MA2107-A


CASIO®

# User's Guide

Watch

# 3477*EN

Congratulations upon your selection of this CASIO watch.

To ensure that this watch provides you with the years of service for which it is designed, carefully read and follow the instructions in this manual, especially the information under “Operating Precautions” and “User Maintenance”.

# 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.

# Contents

## Procedure Lookup

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

# Watch Features

◆**Accurate timekeeping**
Receive time signals that are used to correct time settings and ensure timekeeping accuracy.

◆**World Time**
Display the current time in any one of 48 cities around the globe.

◆**Timer**

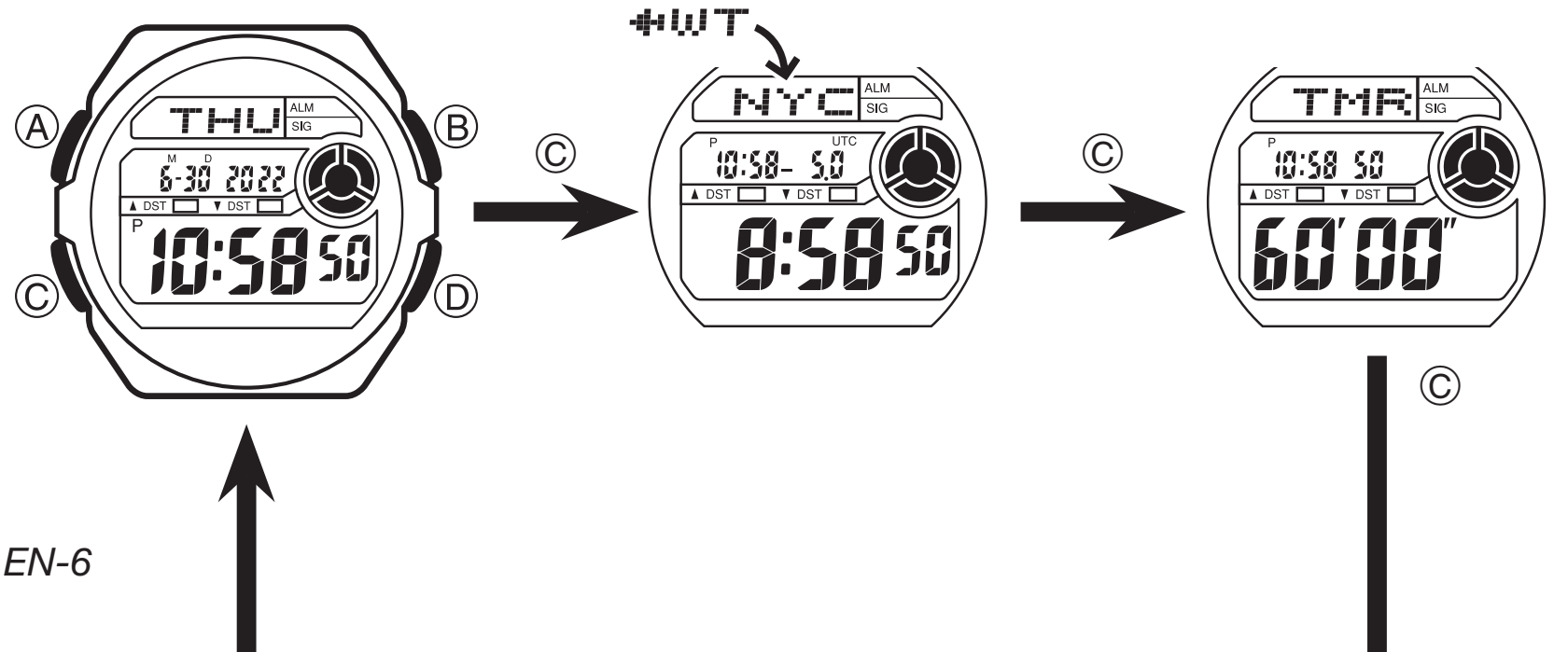
◆**Stopwatch**

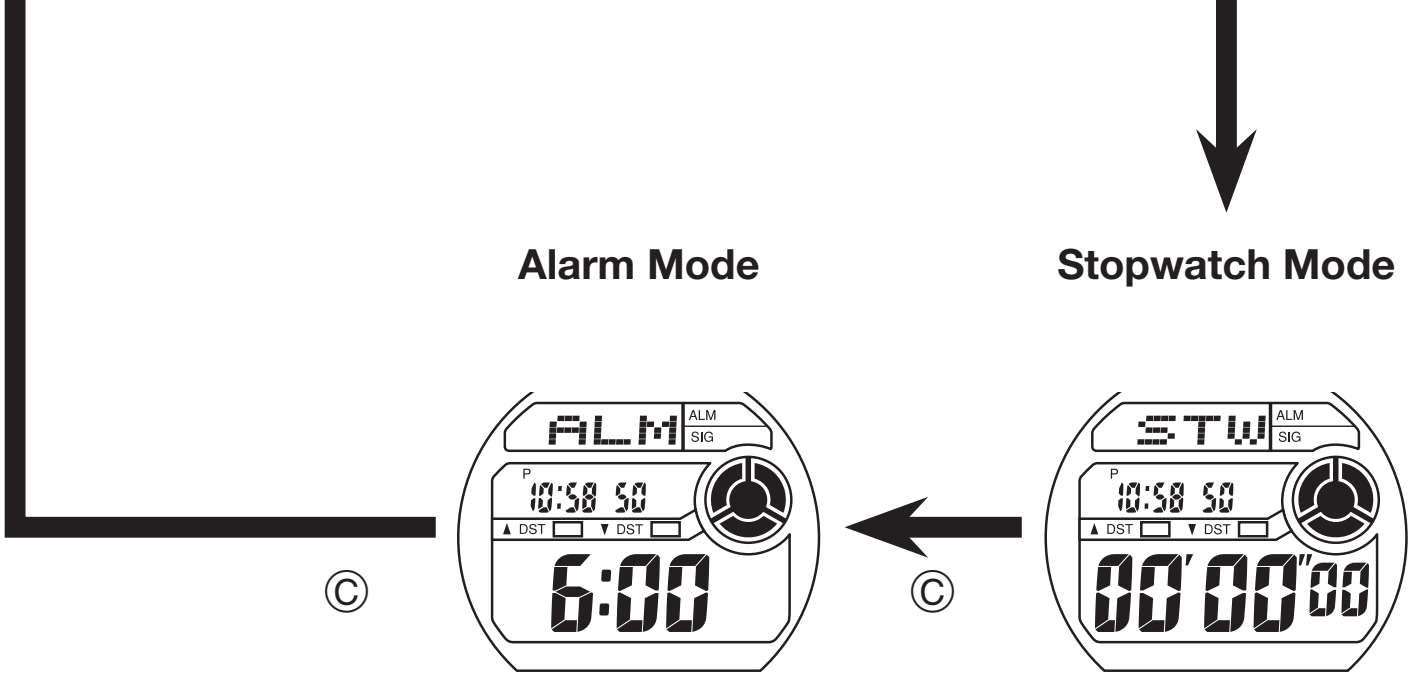
◆**Alarm**

# Selecting a Mode

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

**Timekeeping Mode** **World Time Mode** **Timer Mode**




Alarm Mode
Stopwatch Mode
ALM
ALM
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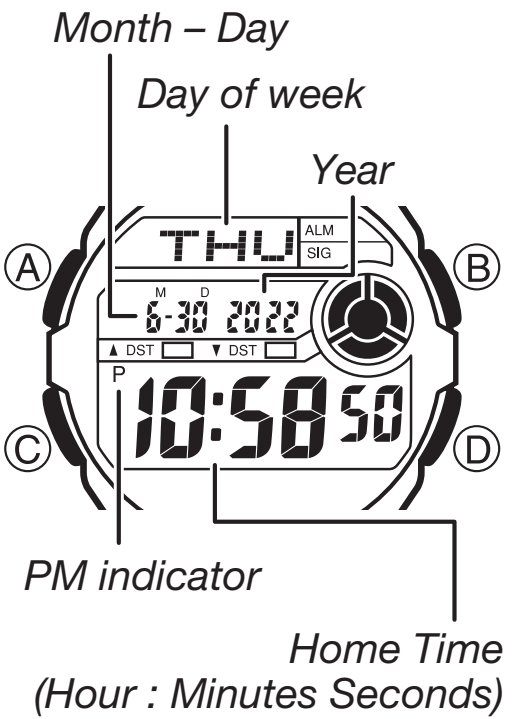
# Radio-controlled Atomic Timekeeping




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

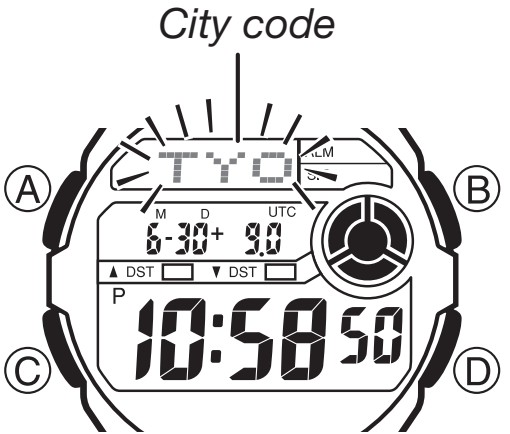
- Supported time calibration signals: Germany (Mainflingen), England (Anthorn), United States (Fort Collins), Japan.
- See the information under “Signal Reception Troubleshooting” (page EN-27) if you experience problems with time calibration signal reception.

**Current Time Setting**

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

- **The first thing you should do after purchasing this watch is to specify your Home City (the city where you normally will use the watch). For more information, see “To specify your Home City” (page EN-10).**
- 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 EN-38) 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.

### *To specify your Home City*




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

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

3. Press Ⓐ to exit the setting screen.

## Important!

- Normally, your watch should show the correct time as soon as you select your Home City code. If it does not, it should adjust automatically after the next auto receive operation (in the middle of the night). You can also perform manual receive (page EN-24) or you can set the time manually (page EN-40).
- The watch will receive the time calibration signal automatically from the applicable transmitter (in the middle of the night) and update its settings accordingly. For information about the relationship between city codes and transmitters, see “Home City Codes and Transmitters” (page EN-16).
- Under factory default settings, auto receive is turned off for all of the following city codes: **HNL** (Honolulu), **ANC** (Anchorage), **MOW** (Moscow), **HKG** (Hong Kong), and **BJS** (Beijing). For details about turning on auto receive for these city codes, see “To turn auto receive on and off” on page EN-25.
- You can disable time signal reception, if you want. See “To turn auto receive on and off” on page EN-25 for more information.
- See the maps under “Approximate Reception Ranges” (page EN-17) for information about the reception ranges of the watch.

- If you are in an area that does not use Daylight Saving Time (summer time), turn off the DST setting (page EN-46).

**Time Calibration Signal Reception**

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

- **Auto Receive**

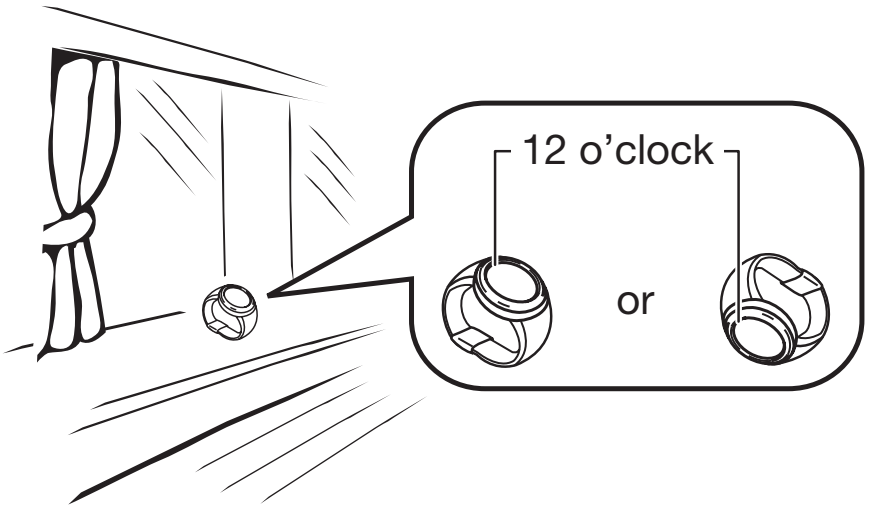
  With auto receive, the watch receives the time calibration signal automatically up to six times a day. When any auto receive is successful, the remaining auto receive operations are not performed. For more information, see “About Auto Receive” (page EN-18).

- **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 EN-24).

**Important!**

- When getting ready to receive the time calibration signal, position the watch as shown in the nearby illustration, with its 12 o’clock side facing towards a window. 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

Inside a vehicle

Near household appliances, office equipment, or a mobile phone

Near a construction site, airport, or other sources of electrical noise

Near high-tension power lines

Among or behind mountains

- Signal reception normally is better at night than during the day.
- Time calibration signal reception takes from two to ten minutes, but in some cases it can take as long as 20 minutes. Take care that you do not perform any button operations or move the watch during this time.

- The time calibration signal the watch will attempt to pick up depends on its current Home City code setting as shown below. If you use the watch in Japan or Europe (each of which has two different transmitter locations), it will try to receive the time calibration signal from one of the transmitters in your current location. If it cannot receive the signal, it will then try to receive the time calibration signal from the other transmitter.

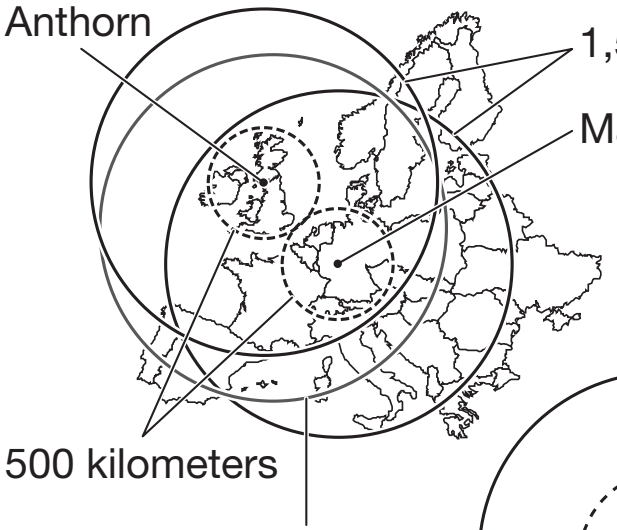
**Home City Codes and Transmitters**

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

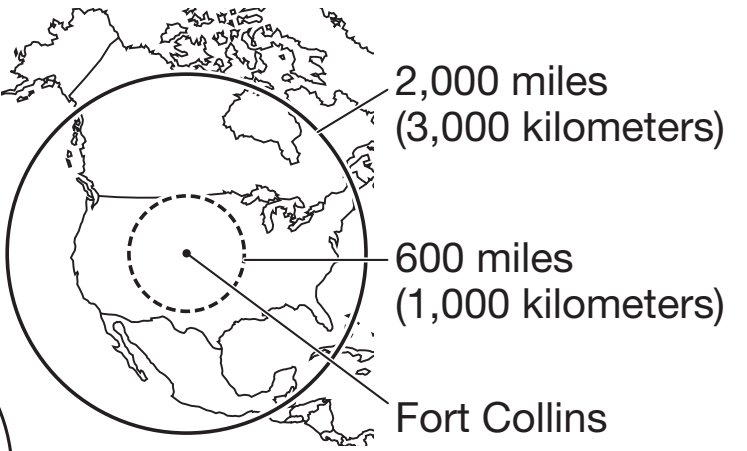
* The areas covered by the **HNL**, **ANC**, **MOW**, **HKG**, and **BJS** city codes are quite far from the time calibration signal transmitters, and so certain conditions may cause problems with signal reception.

## Approximate Reception Ranges

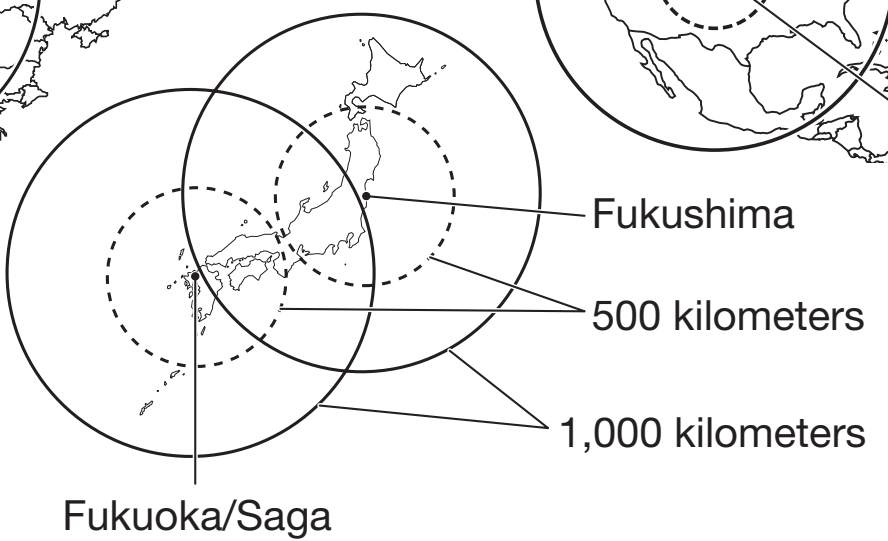
### U.K. and German Signals




### U.S. Signal




### Japan Signal



- Signal reception may not be possible at the distances noted below during certain times of the year or day. Radio interference may also cause problems with reception.
  Mainflingen (Germany) or 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)
- Even when the watch is within the reception range of a transmitter, signal reception may be impossible at times due to the effects of geographic contours, structures, weather, the season of the year, the time of day, radio interference, etc. Note that the signal becomes weaker at distances of approximately 500 kilometers from the transmitter, which means that the influence of the conditions listed above becomes even greater.

## About Auto Receive

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

| Your Home City | | Auto Receive Start Times | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| **HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, YYT** | Standard Time<br>Daylight Saving Time | Midnight | 1:00 am | 2:00 am | 3:00 am | 4:00 am | 5:00 am |
| **LIS, LON** | Standard Time | 1:00 am | 2:00 am | 3:00 am | 4:00 am | 5:00 am | Midnight * |
| | Daylight Saving Time | 2:00 am | 3:00 am | 4:00 am | 5:00 am | Midnight * | 1:00 am * |
| **MAD, PAR, ROM, BER, STO** | Standard Time | 2:00 am | 3:00 am | 4:00 am | 5:00 am | Midnight * | 1:00 am * |
| | Daylight Saving Time | 3:00 am | 4:00 am | 5:00 am | Midnight * | 1:00 am * | 2:00 am * |

| Your Home City | | Auto Receive Start Times | | | | | |
|---|---|---|---|---|---|---|---|
| | | 1 | 2 | 3 | 4 | 5 | 6 |
| **ATH** | Standard Time | 3:00 am | 4:00 am | 5:00 am | Midnight * | 1:00 am * | 2:00 am * |
| | Daylight Saving Time | 4:00 am | 5:00 am | Midnight * | 1:00 am * | 2:00 am * | 3:00 am * |
| **MOW** | Standard Time | 4:00 am | 5:00 am | Midnight * | 1:00 am * | 2:00 am * | 3:00 am * |
| | Daylight Saving Time | 5:00 am | Midnight * | 1:00 am * | 2:00 am * | 3:00 am * | 4:00 am * |
| **HKG, BJS, TPE, SEL, TYO** | Standard Time | Midnight | 1:00 am | 2:00 am | 3:00 am | 4:00 am | 5:00 am |

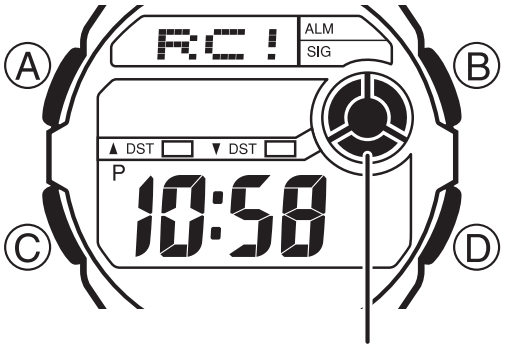
* Next day

**Note**

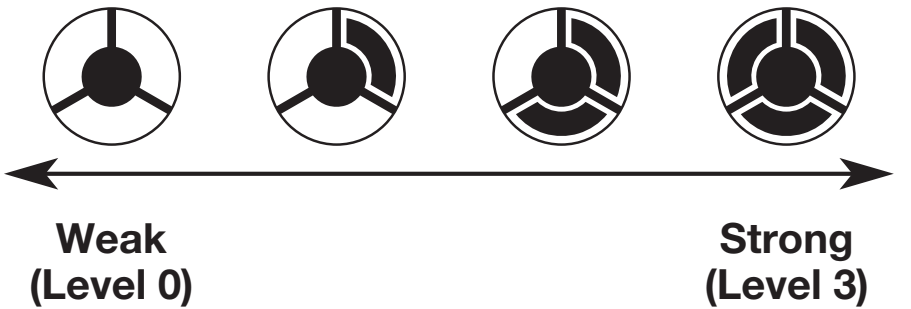
- When a calibration time is reached, the watch will receive the calibration signal only if it is in either the Timekeeping Mode or World Time Mode. Reception is not performed if a calibration time is reached while you are configuring settings.
- Auto receive of the calibration signal is designed to be performed between midnight and 5:00 a.m. , 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 ten minutes everyday when the time in the Timekeeping Mode reaches each of the calibration times. Avoid performing any button operation within ten minutes before or after any one of the calibration times. Doing so can interfere with correct calibration.
- Remember that reception of the calibration signal depends on the current time in the Timekeeping Mode. The receive operation will be performed whenever the display shows any one of the calibration times, regardless of whether or not the displayed time actually is the correct time.
- Calibration signal reception is disabled while a countdown timer operation is in progress.

## About the Receiving Indicator

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



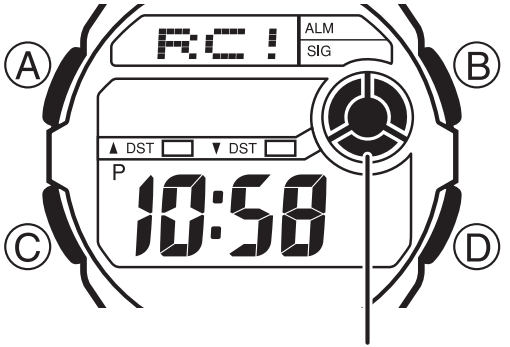

*Receiving indicator*




- Even in an area where signal strength is strong, it takes about 10 seconds for signal reception to stabilize enough for the receiving indicator to indicate signal strength.
- Use the receiving 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 Level 3 receiving indicator will remain on the display in all modes. The Level 3 receiving indicator will not be displayed if signal reception was unsuccessful or after you adjust the current time setting manually.
- The Level 3 receiving 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 Level 3 receiving indicator indicates that at least one of the auto calibration signal receive operations was successful. Note, however, that the Level 3 receiving indicator is cleared from the display when the first auto receive operation of the day is performed.

### *To perform manual receive*




*Receiving indicator*

1. Place the watch on a stable surface so its top (12 o'clock side) is facing towards a window (page EN-14).
2. In the Timekeeping Mode, hold down Ⓓ for about two seconds until **RC!** appears on the display.

- Time calibration signal reception takes from two to ten minutes, but in some cases it can take as long as 20 minutes. Take care that you do not perform any button operations or move the watch during this time.
- After signal reception is complete, the display of the watch changes to the Last Signal screen (page EN-26).

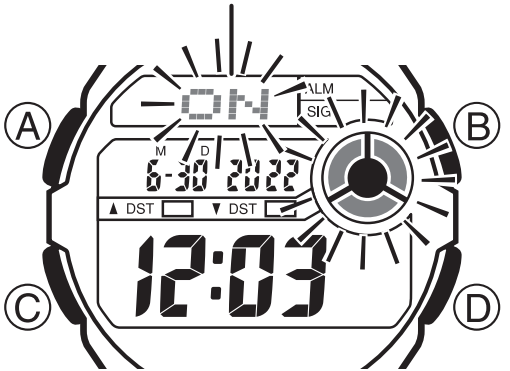
**Note**

- To interrupt a receive operation and return to the Timekeeping Mode, press Ⓓ.
- If the receive operation is unsuccessful, the message **ERR** appears on the display for about one or two minutes. After that, the watch returns to the Timekeeping Mode.
- You can also change from the Last Signal or **ERR** screen to the normal timekeeping screen by pressing Ⓓ.

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

### *To turn auto receive on and off*

*On/Off Status*



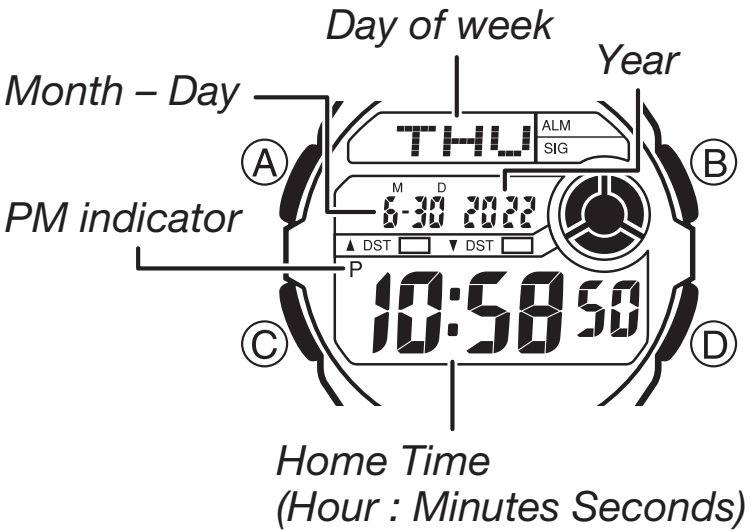

1. In the Timekeeping Mode, press Ⓓ to display the Last Signal screen (page EN-26).
2. Hold down Ⓐ until the receiving indicator and current auto receive setting (**ON** or **OFF**) start to flash. This is the setting screen.
   • Note that the setting screen will not appear if the currently selected Home City is one that does not support time calibration reception.
3. Press Ⓓ to toggle auto receive on (**ON**) and off (**OFF**).
4. Press Ⓐ to exit the setting screen.

• For information about city codes that support signal receive, see “To specify your Home City” (page EN-10).

***To display the Last Signal screen***

In the Timekeeping Mode, press Ⓓ to display the Last Signal screen (indicated by **GET**). The Last Signal screen shows the date and time of the last successful time calibration signal reception.

**Current Time and Date Screen**




Ⓓ

**Last Signal Screen**

## Signal Reception Troubleshooting

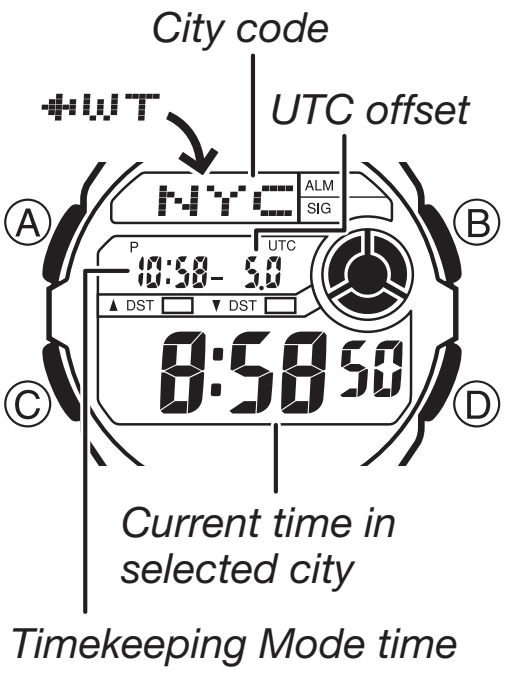
Check the following points whenever you experience problems with calibration signal reception.

| Problem | Probable Cause | What you should do |
|---|---|---|
| Cannot perform manual receive. | • The watch is not in the Timekeeping Mode.<br>• Your current Home City is not one of the following city codes: **HNL**, **ANC**, **YVR**, **LAX**, **YEA**, **DEN**, **MEX**, **YWG**, **CHI**, **MIA**, **YTO**, **NYC**, **YHZ**, **YYT**, **LIS**, **LON**, **MAD**, **PAR**, **ROM**, **BER**, **STO**, **ATH**, **MOW**, **HKG**, **BJS**, **TPE**, **SEL**, and **TYO**.<br>• The countdown timer is running. | • Enter the Timekeeping Mode and try again (page EN-24).<br>• Select one of the cities to the left as your Home City (page EN-10).<br>• Stop the countdown timer (page EN-32) and try again. |
| Auto receive is turned on, but the Level 3 receiving indicator does not appear on the display. | • You changed the time setting manually.<br>• The watch was not in the Timekeeping or World Time Mode, or you performed some button operation during the auto receive operation. | • Perform manual signal receive or wait until the next auto signal receive operation is performed. |

| Problem | Probable Cause | What you should do |
|---|---|---|
| Auto receive is turned on, but the Level 3 receiving indicator does not appear on the display. | • Even if receive is successful, the Level 3 receiving indicator disappears every day when the first auto receive operation of the day is performed.<br>• Time data (hour, minutes, seconds) only was received during the last receive operation. The Level 3 receiving indicator appears only when time data and date data (year, month, day) are both received. | • Perform manual signal receive or wait until the next auto signal receive operation is performed.<br>• Check to make sure the watch is in a location where it can receive the signal (page EN-14). |
| Time setting is incorrect following signal reception. | • If the time is one hour off, the DST setting may be incorrect.<br>• The Home City code setting is not correct for the area where you are using the watch. | • Change the DST setting to Auto DST (page EN-46).<br>• Select the correct Home City code (page EN-10). |

- For further information, see “Important!” (page EN-14) and “Radio-controlled Atomic Timekeeping Precautions” (page EN-50).

# World Time




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

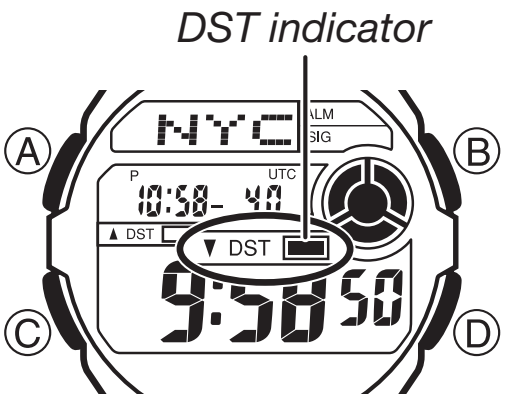
- If the current time shown for a city is wrong, check your Home City time settings and make the necessary changes (page EN-10).
- All of the operations in this section are performed in the World Time Mode, which you enter by pressing Ⓒ (page EN-6).

***To view the time in another city***

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

- For full information on city codes, see the “City Table” at the back of this manual.

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

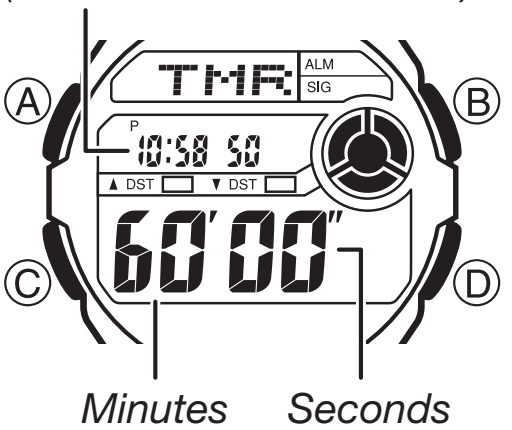



1. In the World Time Mode, use Ⓓ to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
2. Hold down Ⓐ to toggle Daylight Saving Time (DST indicator displayed) and Standard Time (DST indicator not displayed).

- The DST indicator will appear whenever you display a city code for which Daylight Saving Time is turned on.
- Note that the DST/Standard Time setting affects only the currently displayed city code. Other city codes are not affected.
- Enabling summer time for the city you have specified as your Home City also enables summer time for your home time (normal timekeeping).

# Timer

*Timekeeping Mode time (Hour : Minutes Seconds)*




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

- All of the operations in this section are performed in the Timer Mode, which you enter by pressing Ⓒ (page EN-6).

***To set the countdown start time***

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

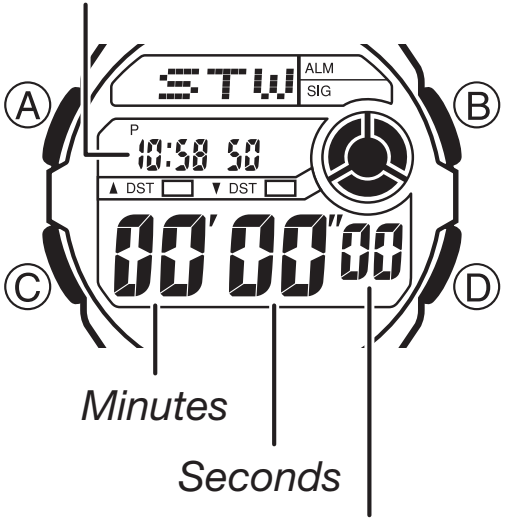
***To use the timer***

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

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

# Stopwatch

*Timekeeping Mode time (Hour : Minutes Seconds)*




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

- The display range of the stopwatch is 59 minutes, 59.99 seconds.
- The stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.
- Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to elapsed time measurement.
- The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
- All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing Ⓒ (page EN-7).

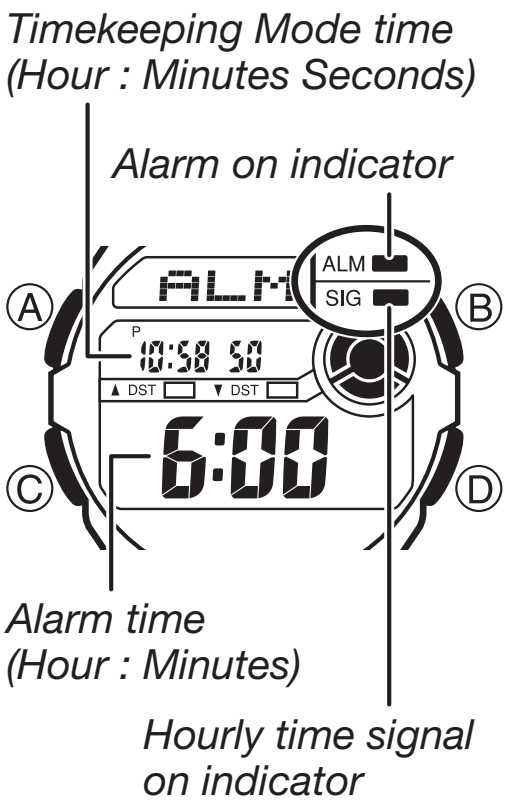
## *To measure times with the stopwatch*

### Elapsed Time


### Split Time


### Two Finishes

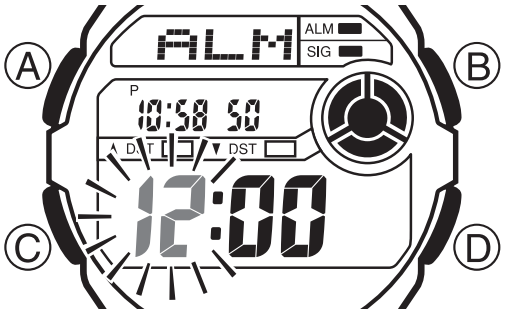
# Alarm




After you set (and turn on) the daily alarm, the alarm tone sounds when the alarm time is reached. You can also turn on an Hourly Time Signal that causes the watch to beep for about one second every hour on the hour.

- All of the operations in this section are performed in the Alarm Mode, which you enter by pressing Ⓒ (page EN-7).

### *To set the alarm time*




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

## Alarm Operation

The alarm sounds at the preset time for about 10 seconds (in all modes), or until you stop it by pressing any button.

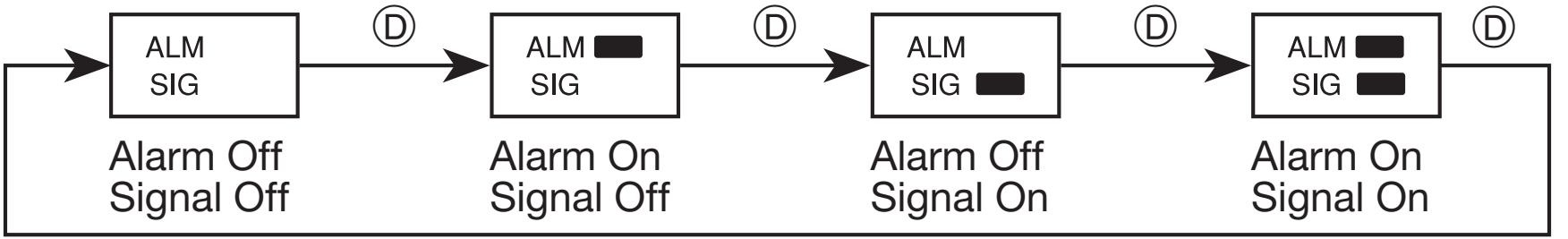
***To test the alarm***

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

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

In the Alarm Mode, press Ⓓ to cycle through the settings shown below.

**Alarm On Indicator / Hourly Time Signal On Indicator**

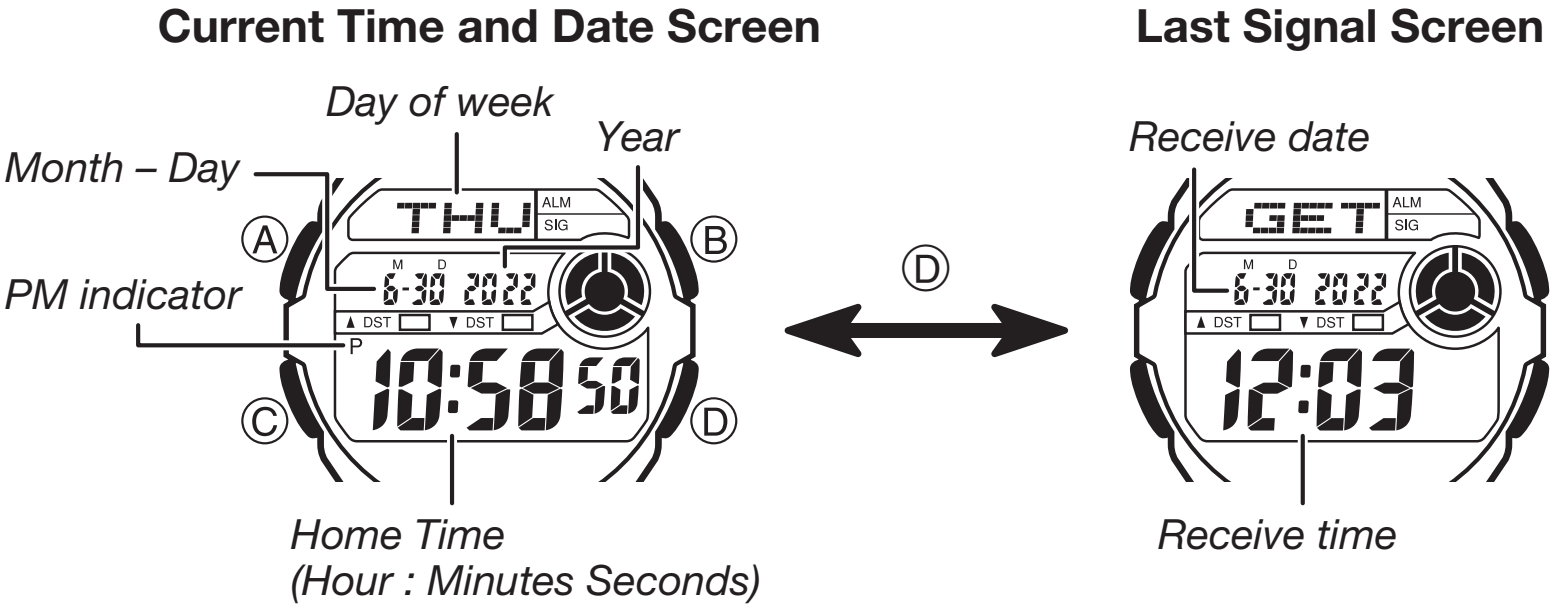



- The alarm on indicator and the Hourly Time Signal on indicator are shown on the display in all modes while these functions are turned on.

# Timekeeping

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

- When setting the time, you can also configure settings for the City Code, the DST setting, the 12/24-Hour Format, Year, Month, Day, the Language setting, and the Month/Day display format.
- Pressing Ⓓ in the Timekeeping Mode will display the Last Signal screen.



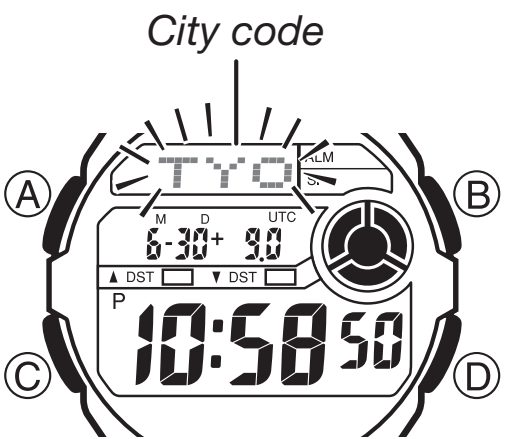

## Note

- This watch is capable of displaying text for the day of the week in any one of nine different languages (English, Spanish, French, Portuguese, German, Italian, Chinese, Russian, and Japanese).

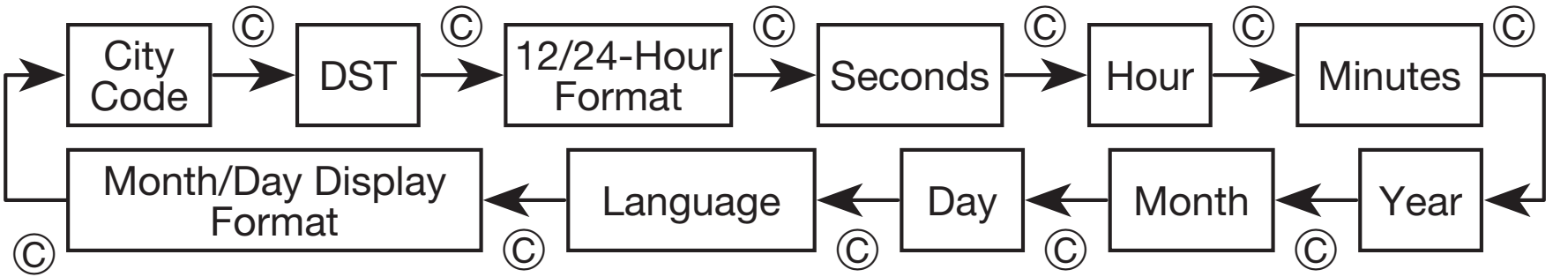
## Setting the Time and Date

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

### *To set the time and date*




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




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

| Screen: | To do this: | Do this: |
|---|---|---|
| TYO | Change the city code | Use Ⓑ (west) and Ⓓ (east). |
| AUTO | Cycle between auto DST (**AUTO**), Standard Time (**OFF**), and Daylight Saving Time (**ON**) | Press Ⓓ. |
| 12H | Toggle between 12-hour (**12H**) and 24-hour (**24H**) timekeeping | Press Ⓓ. |
| 50 | Reset the seconds to **00** | Press Ⓓ. |

| Screen: | To do this: | Do this: |
|---|---|---|
|  | Change the hour, minutes, or year | Use Ⓑ (–) and Ⓓ (+). |
|  | Change the month or day | |
|  | Change the language<br>**ENG**: English **ESP**: Spanish<br>**FRA**: French **POR**: Portuguese<br>**DEU**: German **ITA**: Italian<br>**CHN**: Chinese **РУС** : Russian<br>**JPN**: Japanese | Use Ⓑ and Ⓓ. |
|  | Toggle the month/day display format between month/day (**M/D**) and day/month (**D/M**). | Press Ⓓ. |

- See the “City Table” at the back of this manual for a complete list of available city codes.

- See the “Day of the Week List” at the back of this manual for information on abbreviations used.
- Auto DST (**AUTO**) can be selected only while **HNL**, **ANC**, **YVR**, **LAX**, **YEA**, **DEN**, **MEX**, **YWG**, **CHI**, **MIA**, **YTO**, **NYC**, **YHZ**, **YYT**, **LIS**, **LON**, **MAD**, **PAR**, **ROM**, **BER**, **STO**, **ATH**, **MOW**, **HKG**, **BJS**, **TPE**, **SEL**, or **TYO** is selected as the Home City code. For more information, see “Daylight Saving Time (DST)” below.
- 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.

4. Press Ⓐ to exit the setting screen.

## Daylight Saving Time (DST)

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

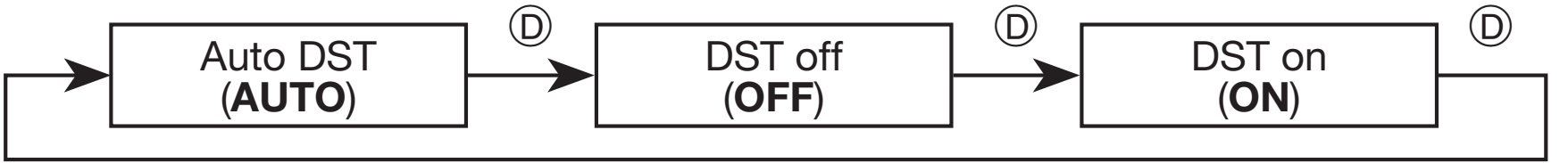
The time calibration signals transmitted from Mainflingen (Germany), Anthorn (England), or Fort Collins (the United States) includes both Standard Time and DST data. When the Auto DST setting is turned on, the watch switches between Standard Time and DST (summer time) automatically in accordance with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

The time calibration signals transmitted from Fukushima and Fukuoka/Saga (Japan) do not include summer time data.

- The initial default setting for DST depends on the city you have specified as your Home City.
  - The initial default DST setting is “Auto DST (**AUTO**)” when you have one of the following cities specified as your Home City: **ANC**, **YVR**, **LAX**, **YEA**, **DEN**, **MEX**, **YWG**, **CHI**, **MIA**, **YTO**, **NYC**, **YHZ**, **YYT**, **LIS**, **LON**, **MAD**, **PAR**, **ROM**, **BER**, **STO**, **ATH**, **MOW**, **TYO**.
  - The initial default DST setting is “DST off (**OFF**)” when you have one of the following cities specified as your Home City: **HNL**, **HKG**, **BJS**, **TPE**, **SEL**.
  - The initial default DST setting is “DST off (**OFF**)” when you have a city that does not support time signal reception specified as your Home City.
- 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 Ⓐ until the city code starts to flash, which indicates the setting screen.
2. Press Ⓒ and the DST setting screen appears.
3. Use Ⓓ to cycle through the DST settings in the sequence shown below.




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

• The DST indicator appears to indicate that Daylight Saving Time is turned on.

# 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.

## Auto Display

Auto Display continually changes the contents of the digital display.

### *To turn off Auto Display*

Press any button to turn off Auto Display. This returns to the Timekeeping Mode.

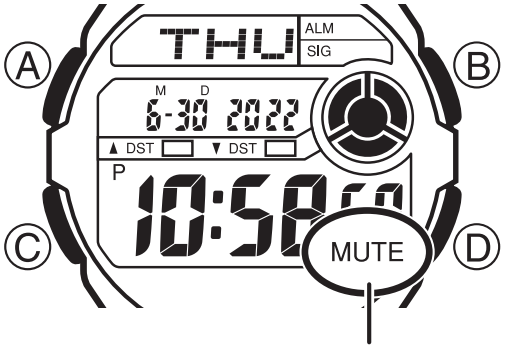
### *To turn on Auto Display*

In the Timekeeping Mode (page EN-6), while holding down Ⓑ, hold down Ⓓ for about two seconds until the watch beeps.

**Note**

- Calibration signal reception is disabled while Auto Display is being performed.
- Auto Display cannot be performed while a setting screen is on the display.

## Button Operation Tone




*MUTE indicator*

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, the alarm, Hourly Time Signal, and Timer Mode alarm 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 Ⓒ to toggle the button operation tone on (**MUTE** not displayed) and off (**MUTE** displayed).

- Since the Ⓒ button is also the mode change button, holding it down to turn the button operation tone on or off also causes the watch's current mode to change.
- The **MUTE** indicator is displayed in all modes when the button operation tone is turned off.

## Auto Return Features

- If you leave the watch with the Last Signal screen in the Timekeeping Mode for one or two minutes without performing any operation, it returns to the Current Time and Date screen in the Timekeeping Mode automatically.
- If you leave the watch in the Alarm Mode for two or three minutes without performing any operation, it returns to the Timekeeping Mode automatically.
- If you leave the watch with a flashing setting on the display for two or three minutes without performing any operation, the watch exits the setting screen automatically.

## Scrolling

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

## Initial Screens

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

## Radio-controlled Atomic Timekeeping Precautions

- Strong electrostatic charge can result in the wrong time being set.
- The time calibration signal is bounced 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.
- 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 date by a time calibration signal cannot be performed starting from January 1, 2100.
- This watch can receive signals that differentiate between leap years and non-leap years.

- Though this watch is designed to receive both time data (hour, minutes, seconds) and date data (year, month, day), certain signal conditions can limit reception to time data only.
- Normally, the signal reception date shown by the Last Signal screen is the date data included in the received time calibration signal. When only time data is received, however, the Last Signal screen shows the date as kept in the Timekeeping Mode at the time of signal reception.
- If you are in an area where proper time calibration signal reception is impossible, the watch keeps time 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 (page EN-10), DST (summer time) (page EN-46), and auto receive settings (page EN-25). The following are the initial factory defaults for these settings.

| Setting | Initial Factory Default |
|---|---|
| City code | **TYO** (Tokyo) |
| DST (summer time) | **AUTO** (Auto switching) |
| Auto receive | **ON** (Auto receive) |

- The watch's Home City code setting will change automatically to **TYO** (Tokyo) whenever the battery goes dead or is replaced. **TYO** (Tokyo) causes the watch to receive the time calibration signals of Japan. If you are using the watch in North America or Europe, you will need to change the Home City code setting to match your location after having the watch's battery replaced.

## Timekeeping

- The day of the week is displayed automatically in accordance with the date (year, month, and day) settings.
- The year can be set in the range of 2000 to 2099.
- The watch's built-in full automatic calendar makes allowances for different month lengths and leap years. Once you set the date, there should be no reason to change it except after you have the watch's battery replaced.
- The times for the Timekeeping Mode and all the city codes of the World Time Mode are calculated in accordance with each city's UTC offset.
- The UTC offset is a value that indicates the time difference between a reference point in Greenwich, England and the time zone where a city is located.

- The letters “UTC” is the abbreviation for “Coordinated Universal Time”, which is the world-wide scientific standard of timekeeping. It is based upon carefully maintained atomic (cesium) clocks that keep time accurately to within microseconds. Leap seconds are added or subtracted as necessary to keep UTC in sync with the Earth’s rotation.

## 12-hour/24-hour Timekeeping Formats

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

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

## Illumination

The display of the watch is illuminated for easy reading in the dark. In any mode (except when a setting screen is on the display), press Ⓑ to illuminate the display for about three seconds.

## Illumination Precautions

- The LED that provides illumination loses power after very long use.
- Illumination may be hard to see when viewed under direct sunlight.
- Illumination turns off automatically whenever an alarm sounds or when time calibration reception is in progress.
- Frequent use of illumination runs down the battery.

# 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 (English, Spanish, French, Portuguese, German, Italian, Chinese, Russian, Japanese)

Time format: 12-hour and 24-hour

Calendar system: Full Auto calendar pre-programmed 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); Month/Day display format

**Time Calibration Signal Reception:** Auto receive up to six times a day (remaining auto receives cancelled as soon as one is successful); Manual Receive; Last Signal screen; Standard time/summer time auto switching

Receivable Time Calibration Signals: Mainflingen, Germany (Call Sign: DCF77, Frequency: 77.5 kHz); Anthorn, England (Call Sign: MSF, Frequency: 60.0 kHz); Fukushima, Japan (Call Sign: JJY, Frequency: 40.0 kHz); Fukuoka/Saga, Japan (Call Sign: JJY, Frequency: 60.0 kHz); Fort Collins, Colorado, the United States (Call Sign: WWVB, Frequency: 60.0 kHz)

**World Time:** 48 cities (29 time zones); UTC offset
Other: Standard Time/Daylight Saving Time (summer time)

**Timer:**
Measuring unit: 1 second
Input range: 1 minute to 60 minutes (1-minute increments)

**Stopwatch:**
Measuring unit: 1/100 second
Measuring capacity: 59' 59.99"
Measuring modes: Elapsed time, split time, two finishes

**Alarm:** Daily alarm; Hourly Time Signal

**Illumination:** LED light

**Other:** Auto Display function; Button operation tone on/off

**Battery:** One lithium battery (Type: CR1620)

Approximately 3 years on type CR1620 (assuming alarm operation 10 seconds per day, one illumination operation 3 seconds per day and one signal reception 6 minutes per day)

*Frequent use of illumination can shorten battery operating time.*

Specifications are subject to change without notice.

# Operating Precautions

## Water Resistance

- The information below applies to watches with WATER RESIST or WATER RESISTANT marked on the back cover.

| | | Water Resistance Under Daily Use | Enhanced Water Resistance Under Daily Use | | |
|---|---|---|---|---|---|
| | | | 5 Atmospheres | 10 Atmospheres | 20 Atmospheres |
| Marking | On watch front or on back cover | No BAR mark | 5BAR | 10BAR | 20BAR |
| Example of Daily Use | Hand washing, rain | Yes | Yes | Yes | Yes |
| | Water-related work, swimming | No | Yes | Yes | Yes |
| | Windsurfing | No | No | Yes | Yes |
| | Skin diving | No | No | Yes | Yes |

- Do not use your watch for scuba diving or other types of diving that requires air tanks.

- Watches that do not have WATER RESIST or WATER RESISTANT marked on the back cover are not protected against the effects of sweat. Avoid using such a watch under conditions where it will be exposed to large amounts of sweat or moisture, or to direct splashing with water.
- Even if a watch is water resistant, note the usage precautions described below. Such types of use reduce water resistance performance and can cause fogging of the glass.
  - Do not operate the crown or buttons while your watch is submersed in water or wet.
  - Avoid wearing your watch while in the bath.
  - Do not wear your watch while in a heated swimming pool, sauna, or any other high temperature/high humidity environment.
  - Do not wear your watch while washing your hands or face, while doing housework, or while performing any other task that involves soaps or detergents.
- After submersion in seawater, use plain water to rinse all salt and dirt from your watch.
- To maintain water resistance, have the gaskets of your watch replaced periodically (about once every two or three years).

- A trained technician will inspect your watch for proper water resistance whenever you have its battery replaced. Battery replacement requires the use of special tools. Always request battery replacement from your original retailer or from an authorized CASIO service center.
- Some water-resistant watches come with fashionable leather bands. Avoid swimming, washing, or any other activity that causes direct exposure of a leather band to water.
- The inside surface of the watch glass may fog when the watch is exposed to a sudden drop in temperature. No problem is indicated if the fogging clears up relatively quickly. Sudden and extreme temperature changes (such as coming into an air conditioned room in the summer and standing close to an air conditioner outlet, or leaving a heated room in the winter and allowing your watch to come into contact with snow) can cause it to take longer for glass fogging to clear up. If glass fogging does not clear up or if you notice moisture inside of the glass, immediately stop using your watch and take it to your original retailer or to an authorized CASIO service center.
- Your water-resistant watch has been tested in accordance with International Organization for Standardization regulations.

## Band

- Tightening the band too tightly can cause you to sweat and make it difficult for air to pass under the band, which can lead to skin irritation. Do not fasten the band too tightly. There should be enough room between the band and your wrist so you can insert your finger.
- Deterioration, rust, and other conditions can cause the band to break or come off of your watch, which in turn can cause band pins to fly out of position or to fall out. This creates the risk of your watch falling from your wrist and becoming lost, and also creates the risk of personal injury. Always take good care of your band and keep it clean.
- Immediately stop using a band if you even notice any of the following: loss of band flexibility, band cracks, band discoloration, band looseness, band connecting pin flying or falling out, or any other abnormality. Take your watch to your original retailer or to a CASIO service center for inspection and repair (for which you will be charged) or to have the band replaced (for which you will be charged).

## Temperature

- Never leave your watch on the dashboard of a car, near a heater, or in any other location that is subject to very high temperatures. Do not leave your watch where it will be exposed to very low temperatures. Temperature extremes can cause your watch to lose or gain time, to stop, or otherwise malfunction.
- Leaving your watch in an area hotter than +60°C (140°F) for long periods can lead to problems with its LCD. The LCD may become difficult to read at temperatures lower than 0°C (32°F) and greater than +40°C (104°F).

## Impact

- Your watch is designed to withstand impact incurred during normal daily use and during light activity such as playing catch, tennis, etc. Dropping your watch or otherwise subjecting it to strong impact, however, can lead to malfunction. Note that watches with shock-resistant designs (G-SHOCK, BABY-G, G-MS) can be worn while operating a chain saw or engaging in other activities that generate strong vibration, or while engaging in strenuous sports activities (motocross, etc.)

## Magnetism

- Though a digital watch normally is not affected by magnetism, very strong magnetism (from medical equipment, etc.) should be avoided because it can cause malfunction and damage to electronic components.

## Electrostatic Charge

- Exposure to very strong electrostatic charge can cause your watch to display the wrong time. Very strong electrostatic charge even can damage electronic components.
- Electrostatic charge can cause the display to go blank momentarily or cause a rainbow effect on the display.

## Chemicals

- Do not allow your watch to come into contact with thinner, gasoline, solvents, oils, or fats, or with any cleaners, adhesives, paints, medicines, or cosmetics that contain such ingredients. Doing so can cause discoloration of or damage to the resin case, resin band, leather, and other parts.

## Storage

- If you do not plan to use your watch for a long time, thoroughly wipe it free of all dirt, sweat, and moisture, and store it in a cool, dry place.

## Resin Components

- Allowing your watch to remain in contact with other items or storing it together with other items for long periods while it is wet can cause color on resin components to transfer to the other items, or the color of the other items to transfer to the resin components of your watch. Be sure to dry off your watch thoroughly before storing it and make sure it is not in contact with other items.
- Leaving your watch where it is exposed to direct sunlight (ultraviolet rays) for long periods or failure to clean dirt from your watch for long periods can cause it to become discolored.
- Friction caused by certain conditions (strong external force, sustained rubbing, impact, etc.) can cause discoloration of painted components.
- If there are printed figures on the band, strong rubbing of the printed area can cause discoloration.

- Leaving your watch wet for long periods can cause fluorescent color to fade. Wipe the watch dry as soon as possible after it becomes wet.
- Semi-transparent resin parts can become discolored due to sweat and dirt, and if exposed to high temperatures and humidity for long periods.
- Daily use and long-term storage of your watch can lead to deterioration, breaking, or bending of resin components. The extent of such damage depends on usage conditions and storage conditions.

## Leather Band

- Allowing your watch to remain in contact with other items or storing it together with other items for long periods while it is wet can cause the color of the leather band to transfer to the other items or the color of the other items to transfer to the leather band. Be sure to dry off your watch thoroughly with a soft cloth before storing it and make sure it is not in contact with other items.

- Leaving a leather band where it is exposed to direct sunlight (ultraviolet rays) for long periods or failure to clean dirt from a leather band for long periods can cause it to become discolored.
  **CAUTION:** Exposing a leather band to rubbing or dirt can cause color transfer and discoloration.

## Metal Components

- Failure to clean dirt from metal components can lead to formation of rust, even if components are stainless steel or plated. If metal components exposed to sweat or water, wipe thoroughly with a soft, absorbent cloth and then place the watch in a well-ventilated location to dry.
- Use a soft toothbrush or similar tool to scrub the metal with a weak solution of water and a mild neutral detergent, or with soapy water. Next, rinse with water to remove all remaining detergent and then wipe dry with a soft absorbent cloth. When washing metal components, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.

## Bacteria and Odor Resistant Band

- The bacteria and odor resistant band protects against odor generated by the formation of bacteria from sweat, which ensures comfort and hygiene. In order to ensure maximum bacteria and odor resistance, keep the band clean. Use an absorbent soft cloth to thoroughly wipe the band clean of dirt, sweat, and moisture. A bacteria and odor resistant band suppresses the formation of organisms and bacteria. It does not protect against rash due to allergic reaction, etc.

## Liquid Crystal Display

- Display figures may be difficult to read when viewed from an angle.

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.

# User Maintenance

## Caring for Your Watch

Remember that you wear your watch next to your skin, just like a piece of clothing. To ensure your watch performs at the level for which it is designed, keep it clean by frequently wiping with a soft cloth to keep your watch and band free of dirt, sweat, water and other foreign matter.

- Whenever your watch is exposed to sea water or mud, rinse it off with clean fresh water.
- For a metal band or a resin band with metal parts, use a soft toothbrush or similar tool to scrub the band with a weak solution of water and a mild neutral detergent, or with soapy water. Next, rinse with water to remove all remaining detergent and then wipe dry with a soft absorbent cloth. When washing the band, wrap the watch case with kitchen plastic wrap so it does not come into contact with the detergent or soap.

- For a resin band, wash with water and then wipe dry with a soft cloth. Note that sometimes a smudge like pattern may appear on the surface of a resin band. This will not have any effect on your skin or clothing. Wipe with a cloth to remove the smudge pattern.
- Clean water and sweat from a leather band by wiping with a soft cloth.
- Not operating a watch crown, buttons, or rotary bezel could lead to later problems with their operation. Periodically rotate the crown and rotary bezel, and press buttons to maintain proper operation.

## Dangers of Poor Watch Care

### Rust

- Though the metal steel used for your watch is highly rust-resistant, rust can form if your watch is not cleaned after it becomes dirty.
  – Dirt on your watch can make it impossible for oxygen to come into contact with the metal, which can lead to breakdown of the oxidization layer on the metal surface and the formation of rust.

- Rust can cause sharp areas on metal components and can cause band pins to fly out of position or to fall out. If you ever notice any abnormality immediately stop using your watch and take it to your original retailer or to an authorized CASIO service center.
- Even if the surface of the metal appears clean, sweat and rust in crevasses can soil the sleeves of clothing, cause skin irritation, and even interfere with watch performance.

**Premature Wear**

- Leaving sweat or water on a resin band or bezel, or storing your watch an area subject to high moisture can lead to premature wear, cuts, and breaks.

**Skin Irritation**

- Individuals with sensitive skin or in poor physical condition may experience skin irritation when wearing a watch. Such individuals should keep their leather band or resin band particularly clean. Should you ever experience a rash or other skin irritation, immediately remove your watch and contact a skin care professional.

## Battery Replacement

- Leave battery replacement up to your original retailer or authorized CASIO service center.
- Have the battery replaced only with the type specified in the User's Guide. Use of a different battery type can cause malfunction.
- When replacing the battery, also request a check for proper water resistance.
- Ornamental resin components may become worn, cracked, or bent over time when subjected to normal daily use. Note that if cracking or any other abnormality indicating possible damage is noticed in a watch submitted for battery replacement, your watch will be returned with an explanation of the abnormality, without the requested servicing being performed.

## Initial Battery

- The battery that comes loaded in your watch when you purchase it is used for function and performance testing at the factory.
- The test battery may go dead quicker than the normally rated battery life as noted in the User's Guide. Note that you will be charged for replacement of this battery, even if replacement is required within your watch's warranty period.

## Low Battery Power

- Low battery power is indicated by large timekeeping error, by dim display contents, or by a blank display.
- Operation while battery power is low can result in malfunction. Replace the battery as soon as possible.

# Day of the Week List
# City Table

# Day of the Week List

| | Sunday | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday |
|---|---|---|---|---|---|---|---|
| ENG | SUN | MON | TUE | WED | THU | FRI | SAT |
| ESP | DOM | LUN | MAR | MIÉ | JUE | VIE | SÁB |
| FRA | DIM | LUN | MAR | MER | JEU | VEN | SAM |
| POR | DOM | SEG | TER | QUA | QUI | SEX | SÁB |
| DEU | SON | MON | DIE | MIT | DON | FRE | SAM |
| ITA | DOM | LUN | MAR | MER | GIO | VEN | SAB |
| CHN | 日 | 一 | 二 | 三 | 四 | 五 | 六 |
| РУС | ВС | ПН | ВТ | СР | ЧТ | ПТ | СБ |
| JPN | 日 | 月 | 火 | 水 | 木 | 金 | 土 |

# City Table

| City Code | City | UTC Differential | Other major cities in same time zone |
|---|---|---|---|
| PPG | Pago Pago | –11 | |
| HNL | Honolulu | –10 | Papeete |
| ANC | Anchorage | –9 | Nome |
| YVR | Vancouver | –8 | San Francisco, Las Vegas, Seattle/Tacoma, Dawson City |
| LAX | Los Angeles | | |
| YEA | Edmonton | –7 | El Paso |
| DEN | Denver | | |
| MEX | Mexico City | –6 | Houston, Dallas/Fort Worth, New Orleans |
| YWG | Winnipeg | | |
| CHI | Chicago | | |
| MIA | Miami | –5 | Montreal, Detroit, Boston, Panama City, Havana, Lima, Bogota |
| YTO | Toronto | | |
| NYC | New York | | |
| CCS | Caracas | –4 | La Paz, Santiago, Port Of Spain |
| YHZ | Halifax | | |
| YYT | St. Johns | –3.5 | |
| RIO | Rio De Janeiro | –3 | Sao Paulo, Buenos Aires, Brasilia, Montevideo |

| City Code | City | UTC Differential | Other major cities in same time zone |
|---|---|---|---|
| RAI | Praia | –1 | |
| LIS | Lisbon | 0 | Dublin, Casablanca, Dakar, Abidjan |
| LON | London | | |
| MAD | Madrid | +1 | Milan, Amsterdam, Algiers, Hamburg, Frankfurt, Vienna |
| PAR | Paris | | |
| ROM | Rome | | |
| BER | Berlin | | |
| STO | Stockholm | | |
| ATH | Athens | +2 | Helsinki, Istanbul, Beirut, Damascus, Cape Town |
| CAI | Cairo | | |
| JRS | Jerusalem | | |
| MOW | Moscow | +3 | Kuwait, Riyadh, Aden, Addis Ababa, Nairobi |
| JED | Jeddah | | |
| THR | Tehran | +3.5 | Shiraz |
| DXB | Dubai | +4 | Abu Dhabi, Muscat |
| KBL | Kabul | +4.5 | |
| KHI | Karachi | +5 | Male |
| DEL | Delhi | +5.5 | Mumbai, Kolkata, Colombo |

| City Code | City | UTC Differential | Other major cities in same time zone |
|---|---|---|---|
| DAC | Dhaka | +6 | |
| RGN | Yangon | +6.5 | |
| BKK | Bangkok | +7 | Jakarta, Phnom Penh, Hanoi, Vientiane |
| HKG | Hong Kong | +8 | Singapore, Kuala Lumpur, Manila, Perth, Ulaanbaatar |
| BJS | Beijing | | |
| TPE | Taipei | | |
| SEL | Seoul | +9 | Pyongyang |
| TYO | Tokyo | | |
| ADL | Adelaide | +9.5 | Darwin |
| GUM | Guam | +10 | Melbourne, Rabaul |
| SYD | Sydney | | |
| NOU | Noumea | +11 | Port Vila |
| WLG | Wellington | +12 | Christchurch, Nadi, Nauru Island |

- Based on data as of January 2021.
- The rules governing global times (GMT differential and UTC offset) and summer time are determined by each individual country.

CASIO®

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