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

- Bright Light

The electricity generated by the solar cell of the watch is stored by a rechargeable 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 covered only partially.

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

General Guide

- Press \(\mathcal{C}\) to change from mode to mode.
- In any mode (except when a setting screen is on the display), press \(\mathcal{B}\) to illuminate the display.

Timekeeping Mode

1. In the Timekeeping Mode, hold down \(\mathcal{C}\) until the city code starts to flash, which indicates the setting screen.
2. Press \(\mathcal{C}\) (right) and \(\mathcal{B}\) (left) to select the city code you want to use as your Home City.

To specify your Home City

- In the Timekeeping Mode, hold down \(\mathcal{B}\) until the city code starts to flash, which indicates the setting screen.
- Press \(\mathcal{C}\) (right) and \(\mathcal{B}\) (left) to select the city code you want to use as your Home City.

Radio-controlled Atomic Timekeeping

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

Current Time Setting

This watch adjusts its time setting automatically in accordance with a time calibration signal. You also can 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.
- As of December 2009, China does not use Daylight Saving Time (DST). If China does go to the Daylight Saving Time system in the future, some functions of this watch may no longer operate correctly.
- Using this watch in a country covered by a time calibration that is different from the countries it supports may result in incorrect time indication due to local application of summer time, etc.

To specify your Home City

- Press \(\mathcal{C}\) or \(\mathcal{B}\) to exit the setting screen.

- 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 also can 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 “Important!” under “Time Calibration Signal Reception” and “Transmitters”.
- See the maps under “Approximate Reception Ranges” for information about the reception ranges of the watch.
- You can disable time signal reception, if you want. See “To turn auto receive on and off” for more information.
- Under factory default settings, auto receive is turned off for all of the following city codes: MOW (Moscow), HNL (Honolulu), and ANC (Anchorage). For details about turning on auto receive for these city codes, see “To turn auto receive on and off”.

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 (five times a day for the Chinese calibration signal). 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 pointing towards a window. This watch is designed to receive a time calibration signal late at night. Because of this, you should place the watch near a window as shown in the illustration when you take it off at night. 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
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.

### Approximate Reception Ranges

**U.K. and German Signals**
- 1,500 kilometers: Anthorn (England)
- 500 kilometers: North American signal

**The Anthorn signal is receivable within this area.**

**Japan Signals**
- 500 kilometers: Fukushima
- 1,000 kilometers: Fort Collins, Colorado (the United States)

Signals are receivable in the Taiwan area when reception conditions are good.

• Signal reception may not be possible at the distances noted below during certain times of the year or day. Radio interference also may cause problems with reception.

Shanghai (China) transmitter: 1,500 kilometers (910 miles)
Shangqiu City (China): 1,500 kilometers (910 miles)
Fukuoka/Saga (Japan): 500 kilometers
Fukushima (Japan): 500 kilometers
Shangqiu (China) transmitter: 1,500 kilometers (910 miles)

Even when the watch is within the reception range of the transmitter, signal reception may 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 (five times a day for the Chinese calibration signal). 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.

#### Approximate Reception Ranges

<table>
<thead>
<tr>
<th>Home City Code</th>
<th>Transmitter</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW*</td>
<td>Anthorn (England)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW*</td>
<td>Mainflingen (Germany)</td>
<td>77.5 kHz</td>
</tr>
<tr>
<td>LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW*</td>
<td>Shangqiu (China) transmitter</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW*</td>
<td>Fukushima (Japan)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW*</td>
<td>Fukushima/Saga (Japan)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>TPE, SEL, TYO</td>
<td>Fort Collins, Colorado (the United States)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>HNL, ANC, YVR, LAS, LAX, DEN, MEX, CHI, MIA, YTO, NYC, HND, YVR, ANC</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

Calibration signal reception is disabled while a countdown timer operation is in progress.

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To interrupt a receive operation and return to normal timekeeping, press [ ]

**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 every day, 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 two to seven minutes every day when the time in the Timekeeping Mode reaches a calibration time. Do not perform any button operation within seven minutes before or after 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 of the calibration times, regardless of whether or not the display is turned off.

### About the Signal Strength Indicator

The signal strength 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. The signal strength indicator is displayed while an auto or manual receive operation is in progress.

- Even in an area where signal strength is strong, it takes about 10 seconds for signal reception to stabilize enough for the signal strength indicator to indicate signal strength.
- Use the signal strength indicator as a guide for checking signal strength and for finding the best location for the watch during signal receive operations.
- Following reception of the time calibration signal and calibration of the watch’s time setting, the RCVD indicator will remain on the display for about two minutes. This indicator will not be displayed if signal reception was unsuccessful or after you adjust the current time setting manually.
- The RCVD indicator is displayed only when the watch is able to receive both time and date data successfully. It does not appear when only time data is received.
- The RCVD indicator indicates that at least one of the auto calibration signal receive operations was successful. Note, however, that the RCVD indicator disappears from the display each day when the first auto receive operation of the day is performed.

To perform manual receive

1. Enter the Timekeeping Mode.
2. Hold down [ ] for about two seconds until the RCVD indicator starts to flash on the display. This indicates that manual receive is in progress.
- Time calibration signal reception takes from two to seven minutes. Take care that you do not perform any button operations or move the watch during this time.
- If the receive operation is successful, the reception date and time appear on the display, along with the SET indicator.
3. After manual receive is complete, press [ ] to return to normal timekeeping.
- The watch also will return to normal timekeeping if you do not perform any button operation for about one or two minutes.
- If the latest reception fails but a previous reception was successful during the current day, the RCVD indicator will be displayed.

**Note**

- To interrupt a receive operation and return to normal timekeeping, press [ ].

**To receive a previously successful reception**
To turn auto receive on and off
1. In the Timekeeping Mode, press to display the latest successful receive time and date screen.
2. Hold down until the current auto receive setting ( or ) starts 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 ( or ) and off ( or ).
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 view the latest successful receive time and date. Press again to return to the previous screen.
• The watch will also return to normal timekeeping if you do not perform any button operation for about one or two minutes.

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

Problem
- Cannot perform manual receive.
  - The watch is not in the Timekeeping Mode.
  - Your current Home City is not one of the following: LB, LON, MAD, PAR, ROM, BER, IST, ATH, MOW, HKG, BPE, TPE, SEL, TYO, HNL, ANC, VJR, LAX, YEA, DEN, MEX, CHI, Hnl, YTO, NY, or YZT.
  - A countdown timer operation is in progress.
- Auto receive is turned on, but the RCVD indicator does not appear on the display.
  - You changed the time setting manually.
  - The DST setting was changed manually in the World Time Mode. (If you pressed a button while signal reception was in progress, even if receive is successful, the RCDV indicator will disappear from the display each day when the first auto receive operation of the day is performed.)
  - Time data (hour, minutes, seconds) only was received.
- The 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 and select the correct Home City code.

What you should do
- Enter the Timekeeping Mode and try again.
- Select LB, LON, MAD, PAR, ROM, BER, IST, ATH, MOW, HKG, BPE, TPE, SEL, TYO, HNL, ANC, VJR, LAX, YEA, DEN, MEX, CHI, Hnl, YTO, NY, or YZT as your Home City.
- Enter the Countdown Timer Mode and stop the countdown.
- Perform manual signal reception or wait until the next automatic signal reception operation is performed.
- Check to make sure the watch is in a location where it can receive the signal.
- Select the Timekeeping Mode.

World Time
World Time shows the current time in 48 cities (29 time zones) around the world.
• The times kept in the World Time Mode are synchronized with the time being kept in the Timekeeping Mode. If you feel that there is an error in any World Time mode, check to make sure you have the correct city selected as your Home City. Also check to make sure that the current time as shown in the Timekeeping Mode is correct.
• Select/Select a city code in the World Time Mode to display the current time in any particular time zone around the globe. See the “City Code Table” for information about the UTC differential settings that are supported.
• All of the operations in this section are performed in the Timekeeping 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).
• Pressing and at the same time will jump to the UTC time zone.

To toggle a city code time between Standard Time and Daylight Saving Time
1. In the World Time Mode, press to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
2. Hold down to toggle between Daylight Saving Time (SST indicator displayed) and Standard Time (SST indicator not displayed).
• The DST indicator is shown on the World Time Mode screen while Daylight Saving Time is turned on.
• Note that the Standard Time/Daylight Saving Time setting affects only the currently displayed city code. Other city codes are not affected.
• Note that you cannot switch between Standard Time and Daylight Saving Time while UTC is selected as the city code.

Alarm
The Alarm Mode gives you a choice of four one-time alarms and one snooze alarm.
• Also use the Alarm Mode to turn the Hourly Time Signal ( ) on and off.
• There are five alarm screens numbered AL1, AL2, AL3, AL4 and AL5.
• For one-time alarm, and a snooze alarm indicated by SNZ, The Hourly Time Signal is indicated by .
• All of the operations in this section are performed in the Alarm Mode, which you enter by pressing .

To set a one-time alarm
1. In the Alarm Mode, press to scroll through the alarm screens until the one whose time you want to set is displayed.

Problem
To test the alarm
In the Alarm Mode, hold down to sound the alarm.
To turn an alarm on and off
1. In the Alarm Mode, use to select an alarm.
2. Press to toggle it on ( ) and off ( ).
   • Turning on an alarm (AL1, AL2, AL3, AL4 or SNZ) displays the alarm on its Indicator on the Alarm Mode screen.
   • In all modes, the alarm indicator is shown for any alarm that currently is turned on.
   • The alarm on indicator flashes while the alarm is sounding.
   • The snooze alarm indicator flashes while the snooze alarm is sounding and during the 5-minute intervals between alarms.
   • Also use the Alarm Mode to turn the Hourly Time Signal on or off.

To turn the Hourly Time Signal on and off
1. In the Alarm Mode, use to select the Hourly Time Signal ( ).
2. Press to toggle it on ( ) and off ( ).
   • The Hourly Time Signal indicator is shown on the display in all modes while this function is turned on.

Stopwatch
The stopwatch lets you measure elapsed time, split times, and the time.
• The display range of the stopwatch is 23 hours, 59 minutes, 59.99 seconds.
• The stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.
• The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
• Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to elapsed time measurement.
• All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing .

To measure times with the stopwatch

Start
Stop
Re-start
Stop
Clear

Split Time
Split Release
Stop
Clear

Two Finishes
Split (displayed)
Display time of first runner finishes.
Second runner finishes.

Stop
Clear

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Countdown Timer

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

- All of the operations in this section are performed in the Countdown Timer Mode, which you enter by pressing D.

Countdown End Beeper

The countdown end beeper lets you know when the countdown reaches zero. The beeper stops after about 10 seconds when you press any button.

To configure the countdown timer

1. While the countdown start time is on the display in the Countdown Timer Mode, hold down A until the current countdown start time starts to flash, which indicates the setting screen.
2. If the countdown start time is not displayed, use the procedure under “To use the countdown timer” to display it.
3. Press E to move the flashing between the hour and minute settings.
4. When a setting is flashing, use (+) and (-) to change it.
5. To allow a countdown start time of 24 hours, set 00:00.
6. Press A to exit the setting screen.

To use the countdown timer

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

The countdown timer operation continues even if you exit the Countdown Timer Mode.

- Press E while a countdown operation is in progress to pause it. Press E again to resume the countdown.
- To stop a countdown operation completely, first pause it (by pressing E), and then press A. This returns the countdown time to its starting value.

Illumination

This watch has an EL (electro-luminescent) panel that causes the entire display to glow for easy reading in the dark. The watch’s auto light switch turns on illumination automatically when you angle the watch towards your face.

- The auto light switch must be turned on (indicated by the auto light switch on indicator) for it to operate.
- See “Illumination Precautions” for other important information about using illumination.

To illuminate the display manually

In any mode (except when a setting screen is on the display), press A to turn on illumination.

- The above operation turns on illumination regardless of the current auto light switch setting.

About the Auto Light Switch

Turning on the auto light switch causes illumination to turn on, whenever you position your wrist as described below. Note that this watch features a “Full Auto EL” function, so the auto light switch operates only when available light is below a certain level. It does not turn off on the backlight under bright light.

To turn the auto light switch on and off

1. In the Timekeeping Mode, hold down E for about three seconds to toggle the auto light switch on (AEL displayed) and off (AEL not displayed).
2. The auto light switch on indicator is on the display in all modes while the auto light switch is turned on.

Warning

- Always make sure you are in a safe place whenever you are reading the display of the watch using the auto light switch. Be especially careful when running or engaged in any other activity that can result in accident or injury. Also take care that sudden illumination by the auto light switch does not startle or distract others around you.
- When you are wearing the watch, make sure that its auto light switch is turned off before riding a bicycle or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of the auto light switch can create a distraction, which can result in a traffic accident and serious personal injury.

Power Supply

This watch is equipped with a solar cell and a rechargeable 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.

- 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 sleeves as much as possible. Charging is reduced significantly if the face is covered only partially.

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. Be sure that the watch is exposed to bright light whenever possible.
- This watch uses a 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 rechargeable battery to charge fully, contact your dealer or CASIO distributor about having it replaced.
- Never try to remove or replace the watch’s rechargeable battery yourself. Use of the wrong type of battery can damage the watch.
- All data stored in memory is deleted, and 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.

Battery Power Indicator and Recover Indicator

The battery power indicator on the display shows you the current status of the rechargeable battery’s power.

<table>
<thead>
<tr>
<th>Level</th>
<th>Battery Power Indicator</th>
<th>Function Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>All functions enabled.</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Auto and manual receive, illumination, and beeper disabled.</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Except for timelapping and the CHG (charge) indicator, all functions and display indicators disabled.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>All functions disabled.</td>
<td></td>
</tr>
</tbody>
</table>

- The flashing CHG indicator at Level 3 tells you that battery power is very low, and that exposure to bright light for charging is required as soon as possible.
- At Level 5, all functions are disabled and settings return to their initial factory defaults. Once the battery reaches Level 2 after falling to Level 5, reconfigure the current time, date, and other settings.

- 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, Europe, or China, you will need to change the Home City code setting to match your location whenever the battery drops to Level 5.
- Display indicators reappear as soon as the battery is charged from Level 5 to Level 2.
- Leaving the watch exposed to direct sunlight or some other very strong light source can cause the battery power indicator to show a reading temporarily that is higher than the actual battery level. The correct battery level should be indicated after a few minutes.

- If you use the light or alarms a number of times during a short period, all segments of the battery power indicator flash and the following operations become temporarily disabled as battery power recovers.
  - Display illumination
  - Alarm and hourly time signal
  - Time calibration signal reception
- After some time, the battery power indicator should stop flashing to indicate that battery power is back to normal. At this time the watch should return to normal operation.
- If the battery power indicator frequently flashes, it means that battery power is low. Leave the watch in bright light to allow it to charge.

Charging Precautions

Certain charging conditions can cause the watch to become very hot. Avoid leaving the watch in the areas described below whenever charging to rechargeable battery.

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

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.

<table>
<thead>
<tr>
<th>Exposure Level (Brightness)</th>
<th>Approximate Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor sunlight (5,000 lux)</td>
<td>5 minutes</td>
</tr>
<tr>
<td>Sunlight Through a Window (10,000 lux)</td>
<td>24 minutes</td>
</tr>
<tr>
<td>Daylight Through a Cloudy Day (5,000 lux)</td>
<td>48 minutes</td>
</tr>
<tr>
<td>Indoor Fluorescent Lighting (150 lux)</td>
<td>8 hours</td>
</tr>
</tbody>
</table>

- For details about the battery operating time and daily operating conditions, see the "Power Supply" section of the Specifications.
- Stable operation is promoted by frequent exposure to light.

Recovery Times

Table below shows the amount of exposure that is required to take the battery from one level to the next.

<table>
<thead>
<tr>
<th>Exposure Level (Brightness)</th>
<th>Approximate Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outdoor sunlight (5,000 lux)</td>
<td>2 hours</td>
</tr>
<tr>
<td>Sunlight Through a Window (10,000 lux)</td>
<td>24 hours</td>
</tr>
<tr>
<td>Daylight Through a Cloudy Day (5,000 lux)</td>
<td>48 hours</td>
</tr>
<tr>
<td>Indoor Fluorescent Lighting (500 lux)</td>
<td>10 hours</td>
</tr>
</tbody>
</table>

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

Timekeeping

Current Time

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

Read This Before You Set the Time and Date!

- This watch is provided with a number of city codes, each of which represents the time zone where that city is located. When setting the time, it is important that you first select the correct city code for your Home City (the city where you normally use the watch). If your location is not included in the preset city codes, please select the city code that is in the same time zone as your location.
- Note that all of the times for the World Time Mode city codes are displayed in accordance with the time and date settings you configure in the Timekeeping Mode.

To set the time and date manually

1. In the Timekeeping Mode, hold down (OFF) until the city code starts to flash, which indicates the setting screen.
2. Use (C) and (D) to select the city code you want.
3. Make sure you select your Home City code before changing any other setting.
4. Press any key except (F) to exit the setting screen.

- For full information on city codes, see "City Code Table".

- Press (C) to toggle the Power Saving setting.
- Press (D) to exit the setting screen.
- Auto DST (PDT) can be selected only while LST, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YAY, DEA, MEX, CHI, MIA, YTO, NYC, NYZ, YYT, or YVR is selected as the Home City code. The Power Saving indicator is on the display in all modes except for the Power Saving function.

- Cycle between Auto DST (PDT), Standard Time (ON) and Standard Time (OFF). Press (C).

- Toggle between 12-hour (A) and 24-hour (B) timekeeping. Press (D).

- Change the hour, minute, or day. Use (C) (+) and (D) (-) to change.

- Toggel between Power Saving on (A) and off (F). Press (D).

- You can perform any one of the following operations.
  1. In the Timekeeping Mode, hold down (OFF) until the city code starts to flash, which indicates the setting screen.
  2. Press (C) to exit the setting screen.

- To turn Power Saving on and off

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

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 Mainfingen (Germany), Anthen (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 by the Fukushima and Fukushima Sagi, Japan transmitters include summer time data, summer time currently is not implemented in Japan (as of 2000).
- The default DST setting is Auto DST (PDT) whenever you select LST, LON, MAD, PAR, ROM, BER, ATH, MOW, YAY, DEA, MEX, CHI, MIA, YTO, NYC, NYZ, YYT, or YVR as your Home City code.
- If you experience problems receiving the time calibration signal in your area, it probably is 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 (OFF) until the city code starts to flash, which indicates the setting screen.
2. Press (C) and the DST setting appears.
3. Use (C) and (D) to toggle the DST settings in the sequence shown below:

- Auto DST (PDT) → DST off → DST on → DST off

- If you change your Home City to one that is within the same transmitter area, the current DST (Auto DST) will be retained. If you change to a city that is outside your current transmitter area, DST will be turned off automatically.

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.

Button Operation Tone

- The button operation tone sounds any time you press one of the watch's buttons. You can turn the button operation tone on or off as desired.
- Even if you turn off the button operation tone, alarms, the Hourly Time Signal, and other beepers all operate normally.

To turn the button operation tone on and off

- In any mode (except when a setting screen is on the display), hold down (C) to toggle the button operation tone on (off displayed) and off (displayed).
- Holding down (C) to turn the button operation tone on or off also causes the watch's current mode to change.
- The indicator is displayed in all modes when the button operation tone is turned off.

Power Saving Function

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

<table>
<thead>
<tr>
<th>Time in Dark</th>
<th>Display</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 to 70 minutes</td>
<td>Blank, with Power Saving indicator flashing</td>
<td>All functions enabled, except for the display</td>
</tr>
<tr>
<td>7 or 67 days</td>
<td>Blank, with Power Saving indicator not flashing, display illumination, and display are disabled</td>
<td></td>
</tr>
</tbody>
</table>

- 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.
- Angle the watch towards your face for reading.

To turn Power Saving on and off

1. In the Timekeeping Mode, hold down (OFF) until the city code starts to flash, which indicates the setting screen.
2. Press (C) and the Power Saving indicator appears.
3. Press (C) to toggle Power Saving on (A) and off (F).
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 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 other time you may manually set.
- The watch is designed to update the date and day of the week automatically for the current time setting in accordance with the time calibration signal transmitted 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.
- If you are in an area where proper time calibration signal reception is impossible, the watch keeps the time with the precision noted in “Specifications”.
- 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.
- The Home City setting reverts to the initial default of YO (Tokyo) whenever the battery power level drops to Level 5 or when you have the rechargeable battery replaced. If this happens, change the Home City to the setting you want.

Transmitters

The time calibration signal received by this watch depends on the currently selected Home City code.
- When a U.S. time zone is selected, the watch receives the time calibration signal transmitted from the United States (Fort Collins).
- When a Japan time zone is selected, the watch receives the time calibration signal transmitted from Japan (Fukushima and Fukushima/Saga).
- When a European time zone is selected, the watch receives the time calibration signal transmitted from Germany (Munich) and England (Athorn).
- When a China time zone is selected, the watch receives the time calibration signal transmitted from China (Shanghai, Chongqing).

Auto Return

- If you do not perform any operation for about two or three minutes while a setting screen (with a flashing setting item) is on the display, the watch will exit the setting screen automatically.
- The watch returns to the Timekeeping Mode automatically if you do not perform any button operation for two or three minutes in the Alarm Mode.

Scrolling

- Press the and buttons 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 at high speed.

Initial Screens

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

Timekeeping

- Resetting the seconds to 00 while the current count is in the range of 30 to 59 causes the data to be increased by 1. In the range of 00 to 29, the seconds are reset to 00 without changing the minutes. 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 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 Coordinated Universal Time (UTC) for each city based on your Home City time setting.

World Time

The seconds count of the World Time is synchronized with the seconds count of the Timekeeping Mode.

Illumination Precautions

- The electro-luminescent panel that provides illumination loses power after very long use.
- The watch may emit a audible sound whenever the illumination is displayed. This is due to vibration of the EL panel used for illumination, and does not indicate malfunction.
- Illumination turns off automatically whenever an alarm sounds.
- Frequent use of illumination runs down the battery.

Auto light switch precautions

- Avoid wearing the watch on the inside of your wrist. Doing so causes the auto light switch to operate when it is not needed, which shortens battery life. If you want to wear the watch on the inside of your wrist, turn off the auto light switch feature.

Specifications

Accuracy at normal temperature: ± 15 seconds a month (with no signal calibration)

Timekeeping: Hour, minutes, seconds, p.m. (P), month, day, day of the week

Time format: 12-hour and 24-hour

Calendar system: Full Auto-calendar programme from the year 2000 to 2099

Other: Home City code (can be assigned one of 48 city codes); Standard Time / Daylight Saving Time (summer time)

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

Receivable Time Calibration Signals: Mainflingen, Germany (Call Sign: DCF77, Frequency: 77.5 kHz); Athens, England (Call Sign: MSF, Frequency: 60.0 kHz); Fort Collins, Colorado, United States (Call Sign: WWVB, Frequency: 60.0 MHz); Fukushima, Japan (Call Sign: JY, Frequency: 60.0 kHz); Shangri-la, City, Hainan Province, China (Call Sign: BP, Frequency: 68.5 MHz)

World Time: 48 cities (29 time zones)
Other: Daylight Saving Time/Standard Time
Alarms: 5 daily alarms (hour-one time alarm; one snooze alarm); Hourly Time Signal
Stopwatch:
- Measuring unit: 1/100 second
- Measuring capacity: 29:59 59.99
- Measuring modes: Elapsed time, split time, two finishes

Countdown Timer:
- Measuring unit: 1 second
- Input range: 1 minute to 24 hours (1-minute increments and 1-hour increments)

Illumination: EL (electro-luminescent panel); Full Auto Light Switch
Other: Power Saving; Button operation tone on/off

Power Supply: Solar cell and one rechargeable battery
Approximate battery operating time: 10 months (from full charge to Level 4) under the following conditions:
- Watch not exposed to light
- Internal timekeeping
- Display on 18 hours per day, sleep state 6 hours per day
- 1 illumination operation (1.5 seconds) per day
- 10 seconds of alarm operation per day
- Approximately 4 minutes of signal reception per day

City Code Table

<table>
<thead>
<tr>
<th>City Code</th>
<th>City</th>
<th>UTC Offset/GMT Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIS</td>
<td>Lisbon</td>
<td>1</td>
</tr>
<tr>
<td>LON</td>
<td>London</td>
<td>0</td>
</tr>
<tr>
<td>MAD</td>
<td>Madrid</td>
<td>1</td>
</tr>
<tr>
<td>PAR</td>
<td>Paris</td>
<td>2</td>
</tr>
<tr>
<td>STO</td>
<td>Stockholm</td>
<td>3</td>
</tr>
<tr>
<td>TPE</td>
<td>Taipei</td>
<td>4</td>
</tr>
<tr>
<td>BKK</td>
<td>Bangkok</td>
<td>5</td>
</tr>
<tr>
<td>KHI</td>
<td>Karachi</td>
<td>6</td>
</tr>
<tr>
<td>DUB</td>
<td>Dublin</td>
<td>7</td>
</tr>
<tr>
<td>LAX</td>
<td>Los Angeles</td>
<td>8</td>
</tr>
<tr>
<td>BJS</td>
<td>Beijing</td>
<td>9</td>
</tr>
<tr>
<td>CHI</td>
<td>Chicago</td>
<td>10</td>
</tr>
<tr>
<td>KYO</td>
<td>Kyiv</td>
<td>11</td>
</tr>
<tr>
<td>DAV</td>
<td>David</td>
<td>12</td>
</tr>
<tr>
<td>SYD</td>
<td>Sydney</td>
<td>13</td>
</tr>
<tr>
<td>BNE</td>
<td>Beijing</td>
<td>14</td>
</tr>
<tr>
<td>KUN</td>
<td>Kunming</td>
<td>15</td>
</tr>
<tr>
<td>SGN</td>
<td>Singapore</td>
<td>16</td>
</tr>
<tr>
<td>HKG</td>
<td>Hong Kong</td>
<td>17</td>
</tr>
<tr>
<td>CPR</td>
<td>Chengdu</td>
<td>18</td>
</tr>
<tr>
<td>SFO</td>
<td>San Francisco</td>
<td>19</td>
</tr>
<tr>
<td>HND</td>
<td>Tokyo</td>
<td>20</td>
</tr>
</tbody>
</table>

- Based on data as of December 2009.
- The rules governing global times (UTC offset and GMT differential) and summer time are determined by each individual country.