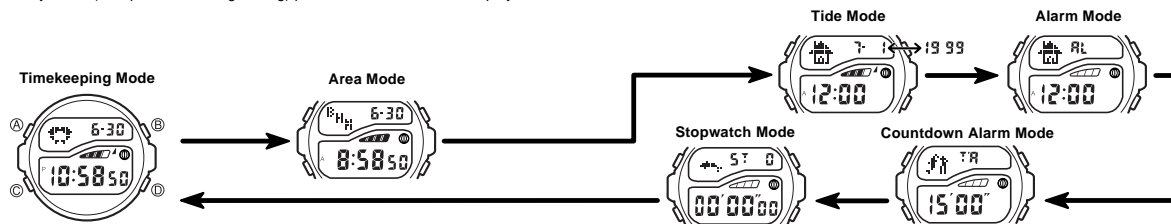


GENERAL GUIDE

- Press **(C)** to change from mode to mode.
- In any mode (except when making setting) press **(B)** to illuminate the display for about three seconds.

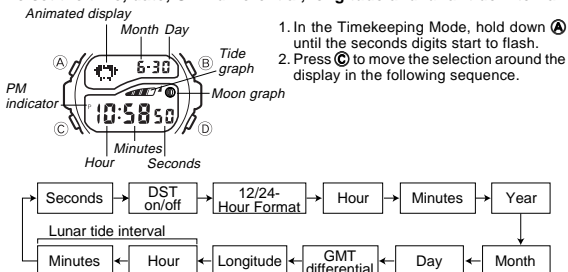


TIMEKEEPING MODE

The settings you make in the Timekeeping Mode are very important, because they affect the Moon Age and Tide Graph functions.

- Pressing **(A)** toggles between display of the month and day, and display of the day of the week and day.
- For normal timekeeping, you need to set the time, and date, and turn daylight saving time (summer time) on or off.
- To use the Tide Graph functions, you must set the GMT differential, your current longitude, and the lunar tide interval on your point.

To set the time, date, GMT differential, longitude and lunar tide interval



- While the seconds digits are selected (flashing), press **(B)** to reset the seconds to 00. If you press **(B)** while the seconds count is in the range of 30 to 59, the seconds are reset to 00 and 1 is added to the minutes. If the seconds count is in the range of 00 to 29, the minutes count is unchanged.
- While any other digits (besides seconds), are selected (flashing), press **(B)** to increase the number or **(C)** to decrease it. Holding down either button changes the current number at high speed.
- While the DST on/off setting is selected, press **(B)** to toggle DST on and off.
- While the 12/24-hour setting is selected, press **(B)** to switch between the two formats.
- The day of the week is automatically set in accordance with the date.
- The date can be set with the range of January 1, 1995 to December 31, 2039.
- After you are finished making the settings you want, press **(A)** to return to the Timekeeping Mode.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Timekeeping Mode automatically.

Important!

- Be sure to use DST on/off setting to turn daylight saving time (summer time) on and off. Never manually change the timekeeping setting to adjust for daylight saving time. Doing so will produce incorrect Tide Graph and Moon Age.
- The GMT differential is the difference in time between the time zone where you are currently located and Greenwich Mean Time (GMT).
- See "TIME ZONE CHART" at the back of this manual for information about determining the GMT differential in your area.

About the lunar tide interval

The lunar tide interval is the period from the moon's upper transit (moon up) to high tide. If you know the lunar tide interval, tide changes can be determined using the moon age. This watch calculates tide changes according to the current time and the location setting, and displays them graphically.

To view today's tide data

- In the Timekeeping Mode, press **(A)** to display the tide for the current time and date.



- Press **(B)** to advance the tide data display by one hour. Holding down **(B)** advances the time at high speed.
 - Pressing **(B)** while the tide for 11:00pm is displayed advances to midnight (00:00am), but the date does not change. This means the tide data shown is for midnight (00:00am) of the current date.
 - Holding down **(B)** while tide data is displayed shows the current moon age.
- After you are finished viewing tide data, press **(A)** to return to the Timekeeping Mode.
- If you do not operate any button for a few minutes while tide data is on the display, the watch goes back to the Timekeeping Mode automatically.
- You can view tide data for other points by starting the above operation from the Area Mode.
- Use the Tide Mode to view tide data for other dates.

About the Backlight

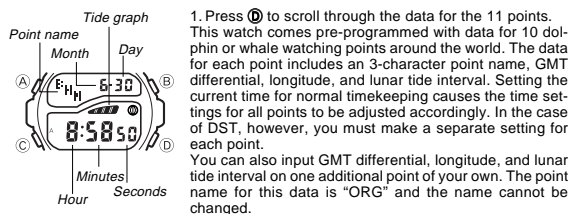
In any mode (except when making any setting) press **(B)** to illuminate the display for about three seconds.

- The backlight of the watch employs an electro-luminescent (EL) light, which loses illuminating power after very long use.
- The illumination provided by the backlight may be hard to see when viewed under direct sunlight.

- The watch will emit an audible sound whenever the display is illuminated. This does not indicate malfunction of the watch.
- The backlight automatically turns off whenever an alarm sounds.

AREA MODE

The Area Mode shows the point name and current time, as well as the month and day, or day of the week and day at each point.



- Press **(B)** to scroll through the data for the 11 points. This watch comes pre-programmed with data for 10 dolphin or whale watching points around the world. The data for each point includes a 3-character point name, GMT differential, longitude, and lunar tide interval. Setting the current time for normal timekeeping causes the time settings for all points to be adjusted accordingly. In the case of DST, however, you must make a separate setting for each point. You can also input GMT differential, longitude, and lunar tide interval on one additional point of your own. The point name for this data is "ORG" and the name cannot be changed.

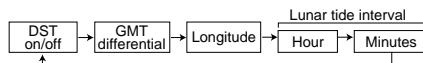
- See the "PRESET LOCATION CHART" at the back of this manual for details on the locations whose data is preset in watch memory when you purchase it.

To view point data

- Press **(B)** to scroll through the current times at the 11 points. Holding down **(B)** scrolls at high speed.
 - While the current time at a particular point is displayed, press **(A)** to switch to the tide data display.
 - Press **(B)** to advance the tide data display by one hour. Holding down **(B)** advances the time at high speed.
 - Pressing **(B)** while the tide for 11:00pm is displayed advances to midnight (00:00am), but the date does not change. This means the tide data shown is for midnight (00:00am) of the current date.
 - Holding down **(B)** while tide data is displayed shows the current moon age.
 - After you are finished viewing tide data, press **(A)** to return to the Area Mode timekeeping display.
- If you do not operate any button for a few minutes while tide data is on the display, the watch goes back to the Timekeeping Mode automatically.
 - Use the Tide Mode to view tide data for other dates.

To input your own point data

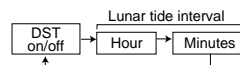
- While in the Area Mode, press **(B)** a number of times until "ORG" appears on the display.
- Hold down **(A)** until the DST ON or OFF starts to flash.
- Press **(C)** to move the selection around the display in the following sequence.



- While the DST on/off setting is selected, press **(B)** to toggle DST on and off.
- While any other digits, are selected (flashing), press **(B)** to increase the number or **(C)** to decrease it. Holding down either button changes the current number at high speed.
- After you are finished making the settings you want, press **(A)** to return to the Area Mode.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Area Mode automatically.

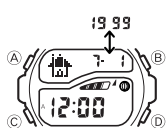
To change the DST on/off setting and lunar tide interval for the 10 preset points

- While in the Area Mode, press **(B)** to display the point whose settings you want to change.
- Hold down **(A)** until the DST ON or OFF start to flash.
- Press **(C)** to move the selection around the display in the following sequence.



- While the DST on/off setting is selected, press **(B)** to toggle DST on and off.
- While any other digits, are selected (flashing), press **(B)** to increase the number or **(C)** to decrease it. Holding down either button changes the current number at high speed.
- After you are finished making the settings you want, press **(A)** to return to the Area Mode.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Area Mode automatically.

TIDE MODE



The Tide Mode lets you view tide data for a specific date and time at the point you want.

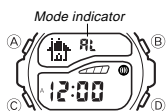
To specify the point, date, and time of the tide

1. Hold down **A** until the point name and point number start to flash. **A** is the time you set in Timekeeping Mode.
2. Press **C** to move the selection around the display in the following sequence.



3. While any digits are selected (flashing), press **D** to increase the number or **B** to decrease it. Holding down either button changes the current number at high speed.
4. After you are finished making the settings you want, press **A** to return to the Tide Mode.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Tide Mode automatically.
5. Press **D** to select the time whose tide you want to view. Each press of **D** advances the time. Holding down **D** advances the time at high speed.
- Pressing **D** while the tide for 11:00pm is displayed advances to midnight (00:00am), but the date does not change. This means the tide data shown is for midnight (00:00am) of the current date.

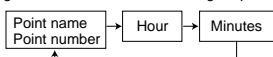
ALARM MODE



- You can set an alarm for a specific point. The alarm will sound when the time in the point you select reaches the alarm time.
- When the Hourly Time Signal is turned on, the watch beeps every hour on the hour in the point you select.

To set the alarm time

1. Hold down **A** until the point name and point number start to flash on the display.
2. Press **C** to change the selection in the following sequence.



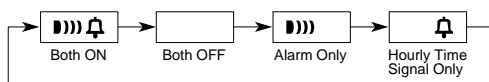
3. Press **D** to increase the number or **B** to decrease it. Holding down either button changes the current number at high speed.
- The format (12-hour and 24-hour) of the alarm time matches the format you select for normal timekeeping.
- When setting the alarm time using the 12-hour format, take care to set the time correctly as morning or afternoon.
4. After you set the alarm time, press **A** to return to the Alarm Mode. At this time the Alarm is automatically switched on.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Alarm Mode automatically.

To stop the alarm

- Press any button to stop the alarm after it starts to sound.

To turn the alarm and Hourly Time Signal on and off

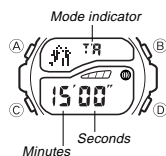
Press **D** while in the Alarm Mode to change the status of the alarm and Hourly Time Signal in the following sequence.



To test the alarm

Hold down **D** while in the Alarm Mode to sound the alarm.

COUNTDOWN ALARM MODE



The countdown alarm can be set within a range of 1 minute to 60 minutes. When the countdown reaches zero, an alarm sounds for 10 seconds or until you press any button.

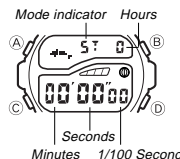
To set the countdown start time

1. Hold down **A** while in the Countdown Alarm Mode. The minutes digits flash on the display.
2. Press **D** to increase the value or **B** to decrease it. Holding down either button changes the value at high speed.
3. After you set the countdown start time, press **A** to return to the Countdown Alarm Mode.
- If you do not operate any button for a few minutes while a selection is flashing, the flashing stops and the watch goes back to the Countdown Alarm Mode automatically.

To use the countdown alarm

1. Press **D** while in the Countdown Alarm Mode to start the countdown alarm.
2. Press **D** again to stop the countdown alarm.
- You can resume countdown alarm operation by pressing **D**.
3. Press **D** to stop the countdown alarm, and then press **A** to reset the countdown time to its starting value.
- When the end of the countdown is reached, the alarm sounds for 10 seconds or until you stop the alarm by pressing any button. Countdown timing stops and the countdown time is automatically reset to its starting value after the alarm stops.
- The watch beeps as the countdown time passes the 5-minute mark.

STOPWATCH MODE



The stopwatch Mode lets you measure elapsed time, split times, and two finishes. The range of the stopwatch is 23 hours, 59 minutes 59.99 seconds. You can use the EL backlight at any time while the stopwatch is operating by pressing **B**.

Elapsed time measurement



Split time measurement



Split time and 1st-2nd place times



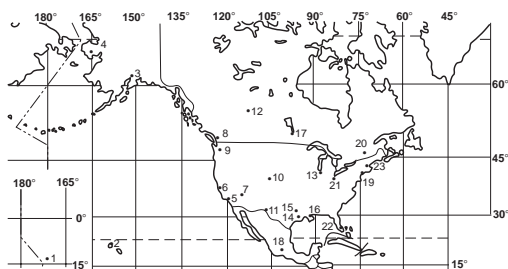
Split
First runner finishes.

Stop
Second runner finishes.
Record time of first runner.

Split release
Record time of second runner.

TIME ZONE CHART

North America



NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
1.	PAGO PAGO	-11	171°W	14°N
2.	HONOLULU	-10	158°W	21°N
3.	ANCHORAGE	-9	150°W	61°N
4.	NOME	-9	165°W	65°N
5.	LOS ANGELES	-8	118°W	34°N
6.	SAN FRANCISCO	-8	122°W	38°N
7.	LAS VEGAS	-8	115°W	36°N
8.	VANCOUVER	-8	123°W	49°N
9.	SEATTLE	-8	122°W	48°N
10.	DENVER	-7	105°W	40°N
11.	EL PASO	-7	106°W	32°N
12.	EDMONTON	-7	114°W	54°N
13.	CHICAGO	-6	88°W	42°N
14.	HOUSTON	-6	95°W	30°N

NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
15.	DALLAS/FORT WORTH	-6	97°W	33°N
16.	NEW ORLEANS	-6	90°W	30°N
17.	WINNIPEG	-6	97°W	50°N
18.	MEXICO CITY	-6	99°W	19°N
19.	NEW YORK	-5	74°W	41°N
20.	MONTREAL	-5	74°W	45°N
21.	DETROIT	-5	83°W	42°N
22.	MIAMI	-5	80°W	26°N
23.	BOSTON	-5	71°W	42°N

Add 1 hour to the difference time if DST (Daylight Saving Time) is used. (EX. if difference of standard time is +2, that of DST is +3.)

Central and South America



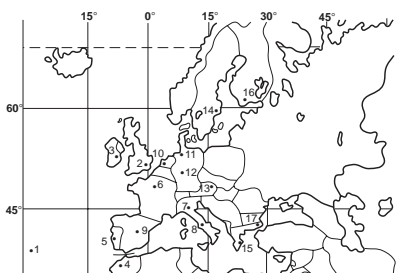
NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
1.	PANAMA CITY	-5	80°W	9°N
2.	LIMA	-5	77°W	12°S
3.	BOGOTA	-5	74°W	5°N
4.	CARACAS	-4	67°W	10°N
5.	LA PAZ	-4	68°W	17°S
6.	SANTIAGO	-4	71°W	33°S
7.	PORT OF SPAIN	-4	61°W	11°N
8.	RIO DE JANEIRO	-3	43°W	23°S
9.	SAO PAULO	-3	47°W	24°S
10.	BRASILIA	-3	48°W	16°S
11.	BUENOS AIRES	-3	58°W	35°S
12.	MONTEVIDEO	-3	56°W	35°S

Add 1 hour to the difference time if DST (Daylight Saving Time) is used. (EX. if difference of standard time is +2, that of DST is +3.)

NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
-----	------	---	-----------	----------

Add 1 hour to the difference time if DST (Daylight Saving Time) is used. (EX. if difference of standard time is +2, that of DST is +3.)

Europe



NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
1.	AZORES	-1	25°W	38°N
2.	LONDON	+0	0°E	51°N
3.	DUBLIN	+0	6°W	53°N
4.	CASABLANCA	+0	8°W	34°N
5.	LISBON	+0	9°W	39°N
6.	PARIS	+1	2°E	49°N
7.	MILAN	+1	9°E	45°N
8.	ROME	+1	12°E	42°N
9.	MADRID	+1	4°W	40°N
10.	AMSTERDAM	+1	5°E	52°N
11.	HAMBURG	+1	10°E	54°N
12.	FRANKFURT	+1	9°E	50°N
13.	VIENNA	+1	16°E	48°N
14.	STOCKHOLM	+1	18°E	59°N

NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
15.	ATHENS	+2	24°E	38°N
16.	HELSINKI	+2	25°E	60°N
17.	ISTANBUL	+2	29°E	41°N

Add 1 hour to the difference time if DST (Daylight Saving Time) is used. (EX. if difference of standard time is +2, that of DST is +3.)

Africa and Middle East

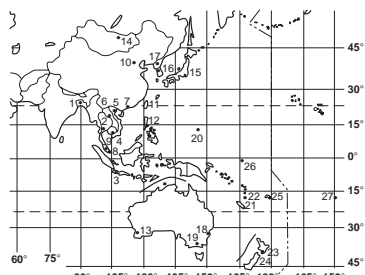


NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
1.	BEIRUT	+2	35°E	34°N
2.	DAMASCUS	+2	36°E	33°N
3.	CAPE TOWN	+2	18°E	34°S
4.	KUWAIT	+3	48°E	29°N
5.	RIYADH	+3	47°E	25°N
6.	JEDDAH	+3	39°E	21°N
7.	ADEN	+3	45°E	13°N
8.	ADDIS ABABA	+3	39°E	9°N
9.	NAIROBI	+3	37°E	1°S
10.	DUBAI	+4	55°E	25°N
11.	ABU DHABI	+4	54°E	24°N
12.	MUSCAT	+4	58°E	23°N
13.	KARACHI	+5	67°E	25°N
14.	PRAIA	-1	23°W	15°N

NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
15.	DAKAR	+0	17°W	15°N
16.	ABIDJAN	+0	4°W	5°N

Add 1 hour to the difference time if DST (Daylight Saving Time) is used. (EX. if difference of standard time is +2, that of DST is +3.)

Asia and South Pacific

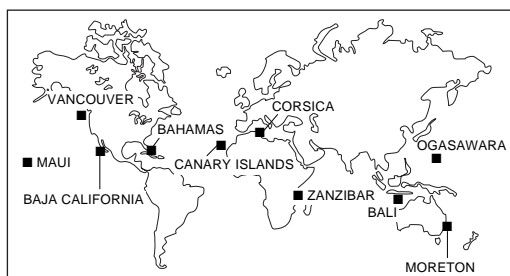


NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
1.	DHAKA	+6	90°E	24°N
2.	BANGKOK	+7	100°E	14°N
3.	JAKARTA	+7	107°E	6°S
4.	PHNOM PENH	+7	105°E	12°N
5.	HANOI	+7	106°E	21°N
6.	VIENTIANE	+7	103°E	18°N
7.	HONG KONG	+8	114°E	22°N
8.	SINGAPORE	+8	104°E	1°N
9.	KUALA LUMPUR	+8	102°E	3°N
10.	BEIJING	+8	116°E	40°N
11.	TAIPEI	+8	122°E	25°N
12.	MANILA	+8	121°E	15°N
13.	PERTH	+8	116°E	32°S
14.	ULANBATOR	+8	107°E	48°N
15.	TOKYO	+9	140°E	36°N

NO.	CITY	THE DIFFERENCE FROM GMT FOR STANDARD TIME	LONGITUDE	LATITUDE
16.	SEOUL	+9	127°E	38°N
17.	PYONGYANG	+9	126°E	39°N
18.	SYDNEY	+10	151°E	34°S
19.	MELBOURNE	+10	145°E	38°S
20.	GUAM	+10	145°E	13°N
21.	NOUMEA	+11	166°E	22°S
22.	PORT VILA	+11	168°E	18°S
23.	WELLINGTON	+12	175°E	41°S
24.	CHRISTCHURCH	+12	173°E	43°S
25.	NADI	+12	178°E	18°S
26.	NAURU ISLAND	+12	166°E	1°S
27.	PAPEETE	-10	150°W	18°S

Add 1 hour to the difference time if DST (Daylight Saving Time) is used. (EX. if difference of standard time is +2, that of DST is +3.)

PRESET LOCATION CHART



No.	POINT NAME	GMT differential	Latitude	Longitude	Lunar Tide Interval
01	BAHAMAS	-5h	27N	79W	7:40
02	BAJA CALIFORNIA	-7h	24N	110W	8:50
03	BALI	+8h	9S	115E	10:50
04	CANARY ISLANDS	0h	28N	17W	0:00
05	CORSICA	+1h	43N	9E	9:00
06	MORETON	+10h	27S	153E	10:00
07	MAUI	-10h	21N	157W	4:00
08	OGASAWARA	+9h	27N	142E	6:30
09	VANCOUVER	-8h	50N	126W	1:00
10	ZANZIBAR	+3h	6S	39E	3:30

POINT NAME is CASIO original.
Based on data as of September 1998.

BAHAMAS	Area around the Little Bahama Bank, located north of the Grand Bahama Island.
BAJA CALIFORNIA	Area around the central part of the Baja Peninsula, located south of California in Mexico.
BALI	Area around Bali, Indonesia.
CANARY ISLANDS	Area around Gomera Island, which is part of the Canary Islands (Spain).
CORSICA	Ligurian Sea, located north of Corsica (France).
MORETON	Area around Moreton Island, located just off Brisbane, Australia.
MAUI	Area around Maui, located northwest of Hawaii Island.
OGASAWARA	Area around Chichijima Island, which is one of the Ogasawara Islands located about 1,000 kilometers south of Tokyo.
VANCOUVER	Area around Johnstone Strait, Vancouver, Canada.
ZANZIBAR	Area off of Zanzibar, Tanzania.