

## Power Saving

Power Saving causes the watch to enter a sleep state automatically and save power whenever the watch is left in the dark. The Power Saving feature of the watch is turned on at the factory.

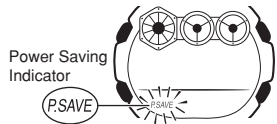
- Note that the watch may also enter the sleep state if the watch is blocked from light by your sleeve.

### ■ How the sleep state works

#### Display sleep state

The display sleep state is triggered whenever the watch is left in the dark for about one hour between the hours of 10:00 p.m. and 6:00 a.m.

- The display sleep state causes the display to go blank, except for a flashing Power Saving indicator. The alarm and the hourly time signal continue to operate normally while the watch is in the display sleep state.
- The watch will not enter the sleep state if it is in the Timer Mode or the Stopwatch Mode.



#### Function sleep state

The function sleep state is triggered whenever the watch is left in the dark for six or seven days. The power saving indicator stops flashing and remains on the display to indicate the function sleep state.

- The alarm and the hourly time signal are disabled while the watch is in the function sleep state, and time calibration signal auto receive is not performed.
- Digital timekeeping functions continue to operate normally in the function sleep state.

### ■ To recover from the sleep state

Move the watch to a brightly lit location or press any button. The watch will also recover from the sleep state if you angle it towards your eyes for reading (see "To illuminate the display with the auto light switch").

- It can take up to two seconds before display figures re-appear after you place the watch in a well-lit area.

### ■ To turn Power Saving on and off

Use the procedure under "Configuring Home Time Settings" to turn Power Saving on or off.

Leaving the watch in a drawer or anywhere else it is dark can cause Power Saving to trigger in order to conserve battery power.

## LCD Types

This watch is available with either of two different LCD types: light background with dark figures (black-on-white) or dark background with light figures (white-on-black).

Note that all of the samples in this manual show the black-on-white type LCD.

Black-On-White  
Black indicates "ON".



White-On-Black  
White indicates "ON".



## Modes and Display Screens

Each press of the **C** button sounds a confirmation tone and cycles through available modes in the sequence shown below.

- The display will revert to the Timekeeping Mode automatically if you leave the Alarm Mode screen displayed without performing any operation for about two or three minutes.

### Timekeeping Mode

PM Indicator (Appears with times between noon and midnight.)

Graphic Dial

Battery Indicator

Receive Indicator

(A) Button

(B) Button (Screen Switching)

Hour, minute, second

(C) Button (Mode switching)

(D) Button

(L) Button (Display Illumination)

Day of the Week

↔ (B) ↔

(C) →

← (C)

**Changing Display Screen Contents**  
Each press of the **B** button toggles the lower display contents between the date (month/day) and the day of the week.

**Days of the Week**  
SUN: Sunday MON: Monday TUE: Tuesday WED: Wednesday THU: Thursday FRI: Friday SAT: Saturday

- A segment appears with the passage of each second of the current minute.
- For details about the battery level indicator, see "Battery Level Indicator". For details about the receive indicator, see "Receive Indicator".

### World Time Mode

Current Time in Selected City

City Code

(C) →

### Alarm Mode

Alarm Time

Alarm Number

↓ (C)

### Stopwatch Mode

Mode Indicator

Elapsed Time

← (C)

### Timer Mode

Timer Time

Mode Indicator

## Power Supply

The power supply of this watch uses a solar cell to generate electrical power, which is stored by a rechargeable battery. Using or storing the watch where it is not regularly exposed to light, or allowing it to be blocked from light by your sleeve for long periods as you are wearing it can cause the power of the rechargeable battery to run down. To ensure stable operation, be sure to allow the watch to be exposed to light as much as possible when you are wearing or storing it.

**Important!**  
Note that all data in memory and all settings are cleared whenever you allow the level of the rechargeable battery to drop to Level 4.

### Flashing Recover Indicator

If you use the light or alarm a number of times during a short period, a recover (RECOV) indicator flashes on the display and the following operations become disabled as battery power recovers.

- Display illumination,
- Alarm and hourly time signal
- Time calibration signal reception

Normal operation will return after the battery recovers.



## Battery Level Indicator

|         | Black-On-White | White-On-Black |   |
|---------|----------------|----------------|---|
| Level 1 |                |                | Normal operation enabled.   |
| Level 2 |                |                | Normal operation enabled.   |
| Level 3 |                |                | Digital display, illumination, alarms, tones (alarms, hourly time signal), and signal reception disabled. |
| Level 4 |                |                | All functions, including timekeeping, disabled.   |

- Exposing the watch to direct sunlight or other strong light may cause the battery level indicator to indicate a level momentarily that is higher than the actual battery level. Because of this, you should wait for a short while after charging to check the battery level indicator.
- Even after the battery drops to Level 4, you will be able to resume normal operation by charging the battery.
- When charging from Level 4, the display will start operating when the battery reaches Level 3. At this time you will be able to configure time and date settings, but you should keep the watch exposed to light until the battery reaches Level 2 or Level 1.

### Start charging at Level 3!

Battery Level 3 indicates that remaining battery power is very low. Be sure to expose the watch to light for recharging as soon as possible after the Level 3 indicator starts to flash.

## Charging Precautions

Avoid charging the watch in the following locations, and anywhere else where the watch may become very hot.

- On the dashboard of an automobile parked in the sun
  - Very close to an incandescent light source or other sources of heat
  - In a location exposed to direct sunlight for long periods
- Note that the display panel may become black under very high temperatures. This is temporary, and the display will appear normal again at lower temperatures.



Depending on the light source you are using, the case of the watch may become quite hot during charging. Take care to guard against burn injury after charging.

## To charge the battery

- Point the solar panel (display) of the watch at a light source.
- Remember that even a partial blockage of the solar cell reduces charging efficiency.

Example: Positioning the watch



- The illustration shows the resin band model.

## Charging Guide

Starting from a full charge, the watch should be able to continue operating for about eight months without further charging under the conditions described below.

Daily Use (All time values are approximate.)

- Display Illumination: 1.5 seconds
- Alarm: 10 seconds
- Signal reception: 16 minutes
- Display On: 18 hours

Making sure the watch is regularly exposed to light ensures stable operation.

## Required Daily Charging Time

- The following is the daily amount of charging required each day to support the operations under "Daily Use".

| Exposure Level (Brightness)                              | Approximate Exposure Time |
|--|---------------------------|
| Outdoor Sunlight (50,000 lux)                            | 5 minutes                 |
| Sunlight Through a Window (10,000 lux)                   | 24 minutes                |
| Daylight Through a Window on an Overcast Day (5,000 lux) | 48 minutes                |
| Indoor Fluorescent Lighting (500 lux)                    | 8 hours                   |

- Charge Times Required to Advance to a Higher Level

| Exposure Level (Brightness)                              | Approximate Exposure Time |                   |                   |         |
|--|---------------------------|-------------------|-------------------|---------|
|  | Level 4 → Level 3         | Level 3 → Level 2 | Level 2 → Level 1 | Level 1 |
| Outdoor Sunlight (50,000 lux)                            | 2 hours                   | 22 hours          | 6 hours           |         |
| Sunlight Through a Window (10,000 lux)                   | 5 hours                   | 109 hours         | 30 hours          |         |
| Daylight Through a Window on an Overcast Day (5,000 lux) | 9 hours                   | 222 hours         | 61 hours          |         |
| Indoor Fluorescent Lighting (500 lux)                    | 101 hours                 | ---               | ---               |         |

- Note that the above charging times are for reference only. Actual charging time depends on a variety of environmental factors.

## Display Illumination

An EL (electroluminescent) panel is used to illuminate the display of the watch for easy reading in the dark. An auto light switch automatically illuminates the display when you angle the watch towards your eyes for reading.

### To illuminate the display manually

Press the **L** button in any mode to illuminate the display of the watch.

- You can use the procedure under "To specify the illumination duration" to select either 1.5 seconds or 2.5 seconds for the illumination duration.

- Pressing the **L** button illuminates the display regardless of whether the auto light switch is on or off.



You may hear a faint rattling sound when you move the watch around. This sound is caused by the movement of a metal bulb that controls operation of the auto light switch, and does not indicate malfunction.

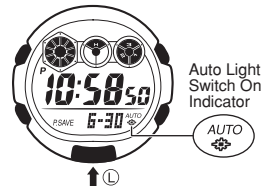
### To illuminate the display with the auto light switch

The auto light switch automatically illuminates the display whenever you angle the watch towards your eyes for reading, but only when it is dark.

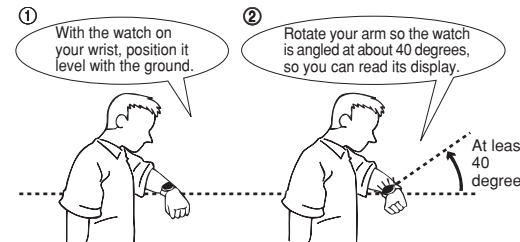
- The auto light switch does not illuminate the display when surrounding light is bright.
- You can use the procedure under "To specify the illumination duration" to configure the illumination duration as approximately 1.5 seconds or 2.5 seconds.

### To turn the auto light switch on and off

While a setting screen (one on which a setting is flashing) is on the display, hold down the **L** button for about two seconds to toggle the auto light switch on (auto light switch on indicator displayed) and off (no indicator displayed).



## Positioning Your Arm Correctly



- You should be wearing the watch on the outside of your wrist when using the auto light switch.
- Make sure that the left (9 o'clock) and right (3 o'clock) sides of the watch are within  $\pm 15$  degrees of being parallel with the ground. The auto light switch may not operate properly if the angle is greater.



### Important!

- The light may be difficult to see if you turn it on under bright sunlight.
- If you press any button or if an alarm operation starts while the display is illuminated, illumination will turn off.
- Display illumination does not work while you are performing a time calibration signal manual receive operation.
- You may hear humming sound from the watch while the display is illuminated. This is caused by vibration of the EL panel used of illumination, and does not indicate malfunction.

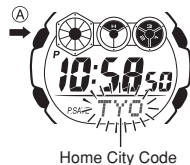
## Auto Light Precautions

- Frequent use of the auto light can run down the battery.
- The auto light switch may cause the display to illuminate when your sleeve covers the display of the watch.
- The display may not illuminate immediately when you angle the watch towards your face. This does not indicate malfunction.
- The display remains illuminated for the currently set duration (1.5 or 2.5 seconds) only, even if you leave the watch angled towards your face.
- The auto light switch is automatically disabled whenever battery power is at Level 3 or lower.
- The display may illuminate unintentionally when you wear the watch on the inside of your wrist, when you shake your arm, or when you raise your arm. **Be sure to turn off the auto light switch whenever you do not need display illumination.**
- Keep the auto light switch turned off whenever you are wearing the watch on the inside of your wrist.
- Electro-static charge and magnetism can interfere with auto light operation and even make operation impossible. If this happens lower your arm to the starting position and then raise it again. If you still have trouble with illumination, try lowering your arm down to your side and then raise it to your face for reading.

## ■ To specify the illumination duration

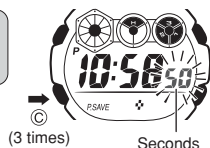
- In the Timekeeping Mode, hold down **A** for about two seconds.

- This will cause your Home City code to flash on the display.



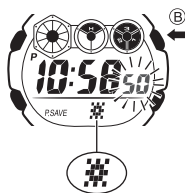
Home City Code

- Press the **C** button three times to display the flashing seconds count.



(3 times) Seconds

- Press the **B** button to toggle the illumination duration between about 1.5 seconds (☆ indicator) and 2.5 seconds (⊞ indicator).



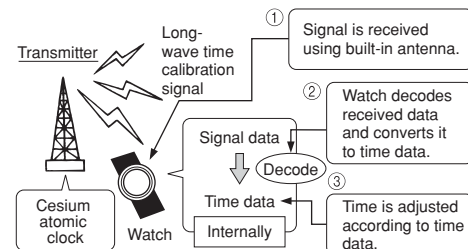
- After the setting is the way you want, press the **A** button to exit the setting screen.

- The watch will also exit the setting screen automatically if you do not perform any operation for about two or three minutes.

## How a Radio-controlled Watch Works

### What is a radio-controlled watch?

Your radio-controlled watch is designed to receive a time calibration signal that contains standard time data, and adjust its current time setting accordingly.



After the watch receives the Standard Time signal, it performs internal calculations to determine the current time. Because of this, there may be an error of up to one second in the displayed time.

### Calibration Signal

- The Japanese calibration signal (Call Sign: JJY) is maintained by the National Institute of Information and Communications Technology (NICT). It is a long wave signal transmitted 24 hours a day from the Mt. Otakadoya transmitter (40kHz) located in Tamura-gun, Fukushima Prefecture, and from the Mt. Hagane transmitter (60kHz) located on the border between Saga Prefecture and Fukuoka Prefecture.
- The U.S. calibration signal (Call Sign: WWVB) is transmitted by the National Institute of Standards and technology from Fort Collins, Colorado.

Note that transmission of the time calibration signal may be interrupted occasionally due to maintenance, lightning, etc.

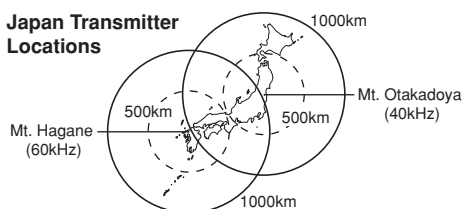
## Reception Range

This watch is designed to receive the standard time calibration signal of Japan (JJY) or of the United States (WWVB). The signal that is received depends on the current Home City setting.

- For information about selecting a Home City, see "Configuring Home Time Settings". For information about city codes, see the "World Time City Code List".

| Home City          | Transmitter  |
|--------------------|--|
| TYO, SEL           | Either the Mt. Otakadoya signal (40kHz) or the Mt. Hagane signal (60kHz) |
| LAX, DEN, CHI, NYC | Fort Collins, Colorado signal  |

### Japan Transmitter Locations



- Under optimum conditions, the calibration signal should be receivable up to 1,000 kilometers from the transmitter. Note that the wave is relatively weak at distances greater than 500km, so reception may be poor at long distances.

### U.S. Transmitter Location



- Under optimum conditions, the calibration signal should be receivable up to 3,000 kilometers from the transmitter. Note that the wave is relatively weak at distances greater than 1,000km, so reception may be poor at long distances.

- Geographic contours, nearby buildings, seasonal conditions, the time of day, can even make reception impossible even when you are within range of the transmitter.
- Best reception is possible late at night.

## Location

Reception is difficult and may even be impossible in the locations described below. Avoid such locations when performing signal reception.

- You should think of your watch operating like a radio or TV when it is receiving the calibration signal.



Among or near buildings



Near high-voltage lines



Inside a vehicle (automobile, train, plane, etc.)



Next to a household appliance or office equipment (TV, speaker, fax, computer, cell phone, etc.)



In a location where there is radio interference (construction site, airport, etc.)



Near mountains

If you are experiencing problems with reception, move away from the types of locations described above to a location with better reception, and try again.

## Receiving the Calibration Signal

There are two methods you can use to receive the time calibration signal.

### Auto Receive (3 times per day)

When the Home City setting is **TYO** or **SEL**, the time calibration signal is received automatically at 1:00, 2:00, and 3:00 each morning.

- If both the 2:00 and 3:00 receive operations are unsuccessful, a receive operation is performed at 4:00. If receive is still unsuccessful, it is performed again at 5:00.
- If all five of the above receive operations are unsuccessful, a receive operation is performed again at midnight the following day.

When the Home City is **NYC**, **CHI**, **DEN**, or **LAX**, auto receive is performed at midnight, and at 1:00 and 2:00 in the morning.

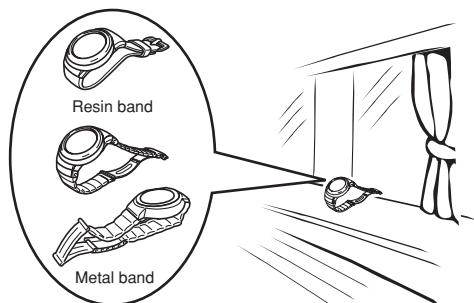
- If both the 1:00 and 2:00 receive operations are unsuccessful, a receive operation is performed at 3:00. If receive is still unsuccessful, it is performed again at 4:00.
- If all five of the above receive operations are unsuccessful, a receive operation is performed again at 5:00.

### Manual receive (You initiate reception using a button operation.)

The watch is set up for auto receive at the factory, so all you need to do is to place it in a location that allows good reception each night.

## ■ To position the watch for optimum reception

Remove the watch from your wrist and place it somewhere so its top (12 o'clock side, where the antenna is located) is facing approximately in the direction of the signal transmitter. Keep the watch away from metal objects.



- Orienting the watch so it is sideways to the transmitter makes it more difficult to receive the signal.
- Do not move the watch while it is receiving the calibration signal.

## ■ Time Required for Reception

A calibration signal receive operation takes anywhere from about two to five minutes.

- Note that when "AUTO" (Auto Select) is specified as the transmitter selection mode, signal reception can take up to 12 minutes.
- See "Configuring Auto Receive Settings" for more information.

## ■ To perform manual receive

In the Timekeeping Mode, hold down the **(D)** button for about two seconds.



- The watch will beep and reception will start. An indicator will appear on the display to indicate reception conditions.

## ■ To interrupt reception

Press the **(D)** button.

- All other buttons besides **(D)** are disabled during signal reception.

### When reception is successful

The watch terminates reception and adjusts the current time. Next it beeps and then displays the date and time that the adjustment was performed.

- The watch will return to the Timekeeping Mode screen if you press the **(D)** button or if you do not perform any operation for about two or three minutes.

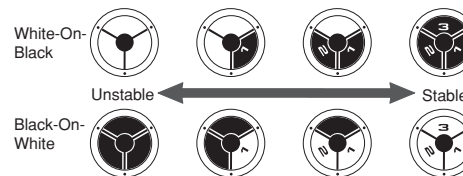
### Reception Error (ERR Indicator)

The watch does not adjust its current time setting, and displays "ERR" when signal reception is unsuccessful for some reason.

- The watch will return to the Timekeeping Mode screen if you press the **(D)** button or if you do not perform any operation for about two or three minutes.

## ■ Receive Indicator

The receive indicator cycles from "Unstable" through "Stable" as shown below while reception is in progress. How far it cycles depends on the signal strength. Keep the watch in a location where reception is stable while reception is in progress.



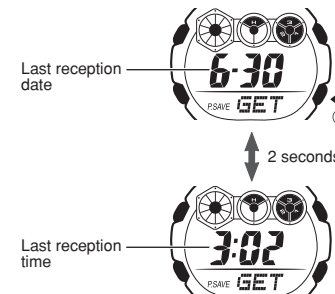
- Even under optimum reception conditions, it can take about 10 seconds for reception to stabilize.

- Use the receive indicator to check reception status and to determine the best location for signal reception.
- Note that weather, the time of day, surroundings, and other factors can all affect reception.

## ■ To view the last reception date and time

In the Timekeeping Mode, press the **(D)** button.

- This causes the display to start alternating between the last reception date screen and the last reception time screen at two-second intervals.
- "----" will appear in the digital display if the watch has not been able to perform any signal reception successfully.
- To return to the Timekeeping Mode, press the **(D)** button again.
- The watch will return to the Timekeeping Mode automatically if you do not perform any operation for about two or three minutes.



## Configuring Auto Receive Settings

Use the procedure below to turn auto receive of the time calibration signal on or off. When **TYO** (Tokyo) or **SEL** (Seoul) is selected as your Home City, you can also specify the transmitter selection mode, which controls which Japanese transmitter signal should be used for time calibration.

- For information about selecting your Home City, see "Configuring Home Time Settings".
- The initial factory default settings for auto receive are Home City = **TYO** (Tokyo); Auto Receive = On; Transmitter = **AUTO**
- The following procedure can be performed only when **TYO**, **SEL**, **NYC**, **CHI**, **DEN**, or **LAX** is selected as the Home City.

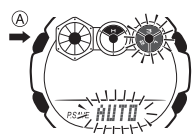
## ■ To configure auto receive settings

1. In the Timekeeping Mode, press the **(D)** button.



- This causes the display to start alternating between the last reception date and time screens.
- The watch will return to the Timekeeping Mode automatically if you do not perform any operation for about two or three minutes.

2. Hold down the **(A)** button for about two seconds.



- This will cause the current auto receive setting to flash on the display.

3. Use the **(D)** and **(B)** buttons to cycle through the available auto receive settings.



4. When the setting is the way you want, press the **(A)** button.



- This will exit the setting screen and return to the last reception date and time screens.
- To return to the Timekeeping Mode, press the **(D)** button again.
- The watch will return to the Timekeeping Mode automatically if you do not perform any operation for about two or three minutes.

## Auto Receive Settings when the Home City is TYO or SEL

- **AUTO**  
Auto receive turned on with automatic selection of either the Mt. Otakadoya signal (40kHz) or the Mt. Hagane signal (60kHz), whichever is strongest.
- **J40**  
Auto receive turned on for the Mt. Otakadoya signal (40kHz).
- **J60**  
Auto receive turned on for the Mt. Hagane signal (60kHz).
- **OFF**  
Auto receive turned off.

## Auto Receive Settings when the Home City is NYC, CHI, DEN, or LAX

- **ON**  
Auto receive turned on for the Ft. Collins, Colorado signal.
- **OFF**  
Auto receive turned off.

## Calibration Signal Reception Precautions

- Auto reception can be performed while the watch is in the Timekeeping Mode or World Time Mode only.
- Reception cannot be performed while Timer Mode countdown is in progress.
- Pressing any button while auto reception is in progress will cause the watch to beep and then exit the receive operation.
- Make sure you are within the range of the calibration signal transmitter before performing the reception operation. Remember that geographic contours, nearby buildings, seasonal conditions, the time of day, can even make reception impossible even when you are within range of the transmitter.
- Proper reception may be impossible if there is something blocking the signal. If reception is unsuccessful, try again.
- This watch is designed to adjust its current time setting in accordance with the calibration signal transmitted in Japan and the United States only. It operates like a standard (non-radio controlled) watch outside of the range of the receivable time calibration signal transmitters.
- When the watch is unable to adjust its time signal using the calibration signal for some reason, timekeeping accuracy is within  $\pm 15$  seconds per month.
- Strong electrostatic charge can cause timekeeping error.
- Signal reception is cancelled if the alarm starts to sound while it is being performed.
- The watch's calendar shows dates up to the year 2099. Attempting a receive operation after that causes an error.

## Troubleshooting

### The watch cannot receive the time calibration signal.

- Is the signal being transmitted?  
Though the Japanese calibration signal (Call Sign: JJY) is continually transmitted by the National Institute of Information and Communications Technology (NICT) in theory, it may sometimes be interrupted for periodic maintenance work, or because of lightning or other problems.
- Are you within the reception range of a transmitter?  
See "Reception Range" for information about areas where the watch can receive the signal.
- Is there something in the immediate area that may be interfering with reception?  
Even if you are within the reception range of a transmitter, objects between you and the transmitter or electrical noise can interfere with reception. Avoid such areas during signal reception. See "Location" for more information.
- Do you have the correct Home City code selected?  
Remember that auto receive is not performed unless **TYO** (Tokyo), **SEL** (Seoul), **NYC** (New York), **CHI** (Chicago), **DEN** (Denver), or **LAX** (Los Angeles) is selected as the Home City. Select the correct Home City code using the procedure under "Configuring Home Time Settings".
- Is auto receive turned off (OFF)?  
Use the procedure under "Configuring Auto Receive Settings" to turn on auto receive.
- Is the watch in any mode other than the Timekeeping Mode or World Time Mode during the auto receive times (midnight, 1:00 a.m., 2:00 a.m., 3:00 a.m., 4:00 a.m., and 5:00 a.m.)?  
Auto receive is performed only when the watch is in the Timekeeping Mode or World Time Mode. It is not performed if the watch is in any other mode.

### Time calibration signal reception is successful, but the hourly time signal and current time are slightly off.

- After the watch receives the time calibration signal, it performs an internal decoding process before updating its time setting. Because of this, the time setting may be slightly off (within one second).

### Time calibration signal reception is successful, but the current time is one hour fast.

- Do you have summer time (DST) turned on (ON)? Use the procedure under "Configuring Home Time Settings" to turn off summer time.

### Time calibration signal reception is successful, but the current time setting is wrong.

- Is the correct city code selected for your Home City?  
If you are in Japan, you should have **TYO** selected for your Home City. For other areas, select the correct Home City code using the procedure under "Configuring Home Time Settings".

### The auto receive ON/OFF settings don't appear when configuring auto receive settings.

- Auto receive ON/OFF settings do not appear on the display unless **TYO** (Tokyo), **SEL** (Seoul), **NYC** (New York), **CHI** (Chicago), **DEN** (Denver), or **LAX** (Los Angeles) is selected as the Home City. Use the procedure under "Configuring Home Time Settings" to select your correct Home City.

### The auto receive AUTO, J40, and J60 settings do not appear when configuring auto receive settings.

- The AT, J40, and J60 transmitter selection mode options are available only when **TYO** (Tokyo) is selected as the Home City code. Use the procedure under "Configuring Home Time Settings" to select your correct Home City.

### What time is auto receive performed?

- Auto receive is performed in the middle of the night, when reception conditions are best. Before going to bed at night, place the watch near a window, with its 12 o'clock position facing in the general direction of the transmitter.

### How can I perform manual receive?

- Hold down the lower right **D** button for about two seconds. The watch will beep to indicate that manual receive has started. Place it near a window, with its 12 o'clock position facing in the general direction of the transmitter.

### How can I view the last reception date and time?

- In the Timekeeping Mode, press the lower right **D** button. This will display the date and time that the time calibration signal was last received successfully. To return to the Timekeeping Mode, press the **D** button again. See "To view the last reception date and time" for more information.
- Check the auto signal reception setting whenever you have problems with signal reception or when the time setting produced by signal reception is incorrect.
- The initial factory default configuration of the reception settings are shown below. You do not need to change these settings if you use the watch in Japan.

|              |             |   |
|--------------|-------------|---|
| Auto Receive | <b>AUTO</b> | Auto Japan transmitter select (40kHz/ 60kHz)  |
| Home City    | <b>TYO</b>  | Tokyo   |
| Summer Time  | <b>A</b>    | Auto switching in accordance with signal data |

## World Time Mode

World time lets you display the current time in any one of 30 cities (29 time zones) around the world.

- When you enter the World Time Mode, the screen for the city that was displayed when you last exited the mode appears first.
- The seconds count in the World Time Mode is linked with the Timekeeping Mode seconds count.
- The same 12-hour/24-hour format you select for the Timekeeping Mode time is also applied in the World Time Mode.

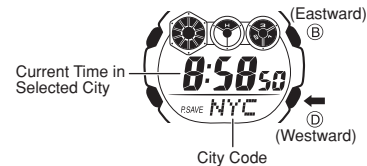
### Important!

- If the World Time Mode time is incorrect, check the current time settings in the Timekeeping Mode and the World Time city settings.
- For more information, see "Configuring Home Time Settings".

### To search for a city code

In the World Time Mode, press the **D** (westward) or **B** (eastward) button.

- This scrolls the available city codes.
- Holding down the **B** and **D** buttons scrolls at high speed.

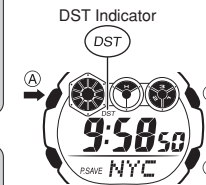


## Using Summer Time (DST)

Summer time, or Daylight Saving Time (DST) as it is known in some countries, calls for setting clocks ahead one hour during the summer season. Note that the use of summer time depends on the country and even the local area.

### To turn summer time on or off

- In the World Time Mode, use the **D** and **B** buttons to display the screen for the city code whose summer time setting you want to change.
- Hold down the **A** button for about two seconds.



- This toggles summer time on and off.
- The "DST" indicator appears on the display and timekeeping is advanced by one hour when summer time is turned on.
- You can turn summer time on or off independently for each World Time Mode city. Note, however, that you cannot turn on summer time for the "GMT" city code.
- Turning on summer time for your home time city causes the time shown in the Timekeeping Mode to be advanced by one hour.

## World Time City Code List

| City Code | GMT Differential | City Name           | City Code | GMT Differential | City Name  |
|-----------|------------------|---------------------|-----------|------------------|------------|
| ---       | -11              |                     | JRS       | +2               | Jerusalem  |
| HNL       | -10              | Honolulu            | JED       | +3               | Jeddah     |
| ANC       | -9               | Anchorage           | THR       | +3.5             | Teheran    |
| LAX       | -8               | Los Angeles         | DXB       | +4               | Dubai      |
| DEN       | -7               | Denver              | KBL       | +4.5             | Kabul      |
| CHI       | -6               | Chicago             | KHI       | +5               | Karachi    |
| NYC       | -5               | New York            | DEL       | +5.5             | Delhi      |
| CCS       | -4               | Caracas             | DAC       | +6               | Dakar      |
| RIO       | -3               | Rio de Janeiro      | RGN       | +6.5             | Yangon     |
| ---       | -2               |                     | BKK       | +7               | Bangkok    |
| ---       | -1               |                     | HKG       | +8               | Hong Kong  |
| GMT       | +0               | Greenwich Mean Time | SEL       | +9               | Seoul      |
| LON       | +0               | London              | TYO       | +9               | Tokyo      |
| PAR       | +1               | Paris               | ADL       | +9.5             | Adelaide   |
| BER       | +1               | Berlin              | SYD       | +10              | Sydney     |
| ATH       | +2               | Athens              | NOU       | +11              | Noumea     |
| CAI       | +2               | Cairo               | WLG       | +12              | Wellington |

- The contents of the above table are current as of June 2004.
- Time differentials in the above table are in accordance with Universal Time Coordinated (UTC).

## Using the Alarm and Hourly Time Signal

### Alarms

#### ■ Daily Alarms (AL1 to AL4)

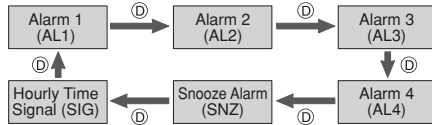
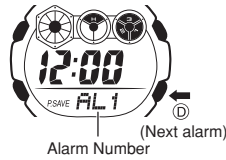
The watch beeps for about 10 seconds when an alarm time is reached.

#### ■ Snooze Alarm (SNZ)

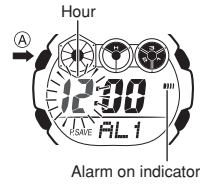
With the snooze alarm, the watch beeps for 10 seconds when the alarm time is reached, and up to seven times at five-minute intervals thereafter (approximately 30 minutes total). Pressing any button stops the beeper, but the alarm will sound again after five minutes.

#### ■ To set an alarm time

- In the Alarm Mode, use the **D** button to scroll through the alarm screens until the one whose setting you want to change is displayed.



- Hold down the **A** button for about two seconds until the hour digits start to flash on the display.



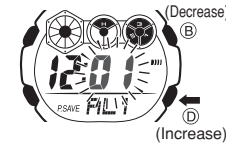
- This also causes the alarm on indicator to appear and automatically turns on the alarm.

- Use the **C** button to select the digits you want to change.



- Each press of the **C** button moves the flashing between the hour digits and minute digits.

- Use the **D** (+) and **B** (-) buttons to change the currently selected digits.



Repeat steps 3 and 4 for the hour digits and the minute digits to set the time you want.

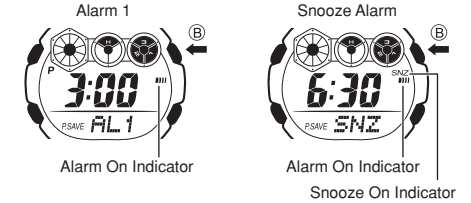
- When setting the hour, make sure you specify AM (A) or PM (P) correctly when using 12-hour timekeeping, or that you specify the correct 24-hour time.
- The same 12-hour/24-hour format you select for your home time is also applied in the Alarm Mode.

- When the setting is the way you want, press the **A** button.

- This exits the setting screen.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

#### ■ To turn an alarm on and off

- In the Alarm Mode, use the **D** button to display the screen for the alarm you want to turn on or off.
- Press the **B** button to toggle the displayed alarm on (alarm on indicator displayed) or off (alarm on indicator not displayed). Turning on the snooze alarm will cause the "SNZ" indicator to appear on the display.



#### ■ To stop the alarm beeper

Press any button.

- In the case of the snooze alarm the alarm will sound again in about five minutes. "SNZ" flashes on the display during the five-minute period between snooze alarms (indicating that the alarm will sound again).
- The snooze alarm will be canceled automatically when any of the following occurs while the SNZ indicator is flashing on the display.
  - If you turn off the snooze alarm
  - If you display the snooze alarm setting screen
  - If you display the Timekeeping Mode setting screen

#### ■ To test the alarm

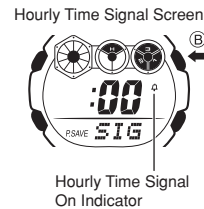
In the Alarm Mode, hold down the **D** button to sound the alarm.

### Hourly Time Signal

The hourly time signal causes the watch to beep twice every hour on the hour.

#### ■ To turn the hourly time signal on and off

- In the Alarm Mode, use the **D** button to display the hourly time signal screen.



- Press the **B** button to toggle the hourly time signal on or off.

- Turning on the hourly time signal causes the hourly time signal indicator to appear on the display. The watch will beep twice every hour on the hour.

## Stopwatch Mode

The stopwatch measures elapsed time in units of 1/100 second up to 23 hours 59 minutes, 59.99 seconds (24 hours). When the maximum limit is reached, the elapsed time automatically returns to zero and timing continues from there.

#### ■ Performing Stopwatch Operations

In the Stopwatch Mode, press the **C** button to start and stop elapsed time measurement.

- During elapsed time measurements, segments in the graphic dials appear and disappear to indicated the passage of time.



- Pressing the **B** button while timing is being performed freezes the current elapsed time on the display and displays the "SPL" (split) indicator, while elapsed timing continues internally.
- Changing to another mode while a split time is displayed clears the split time.
- Pressing the **B** button while elapsed time measurement is stopped resets the stopwatch to all zeros.

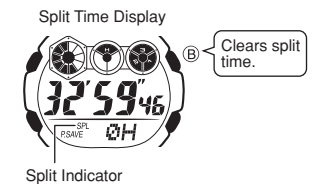
#### ■ Elapsed Time Measurement



#### ■ Cumulative Elapsed Time Measurement

Pressing the **D** button to restart the stopwatch without resetting it to all zeros causes the elapsed time measurement to resume from where it was last stopped.

#### ■ Split Time Measurement



#### ■ 1st and 2nd Place Finishers



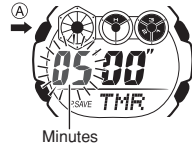
## Timer Mode

You can set the start time of the time in the range of 1 to 60 minutes, in units of one minute. The watch beeps for 10 seconds when the end of the countdown is reached.

### ■ To set the timer time

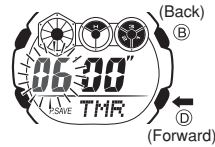
1. In the Timer Mode, hold down **(A)** for about two seconds.

- This will cause the minute digits of the timer start time to flash.



2. Use the **(D)** (+) and **(B)** (-) buttons to change the start time.

- Holding down either button scrolls the start time setting at high speed.
- You can set a start time in the range of 1 minute to 60 minutes.



3. After start time is the way you want, press the **(A)** button.

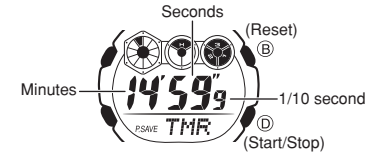
- This exits the setting screen.
- The watch will also exit the setting screen automatically if you do not perform any operation for about two or three minutes.



### ■ Using the Timer

In the Timer Mode, press the **(D)** button.

- Each press of the **(D)** button starts or stops the countdown.
- The timer counts down in 1/10 second units.
- During elapsed time measurements, segments in the graphic dials appear and disappear to indicated the passage of time.



- Pressing the **(B)** button while the countdown is stopped resets the display to the start time.
- Pressing the **(D)** button again while the timer countdown is stopped restarts the countdown.

### ■ End of Countdown

The watch beeps for 10 seconds when the end of the countdown is reached.

### ■ To stop the time up beeper

Press any button while the beeper is sounding to stop it.

## Configuring Home Time Settings

Home time settings include your Home City (the city where you will normally use the watch), the current time and date in your Home City, and other settings.

- Use the Timekeeping Mode to configure home time settings.
- Also use the following procedure when you want to turn Power Saving on or off.

### ■ To configure home time settings

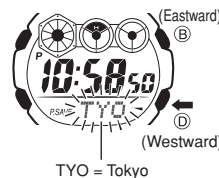
1. In the Timekeeping Mode, hold down the **(A)** button for about two seconds.

- This will cause the city code currently selected as the Home City to flash on the display.



2. Use the **(D)** (westward) button and the **(B)** (eastward) button to scroll through the city codes until the one you want to select is displayed.

- See the "World Time City Code List" for information about city codes.
- Holding down either button scrolls at high speed.



3. When the city code you want is displayed, press the **(C)** button.

- This will display the summer time (DST) setting screen.



4. Press the **(D)** button to cycle through the available summer time (DST) settings until the one you want to select is displayed.



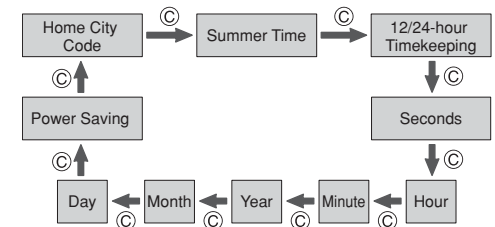
- **A (AUTO)**  
This setting enables the auto summer time setting, which turns summer time on or off in accordance with the received time calibration signal.
- This setting uses Japan summer time data when **TYO** is selected as the Home City, and U.S. summer time data when **NYC**, **CHI**, **DEN**, or **LAX** is selected as the Home City.

- **OF (OFF)**  
This setting turns off summer time and returns to normal timekeeping.

- **On (ON)**  
This setting turns on summer time and advances the current time by one hour.

- Only OFF or ON can be selected if the current Home City code is a setting other than **HKG**, **TYO**, **SEL**, **NYC**, **CHI**, **DEN**, **LAX**, **ANC**, or **HNL**.

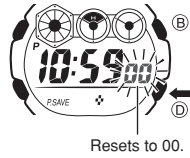
5. When the summer time setting is the way you want, use the **(C)** button to cycle the display through the settings shown below.



6. While the 12/24-hour timekeeping setting is flashing, press the **(D)** button to toggle between 12-hour ("12H") and 24-hour ("24H") timekeeping.

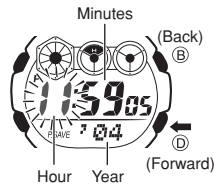


7. While the seconds are selected, press the **(D)** button to reset them to 00 in accordance with the time signal on the radio, TV, etc.



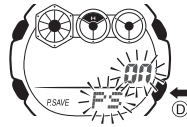
- Pressing the **(D)** button while the seconds count is in the range of 30 to 59 resets it to 00 and also adds 1 to the minutes. Pressing the **(D)** button in the range of 00 to 29 resets the seconds count without changing the minutes.
- Pressing the **(B)** button while the seconds count is flashing changes the display illumination duration. See "To specify the illumination duration" for more information.

8. While the hour, minutes, year, month, or day setting is flashing, use the **(D)** (+) and **(B)** (-) buttons to change the setting.



- Holding down either button changes the setting at high speed.
- When setting the hour, make sure you specify AM (no indicator) or PM (P) correctly, or that you specify the correct 24-hour time.
- You can set a year in the range of 2000 to 2099. The day of the week is set automatically in accordance with the date you set.
- The watch automatically makes adjustments for leap years and month lengths.

9. While the Power Saving setting is flashing, press the **(D)** button to toggle it on (ON) or off (OFF).



- If you turn on Power Saving, the Power Saving indicator will be on the display when you exit the setting screen.

10. When all of the settings are the way you want, press the **(A)** button.

- This exits the setting screen.
- The display also will exit the setting screen automatically if you do not perform any operation for about two or three minutes.

Use the **(C)** button to select each of the settings and the **(D)** and **(B)** buttons to change them.