

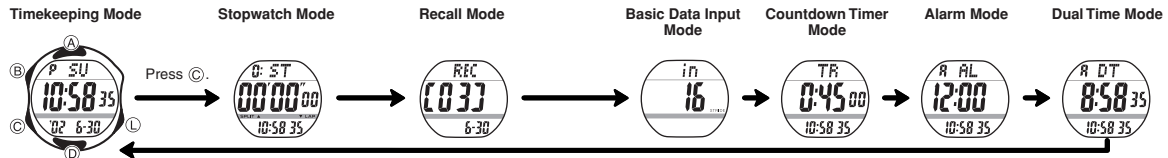
About This Manual



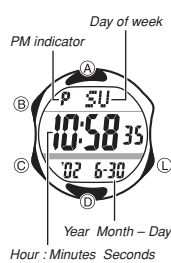
- Button operations are indicated using the letters shown in the illustration.
- This watch is equipped with two color LCD panels. For the sake of simplicity, the screen shots in this manual are shown using only one color.
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "Reference" section.

General Guide

- Press **C** to change from mode to mode.
- In any mode, press **L** to illuminate the display.



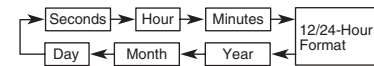
Timekeeping



Use the Timekeeping Mode to set and view the current time and date. You also use the Timekeeping Mode to select the current time color.

To set the time and date

1. In the Timekeeping Mode, hold down **B** until the seconds start to flash, which indicates the setting screen.
2. Press **C** to move the flashing in the sequence shown below to select other settings.



3. When the setting you want to change is flashing, use **D** and **A** to change it as described below.

To change this setting	Perform this button operation
Seconds	Press D to reset to 00 .
Hour, Minutes, Year, Month, Day	Use D (+) and A (-) to change the setting.
12/24-Hour Format	Press D to toggle between 12-hour (12H) and 24-hour (24H) timekeeping.

- Pressing **D** while the seconds are in the range of 30 to 59 resets them to **00** and adds 1 to the minutes. In the range of 00 to 29, the minutes are unchanged.
- 4. Press **B** to exit the setting screen.
- The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is applied in all modes.
- The day of the week is automatically displayed in accordance with the date (year, month, and day) settings.

Current Time Color Setting

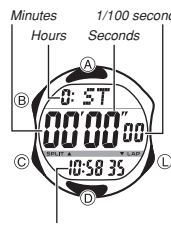


You can select from among three different colors for the current time. The color you select affects the figures in the center part of the display, and the AM (R)/PM (P) indicator, which appears in the upper part of the display.

To change the timekeeping color

- In the Timekeeping Mode, hold down **D** for about one second to change the color of the current time.
- Each time you perform the above operation, the color setting changes in the sequence: black → blue → red → black, and so on.
- The above setting affects the hour, minutes, seconds, and am/pm indicator only.

Stopwatch



The stopwatch is a 1/100-second stopwatch that measures elapsed time and lap/split times. The stopwatch uses the data you input in the Basic Data Input Mode and a pacer signal to calculate the distance you cover while jogging or running. Stopwatch times and your distance are also stored in memory.

- The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
- Exiting the Stopwatch Mode while a lap/split time is frozen on the display clears the lap/split time and returns to elapsed time measurement.
- Stopwatch measurements are performed in the Stopwatch Mode, which you enter by pressing **C**.

How the Stopwatch Works

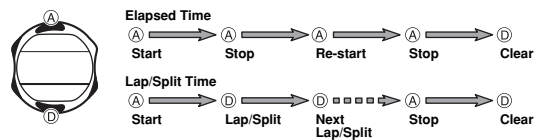
There are two ways you can use the stopwatch: to measure elapsed time and lap/split times like a standard stopwatch (see "To measure times with the stopwatch"), and to keep track of the distance you cover while jogging or running. In order to use the stopwatch to keep track of distance, you must first perform the steps listed below.

1. Set your basic data. See "Inputting Basic Data".
2. Configure the pacer signal. See "About the Pacer Signal".

Note

- In order to obtain accurate distance calculations, you must set accurate basic data and keep your exercise pace in accordance with the pacer signal emitted by the watch.
- See "How Stopwatch Data is Stored" for information about the type of data the watch stores in memory when you use the stopwatch.
- You can view distance covered data only by recalling it in the Recall Mode. It does not appear on the Stopwatch Mode screen.

To measure times with the stopwatch

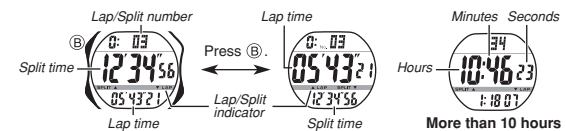


Note

- Pressing **D** to perform a lap/split time operation freezes the lap/split time at that point on the display for about eight seconds. After that, the display returns to normal stopwatch time measurement.
- During a stopwatch time measurement operation, the upper part of the display shows the hour digit and the current lap/split number, the center part shows the current split time, and the lower part shows the current lap time.

Selecting the Stopwatch Screen Format

The following shows how you can control the position of the lap time and split time on the stopwatch screen.



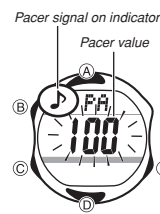
- The Lap/Split indicator uses arrows to indicate the location the lap time and split (elapsed) time.
- If you have red or blue selected for the current time in the Timekeeping Mode, the center part of the display is blue while a split time is frozen on the display, and red while a lap time is frozen.
- When you first start a stopwatch operation by pressing **A**, both the center part and the lower part of the display show minutes, seconds, and 1/100 second. Whenever the time shown in the lower part of the display is greater than 60 minutes, the display format changes to show hours, minutes, and seconds. Whenever the time in the center part of the display is greater than 10 hours, the display format changes to show hours, minutes, and seconds.

About the Pacer Signal

The pacer signal of this watch beeps in accordance with a pacer value (rate) set by you. You can use the pacer signal to maintain a constant pace while jogging or running. You can also turn off the pacer signal when you do not want to use it.

- The pacer value you set specifies the number of beeps per minute.
- Turning on the pacer signal causes the watch to beep at the rate specified by the pacer value.
- You can disable the pacer function by setting a pacer value of ---. While the pacer value is set to ---, the watch does not calculate distance covered.

To set the pacer value



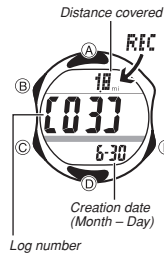
1. While the Stopwatch Mode screen shows all zeros (**0:00 00 00**), hold down **B** until the pacer value appears flashing on the display. This is the pacer value setting screen.
2. Press **C** to turn on the pacer signal.
 - Each press toggles the pacer signal on (sounds) and off (does not sound).
3. Use **D** (+) and **A** (-) to change the pacer value.
 - Each press of a button changes the pacer value in units of 5. You can set a pacer value in the range of 100 to 200.
 - Pressing **D** while the pacer value is 200 or **A** while it is 100 changes the value to ---.
4. Press **B** to exit the setting screen.

To turn pacer signal on and off

While the Stopwatch Mode screen shows anything other than all zeros, hold down (B) for about one second to toggle the pacer signal on (P displayed) and off (P not displayed).

- Each press of (B) toggles the middle part of the display between the lap time and split time.

Recall Mode

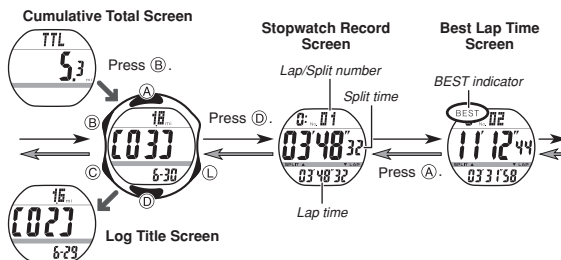


Use the Recall Mode to recall and delete records stored by the Stopwatch Mode.

- Stopwatch records are stored in "logs" that are created automatically by the watch. See "Memory Management" for more information.
- The title screen of the newest log appears first whenever you enter the Recall Mode.
- Log numbers are automatically assigned in sequence, starting from 1.
- All of the operations in this section are performed in the Recall Mode, which you enter by pressing (C).

To recall stopwatch records

In the Recall Mode, use (B) to scroll through the log title screens, starting from the newest one, as shown below. When the title screen of the log you want is displayed, use (D) and (A) to cycle through the records contained in the log.



- The cumulative total screen shows the total distance since the last cumulative total distance reset.
- The locations of the lap time and split time (middle or bottom of the display) in the Stopwatch Record screen are determined by the display format you last selected in the Stopwatch Mode.
- The **BEST** indicator identifies the record that contains the best lap time in the log.
- If the watch is configured for the split time in the middle part of the display, the split time is shown on the Best Lap Time screen in blue. If the lap time is in the middle, it is shown in red.
- If a best lap time record is deleted automatically when the log becomes full, the **BEST** indicator will not be transferred to the record with the next best lap time. See "Memory Management" for more information about automatic deletion of records.
- The unit of measurement used for the distance calculation depends on the unit you select for your stride length as shown in the table below. See "To input your basic data" for more information.

Selected Stride Unit	Distance Unit
in (inches)	mi (miles)
cm (centimeters)	km (kilometers)

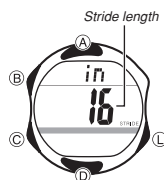
To delete a log

- In the Recall Mode, display the title screen of the log you want to delete.
 - See "To reset the cumulative total screen" below for information about what happens when you select the cumulative total screen here.
- Hold down (A) and (D) until the watch emits a long beep and CLR stops flashing on the display.
- This deletes the log and all the records inside it. Deleting a log does not change the cumulative total distance value.

To reset the cumulative total screen

- In the Recall Mode, display the cumulative total screen.
- Hold down (A) and (D) until the watch emits a long beep and CLR stops flashing on the display.
- This resets the cumulative total distance to zero, without deleting any logs or records. A new cumulative total will start with the next stopwatch operation you perform.

Inputting Basic Data



Basic Data Input Mode lets you specify your stride length and a stride length unit. The Stopwatch Mode uses this basic data for calculating distances you cover while jogging or running.

- The top of the Stride Length screen shows in/cm in place of i/f when you have centimeters specified as the stride length unit.
- All of the operations in this section are performed in the Basic Data Input Mode, which you enter by pressing (C).

Basic Data

You can specify either inches (in) or centimeters (cm) as the stride length unit. The unit you specify for the stride length unit also determines the unit of measurement used for the distance value in the Stopwatch Mode and Recall Mode, as shown below.

Stride Length Unit	Setting Range	Setting Increment	Distance Unit
Inches (in)	16 to 76 in	2 in	Miles (mi)
Centimeters (cm)	40 to 190 cm	5 cm	Kilometers (km)

The following examples illustrate how you can calculate values for this setting.

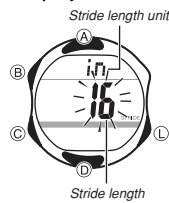
- $239 \text{ steps required to run around a } 330\text{-yard track.}$
 $330 \text{ (yards)} \times 239 \text{ (steps)} \times 36 = 49.70 \text{ (approximately } 50 \text{ inches)}$
- $239 \text{ steps required to run around a } 300\text{-meter track.}$
 $300 \text{ (meters)} \times 239 \text{ (steps)} = 1.255 \text{ (approximately } 125 \text{ cm)}$

- Be sure to update basic data values whenever the person using the watch changes.

Important!

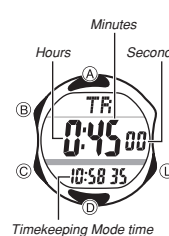
- You cannot change basic data settings while a Stopwatch Mode time measurement operation is in progress. Stopwatch operation must be stopped and the Stopwatch screen must be cleared to all zeros before you can change basic data settings.
- Whenever you want to change the stride length unit, you must first reset the Cumulative Total screen to zero. See "To reset the cumulative total screen" for information about how to do this.

To input your basic data



- In the Basic Data Input Mode, hold down (B) until stride length starts to flash, which indicates the setting screen.
- Press (C) to move the flashing between the stride length and stride length unit (i/f or c/m) settings.
- Input the basic data values you want.
 - While the stride length is selected, use (D) (+) and (A) (-) to change it.
 - While the stride length unit is selected, press (D) to switch between available units. If you find you cannot change the unit, press (B) to exit the setting screen, and then reset the cumulative total screen (see "To reset the cumulative total screen").
- Press (B) to exit the setting screen.

Countdown Timer



You can set the countdown timer within a range of 10 seconds to 100 hours. An alarm sounds when the countdown reaches zero.

- You can also select auto-repeat, which automatically restarts the countdown from the original value you set whenever zero is reached.
- Countdown timer functions are available in the Countdown Timer Mode, which you can enter using (C).

To set the countdown start time

- In the Countdown Timer Mode, hold down (B) until the hour setting of the countdown start time starts to flash, which indicates the setting screen.
- Press (C) to move the flashing between the hours, minutes, and seconds.
- Use (D) (+) and (A) (-) to change the flashing item.

- To set the starting value of the countdown time to 100 hours, set 0:00 00.
- You can set the seconds in 10-second increments.

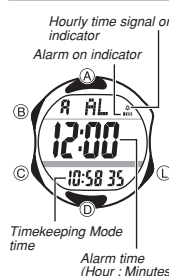
To use the countdown timer

- Press (A) while in the Countdown Timer Mode to start the countdown timer.
- When the end of the countdown is reached and auto-repeat is turned off, the alarm sounds for four seconds or until you stop it by pressing any button. The countdown time is automatically reset to its starting value after the alarm stops.
- Press (A) while a countdown operation is in progress to pause it. Press (A) again to resume the countdown.
- To completely stop a countdown operation, first pause it (by pressing (A)), and then press (D). This returns the countdown time to its starting value.

To turn auto-repeat on and off

- While the countdown start time is displayed on the Countdown Timer Mode screen, press (D) to toggle auto-repeat on (R displayed) and off (R not displayed).
- The countdown time is displayed in blue while auto-repeat timing is turned on.
- When the end of the countdown is reached and auto-repeat is turned on, the alarm sounds, but the countdown starts again automatically whenever the countdown reaches zero. You can stop timing by pressing (A), and manually reset to the starting countdown time by pressing (D).
- Frequent use of auto-repeat and the alarm can run down battery power.

Alarm



When the alarm is turned on, the alarm sounds when the alarm time is reached.

- You can also turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.
- Alarm settings (and Hourly Time Signal settings) are available in the Alarm Mode, which you enter by pressing (C).

To set the alarm time

- In the Alarm Mode, hold down (B) until the hour setting of the alarm time starts to flash, which indicates the setting screen.
 - This operation automatically turns on the alarm.
- Press (C) to move the flashing between the hour and minutes.
- Use (D) (+) and (A) (-) to change the flashing item.

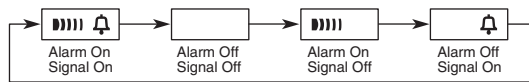
- When the watch is configured for the 12-hour timekeeping format, take care that you set the correct a.m. (R indicator) or p.m. (P indicator) time.

To test the alarm

- Press (B) to exit the setting screen.
- Daily Alarm Operation**
The alarm sounds at the preset time each day for about 20 seconds, or until you stop it by pressing any button.
- To test the alarm**
In the Alarm Mode, hold down (A) to sound the alarm.

To turn the Daily Alarm and Hourly Time Signal on and off
In the Alarm Mode, press **(D)** to cycle through the on and off settings as shown below.

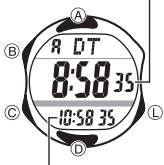
Alarm On Indicator/Hourly Time Signal On Indicator



- The alarm time is displayed in blue while the alarm is turned on.

Dual Time

Dual Time
(Hour : Minutes Seconds)



Timekeeping Mode time

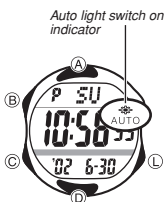
The Dual Time Mode lets you keep track of time in a different time zone.

- The seconds count of the Dual Time is synchronized with the seconds count of the Timekeeping Mode.

To set the Dual Time

1. Press **(C)** to enter the Dual Time Mode.
 2. Use **(A)**, **(B)**, and **(D)** to set the Dual Time Mode time.
- Pressing **(B)** sets the Dual Time Mode to the same time as the Timekeeping Mode.
 - Each press of **(D)** (+) and **(A)** (-) changes the time setting in 30-minute increments.

Backlight



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

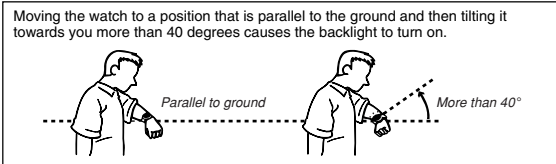
- The auto light switch must be turned on (indicated by the auto light switch on indicator) for it to operate.
- See "Backlight Precautions" for other important information about using the backlight.

To turn on the backlight manually

- In any mode, press **(L)** to illuminate the display for about one second.
- The above operation turns on the backlight regardless of the current auto light switch setting.

About the Auto Light Switch

Turning on the auto light switch causes the backlight to turn on for about one second, whenever you position your wrist as described below in any mode.



Warning!

- Always make sure you are in a safe place whenever you are reading the display of the watch using the auto light switch. Be especially careful when running or engaged in any other activity that can result in accident or injury. Also take care that sudden illumination by the auto light switch does not surprise or distract others around you.
- When you are wearing the watch, make sure that its auto light switch is turned off before riding on a bicycle or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of the auto light switch can create a distraction, which can result in a traffic accident and serious personal injury.

To turn the auto light switch on and off

- In the Timekeeping Mode, hold down **(A)** for about two seconds to toggle the auto light switch on (AUTO displayed) and off (AUTO not displayed).
- The auto light switch on indicator (AUTO) is on the display in all modes while the auto light switch is turned on.

Reference

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

Auto Display



Auto Display continually changes the contents of the digital display.

To turn off Auto Display

Press any button (except for **(L)**) to turn off Auto Display.

To turn on Auto Display

Hold down **(C)** for about two seconds until the watch beeps.

- Note that Auto Display cannot be performed while a setting screen is on the display.

Auto Return Features

- After you perform any button operation in any mode (except for the Stopwatch Mode), pressing **(C)** returns directly to the Timekeeping Mode.
- If you leave a screen with flashing digits on the display for two or three minutes without performing any operation, the watch automatically saves any settings you have made up to that point and exits the setting screen.

Data and Setting Scrolling

The **(A)** and **(D)** buttons are used in various modes and setting screens to scroll through data on the display. In most cases, holding down these buttons during a scroll operation scrolls through the data at high speed.

Timekeeping

- With the 12-hour format, the **P** (PM) indicator appears for times in the range of noon to 11:59 p.m. and the **A** (AM) indicator appears for times in the range of midnight to 11:59 a.m.
- With the 24-hour format, times are displayed in the range of 0:00 to 23:59, without any indicator.
- The year can be set in the range of 2000 to 2039.
- The watch's built-in full automatic calendar automatically makes allowances for different month lengths and leap years. Once you set the date, there should be no reason to change it except after you have the watch's battery replaced.
- The current time is displayed in the lower part of the Stopwatch, Countdown Timer, Alarm, and Dual Time screens. On these screens, the a.m. and p.m. indicators are not shown when the watch is configured for the 12-hour timekeeping format.

Stopwatch

- You can use lap time measurement to time how long it takes to complete a specific portion (such as a single lap) of a race.
- You can use split time measurement to time how long it takes to get from the start to a specific point in a race.

Memory Management

- Each time you press **(A)** to start a new elapsed time, lap/split operation in the Stopwatch Mode, the watch automatically creates a new "log" in its memory. The log remains open for data storage until you permanently close it by pressing **(D)** to clear the stopwatch to all zeros.
- The watch has enough memory to hold up to 61 records. Since each log title screen uses up one record of memory space, the maximum number of lap/split time records you can store depends on how many logs there are currently in memory, as shown below.

Memory Capacity	Number of Logs Currently in Memory	Lap/Split Time Record Capacity
61 Records	1	61 records - 1 log title screen = 60
	2	61 records - 2 log title screens = 59
	5	61 records - 5 log title screens = 56

- The watch also calculates the cumulative total distance for all stopwatch operations since the last time the cumulative total distance was reset. The cumulative total does not affect memory capacity.
- If watch memory is already full when you perform a stopwatch button operation that creates a new log, the oldest log in memory and all of its records are deleted automatically to make room for the new log.
- If you are adding records to the only log in memory and watch memory becomes full, adding another record causes the oldest record in the log to be deleted automatically to make room for the new record.
- If you are adding records to a log when there are multiple logs in memory and watch memory becomes full, adding another record causes the oldest log in memory and all of its record to be deleted automatically to make room for new records.

How Stopwatch Data is Stored

The following table describes how data is stored when you perform the various button operations described under "To measure times with the stopwatch".

Stopwatch Button Operation	Data Store Operation
(A) Start (from all zeros)	Creates a new log; current date and distance (updated as timing progresses)
(A) Stop	Time measurement stops, without storing data in memory.
(A) Re-start	Time measurement re-starts, without storing data in memory.
(D) Lap/Split	Creates new record; displayed lap/split times
(D) Clear	Creates new record; displayed lap/split times (Stopwatch display is cleared to all zeros.)

Backlight Precautions

- The electro-luminescent panel that provides illumination loses power after very long use.
- The illumination provided by the backlight may be hard to see when viewed under direct sunlight.
- The watch may emit an audible sound whenever the display is illuminated. This is due to vibration of the EL panel used for illumination, and does not indicate malfunction.
- The backlight automatically turns off whenever an alarm sounds.
- Frequent use of the backlight shortens the battery life.

Auto light switch precautions

- In order to protect against running down the battery, the auto light switch automatically turns off approximately five hours after you turn it on.
- Avoid wearing the watch on the inside of your wrist. Doing so causes the auto light switch to operate when it is not needed, which shortens battery life. If you want to wear the watch on the inside of your wrist, turn off the auto light switch feature.

More than 15 degrees too high



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

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