARD TIME AND DAYLIGHT SAVING TIME]

- The time difference and use of daylight saving time may change in some areas or countries when they are so decided by the countries concerned.
- When the daylight saving time is set for the city selected in the TIME/CALENDAR mode, the current time is advanced by one hour. When the standard time is set, the current time is moved back by one hour.

BATTERY CHANGE

**2
Years**

Battery life : Approx. 2 years

Battery : SEIKO SR1120SW

- *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.*

● 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 and C at the same time for 2 to 3 seconds. The display will become blank, and the watch will return to the initial setting of "12:00'00" a.m., January 1st, 2000, SAT (Saturday), LON (London)" when the buttons are released.

** Before using the watch, set the time/calendar.*

** Please note that all the memos registered in the memo channels will be erased after the IC is reset.*



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).