

# Operation Guide 3469

## About This Manual



- Depending on the model of your watch, display text appears either as dark figures on a light background or light figures on a dark background. All sample displays in this manual are shown using dark figures on a light background.
- Button operations are indicated using the letters shown in the illustration.
- Note that the product illustrations in this manual are intended for reference only, and so the actual product may appear somewhat different than depicted by an 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.

E-1

- To ensure that this watch provides you with the years of service for which it is designed, carefully read and follow the instructions under "Operating Precautions" and "User Maintenance."
- Be sure to keep all user documentation handy for future reference.

## Contents

|  |      |
|--|------|
| About This Manual .....  | E-1  |
| General Guide .....  | E-6  |
| Timekeeping .....  | E-8  |
| To set the time and date .....                                     | E-8  |
| To toggle between 12-hour and 24-hour timekeeping .....            | E-10 |
| To toggle the Timekeeping Mode between DST and Standard Time ..... | E-11 |
| Stopwatch .....  | E-12 |
| To measure elapsed time .....                                      | E-16 |
| To measure elapsed time with lap times .....                       | E-16 |
| To measure elapsed time with split times .....                     | E-18 |
| To time first and second place finishes .....                      | E-20 |

E-2

E-3

|  |      |
|--|------|
| Recall Mode .....  | E-23 |
| To recall stopwatch time records .....                           | E-24 |
| To delete a log .....  | E-26 |
| Countdown Timer .....  | E-27 |
| To use the countdown timer .....                                 | E-28 |
| To configure countdown start time and auto-repeat settings ..... | E-29 |
| Alarms .....   | E-31 |
| To set an alarm time .....                                       | E-33 |
| To test the alarm .....  | E-35 |
| To select the operation of Alarm 1 .....                         | E-36 |
| To turn Alarms 2 and 3 on and off .....                          | E-37 |
| To turn the hourly time signal on and off .....                  | E-38 |
| Dual Time .....  | E-39 |
| To set the Dual Time .....                                       | E-39 |

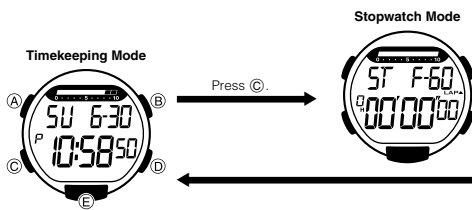
|  |      |
|--|------|
| Illumination .....                                 | E-41 |
| To illuminate the display manually .....           | E-41 |
| To specify the illumination duration .....         | E-42 |
| Reference .....                                    | E-43 |
| To turn the button operation tone on and off ..... | E-44 |
| Specifications .....                               | E-47 |
| Operating Precautions .....                        | E-49 |
| User Maintenance .....                             | E-60 |

E-4

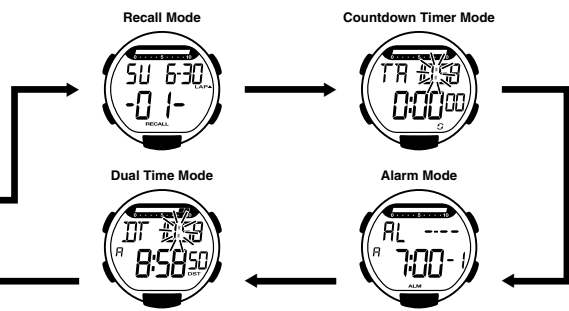
E-5

## General Guide

- Press (C) to change from mode to mode.
- In any mode (except when a setting screen is on the display), press (B) to illuminate the face of the watch.

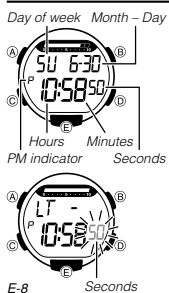


E-6



E-7

## Timekeeping

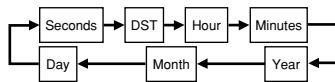


E-8

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

### To set the time and date

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



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

| Screen: | To do this:   | Do this:                 |
|---------|---|--------------------------|
| 36      | Reset the seconds to 00   | Press (D).               |
| 07      | Toggle between Daylight Saving Time (07) and Standard Time (0F) | Press (D).               |
| P 10:58 | Change the hour or minutes                                      | Use (D) (+) and (E) (-). |
| 20 19   | Change the year   | Use (D) (+) and (E) (-). |
| 6:30    | Change the month or day   | Use (D) (+) and (E) (-). |

4. Press (A) to exit the setting screen.
- The day of the week is displayed automatically in accordance with the date (year, month, and day) settings.
- See "Daylight Saving Time (DST) Setting" below for details about the DST setting.

E-9

### To toggle between 12-hour and 24-hour timekeeping

- In the Timekeeping Mode, press **(D)** to toggle between 12-hour timekeeping and 24-hour timekeeping.
- 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 p.m. and the **A** (AM) indicator appears to the left of the hour digits 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 applied in all other modes.
  - The **A** and **P** indicators are not displayed with the Timekeeping Mode time on the Countdown Timer Mode and Dual Time Mode screens.

### Daylight Saving Time (DST) Setting

Daylight Saving Time (summer time) 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 the Timekeeping Mode between DST and Standard Time

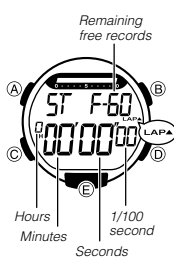
- In the Timekeeping Mode, hold down **(A)** until the seconds start to flash, which indicates the setting screen.
- Press **(C)** once and the DST setting screen appears.
- Press **(D)** to toggle between Daylight Saving Time (**DT** displayed) and Standard Time (**ST** displayed).
- Press **(A)** to exit the setting screen.
  - The **DST** indicator appears on the Timekeeping and Alarm Mode screens to indicate that Daylight Saving Time is turned on.



E-10

E-11

## Stopwatch



The stopwatch lets you measure elapsed time, lap times, split times, and two finishes. Lap times and split times can be stored in memory.

- The display range of the stopwatch is 99 hours, 59 minutes, 59 seconds.
- All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing **(C)** (page E-6).

### Note

- "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 stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.

- The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
- For information about how stopwatch times are stored in memory, see "Memory Management" (page E-21).

### Viewing the Stopwatch Displays

The information that appears in the watch's upper and lower displays depends on whether you are measuring lap times or split times.

#### Lap Time Measurement

- Upper Display: Lap time
- Lower Display: Elapsed time

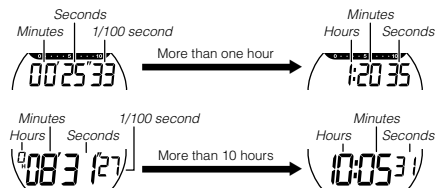
#### Split Time Measurement

- Upper Display: Lap time
- Lower Display: Elapsed time (Split time appears here for eight seconds as it is stored in memory.)

E-12

E-13

- See "To measure elapsed time with lap times" (page E-16) and "To measure elapsed time with split times" (page E-18) for more information about each type of measurement.
- You can perform elapsed time measurement starting from either the lap time screen or the split time screen (pages E-16 and E-18). Whenever you enter the Stopwatch Mode, the screen (lap time or split time) that was displayed when you last exited the mode will appear first.
- During a stopwatch elapsed time operation, the upper display initially shows minutes, seconds, and a 1/100-second value. This changes to hours, minutes, and seconds when the time in the upper display exceeds 60 minutes.
- The lower display initially shows hours, minutes, seconds, and a 1/100-second value. This changes to hours, minutes, and seconds when the time in the lower display exceeds 10 hours.



E-14

E-15

### To measure elapsed time

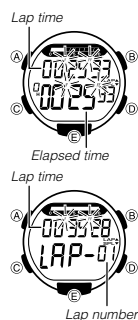
#### Note

- You can perform the following steps starting from either the lap time screen or the split time screen.
- Press **(D)** to start the stopwatch.
  - Press **(D)** again to stop the stopwatch.
    - You can resume the measurement operation by pressing **(D)**.
  - Press **(E)** to clear the stopwatch to all zeros.

### To measure elapsed time with lap times

- When the stopwatch display shows all zeros, press **(E)** to display the lap time screen (indicated by **LAP▲**).
- Press **(D)** to start an elapsed time measurement.
  - At the time, both the upper and lower displays will show identical times.
- Press **(E)** to record the time of the first lap.

E-16



- This freezes the current lap time in the upper part of the display for about eight seconds, while measurement of total elapsed time and the next lap time continue internally. The lap number of the displayed time appears in the lower display.
- After eight seconds, the ongoing elapsed time measurement re-appears in the lower display.

- Repeat step 3 to record more lap times.
- Press **(D)** to stop the stopwatch.

- Press **(E)** to clear the stopwatch to all zeros.
  - Lap numbers are incremented automatically starting from **1** whenever you press **(E)** in step 3 of the above procedure. The maximum lap number is **99**. Recording a lap after that causes the lap number count to restart from **00**.

E-17

### To measure elapsed time with split times

- When the stopwatch display shows all zeros, press **(E)** to display the split time screen (indicated by **SPL▼**).
- Press **(D)** to start an elapsed time measurement.
  - At the time, both the upper and lower displays will show identical times.
- Press **(E)** to record the time of the first split.
  - The current split time appears in the lower display for about eight seconds, as the total elapsed time, next lap time, and next split time continue to be timed internally by the watch. The split number of the displayed time appears in the upper display.
  - After eight seconds, the ongoing lap time measurement appears in the upper display and the ongoing elapsed time measurement appears in the lower display.

E-18

### Split Time Recording

(Displayed for eight seconds after **(E)** is pressed.)



- Repeat step 3 to record more split times.
- Press **(D)** to stop the stopwatch.
- Press **(E)** to clear the stopwatch to all zeros.

- Split numbers are incremented automatically starting from **1** whenever you press **(E)** in step 3 of the above procedure. The maximum split number is **99**. Recording a split time after that causes the split number count to restart from **00**.

E-19

### To time first and second place finishes

- When the stopwatch display shows all zeros, press (E) to display the split time screen (indicated by **SPLV**).
- Press (D) to start a time measurement.
- Press (E) when the first finisher crosses the finish line.
  - This freezes the time of the first finisher in the lower part of the display for about eight seconds. After that, the display returns to elapsed time measurement.
- Press (D) when the second finisher crosses the finish line.
  - The second finisher's time will appear in the lower display.
  - The difference between the first finisher's and the second finisher's time will appear in the upper display.
- Press (E) to clear the stopwatch to all zeros.

E-20

E-21

### How stopwatch data is stored

The following table shows how stopwatch data is stored when you perform stopwatch button operations.

| Stopwatch Button Operation  | Data Storage Description  |
|---|---|
| From all-zeros, press (D) to start.                                     | Creates a new log. Stores the date the button was pressed, and the new log number.  |
| Press (E) to display lap/split time.                                    | Creates a new record with each button operation. Stores the lap and split times and total elapsed time at each point the button is pressed. |
| Press (D) to stop elapsed time measurement and then press (E) to reset. | Resets the elapsed time to all zeros without recording data.  |

• See "Recall Mode" (page E-23) for details on how to recall time records from memory.

E-22

E-23

### Memory Management

A new log is created each time you press (D) in the Stopwatch Mode to start a new elapsed time measurement operation. A log contains a log title screen, and records of all the lap or split times you record during the current elapsed time measurement operation.

- The capacity of the watch's memory is 60 records.
- If you are adding records to a log when there are multiple logs in memory and watch memory becomes full, adding another record causes the oldest log in memory and all of its records to be deleted automatically to make room for new records.

### Recall Mode



Log Title Screen

Use the Recall Mode to recall and delete logs and records you stored in the Stopwatch Mode. You can use the Recall Mode to view both lap and split time records.

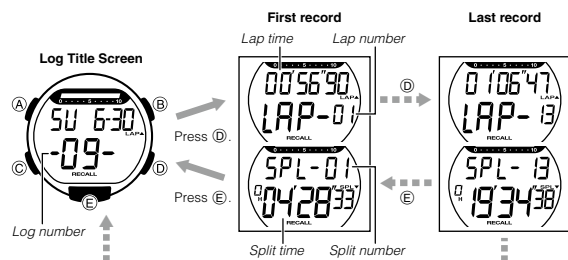
- When you enter the Recall Mode, the newest log recorded in the Stopwatch Mode will appear first. If there are no logs in memory, --- appears on the display.
- You can use the Recall Mode to check memory data even while a stopwatch elapsed time measurement operation is in progress. However, the time data that is currently being measured will not appear in the Recall Mode.
- You can convert a lap time saved in the Stopwatch Mode to a split time (page E-24).

### To recall stopwatch time records

- In the Stopwatch Mode, check to make sure that the displays reset to all zeros (page E-16).
  - If all zeros are not displayed, reset the stopwatch.
- Use the (E) button to select either the lap time screen (to view lap time records) or the split time screen (to view split time records) (pages E-16 and E-18).
  - To convert a lap time saved in the Stopwatch Mode to a split time, select the split time screen.
- Press the (C) button to enter the Recall Mode.
- Use the (A) button to scroll through the log title screens from the newest to the oldest until the title screen of the log whose records you want to view is displayed.
- Use (D) (forward) and (E) (back) to scroll through records in lap number sequence.

E-24

E-25



• Whether you will be able to view lap time records or split time records will depend on the screen you selected in step 2, above.

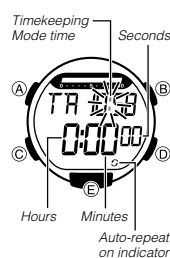
### To delete a log

- In the Recall Mode, display the title screen of the log you want to delete.
- Hold down (D) and (E) until **ALL R** stops flashing on the display.
  - This deletes the log and all the records inside it.
  - Deleting a single log slides all newer logs (ones with higher log numbers) upwards to fill the empty space. This causes the log numbers of all the newer logs to be reduced by 1. If there are six logs currently in memory (numbered 01 through 06) and you delete log 03, the numbers of logs that previously were numbered 04, 05, and 06 will change to 03, 04, and 05.

E-26

E-27

### Countdown Timer



You can set the countdown timer within a range of one minute to 24 hours. An alarm sounds when the countdown reaches zero.

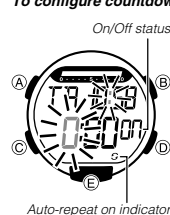
- You also can select auto-repeat, which automatically restarts the countdown from the original value you set whenever zero is reached.
- All of the operations in this section are performed in the Countdown Timer Mode, which you enter by pressing (C) (page E-7).

### To use the countdown timer

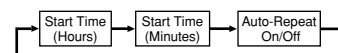
- Press (D) while in the Countdown Timer Mode to start the countdown timer.
- When the end of the countdown is reached and auto-repeat is turned off, the alarm sounds for 10 seconds or until you stop it by pressing any button. The countdown time is reset automatically to its starting value after the alarm stops.
  - When auto-repeat is turned on, the countdown will restart automatically without pausing when it reaches zero. The alarm sounds when the countdown reaches zero.
  - The countdown timer measurement operation continues even if you exit the Countdown Timer Mode.
  - Press (D) while a countdown operation is in progress to pause it. Press (D) again to resume the countdown.
  - To stop a countdown operation completely, first pause it (by pressing (D)), and then press (E). This returns the countdown time to its starting value.

E-28

### To configure countdown start time and auto-repeat settings



- While the countdown start time is on the display in the Countdown Timer Mode, hold down (A) until the hour setting of the 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" (page E-28) to display it.
- Press (C) to move the flashing in the sequence shown below, and select the setting you want to change.



E-29

- Perform the following operations, depending on which setting currently is selected on the display.
  - While the start time setting is flashing, use (D) (+) and (E) (-) to change it.
  - Set 000 to specify 24 hours.
  - While the auto-repeat on/off setting (ON or OFF) is flashing on the display, press (D) to toggle auto-repeat on (ON) and off (OFF).
- Press (A) to exit the setting screen.
  - The auto-repeat on indicator (A) is displayed on the Countdown Timer Mode screen while this function is turned on.
  - Frequent use of auto-repeat and the alarm can run down battery power.

E-30

## Alarms



You can set up to three independent multi-function alarms with hour, minutes, month, and day. When an alarm is turned on, the alarm tone sounds when the alarm time is reached. One of the alarms has a snooze feature. You also can turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.

- There are three alarm screens numbered 1 through 3.
- The hourly time signal screen is indicated by SIG.
- All of the operations in this section are performed in the Alarm Mode, which you enter by pressing (C) (page E-7).

E-31

## Alarm Types

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

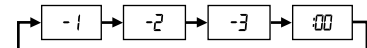
- Daily alarm**  
Set the hour and minutes for the alarm time. This type of setting causes the alarm to sound everyday at the time you set.
- Date alarm**  
Set the month, day, hour and minutes for the alarm time. This type of setting causes the alarm to sound at the specific time, on the specific date you set.
- 1-Month alarm**  
Set the month, hour and minutes for the alarm time. This type of setting causes the alarm to sound everyday at time you set, only during the month you set.
- Monthly alarm**  
Set the day, hour and minutes for the alarm time. This type of setting causes the alarm to sound every month at the time you set, on the day you set.

E-32

## To set an alarm time

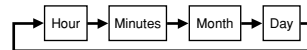


- In the Alarm Mode, use (D) to scroll through the alarm screens until the one whose time you want to set is displayed.



- Alarm 1 has a snooze feature.
- The snooze alarm operation repeats every five minutes.

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



E-33

- While a setting is flashing, use (D) (+) and (E) (-) to change it.
  - To set an alarm that does not include a month (daily alarm, monthly alarm), set -- for the month. Use (D) and (E) until the -- mark appears (between 12 and 1) while month setting is flashing.
  - To set an alarm that does not include a day (daily alarm, 1-month alarm), set -- for the day. Use (D) and (E) until the -- mark appears (between the end of the month and 1) while the day 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 (A) to exit the setting screen.

## Alarm Operation

The alarm sounds at the preset time for about 10 seconds. The snooze feature (Alarm 1) is turned on, the alarm operation is performed a total of seven times, every five minutes, until you turn the alarm off or turn off the snooze feature (page E-36).

- Alarm and Hourly Time Signal operations are performed in accordance with the Timekeeping Mode time.

E-34

## Note

- Pressing any button stops the alarm tone operation.
- Performing any one of the operations below during a 5-minute interval between snooze alarms cancels the current snooze alarm operation.
  - Displaying the Timekeeping Mode setting screen (page E-8)
  - Displaying the Alarm 1 setting screen (page E-33)

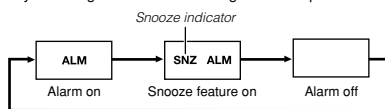
## To test the alarm

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

E-35

## To select the operation of Alarm 1

- In the Alarm Mode, use (D) to select Alarm 1.
- Press (A) to cycle through the available settings in the sequence shown below.



- The applicable alarm on indicator is displayed in all modes when an alarm is turned on.
- The snooze indicator flashes while the snooze alarm is sounding and during the 5-minute intervals between alarms.
- Displaying the Alarm 1 setting screen (page E-33) while the snooze alarm is turned on turns off the snooze alarm automatically.

E-36

## To turn Alarms 2 and 3 on and off

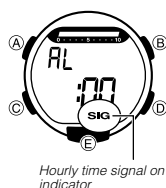
- In the Alarm Mode, use (D) to select alarm number 2 or 3.
- Press (A) to toggle the displayed alarm on and off.
  - Turning on an alarm (2 or 3) displays the alarm on indicator on its screen.
  - The alarm on indicator is displayed in all modes.
  - If any alarm is on, the alarm on indicator is shown on the display in all modes.



E-37

## To turn the hourly time signal on and off

- In the Alarm Mode, use (D) to select the Hourly Time Signal.
- Press (A) to toggle the displayed item on and off.
  - Turning on the Hourly Time Signal displays the hourly time signal on indicator on its screen.
  - The hourly time signal on indicator is displayed in all modes.



E-38

## Dual Time

### Timekeeping Mode time

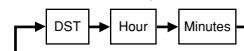


The Dual Time Mode lets you keep track of time in a different time zone. You can select Standard Time or Daylight Saving Time for the Dual Time.

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

### To set the Dual Time

- Press (C) to enter the Dual Time Mode (page E-7).
- In the Dual Time Mode, hold down (A) until the DST setting starts to flash, which indicates the setting screen.
- Press (C) to move the flashing in the sequence shown below to select the other settings.



E-39

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

| Screen: | To do this:  | Do this:                               |
|---------|--|--|
|         | Toggle between Daylight Saving Time (DST) and Standard Time (ST) | Press <b>(D)</b> .                     |
|         | Change the hour or minutes                                       | Use <b>(D)</b> (+) and <b>(E)</b> (-). |

5. Press **(A)** to exit the setting screen.

\* The **DST** indicator on the Dual Time Mode screen indicates that DST is turned on for the Dual Time Mode time.

E-40

## Illumination



An LED (light-emitting diode) illuminates the face of the watch for easy reading in the dark.

\* See "Illumination Precautions" (page E-46) for other important information about using illumination.

### To illuminate the display manually

In any mode, press **(B)** to turn on illumination.

\* You can use the procedure below to select either 1.5 seconds or 3 seconds as the illumination duration. When you press **(B)**, illumination will remain on for about 1.5 seconds or 3 seconds, depending on the current illumination duration setting.

### To specify the illumination duration



- In the Timekeeping Mode, hold down **(A)** until the seconds start to flash, which indicates the setting screen.
- While the seconds are flashing, press **(E)** to toggle the setting between 1.5 seconds (1.5) and 3 seconds (3).
- Press **(A)** to exit the setting screen.

E-42

E-41

## Reference

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

### Auto Return Feature

- If you leave a screen with flashing digits on the display for two or three minutes without performing any operation, the watch saves any settings you have made up to that point and exits the setting screen automatically.
- The watch will change to the Timekeeping Mode automatically if you do not perform any operation in the Recall Mode or Alarm Mode for two or three minutes.

## Button Operation Tone



The button operation tone sounds any time you press one of the watch's buttons. You can turn the button operation tone on or off as desired.

\* The multi-function alarms and Countdown Timer Mode alarm will sound even if the button operation tone is turned off.

### To turn the button operation tone on and off

In any mode (except when a setting screen is on the display), hold down **(C)** to toggle the button operation tone on (mute indicator not displayed) and off (mute indicator displayed).

- Holding down **(C)** to turn the button operation tone on or off also causes the watch's current mode to change.
- The mute indicator is displayed in all modes when the button operation tone is turned off.

E-44

E-43

## Scrolling

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

## Timekeeping

- 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 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.

## Illumination Precautions

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

E-46

## Specifications

**Accuracy at normal temperature:** ± 30 seconds a month

**Timekeeping:** Hour, minutes, seconds, a.m. (A)/ p.m. (P), month, day, day of the week

Time format: 12-hour and 24-hour

Calendar system: Full Auto-calendar pre-programmed from the year 2000 to 2099

Other: Daylight Saving Time (summer time)/Standard Time

### Stopwatch:

Measurement Capacity: 99 hours, 59 minutes, 59 seconds

Measurement Units: Depends on range.

Lap Times: 1/100 second from 00:00 00 to 00:59 59.99; 1 second from 1:00 00 to 99:59 59

Split Times: 1/100 second from 00:00 00 to 09:59 59.99; 1 second from 10:00 00 to 99:59 59

Measurement Types: Elapsed time, lap times, split times, two finishes

Memory Capacity: 60 records (used for lap times and split times)

Other: Lap/split numbers

## Countdown Timer:

Measuring unit: one second

Input range: one minute to 24 hours (1-minute increments and 1-hour increments)

Other: Auto-repeat timing

**Alarms:** 3 Multi-function\*alarms (1 with snooze feature); Hourly Time Signal

\*Alarm type: Daily alarm, Date alarm, 1-month alarm, Monthly alarm

**Dual Time:** Hour, minutes, seconds, a.m. (A)/p.m. (P)

Other: Daylight Saving Time (summer time)/Standard Time

**Illumination:** LED (light-emitting diode); Selectable illumination duration (approximately 1.5 seconds or 3 seconds)

**Other:** Button operation tone on/off

## Battery:

One lithium battery (Type: CR1620)

Approximately 5 years on type CR1620 (10 seconds of alarm operation per day, one illumination operation (1.5 seconds) per day)

Specifications are subject to change without notice.

E-48

## Operating Precautions

### Water Resistance

\* The information below applies to watches with WATER RESIST or WATER RESISTANT marked on the back cover.

| Marking              | On watch front or on back cover | Water Resistance Under Daily Use | Enhanced Water Resistance Under Daily Use |                |                |
|----------------------|---------------------------------|----------------------------------|---|----------------|----------------|
|                      |                                 |                                  | 5 Atmospheres                             | 10 Atmospheres | 20 Atmospheres |
|                      | Hand washing, rain              | No BAR mark                      | 5BAR                                      | 10BAR          | 20BAR          |
| Example of Daily Use | Water-related work, swimming    | Yes                              | Yes                                       | Yes            | Yes            |
|                      | Windsurfing                     | No                               | No  | Yes            | Yes            |
|                      | Skin diving                     | No                               | No  | Yes            | Yes            |

\* Do not use your watch for scuba diving or other types of diving that requires air tanks.  
OPUM-E

E-49

- Watches that do not have WATER RESIST or WATER RESISTANT marked on the back cover are not protected against the effects of sweat. Avoid using such a watch under conditions where it will be exposed to large amounts of sweat or moisture, or to direct splashing with water.
- Even if a watch is water resistant, note the usage precautions described below. Such types of use reduce water resistance performance and can cause fogging of the glass.
  - Do not operate the crown or buttons while your watch is submersed in water or wet.
  - Avoid wearing your watch while in the bath.
  - Do not wear your watch while in a heated swimming pool, sauna, or any other high temperature/high humidity environment.
  - Do not wear your watch while washing your hands or face, while doing housework, or while performing any other task that involves soaps or detergents.
- After submersion in seawater, use plain water to rinse all salt and dirt from your watch.
- To maintain water resistance, have the gaskets of your watch replaced periodically (about once every two or three years).

E-50

- A trained technician will inspect your watch for proper water resistance whenever you have its battery replaced. Battery replacement requires the use of special tools. Always request battery replacement from your original retailer or from an authorized CASIO service center.
- Some water-resistant watches come with fashionable leather bands. Avoid swimming, washing, or any other activity that causes direct exposure of a leather band to water.
- The inside surface of the watch glass may fog when the watch is exposed to a sudden drop in temperature. No problem is indicated if the fogging clears up relatively quickly. Sudden and extreme temperature changes (such as coming into an air conditioned room in the summer and standing close to an air conditioner outlet, or leaving a heated room in the winter and allowing your watch to come into contact with snow) can cause it to take longer for glass fogging to clear up. If glass fogging does not clear up or if you notice moisture inside of the glass, immediately stop using your watch and take it to your original retailer or to an authorized CASIO service center.
- Your water-resistant watch has been tested in accordance with International Organization for Standardization regulations.

E-51

## Band

- Tightening the band too tightly can cause you to sweat and make it difficult for air to pass under the band, which can lead to skin irritation. Do not fasten the band too tightly. There should be enough room between the band and your wrist so you can insert your finger.
- Deterioration, rust, and other conditions can cause the band to break or come off of your watch, which in turn can cause band pins to fly out of position or to fall out. This creates the risk of your watch falling from your wrist and becoming lost, and also creates the risk of personal injury. Always take good care of your band and keep it clean.
- Immediately stop using a band if you even notice any of the following: loss of band flexibility, band cracks, band discoloration, band looseness, band connecting pin flying or falling out, or any other abnormality. Take your watch to your original retailer or to a CASIO service center for inspection and repair (for which you will be charged) or to have the band replaced (for which you will be charged).

E-52

## Temperature

- Never leave your watch on the dashboard of a car, near a heater, or in any other location that is subject to very high temperatures. Do not leave your watch where it will be exposed to very low temperatures. Temperature extremes can cause your watch to lose or gain time, to stop, or otherwise malfunction.
- Leaving your watch in an area hotter than +60°C (140°F) for long periods can lead to problems with its LCD. The LCD may become difficult to read at temperatures lower than 0°C (32°F) and greater than +40°C (104°F).

## Impact

- Your watch is designed to withstand impact incurred during normal daily use and during light activity such as playing catch, tennis, etc. Dropping your watch or otherwise subjecting it to strong impact, however, can lead to malfunction. Note that watches with shock-resistant designs (G-SHOCK, BABY-G, G-MS) can be worn while operating a chain saw or engaging in other activities that generate strong vibration, or while engaging in strenuous sports activities (motocross, etc.)

E-53

## Magnetism

- Though a digital watch normally is not affected by magnetism, very strong magnetism (from medical equipment, etc.) should be avoided because it can cause malfunction and damage to electronic components.

## Electrostatic Charge

- Exposure to very strong electrostatic charge can cause your watch to display the wrong time. Very strong electrostatic charge even can damage electronic components.
- Electrostatic charge can cause the display to go blank momentarily or cause a rainbow effect on the display.

## Chemicals

- Do not allow your watch to come into contact with thinner, gasoline, solvents, oils, or fats, or with any cleaners, adhesives, paints, medicines, or cosmetics that contain such ingredients. Doing so can cause discoloration of or damage to the resin case, resin band, leather, and other parts.

E-54

## Storage

- If you do not plan to use your watch for a long time, thoroughly wipe it free of all dirt, sweat, and moisture, and store it in a cool, dry place.

## Resin Components

- Allowing your watch to remain in contact with other items or storing it together with other items for long periods while it is wet can cause color on resin components to transfer to the other items, or the color of the other items to transfer to the resin components of your watch. Be sure to dry off your watch thoroughly before storing it and make sure it is not in contact with other items.
- Leaving your watch where it is exposed to direct sunlight (ultraviolet rays) for long periods or failure to clean dirt from your watch for long periods can cause it to become discolored.
- Friction caused by certain conditions (strong external force, sustained rubbing, impact, etc.) can cause discoloration of painted components.
- If there are printed figures on the band, strong rubbing of the printed area can cause discoloration.

E-55

- Leaving your watch wet for long periods can cause fluorescent color to fade. Wipe the watch dry as soon as possible after it becomes wet.
- Semi-transparent resin parts can become discolored due to sweat and dirt, and if exposed to high temperatures and humidity for long periods.
- Daily use and long-term storage of your watch can lead to deterioration, breaking, or bending of resin components. The extent of such damage depends on usage conditions and storage conditions.

## Leather Band

- Allowing your watch to remain in contact with other items or storing it together with other items for long periods while it is wet can cause the color of the leather band to transfer to the other items or the color of the other items to transfer to the leather band. Be sure to dry off your watch thoroughly with a soft cloth before storing it and make sure it is not in contact with other items.

E-56

- Leaving a leather band where it is exposed to direct sunlight (ultraviolet rays) for long periods or failure to clean dirt from a leather band for long periods can cause it to become discolored.

**CAUTION:** Exposing a leather band to rubbing or dirt can cause color transfer and discoloration.

## Metal Components

- Failure to clean dirt from metal components can lead to formation of rust, even if components are stainless steel or plated. If metal components exposed to sweat or water, wipe thoroughly with a soft, absorbent cloth and then place the watch in a well-ventilated location to dry.
- Use a soft toothbrush or similar tool to scrub the metal with a weak solution of water and a mild neutral detergent, or with soapy water. Next, rinse with water to remove all remaining detergent and then wipe dry with a soft absorbent cloth. When washing metal components, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.

E-57

## Bacteria and Odor Resistant Band

- The bacteria and odor resistant band protects against odor generated by the formation of bacteria from sweat, which ensures comfort and hygiene. In order to ensure maximum bacteria and odor resistance, keep the band clean. Use an absorbent soft cloth to thoroughly wipe the band clean of dirt, sweat, and moisture. A bacteria and odor resistant band suppresses the formation of organisms and bacteria. It does not protect against rash due to allergic reaction, etc.

## Liquid Crystal Display

- Display figures may be difficult to read when viewed from an angle.

## Watch with Data Memory

- Allowing the battery to go dead, replacing the battery, or having your watch repaired can cause all data in watch memory to be lost. Note that CASIO COMPUTER CO., LTD. assumes no responsibility for any damages or losses caused by data lost due to malfunction or repair of your watch, replacement of the battery, etc. Be sure to keep separate written copies of all important data.

E-58

Note that CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss suffered by you or any third party arising through the use of your watch or its malfunction.

E-59

## User Maintenance

### Caring for Your Watch

Remember that you wear your watch next to your skin, just like a piece of clothing. To ensure your watch performs at the level for which it is designed, keep it clean by frequently wiping with a soft cloth to keep your watch and band free of dirt, sweat, water and other foreign matter.

- Whenever your watch is exposed to sea water or mud, rinse it off with clean fresh water.
- For a metal band or a resin band with metal parts, use a soft toothbrush or similar tool to scrub the band with a weak solution of water and a mild neutral detergent, or with soapy water. Next, rinse with water to remove all remaining detergent and then wipe dry with a soft absorbent cloth. When washing the band, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.
- For a resin band, wash with water and then wipe dry with a soft cloth. Note that sometimes a smudge like pattern may appear on the surface of a resin band. This will not have any effect on your skin or clothing. Wipe with a cloth to remove the smudge pattern.

E-60

- Clean water and sweat from a leather band by wiping with a soft cloth.
- Not operating a watch crown, buttons, or rotary bezel could lead to later problems with their operation. Periodically rotate the crown and rotary bezel, and press buttons to maintain proper operation.

### Dangers of Poor Watch Care

#### Rust

- Though the metal steel used for your watch is highly rust-resistant, rust can form if your watch is not cleaned after it becomes dirty.
  - Dirt on your watch can make it impossible for oxygen to come into contact with the metal, which can lead to breakdown of the oxidation layer on the metal surface and the formation of rust.
- Rust can cause sharp areas on metal components and can cause band pins to fly out of position or to fall out. If you ever notice any abnormality immediately stop using your watch and take it to your original retailer or to an authorized CASIO service center.

E-61

- Even if the surface of the metal appears clean, sweat and rust in crevasses can soil the sleeves of clothing, cause skin irritation, and even interfere with watch performance.

### Premature Wear

- Leaving sweat or water on a resin band or bezel, or storing your watch in an area subject to high moisture can lead to premature wear, cuts, and breaks.

### Skin Irritation

- Individuals with sensitive skin or in poor physical condition may experience skin irritation when wearing a watch. Such individuals should keep their leather band or resin band particularly clean. Should you ever experience a rash or other skin irritation, immediately remove your watch and contact a skin care professional.

### Battery Replacement

- Leave battery replacement up to your original retailer or authorized CASIO service center.
- Have the battery replaced only with the type specified in the User's Guide. Use of a different battery type can cause malfunction.

E-62

- When replacing the battery, also request a check for proper water resistance.
- Ornamental resin components may become worn, cracked, or bent over time when subjected to normal daily use. Note that if cracking or any other abnormality indicating possible damage is noticed in a watch submitted for battery replacement, your watch will be returned with an explanation of the abnormality, without the requested servicing being performed.

### Initial Battery

- The battery that comes loaded in your watch when you purchase it is used for function and performance testing at the factory.
- The test battery may go dead quicker than the normally rated battery life as noted in the User's Guide. Note that you will be charged for replacement of this battery, even if replacement is required within your watch's warranty period.

E-63

### Low Battery Power

- Low battery power is indicated by large timekeeping error, by dim display contents, or by a blank display.
- Operation while battery power is low can result in malfunction. Replace the battery as soon as possible.

E-64