

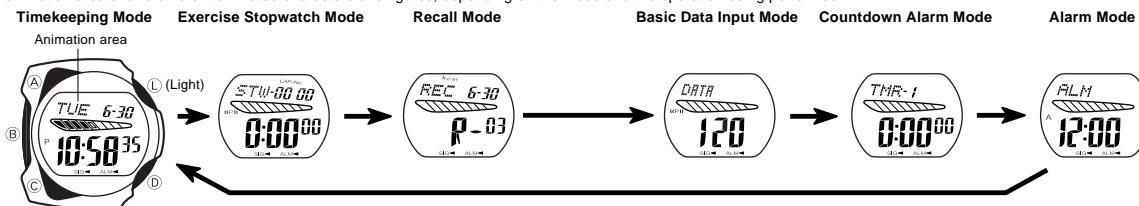
ABOUT THIS USER'S GUIDE



- Button operations are indicated using the letters shown in the illustration.
- Each section of this User's Guide 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 **(A)** to change from mode to mode.
- The animation area shows different animated characters and figures, depending on the mode and the operation being performed.



BACKLIGHT



Auto light switch on indicator

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.

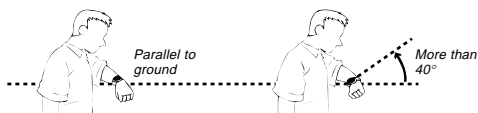
Turning on the Backlight manually
In any mode, press **(D)** to illuminate the display for about one second.

- In the Timekeeping Mode, pressing **(D)** lights the backlight and causes an animation to play.
- 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.

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



Warning!

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

To turn the auto light switch on and off

- In the Timekeeping Mode, hold down **(A)** for one second to turn the auto light switch on (☀️ displayed) and off (☀️ not displayed).
- In order to protect against running down the battery, the auto light switch is automatically turned off approximately six hours after you turn it on. Repeat the above procedure to turn the auto light switch back on if you want.
 - The auto light switch on indicator (☀️) is on the display in all modes while the auto light switch is turned on.

TIMEKEEPING MODE

In addition to normal timekeeping, use the Timekeeping Mode to set the current time and date.

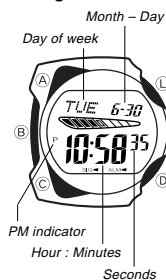
Calibrating the Seconds Count



Use the following procedure to calibrate the seconds count on a time signal from a radio, TV, or other source.

1. In the Timekeeping Mode, hold down **(D)** until the seconds digits start to flash on the display.
2. Press **(C)** to set the seconds count to **00** when the time signal you are calibrating to sounds.
- Pressing **(C)** while the seconds count is in the range of 30 to 59 resets the seconds to **00** and adds 1 to the minutes. If the seconds count is in the range of 00 to 29, the minutes count is unchanged.
3. Press **(D)** to return to the current time display.

Setting the Current Time and Date

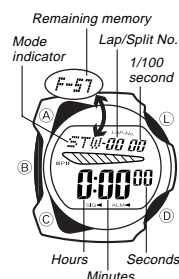


1. In the Timekeeping Mode, hold down **(D)** until the seconds digits start to flash on the display.
 - The seconds digits are flashing because they are selected.
2. Press **(B)** to move the flashing in the sequence shown below to select other digits and settings.
 - Seconds → Hour → Minutes → Day → Month → Year
3. While hour, minutes, year, month, or day is selected (flashing), press **(C)** to increase the setting or **(A)** to decrease it.
4. After the time and date are set the way you want them, press **(D)** to return to the current time screen.
 - The day of the week is automatically displayed in accordance with the month and day setting.

EXERCISE STOPWATCH MODE

The Exercise Stopwatch Mode provides you with a 1/100-second stopwatch for measuring elapsed time and lap/split times. Elapsed time measured in the Exercise Stopwatch Mode is used in combination with data you input in the Basic Data Input Mode to calculate the number of calories you burn while jogging or running.

- Whenever you perform a stopwatch time measurement operation, the date, elapsed time, and calories burned are automatically stored in memory. Data in memory can be viewed using the Recall Mode.



Measuring Elapsed Time

1. In the Exercise Stopwatch Mode, press **(A)** to start the stopwatch.
2. Press **(A)** to stop the stopwatch.
 - You can resume the measurement operation by pressing **(A)** again.
 - 3. Press **(C)** to clear the stopwatch to all zeros.

Stopping and Clearing the Stopwatch

- Pressing **(A)** while the stopwatch is running stops it and leaves the measured time on the display. Pressing **(A)** at this time resumes the stopwatch operation, starting from the displayed time.
- Pressing **(C)** while the stopwatch is stopped and a time is on the display clears the stopwatch to all zeros. Note that you must press **(C)** to clear the stopwatch to all zeros before you can perform certain stopwatch operations.
- When the stopwatch is cleared, the upper part of the display periodically changes between the mode indicator and remaining memory value.

Recording Lap or Split Times

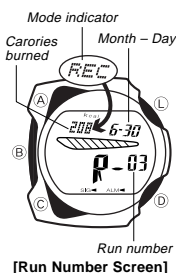


1. Press **(A)** to start the stopwatch.
2. Press **(B)** to display the timing up to that point. Stopwatch timing continues internally.
- When you press **(B)**, the lap (or split) time remain on the display for about seven seconds. Then the screen automatically changes back to the stopwatch (elapsed time) screen.
- Holding down **(D)** for about one second causes the display to change between the lap time (LAP displayed) and split time (SPL displayed).
3. You can repeat step 2 as many times as you want.
4. Press **(A)** to stop the time measurement.
- About seven seconds after you press **(A)** to stop the time measurement, a value showing the number of calories burned appears on the display.
5. After the number of calories burned value appears, press **(C)** to clear the stopwatch to all zeros.
- The data is stored as lap or split times depending on the last operation you perform. If you measure a lap time and then a split time, all the lap/split times stored in memory are shown as split times in the Recall Mode.

How the Watch Counts Calories

- The watch calculates the number of calories you consume using the elapsed time measured in the Exercise Stopwatch Mode and the age, weight and other data you input in the Basic Data Input Mode. The calorie calculations made by this watch will not be correct unless you input your own personal basic data.
- The watch also sounds a pacer signal to that you should use as a reference to control the intensity of your workouts. See "About the Pacer Signal" for details.
- The calorie value on the display is updated every 30 seconds while a stopwatch operation is in progress.

RECALL MODE

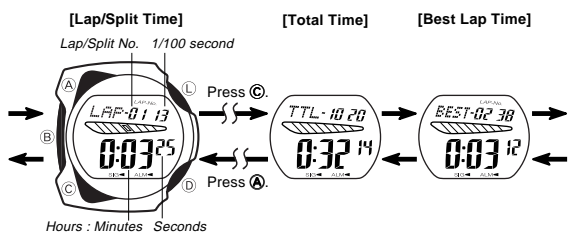


The Recall Mode is used to recall and delete data that is stored by Exercise Stopwatch Mode operations.

- Data is assigned a run number when it is stored in memory. The oldest data is run number 1 ↑ data.
- Whenever you enter the Recall Mode, the newest (highest run number) data appears first.

Recalling Stopwatch Data

1. In the Recall Mode, press (D) to scroll through run numbers until the one whose data you want to view is on the display.
2. Use (A) or (C) to scroll through the different time data available for the run number you selected.



- Note that there can be multiple lap/split time screens.
- If you did not measure any lap/split times, only the run number screen and total time screen appear when you press (A) or (C). The lap/split time screens and best lap screen do not appear.
- The run number screen appears between the best lap screen and the screen for lap/split time 1.
- The total time screen shows the total amount of elapsed time.
- Best lap time screen shows the fastest lap among those recorded under the current run number.
- Pressing (D) while viewing the data under a run number jumps to the next lower run number.

Deleting Stopwatch Data

You can delete the data stored under a specific run number, or all data stored under all run numbers. Note the following important rules about deleting data.

Important!

- Performing a lap or split time operation in the Exercise Stopwatch Mode stores the data in memory immediately, even if the stopwatch is still running. Note that you cannot delete a run number for which a stopwatch operation is still being performed.
- You cannot delete all stopwatch data while the stopwatch is running in the Exercise Stopwatch Mode. Also, the screen in the Exercise Stopwatch Mode must show all zeros.
- If the stopwatch is running, enter the Exercise Stopwatch Mode and then press (A) to stop it. Press (C) to clear the Exercise Stopwatch Mode display to all zeros.

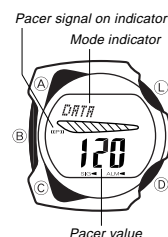
To delete data under a specific run number

1. In the Recall Mode, display the run number whose data you want to delete.
2. Hold down (A) and (C) until the message $\square \square \square \square$ appears and the watch beeps.

To delete all data under all run numbers

1. In the Recall Mode, display any run number.
2. Hold down (A) and (C) until the message $\square \square \square \square$ appears and the watch beeps.

BASIC DATA INPUT MODE



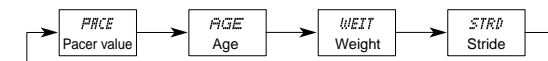
The Basic Data Input Mode is for inputting your weight, age, and stride length that the Exercise Stopwatch Mode uses for calculating the number of calories you burn while jogging or running. You can also turn the pacer that controls the intensity of your workouts on and off.

- See "Basic Data" for full explanation of basic data contents.
- You cannot input basic data while the stopwatch is running in the Exercise Stopwatch Mode.
- If the stopwatch is running, enter the Exercise Stopwatch Mode and then press (A) to stop it.

Inputting Basic Data



1. In the Basic Data Input Mode, hold down (D) until the pacer value starts to flash on the display.
 - The pacer value is flashing because it is selected.
 - This operation automatically turns on the pacer signal.
2. Press (D) to move the flashing in the sequence shown below to select other settings.
 - The top lines in the sequence show the on-screen indicator for each setting.



- While the weight setting is selected, the upper part of the display periodically alternates between the *WEIT* indicator and the unit of the setting (*KG*).
 - While the stride setting is selected, the upper part of the display periodically alternates between the *STRD* indicator and the unit of the setting (*M*).
3. While the pacer value, age, weight, or stride setting is selected (flashing), press (C) to increase the setting or (A) to decrease it.
 - Changing the pacer value (see "About the Pacer Signal") causes the pacer signal to sound at the speed set by the pacer value for 15 seconds.
 4. After the basic data is the way you want it, press (D) to return to the initial Basic Data Input Mode screen.

About the Pacer Signal

The pacer signal is a beeper that helps you to maintain a specific level of intensity during your workouts. You can control the speed of the pacer signal by setting the pacer value.

- The pacer signal sounds in the Exercise Stopwatch Mode and Basic Data Input Mode only.
- Starting the stopwatch in the Exercise Stopwatch Mode while the pacer signal is on causes the pacer signal to sound for the first 15 seconds of each minute for the first 30 minutes.
- If you stop the stopwatch (by pressing (A)) and then resume the stopwatch operation (by pressing (A)), the pacer signal sounds for the first 15 seconds of the resumed stopwatch operation.

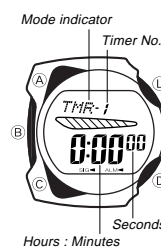
To turn pacer signal on and off

In the Basic Data Input Mode, press (A) to toggle the pacer signal on ($\square \square \square \square$ displayed) and off ($\square \square \square \square$ not displayed).

To test the pacer signal

In the Basic Data Input Mode, press (C) to sound the pacer signal for 15 seconds. You can stop the pacer signal by pressing any button.

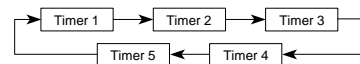
COUNTDOWN ALARM MODE



You can set up to five countdown times in the Countdown Alarm Mode. Times can be used individually, or in series. An alarm sounds when the countdown reaches zero.

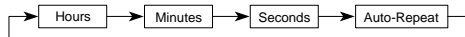
Setting a Countdown Time

1. In the Countdown Alarm Mode, use (C) to select the timer whose time you want to set.



2. Hold down (D) until the hours digits of the countdown time start to flash on the display.
 - The hours digits are flashing because they are selected.

3. Press (D) to move the flashing in the sequence shown below to select other settings.



- See "About Auto-Repeat" for details on setting up the Auto-Repeat function.
- 4. While hours, minutes, or seconds digits are selected (flashing), press (C) to increase the setting or (A) to decrease them.
- The seconds setting change in 10-second increments.
- To set the starting value of the countdown time to 24 hours, set $0:00:00$.
- 5. After the countdown time is the way you want it, press (D) to return to the initial Countdown Alarm Mode screen.

Using a Countdown Timer

1. In the Countdown Alarm Mode, press (C) to select the timer whose time you want to use.
2. Press (A) to start the countdown timer.
- When the end of the countdown is reached and Auto-Repeat is turned off, an alarm sounds for 10 seconds or until you stop the alarm 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 (C). This returns the countdown time to its starting value.

About Auto-Repeat

All of the timers for which Auto-Repeat is turned on operate in succession when a timer operation is started. This means you can set up an interval routine that is tailored to your own specific training needs.

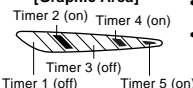
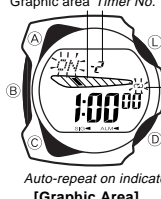
- The following example shows how timing would be performed when Auto-Repeat is turned on for Timers 2, 4, and 5. This loop would be repeated endlessly until you stop it.



- If Auto-Repeat is turned on for only one timer, that timer's operation is repeated until you stop it.
- The watch beeps for two seconds when the end of a countdown is reached while Auto-Repeat is turned on.

To turn Auto-Repeat on and off

Graphic area *Timer No.*



1. In the Countdown Alarm Mode, press (C) to select the timer whose time you want to use.

2. Hold down (D) until the hours digits of the countdown time start to flash on the display.

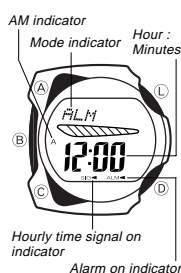
3. Press (D) three times to select Auto-Repeat on/off setting.

- Auto-Repeat on/off setting is selected when the $\square \square \square \square$ or $\square \square \square \square$ setting is flashing.
4. Press (A) or (C) to turn Auto-Repeat on ($\square \square \square \square$) and off ($\square \square \square \square$).

5. After the Auto-Repeat function is the way you want it, press (D) to return to the initial Countdown Alarm Mode screen.

- The Auto-Repeat on/off status of each timer is indicated in the graphic area of the Countdown Alarm Mode.
- The indicator ($\square \square \square \square$) on the display indicates that Auto-Repeat is turned on.

ALARM MODE



You can set a Daily Alarm that sounds at the same time each day, while it is turned on. You can also turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.

Setting the Daily Alarm

- In the Alarm Mode, hold down **(D)** until the hour digits of the alarm time start to flash on the display.
 - The hour digits are flashing because they are *selected*.
 - This operation automatically turns on the Daily Alarm.
- Press **(E)** to move the flashing in the sequence shown below to select other digits.



- While hour or minutes is selected (flashing), press **(C)** to increase the setting or **(A)** to decrease it.
 - When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. (A indicator) or p.m. (P indicator).
- After the alarm time is the way you want it, press **(D)** to return to the initial Alarm Mode 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.

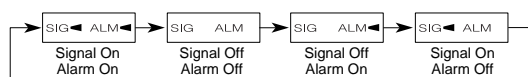
To test the alarm

Hold down **(C)** to sound the alarm.

Turning the Daily Alarm and Hourly Time Signal on and off

In the Alarm Mode, press **(A)** to cycle through the on and off settings as shown below.

[Hourly Time Signal On Indicator/Alarm On Indicator]



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.

Animated Figures

Animation area



The animation area of the display shows animated figures when you perform certain button operations.

- In the Timekeeping Mode, the animation area normally shows the day of the week. Different animated figures appear at 00, 20, and 40 seconds.

Auto Return Operations

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

Data and Setting Scrolling

The **(A)** and **(C)** buttons are used in various modes and 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.

12-hour/24-hour Timekeeping Formats

The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is also applied in the Alarm Mode.

Timekeeping Mode Notes

- In the Timekeeping Mode (except when making setting), press **(C)** to switch between the 12-hour and 24-hour formats.
- With the 12-hour format, the **P** (PM) indicator appears to the left of the hour digits for times in the range of noon to 11:59 pm and the **A** (AM) indicator appears to the left of the hour digits for times in the range of midnight to 11:59 am.
- With the 24-hour format, times are indicated in the range of 00:00 to 23:59, without any indicator.
- The year can be set in the range of 1995 to 2039.
- The watch's built-in full automatic calendar automatically make allowances for different month lengths and leap years. Once you set the date, there should be no reason to change it except after the replacement of the watch's battery.

Backlight Precautions

- The electro-luminescent (EL) panel loses illuminating power after very long use.
- The illumination provided by the backlight may be hard to see when viewed under direct sunlight.
- The watch will emit an audible sound whenever the display is illuminated. It does not indicate malfunction of the watch.
- The backlight automatically turns off whenever an alarm sounds.
- Normally the backlight lights when you press the **(L)** button. In the Exercise Stopwatch Mode, pressing **(A)** or **(C)** also causes the backlight to light for about one second.

Auto light switch precautions

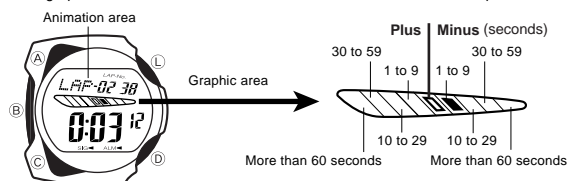
- Avoid wearing the watch on the inside of your wrist. Doing so causes the auto light switch to operate when it is not needed, which shortens battery life.
- The backlight turns off in about one second, even if you keep the watch pointed towards your face.
- The backlight may not light if the face of the watch is more than 15 degrees off the parallel as shown below. Make sure that the back of your hand is parallel to the ground.



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

Exercise Stopwatch Mode Precautions

- The values for the number of calories burned produced by this watch include both calories normally burned through normal metabolism and rest and extra calories burned by jogging or running.
- This watch is set up to calculate calories burned by women while jogging. Men should increase the values produced by this watch by 5%.
- You can use the 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.
- Whenever a lap time or split time is on the display in the Exercise Stopwatch Mode, the graphic area shows the difference between the current and last lap.



- While the stopwatch is running, the animation area shows either a pig (running), or a leopard (leaping), depending on the number of calories burned.

Exercise Stopwatch Mode memory management

- Measuring time with the stopwatch causes the date, elapsed time, and calories burned to be stored under a run number. If you measured lap and split times, they are also stored, along with a best lap time.
- This watch has enough memory to store up to 60 records. Date, run number, and calories burned take up one record. Each time (elapsed time, lap time, split time, best lap) takes up one record. The following shows some examples of how memory can be used, but other combinations are also possible.

Data Configuration	Maximum Number of Measurements
Elapsed time only (plus date, run number, calories)	30
58 lap or split times (plus date, run number, calories, best time)	1

- When memory becomes full, the next stopwatch measurement operation automatically deletes the oldest record number to make room for the new data. Note that data is deleted in record number units, so all split/lap times under the run number are deleted.
- The lap/split number flashes on the display when an ongoing stopwatch operation causes memory to become full.

Basic Data

The term *basic data* refers to information about pacer value, your current weight, age, and stride length.

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

Pacer Value

The speed of the pacer signal is determined by the pacer value, which is the number of beats per minute. You can set the pacer value in increments of 5, in the range of 100 to 200.

Age

You can set the age value in 1-year increments in the range from 13 to 19 years. In the range from 20 to 70, you can set the age value in 10-year increments.

Weight

You can set your current weight value in increments of 1 kg, in the range of 30 to 150 kg. Those lighter than 30 kg should use the minimum setting, while those heavier than 150 kg should use the maximum setting.

Stride Length

You can set stride length values in increment of 5 cm, in the range of 40 to 190 cm. The following examples illustrate how you can calculate values for these setting.

- 239 steps required to jog around a 300-meter track.
300 (meters) ÷ 239 (steps) = 1.255 (approximately 126 cm)
- 25 steps required to run the length of a tennis court (23.77 meters).
23.77 (meters) ÷ 25 (steps) = 0.9508 (approximately 95 cm)