# **PULSAR**

## CAL. W866 DIGITAL QUARTZ

- Full-panel dot-matrix liquid crystal panel
- Time/calendar
- Stopwatch with data recall function
- Countdown timer
- 3-channel regular alarm
- World time
- Auto light function

## **MODE CHANGE**



(A) With each press, the mode changes in the following order.

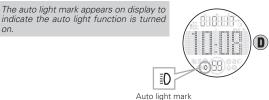


## **ILLUMINATING LIGHT**

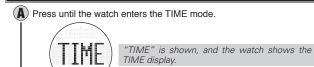
n Press to turn the backlight on.

## **AUTO LIGHT FUNCTION**

- The auto light function allows you to turn the illuminating light on by pressing any button.
- Keep holding down for 2 seconds to activate the auto light function.

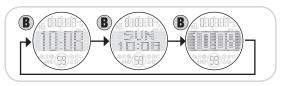


## TIME MODE (TIME)



B Keep holding down for 4 seconds to select a desired display.

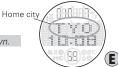
In the TIME mode, you can choose the display format from three options .



#### **CHECKING THE HOME CITY**

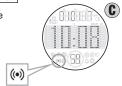
Press to show the home city.

The home city currently set is shown.



#### **KEY SOUND/HOURLY TIME SIGNAL SETTING**

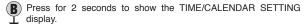
Press to turn the key sound and the hourly time signal on or off.

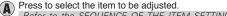


Key sound/hourly time signal mark

The Sound Demo (melody of Alarm\_1) can be heard by pressing and holding buttons C and E at the same time.

## TIME/CALENDAR SETTING





Refer to the SEQUENCE OF THE ITEM SETTINGS on the next page.

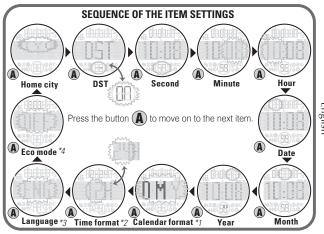
Press to increase the digits (+) or move forward.

E Reep holding down each button to fast-forward or rewind quickly.

Press to decrease the digits (-) or move backward.

Press for more than 1 second to confirm the settings and return to the TIME mode

If the watch is left untouched in the TIME/CALENDAR SETTING display, it will automatically return to the TIME mode in 2 to 3 minutes



#### NOTES ON SETTINGS

- The calendar automatically adjusts for odd and even months including February of leap years up to 2066.
- Once the year, month and date have been set, the day of the week is automatically set.

#### \*1 Calendar format

Choose from "Date-Month-Year", "Month-Date-Year" or "Year-Month-Date". The default setting is "Date-Month-Year".

#### \*2 Time format

Select either 12-hour indication format or 24-hour indication format. The default setting is 12-hour indication format

#### \*3 Language

Choose from English (ENG), French (FRA), Spanish (SPA) or German (GER). The day of the week is displayed in the selected language. The default setting is English.

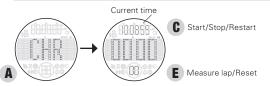
#### \*4 ECO mode

Select the transition time to the eco mode among OFF, 1, 3, 6 and 12 hours. When the selected transition time passes without any button operation, the watch automatically enters the eco mode. The default setting is OFF.

## **STOPWATCH MODE (CHRONO)**

- The stopwatch measures up to 9 hours, 59 minutes and 59.99 seconds in 1/100 second increments
  - A Press until the watch enters the STOPWATCH mode.

"CHR" is shown, and the watch shows the STOPWATCH display.



After 9 hours, 59 minutes and 59.99 seconds have been measured, the stopwatch will automatically stop and be reset and the measured data will be stored.

When a new measurement is commenced, the lap time data obtained from the previous measurement will be automatically deleted.

Press to start the stopwatch.

While the stopwatch is measuring, the stopwatch mark is flashing.

Press to take a lap time.

**★ LAP 2** 

Lap time

Lan number

Stopwatch mark

**LAP 100** 

Up to 100 lap times can be taken. If the button E is pressed after 100 lap times are taken, "FULL" appears on the display and no more lap times will be recorded



Press to stop the stopwatch.

Press to reset the stopwatch.

## DATA RECALL MODE (DATA)

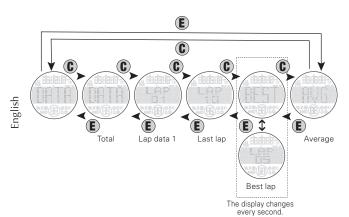
• The first 100 lap times are automatically stored in memory.

Press until the watch enters the DATA RECALL mode.

"DATA" is shown, and the watch enters the DATA RECALL display.



or Press to view the contents of the data in the order shown in the illustration on the next page.

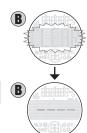


## HOW TO DELETE THE DATA



Reep holding down again for 2 seconds to confirm the deletion of all the data.

If there is no data, "----" will be displayed.



## TIMER MODE

 The timer can be set from 10 seconds up to 9 hours 59 minutes 59 seconds in one-second increments.

A Press until the watch enters the TIMER mode.

"TMR" is shown, and the watch shows the TIMER display.



## **TIMER SETTING**

Press for 2 seconds to show the TIMER SETTING display.

The second digits start flashing.

Press to increase the digits (+) or move forward.

Keep holding down each button to fast-forward or rewind quickly.

Press to decrease the digits (-) or move backward.

Press to select the item to be adjusted.



Press to confirm the settings and return to the TIMER mode.

If the watch is left untouched in the TIMER SETTING display, it will automatically return to the TIMER mode in 2 to 3 minutes.

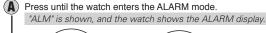
# TIMER OPERATION © Press to start the timer. While the timer is counting, the timer mark appears. © Press to stop the timer.

The warning sound starts to beep from 3 seconds before the set time is up. When the time is up, the timer beeps for 5 seconds. To stop the beep manually while sounding, press any of the buttons.

Timer mark

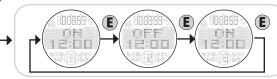
Press to reset the timer.

 The three-channel daily alarm sounds at a designated time every 24 hours. Each alarm channel can be engaged or disengaged independently.





Press to select an alarm channel.



English



Hour

Press for 2 seconds to show the ALARM SETTING display.

The hour display starts flashing.

Press to increase the digits (+) or move forward.

Keep holding down each button to fast-forward or rewind quickly.

Press to decrease the digits (-) or move backward.

Press to select the item to be adjusted.

Minute

Press to confirm the settings and return to the ALARM mode.

"ON" and the alarm mark appear and the alarm is automatically engaged.

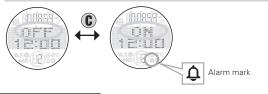
If the watch is left untouched in the ALARM SETTING display, it will automatically return to the ALARM mode in 2 to 3 minutes.



### ALARM ENGAGEMENT/DISENGAGEMENT

- Press to select an alarm channel.
- ▼ \A/i
- ( With each press, the alarm is engaged and disengaged alternately.

When the alarm is engaged, the alarm mark appears on display.



#### **ALARM SOUND PREVIEW**

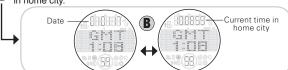
Each alarm has a different sound. To test the alarm sound, press the button C for 2 seconds or more.

## **WORLD TIME MODE**

- The time of 44 cities in different time zones throughout the world can be displayed.
- Daylight saving time can also be set (except for GMT).
  - Press until the watch enters the WORLD TIME mode.



Press to select a desired display either with date or with current time in home city.





Press to select the city in ascending order.

Keep holding down each button to show the animation of the names of the cities automatically.

Press to select the city in descending order.

## DAYLIGHT SAVING TIME SETTING

**B** If the daylight saving time is effective in the selected city, keep holding down to show the daylight saving time.



- When the daylight saving time is set, the daylight saving time mark appears on display.
- The daylight saving time cannot be set if GMT is selected.
- When the daylight saving time is set in the TIME mode, it is also set in the WORLD TIME mode.

## TIME DIFFERENCES

Time difference from GMT	City code	City name	Time difference from GMT	City code	City name
0	GMT	GMT	+4	DXB	Dubai
0	LIS	Lisbon	+4.5	KBL	Kabul
0	LON	London	+5	КНІ	Karachi
+1	PAR	Paris	+5.5	DEL	Delhi
+1	ROM	Rome	+6	DAC	Dhaka
+1	BER	Berlin	+6.5	RGN	Yangon
+2	ATH	Athens	+7	вкк	Bangkok
+2	CAI	Cairo	+7	JKT	Jakarta
+3	MOW	Moscow	+8	SIN	Singapore
+3	JED	Jeddah	+8	HKG	Hong Kong
+3	BGW	Baghdad	+8	BJS	Beijing
+3.5	THR	Teheran	+9	SEL	Seoul

English

Time difference from GMT	City code	City name	Time difference from GMT	City code	City name
+9	TYO	Tokyo	-8	LAX	Los Angeles
+9.5	ADL	Adelaide	-7	DEN	Denver
+10	GUM	Guam	-6	CHI	Chicago
+10	SYD	Sydney	-5	NYC	New York
+10	OOL	Gold Coast	-5	YMQ	Montreal
+11	NOU	Noumea	-5	BOS	Boston
+12	WLG	Wellington	-4	SDQ	Santo Domingo
-10	HNL	Honolulu	-3	BUE	Buenos Aires
-9	ANC	Anchorage	-3	RIO	Rio de Janeiro
-8	YVR	Vancouver	-1	PDL	Azores

In some countries, the daylight saving time may be in effect. The time difference and daylight saving time of various countries are subject to change, according to the governments of respective countries or regions.

## **BATTERY CHANGE**

2 Years

Battery life: Approx. 2 years

Battery : CR2025

 The battery life may be less than 2 years if the alarm sounds more than once a day, the built-in illuminating light is turned on for 3 seconds 10 times a day and the stopwatch is used for more than 1 hour per day.

- As the battery is inserted at the factory to check the functions 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.

#### Battery life indicator

When the battery voltage becomes low, the battery mark starts flashing on the display. In such a case, have the battery replaced with a new one as soon as possible.

#### 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 E at the same time for more than 3 seconds. The display will show "TIME" for one second, and then automatically change to the display of "01.01.17 A 12:00 01".

Before 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.

## 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 3 bar WR 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 manu-factured 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



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.

- \* 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.
  - 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.

## 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.

#### **TEMPERATURES**



Operational temperature range: Between -5° C (+23° F) and 50° C (122° F)



Display temperature range: Between 0° C (+32° F) and 40° C (+104° F)



Functional temperature range of alarm and LED light: Between 5° C (+41° F) and 50° C (+122° F)

#### 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.

English

### 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.