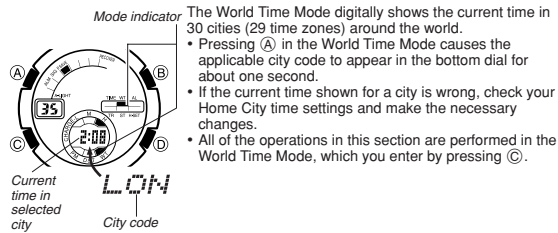


When you want to do this:	Perform this button operation:
Move the hand setting forward 20 seconds	• Press (D).
Move the hand setting a short way forward at high speed	• Hold down (D). • Release (D) when the hands reach the setting you want.
Move the hand setting a long way forward at high speed	• While holding down (D) to move the hands at high speed, press (B) to lock the high-speed hand movement. • To stop the hand movement, press any button. • Hand movement stops automatically if the hour hand makes one full (12-hour) revolution.

- Press (A) to exit the setting screen.
- The minute hand will be adjusted slightly to match the seconds when you exit the setting screen.
- To return to the Timekeeping Mode, press (C).

World Time



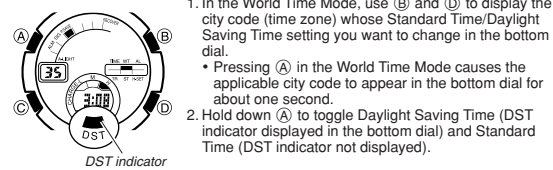
The World Time Mode digitally shows the current time in 30 cities (29 time zones) around the world.

- Pressing (A) in the World Time Mode causes the applicable city code to appear in the bottom dial for about one second.
- If the current time shown for a city is wrong, check your Home City time settings and make the necessary changes.
- All of the operations in this section are performed in the World Time Mode, which you enter by pressing (C).

To view the time in another city

- While in the World Time Mode, press (D) to scroll through the city codes (time zones) to the east or (B) to scroll to the west.
- For full information on city codes, see the "City Code Table".

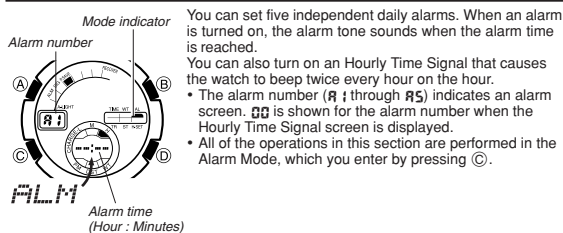
To toggle a city code time between Standard Time and Daylight Saving Time



- In the World Time Mode, use (B) and (D) to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change in the bottom dial.
- Pressing (A) in the World Time Mode causes the applicable city code to appear in the bottom dial for about one second.
- Hold down (A) to toggle Daylight Saving Time (DST indicator displayed in the bottom dial) and Standard Time (DST indicator not displayed).

- Note that you cannot use the World Time Mode to change the DST setting of the Home City code you currently have selected in the Timekeeping Mode. See "To change the Daylight Saving Time (summer time) setting" for information about turning the Home City code DST setting on and off.
- Note that you cannot switch between Standard Time and Daylight Saving Time while GMT is selected as the city code.
- The DST indicator will appear whenever you display a city code for which 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.

Alarms

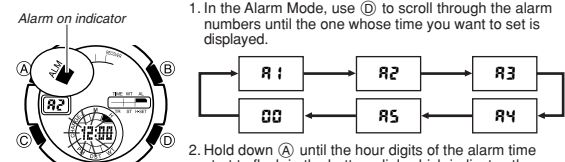


You can set five independent daily alarms. When an alarm is turned on, the alarm tone sounds when the alarm time is reached.

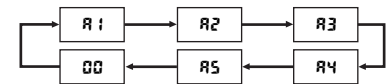
You can also turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.

- The alarm number (R1 through R5) indicates an alarm screen. 00 is shown for the alarm number when the Hourly Time Signal screen is displayed.
- All of the operations in this section are performed in the Alarm Mode, which you enter by pressing (C).

To set an alarm time



- In the Alarm Mode, use (D) to scroll through the alarm numbers until the one whose time you want to set is displayed.



- Hold down (A) until the hour digits of the alarm time start to flash in the bottom dial, which indicates the setting screen.
- This automatically turns on the alarm.

- Press (C) to move the flashing between the hour and minute settings.
- While a setting is flashing, use (D) (+) and (B) (-) to change it.
- When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. (no indicator) or p.m. (PM indicator on the bottom dial).

- Press (A) to exit the setting screen.

Alarm Operation

The alarm sounds in all modes at the preset time for about 10 seconds, or until you stop it by pressing any button.

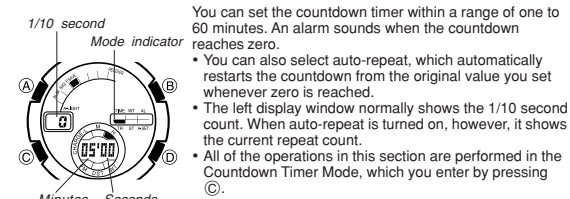
To test the alarm

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

To turn an alarm and the Hourly Time Signal on and off

- In the Alarm Mode, use (D) to select an alarm or the Hourly Time Signal.
- When the alarm or the Hourly Time Signal you want to set is selected, press (B) to turn it on and off. The current setting is indicated by following indicators.
- ALM Indicates alarm is ON.
- SIG Indicates Hourly Time Signal is ON.
- The alarm on indicator (ALM) and the Hourly Time Signal on indicator (SIG) remain displayed in all modes while these functions are turned on.
- The alarm on indicator appears when any of the alarms is turned on.

Countdown Timer



You can set the countdown timer within a range of one to 60 minutes. 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.
- The left display window normally shows the 1/10 second count. When auto-repeat is turned on, however, it shows the current repeat count.
- All of the operations in this section are performed in the Countdown Timer Mode, which you enter by pressing (C).

To set the countdown start time

- While the countdown start time is displayed in the bottom dial in the Countdown Timer Mode, hold down (A) until the current countdown start time starts to flash, which indicates the setting screen.
- If the countdown start time is not displayed, use the procedure under "To use the countdown timer" to display it.
- Press (C) to toggle the flashing contents of the bottom dial between the two settings shown below.



- While a setting is flashing, use (D) (+) and (B) (-) to change it.
- See "To turn auto-repeat on and off" below for details on the auto-repeat setting.
- Press (A) to exit the setting screen.

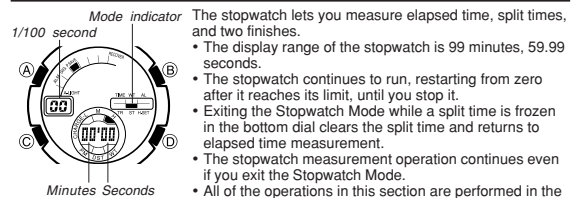
To use the countdown timer

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

To turn auto-repeat on and off

- While the countdown start time is displayed in the bottom dial in the Countdown Timer Mode, hold down (A) until the current countdown start time starts to flash in the bottom dial, which indicates the setting screen.
- Press (C) until the auto-repeat setting is flashing in the bottom dial.
- Press (D) to turn auto-repeat on ([] displayed) and off ([] displayed).
- Press (A) to exit the setting screen.
- When auto-repeat is turned on, the alarm sounds and countdown starts again whenever the countdown reaches zero. You can stop the countdown by pressing (D), and manually reset to the countdown start time by pressing (B).
- Auto-repeat timing repeats up to nine times.

Stopwatch

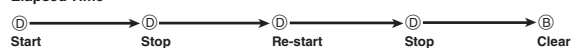


The stopwatch lets you measure elapsed time, split times, and two finishes.

- The display range of the stopwatch is 99 minutes, 59.99 seconds.
- The stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.
- Exiting the Stopwatch Mode while a split time is frozen in the bottom dial clears the split time and returns to elapsed time measurement.
- The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
- All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing (C).

To measure times with the stopwatch

Elapsed Time



Split Time

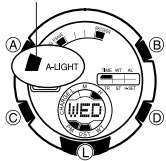


Two Finishes



Illumination

Auto light switch indicator



An LED (light-emitting diode) and light guide panel illuminate the digital display areas for easy reading in the dark. The watch's auto light switch automatically illuminates the digital display areas when you angle the watch towards your face.

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

To turn on illumination manually

In any mode, press (L) to illuminate the digital display areas.

- You can specify 1.5 seconds or 2.5 seconds as the illumination duration. See "To set the digital time and date" for more information.
- The above operation turns on illumination regardless of the current auto light switch setting.

About the Auto Light Switch

Turning on the auto light switch causes illumination to turn on whenever you position your wrist as described below in any mode. Note that this watch features a "Full Auto Light," so the auto light switch operates only when available light is below a certain level. It does not illuminate the digital display areas under bright light.

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

- Wear the watch on the outside of your wrist.



Warning!

- Always make sure you are in a safe place whenever you are reading 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 any mode, hold down (L) for about two seconds to toggle the auto light switch on (auto light switch indicator displayed) and off (auto light switch indicator not displayed).

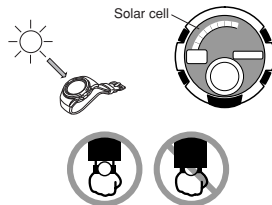
- The auto light switch is automatically turned off whenever battery power is at Level 4.
- After battery power recovers to Level 2, you will have to perform the above procedure to turn the auto light switch back on again.
- The auto light switch indicator remains in all modes while the auto light switch is turned on.

Power Supply

This watch is equipped with a solar cell and special rechargeable batteries (secondary batteries) that are charged by the electrical power produced by the solar cell. The illustration shown below shows how you should position the watch for charging.

Example: Orient the watch so its face is pointing at a light source.

- The illustration shows how to position a watch with a resin band.
- Note that charging efficiency drops when any part of the solar cell is blocked by clothing, etc.
- Normally, you should try to keep the watch outside of your sleeve as much as possible. Charging is significantly reduced if the face is only partially covered.



Important!

- Storing the watch for long periods in an area where there is no light or wearing it in such a way that it is blocked from exposure to light can cause rechargeable battery power to run down. Make sure that the watch is normally exposed to bright light whenever possible.
- This watch uses special rechargeable batteries to store power produced by the solar cell, so regular battery replacement is not required. However, after very long use, the rechargeable batteries may lose its ability to achieve a full charge. If you experience problems getting the special rechargeable batteries to fully charge, contact your dealer or CASIO distributor about having them replaced.
- Never try to remove or replace the watch's special batteries yourself. Use of the wrong type of batteries can damage the watch.
- All data stored in memory is deleted, and the current time and all other settings return to their initial factory defaults whenever battery power drops to Level 4 and if you should ever need to have the rechargeable batteries replaced.
- Turn on the watch's Power Saving function and keep it in an area normally exposed to bright light when storing it for long periods. This helps to keep the rechargeable batteries from going dead.

Battery Power Indicator and Recover Indicator

The battery power indicator shows you the current power level of the rechargeable batteries.

Recover indicator



Battery power indicator

Level	Battery Power Indicator	Function Status
1		All functions enabled.
2		All functions enabled.
3		Alarm, hourly time signal, illumination, auto light switch, and display are disabled. Though the hands of the watch do not move, time continues to be kept internally.
4		All functions, including timekeeping, disabled and initialized.

- The flashing charge indicator (CHARGE!) at Level 3 tells you that battery power is very low, and that exposure to bright light for charging is required as soon as possible.
- At Level 4, all functions are disabled and settings return to their initial factory defaults. Functions are enabled once again after the rechargeable batteries are charged, but you need to set the time and date, after the batteries reach Level 3 (indicated by the flashing charge indicator) from Level 4. You will not be able to configure any of the other settings until the batteries reach Level 2 (no charge indicator) after dropping to Level 4.
- Leaving the watch in direct sunlight or some other very strong light source can cause the battery power indicator to momentarily show a reading that is higher than the actual battery level. The correct battery power indicator should appear after a few minutes.
- If you use the light or alarms a number of times during a short period, the recover indicator appears and the following operations become disabled until battery power recovers.

Illumination

Beeper tone

Coordination between digital and analog timekeeping

After some time, battery power will recover and the recover indicator will disappear, indicating that the above functions are enabled again.

Charging Precautions

Certain charging conditions can cause the watch to become very hot. Avoid leaving the watch in the areas described below whenever charging its rechargeable batteries. Also note that allowing the watch to become very hot can cause its liquid crystal display to black out. The appearance of the LCD should become normal again when the watch returns to a lower temperature.

Warning!

Leaving the watch in bright light to charge its rechargeable batteries can cause it to become quite hot. Take care when handling the watch to avoid burn injury. The watch can become particularly hot when exposed to the following conditions for long periods.

- On the dashboard of a car parked in direct sunlight
- Too close to an incandescent lamp
- Under direct sunlight

Charging Guide

After a full charge, timekeeping remains enabled for up to about 12 months.

- The following table shows the amount of time the watch needs to be exposed to light each day in order to generate enough power for normal daily operations.

Exposure Level (Brightness)	Approximate Exposure Time
Outdoor Sunlight (50,000 lux)	4 minutes
Sunlight Through a Window (10,000 lux)	19 minutes
Daylight Through a Window on a Cloudy Day (5,000 lux)	29 minutes
Indoor Fluorescent Lighting (500 lux)	5 hours

- Since these are the specs, we can include all the technical details.

- Display on 18 hours per day, sleep state 6 hours per day
- 1 illumination operation (1.5 seconds) per day
- 10 seconds of alarm operation per day

- Stable operation is promoted by frequent charging.

Recovery Times

The table below shows the amount exposure that is required to take the batteries from one level to the next.

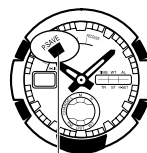
Exposure Level (Brightness)	Approximate Exposure Time			
	Level 4	Level 3	Level 2	Level 1
Outdoor Sunlight (50,000 lux)	2 hours	19 hours	5 hours	
Sunlight Through a Window (10,000 lux)	7 hours	94 hours	22 hours	
Daylight Through a Window on a Cloudy Day (5,000 lux)	10 hours	152 hours	35 hours	
Indoor Fluorescent Lighting (500 lux)	109 hours		---	

- The above exposure time values are all for reference only. Actual required exposure times depend on lighting conditions.

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.

Power Saving Function



Power saving indicator

When turned on, the Power Saving function automatically puts the watch into a sleep state whenever it is left for a certain period in an area where it is dark. The table below shows how watch functions are affected by Power Saving.

Elapsed Time in Dark	Functions
60 to 70 minutes	<ul style="list-style-type: none"> • LCD off • Alarm, hourly time signal, and analog timekeeping
6 or 7 days	<ul style="list-style-type: none"> • LCD off, alarm and hourly time signal disabled • Analog timekeeping stopped at 12 o'clock

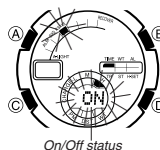
- Wearing the watch inside the sleeve of clothing can cause it to enter the sleep state.
- The watch will not enter the sleep state between 6:00 AM and 10:59 PM. If the watch is already in the sleep state when 6:00 AM arrives, however, it will remain in the sleep state.

To recover from the sleep state

Perform any one of the following operations.

- Move the watch to a well-lit area.
- Press any button.
- Angle the watch towards your face for reading.

To turn Power Saving on and off



1. In the Timekeeping Mode, hold down (A) until the city code starts to flash in the bottom dial, which indicates the setting screen.
 2. Press (C) nine times until the Power Saving on/off screen appears.
 3. Press (D) to toggle Power Saving on (ON) and off (OFF).
 4. Press (A) to exit the setting screen.
- The Power Saving indicator (SAV) is on the display in all modes while Power Saving is turned on.

Auto Return Features

- If you leave the watch in the Alarm or Hand Setting Mode for two or three minutes without performing any operation, it automatically returns to the Timekeeping Mode.
- If you leave the watch with a flashing setting in a digital display area for two or three minutes without performing any operation, the watch automatically exits the setting screen.

Scrolling

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

Initial Screens

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

Timekeeping

- Resetting the seconds to 00 while the current count is in the range of 30 to 59 causes the minutes to be increased by 1. In the range of 00 to 29, the seconds are reset to 00 without changing the minutes.
- 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 2000 to 2099.
- The watch's built-in full automatic calendar 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 batteries replaced or when battery power drops to Level 4.
- The current time for all city codes in the Timekeeping Mode and World Time Mode is calculated in accordance with the Greenwich Mean Time (GMT) differential for each city, based on your Home City time setting.
- GMT differential is calculated by this watch based on Universal Time Coordinated (UTC*) data.
- *UTC is the world-wide scientific standard of timekeeping. It is based upon carefully maintained atomic (cesium) clocks that keep time accurately to within microseconds. Leap seconds are added or subtracted as necessary to keep UTC in sync with the Earth's rotation. The reference point for UTC is Greenwich, England.*

12-hour/24-hour Timekeeping Formats

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

- With the 12-hour format, the PM indicator (PM) appears on the bottom dial for times in the range of noon to 11:59 p.m. and no 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.

Illumination Precautions

- Illumination may be hard to see when viewed under direct sunlight.
- Illumination automatically turns off whenever an alarm sounds.
- Frequent use of illumination runs down the batteries.

Auto light switch precautions

- The auto light switch is turned off automatically whenever battery power is at Level 3.
- Wearing the watch on the inside of your wrist, movement of your arm, or vibration of your arm can cause frequent activation of the auto light switch and illumination of the digital display areas. To avoid running down the batteries, turn off the auto light switch whenever engaging in activities that might cause frequent illumination.
- Note that wearing the watch under your sleeve while the auto light switch is turned on can cause frequent illumination of the digital display areas and can run down the batteries.

More than 15 degrees too high



- Illumination may not turn on 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.
- Illumination turns off after the preset illumination duration (see "To set the digital time and date"), 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 illumination does not turn on, try moving the watch back to the starting position (parallel with the ground) and then tilt it back towards 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, illumination may not turn on until about one second after you turn the face of the watch towards you. This does not necessarily indicate malfunction of the auto light switch.
- You may notice a very faint clicking sound coming from the watch when it is shaken back and forth. This sound is caused by mechanical operation of the auto light switch, and does not indicate a problem with the watch.

City Code Table

City Code	City	GMT Differential	Other major cities in same time zone
--		-11.0	Pago Pago
HNL	Honolulu	-10.0	Papeete
ANC	Anchorage	-09.0	Nome
LAX	Los Angeles	-08.0	San Francisco, Las Vegas, Vancouver, Seattle/Tacoma, Dawson City
DEN	Denver	-07.0	El Paso, Edmonton
CHI	Chicago	-06.0	Houston, Dallas/Fort Worth, New Orleans, Mexico City, Winnipeg
NYC	New York	-05.0	Montreal, Detroit, Miami, Boston, Panama City, Havana, Lima, Bogota
CCS	Caracas	-04.0	La Paz, Santiago, Port of Spain
RIO	Rio De Janeiro	-03.0	Sao Paulo, Buenos Aires, Brasilia, Montevideo
--		-02.0	
--		-01.0	Praia
GMT			Dublin, Lisbon, Casablanca, Dakar, Abidjan
LON	London	+00.0	
PAR	Paris		Milan, Rome, Madrid, Amsterdam, Algiers, Hamburg, Frankfurt, Vienna, Stockholm
BER	Berlin	+01.0	
ATH	Athens		Helsinki, Istanbul, Beirut, Damascus, Cape Town
CAI	Cairo	+02.0	
JRS	Jerusalem		
JED	Jeddah	+03.0	Kuwait, Riyadh, Aden, Addis Ababa, Nairobi, Moscow
THR	Tehran	+03.5	Shiraz
DXB	Dubai	+04.0	Abu Dhabi, Muscat
KBL	Kabul	+04.5	
KHI	Karachi	+05.0	Male
DEL	Delhi	+05.5	Mumbai, Kolkata
DAC	Dhaka	+06.0	Colombo
RGN	Yangon	+06.5	
BKK	Bangkok	+07.0	Jakarta, Phnom Penh, Hanoi, Vientiane
HKG	Hong Kong	+08.0	Singapore, Kuala Lumpur, Beijing, Taipei, Manila, Perth, Ulaanbaatar
SEL	Seoul		Pyongyang
TYO	Tokyo	+09.0	
ADL	Adelaide	+09.5	Darwin
SYD	Sydney	+10.0	Melbourne, Guam, Rabaul
NOU	Noumea	+11.0	Port Vila
WLG	Wellington	+12.0	Christchurch, Nadi, Nauru Island

* Based on data as of December 2003.