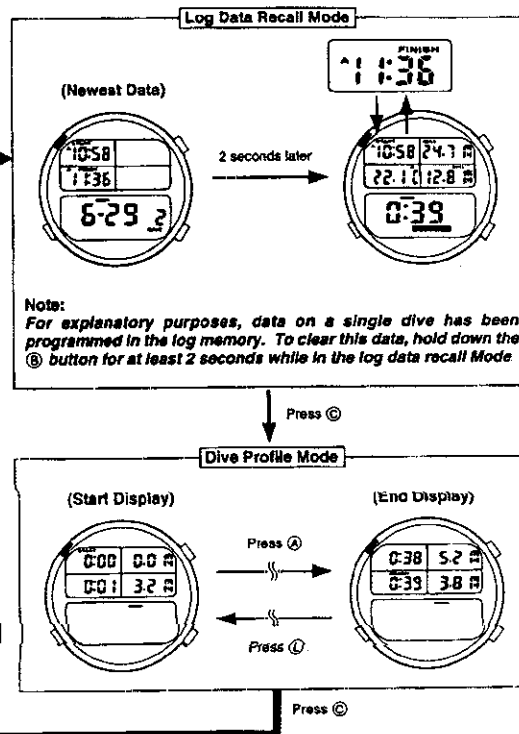
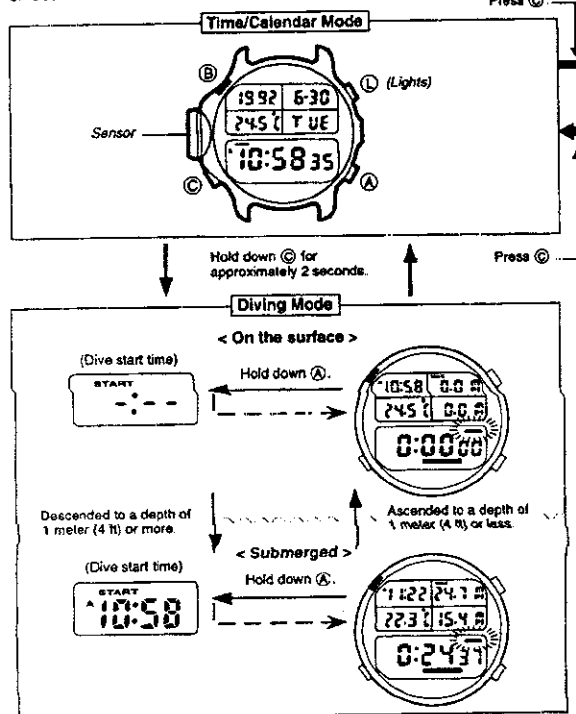


## OPERATION

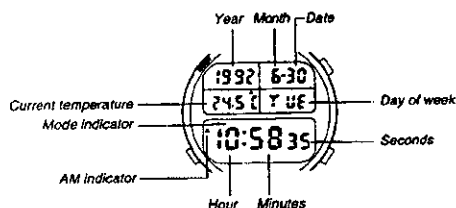
For information on how to read the display refer to the separate instructions on each function



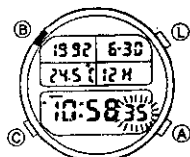
**Note:**  
For explanatory purposes, data on a single dive has been programmed in the log memory. To clear this data, hold down the B button for at least 2 seconds while in the log data recall Mode.

## SETTING THE TIME AND CALENDAR

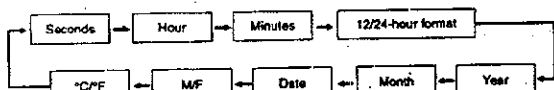
### Reading the Time/Calendar Mode Display



### To set the time and date



1. Press the B button while in the Time/Calendar Mode. The seconds flash because they are selected.
2. Press the C button to change the selection in the following sequence



3. While the seconds digits are selected (flashing), press the A button to reset them to "00". If you press the A button while the seconds count is in the range of 30 to 59, it is reset to "00" and 1 is added to the minutes. If the seconds count is in the range of 00 to 29, the minutes count is unchanged.
4. While any digits (besides seconds) are selected (flashing), press the A button to increase the number or the L button to decrease it. Holding down either button changes the current selection at high speed. While the 12/24-hour, M/F (meter/f), or C/F (Celsius/Fahrenheit) setting is selected, press the A button to switch between the two formats.
5. After you set the time and date, press the B button twice to return to the Time/Calendar Mode.

- The day of the week is automatically set in accordance with the date.

- The date can be set within the range of January 1 1990 to December 31, 2029.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Time/Calendar Mode automatically.

## TEMPERATURE FUNCTION

This watch features a built-in temperature sensor that is capable of measuring both air and water temperature. The readout from the temperature sensor can also be switched between Celsius (°C) and Fahrenheit (°F). The thermometer can be adjusted to correct for measurement error.

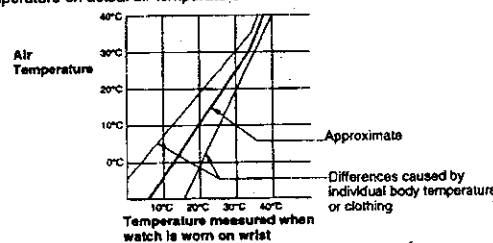
### Important

Since the temperature sensor is built into the watch, the value produced on the display represents the temperature of the watch itself. Note the following precautions when precise temperature readings are required.

### Air Temperature Measurements

Air temperature measurements are affected by your body temperature (while you are wearing the watch), direct sunlight, and moisture. To achieve a more accurate temperature measurement, remove the watch from your wrist, place it in a well-ventilated location out of direct sunlight, and wipe off all moisture from the case. It takes approximately 20 to 30 minutes for the case of the watch to reach the actual surrounding air temperature.

Accurate air temperature measurements cannot be achieved while you are wearing the watch. The following graph illustrates the effects of body temperature on actual air temperature.



### Water Temperature Measurements

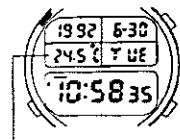
Water temperature measurements are almost unaffected by wearing the watch on your wrist. Note however that if temperature changes radically, it takes about five minutes for the watch temperature to match the water temperature.

## About Temperature Measurements

- During normal operation (Time/Calendar Mode) Automatic measurements are taken every ten minutes (00, 10, 20, etc.) You can also take instantaneous measurements at any time by pressing (B).
- While diving (Diving Mode) Automatic measurements are taken every 25 seconds. Note, however that measurements are not taken whenever the watch's display light is lit.

## About the temperature display

< Time/Calendar Mode >

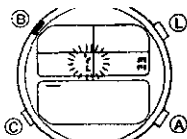
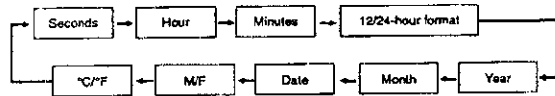


Current temperature

- The temperature is constantly displayed while it is being measured. In the Log Data Recall Mode, the water temperature at the maximum depth appears in place of the current temperature.
- Whenever a measured temperature is outside the allowable measurement range, the temperature reading shows --°C (or °F). The display returns to normal as soon as the measured temperature falls within the allowable range.

## Switching Between Celsius and Fahrenheit

- 1 Press the (B) button while in the Time/Calendar Mode. The seconds flash because they are selected.
- 2 Press the (C) button to change the selection in the following sequence



3. Press the (C) button until °C/°F is selected (°C or °F is flashing).
4. Press the (A) button to select either celsius "C" or fahrenheit "F".
- 5 After you select the celsius or fahrenheit press the (B) button twice to return to the Time/Calendar Mode.

- The setting reverts to "C" whenever you have the battery of the watch replaced

## Adjusting the Temperature Measurement

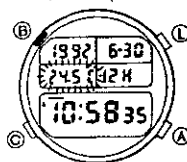
The temperature sensor of this watch is calibrated at the factory before shipment and further adjustment is normally not required. If noticeable error is found in the temperature readings produced by the watch, you can adjust it to correct the error.

### Important

Incorrectly adjusting the temperature measurement of this watch can result in incorrect readings. Carefully read the following before doing anything.

- Compare the readings produced by the watch with those of another reliable, accurate thermometer.
- If adjustment is required, remove the watch from your wrist and wait for 20 or 30 minutes to give the temperature of the watch time to stabilize.
- Perform the temperature adjustment procedure as quickly as possible to avoid the temperature of the watch being affected by your body temperature.
- You can also perform temperature adjustment underwater if the water temperature is stable.

### To adjust the temperature



1. Press the (B) button while in the Time/Calendar Mode. The seconds flash because they are selected.
2. Press the (B) button again and the current temperature digits flash.

3. Each press of the (A) button increase the displayed temperature by 0.1°C and pressing the (L) button decreases it by 0.1°C.
- If you have selected Fahrenheit as your unit of measurement the above operations change the reading by 0.2°F.
4. After adjusting the temperature press the (B) button to return to the Time/Calendar Mode.
- If you do not operate any button for a few minutes while the temperature digits are flashing, the flashing stops and the watch goes back to the Time/Calendar Mode automatically.

### To reset the temperature adjustment

The following operation returns the temperature adjustment to the factory setting.

1. Press the (B) button twice while in the Time/Calendar Mode and the current temperature digits flash.
2. Press the (C) button to reset the temperature adjustment.
3. Press the (B) button to return to the Time/Calendar Mode.

### Measurement formats and ranges

- Measurement Range: -10°C to +60°C (14°F to 140°F)
- Display Units: 0.1°C/0.2°F
- Precision: ±2°C/±3.6°F

## DIVING FUNCTIONS

### 1. About the Diving Functions

The pressure and temperature sensors of this watch provide a wealth of useful diving data. Besides automatically measuring depths in the Diving Mode, the watch also stores depth and temperature data into a log memory for later recall.

### Measurement formats and ranges

#### ■ Pressure Sensor

- Dive Time : measured in 1-second increments  
Display range: up to 11 hours, 59 minutes and 59 seconds
- Depth : measured in 0.1-meter (1-ft) increments  
Display range: between 0 and 80 meters (0 and 263 ft)  
Note that depths between 0 and 1 meter (0 and 4 ft) are registered as "0.0 M (0 F)". Display shows "dEEP" when 80 meters (263 ft) is exceeded.  
Reading frequency: every 3 seconds

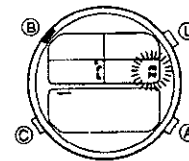
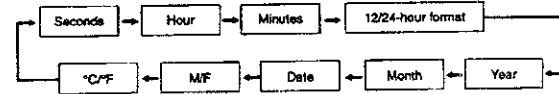
#### ■ Temperature Sensor

- Water Temperature Measurement  
Display Unit: 0.1°C/0.2°F  
Display Range: -10°C to 60°C (14°F to 140°F)
- Measurement Interval: Approximately 25 seconds

### Basic Diving Operations

#### Switching between meters and feet

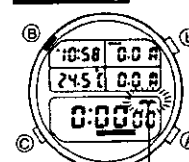
- 1 Press the (B) button while in the Time/Calendar Mode. The seconds flash because they are selected.
- 2 Press the (C) button to change the selection in the following sequence



3. Press the (C) button until M/F is selected (M or F is flashing).
4. Press the (A) button to select either meters "M" or feet "F".
- 5 After you select the meters or feet press the (B) button twice to return to the Time/Calendar Mode.

- The setting reverts to "M" whenever you have the battery of the watch replaced

#### Before diving

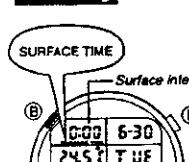


Mode indicator

Switch to the Diving Mode by holding down the (C) button for at least two seconds

- Once set to the Diving Mode, the Diving Function will automatically make diving time depth and water temperature calculations

#### After diving



Mode indicator

Switch back to the Time/Calendar Mode by holding down the (C) button for at least two seconds

- Immediately after you switch back to the Time/Calendar Mode, the surface interval is shown on the display

#### For repetitive dives

After surfacing and switching to the Time/Calendar Mode, be sure to switch back to the Diving Mode before starting your next dive. If you do not switch back, your second dive will be considered a continuation of the first dive, with the data being added on accordingly.

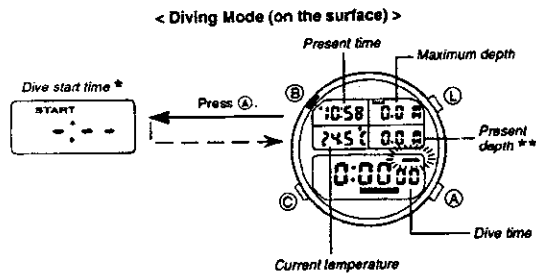
### 2. How to Use the Diving Function

Switching to the Diving Mode

- To switch to the Diving Mode while in the Time/Calendar, Log Data Recall, or Dive Profile Mode, hold down the (C) button for at least two seconds.
- Holding down the (A) button while in the Diving Mode replace the present time display with the dive start time.
- When you surface after a dive, hold the (C) button down for at least two seconds to return to the Time/Calendar Mode.

**Important**

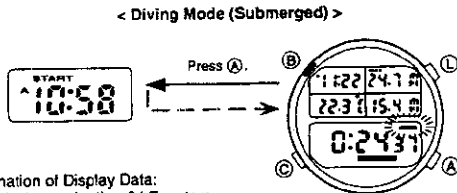
While underwater (at a depth of at least 1.0 meter/4 ft) operation will not revert to the Time/Calendar Mode even if you press the (C) button (prevents inadvertent operational errors).



- \* Dive start time display appears as "--:--" until a depth of at least 1.0 meter (4 ft) is reached.
- \*\* "M (F)" mark flashes until a depth of at least 1.0 meter (4 ft) is reached.

**Automatic calculation of dive start time and memory function**

When a depth of at least 1.0 meter (4 ft) is reached, the diving timer automatically begins counting the dive time. The time when this timer starts is known as the "dive start time"



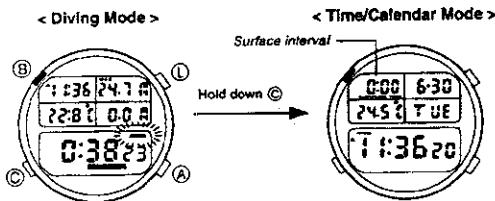
**Explanation of Display Data:**

- Maximum depth = 24.7 meters
- Present depth = 15.4 meters
- Dive start time = 10:58 AM
- Present time = 11:22 AM
- Current temperature = 22.3 C
- Dive time = 24 minutes and 37 seconds

When you press the (C) button to switch to the Time/Calendar Mode after completing a dive (which is at least 1 meter (4 ft) deep and 3 minutes in duration) the log data is automatically input into memory.

**Calculation of surface interval**

As soon as you come to the surface after completing a dive, the "surface timer" begins to count the time you spend resting on the surface, counting up to 24 hours or until you begin your next dive. To display the surface interval, simply hold down the (C) button for at least two seconds while in the Diving Mode.



**Automatic switching to Time/Calendar Mode**

- If you remain on the surface (depth of "0") for one hour or more without switching back to the Time/Calendar Mode, operation will revert automatically.
- If you decide to dive again after remaining on the surface for an extended period, always be sure to switch back to the Diving Mode before diving.
- When the expired dive time exceeds 12 hours, operation automatically switches back to the Time/Calendar Mode. Data up to this point is held in memory.

**Display light**

The display features a built-in light which lights when you press the (L) button. In the Time/Calendar Mode, the light goes out immediately after you release the (L) button, while in the Diving Mode it remains lit for 3 to 4 seconds after you release the button.

**Note**

- The display light does not operate if the water temperature is below -5°C (23°F).
- The display light temporarily goes out in the Diving Mode if a depth measurement is taken during the 3 or 4 seconds that the light is lit.

**3. Log Data Memory**

**About the log memory**

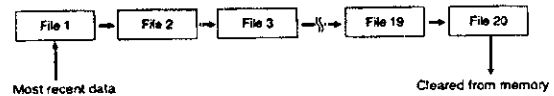
After finishing a dive, log data for a single dive is put into memory when operation is switched to the Time/Calendar Mode. The built-in memory is capable of holding log data for up to 20 dives. The following data is stored in memory for each dive:

- ① Dive date ..... Month and date
- ② Dive number ..... Indicates the number of dives for the day.
- ③ Dive start time ..... Hr. (AM/PM)/Min. (Seconds rounded down)
- ④ Dive end time ..... Hr. (AM/PM)/Min. (Seconds rounded up)
- ⑤ Dive time ..... Hr./Min. (Seconds rounded up)
- ⑥ Maximum depth
- ⑦ Average depth... Total measured depth divided by total number of measurements
- ⑧ Water temperature at maximum depth

The above data can be recalled in the Log Data Recall Mode

**Automatic Log Memory**

Up to 20 log data files can be stored in memory. Once memory is full, memory is updated by recording the newest data and deleting the oldest file.



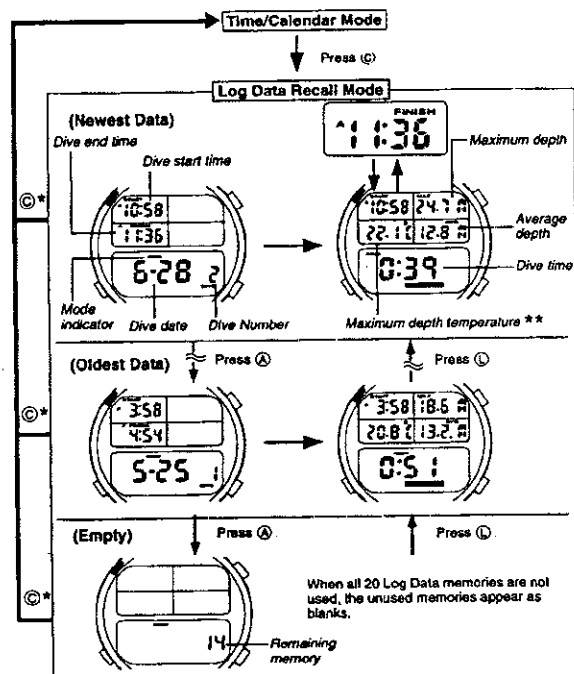
- Using this filing system, the "oldest" dive data is cleared from memory automatically so there is no need to clear the memory manually. If you want to clear unnecessary data, however, enter the Log Data Recall Mode and hold down the (B) button for at least two seconds. The log data you specify is cleared from memory.

**To review log data**

You can review log data in the Log Data Recall Mode. The first data to appear is the newest data (File 1), and each press of the (A) button advances to the next set of data (File 2, File 3 etc.). Pressing button (L) displays data in reverse sequence.

- Holding down either button scrolls through the data at high speed.
- Pressing the (A) and (L) buttons at the same time in the Log Data Recall Mode jumps to the newest data (File 1).

**Note**  
For explanatory purposes, data on a single dive has been programmed in the log memory. To clear this data, hold down the (B) button for at least 2 seconds while in the Log Data Recall Mode.



- \* When you've finished reviewing log data, press the (C) button twice to return operation to Time/Calendar Mode.

- \*\* If the maximum depth temperature was recorded in memory within the initial five minutes of the dive, it flashes on the display when you recall it. This warns you of the possibility that the watch case did not have enough time to reach water temperature and that the temperature value may be incorrect.

### When utilizing log data with dive tables

1. Make sure you have a clear understanding of dive tables and their use. Before using this watch make sure you have undergone a thorough diving training program.
2. Make sure you have a clear understanding of the special characteristics of all the log data provided by this watch (dive time, maximum depth, dive start time, dive end time, average depth, maximum depth, temperature).
3. Always remember that depth readings provided by this watch are not guaranteed for 100% accuracy.
4. Any log data accompanied by a warning mark should not be used. For details, see section "What To Do When a Warning Mark Appears".
5. Always obey the basic rules of safe diving.
  - It is recommended to dive within the limits of the no-decompression limit. Also, be sure to make "safety stops" every 3 to 6 meters (10 to 20 ft).
  - It is dangerous to dive near the no-decompression limit. Dive 1 to 2 ranks within your actual limitations.
  - No dive table is 100% accurate. In addition, always take into account individual physical differences, your physical condition, water temperature etc.
  - Note that high altitude/fresh water diving requires the use of special dive tables and calculations. Be sure to receive appropriate training before attempting high altitude or fresh water diving.

### Calculation of average air consumption using average depth data

Average depth data is calculated by adding all depth readings at depths greater than 1.0 meter (4 ft) and dividing by the number of readings taken. Because of this, readings at less than 1.0 meter (4 ft) are not considered. If tank air is consumed while on the surface, it will be impossible to utilize the average depth log data in calculating average air consumption. Note also that the time which elapses while you are on the surface is not included in the "dive time"

## HOW THE DIVING FUNCTION WORKS

### About depth and water pressure

Water pressure increases with depth. In the case of sea water (specific gravity = 1.025), water pressure increases by 1 ATM (103kg/cm<sup>2</sup>) with each 10 meters (33 ft) of depth. This watch makes use of the relationship between pressure and depth, using a pressure sensor to calculate the water pressure and then converting this data into depth readings

### Operation of pressure sensor and "0 M (0 F)" reset

When the Diving Mode is entered, the built-in sensor immediately begins to operate. When you begin a dive, the sensor will automatically begin making depth readings and trigger the dive timer to measure dive time. Note also that the atmospheric pressure is set to "0 M (0 F)" when the Diving Mode is entered. Normally you should select the Diving Mode immediately before beginning a dive

### Present depth reading (Diving Mode)

The present depth reading shows your dive depth in real time. New readings are shown every 3 seconds.

When using this reading to monitor ascending speed, it is recommended to ascend at a rate of approximately 10 meters (33 ft) per minute (0.5m/2 ft every 3 seconds)

### Maximum depth reading (Diving Mode/Log Data Recall Mode)

In Diving Mode: shows maximum depth reached since start of dive.  
In Log Data Recall Mode: shows maximum depth reached for each dive.

### Average depth reading (Log Data Recall Mode)

Shows average depth reached during each dive.  
Calculation method: sum of depth readings divided by number of depth readings taken.

- Depth readings on surface (at depth of less than 1.0 meter/4 ft) are not considered. If tank air is consumed while on the surface, it will be impossible to utilize the average depth log data in calculating average air consumption.

### Depth Reading

Display range: between 0 and 80 meters (0 and 263 ft)  
(Note that depths between 0 and 1 meter (0 and 4ft) are registered as "0.0 M (0 F)". Display shows "dEEp" when 80 meters (263 ft) is exceeded)  
Reading frequency: every 3 seconds

### Water Temperature Reading

- Display range: -10°C to 60°C (14°F to 140°F)
- Display units: 0.1°C/0.2°F
- Reading frequency: every 25 seconds (every 40 seconds when display light is lit)
- Current water temperature (Diving Mode)  
This reading is updated every 25 seconds.
- Maximum depth temperature (Log Data Recall Mode)  
Water temperature at maximum depth reached during a dive

### Note

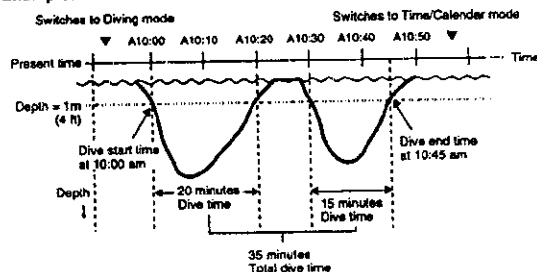
In the case of radical temperature change, the watch takes about five minutes to reach the new temperature

### Dive Time Calculation

#### Maximum dive time — 11 hours 59 minutes and 59 seconds

When a dive time of 12 hours is reached, operation automatically switches to the Time/Calendar Mode. Log data up to this point is held in memory

#### Example:



#### Dive start

With the watch set to the Diving Mode, the diving timer will start automatically when a depth of 1.0 meter (4 ft) is reached. (Dive start time calculated by rounding seconds down to the nearest minute)

#### Dive end

With the watch set to the Diving Mode, the diving timer will stop automatically when you surface to a depth of less than 1.0 meter (4 ft) (Dive end time calculated by rounding seconds up to the nearest minute). Dive end time can be reviewed in the Log Data Recall Mode.

#### Elapsed dive time

Shows the total time elapsed at depths of 1.0 meter (4 ft) or more

#### Note

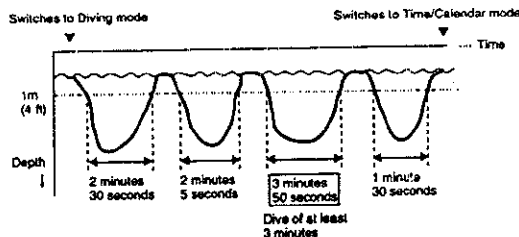
- After surfacing and switching to the Time/Calendar Mode, be sure to switch back to the Diving Mode before starting your next dive. If you do not switch back, your second dive will be considered a continuation of the first dive, with the data being added on accordingly.
- Note that the "dive time" will not necessarily equal the difference between the "dive start" time and the "dive end" time as the dive timer stops counting when you ascend to a depth above 1.0 meter (4 ft) (for rests, etc.). The "dive time" shows only the time spent underwater at a depth greater than 1.0 meter (4 ft).

### Registered Dives (Valid Dives) and Non-Registered Dives (Invalid Dives)

Often times, a single "dive" may actually consist of several short dives, with the diver returning to the surface frequently. If, however, the dive does not contain at least one "leg" where the diver stays submerged at least 3 minutes, the dive will not be registered in the log memory

#### Registered dive (Valid dive)

Example: Dive registered in log memory

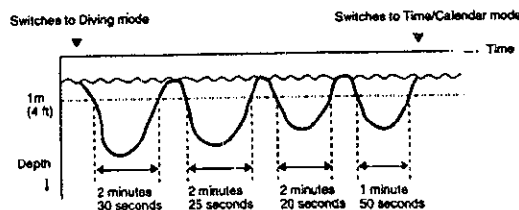


In the above case, at least one of the "legs" in this dive exceeded 3 minutes. The timer will register the total elapsed dive time of 10 minutes in this case

$$\begin{array}{r}
 2 \text{ minutes} \\
 30 \text{ seconds} \\
 + 2 \text{ minutes} \\
 5 \text{ seconds} \\
 + 3 \text{ minutes} \\
 50 \text{ seconds} \\
 + 1 \text{ minute} \\
 30 \text{ seconds} \\
 \hline
 = 9 \text{ minutes} \\
 55 \text{ seconds} \\
 \text{(Seconds rounded up)} \\
 \hline
 10 \text{ minutes}
 \end{array}$$

#### Non-Registered Dive (Invalid dive)

Example: Dive NOT registered in log memory



- In this case, none of the "legs" exceeded 3 minutes. Because of this, the dive is not registered in the log memory.
- Since one leg must be at 3 minutes long to register data in log memory, you may not be able to use this function for snorkeling.
- Note that non-registered dives made during "surface interval" will not affect the surface interval reading.
- Dive Profile data is recorded regardless of whether the dive is valid or invalid.

### Surface Interval Calculation

The timer begins counting the "surface interval" (time spent on the surface between two dives) immediately after you ascend to a depth of less than 1.0 meter (4 ft). This timer does not operate after non-registered dives. In addition, non-registered dives made during "surface interval" will not affect the surface interval reading.

### Range of Dive Timer

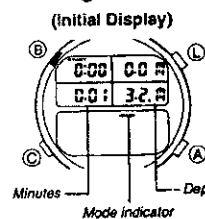
Elapsed dive time can be measured up to 11 hours 59 minutes and 59 seconds. When a dive time of 12 hours is reached, operation automatically switches to the Time/Calendar Mode. Log data up to this point is held in memory and a count of the surface interval begins.

## DIVE PROFILE FUNCTION

Regardless of whether a dive is valid or invalid, Dive Profile data is measured and stored in memory during the dive. Dive Profile data is the maximum depth reached during each minute of the dive, and up to 60 values can be stored in memory. Starting a new dive erases the previous dive's Dive Profile data.

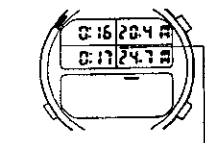
- If a dive is longer than 60 minutes, the Dive Profile memory contains data for the final 60 minutes of the dive only. This means that if a dive takes 1 hour 20 minutes, the Dive Profile memory contains data starting from 20 minutes into the dive up to the end of the dive.

### Recalling Dive Profile Data



- 1 While in the Time/Calendar mode, press the **ⓐ** button twice to display the initial Dive Profile Mode display.

- If you do not press any button for about one hour in the Dive Profile mode, the display returns to the Time/Calendar Mode automatically.



- 2 Press the **ⓐ** button to scroll forward minute-by-minute through the data, or the **Ⓛ** button to scroll back. Holding down either button scrolls through the data at high speed.
- Pressing the **ⓐ** and **Ⓛ** buttons at the same time returns to the initial display.

The indicator "MAX" indicates the maximum depth for the entire dive.

### Clearing Dive Profile Data

Existing Dive Profile data is cleared automatically any time you start a new dive. You can also manually clear all Dive Profile data by holding down the **ⓐ** button for about two seconds.

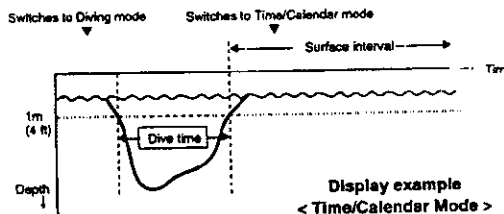
- Pressing the **ⓐ** button returns to the Time/Calendar Mode.

## MEASUREMENT OF SURFACE INTERVAL.

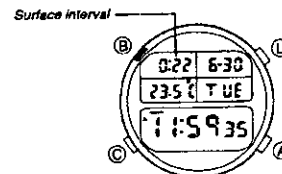
This watch is equipped with a function that lets you automatically measure the surface interval (since the current depth registered 0.0 M (0 F) on the display). The surface interval can be measured up to 24 hours, and the count of the time is terminated when you begin the next dive. At the end of the next dive the count for the surface interval restarts from zero.

- Remember that a dive is considered to be valid only if it is below a depth of 1 meter (4 ft) for more than 3 minutes. If you make a dive that does not meet these conditions, the count of surface interval is not terminated and it continues from the end of the last valid dive (below a depth of 1 meter (4 ft) for more than 3 minutes).
- The count for the surface interval continues no matter what Mode the watch is in, but the display of the count (hours and minutes only) is shown only in the Time/Calendar Mode.

### Example:



Display example < Time/Calendar Mode >



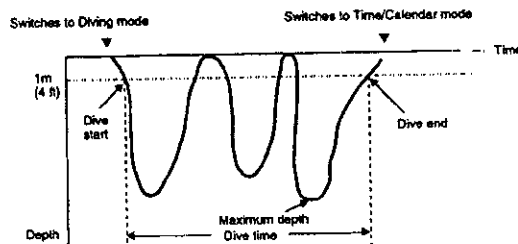
- Note that surface interval is rounded down to the nearest minute for safety reasons.

### Important

- The following two conditions will disable the count of the surface time.
- Holding down the **ⓐ** button in the Log Data Recall Mode for approximately two seconds to clear the newest log data.
- Even though a valid dive is completed, a count of the surface time is not performed if all four buttons are pressed to force an exit from the Diving Mode to the Time/Calendar Mode. For further details on forcing an exit from the Diving Mode to the Time/Calendar Mode.

## SNORKEL DIVING USE

In addition to scuba diving, this watch can also serve as a handy tool for snorkel diving. Since the duration of dives when snorkel diving is comparatively short, however, they are not registered in the log memory. Also note that if you snorkel dive during a count of surface interval, the snorkel dive will not terminate the count of surface interval unless the snorkel dive meets the conditions required to be a valid dive (below a depth of 1 meter (4 ft) for more than 3 minutes).



- The data for this dive is cleared from the display when you enter the Time/Calendar Mode. Data is not recorded into log memory but Dive Profile data is recorded.

## HELPFUL HINTS ON DIVE FUNCTION OPERATION

### "0 M (0 F)" Reset Function

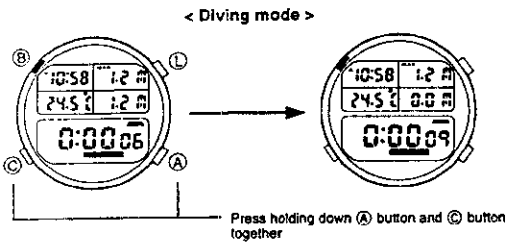
#### Automatic "0 M (0 F)" reset

When the Diving Mode is entered, the present depth reading is set at "0 M (0 F)" (even if you are underwater at a different pressure). Because of this avoid switching to the Diving Mode while underwater.

#### Manual "0 M (0 F)" reset

By pressing holding down the **ⓐ** button and **ⓐ** button together for at least 1 second the pressure reading can be reset to "0 M (0 F)".

In some cases, such as when the sensor is exposed to wide changes in temperature, the display may show a depth of greater than 1.0 M (4 F) even when you are at the surface. In this case, it is necessary to reset the pressure reading to "0 M (0 F)" at the surface.



### Underwater 0 M (0 F) reset

This watch is equipped with a special function which compares a standard value of the sensor value to provide an absolute pressure reading in cases where you have made one of the following operational errors:

- entered the Diving Mode while underwater (automatic reset).
- held down the (A) and (C) buttons for at least one second while underwater (manual reset)

### Calculation of standard value and absolute value

Whenever the sensor value exceeds the standard values listed below during a dive, operation automatically switches to show the absolute water pressure:

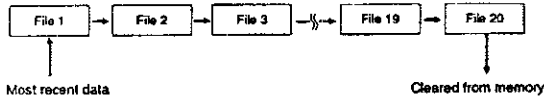
- Standard value: 1.24kg/cm<sup>2</sup> (bars absolute) at 25°C (77°F)  
 Bars absolute 2 meters (7 ft) below the surface of the sea water (gravity 1.025) with standard atmosphere at 25°C (77°F)
- Absolute water pressure: Depth of 0 meters (0 ft) measured at 25°C (77°F) with a bars absolute of 1.033kg/cm<sup>2</sup>.

- At this time, a single warning mark (!) appears on the display

### Clearing Log Data

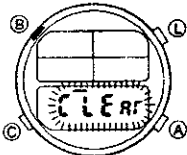
#### Auto-clear

Up to 20 log data files can be stored in memory. Once memory is full, memory is update by recording the newest data and deleting the oldest file.



### Clearing a specific log data file

Use the following procedure to clear a specific log data file.



- 1 Press the (A) button or the (L) button to display the data you wish to clear from memory.
- 2 Hold down the (B) button for at least two seconds until the "CLEAR" message appears. The data will be cleared from memory

- If the (B) button is not held down for at least two seconds data will not be cleared from memory

The cleared file will be empty however the other files are held in memory without being altered

#### Note

If the newest log data is cleared during the surface interval calculation of the surface interval will be automatically stop.

### Forced Exit from Diving Mode

When the depth display shows a depth of 1.0m (4 ft) or more, operation cannot be switched from the Diving Mode to the Time/Calendar Mode by pressing the (C) button. If, however, it becomes necessary to switch to the Time/Calendar Mode during a dive for one of the reasons listed below, you can do so by holding down the (A), (B), (C) and (L) buttons together for at least 2 seconds.

- when watch is used in recompression chambers or other high-pressure environments.
- when watch is used in environments where temperature varies widely from suggested operating temperature range

#### Notes

- When this operation is performed, log data and dive profile data are not registered. In addition, "surface interval" is not calculated.
- Avoid forcing an exit from the Diving Mode under normal conditions.

## WEAK BATTERY POWER

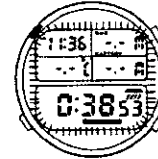
The message "BATTERY" appears on the display to let you know that the battery is getting weak. While this message is displayed, display light and sensor measurements are not operational, so be sure to have the battery replaced as soon as possible.

In order to avoid possible problems due to a weak battery, we suggest that you have it replaced (regardless of the low battery message status) if you plan to engage in intensive diving.

#### < Time/Calendar mode >



#### < Diving mode >



Display flashes

#### Notes

- No Diving Mode measurement, backlight, or temperature measurement operation is available while the low battery message is shown on the display.
- Operating the display light at low temperatures (around 0°C/32°F) can cause the low battery message to appear, but the display will clear when normal temperature is attained. Avoid using the display light as much as possible at temperatures outside the guaranteed operating temperature range (0°C/32°F to 40°C/104°F).
- Be sure to have the battery replaced at least once every two years. If the light is used frequently, it may cease to function and the battery should be replaced as soon as possible.
- If you dive more than 100 times or so a year, be sure to have your watch serviced at least once a year (or once per 100 dives).

Battery replacement should be performed only by an Authorized CASIO Service Point. When replacing battery, the Authorized CASIO Service Point will also perform a full overhaul, replacing the sealing material which is vital to the water resistance of your watch. Be sure to request such servicing through an Authorized CASIO Dealer/Distributor.

## MEASUREMENT ERRORS

### Depth Reading Errors

In some cases, due to operational errors or abnormal environmental conditions, the display may indicate incorrect depth readings (such as -1.0 meter (-4 ft), etc.).

These readings may occur when:

- the watch is exposed to abnormal changes in temperature (such as when it is suddenly submerged after being exposed to direct sunlight for an extended period) or air pressure.
- the depth reading is inadvertently set to "0 M (0 F)" while underwater (depth = 1 to 2 meters/4 to 7 ft)

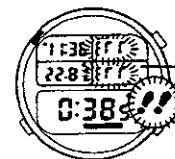
In such cases, a depth measurement error occurs and the message "Err" appears on the display for three seconds, followed by a flashing double warning mark (!!). Most of the time, depth errors occur on the surface and so the reading is automatically reset to 0 M after the error display. Note that appearance of the double warning mark indicates a large error in the displayed data, and so such data should be disregarded.

#### Note

Depth reading errors are not caused by malfunction, and normal depth measurement can be carried out after resetting the depth to 0 M (0 F). The related data, however, should not be relied on. Because of this, always switch first to the Time/Calendar Mode and then back to the Diving Mode before continuing your dive if a depth reading error occurs.

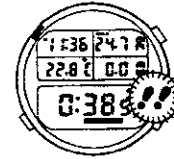
Depth reading error message indicates that log data is incorrect

#### < Depth reading error message >



Flashes

#### < Auto-reset to 0 meters >



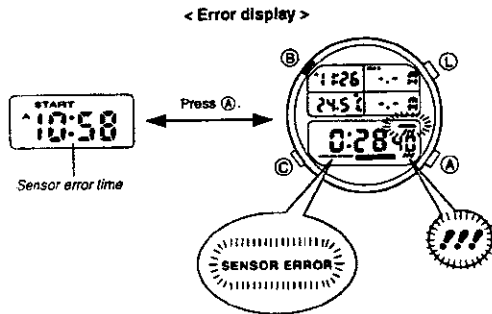
Warning mark flashes

Automatic 0 reset is performed even after the appearance of a depth reading error message. Measurements and log data storage into memory are performed normally but the "!!" mark continues to flash.

### Sensor Error Detection

If your watch is subjected to extremely strong impact, the sensor may malfunction in the Diving Mode. In this case, a "SENSOR ERROR" message will appear along with the warning mark "!!!" indicating incorrect data.

- At this time, each press of the (A) button switches between display to the current time and the time when the sensor error occurred.



If a sensor error occurs, do not use your watch during diving. Consult with an Authorized CASIO dealer/Distributor as soon as possible to arrange for servicing by an Authorized CASIO Service Point listed on the Warranty Certificate.

### WHAT TO DO WHEN A WARNING MARK APPEARS

Warning marks indicate some abnormality was detected during Diving Mode measurements. The warning marks also appear when the corresponding data is recalled from the log memory. Note that warning marks indicate serious error in the data, and so such data should not be used for dive planning, etc.

The following table describes the meanings of the warning marks

Warning Mark	Meaning	Possible Cause	See Page
!	Absolute Depth	<ul style="list-style-type: none"> <li>Entry into Diving Mode while submerged.</li> <li>Incorrect 0 M reset.</li> <li>Measured water temperature lower than -5°C/23°F or greater than 42°C/108°F.</li> </ul>	34
!!	Depth Error	<ul style="list-style-type: none"> <li>Large temperature or pressure change.</li> <li>Impossible depth (such as negative value) measured.</li> </ul>	38
!!!	Sensor Error	Measurement impossible due to sensor malfunction.	39
!!!!	Low Battery Warning	Low battery power. Display light and sensor measurement operation disabled.	36
! !!	Absolute Depth + Depth Error		

- When more than one error condition occurs at the same time, the condition with the greater number of warning marks is given priority.
- Frequent appearance of warning marks indicates malfunction. In such a case, be sure to consult with an Authorized CASIO Dealer/Distributor as soon as possible to arrange for repair by an Authorized CASIO Service Point.

### IMPORTANT POINTS TO REMEMBER

- Avoid using your watch in temperatures outside the suggested operating temperature range (0°C to 40°C / 32°F to 104°F). Never use this watch for applications such as "cold water diving" where the water temperature is extremely low, as resulting readings will be incorrect. In some cases, it is necessary to reset the pressure to "0 M (0 F)" while on the surface. This can be carried out by pressing holding down the (A) button and (C) button together for at least 1 second.

If the display does not return to "0 M (0 F)" even after holding down the (A) and (C) buttons, hold all four buttons down simultaneously for at least two seconds to return to the Time/Calendar Mode. If the depth display indicates a depth of 1 meter (4 ft) or more, operation will not return to the Time/Calendar Mode even if you press the (C) button.

- Avoid using this watch for dives deeper than 80 meters (263 ft). This watch is designed to measure depths between 0 and 80 meters (0 and 263 ft). When a depth of 80 meters (263 ft) is exceeded, a "dEEP" message will appear on the display. Note also that for recreational diving, it is recommended to dive no deeper than approximately 30 meters (99 ft).
- Calculation is impossible if dive time exceeds 12 hours. The maximum dive time that can be measured by this watch is 12 hours. When the dive time reaches 12 hours, the watch automatically changes to the Time/Calendar Mode and the log data accumulated during the 12-hour period is stored in memory. When recreational diving, it is suggested that the dive time be kept at less than one hour, no matter what the depth of the dive.
- This watch cannot be used in helium atmospheres. Use of this watch in helium atmospheres may result in malfunction or even damage your watch.
- This watch does not replace pressure gauges. This divers watch is designed only as a backup to your standard diving (snorkel diving and scuba diving) equipment.