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Watch Operation Guide 3582

CASIO

Contents

About This Watch

This section provides an overview of the watch and introduces convenient ways it can be used.

● Watch Features

- Solar Charging

  Sunlight and artificial light generate electricity for watch operation as it charges.

- Time Signal Reception

  The watch receives a radio signal containing time information and uses it to keep its time setting accurate.

- Luminous LCD

  The LCD is coated with phosphorescent paint that absorbs light to make it readable even in the dark.

- World Time

  Displays the current time in any one of 48 cities (31 time zones) around the globe and UTC.

- Alarm

  An alarm sounds whenever a time specified by you is reached.

- Digital Compass

  You can use the compass function to determine the direction of north, and to check your bearing to a destination.

- Altitude Measurement

  You can use this function to take an altitude reading at your current location.
  You can record the altitude, along with the date and time of the measurement.
  You can also measure the altitude differential between two points.

- Barometric Pressure and Temperature Measurement

  You can display the current barometric pressure tendency, which helps you be on the alert for noteworthy pressure changes.

  The watch can be used to take current air temperature readings.

- Viewing Altitude Records

  You can view or delete records of altitude measurements.

- Sunrise and Sunset Times

  You can look up the sunrise and sunset times for a specified date and location.

- Stopwatch

  The stopwatch performs elapsed time measurement up to 999 hours, 59 minutes, 59.9 seconds in 1/10 second units.

- Timer

  Countdown from a start time specified by you. An alarm sounds when the countdown reaches zero.

Important!

- This watch is not a special-purpose measuring instrument. Measurement function readings are intended for general reference only.
- Whenever using the Digital Compass of this watch for serious trekking, mountain climbing, or other activities, be sure to always take along another compass to confirm readings. If the readings produced by the Digital Compass of this watch are different from those of the other compass, perform 2-point calibration of the Digital Compass to ensure better accuracy.
  - Compass readings and calibration will not be possible if the watch is in the vicinity of a permanent magnet (magnetic accessory, etc.), metal objects, high-voltage wires, aerial wires, or electrical household appliances (TV, computer, cellphone, etc.)

  Digital Compass
- The watch's altimeter function calculates and displays relative altitude based on barometric pressure readings produced by its pressure sensor. Because of this, altitude values displayed by the watch may be different from your actual elevation and/or sea level elevation indicated for the area where you are located. Regular calibration in accordance with the local altitude (elevation) indications is recommended.

  Altitude Measurement

Note

- The illustrations included in this operation guide have been created to facilitate explanation. An illustration may differ somewhat from the item it represents.

General Guide

A button

Pressing this button in the Timekeeping Mode enters the Altimeter Mode.

B button

Pressing this button in the Timekeeping Mode enters the Barometer/Temperature Mode.

C button

Pressing this button in the Timekeeping Mode enters the Compass Mode.

D button

Each press cycles between watch modes.

In any mode, hold down this button for at least two seconds to return to the Timekeeping Mode.

E button

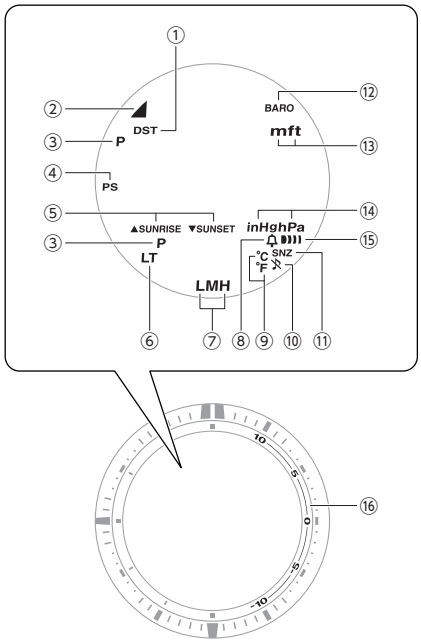
Pressing this button in the Timekeeping Mode cycles between displays.

L button

Press to turn on illumination.

Watch Operation Guide 3582 CASIO

Indicators



① Displayed while the watch is indicating summer time.

② Appears when the time signal receive operation is successful.

③ Displayed during p.m. times while 12-hour timekeeping is being used.

④ Displayed while Power Saving is enabled.

⑤ Displayed when the watch is in the Sunrise/Sunset Mode.

⑥ Displayed while Full Auto Light is enabled.

⑦ Shows the current charge level.

⑧ Appears when the hourly time signal is on.

⑨ Shows the temperature unit being used.

⑩ Displayed while the button operation tone is disabled.

⑪ Displayed while the snooze alarm is turned on.

⑫ Displayed while barometric pressure change indication is enabled.

⑬ Shows the altitude unit being used.

⑭ Shows the barometric pressure measurement unit.

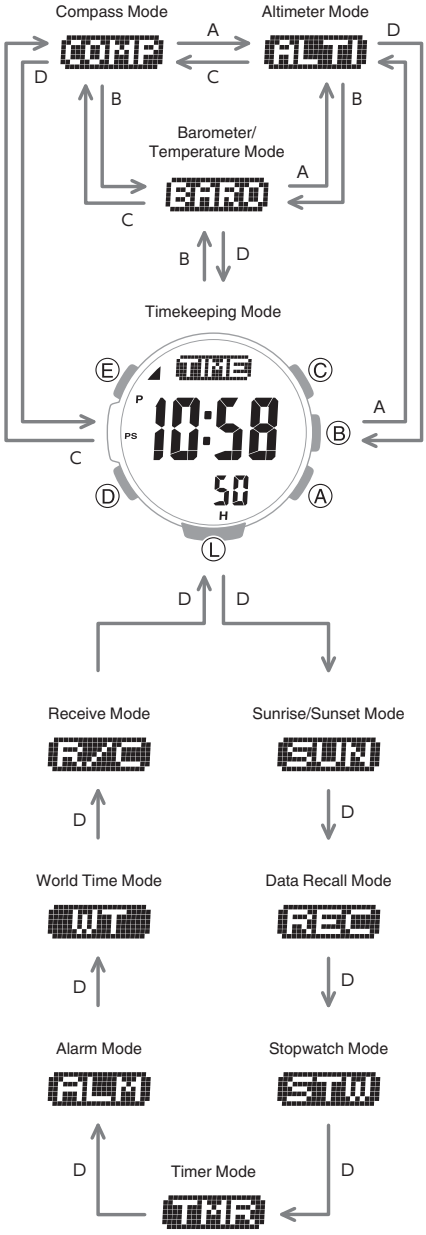
⑮ Displayed when an alarm is turned on.

⑯ Graphic display of the altitude/barometric pressure differential.

Navigating Between Modes

Your watch has the modes shown below.

- To return to the Timekeeping Mode from any other mode, hold down (D) for at least two seconds.



Use the buttons in the illustration above to navigate between modes.

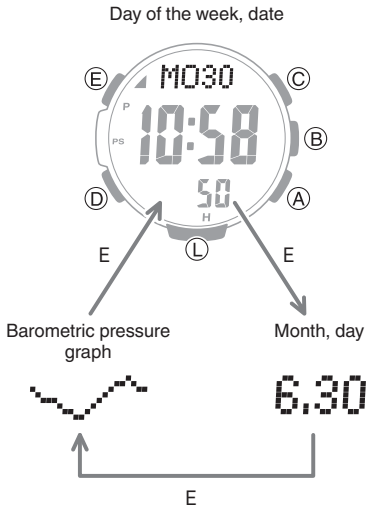
Mode Overview

● Timekeeping Mode

In this mode, the digital display shows the current date and time.

You can also display the items below in the upper display area by pressing (E).

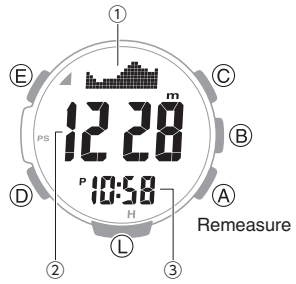
- Month, day
- Barometric pressure graph



● Altimeter Mode

Use this mode to take an altitude reading for your current location.

Altitude Measurement



① Altitude graph/altitude differential

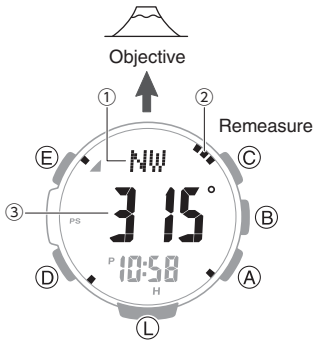
② Altitude

③ Current time

● Compass Mode

Use this mode to take direction and bearing angle readings.

Digital Compass



① Bearing at 12 o'clock

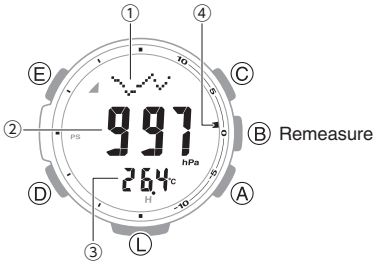
② Graphic pointer indicating north

③ Bearing angle at 12 o'clock

● Barometer/Temperature Mode

Use this mode to take barometric pressure and temperature readings for your current location.

Barometric Pressure and Temperature Measurement



① Barometric pressure graph

② Barometric pressure

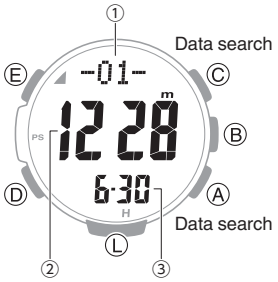
③ Temperature

④ Barometric pressure differential graphic

● Data Recall Mode

Use this mode to view altitude records.

Viewing Altitude Records



① Record number

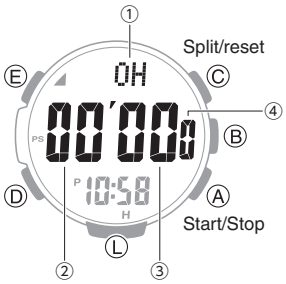
② Altitude

③ Recording date

● Stopwatch Mode

Use this mode to measure elapsed time.

Stopwatch



① Stopwatch hours

② Stopwatch minutes

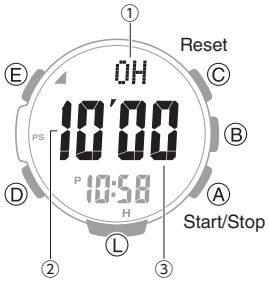
③ Stopwatch seconds

④ Stopwatch 1/10 second

● Timer Mode

Use this mode to countdown from a desired start time.

Timer



① Timer hours

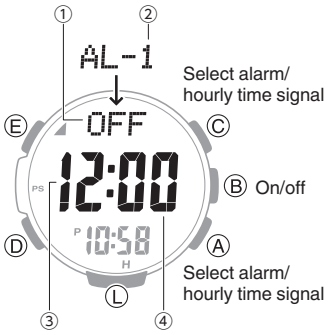
② Timer minutes

③ Timer seconds

● Alarm Mode

The watch will beep when an alarm time is reached.

Alarm



① Alarm or hourly time signal status (on/off)

② Alarm number

③ Alarm hour

④ Alarm minute

● World Time Mode

You can view the current time in 48 cities (31 time zones), and UTC (Coordinated Universal Time) time.

World Time

① City Codes (World Time Codes)

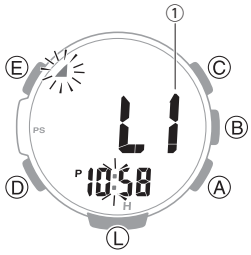
② World Time City current time

③ Home City time

● Receive Mode

With this mode, you can receive a time signal manually.

Time Adjustment Using a Time Signal



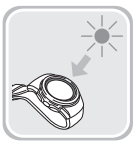
① Receive level indicator

Charging

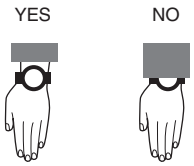
This watch runs on power supplied from a rechargeable (secondary) battery that is charged by a solar panel. The solar panel is integrated into the face of the watch, and power is generated whenever the face is exposed to light.

● Charging the Watch

When you are not wearing the watch, put it in a location where it is exposed to bright light.



While you are wearing the watch, make sure that its face (solar panel) is not blocked from light by the sleeve of your clothing. Power generation efficiency is reduced even when the face of the watch is blocked only partially.

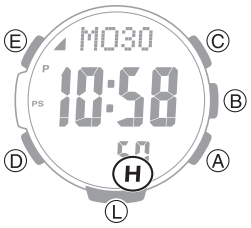


Important!

- Some light sources and environments can cause the watch to become extremely hot during charging, which creates the risk of burn injury and damage to internal watch components.
  Avoid charging the watch under conditions like the ones described below, where the temperatures may exceed 60 °C (140 °F).
  - On the dashboard of a vehicle parked in the sun
  - Near incandescent lamps, camera lights, halogen lamps, or other sources of heat
  - In locations exposed to direct sunlight for long periods and other hot locations
- The display panel may become black (or white, depending on the LCD type) under very high temperatures. This is temporary, and the display will return to normal at lower temperatures.

● Checking the Charge Level

A display indicator shows the watch's current charge level.



Charge Level 1: Good

All functions enabled.

Charge Level 2: Good

All functions enabled.

Charge Level 3: Low

[L] and [LOW] flash on the display and the functions below become disabled.

- Time signal reception
- Compass, altitude, barometric pressure/ temperature measurements
- Face illumination
- Sounds (alarm, etc.)

Charge Level 4: Low

When the battery charge drops lower than Level 3, [CHG] starts to flash on the display and all functions become disabled.

Charge Level 5: Dead

The digital display will go blank if the battery goes dead. Memory data is lost, and watch settings are returned to their initial factory defaults.

Important!

- Should the battery go low or go dead, expose the face (solar panel) to light as soon as possible.

Note

- When [H], [M], and [L] are all flashing on the display, it means that all functions are disabled due to momentary battery power consumption.
  [H], [M], and [L] are flashing on the display.

● Charging Time Guidelines

The table below shows guidelines for approximate charging times.

Charging Times Required for 1 Day of Operation

Light Level (Lux)	Approximate Charging Time
50,000	5 minutes
10,000	24 minutes
5,000	48 minutes
500	8 hours

Charge Recovery Times

- Sunny day, outdoors (50,000 lux)

Dead battery → Medium charge	2 hours
Medium charge → High charge	16 hours
High charge → Full charge	5 hours

- Sunny day, near a window (10,000 lux)

Dead battery → Medium charge	6 hours
Medium charge → High charge	77 hours
High charge → Full charge	21 hours

- Overcast day, near a window (5,000 lux)

Dead battery → Medium charge	12 hours
Medium charge → High charge	156 hours
High charge → Full charge	42 hours

- Indoor fluorescent lighting (500 lux)

Dead battery → Medium charge	144 hours
Medium charge → High charge	-
High charge → Full charge	-

Note

- Actual charging time depends on the charging environment, watch settings, and other factors.

● Power Saving Function

Leaving the watch in a dark location for about one hour between the hours of 10 p.m. and 6 a.m. will cause the display to go blank, and the watch to enter Level 1 power saving. If the watch is left in this condition for six or seven days, the watch will enter Level 2 power saving.

Power Saving Level 1 :

Digital display goes blank to save power.

Power Saving Level 2 :

Digital display goes blank to save power. All functions are disabled.

Recovering from Power Saving Operation

Use one of the operations below to exit power saving.

- Press any button.
- Move the watch to a bright location.
- Trigger Full Auto Light by angling the watch towards your face.

Note

- The watch will not enter power saving in the cases below.
  - While in the Stopwatch Mode
  - While in the Timer Mode
  - While the barometric pressure change indicator is displayed
- You can enable or disable Power Saving.
  Configuring Power Saving Function Settings
- Note that the watch also may enter power saving if its face is blocked from light by your sleeve while you are wearing it.

Viewing the Face in the Dark

The face of the watch can be illuminated for viewing in the dark.

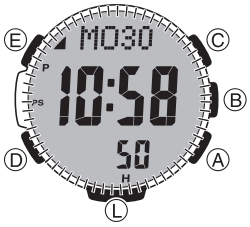
The watch's face also is a luminous LCD. The display can be read in the dark for approximately one hour after exposure to light.

Luminous LCD

● To illuminate the face manually

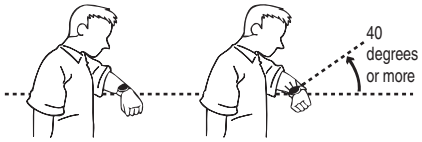
Pressing (L) turns on illumination.

- Illumination will turn off automatically if an alarm starts to sound.
- Illumination will not turn on while a signal receive operation is in progress. Also, illumination may not turn on while a sensor is taking a reading.



● To illuminate the face when Auto Light is enabled

If Full Auto Light is enabled, face illumination will turn on automatically whenever the watch is positioned at an angle of 40 degrees or more.



Important!

- Auto Light may not operate properly when the watch is at a horizontal angle of 15 degrees or greater from horizontal as shown in the illustration below.

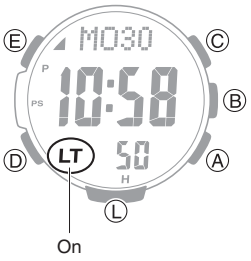
- Electro-static charge or magnetism can interfere with proper Full Auto Light operation. If this happens, try lowering your arm and then angle it towards your face again.
- When moving the watch you may note a slight rattling sound. This is the sound of Full Auto Light switch operation and does not indicate malfunction.

Note

- Full Auto Light does not turn on illumination if you are in a well-lit location.
- Full Auto Light is disabled when any one of the conditions below exists.
  - While an alarm, timer alert, or other beepper is sounding
  - Watch in the Compass Mode
  - While a time signal receive operation is in progress
  - While sunrise/sunset times are being calculated

● Configuring the Full Auto Light Setting

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (L) for at least three seconds to toggle Full Auto Light between enabled and disabled.
   - [LT] is displayed while Full Auto Light is enabled.



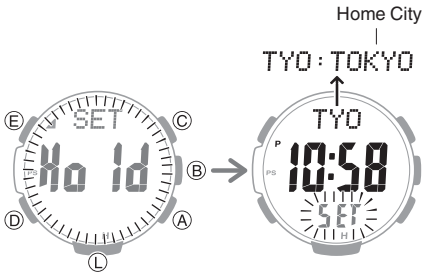
Note

- Full Auto Light is disabled while [CHG] is shown on the display.

● **Specifying the Illumination Duration**

You can select either 1.5 seconds or three seconds as the illumination duration.

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.

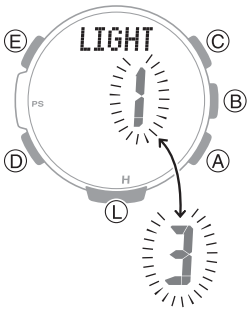


3. Press (D) 10 times.

   [LIGHT] appears on the display with [1] or [3] flashing.
4. Press (A) to select an illumination duration.

   [1]: 1.5-second illumination

   [3]: 3-second illumination



5. Press (E) twice to complete the setting operation.

Time Adjustment

Your watch can receive time calibration signals and correct its date and time setting.

Time Adjustment Using a Time Signal

Overview

The watch's time and day settings can be configured in accordance with a received time calibration signal.

Important!

- In order to make it possible for the current time setting to be corrected based on time calibration signal reception, you need to specify the area where you are using the watch.
  Setting a Home City

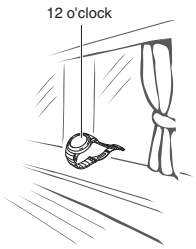
Note

- Areas where time signal reception is supported are limited. When you are using the watch in an area where time calibration signal reception is not possible, adjust time and day settings manually.
  Using Watch Operations to Adjust the Time Setting

Appropriate Signal Reception Location

A time calibration signal can be received while the watch is near a window.

- Position the watch so its 12 o'clock side is facing the window.
- Keep metal objects away from the watch.
- Do not move the watch.
- Do not perform any operation on the watch.



Note

- You may experience time calibration signal reception problems in the areas described below.
  - Among or near buildings
  - While riding in a vehicle
  - Near household appliances, office machines, mobile phones, etc.
  - On a construction site, in an airport, or any other location where radio wave interference occurs
  - Near high-voltage lines
  - In mountainous areas or behind a mountain

Time Signal Reception Ranges

● Japan (JJY)

The Japan time signal radio stations are located on Mt. Otakadoya in Fukushima and Mt. Hagane in Fukuoka/Saga.
The reception range of the Japanese time signals is approximately 1,000 km from each transmission station.

● China (BPC)

The China time signal radio station is located in Shangqiu, Henan Province, China.
The reception range of the Chinese time signal is approximately 1,500 km from the transmission station.

● United States (WWVB)

The United States time signal radio station is located in Fort Collins, Colorado.
The reception range of the U.S. time signal is approximately 3,000 km from the transmission station.

● U.K. (MSF)/Germany (DCF77)

The U.K. time signal radio station is located in Anthorn, Cumbria.
The German time signal radio station is located in Mainflingen, southeast of Frankfurt.
The reception range of the U.K. and German time signals is approximately 1,500 km from each transmission station.

Note

- Even if you are within the normal reception range of a time calibration signal, reception may be made impossible by the following factors: geographic contours, weather, the season, the time of day, wireless noise.
- A time calibration signal cannot be received while the city selected as your Home City is one that does not support signal reception.

Auto Time Calibration Signal Receive

An automatic time calibration signal receive operation is performed and the time and day settings are corrected between midnight and 5:00 a.m. Once a signal receive operation is successful, no more auto receive operations are performed that day.

1. Place the watch near a window or some other location appropriate for signal reception.
   - [◢] flashes while time signal reception is in progress.
   - When a receive operation is successful, the watch adjusts its current time and day settings automatically, and then returns to the Timekeeping Mode.

Note

- Reception takes anywhere from about two minutes to about 10 minutes. It can take as long as 20 minutes.

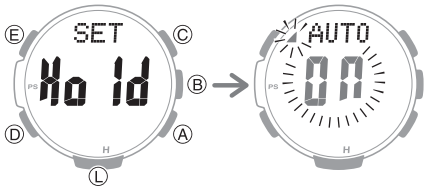
Enabling and disabling Auto Receive

You can stop auto receive by disabling the Auto Receive setting.

Note

- While the Home City setting is one where time signal reception is possible, you can enable or disable auto receive as required.
  Time Signal Reception Ranges

1. Enter the Receive Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when [AUTO] appears on the display.
   This causes [On] or [OFF] to flash on the display.



3. Press (A) to toggle Auto Receive between enabled and disabled.
   [On]: Auto Receive enabled.
   [OFF]: Auto Receive disabled.
4. Press (E) to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Manual Time Calibration Signal Receive

1. Place the watch near a window or some other location appropriate for time signal reception.
2. Enter the Receive Mode.
   Navigating Between Modes
3. Hold down (A) for at least two seconds. Release the button when [◢] starts to flash.

   This indicates that the receive operation has started. After the receive operation is complete, the watch's time and day settings will be corrected accordingly.

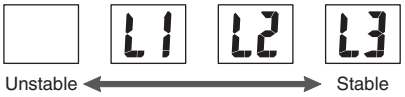
- The level indicator shows the signal level ([L1], [L2], [L3]) while a receive operation is in progress.
  Receive Level Indicator

Note

- The receive operation takes anywhere from about two minutes to about 10 minutes. It can take as long as 20 minutes.
- Time calibration signal reception is better at night than during the day.
- A time calibration signal cannot be received while the city selected as your Home City is one that does not support signal reception.

Receive Level Indicator

While a receive operation is in progress, its current status is indicated on the display as shown below. Use the level indicator to find a location where signal reception is stable.



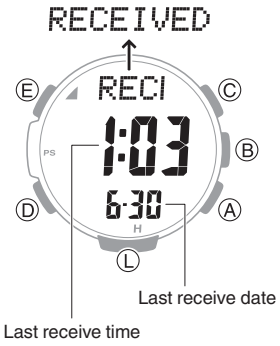
Note

- It takes about 10 seconds for time signal reception conditions to stabilize.
- Reception conditions are affected by weather, the time of day, the surrounding environment, etc.

Checking the Last Time Adjustment Result

1. Enter the Receive Mode.
   Navigating Between Modes

   This displays the date and time of the last successful receive operation.



Signal Reception Precautions

- When the watch is unable to correct its time in accordance with a calibration signal for some reason, average timekeeping accuracy is within ±15 seconds per month.
- Note that an internal decoding process the watch performs after it receives a signal may cause the time setting to be slightly off (by less than one second).
- Time calibration signal reception is not possible under the conditions described below.
  - While battery power is low
  - In any mode besides the Timekeeping Mode or World Time Mode
  - When the watch is at Level 2 power saving
  - While a compass reading, barometric pressure/ temperature measurement, or altitude measurement operation is in progress
  - While the barometric pressure change indication is enabled
  - While a climb record data measurement operation is in progress
  - While a timer countdown operation is in progress
  - While the Home City area setting is one where time signal reception is not possible
  - While the watch is outside the time signal reception range
- When the receive operation is successful, the time and/or day settings will be corrected automatically. Summer time will not be applied correctly in the case described below.
  - When the summer time start date and time, end date and time, or other rules are changed by authorities

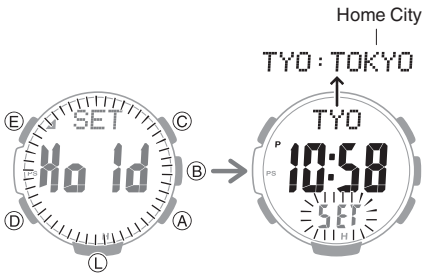
Using Watch Operations to Adjust the Time Setting

If, for some reason, you cannot use time signal reception to adjust the current time setting, you can adjust date, time, and Home City settings manually using watch button operations.

● Setting a Home City

Use the procedure in this section to select a city to use as your Home City. If you are in an area that observes summer time, you can also enable or disable summer time.

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.



3. Use (A) and (C) to change the Home City setting.
   - Holding down (A) or (C) scrolls through settings at high speed.
   - For details refer to the information below.
     City Table
4. Press (D).
5. Use (A) to change the summer time setting.

   Each press of (A) cycles through settings in the sequence shown below.
   - [AUTO]
     The watch switches between standard time and summer time automatically.
   - [OFF]
     The watch always indicates standard time.
   - [ON]
     The watch always indicates summer time.

6. Press (E) twice to complete the setting operation.

Note

- The [AUTO] summer time setting is valid when the watch's Home City is in an area where a time signal can be received.
- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

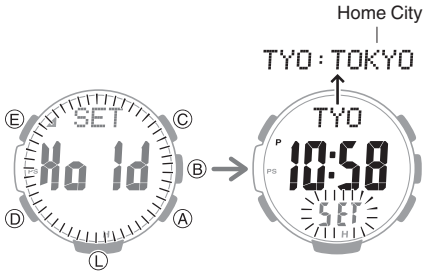
● Setting the Time/Date

You can use the procedure below to adjust the time and date settings when using the watch where signal reception is not possible.

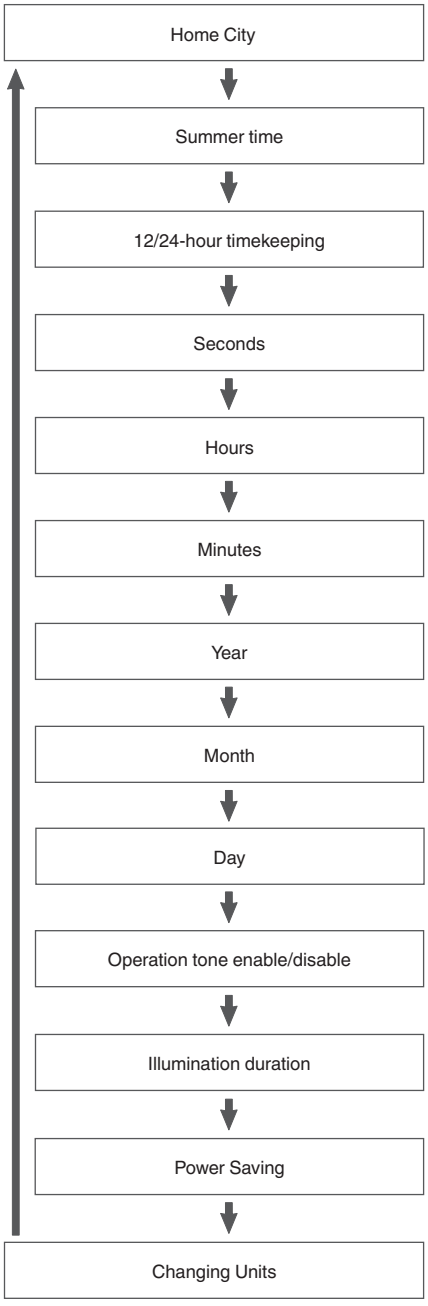
Important!

- If you are using the watch in an area where signal receive operations are possible, time and date settings using the time signal is recommended.
- Configure the Home City setting before changing the current time and date settings.
  Setting a Home City

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.



3. Use (D) to display the setting you want to change.
   - Each press of (D) cycles through settings in the sequence shown below.



4. Configure the date and time settings.
   - While the seconds are flashing, pressing (A) will reset them to 00. 1 is added to the minutes when the current seconds count is between 30 and 59 seconds.
   - For all the other settings, use (A) and (C) to change the flashing setting. Holding down (A) or (C) scrolls through settings at high speed.
5. Repeat steps 3 and 4 to select time and date settings.
6. Press (E) twice to complete the setting operation.

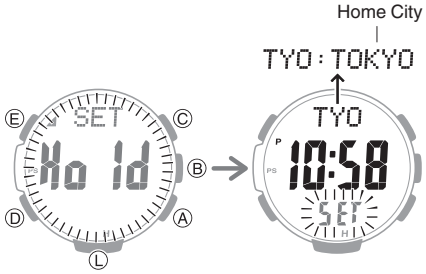
Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

● Switching between 12-hour and 24-hour Timekeeping

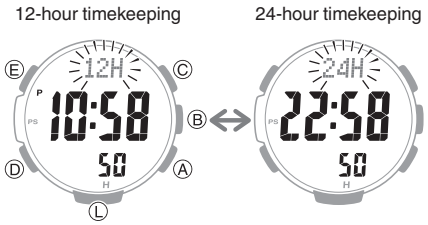
You can specify either 12-hour format or 24-hour format for the time display.

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.



3. Press (D) twice.
   This causes [12H] or [24H] to flash on the display.

4. Press (A) to select [12H] (12-hour timekeeping) or [24H] (24-hour timekeeping).



5. Press (E) twice to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

World Time

You can view the current time in 48 cities (31 time zones), and UTC (Coordinated Universal Time) time.

Checking World Time

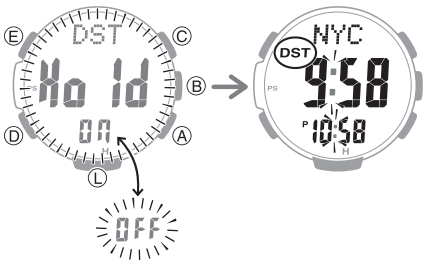
1. Enter the World Time Mode.
   Navigating Between Modes
   This displays [WT]. After one second, the city code and name of your currently selected World Time City appears.

Specifying a World Time City

Use the procedure in this section to select a World Time city. If you are in an area that observes summer time, you can also enable or disable summer time.

1. Enter the World Time Mode.
   Navigating Between Modes
2. Use (A) and (C) to display the city you want to specify as a World Time City.
   - Holding down (A) or (C) scrolls through settings at high speed.

3. To change the summer time setting, hold down (E) for about two seconds.
   This causes [DST] [Hold] [On] or [DST] [Hold] [OFF] to flash on the display. After that, the setting is changed.
   - [DST] [Hold] [On] flashing on the display indicates summer time.
   - [DST] [Hold] [OFF] flashing on the display indicates standard time.
   - [DST] is displayed while summer time is selected.



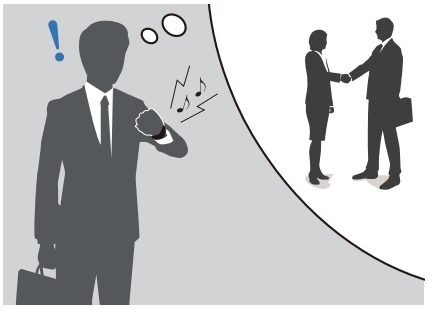
Note

- While [UTC] is selected as the city, you will not be able to change or check the summer time setting.
- The summer time setting you configure is applied to the currently selected city only. It does not affect other cities.

Alarm

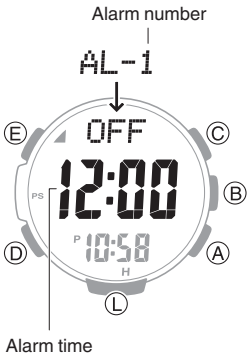
The watch will beep when the alarm time is reached. You can configure up to four standard daily alarms, and one daily alarm with snooze. The hourly time signal causes the watch to beep every hour on the hour.

- Snooze causes the alarm to sound up to seven times, at five-minute intervals.
- The alarm sound is muted in the cases described below.
  - When battery power is low
  - When watch is at Level 2 power saving
    Power Saving Function

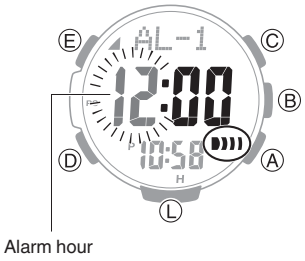


Configuring Alarm Settings

1. Enter the Alarm Mode.
   Navigating Between Modes
2. Use (A) and (C) to select the alarm ([AL-1] to [AL-4], or [SNZ]) whose setting you want to change.



3. Hold down (E) for at least two seconds. Release the button when the hour setting starts to flash.
   - The (alarm) indicator is displayed when any alarm is turned on.



4. Use (A) and (C) to change the hour setting.
   - Holding down (A) or (C) scrolls through settings at high speed.
   - If you are using 12-hour timekeeping, [P] indicates p.m.

5. Press (D).
   This causes the minutes digits to flash.

6. Use (A) and (C) to set the minute setting.
7. Press (E) to complete the setting operation.

Note

- If you do not perform any operation for about three minutes while in the Alarm mode, the watch automatically returns to the Timekeeping Mode.

● To stop the alarm

To stop the alarm after it starts to sound when an alarm time is reached, press any button.

Snooze causes the alarm to sound up to seven times, at five-minute intervals. To cancel a snooze alarm, turn [SNZ] off.

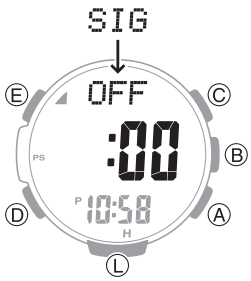
Turning Off an Alarm or the Hourly Time Signal

Note

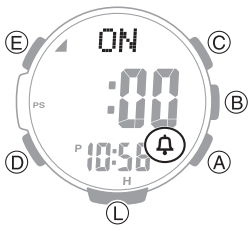
- A beeper sounds for 10 seconds when an alarm time is reached.

Configuring the Hourly Time Signal Setting

1. Enter the Alarm Mode.
   Navigating Between Modes
2. Press (A) or (C) to display the hourly time signal screen ([SIG]).



3. Press (B) to toggle the hourly time signal between enabled and disabled.
   - (hourly time signal) is shown on the display while the hourly time signal is turned on.



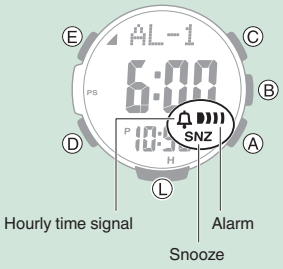
Turning Off an Alarm or the Hourly Time Signal

To stop an alarm or the hourly time signal from sounding, perform the steps below to turn it off.

- To have an alarm or hourly time signal sound again, turn it back on.

Note

- Indicators are displayed while any of the alarms or the hourly time signal is turned on.
- The applicable indicators are not displayed while all of the alarms are turned off and/or the hourly time signal is turned off.



1. Enter the Alarm Mode.
Navigating Between Modes
2. Use (A) and (C) to scroll through the alarm ([AL-1] to [AL-4], [SNZ]) and hourly time signal ( ) screens until the one you want to turn off is displayed.

3. Press (B) to turn off the displayed alarm or the hourly time signal.
   - Each press of (B) toggles between on and off.
   - Turning off an alarm causes (alarm) to disappear from the display. Turning off the hourly time signal causes (hourly time signal) to disappear.

Note

- If (alarm) is still displayed after you turn off an alarm, it means that at least one of the other alarms is still turned on. To turn off all of the alarms, repeat steps 2 and 3 until the (alarm) indicator is no longer displayed.

Luminous LCD

The LCD is coated with phosphorescent paint that absorbs light to make it readable even in the dark. The duration and brightness of the luminous LCD's glow depends on the intensity and duration of the absorbed light.
The phosphorescent paint used does not contain any radioactive materials.

● Usage Example

If the screen is exposed to the light of a standard outdoor LED headlamp (approximately 200 lumens) from a distance of five centimeters for one minute, it will glow in the dark for approximately one hour.
Once the light source is removed, brightness gradually diminishes.

Digital Compass

You can use the compass function to determine the direction of north, and to check your bearing to a destination.

Important!

- Check the information at the link below to find out how to ensure correct readings.
Calibrating Compass Readings
Digital Compass Reading Precautions

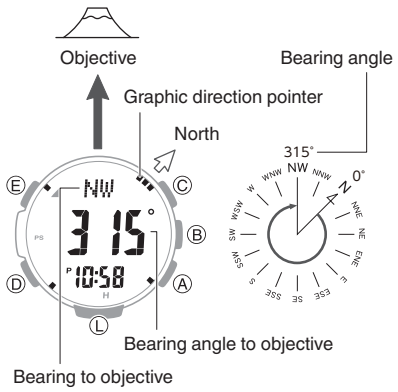
Taking a Compass Reading

1. Enter the Compass Mode.
   Navigating Between Modes
   - Entering the Compass Mode starts compass readings.
2. Keeping the watch horizontal, point 12 o'clock in the direction of your desired objective.

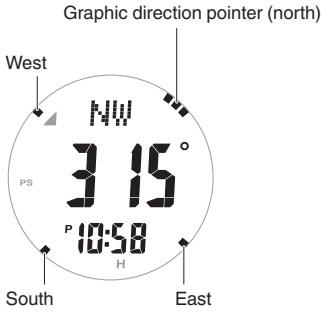
   The digital display shows one of 16 literal direction indications and the bearing angle.
   - To retrigger the compass operation, press (C).

Interpreting Bearing Readings

Directions: N (North), E (East), W (West), S (South)

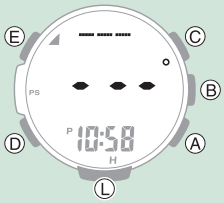


- Graphic direction pointers indicate north, south, east, and west. North is indicated by a pointer that looks like this: ■■■.



Note

- Normally the compass indicates magnetic north. You can also configure settings to indicate true north.
  Setting Up for True North Readings (Magnetic Declination Calibration)
  Magnetic North and True North
- After the initial reading is displayed, the watch will continue to take readings approximately every second for approximately the next 60 seconds. After measurement is complete, the graphic direction pointer disappears from the display, and [- - -] is shown for the bearing to your objective and its bearing angle.



- If four directions (north, south, east, west) and your target bearing are not displayed on the screen when you press (C), the bearing recorded in the bearing memory may be displayed instead of four directions.
  Press (E) to clear the recording bearing.
  Saving a Bearing to an Objective (Bearing Memory)
- Full Auto Light will not illuminate the face while a compass operation is in progress.
- If an alarm or other beeper sounds, or if you turn on illumination by pressing (L) while a compass operation is in progress, the compass operation will be suspended momentarily. The compass operation will resume when the beeper stops or illumination turns off.
- If you do not perform any operation for about two or three minutes while in the Compass Mode, the watch automatically returns to the Timekeeping Mode.

● Aligning a Map with Actual Surroundings (Setting a Map)

Setting a map means to align the map so the directions indicated on it are aligned with the actual directions of your location. Once you set a map, you can more easily get a grasp of the relationship between map markings and actual geographic contours. To set a map with this watch, align north on the map with the north indication of the watch. Once you set the map, you can compare your bearing on the map with your surroundings, which will help you determine your current location and destination.

- Note that map reading skills and experience are required to determine your current location and destination on a map.

Saving a Bearing to an Objective (Bearing Memory)

You can use record the bearing to a destination. Displaying the recorded bearing makes it possible to progress towards your target destination when the visibility is poor.

1. Enter the Compass Mode.
   Navigating Between Modes
2. Keeping the watch horizontal, point 12 o'clock in the direction of the objective your want to record.
3. Press (E).

   The direction of the 12 o'clock position of the watch is recorded as the target direction and indicated by the graphic direction pointer.

- To clear a recorded bearing, press (E).

Calibrating Compass Readings

Calibrating Compass Readings

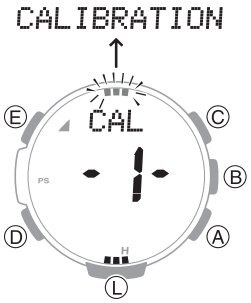
Calibrating Compass Readings

Perform 2-point calibration whenever you notice the watch's compass readings are different from those of another compass, or before setting out on a climb or trek.

- Note that accurate compass readings and/or calibration will not be possible in an area where strong magnetism is present.
  Digital Compass Reading Precautions

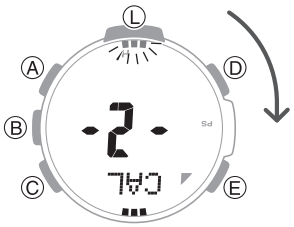
2-Point Calibration

1. Enter the Compass Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds.
   Release the button when ■■■ flashes at 12 o'clock, and [CALIBRATION] and [-1-] appear on the display.



3. While keeping the watch horizontal, press (C).
   This starts calibration of the first point, which causes [- - -] to appear on the display. When calibration is successful, [Turn 180°] appears and the ■■■ direction pointer flashes at 6 o'clock. Next, after about one second, [CALIBRATION] and [-2-] appear.

4. Rotate the watch 180 degrees, taking care to be as exact as possible.



5. Press (C).
   - This starts calibration of the second point, which causes [- - -] to appear on the display.
   - When calibration is successful, [OK] appears on the display and the watch returns to the Digital Compass screen.

Note

- [ERR] [-1-] appears if calibration fails for some reason. If this happens, restart the above procedure from step 3.

Setting Up for True North Readings (Magnetic Declination Calibration)

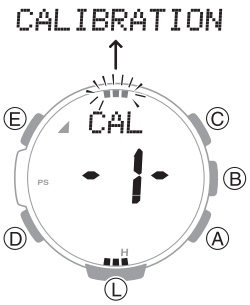
If you want the watch to indicate true north instead of magnetic north, you need to specify your current location's magnetic declination direction (east or west) and declination angle.
Magnetic North and True North

- The magnetic declination angle value can be set in 1° (degree) units only. Use a value that is closest to the angle you want to set.
  Example: For an angle of 7.4°, set 7°.
  Example: For an angle of 7°40' (7 degrees, 40 minutes), set 8°.

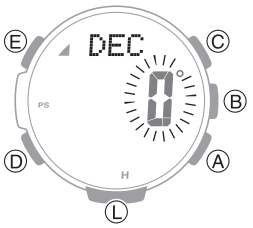
Note

- Magnetic declination angles (east or west) and angle degree values for specific locations can be found on geographic maps, mountain climbing maps, and other maps that include contour lines.

1. Enter the Compass Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds.
   Release the button when ■■■ flashes at 12 o'clock, and [CALIBRATION] and [-1-] appear on the display.



3. Press (D).
   This displays [DEC] [0°].



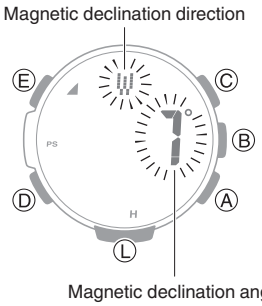
4. Use (A) (East) and (C) (West) to change the magnetic declination direction and angle.
   - Holding down (A) or (C) scrolls through settings at high speed.

   Setting range: 90° west to 90° east

   [OFF]: Magnetic north

   [E]: East declination (Magnetic north is east of true north.)

   [W]: West declination (Magnetic north is west of true north.)
   - To return the setting to [OFF], press (A) and (C) at the same time.



5. Press (E) to complete the setting operation.

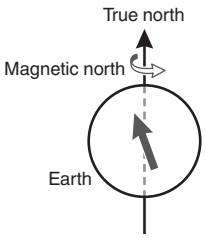
● Magnetic North and True North

There are actually two types of north: magnetic north and true north.

Magnetic north: North indicated by the needle of a compass

True north: Direction to the North Pole

As shown in the illustration below, magnetic north and true north are not the same.



Note

- The north indicated on commercially available maps is normally true north.

Digital Compass Reading Precautions

Location During Use

Taking readings near sources of strong magnetism can cause reading error. Keep the watch away from the following types of items.

Permanent magnets (magnetic accessories, etc.), metal objects, high-voltage wires, aerial wires, electrical household appliances (TVs, computers, cellphones, etc.)

- Note that correct direction readings are not possible indoors, especially inside of reinforced concrete structures.
- Accurate direction readings are not possible on electric trains, on boats, on aircraft, etc.

Storage Location

Exposure of the watch to magnetism can affect the accuracy of digital compass readings. Keep the watch away from the types of items below.

Permanent magnets (magnetic accessories, etc.), metal objects, electrical household appliances (TVs, computers, cellphones, etc.)

Altitude Measurement

The watch takes altitude readings and displays results based on air pressure measurements taken by a built-in pressure sensor.

Important!

- The altitude readings displayed by the watch are relative values that are calculated based on barometric pressure measured by the watch's pressure sensor. This means that barometric pressure changes due to weather can cause altitude readings taken at the same location to be different. Also note that the value displayed by the watch may be different from the actual elevation and/or sea level elevation indicated for the area where you are located. When using the watch's altimeter while mountain climbing, it is recommended that you regularly calibrate its readings in accordance with local altitude (elevation) indications.
  Calibrating Altitude Readings (Offset)
- Check the information at the link below to find out about how to minimize differences between readings produced by the watch, and values provided by local altitude (elevation) indications.
  Calibrating Altitude Readings (Offset)
  Altitude Reading Precautions

Checking the Current Altitude

1. Enter the Altimeter Mode.
   Navigating Between Modes
   - You can select either of two Altimeter Mode screens.
     Changing Displayed Information

Altitude Graph Screen | Altitude Differential Screen

Entering the Altimeter Mode will start altitude measurement and display the altitude at your current location.

- The watch takes altitude readings every second for about the first three minutes. After that, it takes readings according to the watch's auto measurement interval setting.
- Check the information at the link below to find out how to configure the auto measurement interval.
  Setting the Measurement Interval for Auto Record Data and Climb Record Data
- To retrigger measurement, press (A).
- To return to the Timekeeping Mode, press (D).

Note

- Measurement range: -700 to 10,000 meters (-2,300 to 32,800 feet) (Measurement unit: 1 meter (5 feet)) Note that calibrating altitude readings will cause a change in the measurement range.
- [- - -] will appear for the measured value if it is outside the allowable range.

Altitude Graph Screen

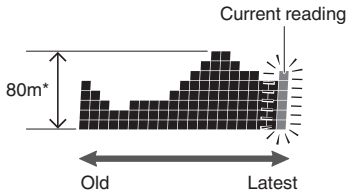
Altitude Differential Screen

① Current location altitude

② Altitude graph

③ Differential between reference altitude and current altitude

Interpreting Altitude Graph Contents



* 1 square (■) is 10 m.

Calibrating Altitude Readings (Offset)

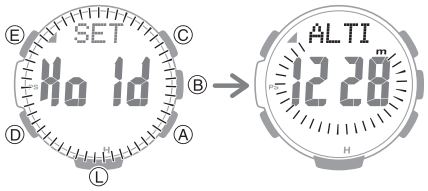
To minimize the difference between locally indicated and measured values, you should update the reference altitude value (offset) before setting off and during treks or any other activities where you take altitude readings.

Also, you can ensure accurate measurements by checking a map local altitude indications or some other source for your current location's altitude, and regularly calibrating watch readings with the latest information while mountain climbing.

Note

- You can find out the altitude at your current location from signs, maps, on the Internet, etc.
- Differences between actual altitude and watch readings can be caused by the factors below.
  - Changes in barometric pressure
  - Changes in temperature caused by variations in barometric pressure and by elevation
- Though altitude readings can be taken without calibration, doing so may produce readings that are very different from indications by altitude markers, etc.

1. Enter the Altimeter Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when [ALTI] appears on the display.
   This displays the current altitude and enters the Altitude Offset Mode.



3. Use (A) and (C) to change the altitude value to an elevation value obtained from another source.
   Setting range: -10,000 to 10,000 meters (or -32,800 to 32,800 feet)
   Setting unit: 1 meter (or 5 feet)
   - Holding down (A) or (C) scrolls through settings at high speed.
   - To return the altitude setting to its initial factory default, press (A) and (C) at the same time.
     – This displays [OFF].
4. Press (E) to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Setting a Reference Altitude and Taking Altitude Differential Readings

You can use the procedure below to display the differential between a reference altitude and another altitude. This makes it easy to display the altitude differential between two points while climbing or trekking.

Select the Altitude Differential Screen.
Changing Displayed Information

1. Use the contour lines on your map to determine the altitude differential between your current location and your destination.
2. Take an altitude reading of your current location.
   Checking the Current Altitude
3. Use (E) to set your current location as the reference altitude.
   This makes the altitude differential ±0 m (±0 feet).

4. While comparing the difference between the altitude you found on the map and the altitude differential displayed by the watch, advance towards your destination.

- When the altitude differential you found on the map is the same as that displayed by the watch, it means you are close to your destination.

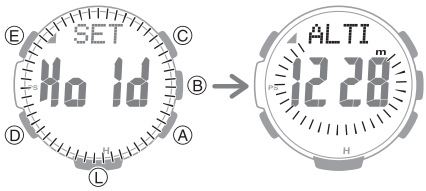
Note

- [- - - -] appears when the altitude differential is outside the measurement range (±3,000 m (±9,840 feet)).

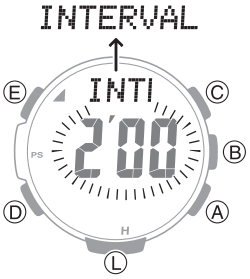
Setting the Measurement Interval for Auto Record Data and Climb Record Data

You can select an auto measurement interval of either five seconds or two minutes.

1. Enter the Altimeter Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when [ALTI] appears on the display.
   This displays the altitude for your current location.



3. Press (D).
   This causes the auto measurement interval to appear on the display.



4. Press (A) to toggle the auto measurement interval between [0'05] and [2'00].
   [0'05]: Readings taken every second for the first three minutes, and then every five seconds for about the next one hour.
   [2'00]: Readings taken every second for the first three minutes, and then every two minutes for about the next 12 hours.
5. Press (E) to complete the setting operation.

Note

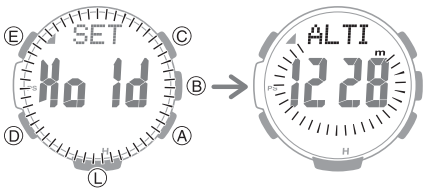
- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.
- The watch will automatically return to the Timekeeping Mode if you do not perform any operation in the Altimeter Mode for about one hour while [0'05] is selected as the measurement interval or about 12 hours while [2'00] is selected.

Changing Displayed Information

In the Altimeter Mode, you can use the procedure below to select either the Altitude Graph Screen or Altitude Differential Screen.

1. Enter the Altimeter Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when [ALTI] appears on the display.

   This displays the altitude for your current location.

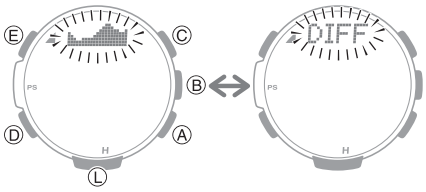


3. Press (D) twice.

   After [DISP] appears on the display, the altitude graph or [DIFF] (altitude differential) flashes on the display.
4. Use (A) to toggle between the screens.

   Each press of (A) toggles between the Altitude Graph Screen and the Altitude Differential Screen.

Altitude Graph Screen | Altitude Differential Screen



5. Press (E) to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Recording Altitude Readings

Use the procedure below to record measured altitude data.
There are three types of altitude data: manually recorded data, auto record data, and climb record data.

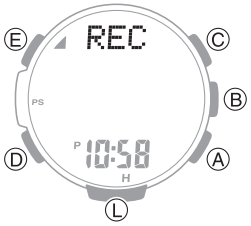
- Use the Data Recall Mode to view or delete records.
  Viewing Altitude Records

● Manually Recorded Data

The date and time are also recorded along with the altitude measurement. The watch has memory for up to 30 measurement records, and records are sequentially assigned numbers from [-01-] to [-30-].

1. Enter the Altimeter Mode.
   Navigating Between Modes
2. Hold down (A) for at least two seconds until [REC] stops flashing.

   This records the current altitude, date, and time.
   - If you do not remove your finger and continue to press (A), climb recording will be toggled between enabled and disabled.



Note

- Recording altitude data when there are already 30 records in memory automatically deletes the oldest record to make room for the new one.

● Auto Record Data

Entering the Altimeter Mode automatically starts altitude data measurement at regular intervals. Each auto record data measurement uses one memory record. Each record includes the date (month, day) and time of the measurement, along with the altitude data (high/low altitude, cumulative ascent/descent).

Auto Record and Climb Record Data Contents

- You can select the measurement interval.

Setting the Measurement Interval for Auto Record Data and Climb Record Data

Note

- Auto recording ends when you exit the Altimeter Mode. Re-entering the Altimeter Mode restarts recording of cumulative values from where it was stopped when you last exited the Altimeter Mode.

● Climb Record Data

Starting a climb record operation automatically records altitude data at regular intervals, even if you exit the Altimeter Mode. Each record includes the date (month, day) and time of the measurement, along with the altitude data (high/low altitude, cumulative ascent/descent).

The watch has memory for up to 14 measurement data records, and records are sequentially assigned numbers from [Mt.1] to [Mt.14].

Auto Record and Climb Record Data Contents

- Altitude is measured and recorded at regular intervals for up to 12 hours even if you exit the Altimeter Mode.
- You can select the measurement interval.

Setting the Measurement Interval for Auto Record Data and Climb Record Data

- Recording automatically stops when battery power goes low.

Note

- Climb record data can be recorded for up to 14 climbs. It includes high and low altitudes, and cumulative ascent and descent.

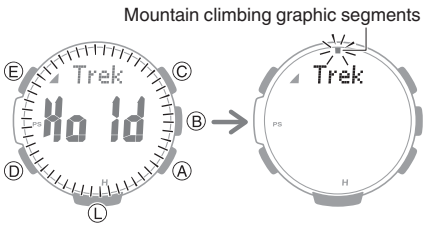
● To start measurement

1. Enter the Altimeter Mode.

Navigating Between Modes

2. Hold down (A) for at least five seconds. Release the button when [Trek] and mountain climbing graphic segments appear on the display.

   This starts recording of altitude data (high/low altitude, cumulative ascent/descent).



- Mountain climbing graphic segments flash or are displayed around the periphery of the display while recording is in progress. Each segment represents 12 minutes, and one lap around the periphery represents 12 hours.

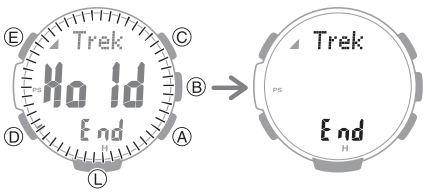
● To stop measurement

1. Enter the Altimeter Mode.

Navigating Between Modes

2. Hold down (A) for at least five seconds. Release the button when [Trek] [END] appears on the display.

   This stops altitude data (high/low altitude, cumulative ascent/descent) recording.



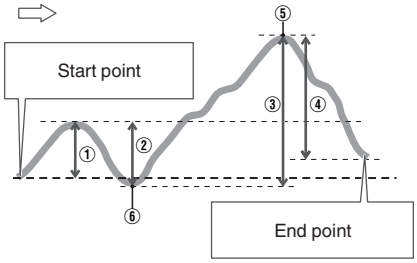
Note

- If you want to record more than 15 data records, delete old records to make room for the new data.

Deleting a Particular Record

● Auto Record and Climb Record Data Contents

The altitude data below is recorded by auto record and climb record operations.



High Altitude (MAX): ⑤

Low Altitude (MIN): ⑥

Cumulative Ascent (ASC): ①+③*

Cumulative Descent (DSC): ②+④*

* Cumulative ascent and cumulative descent values are updated whenever there is a difference of at least ±15 m (±49 feet) from one reading to the next.

Note

- In the case of auto record data, the auto record operation ends if you exit the Altimeter Mode. Re-entering the Altimeter Mode restarts recording of cumulative values from where it was stopped when you last exited the Altimeter Mode.
- For climb record data, auto measurement continues even if you exit the Altimeter Mode.

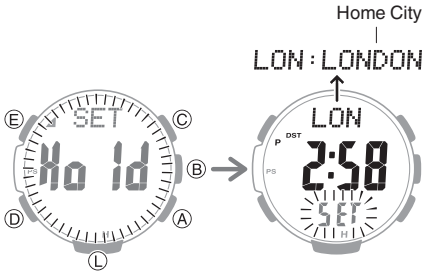
Specifying the Altitude Measurement Unit

You can select either meters (m) or feet (ft) as the Altimeter Mode display unit.

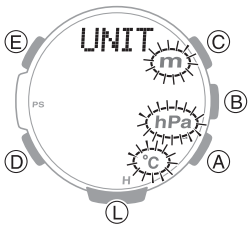
Important!

- When Tokyo (TYO) is set as the Home City, the altitude unit is fixed as meters (m) and cannot be changed.

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.
   Example: When your Home City is London

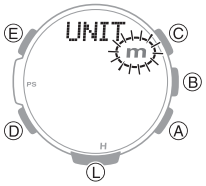


3. Press (D) 12 times.
   This displays [UNIT].

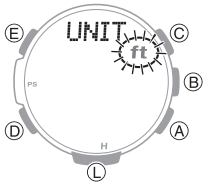


4. Use (A) to select an altitude unit.
   [m]: Meters
   [ft]: Feet

Meters



Feet



5. Press (E) twice to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Altitude Reading Precautions

Effects of Temperature

When taking altitude readings, take the steps below to keep the watch at as stable a temperature as possible. Changes in temperature can affect altitude readings.

- Take readings with the watch on your wrist.
- Take readings in an area where temperature is stable.

Altitude Readings

- Do not use this watch while skydiving, hang gliding, paragliding, gyrocopter flying, glider flying, or engaged in other activities where altitude changes suddenly.
- Altitude readings produced by this watch are not intended for special-purpose or industrial level use.
- In an aircraft, the watch measures the in-cabin pressurized air pressure, so readings will not match altitudes announced by the crew.

Altitude Readings (Relative Altitude)

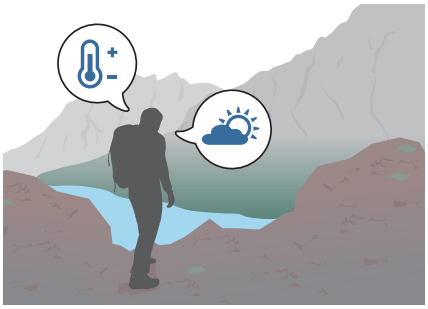
This watch uses International Standard Atmosphere (ISA) relative altitude data defined by the International Civil Aviation Organization (ICAO). Barometric pressure generally becomes lower as altitude increases.

Correct measurement may not be possible under the conditions below.

- During unstable atmospheric conditions
- During sudden temperature changes
- After the watch has been subjected to strong impact

Barometric Pressure and Temperature Measurement

You can use the watch to take barometric pressure and temperature readings for your current location.

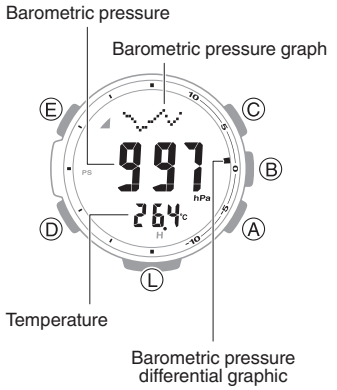


Important!

- Check the information at the link below to find out how to ensure correct readings.
  Correcting Measured Barometric Pressure and Temperature Values (Offset)
  Barometric Pressure and Temperature Reading Precautions

Measuring Barometric Pressure and Temperature

1. Enter the Barometer/Temperature Mode.
   Navigating Between Modes
   Entering the Barometer/Temperature Mode starts measurement, and displays the barometric pressure and temperature at your current location, and a barometric pressure graph.
   - After you enter the Barometer/Temperature Mode, the watch takes readings about every five seconds for three minutes. After that, a measurement is taken about every two minutes.



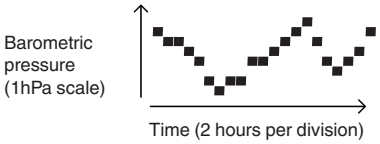
   - To re-trigger measurement, press (B).
   - To return to the Timekeeping Mode, press (D).

Note

- The watch will automatically return to the Timekeeping Mode if you do not perform any operation in the Barometer/Temperature Mode for about one hour.
- Measurement ranges are shown below. [- - -] will appear for the measured value if it is outside the allowable range.
  Barometric pressure measurement: 260 hPa to 1,100 hPa (7.65 inHg to 32.45 inHg)
  Thermometer measurement: -10.0 °C to 60.0 °C (14.0 °F to 140.0 °F)

Checking Changes in Barometric Pressure Over Time

Your watch shows a graph of barometric pressure readings taken at two-hour intervals. You can view barometric pressure readings for the past 42 hours. The square (■) at the far right of the graph indicates the latest barometric pressure reading.



● Predicting Upcoming Weather

A trend like this:	Means this:
	Rising barometric pressure, which indicates that upcoming weather probably will be fair.
	Falling barometric pressure, which indicates that upcoming weather probably will be bad.

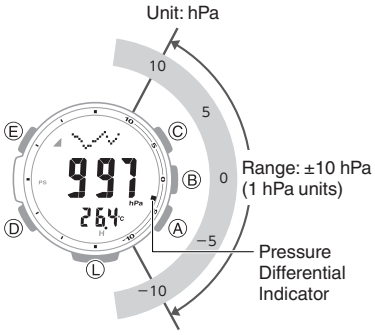
Note

- Large changes in barometric pressure and/or temperature can cause past data readings to be plotted outside of the visible area of the graph. Though plots are not visible, the data is still maintained in watch memory.

Checking the Change Between Two Barometric Pressure Readings (Barometric Pressure Differential)

In the Barometer/Temperature Mode, the display shows the current measured value, and a graphic indicator of the differential between the automatically measured current value and the latest value measured at two-hour intervals.

Example: Barometric pressure differential of -3 hPa (approximately -0.09 inHg)



Note

- The barometric pressure differential graphic indicator will not be displayed if the barometric pressure differential exceeds ±10 hPa, or if the barometric pressure measurement value exceeds the measurement range.

Sudden Barometric Pressure Change Indications

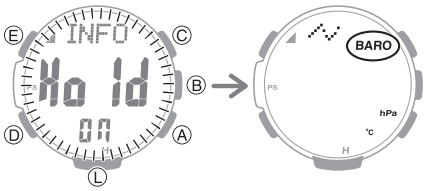
Whenever the watch detects a significant change in air pressure readings (due to sudden ascent or descent, or to the passage of a low-pressure or high-pressure area), it will beep to let you know. An arrow will also flash on the display at this time if the watch is in the Barometer/Temperature Mode, or if it is in the Timekeeping Mode with the barometric pressure graph displayed. The arrow that appears shows the direction of the pressure change. These alerts are called “Barometric Pressure Change Indications”.

This indication:	Means this:
	Sudden drop in pressure
	Sudden rise in pressure
	Sustained rise in pressure, shifting to a fall
	Sustained fall in pressure, shifting to a rise

Important!

- To ensure correct barometric pressure change indication operation, enable it in a location where the altitude is constant (such as a lodge, camp area, or on the ocean).
- A change in altitude causes a change in air pressure. Because of this, correct readings are impossible. Do not take readings while ascending or descending a mountain, etc.

1. Enter the Barometer/Temperature Mode.
   Navigating Between Modes
2. Hold down (B) for at least two seconds.
   If Barometric Pressure Change Indications are enabled, [INFO] [Hold] [On] flash on the display, and then [BARO] appears.



3. To disable Barometric Pressure Change Indication, hold down (B) again for at least two seconds.
   [INFO] [Hold] [OFF] flash on the display, and then [BARO] disappears.

Note

- If the Barometric Pressure Change Indication is enabled, readings are taken every two minutes even while the watch is not in the Barometer/Temperature Mode.
- The barometric pressure change indication becomes disabled automatically 24 hours after it is enabled.
- Time signal reception is disabled while Barometric Pressure Change Indication is turned on. Power saving is also disabled.
  Power Saving Function
- You will not be able to turn on Barometric Pressure Change Indication while the charge level of the watch’s battery is low.
- Low battery power will also cause Barometric Pressure Change Indication to turn off.

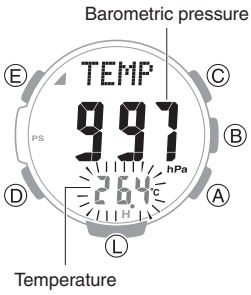
Correcting Measured Barometric Pressure and Temperature Values (Offset)

The watch’s built-in pressure sensor and temperature sensor are adjusted at the factory and normally do not require correction. However, you can correct the displayed value if you notice major errors in readings.

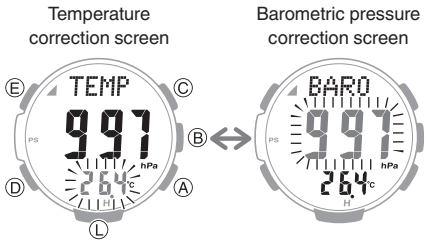
Important!

- The watch will not be able to produce correct barometric pressure readings if you make a mistake during the correction procedure. Check to ensure that the values you use for calibration produces correct pressure and temperature readings.
- Before adjusting the temperature sensor, remove the watch from your wrist and leave it in the area where you plan to measure temperature for about 20 or 30 minutes to allow the case temperature to become the same as the air temperature.

1. Enter the Barometer/Temperature Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when [TEMP] appears on the display.
   This causes the temperature reading to flash on the display.



3. Press (D) to select the temperature correction or barometric pressure correction screen.



4. Use (A) and (C) to change the value.

   Temperature Setting Unit: 0.1 °C (or 0.2 °F)

   Barometric Pressure Setting Unit: 1 hPa (or 0.05 inHg)

   - Holding down (A) or (C) scrolls through settings at high speed.
   - To return the barometric pressure setting to its initial factory default, press (A) and (C) at the same time.

5. Press (E) to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Specifying the Barometric Pressure Unit

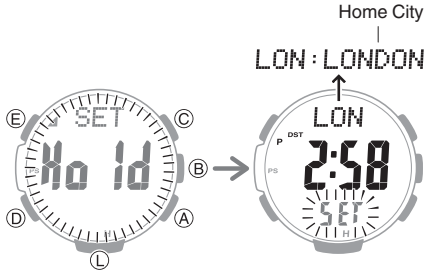
You can specify either hectopascals (hPa) or inches of mercury (inHg) as the display unit for barometric pressure values.

Important!

- When Tokyo (TYO) is the Home City, the barometric pressure unit is fixed as hectopascals (hPa) and cannot be changed.

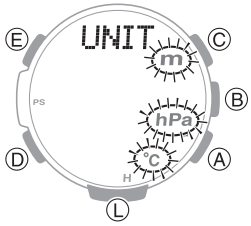
1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.

   Example: When your Home City is London



3. Press (D) 12 times.

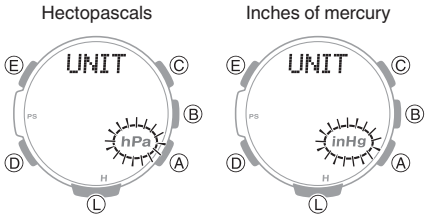
   This displays [UNIT].



4. Use (B) to select a barometric pressure unit.

   [hPa]: Hectopascals

   [inHg]: Inches of mercury



5. Press (E) twice to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

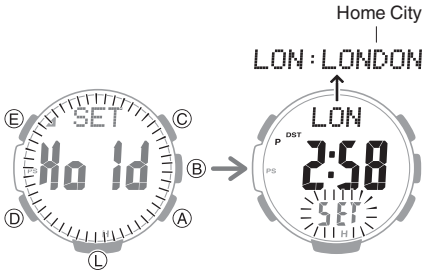
Specifying the Temperature Measurement Unit

You can select either Celsius (°C) or Fahrenheit (°F) as the temperature display unit.

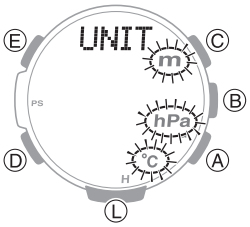
Important!

- When Tokyo (TYO) is the Home City, the temperature unit is fixed as Celsius (°C) and cannot be changed.

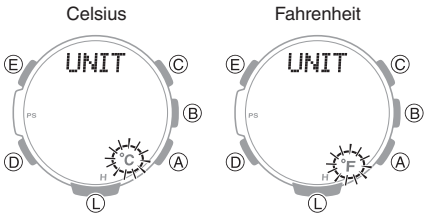
1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.
   Example: When your Home City is London



3. Press (D) 12 times.
   This displays [UNIT].



4. Use (C) to select a temperature unit.
   [°C]: Celsius
   [°F]: Fahrenheit



5. Press (E) twice to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Barometric Pressure and Temperature Reading Precautions

● Barometric Pressure Reading Precautions

- The barometric pressure graph produced by this watch can be used to obtain an idea of upcoming weather conditions. However, this watch should not be used in place of precision instruments required for official weather prediction and reporting.
- Pressure sensor readings can be affected by sudden changes in temperature. Because of this, there may be some error in the readings produced by the watch.

● Temperature Reading Precautions

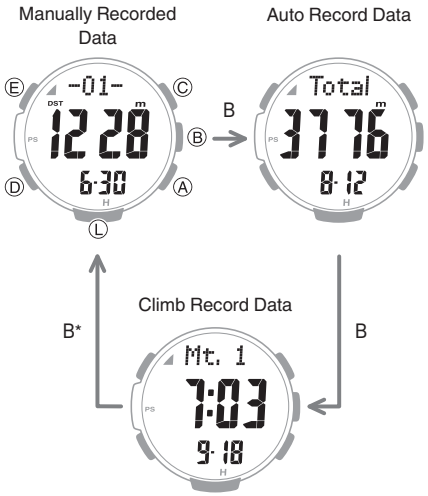
- Body temperature, direct sunlight, and humidity all have an effect on temperature readings. To help ensure more accurate temperature readings, remove the watch from your wrist, wipe it dry of any moisture, and place it in a well-ventilated location not exposed to direct sunlight. You should be able to take temperature readings after about 20 to 30 minutes.

Viewing Altitude Records

You can use the Data Recall Mode to view manually recorded, auto recorded, and climb record altitude measurement data.
Recording Altitude Readings

Viewing Recorded Data

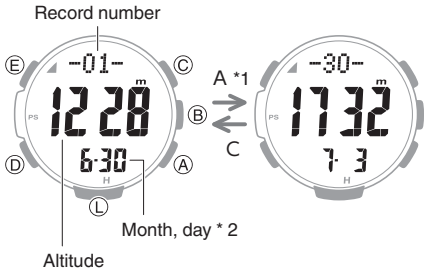
1. Enter the Data Recall Mode.
   Navigating Between Modes
   This displays a record of data recorded in the Altimeter Mode.
2. Press (B) to select manually recorded data, auto record data, or climb record data.



* Each press of (B) scrolls through climb data records from record 1 ([Mt.1]) up to a maximum of record 14 ([Mt.14]).

3. Use (A) and (C) to display the data you want to view.
   - Holding down (A) or (C) scrolls through settings at high speed.

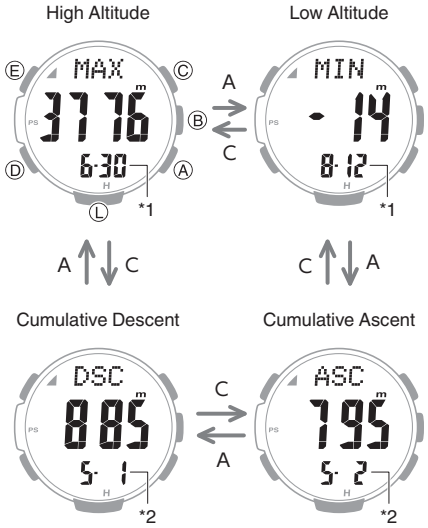
● **Manually Recorded Data ([-01-] to [-30-])**



*1 Each press of the button scrolls through manually recorded data records from record 1 ([-01-]) up to a maximum of record 30 ([-30-]).

*2 The date (month, day) and time alternate on the display at one-second intervals.

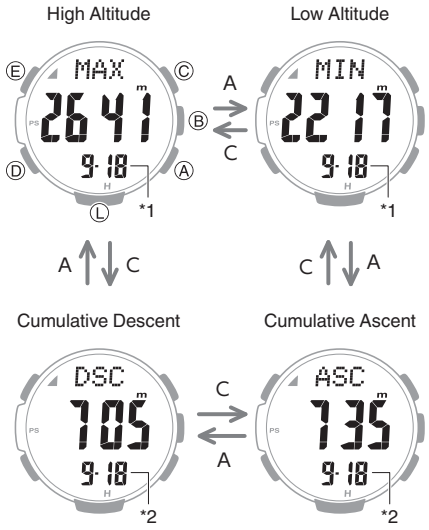
● **Auto Record Data**



*1 The recording date (month, day) and time alternate on the display at one-second intervals.

*2 The date (month, day) and year when accumulation started alternate on the display at one-second intervals.

● **Climb Record Data ([Mt.1] to [Mt.14])**



*1 The recording date (month, day) and time alternate on the display at one-second intervals.

*2 The date (month, day) and year when accumulation started alternate on the display at one-second intervals.

Note

- If there is no data left in memory due to a data delete operation, error, or some other reason, [- - - -] or [0] will appear on the display.
- If the cumulative ascent (ASC) or cumulative descent (DSC) value exceeds 99,999 m (327,995 feet), it will revert to 0 and continue from there.
- If you do not perform any operation for about two or three minutes while in the Data Recall Mode, the watch automatically returns to the Timekeeping Mode.

Deleting Data

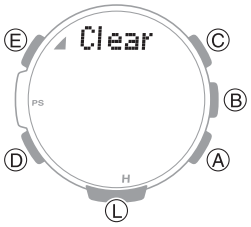
Note

- Data cannot be deleted while a climb record data measurement operation is in progress.

● **Deleting a Particular Record**

1. Enter the Data Recall Mode.
   Navigating Between Modes
2. Use (B) to select the data you want to delete.
   - If you selected manually recorded data, use (A) and (C) to select the data you want to delete.
3. Hold down the (E) for at least two seconds. Release the button as soon as [Clear] stops flashing.

   This deletes the record you selected.

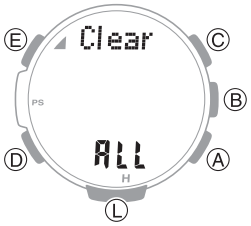


- Note that holding down (E) for at least five seconds while manually recorded data is selected will delete all manually recorded data.

● **Deleting All Manually Recorded Data**

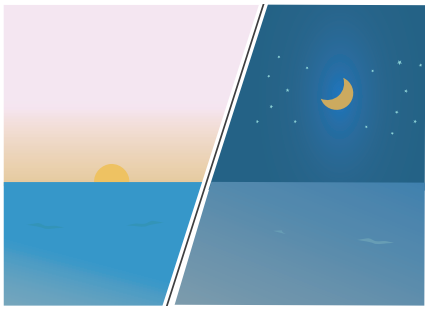
1. Enter the Data Recall Mode.
   Navigating Between Modes
2. Use (B) to select manually recorded data.
3. Hold down (E) for at least five seconds. Release the button when [Clear] [ALL] stops flashing.

   This deletes all manually recorded data.



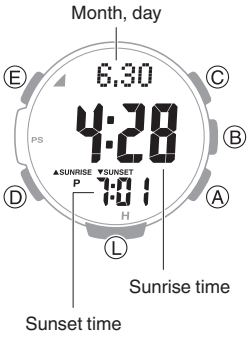
Sunrise and Sunset Times

You can use the procedures in this section to check the sunrise and sunset times for a specified date (year, month, day) and location.



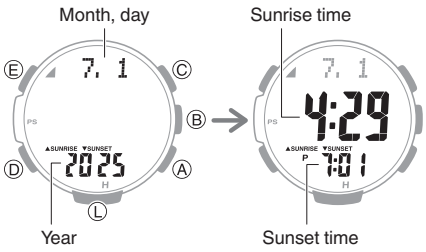
Looking Up Today's Sunrise and Sunset Times

1. Enter the Sunrise/Sunset Mode.
   Navigating Between Modes
   This displays the current date's sunrise and sunset times for your Home City.



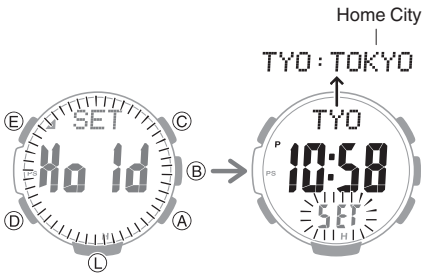
Looking Up Sunrise and Sunset Times by Specifying a Day

1. Enter the Sunrise/Sunset Mode.
   Navigating Between Modes
2. Use (A) and (C) to select the day you want.
   This displays the sunrise and sunset times for the day you specified.
   - Holding down (A) or (C) scrolls through settings at high speed.

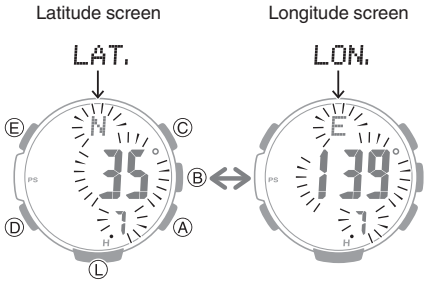


Looking Up Sunrise and Sunset Times by Specifying a Location

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.



3. Use (A) and (C) to select the city name of the location whose sunrise/sunset times you want to look up.
   - Holding down (A) or (C) scrolls through settings at high speed.
   - If you don't need to specify a latitude and longitude, press (E) twice and advance to step 8.
4. Press (E).
   This displays the latitude or longitude setting screen.
5. Press (D) to toggle between the latitude and longitude setting screens.



6. Use (A) and (C) to specify an angle.
   Setting ranges are shown below.
   Latitude: 65.0°S (65.0 degrees south latitude) to 0.0°N to 65.0°N (65.0 degrees north latitude)
   Longitude: 179.9°W (179.9 degrees west longitude) to 0.0°E to 180.0°E (180.0 degrees east longitude)
   - You can change the setting in 0.1° increments.
   - Holding down (A) or (C) scrolls through settings at high speed.
7. Press (E) to return to the Timekeeping Mode.
8. Press (D).
   This displays the sunrise/sunset times for the location you specified.

Important!

- If you specify a city that is not your Home City as the location when checking sunrise and sunset times, be sure to change back to your Home City setting after you are finished. If you don't, the watch will not display the correct current time.
  Setting a Home City

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.

Stopwatch

The stopwatch performs elapsed time measurement up to 999 hours, 59 minutes, 59.9 seconds in 1/10 second units.

It can also measure split times.

Measuring Elapsed Time

1. Enter the Stopwatch Mode.
   Navigating Between Modes
2. Use the operations below to measure elapsed time.

Ⓐ Start
↓
Ⓐ Stop
↓
Ⓐ Resume
↓
Ⓐ Stop

3. Press (C) to reset the measurement time to all zeros.

Measuring a Split Time

1. Enter the Stopwatch Mode.
   Navigating Between Modes
2. Use the operations below to measure elapsed time.

Ⓐ Start
↓
Ⓒ Split
↓
Ⓒ Split release
↓
Ⓐ Stop

3. Press (C) to reset the measurement time to all zeros.

Timing the First and Second Place Finishers

1. Enter the Stopwatch Mode.
   Navigating Between Modes
2. Use the operations below to measure elapsed time.

Ⓐ Start
↓
Ⓒ 1st Finisher*
↓
Ⓐ 2nd Finisher*

* Displays the time of the first finisher.

3. Press (C) to display the time of the second place finisher.
4. Press (C) to reset the measurement time to all zeros.

Timer

The timer counts down from a start time specified by you. A beeper sounds when the end of the countdown is reached.

- The beeper will not sound if battery power is low.

Setting a Start Time

The countdown start time can be set in 1-minute units up to 24 hours.

1. Enter the Timer Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the hour setting starts to flash.

3. Use (A) and (C) to change the timer hours setting.
   - Holding down (A) or (C) scrolls through settings at high speed.
4. Press (D).
   This causes the minutes digits to flash.

5. Use (A) and (C) to change the minutes setting.
6. Press (E) to complete the setting operation.

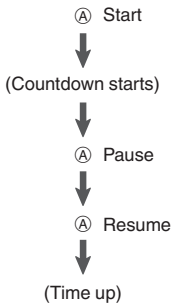
Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.
- Setting a start time of “0H00'00” will perform a countdown of 24 hours.

Using the Timer

1. Enter the Timer Mode.
   Navigating Between Modes

2. Use the operations below to perform a timer operation.



   - A beeper will sound for 10 seconds to let you know when the end of a countdown is reached.
   - You can reset a paused countdown to its start time, by pressing (C).
3. Press any button to stop the tone.

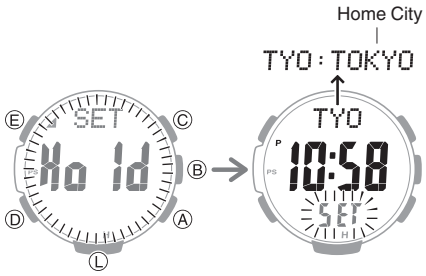
Other Settings

This section explains other watch settings you can configure.

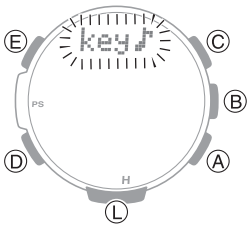
Enabling the Button Operation Tone

Use the procedure below to enable or disable the tone that sounds when you press a button.

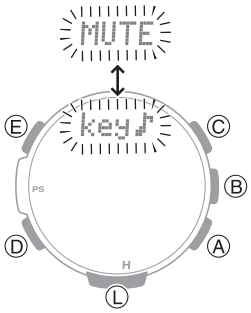
1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.



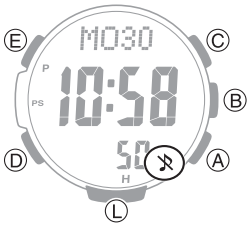
3. Press (D) nine times.
   This causes [key♪] or [MUTE] to flash on the display.



4. Press (A) to select [key♪] or [MUTE].
   [key♪]: Operation tone enabled.
   [MUTE]: Operation tone disabled.



5. Press (E) twice to complete the setting operation.
   - [🔇] is displayed while the operation tone is muted.

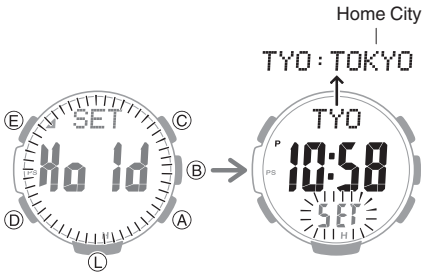


Note

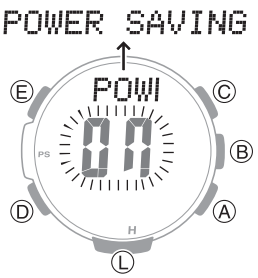
- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.
- Note that alarm and timer tones will still sound even while the operation tone is muted.

Configuring Power Saving Function Settings

1. Enter the Timekeeping Mode.
   Navigating Between Modes
2. Hold down (E) for at least two seconds. Release the button when the name of the currently selected Home City appears on the display.



3. Press (D) 11 times.
   This displays [POWER SAVING].



4. Press (A) to toggle between on and off.
   [On]: Power Saving enabled.
   [OFF]: Power Saving disabled.
5. Press (E) twice to complete the setting operation.

Note

- While the setting is being configured, the watch will exit the setting operation automatically after about two or three minutes of non-operation.
- For details about Power Saving, refer to the information below.
  Power Saving Function

Specifications

Accuracy :

±15 seconds per month when time correction using signal reception is not possible.

Basic Functions :

Hour, minute, second, month, day, day of the week
Barometric pressure graph
a.m./p.m.(P)/24-hour timekeeping
Full Auto Calendar (2000 to 2099)

Signal Receive Functions :

Auto receive, manual receive
Last receive date and time display
Auto summer time switching
Auto transmitter selection (for JJY, MSF/DCF77)
Receivable call signs:
JJY (40 kHz/60 kHz), WWVB (60 kHz), MSF (60 kHz), DCF77 (77.5 kHz), BPC (68.5 kHz)
Auto Receive enable/disable

Digital Compass :

Measurement range: 0° to 359°
Measurement unit: 1°
Continuous Bearing Measurement (1 minute)
Compass calibration (2-point calibration, magnetic declination angle)
North, south, east, west indication (four-direction graphic pointer)
Bearing memory

Altimeter (relative altitude) :

Measuring range: -700 to 10,000 m (or -2,300 to 32,800 ft.)
Display range: -10,000 to 10,000 m (or -32,800 to 32,800 ft.)
(Altitude calibration can be used to display any 10,700 m within the range above.)
Measuring unit: 1 m (or 5 ft.)
Measuring interval: 2 minutes/5 seconds
Altitude calibration
Altitude graph
Altitude differential measurement: -3,000 to +3,000 m (or -9,840 to 9,840 ft.)
Reference altitude setting

Altitude Memory
Manually Recorded Data
Recording of altitude, date (month, day), and time by button operation. Up to 30 records.
Auto Record Data
One record of high altitude, low altitude, cumulative ascent, cumulative descent
Climb Record Data
Up to 14 records of high altitude, low altitude, cumulative ascent, cumulative descent

Barometer :

Measurement range: 260 to 1,100 hPa (or 7.65 to 32.45 inHg)
Display range: 260 to 1,100 hPa (or 7.65 to 32.45 inHg)
Measurement unit: 1 hPa (or 0.05 inHg)
Barometric pressure adjustment
Barometric pressure graph
Barometric pressure differential graphic
Barometric pressure change indications

Temperature :

Measuring range: -10.0 to 60.0 °C (or 14.0 to 140.0 °F)
Display range: -10.0 to 60.0 °C (or 14.0 to 140.0 °F)
Measuring unit: 0.1 °C (or 0.2 °F)
Temperature Correction

Sensor Accuracy :

Direction
Measurement accuracy: Within ±10°
Accuracy guaranteed temperature range: 10 °C to 40 °C (50 °F to 104 °F)
Bearing graph within ±2 gradations
Pressure
Measurement accuracy: Within ±3 hPa (0.1 inHg)
(Altimeter measurement accuracy: Within ±75 m (246 ft.))
Guaranteed accuracy temperature range: -10 °C to 40 °C (14 °F to 104 °F)
- Strong impact or prolonged exposure to temperature extremes may negatively affect accuracy.

Temperature
Measurement accuracy: Within ±2 °C (3.6 °F)
Accuracy guaranteed temperature range: -10 °C to 60 °C (14 °F to 140 °F)

Sunrise/Sunset Functions :

Sunrise and sunset times
Day select

Stopwatch :

Measuring unit: 1/10 seconds
Measuring range:
999 hours, 59 minutes, 59.9 seconds (1000 hours)
Measurement Functions:
Elapsed time, cumulative time, split times, 1st and 2nd place finisher times

Timer :

Setting unit: 1 minute
Countdown range: 24 hours
Countdown unit: 1 second
Time up alert duration: 10 seconds

Alarm :

Time alarms
Alarms: 5 (with one snooze alarm)
Setting units: Hours, minutes
Alarm tone duration: 10 seconds
Hourly time signal: Beep every hour on the hour

World Time :

48 cities (31 time zones) and Coordinated Universal Time (UTC)
Summer time

Other :

Luminous LCD, high-brightness LED light (Full Auto Light, afterglow, 1.5 or 3-second illumination duration setting), power-saving, battery power indicator, operation tone on/off

Power Supply :

Solar panel and one rechargeable battery (Type: CTL1616)
Battery nominal voltage: 2.3V
Battery operating time: Approximately 7 months
Conditions:
Illumination: 1.5 seconds/day
Beeper: 10 seconds/day
Digital Compass Operations: 20 times/month
Mountain climbing: Once/month (Altitude readings: Approximately 1 hour; Barometric pressure change indication measurements: Approximately 24 hours)
Barometric Pressure Graph: Measurement every 2 hours
Time signal reception: 4 minutes/day
Display: 18 hours/day

Specifications are subject to change without notice.

Other Information

This section provides non-operational information you also need to know. Refer to this information as required.

City Table

City		Offset
UTC	Coordinated Universal Time	0
LIS: LISBON *	Lisbon	
LON: LONDON *	London	
MAD: MADRID *	Madrid	+1
PAR: PARIS *	Paris	
ROM: ROME *	Rome	
BER: BERLIN *	Berlin	
STO: STOCKHOLM *	Stockholm	
ATH: ATHENS *	Athens	+2
CAI: CAIRO	Cairo	
JRS: JERUSALEM	Jerusalem	
MOW: MOSCOW *	Moscow	+3
JED: JEDDAH	Jeddah	
THR: TEHRAN	Tehran	+3.5
DXB: DUBAI	Dubai	+4
KBL: KABUL	Kabul	+4.5
KHI: KARACHI	Karachi	+5
DEL: DELHI	Delhi	+5.5
KTM: KATHMANDU	Kathmandu	+5.75
DAC: DHAKA	Dhaka	+6
RGN: YANGON	Yangon	+6.5
BKK: BANGKOK	Bangkok	+7
SIN: SINGAPORE	Singapore	+8
HKG: HONG KONG *	Hong Kong	
BJS: BEIJING *	Beijing	
TPE: TAIPEI *	Taipei	

City		Offset
SEL: SEOUL *	Seoul	+9
TYO: TOKYO *	Tokyo	
ADL: ADELAIDE	Adelaide	+9.5
GUM: GUAM	Guam	+10
SYD: SYDNEY	Sydney	
NOU: NOUMEA	Noumea	+11
WLG: WELLINGTON	Wellington	+12
PPG: PAGO PAGO	Pago Pago	-11
HNL: HONOLULU *	Honolulu	-10
ANC: ANCHORAGE *	Anchorage	-9
YVR: VANCOUVER *	Vancouver	-8
LAX: LOS ANGELES *	Los Angeles	
YEA: EDMONTON *	Edmonton	-7
DEN: DENVER *	Denver	
MEX: MEXICO CITY *	Mexico City	-6
CHI: CHICAGO *	Chicago	
NYC: NEW YORK *	New York	-5
SCL: SANTIAGO	Santiago	-4
YHZ: HALIFAX *	Halifax	
YYT: ST. JOHN'S *	St. John's	-3.5
RIO: RIO DE JANEIRO	Rio de Janeiro	-3
FEN: F. DE NORONHA	Fernando de Noronha	-2
RAI: PRAIA	Praia	-1

* Cities where time calibration signal reception is possible.

- The information in the above table is current as of July 2024.
- Time zones may change and UTC differentials may become different from those shown in the table above.

Troubleshooting

Signal Reception (Time Calibration Signal)

Q1 The watch cannot perform a receive operation.

Is the watch's battery charged?

↓

Signal reception is not possible while battery power is low. Keep the watch exposed to light until it recharges sufficiently.

Charging

Is the watch in the Timekeeping Mode or World Time Mode?

↓

Time signal receive is not possible unless the watch is in the Timekeeping Mode or World Time Mode. Enter the Timekeeping Mode or World Time Mode.

Navigating Between Modes

Is your Home City setting correct for your location?

↓

The watch will not indicate the correct time if the Home City setting is wrong. Change your Home City setting so it correctly reflects your location.

Setting a Home City

After checking the above, the watch still cannot perform a receive operation.

Time calibration signal reception is not possible under the conditions described below.

- When watch is at Level 2 power saving
- Timer countdown operation in progress

If successful reception is not possible for some reason, you can adjust the time and day settings manually.

Q2 The signal receive operation always fails.

Is the watch in a location that is appropriate for signal reception?

↓

Check your surroundings and move the watch to a location where signal reception is better.

Appropriate Signal Reception Location

Did you avoid touching the watch while the receive operation was in progress?

↓

Minimize movement of the watch and do not perform any watch operation while a receive operation is in progress.

Is there an alarm configured to sound during the same period that the signal receive operation is performed?

↓

Receive stops if an alarm operation starts while it is being performed. Disable the alarm.

Turning Off an Alarm or the Hourly Time Signal

Is the signal transmitter in your area transmitting a signal?

The transmitter of the time calibration may not be transmitting a signal.
Try again later.

Q3 Signal reception should have been successful, but the watch's time and/or day is wrong.

Adjust time and day settings manually.

Using Watch Operations to Adjust the Time Setting

Altitude Measurement

Q1 Readings produce different results at the same location.
Watch readings are different from altitude information available from other sources.
Correct altitude readings are not possible.

Relative altitude is calculated based on changes in barometric pressure measured by the watch's pressure sensor. This means that barometric pressure changes can cause readings taken at the same location to be different. Also note that the value displayed by the watch may be different from the actual elevation and/or sea level elevation indicated for the area where you are located. When using the watch's altimeter while mountain climbing, it is recommended that you regularly calibrate its readings in accordance with local altitude (elevation) indications.

Calibrating Altitude Readings (Offset)

Q2 [ERR] appears during measurement.

There may be a problem with the sensor. Try taking another measurement.

If [ERR] keeps appearing after multiple measurement attempts, contact a CASIO service center or your original retailer.

Digital Compass

Q1 The entire display is flashing.

Abnormal magnetism has been detected. Move away from any potential source of strong magnetism and try taking a reading again.

Digital Compass Reading Precautions

- If the display flashes again, it could mean that the watch itself has become magnetized. Move away from any potential source of strong magnetism, perform 2-point calibration, and then try taking a reading again.

Calibrating Compass Readings

Q2 [ERR] appears during measurement.

There is a problem with the sensor or there may be a source strong magnetic force nearby. Move away from any potential source of strong magnetism and try taking a reading again. If [ERR] keeps appearing after multiple measurement attempts, contact a CASIO service center or your original retailer.

Digital Compass Reading Precautions

Q3 [ERR] appears following 2-point calibration.

[ERR] on the display could indicate a sensor problem.

- If [ERR] disappears after about one second, try performing 2-point calibration again.
- If [ERR] keeps appearing after multiple attempts, contact a CASIO service center or your original retailer.

Q4 Direction information indicated by the watch is different from that indicated by a backup compass.

Move away from any potential source of strong magnetism, perform 2-point calibration, and then try taking a reading again.

Calibrating Compass Readings
Digital Compass Reading Precautions

Q5 Readings at the same location produce different results.
Cannot take readings indoors.

Move away from any potential source of strong magnetism and try taking a reading again.

Digital Compass Reading Precautions

Barometric Pressure Measurement

Q1 The barometric pressure differential graphic is not displayed after barometric pressure measurement.

The barometric pressure differential graphic is not displayed if the barometric pressure measurement value exceeds the allowable measurement range (260hPa to 1,100hPa) or if the barometric pressure differential exceeds ±10hPa. If [ERR] is displayed, there may be a problem with the sensor.

Checking the Change Between Two Barometric Pressure Readings (Barometric Pressure Differential)

Q2 [ERR] appears during measurement.

There may be a problem with the sensor. Try taking another measurement. If [ERR] keeps appearing after multiple measurement attempts, contact a CASIO service center or your original retailer.

Temperature Measurement

Q1 [ERR] appears during measurement.

There may be a problem with the sensor. Try taking another measurement. If [ERR] keeps appearing after multiple measurement attempts, contact a CASIO service center or your original retailer.

World Time

Q1 The time for a World Time City is not correct.

The summer time setting (standard time/summer time) may be wrong.

Specifying a World Time City

Alarm and Hourly Time Signal

Q1 An alarm does not sound.

Is the watch's battery charged?

↓

Keep the watch exposed to light until it recharges sufficiently.
Charging

Other than the above.

The alarm's settings may not be configured. Configure the alarm settings.
Configuring Alarm Settings

Q2 The hourly time signal does not sound.

Is the watch's battery charged?

↓

Keep the watch exposed to light until it recharges sufficiently.
Charging

Other than the above.

The hourly time signal may be disabled. Enable the hourly time signal.
Configuring the Hourly Time Signal Setting

Charging

Q1 The watch does not work even though it is exposed to light.

The watch stops operating whenever the battery goes dead. Keep the watch exposed to light until it recharges sufficiently.
Checking the Charge Level

Q2 [H], [M], and [L] are flashing on the display.

The watch is in the charge recovery mode. Wait until the recovery process is complete (about 15 minutes). The watch will recover more quickly if you place it in a brightly lit location.

- If a signal receive operation, alarm, hourly time signal, illumination and/or other power-intensive functions are used within a short period of time, the charge level of the battery will drop and cause the watch to go into a charge recovery mode. Function availability will be temporarily limited, but functionality will return after the battery recovers.
Checking the Charge Level

Q3 [CHG] is flashing on the display.

The charge level of the watch is extremely low. Immediately expose the watch to light to charge it.
Checking the Charge Level

Other

Q1 I can't find the information I need here.

Visit the website below.

https://world.casio.com/support/

Precautions

Operating Precautions

● Water Resistance

- The information below applies to watches with WATER RESIST or WATER RESISTANT marked on the back cover.

Water Resistance Under Daily Use

Marking on watch front or on back cover	No BAR mark

Example of Daily Use

Hand washing, rain	Yes
Water-related work, swimming	No
Windsurfing	No
Skin diving	No

Enhanced Water Resistance Under Daily Use

5 Atmospheres

Marking on watch front or on back cover	5BAR

Example of Daily Use

Hand washing, rain	Yes
Water-related work, swimming	Yes
Windsurfing	No
Skin diving	No

10 Atmospheres

Marking on watch front or on back cover	10BAR

Example of Daily Use

Hand washing, rain	Yes
Water-related work, swimming	Yes
Windsurfing	Yes
Skin diving	Yes

20 Atmospheres

Marking on watch front or on back cover	20BAR

Example of Daily Use

Hand washing, rain	Yes
Water-related work, swimming	Yes
Windsurfing	Yes
Skin diving	Yes

- Do not use your watch for scuba diving or other types of diving that requires air tanks.
- Watches that do not have WATER RESIST or WATER RESISTANT marked on the back cover are not protected against the effects of sweat. Avoid using such a watch under conditions where it will be exposed to large amounts of sweat or moisture, or to direct splashing with water.
- Even if a watch is water resistant, note the usage precautions described below. Such types of use reduce water resistance performance and can cause fogging of the glass.
  - Do not operate the crown or buttons while your watch is submersed in water or wet.
  - Avoid wearing your watch while in the bath.
  - Do not wear your watch while in a heated swimming pool, sauna, or any other high temperature/high humidity environment.
  - Do not wear your watch while washing your hands or face, while doing housework, or while performing any other task that involves soaps or detergents.
- After submersion in seawater, use plain water to rinse all salt and dirt from your watch.
- To maintain water resistance, have the gaskets of your watch replaced periodically (about once every two or three years).
- A trained technician will inspect your watch for proper water resistance whenever you have its battery replaced. Battery replacement requires the use of special tools. Always request battery replacement from your original retailer or from an authorized CASIO service center.
- Some water-resistant watches come with fashionable leather bands. Avoid swimming, washing, or any other activity that causes direct exposure of a leather band to water.
- The inside surface of the watch glass may fog when the watch is exposed to a sudden drop in temperature. No problem is indicated if the fogging clears up relatively quickly. Sudden and extreme temperature changes (such as coming into an air conditioned room in the summer and standing close to an air conditioner outlet, or leaving a heated room in the winter and allowing your watch to come into contact with snow) can cause it to take longer for glass fogging to clear up. If glass fogging does not clear up or if you notice moisture inside of the glass, immediately stop using your watch and take it to your original retailer or to an authorized CASIO service center.
- Your water-resistant watch has been tested in accordance with International Organization for Standardization regulations.

● Band

- Tightening the band too tightly can cause you to sweat and make it difficult for air to pass under the band, which can lead to skin irritation. Do not fasten the band too tightly. There should be enough room between the band and your wrist so you can insert your finger.
- Deterioration, rust, and other conditions can cause the band to break or come off of your watch, which in turn can cause band pins to fly out of position or to fall out. This creates the risk of your watch falling from your wrist and becoming lost, and also creates the risk of personal injury. Always take good care of your band and keep it clean.
- Immediately stop using a band if you even notice any of the following: loss of band flexibility, band cracks, band discoloration, band looseness, band connecting pin flying or falling out, or any other abnormality. Take your watch to your original retailer or to a CASIO service center for inspection and repair (for which you will be charged) or to have the band replaced (for which you will be charged).

Temperature

- Never leave your watch on the dashboard of a car, near a heater, or in any other location that is subject to very high temperatures. Do not leave your watch where it will be exposed to very low temperatures. Temperature extremes can cause your watch to lose or gain time, to stop, or otherwise malfunction.
- Leaving your watch in an area hotter than +60 °C (140 °F) for long periods can lead to problems with its LCD. The LCD may become difficult to read at temperatures lower than 0 °C (32 °F) and greater than +40 °C (104 °F).

Impact

- Your watch is designed to withstand impact incurred during normal daily use and during light activity such as playing catch, tennis, etc. Dropping your watch or otherwise subjecting it to strong impact, however, can lead to malfunction. Note that watches with shock-resistant designs (G-SHOCK, BABY-G, G-MS) can be worn while operating a chain saw or engaging in other activities that generate strong vibration, or while engaging in strenuous sports activities (motocross, etc.)

Magnetism

- Though operation of your watch normally is not affected by magnetism, its accuracy may be affected if the watch itself becomes magnetized. Also, very strong magnetism (from medical equipment, etc.) should be avoided because it can cause malfunction of your watch and damage to electronic components.

Electrostatic Charge

- Exposure to very strong electrostatic charge can cause your watch to display the wrong time. Very strong electrostatic charge even can damage electronic components.
- Electrostatic charge may cause temporary blotching in blank areas of the LCD.

Chemicals

- Do not allow your watch to come into contact with thinner, gasoline, solvents, oils, or fats, or with any cleaners, adhesives, paints, medicines, or cosmetics that contain such ingredients. Doing so can cause discoloration of or damage to the resin case, resin band, leather, and other parts.

Storage

- If you do not plan to use your watch for a long time, thoroughly wipe it free of all dirt, sweat, and moisture, and store it in a cool, dry place.

Resin Components

- Allowing your watch to remain in contact with other items or storing it together with other items for long periods while it is wet can cause color on resin components to transfer to the other items, or the color of the other items to transfer to the resin components of your watch. Be sure to dry off your watch thoroughly before storing it and make sure it is not in contact with other items.
- Leaving your watch where it is exposed to direct sunlight (ultraviolet rays) for long periods or failure to clean dirt from your watch for long periods can cause it to become discolored.
- Friction caused by certain conditions (strong external force, sustained rubbing, impact, etc.) can cause discoloration of painted components.
- If there are printed figures on the band, strong rubbing of the printed area can cause discoloration.
- Leaving your watch wet for long periods can cause fluorescent color to fade. Wipe the watch dry as soon as possible after it becomes wet.
- Semi-transparent resin parts can become discolored due to sweat and dirt, and if exposed to high temperatures and humidity for long periods.
- Daily use and long-term storage of your watch can lead to deterioration, breaking, or bending of resin components. The extent of such damage depends on usage conditions and storage conditions.

Leather Band

- Allowing your watch to remain in contact with other items or storing it together with other items for long periods while it is wet can cause the color of the leather band to transfer to the other items or the color of the other items to transfer to the leather band. Be sure to dry off your watch thoroughly with a soft cloth before storing it and make sure it is not in contact with other items.
- Leaving a leather band where it is exposed to direct sunlight (ultraviolet rays) for long periods or failure to clean dirt from a leather band for long periods can cause it to become discolored.

  CAUTION:
  Exposing a leather band to rubbing or dirt can cause color transfer and discoloration.

Metal Components

- Failure to clean dirt from metal components can lead to formation of rust, even if components are stainless steel or plated. If metal components exposed to sweat or water, wipe thoroughly with a soft, absorbent cloth and then place the watch in a well-ventilated location to dry.
- Use a soft toothbrush or similar tool to scrub the metal with a weak solution of water and a mild neutral detergent, or with soapy water. Next, rinse with water to remove all remaining detergent and then wipe dry with a soft absorbent cloth. When washing metal components, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.

● **Bacteria and Odor Resistant Band**

- The bacteria and odor resistant band protects against odor generated by the formation of bacteria from sweat, which ensures comfort and hygiene. In order to ensure maximum bacteria and odor resistance, keep the band clean. Use an absorbent soft cloth to thoroughly wipe the band clean of dirt, sweat, and moisture. A bacteria and odor resistant band suppresses the formation of organisms and bacteria. It does not protect against rash due to allergic reaction, etc.

● **Liquid Crystal Display**

- Display figures may be difficult to read when viewed from an angle.

● **Watch with Data Memory**

- Allowing the battery to go dead, replacing the battery, or having your watch repaired can cause all data in watch memory to be lost. Note that CASIO Computer Co., Ltd. assumes no responsibility for any damages or losses caused by data lost due to malfunction or repair of your watch, replacement of the battery, etc. Be sure to keep separate written copies of all important data.

● **Watch Sensors**

- A watch sensor is a precision instrument. Never try to take it apart. Never try to insert any objects into the openings of a sensor, and take care to ensure that dirt, dust, or other foreign matter does not get into it. After using your watch where it has been immersed in saltwater, rinse it thoroughly with fresh water.

Note that CASIO Computer Co., Ltd. assumes no responsibility for any damage or loss suffered by you or any third party arising through the use of your watch or its malfunction.

User Maintenance

● **Caring for Your Watch**

Remember that you wear your watch next to your skin, just like a piece of clothing. To ensure your watch performs at the level for which it is designed, keep it clean by frequently wiping with a soft cloth to keep your watch and band free of dirt, sweat, water and other foreign matter.

- Whenever your watch is exposed to sea water or mud, rinse it off with clean fresh water.
- For a metal band or a resin band with metal parts, use a soft toothbrush or similar tool to scrub the band with a weak solution of water and a mild neutral detergent, or with soapy water. Next, rinse with water to remove all remaining detergent and then wipe dry with a soft absorbent cloth. When washing the band, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.
- For a resin band, wash with water and then wipe dry with a soft cloth. Note that sometimes a smudge like pattern may appear on the surface of a resin band. This will not have any effect on your skin or clothing. Wipe with a cloth to remove the smudge pattern.
- Clean water and sweat from a leather band by wiping with a soft cloth.
- Not operating a watch crown, buttons, or rotary bezel could lead to later problems with their operation. Periodically rotate the crown and rotary bezel, and press buttons to maintain proper operation.

● **Dangers of Poor Watch Care**

Rust

- Though the metal steel used for your watch is highly rust-resistant, rust can form if your watch is not cleaned after it becomes dirty.
  - Dirt on your watch can make it impossible for oxygen to come into contact with the metal, which can lead to breakdown of the oxidization layer on the metal surface and the formation of rust.
- Rust can cause sharp areas on metal components and can cause band pins to fly out of position or to fall out. If you ever notice any abnormality immediately stop using your watch and take it to your original retailer or to an authorized CASIO service center.
- Even if the surface of the metal appears clean, sweat and rust in crevasses can soil the sleeves of clothing, cause skin irritation, and even interfere with watch performance.

Premature Wear

- Leaving sweat or water on a resin band or bezel, or storing your watch an area subject to high moisture can lead to premature wear, cuts, and breaks.

Skin Irritation

- Individuals with sensitive skin or in poor physical condition may experience skin irritation when wearing a watch. Such individuals should keep their leather band or resin band particularly clean. Should you ever experience a rash or other skin irritation, immediately remove your watch and contact a skin care professional.

Battery

- The special rechargeable battery used by your watch is not intended to be removed or replaced by you. Use of a rechargeable battery other than the special one specified for your watch can damage your watch.
- The rechargeable (secondary) battery is charged when the solar panel is exposed to light, so it does not require regular replacement as the primary battery requires. Note, however, that long use or operating conditions can cause the capacity or charging efficiency of the rechargeable battery to deteriorate. If you feel that the amount of operation provided by charging is too short, contact your original retailer or CASIO service center.