## About This Manual


－The operational procedures for Modules 2998 and 2999 are identical．All of the illustrations in this manual show Module 2998.
－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．
are indicated using the letters shown Each section of th
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 display．


## Timekeeping

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

Read this before you set the time and date ！ The times displayed in the Timekeeping Mode and World Time Mode are linked．Because of this，make sure you select a city code for your Home City（the city where you normally use the watch）before you set the time and date while in the Timekeeping Mode
－For full information on city codes位mation on city codes，see the＂City Code

To set the time and date


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


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

| Screen | To do this： | Do this： |
| :---: | :---: | :---: |
| 디 | Reset the seconds to 밈 | Press（D）． |
| T＇Y＇O | Change the city code | Use（D）（east）and（B）（west）． |
| $\square F^{\text {(0si) }}$ | Toggle between Daylight Saving Time（ロП） and Standard Time（DF） | Press（D）． |
| $\frac{10}{50}$ | Change the hour or minutes | Use（D）（＋）and（B）（－）． |
| 灶 H | Toggle between 12 －hour（ l li：H H ）and 24 －hour （렙！）timekeeping | Press（D）． |
|  | Change the year，month，or day | Use（D）（＋）and（B）（－）． |

－See＂Daylight Saving Time（DST）＂for details about the DST setting． 4．Press（A）to exit the setting screen．
－Resetting the seconds to $\square \square 1 /$ 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 딤 without changing the minutes．
－With the 12 －hour format，the $\mathbf{P}$（PM）indicator 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．
－The 12 －hour／24－hour timekeeping format you select in the Timekeeping Mode is applied in all modes．
－The year can be set in the range of 2000 to 2099.
－The watch＇s built－in full automatic calendar makes allowances for different month
lengths and leap years．Once you set the date，there should be no reason to change
it except after you have the watch＇s battery replaced．
－The day of the week is displayed automatically in accordance with the date（year， month，and day）settings．

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．

To toggle the Timekeeping Mode time between DST and Standard Time


World Time

the selected city code
World Time shows the current time in 48 cities（ 29 time
zones）around the world
All of the operations in this section are performed in the （

To view the time for another city code
In the World Time Mode，press（D）to scroll eastwardly through city codes．
－For full information about city codes，see the＂City Code Table＂
If the current time shown for a city is wrong，check your Timekeeping Mode time and Home City code settings and make the necessary changes．

To toggle a city code time between Standard Time and Daylight Saving Time 1．In the World Time Mode，use（D）to display the city code ime／Daylig savi setting you want to change．


2．Hold down（A）for about one second to toggle between Daylight Saving Time（DST indicator displayed）and
Standard Time（DST indicator not displayed）．
－The DST indicator is on the display whenever you
display a city code for which Daylight Saving Time is
－Note that the DST／Standard Time setting affects only the currently displayed city code．Other city codes are not affected．
In the World Time Mode，you can switch the city code you currently have selected as your Timekeeping Mode Home City between Standard Time and DST．The setting you select in the World Time Mode will also be
applied in the Timekeeping Mode．

## Operation Guide 2998/2999

## 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.
if you evit the Stopwatch Mode
if you exit the Stopwatch Mode.
on the display clears the split time a split time is frozen elapsed time measurement.
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


Countdown Timer


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

- The countdown operation continues even if you exit the
- All of the operations in thi

Countcown Timer Mode, whiction are performed in the ©.

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

To set the countdown start time

1. In the Countdown Timer Mode, hold down (A) until the

## Alarms



You can set five independent Daily Alarms. When an alarm is turned on, the alarm tone sounds when the alarm time is reached. One of the alarms is a snooze alarm, while the other four are one-time alarms.
You can turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.

- There are six screens in the Alarm Mode. Four are for one-time alarms (indicated by numbers from ${ }^{\prime \prime \prime \prime} \mid$ through $\mathrm{AL}-4$ ), one is for a snooze alarm (indicated by by :"'IG).
- All of the operations in this section are performed 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.


- To set a one-time alarm, display one of the screens indicated by an alarm number
 SNz.
- The snooze alarm repeats every five minutes.

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 turns on the alarm automatically.

3. Press (C) to move the flashing between the hour and minute settings.
4. While a setting is flashing, use (D) $(+)$ and (B) $(-)$ to change it.

- When setting the alarm time using the 12-hour format, take care to set the time correctly as a.m. or p.m. ( $\mathbf{P}$ indicator).

5. Press (A) to exit the setting screen.
hours of the countdown start time start to flash, which
6. Press (C) to move the flashing between the hour and minute settings.
7. While a setting is flashing, use (D) (+) and (B) (-) to change it.

- To set the starting value of the countdown time to

4. Press (A) to exit the setting screen.


Alarm Operation
The alarm sounds at the preset time for about 10 seconds, regardless of the mode the The alarm sounds at the preset time for about 10 seconds, regardless of the mode the watch is in. In the case of the snooze alarm, the alarm operation is performed a total

- To stop the alarm tone after it starts to sound, press any button.
- Performing any one of the following operations during a 5-minute interval between snooze alarms cancels the current snooze alarm operation.
Displaying the Timekeeping Mode setting screen
Displaying the SNJ.' setting screen
To test the alarm
In the Alarm Mode, hold down (D) to sound the alarm.
To turn an alarm on and off


To turn the Hourly Time Signal on and off
To turn the Hourly Time Signal on and off (1n the Alarm Mode, use (D) select the Hourly Time


Signal (:'I' $\mathbf{\prime}$ ). .
2. Press (A) to toggle it on ([IM displayed) and off (DF displayed).

- The Hourly Time Signal on indicator is shown on the display in all modes while the Hourly Time Signal is turned on.

This watch has an EL (electro-luminescent) panel that causes the entire display to glow for easy reading in the dark.

## Illumination Precautions

- The electro-luminescent panel that provides illumination
- The electro-luminescent panel th
- Illumination may be hard to see when viewed under
direct sunlight.
The watch may emit an audible sound whenever the display is illuminated. This is due to vibration of the EL panel used for illumination, and does not indicate malfunction.
- Illumination turns off automatically whenever an alarm sounds
Frequent use of illumination runs down the battery
To illuminate the display
In any mode (except when a setting screen is on the display), press (B) to turn on
illumination.
- You can use the procedure below to select either 1.5 seconds or 3 seconds as the illumination duration. When you press (B), the illumination will remain on for about 1.5 seconds or 3 seconds, depending on the current setting.


## To specify the illumination duration



In the Timekeeping Mode, hold down (A) until the seconds
screen.
2. While the seconds are flashing, press (B) to toggle the illumination duration between 1.5 seconds ( $\%$ ) and 3 seconds (

## 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

Mute indicator $\begin{aligned} & \text { The button operation tone sounds any time you press one } \\ & \text { of the watch's buttons. You can turn the button operation }\end{aligned}$ tone on or off as desired.

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 ind
displayed).

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

Auto Return Features

- If you leave the watch in the Alarm Mode for two or three minutes without performing
any operation, it changes to the Timekeeping Mode automatically.
- If you leave a screen with flashing digits on the display for two or three minutes without performing any operation, the watch saves any settings you have made up that point and exits 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 scrolls at high speed.

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

- The seconds count of the World Time is synchronized with the seconds count of the Timekeeping Mode.
- All World Time Mode times are calculated from the current Home City time in the Timekeeping Mode using UTC time differential values
-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.

City Code Table

| $\begin{array}{\|c} \hline \text { City } \\ \text { Code } \end{array}$ | City | $\begin{array}{\|c\|} \hline \text { UTC } \\ \text { Differential } \\ \hline \end{array}$ | 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 | Las Vegas, Seattle/Tacoma, Dawson City |
| SFO | San Francisco |  |  |
| LAX | Los Angeles |  |  |
| DEN | Denver | -07.0 | El Paso, Edmonton |
| MEX | Mexico City | -06.0 | Winnipeg, Houston, Dallas/Fort Worth, New Orleans |
| CHI | Chicago |  |  |
| MIA <br> NYC | Miami | -05.0 | Montreal, Detroit, Boston, Panama City, Havana, Lima, |
| NYC | New York |  | Bogota |
| CCS | Caracas | -04.0 | La Paz, Santiago, Port Of Spain |
| YYT | St. Johns | -03.5 |  |
| RIO | Rio De Janeiro | -03.0 | Sao Paulo, Buenos Aires, Brasilia, Montevideo |
| RAI | Praia | -01.0 |  |
| LIS | Lisbon | +00.0 | Dublin, Casablanca, Dakar, Abidjan |
| LON | London |  |  |
| BCN | Barcelona | +01.0 | Amsterdam, Algiers, Hamburg, Frankfurt, Vienna, |
| PAR | Paris |  | Stockholm, Madrid |
| MML | Milan |  |  |
| ROM | Rome |  |  |
| BER | Berlin |  |  |
| ATH | Athens | +02.0 | Helsinki, Beirut, Damascus, Cape Town |
| JNB | Johannesburg |  |  |
| IST | Istanbul |  |  |
| CAI | Cairo |  |  |
| JRS | Jerusalem |  |  |
| MOW | Moscow | +03.0 | Kuwait, Riyadh, Aden, Addis Ababa, Nairobi |
| JED | Jeddah |  |  |
| THR | Tehran | +03.5 | Shiraz |
| DXB | Dubai | +04.0 | Abu Dhabi, Muscat |
| KBL | Kabul | +04.5 | Mumbai, Kolkata |
| KHI | Karachi | +05.0 | Colombo |
| MLE | Male |  |  |
| DEL | Delhi | +05.5 | Jakarta, Phnom Penh, Hanoi, Vientiane |
| DAC | Dhaka | +06.0 | Kuala Lumpur, Taipei, Manila, Perth, Ulaanbaatar |
| RGN | Yangon | +06.5 |  |
| BKK | Bangkok | +07.0 |  |
| SIN | Singapore | +08.0 | Pyongyang |
| HKG | Hong Kong |  |  |
| BJS | Beijing |  | Darwin |
| SEL | Seoul | +09.0 | Melbourne, Rabaul |
| TYO | Tokyo |  |  |
| ADL | Adelaide | +09.5 | Port Vila |
| GUM | Guam | +10.0 | Christchurch, Nadi, Nauru Island |
| SYD | Sydney |  |  |
| NOU | Noumea | +11.0 |  |
| WLG | Wellington | +12.0 |  |

"Based on data as of June 2005

