Operation Guide 3040

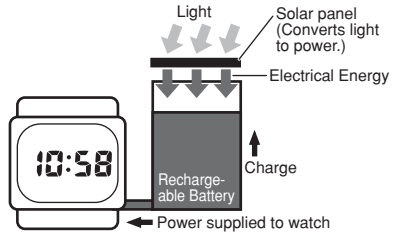
CASIO

Keep your watch exposed to light!

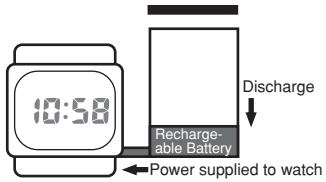
Your watch runs on electrical power generated from light and stored by a rechargeable battery.
To ensure stable operation, make sure that the watch is exposed to light as much as possible.

How the solar panel and battery work

When exposed to light



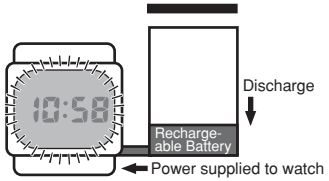
When not exposed to light



Your watch continues to operate, even when it is not exposed to light. Leaving the watch in the dark can run down its battery and cause functions to become disabled.

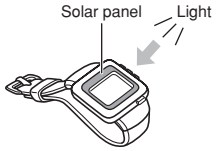
Avoid overuse of display illumination

Over use of display illumination can run down the battery.



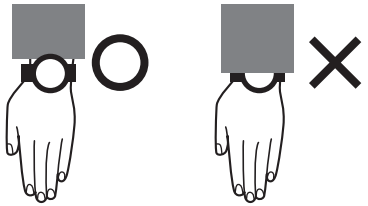
Tips on how to keep the battery charged

- Watch functions are disabled as remaining battery power drops. To ensure normal watch operation, be sure to expose the watch to light as much as possible.
- Whenever you are not wearing the watch on your wrist, position it so the face (solar panel) is pointed in the direction of a source of bright light.



Leave the watch under fluorescent lighting, near a window, etc.

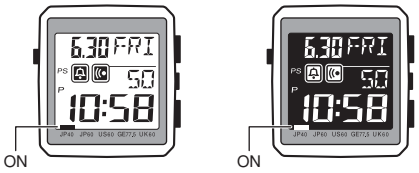
- When wearing the watch, try to keep your sleeve from blocking its face (solar panel).



Charging efficiency is significantly reduced even if the face of the watch is only partially covered by your sleeve.

Display

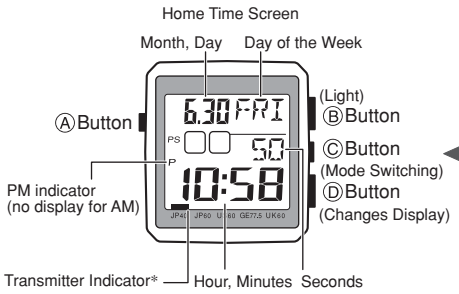
All of the illustrations in this manual show a Type A display (dark figures on a light background).
The Type B display has light colored figures on a dark background.



Modes and Indicators

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

Timekeeping Mode



Switching between Display Screens

Each press of the Ⓓ button switches the display between the home time screen and the dual time screen.

Dual Time

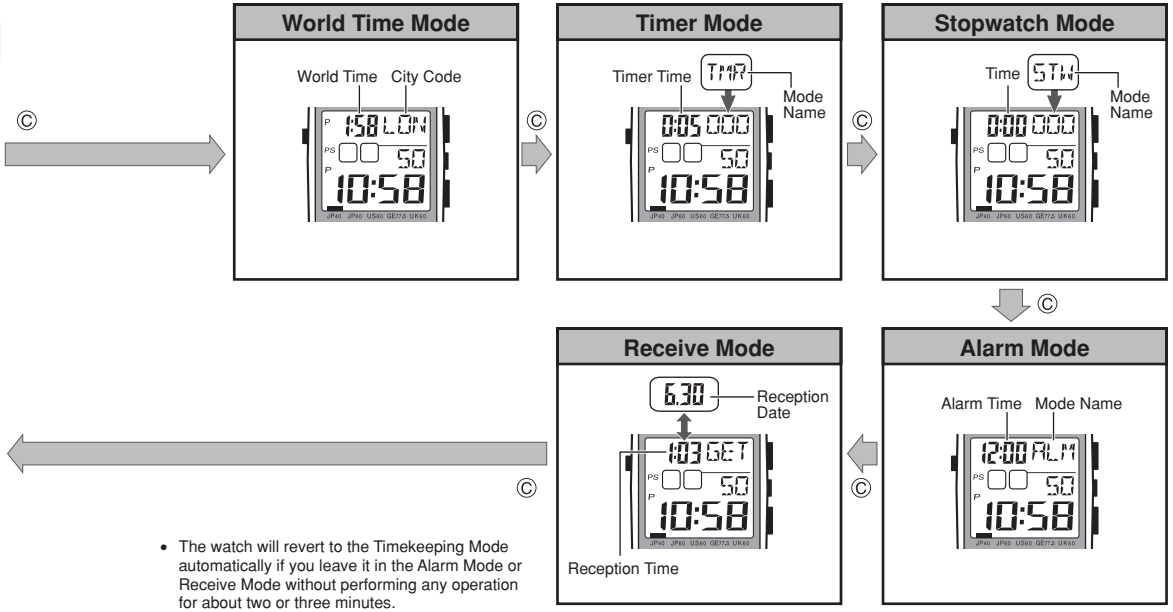
Dual time lets you view the current time in your Home City and in one more time zone (Secondary City).

- A simple operation lets you make the current Secondary City Zone your Home City, and your current Home City the Secondary City. See “Using Dual Time”.

Days of the Week

SUN : Sunday	MON : Monday
TUE : Tuesday	WED : Wednesday
THU : Thursday	F R I : Friday
SAT : Saturday	

- See “Transmitter Indicator” for more information about the transmitter indicator.



- The watch will revert to the Timekeeping Mode automatically if you leave it in the Alarm Mode or Receive Mode without performing any operation for about two or three minutes.

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Power Supply

The power supply of this watch uses a solar panel to generate electrical power, which is stored by a rechargeable battery. Using or storing the watch where it is not exposed to light regularly 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 go dead.

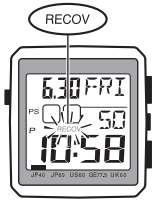
Flashing RECOV Indicator

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

- Illumination
- Alarm and hourly time signal
- Time up beeper
- Time calibration signal reception

Normal operation will return after the battery recovers.

Recover Indicator



Low Battery Indication

When rechargeable battery power goes low, the watch will start to disable some of its functions and "LOW" will flash on the display in the Timekeeping Mode. If the dual time screen is displayed, the screen will change automatically to the home time screen.
If you continue using the watch without charging the battery, more functions will become disabled and "CHG" will start to flash on the display. Be sure to recharge the battery by exposing the watch to light as soon as possible at the first sign of low battery power. Frequent flashing of the RECOV indicator also means that the battery is low. Expose the watch to light to charge the battery.

Display Indication	Disabled Functions
Timekeeping Mode 	Display illumination, alarms, hourly time signal, time up beeper, and other alerts, and time calibration signal reception.
	Display, display illumination, alarms, hourly time signal, time up beeper, and other alerts, and time calibration signal reception.

- When the rechargeable battery goes completely dead, the display will go blank and timekeeping will stop. These functions will be restored when the battery is recharged.
- When you start to recharge the battery after it does dead, "CHG" will start flashing on the display. However, watch functions will not yet be re-enabled at this time. Keep the watch exposed to light until the flashing "CHG" indicator disappears from the display.

Charging Precautions

Avoid charging the watch in the following locations, and anywhere else where 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.

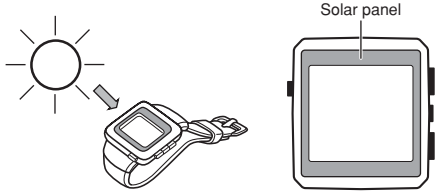
⚠ Depending on the light source you are using, the case of the watch may become quite hot during charging. Take care to guard against burn injury after charging.

■ To charge the battery

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

- Remember that even a partial blockage of the solar panel 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 eight months without further charging under the example conditions described below.

Example of Daily Use

- Illumination: 1.5 seconds/day
- Alarm: 10 seconds/day
- Signal Reception: 10 minutes/day
- Digital Display: 18 hours/day

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

Required Daily Charging Time

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

Exposure Level (Brightness)	Approximate Exposure Time
Outdoor Sunlight (50,000 lux)	8 minutes
Sunlight through a Window (10,000 lux)	30 minutes
Overcast Daylight through a Window (5,000 lux)	48 minutes
Indoor Fluorescent Lighting (500 lux)	8 hours

- **Charge Times Required to Charge the Battery**

Exposure Level (Brightness)	Approximate Exposure Time: Charge Indicator Off ➡ Full Charge
Outdoor Sunlight (50,000 lux)	2 hours → 38 hours
Sunlight through a Window (10,000 lux)	5 hours → 141 hours
Overcast Daylight through a Window (5,000 lux)	8 hours → 229 hours
Indoor Fluorescent Lighting (500 lux)	83 hours → – – –

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

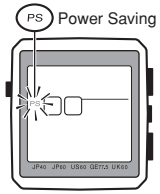
Power Saving

Power Saving causes the watch to enter a sleep state automatically in order to save power whenever it is left in the dark. The Power Saving feature of the watch is turned on at the factory.

- 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 about one hour between the hours of 10 p.m. and 6 a.m.
  - The display sleep state causes the display to go blank, except for a flashing Power Saving indicator. Alarms and the hourly time signal continue to operate normally while the watch is in the display sleep state.
  - The watch does not enter the sleep state if it is in the Timer Mode or Stopwatch Mode.



- **Function sleep state**
  The function sleep state is triggered whenever the watch is left in the dark for six or seven days.
  - The Power Saving indicator stops flashing and remains on the display, and the following functions are disabled. Alarms and the hourly time signal are also disabled while the watch is in the function sleep state.
    Time calibration signal reception is not performed while the watch is in the function sleep state.
    - Digital timekeeping functions continue to operate normally.

■ To recover from the sleep state

Move the watch to a brightly lit location or press any button.

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

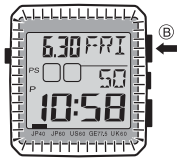
■ To turn Power Saving on and off

See the procedure under "To configure Home City settings" for information about turning off Power Saving.

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

Illumination

In any mode (except when a setting screen is on the display), press the Ⓑ button to illuminate the display for easy reading in the dark.



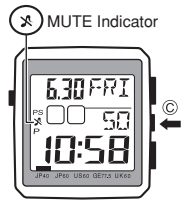
- Illumination may be difficult to see under bright sunlight.
- Illumination turns off automatically if an operation tone or alarm sounds.
- Illumination will not turn on while manual receive is in progress.
- You may notice a slight sound from the watch while illumination is turned on. This is the sound of EL panel vibration and does not indicate malfunction.

Operation Tone

The tone that sounds to signal a mode change or other operation can be turned on and off.

■ To turn the operation tone on or off

When any screen besides a setting screen (one with a flashing setting) is on the display, hold down the Ⓒ button for about three seconds.

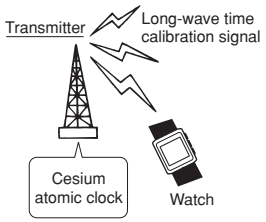


- This will cause the operation tone to sound and then toggle the operation tone on or off.
- A MUTE indicator is on the display while the operation tone is off.
- Holding down the Ⓒ button also changes the watch's current mode.
- The alarm, hourly time signal, and timer time up beeper continue to sound, even when the operation tone is turned off.

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 National Institute of Information and Communications Technology (NICT). It is transmitted 24 hours a day from the Mt. Otakadoya transmitter (40 kHz) located in Tamura-gun, Fukushima Prefecture, and from the Mt. Hagane transmitter (60 kHz) 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 (NIST) from Fort Collins, Colorado.
- The U.K. calibration signal (Call Sign: MSF) is transmitted by the National Physical Laboratory (NPL) from Rugby, Warwickshire.
- The German calibration signal (Call Sign: DCF77) is transmitted by Physikalisch - Technische Bundesanstalt (PTB) from Mainflingen.

The time data of the Japanese calibration signal (Call Sign: JJY) is maintained by the Japan Standard Time Group of the National Institute of Information and Communications Technology (NICT). Note that transmission of the standard wave may be interrupted occasionally due to maintenance, lightning, etc. For more information, visit the website of the Japan Standard Time Group of the National Institute of Information and Communications Technology (NICT) at the following URL.

http://jjy.nict.go.jp

- Note that the above URL is subject to change.

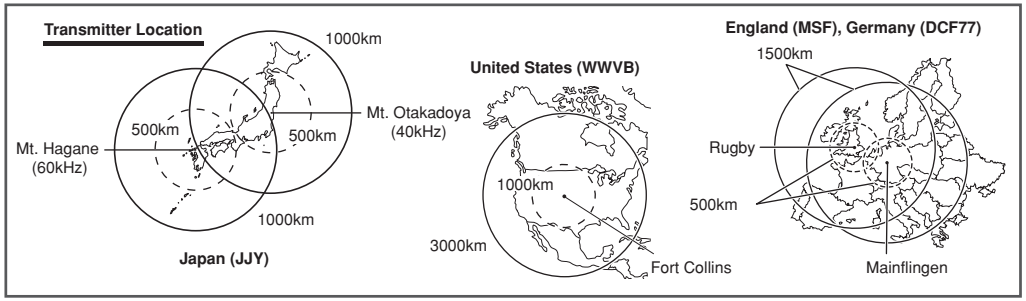
Reception Ranges

The table below shows the time calibration signal that the watch receives when a particular city code is selected as your Home City.

- **For information about selecting a Home City, see "To configure Home City settings". See the "City Code List" for more information.**

Home City (Supports signal reception)	Receivable Transmitter
TYO, SEL, TPE, BJS, HKG	Japanese (JJY) time calibration signal
HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, YYT	United States (WWVB) time calibration signal
LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW	English (MSF) and German (DCF77) time calibration signal

- The BJS (Beijing), HKG (Hong Kong), HNL (Honolulu), ANC (Anchorage), and MOW (Moscow) city codes also support time calibration signal reception. Reception from the applicable locations is possible under favorable conditions.



- Certain conditions can make reception impossible even when the watch is within one of the reception ranges shown above. Signals become weaker outside of the smaller circles indicated by dashed lines, so the reception environment has a greater effect on signal reception.

The following can also affect signal reception: geographic contours, structures, weather, climate, time of day (afternoon, evening), noise.

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, computer, cell 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 in order to receive the time calibration signal.

- Auto Receive, six times a day: Midnight, 1:00, 2:00, 3:00, 4:00, and 5:00 a.m.
- Manual receive (You initiate reception using a button operation.)

- Any time a signal receive operation is successful, no more auto receive operations are performed that day.
- The watch is set up for auto receive at the factory, so all you need to do is to place it in a location that allows good reception each night. Note however that auto receive is turned off for the following city codes: BJS, HKG, HNL, ANC, and MOW.

For information about turning auto receive on and off, see "To turn auto receive on and off".

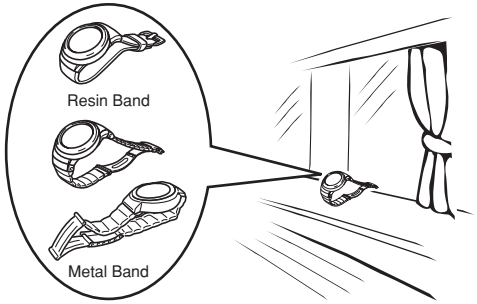
- Auto receive will be performed whenever the Timekeeping Mode (see "Modes and Indicators") Home Time reaches one of the times shown above.
- The auto receive start time differs according to the current home city and summer time setting.

Home City		Auto Receive Start Times					
		1	2	3	4	5	6
TYO, SEL, TPE, BJS, HKG	Standard Time	00:00 a.m.	01:00 a.m.	02:00 a.m.	03:00 a.m.	04:00 a.m.	05:00 a.m.
HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, YYT	Standard Time Summer Time	00:00 a.m.	01:00 a.m.	02:00 a.m.	03:00 a.m.	04:00 a.m.	05:00 a.m.
LIS, LON	Standard Time	01:00 a.m.	02:00 a.m.	03:00 a.m.	04:00 a.m.	05:00 a.m.	00:00 the following morning
	Summer Time	02:00 a.m.	03:00 a.m.	04:00 a.m.	05:00 a.m.	00:00 the following morning	01:00 the following morning
MAD, PAR, ROM, BER, STO	Standard Time	02:00 a.m.	03:00 a.m.	04:00 a.m.	05:00 a.m.	00:00 the following morning	01:00 the following morning
	Summer Time	03:00 a.m.	04:00 a.m.	05:00 a.m.	00:00 the following morning	01:00 the following morning	02:00 the following morning
ATH	Standard Time	03:00 a.m.	04:00 a.m.	05:00 a.m.	00:00 the following morning	01:00 the following morning	02:00 the following morning
	Summer Time	04:00 a.m.	05:00 a.m.	00:00 the following morning	01:00 the following morning	02:00 the following morning	03:00 the following morning
MOW	Standard Time	04:00 a.m.	05:00 a.m.	00:00 the following morning	01:00 the following morning	02:00 the following morning	03:00 the following morning
	Summer Time	05:00 a.m.	00:00 the following morning	01:00 the following morning	02:00 the following morning	03:00 the following morning	04:00 a.m.

CASIO

■ To position the watch for optimum reception

Remove the watch from your wrist and place it somewhere so its top (12 o'clock, 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 one to seven minutes.

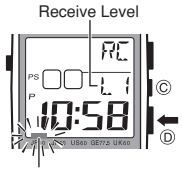
- Under certain conditions, signal reception can take as long as 13 minutes.
- **For information about turning auto receive on and off, see "To turn auto receive on and off".**

■ To trigger signal reception manually

In the Timekeeping Mode, press the Ⓒ button five times to enter the Receive Mode.

Hold down the Ⓓ button for about two seconds.

- This causes "RC" to appear on the display and starts signal reception.
- During signal reception, the receive level (see "Receive Level Indication") cycles through its values and the transmitter indicator (see "Transmitter Indicator") flashes on the display.



■ To interrupt reception

Press the Ⓓ button to interrupt time calibration signal reception.

- All other buttons besides Ⓓ are disabled during manual signal reception.

When reception is successful

After reception is complete, the watch adjusts its current time setting and then its current date setting.

- After the date and time of the adjustment appears on the display, press the Ⓒ button to return to the Timekeeping Mode. The watch will also return to the Timekeeping Mode automatically if you do not perform any operation for about two or three minutes.

Reception Error (ERR Indicator)

In the case of an error, the watch will not adjust its current time setting, but display "ERR" instead.

- If the "ERR" indicator is displayed, you can clear it manually by pressing the Ⓒ button. The error will also clear automatically if you do not perform any operation for about two or three minutes.

Receive Level Indication

The receive level cycles through the values shown below while reception is in progress.Keep the watch in a location where reception is stable while reception is in progress.

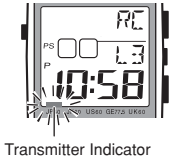
- Even under optimum reception conditions, it can take about 10 seconds for reception to stabilize.

- Use the receive level indication 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.

Transmitter Indicator

A transmitter indicator flashes during signal reception to indicate the transmitter whose signal is being received.

- The transmitter indicator remains displayed (stops flashing) after signal reception is successful. The currently displayed transmitter indicator is cleared at the first signal reception operation on the following day. See "Receiving the Calibration Signal" for more information.

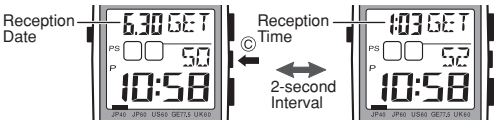


JP40 ····· Japanese time calibration signal (40 kHz)
JP60 ····· Japanese time calibration signal (60 kHz)
US60 ····· United States time calibration signal
GE77.5 ····· German time calibration signal
UK60 ····· United Kingdom time calibration signal

■ To view the last reception date and time

In the Timekeeping Mode, press the Ⓒ button five times to enter the Receive Mode.

- This displays the date and time when signal reception was last successful, and the current time and date were last adjusted.
- The day screen and time screen alternate at two-second intervals.
- If there have been no successful receptions, the last reception time will show "- - -".
- To return to the Timekeeping Mode, press the Ⓒ button again.
- The watch will return to the Timekeeping Mode automatically if you do not perform any operation for about two or three minutes.



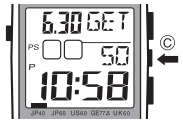
■ To turn auto receive on and off

You can turn off auto received so it is not performed each day.

- You can turn auto receive on or off while a city that supports auto receive is selected as your Home City.
- **For details about city codes that support time calibration signal reception, see "Reception Ranges".**

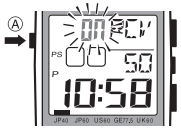
1. **In the Timekeeping Mode, press the Ⓒ button five times.**

- This displays the last reception date and time screen.
- The watch will return to the Timekeeping Mode automatically if you do not perform any operation for about two or three minutes.

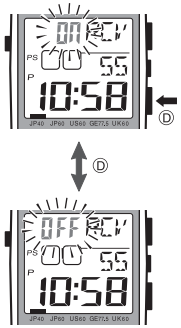


2. **Press the Ⓐ button until ON or OFF flashes on the display.**

- This is the setting screen.



3. **Press the Ⓓ button to toggle the setting between ON and OFF.**



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

- This will exit the setting screen and return to the last reception date and time screen.
- Press the Ⓒ button to return to the Timekeeping Mode.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

When auto receive is turned on...

- **When the Home City is TYO, SEL, TPE, BJS, or HKG**
  Auto receive and auto transmitter selection turn on. The watch automatically selects either the Otakadoya Mountain signal (40 kHz) or the Hagane Mountain signal (60 kHz), whichever is strongest.
  - The transmitter from which a signal was last successfully received will be given priority for the next auto receive operation.

- **When the Home City is HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO NYC, YHZ, or YYT**
  Auto receive turns on, and the watch receives the signal from Ft. Collins, Colorado.

- **When the Home City is LIS, LON, MAD, PAR, ROM, BER, STO, ATH, or MOW**
  Auto receive and auto transmitter selection turn on. The watch automatically selects either the U.K. (Rugby, Warwickshire) transmitter or German (Mainflingen) transmitter, whichever is strongest.
  - The transmitter from which a signal was last successfully received will be given priority for the next auto receive operation.

Calibration Signal Reception Precautions

- Auto receive can be performed while the watch is in the Timekeeping Mode or World Time Mode only.
- Signal reception is not possible when any one of the following conditions exists.
  - Timer operation in progress
  - Low battery indicator (“LOW” or “CHG”) on the display
  - Recover indicator (RECOV) displayed
- Pressing any button while auto receive is in progress will terminate it.
- 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, the United States, the U.K., or Germany. Note that you will need to make your own adjustments when using this watch outside of the range of the 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 ±20 seconds per month.
- Strong electrostatic charge can cause timekeeping error.
- Signal reception is cancelled if an alert operation starts 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

1. The watch cannot receive the time calibration signal.

- Is the signal being transmitted?
  Though the time data of the Japanese calibration signal (Call Sign: JJY) is maintained by the Japan Standard Time Group of the National Institute of Information and Communications Technology (NICT), it may sometimes be interrupted for periodic maintenance work, or because of lightning or other problems.
- Are you within the reception range of a transmitter?
  See “Reception Ranges” for information about areas where the watch can receive the signal.
- Is there something in the immediate area that may be interfering with reception?
  Even if you are within the reception range of a transmitter, objects between you and the transmitter or electrical noise can interfere with reception. Avoid such areas (see “Location”) during signal reception.
- Do you have the correct Home City code selected?
  Calibration signal reception will be impossible if you have any city that is not included under “Reception Ranges” selected as your Home City. For details about setting the correct Home City, see “To configure Home City settings”.
- Is auto receive turned off?
  Use the procedure under “To turn auto receive on and off” to turn on auto receive.
- Is a timer operation in progress?
  Signal reception cannot be performed while a timer operation is in progress. To stop a timer operation, enter the Timer Mode and then press the Ⓓ button.
- Is the watch in any mode other than the Timekeeping Mode or World Time Mode during the auto receive times (midnight, 1:00 a.m., 2:00 a.m., 3:00 a.m., 4:00 a.m., and 5:00 a.m.)?
  Auto receive is performed only when the watch is in the Timekeeping Mode or World Time Mode. It is not performed if the watch is in any other mode.

2. Time calibration signal reception is successful, but the hourly time signal and current time are slightly off.

- After the watch receives the time calibration signal, it performs an internal decoding process before updating its time setting. Because of this, the time setting may be slightly off (within one second).

3. Time calibration signal reception is successful, but the current time is one hour fast.

- Do you have summer time (DST) turned on? Use the procedure under “To configure Home City settings” to change the summer time setting to OFF or AUTO.

4. Time calibration signal reception is successful, but the current time setting is wrong.

- Is TYO (Tokyo) selected for your Home City? For details about setting the correct Home City, see “To configure Home City settings”.

5. I can’t turn auto receive on and off

- You will not be able to turn auto receive on or off if you have any city that is not included under “Reception Ranges” selected as your Home City. For details about setting the correct Home City, see “To configure Home City settings”.

6. What time is auto receive performed?

- Auto receive is performed in the middle of the night, when reception conditions are best. Before going to bed at night, place the watch near a window, with 12 o’clock facing in the general direction of the transmitter.

7. How can I perform manual receive?

- In the Receive Mode, hold down the Ⓓ button (lower right) for about two seconds. “RC” will appear on the display to indicate that manual receive has started. Place the watch near a window, with 12 o’clock facing in the general direction of the transmitter.

8. How can I view the last reception date and time?

- Enter the Receive Mode. The display will alternate at two-second intervals between the date and time of the last successful signal reception.

- 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.

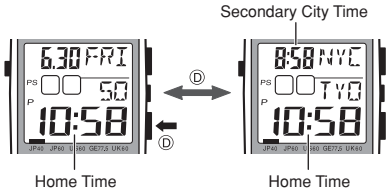
Auto Receive	ON	On
Home City	TYO	Tokyo
Summer Time	AT	Auto (according to signal data)

Using Dual Time

Use the Ⓒ button to enter the Timekeeping Mode as shown under “Modes and Indicators”.

Dual time lets you view the current time in your Home City and in one more time zone (Secondary City) on the same screen. A simple operation lets you make the current Secondary City your Home City, and the current Home City your Secondary City.

- For details about setting the current time, see “To configure Home City settings”.
- Switching your Home City and Secondary City with each other will switch both the city codes and current time settings. Depending on the city codes, switching cities may also cause a change in the time calibration signal transmitter setting. See “Reception Range” for more information.



■ To switch Dual Time cities

In the Timekeeping Mode, hold down the Ⓓ button for about three seconds until the watch beeps and the Home City and Secondary City times switch positions on the display.

- The dual time screen will be on the display after you switch Dual Time cities. Press the Ⓓ button to return to the Timekeeping Mode.

CASIO

Using World Time

Use the Ⓒ button to enter the World Time Mode as shown under "Modes and Indicators".

World Time lets you display the current time in any one of 48 cities (29 time zones) around the world.

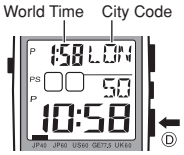
- The times for each city code in the World Time mode are displayed automatically by applying a time differential to the Timekeeping Mode Home Time.
- When you enter the World Time Mode, the screen for the city that was displayed when you last exited the mode appears first.

Important!
If the World Time Mode time is incorrect, correct the setting of the Home Time in the Timekeeping Mode.
- **See "To configure Home City settings" for more information.**

■ To search for a city code

In the World Time Mode, press the Ⓓ button to scroll through city codes.

- Holding down the Ⓓ button scrolls at high speed.



Using Summer Time (DST)

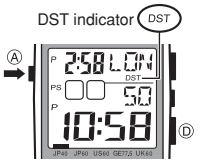
Summer time, or Daylight Saving Time (DST) as is it is called in some countries, calls for setting clocks ahead one hour during the summer season. Note that the use of summer time depends on the country and even the local area.

■ To turn summer time on or off

Getting Ready
In the World Time Mode, use the Ⓓ button to display the screen for the city code whose summer time setting you want to change.

Press the Ⓐ button.

- Press the Ⓐ button to toggle the summer time on or off.
- The "DST" indicator appears on the display and timekeeping is advanced by one hour when summer time is turned on.
- You can turn summer time on or off independently for each World Time Mode city.
- If you turn on summer time for the city that you are using for your Home Time city, summer time is also turned on in the Timekeeping Mode.



City Code List

City Code	GMT Differential	City Name	City Code	GMT Differential	City Name
PPG	–11	Pago Pago	STO	+1	Stockholm
HNL	–10	Honolulu	ATH	+2	Athens
ANC	–9	Anchorage	CAI	+2	Cairo
YVR	–8	Vancouver	JRS	+2	Jerusalem
LAX	–8	Los Angeles	MOW	+3	Moscow
YEA	–7	Edmonton	JED	+3	Jeddah
DEN	–7	Denver	THR	+3.5	Teheran
MEX	–6	Mexico City	DXB	+4	Dubai
YWG	–6	Winnipeg	KBL	+4.5	Kabul
CHI	–6	Chicago	KHI	+5	Karachi
MIA	–5	Miami	DEL	+5.5	Delhi
YTO	–5	Toronto	DAC	+6	Dhaka
NYC	–5	New York	RGN	+6.5	Yangon
CCS	–4	Caracas	BKK	+7	Bangkok
YHZ	–4	Halifax	HKG	+8	Hong Kong
YYT	–3.5	St. John's	BJS	+8	Beijing
RIO	–3	Rio de Janeiro	TPE	+8	Taipei
RAI	–1	Praia	SEL	+9	Seoul
LIS	+0	Lisbon	TYO	+9	Tokyo
LON	+0	London	ADL	+9.5	Adelaide
MAD	+1	Madrid	GUM	+10	Guam
PAR	+1	Paris	SYD	+10	Sydney
ROM	+1	Rome	NOU	+11	Noumea
BER	+1	Berlin	WLG	+12	Wellington

- The contents of the above table are current as of December 2005.
- Time differentials in the above table are in accordance with Universal Time Coordinated (UTC).

Using the Alarms and Hourly Time Signal

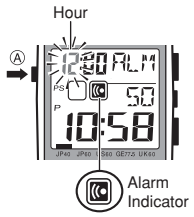
Use the Ⓒ button to enter the Alarm Mode as shown under "Modes and Indicators".

The watch beeps for 10 seconds when the Timekeeping Mode time reaches the currently set alarm time. The Hourly Time signal causes the watch to beep every hour on the hour.

■ To set an alarm time

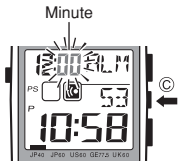
1. **In the Alarm Mode, press the Ⓐ button.**

- The hour digits start to flash on the display. This is the setting screen.
- This also causes the alarm indicator to appear, and turns on the alarm automatically.



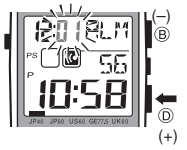
2. **Use the Ⓒ button to move the flashing to the setting you want to change.**

- Each press of Ⓒ moves the flashing between the hour and minute as shown below. Move the flashing to the digits you want to change.



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

- Press the Ⓓ button to increase the selected setting or the Ⓑ button to decrease it.
- Holding down either button changes the setting at high speed.



Repeat steps 2 and 3 to set the alarm time you want.

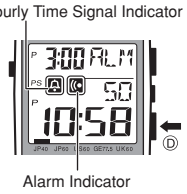
4. **When the alarm time is the way you want, press the Ⓐ button to exit the setting screen.**

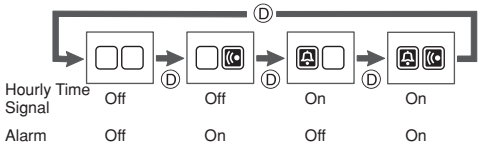
- This exits the setting screen.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

■ To turn an alarm or the hourly time signal on or off

In the Alarm Mode, press the Ⓓ button.

- Each press of the Ⓓ button cycles through alarm and Hourly Time Signal settings as shown below. The current on/off status is indicated by the indicators that appear on the display.
- Turning on an alarm or the Hourly Time Signal causes its indicator to appear on the display.





- Indicators may become difficult to see while the display is illuminated or when surrounding light is bright.

■ To stop an alarm

Pressing any button while the beeper is sounding stops it.

■ To test the alarm

In the Alarm Mode, hold down the Ⓓ button to sound the beeper.

Using the Timer

Use the Ⓒ button to enter the Timer Mode as shown under “Modes and Indicators”.

You can set the start time of the timer in units of one minute in the range of 1 to 24 hours. The watch beeps for 10 seconds when the end of the countdown is reached. Turning on the watch’s auto repeat timer feature causes the countdown to restart from the start time whenever the end of the countdown is reached.

Timer Types

You can use either of the two settings describe below to configure timer settings.

- **For information about selecting the timer type, see “To configure timer settings”.**

Repeat Timer

With the Repeat Timer, the timer stops when the end of the countdown is reached. After about 10 seconds, the original start time re-appears on the display.

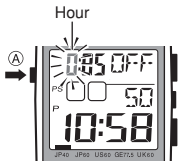
● Auto Repeat Timer

With the auto repeat timer, the timer automatically resets the start time and continues timing when the end of the current countdown is reached.

- The countdown repeats up to eight times, or until you stop it manually.

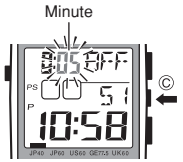
■ To configure timer settings

1. **While the current starting time is displayed in the Timer Mode, press the Ⓐ button.**

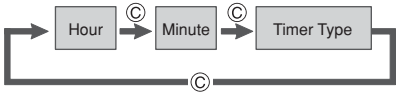


- The hour digits start to flash on the display. This is the setting screen.

2. **Use the Ⓒ button to move the flashing to the setting you want to change.**



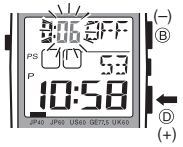
- Each press of Ⓒ moves the flashing between the settings as shown below. Move the flashing to the digits you want to change.



3. **Configure the setting that is flashing.**

To set the start time hours and minutes

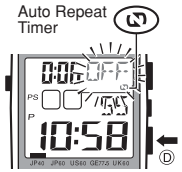
Use the Ⓓ (+) and Ⓑ (–) buttons to change the hour and minute settings.



- Holding down either button changes the setting at high speed.
- To configure the setting to countdown 24 hours, set the start time as 0:00.

To select the timer type

Press the Ⓓ button to toggle between the auto repeat timer and repeat timer.



- “ON” indicates the auto repeat timer while “OFF” indicates the repeat timer.

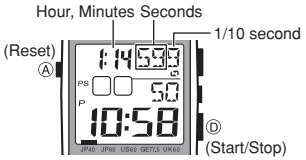
4. **When all of the settings are the way you want, press the Ⓐ button to exit the setting screen.**

- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.
- The auto repeat indicator (↻) appears on the display while the auto repeat timer is turned on.

■ To use the countdown timer

Press the Ⓓ button to interrupt time calibration signal reception.

- Each press of the Ⓓ button starts or stops the stopwatch.
- The time counts down in 1/10-second steps.



- Pressing the Ⓐ button while the countdown is stopped displays the reset time.
- Holding down the Ⓓ button for about two seconds while a countdown either is ongoing or stopped will reset the timer to its start time.
- Pressing the Ⓓ button again while the countdown is stopped restarts the countdown.

Time Up Beeper

The watch beeps for 10 seconds when the end of the countdown is reached.

■ To stop an alarm

Pressing any button while the beeper is sounding stops it.

Using the Stopwatch

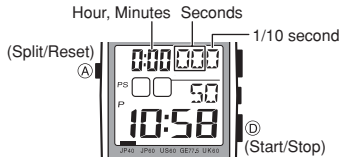
Use the Ⓒ button to enter the Stopwatch Mode as shown under “Modes and Indicators”.

The stopwatch measures elapsed time in units of 1/10 second up to 23 hours, 59 minutes, 59.9 seconds (24 hours). When the maximum limit is reached, the elapsed time returns to zero automatically and timing continues from there.

Using the Stopwatch

In the Stopwatch Mode, press the Ⓓ button to start and stop the stopwatch.

- Each press of the Ⓓ button starts or stops the stopwatch.



- Pressing the Ⓐ button while an elapsed time operation is in progress will freeze the current time on the display and continue timing of the next split internally. This condition is indicated by the “SPL” (split) indicator on the display.

Changing to another mode while a split time is displayed cancels the split time operation.

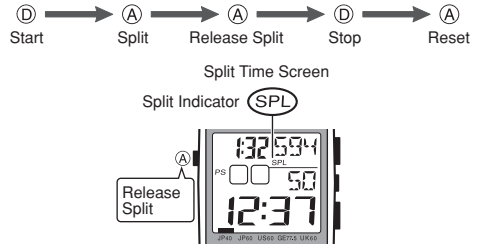
- Pressing the Ⓐ button while the stopwatch is stopped will reset stopwatch to all zeros.
- Holding down the Ⓓ button for about two seconds while the stopwatch either is performing an elapsed time operation or stopped also will reset it to all zeros.

■ To measure elapsed time

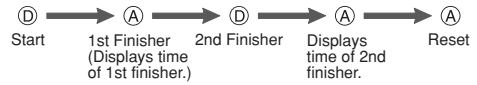
Cumulative Time Measurement

Pressing the Ⓓ button to restart the stopwatch without resetting it to all zeros will resume elapsed time measurement from where it was last stopped.

■ To measure split times



■ To time 1st and 2nd place finishers



Setting the Home City Time and Date

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

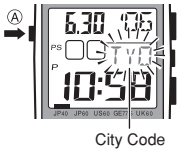
- Always use the Timekeeping Mode to set and adjust the current time and date settings.
- You can use the dual time screen to view the current time in two different time zones.
- You can also turn Power Saving on and off while setting the time and date.

■ To configure Home City settings

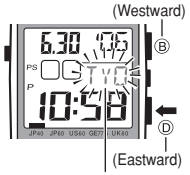
1. **Make sure that the time whose settings you want to configure is selected as your Home Time.**

- The Home Time is the time that appears on the Home Time screen. It is also the lower time on the Dual Time screen.
- To switch the positions of the Home Time and Secondary City time on the Dual Time screen, hold down the Ⓓ button for about three seconds.

2. **Press the Ⓐ button so the Home City code flashes on the display. This is the setting screen.**



3. **Use the Ⓓ (Eastward) and Ⓑ (Westward) buttons to scroll through the city codes until the one you want to use as your Home City is displayed.**



- **See “City Code List” for a complete list of city codes.**
- Holding either button scrolls the setting at high speed.

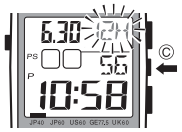
4. **Press the Ⓒ button to display the summer time setting.**

5. **Press the Ⓓ button to cycle through the summer time (DST) settings described below.**

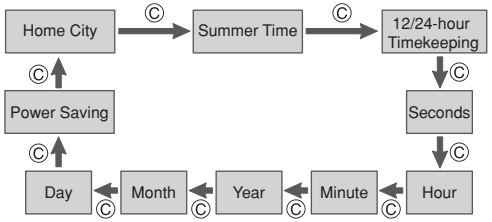
AT (AUTO) This setting enables the auto summer time setting, which turns summer time on or off in accordance with the received time calibration signal.
OFF This setting turns off summer time, and displays the current time normally.
ON This setting turns on summer time. • Selecting this setting displays the DST indicator, and advances the current time setting by one hour.

- Note that the above setting toggles between “OFF” and “ON” when any city code other than those listed under “Reception Ranges” is selected as the Home City.

6. **Use the Ⓒ button to move the flashing to the setting you want to change.**



- Each press of Ⓒ moves the flashing between the settings as shown below.

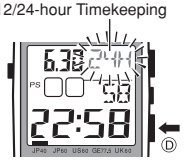


7. **Use the Ⓓ (+) and Ⓑ (–) buttons to change the currently selected setting.**

- Use Ⓓ (+) and Ⓑ (–) to change the currently selected setting.

a. When the 12/24-hour timekeeping setting is selected

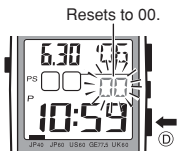
Press the Ⓓ button to toggle the timekeeping format between 12-hour (“12H” indicator) and 24-hour (“24H” indicator).



b. When the seconds setting is selected

Press the Ⓓ button to reset the seconds to 00 in accordance with the time signal on the radio, TV, etc.

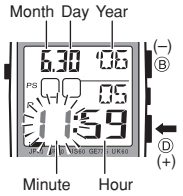
- Pressing the Ⓓ button while the seconds count is in the range of 30 to 59 resets it to 00 and also adds 1 to the minutes. Pressing the Ⓓ button in the range of 00 to 29 resets the seconds count without changing the minutes.



c. When the hour, minute, year, month, or day setting is selected

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

- Holding either button scrolls the setting at high speed.



d. When the Power Saving setting is selected

Press the Ⓓ button to toggle Power Saving ON and OFF.

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

Repeat the above steps as many times as necessary to select each setting and change it as required.

- 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 makes adjustments for leap years and month lengths automatically.

8. **When all of the settings are the way you want, press the Ⓐ button to exit the setting screen.**

- 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.