

Index

Introduction	5
A. Special functions of this watch	6
B. For safe diving	7
⚠ WARNING:	
C. Usage points that should be avoided while diving[Make sure you read this warning.]	8
⚠ CAUTION:	
D. For safe usage [Make sure you read this caution]	11
1. Items to check for safe usage	11
2. Things to check before diving	15
3. Points to notice while diving	16
4. What to do after diving	17
E. Various warning functions.....	18
F. Name of each part [The dot display symbols and their meaning]	21
G. How to change the mode	24
H. Time and calendar mode	26
How to set the time and calendar	28
I. The alarm mode	30
J. The diving mode	32
K. Valid and invalid diving used in this watch	36

M. The surface mode [Measurement of reset time on surface]	39
N. The log mode	42
O. The transfer mode	45
P. How to perform all reset	48
Q. No decompression limits	50
R. Specifications	52
S. The battery warning function and the battery	54
T. For long usage	57
U. Warranty and service	60
V. List of Citizen service centers	62

Introduction

If you follow the right rules of scuba diving and skin diving, you can enjoy safe water sports. But on the other hand, there is an element of danger from the bends and other possible accidents. So after receiving proper training, please check for safety and enjoy your diving.

When you use this product, please understand the instructions and warnings well, so that you may use it properly.

In a case where this product is used in a way that is not mentioned in the USER'S manual, the watch might not function properly.

Further more all repairs including battery replacement should be carried out by a Citizen Service Center. Please arrange for a Citizen Service Center to look after your watch through the shop from which it was purchased.

Please keep this USER'S manual in a safe place, for reference when you need it.

A. Special functions of this watch

This is a full-scale divers watch with digital display and an electronic depth gauge.

- 1) This watch measures and displays depth as soon as you start diving, due to the water sensor.
- 2) This watch measures the water temperature while diving; and when not diving, the air temperature.
- 3) While you are diving, various log data is recorded.
- 4) After completing a dive, by using a communication unit, you can transfer data to a personal computer and also confirm the data with a personal computer.
★ Compatible computers: IBM PC / AT or any other compatible computer with keyboard and monitor. (There are some computers that are not compatible).
For more details, please read the "Communications AQUALAND GRAPH USER'S manual".
- 5) The elapsed time after a valid dive is completed (maximum of 24 hours) is measured automatically. This watch can be used as a safety guide line for resting time on the surface. [surface mode]
- 6) To ensure safe diving, various warning functions are included.

B. For safe diving

- Basic knowledge and techniques are required to dive safely so please take the necessary training to acquire them.
- In order to use this watch safely, **C.** [Usage points that should be avoided while diving] and **D.** [For safe usage] need to be understood sufficiently when using this watch for diving.

C. Usage points that should be avoided while diving [Make sure you read this warning]

When you use this watch for diving, please heed the following points. [Do not use under these conditions.]

⚠ WARNING:

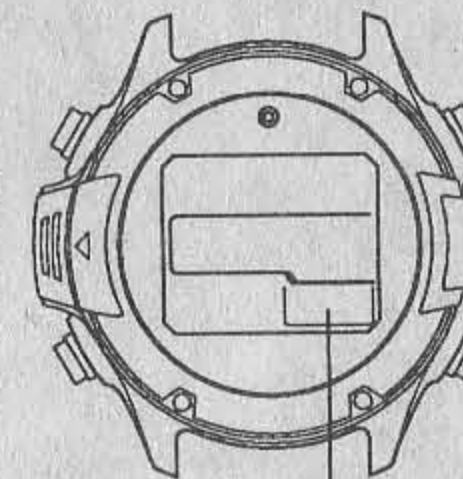
1. Do not use under these conditions:

- If you have not taken a course on safe diving, please do not use the watch.
- Please do not use the watch outside the temperature limits.
The temperature limits for this watch are 10°C~40°C(50°F~104°F). If you use the watch outside of this range, it will not display accurate depth.
- Never use the watch while diving with helium gas [saturated diving]. If you use the watch with helium gas, it is likely to cause problems, or failure.
- Do not use the watch for determining your actions in dangerous situations. This watch is not designed as equipment for the prevention of emergencies or accidents.
- Do not use this watch as a substitute for pressure equipment in applications other than diving or instead of a buddy systems.
This watch is not a gauge or meter which is authorized by any public organization, it should be used as a guide line for auxiliary equipment.

- Do not use this watch at altitudes over 4000m (13120 ft) since. Water depth cannot be measured at higher altitudes.
- Do not use the watch outside of the water depth measurement range.
- In case the safe diving warning function activates, immediately check the watch, and stop using it.
Look up "various warning functions" to find out how to deal with each one.

(Before diving)

- When the water sensor check warning function operates, — the dot display alternates between dot display and "CHEK" display as a warning.
- When the battery warning function operates — the dot display alternates between dot display and "BAT." display as a warning.
- When the unusual air pressure error warning function operates — The dot display alternates between dot display and "ERR" display as a warning.
- When the watch stops or something goes wrong with it, please do not use it.**
- When the water depth meter display on the watch shows a big difference with other Water depth meters, please refrain from using the watch.**



Dot display

(While diving)

- 1) When the depth chart error warning function operates — the dot display alternates between dot display and "ERR" display as a warning.
- 2) When the battery warning function operates — the dot display alternates between dot display and "BAT." display, as a warning. Once the battery warning display appears, please realize we can't guarantee the accuracy of the depth measurement.
- 3) **When the watch stops or something goes wrong with it, please do not use it.**
- 4) **When the water depth meter has a big difference with other water depth meters, please do not use the watch.**

D. For safe usage

[Make sure you read this caution]

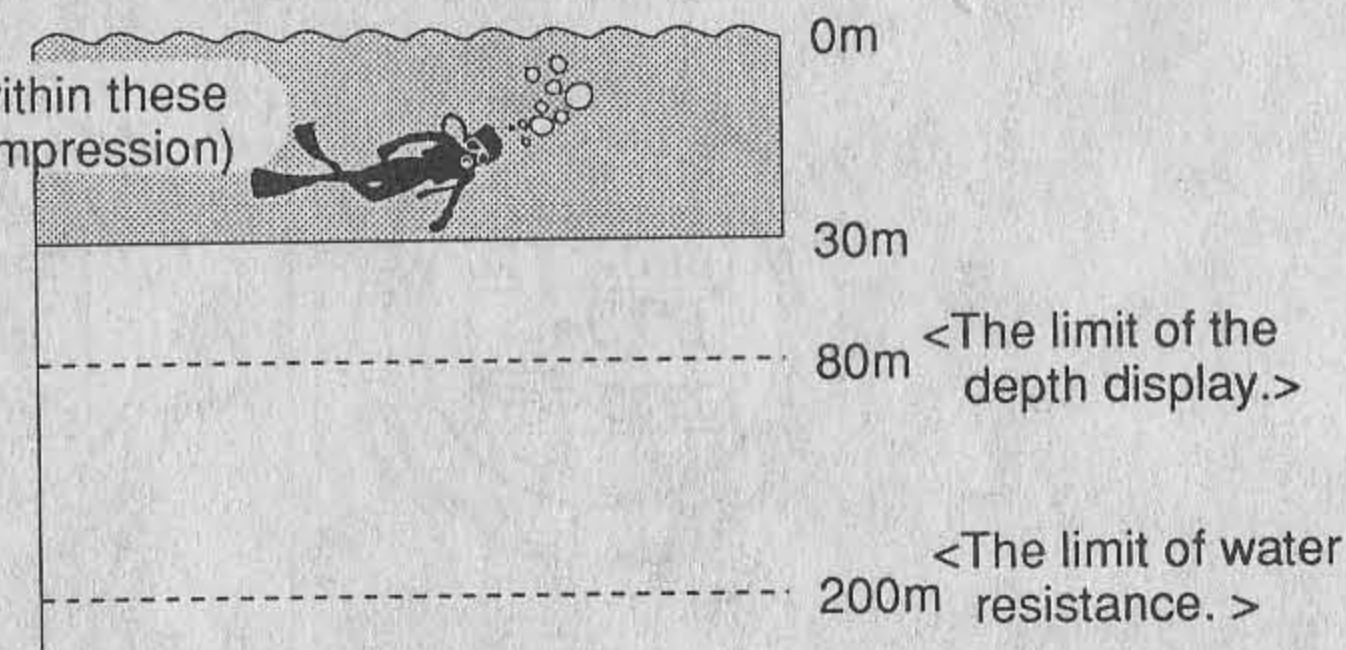
⚠ CAUTION:

1. Items to check for safe usage

1. The depth display of this watch is up to 80m (260ft).

Although this watch has water resistance up to 200m (656ft), the depth display only goes up to 80m (260ft). For safe diving we recommend that you stay shallower than 30 meters (100ft) [sports diving].

We recommend that you stay within these limits of sports diving. (no decompression)



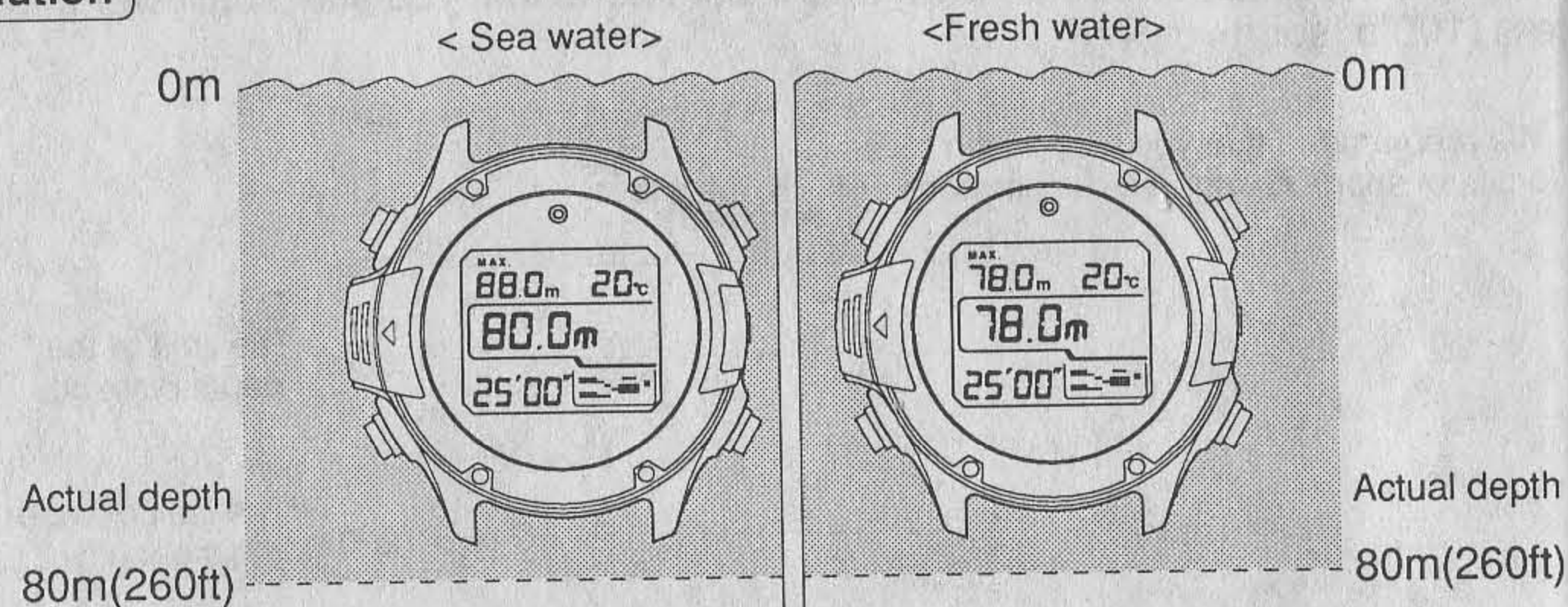
b. The water depth meter in this watch is set according to the sea water standard (1.025 gravity).

In case you use the watch in fresh water, i.e. lake water etc., you need to make a conversion.

[Example]

When the watch is 80m(260ft) deep, in the case of sea water it displays 80m(260ft), but when in fresh water, it displays 78m(253ft); Shallower than what it really is.

Caution



c. Avoid descending too rapidly.

In order to get an accurate depth readings, slow down the descent, or stop.

d. Avoid ascending too rapidly.

If you ascend at a speed greater than 1.5m(5ft) per 5secs. 18m(60ft) per minute according to the US navy diving manual), then the ascending speed warning function will operate. The dot display changes to "SLOW" display and an alarm will sound.

Please maintain a safe ascending speed.

Slow down your ascent or stop in order to get an accurate depth reading.

As rapid ascending is hazardous to the human body, sometimes causing the bends, always avoid it.



- e. **Do not use the watch in places where it is exposed to large changes of air pressure or temperature.**

The watch will automatically check for unusual air pressure once an hour, while in various normal modes (time and calendar mode / surface mode / log mode / alarm mode). If any abnormality is detected, the dot display will alternate between dot display and "ERR" display. When this happens, the water depth cannot be measured.

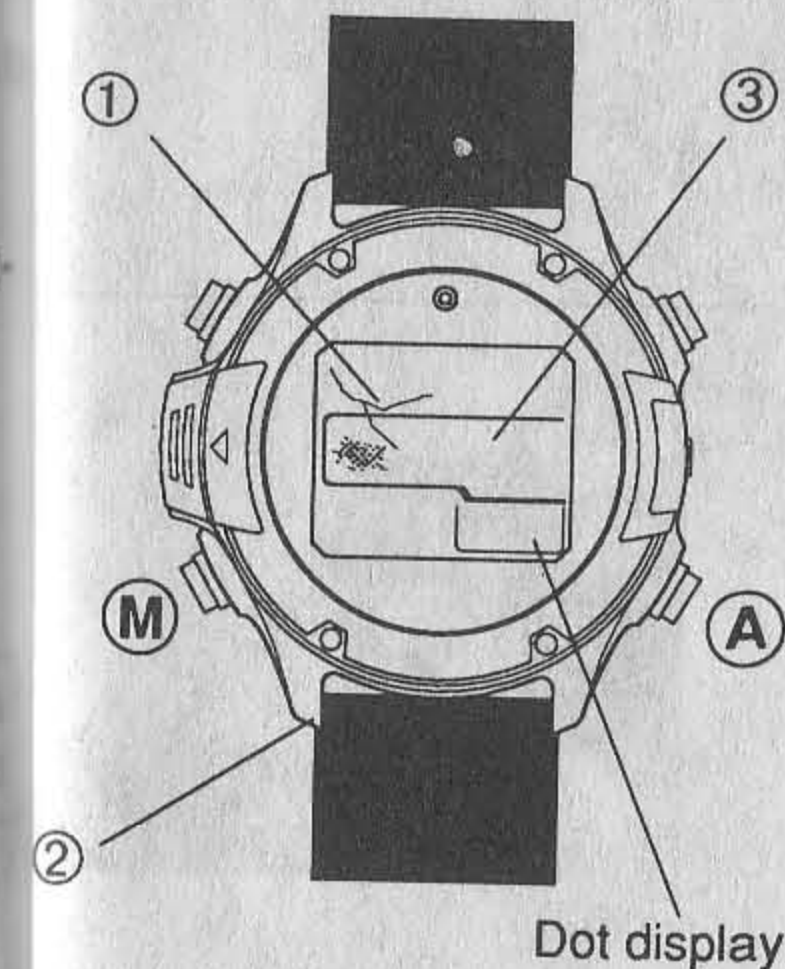
- f. **We recommend that you change the battery as early as possible.**

The life of the battery in this watch is about 3 years after a new battery is installed. (Please look up S. [Battery] for the conditions of usage). However, the life of the battery changes a lot depending on the frequency of use of various functions. In order to enjoy safe diving, we recommend that you change the battery ahead of time.

2. Things to check before diving

When you dive please check the following points.

Check your watch

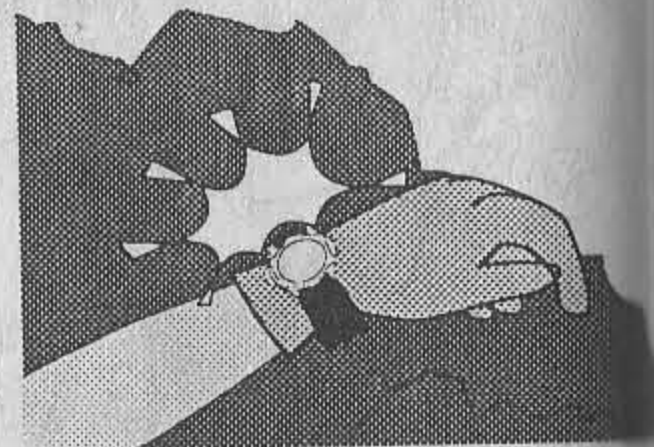


- 1) Check that there are no problems like scratches, cracks or chips on the strap or glass.
- 2) Check that the band and watch body are attached correctly.
- 3) Check that the time and calendar is set correctly.
- 4) Check if the dot display is alternating between dot display and "BAT." display. If so, then it is time to change the battery.
→Consult various other warning functions for counteraction needed.
- 5) Check that the dot display is not alternating between dot display and "ERR". If so then it indicates that there has been unusual air pressure detected.
→Consult various other warning functions for counteraction needed.

- 6) Check that the dot display is not alternating between dot display and "CHEK" display. If so, then you should check the water sensor.
→Consult various other warning functions for counteraction needed.
- 7) Confirm the alarm sound by operating the alarm monitor.
- Change to the alarm mode by pressing **(M)** button.
 - Alarm monitor is activated while pressing **(A)** button.
- At the same time the alarm will be switched ON/OFF.

3. Points to notice while diving

- There are times when the alarm sound is not easily heard: when underwater, when being carry, and in other outside environment.
- Accurate water temperature is most likely to be indicated after 1 to 3 minutes from the start of your dive.
- When various warning functions are operating, please heed the warning.
- Be careful not to knock the watch against hard objects like diving equipment or rocks, etc.



4. What to do after diving

- Wash and rinse off any sea water, mud, sand, and such like, present on the watch, with fresh water. Then dry any moisture completely, with a dry cloth, etc.
- Treat the sensor carefully. Do not remove the cover or use sharp objects to clean dirt or dust from it. If any dirt gets into the sensor, wash it with clean water; if that doesn't remove the dirt, please take the watch to the nearest Citizen Service Center.
- Do not expose the watch to chemicals.
- For information about basic care for this watch, please look at T. [For long usage].

E. Various warning functions

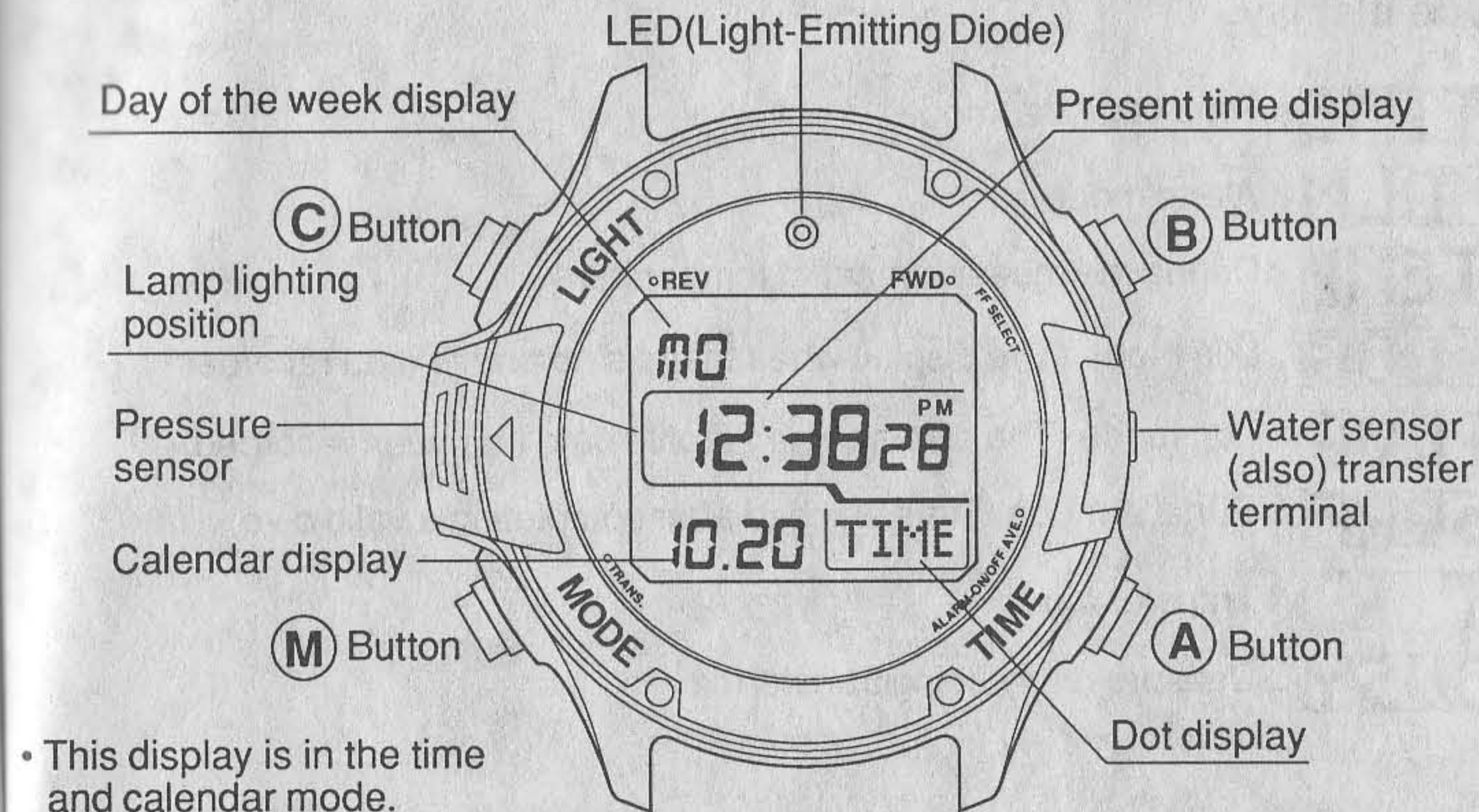
This watch has 5 warning functions to help you avoid any trouble or danger while diving. **Use these warning functions, as much as possible, as safety guidelines for diving.** The level of danger is often complex depending on your body condition or diving situation, etc. Even if there is no warning, it may not mean there is no danger.

Function	Ascending speed warning	Water depth display error warning	Battery warning
Warning method	<p>The dot display will alternate between dot display and "SLOW" display.</p> <ul style="list-style-type: none"> The alarm will continue to beep for 5 seconds until ascent is slowed. 	<p>The dot display will alternate between dot display and "ERR" display.</p> <ul style="list-style-type: none"> While displaying "ERR" we do not guarantee water depth accuracy. 	<p>When the dot display will alternate between dot display and "BAT." display.</p> <ul style="list-style-type: none"> You cannot change to diving mode. The alarm doesn't sound. The lamp doesn't work.

Function	Ascending speed warning	Water depth display error warning	Battery warning
Conditions of operation	<p>[While in diving mode, the water depth measurement display]</p> <ul style="list-style-type: none"> When the ascending speed is too fast, continuous speed of 0.3m(1ft) per second for more than 5 seconds. 	<p>[While in diving mode, the water depth measurement display]</p> <ul style="list-style-type: none"> When the ascending or descending speed is too fast, more than 4m (15ft) per second. 	<p>[While in diving mode, the water depth measurement display or each normal mode]</p> <ul style="list-style-type: none"> When it is close to the time to change the battery.
	<p>Counter-action needed</p> <ul style="list-style-type: none"> Please slow down your ascent. 	<ul style="list-style-type: none"> After the diving mode is complete, if you can change back to normal mode, there is no problem. 	<ul style="list-style-type: none"> When changing the battery all the diving data will be lost. In the case where there is needed diving data, transfer the data to a personal computer or record it in a log book beforehand. Various tests are made in order to maintain the special properties of the watch, so avoid any place other than a Citizen Service Center for any after service care, such as changing the battery, etc.









Function	Water sensor check warning	Unusual air pressure detection error warning.
Warning method	<p>"CHEK" will be displayed in the dot display window.</p> <p>•You cannot change to diving mode.</p>	<p>In the dot display window "ERR" will appear.</p> <p>•You cannot change to diving mode.</p>
Conditions of operation	<p>[Ready for diving mode or each normal mode]</p> <p>•When the water sensor is left "ON" for more than 1 hour on the ground, or shallow than 1m(4ft) under the water.</p>	<p>[Each normal mode]</p> <p>•When unusual air pressure is detected.</p>
Counter-action heeded	<p>•When the water sensor gets wet, : wipe with a dry cloth.</p> <p>•When the water sensor gets dirty, : wipe off with a soft cloth in clean water. Even if you follow the steps above, or the "CHEK" display sometimes flashes, then take the watch to a Citizen Service Center.</p>	<p>•Please do not use this watch in places over 4000m(13120 ft) above sea level. Except when in the above environment if the "ERR" display does not disappear within 1 day, please take the watch to a Citizen Service Center.</p>

F. Name of each part







The dot display symbols and their meaning

<Mode display>

-  : Time calendar mode
-  : Alarm mode
-  : During the measurement of temperature
-  : Log mode (The display when there is no profile data recorded)
-  : Log mode (The display when profile data has been recorded)
-  : Surface mode (Time elapsed after completing a valid dive)
-  : Transfer mode
-  : Data presently being transferred



⚠ Warning display

-  : Ascending speed warning
-  : Various checks
-  : Battery warning
-  : Various errors

* Please look at the N. [The log mode] for an explanation about PROFILE DATA.

The dot display symbols and their meaning

<Mode display>

TIME : Time calendar mode

ALM : Alarm mode

TEMP : During the measurement of temperature

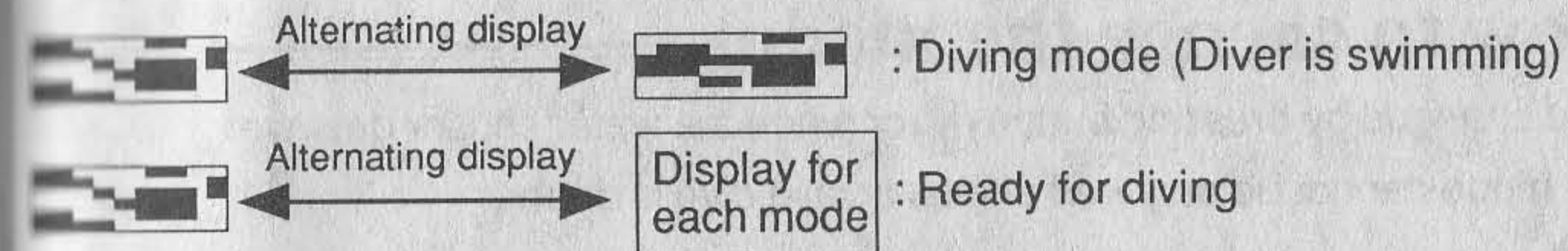
LOG : Log mode (The display when there is no profile data recorded)

PLOG : Log mode (The display when profile data has been recorded)

SURF : Surface mode (Time elapsed after completing a valid dive)

TR : Transfer mode

BUSY : Data presently being transferred



⚠ Warning display

SLOW : Ascending speed warning

CHEK : Various checks

BAT. : Battery warning

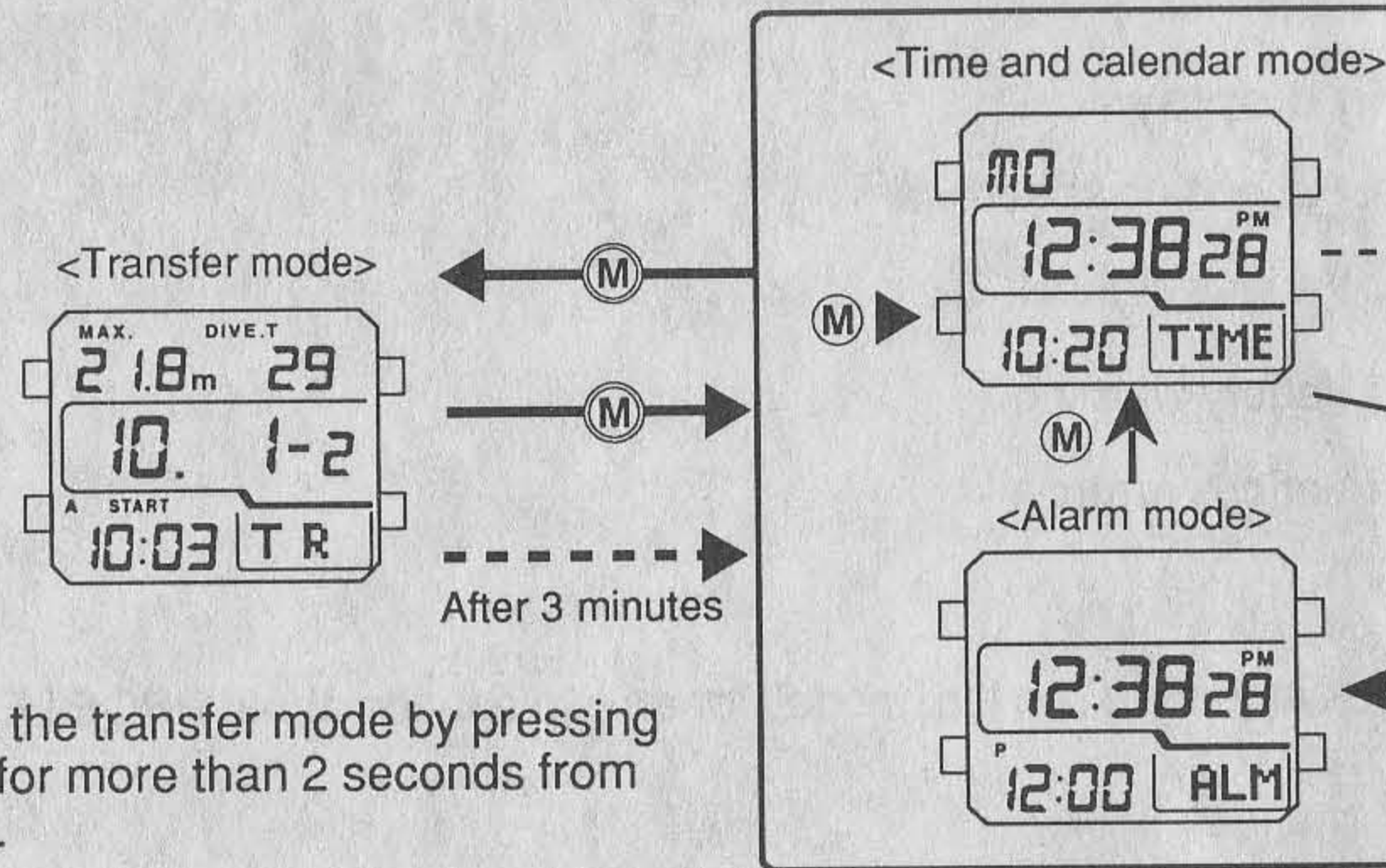
ERR : Various errors

* Please look at the N. [The log mode] for an explanation about PROFILE DATA.

G. How to change the mode

The mode changes by pressing button (M) or when the water sensor gets wet.

* Surface mode cannot be acquired unless a valid dive is done.



* Change to the transfer mode by pressing (M) button for more than 2 seconds from any mode.

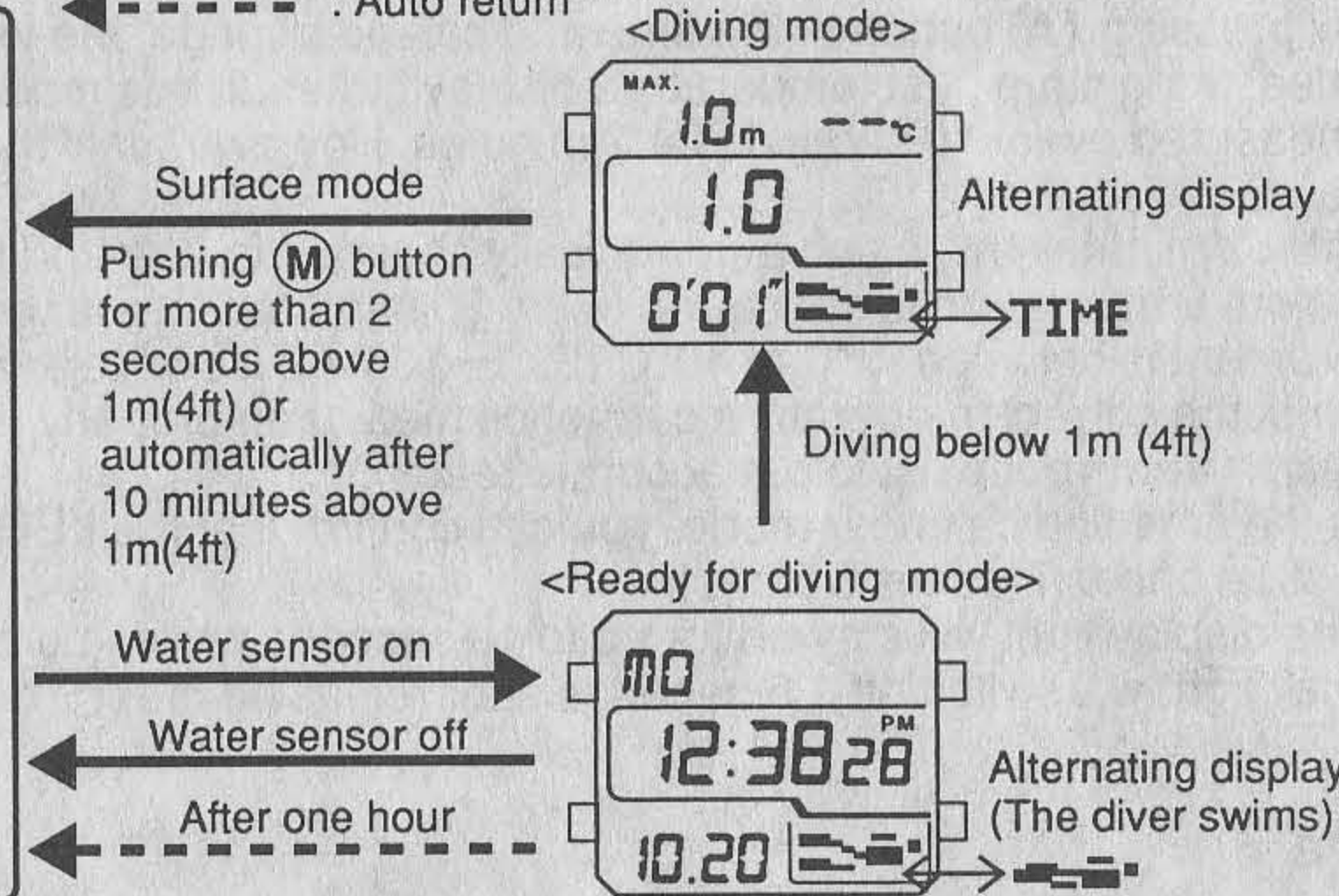
* Change to the transfer mode by pressing (M) button for more than 2 seconds from any mode

(M) : Press (M) button once

(M) : Press (M) button for more than 2 seconds

← - - - - : Displayed only while in surface mode

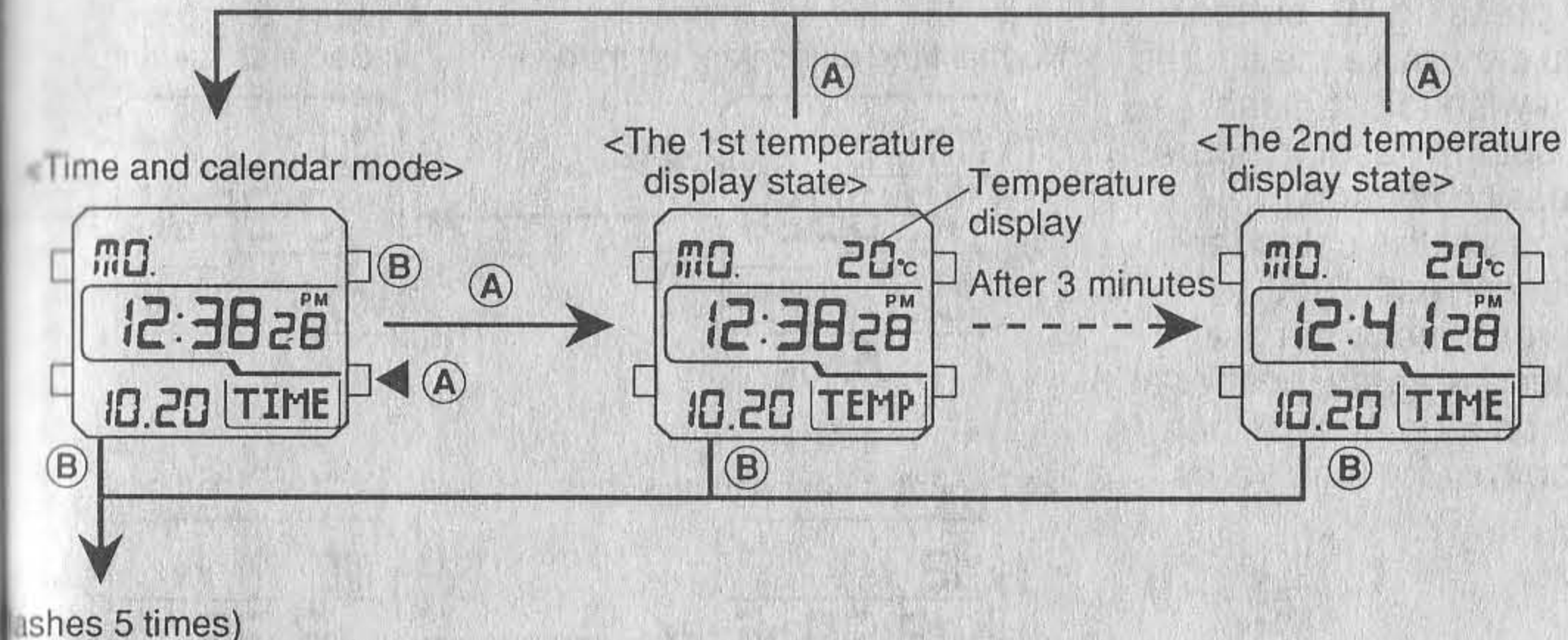
← - - - - : Auto return



H. Time and calendar mode

[This is the function which displays present time and present calendar.]

- In normal time mode, a LED, which is situated at 12 o'clock, flashes a time signal for 3 seconds on every hour. (e.x. 7:00:00, 01, 02)
- By pressing (A) button in the time and calendar mode, the watch is in the temperature measuring state (1st temperature display state). In this mode the temperature is measured every 10 seconds for 3 minutes. However, until the first measurement is taken it displays [-- °C].
- After 3 minutes the watch automatically changes to (the 2nd temperature display state) where temperature is measured every 30 minutes. The range of temperature measurement is between -5°C to 40°C (23°F~104°F). However, while the watch is on your wrist the correct temperature cannot be measured properly, so please remove the watch from your wrist to get accurate readings.
- In the time and calendar mode, you can confirm that the LED flashes by pressing (B) button once. (Flashes 5 times)
- The display light will stay on for up to 10 seconds while you press (C) button. The display light will switch off 1.5 seconds after releasing the (C) button.



I. How to set the time and calendar

- To set the time from the time and calendar mode, press (B) button for more than 2 seconds, and the "seconds" will start to flash.
- By pressing (B) button you can make the figures you wish to set, flash.
- To set the flashing figures, press (A) button.
- If you set the calendar year correctly, you never have to set the calendar again; neither at the change over of the month or for leap years.

<Normal time and calendar mode>



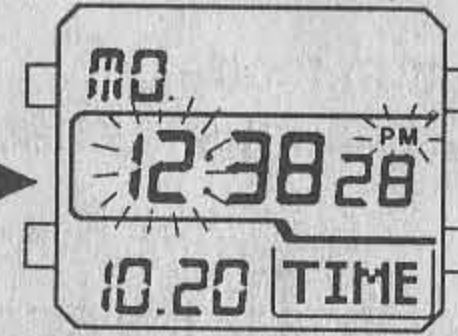
<"Seconds" setting>



<"Minutes" setting>



<"Hour" setting>



<"Month" setting>



<12 hour/24 hour setting>



<"Year" setting>



<"Day of the week" setting>



<"Date" setting>



⚡ : Flashing

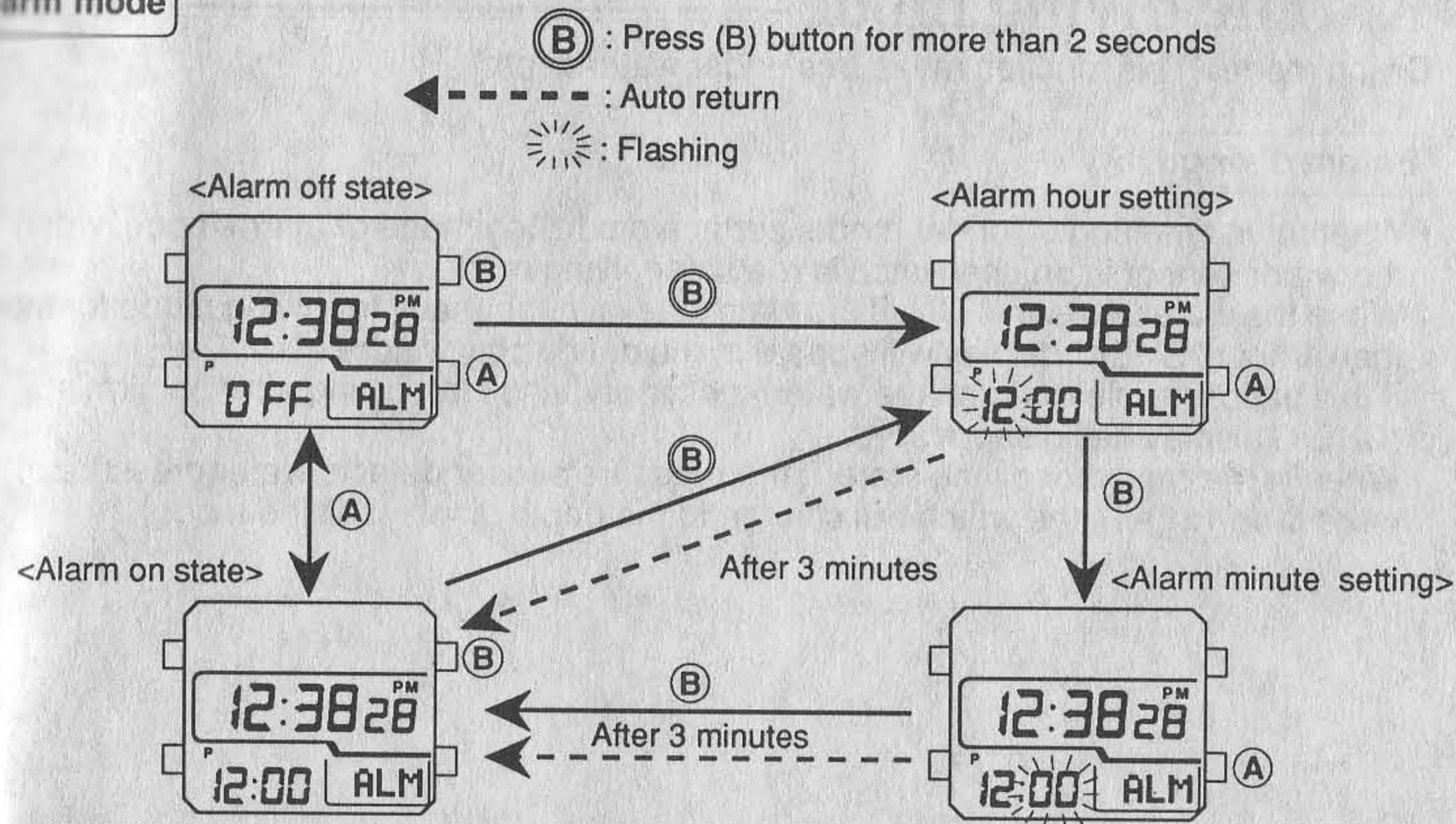
J. The alarm mode

Alarm mode: Once you have set the alarm, the alarm will ring everyday at the same time like an alarm clock. The alarm rings for 15 seconds.

Setting the alarm :

1. Press **(M)** button to change to alarm mode
2. Press **(B)** button for more than 2 seconds to change to the alarm hour setting mode (hours will flash)
3. Make hour set with **(A)** button.
4. Press **(B)** button once more to change to the alarm minute setting mode. (minutes will flash)
5. Make minute set with **(A)** button.
6. Press either **(B)** or **(M)** button to complete the alarm setting.
 - Select alarm ON/OFF with **(A)** button. By pressing **(A)** button continuously, the alarm monitor will ring.
 - If you wish to stop the alarm while it's ringing press, any button.
 - While pressing **(C)** button, the display will light up. The display light will switch off about 1.5 seconds after releasing the **(C)** button.

Alarm mode



K. The diving mode

Diving mode: [This function measures under water depth]

Before diving

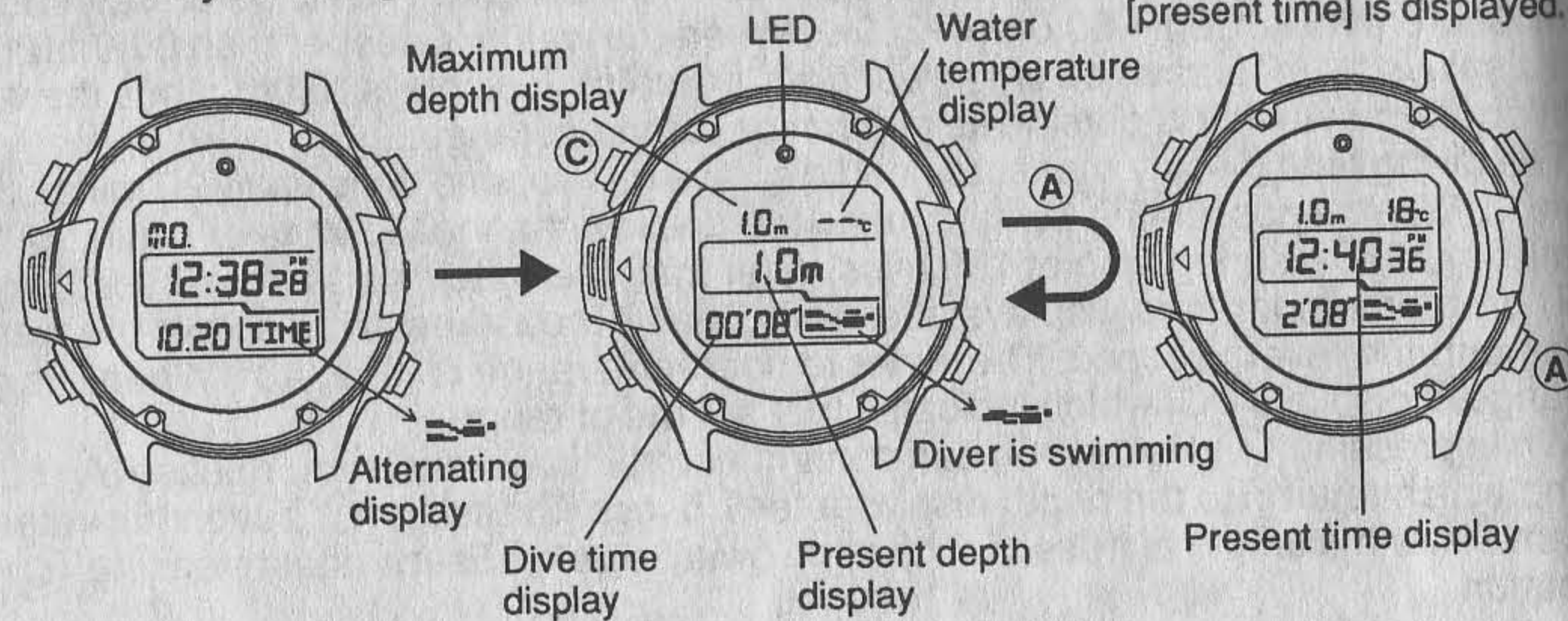
- Whether in time and calendar mode, surface mode, log mode or alarm mode, when the water sensor is on, the watch is ready for diving mode.
- * When the water sensor is ON, if the watch stays in the ready for diving mode for more than 1 hour, "CHEK" display will appear in the dot display window. If this happens, please wipe the water sensor dry, and start diving after confirming "CHEK" display has disappeared. When in the ready for diving state, if the pressure sensor detects water pressure of more than 1m(4ft), the watch will change to the depth display (diving mode).

While diving

- 1) When starting a dive, the dot display will tell the swimming diver when the watch is in diving mode.
- 2) The LED will flash once every 4 seconds to show the watch is in diving mode.
- 3) The water depth is measured and displayed every second. The range of water depth measurement is 1.0m~ 80.0m(4~260ft). When the watch is deeper than 80.0m(260ft), it displays "---m" and when shallower than 1.0m(4ft), it displays "0.0m"; thus the watch informs you when it is outside its depth measurement range.
- 4) The diving time display measures and displays in 1 second units up to 29 mins., 59 secs. When it passes the 30 min. mark, the display changes to units of 1 min. With a maximum measuring time of 199 mins. After that, the watch starts from 0 secs, again.
- 5) The water temperature displays after 1min. then it measures and displays the water temperature every second. The water temperature range is -5° to 40°. When it is out of range, it displays [°C] which indicates that are out of range.
- 6) While pressing (A) button you can confirm normal time. When you release (A) button the watch returns to the depth display after 1.5secs. Pressing (C) button activates the lamp for a maximum of 10secs. The lamp switches off 1.5secs after releasing (C) button.

Example: <Time and calendar mode>
Ready for diving mode

<Diving mode>



• Cancelling diving mode

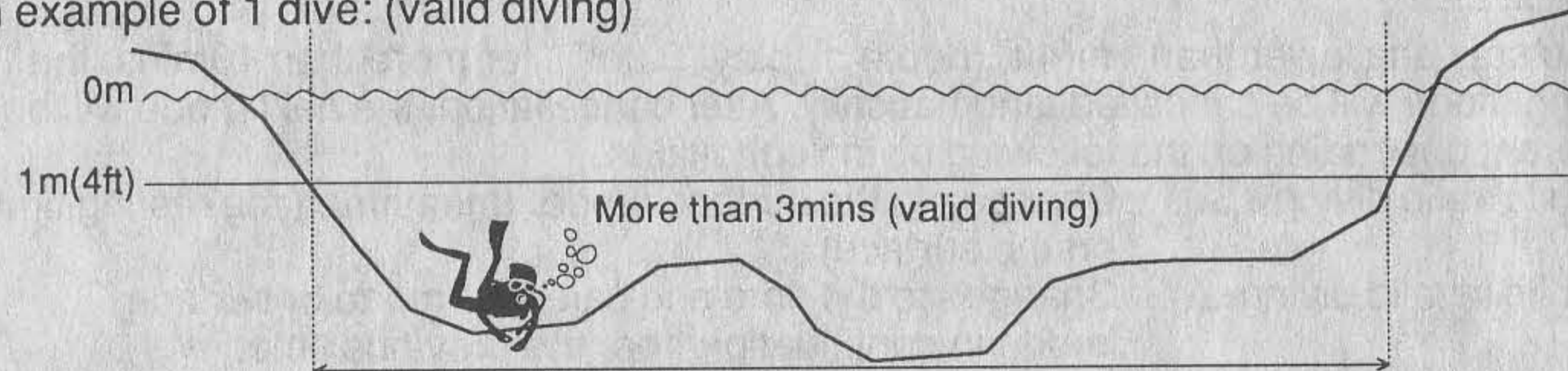
After diving

- 1) If you stay shallower than 1m(4ft) (depth display "0.0m") for more than 10mins, the diving mode will be cancelled automatically. After cancellation, the next mode will be different depending on the following diving conditions.
 - While valid diving Changes to the surface mode. (measuring the resting time on the surface)
 - While invalid diving Changes to the time and calendar mode or surface mode in continuation from the previous time.
- 2) When you press (M) button for more than 2 secs above a water depth of 1m(4ft), the diving mode will be cancelled. After cancellation, the mode will change depending on the diving state as in "1)". However if the water sensor gets wet, the dot display alternates between diver display and mode display.

L. Valid and invalid diving used in this watch

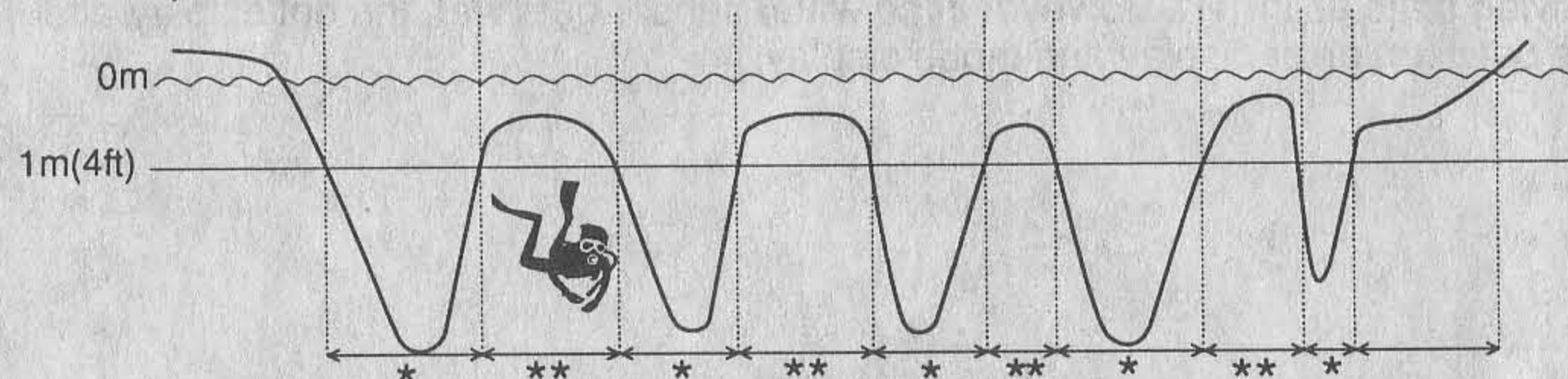
Valid diving: diving deeper than 1m(4ft) continuously for more than 3mins.

An example of 1 dive: (valid diving)



Invalid diving: diving deeper than 1m for less than 3mins.

An example of 1 dive: (invalid diving)

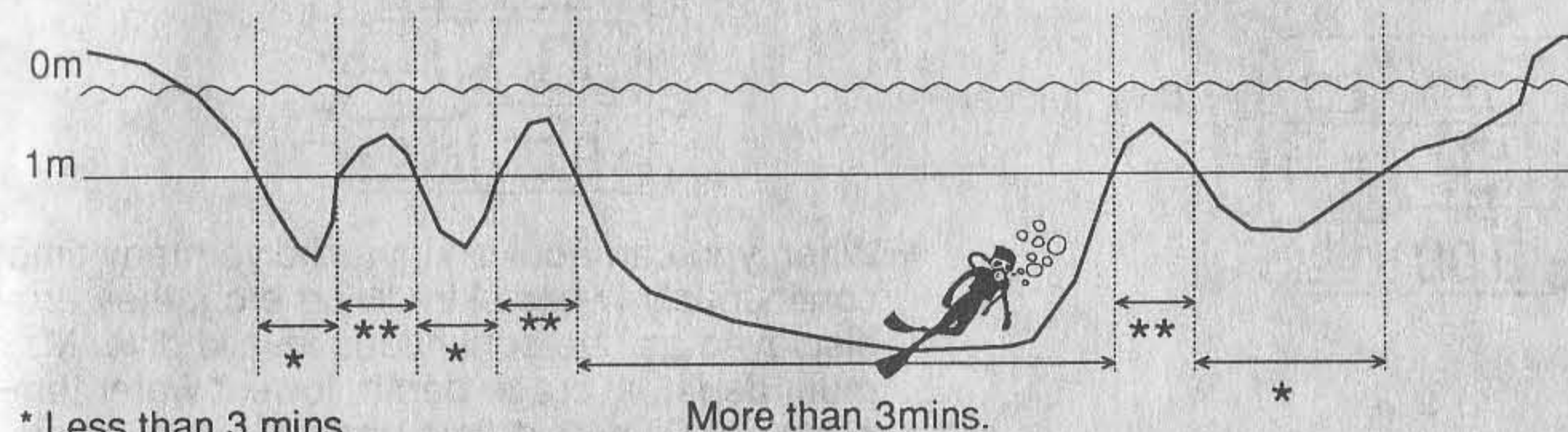


* Less than 3mins, ** Less than 10mins

One dive: In this watch, one dive starts from the time you dive deeper than 1m(4ft) to the time you return shallower than 1m(4ft) depth.

However when diving deeper than 1m(4ft) after being shallower than 1m(4ft) for less than 10mins, the watch will record it as one continuous dive.

• An example of 1 dive: (valid diving)



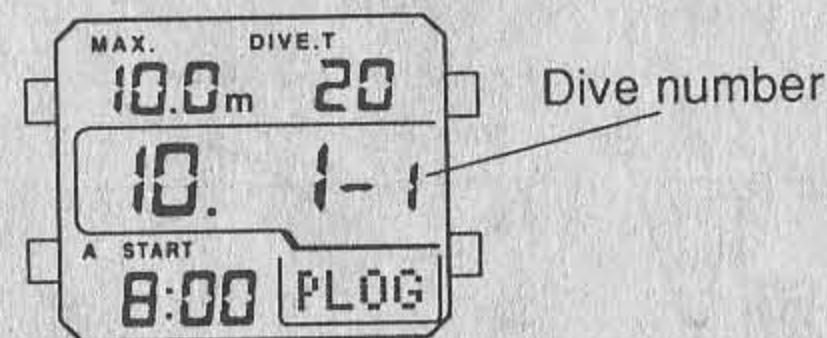
* Less than 3 mins.

** Less than 10mins.

- Display examples of valid and invalid diving for this watch.

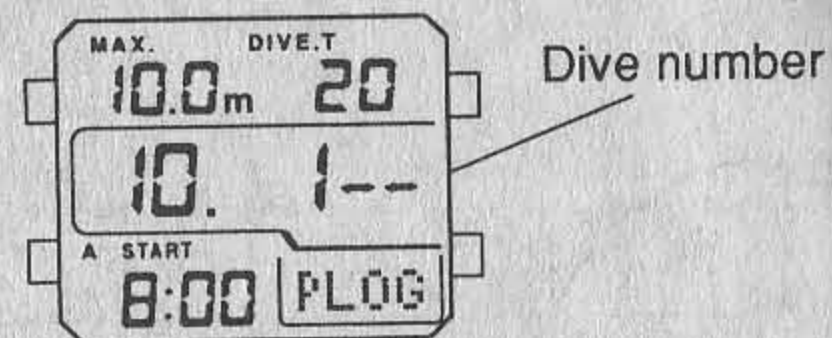
Display example while valid diving in the log mode.

A dive number is displayed so you can know the number of (valid) dives you have made in the current series.



Display example while making an invalid dive in the log mode.

The dive number is indicated by the dive number (— display)



- ★ When you carry out an invalid dive many times continuously (while skin-diving etc.), they are displayed as one continuous invalid dive. Maximum depth, average depth, lowest water temperature, Dive start time and Dive completed time are all detected as one dive. However when the Rest Time on the surface is more than 10mins between Invalid dive, they are counted as 2 invalid dives.

M. The surface mode [Measurement of reset time on surface]——

This is a function which automatically measures the elapsed time (resting time on the surface) after the last ^{*1}valid dive is completed. You can use it for meeting a rest time criteria after completing a dive.

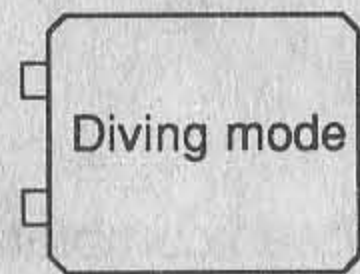
*1: Please look at L. [Valid and invalid diving used in this watch].

In this mode:

It automatically starts to measure elapsed time after a valid dive has been completed. (Up to 24 hours)→“SURF” mode display starts. After 24 hours has elapsed in “SURF” mode, the measurement display automatically stops. This mode will not appear again until the next valid dive has been completed.

Every time a valid dive has been completed, it starts timing from ‘0’ seconds. You can not start or stop the timing by using the buttons.

Valid dive complete



Surface mode / timing and display starts automatically after 10 mins. or
Press (M) button for more than 2 seconds to change the display

<Surface mode timing state>



After 24 hours

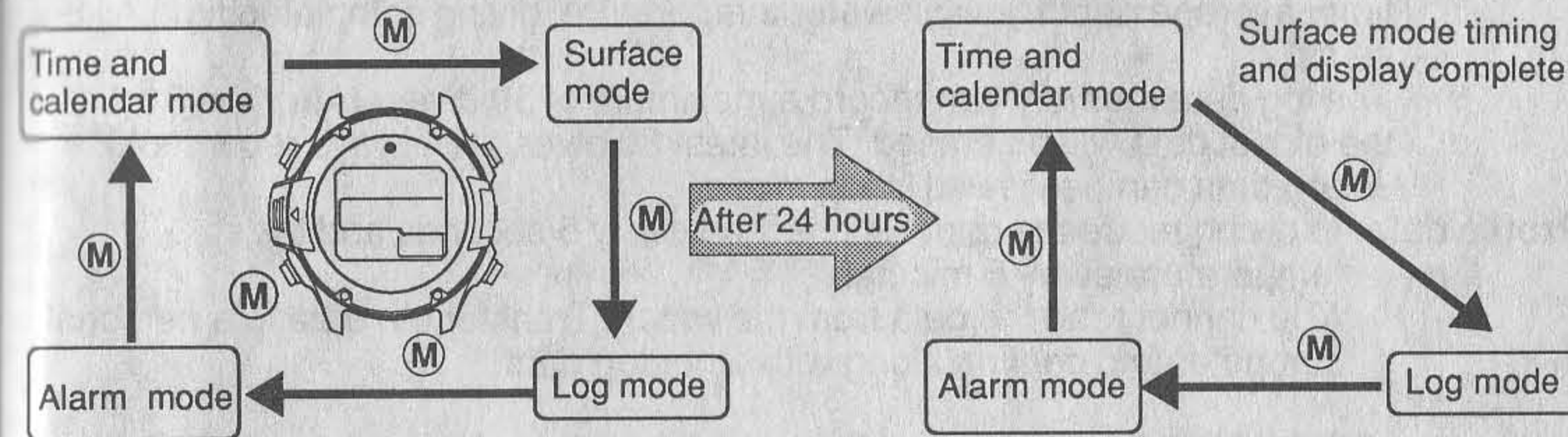
Surface mode / timing and display complete

When the watch is in surface mode it returns to time and calendar mode display.

(Mode display selection)

<The surface mode is active for 24 hours after completing a valid dive>

<After surface mode timing display is complete>



(M): Press (M) button once

N. The log mode

[This is a function to confirm data that has been automatically recorded when you dive while in the diving mode.]

Log data: maximum depth, dive time, dive month and date, dive number, dive start time, average depth, lowest water temperature, diving completed time, All 8 items.

The log data memory can record a maximum of 30 dives. (After the 31st dive the oldest data will be erased. The latest 30 dives are always recorded).

★ Log data can be viewed in log mode.

Profile data: In diving mode the depth is checked every 5 seconds and the temperature every 5 minutes.

You cannot read the data from the watch. Transfer the data to a personal computer and confirm along with other log data.

- When the "PLOG" dot display appears, it is possible to transfer log data, with profile data included, to a personal computer.

Profile log can record the latest 6 hours of data. After exceeding 6 hours, the oldest data is automatically deleted. We recommend that before a total of 6 hours is exceeded, you transfer the data to a personal computer.

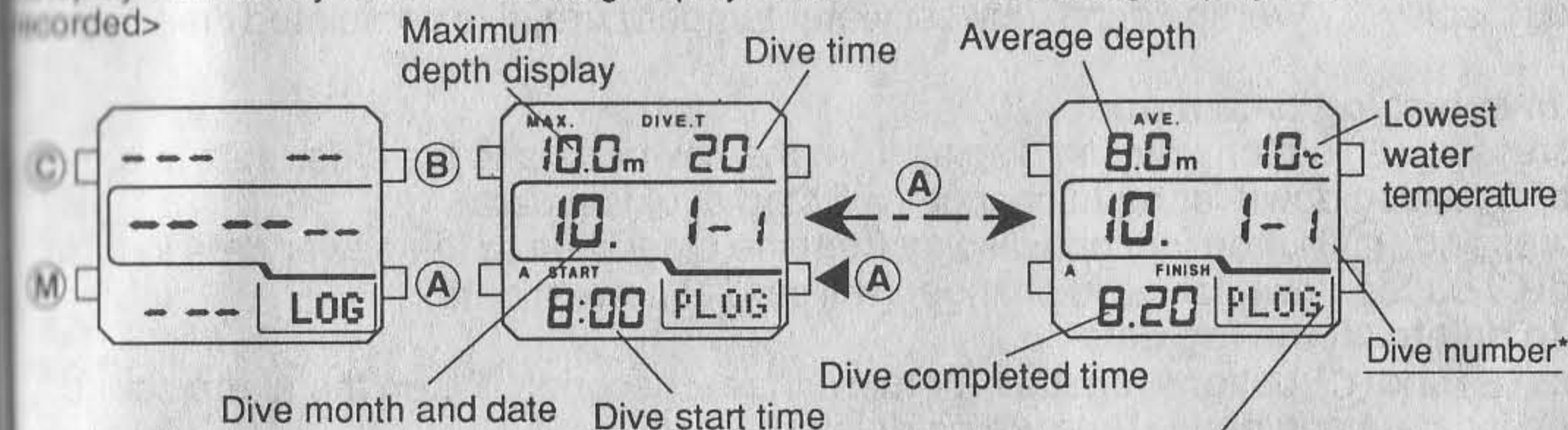
Log mode

When there is profile data

Display without any data recorded

<1st log display state>

<2nd log display state>



*dive number

The dive number is displayed for up to 9 dives. If 10 dives are made in a day, the display will return to 1 again.

After that, estimate the number of dives made during the day using the dive start times.

When there is profile data, "PLOG" will be displayed.

When there is no profile data, only "LOG" will be displayed.

* Only "PLOG" displayed data can be transferred to a personal computer.

N. The log mode

[This is a function to confirm data that has been automatically recorded when you dive while in the diving mode.]

Log data: maximum depth, dive time, dive month and date, dive number, dive start time, average depth, lowest water temperature, diving completed time, All 8 items.

The log data memory can record a maximum of 30 dives. (After the 31st dive the oldest data will be erased. The latest 30 dives are always recorded).

★ Log data can be viewed in log mode.

Profile data: In diving mode the depth is checked every 5 seconds and the temperature every 5 minutes.

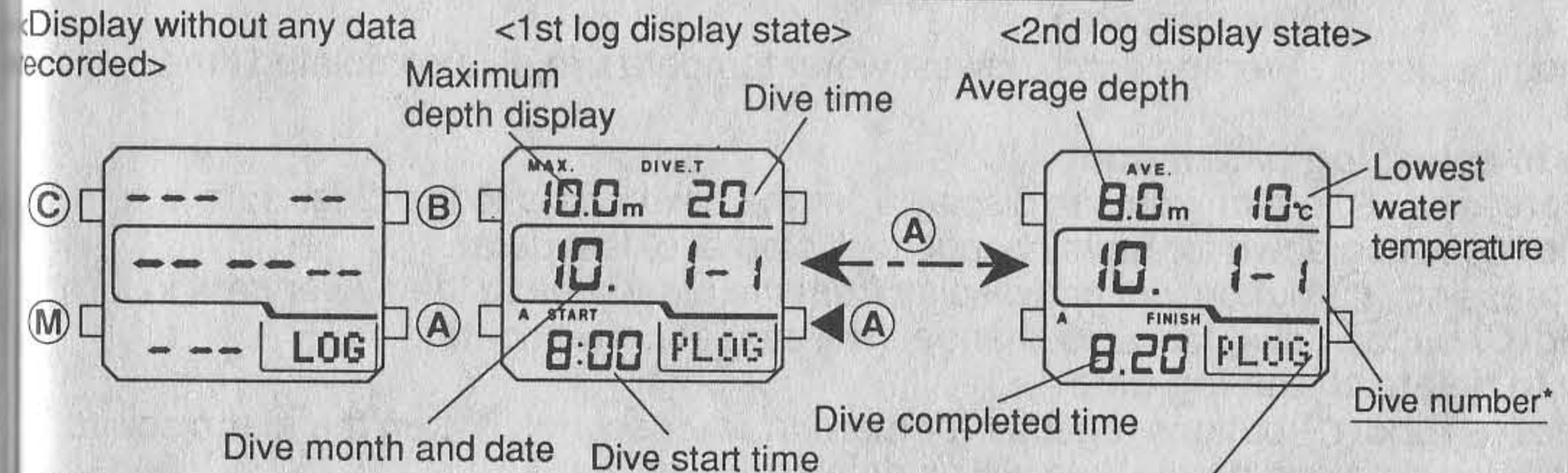
You cannot read the data from the watch. Transfer the data to a personal computer and confirm along with other log data.

- When the "PLOG" dot display appears, it is possible to transfer log data, with profile data included, to a personal computer.

Profile log can record the latest 6 hours of data. After exceeding 6 hours, the oldest data is automatically deleted. We recommend that before a total of 6 hours is exceeded, you transfer the data to a personal computer.

Log mode

When there is profile data



*dive number

The dive number is displayed for up to 9 dives. If 10 dives are made in a day, the display will return to 1 again. After that, estimate the number of dives made during the day using the dive start times.

When there is profile data, "PLOG" will be displayed. When there is no profile data, only "LOG" will be displayed.
* Only "PLOG" displayed data can be transferred to a personal computer.

It separately displays both 1st log display and 2nd log display; you can select by pressing (A) button.

1st log display.....Maximum depth, dive time, dive month and date, dive number,
dive start time

2nd log display.....Average depth, lowest water temperature, dive completed time

How to select log data mode

- By pressing (B) button you can display from the newer data to the older data in turn. Hold (B) button down for rapid change (will stop at oldest data).
- By pressing (C) button you can display from the older data to the newer data in turn. Hold (C) button down for rapid change. (will stop at newest data).

How to delete all the log data

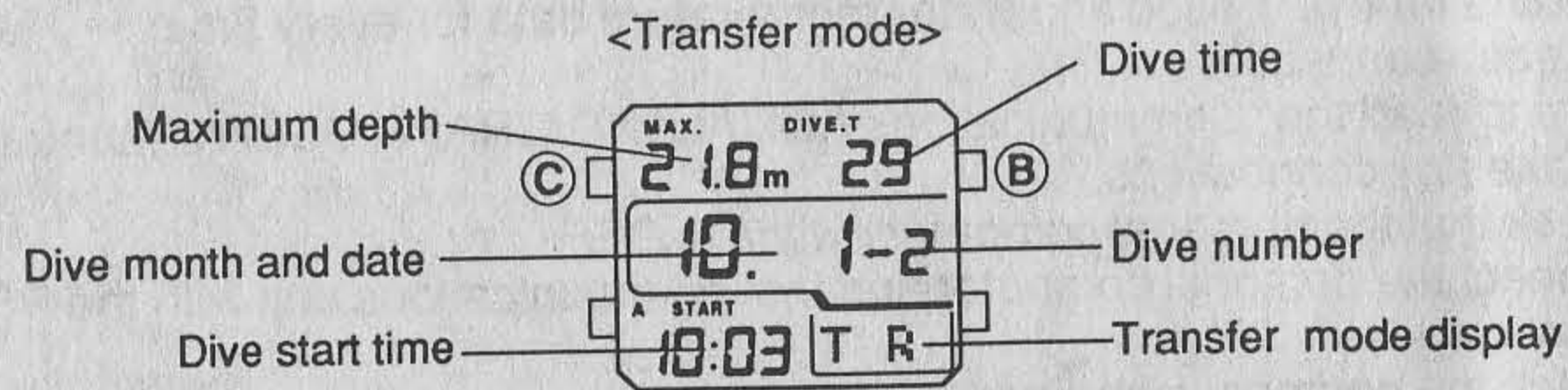
- Press (B) and (C) buttons together for more than 2 seconds. When the alarm sounds, all the log data and profile data will be deleted.

0. The transfer mode

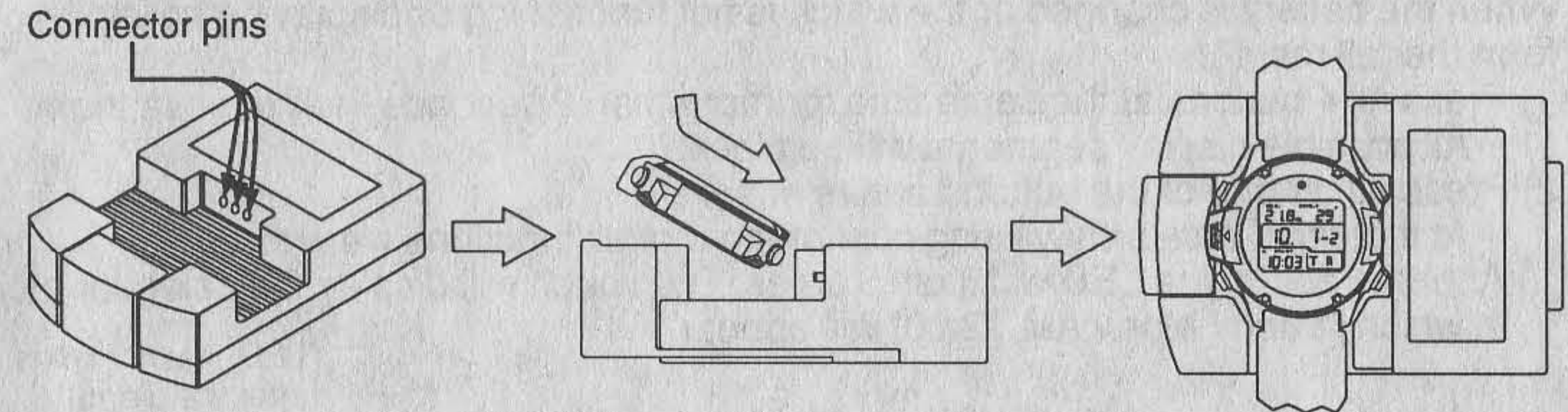
[This function allows transfer of diving data to a personal computer.]

1. You can change to the transfer mode from any mode except the diving mode, by pressing (M) button for more than 2secs.
2. In this mode, you can transfer data to a personal computer by using the communications unit and a RS-232C direct cable.
3. Compatible computers
IBM PC / AT or any other compatible computer (There are some computers that are not compatible).
4. Log data, including profile data to be transferred:
maximum depth / average depth / dive time / dive month and date / dive number / dive start time / lowest water temperature / dive completed time. These 8 items plus depth data for every 5sec and water temperature data for every 5min.
5. About each connection:
Be sure to read the "Communications AQUALAND GRAPH USER'S manual" before you make any connections.
 - 1) Check that the personal computer switch is OFF.
 - 2) Connect the personal computer and the communications unit with the RS-232C direct cable.
 - 3) Switch the personal computer on, and start the aqualand graph.

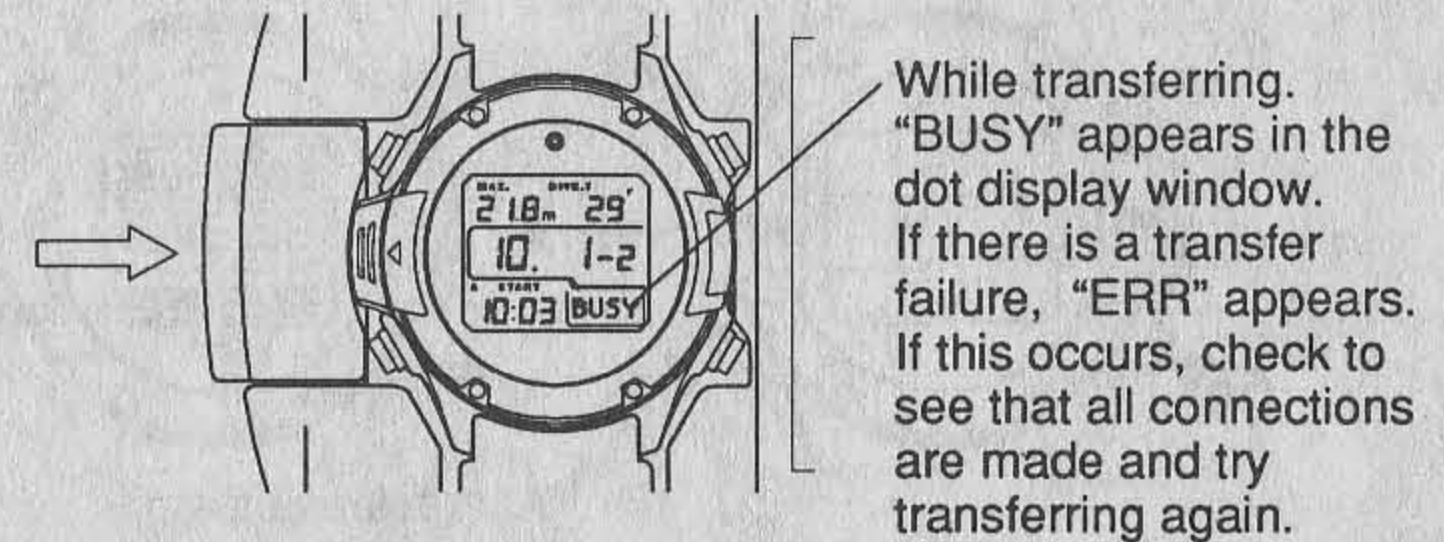
- 4) Set the watch to transfer mode, and recall the data you wish to send.
(The method to recall the data)
When the watch is changed to this mode, the latest log data, will be displayed.
However when the log mode is changed to the transfer mode the displayed profile data appears together with the log data, can be transferred to the PC.
6. From the log data including the newest profile data, you can recall the other data in turn. By pressing (B) button.
From the log data including the oldest profile data, you can recall the other data in turn. By pressing (C) button.
By operating each button, select the data you wish to transfer to your personal computer.



- ☆ Place the watch so that the transfer terminal is touching the center pin of the 3 way connector. (Look at the picture below)



7. How to remove.
Hold the band of the watch and raise by lifting the left side (pressure sensor side) of the watch gently.
Before disconnecting the RS-232C cable, complete the aqualand graph then turn the personal computer off.



P. How to perform all reset

When the battery is changed or the watch is not functioning or displaying normally, perform the "all reset".

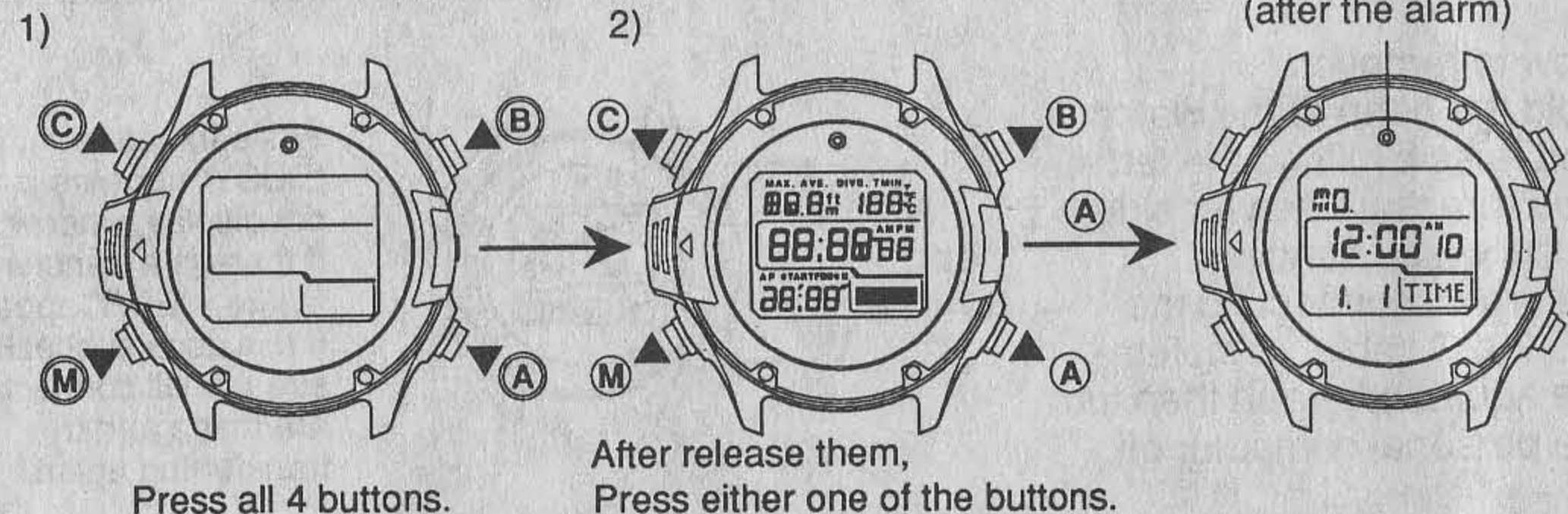
1) Press all 4 buttons at the same time for more than 2 seconds then release them.

→All possible display segments will be black.

2) Press either one of the buttons and release.

→At that time, an alarm will ring confirming that all functions were reset.

After the alarm, the LED will flash 3 times. The watch will display the calendar mode in which "1 Jan / Mon / AM 12:00" will appear.

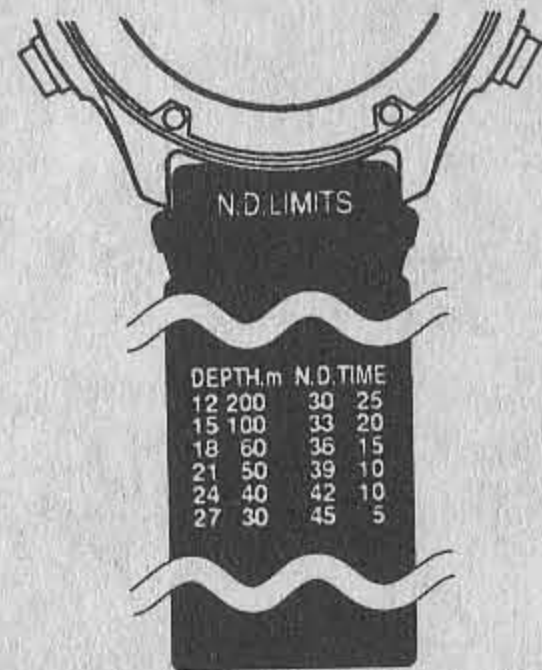


★ Caution: when resetting all functions.

- If you perform the "all reset", all log and profile data will be deleted, so transfer all data to a personal computer or record it in a log book beforehand.
- When you release all 4 buttons, if the water sensor is wet, "CHEK" will appear in the dot display. After that, all possible display segments will be black. Please operate the watch in the same way as normal resetting.

Q. No decompression limits

<No decompression limits>



When a diver has completed a dive, and is ascending to the surface, the speed at which a diver can ascend to the surface, without stopping for decompression, is decided according to the diving depth and diving time. These limits are marked as no decompression limits. The no decompression limits which are on the watch band, are based on the US navy diving manual (1985 edition).

(There are some models on which this is not printed.)

* These no decompression limits are for one dive.

<How to read the no decompression limits>

DEPTH.m	N.D.TIME
12m (40ft)	200min.
15m (50ft)	100min.
18m (60ft)	60min.
21m (70ft)	50min.
24m (80ft)	40min.
27m (90ft)	30min.
30m (100ft)	25min.
33m (110ft)	20min.
36m (120ft)	15min.
39m (130ft)	10min.
42m (140ft)	10min.
45m (150ft)	5min.

(Example)

If you dive no deeper than 21m for no more than 50mins, then according to this chart there is no need to stop for decompression.

★Caution:

The no decompression limit is different depending on body condition, or personal differences. Please use the no decompression limits on this watch as a guide line.

When a dive requires no decompression limits make sure you follow a specialized divers manual.

R. Specifications

1. Type: Digital divers watch with water depth meter, thermometer, water sensor
2. Quartz crystal frequency: 32,768Hz (Hz = oscillations per second)
3. Time accuracy (Under normal temperature): within ± 20 seconds per month
4. Water depth meter accuracy: within $\pm 3\%$ of displayed figure plus 30cm (1ft) However it must be within the operating temperature range $10^{\circ}\text{C}\sim 40^{\circ}\text{C}$ ($50^{\circ}\text{F}\sim 104^{\circ}\text{F}$), the water depth meter is effected by change of temperature.
5. Display method: Digital system display
6. Watch operating temperature range: $-10^{\circ}\text{C}\sim 60^{\circ}\text{C}$ ($14^{\circ}\text{F}\sim 140^{\circ}\text{F}$)
7. Display functions
 - Time: hours / minutes / seconds
 - Calendar: month / day / day of the week
 - Temperature display (including the lowest water temperature displayed in log mode): $-5^{\circ}\text{C}\sim 14^{\circ}\text{C}$ within $\pm 3^{\circ}\text{C}$ 1°C unit / $15^{\circ}\text{C}\sim 40^{\circ}\text{C}$ within $\pm 2^{\circ}\text{C}$ 1°C unit ($23^{\circ}\text{F}\sim 57^{\circ}\text{F}$ within $\pm 6^{\circ}\text{F}$ 1°F unit / $59^{\circ}\text{F}\sim 104^{\circ}\text{F}$ within $\pm 4^{\circ}\text{F}$ 1°F unit)
 - Present depth display: 1.0m~80.0m (10cm units) [Below 1.0m is displayed as 0m] 4ft~260ft (1ft units) [Below 1ft is displayed as 0ft]
 - Maximum depth display: 1.0m~80.0m (4ft~260ft)
 - Average depth: 1.0m~80.0m (4ft~260ft)

- Dive month and date: month / date
 - Dive start time: hour / minute
 - Dive completed time : hour / minute
 - Dive time: 0 min~199 mins.
 - Dive number: 1~9
8. Available functions
 - Time and calendar Mode • Alarm mode • Diving mode • Surface mode
 - Log mode • Transfer mode
 - <Various warning functions>
 - Battery warning function • Ascending speed warning function
 - Water depth display error warning function • Water sensor check warning function
 - Unusual air pressure detection error warning function
 - Extra features:
 - Water-resistant to a depth of 200m below sea level
 - Water sensor(also transfer terminal)
 - IC: C/MOS/LSI 2 pcs.
 - Battery: Lithium battery (battery no. 280-205 code no. CR 2025) 1pce.
 - Battery Life: Approximately 3 years after installation of new battery
- * Specifications are subject to change without notice.

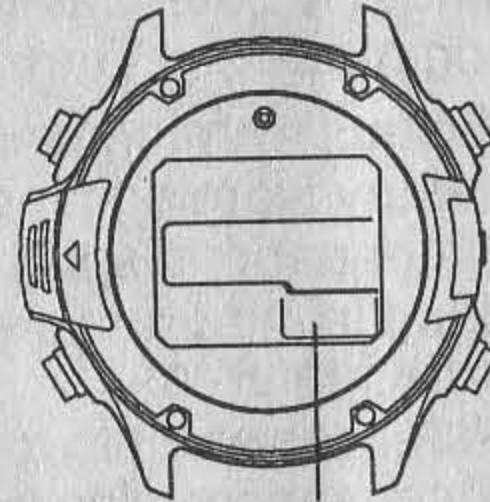
S. The battery warning function and the battery

1. Battery warning function

- This watch has a battery warning function to let you know when to change the battery.
- When the dot display alternates between "BAT." and the dot display, this indicates that the battery is low. Please take the watch to a Citizen Service Center to get the battery changed and the watch checked as soon as possible.

★ Caution:

When the battery warning function appears during normal display modes, except diving mode, you can not change to diving mode. In diving mode after the battery warning function appears, the battery warning function may disappear when you cancel diving mode. However the battery is still low and requires changing as soon as possible.



Dot display

2. Battery

a. Battery life span

- The life of the battery in this watch is about 3 years, after a new battery is installed. Following is a list of probable usage:
 - 1) Number of dives: 100 per year
 - 2) Dive time: 35mins. (per dive)

3) Data transfer: Once a week

* The battery life may change depending on how often various functions are used.

When using the watch for purposes other than diving, the battery life will be shortened according to the length of time the watch is wet.

★ Depending on the amount of dives, the probable battery life span is as follows.

35 mins. 200 times per year: 2.2 years

35 mins. 300 times per year: 1.8 years

This assumes that other usages are the same as mentioned.

b. The first battery

- The battery which is already in your watch when you purchased it, is a monitor battery used to check the functions of the watch, and so the battery may require changing within 2 years after purchasing the watch.

c. Changing the battery

- 1) Battery replacement should be carried out by the manufacturer, as a repair. Please arrange for a Citizen Service Center to look after your watch through the shop from which it was purchased.
- 2) When the battery is changed the water resistance should be checked and if need be, seals changed.
- 3) When changing the battery, the log data and profile data will be lost, so please transfer the data to a personal computer or record it in a log book beforehand.

- 4) If you leave a dead battery inside the watch, leakage can cause damage, so we recommend that you change the battery as soon as possible.
- 5) If you intend to use the watch overseas for any length of time, there may be a chance you cannot get the watch serviced, so we recommend that you change the battery prior to your departure.
- 6) The changing of the battery, and the checking and changing of any incidentals, even within the guarantee period, will be chargeable.

⚠ Caution:

- When you store batteries, please keep them out of the reach of young children.
- In the event a child swallows a battery, please take them to a doctor immediately.

T. For long usage

1. Water-resistance

- a. All servicing of your watch, including battery replacement, should only be done by the manufacturer.
- b. In order to ensure that your watch stays water-resistant, you should have it inspected once every one or two years in addition to regular battery replacement.

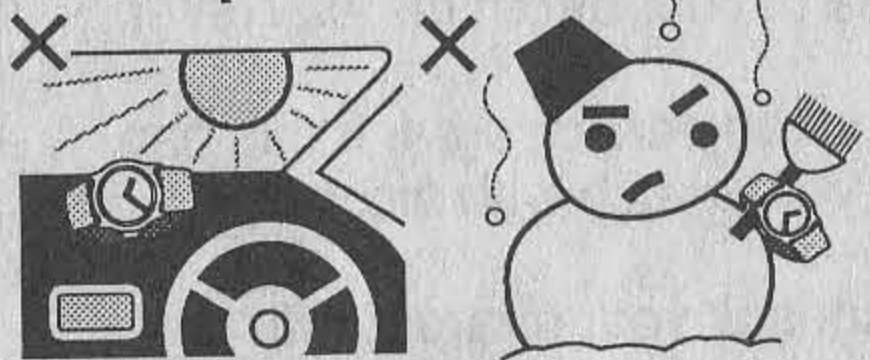
2. About the depth sensor (Pressure sensor)

- a. There is a sensor cover that protects the sensor area of your depth meter. Never remove it.
- b. Be careful not to get any sand, particles, dust, etc. on the sensor area. If this happens, rinse the watch with clean water. Never clean your watch with alcohol or chemicals such as gasoline, thinners, etc.
- c. If you cannot adequately clean your watch, please consult your nearest Citizen Service Center.

3. About Your Watchband

- For comfortable everyday use of your watch when you are not diving, we recommend adjusting the band so that there is about enough room to insert one finger between it and your wrist.
- If cracks, tears, etc. appear in your band, you should immediately buy a new band.
- When you replace the band, make absolutely certain that it is fastened securely to the body of the watch.

4. Temperature

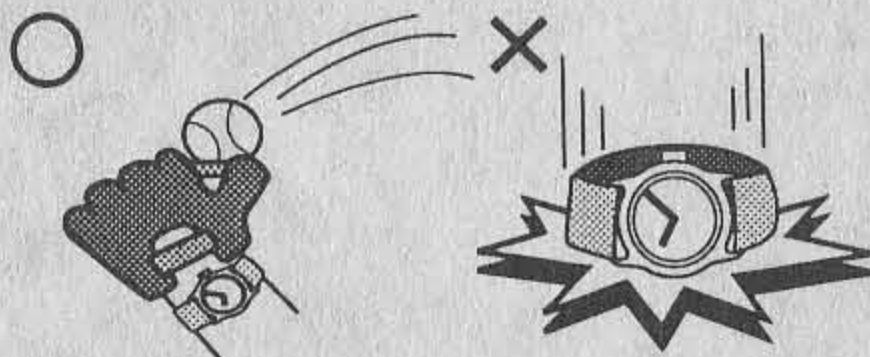


Do not leave your watch in areas of direct sunlight, such as on the dashboard of a car or other places that get very hot for a long time. You should not leave your watch in cold places for extended periods, either. Such conditions can damage the watch and shorten the life of the battery.

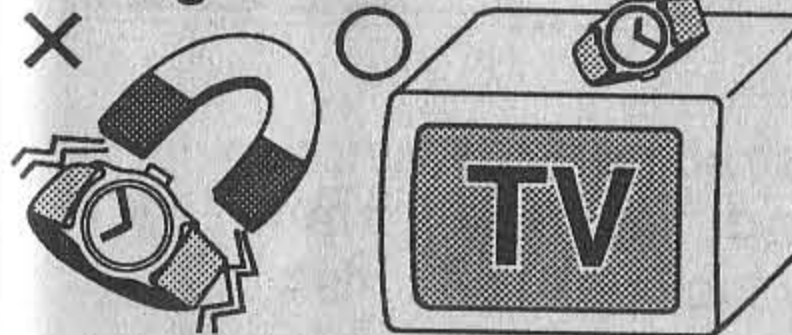
They can also cause the watch to run fast or slow.

The types of shocks that you would incur while participating in typical activities like golf, ball games, etc., do not harm your watch.

However, be careful not to drop the watch on the floor, bang it strongly against hard objects and so forth since this will damage or break it.



6. Magnetism



This watch is magnetized. There are no problems with everyday use. However, when you use it in magnetized environments or near strongly magnetized instruments such as are sometimes used in physical therapy, medicine, etc., you should be careful not to bring your watch into prolonged or direct contact.

7. Static Electricity

The IC power source used in your watch is susceptible to static electricity. Static electricity can distort the displays on your watch, so please be careful.

8. Chemicals, gases, etc.



Avoid using your watch in the presence of chemicals and gases.

When various types of solvents like thinners, benzine and other things like gasoline, nail polish remover, toilet bowl cleansers, laundry detergents, etc., come into contact with your watch band they can change its color, cause stains and cracks, etc. Be careful to keep your watch away from chemicals.

Also, when you are using any device that contains mercury, such as a thermometer, contact could cause color changes on your watch case, dial and band, so be very careful.

U. Warranty and service

1. If you have used your watch properly according to the instructions contained in this manual and any damage to your watch should occur during your warranty period, in accordance with the conditions of the warranty included with this manual, we will repair your watch free of charge. However, our liability is limited to repair of damage. Furthermore, any service or repairs that you have performed at a place other than a Citizen Service Center are not covered by this warranty.

2. Stock Period Of Parts Necessary For Repair

Citizen normally stocks repair parts for its watches for a period of 7 years. However, you should know in advance that sometimes if a damaged part such as a crystal, case, crown, or watch face is replaced it may be replaced by a similar but not identical part which might differ slightly in appearance.

3. How Long Can You Continue To Have Repairs Done?

In normal circumstances, even if your Citizen Parts And Service Warranty is no longer in effect, you can still have your watch repaired for a fee.

Nevertheless, you should be aware of the possibility that the wear and tear on your watch that may result from normal extended use may make it difficult to restore your watch to its original level of precision.

4. To Extend The Life Of Your Watch, Have Periodic Inspections And Replace Worn Parts

You should have a periodic inspection of your watch at least once every one or two years for maintenance purposes.

However, how often your watch may need a maintenance check will really depend on how you use it. Consult a Citizen Service Center regarding your individual maintenance needs.

There is a charge for periodic inspection and parts replacement.

*If you do something like smash your watch against a rock and break the crystal, don't try to fix it yourself. Consult a Citizen Service Center.

*If you have any questions about your warranty or service, etc., consult your Citizen Service Center.

*All subsequent repairs and service for this watch, including battery replacement, should be done by the manufacturer. We bear no liability for any service or battery replacement performed outside a Citizen Service Center.