

# Operation Guide 5015

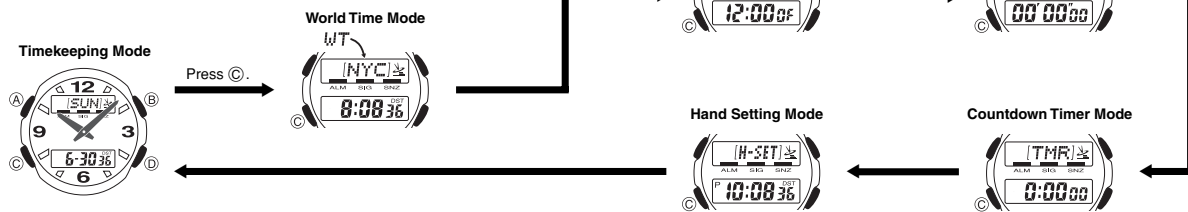
## About This Manual



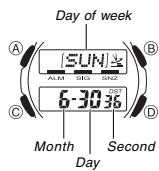
- Depending on the model of your watch, display text appears either as dark figures on a light background, or light figures on a dark background. All sample displays in this manual are shown using dark figures on a light background.
- Button operations are indicated using the letters shown in the illustration.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

## General Guide

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



## Radio-controlled Atomic Timekeeping



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

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

### Current Time Setting

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

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

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

### To specify your Home City



- In the Timekeeping Mode, hold down (A) until the city code starts to flash. This is the setting screen.
- Press (D) (east) to scroll through the city codes until the one you want to use as your Home City is displayed.
  - 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
MAD	Madrid	MOW	Moscow	BJS	Beijing	ANC	Anchorage	CHI	Chicago
PAR	Paris			TPE	Taipei	YVR	Vancouver	MIA	Miami
ROM	Rome			SEL	Seoul	LAX	Los Angeles	YTO	Toronto
BER	Berlin			TYO	Tokyo	YEA	Edmonton	NYC	New York
STO	Stockholm					DEN	Denver	YHZ	Halifax
						MEX	Mexico City	YYT	St. Johns

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

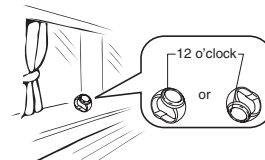
### Time Calibration Signal Reception

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

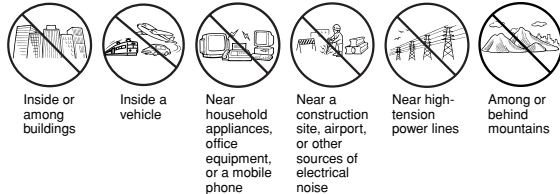
- Auto Receive**  
With auto receive, the watch receives the time calibration signal automatically up to six times a day. When any auto receive is successful, the remaining auto receive operations are not performed. For more information, see "About Auto Receive".
- Manual Receive**  
Manual receive lets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

### Important!

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



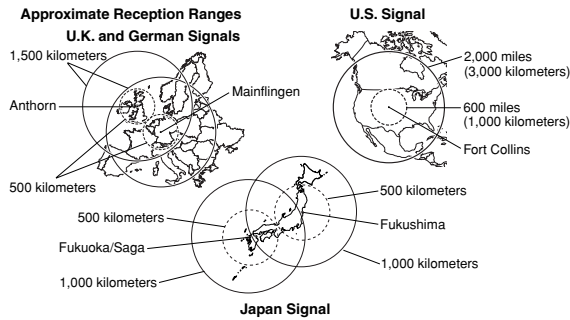
- Signal reception normally is better at night than during the day.
- Time calibration signal reception takes from two to seven minutes, but in some cases it can take as long as 14 minutes. Take care that you do not perform any button operations or move the watch during this time.
- The time calibration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

### Home City Codes and Transmitters

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

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

### Approximate Reception Ranges



- 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 the transmitter, signal reception will be impossible if the signal is blocked by mountains or other geological formations between the watch and signal source.
- Signal reception is affected by weather, atmospheric conditions, and seasonal changes.
- See the information under "Signal Reception Troubleshooting" if you experience problems with time calibration signal reception.

### About Auto Receive

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

- The display of the watch is blank while an auto receive operation is in progress.

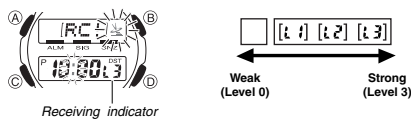
Your Home City		Auto Receive Start Times					
		1	2	3	4	5	6
LIS, LON	Standard Time	1:00 am	2:00 am	3:00 am	4:00 am	5:00 am	Midnight next day
	Daylight Saving Time	2:00 am	3:00 am	4:00 am	5:00 am	Midnight next day	1:00 am next day
MAD, PAR, ROM, BER, STO	Standard Time	2:00 am	3:00 am	4:00 am	5:00 am	Midnight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

### Note

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

### About the Receiving Indicator

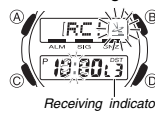
The receiving indicator shows the strength of the calibration signal being received. For best reception, be sure to keep the watch in a location where signal strength is strongest.



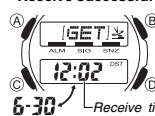
- Use the receiving indicator as a guide for checking signal strength and for finding the best location for the watch during signal receive operations.
- Even in an area where signal strength is strong, it takes about 10 seconds for signal reception to stabilize enough for the receiving indicator to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

### To perform manual receive

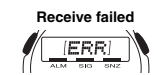
#### Receiving



Receiving indicator



Receive successful



Receive failed

- Enter the Timekeeping Mode.
  - Place the watch on a stable surface so its 12 o'clock side is facing towards a window.
  - Hold down (D) for about two seconds until the Receiving Indicator appears on the display.
    - Time calibration signal reception takes from two to 14 minutes. Take care that you do not perform any button operations or move the watch during this time.
    - If the receive operation is successful, the reception date and time appear on the display, along with the GET indicator.
    - The watch will enter the Timekeeping Mode if you press (D) or if you do not perform any button operation for about one or two minutes.
    - If the current reception fails, the display will show the ERR indicator.
- The watch will enter the Timekeeping Mode without changing the time setting if you press (D) or if you do not perform any button operation for about one or two minutes.

### To turn auto receive on and off



On/Off status

- In the Timekeeping Mode, press (D) to display the Last Signal screen.
- Hold down (A) until the current auto receive setting (ON or OFF) starts to flash. This is the setting screen.
  - Note that the setting screen will not appear if the currently selected Home City is one that does not support time calibration reception.
- Press (D) to toggle auto receive on (ON) and off (OFF).
- Press (A) to exit the setting screen.
  - For information about city codes that support signal receive, see "To specify your Home City".

### To check the latest signal reception results



Receive time

Receive date

- In the Timekeeping Mode, press (D) to display the Last Signal screen.
  - When receive is successful, the display will show the time and date that receive was successful. - - - - indicates that none of the reception operations were successful.
  - To return to the Timekeeping Mode, press (D).

### Signal Reception Troubleshooting

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

Problem	Probable Cause	What you should do
Cannot perform manual receive.	<ul style="list-style-type: none"> <li>The watch is not in the Timekeeping Mode.</li> <li>Your current Home City is not one of the following: LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, HKG, BJS, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, or YYT as your Home City.</li> </ul>	<ul style="list-style-type: none"> <li>Enter the Timekeeping Mode and try again.</li> <li>Select LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, HKG, BJS, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, or YYT as your Home City.</li> </ul>
The time setting is incorrect following signal reception.	<ul style="list-style-type: none"> <li>If the time is one hour off, the DST setting may be incorrect.</li> <li>The Home City code setting is not correct for the area where you are using the watch.</li> <li>The home position of the hands is off.</li> </ul>	<ul style="list-style-type: none"> <li>Change the DST setting to Auto DST.</li> <li>Select the correct Home City code.</li> <li>Enter the Hand Setting Mode and adjust the home position.</li> </ul>

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

### World Time



Current time in selected city

- The World Time Mode digitally displays the current time in 48 cities (29 time zones) around the world.
- If the current time shown for a city is wrong, check your Home City time settings and make the necessary changes.
- The watch will perform a signal reception even if it is in the World Time Mode when a calibration time is reached. If this happens, the World Time Mode time settings will be adjusted in accordance with the Timekeeping Mode's Home City time.
- All of the operations in this section are performed in the World Time Mode, which you enter by pressing (C).

### To view the time in another city

- While in the World Time Mode, press (D) to scroll through the city codes (time zones) to the east.
- For full information on city codes, see the "City Code Table".

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



DST indicator

- In the World Time Mode, use (D) to display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
- Hold down (A) to toggle Daylight Saving Time (DST indicator displayed) and Standard Time (DST indicator not displayed).
- Note that you cannot use the World Time Mode to change the DST setting of the Home City code you currently have selected in the Timekeeping Mode. See "To change the Daylight Saving Time (summer time) setting" for information about turning the Home City code DST setting on and off.

- The DST indicator will appear on the display whenever you display a city code for which Daylight Saving Time is turned on.
- Note that the DST/Standard Time setting affects only the currently displayed city code. Other city codes are not affected.

## Alarms



The Alarm Mode gives you a choice of four one-time alarms and one snooze alarm. Also use the Alarm Mode to turn the Hourly Time Signal (SIG) on and off.

- There are five alarms numbered AL1 through AL4, and SNZ. You can configure SNZ as a snooze alarm only. Alarms AL1 through AL4 can be used as one-time alarms only.
- Alarm settings (and Hourly Time Signal settings) are available in the Alarm Mode, which you enter by pressing C.

### To set an alarm time



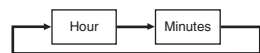
1. In the Alarm Mode, use D to scroll through the alarm screens until the one whose time you want to set is displayed.



2. After you select an alarm, hold down A until the hour setting of the alarm time starts to flash, which indicates the setting screen.

- This operation automatically turns on the alarm.

3. Use C to move the flashing in the sequence shown below to select other settings.



4. While a setting is flashing, use D and B to change it.
- While the hour or minute setting is flashing, use D (+) and B (-) to change it.
5. Press A to exit the setting screen.
- 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).

### Alarm Operation

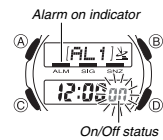
The alarm tone sounds at the preset time for 10 seconds, regardless of the mode the watch is in. In the case of the snooze alarm, the alarm operation is performed a total of seven times, every five minutes, or until you turn the alarm off.

- Pressing any button stops the alarm tone operation.
- If any alarm operation (one-time alarm, snooze) occurs while a signal receive operation is in progress, the receive operation will be canceled.
- Displaying the Timekeeping Mode setting screen during a 5-minute interval between snooze alarms will stop the current snooze alarm operation (but snooze alarm will remain as the alarm type setting).
- The snooze indicator (SNZ) flashes during the 5-minute intervals between alarms.
- The alarm on indicator (ALM) and snooze indicator (SNZ) are displayed in all modes.
- In all modes, the alarm on indicator is shown for any alarm that is currently turned on.

### To test the alarm

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

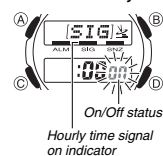
### To turn an alarm on and off



1. In the Alarm Mode, use D to scroll through the alarm screens until the one whose time you want to set is displayed.

2. Press A to toggle it on (ON) and off (OFF).

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

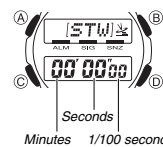


1. In the Alarm Mode, use D to scroll through the alarm screens until the Hourly Time Signal screen (SIG) is displayed.

2. Press A to toggle it on (ON) and off (OFF).

- The Hourly Time Signal on indicator is displayed in all modes when the Hourly Time Signal is turned on.

## Stopwatch

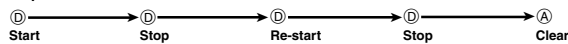


The stopwatch lets you measure elapsed time, split times, and two finishes.

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

### To measure times with the stopwatch

#### Elapsed Time



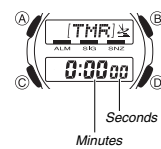
#### Split Time



#### Two Finishes



## Countdown Timer



The countdown timer can be set within a range of 1 minute to 24 hours. An alarm sounds when the countdown reaches zero.

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

### To set the countdown start time

1. While the countdown start time is on the display in the Countdown Timer Mode, hold down A until the current countdown start time starts to flash, which indicates the setting screen.
  - If the countdown start time is not displayed, use the procedure under "To use the countdown timer" to display it.
2. Press C to move the flashing between the hour and minute settings.
3. While a setting is flashing, use D (+) and B (-) to change it.
  - To set the starting value of the countdown time to 24 hours, set 0:00.
4. Press A to exit the setting screen.

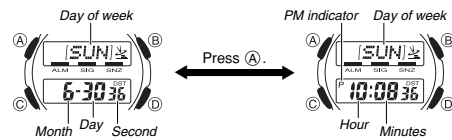
### To use the countdown timer

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

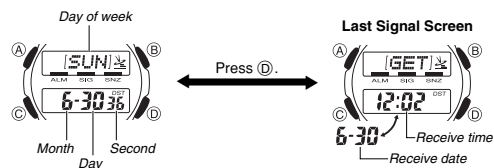
## Timekeeping

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

- When setting the time, you also can configure settings for the day of the week language and the 12/24-hour format.
- All of the operations in this section are performed in the Timekeeping Mode, which you can enter by pressing C.
- In the Timekeeping Mode, you can press A to toggle the display contents as shown below.



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

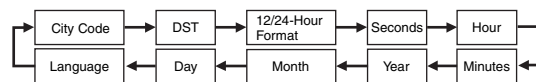


### Setting the Digital Time and Date Manually

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

### To set the current digital time and date manually

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



- The currently selected language indicator flashes on the display while the Language (setting) is selected in the above sequence.
3. When the setting you want to change is flashing, use B and D to change it as described below.

Screen:	To do this:	Do this:
TYO	Change the city code	Press D (east) and B (west).
AUTO	Cycle between Daylight Saving Time (ON), Standard Time (OFF), and Auto DST (AUTO)	Press D.
12H	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping	Press D.
36	Reset the seconds to 00	Press D.
10:00	Change the hour or minutes	Use D (+) and B (-) to change the setting.
20 00	Change the year	
6.30	Change the month or day	Use B and D to change the setting.
ENG	Change the day of the week language	

- See "City Code Table" for a complete list of available city codes.
- Auto DST (AUTO) can be selected only while LIS, LON, MAD, PAR, ROM, BER, STO, ATH, MOW, HKG, BJS, TPE, SEL, TYO, HNL, ANC, YVR, LAX, YEA, DEN, MEX, YWG, CHI, MIA, YTO, NYC, YHZ, or YYT is selected as the Home City code. For more information, see "Daylight Saving Time (DST)" below.
- While the language indicator is flashing on the display, use (B) and (D) to cycle through the language indicators as shown below, until the one for the language you want to select is displayed.

Indicator	Language
ENG	English
ESP	Spanish
FRF	French
DEU	German
ITA	Italian

- Press (A) to exit the setting screen.
- The day of the week is displayed automatically in accordance with the date (year, month, and day) settings.
- See the "Day of the Week List" for information on abbreviations used.
- Holding down (A) in the Timekeeping Mode displays the indicator for the currently selected language. Keeping (A) depressed for about two seconds changes to the Timekeeping Mode setting screen (indicated by the seconds flashing). If you display accidentally the setting screen, press (A) again to exit.

### Daylight Saving Time (DST)

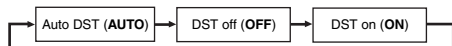
Daylight Saving Time (summer time) advances the time setting by one hour from Standard Time. Remember that not all countries or even local areas use Daylight Saving Time.

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

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

### To change the Daylight Saving Time (summer time) setting

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



- When the setting you want is selected, press (A) to exit the setting screen.
- The DST indicator (DST) appears on the display to indicate that Daylight Saving Time is turned on.

### Analog Timekeeping

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

#### Note

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

### To adjust the analog time



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

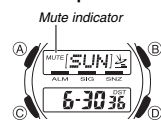
When you want to do this:	Perform this button operation:
Move the hand setting forward 20 seconds	• Press (D).
Move the hand setting a short way forward at high speed	• Hold down (D). • Release (D) when the hands reach the setting you want.
Move the hand setting a long way forward at high speed	• While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

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

## 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, the alarm, Hourly Time Signal, and Countdown 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 (C) to toggle the button operation tone on (mute indicator not displayed) and off (mute indicator displayed).

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

### Auto Return Features

- If you leave the watch in the Alarm or Hand Setting Mode for two or three minutes without performing any operation, it will return 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 will exit the setting screen automatically.

### Scrolling

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

### Initial Screens

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

### Radio-controlled Atomic Timekeeping Precautions

- Strong electrostatic charge can result in the wrong time being set.
- The time calibration signal bounces off the ionosphere. Because of this, such factors as changes in the reflectivity of the ionosphere, as well as movement of the ionosphere to higher altitudes due to seasonal atmospheric changes or the time of day may change the reception range of the signal and make reception temporarily impossible.
- Even if the time calibration signal is received properly, certain conditions can cause the time setting to be off by up to one second.
- The current time setting in accordance with the time calibration signal takes priority over any time settings you make manually.
- The watch is designed to update the date and day of the week automatically for the period January 1, 2000 to December 31, 2099. Setting of the date by the time calibration signal cannot be performed starting from January 1, 2100.
- This watch can receive signals that differentiate between leap years and non-leap years.
- Though this watch is designed to receive both time data (hour, minutes, seconds) and date data (year, month, day), certain signal conditions can limit reception to time data only.
- Normally, the signal reception date shown by the Last Signal screen is the date data included in the received time calibration signal. When only time data is received, however, the Last Signal screen will show the date as kept in the Timekeeping Mode at the time of signal reception.
- If you are in an area where proper time calibration signal reception is impossible, the watch keeps time within  $\pm 30$  seconds a month at normal temperature.
- If you have problems with proper time calibration signal reception or if the time setting is wrong after signal reception, check your current city code, DST (summer time), and auto receive settings.

### Timekeeping

- Resetting the seconds to 00 while the current count is in the range of 30 to 59 causes the minutes to be increased by 1. In the range of 00 to 29, the seconds are reset to 00 without changing the minutes.
- The day of the week is 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 batteries 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 differential.
- The UTC differential is a value that indicates the time difference between a reference point in Greenwich, England and the time zone where a city is located.
- The letters "UTC" is the abbreviation for "Universal Time Coordinated", which is the world-wide scientific standard of timekeeping. It is based upon carefully maintained atomic (cesium) clocks that keep time accurately to within microseconds. Leap seconds are added or subtracted as necessary to keep UTC in sync with the Earth's rotation.

### 12-hour/24-hour Timekeeping Formats

- The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is also applied in all other modes.
- With the 12-hour format, the PM indicator (P) appears on the display for times in the range of noon to 11:59 p.m. and no indicator appears for times in the range of midnight to 11:59 a.m.
- With the 24-hour format, times are displayed in the range of 0:00 to 23:59, without any indicator.

### Illumination Precautions

- An LED (light-emitting diode) and light guide panel illuminate the digital display for easy reading in the dark. In any mode (except when a setting screen is on the display), press (B) to illuminate the display.
- Illumination may be hard to see when viewed under direct sunlight.
- Illumination automatically turns off whenever an alarm sounds.
- Prolonged use of illumination runs down the batteries.

## City Code Table

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

• Based on data as of June 2007.

## 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	VEN	SÁB
FRA	DIM	LUN	MAR	MER	JEU	VEN	SAM
DEU	SON	MON	DIE	MIT	DON	FRE	SAM
ITA	DOM	LUN	MAR	MER	GIO	VEN	SAB