PULSAR

CAL. W150
DIGITAL QUARTZ

- Time/calendar
- Stopwatch with 75 lap/split memory
- Countdown timer
- Daily alarm
- Electroluminescent panel
With each press, the mode changes in order. A

TIME/CALENDER ➡ STOPWATCH ➡ MEMORY RECALL ➡ ALARM ➡ TIMER
TIME/CALENDAR MODE

TIME/CALENDAR SETTING

Press for 2 to 3 seconds.

Select the digits to be adjusted.

Set the flashing digits.

With each press, changeover between 12- and 24-hour indications is made.

Return to TIME/CALENDAR mode.

Selection of the digits

Seconds ➞ Minutes ➞ Hour

↑

Date ➞ Month ➞ Year
The stopwatch measures up to 23 hours, 59 minutes and 59 seconds in 1/100 second increments for the first 1 hour, and in 1 second increments thereafter.
MEMORY RECALL MODE

- The stored data can be recalled block by block after the measurement.

MEMORY RECALL OPERATION

- **D** Press to show the BLOCK SELECTION display.
- **D** Press repeatedly to select the desired block of data.
- **E** Press to recall the stored data in the block.

* The lap/split number is displayed first, and then the lap time and split time are displayed in the upper and lower rows, respectively.
* With each press of button E, the stored data is recalled successively from the oldest to the newest.
HOW TO CLEAR THE STORED DATA

● To erase the data block by block:

D Press in the BLOCK SELECTION display to select the block of data to be erased.

▼

C Press and hold until “DEL” appears.

* The data only in the selected block is erased from memory.

● To erase the data in all the blocks at a stretch:

C In the BLOCK SELECTION display with any block number shown, press and hold until “FREE” appears.

* The data in all the blocks is erased from memory.
The timer can be set up to 23 hours, 59 minutes and 59 seconds in second increments.

**TIMER SETTING**

Press for 2 to 3 seconds.

Select the digits to be adjusted.

Set the flashing digits.

Return to TIMER mode.

Selection of the digits

<table>
<thead>
<tr>
<th>Seconds</th>
<th>⇒</th>
<th>Minutes</th>
<th>⇒</th>
<th>Hour</th>
</tr>
</thead>
</table>
* When the set time is up, a warning sound beeps for 10 seconds. To stop it manually, press any of the buttons.
* After the set time is up, the timer counts up the time up to 23 hours, 59 minutes and 59 seconds as many times as necessary unless stopped and reset.
ALARM SETTING

C Press for 2 to 3 seconds.

D Select the digits to be adjusted (minutes/hour).

E Set the flashing digits.

C Return to ALARM mode.
Alarm engagement/disengagement

With each press, the alarm is engaged and disengaged alternately.

[ Alarm engaged ]

Turning on/off of hourly time signal and button operation confirmation sound

With each press in TIME/CALENDAR mode, the hourly time signal and button operation confirmation sound are turned on and off alternately.
**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 button A is pressed to change over the mode, “Chrono”, “RECAL”, “TIMER” and “ALARM” is displayed first in the STOPWATCH, MEMORY RECALL, TIMER and ALARM mode, respectively.

TIME/CALENDAR MODE
- The calendar automatically adjusts for odd and even months including February of leap years from the year 1996 up to the end of 2045.
- In second setting, when the seconds count any number from “30” to “59” and button E is pressed, one minute is added and the seconds are reset to “00”.
- The flashing digits except the seconds move quickly if button E is kept pressed.
- When setting the hour digits in the 12-hour indication, check that AM/PM is properly set. Only “PM” mark is displayed. For the AM setting, there is no indication. In the 24-hour indication, “24” is displayed.
- Once the year, month and date have been set, the day of the week is automatically set.
- 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 D and E are pressed at the same time. This is not a malfunction. Press button
A, C, D or E to return to the TIME/CALENDAR mode, and then set the time/calendar again.

**STOPWATCH MODE**

- Restart and stop of the stopwatch can be repeated by pressing button E.
- A “Start-Finish-End” stopwatch operation system is used. The data obtained from the start till finish of a race is recorded as a block and stored in memory.
- Lap time measured remains displayed for 5 seconds in the upper row. In the lower row, the lap number is displayed, followed by split time measured. Then, the measurement in progress appears.

![Lap time and Split time display](image)

- The time elapsed from the finish of the race until the end of the measurement will not be included in the measurement.
- Up to 75 measurements can be stored in memory. If more than 75 measurements are made, the measurements over 75 will not be stored in memory.
- When the memory has become full and a lap time/split time measurement is made, “FULL” appears below the measured lap time, indicating that the measurement data is not stored in memory. To check the memory capacity, change the mode to the MEMORY RECALL mode, which displays the number of storable data.
- If the lap time measurement exceeds 60 minutes, any fraction less than a second will be discarded when it is displayed. The split time recalled in the MEMORY RECALL mode, which is the accumulation of the actual lap time measurements, therefore, may not be exactly equal to the one displayed when it was measured.

**MEMORY RECALL MODE**
- Up to 75 sets of lap times and split times can be stored in memory.
- Measurement data obtained from the start to finish of a race is recorded as a block, to which a block number is assigned.
- Up to 38 blocks can be stored in memory.
- When a block of data is erased, the block number is reassigned accordingly.
- When the stored data in all the blocks is erased, the mode is automatically changed to the STOPWATCH.
- The stored data cannot be erased one by one.

**TIMER MODE**
- In the timer setting, the flashing digits move quickly if button E is kept pressed.
- If the watch is left untouched with the digits flashing, it will automatically return to the TIMER mode in 1 to 2 minutes.
- Once the timer is set, the set time is retained and can be used repeatedly unless it is readjusted.
- Restart and stop of the timer can be repeated by pressing button E.
**ALARM MODE**

- At the designated time, the alarm rings for 20 seconds. To stop it manually, press any of the buttons.
- In the alarm time setting, the flashing digits move quickly if button E is kept pressed.
- When the time function is displayed in the 24-hour indication, 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. In the 24-hour indication, there is no indication.
- If the watch is left untouched with the digits flashing, it will automatically return to the ALARM mode in 1 to 2 minutes.
- When the hourly time signal mark is displayed, the hourly time signal rings every hour on the hour and the confirmation sound beeps with each press of the buttons.

**ILLUMINATING LIGHT (electroluminescent panel)**

- The watch works with one battery. When the light begins to lose its luminance, this is an indication that the battery is depleted. We recommend that you change the battery before the watch itself stops.
- If the light is used continuously for a long time, the battery life may be less than the specified period.
BATTERY CHANGE

Battery life : Approx. 3 years
Battery : PANASONIC CR2025

- The battery life may be less than 3 years if the alarm is used for more than 20 seconds a day, the timer warning sound for more than 10 seconds a day and/or the illuminating light for more than 3 seconds 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.
The battery is not rechargeable. Never attempt to recharge it, as this may cause battery leakage or damage to the battery.

**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.
** 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).