

WSD-F21HR

User's Guide

Thank you for purchasing this watch.

Before trying to use this watch, be sure to read the Safety Precautions in the Quick Start Guide that comes with it. Make sure you use the watch correctly.

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Introduction

Attention iPhone Owners!

- When using this watch while it is paired with an iPhone, be sure to have the Wear OS by Google™ app running on the iPhone. If the Wear OS by Google app is not running, functions that require communication with the iPhone will not operate.
- Some watch functions are restricted when it is paired with an iPhone. For details, visit the website below.
<https://support.casio.com/wsd/en/>

Watch Features

Dual-layer Display for Improved Readability

Your watch comes with a dual-layer color and monochrome display. The monochrome display provides a high level of information readability in sunlight, along with low-power operation. The monochrome display is designed to show a greater amount of information (compared with previous CASIO products).

Heart Rate Monitor

The watch can be used to monitor your approximate heart rate while you are wearing it. You can view your current heart rate as well as your specified heart rate zone^{*1} on the “Heart Rate” watch face, or by using the Activity app.

^{*1} To display the heart rate zone, you need to use initial settings to specify a resting heart rate and maximum heart rate.

Powered with Wear OS by Google

Google, Android, Wear OS by Google, Google Play and other related marks and logos are trademarks of Google LLC.

Wear OS by Google works with phones running Android™ 4.4+ (excluding Go edition) or iOS 10+. Supported features may vary between platforms and countries.

Five-atmosphere Water Resistance + MIL-STD^{*2}

Even though this watch has a built-in voice recognition microphone, it still is water resistant up to five atmospheres. This means you can wear your watch while swimming, fishing, etc. MIL-STD-810G standard environment resistance allows you to wear your watch while engaged in a variety of vigorous outdoor activities, including: trail running, mountain climbing, cycle sports, fishing, and more.

^{*2} United States Department of Defense Military Standard

Built-in GPS

This watch has GPS^{*3} built in, and you can acquire location information without connecting with a phone. The watch itself can display a map^{*4} of your current location, measure and record data for a variety of activities, and more.

*3 In addition to GPS (U.S.), your watch also supports GLONASS (Russia) and QZSS (Japan) positioning. This manual uses “GPS” to refer to all of these positioning systems.

*4 To display the map when you do not have a smartphone, you need to have the map data downloaded beforehand.

Three Side Buttons Designed for Sure Operation

The three side buttons are designed for sure operation even when outdoors. Apps can be freely assigned to the [MAP button](#) and the [APP button](#).

Measurement Functions

Your watch can take barometric pressure, altitude, bearing, and other readings. Its built-in watch faces and applications can use readings for display and other useful functions. Note that this watch is not a special purpose measuring instrument. Readings produced by measurement functions are intended as general reference information only.

Compass (Bearing Measurement)

For serious mountain climbing and other activities that require accurate bearing readings, take along a highly reliable compass to use in combination with the watch's compass.

Important!

- Note that accurate compass readings and/or correction will not be possible in the areas described below.
 - 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.)
 - On trains, on boats, on aircraft, etc.
 - Indoors, especially inside of reinforced concrete structures.

Altimeter, Barometer

The watch's Altimeter uses a pressure sensor to measure barometric pressure, and then calculates and displays relative altitude based on the measured value. Because of this, readings taken at different times at the same location may produce different altitude values due to changes in temperature, humidity, barometric pressure, and other factors. Also note that values displayed by the watch may be different from elevations indicated for areas where you are located. When using the watch's altimeter while mountain climbing, it is recommended that you perform regular correction in accordance with the local altitude (elevation) indications.

Tide Graph (Graphic Display of Tide Information)

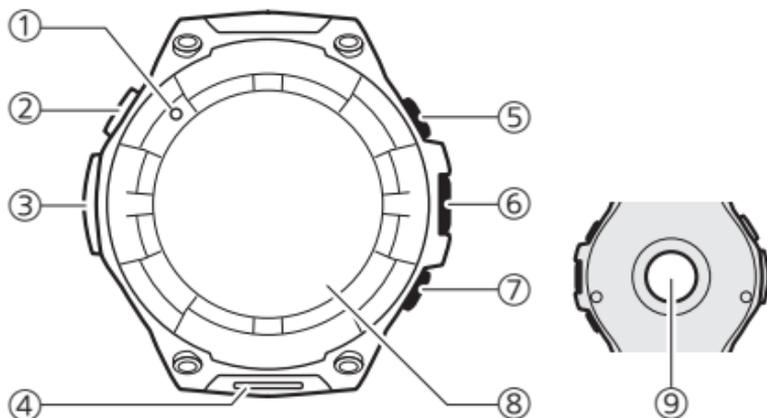
The Tide Graph feature of your watch is intended to provide a rough image of current tide conditions. Do not use its tide information for navigation purposes. For navigation purposes, be sure to use official tide charts issued by a reliable agency or authority for the area you are navigating.

Overview

Package Contents

Watch, AC adaptor, charger cable, Quick Start Guide, warranty

General Guide



① Charge LED

② Charger terminal

③ Pressure sensor

④ Microphone

⑤ MAP button

⑥ Power button

⑦ APP button

⑧ Touch screen

⑨ Optical sensor (PPG Heart Rate)

About This Manual

- The contents of this manual are subject to change without notice.
- Copying of this manual, either in part or its entirety, is forbidden. You are allowed to use this manual for your own personal use. Any other use is forbidden without the permission of CASIO COMPUTER CO., LTD.
- CASIO COMPUTER CO., LTD. shall not be held liable for any lost profits or claims from third parties arising out of the use of this product or this manual.
- CASIO COMPUTER CO., LTD. shall not be held liable for any loss or lost profits due to loss of data caused by malfunction or maintenance of this product, or any other reason.
- The watch and sample screens depicted in the illustrations in this manual may be different from the actual appearance of the watch.

Getting Ready

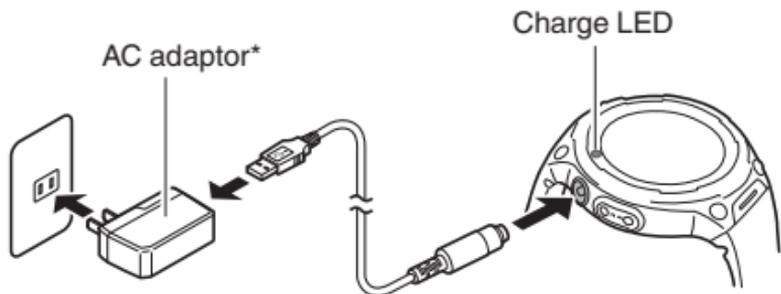
Be sure to read the precautions in the “Quick Start Guide”, and also perform all of the steps under “[Preparing the Watch for First Use](#)” and “[Preparing the Watch for Outdoor Use](#)”.

Preparing the Watch for First Use

You must perform the steps below before using the watch for the first time.

1. Charge the watch

Plug the provided AC adaptor into a power outlet, and then connect the provided charger cable and AC adaptor as shown in the illustration.



- The charge LED lights red during charging, and green when a full charge is achieved.
- Some time after charging starts, the charge level indicator will appear on the watch display. At that time, the watch may or may not turn on automatically. If it does not, hold down the power button for at least two seconds to turn it on.
- * The shape of the AC adaptor supplied in your geographic area may be different from the one shown in the illustration.

✔ Important!

- To help promote longer battery life, regular charging of the watch (about once a month) is recommended even if you do not use it for a long time.

2. Install the Wear OS by Google App on a Smartphone

Android smartphone: Download the Wear OS by Google app on Google Play™.

iPhone: Download the Wear OS by Google app from the App Store.

3. Pair the Watch with Your Smartphone

- If the watch is turned off, hold down the power button for about two seconds to turn it on.
- When pairing, it is recommended that you have the smartphone and watch within one meter of each other. Refer to the websites below for information about how to pair the watch with a smartphone.

Wear OS by Google Help

<https://support.google.com/wearos/>

CASIO Smart Outdoor Watch Support Site

<https://support.casio.com/wsd/en/startup/>

4. Update Your CASIO Apps

- In order to use all of the functionality provided by this watch, be sure to update all of your related CASIO apps to their latest versions before using your watch. For information about the update procedure, visit the website below.

<https://support.casio.com/wsd/en/basic/preparation.html>

5. Install the CASIO MOMENT SETTER+ App on the Smartphone (Android Only)

If you are using an Android smartphone, download the “CASIO MOMENT SETTER+” app on Google Play and install it. Installing the app enables use of the functions below.

- Notifications you specify with MOMENT SETTER as you approach or move away from a registered point
- Display of the smartphone’s battery level

✔ Important!

- There are two versions of the CASIO MOMENT SETTER+ app. Make sure you have the latest version installed on your phone. Icons shown on Google Play indicate whether the app is the old version or new version.



Old version icon



New version icon

Preparing the Watch for Outdoor Use

Performing the steps below prepares the watch's outdoor functions (CASIO watch faces and apps) for optimal operation. Perform these steps after you have completed the procedure under "[Preparing the Watch for First Use](#)".

1. Configure watch settings to enable use of Play Store.

1. If you are using the watch while it is connected with an iPhone, connect the watch to Wi-Fi.
2. While a watch face is displayed, short press the power button to display the App menu.
3. Scroll the list of apps upwards or downwards until "Play Store" is displayed, and then tap it.
 - This will give you access to Play Store. Install the app you want to try.

2. Update your CASIO apps to their latest versions.

1. On the app menu, tap “Play Store”.
2. Select “Apps on your watch” to display a list of the apps currently installed on your watch.
 - If the previous option is not available, swipe from top to bottom to open Play Store menu. Tap the “My Apps” icon.
3. Apps for which updates are available will be shown under “Updates”. If there is an update available for CASIO MOMENT SETTER+, be sure to update it.

3. Configure the location settings of the watch and smartphone.

Watch Operation

1. While the watch face is displayed, swipe the touch screen from top to bottom and then tap .
2. Scroll downwards and tap “Connectivity”.
3. On the screen that appears, enable “Location”.

Smartphone Operation

Go to “Settings” and turn on “Location”. Next, select “High Accuracy” mode. If your smartphone does not have “High Accuracy” setting, turn on its GPS, Wi-Fi, and mobile network (data communication) settings.

The settings in the steps below are required to enable the following functions: CASIO watch faces, the Location Memory app, the TOOL app, the Activity app, and all functions of the MOMENT SETTER app.

4. Enable the CASIO MOMENT SETTER+ “Permissions” setting.

1. While the watch face is displayed, swipe the touch screen from top to bottom and then tap .
2. Scroll the screen downwards, and then tap in the following sequence: “Apps & notifications”, “App permissions”, “System Apps”, “CASIO MOMENT SETTER+”.
3. Tap the items that appear on the display (“Calendar”, “Microphone”, “Location”, “Sensor”, etc.) and enable all of them.

5. Turn on the “Save Daily Location Info” setting.

1. While a watch face is displayed, press the MAP button to display the Location Memory app.
2. Swipe the touch screen from bottom to top. On the menu that appears, tap “Settings”.
 - This displays the setting menu.
3. Scroll the setting menu downwards. When “Save Daily Location Info” is displayed, check to make sure that its setting is “OFF”. Next, tap the setting.
 - A dialog box will appear to confirm if you want to save location information. Carefully read the text of the dialog box.
4. Tap “Every 6 minutes” or “Every 1 minute”.
 - This changes the “Save Daily Location Info” setting to “ON”.
 - Note that selecting “Every 1 minute” will cause a large amount of power to be consumed.

6. Configure initial default settings required to measure heart rate.

- This operation must be performed to perform heart rate measurements with the watch. For details, see [“Initial Default Settings for Heart Rate Measurement”](#).

Initial Default Settings for Heart Rate Measurement

After performing the steps under “[Preparing the Watch for Outdoor Use](#)”, you need to perform the procedure below in order to use the watch for heart rate measurement.

✔ Important!

- During the procedure below, you will need to specify your resting heart rate. Before starting the procedure, read the information under “[Measuring Your Resting Heart Rate](#)” and then determine your resting heart rate.

1. Tap the center of the “Heart Rate” watch face.

2. Tap “Reset”.

3. Input your birth year and month.

1. On the “Birth Year” screen that appears, use ▲ and ▼ to specify your birth year, and then tap ✓.
2. On the “Birth Month” screen that appears, use ▲ and ▼ to specify your birth month, and then tap ✓.
 - The birth information you specify here is used to calculate the Total Maximum Heart Rate automatically based on your age.
 - If you already know your maximum heart rate and wish to input it manually, refer to “[Total Maximum Heart Rate](#)”.

4. Input your resting heart rate.

1. After performing the procedure described under “[Measuring Your Resting Heart Rate](#)”, use  and  to specify your heart rate and then tap  .
 - Input a resting heart rate within the range of 40 to 220.

Measuring Your Resting Heart Rate

You need to input your resting heart rate because the watch uses it as basic data when performing a variety of calculations in accordance with measured heart rate data. Despite its name, your resting heart rate is not necessarily your heart rate any time you are at rest.

This section explains the proper procedure for determining your resting heart rate. Carefully read the information here and apply it when actually determining your resting heart rate.

To measure your resting heart rate

1. Make sure you are in either of the relaxed states described by (a) and (b) below.

- State (a) is recommended for best measurement accuracy.
 - (a) The first thing in the morning when you wake up naturally, remain in bed without rising.
 - (b) If you are already up, lay down, close your eyes, and rest for at least five minutes.

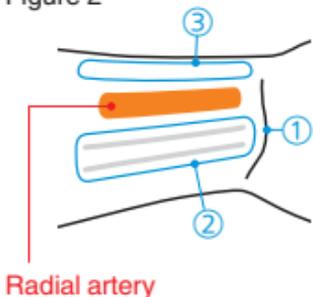
2. Remaining at rest, place your index, middle, and ring fingertips or just your index and middle fingertips over your radial artery on the thumb side of your wrist (Figure 1).

- Your radial artery is located in the area bounded by your hand's wrist fold (①), wrist tendon (②), and the bone on the side of your wrist (③), as shown in Figure 2.

Figure 1



Figure 2



- Slightly shift your fingers around on your wrist and adjust their pressure until you can feel your pulse.
- If you have a hard time finding your pulse on your wrist, you can also try feeling it with your fingers on the side of your neck, or by placing your hand over your heart.

3. Remaining at rest, count the number of beats for one minute.

- You could also count the number of beats for 15 seconds, and then multiply by four.

Basic Operations You Should Remember

✔ Important!

- Note that the operations described here are subject to change due to the type and version of the operating system being used by the smartphone connected with the watch, changes that occur when the watch's operating system is updated, and other factors. For details about Wear OS by Google operations, visit the website below.

<https://support.google.com/wearos/>

Button Functions

Power button	<ul style="list-style-type: none">• Press to restore display brightness after it goes dark.• Pressing while a watch face is displayed will display the App menu (app list for launching apps).• If watch power is off, hold down the power button for at least two seconds to turn the watch on.
MAP button (Top right)	Pressing while a watch face is displayed starts up a previously specified app (Location Memory under initial default settings).
APP button (Bottom right)	Pressing while a watch face is displayed starts up a previously specified app (Activity under initial default settings).

Note

- Visit the website below for information about changing the apps that are started up by pressing the MAP button and APP button.

<https://support.google.com/wearos/>

Wake Up

If you don't tap the touch screen for a few seconds, the watch screen will dim. To wake up the watch and restore it to normal brightness, tap the touch screen or press the power button.

Power Supply Operations

To do this:	Perform this operation:
Charge the watch	See step 1 under " Preparing the Watch for First Use ".
Turn off power	<ol style="list-style-type: none">1. While the watch face is displayed, swipe the touch screen from top to bottom and then tap .2. Scroll the screen downwards. Tap "System" and then "Power off" in sequence. On the confirmation screen that appears, tap .
Turn on power	Hold down the power button for about two seconds.

Watch Face Operations

To do this:	Perform this operation:
Switch to another watch face	<ol style="list-style-type: none">1. While a watch face is displayed, touch and hold the center of the touch screen for about two seconds.2. Scroll a list of favorite watch faces left and right. When the watch face you want to use is displayed, tap it.
Add a watch face to favorites	<ol style="list-style-type: none">1. Scroll a list of favorite watch faces as far as it will go to the right and then tap the + button. This displays a list of all watch faces.2. Scroll the list of all watch faces upwards and downwards. When the watch face you want to add to favorites is displayed, tap it.
Remove a watch face from favorites	On a list of favorite watch faces, swipe upwards on the watch face you want to remove.

Favorite watch faces

Your watch has a wide selection of watch faces built in. You can add the ones you most often use to a list of favorite watch faces for easier selection when you need them.

Note

- For details about watch face operations, visit the website below.
<https://support.google.com/wearos/>
- For information about CASIO watch faces, see “Using CASIO Watch Faces”.

Using Apps

To do this:	Perform this operation:
Start up an app	<ol style="list-style-type: none"><li data-bbox="306 193 961 251">1. While a watch face is displayed, short press the power button to display the App menu.<li data-bbox="306 251 961 324">2. Scroll the list of apps upwards or downwards. When the app you want to run is displayed, tap it.
Return to the watch face	Press the power button.

Using a Specific App

- For information about the Location Memory, Point Navigation, TOOL, Activity, MOMENT SETTER and Multi Timepiece apps, see “Using Outdoor Watch Functions - Using CASIO Watch Faces and Apps”.
- For details about Google™ apps (standard Wear OS by Google apps), visit the website below.
<https://support.google.com/wearos/>
- For information about third-party apps, refer to the website, user documentation, and other information provided by the developer.

Wear OS by Google Functions

The Wear OS by Google operating system of this watch provides the functions below as standard.

- Dictation
- Messaging and incoming phone call notification
- Google Fit™, Timer, Agenda, Translate and other standard Wear OS by Google apps
- Watch faces and apps can be added using the Play Store app
- Wear OS by Google Settings

For details, visit the website below.

<https://support.google.com/wearos/>

Smartphone Dependent Functions

Though you can use a wide range of functions without connecting to a smartphone, some apps and services (dictation, smartphone related apps, etc.) are not available unless there is a connection between the watch and a smartphone. For details, visit the websites below.

<https://support.google.com/wearos/>

You can also visit the website below, enter "What can I do with the watch without connection with a phone?", and then tap the [Search] button.

<https://support.casio.com/en/support/faq.php?cid=019>

Using Outdoor Watch Functions - Using CASIO Watch Faces and Apps

This section explains how to interpret the contents of CASIO watch faces and how to use CASIO apps and make your outdoor adventures more interesting and enjoyable.

Use this app:	To do this:
Location Memory	Check your current location on a color map.
Point Navigation	Display the direction and distance to your destination.
TOOL	Find out more about the natural environment around you.
Activity	View or record information about your runs and other workouts.
MOMENT SETTER	Get useful notifications when they really matter.
Multi Timepiece	Save power by limiting operation to timekeeping and certain functions.

Important!

- In order to get the very best out of the outdoor functions of your watch, be sure to perform the operation under [“Preparing the Watch for Outdoor Use”](#) before using them.
- Speeds and distances displayed by the Location Memory, Point Navigation, Activity, and TOOL apps are values measured by the watch’s or your smartphone’s GPS function. This means displayed values may not be exact due to GPS reception conditions and position sensing error.

Using CASIO Watch Faces

Your watch comes with the CASIO Watch Faces described below built in. Watch face names are used in the list of favorite watch faces and the list of all watch faces (see “[Watch Face Operations](#)”).

Heart Rate	Watch face with heart rate measurement functions. It shows a graph of your heart rate zones over the past 24 hours, which lets you see how your heart rate has changed over time.
2 Layers	Digital watch face that combines easy-to-read monochrome LCD and a color LCD. You can customize the information that appears in the upper and lower areas of the display.
Authentic	Simple analog watch face. In addition to a fixed 24-hour time dial, there are two more dials whose contents can be changed by tapping them.
Place	Analog watch face that can be linked with Google Calendar™ so the locations of specific scheduled events appear as the background image. A map of your current location is shown if there is no event specified.
Journey	Analog watch face that shows a map of your current location. The watch will display up to three events saved to Google Calendar. Tapping an event displays a map to its location.
Traveler	Analog watch face that shows useful information about your travel destination, etc. Each tap of the dial at 10 o'clock changes the information displayed at the bottom of the watch screen.
Multi	Casual digital watch face with three dials whose content can be changed by tapping them.
Location	Analog watch face that shows your current latitude and longitude based on the watch's or your smartphone's GPS, along with a background image of a world map centered on your current location.
World Time	Digital watch face that shows the date, time, and city name (time zone name) in your current location, the time offset between your current location and your home city time, and the current date, time, and city name (time zone name) of your home city.

Important!

- While the “Always-on screen” setting is off (default setting), the watch will automatically switch to the monochrome LCD when display illumination dims after the prescribed period of non-use, regardless of the currently selected watch face. To switch back to the original watch face, tap the touch screen.
 - When remaining battery power is 0%, the watch will automatically switch to the monochrome LCD when display illumination dims after the prescribed period of non-use, regardless of the currently selected watch face, and even if the “Always-on screen” setting is on.
- * “Always-on screen” is a Wear OS by Google setting item. For details, visit the website below.
<https://support.google.com/wearos/>

If the message “Perform magnetization correction.” appears...

The “Perform magnetization correction.” notification may appear while you are using a watch face that includes a compass.

To calibrate the compass, tap the notification and then tap . Move the watch around as shown in the animation that appears on the watch display.

If you feel that altitude, barometric pressure, or other readings are not correct...

Perform the operation required to calibrate the readings you feel are incorrect. See “[Common Outdoor Function Settings](#)” and perform one or more of the operations below.

To calibrate this:	See the information here:
Barometer	“ Barometric Pressure Calibration ”
Altimeter	“ Altitude Calibration ”, “ Correct Altitude Using Location ”
Compass	“ Compass Calibration ”, “ Compass Magnetic Declination Calibration ”

Changing CASIO Watch Face Settings

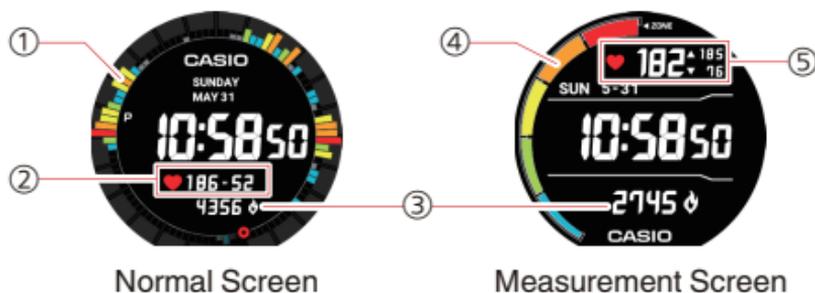
See “[Common Outdoor Function Settings](#)”.

Using the “Heart Rate” Watch Face

Important!

- To display heart rate zones on the watch, you need to configure the Birth Month and Stable Heart Rate settings. Be sure to use the procedure under [“Initial Default Settings for Heart Rate Measurement”](#) to configure the required settings.
- Be sure to affix the watch to your wrist before starting a heart rate measurement operation. Starting a measurement operation and then affixing the watch to your wrist may make correct measurement impossible. For information about how to affix the watch to your wrist, refer to [“Wearing the Watch”](#).
- To display a map as the background of the “Heart Rate” watch face, you need to enable the “location” setting in [CASIO MOMENT SETTER+ “Permissions”](#).

“Heart Rate” is a watch face with heart rate measurement functions. It has two screens: a Normal Screen that shows a heart rate history around its outer periphery, which is displayed while no heart rate measurement operation is in progress and, and a Measurement Screen that is displayed during heart rate measurements.



These screens show the information described below.

- ① Past 24-hour heart rate zone history
Shows a color-coded history of [heart rate zones](#) for the past 24 hours. Tapping this area switches the heart rate zone history to a graph view.
- ② Daily maximum and minimum heart rates
Shows the maximum and minimum heart rates measured during the current day. The heart rate zone of the maximum heart rate for the day is also indicated by the color of the heart icon.*1

- ③ Current daily energy consumption^{*2}
Shows the amount of energy consumed since midnight of the current day. The measurement unit of the displayed value is in accordance with the “Energy Unit” setting.
 - ④ Heart rate zone
Shows the heart rate zone of the current heart rate value.
 - ⑤ Current heart rate, daily maximum and minimum heart rates
Shows the current heart rate value, and its heart rate zone indicated by the color of the heart icon.^{*1} The upper right value shows the daily maximum heart rate, while the lower right value shows the daily minimum heart rate. You can use the “Heart Rate Display Location” setting to move these display items to the middle area of the watch face.
- *1 Gray when the heart rate zone is less than 1.
- *2 Nothing is displayed if the “Save daily activity records” setting is “OFF”.

Starting and Stopping Heart Rate Measurement

When the “Heart Rate Measurement” setting is “Auto Measurement”

When the watch detects you are exercising, it automatically starts heart rate measurement and switches from the Normal Screen to the Measurement Screen. Measurement will stop automatically if the watch detects your movement has stopped.

To take a measurement with the Normal Screen

Tap the center of the Normal Screen. On the confirmation screen that appears, tap .

This displays the Measurement Screen, which displays your measured heart rate. After the time specified by the “Time Until End” setting elapses, the display will automatically return to the Normal Screen.

When the “Heart Rate Measurement” setting is “Continuous Measurement”

Use manual operation to start and stop heart rate measurement.

To start measurement

- 1. Tap the center of the Normal Screen. On the screen that appears, tap .**

To stop an ongoing measurement operation

Tap the center of the Measurement Screen. On the confirmation screen that appears, tap .

Heart Rate Zones

There are five heart rate zones, the sizes of which are calculated based on your resting heart rate and your total maximum heart rate. As a general rule, Zone 1 represents a range that is 50% or greater than, and less than 60% of your maximum heart rate. Zone 5 represents a range that is 90% or greater than your maximum heart rate. The color of the heart icon on the Heart Rate watch face indicates the current zone.

Zone 5:	Red	
Zone 4:	Orange	
Zone 3:	Yellow	
Zone 2:	Green	
Zone 1:	Blue	
Less than Zone 1:	Gray	

Heart Rate Watch Face Settings

You can use the Heart Rate watch face menu items below to configure Heart Rate watch face settings and to specify what items should be shown on the display.

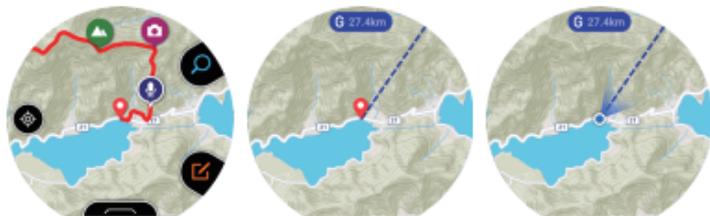
Menu Item	Description
Background Image →Normal Screen; Measurement Screen	Specifies whether the Normal Screen and Measurement Screen of the Heart Rate watch face should have a background image.
Save daily activity records	The setting of this item must be "ON" to display the energy consumption value.
Heart Rate Measurement	Specifies the heart rate measurement method. Auto Measurement: The watch detects if you are exercising, and automatically starts and stops measurement. Continuous Measurement: Tapping the center of the display starts and stops heart rate measurement. Measurement Off: No heart rate measurement.

Menu Item	Description
Heart Rate Display Location	Specifies the location where the heart rate value should be displayed. Upper: Displays the heart rate value in the upper area of the screen. Middle: Displays the heart rate value in the middle area of the screen.
Time Until End	This setting can be configured when the “Heart Rate Measurement” setting is “Auto Measurement”. It specifies how much time should be allowed to elapse before measurement stops after the watch detects that you have stopped exercising.

Using the Location Memory App

The Location Memory app makes it quick and easy to record map-related information. You can use the Location Memory app to perform the operations described below.

- Display a map to check your current location.
- Select from a variety of different map skins including street view, geographic view, satellite view, and more.
- While the app is running, you can track your route on the map.
- Use dictation to create a text memo about your current location.
- Use marks to leave quick memos or when a network connection is not available.
- Use “Revisit” marks to record a memo and have the watch alert you with a notification and navigation instructions back to the marked point whenever you are in the vicinity.



Location Memory App Basic Operations

You can perform main Location Memory app operations using the MAP button and APP button. The operations you can perform with these two buttons are indicated by on-screen icons displayed to the left of each button. You can also perform the operations by tapping the icons.

Icon	Pressing the button or tapping the icon does this:
	Changes the functions of the two buttons to zoom in and zoom out (see below).
	Changes the functions of the two buttons to mark and dictation (see below).
	Zooms in on the map.
	Zooms out from the map.
	Records a memo with a mark.
	Records a dictated memo.

Downloading Mapbox Maps

If you are planning to go to a location where there is no net access but you still want to use maps, you can download them ahead of time while you still have net access.

Using the procedure below to download a map automatically changes the “Map Type” setting to “Mapbox”.

1. While the map is displayed, swipe the touch screen from bottom to top. On the menu that appears, tap “Download Map”.
2. Perform the procedure from step 2 under “[Download Map](#)”.

“Revisit” Marks

Use “Revisit” marks () to record a memo and have the watch alert you with a notification whenever you are in the vicinity (within 5 km under initial default settings). For information about changing the notification distance setting and disabling notification, see “[Changing the “Revisit” Mark Notification Setting](#)”.

✔ Important!

- In order to be able to receive notifications triggered by “Revisit” marks, your Android phone must have the CASIO MOMENT SETTER+ app installed, and there must be a connection between the phone and watch.
- Note that notification receipt triggered by “Revisit” marks is not supported when the watch is connected with an iPhone.
- You can have up to 50 “Revisit” marks registered at one time. Adding a new Revisit mark while there are already 50 marks in memory will delete the oldest one in memory to make room for the new one.

Point Navigation and Show Direction

Using “Point Navigation” and “Show Direction” at the same time provides you with intuitive information about your destination.



Point Navigation

- This setting can be used to have the direction and distance to a destination displayed on the map. While a map is displayed, swipe from bottom to top. On the menu that appears, tap “Point Navigation”. For details, see “[Using Point Navigation](#)”.

Show Direction

- This setting can be used to have the direction that the 12 o'clock position of the watch is pointing displayed on the map. While a map is displayed, swipe from bottom to top. On the menu that appears, tap "Show Direction" to change the setting to "ON".

While the "Show Direction" setting is "ON", directions also are displayed on the Activity app maps.

When the direction to the destination (linear) indicated by "Point Navigation" and the cone of view displayed by "Show Direction" are aligned with each other, it means that 12 o'clock on the watch is pointed in the direction of your destination.

Other Operations

- To view a recorded memo, swipe the displayed map from bottom to top. On the menu that appears, tap "History".
- For information about how to track your route on a map, see "[Enabling Route Tracking on the Map \(Route Display\)](#)".
- For information about map display settings, see "[Common Outdoor Function Settings](#)" and perform one or more of the operations below.
 - To switch the map between Google Maps™ and Mapbox: [Map Type](#)
 - To change the map skin to geographic view or satellite view: [Map Skin](#)

Location Memory App Settings

This section explains settings that are particular to the Location Memory app (“Route Display” and “Revisit”). For information about other setting items, see “[Common Outdoor Function Settings](#)”.

Enabling Route Tracking on the Map (Route Display)

Your route can be tracked on the map.



Your route is normally displayed as a blue line. However, the portion of your route where you performed an Activity app measurement operation is indicated by a red line.

To display your route, use the procedure below to change “Route Display” on the setting menu from “OFF” (initial default setting) to “ON”.

- 1. While the map is displayed, swipe the touch screen from bottom to top. On the menu that appears, tap “Settings”.**
- 2. Scroll the setting menu downwards. After confirming that the “Route Display” setting is “OFF”, tap to change it to “ON”.**

 **Important!**

- This watch acquires location information at regular intervals and tracks your route on a map. To conserve battery power, the frequency of GPS information acquisition is normally low. Because of this, the route tracking displayed while you are traveling by car, train, or other higher speed mode of transportation may appear rather rough. Very high-speed transportation may make it impossible to obtain GPS information and display route correctly.
- If you want smoother route display, start a data measurement operation with the Activity app. GPS information is acquired more frequently during an Activity app data measurement operation, so this will make the route display smoother.
- The watch saves route information, marks, memos, and other data in internal storage. Data is retained as long as memory capacity is available. When memory becomes full, the watch automatically deletes the oldest data to make room for newly recorded data.

Changing the “Revisit” Mark Notification Setting

Use “Revisit” marks to record a mark and have the watch alert you whenever you are in the vicinity. Under the watch’s initial default settings, notification is performed when both of the conditions below are satisfied.

- You are <<within five kilometers>> of the “Revisit” mark location.
- <<At least one day>> has passed since you were last <<within one kilometer>> of the “Revisit” mark location.

The parts of the above conditions enclosed in double angle brackets (<< >>) can be specified by you. You can also disable notifications, if you want. You can use the steps below to configure settings.

- 1. While the map is displayed, swipe the touch screen from bottom to top. On the menu that appears, tap “Settings”.**
- 2. Scroll the setting menu downwards. When “Revisit” is displayed, tap it.**
- 3. On the screen that appears, configure the required settings.**
 - Perform the steps below to modify notification conditions.
 1. If the “Notifications” setting is “OFF”, tap to change it to “ON”.
 2. Tap “Region”. On the list that appears, tap the distance you want to specify.
 3. Tap “Notification Control”. On the list that appears, tap the interval you want to specify.
 - To disable notification, tap “Notifications” to change its setting to “OFF”.

Viewing Your Route on a Phone

You can perform the procedure below to export a route stored in watch memory and view it on a phone using Google Earth™, etc. Note that your phone needs to have “Google Drive™” and “Google Earth” installed in order to perform this procedure.

To output a traveled route from the history display

- 1. While the map is displayed, swipe the touch screen from bottom to top. On the menu that appears, tap “History”.**
- 2. Select the date of the history data you want to display.**
- 3. Tap “Show on Map”.**
 - This displays the history data of the route you traveled on the map.
- 4. Swipe the touch screen from bottom to top. On the menu that appears, tap “Output as KML file”.**
 - If this is the first time for you to perform this operation, an account selection screen will appear. The KML file will be stored on Google Drive, so select your Google account.
 - Once export starts, do not perform any operation on the watch until it is complete.
 - The exported KML file will be stored on your Google Drive in a folder named “CASIO-WSD”.

To output a traveled route from a normal map display

- 1. While the map is displayed, swipe the touch screen from bottom to top. On the menu that appears, tap “Settings”.**
- 2. Scroll the setting menu downwards. Tap “Export” and then “Output as KML file” in sequence.**
 - If this is the first time for you to perform this operation, an account selection screen will appear. The KML file will be stored on Google Drive, so select your Google account.
- 3. Select the date of the route you want to export.**
 - This will start export. Do not perform any operation on the watch until the export is complete.
 - The exported KML file will be stored on your Google Drive in a folder named “CASIO-WSD”.

Using Point Navigation

You can use Point Navigation to have the direction and distance to a destination displayed on the map. In addition to being available with the Point Navigation app, this capability can also be used with the [Location Memory](#) app and the [Activity](#) app.



Navigation in progress (current location map)

Note

- You can also have the direction to the destination specified with Point Navigation displayed on the TOOL app compass. For more information see "[Point Navigation](#)" under "Common Outdoor Function Settings".

Point Navigation Basics

To do this:	Perform this operation:
Start navigation	<ol style="list-style-type: none">1. Use one of the operations below to start up Point Navigation.<ul style="list-style-type: none">• On the app menu, tap “Point Navigation”.• While a map is displayed in the Location Memory app, swipe the touch screen from bottom to top and then tap “Point Navigation”.• While the Activity app “START” screen is displayed, swipe the touch screen from bottom to top and then tap “Point Navigation”.2. Tap “Specify Destination”.^{*1*}^{*2}3. Position your destination so it is aligned with the cross mark in the center of the displayed map, and then tap “Destination”.4. To start navigation, tap “START”.

*1 If you started the operation from the Activity app, you can set the start point of the activity as the navigation destination by tapping “Back to Start Point” here.

*2 If you used Point Navigation to specify a destination in the past, you can also tap “Destination History” and then select a destination from the list of past destinations that appears. History will show up to the last 10 entries only.

To do this:	Perform this operation:
Change the destination during a navigation operation	<ol style="list-style-type: none"> 1. Perform step 1 of “Start navigation”. <ul style="list-style-type: none"> • This will display the message “Navigation being performed.”. 2. Scroll the message downwards, and then tap “Reset Destination”. 3. On the confirmation message screen that appears, tap “Stop”. 4. Perform the “Start navigation” procedure from step 2.
Stop a navigation operation	<ol style="list-style-type: none"> 1. Perform step 1 of “Start navigation”. <ul style="list-style-type: none"> • This will display the message “Navigation being performed.”. 2. Scroll the message downwards, and then tap “Stop Navigation”. 3. On the confirmation message screen that appears, tap “Stop”.

Reaching Your Destination During a Navigation Operation

When you arrive in the vicinity (within approximately 80 meters) of your destination while a Point Navigation map is displayed, a notification message will appear on the display. To stop the navigation operation tap “Stop”. To resume it, tap “Resume”.

Using the TOOL App

The TOOL app displays a wide variety of information about the natural environment around the watch.

TOOL Function List

Compass	Shows a compass needle on the face. A color display shows the latitude and longitude of the current location.
Altimeter	Two color screens are available. An Altimeter Screen (①) that shows a value and dial indication of the altitude at your current location, and an Altitude Graph Screen (②) that shows a graph of altitude changes over the past 24 hours.
Barometer	Two color screens are available. A Barometer Screen (①) that shows a value and dial indication of the barometric pressure at your current location, and a Barometric Pressure Graph Screen (②) that shows a graph of barometric pressure changes over the past 24 hours.
Sunrise/sunset	Two color screens are available. A Time Screen (①) that shows details of the sunrise and sunset times at your current location, and an Azimuth Screen (②) that shows the sunrise and sunset times and azimuths.
Tide Graph	Two color screens are available. A Tide Graph Screen (①) that shows a Tide Graph of a preset point (port), and a Fishing Time Screen (②) that shows recommended fishing times for an ocean or river in the vicinity of your current location.
My Graph	Graphically represents the amount of time during the current date spend engaging in the following activities: resting, walking, running, riding.

Basic TOOL Operations

To do this:	Perform this operation:
Change the TOOL function	<ul style="list-style-type: none">• While the TOOL app is running, press the APP button or MAP button.• While the TOOL app is running, swipe the touch screen from top to bottom, or from bottom to top.
Switch between the two color screens (① and ②) (See “TOOL Function List”.)	To switch from screen ① to screen ②, swipe the touch screen from right to left. To switch from screen ② to screen ①, swipe the touch screen from left to right.
Change TOOL app settings	See “Common Outdoor Function Settings”.

TOOL App Color Display and Monochrome Display

You can switch the TOOL app screen between color display and monochrome display. Outdoors in bright sunlight, the monochrome display provides better readability than the color display.

To do this:	Perform this operation:
Switch from the color display to the monochrome display	Hold down the APP button or MAP button for about three seconds.
Switch from the monochrome display to the color display	Hold down the APP button or MAP button for about three seconds or tap the touch screen.

Note

- While the TOOL app is running, it will shut down automatically after about one minute of non-use.

Using Compass

The pointer indicates true north.*¹



The value in the center of the display shows how many degrees there are in a clockwise direction from the north indication (which is 0°) to 12 o'clock on the watch. For example, if 12 o'clock on the watch is facing due east, the value will show 90°. Letters on the display also indicate the direction that 12 o'clock is facing (16 directions).

*¹ Initial default setting. For information about how to change settings and have magnetic north indicated, see [“Compass Magnetic Declination Calibration”](#).

To lock the direction

You can use Compass to lock the indicated direction to help you maintain a specific bearing while trekking, etc. While the watch's 12 o'clock position is pointed in the direction you want, tap the touch screen. If the watch's 12 o'clock position deviates from the locked direction, the amount of the deviation will be indicated in blue.

To unlock a direction, tap the touch screen again.

Compass Calibration (Magnetization Correction)

The “Perform magnetization correction.” message may appear while you are using Compass. To calibrate the compass, move the watch around as shown in the animation that appears on the watch display. Keep moving your arm until the message disappears, indicating that magnetization correction is complete.

Note

- The watch normally performs magnetization correction automatically. You only need to perform the above operation when the message appears.

Using Altimeter

Altimeter has a color display Altimeter Screen (left), a color display Altitude Graph Screen (right), and a monochrome display.



- All of the screens show the altitude at your current location.
- The Altitude Graph Screen shows a graph of altitude changes over the past 24 hours, along with the low altitude (Min) and high altitude (Max) during that period.
- Your watch measures altitude within the range of -700 to $10,000$ meters (or $-2,300$ to $32,800$ feet), in units of 1 meter (or 5 feet).

Before Using Altimeter

- The watch's Altimeter can be configured to use positioning information (GPS) to correct altitude readings automatically. Configure the settings below to use this function.
 - Correctly configure the “Location” setting on the watch and smartphone. For more information, see step 1 under “[Preparing the Watch for Outdoor Use](#)”.
 - Select “ON” for the “Correct Altitude Using Location” setting. After reading “[Common Outdoor Function Settings](#)”, perform the operation under “[Correct Altitude Using Location](#)”.
- Since the watch displays relative altitude based on changes in barometric pressure, it may display different altitude readings for the same location, or incorrect readings due to changes in the local barometric pressure. “Correct Altitude Using Location” uses GPS information to correct altitude. Even so, since GPS information generally includes some error, there may be large error between the altitude readings produced by this watch and actual altitudes indicated locally. If you want more accurate altitude readings while climbing or hiking, manually inputting locally indicated altitude values is recommended. After reading “[Common Outdoor Function Settings](#)”, perform the operation under “[Altitude Calibration](#)”.
- When taking altitude readings, keep the watch at as stable a temperature as possible. For better accuracy, strap the watch to your wrist for some time before taking readings in order to allow the watch's temperature to stabilize. Changes in pressure sensor temperature can cause measurement error.

Altimeter Precautions

- 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.
- Large changes in barometric pressure due to atmospheric conditions, large temperature changes, or subjecting the watch to strong impact may make correct readings impossible.

Displayed Altitude Values (Relative Altitude)

The two ways to express altitude are described below.

Relative Altitude:

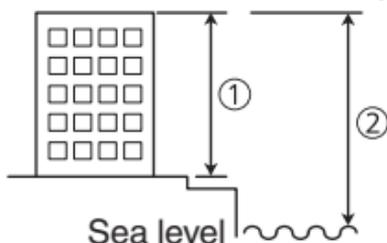
This is the difference in the altitudes between two locations.

Example: Height measured from the ground to the top of a building (①)

Sea Level Altitude (Elevation):

Altitude measured from sea level.

Example: Height measured from sea level to the top of a building (②)



Your watch's Altimeter use a pressure sensor to measure barometric pressure, and then calculates and displays relative altitude based on the measured value. The altitude values displayed by your watch are based on International Standard Atmosphere (ISA) relative altitude data defined by the International Civil Aviation Organization (ICAO).

Using Barometer

Barometer has a color display Barometer Screen (left), a color display Barometric Pressure Graph Screen (right), and a monochrome display.



- All of the screens show the barometric pressure at your current location.
- The Barometric Pressure Graph Screen shows a graph of pressure changes over the past 24 hours, along with the low pressure (Min) and high pressure (Max) during that period.
- Your watch measures barometric pressure within the range of 260 to 1,100 hPa (or 7.6 to 32.5 inHg), in units of 1 hPa (or 0.1 inHg).

Calibrating Barometric Pressure Readings Manually

Though the pressure sensor built into the watch is adjusted at the factory and normally does not require calibration, you can perform the calibration operation above if you notice that readings are very different from those from other sources. After reading “[Common Outdoor Function Settings](#)”, perform the operation under “[Barometric Pressure Calibration](#)”.

Barometer Precautions

- The barometric pressure graph produced by this watch can be used to obtain an idea of upcoming weather conditions. Note that this graph provides only a rough idea of barometric pressure trends, and it is not intended for official weather predictions or reporting activities.
- 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.

Using Sunrise/Sunset

Sunrise/Sunset has a color display Time Screen (left), a color display Azimuth Screen (right), and a monochrome display.



- The Time Screen shows the following times: sunrise time (upper left), pre-dawn nautical twilight start time (lower left), sunset time (upper right), post-sunset nautical twilight end time (lower right), and the current time (bottom center).
- The Azimuth Screen shows the current time, the sunrise time, and the sunset time. The outer circumference of the display shows a compass, with a red pointer indicating north. ☀️ indicates the sunrise azimuth while 🌑 indicates the sunset azimuth.
- The monochrome display alternates at 10-second intervals between sunrise time (RISE) and sunset time (SET).

Nautical Twilight

Twilight is the time when the sky brightens as the sun is at or just below the horizon (water horizon or visible horizon). There are actually three types of twilight: nautical twilight, civil twilight, and astronomical twilight. Nautical twilight is normally defined as occurring when the sun is from 6 to 12 degrees below the horizon.

Using Tide Graph

Tide Graph has a color display Tide Graph Screen (left), a color display Fishing Time Screen (right), and a monochrome display.



- The Tide Graph Screen shows the current tide level and time (red characters in the center of the screen), along with the high tide (High) and the low tide (Low) that will occur up to 12 hours later. The graph shows changes in the tide level for 24 hours (12 hours before and after the current time).
- The number of white fish marks on the [Fishing Time Screen](#) indicates the projected probability of fishing success. Anywhere from zero to four white fish marks are displayed, and more white fish marks indicate that better success can be expected. Note however, that this in no way specifically guarantees your fishing success.
- The monochrome display alternates at 10-second intervals between high tide time (HIGH) and low tide time (LOW).

Before Using Tide Graph

- To use the Tide Graph Screen, you need to specify the point (port) whose tide information you want to view. After reading "[Common Outdoor Function Settings](#)", perform the operation under "[Port setting](#)".
- The information the watch displays on the Fishing Time Screen is calculated based on your current location. It is not affected by the watch's point (port) setting. This means that Fishing Time Screen information can be used for both saltwater and fresh water fishing.
- Keep in mind that the Tide Graph Screen shows information about the currently selected point (port), while Fishing Time Screen information is based on your current location.

Interpreting Fishing Time Screen Contents

Fish Marks (Projected Probability of Fishing Success Indicators)

The number of fish marks on the Fishing Time screen indicates the projected probability of fishing success. Anywhere from zero to four white fish marks are displayed, and more white fish marks indicate that better success can be expected. Note however, that this in no way specifically guarantees your fishing success.

The fish mark indicator display is based on the current Moon age and Moon position (hour angle). Fishing timing is said to be best when the Moon age is new Moon or full Moon, and second best during the Moon's first quarter and last quarter. For the Moon hour angle, 00:00 and 12:00 is said to be optimal, while 06:00 and 18:00 is said to be second best. The correlation of these factors results in the fish mark indications shown below.

	Hour Angle 00:00/12:00 Hour	Hour Angle 06:00/18:00 Hour	Other
New Moon/ Full Moon*			
First Quarter/ Last Quarter			
Other			

* Including Moon ages 26.9 to 28.6, and 12.1 to 13.8.

Note

- Hour angle is one of the coordinates used to give the direction of a celestial body (planet, moon, etc.) point on the celestial sphere. The hour angle directly overhead is 00:00, westward is 06:00, directly downwards is 12:00, and eastward is 18:00.

Current Date's Optimum Predicted Fishing Time Period

The Fishing time Screen shows two orange time periods centered on hour angles 00:00 and 12:00, and two blue time periods centered on hour angles 06:00 and 18:00. Each region indicates periods during which optimum fishing can be expected.

The orange region indicates the best fishing period as predicted by the watch, while the blue region indicates the next best fishing period. The part of a period in the current day that is already passed is indicated by a lighter color, while the darker color indicates the part of the period that has not yet passed. Times indicated by the periods can be read using values around the periphery of the watch face. The 12 o'clock position is noon, while 6 o'clock is midnight.



- ① Time period centered on a Moon hour angle of 18:00 (Time of 18:00 hour angle = 08:50AM)
- ② Time period centered on a Moon hour angle of 12:00 (Time of 12:00 hour angle = 02:10AM)
- ③ Time period centered on a Moon hour angle of 00:00 (Time of 00:00 hour angle = 02:00PM)
- ④ Time period centered on a Moon hour angle of 06:00 (Time of 06:00 hour angle = 08:05PM)

Current Moon Hour Angle and Moon Age Indications

The location of the Moon indicator on the Fishing Time screen shows the current hour angle of the Moon, while the shape of the indicator shows the current Moon age. In the screen shown above, for example, the current Moon hour angle is 22:00 (12 o'clock position = hour angle 00:00, 6 o'clock position = hour angle 12:00), while the Moon age is 21.3 to 23.1.

The table below shows how Moon age is indicated by the Fishing Time screen indicator.

Moon phase	Moon age	Indicator	Moon phase	Moon age	Indicator
New Moon	0.0 - 0.9 28.7 - 29.5		Full Moon	13.9 - 15.7	
	1.0 - 2.7			15.8 - 17.5	
	2.8 - 4.6			17.6 - 19.4	
	4.7 - 6.4			19.5 - 21.2	
First Quarter	6.5 - 8.3		Last Quarter	21.3 - 23.1	
	8.4 - 10.1			23.2 - 24.9	
	10.2 - 12.0			25.0 - 26.8	
	12.1 - 13.8			26.9 - 28.6	

Using My Graph

My Graph shows the status of your activities for the current day.



- Under initial default settings, both color and monochrome screens show how many calories you have burned from the start (00:00) of the current day.
- A color display shows what types of activities you have performed on the current day (① Running, ② Cycling, ③ Walking, ④ Riding, ⑤ Resting) as a concentric circle graph. Up to four of the five items (① through ⑤) can be displayed at the same time. Values at the bottom of the screen show the cumulative times spent engaged in each type of activity. For information about configuring display item settings, see [“To specify activity types that appear on the Activity Graph screen”](#).
- You can hide the current time and cumulative activity times by tapping the touch screen of the color display. Tap the touch screen again to show the times.

Before Using My Graph

To display My Graph, you need to change the “Save daily activity records” setting to “ON”. For more accurate burned calorie calculation, you need to input the following information: height, weight, wrist where you wear the watch. After reading [“Common Outdoor Function Settings”](#), configure the following settings: [“Save daily activity records”](#), [“Height”](#), [“Weight”](#), [“Wrist where you wear the watch”](#).

To specify the type of values shown in the center of the My Graph screen

- 1. Swipe the touch screen from right to left. On the “Settings” Screen that appears, tap . This displays the setting menu.**
- 2. Scroll the setting menu upwards and downwards. When “Centered value / My Graph” is displayed, tap it. This displays a list of value types.**
- 3. Scroll the list upwards and downwards. When the type of value you want shown in the center of the My Graph Screen is displayed, tap it.**

Important!

- Be sure to affix the watch to your wrist before starting a heart rate measurement operation. Starting a measurement operation and then affixing the watch to your wrist may make correct measurement impossible. For information about how to affix the watch to your wrist, refer to [“Wearing the Watch”](#).
- When “Heart Rate” is specified as the type of value to be displayed in the middle area of the screen, displaying the activity graph screen simultaneously starts heart rate measurement. It takes some time for the heart rate value to appear on the display.
- The measurement and calculation method used to determine calories burned, number of steps, and other numeric values depends on the app being used. Because of this, there may be some variation between values. For example, the number of calories shown on My Graph will not necessarily match the number of calories burned on another app’s display.
- The activity type and activity time displayed by My Graph are based on movements detected by the watch’s sensors. Because of this, certain movements may result in misinterpretation of your activity, resulting in the wrong activity type and/or activity time being displayed.

To specify activity types that appear on the Activity Graph screen

- 1. Swipe the touch screen from right to left. On the “Settings” Screen that appears, tap . This displays the setting menu.**
- 2. Scroll the setting menu upwards and downwards. When “Activity Specific Properties” is displayed, tap it. This displays a list of activity types.**
- 3. Tap the check boxes next to the activity types you want to show on the activity graph screen to select (✓) them.**
 - * You can have up to four activity types selected (✓) at one time.**

Using the Activity App

The Activity app shows cumulative elapsed time from when one of the outdoor activities listed below starts until it stops, a track of the route followed on a map, and a list of data (activity time, distance traveled, etc.)

Running
Trekking
Fishing
Cycling

Trail Running
Paddle
Snow

Important!

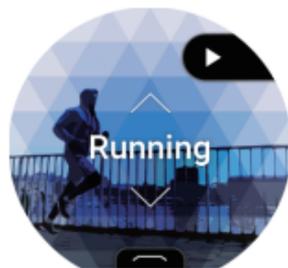
- Be sure to affix the watch to your wrist before starting a heart rate measurement operation. Starting a measurement operation and then affixing the watch to your wrist may make correct measurement impossible. For information about how to affix the watch to your wrist, refer to "[Wearing the Watch](#)".
- To perform heart rate measurements with this watch, you need to enable the "Sensor" setting in [CASIO MOMENT SETTER+ "Permissions"](#).
- To display heart rate zones on the watch, you need to configure the Birth Month and Stable Heart Rate settings. Be sure to use the procedure under "[Initial Default Settings for Heart Rate Measurement](#)" to configure the required settings.

Starting an Activity Measurement Operation

Use the procedure below to start an Activity measurement operation for any activity besides Snow. For information about the Snow activity, see [“To start a Snow activity measurement operation.”](#)

1. Tap the center of the touch screen or press the lower (APP) button, and then select the Activity type.

- To facilitate acquisition of location information, you should perform the above step outdoors in a location where the sky is visible.



Pre-activity measurement screen (“START” screen)

2. Press the upper (MAP) button.

- In the case of the Trekking and Fishing activities, this operation starts the Activity measurement operation immediately. For other activities, it starts a countdown.
- **If the “Location info being acquired...” message appears, perform one of the operations below.**
Move outdoors to a location with an unobstructed view of the sky and wait there without moving until location information can be acquired. To start without waiting, press the upper button.

3. Wait until the countdown reaches zero, and then start your activity.

- To start without waiting, press the upper button.



Activity measurement in progress screen

To start a Snow activity measurement operation

While the “[Auto Record](#)” setting is “OFF”

- 1. Tap the center of the touch screen or press the lower button, and then select Snow.**
- 2. Press the upper button.**
- 3. To start a Snow activity measurement operation, press the upper button again.**

While the “[Auto Record](#)” setting is “ON”

- 1. Tap the center of the touch screen or press the lower button, and then select Snow.**
- 2. Press the upper button.**
 - Measurement will start automatically when the watch detects the start of a Snow run.

Pausing, Restarting, and Stopping an Activity Measurement Operation

Use the procedure below to pause, restart, or stop the Activity measurement operation of any activity besides Snow. For information about the Snow activity, see [“To pause, restart, and stop the Snow activity measurement operation.”](#)

- 1. To pause a measurement operation, display the Activity measurement in progress screen and then press the upper button.***
 - This displays the measurement paused screen.
 - To restart an Activity measurement operation, press the upper button.
 - * In the case of the Fishing activity, display any Activity measurement in progress screen besides the [Catch \(fishing result\) screen](#), and then press the upper button.
- 2. To stop measurement while the measurement paused screen is displayed, hold down the lower button for about two seconds.**
 - This displays a “Save history?” message.
- 3. To save the history, tap “Save”. To discard the data, tap “Discard”.**
 - Tapping “Save” displays the Stats screen after the save operation is complete. Tapping “Discard” will return to the “START” screen.

To pause, restart, and stop the Snow activity measurement operation

While the “Auto Record” setting is “OFF”

- 1. At the end of a Snow run, display the Activity measurement in progress screen and press the upper button to pause measurement.**
 - This displays the Snow run result screen, with the route of your Snow run shown on a map.
 - When starting the next Snow run, press the upper button to restart the Activity measurement operation.
- 2. To stop an Activity measurement operation, display the Snow run result screen and then tap the lower button.**
 - This displays a “Save history?” message.
- 3. To save the history, tap “Save”. To discard the data, tap “Discard”.**
 - Tapping “Save” displays the Stats screen after the save operation is complete. Tapping “Discard” will return to the “START” screen.

While the “Auto Record” setting is “ON”

- The watch detects when your movement has stopped and automatically pauses Activity measurement, which causes the measurement paused screen to appear. The Activity measurement will restart automatically when the watch detects that you have started your activity again.
- To stop an Activity measurement operation, press the upper button while the measurement paused screen is displayed. This will display the Snow run result screen. Perform the steps of the procedure from step 2 above.

To input fishing results during Fishing measurement

While a Fishing data measurement operation is in progress, display the Catch (fishing result) screen and then press the upper button or tap  .



Catch (fishing result) screen

Activity App Screen

Pre-activity measurement screen (“START” screen)

Swipe the touch screen from bottom to top. You can use the menu that appears to perform the operations below.

Use this menu item:	To do this:
Running Display Trail Running Display	To specify items that appear on the Running and Trail Running screens while an Activity measurement operation is in progress, and the locations of the items on the screens.
Download Map	Download maps ahead of time while you have net access when you want to use maps where there is no net access. After tapping this menu item, perform the procedure from step 2 under “ Download Map ”. Using this procedure to download a map automatically changes the “ Map Type ” setting to “Mapbox”.
History/Route Import → Activity History	Display an activity history (activity end dates and times). You can tap an item in the history to display its measurement result screen and/or map screen.

Use this menu item:	To do this:
History/Route Import →Route Import / Google Drive	<p>Import route data* stored on Google Drive and superimpose it on a map, so it can be used as reference while performing an activity. Imported routes are displayed as gray lines on the map during Activity measurement operations.</p> <p>* KML and GPX format files are supported. However, depending on how a file is created, format incompatibilities and import errors may occur.</p>
History/Route Import → History Auto Save	<p>Enable “History Auto Save”, which will cause the operations below to be performed whenever you stop a logging operation with the Activity app. This means you can view history data on the phone.</p> <ul style="list-style-type: none"> • Auto registration of the activity type and date/ time data to Google Calendar • Auto save of traveled route data (KML file) to Google Drive The exported KML file is stored on Google Drive in a folder named “CASIO-WSD”. <p>For details about the required procedure, see “Enabling History Auto Save”.</p>

Use this menu item:	To do this:
History/Route Import → View History on Phone (Android only)	Display a calendar (Google Calendar or another similar app) on the phone. To view the route you traveled with Google Earth or another app, tap the desired data on the Calendar. For details about the required procedure, see “Viewing History Data on a Phone” .
History/Route Import → Link to a Partner → Google Fit	Link the watch to Google Fit. When this item is enabled (“ON”), the watch automatically sends measurement results to Google Fit after recording by the Activity app is complete.
History/Route Import → Activity Stats	Shows stats for all activities that have statistical data available. To browse activity statistics on a smartphone 1. Scroll the screen downwards. When “Browse on Phone” appears, tap it. 2. Select your Google account. <ul style="list-style-type: none"> • The statistical data is stored as text data on your Google Drive in a folder named CASIO-WSD. 3. Use your smartphone to start up the Google Drive app, and then tap the file stored in the CASIO-WSD folder.

Use this menu item:	To do this:
History/Route Import → Running Performance	Shows the heart rate zone, maximum oxygen uptake (VO ₂ Max) and an estimated full marathon time based on your heart rate settings. This item cannot be selected unless you have configured “Initial Default Settings for Heart Rate Measurement” .
Point Navigation	This setting can be used to have the direction and distance to a destination displayed on the activity map. For details, see “Using Point Navigation” .
MOMENT SETTER	Configure MOMENT SETTER notification settings to get useful information delivered when you need it during an activity. For details, see “Using the MOMENT SETTER App” .

Activity Measurement in Progress Screens

Pressing the lower button while measurement is in progress will switch between a measurement data screen, map screen, etc. The screens that can be displayed depend on the activity type.

Enabling History Auto Save

- 1. Display the Activity app “START” screen.**
- 2. Swipe the touch screen from bottom to top. On the menu that appears, tap the following in sequence: “History/Route Import”, “History Auto Save”.**
- 3. On the Select Account screen that appears, select the Google account you want to use.**
- 4. In response to the confirmation message that appears, tap “Enable”.**
 - At this point, a message may appear asking you to grant access to your Google Calendar and/or Google Drive. If this happens, scroll downwards as you read the message, and then tap  to allow access.
 - Check to confirm that “ON” is displayed for “History Auto Save”.
 - While “History Auto Save” is enabled, history data will be uploaded automatically whenever a logging operation performed with the Activity app is stopped.

Viewing History Data on a Phone

Important!

- Note that your phone needs to have “Google Calendar”, “Google Drive”, and “Google Earth” installed in order to perform this procedure.

1. On the phone, start up Google Calendar.

2. On Google Calendar, tap the history data whose details you want to view.

- On the detailed information screen that appears, tap the link of the KML file stored on Google Drive.

3. Use Google Earth to open the KML file.

Android phone:

1. Tap the KML file link.
2. On the app selection screen that appears, tap Google Earth.
 - This starts up Google Earth and shows the route you traveled on a map.

iPhone:

1. Tap the KML file link.
 - This will display the following message: “Unsupported File Format.”
2. In the upper right corner of the screen tap the more options (...) icon. On the screen that appears, tap “Open In”.
3. On the dialog box that appears, tap “Google Earth”.
 - This starts up Google Earth and shows the route you traveled on a map.

Note

- If the watch is paired with an Android phone, you can use watch menu operations to start up the phone's Google Calendar.
1. Display the Activity app "START" screen.
 2. Swipe the touch screen from bottom to top. On the menu that appears, tap the following in sequence: "History/Route Import", "View History on Phone".

Data Displayed During Measurement Operations

Note the points below concerning the data displayed while a measurement operation is in progress.

- For information about procedures to calibrate the barometric pressure and altitude values displayed by the Activity app to make them more accurate, read "[Common Outdoor Function Settings](#)" and then refer to the following items: "[Barometric Pressure Calibration](#)", "[Altitude Calibration](#)", and "[Correct Altitude Using Location](#)".
- Since speed and distance traveled are measured using the watch's or your smartphone's GPS function, location measurement error may result in measured value error.
- Speed and distance are calculated at regular intervals, so there may be some lag before values are displayed.
- If the watch is not able to acquire location information (GPS) at the start of an Activity measurement operation, "----" will be displayed in place of the measurement value.

Linking to Google Fit

- 1. Display the Activity app “START” screen.**
- 2. Swipe the touch screen from bottom to top. On the menu that appears, tap the following in sequence: “History/Route Import” → “Link to a Partner” → “Google Fit”.**
- 3. On the account selection screen that appears, select the Google account you want to use.**
- 4. In response to the confirmation message that appears, tap “Link”.**
 - Confirm that the “Google Fit” setting is “ON”.
 - When this setting is enabled (“ON”), the watch automatically sends measurement results to Google Fit after recording by the Activity app is complete.

Using a Phone to View Activity App Measurement Results with Google Fit

✔ Important!

- Note that your phone needs to have the “Google Fit” app installed in order to perform this procedure.

- 1. On your phone, start up Google Fit.**
- 2. Tap the “Journal” icon at the bottom of the screen. On the list that appears, select the Activity app measurement results sent from the watch to the phone to view their details.**

Note

- A stable network connection between the watch and your phone is required to transfer Activity app measurement results for viewing on your phone.
- Activity app measurement results are displayed by Google Fit on your phone using the following data names: Running, Trail Running, Trekking, Fishing, Cycling, Paddle, Snow. Also note that the Journal shows Google Fit measurement results in addition to measurement results sent from the watch’s Activity app.

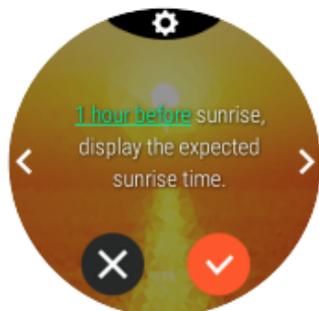
Google Fit

Google Fit is a Google service that helps you manage daily fitness data. For details, refer to Google Fit help.

Using the MOMENT SETTER App

For example, you can use the MOMENT SETTER app to receive notifications like the ones shown below.

- During an Activity app Trekking measurement operation, perform a vibration notification and display the remaining altitude when there are 200 m remaining to an altitude of 2000 m.
- Every day, perform vibration notification and display the sunrise time one hour before sunrise.



Operation involves simple selection of the notification to be received from a menu.

There are two types of MOMENT SETTER notifications: those received during the measurement operation of an Activity app Trekking, Fishing, or another activity, and those that are not related to an activity measurement operation.

MOMENT SETTER App Main Menu

Starting up the MOMENT SETTER app first displays a Main Menu.

Setting items included in the Main Menu are shown in the table below.

Tapping this item:	Displays this menu:
Recent	Menu of up to three notifications that were last turned on. This item appears when one or more MOMENT SETTER notifications were turned on.
Climbing, trekking* ¹ , Fishing* ¹ , Cycling* ¹ , Paddle* ¹ , Snow* ¹	Notification menu corresponding to each activity type (see “Using the Activity App”). The alerts of each menu can be received only while there is a measurement operation in progress for the activity with the same name as the item name.
Extras	Displays a notification menu that is not associated with any activity type. The alerts on this menu can be received even when there is no Activity app measurement operation in progress.
Settings	Setting menu. See “Common Outdoor Function Settings” .

*1 The menu that appears when one of these items is tapped is the same menu that is displayed when MOMENT SETTER is accessed from the Activity app.

Example MOMENT SETTER Operation

This section shows an example operation for configuring notification settings for “Climbing, trekking”. This operation can be started from the MOMENT SETTER app or Activity app.

- 1. Start up the MOMENT SETTER app and scroll the main menu upwards and downwards. When “Climbing, trekking” is displayed, tap it.**
Alternatively, while the Activity app “Trekking” activity is displayed, swipe the touch screen from bottom to top. On the menu that appears, tap “MOMENT SETTER”.
- 2. Scroll the displayed notification menu left and right until the notification you want (such as, “Each 1 km of distance traveled, display the current altitude.”) is displayed.**
 - At this point, the check mark at the bottom of the notification screen will become gray. This indicates that notifications are disabled (no notifications received).
 - To change initial default settings, perform steps 3 and 4. To leave initial default settings as they are, advance to step 5.
 - To return from the notification menu to the previous screen (MOMENT SETTER app main menu or Activity app “START” Screen), press the MAP button or APP button.
- 3. Swipe the touch screen from top to bottom to display the criteria setting screen.**
- 4. Tap “Distance”. On the list that appears, tap a setting (such as “3km”).**
 - This applies the changes and returns to the notification menu. At this time, notifications are enabled and the check mark at the bottom of the display will change to  (meaning that the operation in step 5 is not required).

5. At the bottom of the display, tap  to toggle it to .

6. Press the power button to exit the **MOMENT SETTER** app.

- After performing the above operation, you need to start up the Activity app and start a Trekking measurement operation to actually receive notifications. See [“Using the Activity App”](#).

Note

- A notification from MOMENT SETTER is deleted automatically after a fixed amount of time.
- Since speed measurement, distance traveled measurement, and current location detection are performed using the watch's or your smartphone's GPS function, there may be some measured value error. Accuracy is particularly poor in a ravine or canyon, among buildings, indoors, and in other areas where signal reception is bad.
- You can disable all MOMENT SETTER settings with a single operation. After reading [“Common Outdoor Function Settings”](#), perform the operation under [“All Off”](#).

Using the Multi Timepiece App

The Multi Timepiece app provides access to the Multi Timepiece Mode, which makes it possible to display the current time and particular information (battery level, or barometric pressure/altitude, etc.) only on the monochrome LCD. Use the Multi Timepiece Mode to minimize the information that appears on the watch display and save power while sleeping, while in a location where smart device use is prohibited, etc.

Important!

- In Multi Timepiece Mode, apps, location information, Wi-Fi, and smartphone linking (notification reception, etc.) are all disabled.
- While the watch is in Multi Timepiece Mode, you will not be able to change any settings related to the current time and date (time zone auto switching, smartphone time and date sync, including summer time adjustment, etc.) To update the time setting, every couple of days you should exit Multi Timepiece Mode and establish a connection with a smartphone.

Display Styles

There are two display styles in the Multi Timepiece Mode. You can select the display style each time you enter the Multi Timepiece Mode.

Outdoor Style..... Current time, barometric pressure, altitude

Daily Style..... Current time, day of the week, day, battery level, step count*



Outdoor Style



Daily Style

* Either the battery level (default) or step count can be displayed. The battery operating time while the step count is displayed is approximately one-fourth that provided when the battery level is displayed.

Multi Timepiece Mode Operations

To do this:	Perform this operation:	
Switch the watch to Multi Timepiece Mode	<ol style="list-style-type: none">1. On the app menu, tap “Multi Timepiece”.<ul style="list-style-type: none">• This displays the “Multi Timepiece” screen.2. Tap “Settings” and then configure the settings below as required.	
	Battery Level/ Step Count	While Daily Style is selected, this setting switches the value at the bottom of the display between the battery level and the step count.
	Monochrome Display	Selects the Multi Timepiece mode display style. Bright: Dark characters on a light background. Dark: Light characters on a dark background.
	<ol style="list-style-type: none">3. Tap “Outdoor Style” or “Daily Style”.4. Read the explanation that appears, and then tap “Start”.<ul style="list-style-type: none">• This shuts down Wear OS by Google, enters Multi Timepiece Mode, and displays the current time on a monochrome screen.	
Illuminate the display in Multi Timepiece Mode	Press and immediately release the power button. This will illuminate the display for about two seconds.	

To do this:	Perform this operation:
Correct altitude and barometric pressure values (Outdoor Style only)	<p> Important!</p> <ul style="list-style-type: none"> • Use the operation below to input altitude values based on elevation values from other sources, and/or barometric pressure values measured using an accurate barometer. For details about this operation and why it is necessary, see the explanation under “Altitude Calibration” and “Barometric Pressure Calibration”. <ol style="list-style-type: none"> 1. Hold down the MAP button for about two seconds until the “ALTI” (altitude) value in the lower display starts to flash. <ul style="list-style-type: none"> • This indicates the altitude calibration mode. 2. Use the MAP button and APP button to change the value as desired. 3. Hold down the MAP button for about two seconds until the “BARO” (barometer) value in the upper display starts to flash. <ul style="list-style-type: none"> • This enters the barometric pressure calibration mode. 4. Use the MAP button and APP button to change the value as desired. 5. Hold down the MAP button for two seconds. <ul style="list-style-type: none"> • This exits the calibration mode.
Exit Multi Timepiece Mode and restore normal function	Hold down the power button for about two seconds. This starts up Wear OS by Google and returns to normal function.

Common Outdoor Function Settings

CASIO apps and CASIO watch faces share the same outdoor functions such as Compass, Altimeter, etc. This section explains settings that are common to all CASIO apps and watch faces.

Basic Operations for Configuring Common Settings

Use the setting menu to configure common settings. The required operation to display the setting menu depends on what screen is displayed, but operations are the same in all cases once the menu is displayed. You can use the steps below to configure settings.

1. Display the setting menu.

From a CASIO watch face:

1. Touch and hold the center of the touch screen for about two seconds.
2. Tap  that appears in the lower part of the watch face. This displays the setting menu.

From the TOOL app:

1. Swipe the touch screen from right to left several times.
2. When the “Settings” Screen is displayed, tap . This displays the setting menu.

From the MOMENT SETTER app or Activity app:

1. Swipe the touch screen from bottom to top.
2. Tap “Settings”. This displays the setting menu.

From the Location Memory app:

1. While a map is displayed, swipe the touch screen from bottom to top.
2. On the menu that appears, tap Settings”. This displays the setting menu.

2. Scroll the setting menu upwards and downwards. When the setting item you want to configure is displayed, tap it.

- Some items toggle between settings when tapped, while others display another screen for configuring settings. For an explanation about each item and its operation, see [“Setting Item List”](#).

Setting Item List

The setting items displayed on the setting menu (see “[Basic Operations for Configuring Common Settings](#)”) are shown below. After displaying the setting menu, perform the operation required for the item whose setting you want to change.

Note

- The letters to the right of each setting item indicate the screen from which the setting item can be displayed. For example, the letters “WF” to the right of a setting item means that the setting item can be displayed from a watch face (WF) screen.

WF: Watch face

MS: MOMENT SETTER app

TL: TOOL app

LM: Location Memory app

AC: Activity app

TP: Multi Timepiece app

Compass Calibration (WF)

Operation

Tap this setting item and then move the watch around as instructed by the Compass magnetic calibration message and animation that appears on the display. A message will appear to let you know when magnetic calibration is complete, and then the screen that was displayed before you started calibration (watch face) will reappear.

Description

This function calibrates Compass so it indicates direction correctly.

If Compass Calibration is dimmed (and will not respond when tapped) it means that Compass accuracy is sufficient and that correction is not required.

Compass Magnetic Declination Calibration (WF/TL)

Operation

Each tap of this setting item toggles between “ON” and “OFF”. The Compass indicates true north when on, and magnetic north when off.

Description

This function corrects magnetic north and true north error.

Altitude Calibration (WF/TL/AC)

Operation

1. If “Correct Altitude Using Location” is on, turn it off.
2. Tap “Altitude Calibration”.
3. On the altitude input screen that appears, input the elevation at your current location (which you obtained from local indications).
 - Tap the digit of the value that you want to change, and then use  and  to change it.
 - To reset a manually input altitude calibration value, tap .

Important!

- Tapping  to reset the calibration value causes the watch to display altitude values that are simply calculated based on International Standard Atmosphere (ISA) definitions. Because of this, there will be large error between displayed values and actual altitude. Following reset, it is recommended that you re-input a locally indicated altitude value.
- Changing the “Correct Altitude Using Location” setting to “ON” will cancel any Altitude Calibration value you input manually.

Description

You can lessen error in the altitude readings displayed by the watch by manually inputting accurate local altitude and elevation values. You can find out the elevation at your current location from signs, maps, on the Internet, etc. While mountain climbing, it is highly recommended that you make a habit of regularly comparing altitude readings produced by the watch with locally available elevation indications, and of performing this procedure as required.

Correct Altitude Using Location (WF/TL/AC)

Operation

Each tap of this setting item toggles between “ON” and “OFF”.

Description

Select “ON” for this setting to perform auto altitude calibration based on the watch’s or your smartphone’s location information (GPS). “OFF” must be selected for this setting to perform altitude calibration manually using “[Altitude Calibration](#)”.

Important!

- When “ON” is selected for the “Correct Altitude Using Location” setting, the correction operation is performed only when GPS reception is extremely good. It is not performed in valleys, among buildings, or in any other location where reception is poor.
- Even if correction is being performed, it is based on the GPS measurement value. Because of this, resulting altitudes may not necessarily match the actual altitude or elevation above sea level values. The effect of geoid elevation may result in post-correction altitude values that include error. In Japan, included error is approximately 40 meters.
- If you want more accurate altitude readings, turning off this item and performing the “[Altitude Calibration](#)” operation by manually inputting locally indicated altitude values is recommended.

Barometric Pressure Calibration (WF/TL/AC)

Operation

Tapping this setting item displays a barometric pressure input screen. Input the current barometric pressure as measured by another accurate barometer.

- Tap the digit of the value that you want to change, and then use  and  to change it.
- To reset a manual calibration and display barometric pressure readings based on pressure sensor measurements, tap .

Description

Though the pressure sensor built into the watch is adjusted at the factory and normally does not require calibration, you can perform the calibration operation above if you notice that readings are very different from those from other sources. To calibrate manually, use this item to input the current barometric pressure as measured by another accurate barometer.

Centered value / My Graph (TL)

Operation

Tap this setting item and then scroll the list that appears upwards and downwards. When the type of value you want shown in the center of the My Graph Screen is displayed, tap it.

Description

This setting changes the type of value displayed in the center of the My Graph Screen.

Home city (WF)

Operation

Tap this setting item and then scroll the list that appears upwards and downwards. When the name of the city you want to specify as your Home city is displayed, tap it.

Description

This setting specifies the Home city displayed on watch faces (World Time, Traveler).

Edit Color (WF)

Operation

Tap this setting item, and then on the list that appears tap the color you want to use.

Description

This setting specifies the face color of a watch face (Authentic, Multi, Location, Traveler, etc).

Monochrome Display (WF/TL/AC/TP)

Operation

Each tap of this setting item toggles the face background between “Dark” and “Bright”.

Description

You can select how the watch’s monochrome LCD displays data. This setting is applied to all of the displays below.

- “2 Layers” watch face monochrome display
- TOOL app monochrome display
- Activity app monochrome display
- Multi Timepiece Mode monochrome display

Point Navigation (TL/AC)

Operation

Each tap of this setting item toggles between “ON” and “OFF”.

Description

When the setting of this item is “ON”, an icon indicating the direction to your destination is displayed on the compass color display during navigation with [Point Navigation](#).

GPS Time Calibration (WF)

Operation

1. Move to an outdoor area where the sky is visible.
2. Perform the required operation on a CASIO watch face to display the setting menu, and then tap "GPS Time Calibration".
3. Carefully read the message that appears on the display and then tap "Correct".
4. Wait until GPS reception is complete.

Description

The watch normally adjusts its current time setting by syncing with a smartphone. Should the smartphone battery go dead, if you lose your smartphone, or if syncing is not possible for some other reason, you need to perform the above operation each time you want to adjust the watch's time setting. Each time you do, the watch will temporarily adjust its time setting based on GPS information.

It is recommended that you perform this procedure in a location where GPS reception conditions are good and where the sky is visible. See "[Appropriate and Inappropriate Signal Reception Location](#)".

Port setting (TL)

Operation

Tap this setting item and then scroll the list that appears upwards and downwards. When the name of the point (port name or name of a city near the ocean) you want is displayed, tap it.

Description

This setting specifies the point (port) whose tide information is displayed by the “Tide Graph” of the TOOL app.

Re-calculation with Current Location (TL)

Operation

Tap this setting item to start acquisition of positioning information for your current location. After positioning information acquisition is successful, the TOOL screen will reappear, which will show re-calculated data.

Description

Perform this operation when “DEMO” is displayed on the TOOL app screen or when the message “Displayed result is based on location info from 000 minutes ago.” appears. It re-calculates data displayed by the TOOL app based on current location information acquired by the watch or your smartphone GPS function.

Save Daily Location Info (WF/MS/LM)

Operation

After tapping this setting, you then need to select “Every 6 minutes”, “Every 1 minute”, or “OFF”.

✔ Important!

- When you tap this setting item to toggle from “OFF” to “ON”, you will also need to tap “Every 6 minutes” or “Every 1 minute” on the confirmation dialog box that appears.

Description

This item is for configuring a setting related to the Location Memory app. Selecting “ON” for this item enables maintenance of a daily location history, even when there is no Activity app measurement operation.

✔ Important!

- Note that once internal storage becomes full, the oldest location history information is deleted automatically to make room for new information when it is recorded.

Save daily activity records (WF/TL/MS)

Operation

Each tap of this setting item toggles between “ON” and “OFF”.

✔ Important!

- When you tap this setting item to toggle from “OFF” to “ON”, you will also need to tap “I agree.” on the confirmation dialog box that appears.

Description

This item is for configuring a setting related to watch faces (Heart Rate, Authentic, Multi), the TOOL app (My Graph), and the MOMENT SETTER app. Selecting “ON” for this item, allows the watch to record information (such as displayed workout time and energy consumption) about your activities. If you want to use this function, make sure that its setting is “ON”.

Height (TL/MS)

Operation

Tap this setting item and then use the screen that appears to input your height.

- Tap the digit of the value that you want to change, and then use  and  to change it.

Description

The value you input for this item is used as basic information when calculating data displayed on the TOOL app's "My Graph".

Weight (TL/MS)

Operation

Tap this setting item and then use the screen that appears to input your weight.

- Tap the digit of the value that you want to change, and then use  and  to change it.

Description

The value you input for this item is used as basic information when calculating data displayed on the TOOL app's "My Graph".

Units (WF/TL/AC/MS)

Operation

Each tap of this setting item toggles between "Metric" and "Imperial".

Description

Use this setting to switch between metric units (meters, kilograms, hPa, etc.) and Imperial units (feet, pounds, inHg, etc.) for values displayed by CASIO watch faces and apps.

Energy Unit (WF/TL/MS/AC)

Operation

Each tap of this setting item toggles between "Cal" (kilogram calories or large calories, default setting) and "kJ" (kilojoules).

Description

The setting you specify here is used for the energy consumption value displayed on watch faces (Authentic, Multi), and by the TOOL app (My Graph), the MOMENT SETTER app and the Activity app.

Wrist where you wear the watch (TL/MS)

Operation

Each tap of this setting item toggles between “Right” and “Left”.

Description

The setting for this item is used as basic information when calculating data displayed on the TOOL app’s “My Graph” and the “Heart Rate” watchface.

Target altitude (AC)

Operation

Tap this setting item and then use the screen that appears to specify a target altitude.

- Tap the digit of the value that you want to change, and then use  and  to change it.

Description

Use this item to input a target altitude before starting an Activity app Trekking activity.

Target Distance (AC)

Operation

Tap this setting item and then use the screen that appears to specify the distance to a goal.

- Tap the digit of the value that you want to change, and then use  and  to change it.

Description

Use this item to specify the distance to a goal before starting a Running or Trail Running activity measurement operation. During the Activity measurement operation, the distance remaining to the goal will be displayed based on the value you specify here.

The longer the distance run, the greater the cumulative error in the displayed distance. Because of this, the closer you get to your goal, the less accurate the remaining distance value becomes. You should regard the remaining distance value as a rough estimate.

View Routes Display (AC)

Operation

Each tap of this setting item toggles between “ON” and “OFF”.

Description

Specifies where route data* imported to the watch should be displayed on a map during Activity measurement operations. Select “OFF” for this setting if the route you will be following is different from the imported route data, or if you want to view your current route without route data. Even if you select “OFF” for this setting, the imported route data will remain in watch memory.

* For information about route data importing, see [“History/Route Import→Activity History”](#) and [“History/Route Import→Route Import / Google Drive”](#).

Auto Pause (AC)

Operation

Each tap of this setting item toggles between “ON” and “OFF”.

Description

This setting item is linked with the Running and Cycling activities. While “ON” is selected for this item, the watch detects your movements and automatically pauses the Activity measurement operation when it detects that your movement has stopped (for example, while you are waiting at a traffic light during a run, etc.) or when your movement is extremely slow. Pauses are not included in the measurement data.

Start Countdown (AC)

Operation

Tap this setting item. On the screen that appears, tap  or  to set a countdown time in the range of 0 to 10 seconds.

Description

This setting item is linked with the Running, Trail Running, Cycling, and Paddle activities. It specifies the countdown time until measurement actually starts from the point when “START” is tapped (or the upper button is pressed) to start one of these Activity measurement operations. Specifying “0 sec (OFF)” for this setting causes the measurement operation to start without a countdown.

Lap (AC)

Operation

After tapping this setting, you then need to select “Every 10 km”, “Every 5 km”, or “Every 1 km”.

Description

This setting item is linked with the Running activity. When a run reaches the distance specified here while using the Running activity, the watch will automatically record a lap time. While a Running measurement operation is in progress, you can display the time of the lap (Lap) you ran previously to your current lap and the average (Lap Average) of all of your laps.

Route Colors (AC)

Operation

From the Activity app, perform the required operation to display the setting menu and then tap “Route Colors”. This displays a screen showing the meanings of the route track colors.

Description

Route tracks are drawn on Activity app maps using multiple colors. This item shows the meaning of each color, and is not used for configuring particular settings.

Auto Record (AC)

Operation

1. Use the Activity app to display the Snow “START” screen, and then tap “GO”.
2. Swipe the touch screen from bottom to top and then tap “Settings”.
3. On the setting menu that appears, swipe upwards and downwards until “Auto Record” is displayed, and then tap it.
 - Each tap toggles between “ON” and “OFF”.

Important!

- The “Auto Record” setting can be modified only on the setting menu you display using steps 1 and 2 above.

Description

This setting is related to the Activity app Snow. When the setting of this item is “ON”, the watch will start an activity measurement operation automatically when operation by you is detected. When “OFF”, you need to start measurement operations manually. The initial default setting is “OFF”.

Map Type (AC/MS/LM)

Operation

Each tap of this setting item toggles between “Google Maps” and “Mapbox”.

Description

This setting lets you select either Google Maps or Mapbox as the map type displayed by the Activity app and Location Memory app.

Important!

- Maps displayed while “Mapbox” is selected use geographic information from OpenStreetMap. OpenStreetMap geographic information can be freely edited by anyone, which means that information displayed on a map may not be correct.
- Immediately following execution of a “Download Map” operation, the watch will automatically switch to “Mapbox”.

Map Skin (AC/MS/LM)

Operation

Tap this setting item, and then use the list that appears to tap the name of the map skin you want to use.

Description

This item is for selecting the map skin displayed by the Activity app and the Location Memory app. You can select geographic view, satellite view, or another view to suit your location or purpose.

Download Map (AC/MS/LM)

Operation

1. Tap "Download Map".
 - This displays a list of map skin names.
2. Scroll the list upwards and downwards. When the skin name you want is displayed, tap it.
 - This displays a map with your current location in the center.
3. Scroll the map so the location that you want to be in the center of the map you download is in the center of the watch screen.
 - You can scroll the map after using the APP button (-) to reduce the size of the map and increase the display area. The area in circle in the center of the screen at this time shows the maximum downloadable area.
4. Use the MAP button (+) and APP button (-) to zoom the map so the area you want to download fills the screen.
 - The area that is displayed at this time is the approximate area that will be downloaded.
5. Tap "Fix".
 - This may cause a message prompting you to use Wi-Fi to appear.
 - This starts map downloading, and show the progress on the display. To cancel downloading, tap x.
 - The downloaded map will appear on the display after download is complete.

Important!

- Except when you want to cancel, do not perform any watch operation until map downloading is complete. Performing an operation may stop the download.
- Map data is heavy, so use of a Wi-Fi connection is recommended.
- Zoom levels are limited while a downloaded map is displayed. The smaller the area of the map you display in step 4 of this procedure, the greater the detail that will be shown when you enlarge the map. In step 4, specifying the smallest map area you might possibly need is recommended.
- Tapping "Fix" in step 5 may cause a message prompting Wi-Fi connection to appear. If you are in a location where Wi-Fi is available, tapping "Wi-Fi" to switch communication over to Wi-Fi is recommended.
- The watch can have up to five sets of Mapbox map data (map area and skin type) in memory at a time. If you attempt to download more data while there are already five sets of data in memory, a message will appear prompting you to delete existing downloaded map data. Delete map data you no longer need and try downloading the new data again.

Description

This item is for configuring settings related to the Activity app and the Location Memory app. It is for downloading a map to watch memory when “Mapbox” is selected for “Map Type”. If you want to use the map in an area where a network connection is not available, use this item beforehand in an area where a network connection is available to download the desired map.

Downloaded Map (AC/MS/LM)

Operation

Tapping this setting displays the map you downloaded.

- To display another downloaded map, swipe the touch screen from right to left.
- To delete the currently displayed map, swipe the touch screen from bottom to top and then tap “Delete This Map”.

Description

You can use the procedure under “[Download Map](#)” to view and delete maps saved in watch memory.

Route Tracking(Activity) (AC/LM)

Operation

Each tap of this setting item toggles between “Accuracy Priority” and “Battery Priority”.

Description

This item is for configuring a setting related to Activity app. While “Accuracy Priority” is selected, the GPS positioning operation and refresh operation are performed more frequently, and the route tracked on the map is more accurate. While “Battery Priority” is selected, the accuracy of the route tracked on the map is reduced somewhat, but battery power is saved.

Except when you want to perform long-term Trekking or Fishing measurement operations, use “Accuracy Priority” for better speed and distance calculation accuracy, and more frequent display refreshing.

Important!

- Note that with Activity app Cycling, Paddle, and Snow measurement operations, GPS positioning is executed at relatively short intervals even when “Battery Priority” is selected for this setting. Because of this, battery power savings are less in this case.

All Off (MS)

Operation

1. Tap this item and a confirmation dialog box will appear asking if you want to disable all MOMENT SETTER notifications.
2. Tap “Turn off.” to disable notifications or “Cancel” to leave notifications enabled.

Description

Removing all check marks from the MOMENT SETTER app menu disables all notifications. Note that once you perform this operation, there is no single batch operation to re-enable notifications. You will need to use the MOMENT SETTER app menu to individually re-enable each notification you want.

Route Display (LM)

For information about this item, see [“Enabling Route Tracking on the Map \(Route Display\)”](#).

Revisit (LM)

For information about this item, see [“Changing the “Revisit” Mark Notification Setting”](#).

Total Maximum Heart Rate (WF/MS/AC)

Operation

1. From the “Heart Rate” watch face or Activity app, display the settings menu and then tap “Total Maximum Heart Rate”.
2. Select either “Calculate from Birth Month” or “Manual Setting”.
3. Selecting “Manual Setting” will display an input screen. Use  and  to manually specify a maximum heart rate and then tap .

Description

The Total Maximum Heart Rate setting can be configured automatically based on the [birth information you input](#), or manually. To specify a total maximum heart rate manually, input a value in the range of 20 to 220. The value you input will be used to calculate heart rate zones. For normal daily training, initially select “Calculate from Birth Month”, which generally will set a relatively low value. After training for some time, you should be able to get a grasp of the maximum heart rate that is best for you, so you will be able to select “Manual Setting” and specify the value you want.

Heart Rate Zone Alert (AC)

Purpose of This Setting

- When doing heart-rate training, this item helps to ensure that your heart rate does not exceed the upper limit of the heart rate zone you are using as your target.
- During a long workout, notification will be performed to warn you against over-exertion.

Operation

1. If you have not configured your Birth Month and Stable Heart Rate settings, configure them now.
 - See "[Initial Default Settings for Heart Rate Measurement](#)".
2. From the Activity app, perform the required operation to display the setting menu and then tap "Heart Rate Zone Alert".
3. Select one of the options that appear.

Option	Description
Target Zone 4 Target Zone 3 Target Zone 2 Target Zone 1	While using Running or Trail Running, a Heart Rate Zone Alert will appear on the display whenever your heart rate exceeds the upper limit of your target zone. If you select "Target Zone 3", for example, the alert will appear if your heart rate enters Zone 4 during measurement.
OFF	Heart Rate Zone Alert not displayed.

4. Selecting a setting other than “OFF” will display a screen for selecting a screen option. Select “Display Only” or “Display + Notification”.

Option	Description
Display Only	Exceeding the upper limit of the target zone causes “ZONE” to flash on the Activity app screen (Running or Trail Running measurement screen).
Display + Notification	Along with display of “ZONE” described above, exceeding the upper limit of the target zone causes the watch to perform two short vibrations.

Description

This setting item is linked with the Running, Trail Running, Trekking, Cycling, Paddle, and Snow activities. It triggers an alert whenever the upper limit of the target heart rate zone is exceeded during a measurement operation for all of these activities.

Troubleshooting

Refer to this section whenever you are experiencing problems with watch operation.

If you don't find the solution to your problem here, visit the website below.
<https://support.casio.com/en/support/faq.php?cid=019>

Restoring Watch Operation

If you find yourself unable to obtain proper operation from the watch for some reason, restart it and then try performing the operation again. For information about restarting the watch, visit the website below.

<https://support.google.com/wearos/>

If the watch will not restart...

Perform the procedure below to force it to shut down. After the watch is forced to shut down, it will restart automatically.

1. Hold down the power button until the display goes blank.

- Wait for a while until the watch restarts automatically.

Error Code and Error Message List

If an error code or error message appears on your watch, look it up in the table below and take the required action.

Error Code Error Message	Required Action
1001, 1009 Normal charging is not possible for some reason. If this message keeps appearing, request servicing.	Remove the charger cable from the watch, turn off the watch, and then try charging again. Use only the AC adaptor and charger cable that comes with the watch for charging. If this message/error code keeps appearing, it could mean that the chargeable battery has deteriorated. Request servicing by your original retailer or an authorized CASIO Service Center.
1003 Too cold to charge.	Charge the watch in an area where the ambient temperature is between 10°C and 35°C (50°F and 95°F).
1004, 1007 Too hot to charge.	

Error Code Error Message	Required Action
<p>1021 Data acquisition from the sensor may have failed. Use the Settings screen to perform a System Restart operation.</p>	<p>Data acquisition from one of the following sensors may have failed for some reason: pressure sensor, accelerometer, gyro sensor, magnetic sensor, optical sensor (PPG Heart Rate). Restart the watch by performing the following steps: To restart, swipe the watch face from top to bottom. On the screen that appears, tap , "System", and then "Restart". If this message/error code keeps appearing after restart, request servicing by your original retailer or an authorized CASIO Service Center.</p>
<p>9000 Some problem occurred with the watch. Power will turn off shortly.</p>	<p>To restart the watch, first charge it for at least one hour. Next, hold down the power button for about 12 seconds until the display color changes.</p>
<p>9001, 9002, 9003 Some problem occurred with the watch. Power will turn off shortly.</p>	<p>Take your watch to an authorized CASIO Service Center or to your original retailer for inspection and repair.</p>
<p>9010 Watch temperature is high. Power will turn off to protect it.</p>	<p>Remove the watch from your wrist and leave it in a location that is not exposed to direct sunlight, where the temperature is between 10°C and 30°C (50°F and 86°F) to allow the watch to cool down. You will be able to turn the watch on again after it reaches a lower temperature.</p>

Important!

Note the precautions in this section whenever using this watch.

Precautions During Use

Display Information Accuracy

Tide Graph Precautions

For Japan area oceans, tide times and level changes are predictively calculated using harmonic constant data obtained from Bibliography 742 Tidal Harmonic Constants Tables, Japanese Coast (February 1992) published by the Hydrographic Department of the Japan Coast Guard, and from the List of Tidal Stations (2015) published by the Japan Meteorological Agency. For other area oceans, tide times and level changes are predictively calculated using harmonic constant data obtained from NOAA, NOAA CO-OPS, and the NOAA Tides & Currents website, and the U.S. DEPARTMENT OF COMMERCE / COAST AND GEODETIC SURVEY January 1942 TH-1.

Actual tidal phenomena fluctuate in accordance with weather, the season, and various other factors, and may give rise to irregularities not in accordance with calculated values. Certain conditions may result in some deviation from actual tides. Because of this, the information produced by the Tide Graph function of this app and watch should be treated as approximate reference information only. Never use it for navigation or any other decisions about tide that may put safety at risk.

Sunrise/Sunset Precautions

Sunrise and sunset calculations are performed using the following azimuths: North: 0 degrees, East: 90 degrees, South: 180 degrees, West: 270 degrees. Calculation results include error of multiple seconds, and error becomes greater at higher latitudes. Calculations assume a level horizon, and local topography is not taken into consideration.

Moon Age Precautions

Moon ages displayed by this watch are based on the calculation described below.

- (1) Elongation is calculated using solar and lunar coordinates produced by functional calculus.
 - (2) Moon age is calculated based on the correlation between the elongation and average moon age.
- Though the lunar period averages 29.53 days, it actually fluctuates by as much as ± 1 day, so this calculation produces an error of up to ± 1 day.

Water Resistance

This watch is water resistant up to five atmospheres, which means it can be worn while working around water and while swimming. However, note the information below.

- Even if a watch is water resistant, note the usage precautions described below.
 - Avoid using this watch while windsurfing, skin diving, or scuba diving.
 - Do not operate the buttons while your watch is submersed in water or wet.
 - Do not charge the watch while it is 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 this watch while washing your hands or face, or while performing any other task that includes the use of soap or detergent.
- The touch screen does not work while the watch is submerged in water.
- Heart rate monitor accuracy may be reduced while washing, swimming, or performing other activities involving water.
- After using the watch where it is submerged in seawater or fresh water, or where it is soiled by sand or mud, rinse it with clean water as described below and then thoroughly dry it.
 1. Fill a bucket or other container with tap water or other clean water.
 2. Place the watch in the water and leave it there for about 10 minutes.
 3. Gently move the watch back and forth in the water to remove any salt, dirt, mud, sand, etc.
 - If the touch screen is dirty, do not rub it without first washing it clean.
 - After washing the watch, use a clean, dry, soft cloth to wipe away any remaining water. Next, leave the watch in a well-ventilated, shaded location to dry thoroughly.
 - To clean dirt from the surface of the sensor in the center of the back cover, wipe it with a soft cloth, taking care not to damage the surface.

- To maintain water resistance, have the gaskets of your watch replaced periodically (about once every two or three years).
- Be sure to leave battery replacement up to an authorized CASIO Service Center or your original retailer. Unauthorized battery replacement may cause problems with the waterproof performance of the watch.
- 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 an authorized CASIO Service Center or to your original retailer.
- Do not charge the watch if the watch or charger cable is wet. Wipe off all moisture and make sure the watch and charger cable are dry before charging.

Using GPS

You watch can use radio signals from Global Positioning System satellites to determine your current location and the current time anywhere on the globe. The process for determining your current location is called "positioning".

Appropriate and Inappropriate Signal Reception Location

- A good location for signal reception is outdoors where the sky is visible and not blocked by buildings, trees, or other objects.
- You may experience GPS signal reception problems in the areas described below.
 - Where the view of the sky above is narrow
 - Near trees or buildings
 - Near a train station, airport, or other congested area, or where there is a large amount of vehicular traffic
 - Near railway aerial wires, high-voltage lines, TV towers, etc.
- GPS signal reception is not possible in the areas described below.
 - Where the sky is not visible
 - Underground, in a tunnel, underwater
 - Indoors (Reception may be possible near a window.)
 - Near wireless communication equipment or other devices that generate electromagnetism.
- GPS satellites are in constant motion, so your location, the time of day, or other factors may cause a delay in the positioning operation or may even make positioning impossible.

Using GPS Outside Your Country

Some countries or geographic areas put legal restrictions on the use of GPS, on the collection and logging of location information, etc. Your watch has built-in GPS functionality, so before embarking on international travel to a country or area outside of the country where you purchased your watch, you should check with the embassy of the countries you plan to visit, your travel agency, or some other reliable source of information to find out if there are any prohibitions or restrictions on bringing in devices with GPS functionality, the logging of location information, etc.

Long Periods of Non-use

If you allow the watch to remain discharged and unused for a long period, it will take a long time to acquire GPS signals and perform positioning immediately after you charge the watch and start using it again.

GPS Function Precautions

- Whenever you are in any area where radio wave reception is prohibited or restricted, perform the operation below to turn off the “Location” setting.
 1. While a watch face is displayed, swipe the touch screen from top to bottom and then tap .
 2. Scroll downwards and tap “Connectivity” and then “Location”.
 3. On the screen that appears, disable “Location”.
- Map data may include information that is incorrect. Also, all countries and geographic areas may not be provided in the map data.
- Some location and address names may not display correctly due to applicable laws and restrictions in certain countries and geographic areas.
- The location information provided by the GPS function of this watch is intended for reference purposes only and locations shown may not be accessible or difficult to access. Also, map information may show mountains, jungles, deserts, and other dangerous or lawless locations. Before going to an unknown location, be sure to check on the latest information available about laws and safety.

- Using this watch in the vicinity of a mobile phone or other device that uses 1.5 GHz band radio waves may make signal reception impossible.
- Depending on reception conditions, GPS positioning information may include error up to several hundred meters.
- Location information is not acquired while flying on an aircraft or otherwise moving at very high speed.
- Never use the GPS function of this watch for surveying or any other measuring that requires high accuracy.
- Never use the GPS function of this watch for navigation of boats, aircraft, motor vehicles, individuals, etc.
- Location measurements are performed using satellites that are operated and managed by the United States (GPS), Russia (GLONASS), and Japan (QZSS). Because of this, there is always the possibility that access to its information may be disabled at the discretion of these countries.

Wi-Fi connectivity

Note that when using a Wi-Fi connection you need to be aware of the watch's battery level and your surrounding environment. A low battery or extreme cold can cause Wi-Fi operation to shut down automatically to protect the watch's system.

MIL-STD-810G

This watch has been tested for the items described below in accordance with the MIL-STD-810G standard established by the U.S. Department of Defense.

- Shock resistance is based on the assumption of normal daily use. Throwing the watch, or subjecting it to excessive dropping or other extreme shock can cause it to break.
- Be sure to read the information in this manual under “[Precautions During Use](#)” and “[User Maintenance](#)” in order to ensure proper use of this watch. Failure to use the watch in accordance with this information creates the risk of overheating, fire, electric shock, personal injury, and accident.
- The functions of this watch have been confirmed under test environments, but no guarantees are made concerning operation under all environments where it may be used. Also, no guarantees are made concerning the ability of the watch to withstand damage or malfunction.

Shock	Tested in accordance with Method 516.7 Procedure IV.
Vibration	Tested in accordance with Method 514.7 Procedure I.
Humidity	Tested in accordance with Method 507.6 Procedure II.
Solar Radiation	Tested in accordance with Method 505.6 Procedure II.
Low Pressure Transport	Tested in accordance with Method 500.6 Procedure I.
Low Pressure Operation	Tested in accordance with Method 500.6 Procedure II.
Low Temperature Transport	Tested in accordance with Method 502.6 Procedure I.
Temperature Shock	Tested in accordance with Method 503.6 Procedure I-C.
Ice Accretion	Tested in accordance with Method 521.4 Procedure I.

Protective stickers

- Be sure to remove all protective stickers and/or paper tags that may be affixed to your watch (including its back cover) and/or its band when you purchase it. Using the watch without removing protective stickers and/or paper tags may result in the build-up of dirt between the watch/band and the sticker/paper tag, which creates the risk of rust and skin rash.

Charging

- The watch and AC adaptor may become warm to the touch during charging. This is normal and does not indicate malfunction.
- Do not charge the watch while its charge level is high enough for watch operation. Waiting until the charge level is low until you charge will help to extend battery life. Disconnecting the charger cable from the watch after it reaches a full charge is recommended. Any of the following can hasten battery deterioration and should be avoided.
 - Frequent charging while the battery is fully charged or near fully charged
 - Continuing to charge over a long period (multiple days)
 - Connecting and disconnecting the charger cable multiple times during a single day even though the battery is fully charged
- Do not charge the watch in a location where large amounts of moisture, dust, or fine metal particles are present, in a location subjected to vibration, or near a hard line telephone, a TV, a radio, etc.
- The charger cable of this watch is magnetic. Contact with sand containing iron particles can make it unusable for charging. Should the charger terminal or cable become soiled with mud or sand, thoroughly wipe off all foreign matter before charging.
- In an area where it is extremely cold or hot, you may not be able to charge the watch or the watch may not charge completely. Charge the watch in an area where the ambient temperature is between 10°C and 35°C (50°F and 95°F).

Heart Rate Monitor Functions

- The back cover of the watch has a built-in sensor that detects your pulse. This is used to calculate and display an approximate heart rate value. The factors below can cause error in the displayed heart rate value.
 - How the watch is affixed to the wrist
 - Individual wrist characteristics and conditions
 - Activity type and intensity
 - Sweat, dirt, and/or other foreign matter near the sensorAll of this means that heart rate values displayed by the watch are approximate, and no guarantees are made concerning their accuracy.
- The heart rate monitor function of this watch is intended for recreational purposes, and should not be used in any way for medical purposes.

Band

- A band that is snugly tightened for heart rate monitoring can cause you to sweat and make it difficult for air to pass under the band, which can lead to skin irritation. During normal wear, when you do not need to monitor your heart rate, make sure the band is loose enough to allow you to insert a finger between it and your wrist.
- 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 ever 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 an authorized CASIO Service Center or to your original retailer 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. Doing so can cause malfunction.
- Leaving your watch in an area hotter than +60°C (140°F) for long periods can lead to problems with its display panel. The display panel may become difficult to read at temperatures lower than 0°C (32°F) and greater than +40°C (104°F). Watch operation that is stopped due to high temperatures will not resume until the watch cools sufficiently. Wait for a while to allow the watch to cool.

Use in Cold Environments

- Under cold conditions, the operating time provided by a battery is shorter than normal, even if the battery is fully charged.
- Extreme cold can cause Wi-Fi operation to shut down automatically to protect the watch's system.

Magnetism

- Some watch functions may not operate normally in a location where magnetism is present. Very strong magnetism (from medical equipment, etc.) should be avoided because it can cause malfunction of your watch and damage to electronic components.

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. Contact with such agents can cause discoloration of or damage to the resin case, resin band 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.
- Disconnect the charger cable from the AC adaptor and unplug the AC adaptor from the power outlet when not charging. Store them in a safe place for later use. The charger cable is magnetic, so keep it away from magnetic cards, precision equipment, and analog watches.

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.
- 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.

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.

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 the band, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.

Display Panel

- Display figures may be difficult to read when viewed from an angle.
- The display panel of this watch has flat bottom, and so it is not round. Because of this using a watch face that is designed for a round display may result in some part of the face being cut off.
- The display panel of this watch uses high-precision technology that provides a pixel yield in excess of 99.99%. This means that some very small number of pixels may not light or may remain lit at all times. This is due to the characteristics of the display panel, and does not indicate 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 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.
- To clean the metal parts on a resin band, 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.

Dangers of Poor Watch Care

Rust

- Though the metal 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 an authorized CASIO Service Center or to your original retailer.
- 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 in 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.

Chargeable Battery Handling (Please recycle!)

The built-in lithium-ion battery includes valuable resources.

When you are ready to discard your watch, follow proper procedures in order to recycle resources. For information about the proper procedure to follow when discarding the watch, contact an authorized CASIO service center or your original retailer.

Important!

- Do not try to replace batteries by yourself. Request battery replacement from an authorized CASIO service center or your original retailer.

Personal Information Protection Precautions

To protect your personal information, be sure to unpair the watch from your smartphone before transferring ownership of the watch to another party or before disposing of the watch. For details, visit the website below, enter "How do I unpair from a phone?", and then tap the [Search] button.

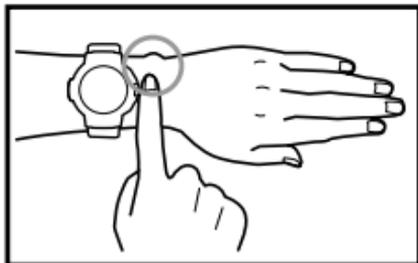
<https://support.casio.com/en/support/faq.php?cid=019>

Wearing the Watch

How you wear the watch on your wrist affects the accuracy of heart rate monitor values. Position the watch as described below.

1. **With the watch fastened loosely on your wrist, place at least one finger to the right of the power button* (Figure (1)).**

Figure (1)



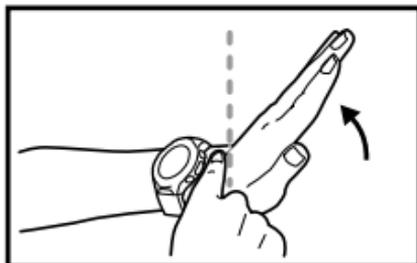
- If the watch covers the protruding bone of your wrist (your ulna, which is circled in the nearby figure), keep adding fingers until it doesn't anymore.



- The location and shape of this bone differ from person to person.
- * If you wear the watch on your right wrist, place your finger(s) to the left of the pressure sensor (left side of the watch).

- 2. Position the watch so there is at least one finger width between it and your wrist joint when you bend your hand back (Figure (2)).**

Figure (2)



- 3. After you determine the best wrist position, tighten the band snugly so the watch does not slide on your wrist.**

- To improve measurement accuracy, keep your arm still with the touch screen facing upwards for about the first 15 seconds immediately after the start of a heart rate measurement operation (such as when you start an Activity app measurement).

✔ Important!

- A band that is snugly tightened for heart rate monitoring can cause you to sweat and make it difficult for air to pass under the band, which can lead to skin irritation. During normal wear, when you do not need to monitor your heart rate, make sure the band is loose enough to allow you to insert a finger between it and your wrist.

Main Specifications

- 1.32-inch dual layer display, Color TFT LCD (320 × 300 pixels) + Monochrome LCD
- Capacitive touch panel
- Microphone
- Vibration
- Battery:
 - Type: Lithium-ion battery
 - Charging time:
 - Approximately 2.5 hours at room temperature (Be sure to use the special charger cable and AC adaptor.)
- Bluetooth: Bluetooth® 4.2 (Low Energy support)
- Wi-Fi: IEEE802.11b/g/n
- Memory & storage: 768 MB RAM, 4 GB internal storage
- Charging method: Magnetic crimped charging terminal
- Buttons: MAP button, Power button, APP button
- 5-bar (50-meter) water resistant*1
- Environment performance: MIL-STD-810G (United States military standard issued by the U.S. Department of Defense)
- Sensors: GPS, Pressure sensor, Accelerometer, Gyrometer, Magnetic sensor, Optical sensor (PPG Heart Rate)

- Watch:
 - Auto time correction:
 - By communication with smartphone (Time can be adjusted manually.)
 - By GPS information (Can be corrected manually.)
 - Time zones (world time function):
 - Supports multiple world time zones. (Types depend on system time zones.)
 - 12/24-hour timekeeping
 - Full auto-calendar:
 - Auto switching by linking with smartphone
 - Summer time:
 - Auto switching by linking with smartphone
 - Watch Face Types:
 - Three favorites, more can be added.
- Location Memory App:
 - Map screen, route screen, selectable map skin, map downloading (off-line maps), voice memo, landmark, Revisit marks², history screen

- **TOOL App:**

- Compass:**

- Measurement range: 0° to 359°

- Measurement unit: 1°

- Continuous measurement duration: 1 minute

- North indication hand, Magnetic declination calibration, Bearing memory, Gradient calibration

- Altimeter:**

- Measurement range: -700 to 10,000 m (-2,300 to 32,800 ft)

- Measurement unit: 1 m (5 ft)

- Measurement accuracy: within ±75 m (within ±250 ft) (When frequent manual calibration is performed)

- Shortest measurement interval: 1 minute

- Altitude graph: Past 24 hours

- Manual altitude calibration, Auto altitude calibration using location information^{*3}

- Barometer:**

- Measurement range: 260 to 1,100 hPa (7.6 to 32.5 inHg)

- Measurement unit: 1 hPa (0.1 inHg)

- Measurement accuracy: within ±3 hPa (within ±0.1 inHg)

- Atmospheric pressure tendency graph: Past 24 hours

- Barometric pressure measurement interval: 1 minute

- Manual barometric pressure calibration

- Tide and Fishing:**

- Tide graph: Past 12 hours + Next 12 hours

- Fishing time (Calculated according to current location, and moon hour angle and age.)

- Sunrise/sunset:**

- Sunrise/Sunset times (Current location sunrise/sunset)

- Sunrise/Sunset directions: Accuracy depends on compass

- My Graph^{*4}:**

- Daily activity pattern: Running, bicycle, walking, vehicle, stopped

- Calories burned, Heart rate, Steps, Workout time

- Activity App:
Running, Trail Running, Trekking, Fishing, Cycling, Paddle, Snow
- MOMENT SETTER App:
Trekking, Fishing, Cycling, Paddle, Snow notifications
- Screen brightness setting: 5 levels
- Watch battery level indicator: Integer value, 0 to 100%
- Charger (AC adaptor):
INPUT: AC 100 V to 240 V 50 Hz/60 Hz
OUTPUT: 5.0 V
- Charger cable:
Length: Approximately 0.75 m (2.46 ft)
Type: AC adaptor USB Type A
- Operating time on full charge*¹:
Normal use: More than one day
Multi-Timepiece Mode: Approximately one month ^{*5}
- Operating temperature: -10°C to 40°C (14°F to 104°F)
- Crystal: Mineral glass (dirt resistant coating)
- Approx. Size (Body H × W × D): 61.7 × 57.7 × 16.75 mm (2.4" × 2.3" × 0.7")^{*6}
- Approx. Weight (including band): 81 g (2.9 oz)
- Included accessories: Charger (AC adaptor), Special charger cable

- About MIL-STD-810G (United States military standard issued by the U.S. Department of Defense):

Description:

1. Shock
2. Vibration
3. Humidity
4. Solar-Radiation
5. Low Pressure Transport
6. Low Pressure Operation
7. Low Temperature Transport
8. Temperature Shock
9. Ice Accretion

Procedure: MIL-STD-810G, w/change1

- 1: Method 516.7 Procedure IV
- 2: Method 514.7 Procedure I
- 3: Method 507.6 Procedure II
- 4: Method 505.6 Procedure II
- 5: Method 500.6 Procedure I
- 6: Method 500.6 Procedure II
- 7: Method 502.6 Procedure I
- 8: Method 503.6 Procedure I -C
- 9: Method 521.4 Procedure I

Attention:

The functions of this watch have been confirmed under test environments, but no guarantees are made concerning operation under all environments where it may be used. Also, no guarantees are made concerning the ability of the watch to withstand damage or malfunction.

- Phones & tablets that work with Wear OS by Google
Wear OS by Google works with phones running Android 4.4+ (excluding Go edition) or iOS 10+¹⁷. Supported features may vary between platforms and countries.
Visit g.co/wearcheck on your Android phone or iPhone® to see if it is compatible.

- *1 CASIO test conditions
- *2 In order to be able to use these functions your Android phone must have the CASIO MOMENT SETTER+ app installed, and there must be a connection between the phone and watch. These functions are not supported in the case of iOS.
- *3 GPS altitude information is used, so the indicated altitude may not exactly match the actual above sea level elevation or altitude.
- *4 Default: OFF
- *5 Displaying the step count reduces the battery operating time.
- *6 Approximately 19.05 mm (0.8") if the protrusion of the sensor area is included.
- *7 Limited functionality when connected to iOS device.

Supplementary Information

Open Source Information

CASIO uses GPL, LGPL and other source code that comes under an open source license in this product. CASIO discloses the source code in accordance with each open source license. For source codes and details about each open source license, visit the CASIO website. Source code is provided “as-is” without any guarantees. However, this does not affect warranty conditions by CASIO concerning product defects (including defects in the source code).

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- iPhone is a trademark or registered trademark of Apple Inc. registered in the United States and other countries.
- App Store is a service mark of Apple Inc., registered in the U.S. and other countries.
- Other company, product and service names used in this manual also may be trademarks or registered trademarks of others.

Regulatory Information

Your watch is a device that supports electronic way of display. To display regulatory information, perform the steps below.

- 1. While the watch face is displayed, swipe the touch screen from top to bottom and then tap .**
- 2. Scroll the screen downwards. Tap “System” and then “Regulatory information” in sequence.**

This device complies with part 15 of FCC Rules and Industry Canada's licence-exempt RSSs. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

The available scientific evidence does not show that any health problems are associated with using low power wireless devices.

There is no proof, however, that these low power wireless devices are absolutely safe. Low power Wireless devices emit low levels of radio frequency energy (RF) in the microwave range while being used. Whereas high levels of RF can produce health effects (by heating tissue), exposure of low-level RF that does not produce heating effects causes no known adverse health effects. Many studies of low-level RF exposures have not found any biological effects. Some studies have suggested that some biological effects might occur, but such findings have not been confirmed by additional research. The WSD-F21 has been tested and found to comply with FCC/IC radiation exposure limits set forth for an uncontrolled environment and meets the FCC radio frequency (RF) Exposure Guidelines and RSS-102 of the IC radio frequency (RF) Exposure rules.

This product is subject to the Export Administration Regulations (EAR) of the United States, and so it cannot be exported to or brought into countries that fall under U.S. Embargoes and Other Special Controls.

Frequency band and maximum output power

- WSD-F21

IEEE802.11b/g/n:2.4GHz band $\leq 19\text{dBm}$

Bluetooth(2.4GHz) $\leq 10.5\text{dBm}$

Product Quality Information

CASIO collects information about watch usage in a way that keeps users anonymous. This information is securely stored on CASIO servers and is not accessible by third-parties. It is used to improve product quality and functionality.

CASIO®

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