

ABOUT THIS MANUAL

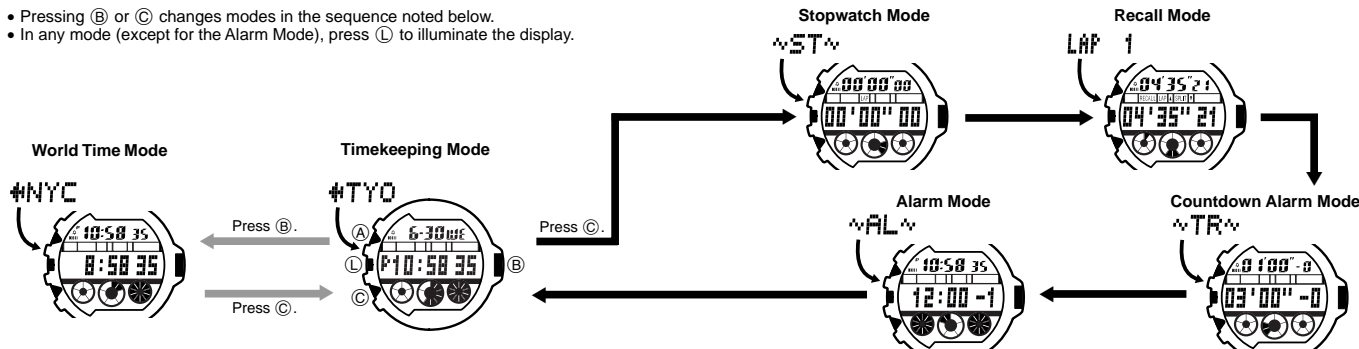


- Button operations are indicated using the letters shown in the illustration.

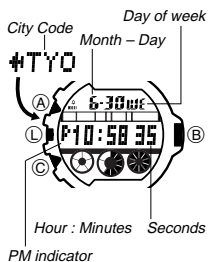
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "REFERENCE" section.

GENERAL GUIDE

- Pressing (B) or (C) changes modes in the sequence noted below.
- In any mode (except for the Alarm Mode), press (L) to illuminate the display.



TIMEKEEPING



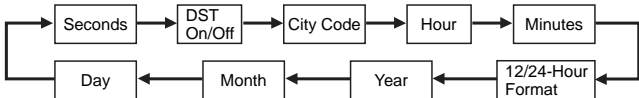
Use the Timekeeping Mode to set and view the current time and date.

- Read This Before You Set the Time and Date!**
The digital times displayed in the Timekeeping Mode and World Time Mode are linked. Because of this, make sure you select a "Home City" (the city whose time and date you are setting), before you set the time and date.
- When you enter the Timekeeping Mode from another mode, the Home City code appears first, followed after a few seconds by the current time.

Setting the Time and Date



1. In the Timekeeping Mode, hold down (A) until the seconds digits start to flash.
 2. While the seconds digits are flashing, press (B) to reset the seconds to 00.
 3. Press (C) to move the flashing in the sequence shown below to select other settings.
- Pressing (B) while the seconds count is in the range of 30 to 59 resets the seconds to 00 and adds 1 to the minutes. In the range of 00 to 29, the minutes count is unchanged.



- See "Daylight Saving Time (DST)" for details on DST On/Off setting.
- 4. Use (C) to select the city code setting.
- 5. Use (B) and (L) to scroll through the city codes until the one you want to set as your Home City.
- Pressing (B) scrolls forward, while (L) scrolls back through city codes.
- See "CITY CODE TABLE" for a complete list of available codes.
- 6. Use (C) to select the hour, minutes, year, month, and day, and make the settings you want for each.
- While hour, minutes, year, month, or day is selected (flashing), press (B) to increase the setting or (L) to decrease it.
- When the 12/24-hour setting is selected, press (B) to toggle between 12-hour (12H) and 24-hour (24H) timekeeping.
- 7. Press (A) to return to the current time screen.

Daylight Saving Time (DST)

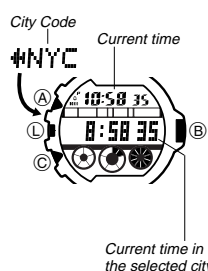
Daylight Saving Time automatically advances the time setting by one hour from Standard Time. Remember that not all countries or even local areas use Daylight Saving Time.

To toggle your Home City time between DST and Standard Time

1. In the Timekeeping Mode, hold down (A) until the seconds digits start to flash.
 2. Press (C) once to move the flashing to the DST On/Off setting.
 3. Press (B) to toggle Daylight Saving Time (DST) and standard time (ST).
 4. Press (A) to return to the current time screen.
- The DST indicator appears on the display to indicate that daylight saving time is turned on.



WORLD TIME



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

- For full information on city codes, see "CITY CODE TABLE".

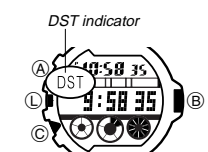
Entering and Exiting the World Time Mode

- In the Timekeeping Mode, press (B) to switch to the World Time Mode.
- In the World Time Mode, press (C) to return to the Timekeeping Mode.

Viewing the Time in Another City

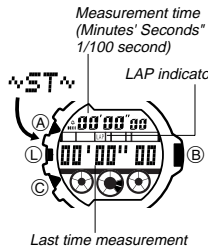
- In the World Time Mode, press (B) to scroll forward through the city codes.

toggling World Time between DST and Standard Time



1. In the World Time Mode, display the city code whose DST/Standard Time setting you want to change.
 2. Hold down (A) for about one second to toggle DST (DST displayed) and standard time (DST not displayed).
- You can make separate settings for each city code.
 - The DST indicator appears on the display to indicate that daylight saving time is turned on.
 - Note that the DST/Standard Time setting affects only the currently displayed city code. Other city codes are not affected.

STOPWATCH



The Stopwatch Mode let you record elapsed time, lap times, and split times. The range of the stopwatch is 59 minutes, 59.99 seconds. You can also store lap and split times in memory.

- Stopwatch functions are available in the Stopwatch Mode, which you can enter using (C).
- The current time measurement is shown in the upper display, while the lower display shows the last time measurement (elapsed time, lap time, or split time).
- 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.

Measuring Elapsed Time

1. Press (B) to start the stopwatch.
 2. Press (A) to stop the stopwatch.
 3. Press (A) to clear the stopwatch to all zeros.
- You can resume the measurement operation by pressing (B).

Switching between Lap Time and Split Time Measurement

While the stopwatch is cleared (all zeros), press (A) to toggle between lap time measurement (LAP displayed) and split time measurement (SPLIT displayed).

Recording Lap Times or Split Times

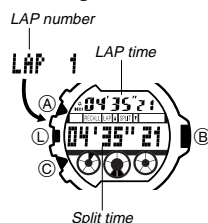
1. Select either lap time measurement (LAP displayed) or split time measurement (SPLIT displayed).
2. Press (B) to start the stopwatch.
3. Press (B) to record the lap and split time.
4. You can repeat step 3 as many times as you want.
5. Press (A) to stop the time measurement.
6. Press (A) to clear the stopwatch to all zeros.

About Stopwatch Memory

Whenever you perform a stopwatch operation, measured times are automatically stored into memory along with the lap number. You can store up to 30 lap/split times in memory. If you perform more than 30 lap/split time operations, the memory will contain the times for the last 29 laps/splits (as lap/split numbers 1 through 29), and the final lap and split time (as lap/split 30).

- Both lap time and split time data is stored in memory, regardless of whether you performed a lap time or split time measurement.
- Data in lap/split memory is cleared whenever you start a new stopwatch operation.
- The final elapsed time or final lap/split time is stored in memory when you press (A) to stop the stopwatch.

Recalling Data from Memory

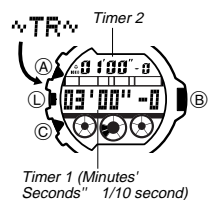


1. Use (C) to enter the Recall Mode.
- The lower part of the display first shows the lap number and then the corresponding split time in memory. The upper part of the display shows the corresponding lap time.
2. Press (B) to scroll forward through the data items.

Deleting the Data from Memory

- To delete all data currently in memory, enter the Recall Mode and then hold down (A) until the time display resets to all zeros.
- Data cannot be cleared from memory while a Stopwatch Mode measurement operation is in progress.

COUNTDOWN ALARM



Two independent countdown timers (Timer 1 and Timer 2) can be set within the range of 1 second to 59 minutes, 59 seconds. When the countdown reaches zero, an alarm sounds.

- Countdown alarm functions are available in the Countdown Alarm Mode, which you can enter using (C).

Using the Timer

There are two types of countdown operations: single countdown and continuous countdown.

Single Countdown

With this countdown, the time of Timer 1 counts down only once. When the end of the countdown is reached, the alarm sounds for 10 seconds or until you stop it by pressing any button. The countdown time is automatically reset to its starting value after the alarm stops.

- To perform this type of countdown, set Timer 1 to the starting time you want, and set the Timer 2 time to zero.

Continuous Countdown

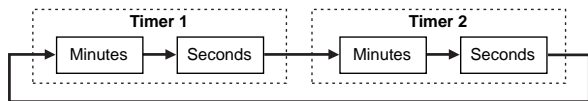
This countdown alternates between Timer 1 and Timer 2 up to 10 times. The alarm sounds when the end of each countdown is reached.

- The continuous countdown operation repeats up to 10 times before stopping.
- Normally, an alarm tone sounds for 10 seconds when the end of the countdown is reached. If you use continuous countdown with a start time of 10 seconds or less, the watch beeps once.

Setting a Countdown Time



1. In the Countdown Alarm Mode, hold down (A) until the minutes digits of the countdown time of the Timer 1 starts to flash.
- You cannot set a countdown time while it is running.
2. Press (C) to move the flashing in the sequence shown below to select other settings.



3. While minutes or seconds digits are flashing, press (B) to increase the setting or (L) to decrease it.
4. Press (A) to return to the countdown alarm display screen.
5. Setting a start time for Timer 2 (upper) while zero is set as the Timer 1 (lower) start time causes the Timer 2 start time you set to appear in the lower (Timer 1) position.

Using the Countdown Timer

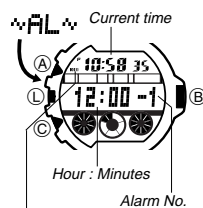
- Press (B) while in the Countdown Alarm Mode to start the countdown timer.
- Press (B) while a countdown operation is in progress to pause it. Press (B) again to resume the countdown.
 - To completely stop a countdown operation, first pause it (by pressing (B)), and then press (A). This returns the countdown time to its starting value.

ALARM

You can set the hour and minutes for five separate Daily Alarms. When the Daily Alarm is turned on, the alarm tone sounds at the preset time each day.

You can also turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.

- Alarm functions (and Hourly Time Signal settings) are available in the Alarm Mode, which you can enter using (C).
- An alarm number (1 through 5) along with an alarm time indicates the alarm screen. The figures (11) in place of the alarm number and alarm time indicate the Hourly Time Signal screen.



Alarm on indicator

Setting an Alarm Time



1. In the Alarm Mode, press (B) to select the alarm whose time you want to set.



2. After you select an alarm, hold down (A) until the hour digits of the alarm time start to flash.
- This operation automatically turns on the alarm.
3. Press (C) to move the flashing in the sequence shown below to select other settings.



4. While hour or minutes is flashing, press (B) to increase the setting or (L) to decrease it.
- When setting the alarm time using the 12-hour format, take care to set the time correctly as p.m. (P indicator) or a.m. (no indicator).
5. Press (A) to return to the alarm display screen.

Alarm Operation

The alarm sounds at the preset time for about 20 seconds, or until you stop it by pressing any button.

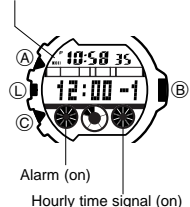
To test the alarm

In the Alarm Mode, hold down (L) to sound the alarm.

Turning an Alarm and the Hourly Time Signal On and Off

1. In the Alarm Mode, press (B) to select an alarm or the Hourly Time Signal.
2. When the alarm or the Hourly Time Signal you want to is selected, press (L) to turn it on and off.
- Turning on an alarm causes the alarm indicator (111) to appear, and the alarm on graphic at the bottom left of the display to become black.
- Turning on the hourly time signal causes the hourly time signal indicator (4) to appear, and the Hourly Time Signal on graphic at the bottom right of the display to become black.
- The alarm on indicator and the Hourly Time Signal on indicator are shown on the display in all modes while these functions are turned on.
- If any alarm is on, the alarm on indicator is shown on the display when you change to another mode.

Alarm on indicator



Alarm (on)
Hourly time signal (on)

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.

Turning on the Backlight manually

In any mode (except for the Alarm Mode), press (L) to illuminate the display for about two seconds.

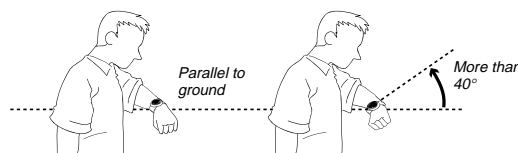
- The above operation turns on the backlight regardless of the current auto light switch setting.

About the Auto Light Switch

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

- See "Backlight Precautions" for other important information about using the backlight.

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.

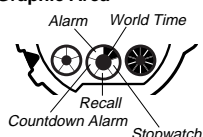
To turn the auto light switch on and off

In the Timekeeping Mode, hold down (L) for two seconds to turn the auto light switch on (AUTO-EL displayed) and off (AUTO-EL 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 (AUTO-EL) 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.

Graphic Area

The following are meanings of the graphics at the bottom of the display.

- In the Timekeeping Mode, all three graphics indicate the passage of seconds.
- The center graphic indicates the current mode, as shown in the illustration. Note that no indication is given for the Timekeeping Mode.

- In the Stopwatch and Countdown Alarm Modes, the left and right graphics show the passage of 1/10-second increments. In the Recall Mode, the left and right graphics indicate the lap number. In the Alarm Mode, the left and right graphics indicate the alarm and hourly time signal on/off status.

Auto Return Features

- After you perform an operation in any mode (except for the Stopwatch Mode), pressing (C) returns 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 anything you have input up to that point and exits the setting screen.

Initial Screens

When you enter the World Time, Recall, or Alarm Mode, the data you were viewing when you last exited the mode appears first.

Data and Setting Scrolling

The (G) and (L) 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.

12-hour/24-hour Timekeeping

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

- 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. No indicator is shown from midnight to 11:59 am.
- With the 24-hour format, times are indicated in the range of 0:00 to 23:59, without indicator.

Timekeeping

- The day of the week is automatically displayed in accordance with the date (year, month, and day) settings.
- The year can be set in the range of 1995 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 the replacement of the watch's battery.

World Time Mode

- The current times in all World Time Mode cities are calculated in accordance with the Greenwich Mean Time (GMT) differential for each city, based on the current Home City time setting in the Timekeeping Mode.
- GMT differential is calculated by this watch based on Universal Time Coordinated (UTC) data.
- The seconds count of the World Time is synchronized with the seconds count of the Timekeeping Mode.

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.

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. 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 two seconds, 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.

CITY CODE TABLE

City Code	City	GMT Differential	Other major cities in same time zone
		+1	PAGO PAGO
HNL	HONOLULU	-10	PAPEETE
ANC	ANCHORAGE	-9	NOME
LAX	LOS ANGELES	-8	SAN FRANCISCO, LAS VEGAS, VANCOUVER, SEATTLE, DAWSON CITY
DEN	DENVER	-7	EL PASO, EDMONTON
CHI	CHICAGO	-6	HOUSTON, DALLAS/FORT WORTH, NEW ORLEANS, MEXICO CITY, WINNIPEG
NYC	NEW YORK	-5	MONTREAL, DETROIT, MIAMI, BOSTON, PANAMA CITY, HAVANA, LIMA, BOGOTA
CCS	CARACAS	-4	LA PAZ, SANTIAGO, PORT OF SPAIN
RIO	RIO DE JANEIRO	-3	SAO PAULO, BUENOS AIRES, BRASILIA, MONTEVIDEO
--		-2	
		-1	PRAIA
GMT		+0	DUBLIN, LISBON, CASABLANCA, DAKAR, ABIDJAN
LON	LONDON	+0	
PAR	PARIS	+01	MILAN, ROME, MADRID, AMSTERDAM, ALGIERS, HAMBURG, FRANKFURT, VIENNA, STOCKHOLM, BERLIN
CAI	CAIRO	+02	ATHENS, HELSINKI, ISTANBUL, BEIRUT, DAMASCUS, CAPE TOWN
JRS	JERUSALEM	+02	
JED	JEDDAH	+03	KUWAIT, RIYADH, ADEN, ADDIS ABABA, NAIROBI
THR	TEHRAN	+03.5	SHIRAZ
DXB	DUBAI	+04	ABU DHABI, MUSCAT
KBL	KABUL	+04.5	
KHI	KARACHI	+05	MALE
DEL	DELHI	+05.5	MUMBAI, CALCUTTA
DAC	DHAKA	+06	COLOMBO
RGN	YANGON	+06.5	
BKK	BANGKOK	+07	JAKARTA, PHNOM PENH, HANOI, VIENTIANE
HKG	HONG KONG	+08	SINGAPORE, KUALA LUMPUR, BEIJING, TAIPEI, MANILA, PERTH, ULAANBAATAR
TYO	TOKYO	+09	SEOUL, PYONGYANG
ADL	ADELAIDE	+09.5	DARWIN
SYD	SYDNEY	+10	MELBOURNE, GUAM, RABAU
NOU	NOUMEA	+11	PORT VILA
WLG	WELLINGTON	+12	CHRISTCHURCH, NADI, NAURU ISLAND

- Based on data as of June 1999.