## About This Manual



- Depending on the model of your watch, display text



## Things to check before using the watch

1. Check the Home City and the daylight saving time (DST) setting.
Use the procedure under "To configure Home City settings" (page E-18) to configure

Use the procedure under "To configure Home City settings" (page E-18) to configure
your Home City and daylight saving time settings. your Home City and daylight saving time settings.

## Important!

- Proper World Time Mode data depend on correct Home City, time, and date
- Proper World Time Mode data depend on correct Home City, time, and date
settings in the Timekeeping Mode. Make sure you configure these settings settings in
correctly.


## 2. Set the current time.

- See "Adjusting the Digital Time and Date Settings" (page E-21).

The watch is now ready for use.

## Contents

About This Manual ..... E-2
Things to check before using the watch ..... E-3
Mode Reference Guide ..... E-9
Timekeeping. ..... E-17
Configuring Home City Settings. ..... E-18
To configure Home City settings ..... E-18
To change the Daylight Saving Time (summer time) setting ..... E-20
Adjusting the Digital Time and Date Settings ..... E-21
To configure the digital time and date settings ..... E-21
Using the Stopwatch ..... E-25
To enter the Stopwatch Mode . ..... E-25
To perform an elapsed time operation . ..... E-26
To pause at a split time ..... E-26
To measure two finishes . .....  E-26
To use Auto-Start .....  E-28
Checking the Current Time in a Different Time Zone ..... E-29
To enter the World Time Mode. .....  $\mathrm{E}-30$
To view the time in another time zone ..... E-30
To specify standard time or daylight saving time (DST) for a city. ..... E-31
To swap your Home City and World Time City. ..... E-32
Using the Alarm . ..... E-33
To enter the Alarm Mode. ..... E-34
E-4 ..... E-5
Adjusting Hand Positions ..... E-47
Button Operation Tone ..... E-49
To turn the button operation tone on and off ..... E-49
Troubleshooting ..... E-51
Main Indicators ..... E-52
Specifications. . ..... E-54
To set an alarm time ..... E-34
To turn an alarm and the Hourly Time Signal on and off . . . ..... E-36
To stop the alarm ..... E-36
Countdown Timer ..... E-37
To enter the Countdown Timer Mode ..... E-38
To perform a countdown timer operation ..... E-38
To stop the alarm ..... E-40
Illumination. ..... E-41
To turn on illumination manually . ..... E-4
o change the illumination duration .
E-45
To enable or disable the auto light switch.

| To do this: | Enter this mode: | See: |
| :--- | :--- | :--- |
| - View the current date in the Home City <br> - Configure Home City and daylight saving time (DST) <br> settings <br> - Configure time and date settings | Timekeeping Mode | E-17 |
| Use the stopwatch to measure elapsed time | Stopwatch Mode | E-25 |
| View the current time in one of 48 cities <br> (31 time zones) around the globe | World Time Mode | E-29 |
| Set an alarm time | Alarm Mode | $\mathrm{E}-33$ |
| Use the countdown timer | Countdown Timer Mode | $\mathrm{E}-37$ |

## Operation Guide 5398

Selecting a Mode

- Press (C) to cycle between the modes as shown below.
- To return to the Timekeeping Mode from any other mode, hold down (C) for about
two seconds.
- In any mode (except a setting mode), press (B) to illuminate the display.

- If the timer in the Countdown Timer Mode is stopped and reset to the countdown start time, you can also go directly from the Timekeeping mode to the Countdown start time, you can also go directly from the Timekeeping mode to the Countdown see "Directly Entering the Countdown Timer Mode from the Timekeeping Mode" (page E-40).


General Functions (All Modes)
The functions and operations described in this section can be used in all modes.
Auto Return Features
The watch will automatically return to the Timekeeping Mode if you do not perform any operation for a certain amount of time, as described below.

| Mode | Approximate Elapsed Time |
| :--- | :---: |
| Alarm | 3 minutes |
| Time or other setting mode <br> (information flashing on the display) | 10 seconds |

## Rotary switch Operations



## Important!

- With this watch, you do not need to pull out the rotary switch before rotating it. Pulling on the rotary switch can damage the watch and
- To protect against unintended operation, nothing happens for the first rotary switch rotation. Continue rotating the rotary switch until the desired operation is performed. If you do not perform any rotary switch operation for about three minutes, you will need to rotate the rotary switch as described above before it
- Note that the result of a rotary switch operation depends on the mode the watch is in when you perform it.
- You can use rotary switch rotation to perform the operations described below. Timekeeping: Enter the Countdown Timer Mode
(when the countdown timer is stopped and reset to all zeros)
- World Time: Change the World Time Cit
- Alarm: Scroll through the available alarm screens

1. While holding down (B), press (C).

Quickly rotating the rotary switch three times in either direction will start high-speed movement (hand movement or displayed setting scrolling) in the corresponding witch in the direction oppsite that of the current high-speed movement, or pres direction opposite that of the current high-speed movement, or press any button.

Moving the Hands Out of the Way for Better Viewing
You can use the procedure below to temporarily move the hour and minute hands out of the way to better view what is on the display.

- This operation can be performed in any mode. In the case of a setting mode (setting flashing on the screen), the hands will move out of the way automatically, even if you do not perform the below operation.
- This will cause the hour and minute hands to move to a location where they do not block your view of the digital display
Example: When the current time is $8: 23$


2. Holding down (B) again as you press (C) will cause the hands to return to their normal positions (normal timekeeping).

E-14

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


Configuring Home City Settings
There are two Home City settings: actually selecting the Home City, and selecting either standard time or daylight saving time (DST)

To configure Home City settings

| (A) | 1. In the Timekeeping Mode, hold down (A) until the <br> flashing Hold indicator disappears from the display <br> and the currently selected city code appears on the <br> right side of the upper display. |
| :--- | :--- |
| (T) This indicates the city code setting mode. |  |

In the Timekeeping Mode, hold down (A) until the and the currently right side of the upper display
2. Rotate the rotary switch to scroll through city codes on the digital display until the one you want to use as you For City is displayed. Table" at the back of this manual.
3. After the setting is the way you want, press (A) to return to the Timekeeping Mode.
Note

- After you specify a city code, the watch will use UTC* offsets in the World Time Mode to calculate the current time for other time zones based on the current time in your Home City.
* Coordinated Universal Time, the world-wide scientific standard of timekeeping. The reference point for UTC is Greenwich, England.


## Operation Guide 5398

To change the Daylight Saving Time (summer time) setting

1. In the Timekeeping Mode, hold down (A) until the flashing Hold indicator disappears from the display and the currently selected city code appears on the right side of the upper display.

- This indicates the city code setting mode.

2. Press © to display the DST setting mode.
3. Rotate the rotary switch to toggle between Daylight Saving Time (ON) and Standard Time (OFF). Note that you cannot switch between daylight saving time and standard time while UTC is selected as your Home City.
4. After the setting is the way you want, press (A) to return to the Timekeeping Mode.

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

Adjusting the Digital Time and Date Settings
Use the procedure below to adjust the digital time and date settings.

## To configure the digital time and date settings


e, hold down (A) until the flashing Hold indicator disappears from the display and the currently selected city code appears on the right side of the upper display

- This indicates the city code setting mode.

2. Press (C) to move the flashing in the sequence shown below to select the other settings.

3. When the timekeeping setting you want to change is flashing, perform the operation described below.

| Screen | To do this: | Do this: |
| :---: | :---: | :---: |
| $1 \pm 1$ | Toggle between 12-hour (12H) and 24-hour (24H) timekeeping | Rotate the rotary switch. |
| 36 | Reset the seconds to $\mathbf{0 0}$ | Press (D). |
| P $40: 80$ | Change the hour or minute |  |
| E15 | Change the year | Rotate the rotary switch. |
| 6.75 | Change the month or day |  |

4. Press (A) to exit the setting mode

## Note

- 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 .
-While the "Minute (and hour)" setting is selected above, the hour setting will chang automatically whenever you move the minute setting past midnight.
- 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 day of the week changes automatically when the date changes.


## Using the Stopwatch



To perform an elapsed time operation


To measure two finishes


E-26

To use Auto-Start


Note

- The Stopwatch Mode can indicate elapsed time up to 23 hours, 59 minutes, 59 seconds.
- Once started, stopwatch timing continues until you press (T) to stop it, even if you exit the Stopwatch Mode to another mode and even if timing reaches the
stopwatch limit defined above.
Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to elapsed time measurement.


## Auto-Start

With Auto-Start, you can configure the stopwatch to perform a countdown and start elapsed time measurement automatically when the countdown reaches zero.

- Set a countdown length in the range of one to 60 seconds before using Auto-Start.
- Auto-Start is disabled automatically after the stopwatch elapsed time operation it
started is complete.
- If you do not want to use a countdown, select STW for the countdown value
- During the final three seconds of the countdown, a beeper sounds with each second.

Checking the Current Time in a Different Time Zone
(A)

## Operation Guide 5398

To enter the World Time Mode
Use (C) to select the World Time Mode as shown on page E-11.
To view the time in another time zone
In the World Time Mode, rotate the rotary switch to change the city code setting - To display the UTC city code (differential 0), hold down (D)

To specify standard time or daylight saving time (DST) for a city


1. In the World Time Mode, rotate the rotary switch to

In the World Time Mode, rotate the rotary switch to
display the city code (time zone) whose Standard Time/Daylight Saving Time setting you want to change.
2. Hold down (A) for about two seconds.

- This toggles the city code you selected in step between Dayight Savis Time (DST indicator displayed) displayed)

Note that you cannot switch between standard time/ daylight saving time (DST) while UTC is selected as
-The standard time/daylight saving time (DST) setting affects only the currently displayed city. Other cities are not affected

To swap your Home City and World Time City
In the World Time Mode, hold down (T) for at least three seconds,
This will swap your Home City and World Time City.
Example: To swap the Home City (TYO) and World Time City (NYC)


New World Time City (TYO)

## Using the Alarm

Alarm number | You can set five independent daily alarms. When a daily |
| :--- |
| alarm is turned on, an alarm tone will sound for about |

10 seconds each day when the time in the Timekeeping

## To enter the Alarm Mode

Use (C) to select the Alarm Mode as shown on page E-11.

- The snooze alarm screen is indicated by SNZ, while the other alarm screens are - The snooze alarm screen is indicated by SNZ, while the other alarm screens are
numbered AL1 through AL4. The Hourly Time Signal screen is indicated by SIG -When you enter the Alarm Mode, the data you were viewing when you last exited the mode appears first.


1. In the Alarm Mode, rotate the rotary switch to scroll through the alarm screens until the one whose setting you want to change is displayed.


E-34

To turn an alarm and the Hourly Time Signal on and off


In the Alarm Mode, rotate the rotary switch to select an alarm or the Hourly Time Signal. is displayed press (T) to toggle it between on " $\boldsymbol{f f}$ " displayed) and off ("g Ff " displayed) - The alarm on indicator (when any alarm is on) snooze alarm indicator (when the snooze alarm is on), and the Hourly Time Signal on indicator (when the Hourly Time Signal is on) are shown on the display in all modes.

To stop the alarm
Press any button.
2. Hold down (A) for about two seconds until the alarm time starts to flash This is the setting mode.
3. Press (C) to move the flashing to the setting you want to change
-When both the hour and minute setting is flashing: the hour setting will change
automatically as you change the minute setting in the next step.

- When just the hour setting is flashing: just the hour setting will change in the next step.

4. Rotate the rotary switch to change the currently flashing setting.

- 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).

5. Press (A) to exit the setting mode.

To test the alarm
In the Alarm Mode, hold down (T) to sound the alarm.

Countdown Timer



1. Rotate the rotary switch to adjust the minutes setting.
 If a countdown timer operation is in progress, press (T) to stop it and then press (D) to reset to the current starting time.

- If a countdown timer operation is paused, press (D) to reset to the current starting time.

To perform a countdown timer operation

| $(T)$ | $(T)$ | $(T)$ | $(T)$ | (Resume) |
| :--- | :--- | :--- | :--- | :--- |
| Start | Stop | (Stop) | Rese |  |

Countdown in Progress


Countdown Complete


## Operation Guide 5398

- Before starting a countdown timer operation, check to make sure that a countdown operation is not in progress (indicated by the seconds counting down) If it is, press (T) to stop it and then (D) to reset to the countdown start time.


## To stop the alarm <br> Press any button.

Directly Entering the Countdown Timer Mode from the Timekeeping Mode

- While the Countdown Timer is stopped and reset to the countdown start time, you can use the operations below to directly enter the Countdown Timer Mode from mekeeping Mode.
- In the Timekeeping Mode, rotate the rotary switch. If you do not change the Countdown Timer start time setting within about 10 seconds, the watch will automatically return to the Timekeeping Mode.
and Timekeeping Mode, press (T). This will enter the Countdown Timer Mode and start a countdown operation from the currently set start time.


## Illumination

The display of the watch is illuminated for easy reading in the dark. The watch's auto light switch turns on illumination automatically when you angle the watch towards your face

- The auto light switch must be turned on (page E-45) for it to operate


## To turn on illumination manually

Press (B) in any mode to illuminate the display

- You can use the procedure below to select either 1.5 seconds or three seconds as

The above operation turns on illumination regardless of the current auto light switch setting.

## To change the illumination duration

1. In the Timekeeping Mode, hold down (A) until the flashing Hold indicator disappears from the display and the currently selected city code appears on the right side of the upper display.
2. Press (C) nine times to display the illumination duration setting screen.

- The current illumination duration setting (1 or 3) will be flashing in the middle display.
See the sequence in step 2 of the procedure under "To configure the digital time and date settings" (page E-21) for information about how to scroll through setting screens.

3. Rotate the rotary switch to toggle the illumination duration between three seconds ( 3 displayed) and 1.5 seconds ( 1 displayed).
4. After all the settings are the way you want, press (A) to exit the setting screen.

## About the Auto Light Switch

Enabling the auto light switch causes illumination to turn on, whenever you position your wrist as described below in any mode.
Moving the watch to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes illumination to turn on.

## Warning!



Wear the watch on the
outside of your wrist
Always make sure you are in a safe place whenever you are reading the display of the watch using the auto light switch. Be especially careful when running or engaged in any other activity that can result in accident or injury. Also take care that sudden illumination by the auto light switch does not startle or distract others around you.

- When you are wearing the watch, make sure that its auto light switch is disabled before riding on a bicycle or operating a motorcycle or any other disabled before riding on a bicycle or operating a motorcycle or any other on create a distraction, which can result in a traffic accident and serious personal injury.


## Note

The auto light switch is always disabled, regardless of its on/off setting, when any one of the following conditions exists
While an alarm is sounding
While a hand shift operation is in progress

## To enable or disable the auto light switch



In the Timekeeping Mode, hold down (B) for at least three the auto light switch between enabled and disabled (LT not displayed)

- The auto light switch enabled indicator (LT) is displayed in all modes while the auto light switch is enabled.

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.
- Frequent use of illumination runs down the battery.

Auto light switch precautions

- Illumination may not turn on if the face of the watch is more than 15 degrees above or below parallel. Make sure that the back of your hand is parallel to the ground.
Leaving auto light enabled can run down the watch's battery due to frequent display illumination,
Static electricity or magnetic force can interfere with proper operation of the auto light switch. If illumination does not turn on the ground) and then tilt it back towards your face again. If this does not work, drop your arm all the way down so it hangs at your side, and then bring it back up again.
- You may notice a very faint clicking sound coming from the watch when it is shaken back and forth. This sound is caused by mechanical operation of the auto shaken back and forth. This sound is caused by mechanical
light switch, and does not indicate a problem with the watch.
- To protect against running down the battery, auto light switch operation automatically disables approximately six hours after you enable it.

E-46

## Adjusting Hand Positions

The watch hands can go out of alignment with the time on the digital display if it is exposed to strong magnetism or impact. If this happens, you should adjust th is exposed to strong magnetism or impact. If this happens, you should adjust the hand positions.

## Important!

- You do not need to perform the operation below as long as the analog hands
indicate the same time as the digital display.

1. Hold down (A) for about five seconds until Sub appears.

- This indicates the timer hand adjustment mode.

2. If the timer hand is not at 12 o'clock, rotate the rotary
 switch to adjust it until it is.
3. Press (c).

This enters the hour and minute hand adjustmen mode.

- Press (C) again* to enter the timer hand adjustment
*Node. are moving

4. If the hour and minute hands are not at 12 o'clock, rotate the rotary switch to adjust them until they are.
5. Press (A) to return to the Timekeeping Mode. Check to make sure that the time indicated by the hands matches the time on the digital display. If the times don't match, perform the correction procedure above again.

Button Operation Tone


You can turn the button operation tone on or off as desired.

- Even if you turn off the button operation tone, the stopwatch countdown tone, alarms, the Hourly Time
Signal, and other beepers all operate normally

To turn the button operation tone on and off 1. In the Timekeeping Mode, hold down (A) until the flashing Hold indicator disappears from the display
and the currently selected city code appears on the and the currently selected city code appears on the right side of the upper display.
2. Press (©) eight times to display the button operation tone On/Off screen (page E-22). The screen will show either KEY) or MUTE.
3. Rotate the rotary switch to toggle the setting between KEY』 (ON) and MUTE (OFF).
4. After all the settings are the way you want, press (A) to exit the setting screen

## Troubleshooting

Time Setting
The current time setting is off by hours
Your Home City setting may be wrong (page E-18). Check your Home City setting and correct it, if necessary.
$\square$ The current time setting is off by one hour.
You may need to change your Home City's standard time/daylight saving time (DST) setting. Use the procedure under "Adjusting the Digital Time and Date Settings" (page E-21) to change the standard time/daylight saving time (DST) setting.
World Time Mode

- The time for my World Time City is off in the World Time Mode.

This could be due to incorrect switching between standard time and daylight saving time. See "To specify standard time or daylight saving time (DST) for a city" (page E-31)
for more information.

## Main Indicators

| (1) 3 | Number | Name | See |
| :---: | :---: | :---: | :---: |
|  | 1 | Mute indicator | E-49 |
|  | 2] | Auto light switch enabled indicator | E-45 |
| $\xrightarrow{\square}$ | 3 | Hands shifted indicator | E-15 |
|  | 4 | DST indicator | E-20, E-31 |
| $\{\sqrt{p 7}$ | 5 | PM indicator | E-17 |
|  | 6 | Snooze alarm on indicator | E-36 |
|  | 7 | Alarm indicator | E-34 |
|  | 8 | Hourly time signal on indicator | E-36 |
| 4 5678 9 | 9 | Graphic | E-53 |

Graphic
The graphic flashes in each mode as described below.

| The graphic flashes in each mode as described below. |  |
| :--- | :--- |
| Mode | Flashing |
| Timekeeping | Seconds of current time |
| World Time Mode |  |
| Alarm Mode | $1 / 10$ seconds of elapsed time measurement |
| Stopwatch Mode | Seconds of countdown |
| Countdown Timer Mode |  |

- The graphic also flashes immediately after you change from one mode to another.


## Specifications

Accuracy at normal temperature: $\pm 15$ seconds a month
Digital Timekeeping: Hour, minutes, seconds, p.m. (P), month, day, day of the week
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)
Analog Timekeeping: Hour, minutes (hand moves every 20 seconds)
Stopwatch:
Measuring unit: $1 / 100$ second
Measuring unit: $1 / 100$ second
Measuring capacity: $23: 59^{\prime} 59.99^{\prime \prime}$
Measuring modes: Elapsed time, split time, two finishes, Auto Start
World Time: 48 cities ( 31 time zones)
Other: Daylight Saving Time/Standard Time; Home City/World Time City switching

Alarms: 5 Daily alarms (four one-time alarms; one snooze alarm); Hourly time signal Countdown Timer:

Measuring unit: 1 second
Countdown range: 60 minutes
Countdo ting setting range: 1 to 60 minutes (1-minute increments) minutes
Illumination: LED (light-emitting diode); Selectable illumination duration (approximately 1.5 seconds or 3 seconds); Auto Light Switch
Other: Button operation tone on/off; Moving the Hands to View the Digital Display
Power Supply: Two silver oxide batteries (Type: SR927W)
Approximate battery operating time: 3 years under the following conditions:

- 1 illumination operation ( 1.5 seconds) per day
- Alarm: 10 seconds/day

Frequent use of illumination runs down the battery.

City Code Table


City Code Table

| City Code | City name | UTC Offset/ GMT Differential | $\begin{aligned} & \text { City } \\ & \text { Code } \\ & \hline \end{aligned}$ | City name | UTC Offset/ GMT Differential |
| :---: | :---: | :---: | :---: | :---: | :---: |
| PPG | PAGO PAGO | -11 | RAI | PRAIA | -1 |
| HNL | HONOLULU | -10 | UTC |  | 0 |
| ANC | ANCHORAGE | -9 | LIS | LISBON |  |
| YVR | VANCOUVER | -8 | LON | LONDON |  |
| LAX | LOS ANGELES |  | MAD | MADRID | +1 |
| YEA | EDMONTON | -7 | PAR | PARIS |  |
| DEN | DENVER |  | ROM | ROME |  |
| MEX | MEXICO CITY | -6 | BER | BERLIN |  |
| CHI | CHICAGO |  | STO | STOCKHOLM |  |
| NYC | NEW YORK | -5 | ATH | ATHENS | +2 |
| SCL | SANTIAGO | -4 | CAI | CAIRO |  |
| YHZ | HALIFAX |  | JRS | JERUSALEM |  |
| YYT | ST. JOHN'S | -3.5 | MOW* | MOSCOW | +3 |
| RIO | RIO DE JANEIRO | -3 | JED | JEDDAH |  |
| FEN | F. DE NORONHA | -2 | THR | TEHRAN | +3.5 |


| City Code | City name | UTC Offset/f |
| :---: | :---: | :---: |
| DXB | DUBAI | +4 |
| KBL | KABUL | +4.5 |
| KHI | KARACHI | +5 |
| DEL | DELHI | +5.5 |
| KTM | KATHMANDU | +5.75 |
| DAC | DHAKA | +6 |
| RGN | YANGON | +6.5 |
| BKK | BANGKOK | +7 |
| SIN | SINGAPORE | +8 |
| HKG | HONG KONG |  |
| BJS | BEIJING |  |
| TPE | TAIPEI |  |
| SEL | SEOUL | +9 |
| TYO | TOKYO |  |
| ADL | ADELAIDE | +9.5 |
| GUM | GUAM | +10 |
| SYD | SYDNEY |  |


| City | City name | UTC Offset// <br> GMT Differential |
| :---: | :---: | :---: |
| Code | NOUMEA | +11 |
| WLG | WELLINGTON | +12 |

* As of December 2013, the official UTC offset for Moscow, Russia (MOW) has been changed from +3 to +4 , but this offset) for MOW Because of this you should leave the summer time setting turned on (which advances the time by one hour) for the MOW time. -This table shows the city codes of this watch.
- The rules governing global times (UTC offset and GMT differential) and summer time are determined by each individual country.

