

# Operation Guide 5499

CASIO®

ENGLISH

Congratulations upon your selection of this CASIO watch.

### Warning!

- The measurement functions built into this watch are not intended for taking measurements that require professional or industrial precision. Values produced by this watch should be considered as reasonable representations only.
- 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-1

## About This Manual



- Depending on the model of your watch, digital display text appears either as dark figures on a light background, or light figures on a dark background. All examples 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.

E-2

## Things to check before using the watch

### 1. Check the Home City and the daylight saving time (DST) setting.

Use the procedure under "To configure Home City settings" (page E-14) to configure your Home City and daylight saving time settings.

### Important!

- Proper World Time Mode data depends on correct Home City, time, and date settings in the Timekeeping Mode. Make sure you configure these settings correctly.

### 2. Set the current time.

See "Configuring Current Time and Date Settings" (page E-16).

The watch is now ready for use.

E-3

## Contents

About This Manual .....	E-2
Things to check before using the watch .....	E-3
Mode Reference Guide .....	E-7
General Functions (All Modes).....	E-10
Timekeeping .....	E-13
Configuring Home City Settings .....	E-14
To configure Home City settings .....	E-14
To change the daylight saving time (summer time) setting.....	E-15
Configuring Current Time and Date Settings .....	E-16
To change the current time and date settings .....	E-16
Hand Home Position Adjustment .....	E-19
To adjust home positions .....	E-19
Taking Temperature Readings .....	E-21
To take temperature readings .....	E-21
To calibrate the temperature sensor .....	E-23
Specifying Temperature Unit .....	E-24
To specify the temperature unit .....	E-24

E-4

Using the Stopwatch .....	E-25
To enter the Stopwatch Mode .....	E-25
To perform an elapsed time operation .....	E-26
To pause at a split time .....	E-26
To measure two finishes .....	E-26
Using the Countdown Timer .....	E-27
To enter the Countdown Timer Mode.....	E-27
To specify the countdown start time .....	E-27
To perform a countdown timer operation .....	E-28
To stop the alarm .....	E-28
Checking the Current Time in a Different Time Zone.....	E-29
To enter the World Time Mode .....	E-29
To view the time in another time zone .....	E-29
To specify standard time or daylight saving time (DST) for a city .....	E-30
To swap your Home Time and World Time Cities .....	E-31
Using the Alarm .....	E-32
To enter the Alarm Mode .....	E-32
To set an alarm time .....	E-33
To test the alarm .....	E-33
To turn an alarm and the Hourly Time Signal on and off.....	E-34
To stop the alarm .....	E-34

E-5

Illumination .....	E-35
To turn on illumination manually .....	E-35
To change the illumination duration .....	E-35
To enable or disable auto light.....	E-37
Button Operation Tone .....	E-39
To enable or disable the button operation tone .....	E-39
Troubleshooting .....	E-40
Specifications .....	E-43

E-6

## Mode Reference Guide

The mode you should select depends on what you want to do.

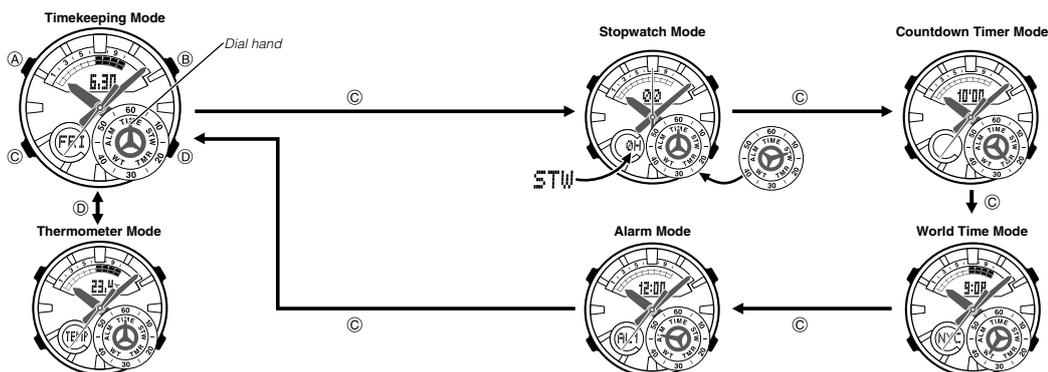
To do this:	Enter this mode:	See:
• View the current date in the Home City • Configure Home City and daylight saving time (DST) settings • Configure time and date settings	Timekeeping Mode	E-13
Determine the temperature at your current location	Thermometer Mode	E-21
Use the stopwatch to measure elapsed time	Stopwatch Mode	E-25
Use the countdown timer	Countdown Timer Mode	E-27
View the current time in one of 48 cities (31 time zones) around the globe	World Time Mode	E-29
• Set an alarm time • Turn the hourly time signal on or off	Alarm Mode	E-32

E-7

## Selecting a Mode

- The illustration below shows which buttons you need to press to navigate between modes.
- To return to the Timekeeping Mode from any other mode, hold down (C) for about two seconds.

\* The dial hand indicates the watch's current mode.



E-8

E-9

## General Functions (All Modes)

The functions and operations described in this section can be used in all of the modes.

### Auto Return Features

- The watch will automatically return to the Timekeeping Mode if you do not perform any button operation for a particular amount of time in each mode.

Mode Name	Approximate Elapsed Time
Alarm	3 minutes
Thermometer	1 to 2 minutes
Setting screen (digital setting flashing)	3 minutes

### Initial Screens

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

### Scrolling

- The (D) and (B) buttons are used on the setting screen to scroll through data on the digital display. In most cases, holding down these buttons during a scroll operation scrolls through the data at high speed.

E-10

## Moving the Hands Out of the Way for Better Viewing

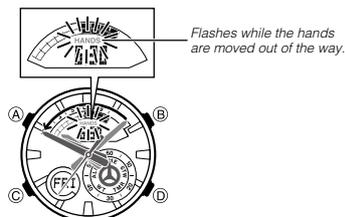
You can use the procedure below to temporarily move the hour and minute hands out of the way to better view what is on the display.

- This operation can be performed in any mode. In the case of a setting mode (setting flashing on the screen), the hands will move out of the way automatically, even if you do not perform the operation below.

- While holding down (B), press (C).

- This will cause the hour and minute hands to move to a location where they do not block your view of the digital display.

Example: When the current time is 10:08



- Holding down (B) again as you press (C) will cause the hands to return to their normal positions (normal timekeeping).

### Note

- Watch button functions are the same regardless of whether the hands are moved out of the way or at their normal positions.
- Changing to another mode will cause the hands to move back to their normal positions.
- The hands also will move back to their normal positions automatically if no operation is performed for about one hour.

E-12

E-13

## Configuring Home City Settings

There are two Home City settings: actually selecting the Home City and selecting either standard time or daylight saving time (DST).



City code and city name



DST indicator

### To configure Home City settings

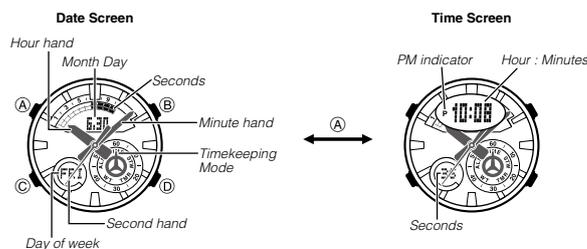
- In the Timekeeping Mode, hold down (A) until ADJ appears in the lower display.
  - When you release (A) (after ADJ appears), SET will be flashing in the upper display. This is the setting mode.
  - The watch will exit the setting mode automatically if you do not perform any operation for about two or three minutes.
- Use (D) (East) and (B) (West) to scroll through the available city codes.
  - Keep scrolling until the city code you want to select as your Home City is shown in the lower display.
  - For details about city codes, see the "City Code Table" at the back of this manual.
- Press (C).
  - This will cause the DST indicator to appear in the upper display and the DST setting of the currently selected Home City to appear in the lower display.
- Press (D) to toggle the DST setting between daylight saving time (ON) and standard time (OFF).
  - Note that you cannot switch between standard time and daylight saving time (DST) while UTC is selected as your Home City.

E-14

## Timekeeping

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

- Each press of (A) in the Timekeeping Mode will change digital display contents as shown below.



- After all of the settings are the way you want, press (A) to exit the setting screen.
  - The DST indicator appears to indicate that daylight saving time is turned on.

### Note

- After you specify a city code, the watch will use UTC\* offsets in the World Time Mode to calculate the current time for other time zones based on the current time in your Home City.
- \* Coordinated Universal Time, the world-wide scientific standard of timekeeping. The reference point for UTC is Greenwich, England.

### To change the daylight saving time (summer time) setting

- In the Timekeeping Mode, hold down (A) until ADJ appears in the lower display.
  - When you release (A) (after ADJ appears), SET will be flashing in the upper display.
- Press (C).
  - This will cause the DST indicator to appear in the upper display and the DST setting of the currently selected Home City to appear in the lower display.
- Press (D) to toggle the DST setting between daylight saving time (ON) and standard time (OFF).
- After all of the settings are the way you want, press (A) to exit the setting screen.
  - The DST indicator appears to indicate that daylight saving time is turned on.

E-15

## Configuring Current Time and Date Settings

You can use the procedure below to adjust the Timekeeping Mode time and date settings if they are off. Changing the digital Home City data should cause the analog time setting to change accordingly. If the analog time does not indicate the digital time, check the home positions of the hands and make adjustments if necessary (page E-19).

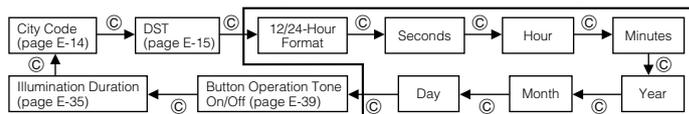
### To change the current time and date settings



- In the Timekeeping Mode, hold down **A** until **ADJ** appears in the lower display.
  - When you release **A** (after **ADJ** appears), **SET** will be flashing in the upper display.

E-16

- Press **C** to move the flashing in the sequence shown below to select the other settings.



- The following steps explain how to configure timekeeping settings only.

- When the timekeeping setting you want to change is flashing, use **D** and/or **B** to change it as described below.

Screen	To do this:	Do this:
12H	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping.	Press <b>D</b> .
36	Reset the seconds to <b>00</b> (If the current seconds count is between 30 and 59, one is added to the minute count).	Press <b>D</b> .
10:08	Change the hour or minutes	Use <b>D</b> (+) and <b>B</b> (-).
20 17 6.30	Change the year, month, or day	

- After all of the settings are the way you want, press **A** to exit the setting screen.

E-17

### Note

- While the 12-hour format is selected for timekeeping, a **P** (PM) indicator will appear for times from noon to 11:59 p.m. No indicator appears for times from midnight to 11:59 a.m. With 24-hour format, time is displayed from 0:00 to 23:59, without any **P** (PM) indicator.
- 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.
- The day of the week changes automatically when the date changes.

E-18

## Hand Home Position Adjustment

Strong magnetism or impact can cause the hands of the watch to go out of alignment.

- Home position adjustment is not necessary when the analog time and digital time are the same time in the Timekeeping Mode.

### To adjust home positions



- In the Timekeeping Mode, hold down **A** and keep it depressed for about five seconds until **H.SET** appears on the lower display.
  - When you release **A** after **H.SET** appears, the second hand will move to 12 o'clock. This indicates the second hand home position adjustment mode.
  - Though **ADJ** will appear in the lower display about two seconds after you hold down **A**, do not release the button yet. Keep it depressed until **H.SET** appears.
  - Use the **C** button to select a hand for adjustment. Each press of **C** cycles in sequences from the second hand, to the hour and minute hands, and then the dial hand. Selecting a hand causes it to move to 12 o'clock and the content of the upper display changes as shown in the table below.

Upper display	Selected hand
Flashing <b>00</b>	Second hand
Flashing <b>0:00</b>	Hour and minute hands
Flashing <b>SUB</b>	Dial hand

- If the selected hand does not move exactly to 12 o'clock, perform step 2 below to adjust it.

E-19

- The dial hand must point to 12 o'clock.
  - The watch will return to regular timekeeping automatically if you do not perform any operation for about two or three minutes. Any changes you have made to settings up to that point will be saved.
- Use **D** (+) and **B** (-) to adjust the position of the currently selected hand.
    - Holding down either button will cause the hand to move at high speed. Once started, high-speed hand movement will continue even if you release the button. To stop high-speed hand movement, press any button.
    - The second hand and dial hand will automatically stop high-speed movement after they complete one revolution. The minute hand will stop automatically after 12 revolutions.
  - Press **A** to exit home position correction and return to regular timekeeping.

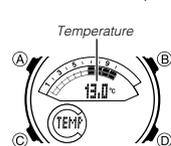
### Note

- After performing home position adjustment, enter the Timekeeping Mode and check to make sure that the analog hands and the upper display indicate the same time. If they do not, perform home position adjustment again.

E-20

## Taking Temperature Readings

This watch uses a temperature sensor to measure temperature.



### To take temperature readings

- While in the Timekeeping Mode, press **D** to enter the Thermometer Mode.
  - TEMP** will appear in the lower display and temperature measurement will start. After about one second, the measurement reading will appear in the upper display.
  - The watch will continue to take temperature readings every five seconds for one or two minutes.
- Press **D** to return to the Timekeeping Mode.
  - The watch will return to the Timekeeping Mode automatically if you do not perform any operation for about one or two minutes after entering the Thermometer Mode.

### Display Units

You can select either Celsius (°C) or Fahrenheit (°F) for the displayed temperature value. See "To specify the temperature unit" (page E-24).

### Temperature Sensor Calibration

The temperature sensor built into the watch is calibrated at the factory and normally require no further adjustment. If you notice serious errors in the temperature readings produced by the watch, you can calibrate the sensor to correct the errors.

### Important!

- Incorrectly calibrating the temperature sensor can result in incorrect readings. Carefully read the following before doing anything.
  - Compare the readings produced by the watch with those of another reliable and accurate thermometer.
  - If adjustment is required, remove the watch from your wrist and wait for 20 or 30 minutes to give the temperature of the watch time to stabilize.

E-22

### To calibrate the temperature sensor



- Take a reading with another measurement device to determine the exact current temperature.
- With the watch in the Timekeeping Mode, press **D** to enter the Thermometer Mode.
- Hold down **A** for about two seconds until the temperature reading disappears from the upper display. Release **A** at this time, which will cause the temperature reading to flash, which indicates the setting mode.
- Use **D** (+) and **B** (-) to calibrate the temperature value with the reading of another instrument.
  - Each press of a button changes the temperature value in units of 0.1°C (0.2°F).
  - To return the currently flashing value to its initial factory default setting, press **D** and **B** at the same time.
- Press **A** to return to the Thermometer Mode.

### Thermometer Precautions

Temperature measurements are affected by your body temperature (while you are wearing the watch), direct sunlight, and moisture. To achieve a more accurate temperature measurement, remove the watch from your wrist, place it in a well ventilated location out of direct sunlight, and wipe all moisture from the case. It takes approximately 20 to 30 minutes for the case of the watch to reach the actual surrounding temperature.

E-23

## Specifying Temperature Unit

Use the procedure below to specify the temperature unit to be used in the Thermometer Mode.



### Important!

When TOKYO is selected as the Home City, the temperature unit is set automatically to Celsius (°C). This setting cannot be changed.

### To specify the temperature unit

- In the Timekeeping Mode, press **D** to enter the Thermometer Mode.
- Hold down **A** for about two seconds until the temperature reading disappears from the upper display. Release **A** at this time, which will cause the temperature reading to flash, which indicates the setting mode.
- Press **C** to display the current temperature unit in the upper display.
- Press **D** to toggle the temperature unit between °C (Celsius) and °F (Fahrenheit).
- After the setting is the way you want, press **A** to exit the setting screen.

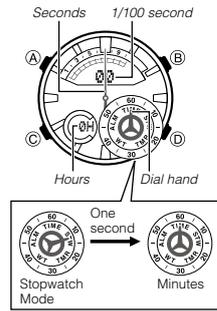
E-24

## Using the Stopwatch

The stopwatch measures elapsed time, split times, and two finishes.

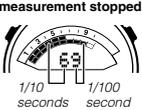
### To enter the Stopwatch Mode

Use **C** to select the Stopwatch Mode as shown on page E-8.



E-25

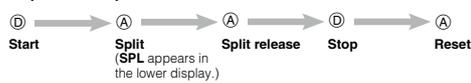
### Elapsed time measurement stopped



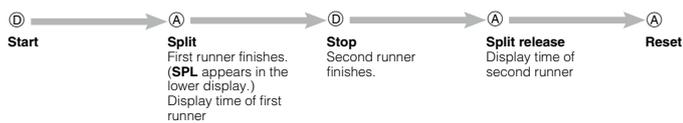
### To perform an elapsed time operation



### To pause at a split time



### To measure two finishes



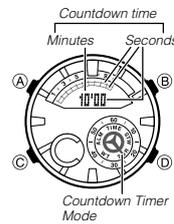
### Note

- The Stopwatch Mode can indicate elapsed time up to 23 hours, 59 minutes, 59.99 seconds.
- Once started, stopwatch timing continues until you press **D** to stop it, even if you exit the Stopwatch Mode to another mode and even if timing reaches the stopwatch limit defined above.

E-26

## Using the Countdown Timer

The countdown timer can be configured to start at a preset time and sound an alarm when the end of the countdown is reached.



### To enter the Countdown Timer Mode

Use **C** to select the Countdown Timer Mode as shown on page E-8.

### To specify the countdown start time

- Enter the Countdown Timer Mode.
  - If a countdown is in progress (indicated by the seconds counting down), press **D** to stop it and then press **A** to reset to the current countdown start time.
  - If a countdown is paused, press **A** to reset to the current countdown start time.
- Hold down **A** until the minute setting of the current countdown start time starts to flash. This is the setting screen.
- Use **D** (+) and **B** (-) to change the minute.
- Press **A** to exit the setting screen.

E-27

### To perform a countdown timer operation



- Before starting a countdown timer operation, check to make sure that a countdown operation is not already in progress (indicated by the seconds counting down). If it is, press **D** to stop it and then **A** to reset to the countdown start time.
- An alarm sounds for 10 seconds when the end of the countdown is reached. This alarm will sound in all modes. The countdown time is reset to its starting value automatically after the alarm sounds.

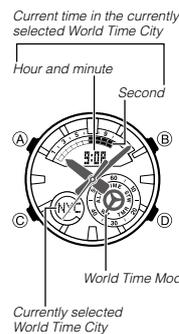
### To stop the alarm

Press any button.

E-28

## Checking the Current Time in a Different Time Zone

You can use the World Time Mode to view the current time in one of 31 time zones (48 cities) around the globe. The city that is currently selected in the World Time Mode is called the "World Time City".  
\* You also can swap the current World Time City and Home Time City in the World Time Mode (page E-31).



### To enter the World Time Mode

Use **C** to select the World Time Mode as shown on page E-8.

- The current city code and city name will scroll across the lower display. After that, the city code will remain shown in the lower display. You can scroll the city code and city name again by pressing **A**.
- The hour, minute, and second hands will indicate the current Timekeeping Mode time.

### To view the time in another time zone

- In the World Time Mode, use **D** (East) to scroll through city codes.
- To change the city code to **UTC**, press **B** and **D** at the same time.

E-29

### To specify standard time or daylight saving time (DST) for a city



Hold down **A**



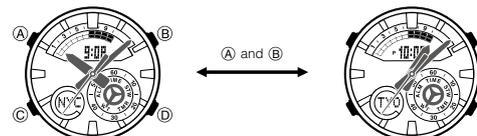
DST indicator

- In the World Time Mode, use **D** (East) to scroll through the available city codes.
  - Keep scrolling until the city code whose standard time/daylight saving time setting you want to change is shown in the lower display.
- To toggle between summer time (DST indicator in the upper display) and standard time (DST indicator not displayed), hold down **A**.
  - Using the World Time Mode to change the DST setting of the city code that is selected as your Home City also will change the Timekeeping Mode time DST setting.
  - Note that you cannot switch between standard time/daylight saving time (DST) while **UTC** is selected as the World Time City.
  - Note that the standard time/daylight saving time (DST) setting affects only the currently selected time zone. Other time zones are not affected.

E-30

### To swap your Home Time and World Time Cities

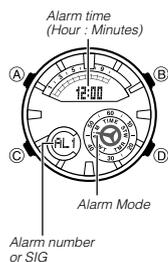
- In the World Time Mode, use **D** to select the city you want to use as your new Home City.
- To swap, press **A** and **B** at the same time.



- This will make the World Time City you selected in step 1 (**NYC** (NEW YORK)) your new Home City.
- Your previous Home City (**TYO** (TOKYO)) will be your new World Time City.

E-31

## Using the Alarm



You can set five independent daily alarms. When an alarm is turned on, an alarm will sound for about 10 seconds each day when the time in the Timekeeping Mode reaches the preset alarm time. This is true even if the watch is not in the Timekeeping Mode. One of the daily alarms is a snooze alarm. The snooze alarm will sound every five minutes up to seven times or until it is turned off. You can also turn on an Hourly Time Signal, which will cause the watch to beep twice every hour on the hour.

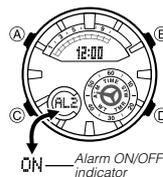
### To enter the Alarm Mode

Use **(C)** to select the Alarm Mode as shown on page E-8.

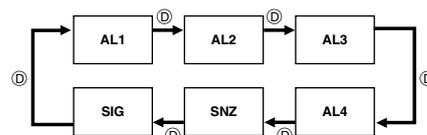
- The lower display will show the currently selected alarm number (**AL1** to **AL4**, or **SNZ**), or the hourly time signal indicator (**SIG**).
- When you enter the Alarm Mode, the data you were viewing when you last exited the mode appears first.

E-32

## To set an alarm time



- In the Alarm Mode, use **(D)** to scroll through the alarm screens in the lower display until the one you want to change is shown.



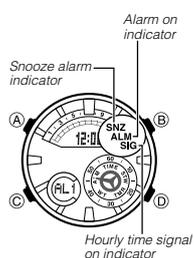
- Hold down **(A)** until the hour digits of the alarm setting start to flash in the upper display.
  - This is the setting screen.
- Press **(C)** to move the flashing between the hour and minute settings.
- While a setting is flashing, use **(I)** (+) and **(J)** (-) to change it.
  - When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. (no indicator) or p.m. (**P** indicator).
- Press **(A)** to exit the setting screen.

## To test the alarm

In the Alarm Mode, hold down **(D)** 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 is selected, press **(A)** to turn it on and off.



- The alarm on indicator (when any alarm is on), snooze alarm indicator (when the snooze alarm is on), and the Hourly Time Signal on indicator (when the Hourly Time Signal is on) are shown on the upper display in all modes.

## To stop the alarm

Press any button.

E-34

## Illumination



The face of the watch is illuminated for easy reading in the dark. The auto light turns on illumination automatically when you angle the watch towards your face.

- Auto light must be enabled (page E-37) for it to operate.

### To turn on illumination manually

- Press **(B)** in any mode (except when a flashing setting screen is displayed) to turn on illumination.
- You can use the procedure below to select either 1.5 seconds or three seconds as the illumination duration. When you press **(B)**, the illumination will remain on for about 1.5 seconds or three seconds, depending on the current illumination duration setting.
  - The above operation turn on illumination regardless of whether auto light is enabled or disabled.
  - Illumination is disabled while configuring sensor measurement mode settings.

## To change the illumination duration

- In the Timekeeping Mode, hold down **(A)** until **ADJ** appears in the lower display.
  - When you release **(A)** (after **ADJ** appears), **SET** will be flashing in the upper display.
- Use **(C)** to cycle through the settings on the upper display until the current illumination duration (**LT1** or **LT3**) is shown.
  - See the sequence in step 2 of the procedure under "To change the current time and date settings" (page E-16) for information about how to scroll through setting screens.

- Press **(D)** to toggle the illumination duration between three seconds (**LT3** displayed) and 1.5 seconds (**LT1** displayed).
- After all of the settings are the way you want, press **(A)** to exit the setting screen.

## About Auto Light

While Auto Light is enabled, illumination will turn on whenever you position your wrist as described below in any mode. **Moving the watch to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes illumination to turn on.**



### Warning!

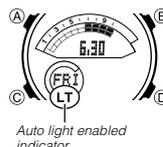
- Always make sure you are in a safe place whenever you are reading the display of the watch using auto light. Be especially careful when running or engaged in any other activity that can result in accident or injury. Also take care that sudden illumination by auto light does not startle or distract others around you.
- When you are wearing the watch, make sure that auto light is disabled before riding on a bicycle or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of auto light can create a distraction, which can result in a traffic accident and serious personal injury.

E-36

## Note

- Auto light is always disabled, regardless of its enabled/disabled setting, when any one of the following conditions exists.
  - While an alarm is sounding
  - During sensor measurement

## To enable or disable auto light



- In the Timekeeping Mode, hold down **(B)** for about three seconds to toggle auto light between enabled (**LT** shown in the lower display) and disabled (**LT** not displayed).
- The auto light enabled indicator (**LT**) is on the lower display in all modes while auto light is enabled.
  - Auto light remains enabled for about six hours. After that disables automatically.

## Illumination Precautions

- Illumination may be hard to see when viewed under direct sunlight.
- Illumination will not turn on while an alarm is sounding, while high-speed hand movement is in progress, while a sensor is taking a reading. Illumination will turn on if **(B)** is pressed between sensor reading operations.
- Illumination turns off automatically whenever an alarm sounds.
- Frequent use of illumination runs down the batteries.

## Auto light precautions



- 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 (page E-35), even if you keep the watch pointed towards your face.
- Static electricity or magnetic force can interfere with proper operation of auto light. 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 your face 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.
- 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 auto light, and does not indicate a problem with the watch.

## Button Operation Tone

When enabled, the button operation tone sounds any time you press one of the watch's buttons. You can enable or disable the button operation tone as desired.

### To enable or disable the button operation tone



- In the Timekeeping Mode, hold down **(A)** until **ADJ** appears in the lower display.
  - When you release **(A)** (after **ADJ** appears), **SET** will be flashing in the upper display.
- Use **(D)** to cycle through settings on the lower display until the current button operation tone setting (**MUTE** or **KEY ♪**) is shown.
  - See the sequence in step 2 of the procedure under "To change the current time and date settings" (page E-16) for information about how to scroll through setting screens.
- Press **(D)** to toggle the button operation tone setting between enabled (**KEY ♪**) and disabled (**MUTE**).
- After the setting is the way you want, press **(A)** to exit the setting screen.

### Note

- The mute indicator is displayed in all modes when the button operation tone is disabled.

E-38

E-39

## Troubleshooting

### Time Setting

#### Why is the current time setting off by a couple of hours?

Your Home City setting may be wrong (page E-14). Check your Home City setting and correct it, if necessary.

#### Why is the current time setting off by one hour?

You may need to change your Home City's standard time/daylight saving time (DST) setting. Use the procedure under "To change the current time and date settings" (page E-16).

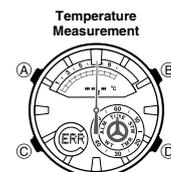
### Sensor modes

#### Why can't I change the temperature unit setting?

The temperature unit setting is always Celsius (°C) whenever TOKYO is selected as the Home City. In this case, the setting cannot be changed.

#### Why does "ERR" appear while a sensor operation is in progress?

Subjecting the watch to strong impact can cause sensor malfunction or improper contact of internal circuitry. When this happens, ERR (error) will appear on the lower display and sensor operations will be disabled.



- If **ERR** appears while a measurement operation is being performed in a sensor mode, restart the measurement. If **ERR** appears on the lower display again, it can mean there is something wrong with the sensor.
- If **ERR** keeps appearing during measurement, it could mean there is a problem with the applicable sensor.

### World Time Mode

#### The time for my World Time City is off in the World Time Mode.

This could be due to incorrect switching between standard time and daylight saving time. See "To specify standard time or daylight saving time (DST) for a city" (page E-30) for more information.

E-40

E-41

## Battery

### Why is the low battery alert flashing?



Low battery alert

Battery power is low. Watch operations are disabled while the low battery alert is flashing on the lower display. If the low battery alert disappears after battery power recovers but then starts to flash again after a short while, it means that you need to have the watch's batteries replaced.

E-42

E-43

### World Time: 48 cities (31 time zones)

Other: daylight saving time/standard time

**Alarms:** 5 daily alarms (with one snooze alarm); Hourly Time Signal

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

**Other:** Button operation tone on/off; Hand shifting (to view digital display)

**Battery:** Two silver oxide batteries (Type: SR927W)

Approximate battery operating time: 2 years under the following conditions:

- 1 illumination operation (1.5 seconds) per day
- Alarm: 10 seconds/day
- Temperature readings: Once/week

Frequent use of illumination runs down the batteries. Particular care is required when using auto light (page E-38).

Specifications are subject to change without notice.

E-44

L-1

## Specifications

**Accuracy at normal temperature:** ±15 seconds a month

**Digital Timekeeping:** Hour, minutes, seconds, 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: Two display formats (month, day or time); Home City code (can be assigned one of 48 city codes); standard time / daylight saving time (summer time)

**Analog Timekeeping:** Hour, minutes (hand moves every 10 seconds), seconds

**Thermometer:**

Measurement and display range: -10.0 to 60.0°C (or 14.0 to 140.0°F)

Display unit: 0.1°C (or 0.2°F)

Measurement timing: Every five seconds in the Thermometer Mode

Other: Calibration; Selectable measurement unit

**Temperature Sensor Precision:**

±2°C (±3.6°F) in range of -10°C to 60°C (14.0°F to 140.0°F)

**Stopwatch:**

Measuring unit: 1/100 second

Measuring capacity: 23:59' 59.99"

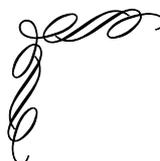
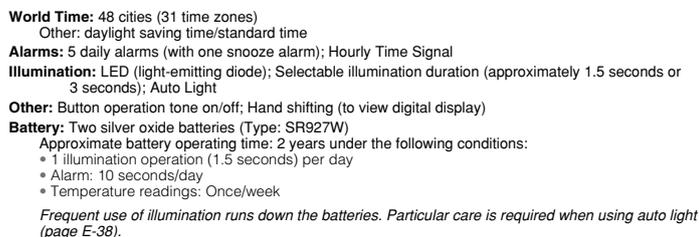
Measuring modes: Elapsed time, split time, two finishes

**Countdown Timer:**

Measuring unit: 1 second

Countdown range: 60 minutes

Setting ranges: Countdown start time (1 to 60 minutes, 1-minute increments)



## City Code Table



## City Code Table

City Code	City	UTC Offset/ GMT Differential	City Code	City	UTC Offset/ GMT Differential
PPG	Pago Pago	-11	UTC		
HNL	Honolulu	-10	LIS	Lisbon	0
ANC	Anchorage	-9	LON	London	
YVR	Vancouver		MAD	Madrid	
LAX	Los Angeles	-8	PAR	Paris	
YEA	Edmonton		ROM	Rome	+1
DEN	Denver	-7	BER	Berlin	
MEX	Mexico City		STO	Stockholm	
CHI	Chicago	-6	ATH	Athens	
NYC	New York	-5	CAI	Cairo	+2
YHZ	Halifax	-4	JRS	Jerusalem	
YYT	St. Johns	-3.5	MOW	Moscow	+3
SCL	Santiago		JED	Jeddah	
RIO	Rio De Janeiro	-3	THR	Tehran	+3.5
FEN	Fernando de Noronha	-2	DXB	Dubai	+4
RAI	Praia	-1	KBL	Kabul	+4.5
			KHI	Karachi	+5

City Code	City	UTC Offset/ GMT Differential
DEL	Delhi	+5.5
KTM	Kathmandu	+5.75
DAC	Dhaka	+6
RGN	Yangon	+6.5
BKK	Bangkok	+7
SIN	Singapore	
HKG	Hong Kong	+8
BJS	Beijing	
TPE	Taipei	
SEL	Seoul	+9
TYO	Tokyo	
ADL	Adelaide	+9.5
GUM	Guam	+10
SYD	Sydney	
NOU	Noumea	+11
WLG	Wellington	+12

- This table shows the city codes of this watch. (As of January 2016)
- The rules governing global times (GMT differential and UTC offset) and summer time are determined by each individual country.

L-2

L-3