

# Operation Guide 5102

ENGLISH

Congratulations upon your selection of this CASIO watch.

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## About This Manual

Button operations are indicated using the letters (A) through (C) shown in the illustration.



### Hand Functions

#### <Regular timekeeping>

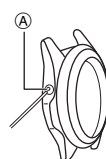
- 1 Hour Hand
- 2 Second Hand
- 3 Minute Hand
- 4 24-hour Hand

#### <Others>

- 5 Ornament (page E-3)
- 6 Moon Phase Indicator (page E-14)

This User's Guide uses numbers shown above to identify watch hands.

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### Important!

The (A) button is designed to protect against accidental pressing. Use a thin pointed object to press the depression of the button to operate it.

### Ornament

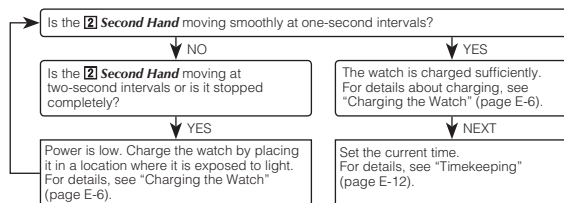
The 5 Ornament normally performs a random movement at the top and at the 30-minute mark of each hour, and whenever (C) is pressed.

- Note that no movement will be performed late at night if the watch is left in the dark.

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## Things to check before using the watch

### Observe the movement of the 2 Second Hand.



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## Charging the Watch

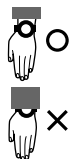
The face of the watch is a solar panel that generates power from light. The generated power charges a built-in rechargeable battery, which powers watch operations. The watch charges whenever it is exposed to light.

### 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 light that is as strong as possible.



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-11) if its face is blocked by your sleeve even only partially.

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### 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.

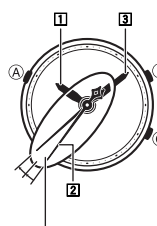
- On the dashboard of a car parked in direct sunlight
- Too close to an incandescent lamp
- Under direct sunlight

### Important!

- Keep the watch 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. Make sure that the watch is exposed to bright light whenever possible.

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### Power Levels



Moves at two-second intervals.

You can get an idea of the watch's power level by observing the movement of the 2 Second Hand in the regular timekeeping.

- If the 2 Second Hand is moving normally at one-second intervals, power is at Level 1.
- If the 2 Second Hand is moving at two-second intervals, power is at Level 2, which is quite low. Expose the watch to light as soon as possible so it can charge (Low battery alert).

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Level	Hand Movement	Function Status
1	Normal.	All functions enabled
2	2 Second Hand moves at two-second intervals.	
3	1 Hour Hand, 2 Second Hand and 3 Minute Hand stopped at 12 o'clock.	All functions disabled

- When power drops to Level 3, all functions will be disabled but the watch will continue to keep time internally for about one week. If you recharge the battery sufficiently during this period, the analog hands will move automatically to the correct setting and regular timekeeping will resume. After one week, all settings (including timekeeping) will be cleared. Recharging the battery will reset all settings to their initial factory defaults.

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## Charging Times

Exposure Level (Brightness)	Daily Operation *1	Level Change *2		
		Level 3	Level 2	Level 1
Outdoor sunlight (50,000 lux)	8 minutes	→		
Window sunlight (10,000 lux)	30 minutes	3 hours	39 hours	
Window sunlight on cloudy day (5,000 lux)	48 minutes	9 hours	149 hours	
Indoor fluorescent lighting (500 lux)	8 hours	14 hours	241 hours	
		173 hours	---	

- \* 1 Approximate exposure each day to generate power for normal daily operation.  
 \* 2 Approximate exposure to take power up one level.  
 • The above times are for reference only. Actual times depend on lighting conditions.

## Power Saving

Power Saving enters a sleep state automatically whenever the watch is left for one week in an area where it is dark.

### What happens when the watch is in the sleep state

- All regular timekeeping hands move to 12 o'clock and stop.
- Internal timekeeping functions continue to operate normally.

### To recover from the sleep state

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

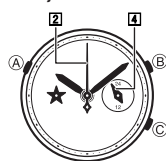
- It can take up to 14 minutes for the watch to recover from the sleep state to normal operation. Do not perform any button operations during that time.

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E-11

## Timekeeping

### To adjust the time setting



1. Hold down (A) for about two seconds until the [2] **Second Hand** moves to 12 o'clock.
2. Use (C) (+1 minute) and (B) (-1 minute) to change the current time setting.
  - Holding down either button for about two seconds and then releasing it starts high-speed hand movement in the applicable direction.
  - Pressing (C) and (B) at the same time will start high-speed hand movement, which will continue until the hands complete a 24-hour rotation.
  - To stop high-speed hand movement, press any button.
  - Check the [4] **24-hour Hand** to make sure that the time is set properly (1:00 a.m. = 1 o'clock, 1:00 p.m. = 13 o'clock).

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3. After the setting is the way you want, press (A).

- This will exit the setting mode and the [2] **Second Hand** will resume regular timekeeping.
- For best timekeeping accuracy, press (A) on a time signal from the TV or radio.
- The watch will exit the setting mode automatically if you do not perform any button operation for about two or three minutes.

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## Moon Phase

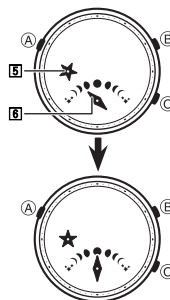
Moon Phase lets you view the current phase of the Moon. Before using the watch for the first time, check to make sure that the [6] **Moon Phase Indicator** is correctly indicating the current Moon phase. If it isn't, use the procedure on the next page to adjust it.

### Moon Phase Indicator

The [6] **Moon Phase Indicator** indicates the current Moon phase as shown below.

Moon Phase Indicator					
Moon Phase	New Moon	(Waxing)	Full Moon	(Waning)	New Moon

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### To adjust the Moon phase indicator setting

Hold down (B) for about one second to advance the [6] **Moon Phase Indicator** by one day. Repeat as many times as necessary until the phase is indicated correctly.

- Holding down (B) longer will advance the [6] **Moon Phase Indicator** at high speed.
- Pressing (B) will also cause the [5] **Ornament** to move.
- Adjustment of the [6] **Moon Phase Indicator** is recommended on a day that there is a full Moon or a new Moon, since the current phase is easiest to determine on these days.

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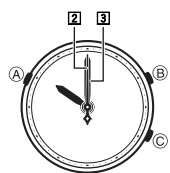
## Hand Home Position Adjustment

Strong magnetism or impact can cause the hands of the watch to be off. If this happens, perform the applicable home position adjustment procedures in this section.

- Hand home position adjustment is not required if the time and day settings are correct.

### Important!

- It can take up to 14 minutes for the hands to move to their home positions for hand home position adjustment. It also can take up to 14 minutes for the hand to return to their normal positions following hand home position adjustment.
- If you need to move a hand to the left, move it past the correct home positions and then use (C) to move back to the right. This helps to ensure better home position adjustment accuracy.

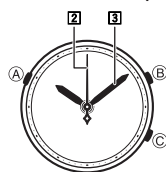


1. In the regular timekeeping, hold down (A) for about 7 seconds until the [3] **Minute Hand** and [2] **Second Hand** move to 12 o'clock.
- The [3] **Minute Hand** and [2] **Second Hand** are in their correct home positions if they are pointed precisely at 12 o'clock. If the hands are in the correct home positions, advance to step 4.

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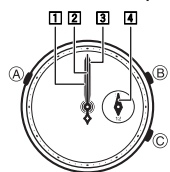
### If the current home positions are within ±15 minutes 00 seconds



2. Use (C) (+1 second) and (B) (-1 second) to adjust the hand positions so they point to 12 o'clock.
  - Holding down either button for about two seconds and then releasing it starts high-speed hand movement in the applicable direction.
  - To stop high-speed hand movement, press any button.
  - After adjusting the home positions, go to step 4.

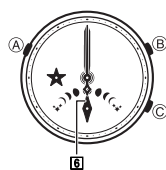
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### If the current home positions are greater than ±15 minutes 00 seconds



2. After performing step 1, hold down (C) and (B) at the same time until the [1] **Hour Hand**, [3] **Minute Hand**, [2] **Second Hand**, and [4] **24-hour Hand** all move to 12 o'clock.
3. Use (C) (+1 second) and (B) (-1 second) to adjust the hand positions so they point to 12 o'clock.
  - Holding down either button for about two seconds and then releasing it starts high-speed hand movement in the applicable direction.
  - To stop high-speed hand movement, press any button.
  - The [4] **24-hour Hand** is synchronized with the [1] **Hour Hand** and [3] **Minute Hand**, so separate adjustment is not required.
  - After adjusting the home positions, go to step 4.

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4. Press (A). This will cause the **[6] Moon Phase Indicator** to move to its home position (Full Moon).
  - If the **[6] Moon Phase Indicator** is at the correct home position, advance to step 6.
5. Use (C) (+) and (B) (–) to adjust the **[6] Moon Phase Indicator** so it is at its home position (Full Moon).
  - Holding down either button for about two seconds and then releasing it starts high-speed hand movement in the applicable direction.
  - To stop high-speed hand movement, press any button.
  - After adjusting the home position, go to step 6.
6. Press (A) to exit home position correction and return to regular timekeeping.

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## Charging

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

This can happen after the power level drops to Level 3 (page E-9). Continue exposing the watch to light until the **[2] Second Hand** starts moving normally (at one-second intervals).

### ■ The **[2] Second Hand** starts to move at one-second intervals, but then suddenly returns to moving at two-second intervals.

The watch probably is not sufficiently charged yet. Continue keeping it exposed to light.

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## Troubleshooting

### Hand Movement and Position

#### ■ The **[2] Second Hand** is moving at two second intervals.

#### ■ All regular timekeeping hands are stopped at 12 o'clock and none of the buttons work.

Power may be low. Expose the watch to light until the **[2] Second Hand** starts moving normally, at one-second intervals (page E-8).

#### ■ The hands of the watch suddenly start moving at high speed, even when I do not perform any operation.

The hand movement does not indicate malfunction, and should stop shortly. The watch is recovering from a sleep state (page E-11).

#### ■ The hands are off.

This could indicate that the watch has been exposed to magnetism or strong impact, which has caused problems with proper hand alignment. Adjust the watch's hand home position alignment (page E-16).

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## Specifications

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

**Timekeeping:** Hour, minutes, seconds, 24-hour

**Other:** Moon Phase; Power Saving; Low battery alert

**Power Supply:** Solar panel and one rechargeable battery

Approximate battery operating time: 9 months (no exposure to light after a full charge)

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