

Operation Guide 2634

Getting Acquainted

Congratulations upon your selection of this CASIO watch. To get the most out of your purchase, be sure to carefully read this manual and keep it on hand for later reference when necessary.

Expose the watch to bright light to charge its battery before using it.
 You can use this watch even as its battery is being charged by exposure to bright light.
 • Be sure to read "Battery" of this manual for important information you need to know when exposing the watch to bright light.

If the digital display of the watch is blank...

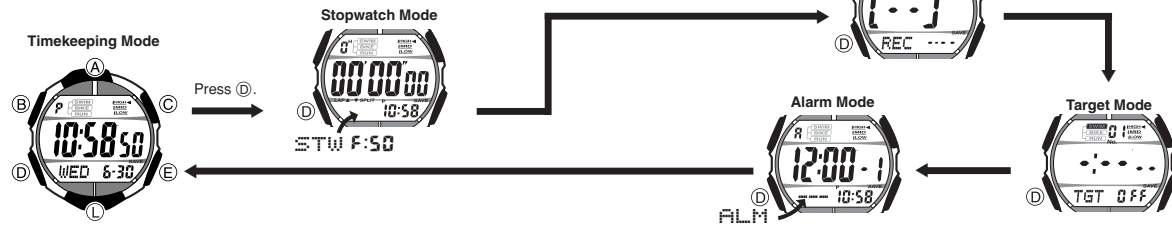


If the **SLEEP** indicator is on the display (either flashing or steady), it means that the display is blank because the watch's Power Saving function has turned off the display to conserve power. Power Saving automatically turns off the display and enters a sleep state whenever the watch is left for a certain period where it is dark.

- The initial factory default setting is Power Saving on.
- The watch recovers from the sleep state if you move it to a well-lit area*, if you press any button, or if you angle the watch towards your face for reading.
- * It can take up to two seconds for the display to turn on.
- See "Power Saving Function" for more information.

General Guide

- Press (D) to change from mode to mode.
- In any mode (except for the Recall Mode), press (L) to illuminate the display.



About This Manual

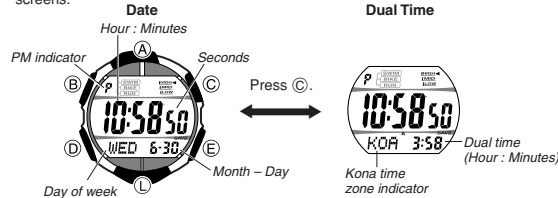


- Button operations are indicated using the letters shown in the illustration.
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "Reference" section.

Timekeeping

Use the Timekeeping Mode to set and view the current time and date. The Timekeeping Mode also has a Dual Time screen that lets you view the current time in Kona, Hawaii, which is the site of the Ironman Triathlon.

- In the Timekeeping Mode, press (C) to toggle between the Date and the Dual Time screens.



Setting the Time and Date

When setting the time, you can also configure settings for the display illumination duration, the 12/24-hour format, power saving on/off, and the Dual Time screen.

About the Dual Time screen

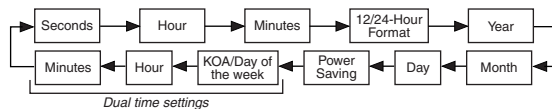
The Dual Time screen is initially set up to show the time in Kona, Hawaii, which is the site of the Ironman Triathlon. You can leave this setting the way it is or change it to show the current time in another time zone.

- If you need to adjust the current Kona time setting, use the "Time Differential Table" for reference. If you live in Tokyo for example, you would need to subtract 19 hours from the current Tokyo time to determine the current time in Kona, Hawaii. Note that the times in the "Time Differential Table" are standard times. You need to subtract one hour from these times during periods when summer time (Daylight Saving Time) applies.
- You can also use the Dual Time screen to keep track of the current time in another area outside of the Kona, Hawaii time zone. If you do, you should turn off KONA (Kona time zone indicator) on the Dual Time screen. This will cause the indicator to be replaced by an indicator that shows the day of the week for the current date.

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

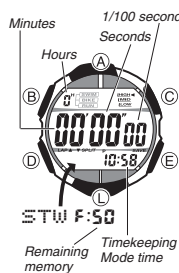


3. When the setting you want to change is flashing, use (C) and (E) to change it as described below.

Screen	To do this:	Do this:
10:58:50 * 6:30	Reset the seconds to 00	Press (E).
12H 6:30	Toggle the display illumination duration setting between 1.5 seconds (→) and 2.5 seconds (⌘)	Press (C) while the seconds count is flashing.
2004 6:30	Change the hour or minutes	Use (E) (+) and (C) (-).
2004 6:30	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping	Press (E).
2004 6:30	Change the year, month, or day	Use (E) (+) and (C) (-).
SAVE ON	Toggle power saving on (ON) and off (OFF)	Press (E).
KOA KONA	Switch between the KOA (Kona) indicator and --- (day of the week)	Press (E).
3:58:50 KOA KONA	Change the dual time hour or minutes	Use (E) (+) and (C) (-).

4. Press (B) to exit the setting screen.

Stopwatch



The 1/100-second stopwatch measures elapsed time, as well as lap/split times. The Stopwatch Mode also includes a number of features and functions for the triathlete, including lap/split time memory, auto-start, target splits, leg (event) indicators, and more.

- All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing (D).
- See "Timing a Triathlon" for information about triathlon functions.

Measuring Elapsed Time

Use the following procedure to perform a basic elapsed time operation with the stopwatch.

- The stopwatch continues to run until you stop it. If the elapsed time measurement reaches the maximum limit, it will restart from zero.

To measure elapsed time



1. In the Stopwatch Mode, press (A) to start the elapsed time measurement.
 - Starting an elapsed time operation displays the elapsed time in the center of the display and in the lower part of the display.
 - Note that pressing (A) will not start an elapsed time operation while an auto-start countdown is being performed. In this case, you need to stop the auto-start countdown before starting the elapsed time operation.
 - Elapsed time measurement continues even if you exit the Stopwatch Mode.
2. To stop elapsed time measurement, hold down (C) for about two seconds until the watch emits two short beeps and then one long beep.

- Pressing (B) while an elapsed time operation is in progress or stopped cycles the lower Stopwatch Mode display between the three screens shown below.



- To clear the displayed stopwatch times to all zeroes, stop elapsed time measurement and then hold down (C) for two seconds until CLR starts flashing on the display and the watch beeps.
- Keep (C) depressed until the watch beeps. If you release (C) after CLR starts to flash but the watch does not beep yet, the Stopwatch Mode measured times will reappear.

Recording Lap and Split Times

"Lap time" is the time spent to cover a specific segment of a race, such as one lap around a track.

"Split time" is the time spent from the beginning of a race up to a certain point.

- The explanations in this section describe general lap and split time registration, without using the target split feature for triathlon timing. They assume that all target splits are turned off. See "Timing a Triathlon" for more information about target splits.
- Lap/split times are stored in memory automatically whenever you perform a lap/split time operation with the (C) button. See "Recall Mode" for more information.

To record lap/split times

Lap/Split number Lap time



- In the Stopwatch Mode, press (A) to start an elapsed time measurement.
- Press (C) to freeze the current lap time in the center of the display and the current split time in the lower display. The lap and split times are automatically stored in memory at this time.
 - Pressing (C) causes the watch to beep twice. The lap time and split time will remain frozen on the display for about eight seconds. After that, the display will automatically change back to the elapsed time display, which will show the time of the next lap in the center and the total elapsed time (split time) at the bottom.
 - Stopwatch timing continues internally while the lap/split times are frozen on the display.
- You can repeat step 2 as many times as you want.
- To stop the elapsed time measurement, hold down (C) for about two seconds, until the watch emits two short beeps, followed by one long beep.
 - After stopping elapsed time measurement, you can resume it by pressing (A).
- To clear the displayed stopwatch times to all zeroes, stop elapsed time measurement and then hold down (C) for two seconds until CLR starts flashing on the display and the watch beeps.
 - Keep (C) depressed until the watch beeps. If you release (C) after CLR starts to flash but the watch does not beep yet, the Stopwatch Mode measured times will reappear.
 - The lap/split number of the current lap/split flashes on the display while an elapsed time measurement is in progress. Lap/split numbers are automatically incremented starting from 01; whenever you press (C) in step 2 of the above procedure. The maximum lap/split number is 99. Recording a lap/split after that causes the lap/split number count to restart from 00.

Auto-start

Auto-start automatically starts a stopwatch elapsed time operation when a time set by you is reached.

- Auto-start is coordinated with the current Timekeeping Mode time. The stopwatch elapsed time operation will start automatically when the auto-start time you specify is reached in the Timekeeping Mode.
- Note that you can configure an auto-start time or turn auto-start on or off only while the Stopwatch Mode screen shows all zeroes.

To set the auto-start time

Auto start time



- While the Stopwatch Mode screen shows all zeroes, hold down (B) until the hour setting of the auto-start time starts to flash, which indicates the setting screen.
- Press (D) to move the flashing between the hour and minute settings.
- While a setting is flashing, use (E) (+) and (C) (-) to change it.
- Press (B) to exit the setting screen.

To turn auto-start on and off

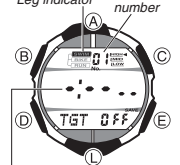
Time remaining until auto-start (hours, minutes, seconds)



- While the Stopwatch Mode screen shows all zeroes, hold down (E) for about one second to toggle auto-start on (countdown displayed) and off (all zeroes displayed).
- When auto-start is turned on, the Stopwatch Mode screen counts down the time remaining until the auto-start time is reached. When the countdown reaches zero, the watch beeps three times and a stopwatch elapsed time operation starts automatically, regardless of the mode the watch is currently in.
- The auto-start countdown continues, even if you exit the Stopwatch Mode.
- Note that a stopwatch elapsed time operation cannot be started manually by pressing (A) while an auto-start countdown is in progress. You need to turn off auto-start before using the stopwatch.

Timing a Triathlon

Leg indicator Lap/Split number



Target split (hours, minutes, seconds)

You can configure the watch with up to five target split times and leg indicators. Then when you time the legs of a triathlon, the watch will display the leg indicators during each leg, and beep when a preset target split time is reached. You can even display the difference between a preset target split time and your actual split.

- See "Stopwatch" for full details about using the Stopwatch Mode and for more information about lap and split time operations.

Configuring the Watch for Triathlon Timing

You can use the Target Mode to configure the watch with target splits, and to display leg indicators during timing of each leg.

Configuring the watch for timing a triathlon consists of the following three steps.

- Setting target split times
- Specifying leg indicators
- Turning on the target splits you want to use

Target Splits and Leg Indicators

You can configure the watch up to five target lap/split times (01 through 05) and specify leg indicators (Swim, Bike, Run) that appear on the display on the Stopwatch Mode screen during timing of each leg.

The following shows examples of two possible configurations that you can use.

Example 1: Swim: 20 minutes; Bike: 3 hours; Run: 2 hours

Leg	Lap/Split Number	Target Split
Swim	01	20 minutes
Bike	02	3 hours 20 minutes
Run	03	5 hours 20 minutes
None	04	Off
None	05	Off

Example 2: Swim: 20 minutes; Transition: 5 minutes; Bike: 3 hours; Transition: 5 minutes; Run: 2 hours

Leg	Split Number	Target Split
Swim	01	20 minutes
Transition	02	25 minutes
Bike	03	3 hours 25 minutes
Transition	04	3 hours 30 minutes
Run	05	5 hours 30 minutes

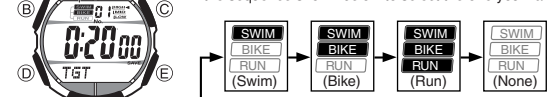
To configure target split times

- In the Target Mode, use (E) and (C) to scroll through the target split screens (01 through 05) until the one whose time you want to set is displayed.
 - Press (E) to move to the next screen.
 - Press (C) to move to the previous screen.
- After you select a target split, hold down (B) until the hour setting of the target split time starts to flash. This is the setting screen.

- If the hour setting does not flash when you hold down (B), it probably means that a Stopwatch Mode elapsed time or auto-start countdown operation is being performed. Go to the Stopwatch Mode and stop the operation.
- Press (D) to move the flashing between the hour, minute, and seconds settings.
- While a setting is flashing, use (E) (+) and (C) (-) to change it.
- You can specify a target split time of up to 99 hours, 59 minutes 50 seconds in 10-second steps.
- Press (B) to exit the setting screen.

To specify a leg indicator for a split

- In the Target Mode, use (E) and (C) to scroll through the target split screens (01 through 05) until the one whose leg indicator you want to specify is displayed.
- Press (A) to cycle through the leg indicator settings in the sequence shown below to select the one you want.



To turn a target split on and off

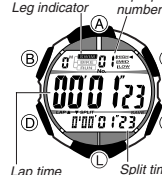
- In the Target Mode, use (E) and (C) to scroll through the target split screens (01 through 05) until the one you want to turn on or off is displayed.
- Press (B) to toggle the currently displayed target split on (target split time displayed) and off (--- displayed).

Timing During a Triathlon

Basically, timing a triathlon is the same as elapsed time measurement and lap/split time recording in the Stopwatch Mode. The only difference is that you have the watch configured with target splits and leg indicators before starting actual timing.

To time a triathlon

Leg indicator Lap/Split number



- Use the procedure under "Configuring the Watch for Triathlon Timing" to configure the watch for triathlon timing.
- Use (A) to enter the Stopwatch Mode.
- When you start the first leg of a triathlon (usually the swim leg), press (A) to start an elapsed time measurement.
 - If you have the watch configured to display leg indicators, the leg indicator will flash on the display. The current lap/split number will also be displayed.
- When you reach the end of the first leg, press (C) so the watch beeps twice.
 - This will freeze the time of the first leg (lap/split number 01) in the center of the display and in the lower display. The times will also be stored automatically in memory.

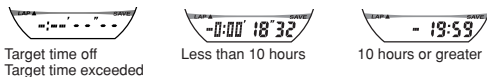
- After about eight seconds, the display will automatically change back to the elapsed time display, with the time of the current leg (lap) in the center and the total elapsed time (split) at the bottom.
- Repeat step 4 for each leg of the triathlon.
- If you have the watch configured with targets for the transition periods (as in Example 2), perform step 4 when you complete the transitions between legs.
- When you complete the last leg of the triathlon, hold down **(C)** for about two seconds, until the watch emits two short beeps, followed by one long beep.
 - This stops the elapsed time measurement.
- To clear the displayed leg (lap) time and total elapsed time to all zeroes, hold down **(C)** for two seconds until **CLR** stops flashing on the display and the watch beeps.

Note

- If you have a target split time set and turned on, the watch will beep for three seconds when the split time being measured in the Stopwatch Mode during that split reaches the target split time. You can also display the difference between your target split time and the actual time you record for that split.
- Pressing **(B)** while an elapsed time operation is in progress or stopped cycles the lower Stopwatch Mode display between the three screens shown below.



- All of the digits of the Target Split Differential contain dashes (-) if the target split time feature is turned off or if the current split time exceeds the preset target split time. The target split time differential is displayed using hours, minutes, seconds and 1/100 second when it is less than 10 hours. Hours and minutes only are displayed when the differential is 10 hours or greater.



- Leg indicators can be displayed for up to five splits only. All leg indicators are displayed if you record more than five lap/split times during an elapsed time operation.

Recall Mode

Log number

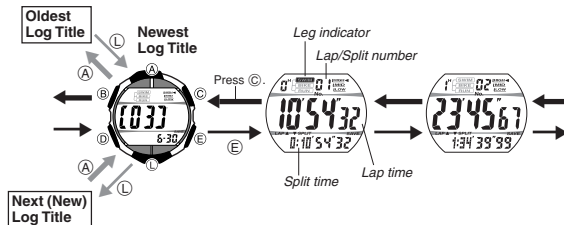


Use the Recall Mode to recall and delete records stored by the Stopwatch Mode.

- The title screen of the newest log appears first whenever you enter the Recall Mode.
- Log numbers are automatically assigned in sequence, starting from **01**.
- is shown in place of the log number and creation date on the Recall Mode screen if there are no stopwatch records currently in memory.
- All of the operations in this section are performed in the Recall Mode, which you enter by pressing **(D)**.

To recall stopwatch records

In the Recall Mode, use **(A)** (+) and **(L)** (-) 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 **(E)** (+) and **(C)** (-) to cycle through the records contained in the log.



- Stopwatch records are stored in "logs" that are created automatically by the watch. See "Memory Management" for more information.

To delete a log

- In the Recall Mode, display the Log Title screen of the log you want to delete.
 - Hold down **(B)** until the watch emits a beep and **CLR** stops flashing on the display.
 - Press and hold **(B)** until **CLR** starts to flash on the display and then stops flashing. If you release **(B)** before **CLR** stops flashing the watch will return to the Log Title screen without deleting the log.
- Note that you cannot delete a log if the lap time currently displayed in the Stopwatch Mode is part of that log. To delete the log, you first need to reset the Stopwatch Mode screen to all zeroes.

Memory Management

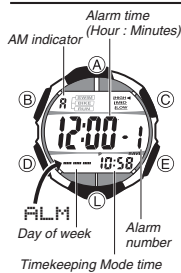
Starting an elapsed time measurement operation in the Stopwatch Mode creates a new log. Any lap/split times recorded during the elapsed time measurement, as well as the final elapsed time are all stored in the records of the log. The log remains open for data storage until you permanently close it by clearing the Stopwatch Mode screen to all zeroes.

- The watch has enough memory to hold up to 51 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
51 records	1	51 records - 1 log title screen = 50
	2	51 records - 2 log title screens = 49
	5	51 records - 5 log title screens = 46

- If watch memory is already full when you start a Stopwatch elapsed time measurement 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.

Alarms



You can set up to five independent alarms with hour, minutes, and day of the week. 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, which will cause the watch to beep twice every hour on the hour.
- The alarm number (1 through 5) indicates an alarm screen. :00 is shown for the alarm time when the Hourly Time Signal screen is on the display.
- When you enter the Alarm Mode, the data you were viewing when you last exited the mode appears first.
- All of the operations in this section are performed in the Alarm Mode, which you enter by pressing **(D)**.

Alarm Types

The alarm type is determined by the settings you configure, as described below.

Daily alarm

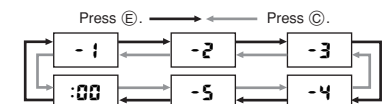
Set the hour and minutes for the alarm time. This type of setting causes the alarm to sound everyday at the time you set.

Weekly alarm

Set the hour, minutes, and the day of the week for the alarm time. This type of setting causes the alarm to sound every week at the time you set, on the day of the week you set.

To set an alarm time

- In the Alarm Mode, use **(E)** and **(C)** to scroll through the alarm screens until the one whose time you want to set is displayed.



- After you select an alarm, 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 **(D)** to move the flashing between the hour, minute, and day of the week settings.

- While a setting is flashing, use **(E)** (+) or **(C)** (-) to change it.
 - To set an alarm that does not include a day of the week (daily alarm), set --- for the day of the week. Press **(E)** or **(C)** until the --- mark appears (between **WED** and **FRI**) while the day of the week setting is flashing.
 - 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).
- Press **(B)** to exit the setting screen.

Alarm Operation

- The alarm sounds at the preset time for about 10 seconds.
- To stop the alarm tone after it starts to sound, press any button.
- The alarm and the Hourly Time Signal operations are performed in all modes except for the Timekeeping Mode setting screen.

To test the alarm

While in the Alarm Mode, hold down **(A)** to sound the alarm.

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

- In the Alarm Mode, use **(E)** and **(C)** to select an alarm or the Hourly Time Signal.
- Press **(B)** to toggle it on and off.
 - Turning on an Alarm (-1 through -5) displays the alarm on indicator on its Alarm Mode screen.
 - In all modes, the alarm on indicator is shown for any alarm that is currently turned on.
 - The Hourly Time Signal on indicator is shown on the display in all modes while the Hourly Time Signal is turned 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.
- You can specify 1.5 seconds or 2.5 seconds as the display illumination duration. See "To set the time and date" for more information.
- See "Backlight Precautions" for other important information about using the backlight.

- To turn on the backlight manually**
Press **(D)** in any mode (except for the Recall Mode) to illuminate the display.
- 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, whenever you position your wrist as described below in any mode. Note that this watch features a "Full Auto EL Light", so the auto light switch operates only when available light is below a certain level. It does not turn on the backlight 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 the backlight to turn on.



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

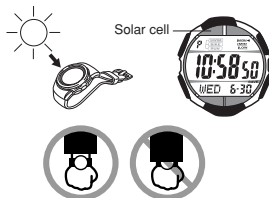
- In the Timekeeping Mode, hold down \odot for about two seconds to toggle the auto light switch on (AUTO \odot displayed) or off (AUTO \odot not displayed).
- The auto light switch on indicator (AUTO \odot) is on the display in all modes while the auto light switch is turned on.

Battery

This watch is equipped with a solar cell and a rechargeable battery (secondary battery) that is charged by the electrical power produced by the solar cell. The illustration shown nearby 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. Be sure that the watch is normally exposed to bright light whenever possible.
- This watch employs a solar cell that converts light into electricity, which charges a built-in rechargeable battery. Normally, the rechargeable battery should not need replacement, but after very long use over a number of years, the rechargeable battery may lose its ability to achieve a full charge. If you experience problems getting the rechargeable battery to a full charge, contact your dealer or CASIO distributor about having the rechargeable battery replaced.
- The rechargeable battery should be replaced with a CASIO-specified CTL1616 battery only. Other rechargeable batteries can cause damage to 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 when you have the battery 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 battery from going dead.

Battery Power Indicator and RECOVER Indicator

The battery power indicator on the display shows you the current status of the rechargeable battery's power.

Level	Battery Power Indicator	Function Status
1		All functions enabled.
2		All functions enabled.
3	 (Charge Soon Alert)	Except for timekeeping and battery power indicator, all functions and display indicators are disabled.
4		All functions disabled.

- The flashing CHARGE indicator 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 battery is charged, but you need to set the time and date, after the battery reaches Level 3 from Level 4. You will not be able to set any of the other settings until the battery reaches Level 2 after dropping to Level 4.
- Display indicators reappear as soon as the battery is charged from Level 4 to Level 3.
- Leaving the watch in direct sunlight or some other very strong light source can cause the battery power indicator to temporarily 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 backlight or the alarm a number of times during a short period, RECOVER appears on the display, and the backlight and beeper tone become disabled until battery power recovers. After some time, battery power will recover and RECOVER will disappear, indicating that the above functions are enabled again.
- If RECOVER appears frequently, it probably means that remaining battery power is low. Leave the watch in bright light to allow it to charge.

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 battery. 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 battery 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 10 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)	5 minutes
Sunlight Through a Window (10,000 lux)	24 minutes
Daylight Through a Window on a Cloudy Day (5,000 lux)	48 minutes
Indoor Fluorescent Lighting (500 lux)	8 hours

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

- Watch is not exposed to light
- Internal timekeeping
- Display on 18 hours per day, sleep state 6 hours per day
- 1 backlight 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 battery 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	21 hours	6 hours	
Sunlight Through a Window (10,000 lux)	6 hours	108 hours	30 hours	
Daylight Through a Window on a Cloudy Day (5,000 lux)	9 hours	219 hours	60 hours	
Indoor Fluorescent Lighting (500 lux)	103 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.

Timekeeping

- Resetting the seconds to $\square\square$ 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 $\square\square$ without changing the minutes.
- 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 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is also applied in all other modes.
- The year can be set in the range of 2000 to 2049. The day of the week is calculated automatically in accordance with the date you set.
- 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 when battery power drops to Level 4.

Auto Return Features

If you leave a screen with flashing digits on the display for two or three minutes without performing any operation, the watch automatically exits the setting screen.

Scrolling

The \odot , \odot , \odot , and \odot 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.

Power Saving Function

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 the Power Saving function.

Elapsed Time in Dark	Display	Operation
60 to 70 minutes	Blank, with SLEEP flashing	Display is off, but all functions are enabled.
6 or 7 days	Blank, with SLEEP not flashing	All functions are disabled, but timekeeping is maintained.

- Wearing the watch inside the sleeve of clothing can cause it to enter the sleep state.
- The watch will not enter the sleep state while the Timekeeping Mode time is between 6:00 AM and 9:59 PM. If the watch is already in the sleep state when the time reaches 6:00 AM, however, it will remain in the sleep state.
- The watch will not enter the sleep state while it is in the Stopwatch Mode.

To recover from the sleep state

Perform any one of the following operations.

- Move the watch to a well-lit area. It can take up to two seconds for the display to turn on.
- 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 (B) until the seconds start to flash, which indicates the setting screen.
 2. Press (D) seven times until the Power Saving on/off screen appears.
 3. Press (E) to toggle Power Saving on (SA) and off (OFF).
 4. Press (B) to exit the setting screen.
- The Power Saving indicator (SAVE) is on the display in all modes while the Power Saving is turned on.

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 backlight automatically turns off whenever an alarm sounds.
- 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.
- Frequent use of the backlight runs down the battery.

Auto light switch precautions

- 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 display. To avoid running down the battery, turn off the auto light switch whenever engaging in activities that might cause frequent illumination of the display.
- Note that wearing the watch under your sleeve while the auto light switch is turned on can cause frequent illumination of the display and can run down the battery.

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 after the preset display illumination duration (see "To set the 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 the backlight does not light, 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, 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.
- 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.

Time Differential Table

Cities in Zone	Difference Between Local Time and Kona Time	GMT Differential
Pago Pago	+01.0	-11.0
Honolulu, Papeete	+00.0	-10.0
Anchorage, Nome	-01.0	-09.0
Los Angeles, San Francisco, Las Vegas, Vancouver, Seattle/Tacoma, Dawson City	-02.0	-08.0
Denver, El Paso, Edmonton	-03.0	-07.0
Chicago, Houston, Dallas/Ft. Worth, New Orleans, Mexico City, Winnipeg	-04.0	-06.0
New York, Montreal, Detroit, Miami, Boston, Panama City, Havana, Lima, Bogota	-05.0	-05.0
Caracas, La Paz, Santiago, Pt. Of Spain	-06.0	-04.0
Rio De Janeiro, Sao Paulo, Buenos Aires, Brasilia, Montevideo	-07.0	-03.0
	-08.0	-02.0
Praia	-09.0	-01.0
London, Dublin, Lisbon, Casablanca, Dakar, Abidjan	-10.0	+00.0
Paris, Milan, Rome, Madrid, Amsterdam, Algiers, Hamburg, Frankfurt, Vienna, Stockholm, Berlin	-11.0	+01.0
Cairo, Jerusalem, Athens, Helsinki, Istanbul, Beirut, Damascus, Cape Town	-12.0	+02.0
Jeddah, Kuwait, Riyadh, Aden, Addis Ababa, Nairobi, Moscow	-13.0	+03.0
Tehran, Shiraz	-13.5	+03.5
Dubai, Abu Dhabi, Muscat	-14.0	+04.0
Kabul	-14.5	+04.5
Karachi, Male	-15.0	+05.0
Delhi, Mumbai, Kolkata	-15.5	+05.5
Dhaka, Colombo	-16.0	+06.0
Yangon	-16.5	+06.5
Bangkok, Jakarta, Phnom Penh, Hanoi, Vientiane	-17.0	+07.0
Hong Kong, Singapore, Kuala Lumpur, Beijing, Taipei, Manila, Perth, Ulaanbaatar	-18.0	+08.0
Tokyo, Seoul, Pyongyang	-19.0	+09.0
Adelaide, Darwin	-19.5	+09.5
Sydney, Melbourne, Guam, Rabaul	-20.0	+10.0
Noumea, Pt. Vila	-21.0	+11.0
Wellington, Christchurch, Nadi, Nauru Is.	-22.0	+12.0

* Based on data as of June 2003.