

Operation Guide 3377

CASIO®

Getting Acquainted

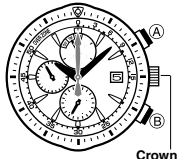
Congratulations upon your selection of this CASIO watch. To get the most out of your purchase, be sure to carefully read this manual and keep it on hand for later reference when necessary.

The pressure sensor of this watch provides depth gauge capabilities when skin diving or snorkeling.

Warning!

- The measurement functions built into this watch are not intended for taking measurements that require professional or industrial precision. Readings produced by this watch should be considered as reasonable representations only.
- This watch is intended for use up to skin diving and snorkeling. Never use this watch while scuba diving.
- Be sure to obtain adequate safety instruction and training before engaging in skin diving or snorkeling.
- CASIO COMPUTER CO., LTD. assumes no responsibility for any loss, or any claims by third parties that may arise through the use of this watch.

About This Manual

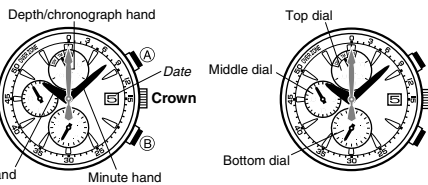


Crown

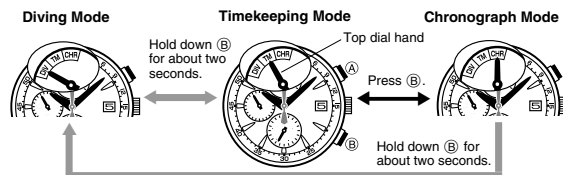
- Button operations are indicated using the letters shown in the illustration.
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "Reference" section.

General Guide

- The hour hand, minute hand, and 24-hour (middle) dial indicate the current time in all modes. The information indicated by the depth/chronograph hand and the other two dials depends on the current mode. For details, see the sections of this manual that cover each of the modes.

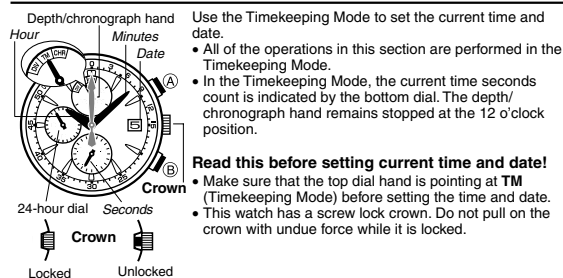


- The pressure sensor is located on the back of the watch.
- Use (B) to cycle between modes as shown below.



- When you change to another mode, the depth/chronograph hand rotates at high speed a number of times and finally stops at the 12 o'clock position. Make sure you wait until the depth/chronograph hand stops before you perform any other operation in the mode you select.

Timekeeping



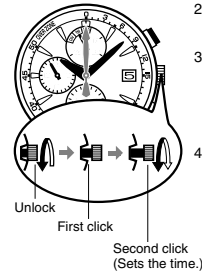
- Use the Timekeeping Mode to set the current time and date.
- All of the operations in this section are performed in the Timekeeping Mode.
 - In the Timekeeping Mode, the current time seconds count is indicated by the bottom dial. The depth/chronograph hand remains stopped at the 12 o'clock position.

Read this before setting current time and date!

- Make sure that the top dial hand is pointing at TM (Timekeeping Mode) before setting the time and date.
- This watch has a screw lock crown. Do not pull on the crown with undue force while it is locked.

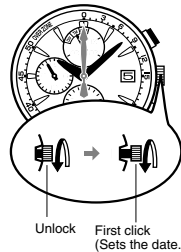
- Never unlock the crown while the watch, especially the area around the crown, is wet. Doing so creates the risk of water getting inside the watch, which can lead to malfunction.
- Never press (A) or (B) while the crown is unlocked. Doing so can cause the watch to enter another mode and result in misalignment of hands.
- Make sure you lock the crown after you finish setting the current time and date.
- Make sure that the hand of the middle (24-hour) dial is pointing to the correct hour of the day when setting the time. An incorrect middle dial setting can cause the date to change at noon instead of midnight.
- The date indicator is based on a 31-day month. Because of this, you will need to change the date setting at the end of February, April, June, September, and November to adjust for the shorter month.
- Avoid changing the date setting while the current time is between 9:00 p.m. and 1:00 a.m. If you change the date setting during this period, the date setting may not change properly to the next day at midnight.

To set the time



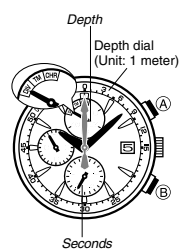
1. Rotate the crown towards you to unlock it.
2. Pull out the crown to the second click.
 - At this time, the hand of the bottom dial will move to the 12 o'clock position and stop there.
3. Rotate the crown to set the correct time.
 - Note that the hand of the middle (24-hour) dial moves in coordination with the hour and minute hands. When adjusting the time, keep an eye on this dial to make sure that its hand indicates the correct hour of the day.
4. When the setting is the way you want, re-lock the crown by pressing it in as you rotate it away from you.

To set the date



1. Rotate the crown towards you to unlock it.
2. Pull the crown out to the first click.
3. Rotate the crown towards you to set the date.
4. When the setting is the way you want, re-lock the crown by pressing it in as you rotate it away from you.

Diving



The pressure sensor of the watch can be used to perform underwater depth measurement while skin diving or snorkeling.

The watch maintains a single maximum depth reading, which is the maximum depth measured during your last dive.

- Depth measurement starts automatically whenever you enter the water while the watch is in the Diving Mode.
- In the Diving Mode, the depth/chronograph hand points to the value of the depth dial around the periphery of the face that corresponds to the current depth reading.

Important!

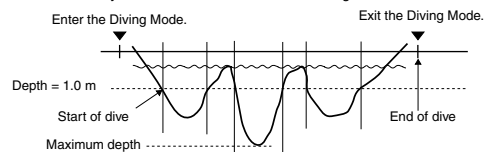
- Never use this watch to measure depth while scuba diving.
- Never perform any button operations or rotate the crown while underwater.

- Relatively accurate depth measurement is guaranteed within the temperature range of 10°C to 40°C. Do not use this watch in temperatures outside this temperature range.
- If you do not submerge past one meter for about 30 minutes while the depth/chronograph hand indicates zero (12 o'clock) in the Diving Mode, the watch will automatically switch to the Timekeeping Mode.

Be sure to read "Diving Mode Precautions" before actually using the watch while skin diving or snorkeling.

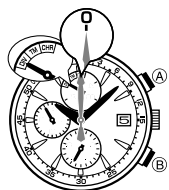
What is "a dive" ?

A dive starts when you pass a depth of one meter while the watch is in the Diving Mode. The dive ends when you are on the surface and exit the Diving Mode. A dive does not end if you surface but do not exit the Diving Mode.



- Remember that the term "dive" as used in this manual refers to skin diving or snorkeling only.
- When you enter the water while the watch is in the Diving Mode, the watch will start depth measurement automatically when the sensor detects that your depth exceeds one meter. Depth measurement stops automatically whenever your depth becomes less than one meter.
- When there is large difference between air temperature and water temperature, immerse the watch in the water for two or three minutes before starting a Diving Mode measurement.
- After you enter the Diving Mode, the watch automatically takes a reference pressure reading and sets the result as 0 meters. This means that before starting a dive, you should enter the Diving Mode while at the water's surface, never while the watch is submerged.

To perform depth measurement



- Before beginning a dive, hold down (B) for about two seconds to enter the Diving Mode.
- Check to make sure that the hand of the top dial is pointing at DIV, and that the depth/chronograph hand is pointed at 12 o'clock (0 meters).
- Enter the water and submerge past one meter to start the dive.
 - The depth/chronograph hand will remain pointed at 12 o'clock (0 meters) as long as you remain at a depth of less than one meter.
 - The watch takes a depth reading at 1-second intervals.

- When you want to end the dive, return to the surface and then hold down (B) for about two seconds to exit the Diving Mode and enter the Timekeeping Mode.
 - Note that you cannot exit the Diving Mode while your current depth is one meter or greater.
 - The maximum depth that can be indicated is 50 meters. At deeper depths the depth/chronograph hand will point to **OVER ZONE**.
 - Even if the watch is performing a Diving Mode operation, low battery power will cause the watch to stop measurement and automatically enter the Timekeeping Mode. If this happens, the maximum depth reading of your current dive will not be recorded in memory.

Maximum Depth Reading

When you exit the Diving Mode after a dive, the watch will store the maximum depth reading you achieved during the dive. The maximum depth reading will remain in memory until you start a new dive, which causes the existing value to be replaced with the maximum depth reading of the new dive.

- Depths less than one meter are not used for the maximum depth reading.

To view the maximum depth reading

- In the Timekeeping Mode or Diving Mode (while the depth/chronograph hand is at the 12 o'clock position), press (A). This will cause the depth/chronograph hand to move until it points to the value that corresponds to the currently stored maximum depth reading.
- The depth/chronograph hand will return to the 12 o'clock position automatically after about 30 seconds, or if you press (A) again.
 - If the maximum depth reading is 50 meters or greater, the depth/chronograph hand will point to **OVER ZONE**.
 - The maximum depth reading currently stored in memory is cleared whenever the watch's battery goes dead. Be sure to keep a separate record of your maximum depth reading, if necessary.
 - If you perform the above operation before diving with the watch for the first time after purchasing it, the maximum depth reading may show the result of depth measurement testing performed at the factory.

Diving Mode Precautions

Note the following important precautions whenever using the Diving Mode.

Before Skin Diving or Snorkeling

- Avoid taking a quick series of deep breaths before you submerge. Doing so creates the risk of loss of consciousness.
- Make sure that the crown is fully locked.
- Make sure that the depth/chronograph hand is pointing at the 12 o'clock position (0 meters) in the Diving Mode. If it isn't, adjust the hand position.
- Make sure the hand of the bottom dial is moving normally (one-second increments). If it is jumping in two-second increments, it means the battery is low and the watch will not stay in the Diving Mode. You will need to have the battery replaced before you can use the Diving Mode.
- Make sure that the watch is set to the correct time of day.
- Make sure the glass, case and band are not cracked or chipped. Never use a damaged watch while diving.
- Make sure that the band is fastened securely around your wrist.

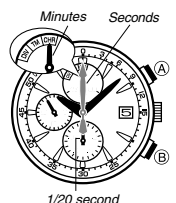
While Skin Diving or Snorkeling

- Be sure to rest sufficiently between dives. Sudden surfacing creates the risk of developing "the bends" (decompression sickness). Also, this watch may not indicate the correct depth if you submerge at a rate in excess of one meter per second.
- Check to make sure that depth measurements are being performed properly. Always use another depth gauge to make sure that the depth measurements produced by this watch are correct.
- Take care when diving near rocks or coral to avoid scratching or damaging the watch.

After Skin Diving or Snorkeling

- Be sure to rest sufficiently between dives. Also, note that riding an aircraft or otherwise moving to high altitudes immediately following a dive can cause decompression sickness.
- To avoid corrosion, rinse your watch thoroughly with fresh water to remove salt water, dirt, etc. When possible, soak the watch in fresh water overnight to make sure that all salt is removed.
- When using a metal band, occasionally clean inside the gaps in the band using a soft toothbrush and soapy water. Failure to do so can result in corrosion of the timepiece, soiling of clothing, or irritation to sensitive skin.

Chronograph



- The chronograph lets you measure elapsed time.
- All of the operations in this section are performed in the Chronograph Mode, which you enter by pressing (B).
 - Entering the Chronograph Mode causes the bottom dial hand to move to the 12 o'clock position.
 - In the Chronograph Mode, the depth/chronograph hand shows the seconds of the elapsed time measurement, the top dial hand shows elapsed minutes, and the bottom dial hand shows elapsed 1/20 second.
 - If you don't perform any operation for about three minutes in the Chronograph Mode while it is cleared to all zeros (depth/chronograph hand, top dial hand, and bottom dial hand all in the 12 o'clock positions), the watch will automatically return to the Timekeeping Mode.

To measure elapsed time

- Press (A) to start the chronograph.
- Press (A) again to stop the chronograph.
 - You can resume the measurement operation by pressing (A).
- While the chronograph is stopped, hold down (A) for about two seconds to clear the chronograph to all zeros.
 - The display range of the chronograph is 59 minutes, 59.95 seconds. Chronograph operation stops automatically when the current elapsed time operation reaches 60 minutes.
 - The hand of the bottom dial revolves for the first 30 seconds of each elapsed time operation. After that, it stops automatically at the 12 o'clock position. When you stop an elapsed time measurement, the hand of the bottom dial will move automatically from the 12 o'clock position to the current 1/20 second count.
 - You cannot change to another mode while an elapsed time operation is in progress. If you need to change to another mode, stop the elapsed time operation and clear the chronograph to all zeros first.
 - Pressing (B) while the chronograph is stopped but not cleared to all zeros will change to the Timekeeping Mode, but it will also cause the chronograph to be cleared to all zeros automatically.

Reference

This section contains more detailed and technical information about watch operation. It also contains important precautions and notes about the various features and functions of this watch.

Questions & Answers

Question: Why does the hand of the bottom dial (seconds count of the current time) seem to be too slow?

Answer: The watch's battery is low. Have it replaced as soon as possible. See "Low Battery Indication" for more information.

Question: What should I do if the depth/chronograph hand does not point exactly at 12 o'clock (0 meters) when I enter the Diving Mode?

Answer: Use the procedure under "Adjusting Hand Positions" to adjust the depth/chronograph hand position.

Question: Why does the depth/chronograph hand point to OVER ZONE when I enter the Diving Mode?

Answer: This can indicate some problem with the pressure sensor. Depth measurements are not possible in this case. Try switching to the Timekeeping Mode and then back to the Diving Mode. If this does not correct the problem, contact your dealer or CASIO distributor.

Question: What should I do if the depth/chronograph hand does not point to 12 o'clock (0 meters) and I cannot exit the Diving Mode when I am at a depth of less than one meter?

Answer: Use the procedure under "Resetting the Diving Mode" to exit the Diving Mode, and then use the procedure under "To adjust hand positions" to adjust hand positions.

Question: How does the watch calculate depth values?

Answer: Water pressure increases with depth. In the case of sea water (specific gravity=1.025), water pressure increases by 1 ATM (1.03 kg/cm²) with each 10 meters of depth.

The pressure sensor of this watch measures water pressure, and then converts it to an underwater depth reading, based on the relationship between pressure and depth.

Question: Is there anything I need to keep in mind when diving at high altitudes or in fresh water?

Answer: The depth reading is automatically reset to 0 m whenever the Diving Mode is entered, so you can use this watch for diving at altitudes. Note, however, that malfunctions occur when diving at altitudes greater than approximately 4,000 meters. Also, this watch bases its calculations on sea water, which has a specific gravity of 1.025, so depth readings will not be correct during fresh-water diving. During fresh-water dives, you must assume that you are approximately 2.5% deeper than the depth shown on the display.
Example: When the depth reading is 5 meters, actual depth is $5 \times 1.025 = 5.1$ meters.

Question: What should I do if the depth/chronograph hand, top dial hand, and bottom dial hand don't align correctly with their starting positions (12 o'clock) when I enter the Chronograph Mode?

Answer: Use the procedure under "Adjusting Hand Positions" to adjust hand positions.

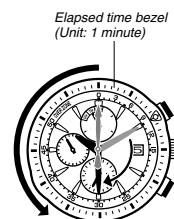
Low Battery Indication

Low battery power is indicated when the hand of the bottom dial (seconds count of the current time) starts jumping in two-second increments instead of the normal one-second increments. When this happens, request battery replacement from your dealer or CASIO distributor.

- If low battery indication starts while the watch is in the Timekeeping Mode, you will not be able to change to another mode.
- If low battery indication starts while the watch is in the Diving Mode or Chronograph Mode, the watch will automatically switch to the Timekeeping Mode, even if a measurement operation is in progress.

Using the Elapsed Time Bezel

- Rotate the elapsed time bezel to align the (M) mark with the minute hand. After that, elapsed time is indicated by the value on the bezel that the minute hand is pointing to.
- Rotate the elapsed time bezel in a counter-clockwise direction only. Never try to force the bezel to rotate clockwise. Doing so can damage it.

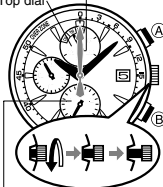


Adjusting Hand Positions

Use the procedure below to adjust the positions of the depth/chronograph hand, the top dial hand, and the bottom dial hand when they do not point exactly straight up when they are in their starting positions.

Depth/chronograph hand

Top dial



Bottom dial

Important!

- Note that the functions of this watch will not operate correctly if the depth/chronograph hand, top dial hand, and bottom dial hand are not aligned correctly.
- Make sure you perform the following adjustment procedure only when you are on dry land. Do not perform it in an area where there is the chance of the watch becoming wet.

To adjust hand positions

1. Enter the Timekeeping Mode.
 - Always double-check to make sure that the watch is in the Timekeeping Mode before advancing to the next step.
2. Rotate the crown towards you to unlock it.
3. Pull the crown out to the second click.
4. Press (A) and (B) at the same time.
 - At this time the depth/chronograph hand should move slightly. Watch to make sure that it does.
5. To advance the depth/chronograph hand and the top dial hand, press (A). Note that these hands can be moved forward only.
 - Movement of the top dial hand is coordinated with the movement of the depth/chronograph hand.
 - Holding down (A) advances the hands at high speed.
 - If the top dial hand is to the right of 12 o'clock, hold down (A) to advance it at high speed until it is aligned with 12 o'clock.
6. To advance the bottom dial hand, press (B). Note that this hand can be moved forward only.
 - Holding down (B) advances the hand at high speed.
7. When the setting is the way you want, re-lock the crown by pressing it in as you rotate it away from you.
 - This causes the watch to return to the Timekeeping Mode.
 - For information about adjusting the settings of the hour, minutes, and middle dial hand, see "To set the time".

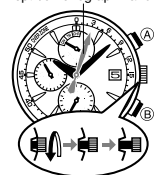
Resetting the Diving Mode

If the depth/chronograph hand does not point to 12 o'clock and watch does not exit the Diving Mode when you hold down (B) after performing a depth measurement, use the following procedure to reset the Diving Mode.

- Never perform the following operation while underwater.

To reset the Diving Mode

Depth/chronograph hand



1. Rotate the crown towards you to unlock it.
2. Pull the crown out to the second click.
3. Press (A) and (B) at the same time.
 - At this time the depth/chronograph hand should move slightly, which indicate that the Diving Mode has been reset. Watch to make sure that it does.
4. Re-lock the crown by pressing it in as you rotate it away from you.
 - This causes the watch to enter the Timekeeping Mode.
5. Use the procedure under "To adjust hand positions" to adjust the depth/chronograph hand, top dial hand, and bottom dial hand positions.