**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 panel 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 even only partially covered.

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- **Radio-controlled Atomic Timekeeping** ............................ E-10
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  - To perform manual receive ............................................ E-24
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**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.
- 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.

**Battery discharges in the dark.**

**Battery charges in the light.**

- 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 about 8 hours exposure to indoor fluorescent lighting.
- Be sure to read “Power Supply” (page E-49) for important information you need to know when exposing the watch to bright light.
- 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” (page E-66) for more information.

**Note that CASIO COMPUTER CO., LTD. assumes no responsibility for any damage or loss suffered by you or any third party arising through the use of your watch or its malfunction.**

**Press C to change from mode to mode.**

**In any mode (except a setting mode), press D to illuminate the display for about one second.**

**Timekeeping Mode**

Press C.

**Alarm Mode**

(page E-40)

**Countdown Timer Mode**

(page E-36)

**World Time Mode**

(page E-29)

**Stopwatch Mode**

(page E-34)
Radio-controlled Atomic Timekeeping

This watch receives a time calibration signal and updates its time setting accordingly. Important! The time calibration signal the watch will attempt to pick up depends on its current Home City code setting as shown below.

**To specify your Home City**

1. In the Timekeeping Mode, hold down \( \text{A} \) for about five seconds, until the watch beeps twice and the city code flashes on the upper display. This is the setting mode.

2. Press \( \text{A} \) (east) and \( \text{B} \) (west) to select the city code you wish to use as your Home City. City code: Athens, Berlin, Anchorage, Moscow, Seoul, Tokyo, Honolulu, Anchorage, Toronto, Vancouver, Los Angeles.

3. Press \( \text{B} \) to exit the setting mode.

**Important!**

- When getting ready to receive the time calibration signal, position the watch as shown in the illustration, with its 12 o’clock side pointing towards a window. Make sure the watch is facing the right way.
- Proper signal reception can be difficult or even impossible under the conditions listed below.
- 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.
- 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 “To set the time and date manually” (page E-58) for more information about manual time setting.
- 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.
- Using this watch in a country covered by a time calibration signal that is different from the country it supports may result in incorrect time indication due to local application of summer time, etc.

**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 for the Chinese calibration signal). When any auto receive is successful, remaining auto receive operations are not performed. For more information, see “About Auto Receive” (page E-21).

- **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” (page E-24).

**Operation Guide 5110**
Signal reception may not be possible at the distances that are further than those noted below during certain times of the year or day. Radio interference also may cause problems with reception.

- Mariestiingen (Germany) or Anthorn (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)
- Shangai (China) transmitter: 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.
- As of December 2013, 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.

### About Auto Receive

The watch receives the time calibration signal automatically up to six times a day (five times for the Chinese calibration signal). When any auto receive is successful, 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**

<table>
<thead>
<tr>
<th>Home City</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAV</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>DUS</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>LON</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>PAR</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>BER</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>MAD</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>STO</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>ATH</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
<tr>
<td>MOW</td>
<td>Midnight*</td>
<td>1:00 am</td>
<td>2:00 am</td>
<td>3:00 am</td>
<td>4:00 am</td>
<td>Midnight*</td>
</tr>
</tbody>
</table>

**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 two to 14 minutes everyday when the time in the Timekeeping Mode reaches a calibration time. Do not perform any button operation within 14 minutes before or after the calibration time. Doing so can interfere with correct calibration.
- Remember that reception of the calibration signal depends on the current time in your Home City, as kept in the Timekeeping Mode.

To perform manual receive

1. Place the watch on a stable surface so its 12 o'clock side is facing towards a window (page E-16).
2. In the Timekeeping Mode, hold down R for about two seconds until the watch beeps.
3. The digital display will go blank, and the left dial hand will move to R (READY). This indicates that the watch is getting ready for time calibration signal reception.
4. See the information under “Signal Reception Troubleshooting” (page E-27) if you experience problems.
5. The left dial hand will move to W (WORK) and stay there while actual reception is in progress.
6. If signal reception is unstable during reception, the left dial hand may move between W (WORK) and R (READY).
7. The hour and minute hands continue to keep time normally.

To check the latest signal reception results

In the Timekeeping Mode, press R to view the last successful receive time and date. Press R again to return to the previous screen.

### Signal Reception Troubleshooting

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

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause</th>
<th>What you should do</th>
</tr>
</thead>
<tbody>
<tr>
<td>I can’t receive a time calibration signal.</td>
<td>You performed some button operation during auto receive.</td>
<td>Perform manual receive at night or wait until the next auto receive operation.</td>
</tr>
<tr>
<td>The watch is not in the Timekeeping Mode or World Time Mode.</td>
<td>Enter the Timekeeping Mode or World Time Mode and try again.</td>
<td></td>
</tr>
<tr>
<td>The watch is in a location where the signal cannot be received for some reason.</td>
<td>A Countdown Timer operation is in progress.</td>
<td></td>
</tr>
<tr>
<td>Radio interference is often present during the day time, which can interfere with signal reception.</td>
<td>Check to make sure the watch is in a location where it can receive the signal (page E-15).</td>
<td></td>
</tr>
</tbody>
</table>

World Time

World Time digitally displays the current time in one of 48 cities (29 time zones) around the world. A simple operation swaps your Home City with the currently selected World Time City.

- When you enter the World Time Mode, the current month and day of the World Time City appear first. After about one second, the current time appears.
- 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 time, 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.
To toggle a city code time between Standard Time and Daylight Saving Time

1. In the World Time Mode, press \( \text{C} \) to select a city code. This action will change the city code that you had previously selected.

2. Hold down \( \text{C} \) for about three seconds to toggle between Standard Time and Daylight Saving Time.

3. The city code (time zone) you want is selected, you can press \( \text{A} \) to display the city code.

4. All of the city codes in the section are performed in the World Time Mode, which you enter by pressing \( \text{A} \) (page E-9).

Swapping your Home City and World Time City

You can use the procedure below to swap your Home City and World Time City. This changes your Home City to your World Time City, and your World Time City to your Home City.

1. In the World Time Mode, use \( \text{B} \) to select the World Time City you want.

2. Hold down \( \text{C} \) until you exit the World Time Mode.

3. The first time you exit the World Time Mode, press \( \text{B} \) to select the World Time City you want.

4. The time is displayed as the World Time City.

To configure countdown start time and auto-repeat settings

1. While the countdown start time is on the display in the Countdown Timer Mode, hold down \( \text{C} \) for about three seconds until the minute setting of the countdown start time is flashing. This is the setting mode.

2. If the countdown start time is not displayed, use the procedure under “To use the countdown timer” (page E-37) to display the countdown start time.

3. Perform the following operations, depending on which setting currently is selected on the display.

   - While the start time setting is flashing, use \( \text{B} \) (+) and \( \text{A} \) (–) to change it.
   - While the auto-repeat on/off setting is flashing on the display, press \( \text{B} \) to toggle auto-repeat on \( \text{A} \) and off \( \text{B} \).
Alarms

When an alarm is turned on, the alarm tone will sound when the current time is reached. One of the alarms is a snooze alarm, while the other four are one-time alarms.
You can turn on an hourly time signal that causes the watch to beep every hour on the hour.
There are five alarm screens numbered AL1, AL2, AL3, AL4, and SNZ for the one-time alarm, and a snooze alarm screen indicated by SNZ.
All of the operations in this section are performed in the Alarm Mode, which you enter by pressing \( \text{A} \) (page E-9).

To set an alarm time
1. In the Alarm Mode, use \( \text{A} \) to scroll through the alarm screens until the one whose time you want to set is displayed.
2. To set a one-time alarm, display alarm screen AL1, AL2, AL3, or AL4. To set the snooze alarm, display the SNZ screen.
3. Use \( \text{B} \) and \( \text{C} \) to change it.

To turn an alarm on and off
1. In the Alarm Mode, use \( \text{A} \) to select an alarm.
2. Press \( \text{A} \) to toggle it on and off.
3. Turning on a alarm (AL1, AL2, AL3, AL4 or SNZ) displays the alarm on indicator on its Alarm Mode screen.
   In all modes, the alarm on 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.

About the Auto Light Switch

Turning on the auto light switch causes illumination to turn on, whenever you position your wrist toward a light source. This is especially useful when reading or engaged in any activity that can result in accident or injury.

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 you are in any area that may cause you harm.

To turn on the auto light switch, hold down \( \text{A} \) for about three seconds to toggle the auto light switch on (auto light switch on indicator displayed) and off (auto light switch on indicator not displayed).

Moving the watch to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes illumination to turn 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 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.
- To turn off the auto light switch, hold down \( \text{A} \) for about three seconds to toggle the auto light switch off (auto light switch off indicator displayed) and on (auto light switch off indicator not displayed).

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 activity that can result in accident or injury.

To turn the auto light switch off
1. The auto light switch is always disabled, regardless of its on/off setting, when any one of the following conditions exists.
   - While an alarm is sounding
   - While a signal reception operation is in progress
   - When any part of the solar panel is blocked by clothing, etc.
   - While the auto light switch is turned on.

Illumination

As LED (light-emitting diode) illuminates the face of the watch for easy reading in the dark. The watch’s auto light switch turns on illumination automatically when you angle the watch towards your face.

To turn on the auto light switch
1. Use \( \text{B} \) to turn on the auto light switch.
2. Press \( \text{B} \) to toggle it on and off.
   The auto light switch must be turned on (indicated by the auto light switch on indicator) for it to operate.
   See “Illumination Precautions” (page E-73) for other important information about using illumination.

To illuminate the display manually
In any mode (except a setting mode), press \( \text{B} \) to turn on the illumination for about one second.
   The above operation turns on illumination regardless of the current auto light switch setting.

Power Supply

This watch is equipped with a solar panel and a special rechargeable battery (secondary battery) that is charged by the electrical power produced by the solar panel. 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 the watch with a resin band.
- Note that charging efficiency drops when any part of the solar panel is blocked by clothing, etc.
- You should try to keep the watch exposed to a steady light as much as possible. Charging is reduced significantly if the face is even only partially covered.
Battery Power Indicator and Power Recovery Mode indicator

The battery power indicator tells 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>(H)</td>
<td>CHG</td>
<td>All functions enabled</td>
</tr>
<tr>
<td>(M)</td>
<td>CHG</td>
<td>All functions enabled</td>
</tr>
<tr>
<td>(L)</td>
<td>CHG (Alert)</td>
<td>Auto and manual receive, illumination, and beeper disabled</td>
</tr>
<tr>
<td>(E)</td>
<td>CHG</td>
<td>Except for timerkeep, all functions and display indicators disabled</td>
</tr>
<tr>
<td>(R)</td>
<td>CHG</td>
<td>All functions disabled</td>
</tr>
</tbody>
</table>

- The flashing **LOW** indicator at Level 3 (L) 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 (CHG), all functions are disabled and settings return to their initial factory defaults. Once the battery reaches Level 2 (M), after falling to Level 5 (CHG), reconfigure the current time, date, and other settings.
- Display indicators reappear as soon as the battery is charged from Level 5 (CHG) to Level 2 (M).
- The watch’s Home City code setting will change automatically to **TYO** (Tokyo) whenever the battery drops to Level 5 (CHG). 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, or China you will need to change the Home City code setting to match your location whenever the battery drops to Level 5 (CHG).
- Leaving the watch exposed to direct sunlight or some other very bright 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.

**Charging Precautions**

Certain charging conditions can cause the watch to become very hot. Avoid leaving the watch in the conditions 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

**Recovery Times**

The 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 (Brightness)</th>
<th>Approximate Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>50,000 lux</td>
<td>8 hours</td>
</tr>
<tr>
<td>10,000 lux</td>
<td>32 hours</td>
</tr>
<tr>
<td>5,000 lux</td>
<td>10 hours</td>
</tr>
<tr>
<td>1,000 lux</td>
<td>36 hours</td>
</tr>
</tbody>
</table>

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

**Read This Before You Set the Time and Date!**

This watch is preset 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, select the preset city code that is in the same time zone as your location.

- Note that all of the times for the World Time City codes (page E-29) are displayed in accordance with the time and date settings you configure for the Timekeeping Mode.

To set the time and date manually:

1. In the Timekeeping Mode, hold down **A** for about five seconds, until the watch beeps twice and the city code flashes on the upper display. This is the setting mode.
2. Use **B** to **F** to select the city code you want.
3. Press **C** to change the flashing city code in the sequence shown below to select the other settings.
4. When the timekeeping setting you want to change is flashing, use **B** to **F** to select it and then press **D** to change it as described below.

**Battery Power Indicator and Power Recovery Mode Indicator**

- Overuse of display illumination or the beeper can cause the **R** (Recover) indicator to appear in the upper display, which indicates that the watch is in the battery power recovery mode. Face illumination, the alarm, the countdown timer alarm, time signals, and all hand operations are disabled in the power recovery mode. The watch continues to keep time internally, so regular timekeeping and function will resume as soon as battery power recovers to normal levels, which is indicated when the **R** indicator disappears.
- If **R** appears frequently, it probably means that remaining battery power is low. Leave the watch in bright light for some time to allow it to charge.

**Charging Guide**

After a full charge, timekeeping remains enabled for up to about six 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.

<table>
<thead>
<tr>
<th>Exposure (Brightness)</th>
<th>Approximate Exposure Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>500 lux</td>
<td>4 minutes</td>
</tr>
<tr>
<td>10,000 lux</td>
<td>30 minutes</td>
</tr>
<tr>
<td>5,000 lux</td>
<td>48 minutes</td>
</tr>
<tr>
<td>1,000 lux</td>
<td>72 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 (page E-77).
- Stable operation is promoted by frequent exposure to light.

**Timekeeping**

You can adjust the Home City time and date in the Timekeeping Mode manually. Pressing **D** in the Timekeeping Mode will toggle the lower display between the screens shown below.

- Use **B** to **F** to select the city code you want.
- Press **C** to change the flashing city code in the sequence shown below to select the other settings.

**Screen**

- Press **E** to change the flashing city code in the sequence shown below to select the other settings.
- **DST** (Daylight Saving Time) is not supported.
- Use **B** to **F** to select the city code you want.

3. Press **F** to change the timekeeping setting you want to change. Use **B** to **F** to select it and then press **D** to change it as described below.

4. When the timekeeping setting you want to change is flashing, use **B** to **F** to select it and then press **D** to change it as described below.

- **City Code**
- **Power Saving**
- **Time Format**
- **Month**
- **Year**
- **Month**
- **Year**
- **Time Display**
- **Time Format**
- **Daylight Saving Time**
- **Time Format**
- **Month**
- **Year**
- **Time Display**
- **Time Format**
- **Daylight Saving Time**
- **Time Format**
- **Month**
- **Year**
- **Time Display**
- **Time Format**
- **Daylight Saving Time**
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), Anthorn (England), and 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 (Daylight Saving Time) automatically in accordance with the signals.

Though the time calibration signals transmitted by the Fukushima and Fukushika Sago, Japan transmitters include summer time data, summer time is not implemented in Japan (as of 2013).

The default DST setting is Auto DST (AUTO) whenever you select LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YEA, DEN, MEX, CHI, MA, YTO, NYC, YHZ, or YY in your Home City code. If your experience problems receiving the time calibration signal in your area, it is implemented in Japan (as of 2013).

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. Daytime 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.

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

Hand Home Position Correction

The hands of the watch can be thrown off by exposure to strong magnetism or impact. If that happens, check if the home positions of the hands are correct and adjust the home positions as required.

To adjust the home positions

1. In the Timekeeping Mode, hold down \( \text{ } \) for about three seconds, until H-SET appears on the upper display and "Sub" flashes in the lower display.

2. The left dial hand is in its correct home position when it moves to C (CHG); If it doesn’t, use \( \text{ } \) to adjust its position.

3. After confirming that the left dial hand is in its correct home position, press \( \text{ } \).

4. This will change to hour hand and minute hand home position manual correction.

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

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.

Radio-controlled Atomic Timekeeping Precautions

Strong electrostatic change can cause the time setting to be thrown off.

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 update the date and day of the week automatically for the period January 1, 2000 to December 31, 2099. Setting of the day by the time calibration signal cannot be performed starting from January 1, 2100.

This watch can receive signals that differentiate 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.
Other:
- Daylight Saving Time/Standard Time; Home City/World Time City Swapping
- Auto-repeat timing
- Auto Light Switch (Full Auto LED Light operates only in the dark)
- Power Saving

Power Supply: Solar panel and one rechargeable battery
- Approximate battery operating time: 8 months (from full charge to Level 5 (CHG); 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
  - 4 minutes of signal reception per day
- Frequent use of illumination runs down the battery. Particular care is required when using the auto light switch (page E-72).

City Code Table

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>City Code</th>
<th>Time Zone</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
<td></td>
</tr>
<tr>
<td>United States</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Specifications

- Accuracy at normal temperature: ±15 seconds a month (with no signal calibration)
- Digital Timekeeping: Hour, minute, seconds, P.M., month, day, day of the week
- Daylight Saving Time: Solar time adjustment
- Analog Timekeeping: Hour, minute (moves every 10 seconds)
- Time Calibration Signal Reception: Auto receive 6 times a day (Remaining auto receive cancelled as soon as one is successful) (5 times a day for the Chinese calibration signal)
- Manual receive
- Receivable Time Calibration Signals: Minflingen, Germany (Call Sign: DC7F7, Frequency: 77.5 kHz); Anthorn, England (Call Sign: MISF, Frequency: 60.0 kHz); Fort Collins, Colorado, the United States (Call Sign: WWVB, Frequency: 60.0 kHz); Fukushima, Japan (Call Sign: JJY, Frequency: 40.0 kHz); Fukushima, Japan (Call Sign: JYY, Frequency: 80.0 kHz); Shanghai City, Henan Province, China (Call Sign: BPC, Frequency: 68.5 kHz)

High-Speed Movement
- The 8th and 9th buttons are used to change the hand setting in various setting modes. In most cases, holding down these buttons will start high-speed movement of the applicable hand(s).

Auto Return Features
- If you leave the watch with a flashing setting on the display for two or three minutes without performing any operation, the watch will exit the setting mode automatically.
- The watch will return to the Timekeeping Mode automatically if you do not perform any operation for two or three minutes in the Alarm Mode.

Auto light switch precautions
- The auto light switch is turned off automatically whenever battery power is at Level 4 (CHG) (page E-51).
- 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.

More than 15 degrees too high
- Illumination may not turn on if the face of the watch is more than 15 degrees above or below parallel. Make sure that the back of your hand is parallel to the ground.
- Illumination turns off in about one second, even if you keep the watch pointed towards your face.

Specifications

- Power Saving
- Solar panel and one rechargeable battery

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

Illumination Precautions
- Under certain conditions, illumination may not turn on until about one second after you turn it on. This does not necessarily indicate malfunction of the auto light switch.
- You may notice a very faint clicking sound coming from the watch when it is shaken from side to side. This sound is caused by mechanical operation of the auto light switch, and does not indicate a problem with the watch.
## City Code Table

<table>
<thead>
<tr>
<th>City Code</th>
<th>City</th>
<th>UTC Offset/GMT Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pago Pago</td>
<td>Pago Pago</td>
<td>-11</td>
</tr>
<tr>
<td>Honolulu</td>
<td>Honolulu</td>
<td>-10</td>
</tr>
<tr>
<td>Anchorage</td>
<td>Anchorage</td>
<td>-9</td>
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<tr>
<td>JAX</td>
<td>Jacksonville</td>
<td>-8</td>
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<tr>
<td>SCL</td>
<td>Santiago</td>
<td>-4</td>
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<td>St. Johns</td>
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<td>Rio De Janeiro</td>
<td>-3</td>
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<td>Praia</td>
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</tr>
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<td>NYC</td>
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<td>Athens</td>
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<tr>
<td>JED</td>
<td>Jeddah</td>
<td>+3.5</td>
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<tr>
<td>DXB</td>
<td>Dubai</td>
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<td>+10</td>
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<td>NOU</td>
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<td>+11</td>
</tr>
<tr>
<td>WLG</td>
<td>Wellington</td>
<td>+12</td>
</tr>
</tbody>
</table>

* The above is current as of December 2013. This watch does not reflect the change in the Moscow (MOW) time offset to +4. Because of this, you should leave the summer time setting turned on (which advances the time by one hour) for Moscow (MOW).

* This table shows the city codes of this watch.

* The rules governing global times (UTC offset and GMT differential) and summer time are determined by each individual country.