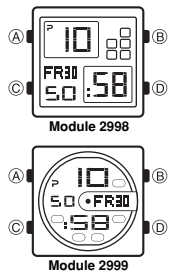


Operation Guide 2998/2999

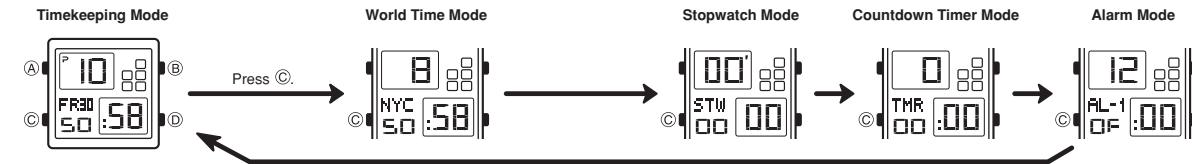
About This Manual



- 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.
- Button operations are indicated using the letters shown in the illustration.
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "Reference" section.

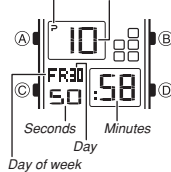
General Guide

- 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

PM indicator Hour

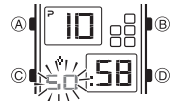


Use the Timekeeping Mode to set and view the current time and date.

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.
- To view the current Home City code setting, press **A** while in the Timekeeping Mode.
- For full information on city codes, see the "City Code Table".

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:
50	Reset the seconds to 00	Press D .
TYO	Change the city code	Use D (east) and B (west).
ST (DST) / OF (STANDARD)	Toggle between Daylight Saving Time (DST) and Standard Time (STANDARD)	Press D .
10 :58	Change the hour or minutes	Use D (+) and B (-).
12H / 24H	Toggle between 12-hour (12H) and 24-hour (24H) timekeeping	Press D .
20 / 06	Change the year, month, or day	Use D (+) and B (-).

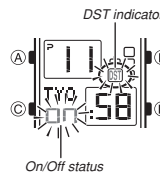
- See "Daylight Saving Time (DST)" for details about the DST setting.
- 4. Press **A** to exit the setting screen.
- Resetting the seconds to 00 while the current count is in the range of 30 to 59 causes the minutes to be increased by 1. In the range of 00 to 29, the seconds are reset to 00 without changing the minutes.
- With the 12-hour format, the **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

1. In the Timekeeping Mode, hold down **A** until the seconds start to flash, which indicates the setting screen.
 2. Press **C** twice to display the DST setting screen.
 3. Press **D** to toggle between Daylight Saving Time (DST) and Standard Time (STANDARD).
 4. Press **A** to exit the setting screen.
- The DST indicator is displayed on the Timekeeping Mode and Alarm Mode screens while Daylight Saving Time is turned on.



World Time

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 World Time Mode, which you enter by pressing **C**.

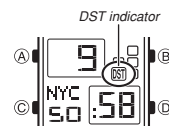
To view the time for another city code

- 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.

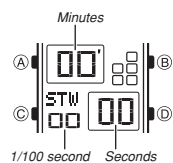
Current time in the zone of the selected city code

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 (time zone) whose Standard Time/Daylight Saving Time 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 turned on.
 - 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.



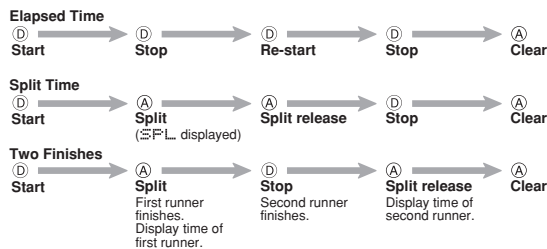
Stopwatch



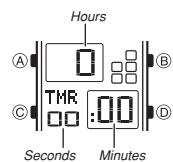
The stopwatch lets you measure elapsed time, split times, and two finishes.

- 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.
- The stopwatch measurement operation continues even if you exit the Stopwatch Mode.
- Exiting the Stopwatch Mode while a split time is frozen on the display clears the split time and returns to 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.

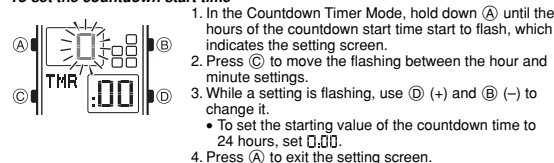
- The countdown operation continues even if you exit the Countdown Timer Mode.
- All of the operations in this section are performed in the Countdown Timer Mode, which you enter by pressing (C).

To use the countdown timer
Press (D) while in the Countdown Timer Mode to start the countdown timer.

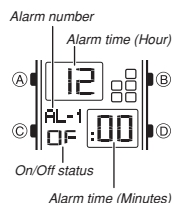
- When the end of the countdown is reached, the alarm sounds for 10 seconds or until you stop it by pressing any button. The countdown time is reset automatically to its starting value after the alarm stops.

- 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



Alarms

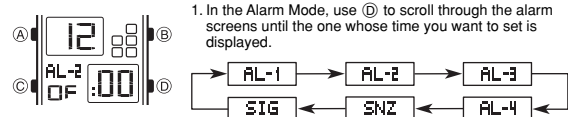


You can set five independent Daily Alarms. When an alarm is turned on, the alarm tone sounds when the alarm time is reached. One of the alarms is a snooze alarm, while the other four are one-time alarms.

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 AL-1 through AL-4), one is for a snooze alarm (indicated by SNZ), and one is for the Hourly Time Signal (indicated by SIG).
- All of the operations in this section are performed in the Alarm Mode, which you enter by pressing (C).

To set an alarm time



- To set a one-time alarm, display one of the screens indicated by an alarm number from AL-1 through AL-4. To set the snooze alarm, display the screen indicated by SNZ.
- The snooze alarm repeats every five minutes.
- 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.
- Press (C) to move the flashing between the hour and minute settings.
- 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. (P indicator).
- 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 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.

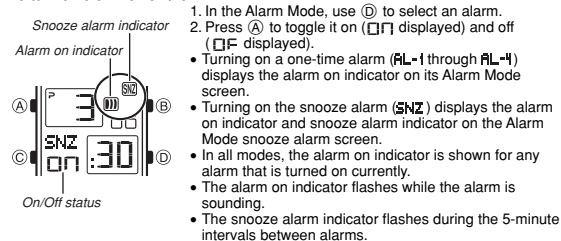
- To stop the alarm tone after it starts to sound, press any button.
- Performing any one of the following operations during a 5-minute interval between snooze alarms cancels the current snooze alarm operation.

Displaying the Timekeeping Mode setting screen
Displaying the SNZ setting screen

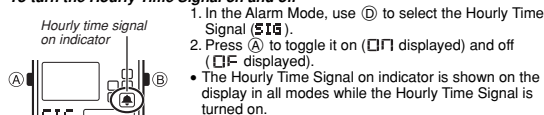
To test the alarm

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



Illumination



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

Illumination Precautions

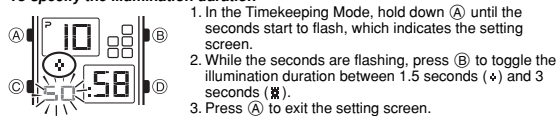
- The electro-luminescent panel that provides illumination loses power after very long use.
- Illumination may be hard to see when viewed under direct sunlight.
- The watch may emit an audible sound whenever the display is illuminated. This is due to vibration of the EL panel used for illumination, and 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.

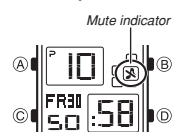
To specify the illumination duration



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).

- 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 to 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

City Code	City	UTC 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	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	Miami	-05.0	Montreal, Detroit, Boston, Panama City, Havana, Lima, Bogota
NYC	New York		
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, Stockholm, Madrid
PAR	Paris		
MIL	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
RGV	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	Nooumea	+11.0	
WLG	Wellington	+12.0	

*Based on data as of June 2005.