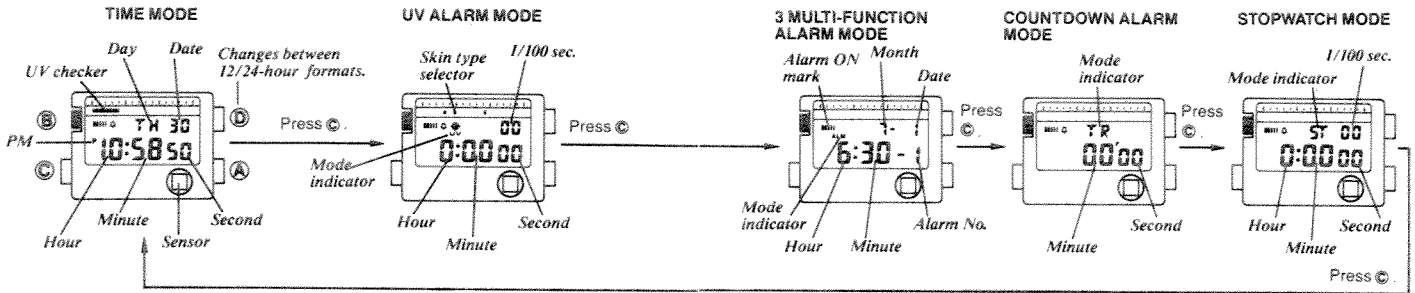# Module No. 508

READING THE DISPLAY

USING THE ULTRAVIOLET RAY MEASUREMENT FUNCTION

The ultraviolet ray measurement function measures ultraviolet ray intensity and accumulation by sensing ultraviolet light and converting the light energy to electric energy.
* There will be slight unavoidable differences in measurement results depending on the method of measurement used, skin type and the use of oils on the skin. Use the function only as a guide to the amount of exposure to sunlight. Use only with sunlight and never with artificial light sources such as ultraviolet lamps.
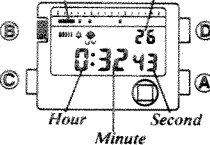
MEASURING ULTRAVIOLET RAYS
Ultraviolet ray intensity
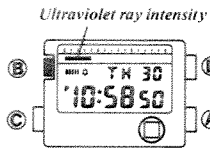
Press Ⓐ in Time mode to start ultraviolet ray intensity measurement. The ultraviolet ray intensity is displayed in the UV checker at the top of the display approximately 2 seconds later.
* When measuring, hold the watch so that it faces the sun.
* Stop measurement if an alarm sounds during a measurement.
* Example: an ultraviolet ray intensity indication of 15 indicates that approximately 30 minutes of exposure for skin type 2, or approximately 50 minutes of exposure for type 4 skin, will result in a suntan.

Ultraviolet ray accumulation

Press Ⓐ in UV mode to start ultraviolet ray accumulation measurement. Press Ⓐ to stop measurement. Press Ⓓ to reset.
* Three flashing points in the UV checker indicate UV alarm warning points.

INFORMATION ABOUT SUNBURN

Sunburn varies depending on:
1) Skin type, and the use of suntan lotions (removal by sweat and water)
2) Physical condition and what has been eaten
3) Air temperature
There are also differences in the sun protection factor (SPF) provided by suntan lotions, depending on the brand. Sunburn appears 12 to 24 hours after exposure as a change in skin color. Even if there is no sunburn, there will still be a slight change in skin color. Skin that has not been exposed to the sun at all has little resistance to ultraviolet rays. Exposing such skin briefly to weak ultraviolet rays daily can increase resistance.

USING THE UV ALARM
The UV alarm is an electronic buzzer that sounds when ultraviolet ray accumulation reaches a level suitable for a slight suntan.
* The influence of ultraviolet rays varies depending on skin type and condition. Before using the watch, set the skin type and keep in mind your skin condition.

<NOTE>
Use the UV alarm only as a general guide to suntanning. Due to the differences such as those mentioned in [INFORMATION ABOUT SUNBURN], going indoors is recommended (even before the alarm sounds) if it is felt that exposure is sufficient.

—SKIN TYPE—
Basically, there are six types of skin.

Type	Description
1	Fairest of skin Will not tan Inflammation easily occurs due to sunburn
2	Fair skin Will suntan lightly Inflammation easily occurs due to sunburn

| Type	Description
3	Lightly colored skin Will gradually tan Inflammation does not easily occur due to sunburn
4	Yellow or brown skin Tans well Little inflammation due to sunburn
5	Brownish skin Tans easily Almost no inflammation due to sunburn
6	Brown or black skin Always tanned No inflammation due to sunburn

SETTING SKIN TYPE
Always set your skin type before measuring ultraviolet ray accumulation.
* This applies for skin which has not been exposed to sunlight. Set a step higher for well tanned skin.

(1) Press Ⓑ in UV mode to set the skin type.
(2) Set your own skin type by pressing Ⓐ. Keep pressed for high speed change.
(3) Press Ⓑ to return to UV mode after setting your skin type.
* Display will automatically return to UV mode if left unused for a few minutes.

UV ALARM OPERATION
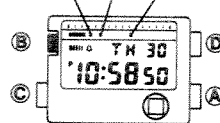
After setting your skin type in the UV mode and pressing Ⓐ to start accumulation measurement, the buzzer will sound for 10 seconds after exposure to ultraviolet rays as follows. Press any key to stop beeper.

①: At the level where the skin is slightly tanned without suntan lotion.
②: At the level where the skin is slightly tanned with suntan oil (SPF 2).
③: At the level where the skin is slightly tanned with a sunscreen lotion (SPF 8).
* SPF is Sun Protection Factor, an index of skin protection.
This is indicated on suntan oils and lotions. Check the label before use.
SPF 1: when nothing is used on the skin
SPF 2-5: when suntan oil is used
SPF 6 or higher: when a sunscreen lotion is used

ULTRAVIOLET RAY MEASUREMENT PRECAUTIONS
* When sunbathing with the UV alarm set, place the watch where the alarm can be easily heard.
* Measurements vary slightly depending on the position of the watch. Always face with the sensor toward the sun.
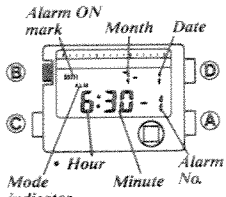Examples:
When sunbathing at the beach: according to body position.
* Using the ultraviolet ray measurement function while it is malfunctioning can result in excessive exposure to sunlight and sunburn. Before use, place the watch in direct sunlight and check if the bar graph of UV checker indicates at 3 graduation or higher by pressing Ⓐ in the time mode. Also check whether the bar graph moves irregularly when Ⓐ is pressed and held in a place where there is no sunlight.
* This function is not designed for use with artificial light sources.
* Accurate measurements are not possible if during measurement suntan lotion or drops of water adhere to the glass of the sensor or a shadow is cast on the glass.
* The ultraviolet measurement function is not intended for use as a used as a medical instrument.

THE CASIO ULTRAVIOLET RAY-MEASURING WATCH IS FOR RECREATIONAL PURPOSES AND NO RESPONSIBILITY IS ASSUMED FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING WITHOUT LIMITATION DAMAGES OR INJURIES RESULTING FORM MATHEMATICAL OR ULTRAVIOLET RAY-MEASUREMENT INACCURACY OF THE PRODUCT.

USING 3 MULTI-FUNCTION ALARMS

Alarm ON mark   *Month   Date*

Mode indicator   • Hour   Minute   Alarm No.

SOUND DEMONSTRATION
Press and hold Ⓐ **in alarm mode** to sound beeper.

SETTING ALARM TIME
1) Press Ⓐ **in alarm mode** to select alarm No. 1, 2 or 3.
2) Press Ⓑ to set new alarm time and date.
3) Pressing Ⓐ increments digit. Keep pressed for high speed change.
4) Each press of Ⓒ shifts flashing position. Set minute, month and date.
5) Press Ⓑ to complete setting.
* Display automatically returns to initial alarm mode display if left unused for a few minutes.

Three alarms can be used independently in 4 different ways. Daily alarm, monthly alarm, daily alarm for 1-month period or date alarm. Beeper sounds for 20 seconds at preset time when alarm is on. Press any button to stop beeper. Signal sounds every hour on the hour if time signals is set.

ON OR OFF SETTING OF ALARM AND TIME SIGNAL
Press Ⓐ in alarm mode to select alarm No. 1, 2, 3 or time signal. Press Ⓓ in each alarm to set alarm on (♪♪♪♪) or off signals (no mark). Press Ⓓ in time signal to set time signal on (♪) or off (off).
* Pressing Ⓑ in alarm mode automatically sets alarm on.
* Alarm time is displayed in the 24-hour system when TIME is in 24-hour system.

**4 TYPES OF ALARMS**

Daily alarm	(-- --)	Month and date not set	Beeper sounds at preset time every day.
Monthly alarm	(-- 10)	Only date set	Beeper sounds on preset date at preset time once every month.
1 month alarm	(1- --)	Only month set	Beeper sounds at preset time every during set month.
Date alarm	(1- 10)	Month and date set	Beeper sounds at preset time, on preset month and date.

SETTING TIME AND DATE

Press Ⓒ.

| SECOND | → | HOUR | → | MINUTE |
| DATE | ← | MONTH | ← | YEAR |
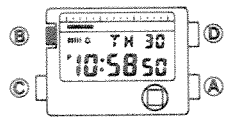
1) Press Ⓑ in **TIME mode** to set time and date.
2) Press Ⓐ on a time signal to correct seconds.
3) Press Ⓒ to shift flashing digit(s). Digit(s) to be changed will flash.
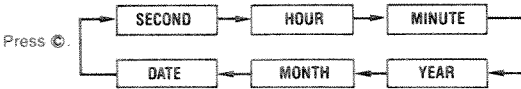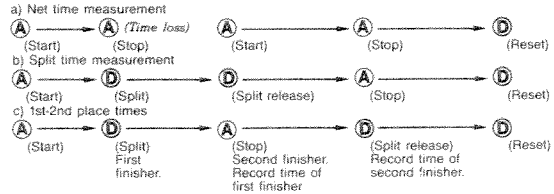
* Year digits can be set up to the year 2029.
4) Each press of Ⓐ increments digit one by one. Keep pressed to change at high speed.
5) Press Ⓑ to complete setting.
* Display automatically returns to TIME mode if left unused for a few minutes.

USING COUNTDOWN ALARM

Countdown can be set from 1 minute to 60 minutes, and times to an accuracy of 1 second. Start/stop operation is possible by pressing Ⓐ and is confirmed by a signal. When display reaches zero, beeper sounds for 10 seconds until any button is pressed.

SETTING COUNTDOWN TIME
Pressing Ⓓ in countdown alarm mode increments digit one by one. Keep pressed for high speed change.
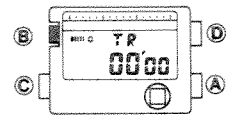
USING STOPWATCH

A signal confirms start/stop and split/reset operation. (Working range) Total elapsed time display is limited to 23 hours 59 minutes 59.99 seconds. For longer times reset and start again.

a) Net time measurement
Ⓐ ——→ Ⓐ *(Time loss)*   Ⓐ ——→ Ⓐ ——→ Ⓓ
(Start)   (Stop)   (Start)   (Stop)   (Reset)

b) Split time measurement
Ⓐ ——→ Ⓓ ——→ Ⓓ ——→ Ⓐ ——→ Ⓓ
(Start)   (Split)   (Split release)   (Stop)   (Reset)

c) 1st-2nd place times
Ⓐ ——→ Ⓓ ——→ Ⓐ ——→ Ⓓ ——→ Ⓓ
(Start)   (Split) First finisher.   (Stop) Second finisher. Record time of first finisher   (Split release) Record time of second finisher.   (Reset)