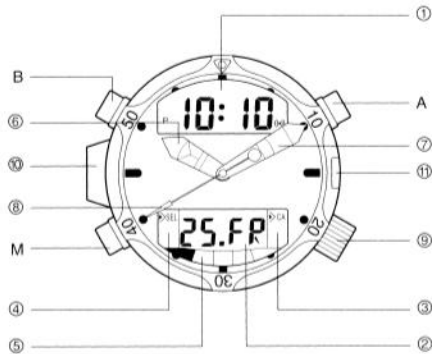


# CITIZEN QUARTZ AQUALAND

DIVER'S WATCH  
with an Electronic Depth Sensor

Model No. JP1XXX  
Cal. C50

CTZ-C6781



Please refer to the diagram above when reading this instruction manual.

- Never manipulate the crown or press the buttons during a dive, except button A.
- This illustration shows a watch using meters to indicate depth readings.

**This watch is a diver's watch having a combination display (analogue and digital) and equipped with an electronic depth meter. When the watch senses water on its water sensor, the watch automatically enters the diving mode without any operation to change the mode and all diving functions become ready for use. After a dive begins, diving time, present depth, maximum depth and water temperature are automatically measured and displayed. The watch is provided with a log data memory function that can store the data for 4 dives. Moreover, different dive alarm functions are available. One alarm function alerts the diver of excess speed in ascending; if you ascend too rapidly during a dive, the alarm sounds.**

**Highly reliable water resistant for use at depths of up to 200 metres**

The highly reliable water resistant conforms to ISO standards for diving watches.

- ISO diving watch standards are those set forth by the International Organisation for standardisation. <ISO/6425>

Any repair of this product, including battery replacement, should be conducted at a Citizen Service Centre. For repair and inspection please contact the place of purchase or contact a Citizen Service Centre directly.

## A. Diving with this watch

Diving can be a safe, enjoyable activity when diving rules are properly followed. It is always, however, accompanied by certain risks including diver's paralysis and unanticipated accidents. Before diving please obtain proper diving instructions and be sure to conduct safety checks. Please use this watch only after you have read and fully understood the operating procedures and cautions as these may result in failure of the watch to function properly.

## WARNING:

### Safe diving

1. Use this product only after having received proper instruction in safe diving procedures.
2. Always use the "buddy system". This watch is not a substitute for a diving partner.
3. This product is recommended for sports diving to depths of up to about 15-20 metres (50ft-65ft), although the depth indicator will measure depths up to 80 metres.
4. Early battery replacement is recommended. A new battery will last approximately 2 years. (However, this will vary greatly depending on the frequency of depth meter use. Replace the battery early.)  
**\*Battery replacement should be conducted only at Citizen Service Centres.**
5. Be sure to rest sufficiently after diving, as specified by diving rules. Riding in an airplane or moving to a high altitude too soon after diving may cause decompression sickness.
6. Use the depth meter function of this watch only as an auxiliary or backup instrument.
7. Avoid rapid ascents when diving, as these adversely affect the human body including causing diver's paralysis. Maintain a safe ascent speed while diving. An ascent of 9 m (30ft) or less per minute is recommended for sports diving to avoid various possible problems. (In conformity with the Diving Manual of the United States Navy, 1993.)

### Do not use the depth meter when...

1. In locations with altitudes exceeding 4,000 m (13,124 ft). The watch will be unable to measure depth accurately.
2. In temperatures outside of the warranted temperature range. The warranted temperature range for the depth meter in this watch is from 10°C to 40C/50°F to 104°F.
3. In potentially dangerous activities or conditions. This watch is not designed for use in maritime emergencies or to prevent sea disasters and the like.
4. A substitute for a pressure gauge is needed. The watch is not designed to gauge pressures other than those associated with the water depth.
5. Diving using a helium enriched environment. This watch cannot be used in a helium enriched environment, as this may cause malfunction or breakage.

**CAUTION:****Stop using this product while diving when...**

1. The low-battery warning indicator is activated.  
As the battery approaches the end of its life, the display switches automatically from the depth meter display to the time display, and the second hand begins to move in 2 second increments.
2. The watch's depth readings differ greatly from those of other depth measuring instruments.
3. The watch stops or exhibits any abnormal functioning. (Avoid knocking the watch against diving equipment, rocks or other hard objects.)

**\*Service for this watch should be conducted only by Citizen Service Centres.**

**B. Name of parts**

Name		Time/Calendar Mode	Alarm Mode	Chronograph Mode
①: Digital display (I)		Hours, Minutes, A/P	Hours, Minutes, A/P	Hours, Minutes
②: Digital display (II)		Date, Day/Seconds or thermometer	ON/OFF	Seconds, 1/100 seconds
③: Operation guide for button (A)		▷ CA	SET	STA
④: Operation guide for button (B)		▷ SEL	▷ SEL	—
⑤: Mode mark display		TME	ALM	CHR
⑥: Hour hand		Always displays hours		
⑦: Minute hand		Always displays minutes		
⑧: Second hand		Always displays seconds		
⑨: Crown		Used to set analog time		
A: Button (A)	Press once	Switch to Second/Date, Day	Switch to ON/OFF	Switch to Start/Stop
	Depress 2 second or more	Thermometer measurement	Alarm monitoring	—
B: Button (B)	Press once	—	—	Split time display/Reset
	Depress 2 second or more	To time setting mode	To Alarm correcting mode	—
M: Button (M)	Press once	To Alarm Mode	To Chronograph Mode	To Log Mode
	Depress 2 second or more	The dive ready state is entered.	The dive ready state is entered.	The dive ready state is entered.

## ⑩ Pressure sensor

Senses water pressure to measure the corresponding depth

## ⑪ Water sensor

Whenever this sensor senses traces of water, the watch automatically enters the diving mode with the [Ready display].

\*In addition, the watch contains the temperature sensor as an internal device.

Log Mode	Dive Alarm Mode	Diving Mode		
		Ready display	Depth measurement readings	0 m reading after depth measurement
*1	Depth Alarm	DIVE mark flashing	Current Depth DIV turns on	0.0 m flashing, DIV turns on
*2	Dive Time Alarm	DIVE mark flashing	Dive time	Dive time
CA	—	DIVE mark flashing	CA	CA
SEL	SEL	DIVE mark flashing	—	—
LOG	DAL	flashing	—	—
Always displays hours				
Always displays minutes				
Always displays seconds				
Used to set analog time				
Memo (logged) recall	—	Corresponding to the display before switching (except for chrono mode)	Maximum depth recall/ Current temperature reading	Maximum depth recall/ Minimum temperature reading
—	Dive alarm monitor	—	—	—
Number of log times recall	—	↑	—	—
—	Dive Alarm correction Mode	—	—	—
To Dive Alarm Mode	To Time/Calendar Mode	↑	—	—
The dive ready state is entered.	The dive ready state is entered.	—	—	To Time/Calendar Mode

\*1 Number of dive times/Maximum depth/Depth start time/Average depth.

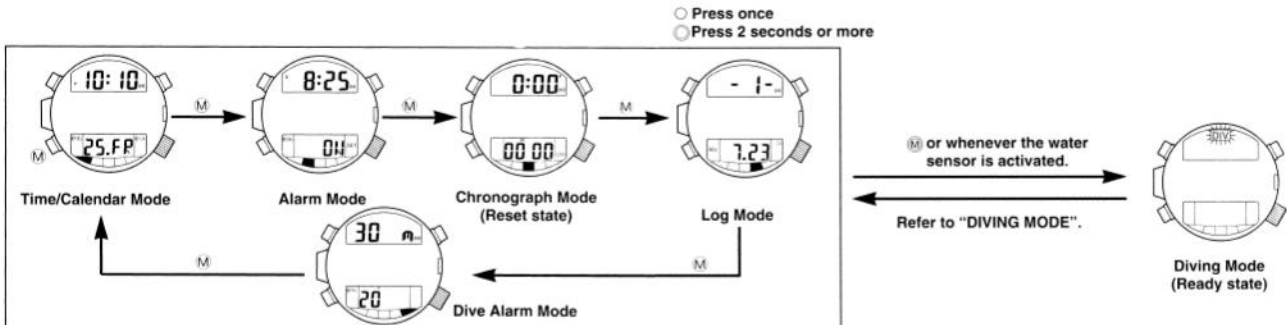
\*2 Month and day/Dive time/Dive end time/Minimum temperature.

### C. SWITCHING MODES

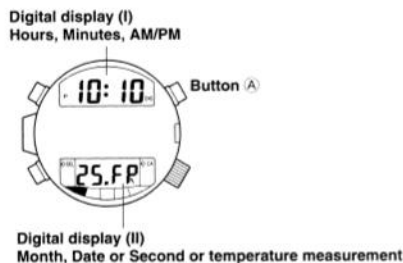
From any mode shown in the box below:

1. The watch can be made to enter the diving mode (Ready state) by pressing button (M) for 2 seconds or more.
2. The watch will enter the diving mode (Ready state) whenever the water sensor is activated.

Each time button (M) is pressed, the display is changed to another mode as shown below.



### D. TIME/CALENDAR MODE



#### Switching in the digital display (II)

1. Press button (A) and select month/date or seconds.
2. Press button (A) two seconds or more, temperature measurement will be displayed.

Temperature measurements are taken and displayed every 10 seconds for 3 minutes.

\* The temperature measurement range is from  $-5^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$  ( $23^{\circ}\text{F}$  to  $104^{\circ}\text{F}$ ).

If the watch is worn on the wrist during temperature measurement, the body temperature affects the measurement.

For accurate temperature measurement, take the watch off and leave it in the measuring environment for a while.

#### When manipulating the crown...

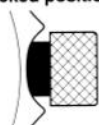
##### About the screw lock

1. Always return the crown to its original position and lock it in when finished.
2. Do not press any of the buttons while the crown is pulled out.
3. Do not pull out or turn the crown when it is wet. Doing so may allow the water to seep inside the watch and cause a malfunction.

Screw locked position



Freed from the screw locked position



#### Setting the Time and Calendar

##### a. Always perform the Digital setting first, then the Analog setting



##### a. Digital setting Setting the Time and Calendar

1. While in the time mode, press button (B) for two seconds or more, seconds will flash, and switch to correcting state.
2. While seconds flash, press button (A) to reset the seconds to "00" then seconds start again.
3. When in the seconds correcting state (seconds flash), press button (B), the flashing digits will change in the order of seconds → minutes → hour → month → date → year → 12/24 hour system. Select the digit to correct.
4. Correct the flashing digit by pressing button (A) (Press and hold down button (A) to quick advance the flashing digit.)

\* Press button (M), the 12 hour/24 hour will switch alternatively.

\* If the watch is left in any correcting state for 3 minutes or more without changing digits, the correcting mode is reset and the watch will automatically return to normal time display mode.

\* Pressing button (M) while in the time correcting state, will return the watch to normal display mode. (Manual return)

\* Due to the auto calendar, no correction at the end of the month is required.

## b. Analog setting

### Setting the Analog Time

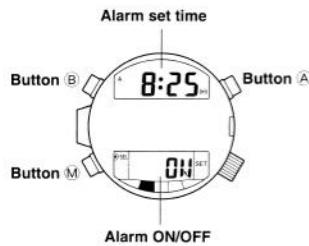
1. Unscrew the crown and pull it out to stop the second hand at "0" position.
2. Turn the crown and position the hour and minute hands 1 minute in advance of the digital time.
3. Press the crown into place when the seconds display of digital time has just come to 0 to start the second hand.

## E. ALARM MODE

- When the alarm indicator is ON, the alarm will sound for 15 seconds at the alarm set time, once a day.

### <Note>

The alarm is disabled during the diving mode, so take care.



### Setting the alarm

1. While in the alarm mode, press button (B) for two seconds or more, hour will flash and alarm will indicate ON automatically.
  2. While hour flashes, press button (A) to set the hours.
  3. Press button (B), the flashing digit will change in this order: hours → minutes.
- \* Press and hold down button (A) to quick advance the flashing digit.
5. Press button (B) or (M) to finalise setting.  
Alarm 12 hours/24 hours is set in synchronised with the time/calendar mode.

### Alarm ON/OFF

Switch the alarm ON/OFF by pressing button (A).

### Alarm monitoring

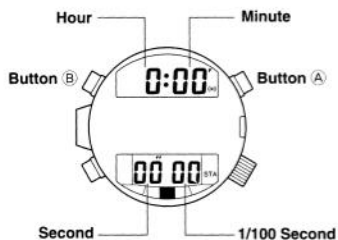
In the alarm mode, while pressing button (A) 2 seconds or more, the alarm monitor will sound.

### <Auto-return system>

If the watch is kept in the alarm mode for 3 minutes or more, it is automatically switched to the time/calendar mode.

## F. CHRONOGRAPH

- The chronograph can measure up to 24 hours in 1/100 seconds.
- The chronograph display automatically returns to 00 and stops.

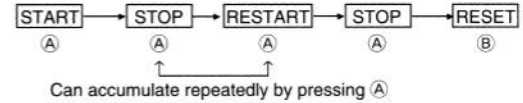


## Using the chronograph

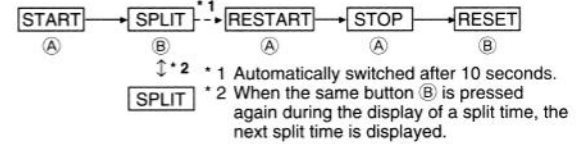
### <Standard measurement>



### <Accumulated elapsed time measurement>



### <Split time measurement>



### <Note>

- Changeover to another mode is disabled during the chronograph measurement.

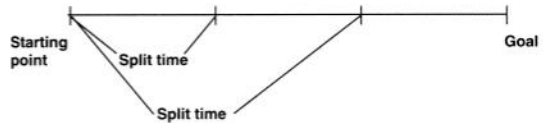
To change the mode to another mode, make the chronograph measurement stop or reset.

### Additional feature

#### <Auto-return system>

- If the chronograph reset state remains for 3 minutes or more, the watch is automatically switched to the time/calendar mode.

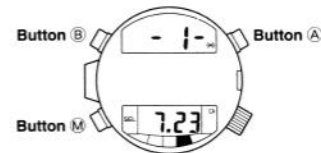
Split time: The time elapsed from the start is displayed whenever the split operation is performed.



## G. LOG MODE

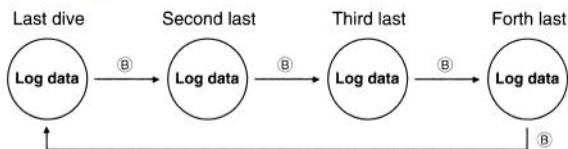
By pressing button (M), change the mode from chronograph to log mode.

The dive log data can be retained in the watch, counting the last 4 dives.



- To recall the log data for the last 4 dives, press button (B). Each time button (B) is pressed, the log data is displayed in the order going back from the latest one.

- If the watch is left in the log mode with any data being displayed for 3 minutes or more, it is automatically switched to the time/calendar mode (auto-return).

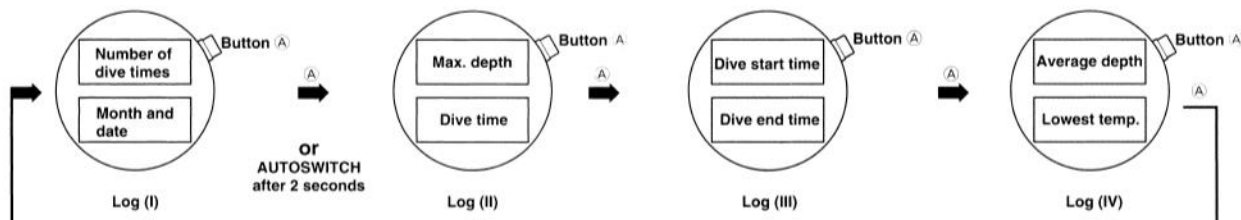


- \* When you begin a dive, the oldest log data (Fourth last log data) is erased automatically. It is recommended to record the data on a log book, etc.

### Changing the Log Display

Every dive makes the watch memorise the following 8 types of log data automatically, which can be recalled in the order of (I), (II), (III) and (IV) as shown below.

- When the watch is switched from the chronograph mode to the log mode by pressing button (M), log (I) is displayed.



- Each time button (A) is pressed, the log display is changed to the next in the order of (I), (II), (III) and (IV).

On rare occasions, even if the water sensor senses traces of water and the watch is switched to the dive mode (dive ready state), however, log (I) display may fail to change to log (II) display automatically. In case this happens, press button (A) to change the display.

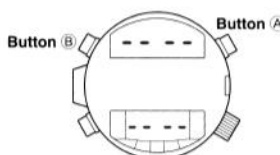
- Only when log (I) is displayed, the display is automatically changed to log (II) after 2 seconds without pressing button (A).

1. Number of dives: The number of dives performed in a particular day. A maximum of 9 dives can be counted. Counting is initiated day by day.
2. Dive month and day: Date and month when diving is performed.
3. Maximum depth: The maximum depth that was reached in one diving.
4. Dive time: Dive time: total time when the diver remains deeper than the depth of one metre. If the diver does go again into the water deeper than 1 m (4ft) within 10 minutes after the diving depth becomes shallower than 1 m (4ft), the dive time counting resumes at the time when the measurement is stopped and the accumulative time is recorded successively. Measurement is taken in units of seconds and up to 100 minutes at maximum. When the maximum is reached, the measurement starts again at zero.

5. Dive start time: The time when a dive depth reaches 1 m (4 ft).
6. Dive end time: The time when a dive depth becomes shallower than 1 m (4 ft).
7. Average depth: Average depth in one dive.
8. Minimum temperature: The minimum temperature recorded in one dive.

These log data are displayed as log (I), (II), (III) and (IV) separately.

To delete all log data;



Depress button (A) and button (B) together from 2 seconds or more and all log data will be deleted.

In case the depth indication flashes;



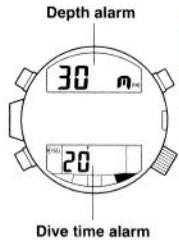
This signifies that the log data is faulty.

In case ER (error) is shown;



This signifies that the log data is faulty.

## H. DIVE ALARM MODES



**(Note)** The alarm may be hard to hear depending on the surroundings (such as the sound of air bubbles) and the watch wearing conditions, so take care in using the alarm.

The following two alarm functions are provided as dive alarms used in this watch.

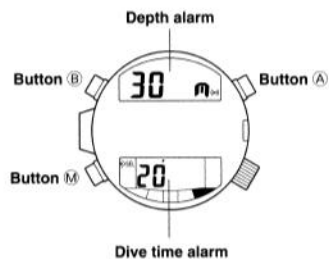
1. **Depth alarm function:** When the set depth is reached during a dive, the alarm will beep for 15 seconds. The depth alarm setting range is 1 m to 80 m/4 ft to 260 ft (units of 1 m/4 ft). If you continue to dive deeper than the set depth alarm, every minute the alarm can be activated repeatedly. The number of times the alarm will be activated can be chosen from 0 to 5 or every minutes.

\* The number of times the alarm will sound during one dive is preset on the watch. For example, if you set the number of times at "1", the alarm sounds only once during one dive.

2. **Dive time alarm function:** When the set time comes after starting a dive, the alarm will beep for 15 seconds. **This alarm will not be repeated.**

\* If the ascending speed is over 1.5 m (5 ft) for 10 seconds during a dive, the ascending speed alarm will beep for the duration of at least 10 seconds to alert the diver of overspeed.

### Setting the depth alarm/dive time alarm



1. Press button **(B)** for 2 seconds or more to switch to the DIVE ALARM correcting mode (the preset depth value starts flashing). At this time, the digital display (II) changes from the dive time alarm display to the display for the number of times the alarm will be activated.

2. Set a diving depth at which you want the alarm to sound by pressing button **(A)**. Each time button **(A)** is pressed, the depth setting becomes deeper by 1 m (4 ft). A maximum setting is 80 m (260 ft). With the maximum exceeded, the setting is returned to 1 m (4 ft).

\* Rapid advance of settings is made by pressing and holding down the button **(A)**.

3. Press button **(B)** to switch to the number of times of alarm occurrences correcting mode (the preset number of times starts flashing).

- Change and set the number of times of alarm occurrences by pressing button **(A)**. The display for the alarm frequency is changed and cycled in the following order: ON→OFF→1→2→3→4→5. ON: The depth alarm will beep every minute when the diving depth is deeper than the set depth. OFF: Depth alarm is disabled.
  - Press button **(B)** to switch the dive time alarm display to the correcting mode (the preset value for the dive time alarm starts flashing).
  - Change and set the dive time alarm time by pressing button **(A)**. The display for dive time alarm is changed and cycled in the following order: — → 05 → 10 → 15 ..... → 95 → —.
- \* With the display of "—", the dive time alarm is disabled.
- Press button **(B)** or **(M)** to finish the setting procedure.

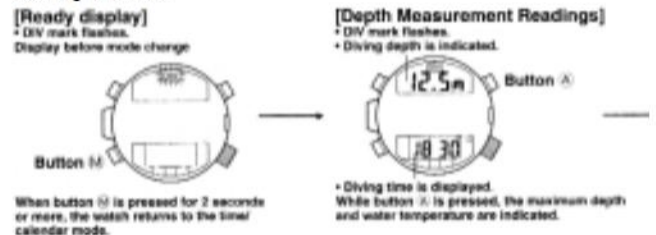
### Dive Alarm Monitor

By keeping button **(A)** depressed, repetitive alarm monitoring at 4 second intervals can be performed in the following order: depth alarm → dive time alarm → rapid ascent warning alarm.

### I. DIVING MODE

When in any other mode, the watch will enter the diving mode with the display changing to [Ready display] by pressing button **(M)** for 2 seconds or more. If [Ready display] put in this way is allowed to stand for about 60 minutes, the display automatically returns to the preceding mode.

One of the following three displays is shown in the diving mode.



- When a depth of 1 m (4 ft) is reached after you begin diving with the watch displaying [Ready display], the display will automatically change to [Depth measurement readings].
- When the diving depth becomes less than 1 m (4 ft), the display will automatically change to [0 m (0 ft) Reading after Depth Measurement].

### Additional feature

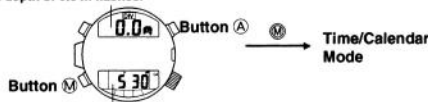
#### <Water Sensing Function>

This watch is provided with a water sensor. Whenever this sensor senses traces of water in any other mode display, the watch automatically enters the diving mode with [Ready display].

\* During the chronograph measurement, however, the mode change is disabled. When the moisture is removed, the watch is released from the [Ready display] state.

## [0 m Reading after Depth Measurement]

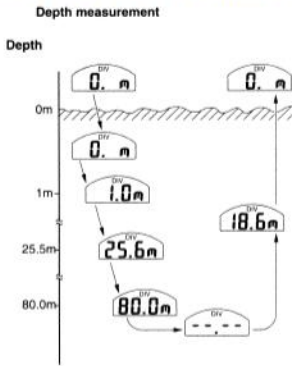
DIV mark turns on  
• A depth of 0.0 m flashes.



• Diving time is displayed.  
While button (A) is pressed, the maximum depth and minimum temperature reached in this dive are indicated.

- If button (M) is pressed for 2 seconds or longer with the display of [0 m (0 ft) Reading after Depth Measurement], then the watch returns to the time/calendar mode. If the diver dives again deeper than 1 m (4 ft) within 10 minutes, the dive time counting resumes.

## Depth Measurement Readings



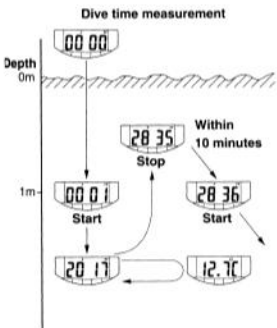
### 1. Depth Measurement

The diving depth is measured every second, and the reading of the depth is displayed on the watch. Units of depth measurement: 1 m to 80 m (4 ft to 260 ft).  
When diving depth is less than 1 m (4 ft): the display will be 00.0 m (000 ft).  
When diving depth exceeds 80 m/260 ft, display will be

— — . — m ( — — — ft).

### In case the ER (Error) displayed depth reading flashes;

This means that the depth measurement is faulty.



### 2. Dive Time Measurement

When the diving depth reaches to 1.0 m (4 ft), the dive time measurement will start. It stops when the depth becomes deeper than 1.0 m (4 ft) within 10 minutes after the end of the dive time, the dive time resumes at the time when the

measurement is stopped and the accumulative time is recorded successively.

### 3. Water Temperature Measurement

Water temperature measurement starts 1 minute after a depth of 1.0 m (4 ft) is measured and displayed. Subsequently, temperatures will be measured every minute.

Units of water temperature measurement: 0.1°C (1°F).  
Range of measurement: -5.0°C to +40°C (23°F- 104°F)  
Before temperature measurement and out of the measurement range: the display will be — — . — °C ( — — °F).

\* While button (A) stays depressed during the display of the diving time, the display shows water temperature readings, not the diving time.

## J. Precautions for Diving Mode Use Making accurate depth readings

- Switch the watch to the Diving Mode shortly before diving. In case the watch, though being used on land, is out in the diving mode because the water sensor senses moisture such as sweat, make the watch released from the diving mode by wiping off the moisture, then switch it to the diving mode again.
- Avoid too rapid descent and ascent when diving. In case the diver rapidly ascends at a rate of 1.5 m (5 ft) or more per 10 seconds, the ascending speed alarm beeps for more than 10 seconds and the display of depth readings becomes flashing, not allowing proper measurement. When the diver rapidly descends or ascends at a rate of 4 m (15 ft) or more per second, the display indicates ER (Error).

### High Altitude and Freshwater Diving

When the Diving Mode is activated, the depth is calibrated at 0 m.

**However, an accurate measurement is not possible at altitudes over 4,000 m (13,124 ft).**

Do not use this watch when diving in such places. Further, this watch displays changes in depth based on a standard of seawater (density 1,025). Depths indicated in fresh water will actually be about 2.5% over indicated. Be sure to complete appropriate safety training before diving in fresh water or at high altitudes. (Example) 20 m in fresh water (indicated depth) x 1.025 = 20.5 m (actual depth).

### Before Diving

- Make sure that the crown is pushed all the way in and locked in place.
- Make sure that there are no cracks or other damage to the watch band or the glass face. Damage to the band may result in the band breaking and loss of the watch.
- Make sure that the band is firmly anchored to the watch body.
- Make sure that the register ring rotates properly.
- Make sure that the time and date are correctly set.
- Make sure that the second hand is moving correctly.

\* If the second hand is moving in 2-second increments, then the battery is low. In this case, do not use for diving. Request battery replacement at the place of purchase or by contacting a Citizen Service Centre directly.

### During Diving

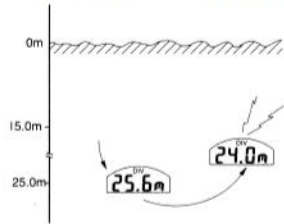
- Never operate the buttons other than button (A) during a dive. Doing so may cause a fault such as poor water resistance.
- The time alarm is set to OFF during a dive, so take care.
- The dive alarm or ascending alarm may be hard to hear in water, depending on the surroundings (such as the sound of air bubbles) and the watch wearing conditions, so take care in using the alarm.
- Be careful not to hit the watch against solid matter such as equipment or rocks.

## After diving

1. After making sure that the crown is locked in place, wash the watch free of seawater, mud and sand using fresh water, wipe completely with a dry cloth.
2. Do not attempt to remove the sensor cover or remove any dirt or debris clogging the sensor portion of the watch, using a sharp instrument. Rather flush out such debris using fresh water. If this fails, please consult a Citizen Service Centre.
3. For general repairs and maintenance please refer to "Care for long time use" on pages 54-59.

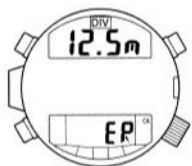
## K. Various Alert Functions

This watch is provided with the following alert functions. These alerts are recommended to be used to increase the safety in diving.



### 1. Ascending Speed Warning

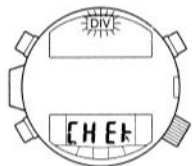
If the ascending speed exceeds 1.5 m (5 ft) in 10 seconds during a dive, the alarm will sound for more than 10 seconds as the ascending speed alert.



### 2. Abnormal Depth Alert

In case of a rapid change in depth over 4 m (15 ft) for one second, the flashing ER (Error) appears on the digital display (II).

If the sensor is faulty, ER (Error) is shown even when the watch is used on land.



### 3. Water Sensor Check Alert

Although the water sensor is activated and the watch enters the diving mode with [Ready Indication], if one hour or longer is elapsed without any action, CHECK appears on the digital display (II) as the water sensor check alert. In such a case, dirt or water might be on the water sensor. So wash the sensor free of adherents, wipe water off the surface and dry it sufficiently.

In this case, replace the battery in advance of its lifetime. (The watch keeps correct time during this occurrence.) However, when this warning function is on, other functions are inhibited as follows:

1. All alarms do not sound.
2. Changeover to the diving mode [Ready display] is disabled.
3. When in the diving mode with [Ready display], changeover to [Depth Measurement Readings] is disabled.
4. With [Depth Measurement Readings] displayed on the watch, the dive alarms do not sound. Stop diving immediately.
5. With [Temperature Measurement Readings] active on the watch, the watch returns to the pre-state.
6. In the case of the water sensor check alert display, the alert display is disabled.

• **Changeover cannot be performed from the diving mode [Ready display] or [0 m Reading after Depth Measurement] to the time/calendar mode.**

• **In case the depth reading is one metre or more, though the watch is used on land.**

In this case, all reset should be performed by referring to page 49. If the watch display is changed to the pre-state of the diving mode [Ready display] or to the time/calendar mode when the crown is pulled out, there is no problem. If the mode change cannot be made, all reset should be performed (see page 49). (Note 1)

• **Digital display malfunction**

Should strong impact of static electricity be applied to the watch by accident, the digital display may malfunction at times. If this occurs, all reset should be performed by referring to page 49. (Note 1)

• **After battery replacement**

After the battery is replaced, be sure to perform all reset by referring to page 49. If not done so, the watch does not operate properly, making correct displays. (Note 1)

**\*Note 1**

All reset operation will erase all the stored data.

## M. ALL RESET



1. Pull the crown out.
2. Press all three buttons together and release.
3. Push the crown into its normal position. If the alarm sounds 2 times, all reset is completed.

Because all the stored data are erased after all reset, setting for each mode should be performed again correctly.

## L. In Case of the Following:

### The second hand goes at 2-second intervals.

This action occurs when the battery run down warning is activated, which warns the user that the battery will run down soon.

## N. THE BATTERY

### a. Battery life

A new battery installed in this watch will last approximately 2 years.

Standard usage conditions

Number of dives: 50 dives/year

Duration of dives: 1 hour

The life of the battery depends on the use frequency of the alarms or other functions. Moreover, if the watch is wet in a situation, other than diving, the water sensor is activated, which reduces the battery lifetime, so take care.

### b. The original battery

The battery in the watch at the time of purchase is one used to test the function and performance of the watch. Please be aware that this battery may not last for the 2 years estimated for normal batteries.

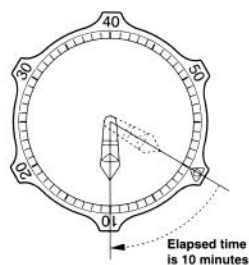
### c. Battery replacement

1. All battery replacement should be done by a Citizen Service Centre. To replace the battery, please contact the place of purchase or contact a Citizen Service Centre directly.
2. When replacing the battery, inspection of water resistance and other parts should be conducted, and packing materials replaced as necessary.
3. Battery replacement will result in deletion of data in the maximum depth memo. Be sure to record such data in a log book, etc. before replacing the battery.
4. Leaving a dead battery in the watch may cause damage due to leaking battery fluids.
5. Before using this watch for long periods overseas, battery replacement is recommended, as this service may be unavailable in some areas.
6. A charge for battery replacement and related inspection and parts replacement will be levied, even within the specified warranty period.

## O. OTHER FUNCTIONS

### Register ring

Use the register ring to measure elapsed time.



**<Using the register ring>**  
**Before diving, rotate the register ring to line up the mark with the minute hand.**  
**Elapsed time is then indicated by the position of the minute hand on the register ring.**

Example: In the diagram at left the minute hand is 10 minutes past the mark, indicating that the 10 minutes have elapsed.

### – Note –

The register ring may only be turned counter clockwise (this helps prevent unwanted movement). Do not attempt to force it to turn clockwise.

### No decompression limits

The range of time when it is unnecessary to stop to decompress while surfacing from a dive is determined by the depth and time of the dive. These values are referred to as “No Decompression Limits.” Use these as estimates when diving.

No Decompression Limits, based on the American Navy Diving Manual (1983), are printed on the band of this watch. (Some models may not have this chart.)

<Reading the chart>

DEPTH. m	-N.D. TIME
12 m	-----200 Min.
15 m	-----100 Min.
18 m	-----60 Min.
21 m	-----50 Min.
24 m	-----40 Min.
27 m	-----30 Min.
30 m	-----25 Min.
33 m	-----20 Min.
36 m	-----15 Min.
39 m	-----10 Min.
42 m	-----10 Min.
45 m	-----5 Min.









**Caution:** The no decompression limit is different depending on the body condition, or personal differences. Please use the no decompression limits on this watch as a guideline.

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

**Example:** If the diver is at 21 m for 50 minutes or less, then it is OK to surface without stopping to decompress.

## P. Care for long term use

### Water resistance

Indication		Water-related use					
							
Dial	Case back	washing face or getting wet in the rain, when splashed over it and no water pressure is applied to it	swimming and general washing work (kitchen work/car washing, etc)	water sports and skin diving (without air tank)	scuba diving (with air tank)	saturated diving (helium gas)	pulling the crown out when the watch is wet
WATER RESIST 200 m	WATER RESIST (ANT)	OK	OK	OK	OK	NO	NO

### 1. Notes on Water Resistance

- This divers watch has the waterproof construction for diving up to 200 m and withstands water pressure up to 200 m deep. The crown is screw-lock type. Tighten the screw completely before use.
- All maintenance services including battery replacement shall be carried out by Citizen Service Repair.
- Subject the watch to the water resistance check at the time of battery replacement or every one or two years to maintain the water resistance of the watch.

### 2. Pressure Sensor

- Never disassemble the sensor cover which protects the pressure sensor.
- Be careful that foreign objects such as sand, dust or other matter does not enter into the sensor. If such objects have entered into the sensor, wash it away with fresh water. Do not use alcohol, gasoline, thinner or other chemical substances.
- If you cannot clean the sensor, bring the watch to the Citizen Service Centre.

### 3. Watch Band

- If the watchband shows cracks, replace it with a new band.
- When replacing the watchband also replace the spring bars connecting the watch and the band.

### 4. Water resistance

- This divers watch is designed to resist water pressure to a maximum depth of 200 m. Before using this watch under water, push in the crown and tighten the screw lock completely.
- All services after sale including battery replacement are provided by the Citizen Service Centre. Never have the case back opened or the screws on the sensor loosened at facilities other than the Citizen Service Centre.
- In order to maintain water-resistance, we recommend that you have the watch checked at the Citizen Service Centre at the time of battery replacement once every one or two years.
- The case back is marked "DO NOT OPEN SERVICE CENTRE REPAIR ONLY"

### 5. Temperature

Avoid exposing the watch to direct sunlight or leaving it in extremely hot or cold locations for a long period of time.

- This will cause malfunctioning and shortening the life of the battery.
- This may cause your watch to gain or lose time and affect its other functions.

### 6. Shock

- This watch will withstand the bumps and jars normally incurred in daily use and while playing such non-contact sports as golf and catchball.
- Dropping the watch on the floor or otherwise imparting severe shock to it may cause malfunctioning or damage.

### 7. Magnetic Fields

This watch is antimagnetic up to 60 gauss and not affected by the magnetic fields produced by ordinary household electric appliances. If used in the immediate vicinity of strong magnetism, however, the watch's functions may temporarily be affected.

### 8. Static Electricity

The integrated circuits used in the watch are sensitive to static electricity. If exposed to intense static electricity, the watch's display may lose its accuracy.

### 9. Chemicals and Gases

Avoid wearing the watch in the presence of strong chemicals and gases. If the watch comes in contact with such solvents as thinner and benzine or products containing materials such as gasoline, nail polish, detergent or adhesive, its components may discolour, dissolve or crack. Be especially careful to avoid chemicals. The watchcase or band may discolour if they come in contact with mercury from a broken thermometer or other equipment.

### 10. Luminous Display

In some cases Luminous paint is applied to the hands of this watch for use in dark areas. This does not cause any health problems since the amount of luminous paint used in the watch is well within the limit allowed and is protected by the glass. Even if the amount used is extremely small, luminous paint is a hazardous substance. If the glass is broken, avoid touching the paint and bring it immediately to the Citizen Service Centre for repair or replacement.

### 11. Safekeeping

If you do not use the watch for an extended period of time, wipe off perspiration, soil and moisture thoroughly and keep it in a place not exposed to extremely high or low temperature or high humidity. Don't leave a dead battery in the watch for a long time and be sure to replace it with a new one. If battery fluid leaks out, it may damage movement components.

## 12. Keep Your Watch Clean

Wipe off soil and moisture from the glass with a soft, absorbent cloth. If you wear the watch when the back side of the case and watchband is soiled they may cause a skin rash as they come in direct contact with your skin. Keep your watch clean also to avoid staining your cuffs. How to clean the watchband:

- Metal band: wash soiled parts with a toothbrush in mild, soapy water.
- Rubber band: wash in water.  
Do not use solvent.

## Q. SPECIFICATION

1. Caliber number  
C500 (Depth indication measured in metres/  
Temperature in Centigrade)  
C506 (Depth indication measured in feet/  
Temperature in Fahrenheit)
2. Accuracy of time measurement  
± 20 seconds/month (at normal temperature  
5°C-35°C/41°F-95°F)
3. Accuracy of depth reading  
± (Indicated value x 3% + 30cm)  
Conditions: constant temperature and excluding  
margin of error by sight.  
\* Assured accuracy temperature range:  
10°C-40°C/50°F-104°F. Accuracy of depth  
reading is affected by surrounding  
temperatures.
4. Accuracy of temperature reading  
-5°C/23°F-+14°C/57.2°F: within ± 3°C/5.4°F  
+15°C/59°F-+40°C/104°F: within ± 2°C/3.6°F
5. Watch operational temperature range  
-10°C+60°C/14°F-140°F
6. Display functions
  - 1) Analog display  
Time: Hours, Minutes, Seconds  
Time of correction: Year, Month, Day; Year (1994-  
2009)
  - 2) Digital Display  
Time: Hours, Minutes, Seconds, AM/PM  
Calendar: Date, Day of the week  
Temperature: -5°C-+40°C/23°F-104°F  
Alarm: Hours, Minutes, ON/OFF  
Chronograph: Hours, Minutes, Seconds, 1/100  
second (24 hour system), Split measurement

## Log Menu

- Dive month and date
- Dive number – 1-9
- Maximum depth – 1.0 m-80.0 m (4 ft-260 ft)
- Dive time – 0 min-100 min
- Dive start time – Hours, Minutes
- Dive completed time – Hours, Minutes
- Average depth – 1.0 m-80.0 m (4 ft-260 ft)
- Lowest temperature – -5°C-+40°C/23°F-104°F
- \* Stored log data memos for the last 4 dives can be recalled

## Dive alarm mode:

- Depth alarm – 1.0 m-80.0 m (to be set in units of 1 m, with the provision to set the number of times of alarms) 5 ft-260 ft ( to be set in units of 5 ft, with the provision to set the number of times of alarms)
- Dive time alarm – 5 min-95 min (5 minutes unit)

## Dive:

- Ready for diving – DIV mark flashing
- Present depth – 1.0 m-80.0 m (10 cm units)/4 ft + 260 ft (1 ft units)
  - \* At depth less than 1.0 m, 0 m, of depth indication is shown. Over 80 m, the display is — —, —, —. 4 ft + 260 ft (1 ft units)
  - \* At depth less than 4 ft, 0 ft of depth indication is shown. Over 260 ft, the display is — —, —.
- Dive time (in seconds measurable up to 100 min) or Temperature indication (in units of 0.1°C, between -5°C and +40°C)
- Dive and 0 m/0 ft
- Dive time (in seconds, measurable up to 100 mins) or maximum depth (in units of 10 cm/1 ft, readings up to 80 m/260 ft max.)

## 7. Alarm functions

- Ascending speed alarm
- Abnormal depth alarm
- Water sensor check alert

## 8. Additional features

- Low battery warning function
- Dive alarm monitor

## 9. Battery to be used

- One battery

## 10. Battery lifetime

- About 2 years (after a new battery is installed)  
<Normal use conditions>
  - Number of times of diving: 50/year
  - One dive duration: 1 hour
- The life of the battery depends on the use frequency of the alarms or other functions. Furthermore, if the watch is wet in a situation other than diving, the water sensor is activated, which reduces the battery lifetime, so take care.