Operation Guide 2763

CASIO

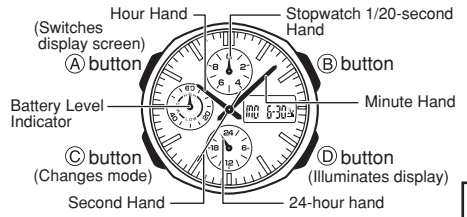
Modes and Display Screens

• The analog hands are not shown in the face illustrations shown in this User's Guide.

Each press of the Ⓒ button sounds a confirmation tone and cycles through available modes in the sequence shown below.

- The watch will automatically revert to the Timekeeping Mode if you leave it in the Alarm Mode (excetp for the Target Alarm screen), Recall Mode, or Hand Setting Mode without performing any operation for about two or three minutes.

Timekeeping Mode



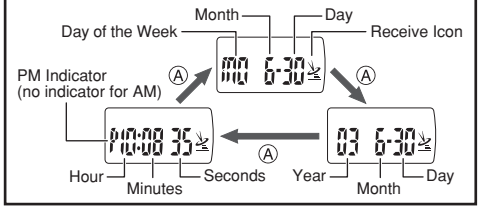
Days of the Week

SU : Sunday MO : Monday TU : Tuesday
WE : Wednesday TH : Thursday FR : Friday
SA : Saturday

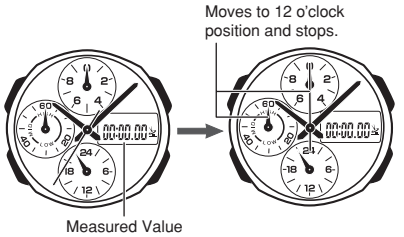
- For information about the battery indicator, see "Battery Indicator". For information about the receive icon, see "Receive Icon".

Switching Between Screens

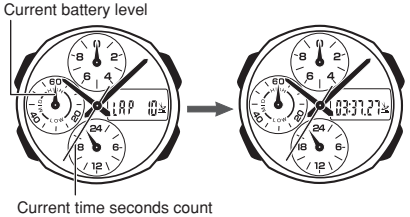
Each press of the Ⓐ button cycles through available modes in the sequence shown below.



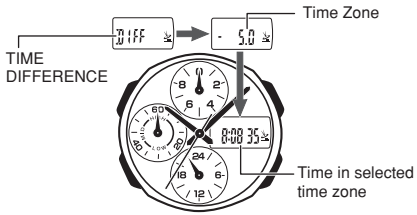
Stopwatch Mode



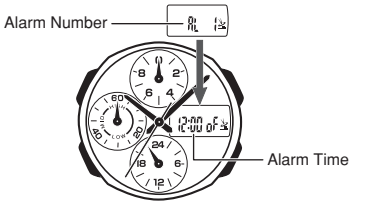
Recall Mode



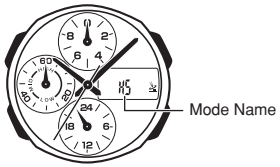
Dual Time Mode



Alarm Mode



Hand Setting Mode

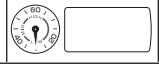


Power Supply

The power supply of this watch uses a solar cell to generate electrical power, which is stored by a rechargeable battery. Using or storing the watch where it is not regularly exposed to light, or allowing it to be blocked from light by your sleeve as you are wearing it can cause the power of the rechargeable battery to run down. To ensure stable operation, be sure to allow the watch to be exposed to light as much as possible when you are wearing or storing it.

Note that all data in memory and all settings are cleared whenever you allow the level of the rechargeable battery to drop to Level 4.

■ Battery Indicator

Level 1		All functions enabled.
Level 2		All functions enabled.
Level 3		Display, display illumination, alarms, hourly time signal, signal reception, and analog timekeeping disabled.
Level 4		All functions, including digital timekeeping, disabled.

- In the Stopwatch Mode, the battery indicator operates as the stopwatch minute hand.
- Exposing the watch to direct sunlight or other strong light may cause the battery level indicator to momentarily indicate a level that is higher than the actual battery level. Because of this, you should wait for a short while after charging to check the battery level indicator.
- Signal reception will become enabled again when the battery is recharged up to Level 2.
- Even after the battery drops to Level 4, watch operation will resume as soon as charging starts. However, you should wait until the battery reaches Level 2 before setting the time and date.

■ Start charging at Level 3!

Battery Level 3 indicates that remaining battery power is very low. Be sure to expose the watch to light for recharging as soon as possible after the battery level indicator shows Level 3.

■ Flashing Recovering Indicator

If you use the light or alarms a number of times during a short period, a Recovering indicator flashes on the display and the following operations become disabled as battery power recovers.

- Display illumination
- Alarm and hourly time signal
- Time calibration signal reception
- Analog timekeeping

Normal operation will return after the battery recovers.

Recovering Indicator

■ Charging Precautions

Avoid charging the watch in the following locations, and anywhere else the watch may become very hot.

- On the dashboard of an automobile parked in the sun
- Very close to an incandescent light source or other sources of heat
- In a location exposed to direct sunlight for long periods

Note that the display panel may become black under very high temperatures. This is temporary, and the display will appear normal again at lower temperatures.

⚠ Depending on the light source you are using, the case of the watch may become quite hot during charging. Take care to guard against burn injury after charging.

■ Charging the Battery

Point the solar panel (face) of the watch at a light source.

- Remember that even a partial blockage of the solar cell reduces charging efficiency.

Example: Positioning the watch

- The illustration shows the resin band model.

■ Charging Guide

Starting from a full charge, the watch should be able to continue operating for about five months without further charging under the conditions described below.

Daily Use (All time values are approximate.)
- Display Illumination: 1.5 seconds
- Alarms: 10 seconds
- Signal reception: 5 times
- Digital and analog timekeeping

Making sure the watch is regularly exposed to light ensures stable operation.

Required Daily Charging Time

- The following is the daily amount of charging required each day to support the operations under "Daily Use".

Environment (Luminosity)	Charging Time
Outdoor sunlight (50,000 lux)	5min.
Indoor sunlight (10,000 lux)	24min.
Outdoor overcast (5,000 lux)	48min.
Fluorescent indoor lighting (500 lux)	8hr.

- Charge Times Required to Advance to a Higher Level

Environment (Luminosity)	Charging Time Level 4 ➡ Level 3 ➡ Level 2 ➡ Level 1		
Outdoor sunlight (50,000 lux)	1 hr.	14hr.	4hr.
Indoor sunlight (10,000 lux)	3 hr.	71hr.	20hr.
Outdoor overcast (5,000 lux)	5 hr.	– – –	– – –
Fluorescent indoor lighting (500 lux)	49hr.	– – –	– – –

- Note that the above charging times are for reference only. Actual charging time depends on a variety of environmental factors.

Power Saving

The Power Saving feature of the watch is turned on at the factory.

- Power Saving causes the watch to automatically enter a sleep state to save power whenever the watch is left in the dark.
- Note that the watch may also enter the sleep state if the watch is blocked from light by your sleeve.

■ How the sleep state works

- **Display sleep state**
  The display sleep state is triggered whenever the watch is left in the dark for three or four days.
  - The display goes blank in the display sleep state.
    Alarms and the hourly time signal continue to operate normally while the watch is in the display sleep state.
    Even when the watch is in the sleep state, digital-analog time coordination and auto signal receive are both performed.
- **Function sleep state**
  The function sleep state is triggered whenever the watch is left in the dark for four days.
  - Alarms and the hourly time signal are also disabled while the watch is in the function sleep state.
    In the function sleep state, analog timekeeping is disabled, so digital-analog time coordination is not performed.
  - Digital timekeeping functions continue to operate normally in the function sleep state.

■ To recover from the sleep mode

Place the watch in an area that is well-lit, press any button, or angle the watch towards your face to illuminate the display using the Auto Light.

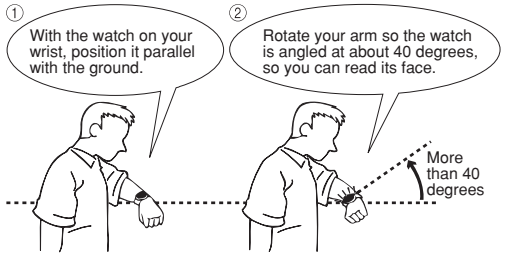
- It can take up to two seconds before the display re-appears after you place the watch in a well-lit area.

■ To turn power saving on and off

See the procedure under “To set the time and date manually” for information about turning off power saving.

Leaving the watch in a drawer or anywhere else it is dark can cause the power saving mode to trigger in order to conserve battery power.

■ Positioning Your Arm Correctly



- You should be wearing the watch **on the outside of your wrist** when using the auto light switch.
- Make sure that the left (9 o’clock) and right (3 o’clock) sides of the watch are within ±15 degrees of being level with the ground. The auto light switch may not operate properly if the angle is greater.

Important!

- The light may be difficult to see if you turn it on under bright sunlight.
- If you press the Ⓑ button or if an alarm operation starts while the display is illuminated, illumination will turn off.

Auto Light Precautions

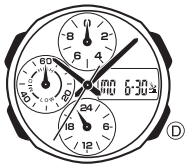
- Frequent use of the auto light can run down the battery.
- The auto light switch may cause the display to illuminate when your sleeve covers the display of the watch.
- The display may not illuminate immediately when you angle the watch towards your face. This does not indicate malfunction.
- The display remains lit for the specified display illumination duration (1.5 seconds or two seconds) only, even if you leave the watch angled towards your face.
- The display may illuminate unintentionally when you wear the watch on the inside of your wrist, when you shake your arm, or when you raise your arm. **Be sure to turn off the auto light switch whenever you do not need display illumination**.
- Keep the auto light switch turned off whenever you are wearing the watch on the inside of your wrist.
- Electro-static charge and magnetism can interfere with auto light operation and even make operation impossible. If this happens lower your arm to the starting position and then raise it again. If you still have trouble with display illumination, try lowering your arm down to your side and then raise it to your face for reading.

Display Illumination

An LED light is used to illuminate the display for easy reading in the dark. An auto light switch automatically illuminates the display when you angle the watch towards your face for reading.

Illuminating the Display Manually

In any mode, press the Ⓓ button to illuminate the display for about 1.5 or two seconds.



- The display does not illuminate if a setting screen (one with a flashing setting) is on the display.
- Pressing the Ⓓ button illuminates the display regardless of whether the auto light switch is on or off.
- You can specify how long the display remains illuminated using the procedure under “Specifying the Display Illumination Duration”.

You may hear a faint rattling sound when you move the watch around. This sound is caused by the movement of a metal bulb that controls operation of the auto light switch, and does not indicate malfunction.

Illuminating the Display with the Auto Light Switch

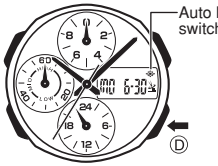
The full auto light switch automatically illuminates the display whenever you angle the watch towards your face for reading, but only when it is dark.

- The full auto light switch does not illuminate the display when surrounding light is bright. The light is very convenient when reading the current time and other data in the dark.

The auto light switch illuminates the display for the specified display illumination duration in all modes when the watch is angled towards the face.

Turning the Auto Light Switch On or Off

In any mode (except when a settings screen is on the display), hold down the Ⓓ button for about two seconds to toggle the auto light switch on (auto light switch on indicator displayed) and off (no indicator displayed).



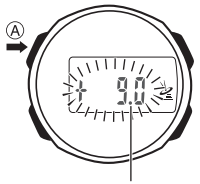
- When the auto light switch is on, holding down the Ⓛ button for about two seconds turns the auto light switch off (auto light switch indicator not displayed).

Specifying the Display Illumination Duration

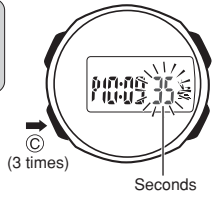
You can use the following procedure to specify either 1.5 seconds or two seconds for the display illumination duration.

1. **In the Timekeeping Mode, hold down the Ⓐ button for about two seconds until the currently selected time zone starts to flash on the display.**

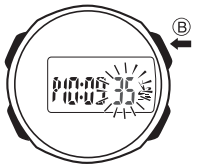
- The second hand moves to 12 o’clock at this time.



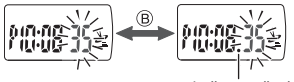
2. **Press the Ⓒ button three times so the seconds count is flashing on the display.**



3. **Press the Ⓑ button to toggle the display illumination duration setting between 1.5 seconds and two seconds.**



- Two seconds is selected when the ● indicator is on the display.
- 1.5 seconds is selected when the ● indicator is not on the display.



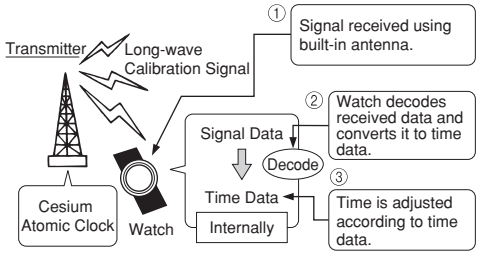
4. **When settings are the way you want, press the Ⓐ button.**

- This exits the setting screen.
- At this time, the second hand will adjust automatically to the digital time.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

How a Radio-controlled Watch Works

What is a radio-controlled watch?

Your radio-controlled watch is designed to receive a time calibration signal that contains standard time data and adjust its current time setting accordingly.



After the watch receives the time calibration signal, it performs internal calculations to determine the current time. Because of this, there may be an error of up to one second in the displayed time.

Calibration Signal

- The Japanese calibration signal (Call Sign: JJY) is maintained by the independent Japan Ministry of Posts and Telecommunications Communication Research Laboratory (CRL). It is a long wave signal transmitted 24 hours a day from the Mt. Otakadoya transmitter (40kHz) located in Tamura-gun, Fukushima Prefecture, and from the Mt. Hagane transmitter (60kHz) located on the border between Saga Prefecture and Fukuoka Prefecture.
- The U.S. calibration signal (Call Sign: WWVB) is transmitted by the National Institute of Standards and technology from Fort Collins, Colorado.

Though the calibration signal is normally transmitted 24 hours a day, transmission may be interrupted occasionally due to maintenance, lightening, etc.

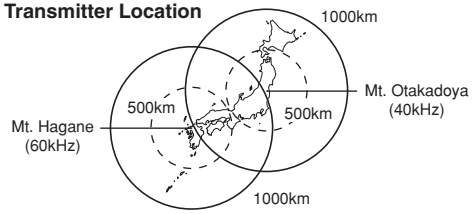
Reception Range

This watch is designed to receive the standard time calibration signal of Japan (JJY) or of the United States (WWVB). The signal that is received depends on the current time zone setting in the Timekeeping Mode.

- **For information about selecting a Time Zone, see "Setting the Time and Date Manually".**

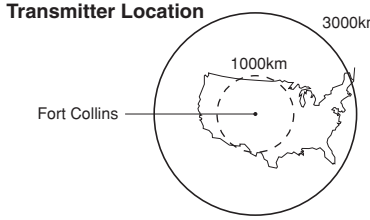
Time Zone	Transmitter
+9.0	Either the Mt. Otakadoya signal (40kHz) or the Mt. Hagane signal (60kHz)
–5.0, –6.0, –7.0, –8.0	Fort Collins, Colorado signal

Transmitter Location



- Under optimum conditions, the calibration signal should be receivable up to 1,000 kilometers from the transmitter. Note that the wave is relatively weak at distances greater than 500km, so reception may be poor at long distances.

Transmitter Location



- Under optimum conditions, the calibration signal should be receivable up to 3,000 kilometers from the transmitter. Note that the wave is relatively weak at distances greater than 1,000km, so reception may be poor at long distances.

- Geographic contours, nearby buildings, the season, the time of day, can even make reception impossible even when you are within range of the transmitter.
- Best reception is possible late at night.

Location

Reception is difficult and may even be impossible in the locations described below. Avoid such locations when performing signal reception.

- You should think of your watch operating like a radio or TV when it is receiving the calibration signal.

Among or near buildings

Near high-voltage lines

Inside a vehicle (automobile, train, plane, etc.)

Next to a household appliance or office equipment (TV, speaker, fax, PC, mobile phone, etc.)

In a location where there is radio interference (construction site, airport, etc.)

Near mountains

If you are experiencing problems with reception, move away from the types of locations described above to a location with better reception, and try again.

Receiving the Calibration Signal

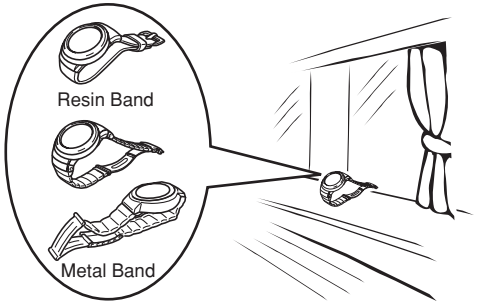
There are two methods you can use to receive the time calibration signal.

- Auto receive (Reception is performed automatically at midnight, 1:00, 2:00, 3:00, and 4:00 each morning.)
- Manual receive (You initiate reception using a button operation.)

- If reception is not successful for any of the normal auto receive times shown above, auto receive is performed one more time at 5:00 a.m.
- The watch is set up for auto reception at the factory, so all you need to do is to place it in a location that allows good reception each night.

■ Setting Up to Make Reception Easier

Remove it from your wrist and place the watch somewhere so its top (12 o'clock side, where the antenna is located) is facing approximately in the direction of the signal transmitter. Keep it away from metal objects.



- Orienting the watch so it is sideways to the transmitter makes it more difficult to receive the signal.
- Do not move the watch while it is receiving the calibration signal.

■ Time Required for Reception

Signal reception takes anywhere from about two to seven minutes.

- Note that when "**A**" is specified as the frequency selection mode, signal reception can take up to 14 minutes.
- See "Configuring Signal Reception Settings" for more information.

■ Triggering Reception Manually

In the Timekeeping Mode, hold down the Ⓑ button for about two seconds until the watch beeps.

- This indicates that manual receive has started. On going reception is indicated by the icon and the receive indicator.

Stopping Signal Reception

Press the Ⓑ button.

- All other buttons besides Ⓑ are disabled during signal reception.

When reception is successful

The watch terminates reception and adjusts the current time. Next it beeps and then displays the date and time the adjustment was performed.

- The icon on the display also indicates successful signal reception.
- Following successful reception, the analog hands adjust automatically to the digital time.

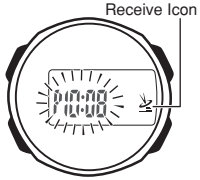
When reception fails

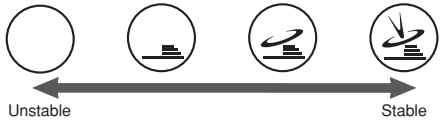
The watch does not adjust its current time setting, and displays "- - -" instead.

- The display also returns to the normal timekeeping screen automatically if you do not perform any operation for about one or two minutes.

■ Receive Icon

The receive icon cycles from "Unstable" through "Stable" as shown below while reception is in progress. How far it cycles depends on the signal strength. Keep the watch in a location where reception is stable when it is in progress.





- Even under optimum reception conditions, it can take about 10 seconds for reception to stabilize.

- Use the receive icon to check reception status and to determine the best location for signal reception.
- Note that weather, the time of day, surroundings, and other factors can all affect reception.

■ Analog Hands and Signal Reception

Second Hand

This hand moves to the 12 o'clock position when reception starts.

- It resumes normal movement after reception is complete.
- Pressing a button to stop reception causes the second hand to move to the seconds count as kept by the digital display and resume normal operation.

Hour and Minute Hand

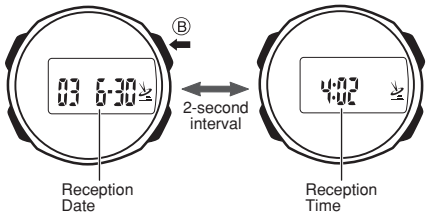
These hands continue to operate normally.

Note that the second hand does not move while signal reception is in progress.

■ Viewing the Last Reception Date and Time

In the Timekeeping Mode, press the Ⓑ button. This displays the date and time of the last successful signal reception.

- The display alternates between the reception date and reception time at two-second intervals.
- To return to the Timekeeping Mode, press the Ⓑ button again.
- The display also returns to the normal timekeeping screen automatically if you do not perform any operation for about one or two minutes.



Configuring Signal Reception Settings

Use the procedure below to turn auto calibration signal reception on and off. When **+9.0** (Tokyo) is selected as the time zone, you can select either of two different Japanese transmitters for reception.

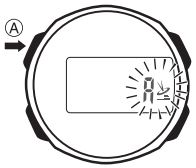
- **For information about selecting a Time Zone, see "Setting the Time and Date Manually".**
- The initial factory default settings of the watch are **+9.0** (Tokyo) for the time zone, and **A** (auto select) for the transmitter selection mode.
- You can perform the following procedure while the current time zone setting is **+9.0**, **–5.0**, **–6.0**, **–7.0** or **–8.0**.

1. **In the Timekeeping Mode, press the Ⓑ button to display the last reception date and time screen.**

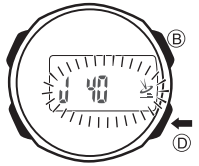
- The display will return to the normal timekeeping screen automatically if you do not perform any operation for about one or two minutes.

2. **Hold down the Ⓐ button for about two seconds until the indicator starts to flash.**

- This is the signal reception setting screen.



3. **Use the Ⓓ and Ⓑ buttons to cycle through the available signal reception settings.**



4. **After the setting is the way you want, press the Ⓐ button to exit the setting screen.**

- Press the Ⓑ button to return to the Timekeeping Mode.
- The display also will return to the normal timekeeping screen automatically if you do not perform any operation for about two or three minutes.

When the time zone setting is +9.0

- **A (AUTO)**
  Selecting this setting turns on auto receive and auto transmitter selection. The watch automatically selects either the Mt. Otakadoya signal (40kHz) or the Mt. Hagane signal (60kHz), whichever is strongest.
- **J 40**
  Selecting this setting turns on auto receive. The watch always receives the Mt. Otakadoya signal (40kHz).
- **J 60**
  Selecting this setting turns on auto receive. The watch always receives the Mt. Hagane signal (60kHz).
- **OFF**
  Selecting this setting turns off auto receive and auto transmitter selection.

When the time zone setting is –5.0, –6.0, –7.0, –8.0

- **W 60**
  Selecting this setting turns on auto receive. The watch always receives the Fort Collins, Colorado signal.
- **OFF**
  Selecting this setting turns off auto receive and auto transmitter selection.

Calibration Signal Reception Precautions

- Auto reception can be performed while the watch is in the Timekeeping Mode or Dual Time Mode only.
- Receipt of a calibration signal causes the digital time to be adjusted first, followed by adjustment of the analog time. In order to ensure correct ajustment of the analog time, be sure to match the analog time with the digital time before performing a signal receive operation.
- Note that analog timekeeping is not performed during signal reception, so the time indicated by the analog hands may be wrong.
- Operating any button while auto reception is in progress will cause the watch to beep and then exit the receive operation.
- Make sure you are within the range of the calibration signal transmitter before performing the reception operation. Remember that geographic contours, nearby buildings, the season, the time of day, can make reception impossible even when you are within range of the transmitter.
- Proper reception may be impossible if there is something blocking the signal. If reception is unsuccessful, try again.
- This watch is designed to adjust its current time setting in accordance with the calibration signal transmitted in Japan and the United States only. Note that you will need to make your own adjustments when using this watch outside of Japan or the United States, or in any area that is outside the range of one of the receivable time calibration signal transmitters.
- When the watch is unable to adjust its time signal using the calibration signal for some reason, timekeeping accuracy is within ±15 seconds per month.
- Strong electrostatic charge can cause timekeeping error.
- Signal reception is canceled if an alarm starts to sound while it is being performed.
- The watch's calendar shows dates up to the year 2099. Attempting a receive operation after that causes an error.

Troubleshooting

Cannot perform manual reception.

Cause:
- Manual receive can be performed in the Timekeeping Mode only.
- Manual reception can be performed only while the current time zone setting is **+9.0**, **–5.0**, **–6.0**, **–7.0** or **–8.0**.

Corrective Measures:
- Perform manual receive in the Timekeeping Mode.
- Change the time zone setting to **+9.0**, **–5.0**, **–6.0**, **–7.0** or **–8.0**. For information about selecting a time zone, see "Setting the Time and Date Manually".

The icon is not on the display even though auto signal reception is turned on.

Cause:
- The icon appears after the watch successfully receives the calibration signal and adjusts the current time setting.
- A single receive operation was not successful.
- The watch is not in the Timekeeping Mode or Dual Time Mode when an auto receive time is reached.
- You performed manual reception, which clears the icon from the display.

Corrective Measures:
- Check to make sure the watch is in a location where it can receive the signal.
- Place the watch in a location where reception conditions are good.
- Make sure that the watch is in the Timekeeping Mode or Dual Time Mode during the auto receive times.

Time setting is incorrect following signal reception.

Cause:
- Summer time is turned on or the wrong time zone is selected.

Corrective Measures:
- If the time is advanced by one hour, it probably means that summer time (indicated by the DST indicator on the display) is turned on. If the time is off by more than one hour, it probably means that the wrong time zone is selected. Use the procedure under "Setting the Time and Date Manually" to correct the applicable setting.

Cannot configure signal reception settings.

Cause:
- Signal reception settings can be configured only while the current time zone setting is **+9.0**, **–5.0**, **–6.0**, **–7.0** or **–8.0**.

Corrective Measures:
- Change the time zone setting to **+9.0**, **–5.0**, **–6.0**, **–7.0** or **–8.0**. For information about selecting a time zone, see "Setting the Time and Date Manually".

- If you cannot receive the calibration signal or if the current time setting is incorrect after signal reception, check the current setup of the watch.
  - The following are the watch's factory default settings, which are configured automatically whenever you have the battery of the watch replaced.

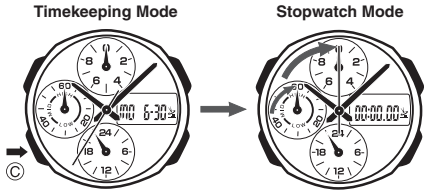
Transmitter	A	Auto Japan transmitter select (40kHz/ 60kHz)
Time Zone	9.0	Tokyo (Japan) time zone
Summer Time	DST A	Auto switching (according to signal data)

Using the Stopwatch

The stopwatch measures elapsed time in units of 1/100 second up to 59 minutes, 59.99 seconds (60 minutes). When the maximum limit is reached, the elapsed time automatically returns to zero and timing continues from there. Performing a lap/split operation automatically stores lap/split times in memory (up to 50 records). A simple operation lets you recall lap/split time records when you need them.

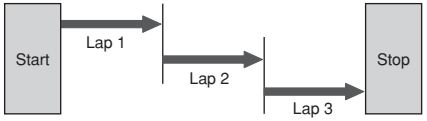
Entering the Stopwatch Mode causes the hands used for stopwatch timing to move automatically to the 12 o'clock position.

- If a stopwatch timing operation is in progress when you enter the Stopwatch Mode, the hands will move to the current elapsed time.



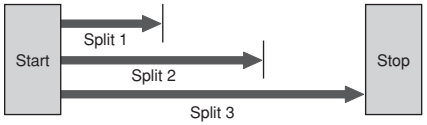
Lap Times
A lap time is the time that elapses during a specific portion of the race, such as a lap around a track.

Example: Measuring the lap time for one lap of a track event, car race, etc.



Split Times
A split time is the time elapsed from the start, up to any point along the course of the race.

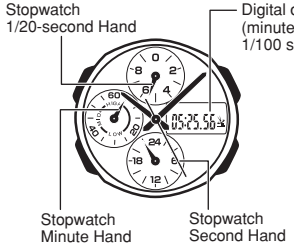
Example: Measuring splits every 10 kilometers



How Hands Operate in the Stopwatch Mode

In the Stopwatch Mode, elapsed time is indicated both by the digital display and by the hands of the watch. Resetting the stopwatch to zero causes the hands to return to the 12 o'clock position.

- In the Stopwatch Mode, the second hand indicates elapsed seconds, while the battery indicator indicates elapsed minutes.
- When you start an elapsed time operation in the Stopwatch Mode and when you exit or enter the Stopwatch Mode while an elapsed time operation is in progress, the stopwatch 1/20-second hand rotates for one minute. After that it stops at the 12 o'clock position. Stopping the elapsed time operation causes the hand to move to the current 1/20-second position.

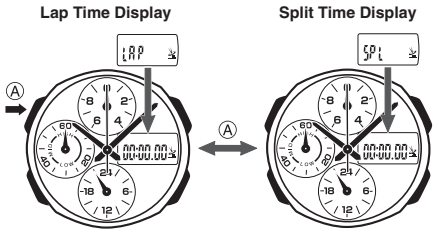


Selecting Lap or Split Time Display for a Stopwatch Elapsed Time Operation

Before starting an elapsed time operation in the Stopwatch Mode, you should select display of either lap times or split times.

While the Stopwatch Mode screen shows all zeros, press the Ⓐ button to toggle between the lap time ("LAP" indicator appears) and split time ("SPL" indicator appears) displays.

- Regardless of whether you select display of lap times or split times, both are stored in lap/split time memory during the elapsed time operation.



Performing Stopwatch Operations

Start
Press the Ⓑ button.

- This starts the elapsed time operation.
- Starting a new elapsed time operation from zero deletes all lap and split time data currently in lap/split time memory.

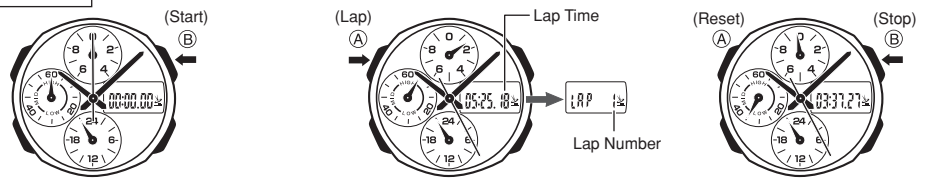
Lap/Split Time Recording
Press the Ⓐ button.

- This freezes the current time on the digital display for five seconds, and stores it in lap/split time memory. Elapsed time measurement continues internally at this time.
- Though the digital time freezes, the stopwatch hands continue to move.

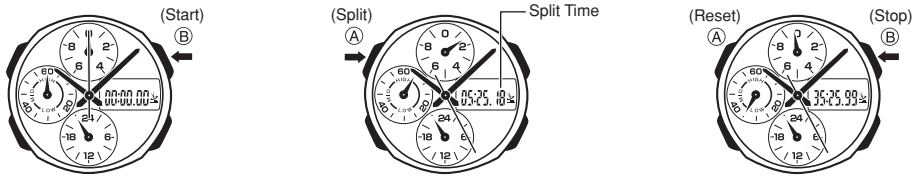
Stop
Press the Ⓑ button.

- This stops the elapsed time operation.
- Pressing the Ⓐ button while timing is stopped resets the stopwatch. Resetting the stopwatch stores the final elapsed time that is on the display to lap/split time memory.

Lap Time Display



Split Time Display



■ Elapse Time Measurement

Ⓑ → Ⓑ → Ⓐ
Start Stop Reset

Cumulative Time Measurement
Pressing the Ⓑ button to restart the stopwatch without resetting it to all zeros resumes elapsed time measurement from where it was last stopped.

■ Recording Lap/Split Times

Ⓑ → Ⓐ → Ⓐ ⋯ Ⓑ → Ⓐ
Start Lap/Split Lap/Split Stop Reset

■ Recording the Times of 1st and 2nd Place Finishers (Split Time Display)

Ⓑ → Ⓐ → Ⓑ → Ⓐ
Start — 1st finisher (Displays time of 1st finisher.) — 2nd finisher (Displays time of 2nd finisher.) — Reset

Lap/Split Time Memory

You can store up to 50 lap/split times in memory. Performing a lap/split time operation when there are already 50 records in memory automatically deletes the oldest record to make room for the new times.

Viewing Lap/Split Time Memory Contents

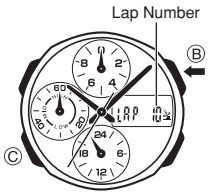
Use the following procedure to recall lap/split time memory contents.

1. Use the Ⓒ button to enter the Recall Mode

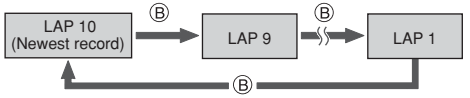
- This displays the last (newest) lap/split time that you recorded.

2. Use the Ⓑ button to scroll through lap/split time record numbers.

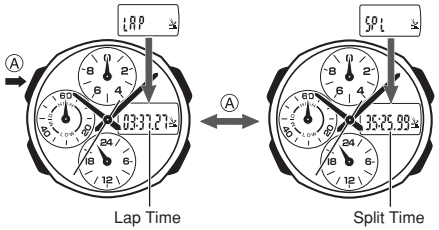
- Each press of the Ⓑ button advances to the next older record.
- Holding down the Ⓑ button scrolls through records at high speed.
- When you stop at a record, its lap time or split time will appear in place of the record number after a few moments.



Example: When there are 10 lap/split time records in memory



3. **While any record is displayed, you can press the Ⓐ button to toggle between the lap time and split time displays.**



Clearing Lap/Split Time Memory Records

- Starting a new elapsed time operation from zero deletes all lap and split time data currently in lap/split time memory.
- You can also manually clear lap/split time memory by holding down the Ⓐ and Ⓑ buttons at the same time for about two seconds.
  - "**LAP - -** " appears on the screen after lap/split time memory is cleared.
  - Note that you cannot delete individual lap/split time memory records.

Dual Time Mode

The Dual Time Mode provides you with easy access to the current time in any one of 29 times zones around the globe.

- When you enter the Dual Time Mode, the screen for the time zone that was displayed when you last exited the mode appears first.
- The seconds count in the Dual Time Mode is linked with the Timekeeping Mode seconds count.
- Dual Time mode times are displayed in the same format (12-hour or 24-hour) that you selected in the Timekeeping Mode.

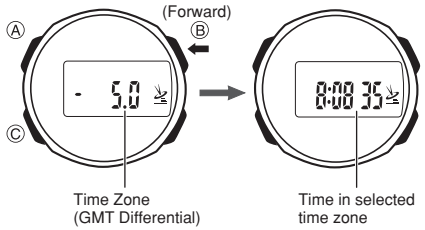
Important!
If a Dual Time Mode time is incorrect, check the time setting and time zone setting of the Timekeeping Mode, and correct them if necessary.

- **For information about selecting a Time Zone and setting the time, see "Setting the Time and Date Manually".**

Time Zone Search

In the Dual Time Mode, press the Ⓑ button to scroll through time zones.

- If you stop at a time zone, the current time will appear in place of the time differential after a few moments.
- Holding down the Ⓑ button scrolls through time zones at high speed.
- The colon between the hour and minute digits flash in the Dual Time Mode.
- Pressing the Ⓐ button in the Dual Time Mode displays the time differential of the currently selected time zone for about one second.



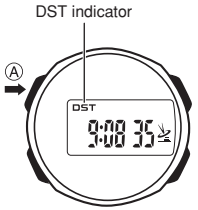
Using Summer Time (DST)

Summer time, or Daylight Saving Time (DST) as it is called in some countries, calls for setting clocks ahead one hour during the summer season. Note that the use of summer time depends on the country and even the local area.

Turning Summer Time On and Off

1. **In the Dual Time Mode, use the Ⓑ button to display the time zone whose summer time setting you want to change.**

2. **Hold down the Ⓐ button for about two seconds to toggle summer time on or off.**



- The "DST" indicator appears on the display and timekeeping in the selected time zone is advanced by one how when summer time is turned on.
- You can turn summer time on or off independently for each Dual Time Mode time zone. Note, however, that you cannot turn on summer time for the "**G0.0**" (Greenwich Mean Time) time zone.

Time Zone List

Time Zone	Cities	Time Zone	Cities
+12.0	Wellington, Christchurch	+1.0	Paris, Rome, Madrid, Frankfurt
+11.0	Noumea, Port Vila		
+10.0	Sydney, Guam	+0.0	London, Dublin
+9.5	Adelaide	G 0.0	Greenwich Mean Time
+9.0	Tokyo, Seoul, Pyongyang	–1.0	Azores
		–2.0	
+8.0	Hong Kong, Singapore, Kuala Lumpur, Beijing, Taipei, Manila	–3.0	Rio de Janeiro, Sao Paulo, Buenos Aries
		–4.0	Caracas, San Diego
+7.0	Bangkok, Jakarta, Hanoi	–5.0	New York, Montreal, Miami, Boston
+6.5	Yangon		
+6.0	Dakar	–6.0	Chicago, Houston, Mexico City
+5.5	Delhi		
+5.0	Karachi	–7.0	Denver, El Paso, Edmonton
+4.5	Kabul		
+4.0	Dubai, Qatar	–8.0	Los Angeles, San Francisco, Las Vegas
+3.5	Teheran		
+3.0	Jeddah, Kuwait, Moscow	–9.0	Anchorage, Nome
+2.0	Athens, Cairo, El Salaam, Helsinki, Beirut	–10.0	Honolulu, Papeete
		–11.0	Pago Pago

- The contents of the above table are current as of June 2003.
- Time zones in the above table are in accordance with Universal Time Coordinated (UTC).

Alarm Mode

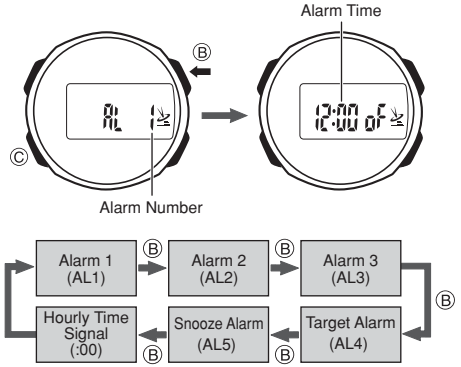
Using the Alarms

You can set up to five independent daily alarms. An alarm sounds for 10 seconds when an alarm time is reached.

■ To view the alarm time or target alarm time

In the Alarm Mode, press the Ⓑ button to cycle through the alarm screens in the sequence shown below.

- The alarm number appears first, followed by the current alarm time setting.

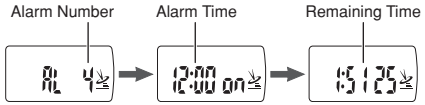


Types of Alarms

- **Daily Alarms (AL 1, AL 2, AL 3)**
  The watch beeps for 10 seconds when the alarm time is reached.
- **Target Alarm (AL 4)**
  With a target alarm, the time remaining until the alarm time counts down on the display. The watch beeps for 10 seconds when the alarm time is reached.
- **Snooze Alarm (AL 5)**
  With the snooze alarm, the watch beeps for 10 seconds when the alarm time is reached, and up to seven times at five-minute intervals thereafter. Pressing any button stops the beeper, but the alarm will sound again after five minutes.

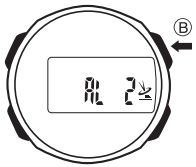
About the Target Alarm Time Screen

When your turn on the target alarm (AL 4), the display shows the alarm time momentarily and changes to show how much time remains until the target alarm time.



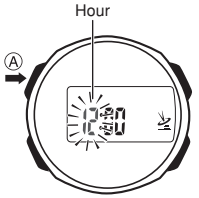
■ To set an alarm time

1. **In the Alarm Mode, use the Ⓑ button to scroll through the alarm screens (AL1 to AL5) until the one you want is displayed.**



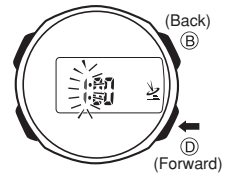
2. **Hold down the Ⓐ button for about two seconds until the hour digits of the alarm time start to flash.**

- This is the setting screen. At this time the displayed alarm turns on automatically. If you have the snooze alarm displayed (AL 5), the snooze indicator (SNZ) also appears at this time.

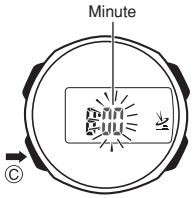


3. **Use the Ⓓ (+) and Ⓑ (–) buttons to change the hour setting.**

- Holding down either button scrolls the setting at high speed.
- When setting the hour, make sure you specify AM (no indicator) or PM (P) correctly when using 12-hour timekeeping, or that you specify the correct 24-hour time.
- Alarm mode times are displayed in the same format (12-hour or 24-hour) that you selected in the Timekeeping Mode.

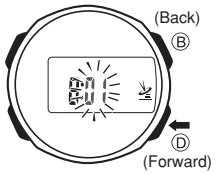


4. **Press the Ⓒ button so the minute setting flashes.**



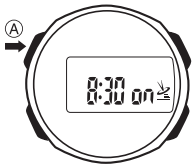
5. **Use the Ⓓ (+) and Ⓑ (–) buttons to change the minute setting.**

- Holding down either button scrolls the setting at high speed.



6. **When setting is the way you want, press the Ⓐ button.**

- This exits the setting screen.
- The alarm you set is turned on automatically whenever you change its settings.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

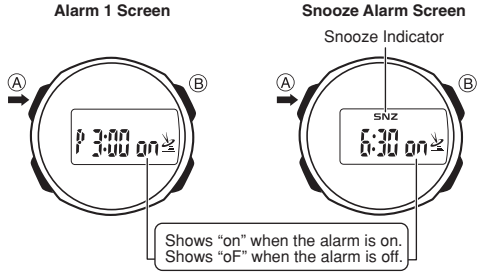


■ To turn an alarm on or off

1. **In the Alarm Mode, use the Ⓑ button to display the screen for the alarm (AL 1 through AL 5) you want to turn on or off.**

2. **Press the Ⓐ button to toggle the displayed alarm on or off.**

- Turning on an alarm also causes its “on” indicator to appear. The snooze alarm screen also has a snooze indicator (SNZ).



- Note that the “on” and “oF” indicators appear in the Alarm Mode only. The snooze indicator (SNZ) remains on the display in all modes.

■ Stopping the Alarm Beeper

Pressing any button while the beeper is sounding stops it.

- In the case of the snooze alarm the alarm will sound again in about five minutes. The snooze indicator flashes while the snooze alarm is active (indicating that the alarm will sound again).
- The snooze alarm will be canceled automatically when any of the following occurs while the SNZ indicator is flashing on the display.
  - If you turn off the snooze alarm in the Alarm Mode
  - If you enter the Alarm Mode, display the snooze alarm screen, and then display the setting screen.
  - If you enter the Timekeeping Mode and then display the setting screen.

■ To test the alarm

In the Alarm Mode, hold down the Ⓑ button to sound the alarm.

Using the Hourly Time Signal

The hourly time signal causes the watch to beep every hour on the hour.

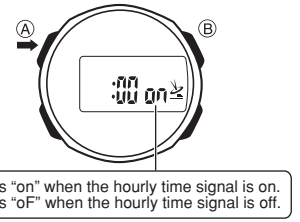
■ To turn the hourly time signal on and off

1. **In the Alarm Mode, use the Ⓑ button to display the screen for the hourly time signal (SIG:00).**

2. **Press the Ⓐ button to toggle the hourly time signal on or off.**

- Turning on a the hourly time signal causes its “on” indicator to appear.

Hourly Time Signal Screen



- Note that the “on” and “oF” indicators appear in the Alarm Mode only.

Setting the Time and Date Manually

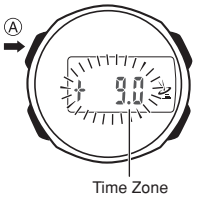
You can use the following procedure to set the current time and date of the time zone that you currently have selected in the Timekeeping Mode.

- Always use the Timekeeping Mode to set and adjust the current time and date settings.

If you are planning to manually change both the digital and analog settings, be sure to adjust the digital setting first.

To set the time and date manually

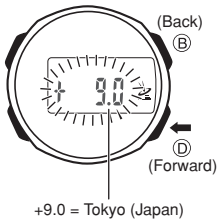
1. **In the Timekeeping Mode, hold down the Ⓐ button for about two seconds until the currently selected time zone starts to flash on the display.**



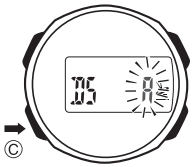
- This is the setting screen.
- The second hand moves to 12 o'clock at this time.

2. **Use the Ⓓ (+) and Ⓑ (–) buttons to scroll through the time zones until the one whose time you want to set is displayed.**

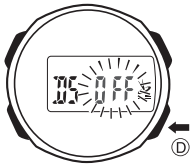
- **See the "Time Zone List" for more information about time zones.**
- Holding down either button scrolls the setting at high speed.



3. **Press the Ⓒ button so the summer time setting is displayed.**



4. **Press the Ⓓ button to cycle through the summer time settings until the one you want is displayed.**



- **DS A**

This setting enables the auto summer time setting, which turns summer time on or off in accordance with the received time calibration signal.

- When this setting is selected the watch automatically adjusts its time in accordance with Japanese summer time when the time zone is **+9.0**, or with U.S. Daylight Saving Time when the time zone is **–5.0**, **–6.0**, **–7.0**, or **–8.0**.

- **DS OFF**

This setting turns off summer time, and displays the current time normally.

- **DS On**

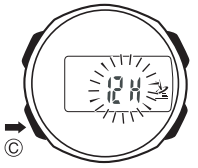
This setting turns on summer time.

- Selecting this setting displays the DST indicator, and advances the current time setting by one hour.

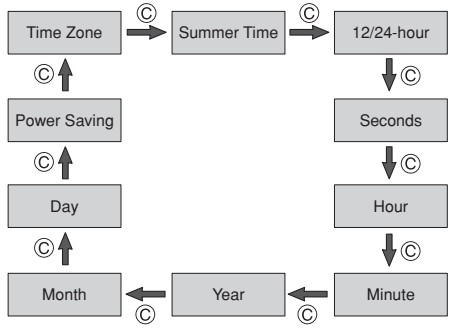
- Note that pressing the Ⓓ button in the above step while any time zone other than **+9.0**, **–5.0**, **–6.0**, **–7.0**, or **–8.0** will simply toggle the summer time setting between **DS OFF** and **DS On**.

5.

a. **Press the Ⓒ button to display the time and date setting.**



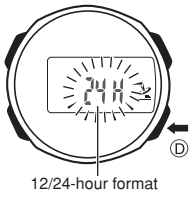
- Use the Ⓒ button to cycle through the time and date settings shown below. Each press of the Ⓒ button causes the applicable setting to flash.



b. **Use the Ⓓ and Ⓑ buttons to change the currently selected setting.**

To select 12/24-hour timekeeping

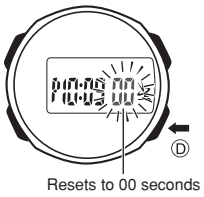
While the 12/24-hour setting is selected, press the Ⓓ button to toggle the timekeeping format between 12-hour ("12H" indicator) and 24-hour ("24H" indicator).



To reset the seconds to 00

While the seconds are selected, press the Ⓓ button to reset them to 00 in accordance with the time signal on the radio, TV, etc.

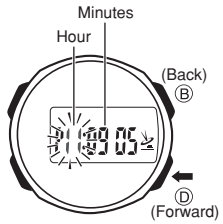
- Pressing the Ⓓ button while the seconds count is in the range of 30 to 59 resets it to 00 and also adds 1 to the minutes. Pressing the Ⓓ button in the range of 00 to 29 resets the seconds count without changing the minutes.



To change the hour, minutes, year, month, or day setting

Press the Ⓓ button to increase the selected setting or the Ⓑ button to decrease it.

- Holding down either button scrolls the setting at high speed.
- When setting the hour, make sure you specify AM (no indicator) or PM (P) correctly when using 12-hour timekeeping, or that you specify the correct 24-hour time.
- You can set a year in the range of 00 (2000) to 99 (2099). The day of the week is set automatically in accordance with the date you set.

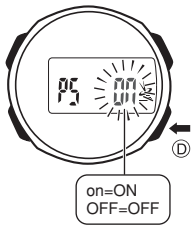


- The watch automatically makes adjustments for leap years and month lengths.

To turn Power Saving On and Off

While the Power Saving setting is selected, press the Ⓓ button to toggle it ON and OFF.

- Turning on Power Saving causes the Power Saving indicator to appear on the setting screen.



6. **When setting is the way you want, press the Ⓐ button.**

- This exits the setting screen.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

Digital-Analog Synchronization

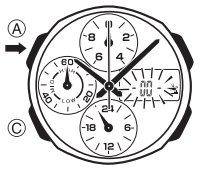
The watch automatically adjusts its analog setting to match the current digital time setting.

- When adjusting the analog time, the hands may move clockwise or counterclockwise.
- Depending on how many hours different the digital and analog time settings are, it may take some time for the analog hand setting procedure to be finished.
- After adjustment of the hour and minute hand, the second hand will adjust automatically to the digital time.

Manually Setting the Analog Time

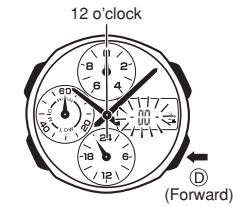
You can use the Hand Setting Mode to manually adjust the analog time when it does not match the digital time.

1. **Use the Ⓒ button to enter the Hand Setting Mode.**



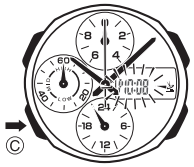
2. **Hold down the Ⓐ button for about two seconds until the second hand stops at the 12 o'clock position and "- 00 -" flashes on the digital display.**

3. **If the second hand does not align with the 12 o'clock position by itself, use the Ⓓ button to adjust it.**



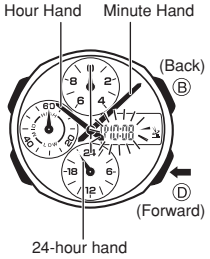
- Each press of the Ⓓ button advances the second hand by one second.
- Holding down the Ⓓ button advances the second hand at high speed.

4. **Press the Ⓒ button to move the flashing between the hour and minute settings.**



5. **Use the Ⓓ (+) and Ⓑ (–) buttons to adjust the hour and minute hands.**

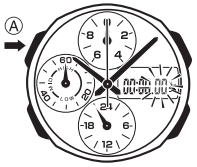
- Each press of the Ⓓ button moves the hands 20 seconds clockwise, while the Ⓑ button moves them 20 seconds counterclockwise.
- Holding down either button moves the hand at high speed.
- Note that the 24-hour hand moves in accordance with movement of the hour and minute hands. One full rotation of the 24-hand is 24 hours. When setting the hour and minute hands, make sure that you also keep an eye on the 24-hour hand to make sure that you set the analog time so it correctly matches the am/pm time on the digital display.



High-speed Lock

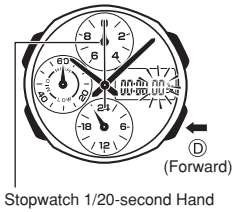
- While holding down the Ⓓ button to start high-speed clockwise movement of the hands, press the Ⓑ button to lock the high-speed movement.
- While holding down the Ⓑ button to start high-speed counterclockwise movement of the hands, press the Ⓓ button to lock the high-speed movement.
- High-speed movement of the hands will continue until it completes a 12-hour cycle, or until you press any button to stop it.

6. **Press the Ⓐ button to select the stopwatch 1/20-second hand for adjustment.**

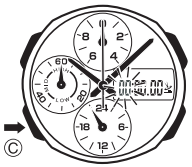


7. **If the 1/20-second hand is not aligned with the 12 o'clock position, use the Ⓓ button to adjust it.**

- Each press of the Ⓓ button advances the 1/20-second hand by one step.
- Holding down the Ⓓ button advances the hand at high speed.

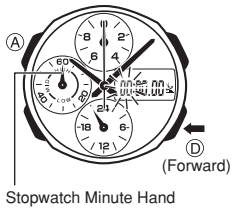


8. **Press the Ⓒ button to advance to setting of the stopwatch minute hand for adjustment.**



9. **If the stopwatch minute hand is not aligned with the 12 o'clock position, use the Ⓓ button to adjust it.**

- Each press of the Ⓓ button advances the stopwatch minute hand by one step.
- Holding down the Ⓓ button advances the hand at high speed.



10. **When all the settings are the way you want, press the Ⓐ button.**

- This exits the setting screen and automatically synchronizes the minute hand with the current seconds count.
- At this time, the second hand will adjust automatically to the digital time.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.