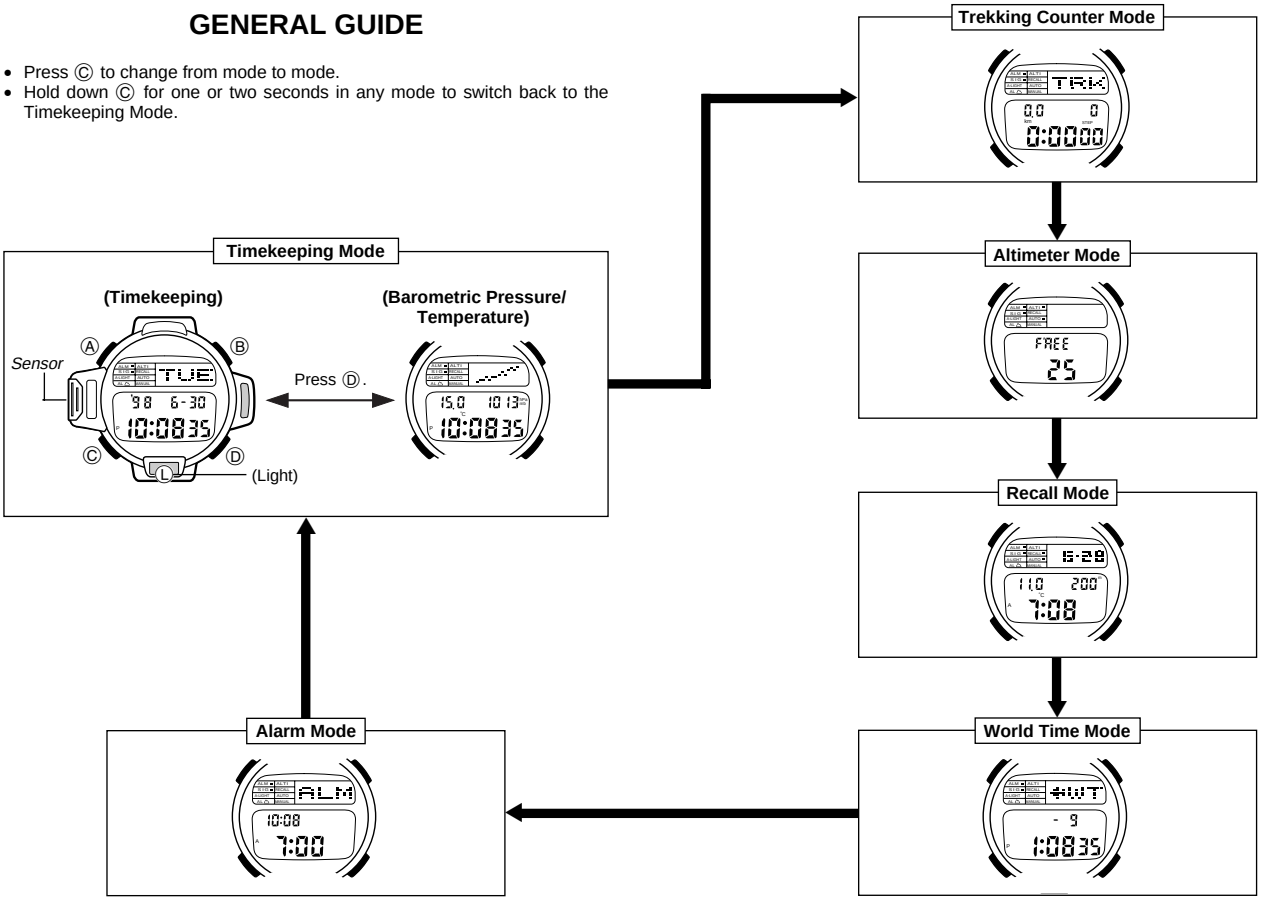
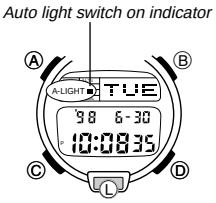
Module No. 1571

GENERAL GUIDE

- Press Ⓒ to change from mode to mode.
- Hold down Ⓒ for one or two seconds in any mode to switch back to the Timekeeping Mode.



BACKLIGHT



The backlight uses an EL (electro-luminescent) panel that causes the entire display to glow for easy reading in the dark. The watch's auto light switch automatically turns on the backlight when you angle the watch towards your face.

- The auto light switch must be turned on (indicated by the auto light switch on indicator) for it to operate.

Note

- The electro-luminescent panel loses illuminating power after very long use.

- The illumination provided by the backlight may be hard to see when viewed under direct sunlight.
- The watch will emit an audible sound whenever the display is illuminated. This is caused by a transformer that vibrates when the EL panel lights up. It does not indicate malfunction of the watch.
- The backlight automatically turns off whenever an alarm sounds.

To manually turn on the backlight

In any mode, press Ⓛ to illuminate the display for about two seconds.

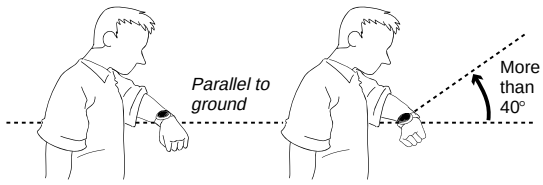
- The above operation turns on the backlight regardless of the current auto light switch setting.

About the Auto Light Switch

Turning on the auto light switch causes the backlight to turn on whenever you position your wrist as described below.

- Avoid wearing the watch on the inside of your wrist. Doing so causes the auto light switch to operate when it is not needed, which shortens battery life.

Moving the watch to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes the backlight to light.



- The backlight turns off in about two seconds, even if you keep the watch pointed towards your face.
- The backlight may not light if the face of the watch is more than 15 degrees off the parallel as shown below. Make sure that the back of your hand is parallel to the ground.

Parallel to ground | *More than 15 degrees too high* | *More than 15 degrees too low*

- Static electricity or magnetic force can interfere with proper operation of the auto light switch. If the backlight does not light, try moving the watch back to the starting position (parallel with the ground) and then tilt it back toward you again. If this does not work, drop your arm all the way down so it hangs at your side, and then bring it back up again.
- Under certain conditions the backlight may not light until about one second or less after turn the face of the watch towards you. This does not necessarily indicate malfunction of the backlight.

To turn the auto light switch on and off

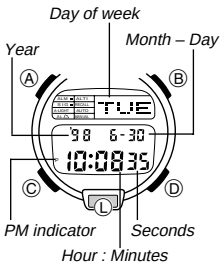
In the Timekeeping Mode, hold down Ⓓ for one second to turn the auto light switch on (**A-LIGHT** ■) and off (**A-LIGHT**).

- In order to protect against running down the battery, the auto light switch is automatically turned off approximately two or three hours after you turn it on. Repeat the above procedure to turn the auto light switch back on if you want.
- The ■ mark next to **A-LIGHT** is on the display in all modes while the auto light switch is turned on.

Warning!

- **Never try to read your watch when mountain climbing or hiking in areas that are dark or in areas with poor footing. Doing so is dangerous and can result in serious personal injury.**
- **Never try to read your watch when running where there is danger of accidents, especially in locations where there might be vehicular or pedestrian traffic. Doing so is dangerous and can result in serious personal injury.**
- **Never try to read your watch when riding on a bicycle or when operating a motorcycle or any other motor vehicle. Doing so is dangerous and can result in a traffic accident and serious personal injury.**
- **When you are wearing the watch, make sure that its auto light switch is turned off before riding on a bicycle or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of the auto light switch can create a distraction, which can result in a traffic accident and serious personal injury.**

TIMEKEEPING FUNCTION



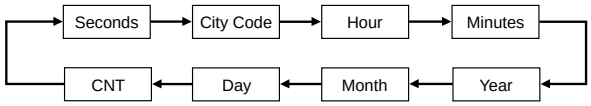
In addition to time and date settings, the Timekeeping Mode also lets you adjust the contrast of the display. Timekeeping Mode time is linked with World Time Mode time, so be sure to select the city code for your current location before setting the time in the Timekeeping Mode.

Setting the city code, time, and date

1. In the Timekeeping Mode, press Ⓓ until the Timekeeping screen appears.
2. Hold down Ⓐ until the seconds digits starts to flash on the display. The seconds digits flash because they are *selected.*

- At this time, the city code currently set for the Timekeeping Mode appears in the upper part of the display in place of the day of the week.

3. Press Ⓒ to change the selection in the following sequence.



- See "Adjusting the display contrast" for details on using the CNT (contrast) setting.

4. While the seconds digits are selected (flashing), press Ⓓ to reset the seconds to 00 and Ⓛ to toggle between the 12-hour and 24-hour formats.

- If you press Ⓓ while the seconds count is in the range of 30 to 59, the seconds are reset to 00 and 1 is added to the minutes. If the seconds count is in the range of 00 to 29, the minutes count is unchanged.
- With the 12-hour format, the **P** (PM) indicator appears to the left of the hour digits for times in the range of noon to 11:59 pm and the **A** (AM) indicator appears to the left of the hour digits for times in the range of midnight to 11:59 am.
- The 24-hour format is indicated by **24** on the display. Times are shown in the range of 00:00 to 23:59.

5. Press Ⓒ until the city code is flashing on the display.
6. Use Ⓑ and Ⓓ to scroll through the city codes until you find the one you want to set as your home city.

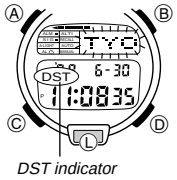
- Ⓓ scrolls forward, while Ⓑ scrolls back through the city codes. Holding down either button scrolls through the city codes at high speed.
- See the "CITY CODE TABLE" for a complete list of available codes.

7. Press Ⓒ until the hour digits are flashing on display.
8. Press Ⓓ to increase the setting or Ⓑ to decrease it. Holding down either button changes the setting at high speed.
9. Repeat steps 7 and 8 to set the minutes, year, month, and day.
10. After you make the settings you want, press Ⓐ to return to the Timekeeping Mode (Timekeeping screen).

- The day of the week is automatically set in accordance with the date.
- The date can be set within the range of January 1, 1995 to December 31, 2039.
- Changing the Timekeeping Mode's city code also causes the time to change to the current time in time zone where the city is located.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Timekeeping Mode automatically.
- Holding down Ⓑ while in the Timekeeping Mode (Timekeeping screen) displays the currently selected city code in place of the day of the week.

Switching between standard time and daylight saving time

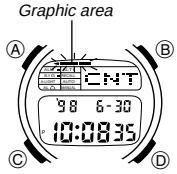
Daylight Saving Time (DST), which is also sometimes called "summer time," advances the time one hour, as is the custom in some areas during the summer.



1. In the Timekeeping Mode, press Ⓓ until the Timekeeping screen appears.
2. Hold down Ⓐ until the seconds digits starts to flash on the display. The seconds digits flash because they are *selected*.
3. Press Ⓒ until the city code is flashing on the display.
4. Press Ⓛ to toggle Daylight Saving Time on (**DST** displayed) and off (**DST** not displayed).
5. After you make the settings you want, press Ⓐ to return to the Timekeeping Mode (Timekeeping screen).

- The **DST** indicator appears on the display to indicate that daylight saving time is turned on.

Adjusting the display contrast



1. In the Timekeeping Mode, press Ⓓ until the Timekeeping screen appears.
2. Hold down Ⓐ until the seconds digits starts to flash on the display. The seconds digits flash because they are *selected*.

- At this time, dots appear in the graphic area of the display to indicate the current contrast setting. Every two dots represent one contrast level.

3. Press Ⓒ seven times until the CNT indicator appears on the display.
4. Pressing Ⓓ makes the images on the display darker, while Ⓑ makes them lighter.

- Display contrast can be adjusted to one of six levels. Two dots in the graphic area indicate the lightest contrast setting (Level 1), while 12 dots indicates the darkest setting (Level 6).

5. After you make the settings you want, press Ⓐ to return to the Timekeeping Mode (Timekeeping screen).

BAROMETER FUNCTIONS

This watch uses a pressure sensor to measure air pressure. This sensor can be calibrated.

Important!

The barometer that is built into this watch measures changes in air pressure, which you can then apply to your own weather predictions. It is not intended for use as a precision instrument in official weather prediction or reporting applications.

Example barometer applications

- Before going mountain climbing, you can take readings to find out the probable upcoming weather.
- You can predict the weather for golf or other outdoor activities.

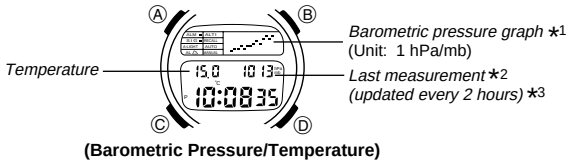
About barometric measurements

The barometer automatically takes measurements every two hours (starting from midnight), regardless of what mode you are in. Barometric pressure measurements are also taken every five seconds for three minutes after you display the Timekeeping Mode's Barometric pressure/Temperature screen. The last measurement result, along with the current temperature is displayed in the Barometric pressure/Temperature screen.

Understanding the barometer screen

1. Use Ⓒ to enter the Timekeeping Mode.
2. Press Ⓓ to display the Barometric Pressure/Temperature screen.

- If you do not press any button for 10 or 11 hours, the watch automatically returns to the Timekeeping screen.



(Barometric Pressure/Temperature)

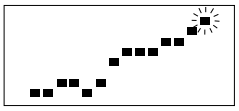
*1 The barometric pressure graph shows the barometric readings for the past 26 hours. The flashing point on the right of the display is the point for the last measurement.

*2 Some countries call this unit hecto-pascal (hPa), while other countries call it millibars (mb). It really makes no difference, because 1 hPa = 1 mb. In this manual, we will refer to hPa/mb or hPa (mb).

*3 The display shows "– – – – hPa/mb" if a measured value falls outside the range of 460 hPa/mb to 1100 hPa/mb. The normal display will return as soon as the pressure returns within the allowable range.

Using the barometric pressure graph

Changes in barometric pressure are caused by changes in the weather and temperature. The following shows how to interpret the data that appears on the barometric pressure graph.



A rising graph generally means better weather.

A falling graph generally means deteriorating weather.

Note that if there are sudden changes in weather or temperature, the graph line of past measurements may run off the top or bottom of the display. The entire graph will become visible once barometric conditions stabilize.

Not visible on display

The following conditions cause the barometric pressure measurement to be skipped, with the corresponding point on the barometric pressure graph being left blank.

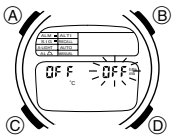
- Barometric reading that is out of range (460 hPa/mb to 1100 hPa/mb)
- Sensor malfunction
- Dead battery

Calibrating the barometric pressure measurement

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

Important!
Incorrectly calibrating the barometric pressure measurement of this watch can result in incorrect readings. Compare the readings produced by the watch with those of another reliable accurate barometer.

To calibrate the barometric pressure



1. In the Timekeeping Mode, use Ⓓ to display the barometric pressure and temperature.
2. Hold down Ⓐ until the display clears. OFF or the temperature value should be flashing on the display.
3. Press Ⓒ to show the barometric pressure calibration display. At this time, OFF or the barometric pressure value should be flashing on the display.

- The OFF indicator appears when the factory setting is being used for the calibration.

4. Each press of Ⓓ increases the displayed barometric pressure by 1 hPa/mb, while pressing Ⓑ decreases it. Holding down either button changes the value at high speed.

- Pressing Ⓑ and Ⓓ at the same time returns to the OFF display.

5. After calibrating the barometric pressure, press Ⓐ to return to the Barometric Pressure/Temperature screen.

- If you do not operate any button for a few minutes while the barometric pressure digits are flashing, the flashing stops and the watch goes back to the Barometric Pressure/Temperature screen.

THERMOMETER FUNCTIONS

A built-in temperature sensor measures temperature and shows the measured value on the display. The thermometer can be calibrated.

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

About temperature measurements

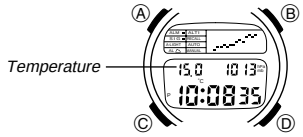
Temperature measurements are taken automatically every five minutes, regardless of what mode the watch is in. Measured temperature values can be viewed in the Timekeeping or Altimeter Mode. Temperature measurements are taken every five seconds for the first three minutes after you display the Timekeeping Mode's Barometric Pressure/Temperature screen, or after you enter the Altimeter Mode. After that, temperature measurements are taken every five minutes.

- Temperature measurement data can be recalled along with altitude measurement data.

Understanding the temperature display

1. Use Ⓒ to enter the Timekeeping Mode.
2. Press Ⓓ to display the Barometric Pressure/Temperature screen.

- If you do not press any button for 10 or 11 hours, the watch automatically returns to the Timekeeping screen.



(Barometric Pressure/Temperature)

- The display shows "– –.– °C" if a measured value falls outside the range of –20.0°C to 60.0°C. The normal display will return as soon as the temperature returns within the allowable range.
- For details on viewing the temperature in the Altimeter Mode, see "Understanding the altimeter display".

Calibrating the temperature measurement

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

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

- Compare the readings produced by the watch with those of another reliable, accurate thermometer.
- If adjustment is required, remove the watch from your wrist and wait for 20 or 30 minutes to give the temperature of the watch time to stabilize.

To calibrate the temperature

1. In the Timekeeping Mode, use Ⓓ to display the barometric pressure and temperature.
2. Hold down Ⓐ until the display clears. OFF or the temperature value should be flashing on the display.

- The OFF indicator appears when the factory setting is being used for the calibration.

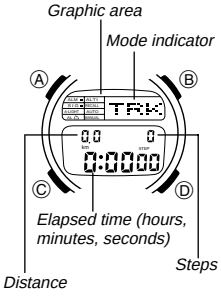
3. Each press of Ⓓ increases the displayed temperature by 0.1°C while pressing Ⓑ decreases it. Holding down either button changes the value at high speed.

- Pressing Ⓑ and Ⓓ at the same time returns to the OFF display.

4. After calibrating the temperature, press Ⓐ to return to the Barometric Pressure/Temperature screen.

- If you do not operate any button for a few minutes while the temperature digits are flashing, the flashing stops and the watch goes back to the Barometric Pressure/Temperature screen.

TREKKING COUNTER FUNCTIONS



The trekking counter uses a vibration sensor to count how many steps you take. It also records the amount of time you spend walking. After you input the length of your stride, it also automatically calculates and displays the distance you have covered.

Important!

- The watch must be hanging free in order for the vibration sensor to work, so the trekking counter cannot count the number of steps you take if the watch is on your wrist. Be sure to wear the watch on your waist.

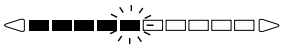
- Note that the accuracy of data measured by the trekking counter can be affected when you are walking on sand or other soft ground, on a steep upgrade, on a steep downgrade, or on stairs.
- Be sure to take care not to drop the watch while walking.
- To improve the accuracy of measured data, be sure to turn off the trekking counter whenever you are taking a break or stop walking for any other reason.

Setting your stride length

1. Use Ⓒ to enter the Trekking Counter Mode.
2. Hold down Ⓐ until the stride length value flashes on the display.
3. Each press of Ⓓ increases the value by 1, while Ⓑ decreases it. Holding down either button changes the value at high speed.
   - You can set a stride length in the range of 20 to 200 cm.
4. After you finish making the setting, press Ⓐ to return to the Trekking Counter Mode.
   - If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Trekking Counter Mode automatically.

Using the trekking counter

1. Attach the watch correctly to your belt.
   - See “BAND CLIP” for details. The procedure you should use depends on the type of band (cloth, leather, metal) that comes with your watch.
2. Press Ⓓ while in the Trekking Counter Mode to start the trekking counter operation.
   - Elapsed time, number of steps, and distance covered are all shown on the display while the trekking counter is operating.
3. Press Ⓓ to temporarily stop trekking counter operation.
   - You can use Ⓓ to stop and re-start trekking counter operation as many times as you like. Each time you press Ⓓ to re-start, the elapsed time, number of steps and distance covered values start from point they were at when you press Ⓓ to stop trekking counter operation.
   - The trekking counter operation continues internally even if you change to another mode.
   - If you change the stride length setting while a trekking counter operation is in progress causes the trekking counter operation to pause. Pressing Ⓓ resumes the operation.
4. After you are finished using the trekking counter, press Ⓓ to stop operation and then press Ⓑ to clear all of the values to zero.
   - The trekking counter is not intended for use as an all-day pedometer. Trekking counter operation requires considerable battery power, so be sure to press Ⓓ to stop its operation after you are through using it. Next, hold down Ⓒ for about two seconds to return to the Timekeeping Mode.
   - To protect against prematurely running down the battery, trekking counter operation turns off automatically and the watch emits a 2-second beep to alert you if the trekking counter is left on for more than 24 hours. Note that measured values up to the point that the trekking counter turns off are retained, so you can start the next operation from the displayed values.
   - While the trekking counter is operating, the graphic area of the display indicates the number of steps you have taken. The first block flashes during steps 0 through 999. At step 1,000, the first block stays on and the second block flashes from steps 1,000 to 1,999. This continues block-by-block until step 9,999. At step 10,000, the first block flashes and the process starts again. The display below that the number of steps is in the range of 4,000 to 4,999 (or 14,000 to 14,999, 24,000 to 24,999, etc.).



ALTIMETER FUNCTIONS

A built-in altimeter uses a pressure sensor to detect the current air pressure, which is then used to estimate the current altitude in accordance with ISA (International Standard Atmosphere) values for altitude and air pressure. If you preset a reference altitude, the watch will also calculate the current relative altitude based on your preset value. Altimeter functions also include data storage memory and an altitude alarm.

Important!

- This watch estimates altitude based on air pressure. This means that altitude readings for the same location may vary if air pressure changes.
- Sudden changes in the weather make it impossible to produce accurate altitude readings.
- This watch employs a semiconductor pressure sensor, which is affected by temperature changes. When taking altitude measurements, be sure to do so while ensuring that the watch is not exposed to temperature changes.
- Do not use this watch while participating in sports where there are sudden altitude changes. Also, do not use this watch for applications that demand professional or industrial level precision. This watch should not be used while engaging in the following activities: sky diving, hang gliding, paragliding, gyrocopter riding, glider riding, etc.

Applications

When no reference altitude is preset:

- The watch produces approximate altitude readings.

When a reference altitude is preset:

- Before beginning the climb, set the reference altitude to 0 m at the foot of the mountain. This makes it possible to determine the difference in altitude between the reference point and your destination.
- To determine the height of a tall building, set the reference altitude to 0 m on the ground floor. Note, however, that if the building is pressurized or air conditioned, you may not be able to get a good reading.

- To determine the difference in altitude between your house and another location, set the reference altitude to 0 m at your house, and then check the reading when you arrive at the other location.
- When mountain climbing, you can input the altitude from a marker as your reference altitude, which will then let you know your altitude as your climb proceeds. The following conditions will prevent you from obtaining accurate readings:

When air pressure changes because of changes in the weather
Extreme temperature changes
When the watch itself is subjected to strong impact

About altitude measurements

There are two types of altitude measurements: those for displayed data (Altimeter Mode measurement) and those for memory data (memory measurements; See “Memory measurements”).

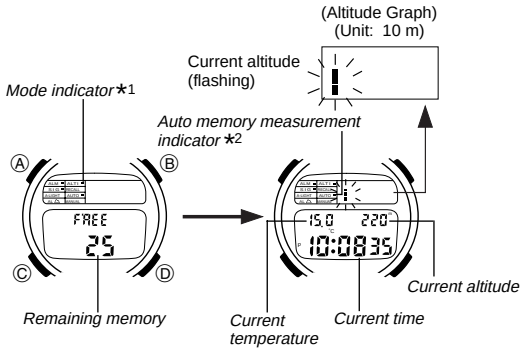
Altimeter Mode measurement

This type of measurement is performed only when the watch is in the Altimeter Mode. As soon as you enter the Altimeter Mode, measurements are taken every five seconds for the first three minutes. After that, measurements are taken every two minutes. The display unit for Altimeter Mode measurements is 5 m, and the display range is 0 to 6000 m.

- The measured altitude may be a negative value in cases where there is a reference altitude value set or because of certain atmospheric conditions.

Understanding the altimeter display

Use Ⓒ to enter the Altimeter Mode. Note that once you enter the Altimeter Mode, if you do not press any button for 10 or 11 hours, the watch automatically returns to the Timekeeping Mode.



*1 The ■ mark next to **ALTI** flashes while a measurement is being taken every five seconds. It does not flash during the measurements taken every two minutes.

*2 The ■ mark next to **AUTO** flashes while a memory measurement is in progress. The indicator stops flashing while no measurement is being performed.

Memory measurements

Memory measurements are taken independently of Altimeter Mode measurements and stored directly into memory (along with temperature measurements) for later recall. There are two types of memory measurements: “Auto Memory Measurements” and “Manual Memory Measurements”.

Auto Memory Measurements

With auto memory measurement, the watch continuously performs measurements whenever the minutes in the Timekeeping Mode reach 00, 15, 30, or 45, until you switch auto measurements off. The watch continues to take measurements regardless of whether or not you change modes, so you can keep a running log of temperature and altitude changes automatically.

Manual Memory Measurements

You can use the manual procedure to take a reading anytime you want to store your current altitude data into memory for later recall. Manual memory measurements can be performed only while the watch is in the Altimeter Mode.

About the memory...

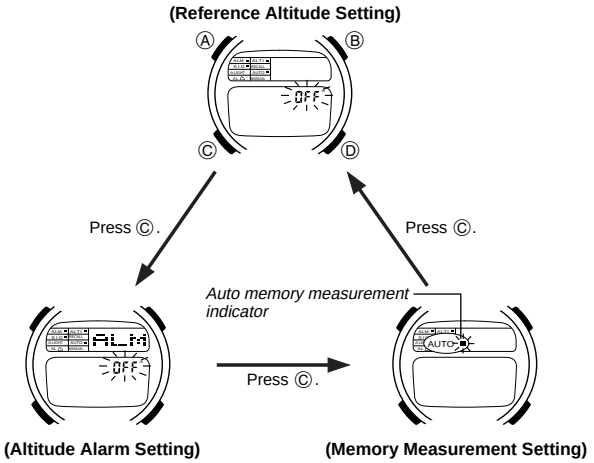
Each memory item (auto or manual) stored by the watch consists of the current altitude, plus the date, time, and temperature. Data is stored in the same sequence that it is input.
Memory can hold a total of 50 sets of data, which is enough to store 12 hours and 15 minutes of auto memory data (if you do not take any manual readings during that time).

Important!
Further auto or manual memory measurements become impossible whenever memory is full. The message FULL on the display indicates that memory is full. Always check the amount of memory remaining before starting memory measurements, and delete data if necessary.

Selecting Auto or Manual Memory Measurement

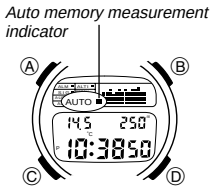
Use the following procedure to switch between auto or manual memory measurement. Note that you cannot perform this operation while a preset auto memory measurement is already in progress.

1. In the Altimeter Mode, hold down Ⓐ until the display clears. After 4 or 5 seconds, either OFF or the current reference altitude value (if set) will start to flash. The data flashes because it is *selected*.
2. Press Ⓒ to change the selection in the following sequence.



3. Press Ⓒ to select the Memory Measurement Setting screen (with either the ■ mark next to **AUTO** or **MANUAL** flashing).
4. Press Ⓑ or Ⓓ to switch between auto memory measurement (**AUTO** ■) or manual memory measurement (**MANUAL** ■).
5. After selecting the type of measurement you want, press Ⓐ to return to the Altimeter Mode.

Using Auto Memory Measurement



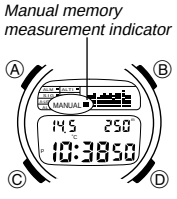
1. Confirm that the auto memory measurement indicator is shown on the display. If it is not, use the procedures under "Selecting Auto or Manual Memory Measurement" to select auto memory measurement.
2. Hold down Ⓓ until the watch emits a short beep, indicating the start of the measurement.
- The data measured when you first start auto memory measurement is also stored into memory.

- The auto memory measurement indicator flashes on the display when you start auto memory measurements. The indicator continues to flash (indicating that measurements continue) even if you change modes.
- Auto memory measurement cuts off automatically whenever there are 49 sets of data stored in memory. The 50th set of data measured when you stop the measurement operation in step 3 below is also stored in memory.

3. To stop measurements at any point, hold down Ⓓ again until the watch emits a short beep.

- A final measurement is taken when you switch auto memory measurement off, and that data is also stored into memory. Such data is indicated by FIN during the recall operation.

Using Manual Memory Measurement

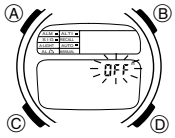


1. Confirm that the manual memory measurement indicator is shown on the display. If it is not, use the procedures under "Selecting Auto or Manual Memory Measurement" to select manual memory measurement.
2. Hold down Ⓓ until the watch emits a short beep, indicating that a measurement is taken.
3. Repeat step 2 whenever you want to take a reading.

- Button operation becomes impossible during the 4 or 5 seconds that it takes to complete a measurement. Normal operation will return once the operation is finished.

Setting a Reference Altitude

After you set a reference altitude, the watch automatically calculates the difference between the current altitude and your preset value. The altitude measurements produced by this watch are subject to error caused by changes in air pressure. Because of this, we recommend that you set the reference altitude during your climb whenever one is available.



1. In the Altimeter Mode, hold down Ⓐ until the display clears. After 4 or 5 seconds, either OFF or the current reference altitude value (if set) will start to flash. The data flashes because it is *selected*.
- The OFF indicator appears when the factory setting is being used for the calibration.

2. Press Ⓓ to increase the current reference altitude value by 5 m or Ⓑ to decrease it. Holding down either button changes the value at high speed.
- You can set the reference altitude within the range of –6000 m to 6000 m.
- Pressing Ⓑ and Ⓓ at the same time returns to the OFF message.

3. After setting the reference altitude you want, press Ⓐ to return to the Altimeter Mode.

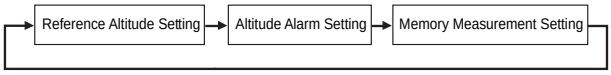
About the Altitude Alarm

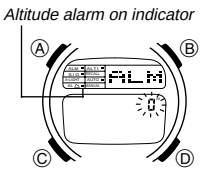
The altitude alarm sounds for about five seconds whenever the current altitude matches a preset value. You can press any button to stop the alarm after it starts to sound. Note that the altitude alarm sounds only while the watch is in the Altimeter Mode.

Example:
If you set the altitude alarm at 130 meters, it will sound when you pass the 130-meter mark on your way up and on your way back down.

To set the altitude alarm

1. In the Altimeter Mode, hold down Ⓐ until the display clears. After 4 or 5 seconds, either OFF or the current reference altitude value (if set) will start to flash. The data flashes because it is *selected*.
2. Press Ⓒ to change the selection in the following sequence.



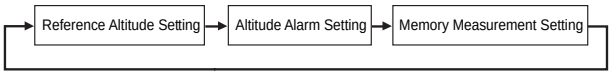


3. Press Ⓒ to select the altitude alarm setting display (indicated by the ALM indicator).
4. Press Ⓓ to increase the altitude alarm value by 5 m or Ⓑ to decrease it. Holding down either button changes the value at high speed.
- You can set the altitude alarm setting within the range of –6000 m to 6000 m.
- Setting an altitude value automatically switches the altitude alarm on.

5. After setting the altitude alarm value, press Ⓐ to return to the Altimeter Mode.

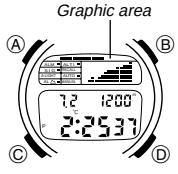
To switch the altitude alarm off

1. In the Altimeter Mode, hold down Ⓐ until the display clears. After 4 or 5 seconds, either OFF or the current reference altitude value (if set) will start to flash. The data flashes because it is *selected*.
2. Press Ⓒ to change the selection in the following sequence.



3. Press Ⓒ to select the altitude alarm setting display (indicated by the ALM indicator).
4. Press Ⓓ and Ⓑ at the same time to change the setting to OFF and switch the altitude alarm off.
5. After switching the altitude alarm off, press Ⓐ to return to the Altimeter Mode.

About the Target Altitude Graph



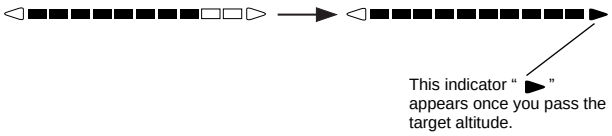
The Target Altitude Graph appears in the graphic area of the display in the Altimeter Mode. It divides the difference between your start point* altitude and the value you set for the altitude alarm into 10 equal parts. It then shows a graph that shows your current location, to give you some idea of how much farther you must go to reach your altitude setting.

* The start point differs according to what type of memory measurement procedure you are using. With auto memory measurements (**AUTO** ■ shown on the display), the start point is the first altitude measured. With manual memory measurements (**MANUAL** ■ shown on the display), the start point is 0 m.

- The target altitude graph is not shown on the display if the altitude alarm is off.

Example:

- The display below would appear at a current altitude of 160 m when you are using manual memory measurement with a target altitude setting of 200 m. Eight points on the graph are darkened because you are 8/10 of the way to your target.



- The display below would appear at a current altitude of 160 m when you are using auto memory measurement with a target altitude setting of 200 m and a starting point of 100 m. Six points on the graph are darkened because you are 6/10 of the way to your target.

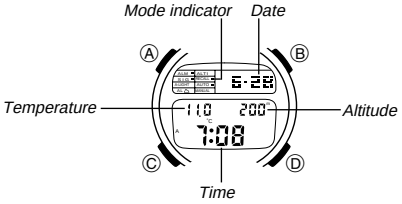
About memory data

Use the following procedures to recall measurement data stored in memory.

To scroll through data items

1. Use Ⓒ to enter the Recall Mode.
2. Press Ⓓ to scroll forward through the stored data items or Ⓑ to scroll backward.

- Holding down either button scrolls through the data items at high speed.
- The data item that is displayed when you exit the Recall Mode is still displayed the next time you enter the Recall Mode.

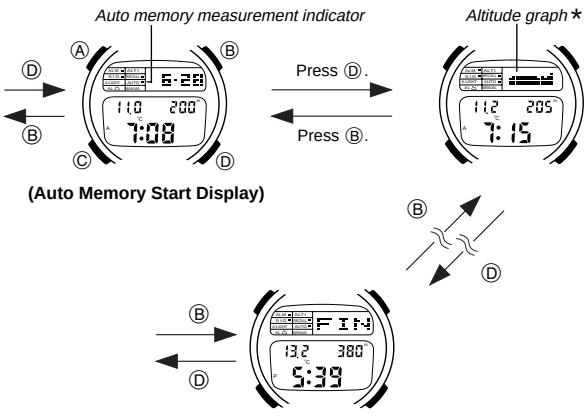


- Measured data is stored in memory even if an error occurs during the measurement. For details on errors, see "ERROR WARNING FUNCTIONS".

About the memory data display

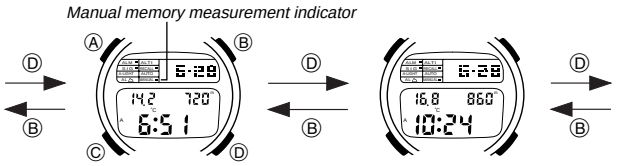
Data stored in memory appears in one of the formats shown below, depending on the measurement method (auto or manual), or whether it is the maximum or minimum reading.

- Auto Memory Data

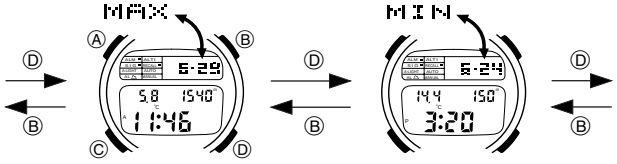


* An altitude graph appears in place of the date for the display of data between the start and end data. The altitude graph divides by 8 the difference between the maximum and minimum altitudes achieved during the auto memory measurement, and shows relative changes.

- Manual Memory Data



- Maximum/Minimum Data

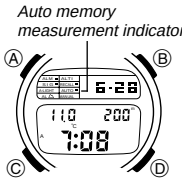


Deleting Data

Delete data in the Recall Mode. The actual procedure you should use to delete data depends on the type of data it is.

To delete auto memory data

The following procedure deletes an entire set (from start measurement to end measurement) of auto memory data.



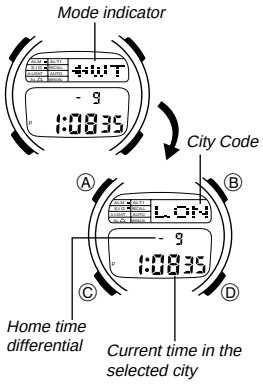
Important!
You cannot delete data while an auto memory measurement is in progress (the ■ mark next to **AUTO** flashing).

1. In the Recall Mode, display the start data of the set of auto memory data that you want to delete.
2. To clear the data, hold down Ⓐ until the watch emits a beep (and until CLR stops flashing on the display).

To delete manual memory, maximum, and minimum data

1. In the Recall Mode, display the data that you want to delete.
2. To clear the data, hold down Ⓐ until the watch emits a beep (and until CLR stops flashing on the display).

WORLD TIME FUNCTIONS



The World Time Mode shows the current time in 27 cities (29 time zones) around the world.

- For full information on city codes, see the "CITY CODE TABLE".
- The Home Time differential shows the difference between the time in the currently displayed city and the city that is selected in the Timekeeping Mode.
- The time zone that is displayed when you leave the World Time Mode will still be displayed when you enter the World Time Mode again.

Timekeeping in the World Time Mode

The current time in all the World Time zones is calculated in accordance with the Greenwich Mean Time (GMT) differential for each zone, based on the current home time setting in the Timekeeping Mode.
You can also turn Daylight Saving Time (DST) on or off separately for each time zone. Turning on daylight saving time automatically advances the corresponding time setting by one hour.

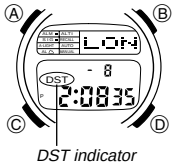
- The seconds count of the World Time is synchronized with the seconds count in the Timekeeping Mode.
- The 12-hour/24-hour format of the World Time matches the format you select in the Timekeeping Mode.
- With daylight saving time, clocks are set one hour later in order to better take advantage of daylight hours during the summer, when days are longer. Whether or not daylight saving time is used depends on the country you are in.

Viewing the Time in Another Zone

1. Use Ⓒ to enter the World Time Mode.
2. Press Ⓓ to scroll forward through the city codes (time zones) and Ⓑ to scroll back.

- Holding down either button scrolls through the city codes at high speed.

Switching a Zone between Standard Time and Daylight Saving Time



DST indicator

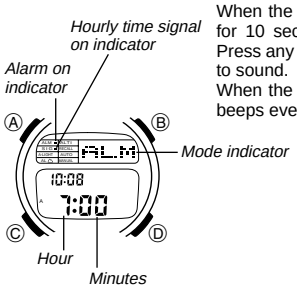
1. In the World Time Mode, display the time zone (city code) whose standard time/ daylight saving time setting you want to change.

- You can make separate settings for each zone (city).

2. Hold down Ⓐ for about one second to toggle daylight saving time on (**DST** displayed) and off (**DST** not displayed).

- The **DST** indicator appears whenever daylight saving time is turned on for the zone (city) whose time is currently on the display.

ALARM FUNCTIONS



When the Daily Alarm is on, the alarm sounds for 10 seconds at the preset time each day. Press any button to stop the alarm after it starts to sound.
When the Hourly Time Signal is on, the watch beeps every hour on the hour.

Setting the alarm time

1. Use Ⓒ to enter the Alarm Mode.
2. Hold down Ⓐ until the hour digits flash on the display. The hour digits flash because they are *selected*.

- At this time, the alarm is automatically switched on.

3. Press Ⓒ to change the selection in the following sequence.

Hour ⟷ Minutes

4. Press Ⓓ to increase the selection or Ⓑ to decrease it. Holding down either button changes the selection at high speed.

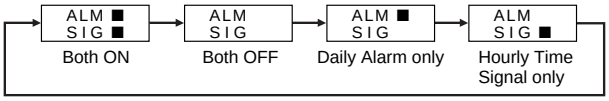
- The format (12-hour and 24-hour) of the alarm time matches the format you select for normal timekeeping.
- When setting the alarm time using the 12-hour format, take care to set the time correctly as morning (A) or afternoon (P).

5. After you set the alarm, press Ⓐ to return to the Alarm Mode.

Turning the Daily Alarm and Hourly Time Signal on and off

Press Ⓓ while in the Alarm Mode to change the status of the Daily Alarm and Hourly Time Signal in the following sequence.

[Alarm ON Indicator / Hourly Time Signal ON Indicator]



Testing the alarm

Hold down Ⓓ while in the Alarm Mode to sound the alarm.

ERROR WARNING FUNCTIONS

This watch is designed to automatically stop taking measurements when there is a sensor malfunction, when battery power drops below a certain level, or when battery voltage is decreased below a certain level due to very cold temperatures.

Sensor malfunction

Momentary voltage drop

Low battery

Important!

- If the sensor is malfunctioning when it comes time for an barometric pressure measurement to be taken, the barometric pressure value appears as - - - - on the display and the corresponding point on the barometric pressure graph is left blank.
- ■ marks flash next to **ALM**, **SIG** and **A-LIGHT** whenever there is a momentary voltage drop due to continuous use of the backlight, etc. The marks stop flashing when voltage returns to its normal level.
- The alarm, hourly time signal, and backlight are all disabled whenever the ■ marks are flashing on the display.
- All functions, except for mode change operations, are disabled while the BAT message is on the display.
- There may be cases where the ERR or BAT message is cleared once you change modes. In this case, you can continue using the watch normally unless the error warning message reappears.

Whenever there is a sensor malfunction, be sure to take the watch to an authorized CASIO distributor or Service Center as soon as possible. If the appearance of the BAT message is caused by extremely low temperature, the message should clear from the display when normal temperature returns. It is recommended, however, that you still have the watch checked by an authorized CASIO distributor or Service Center.

Battery Replacement

ALWAYS LEAVE BATTERY REPLACEMENT UP TO THE DEALER WHERE YOU BOUGHT THE WATCH OR TO AN AUTHORIZED CASIO DISTRIBUTOR. BE SURE TO SHOW THE FOLLOWING INFORMATION TO THE PERSON REPLACING THE BATTERY.

Attention dealer or CASIO distributor

Be sure to use the following procedure when replacing the battery.

1. Open and remove the back cover.

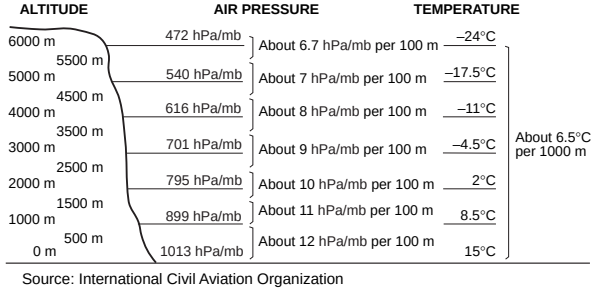
- If CLOSE appears on the display when you open the back cover, replace the back cover. Wait for a few minutes and try again.
- The message WAIT on the display after you replace the cover indicates that the watch is storing data to or recalling data from EEPROM. Wait for a while before replacing the battery to give the WAIT message a chance to clear. If WAIT remains on the display for a long time, go ahead and replace the battery.

2. Remove the battery holder.
3. Remove the old battery and load a new one.
4. Replace the battery holder.
5. Touch the AC contact and the battery (+) side with metallic tweezers.
6. Close the back cover.

ABOUT ALTITUDE AND AIR PRESSURE MEASUREMENTS

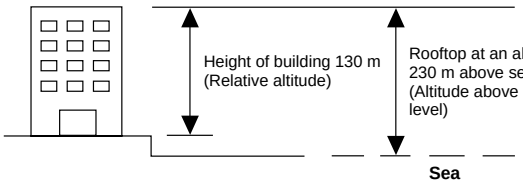
Altimeter

Generally, air pressure and temperature decrease as altitude increases. This watch bases its altitude measurements on International Standard Atmosphere (ISA) values stipulated by the International Civil Aviation Organization (ICAO), which define relationships between altitude, air pressure, and temperature.



Source: International Civil Aviation Organization

There are two standard methods of expressing altitude: Absolute altitude and relative altitude. Absolute altitude expresses an absolute height above sea level. Relative altitude expresses the difference between the height of two different places.



Barometer

Barometric pressure indicates changes in the atmosphere, and by monitoring these changes you can predict the weather with reasonable accuracy. Rising barometric pressure indicates good weather, while falling pressure indicates deteriorating weather conditions.

The barometric pressures that you see in the newspaper and on the TV weather report are measurements corrected to values measured at 0 m sea level.

CITY CODE TABLE

City Code	City	GMT Differential	Other major cities in same time zone
– – –		–11	PAGO PAGO
HNL	HONOLULU	–10	PAPEETE
ANC	ANCHORAGE	–09	NOME
LAX	LOS ANGELES	–08	SAN FRANCISCO, LAS VEGAS, VANCOUVER, SEATTLE, DAWSON CITY
DEN	DENVER	–07	EL PASO, EDMONTON
CHI	CHICAGO	–06	HOUSTON, DALLAS/FORT WORTH, NEW ORLEANS, MEXICO CITY, WINNIPEG
NYC	NEW YORK	–05	MONTREAL, DETROIT, MIAMI, BOSTON, PANAMA CITY, HAVANA, LIMA, BOGOTA
CCS	CARACAS	–04	LA PAZ, SANTIAGO, PORT OF SPAIN
RIO	RIO DE JANEIRO	–03	SAO PAULO, BUENOS AIRES, BRASILIA, MONTEVIDEO
– – –		–02	
– – –		–01	PRAIA
LON	LONDON	+00	DUBLIN, LISBON, CASABLANCA, DAKAR, ABIDJAN
PAR	PARIS	+01	MILAN, ROME, MADRID, AMSTERDAM, ALGIERS, HAMBURG, FRANKFURT, VIENNA, STOCKHOLM, BERLIN
CAI	CAIRO	+02	ATHENS, HELSINKI, ISTANBUL, BEIRUT,
JRS	JERUSALEM		DAMASCUS, CAPE TOWN
JED	JEDDAH	+03	KUWAIT, RIYADH, ADEN, ADDIS ABABA, NAIROBI
THR	TEHRAN	+3.5	SHIRAZ
DXB	DUBAI	+04	ABU DHABI, MUSCAT
KBL	KABUL	+4.5	
KHI	KARACHI	+05	
DEL	DELHI	+5.5	MUMBAI, CALCUTTA
DAC	DHAKA	+06	COLOMBO
RGN	YANGON	+6.5	
BKK	BANGKOK	+07	JAKARTA, PHNOM PENH, HANOI, VIENTIANE
HKG	HONG KONG	+08	SINGAPORE, KUALA LUMPUR, BEIJING, TAIPEI, MANILA, PERTH, ULAANBAATAR
TYO	TOKYO	+09	SEOUL, PYONGYANG
ADL	ADELAIDE	+9.5	DARWIN
SYD	SYDNEY	+10	MELBOURNE, GUAM, RABAUL
NOU	NOUMEA	+11	PORT VILA
WLG	WELLINGTON	+12	CHRISTCHURCH, NADI, NAURU ISLAND

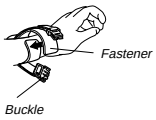
** Based on data as of December 1997.*

BAND CLIP

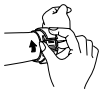
One-Piece Cloth Band and Two-Piece Cloth Band

To fasten the two-piece band on your wrist

1. Wrap the wide inner band around your wrist, pressing the fasteners on the bands together to secure it.
- Band fasteners can separate when wet.



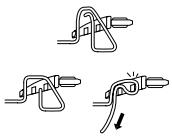
2. Wrap the narrow outer band around your wrist. Grasping the buckle between your thumb and middle finger, insert the band into the buckle while pressing down the top of the band with your forefinger.
- The buckle locks with a snap when fastened.
- Actual buckle shape depends on watch model.



To adjust the length of the two-piece band

1. Slide the buckle on the band to adjust the band length.
2. Pass the band around the outside of the buckle.

3. Double the band back around the inside of the buckle and then pull on the end to tighten.



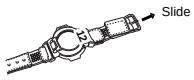
Using the Band Clip

Be sure to attach the band clip to the watch and then attach the watch to your belt whenever using the Trekking Counter. Failure to attach the Trekking Counter correctly to your belt can produce poor measurement accuracy.

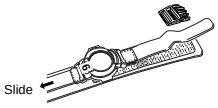
To attach the band clip

1. Remove the band from the watch.

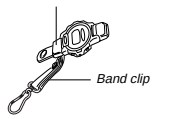
- If your watch was a one-piece band with a fixed buckle, pull the band to remove it from the watch.



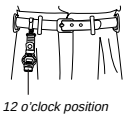
- If your watch has a two-piece band with removable buckle, remove the buckle from the outer band and then slide the band from the watch.



2. Insert the band clip into the attachment *at the bottom (6 o'clock position)* of the watch, double it back, and fasten the snaps to secure it in place.



3. Attach the band clip to your belt.

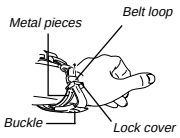


Trekking Counter Precautions

- Be sure to turn off the Trekking Counter when: taking part in any activity involving jumping, bending, stretching, etc.; resting; riding a bicycle, train, bus, or any other vehicle that vibrates.
- Any of the following can cause measurements to lose accuracy: walking on loose ground, up or down steep slopes; running; shuffling your feet; uneven strides; walking in sandals, shower shoes, or similar footwear; walking up or down stairs.
- Measurements may become inaccurate or even fail entirely if the watch is exposed to strong magnetic force.
- Always be sure to fasten the band clip to the bottom (6 o'clock position) of the watch, and not to the top (12 o'clock position).
- Take care to avoid dropping the watch while walking.
- When using the Trekking Counter, make sure the watch is not resting against your clothing or waist pack. If the watch is not hanging loosely, the Trekking Counter will not be able to count your steps correctly.
- When walking up stairs or performing other activities that requires raising of the leg, measurement accuracy can be affected by the watch bumping against or riding on your leg. In such a case, try to position the band clip so it hangs naturally, away from your leg.
- Wear the band clip so it is located in front of your body. This helps to make sure the watch and band clip do not become accidentally caught on something and pulled off your belt.

Leather Band

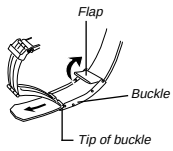
To fasten the band on your wrist



1. Pass the end of the band through the opening in the lock cover and then through the belt loop.
2. Fold the buckle over the two metal pieces, and press down on the buckle until it snaps into place.
3. Close the lock cover and press down until it snaps into place.

- To remove the band from your wrist, pull up on the sides of the lock cover with your thumb and forefinger to release it, and then unfold the buckle.

To adjust the length of the band



1. Pull up the flap on the inside of the buckle to release the band, and then slide the band in or out to adjust its length.

Caution!
The resistance of the flap is quite strong, so do not use your fingernail when pulling it up. Instead, use a screwdriver or other similar tool.

2. After the band is the length you want, fold the flap back down to lock it in place.

Trimming the tip of the band

Band trimming is optional. Use scissors to cut off the tip of the band to eliminate any excess that protrudes from the buckle after you adjust the length of the band. It is recommended that you cut the band at a point that is 5 to 10 mm inside the tip of the buckle.

Important!

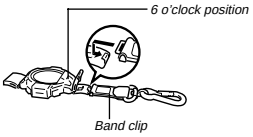
- Always handle scissors and other cutting tools with care to avoid personal injury.
- Take care not to trim too much off the end of the band. It is probably best to cut off a little at a time until you get the band to the length you want.
- Cutting the band may cause the ends of the thread of the remaining part to come loose. If this happens, do not pull on the thread. Trim the loose thread with scissors.

Using the Band Clip

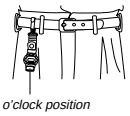
Be sure to attach the band clip to the watch and then attach the watch to your belt whenever using the Trekking Counter. Failure to attach the Trekking Counter correctly to your belt can produce poor measurement accuracy.

To attach the band clip

1. Press the buttons on the sides of the two band clasps to release them, and remove the bands.
2. Close the band clasp at the top (12 o'clock position) of the watch. Squeeze gently but firmly until it locks in place.



3. Hook the band clip into the band clasp *at the bottom (6 o'clock position)*, and then close the clasp. Squeeze gently but firmly until it locks in place.



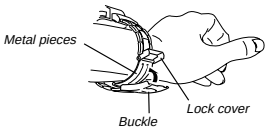
4. Attach the band clip to your belt.

Trekking Counter Precautions

- Be sure to turn off the Trekking Counter when: taking part in any activity involving jumping, bending, stretching, etc.; resting; riding a bicycle, train, bus, or any other vehicle that vibrates.
- Any of the following can cause measurements to lose accuracy: walking on loose ground, up or down steep slopes; running; shuffling your feet; uneven strides; walking in sandals, shower shoes, or similar footwear; walking up or down stairs.
- Measurements may become inaccurate or even fail entirely if the watch is exposed to strong magnetic force.
- Always be sure to fasten the band clip to the bottom (6 o'clock position) of the watch, and not to the top (12 o'clock position).
- Take care to avoid dropping the watch while walking.
- When using the Trekking Counter, make sure the watch is not resting against your clothing or waist pack. If the watch is not hanging loosely, the Trekking Counter will not be able to count your steps correctly.
- When walking up stairs or performing other activities that requires raising of the leg, measurement accuracy can be affected by the watch bumping against or riding on your leg. In such a case, try to position the band clip so it hangs naturally, away from your leg.
- Wear the band clip so it is located in front of your body. This helps to make sure the watch and band clip do not become accidentally caught on something and pulled off your belt.

Metal Band

To fasten the band on your wrist



1. Fold the buckle over the two metal pieces, and press down on the buckle until it snaps into place.
2. Close the lock cover and press down until it snaps into place.

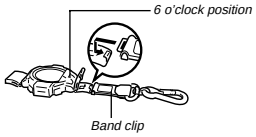
- To remove the band from your wrist, pull up on the sides of the lock cover with your thumb and forefinger to release it, and then unfold the buckle.

Using the Band Clip

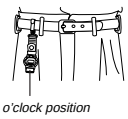
Be sure to attach the band clip to the watch and then attach the watch to your belt whenever using the Trekking Counter. Failure to attach the Trekking Counter correctly to your belt can produce poor measurement accuracy.

To attach the band clip

1. Press the buttons on the sides of the two band clasps to release them, and remove the bands.
2. Close the band clasp at the top (12 o'clock position) of the watch. Squeeze gently but firmly until it locks in place.



3. Hook the band clip into the band clasp *at the bottom (6 o'clock position)*, and then close the clasp. Squeeze gently but firmly until it locks in place.



4. Attach the band clip to your belt.

Trekking Counter Precautions

- Be sure to turn off the Trekking Counter when: taking part in any activity involving jumping, bending, stretching, etc.; resting; riding a bicycle, train, bus, or any other vehicle that vibrates.
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