

Operation Guide 3219

CASIO®

ENGLISH

Congratulations upon your selection of this CASIO watch.

This watch does not have a city code that corresponds to the UTC offset of -3.5 hours. Because of this, the radio-controlled atomic timekeeping function will not display the correct time for Newfoundland, Canada.

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 this product or its malfunction.

E-1

About This Manual



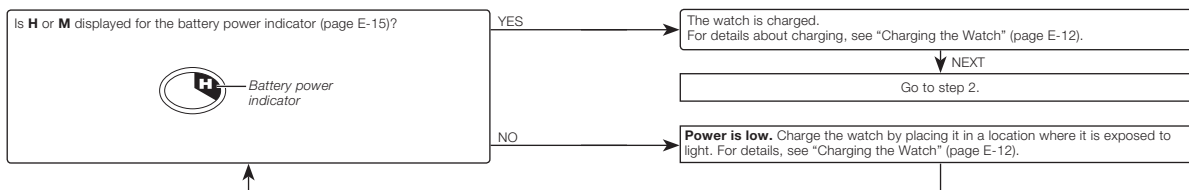
E-2

- 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.

E-3

Things to check before using the watch

1. Check the battery power level.



E-4

E-5

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

Use the procedure under "To configure Home City settings" (page E-42) to configure your Home City and daylight saving time settings.

Important!

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

3. Set the current time.

- To set the time using a time calibration signal**
See "To get ready for a receive operation" (page E-26).
- To set the time manually**
See "Configuring Current Time and Date Settings Manually" (page E-47).

E-6

E-7

The watch is now ready for use.

- For details about the watch's radio controlled timekeeping feature, see "Radio Controlled Atomic Timekeeping" (page E-21).

Contents

E-2 About This Manual

E-4 Things to check before using the watch

E-12 Charging the Watch

E-20 To recover from the sleep state

E-21 Radio Controlled Atomic Timekeeping

E-26 To get ready for a receive operation

E-29 To perform manual receive

E-33 To check the latest signal reception results

E-34 To turn auto receive on and off

E-37 Mode Reference Guide

E-41 Timekeeping

E-42 Configuring Home City Settings

E-42 To configure Home City settings

E-45 To change the Daylight Saving Time (summer time) setting

E-47 Configuring Current Time and Date Settings Manually

E-47 To change the current time and date settings manually

E-51 Checking the Current Time in a Different Time Zone

E-51 To enter the World Time Mode

E-51 To view the time in another time zone

E-52 To specify standard time or daylight saving time (DST) for a city

E-53 Using the Alarm

E-54 To enter the Alarm Mode

E-55 To set an alarm time

E-56 To test the alarm

E-57 To turn an alarm and the Hourly Time Signal on and off

E-57 To stop the alarm

E-8

E-9

Operation Guide 3219

CASIO®

E-58 Using the Stopwatch

- E-58 To enter the Stopwatch Mode
- E-59 To perform an elapsed time operation
- E-59 To pause at a split time
- E-59 To measure two finishes

E-61 Using the Countdown Timer

- E-61 To enter the Countdown Timer Mode
- E-61 To specify the countdown start time
- E-63 To perform a countdown timer operation
- E-63 To stop the alarm

E-64 Illumination

- E-64 To turn on illumination

E-66 Other Settings

- E-66 To turn the button operation tone on and off
- E-68 To turn Power Saving on and off

E-10

E-70 Troubleshooting

E-76 Specifications

E-11

Charging the Watch

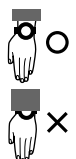
The face of the watch is a solar panel that generates power from light. The generated power charges a built-in rechargeable battery, which powers watch operations. The watch charges whenever it is exposed to light.

Charging Guide



Whenever you are not wearing the watch, leave it in a location where it is exposed to light.

- Best charging performance is achieved by exposing the watch to the strongest light available.



When wearing the watch, make sure that its face is not blocked from light by the sleeve of your clothing.

- The watch may enter a sleep state (page E-19) if its face is blocked by your sleeve even only partially.

E-12

Warning!

Leaving the watch in bright light for charging 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

E-13

Important!

- 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.
- Turn on the watch's Power Saving function (page E-19) and keep it in an area normally exposed to bright light when storing it for long periods. This helps to ensure that power does not run down.
- 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 power to run down. Expose the watch to bright light whenever possible.

E-14

Power Levels

You can get an idea of the watch's power level by observing the battery power indicator on the display.

Battery power indicator



Level	Battery Power Indicator	Function Status
1 (H)		All functions enabled.
2 (M)		All functions enabled.
3 (L and LOW)		Auto and manual receive, illumination, and beeper disabled.
4 (CHG)		Except for timekeeping and the CHG (charge) indicator, all functions and display indicators disabled.
5		All functions disabled.

E-15

- The flashing **LOW** indicator at Level 3 (L) tells you that battery power is very low, and that exposure to bright light for charging is required as soon as possible.
- At Level 5, all functions are disabled and settings return to their initial factory defaults. Once the battery reaches Level 2 (M) after falling to Level 5, reconfigure the current time, date, and other settings.
- Display indicators reappear as soon as the battery is charged from Level 5 to Level 2 (M).
- Leaving the watch exposed to direct sunlight or some other very strong light source can cause the battery power indicator to show a reading temporarily that is higher than the actual battery level. The correct battery level should be indicated after a few minutes.
- The current time and all other settings return to their initial factory defaults whenever battery power drops to Level 5 and when you have the battery replaced.

E-16

Power Recovery Mode

- Performing illumination or beeper operations during a short period may cause all of the battery power indicators (H, M, and L) to start flashing on the display. This indicates that the watch is in the power recovery mode. Illumination, alarm, countdown timer alarm, and hourly time signal operations will be disabled until battery power recovers.
- Battery power will recover in about 15 minutes. At this time, the battery power indicators (H, M, L) will stop flashing. This indicates that the functions listed above are enabled again.
- If all of the battery power indicators (H, M, L) are flashing and the **CHG** (charge) indicator also is flashing, it means the battery level is very low. Expose the watch to bright light as soon as possible.
- Frequent flashing of all of the battery power indicators (H, M, L) probably means that remaining battery power is low. Leave the watch in bright light to allow it to charge.

E-17

Charging Times

Exposure Level (Brightness)	Daily Operation *1	Level Change *2			
		Level 5	Level 4	Level 3	Level 2
Outdoor sunlight (50,000 lux)	5 min.	3 hours			
Window sunlight (10,000 lux)	24 min.	10 hours			
Window sunlight on cloudy day (5,000 lux)	48 min.	16 hours			
Indoor fluorescent lighting (500 lux)	8 hours	184 hours			

- * 1 Approximate exposure each day to generate power for normal daily operation.
- * 2 Approximate exposure time (in hours) required to take power up one level.

E-18

- The above exposure times all are for reference only. Actual exposure times depend on lighting conditions.
- For details about the operating time and daily operating conditions, see the "Power Supply" section of the Specifications (page E-78).

Power Saving

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

- For information about enabling and disabling power saving, see "To turn Power Saving on and off" (page E-68).
- There actually are two sleep state levels: "display sleep" and "function sleep".

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

E-19

- The watch will not enter a sleep state between 6:00 AM and 9:59 PM. If the watch is already in a sleep state when 6:00 AM arrives, however, it will remain in the sleep state.
- The watch will not enter a sleep state while it is in the Stopwatch Mode or Countdown Timer Mode.

To recover from the sleep state

Move the watch to a well-lit area or press any button.

Radio Controlled Atomic Timekeeping

This watch receives a time calibration signal and updates its time setting accordingly. However, when using the watch outside of areas covered by time calibration signals, you will have to adjust the settings manually as required. See "Configuring Current Time and Date Settings Manually" (page E-47) for more information.

This section explains how the watch updates its time settings when the city code selected as the Home City is in Japan, North America, Europe, or China, and is one that supports time calibration signal reception.

E-20

If your Home City Code setting is this:	The watch can receive the signal from the transmitter located here:
LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW	Anthorn (England), Mainflingen (Germany)
HKG, BJS	Shanghai City (China)
TPE, SEL, TYO	Fukushima (Japan), Fukuoka/Saga (Japan)
HNL, ANC, YVR, LAX, YEA, DEN, MEX, CHI, MIA, YTO, NYC, YHZ, YYT	Fort Collins, Colorado (United States)

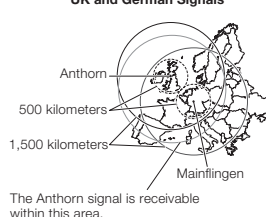
Important!

- The areas covered by **MOW**, **HNL** and **ANC** are quite far from the calibration signal transmitters, so certain conditions may cause reception problems.
- When **HKG** or **BJS** is selected as the Home City, only the time and date are adjusted according to the time calibration signal. You need to switch manually between standard time and daylight saving time (DST) if required. See "To configure Home City settings" (page E-42) for information about how to do this.

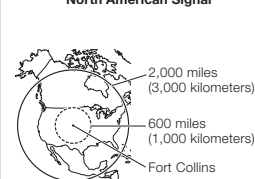
E-22

Approximate Reception Ranges

UK and German Signals

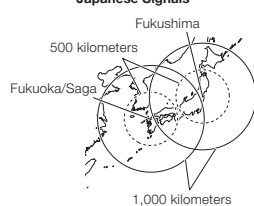


North American Signal

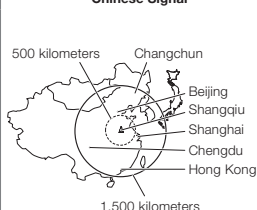


E-24

Japanese Signals



Chinese Signal



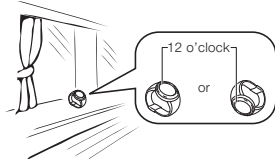
- Even when the watch is within range of a transmitter, signal reception may be impossible due to the effects of geographic contours, structures, weather, the time of year, the time of day, radio interference, etc. The signal becomes weaker at distances of approximately 500 kilometers, which means that the influence of the conditions listed above becomes even greater.
- Signal reception may not be possible at the distances noted below during certain times of the year or day. Radio interference may also cause problems with reception.
 - Mainflingen (Germany) or Anthorn (England) transmitters: 500 kilometers (310 miles)
 - Fort Collins (United States) transmitter: 600 miles (1,000 kilometers)
 - Fukushima or Fukuoka/Saga (Japan) transmitters: 500 kilometers (310 miles)
 - Shanghai (China) transmitter: 500 kilometers (310 miles)
- As of December 2010, China does not use Daylight Saving Time (DST). If China does go to the Daylight Saving Time system in the future, some functions of this watch may no longer operate correctly.

E-24

E-25

To get ready for a receive operation

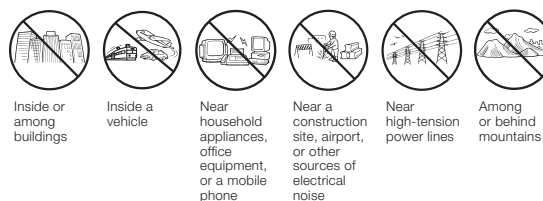
1. Confirm that the watch is in the Timekeeping Mode. If it isn't, use **C** to enter the Timekeeping Mode (page E-38).
2. The antenna of this watch is located on its 12 o'clock side. Position the watch with 12 o'clock facing towards a window as shown in the nearby illustration. Make sure there are no metal objects nearby.



- Signal reception normally is better at night.
- The receive operation takes from two to seven minutes, but in some cases it can take as long as 14 minutes. Take care that you do not perform any button operation or move the watch during this time.

E-26

- Signal reception may be difficult or even impossible under the conditions described below.



E-26

E-27

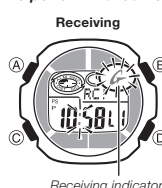
3. What you should do next depends on whether you are using Auto Receive or Manual Receive.
 - Auto Receive: Leave the watch over night in the location you selected in step 2. See "Auto Receive" below for details.
 - Manual Receive: Perform the operation under "To perform manual receive" on page E-29.

Auto Receive

- With Auto Receive, the watch performs the receive operation each day automatically up to six times (up to five times for the Chinese calibration signal) between the hours of midnight and 5 a.m. (according to the Timekeeping Mode time). When any receive operation is successful, none of the other receive operations for that day are performed.
- When a calibration time is reached, the watch will perform the receive operation only if it is in the Timekeeping Mode or World Time Mode. The receive operation is not performed if a calibration time is reached while you are configuring settings.
- You can use the procedure under "To turn auto receive on and off" (page E-34) to enable or disable auto receive.

E-28

To perform manual receive



In the Timekeeping Mode, hold down **D** until the watch beeps.

- A signal level indicator (**L1**, **L2**, or **L3**, see page E-32) appears on the display after reception starts. Do not move the watch or perform any button operation until **GET** or **ERR** appears on the display.

E-29

Operation Guide 3219

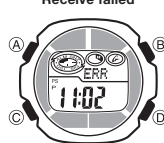
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Receive successful



- If the receive operation is successful, the reception date and time appear on the display, along with the **GET** indicator. The watch will return to the Timekeeping Mode if you press (D) or if you do not perform any button operation for about one or two minutes.

Receive failed



If there was a previously successful reception

- If the current reception fails but a previous reception (within the last 24 hours) was successful, the display shows the receiving indicator and the **ERR** indicator. If the **ERR** indicator only is displayed (without the receiving indicator), it means that all of the receive operations over the past 24 hours have failed. The watch will return to the Timekeeping Mode without changing the time setting if you press (D) or if you do not perform any button operation for about one or two minutes.

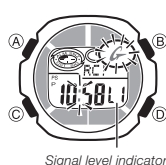
Note

To interrupt a receive operation and return to the Timekeeping Mode, press (D).

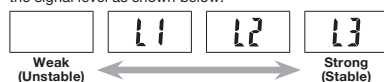
E-30

E-31

Signal Level Indicator



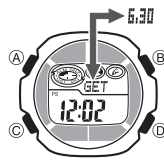
During manual receive, the signal level indicator displays the signal level as shown below.



As you watch the indicator, keep the watch in a location that best maintains stable reception.

- Even under optimum reception conditions, it can take about 10 seconds for reception to stabilize.
- Note that weather, the time of day, surroundings, and other factors all can affect reception.

To check the latest signal reception results



In the Timekeeping Mode, press (D) (page E-38).

- When receive is successful, the display shows the time and date that receive was successful. - : - indicates that none of the receive operations were successful.
- To return to the Timekeeping Mode, press (D).

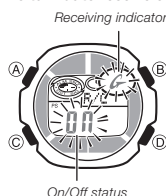
Note

The receiving indicator will not be displayed if you have adjusted the time or date setting manually since the last receive operation.

E-32

E-33

To turn auto receive on and off



1. In the Timekeeping Mode, press (D) (page E-38).
2. Hold down (A) until the current auto receive setting (**On** or **OFF**) and receiving indicator start to flash. This is the setting screen.
 - Note that the setting screen will not appear if the currently selected Home City is one that does not support time calibration reception.
3. Press (D) to toggle between auto receive on (**On**) and off (**OFF**).
4. Press (A) to exit the setting screen.

Radio-controlled Atomic Timekeeping Precautions

- Strong electrostatic charge can result in the wrong time setting.
- Even if a receive operation is successful, certain conditions can cause the time setting to be off by up to one second.
- The watch is designed to update the date and day of the week automatically for the period January 1, 2000 to December 31, 2099. Updating of the date by signal reception will no longer be performed starting from January 1, 2100.
- If you are in an area where signal reception is not possible, the watch keeps time with the precision noted in "Specifications" (page E-76).
- The receive operation is disabled under any of the following conditions.
 - While power is at Level 3 (L) or lower (page E-15)
 - While the watch is in the power recovery mode (page E-17)
 - When the watch is in the function sleep state ("Power Saving", page E-19)
 - While a countdown timer operation is in progress (page E-61)
- A receive operation is cancelled if an alarm sounds while it is being performed.

E-34

E-35

- The Home City setting reverts to the initial default of **TYO** (Tokyo) whenever the battery power level drops to Level 5 or when you have the rechargeable battery replaced. If this happens, change the Home City to the setting you want (page E-42).

Mode Reference Guide

Your watch has 5 "modes". The mode you should select depends on what you want to do.

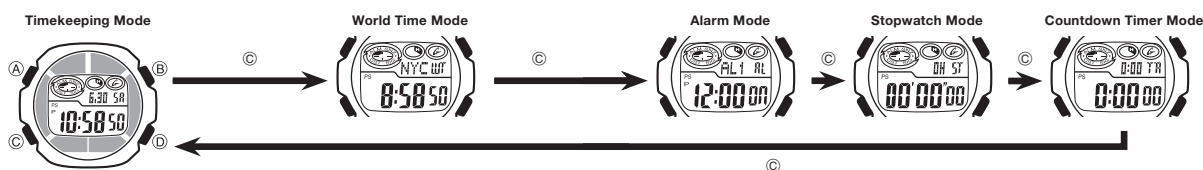
To do this:	Enter this mode:	See:
• View the current date in the Home City • Configure Home City and daylight saving time (DST) settings • Configure time and date settings manually • Perform a time calibration receive operation • Check whether the last receive operation was successful	Timekeeping Mode	E-41
View the current time in one of 48 cities (29 time zones) around the globe	World Time Mode	E-51
Set an alarm time	Alarm Mode	E-53
Use the stopwatch to measure elapsed time	Stopwatch Mode	E-58
Use the countdown timer	Countdown Timer Mode	E-61

E-36

E-37

Selecting a Mode

- The illustration below shows which buttons you need to press to navigate between modes.



E-38

E-39

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 returns to the Timekeeping Mode automatically if you do not perform any button operation for two or three minutes in the Alarm Mode.
- If you leave a screen with flashing digits on the display for two or three minutes without performing any operation, the watch exits the setting screen automatically.

Initial Screens

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

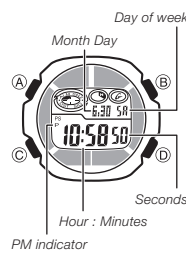
Scrolling

The (B) and (D) buttons are used on the setting screen 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.

E-40

Timekeeping

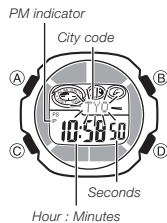
Use the Timekeeping Mode to set and view the current time and date.



E-41

Configuring Home City Settings

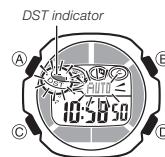
There are two Home City settings: actually selecting the Home City, and selecting either standard time or daylight saving time (DST).



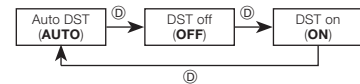
E-42

To configure Home City settings

- In the Timekeeping Mode, hold down (A) for about two seconds until the currently selected city code starts to flash. This is the city code setting screen.
 - The watch will exit the setting mode automatically if you do not perform any operation for about two or three minutes.
 - For details about city codes, see the "City Code Table" at the back of this manual.



- Press (D) (East) and (B) (West) to select the city code you want to use as your Home City.
 - Keep pressing (D) or (B) until the city code you want to select as your Home City appears on the display.
- Press (C) to display the DST setting screen.
- Use (D) to cycle through the DST settings in the sequence shown below.



- The Auto DST (AUTO) setting will be available only when a city code that supports time calibration signal reception (page E-21) is selected as the Home City. While Auto DST is selected, the DST setting will be changed automatically in accordance with time calibration signal data.

E-43

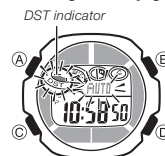
- Note that you cannot switch between standard time and daylight saving time (DST) while UTC is selected as your Home City.
- After the setting is the way you want, press (A) to return to the Timekeeping Mode.
 - To return to the screen in step 1, press (C) again.
 - The **DST** indicator appears to indicate that Daylight Saving Time is turned on.

Note

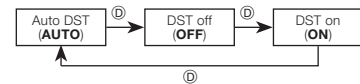
- After you specify a city code, the watch will use UTC* offsets in the World Time Mode to calculate the current time for other time zones based on the current time in your Home City.
 - * Coordinated Universal Time, the world-wide scientific standard of timekeeping. The reference point for UTC is Greenwich, England.
- Selecting some city codes automatically makes it possible for the watch to receive the time calibration signal for the corresponding area. See page E-21 for details.

E-44

To change the Daylight Saving Time (summer time) setting



- In the Timekeeping Mode, hold down (A) for about two seconds until the currently selected city code starts to flash. This is the city code setting screen.
- Press (C) to display the DST setting screen.
- Use (D) to cycle through the DST settings in the sequence shown below.



- The Auto DST (AUTO) setting will be available only when a city code that supports time calibration signal reception (page E-21) is selected as the Home City. While Auto DST is selected, the DST setting will be changed automatically in accordance with time calibration signal data.

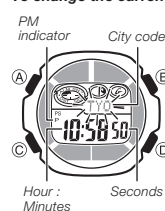
E-45

- After the setting is the way you want, press (A) to return to the Timekeeping Mode.
 - To return to the screen in step 1, press (C) again.
 - The **DST** indicator appears to indicate that Daylight Saving Time is turned on.

Configuring Current Time and Date Settings Manually

You can configure current time and date settings manually when the watch is unable to receive a time calibration signal.

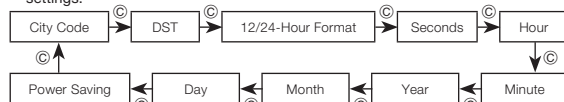
To change the current time and date settings manually



- In the Timekeeping Mode, hold down (A) for about two seconds until the currently selected city code starts to flash. This is the city code setting screen.

E-46

- 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:
TYO	Change the city code	Use (D) (East) and (B) (West).
AUTO	Cycle between Auto DST (AUTO), Daylight Saving Time (ON), and Standard Time (OFF)	Press (D).
12H	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping	Press (D).
50	Reset the seconds to 00	Press (D).
10:58	Change the hour or minute	Use (D) (+) and (B) (-).
20 12 6 30	Change the year, month, or day	Use (D) (+) and (B) (-).

- Press (A) to exit the setting screen.
 - To return to the screen in step 1, press (C) again.

E-48

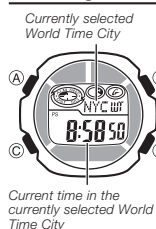
E-49

Note

- For information about selecting a Home City and configuring the DST setting, see "Configuring Home City Settings" (page E-42).
- While 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 rechargeable battery replaced or after power drops to Level 5 (page E-15).
- The day of the week changes automatically when the date changes.
- Refer to the pages shown below for more information on Timekeeping Mode settings.
 - Button operation tone on/off: "To turn the button operation tone on and off" (page E-66)
 - Enabling and disabling power saving: "To turn Power Saving on and off" (page E-68).

E-50

Checking the Current Time in a Different Time Zone



You can use the World Time Mode to view the current time in one of 29 time zones (48 cities) around the globe. The city that is currently selected in the World Time Mode is called the "World Time City".

To enter the World Time Mode

Use **(C)** to select the World Time Mode (**WT**) as shown on page E-38.

To view the time in another time zone

In the World Time Mode, use **(D)** (East) to scroll through city codes.

E-51

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

DST indicator

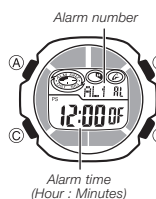


- In the World Time Mode, use **(D)** (East) to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
- Hold down **(A)** for about two seconds until the watch beeps.
 - This toggles the city code you selected in step 1 between Daylight Saving Time (**DST** indicator displayed) and standard time (**DST** indicator not displayed).

- 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.
- The standard time/daylight saving time (DST) setting affects only the currently selected time zone. Other time zones are not affected.

E-52

Using the Alarm



You can set five independent daily alarms. When a daily alarm is turned on, an alarm tone 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 alarms is a snooze alarm, while the other four are one-time alarms. The snooze alarm repeats every five minutes.

You can also turn on an Hourly Time Signal, which will cause the watch to beep twice every hour on the hour.

E-53

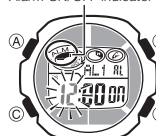
To enter the Alarm Mode

Use **(C)** to select the Alarm Mode (**AL**) as shown on page E-39.

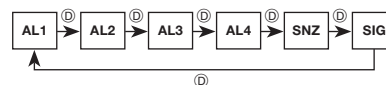
- There are four alarm screens numbered **AL1**, **AL2**, **AL3** and **AL4** for the daily alarm, and a snooze alarm screen indicated by **SNZ**. The Hourly Time Signal screen is indicated by **SIG**.
- When you enter the Alarm Mode, the data you were viewing when you last exited the mode appears first.

To set an alarm time

Alarm ON/OFF indicator



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



- Hold down **(A)** for about two seconds until the alarm time starts to flash. This is the setting screen.
- Press **(C)** to move the flashing between the hour and minute settings.

E-54

- While a setting is flashing, use **(D)** (+) and **(B)** (-) to change it.
 - When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. (no indicator) or p.m. (**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

Snooze alarm indicator



- 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 toggle it between 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 display in all modes.

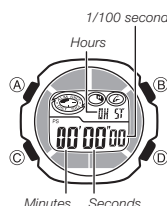
To stop the alarm

Press any button.

E-55

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 (**ST**) as shown on page E-39.

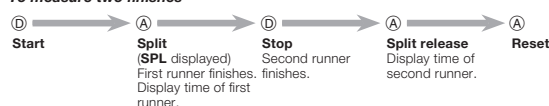
To perform an elapsed time operation



To pause at a split time



To measure two finishes



E-58

E-59

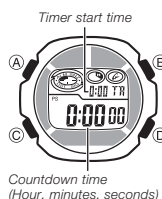
Note

- 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.
- Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to elapsed time measurement.

E-60

Using the Countdown Timer

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



To enter the Countdown Timer Mode

Use **C** to select the Countdown Timer Mode (TR) as shown on page E-39.

To specify the countdown start time

1. 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.

To perform a countdown timer operation



- Before starting a countdown timer operation, check to make sure that a countdown operation is not 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 five 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 when the alarm sounds.

To stop the alarm

Press any button.

E-62

E-61

Illumination



The display of the watch is illuminated for easy reading in the dark.

To turn on illumination

In any mode (except when a setting screen, with flashing digits is on the display), press **B** to illuminate the display for about one second.

- Illumination is disabled during time calibration signal reception.

Illumination Precautions

- The electro-luminescent panel that provides illumination loses power after very long use.
- Illumination may be hard to see when viewed under direct sunlight.
- Illumination turns off automatically whenever an alarm sounds.
- Frequent use of illumination runs down the battery.

E-64

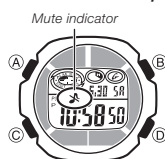
E-63

Other Settings

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.

- Even if you turn off the button operation tone, the alarm, Hourly Time Signal, and Countdown Timer Mode alarm all operate normally.

To turn the button operation tone on and off



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

Note

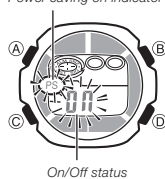
- The mute indicator is displayed in all modes when the button operation tone is turned off.
- Since the **C** button also is the mode change button, holding it down to turn the button operation tone on or off also causes the watch's current mode to change.

E-66

E-65

To turn Power Saving on and off

Power saving on indicator



1. In the Timekeeping Mode, hold down **A** for about two seconds until the currently selected city code starts to flash. This is the city code setting screen.
2. Use **C** to display the Power Saving On/Off screen shown nearby.
3. Press **D** to toggle Power Saving between on (On) and off (OFF).
 - See the sequence in step 2 of the procedure under "To change the current time and date settings manually" (page E-47) for information about how to scroll through the setting screens.
4. Press **A** to exit the setting screen.
 - To return to the screen in step 1, press **C** again.

Note

- The Power Saving on indicator (PS) is on the display in all modes while Power Saving is turned on.

E-68

E-69

Troubleshooting

Time Setting

See "Radio Controlled Atomic Timekeeping" (page E-21) for information about adjusting the time setting according to a time calibration signal.

■ The current time setting is off by hours.

Your Home City setting may be wrong (page E-42). Check your Home City setting and correct it, if necessary.

■ The current time setting is off by one hour.

If you are using the watch in an area where time calibration signal reception is possible, see "To configure Home City settings" (page E-42).
If you are using the watch in an area where time calibration signal reception is not possible, you may need to change your Home City's standard time/daylight saving time (DST) setting manually. Use the procedure under "To change the current time and date settings manually" (page E-47) to change the standard time/daylight saving time (DST) setting.

E-70

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-52) for more information.

Charging

■ The watch does not resume operation after I expose it to light.

This can happen after the power level drops to Level 5 (page E-15). Continue exposing the watch to light until the battery power indicator shows **H** or **M**.

Time Calibration Signal

The information in this section applies only when **LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, HKG, BJS, HNL, ANC, YVR, LAX, YEA, DEN, MEX, CHI, MIA, YTO, NYC, YHZ, YYT, SEL, or TYO** is selected at the Home City. You need to adjust the current time manually when any other city is selected as the Home City.

E-71

■ The display shows the ERR indicator when I check the result of the latest receive operation.

Possible Cause	Remedy	Page
- You are wearing or moving the watch, or performing a button operation during the signal receive operation. - The watch is in an area with poor reception conditions.	Keep the watch in an area where reception conditions are good while the signal receive operation is being performed.	E-26
You are in an area where signal reception is not possible for some reason.	See "Approximate Reception Ranges".	E-23
The calibration signal is not being transmitted for some reason.	- Check the website of the organization that maintains the time calibration signal in your area for information about its down times. - Try again later.	—

E-72

■ The current time setting changes after I set it manually.

You may have the watch configured for Auto Receive of the time calibration signal (page E-28), which will cause the time to be adjusted automatically according to your currently selected Home City. If this results in the wrong time setting, check your Home City setting and correct it, if necessary (page E-42).

■ The current time setting is off by one hour.

Possible Cause	Remedy	Page
Signal reception on a day for switching between standard time/daylight saving time (DST) may have failed for some reason.	Perform the operation under "To get ready for a receive operation". The time setting will be adjusted automatically as soon as signal reception is successful.	E-26
	If you are unable to receive the time calibration signal, change the standard time/daylight saving time (DST) setting manually.	E-45

E-73

■ Auto Receive is not performed or you cannot perform Manual Receive.

Possible Cause	Remedy	Page
The watch is not in the Timekeeping Mode or World Time Mode.	Auto receive is performed only while the watch is in the Timekeeping Mode or World Time Mode. Switch to either of these two modes.	E-38
Your Home City setting is wrong.	Check your Home City setting and correct it, if necessary.	E-42
There is not enough power for signal reception.	Expose the watch to light to charge it.	E-12

E-74

■ Signal reception is being performed successfully, but the time and/or day is wrong.

Possible Cause	Remedy	Page
Your Home City setting is wrong.	Check your Home City setting and correct it, if necessary.	E-42
The DST setting may be incorrect.	Change the DST setting to Auto DST.	E-42

E-75

Specifications

Accuracy at normal temperature: ±30 seconds a month (with no signal calibration)

Timekeeping: Hour, minutes, seconds, p.m. (P), year, 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: Home City code (can be assigned one of 48 city codes); Standard Time/Daylight Saving Time (summer time)

Time Calibration Signal Reception: Auto receive 6 times a day (5 times a day for the Chinese calibration signal); Remaining auto receives cancelled as soon as one is successful; Manual receive

Receiveable Time Calibration Signals: Mainflingen, Germany (Call Sign: DCF77, Frequency: 77.5 kHz); Anthorn, England (Call Sign: MSF, Frequency: 60.0 kHz); Fort Collins, Colorado, the United States (Call Sign: WWVB, Frequency: 60.0 kHz); Fukushima, Japan (Call Sign: JJY, Frequency: 40.0 kHz); Fukuoka/Saga, Japan (Call Sign: JJY, Frequency: 60.0 kHz); Shangqiu City, Henan Province, China (Call Sign: BPC, Frequency: 68.5 kHz)

World Time: 48 cities (29 time zones)
Other: Daylight Saving Time/Standard Time

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: 24 hours
Countdown start time setting range: 1 minute to 24 hours (1-hour increments and 1-minute increments)

E-76

E-77

Alarms: 5 Daily alarms; 4 one-time alarms; 1 snooze alarm; Hourly time signal

Illumination: EL Backlight (electro-luminescent panel)

Other: Battery power indicator; Power Saving; Button operation tone on/off

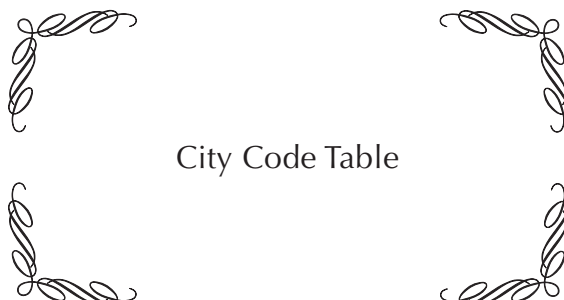
Power Supply: Solar panel and one rechargeable battery

Approximate battery operating time: 11 months (from full charge to Level 4) under the following conditions:

- Watch not exposed to light
- Internal timekeeping
- Display on 18 hours per day, sleep state 6 hours per day
- 1 illumination operation (1.5 seconds) per day
- 10 seconds of alarm operation per day
- 4 minutes of signal reception per day

Frequent use of illumination runs down the battery.

E-78



L-1

Operation Guide 3219

CASIO®

City Code Table

City Code	City	UTC Offset/ GMT Differential
PPG	Pago Pago	-11
HNL	Honolulu	-10
ANC	Anchorage	-9
YVR	Vancouver	-8
LAX	Los Angeles	-8
YEA	Edmonton	-7
DEN	Denver	-7
MEX	Mexico City	-6
CHI	Chicago	-6
MIA	Miami	-5
YTO	Toronto	-5
NYC	New York	-5
SCL	Santiago	-4
YHZ	Halifax	-4
YYT	St. Johns	-3.5

City Code	City	UTC Offset/ GMT Differential
RIO	Rio De Janeiro	-3
RAI	Praia	-1
UTC		
LIS	Lisbon	0
LON	London	0
MAD	Madrid	0
PAR	Paris	0
ROM	Rome	+1
BER	Berlin	+1
STO	Stockholm	+1
ATH	Athens	+2
CAI	Cairo	+2
JRS	Jerusalem	+2
MOW	Moscow	+3
JED	Jeddah	+3

City Code	City	UTC Offset/ GMT Differential
THR	Tehran	+3.5
DXB	Dubai	+4
KBL	Kabul	+4.5
KHI	Karachi	+5
DEL	Delhi	+5.5
DAC	Dhaka	+6
RGN	Yangon	+6.5
BKK	Bangkok	+7
SIN	Singapore	+7
HKG	Hong Kong	+8
BJS	Beijing	+8
TPE	Taipei	+8
SEL	Seoul	+9
TYO	Tokyo	+9
ADL	Adelaide	+9.5

City Code	City	UTC Offset/ GMT Differential
GUM	Guam	+10
SYD	Sydney	+10
NOU	Noumea	+11
WLG	Wellington	+12

* Based on data as of December 2010.
 * The rules governing global times (UTC offset and GMT differential) and summer time are determined by each individual country.

L-2

L-3