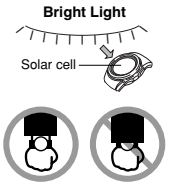
Operation Guide 4765

CASIO

Getting Acquainted

Congratulations upon your selection of this CASIO watch. To get the most out of your purchase, be sure to read this manual carefully.

Keep the watch exposed to bright light

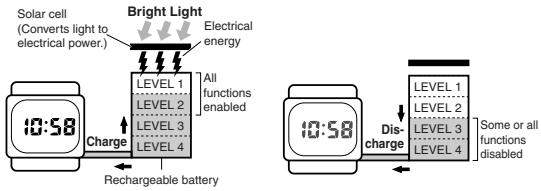


The electricity generated by the solar cell of the watch is stored by a built-in battery. Leaving or using the watch where it is not exposed to light causes the battery to run down. Make sure the watch is exposed to light as much as possible.

- When you are not wearing the watch on your wrist, position the face so it is pointed at a source of bright light.
- You should try to keep the watch outside of your sleeve as much as possible. Charging is reduced significantly if the face is only partially covered.

- The watch continues to operate, even when it is not exposed to light. Leaving the watch in the dark can cause the battery to run down, which will result in some watch functions to be disabled. If the battery goes dead, you will have to re-configure watch settings after recharging. To ensure normal watch operation, be sure to keep it exposed to light as much as possible.

Battery charges in the light. **Battery discharges in the dark.**



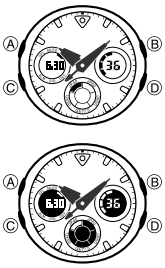
- The actual level at which some functions are disabled depends on the watch model.
- Frequent display illumination can run down the battery quickly and require charging. The following guidelines give an idea of the charging time required to recover from a single illumination operation.
  Approximately 5 minutes exposure to bright sunlight coming in through a window
  Approximately 50 minutes exposure to indoor fluorescent lighting
- **Be sure to read "Power Supply" for important information you need to know when exposing the watch to bright light.**

If the display of the watch is blank...

If the display of the watch is blank, it means that the watch's Power Saving function has turned off the display to conserve power.

- **See "Power Saving Function" for more information.**

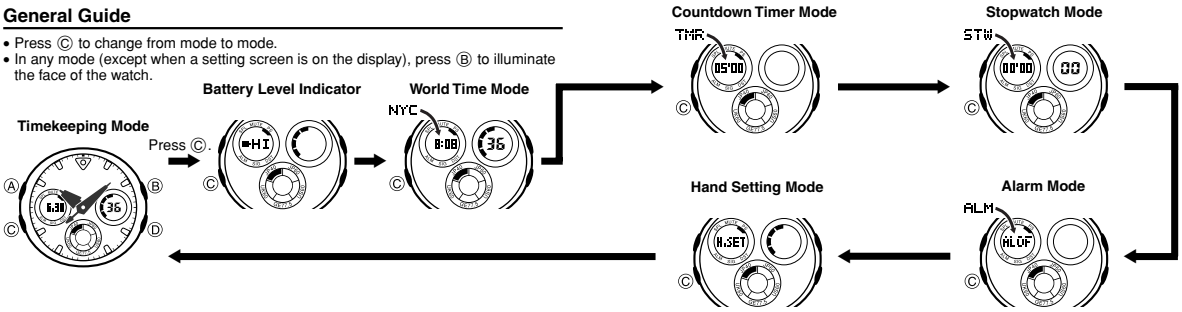
About This Manual



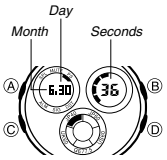
- Depending on the model of your watch, display text appears either as dark figures on a light background, or light figures on a dark background. All sample displays in this manual are shown using dark figures on a light background.
- Button operations are indicated using the letters shown in the illustration.
- Most of the display examples in this manual show only the digital display, without the analog hands.
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "Reference" section.

General Guide

- Press Ⓒ to change from mode to mode.
- In any mode (except when a setting screen is on the display), press Ⓑ to illuminate the face of the watch.



Radio-controlled Atomic Timekeeping



This watch receives a time calibration signal and updates its time setting accordingly.

- Supported time calibration signals: Germany (Mainflingen), England (Rugby), United States (Fort Collins), Japan.

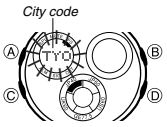
Current Time Setting

This watch adjusts its time setting automatically in accordance with a time calibration signal. You can also perform a manual procedure to set the time and date, when necessary.

- The first thing you should do after purchasing this watch is to specify your Home City (the city where you normally will use the watch). For more information, see "To specify your Home City".

- When using the watch outside the areas covered by the time signal transmitters, you will have to adjust the current time setting manually as required. See "Timekeeping" for more information about manual time settings.
- The U.S. time calibration signal can be picked up by the watch while in North America. The term "North America" in this manual refers to the area that consists of Canada, the continental United States, and Mexico.
- The analog time of this watch is synchronized with the digital time. Because of this, the analog time setting is automatically adjusted whenever you change the digital setting. See "Analog Timekeeping" for more information.

To specify your Home City



1. In the Timekeeping Mode, hold down Ⓐ the city code starts to flash. This is the setting screen.
2. Press Ⓓ (east) to select the city code you want to use as your Home City.
   - Time calibration signal reception is supported when any one of the city codes shown in the table below is selected as your Home City.

German/U.K. Signal				Japan Signal		U.S. Signal			
City Code	City Name	City Code	City Name	City Code	City Name	City Code	City Name	City Code	City Name
LIS	Lisbon	**ATH**	Athens	**HKG**	Hong Kong	**HNL**	Honolulu	**YWG**	Winnipeg
LON	London	**MOW**	Moscow	**BJS**	Beijing	**ANC**	Anchorage	**CHI**	Chicago
MAD	Madrid			**TPE**	Taipei	**YVR**	Vancouver	**MIA**	Miami
PAR	Paris			**SEL**	Seoul	**LAX**	Los Angeles	**YTO**	Toronto
ROM	Rome			**TYO**	Tokyo	**YEA**	Edmonton	**NYC**	New York
BER	Berlin					**DEN**	Denver	**YHZ**	Halifax
STO	Stockholm					**MEX**	Mexico City	**YYT**	St. Johns

3. Press Ⓐ to exit the setting screen.

Important!

- Normally, your watch should show the correct time as soon as you select your Home City code. If it does not, it should adjust automatically after the next auto receive operation (in the middle of the night). You can also perform manual receive or you can set the time manually.
- The watch will receive the time calibration signal automatically from the applicable transmitter (in the middle of the night) and update its settings accordingly. For information about the relationship between city codes and transmitters, see "Home City Codes and Transmitters".
- Under factory default settings, auto receive is turned off for all of the following city codes: **MOW** (Moscow), **HKG** (Hong Kong), **BJS** (Beijing), **HNL** (Honolulu), and **ANC** (Anchorage). For details about turning on auto receive for these city codes, see "To turn auto receive on and off".
- You can disable time signal reception, if you want. See "To turn auto receive on and off" for more information.
- See the maps under "Reception Ranges" for information about the reception ranges of the watch.
- If you are in an area that does not use Daylight Saving Time (summertime), turn off the DST setting.

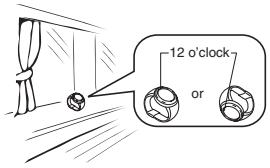
Time Calibration Signal Reception

There are two different methods you can use to receive the time calibration signal: auto receive and manual receive.

- **Auto Receive**
  With auto receive, the watch receives the time calibration signal automatically up to six times a day. When any auto receive is successful, the remaining auto receive operations are not performed. For more information, see "About Auto Receive".
- **Manual Receive**
  Manual receive lets you start a time calibration receive operation with the press of a button. For more information, see "To perform manual receive".

Important!

- When getting ready to receive the time calibration signal, position the watch as shown in the nearby illustration, with its 12 o'clock side facing towards a window. Make sure there are no metal objects nearby.



- Make sure the watch is facing the right way.

- Proper signal reception can be difficult or even impossible under the conditions listed below.

Inside or among buildings | Inside a vehicle | Near household appliances, office equipment, or a mobile phone | Near a construction site, airport, or other sources of electrical noise | Near high-tension power lines | Among or behind mountains

- Signal reception normally is better at night than during the day.
- Time calibration signal reception takes from two to seven minutes, but in some cases it can take as long as 14 minutes. Take care that you do not perform any button operations or move the watch during this time.
- The time calibration signal the watch will attempt to pick up depends on its current Home City code setting as shown below. If you use the watch in Japan or Europe (each of which has two different transmitter locations), it will try to receive the time calibration signal from one of the transmitters in your current location. If it cannot receive the signal, it will then try to receive the time calibration signal from the other transmitter.

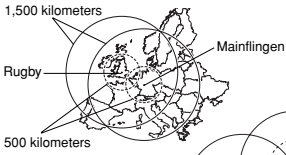
Home City Codes and Transmitters

Home City Code	Transmitter	Frequency
LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW*	Rugby (England) Mainflingen (Germany)	60.0 kHz 77.5 kHz
HKG*, BJS*, TPE, SEL, TYO	Fukushima (Japan) Fukuoka/Saga (Japan)	40.0 kHz 60.0 kHz
HNL*, ANC*, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, YYT	Fort Collins, Colorado (the United States)	60.0 kHz

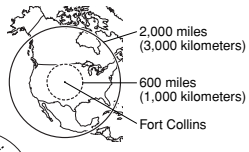
* The areas covered by the **MOW**, **HKG**, **BJS**, **HNL**, and **ANC** city codes are quite far from the time calibration signal transmitters, and so certain conditions may cause problems with signal reception.

Reception Ranges

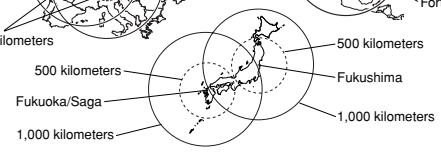
U.K. and German Signals



U.S. Signal



Japan Signal



- Signal reception may not be possible at the distances noted below during certain times of the year or day. Radio interference may also cause problems with reception.
  Mainflingen (Germany) or Rugby (England) transmitters: 500 kilometers (310 miles)
  Fort Collins (United States) transmitter: 600 miles (1,000 kilometers)
  Fukushima or Fukuoka/Saga (Japan) transmitters: 500 kilometers (310 miles)
- Even when the watch is within the reception range of the transmitter, signal reception will be impossible if the signal is blocked by mountains or other geological formations between the watch and signal source.
- Signal reception is affected by weather, atmospheric conditions, and seasonal changes.
- See the information under "Signal Reception Troubleshooting" if you experience problems with time calibration signal reception.

About Auto Receive

The watch receives the time calibration signal automatically up to six times a day. When any auto receive is successful, the remaining auto receive operations are not performed. The reception schedule (calibration times) depends on your currently selected Home City, and whether standard time or Daylight Saving Time is selected for your Home City.

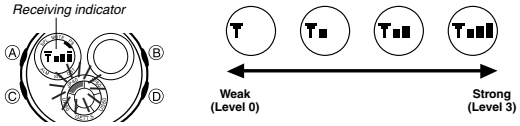
Your Home City		Auto Receive Start Times					
		1	2	3	4	5	6
LIS, LON	Standard Time	1:00 am	2:00 am	3:00 am	4:00 am	5:00 am	Midnight next day
	Daylight Saving Time	2:00 am	3:00 am	4:00 am	5:00 am	Midnight next day	1:00 am next day
MAD, PAR, ROM, BER, STO	Standard Time	2:00 am	3:00 am	4:00 am	5:00 am	Midnight next day	1:00 am next day
	Daylight Saving Time	3:00 am	4:00 am	5:00 am	Midnight next day	1:00 am next day	2:00 am next day
ATH	Standard Time	3:00 am	4:00 am	5:00 am	Midnight next day	1:00 am next day	2:00 am next day
	Daylight Saving Time	4:00 am	5:00 am	Midnight next day	1:00 am next day	2:00 am next day	3:00 am next day
MOW	Standard Time	4:00 am	5:00 am	Midnight next day	1:00 am next day	2:00 am next day	3:00 am next day
	Daylight Saving Time	5:00 am	Midnight next day	1:00 am next day	2:00 am next day	3:00 am next day	4:00 am next day
HKG, BJS, TPE, SEL, TYO	Standard Time	Midnight	1:00 am	2:00 am	3:00 am	4:00 am	5:00 am
HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, YYT	Standard Time Daylight Saving Time	Midnight	1:00 am	2:00 am	3:00 am	4:00 am	5:00 am

Note

- When a calibration time is reached, the watch will receive the calibration signal only if it is in either the Timekeeping Mode or World Time Mode. Reception is not performed if a calibration time is reached while you are configuring settings.
- Auto receive of the calibration signal is designed to be performed early in the morning, while you sleep (provided that the Timekeeping Mode time is set correctly). Before going to bed for the night, remove the watch from your wrist, and put it in a location where it can receive the signal easily.
- The watch receives the calibration signal for one to five minutes everyday when the time in the Timekeeping Mode reaches each of the calibration times. Avoid performing any button operation within five minutes before or after any one of the calibration times. Doing so can interfere with correct calibration.
- Remember that reception of the calibration signal depends on the current time in the Timekeeping Mode. The receive operation will be performed whenever the display shows any one of the calibration times, regardless of whether or not the displayed time actually is the correct time.
- Calibration signal reception is disabled while a countdown timer operation is in progress.

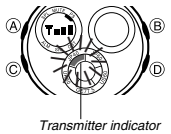
About the Receiving Indicator

The receiving indicator shows the strength of the calibration signal being received. For best reception, be sure to keep the watch in a location where signal strength is strongest.



- Use the receiving indicator as a guide for checking signal strength and for finding the best location for the watch during signal receive operations.
- Even in an area where signal strength is strong, it takes about 10 seconds for signal reception to stabilize enough for the receiving indicator to indicate signal strength.

Transmitter Indicator

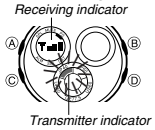


During signal reception, a transmitter indicator will flash to show you which signal is currently being received by the watch. After signal reception is complete, the indicator of the transmitter from which the signal was received will remain on, without flashing.

- The following shows the meaning of each of the transmitter indicator names.
  JP40: Fukushima (Japan)
  JP60: Fukuoka/Saga (Japan)
  US60: Fort Collins, Colorado (the United States)
  GE77.5: Mainflingen (Germany)
  UK60: Rugby (England)
- The transmitter indicator turns off automatically at the start of the first auto receive operation of a new day. The time of the first auto receive operation of a new day depends on your currently selected Home City.

To perform manual receive

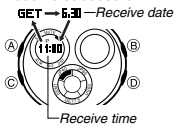
Receiving



1. Enter the Timekeeping Mode.
2. Place the watch on a stable surface so its 12 o'clock side is facing towards a window.
3. Hold down Ⓓ for about two seconds until the Receiving Indicator appears on the display.

- The indicator of the transmitter whose signal the watch is attempting to receive will flash.
- Time calibration signal reception takes from two to 14 minutes. Take care that you do not perform any button operations or move the watch during this time.

Receive successful

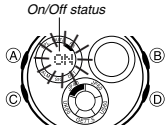


- If the receive operation is successful, the reception date and time appear on the display, along with the **GET** indicator. The indicator of the transmitter whose signal the watch received will also be indicated.
  The watch will enter the Timekeeping Mode if you press Ⓓ or if you do not perform any button operation for about one or two minutes.

Receive failed

- If the current reception fails, the display shows the **ERR** indicator.
  The watch will enter the Timekeeping Mode without changing the time setting if you press Ⓓ or if you do not perform any button operation for about one or two minutes.

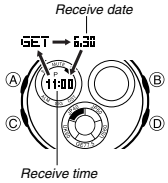
To turn auto receive on and off



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

- For information about city codes that support signal receive, see "To specify your Home City".

To check the latest signal reception results



In the Timekeeping Mode, press Ⓓ to display the Last Signal screen.

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

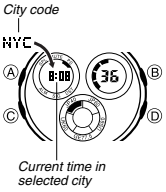
Signal Reception Troubleshooting

Check the following points whenever you experience problems with signal reception.

Problem	Probable Cause	What you should do
Cannot perform manual receive.	• The watch is not in the Timekeeping Mode. • Your current Home City is not one of the following: **LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, HKG, BJS, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ,** or **YYT**	• Enter the Timekeeping Mode and try again. • Select **LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, HKG, BJS, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ,** or **YYT** as your Home City.
Time setting is incorrect following signal reception.	• If the time is one hour off, the DST setting may be incorrect. • The Home City code setting is not correct for the area where you are using the watch.	• Change the DST setting to Auto DST. • Select the correct Home City code.

- For further information, see “Important!” under “Time Calibration Signal Reception” and “Radio-controlled Atomic Timekeeping Precautions”.

World Time



The World Time Mode digitally displays the current time in 48 cities (29 time zones) around the world.

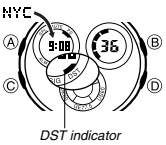
- If the current time shown for a city is wrong, check your Home City time settings and make the necessary changes.
- The watch will perform a signal reception even if it is in the World Time Mode when a calibration time is reached. If this happens, the World Time Mode time settings will be adjusted in accordance with the Timekeeping Mode’s Home City time.
- All of the operations in this section are performed in the World Time Mode, which you enter by pressing Ⓒ.

To view the time in another city

While in the World Time Mode, press Ⓓ to scroll through the city codes (time zones) to the east.

- For full information on city codes, see the “City Code Table”.

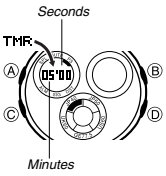
To toggle a city code time between Standard Time and Daylight Saving Time



1. In the World Time Mode, use Ⓓ to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
2. Hold down Ⓐ to toggle Daylight Saving Time (DST indicator displayed) and Standard Time (DST indicator not displayed).

- Note that you cannot use the World Time Mode to change the DST setting of the Home City code you currently have selected in the Timekeeping Mode. See “To change the Daylight Saving Time (summer time) setting” for information about turning the Home City code DST setting on and off.
- The DST indicator will appear on the display whenever you display a city code for which Daylight Saving Time is turned on.
- Note that the DST/Standard Time setting affects only the currently displayed city code. Other city codes are not affected.

Countdown Timer



You can set the countdown timer within a range of one to 60 minutes. An alarm sounds when the countdown reaches zero.

- Calibration signal reception (both auto and manual) is disabled while a countdown timer operation is in progress.
- All of the operations in this section are performed in the Countdown Timer Mode, which you enter by pressing Ⓒ.

To set the countdown start time

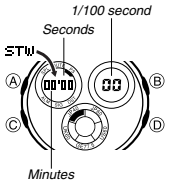
1. While the countdown start time is on the display in the Countdown Timer Mode, hold down Ⓐ until the current countdown start time starts to flash, which indicates the setting screen.
   - If the countdown start time is not displayed, use the procedure under “To use the countdown timer” to display it.
2. While a setting is flashing, use Ⓓ (+) and Ⓑ (–) to change it.
3. Press Ⓐ to exit the setting screen.

To use the countdown timer

Press Ⓓ while in the Countdown Timer Mode to start the countdown timer.

- When the end of the countdown is reached, the alarm sounds for 10 seconds or until you stop it by pressing any button. The countdown time is automatically reset to its starting value after the alarm stops.
- Press Ⓓ while a countdown operation is in progress to pause it. Press Ⓓ again to resume the countdown.
- To completely stop a countdown operation, first pause it (by pressing Ⓓ), and then press Ⓐ. This returns the countdown time to its starting value.

Stopwatch



The stopwatch lets you measure elapsed time, split times, and two finishes.

- The display range of the stopwatch is 59 minutes, 59.99 seconds.
- The stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.
- Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to elapsed time measurement.
- The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
- All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing Ⓒ.

To measure times with the stopwatch

Elapsed Time

Ⓓ Start → Ⓓ Stop → Ⓓ Re-start → Ⓓ Stop → Ⓐ Clear

Split Time

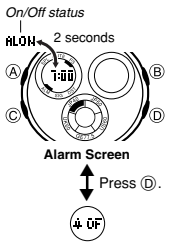
Ⓓ Start → Ⓐ Split → Ⓐ Split release → Ⓓ Stop → Ⓐ Clear

(displayed)

Two Finishes

Ⓓ Start → Ⓐ Split (First runner finishes. Display time of first runner.) → Ⓓ Stop (Second runner finishes.) → Ⓐ Split release (Display time of second runner.) → Ⓐ Clear

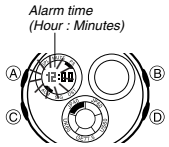
Alarm



When the alarm is turned on, the alarm sounds when the alarm time is reached. You can also turn on an Hourly Time Signal, which will cause the watch to beep twice every hour on the hour.

- When the alarm is turned on, the alarm screen alternates between **ALON** (alarm on) and the current alarm time (hour and minutes). When the alarm is off, **ALOF** (alarm off) remains on the alarm screen.
- All of the operations in this section are performed in the Alarm Mode, which you enter by pressing Ⓒ.
- Pressing Ⓓ in the Alarm Mode toggles between the alarm screen and Hourly Time Signal screen.

To set the alarm time



1. In the Alarm Mode, press Ⓓ to display the alarm screen.
2. Hold down Ⓐ until the hour setting of the alarm time starts to flash, which indicates the setting screen.
   - This operation automatically turns on the alarm.
3. Press Ⓒ to move the flashing between the hour and minute settings.
4. While a setting is flashing, use Ⓓ (+) and Ⓑ (–) to change it.
   - When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. (no indicator) or p.m. (**P** indicator).
5. Press Ⓐ to exit the setting screen.

Alarm Operation

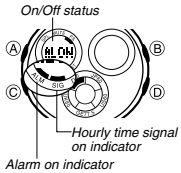
The alarm sounds at the preset time for about 10 seconds, regardless of the mode the watch is in.

- To stop the alarm tone after it starts to sound, press any button.
- Alarm and Hourly Time Signal operations are performed in accordance with the Timekeeping Mode digital time.

To test the alarm

In the Alarm Mode, hold down Ⓓ to sound the alarm.

To turn the alarm and the Hourly Time Signal on and off



1. In the Alarm Mode, press Ⓓ to select the alarm or the Hourly Time Signal screen.
2. Press Ⓐ to toggle the currently selected function on (**ON** displayed) and off (**OF** displayed).

- The alarm on indicator and the Hourly Time Signal on indicator remain on the display in all modes while these functions are turned on.

Illumination

An LED (light-emitting diode) and light guide panel illuminate the digital display for easy reading in the dark.

- See “Illumination Precautions” for other important information.

To turn on illumination

In any mode (except when a setting is on the display), press Ⓑ to illuminate the display.

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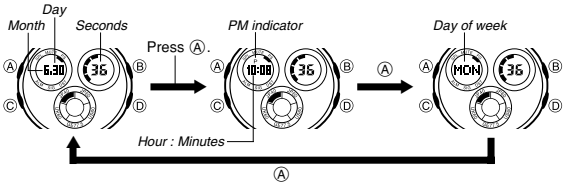
CASIO

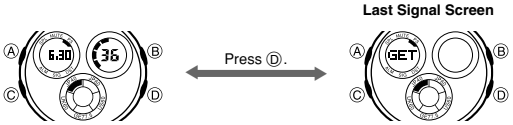
Timekeeping

Use the Timekeeping Mode to set and view the current time and date. This section also explains how to manually set the current date and time.

- When setting the time, you can also configure settings for the illumination duration and the 12/24-hour format.
- All of the operations in this section are performed in the Timekeeping Mode, which you can enter by pressing Ⓒ.



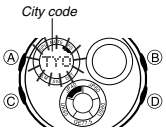
- Pressing Ⓓ in the Timekeeping Mode will display the Last Signal screen.



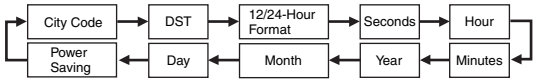
Setting the Digital Time and Date Manually

Make sure you select your Home City code before you change the current time and date settings. World Time Mode times are all displayed in accordance with the Timekeeping Mode settings. Because of this, World Time Mode times will not be correct if you do not select the proper Home City code before setting the time and date in the Timekeeping Mode.

To set the current digital time and date manually



1. In the Timekeeping Mode, hold down Ⓐ until the city code starts to flash, which indicates the setting screen.
2. Press Ⓒ to move the flashing in the sequence shown below to select other settings.



3. When the setting you want to change is flashing, use Ⓓ to change it as described below.

Screen:	To do this:	Do this:
TYO	Change the city code	Press Ⓓ (east).
AUTO	Cycle between Daylight Saving Time (**ON**), Standard Time (**OFF**), and Auto DST (**AUTO**)	Press Ⓓ.
12H	Toggle between 12-hour (**12H**) and 24-hour (**24H**) timekeeping	Press Ⓓ.
36	Reset the seconds to **00**	Press Ⓓ.
P 10:08	Change the hour or minutes	Press Ⓓ (+).
20 08	Change the year	
6.30	Change the month or day	
PSON	Toggle Power Saving on (**PSON**) and off (**PSOF**)	Press Ⓓ.

- See "City Code Table" for a complete list of available city codes.
- Auto DST (**AUTO**) can be selected only while **LIS**, **LON**, **MAD**, **PAR**, **ROM**, **BER**, **STO**, **ATH**, **MOW**, **HKG**, **BJS**, **TPE**, **SEL**, **TYO**, **HNL**, **ANC**, **YVR**, **LAX**, **YEA**, **DEN**, **MEX**, **YWG**, **CHI**, **MIA**, **YTO**, **NYC**, **YHZ**, or **YYT** is selected as the Home City code. For more information, see "Daylight Saving Time (DST)" below.
- For information about settings other than the time and date, see the following.
  Power Saving: Power Saving Function

4. Press Ⓐ to exit the setting screen.

Daylight Saving Time (DST)

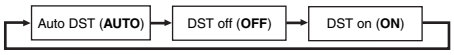
Daylight Saving Time (summer time) advances the time setting by one hour from Standard Time. Remember that not all countries or even local areas use Daylight Saving Time.

The time calibration signals transmitted from Mainflingen (Germany), Rugby (England), or Fort Collins (the United States) include both Standard Time and DST data. When the Auto DST setting is turned on, the watch switches between Standard Time and DST (summer time) automatically in accordance with the signals.

- The time calibration signals transmitted from Fukushima and Fukuoka/Saga (Japan) do not include summer time data.
- The default DST setting is Auto DST (**AUTO**) whenever you select **LIS**, **LON**, **MAD**, **PAR**, **ROM**, **BER**, **STO**, **ATH**, **MOW**, **HKG**, **BJS**, **TPE**, **SEL**, **TYO**, **HNL**, **ANC**, **YVR**, **LAX**, **YEA**, **DEN**, **MEX**, **YWG**, **CHI**, **MIA**, **YTO**, **NYC**, **YHZ**, or **YYT** as your Home City code.
- If you experience problems receiving the time calibration signal in your area, it is probably best to switch between Standard Time and Daylight Saving Time (summer time) manually.

To change the Daylight Saving Time (summer time) setting

1. In the Timekeeping Mode, hold down Ⓐ until the city code starts to flash, which indicates the setting screen.
2. Press Ⓒ once and the DST setting screen appears.
3. Use Ⓓ to cycle through the DST settings in the sequence shown below.



4. When the setting you want is selected, press Ⓐ to exit the setting screen.

- The DST indicator (☾) appears on the display to indicate that Daylight Saving Time is turned on.

Analog Timekeeping

The analog time of this watch is synchronized with the digital time. The analog time setting is adjusted automatically whenever you change the digital time.

Note

- The hands for the analog timepiece move to adjust to a new setting whenever any of the following occurs.
  When you change the digital time setting manually
  When the digital time setting is changed by time calibration signal reception
  When you change the Home City code and/or DST setting
- If the analog time does not match the digital time for any reason, use the procedure described under "To adjust the analog time" to match the analog setting to the digital setting.
- Whenever you need to adjust both the digital and the analog time settings manually, make sure you adjust the digital setting first.
- Depending on how much the hands have to move in order to adjust to the digital time, it may take some time before they stop moving.

To adjust the analog time

1. In the Timekeeping Mode, press Ⓒ six times to enter the Hand Setting Mode.
2. Hold down Ⓐ until the current digital time starts to flash, which indicates the setting screen.
3. Use Ⓓ and Ⓑ to adjust the analog setting as described below.

When you want to do this:	Perform this button operation:
Move the hand setting forward 20 seconds	• Press Ⓓ.
Move the hand setting a short way forward at high speed	• Hold down Ⓓ. • Release Ⓓ when the hands reach the setting you want.
Move the hand setting a long way forward at high speed	• While holding down Ⓓ to move the hands at high speed, press Ⓑ to lock the high-speed hand movement. • To stop the hand movement, press any button. • Hand movement stops automatically if the hour hand makes one full (12-hour) revolution.

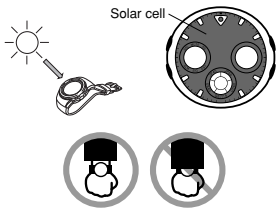
4. Press Ⓐ to exit the setting screen.

- The minute hand will be adjusted slightly to match the seconds when you exit the setting screen.
- To return to the Timekeeping Mode, press Ⓒ.

Power Supply

This watch is equipped with a solar cell and a special rechargeable battery (secondary battery) that is charged by the electrical power produced by the solar cell. The illustration shown below shows how you should position the watch for charging.

Example: Orient the watch so its face is pointing at a light source.



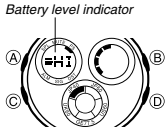
- The illustration shows how to position a watch with a resin band.
- Note that charging efficiency drops when any part of the solar cell is blocked by clothing, etc.
- You should try to keep the watch outside of your sleeve as much as possible. Charging is reduced significantly if the face is only partially covered.

Important!

- Storing the watch for long periods in an area where there is no light or wearing it in such a way that it is blocked from exposure to light can cause rechargeable battery power to run down. Make sure that the watch is normally exposed to bright light whenever possible.
- This watch uses a special rechargeable battery to store power produced by the solar cell, so regular battery replacement is not required. However, after very long use, the rechargeable battery may lose its ability to achieve a full charge. If you experience problems getting the special rechargeable battery to charge fully, contact your dealer or CASIO distributor about having it replaced.
- Never try to remove or replace the watch's special battery yourself. Use of the wrong type of battery can damage the watch.
- The current time and all other settings return to their initial factory defaults whenever battery power drops to Level 5 and when you have the battery replaced.
- Turn on the watch's Power Saving function and keep it in an area normally exposed to bright light when storing it for long periods. This helps to keep the rechargeable battery from going dead.

To check the current battery level

Press Ⓒ to display the battery level indicator.



The battery level indicator shows you the current power level of the rechargeable battery.

Level	Battery Level Indicator	Function Status
1	HI	All functions enabled.
2	MID	All functions enabled.
3	LO (Charge Soon Alert)	Alarm, hourly time signal, illumination and time calibration signal reception disabled.
4	(Charge Soon Alert)	All functions disabled.
5		All functions, including timekeeping, disabled and initialized.

- The flashing Low indicator (**L**) at Level 3 and the flashing charge indicator (**C**) at Level 4 tell you that battery power is very low, and that exposure to bright light for charging is required as soon as possible.
- At Level 5, all functions are disabled and settings return to their initial factory defaults. Functions are enabled once again after the rechargeable battery is charged, but you need to set the time and date, after the battery reaches Level 4 (indicated by the flashing charge indicator (**C**)) from Level 5. You will not be able to configure any of the other settings until the battery reaches Level 3 (no charge indicator) after dropping to Level 5.
- Leaving the watch in direct sunlight or some other very strong light source can cause the battery level indicator to show a reading that is momentarily higher than the actual battery level. The correct battery level indicator should appear after a few minutes.
- The watch's Home City code setting will change automatically to **TYO** (Tokyo) whenever the battery drops to Level 5. With this Home City code setting, the watch is configured to receive the time calibration signals of Japan. If you are using the watch in North America or Europe, you will need to change the Home City code setting to match your location whenever the battery drops to Level 5.
- If you use the illumination or alarms a number of times during a short period, the hands of the watch will stop. Battery Level Indicator will show "**R**" at this time. Also, the following operations will become disabled until battery power recovers.
  Illumination
  Beeper tone
  Time calibration signal reception
  After some time, battery power will recover and the above functions will be enabled again.

Charging Precautions

Certain charging conditions can cause the watch to become very hot. Avoid leaving the watch in the areas described below whenever charging its rechargeable battery. Also note that allowing the watch to become very hot can cause its liquid crystal display to black out. The appearance of the LCD should become normal again when the watch returns to a lower temperature.

Warning!
Leaving the watch in bright light to charge its rechargeable battery can cause it to become quite hot. Take care when handling the watch to avoid burn injury. The watch can become particularly hot when exposed to the following conditions for long periods.
- On the dashboard of a car parked in direct sunlight
- Too close to an incandescent lamp
- Under direct sunlight

Charging Guide

After a full charge, timekeeping remains enabled for up to about 7 months.
- The following table shows the amount of time the watch needs to be exposed to light each day in order to generate enough power for normal daily operations.

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

- Since these are the specs, we can include all the technical details.
  - Display on 18 hours per day, sleep state 6 hours per day
  - 1 illumination operation (1.5 seconds) per day
  - 10 seconds of alarm operation per day
  - 10 minutes of signal reception per day
- Stable operation is promoted by frequent exposure to light.

Recovery Times
The table below shows the amount exposure that is required to take the battery from one level to the next.

Exposure Level (Brightness)	Approximate Exposure Time				
	Level 5 →	Level 4 →	Level 3 →	Level 2 →	Level 1
Outdoor Sunlight (50,000 lux)	2 hours			25 hours	6 hours
Sunlight Through a Window (10,000 lux)	7 hours			94 hours	22 hours
Daylight Through a Window on a Cloudy Day (5,000 lux)	10 hours			152 hours	35 hours
Indoor Fluorescent Lighting (500 lux)	126 hours			– – –	

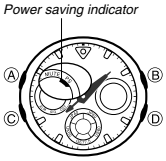
- The above exposure time values are all for reference only. Actual required exposure times depend on lighting conditions.

Reference

This section contains more detailed and technical information about watch operation. It also contains important precautions and notes about the various features and functions of this watch.

Power Saving Function

Power saving indicator



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

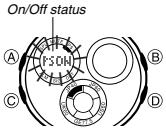
Elapsed Time in Dark	Displa	Operation
60 to 70 minutes	Blank, with Power Saving indicator ( ) flashing	All functions enabled, except for the display
6 or 7 days	Blank, with Power Saving indicator ( ) not flashing	•Beeper tone, illumination, and display disabled •Analog timekeeping stopped at 12 o'clock •Auto receive disabled

- Wearing the watch inside the sleeve of clothing can cause it to enter the sleep state.
- The watch will not enter the sleep state between 6:00 AM and 9:59 PM. If the watch is already in the sleep state when 6:00 AM arrives, however, it will remain in the sleep state.

To recover from the sleep state
Perform any one of the following operations.
- Move the watch to a well-lit area.
- Press any button.

To turn Power Saving on and off

On/Off status



1. In the Timekeeping Mode, hold down Ⓐ until the city code starts to flash, which indicates the setting screen.
2. Press Ⓒ nine times until the Power Saving on/off screen appears.
3. Press Ⓓ to toggle Power Saving on (**PSON**) and off (**PSOF**).
4. Press Ⓐ to exit the setting screen.

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

Button Operation Tone

In any mode (except when a setting screen is on the display), hold down Ⓒ for about three seconds to toggle the button operation tone on and off. The button operation tone off indicator ( ) is displayed while the tone is turned off.
- Even if the button operation tone is turned off, the daily alarm and countdown timer alarm continue to sound when required.

Auto Return Features

- If you leave the watch in the Alarm or Hand Setting Mode, or with the Battery Level indicator displayed for two or three minutes without performing any operation, it automatically returns to the Timekeeping Mode.
- If you leave the watch with a flashing setting on the display for two or three minutes without performing any operation, the watch automatically exits the setting screen.

Scrolling

The Ⓑ and Ⓓ buttons are used in various modes and setting screens to scroll through data on the display. In most cases, holding down these buttons during a scroll operation scrolls through the data at high speed.

Initial Screens

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

Radio-controlled Atomic Timekeeping Precautions

- Strong electrostatic charge can result in the wrong time being set.
- The time calibration signal bounces off the ionosphere. Because of this, such factors as changes in the reflectivity of the ionosphere, as well as movement of the ionosphere to higher altitudes due to seasonal atmospheric changes or the time of day may change the reception range of the signal and make reception temporarily impossible.
- Even if the time calibration signal is received properly, certain conditions can cause the time setting to be off by up to one second.
- The current time setting in accordance with the time calibration signal takes priority over any time settings you make manually.
- The watch is designed to automatically update the date and day of the week for the period January 1, 2000 to December 31, 2099. Setting of the date by the time calibration signal cannot be performed starting from January 1, 2100.
- This watch can receive signals that differentiate between leap years and non-leap years.
- Though this watch is designed to receive both time data (hour, minutes, seconds) and date data (year, month, day), certain signal conditions can limit reception to time data only.
- Normally, the signal reception date shown by the Last Signal screen is the date data included in the received time calibration signal. When only time data is received, however, the Last Signal screen shows the date as kept in the Timekeeping Mode at the time of signal reception.
- If you are in an area where proper time calibration signal reception is impossible, the watch keeps time within ±15 seconds a month at normal temperature.
- If you have problems with proper time calibration signal reception or if the time setting is wrong after signal reception, check your current city code, DST (summer time), and auto receive settings.

Timekeeping

- Resetting the seconds to **00** while the current count is in the range of 30 to 59 causes the minutes to be increased by 1. In the range of 00 to 29, the seconds are reset to **00** without changing the minutes.
- The day of the week is automatically displayed in accordance with the date (year, month, and day) settings.
- The year can be set in the range of 2000 to 2099.
- The watch's built-in full automatic calendar makes allowances for different month lengths and leap years. Once you set the date, there should be no reason to change it except after you have the watch's battery replaced or when battery power drops to Level 5.
- The current time for all city codes in the Timekeeping Mode and World Time Mode is calculated in accordance with the Greenwich Mean Time (GMT) differential for each city, based on your Home City time setting.
- The times for the Timekeeping Mode and all the city codes of the World Time Mode are calculated in accordance with each city's UTC differential.
- The UTC differential is a value that indicates the time difference between a reference point in Greenwich, England and the time zone where a city is located.
- The letters "UTC" is the abbreviation for "Universal Time Coordinated", which is the world-wide scientific standard of timekeeping. It is based upon carefully maintained atomic (cesium) clocks that keep time accurately to within microseconds. Leap seconds are added or subtracted as necessary to keep UTC in sync with the Earth's rotation.

12-hour/24-hour Timekeeping Formats

The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is also applied in all other modes.

- With the 12-hour format, the PM indicator (**P**) appears on the display for times in the range of noon to 11:59 p.m. and no indicator appears for times in the range of midnight to 11:59 a.m.
- With the 24-hour format, times are displayed in the range of 0:00 to 23:59, without any indicator.

Illumination Precautions

- Illumination may be hard to see when viewed under direct sunlight.
- Illumination automatically turns off whenever an alarm sounds.
- Frequent use of illumination runs down the battery.

City Code Table

City Code	City	GMT Differential	Other major cities in same time zone
PPG	Pago Pago	–11.0	
HNL	Honolulu	–10.0	Papeete
ANC	Anchorage	–09.0	Nome
YVR	Vancouver	–08.0	San Francisco, Las Vegas, Seattle/Tacoma, Dawson City, Tijuana
LAX	Los Angeles		
YEA	Edmonton	–07.0	El Paso, Edmonton, Culiacan
DEN	Denver		
MEX	Mexico City	–06.0	Houston, Dallas/Fort Worth, New Orleans
YWG	Winnipeg		
CHI	Chicago		
MIA	Miami	–05.0	Montreal, Detroit, Miami, Boston, Panama City, Havana, Lima, Bogota
YTO	Toronto		
NYC	New York		
CCS	Caracas	–04.0	La Paz, Santiago, Port Of Spain
YHZ	Halifax		
YYT	St. Johns	–03.5	
RIO	Rio De Janeiro	–03.0	Sao Paulo, Buenos Aires, Brasilia, Montevideo
RAI	Praia	–01.0	
LIS	Lisbon	+00.0	Dublin, Casablanca, Dakar, Abidjan
LON	London		
MAD	Madrid	+01.0	Milan, Amsterdam, Algiers, Hamburg, Frankfurt, Vienna
PAR	Paris		
ROM	Rome		
BER	Berlin		
STO	Stockholm		
ATH	Athens	+02.0	Helsinki, Istanbul, Beirut, Damascus, Cape Town
CAI	Cairo		
JRS	Jerusalem		
MOW	Moscow	+03.0	Kuwait, Riyadh, Aden, Addis Ababa, Nairobi
JED	Jeddah		
THR	Tehran	+03.5	Shiraz
DXB	Dubai	+04.0	Abu Dhabi, Muscat
KBL	Kabul	+04.5	
KHI	Karachi	+05.0	Male
DEL	Delhi	+05.5	Mumbai, Kolkata, Colombo
DAC	Dhaka	+06.0	
RGN	Yangon	+06.5	
BKK	Bangkok	+07.0	Jakarta, Phnom Penh, Hanoi, Vientiane
HKG	Hong Kong	+08.0	Singapore, Kuala Lumpur, Manila, Perth, Ulaanbaatar
BJS	Beijing		
TPE	Taipei		
SEL	Seoul	+09.0	Pyongyang
TYO	Tokyo		
ADL	Adelaide	+09.5	Darwin
GUM	Guam	+10.0	Melbourne, Rabaul
SYD	Sydney		
NOU	Noumea	+11.0	Port Vila
WLG	Wellington	+12.0	Christchurch, Nadi, Nauru Island

- Based on data as of December 2006.