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.

This watch does not have a city code that corresponds to the UTC offset of –3.5 hours. Because of this, the radio-controlled atomic timekeeping function will not display the correct time for Newfoundland, Canada.

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.

Procedure Lookup

The following is a handy reference list of all the operational procedures contained in this manual.

To specify your Home City ................................................. E-12
To perform manual receive ................................................. E-25
To turn auto receive on and off ............................................ E-27
To view the latest signal reception results ........................... E-28
To view the time in another city ............................................ E-33
To toggle a city code time between Standard Time and Daylight Saving Time ..................................................... E-34
To set an alarm time ........................................................... E-36
To turn the Hourly Time Signal on and off......................... E-38

Keep the watch exposed to bright light

The electricity generated by the solar cell of the watch is stored by a rechargeable battery. Leaving or using the watch when 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.

<table>
<thead>
<tr>
<th>Solar cell (Converts light to electrical power)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bright Light</td>
</tr>
<tr>
<td>Electrical energy</td>
</tr>
<tr>
<td>Level 1</td>
</tr>
<tr>
<td>Level 2</td>
</tr>
<tr>
<td>Level 3</td>
</tr>
<tr>
<td>Functions enabled</td>
</tr>
<tr>
<td>Some or all functions enabled</td>
</tr>
</tbody>
</table>

Battery discharges in the dark.

| Level 1 enabled functions                     |
| Level 2 enabled functions                     |
| Level 3 enabled functions                     |
| Functions disabled                            |
| Some or all functions disabled                |

About This Manual

- 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.

Procedure Lookup

- 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-45) 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” (page E-69) 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 this product or its malfunction.

Contents

General Guide ................................................................. E-8
Radio-controlled Atomic Timekeeping .............................. E-11
World Time ................................................................. E-32
Alarms ......................................................................... E-35
Stopwatch ................................................................. E-40
Countdown Timer ......................................................... E-42
Power Supply ............................................................. E-45
Timekeeping ............................................................... E-53
Adjusting Home Positions ............................................. E-63
Reference ................................................................. E-67
Specifications ........................................................... E-76

General Guide

- Press \( \text{MODE} \) to change from mode to mode.
- In any mode, press \( \text{MODE} \) to illuminate the face of the watch.
- Holding down \( \text{MODE} \) for at least two seconds at any time will return directly to the Timekeeping Mode.

To turn off all alarms and the Hourly Time Signal ................. E-39
To measure times with the stopwatch ................................ E-40
To configure the countdown timer .................................. E-43
To use the countdown timer ........................................... E-44
To set the time and date manually .................................... E-54
To change the Daylight Saving Time (summer time) setting .... E-59
To adjust home positions ............................................... E-64
To turn the button operation tone on and off .................... E-68
To recover from the sleep state ....................................... E-70

To turn the Hourly Time Signal on and off ......................... E-38
Under factory default settings, auto receive is turned off for all of the following cities:

- Calibration signal reception is disabled while a countdown timer operation is in progress.
- You can disable time signal reception, if you want. See "To turn auto receive on and off" on page E-27 for more information.
- Proper signal reception can be difficult or even impossible under the conditions listed below.
- Signal reception normally is better at night than during the day.
- Time calibration signal reception takes from three to eight minutes, but in some cases it can take as long as 16 minutes. Take care that you do not perform any button operations or move the watch during this time.

### Radio-controlled Atomic Timekeeping

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

- This watch is designed to pick up the time calibration signals transmitted in Germany (Mainflingen), England (Anthorn), the United States (Fort Collins), China (Shangqiu), and Japan (Fukushima, Fukusuka/Saga).

#### 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" (page E-12).
- 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" (page E-53) for more information about manual time settings.

#### To specify your Home City

1. In the Timekeeping Mode, hold down (D) for about three seconds. You can release the button after 40.0 kHz (24-hour timekeeping) also will be flashing on the display.
   - At this time, 12H (10-hour timekeeping) or 24H (24-hour timekeeping) also will be flashing on the display.

2. Press (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 (page E-25) or you can set the time manually (page E-54).

3. 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 page E-18 and "Transmitters" (page E-72).
   - See the maps under "Approximate Reception Ranges" (page E-19) 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" on page E-27 for more information.
   - Under factory default settings, auto receive is turned off for all of the following city codes: HNL (Honolulu) and ANC (Anchorage). For details about turning on auto receive for these city codes, see "To turn auto receive on and off" on page E-27.

4. Press (D) 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 (page E-25) or you can set the time manually (page E-54).

#### 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 6 times a day (5 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" (page E-22).
  - 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-25).

#### Approximate Reception Ranges

<table>
<thead>
<tr>
<th>U.K. and German Signals</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anthorn (England)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>Mainflingen (Germany)</td>
<td>40.0 kHz</td>
</tr>
<tr>
<td>Fort Collins, Colorado</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>U.S. Signal</td>
<td>60.0 kHz</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Approximate Reception Ranges</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>New York (NYC)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>Chicago (CHI)</td>
<td>40.0 kHz</td>
</tr>
<tr>
<td>Los Angeles (LAX)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>Anchorage (ANC)</td>
<td>40.0 kHz</td>
</tr>
<tr>
<td>Honolulu (HNL)</td>
<td>60.0 kHz</td>
</tr>
</tbody>
</table>

### Important Notes

- 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 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.
- The time calibration signal the watch will attempt to pick up depends on its current Home City code setting as shown below.

<table>
<thead>
<tr>
<th>Home City Code</th>
<th>Transmitter</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>LON, PAR, ATH</td>
<td>Anthorn (England)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>LON, PAR, ATH</td>
<td>Mainflingen (Germany)</td>
<td>40.0 kHz</td>
</tr>
<tr>
<td>HNL, ANC, LAX,</td>
<td>Fukushima (Japan)</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>HNL, ANC, LAX,</td>
<td>Fort Collins, Colorado</td>
<td>60.0 kHz</td>
</tr>
<tr>
<td>TYO</td>
<td>Tokyo</td>
<td>40.0 kHz</td>
</tr>
<tr>
<td>TYO</td>
<td>Hong Kong</td>
<td>60.0 kHz</td>
</tr>
</tbody>
</table>

- The areas covered by the HNL and ANC city codes are quite far from the time signal calibration transmitters, and so certain conditions may cause problems with signal reception.
- Calibration signal reception is disabled while a countdown timer operation is in progress.

### Operation Guide 5161

CASIO
About Auto Receive
The watch receives the time calibration signal automatically up to 6 times a day (5 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.

Your Home City | Auto Receive Start Times
--- | ---
TYO | 1:00 am, 2:00 am, 3:00 am, 4:00 am, 5:00 am, Midnight*
HNL | 1:00 am, 2:00 am, 3:00 am, 4:00 am, 5:00 am, Midnight*
PAR | 2:00 am, 3:00 am, 4:00 am, 5:00 am, Midnight*, 0:00 am
ATH | 3:00 am, 4:00 am, 5:00 am, Midnight*, 0:00 am
DEN | 4:00 am, 5:00 am, Midnight*, 0:00 am, 1:00 am
CHI | 5:00 am, 6:00 am, Midnight*, 0:00 am

To perform manual receive
1. While in the Timekeeping Mode or Battery/Receive Mode, hold down \( \text{ON} \) for about two seconds.
2. The second hand will move to \( \text{READY} \) (R) and signal reception will start.
3. The digital display will go blank at this time.
4. The second hand will indicate the current reception status.
5. \( \text{READY} \) (R): Unstable
6. \( \text{WORK} \) or \( \text{W} \): Stable
7. \( \text{Keep the watch in a location where reception is stable while a receive operation is in progress.} \)
8. \( \text{Signal reception takes from three to eight minutes, but in some cases it can take as long as 16 minutes. Take care that you do not perform any button operations or move the watch during this time.} \)
9. \( \text{Even under optimum reception conditions, it can take about 30 seconds for reception to stabilize.} \)

When reception fails
1. The watch displays ‘ERROR’ without adjusting the current time setting.
2. To return to the Timekeeping Mode after ‘ERROR’ appears, press \( \text{A} \) or \( \text{B} \), or do not perform any operation for one or two minutes.
3. Once any receive operation is successful, the receive successful indicator will remain on the display for the rest of the day, even if other receive operations fail.

To turn auto receive off and on
1. In the Timekeeping Mode, press \( \text{ON} \) to enter the Battery/Receive Mode.
2. Press \( \text{A} \) to display the date and time of the last successful signal reception.
3. Hold down \( \text{ON} \) until the current auto receive setting (ON or OFF) starts to flash. This is the setting screen.
4. \( \text{Note that the setting screen will not appear if the currently selected Home City is the one that does not support time calibration reception.} \)
5. \( \text{For information about cities that support signal receive, see ‘To specify your Home City’ (page E-12).} \)

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>Cannot perform manual receive</td>
<td>The watch is not in the Timekeeping Mode. Your current Home City is not listed in the following: LON, PAR, ATH, HKG, TYO, HNL, ANC, LAX, DEN, CHI, or NYC. A countdown timer operation is in progress.</td>
<td>Enter the Timekeeping Mode and try again. Select LON, PAR, ATH, HKG, TYO, HNL, ANC, LAX, DEN, CHI, or NYC as your Home City. Enter the Countdown Timer Mode and stop the countdown.</td>
</tr>
<tr>
<td>Auto receive is turned on, but the receive successful indicator does not appear on the display.</td>
<td>You changed the time setting manually. The DST setting was changed manually.</td>
<td>Perform manual signal receive or wait until the next auto signal receive operation is performed.</td>
</tr>
</tbody>
</table>
### Operation Guide 5161

#### Problem | Probable Cause | What you should do
--- | --- | ---
Auto receive is turned on, but the receive successful indicator does not appear on the display. | Even if reception is successful on a particular day, the receive successful indicator will disappear when the first auto receive operation is performed on the following day. Time data (hour, minutes, seconds) only was received during the last receive operation. The receive successful indicator appears only when time data and date data (year, month, day) are both received. | Check to make sure the watch is in a location where it can receive the signal (page E-16). |

### World Time

**World Time** shows the current time in 29 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 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.

- The World Time Mode indicator is displayed in the World Time Mode.
- 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” at the back of this manual for information about the UTC differential settings that are supported.

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

1. In the World Time Mode, use (i) to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
2. Hold down (i) to toggle between Standard Daylight Saving Time (DST indicator not displayed) and Standard Time (DST indicator not displayed).
3. The DST indicator is shown on the World Time Mode screen while Daylight Saving Time is turned on.
4. Note that the Standard Time/Daylight Saving Time setting affects only the currently displayed city code. Other city codes are not affected.
5. Selecting Daylight Saving Time for the city that is currently selected as the Home City, will also apply Daylight Saving Time to the Timekeeping Mode.
6. Note that you cannot switch between Standard Time and Daylight Saving Time while UTC is selected as the city code.

### Alarms

The Alarm Mode lets you configure five daily alarms. You can use it to turn the Hourly Time Signal on or off.

1. The watch beeps for about 10 seconds when an alarm is reached.
2. You can also use it to turn the Hourly Time Signal on or off.

#### To set an alarm time

1. In the Alarm Mode, use (i) to scroll through the alarm screens until the one whose time you want to set is displayed.
2. Hold down (i) until the hour digits of the current alarm time start to flash. This is the setting mode.
3. Entering the setting mode automatically turns on the displayed alarm.

#### Alarm Operation

The alarm tone sounds at the preset time for 10 seconds, regardless of the mode the watch is in. Alarm and Hourly Time Signal operations are performed in accordance with the Timekeeping Mode time.

To stop the alarm tone after it starts to sound, press any button.

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

1. In the Alarm Mode, use (i) to select the Hourly Time Signal.
2. Hold down (i) for about three seconds until ON flashes on the display. This is the setting mode.
3. Entering the setting mode automatically turns on the Hourly Time Signal.

#### To turn all alarms and the Hourly Time Signal off in the Alarm Mode, hold down (i) for about three seconds.

- Alla OFF will appear on the display indicating all alarms and the Hourly Time Signal are turned off.
The stopwatch lets you measure elapsed times.

- 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.
- 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 \( \square \) (page E-9).

To use the countdown timer

- Press \( \square \) 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 \( \square \) while a countdown operation is in progress to pause it. Press \( \square \) again to resume the countdown.
- To stop a countdown operation completely, hold down \( \square \) for about one second until the countdown time returns to its starting value.

Countdown End Beeper

- The countdown and beeper lets you know when the countdown reaches zero. The beeper stops after about 10 seconds or 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 \( \square \) 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” (page E-44) to display it.
3. Press \( \square \) to scroll the minute setting value.
4. To specify a countdown time of 100 minutes, set \( \square \) to 0:00.

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.

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 covered only partially.

Battery Power Indicator and Recover Indicator

In the Timekeeping Mode, press \( \square \) to enter the Battery/Receive Mode. The battery power indicator on the display shows you the current status of the rechargeable battery's power.

- The flashing \( \square \) LO 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. When 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 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.
- 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.

Important

- Storing the watch for long periods in an area where there is no light or wearing it in a place where it is covered only partially.
- Charging 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.
- Never try to remove or replace the watch’s rechargeable battery yourself. Use of the wrong type of battery can damage the watch.
- The correct battery level should be indicated after a few minutes.
Charging Precautions
Cautions when charging the watch to become very hot. Avoid leaving the watch in areas where high temperatures are maintained. Also note that the following conditions cause the watch to become very hot.

1. Leaving the watch in bright light to charge its rechargeable battery causes it to become quite hot. Take care when handling the watch to avoid burning injury.
2. The watch can become particularly hot when exposed to the following conditions.
   - On the dashboard of a car parked in direct sunlight
   - Near an incandescent lamp

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 burning injury.
The watch can become particularly hot when exposed to the following conditions.

To set the time and date manually

1. In Timekeeping Mode, hold down B for about three seconds. You can release the button after "ADJ" appears on the display.
   - At this time, "12H" (12-hour timekeeping) or "24H" (24-hour timekeeping) also will be flashing on the display.
   - The second hand will move to 12 o'clock and stop there.
2. Press C to toggle between 12-hour (12H) and 24-hour (24H) timekeeping.
3. Press B and the city code of your Home City will flash on the display.
4. Use C to select the city code you want.
5. Make sure you select your Home City code before changing any other setting.
6. For full information on city codes, see "City Code Table" at the back of this manual.

Exposure Guide

- The above exposure time values are all for reference only. Actual required exposure times depend on lighting conditions.
- Stable operation is promoted by frequent exposure to light.

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

- Daylight Saving Time (DST) is available only when a city code that supports signal reception is selected as the Home City.
- Note that all the times for the World Time Mode city codes (page E-32) are displayed in accordance with the time and date settings you configure in the Timekeeping Mode.

Timekeeping

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 Mode city codes (page E-32) are displayed in accordance with the time and date settings you configure in the Timekeeping Mode.
- The watch automatically adjusts its analog setup to match the digital setup of your Home City. If the analog time is not correct even though you are sure the digital setup of your Home City is correct and you are performing signal reception properly, check the home positions of the hands and make adjustments if necessary (page E-63).

To change the Daylight Saving Time (summer time) setting
1. In the Timekeeping Mode, hold down B for about three seconds. You can release the button after "ADJ" appears on the display.
   - At this time, "12H" (12-hour timekeeping) or "24H" (24-hour timekeeping) also will be flashing on the display.
2. Press B twice to enter the Daylight Saving Time setting mode.
3. Use C to cycle through the DST settings in the sequence shown below.

- "Auto DST (AT)" changes the watch to switch between standard time and summer time automatically, in accordance with time calibration signal data. This setting is available only when a city code that supports signal reception is selected as the Home City.
- "DST on (ON)" sets Daylight Saving Time (summer time) manually.
After performing home position adjustment, enter the Timekeeping Mode and check:

- To adjust home positions
  - 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.

Adjusting Home Positions

Strong magnetism or impact can cause the hands of the watch to be off, even if the watch is able to perform the signal receive operation. If this happens, perform the applicable home position adjustment procedures in this section.

- Hand home position adjustment is not required if the analog time and digital time are the same in the Timekeeping Mode.
- Holding down the button during the adjustment procedures in this section will cause the applicable hand to start high-speed hand movement. Once started, high-speed hand movement will continue even if you release the button. To stop high-speed hand movement, press any button.

Transmitter

<table>
<thead>
<tr>
<th>Covered City Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Europe (UK, Germany)</td>
</tr>
<tr>
<td>U.S.</td>
</tr>
<tr>
<td>Canada</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

■ 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 home positions

1. In the Timekeeping Mode, hold down for about six seconds. You can release the button after "M-SET" appears on the display.
2. After the second hand is in the proper home position, press . The hour and minute hands should move to 12 o'clock (their home position), and "SEC 00" will flash on the display.
3. If the second hand does not point to 12 o'clock, use the button to adjust it. Each press of advances the hand by one second.
4. When the setting you want is selected, press to exit the setting screen.

The DST indicator appears 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.

- The hands for the analog 3 o'clock 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 home positions" (page E-64) 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.

Adjusting Home Positions

- Hand home position adjustment is not required if the analog time and digital time are the same in the Timekeeping Mode.
- Holding down the button during the adjustment procedures in this section will cause the applicable hand to start high-speed hand movement. Once started, high-speed hand movement will continue even if you release the button. To stop high-speed hand movement, press any button.

Covered City Codes

<table>
<thead>
<tr>
<th>Covered City Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe (UK, Germany)</td>
</tr>
<tr>
<td>U.S.</td>
</tr>
<tr>
<td>China</td>
</tr>
<tr>
<td>Japan</td>
</tr>
<tr>
<td>Canada</td>
</tr>
<tr>
<td>Other</td>
</tr>
</tbody>
</table>

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.

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>Elapsed Time in Darkness</th>
<th>Display</th>
<th>Operation</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 to 70 minutes</td>
<td>Blank</td>
<td>Second hand moves to 12 o'clock and stops, all functions enabled, display blank.</td>
</tr>
<tr>
<td>6 or 7 days</td>
<td>Blank</td>
<td>All hands stop at 12 o'clock. Auto receive, beeper tone, illumination, and display are disabled.</td>
</tr>
</tbody>
</table>
Digital Timekeeping:  
Accuracy at normal temperature:  
• The watch's built-in full automatic calendar makes allowances for different month lengths and leap years.  
• The year can be set in the range of 2000 to 2099.  
• 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 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.  
• 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.

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.

Time Calibration Signal Reception:  
• When a European time zone is selected, the watch receives the time calibration signal transmitted from the United States (Fort Collins).  
• When a Japanese time zone is selected, the watch receives the time calibration signal transmitted from Japan (Fukushima and Fukuoka/Saga).  
• When a European time zone is selected, the watch receives the time calibration signal transmitted from Germany (Mainflingen) and England (Anthorn).  
• When a China time zone is selected, the watch receives the time calibration signals transmitted from China (Shangqiu City).

Transmitters  
The time calibration signal received by this watch depends on the currently selected Home City code (page E-12).  
• When a U.S. time zone is selected, the watch receives the time calibration signal transmitted from the United States (Fort Collins).  
• When a Japanese time zone is selected, the watch receives the time calibration signal transmitted from Japan (Fukushima and Fukuoka/Saga).  
• When a European time zone is selected, the watch receives the time calibration signal transmitted from Germany (Mainflingen) and England (Anthorn).  
• When a China time zone is selected, the watch receives the time calibration signals transmitted from China (Shangqiu City).

For performance details, see page E-54.  

When your Home City is TYO (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 (page E-12).

Other: Home City code (can be assigned one of 29 city codes); Daylight Saving Time (summer time)/Standard Time

Scrolling  
The O button is used in various modes and setting screens to scroll through data on the display. In most cases, holding down this button during a scroll operation scrolls at high speed.

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

Illumination Precautions  
An LED (light-emitting diode) and a light guide panel illuminate the face of the watch for easy reading in the dark. In any mode, press { to illuminate the face of the watch for about one second.  
• The illumination provided by the light may be difficult to see when viewed under direct sunlight.  
• Illumination turns off automatically whenever an alarm sounds.  
• Frequent use of illumination shortens the battery operating time.

Specifications  
Accuracy at normal temperature: ±15 seconds a month  
Moving the watch to a well-lit area.

Timekeeping Mode:  
• Reseating 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 year can be set in the range of 2000 to 2099.

Time  
• 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.

Power Supply:  
• Solar cell and one rechargeable battery  
Approximate battery operating time: 4 months (from full charge to Level 4) under the following conditions:

• The watch not exposed to light  
• Internal timekeeping  
• Display on 18 hours per day, sleep state 6 hours per day  
• 1 illumination operation (1.5 second) per day  
• 10 seconds of alarm operation per day  
• Approximately 4 minutes of signal reception per day

Other: Home City code (can be assigned one of 29 city codes); Daylight Saving Time (summer time)/Standard Time

Alarms  
• 5 daily alarms; Hourly Time Signal

Stopwatch:  
• Measuring unit: 1/100 seconds  
• Measuring capacity: 99:59:59

Countdown Timer:  
• Measuring unit: 1 second  
• Input range: 1 minute to 100 minutes (1-minute increments)

Illumination:  
• LED (light-emitting diode)

Other: Power Saving, Battery power indicator, Button operation tone on/off, day of the week language selection
### City Code Table

<table>
<thead>
<tr>
<th>City Code</th>
<th>City</th>
<th>UTC Offset/GMT Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>PPG</td>
<td>Pago Pago</td>
<td>-11</td>
</tr>
<tr>
<td>HNL</td>
<td>Honolulu</td>
<td>-10</td>
</tr>
<tr>
<td>ANC</td>
<td>Anchorage</td>
<td>-9</td>
</tr>
<tr>
<td>LAX</td>
<td>Los Angeles</td>
<td>-8</td>
</tr>
<tr>
<td>DEN</td>
<td>Denver</td>
<td>-7</td>
</tr>
<tr>
<td>CHI</td>
<td>Chicago</td>
<td>-6</td>
</tr>
<tr>
<td>NYC</td>
<td>New York</td>
<td>-5</td>
</tr>
<tr>
<td>SCL</td>
<td>Santiago</td>
<td>-4</td>
</tr>
<tr>
<td>RDO</td>
<td>Rio De Janeiro</td>
<td>-3</td>
</tr>
<tr>
<td>THI</td>
<td>Phnom Penh</td>
<td>-1</td>
</tr>
<tr>
<td>LON</td>
<td>London</td>
<td>0</td>
</tr>
<tr>
<td>PAR</td>
<td>Paris</td>
<td>-1</td>
</tr>
<tr>
<td>PPI</td>
<td>Paris</td>
<td>+1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City Code</th>
<th>City</th>
<th>UTC Offset/GMT Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATH</td>
<td>Athens</td>
<td>+2</td>
</tr>
<tr>
<td>JED</td>
<td>Jeddah</td>
<td>+3</td>
</tr>
<tr>
<td>THR</td>
<td>Tehran</td>
<td>+3.5</td>
</tr>
<tr>
<td>DXB</td>
<td>Dubai</td>
<td>+4</td>
</tr>
<tr>
<td>KBL</td>
<td>Kabul</td>
<td>+4.5</td>
</tr>
<tr>
<td>KHI</td>
<td>Karachi</td>
<td>+5</td>
</tr>
<tr>
<td>DEL</td>
<td>Delhi</td>
<td>+5.5</td>
</tr>
<tr>
<td>KTM</td>
<td>Kathmandu</td>
<td>+5.75</td>
</tr>
<tr>
<td>DAC</td>
<td>Dhaka</td>
<td>+6</td>
</tr>
<tr>
<td>RGN</td>
<td>Yangon</td>
<td>+6.5</td>
</tr>
<tr>
<td>BKK</td>
<td>Bangkok</td>
<td>+7</td>
</tr>
<tr>
<td>HKG</td>
<td>Hong Kong</td>
<td>+8</td>
</tr>
<tr>
<td>TYO</td>
<td>Tokyo</td>
<td>+9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>City Code</th>
<th>City</th>
<th>UTC Offset/GMT Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADL</td>
<td>Adelaide</td>
<td>+9.5</td>
</tr>
<tr>
<td>SYD</td>
<td>Sydney</td>
<td>+10</td>
</tr>
<tr>
<td>NOU</td>
<td>Noumea</td>
<td>+11</td>
</tr>
<tr>
<td>WLG</td>
<td>Wellington</td>
<td>+12</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.