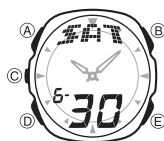


ABOUT THIS MANUAL

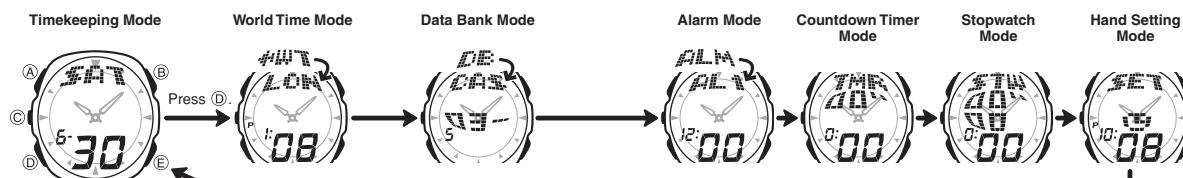


- Button operations are indicated using the letters shown in the illustration.
- Each section of this manual provides you with the information you need to perform operations in each mode. Further details and technical information can be found in the "REFERENCE" section.

If the digital display of your watch is continuously changing, press any button other than **B** to stop it. See "Auto Display" for more information.

GENERAL GUIDE

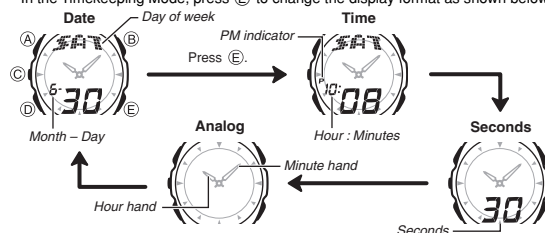
- Press **D** to change from mode to mode. Changing to another mode causes one of a number of different animations to be performed on the display.
- In any mode, press **B** to illuminate the display.



TIMEKEEPING

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

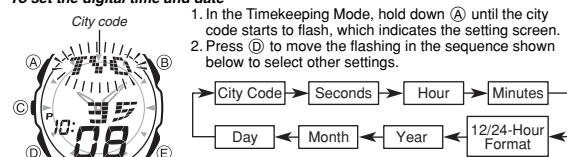
- In the Timekeeping Mode, press **E** to change the display format as shown below.



Read This Before You Set the Time and Date !

The digital 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).

To set the digital time and date



- When the setting you want to change is flashing, use **E** and **B** to change it as described below.

To change this setting	Perform this button operation
Seconds	Press E to reset to 00.
12/24-Hour Format	Press E to toggle between 12-hour (12H) and 24-hour (24H) timekeeping.
City Code, Hour, Minutes, Year, Month, Day	Use E (+) and B (-) to change the setting.

- See "CITY CODE TABLE" for a complete list of available codes.
- Pressing **E** while the second's count is in the range of 30 to 59 resets the seconds to 00 and adds 1 to the minutes. In the range of 00 to 29, the minute's count is unchanged.

- Press **A** to exit the setting screen.

Note

- When you use the above procedure to set the digital display time, the hands of the analog timepiece normally adjust according to your setting.
- With the 12-hour format, the **P** (PM) indicator appears to the left of the hour digits for times in the range of noon to 11:59 p.m. and no indicator appears to the left of the hour digits 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 an indicator.
- The 12-hour/24-hour timekeeping format you select in the Timekeeping Mode is applied in all modes.
- The day of the week is automatically displayed in accordance with the date (year, month, and day) settings.
- The year can be set in the range of 2000 to 2039.
- The watch's built-in full automatic calendar automatically 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 batteries replaced.

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

- In the Timekeeping Mode, hold down **A** until the city code starts to flash, which indicates the setting screen.
- Press **C** to toggle between Daylight Saving Time (DST displayed) and standard time (DST not displayed).
 - Note that you cannot switch between standard time and Daylight Saving Time while GMT is selected as the city code.
- Press **A** to exit the setting screen.
 - The DST indicator appears on the display to indicate that daylight saving time is turned on.

Analog Timekeeping

The analog time of this watch is synchronized with the digital time. The analog time setting is adjusted automatically whenever you change the digital time.

Note

- Whenever you manually change the digital time setting or Home City code, the hands of the analog timepiece move clockwise or counter clockwise to adjust to the new setting. If the analog time does not match the digital time for any reason, use the procedure described under "To adjust the analog time" to match the analog setting to the digital setting.
- Alarms, the hourly time signal, and the backlight are all disabled while the analog hands are moving.
- Whenever you need to manually adjust both the digital and the analog time settings, make sure you adjust the digital setting first.
- Depending on how much the hands have to move in order to adjust to the digital time, it may take some time before the analog hands stop moving.

To adjust the analog time

- In the Timekeeping Mode, press **D** six times to enter the Hand Setting Mode.
- Hold down **A** until the current digital time starts to flash, which indicates the setting screen.
 - Note that you will not be able to change to the setting screen if the analog hands are moving because the watch is automatically adjusting the analog time to match the digital time. If this happens, wait until the hands stop moving.
- Use **E** (+) and **B** (-) to adjust the analog setting as described below.

When you want to do this:	Perform this button operation:
Move the hand setting forward 20 seconds.	Press E .
Move the hand setting back 20 seconds.	Press B .
Move the hand setting a short way forward at high speed.	• Hold down E. • Release E when the hands reach the setting you want.
Move the hand setting a short way back at high speed.	• Hold down B. • Release B when the hands reach the setting you want.
Move the hand setting a long way forward at high speed.	• While holding down E to move the hands at high-speed, press E to lock the high-speed hand movement. • Press any button when the hands are close to the setting you want. • Hand movement stops automatically if the hour hand makes one full (12-hour) revolution.
Move the hand setting a long way back at high speed.	• While holding down B to move the hands at high-speed, press B to lock the high-speed hand movement. • Press any button when the hands are close to the setting you want. • Hand movement stops automatically if the hour hand makes one full (12-hour) revolution.

- Press **A** to exit the setting screen.
 - To return to the Timekeeping Mode, press **D**.

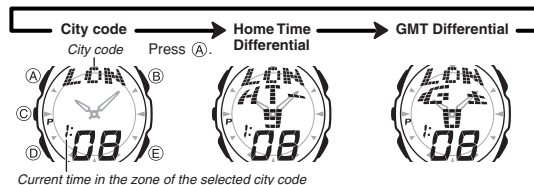
WORLD TIME

World Time shows the current time in 27 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 **(D)**.

To view the time in another city code

In the World Time Mode, press **(E)** to scroll forward through the city codes. Pressing **(A)** cycles through the three screens shown below for the currently selected city code.



Current time in the zone of the selected city code

- The Home Time Differential indicates time difference between the selected city and your Timekeeping Mode Home City time, and the GMT Differential indicates time difference between the selected city and GMT (Greenwich Mean Time).
- 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

- In the World Time Mode, press **(E)** to display the city code whose standard time/Daylight Saving Time setting you want to change.
 - Hold down **(A)** for about two seconds to toggle Daylight Saving Time (**DST** displayed) and standard time (**DST** 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.
- Note that you cannot switch between standard time and Daylight Saving Time while **GMT** is selected as the city code.

Changing Your Home City

Use the World Time Mode to change the city code of your Home City, when you travel to another time zone. Performing this operation automatically changes the Timekeeping Mode time and date settings in accordance with the city code you select.

To change the city code of your Home City

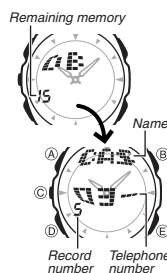
Example: When you plan to take a trip from Tokyo (your Home City) to London.

- In the World Time Mode, display the city code for the city you want to make your Home City (**LON**, in this example).
 - Hold down **(C)** for about one second, until the city code starts to change on the display. Note that it takes a number of seconds before the city code change operation (from **LON** to **TYO**) is completed by the watch.
- Changing the Home City setting causes the analog hands of the watch to adjust automatically to the time of the city code you selected in step 1 (London).
 - Each time you hold down **(C)** for about one second at this point toggles the displayed World Time city code between **TYO** (indicating **LON** is the Home City) and **LON** (indicating **TYO** is the Home City).
 - Note that you cannot display the Home Time differential screen (by pressing **(A)**) while the analog hands are moving.

DATA BANK MODE

The Data Bank Mode lets you store up to 20 records, each containing name and telephone number data. Records are automatically sorted based on the characters of the name. You can recall records by scrolling through them on the display.

- See "CHARACTER LIST" for details on how the watch sorts records.
- The watch comes with the names **OFFICE**, **HOME**, and **FAMILY** pre-programmed in the Data Bank Mode. You can use these names as they are, or you edit or delete them, if you want.
- All of the operations in this section are performed in the Data Bank Mode, which you enter by pressing **(D)**.

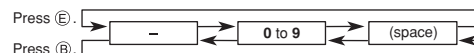


To create a new Data Bank record

- In the Data Bank Mode, press **(E)** until the new data screen appears.
 - The new data screen is the one that is blank (contains no name and telephone number).
 - If the message **FUL** appears on the display, it means that memory is full. To store another record, you will first have to delete some of the records stored in memory.
- Hold down **(A)** until the flashing cursor (—) appears in the name area of the display, which indicates the setting screen.
- Use **(E)** and **(B)** to change the character at the cursor position in the name area. The character changes in the following sequence.



- When the character you want is at the cursor position, press **(D)** to move the cursor to the right.
- Repeat steps 3 and 4 until the name is complete.
 - You can input up to eight characters for the name.
- After you input the name, press **(D)** as many times as necessary to move the cursor to the number area.
 - When the cursor is located at the eighth space of the name area, moving the cursor to the right causes it to jump to the first digit of the number. When the cursor is at the 12th digit of the number, moving it to the right (by pressing **(D)**) causes it to jump to the first character in the name.
- Use **(E)** and **(B)** to change the character (hyphen, number, or space) at the cursor position in the number area. The character changes in the following sequence.



- When the character you want is at the cursor position, press **(D)** to move the cursor to the right.
 - Repeat steps 7 and 8 until you complete number input.
 - You can input up to 12 digits for the number.
 - Press **(A)** to store your data and return to the Data Bank record screen (without the cursor).
- When you press **(A)** to store data, the message **SORT** appears on the display for a while, indicating that data is being sorted. After the sort operation is complete, the Data Bank record screen appears.
 - When the name or telephone number has more than three characters, it scrolls from right to left on the display. The end of the name data is indicated by the symbol **<**.
 - Pressing **(C)** pauses the right-to-left scrolling of the name or telephone number. Press **(C)** again to resume scrolling.

To recall Data Bank records

In the Data Bank Mode, press **(E)** (+) to scroll through Data Bank records on the display.

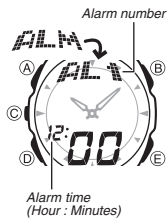
To edit a Data Bank record

- In the Data Bank Mode, scroll through the records and display the one you want to edit.
- Hold down **(A)** until the flashing cursor appears on the display.
- Use **(D)** to move the flashing to the character you want to change.
- Use **(E)** and **(B)** to change the character.
 - For details on inputting characters, see "To create a new Data Bank record" (step 3 for name input and 7 for number input).
- After making the changes that you want, press **(A)** to store them and return to the Data Bank record screen.

To delete a Data Bank record

- In the Data Bank Mode, scroll through the records and display the one you want to delete.
- Hold down **(A)** until the flashing cursor appears on the display.
- Press **(B)** and **(E)** at the same time to delete the record.
 - The message **CLEAR** appears to indicate that the record is being deleted. After the record is deleted, the cursor appears on the display, ready for input.
- Input data or press **(A)** to return to the Data Bank record screen.

ALARM



You can set five independent Daily Alarms. When an alarm is turned on, the alarm tone sounds when the Timekeeping Mode digital time is reached. You can also turn on an Hourly Time Signal that causes the watch to beep twice every hour on the hour.

- Alarm settings (and Hourly Time Signal settings) are available in the Alarm Mode, which you can enter using (D).

Setting the Alarm Time

A selection of setting options helps to make alarm setting quick and easy.

To set an alarm time

Alarm on indicator



- In the Alarm Mode, press (E) to select the alarm whose time you want to set.
 - The alarm number (AL1 through AL5) indicates an alarm screen. SIG appears in place of the alarm number when the Hourly Time Signal screen is shown.

- After you select an alarm, hold down (A) until the hour digits of the alarm time start to flash, which indicates the setting screen.
 - This operation automatically turns on the alarm.
- Use the button operations described below to set the alarm time.

When you want to do this:	Perform this button operation:
Move the flashing between the hour and minutes.	Press (D).
Scroll the flashing hour or minutes.	Use (E) (+) and (B) (-).
Advance the alarm time setting by 30-minute increments.	Press (C).
Change the setting to the nearest hour (:00) or half hour (:30) from the current Timekeeping Mode time.	Hold down (C) for about two seconds.

- 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).

- Press (A) to exit the setting screen.

Daily Alarm Operation

The alarm sounds at the preset time each day for about 20 seconds, or until you stop it by pressing any button.

- Note that the alarm does not sound while the analog hands are moving after you change the Home City (Timekeeping Mode) time.

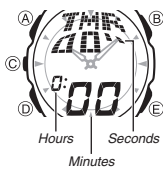
To test the alarm

In the Alarm Mode, hold down (E) to sound the alarm.

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

- In the Alarm Mode, press (E) to select an alarm or the Hourly Time Signal.
- When the alarm or the Hourly Time Signal you want to is selected, press (A) to turn it on and off.
 - ALARM Indicates alarm is on.
 - SIGNAL Indicates Hourly Time Signal is on.
 - The alarm on indicator (ALARM) and the Hourly Time Signal on indicator (SIGNAL) are shown on the display in all modes while these functions are turned on.
 - If any alarm is on, the alarm on indicator is shown on the display when you change to another mode.

COUNTDOWN TIMER



The countdown timer can be set within a range of 1 minute to 24 hours. An alarm sounds when the countdown reaches zero.

- You can also select auto-repeat, which automatically restarts the countdown from the original value you set whenever zero is reached.
- Countdown timer functions are available in the Countdown Timer Mode, which you can enter using (D).

Setting the Countdown Start Time

Perform the following steps to set the Countdown start time.

To set the countdown start time



- In the Countdown Timer Mode, hold down (A) until the hour digit of the countdown start time starts to flash, which indicates the setting screen.
- Use the button operations described below to set the countdown start time.

When you want to do this:	Perform this button operation:
Move the flashing between the hour and minutes.	Press (D).
Scroll the flashing hour or minutes.	Use (E) (+) and (B) (-).
Advance the countdown start time setting by 15-minute increments.	Press (C).
Clear the countdown start time to 0:00.	Hold down (C) for about two seconds.

- To perform a 24-hour countdown, set a start time of 0:00.
- Press (A) to exit the setting screen.

To use the countdown timer

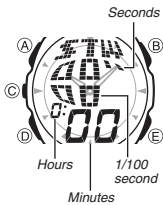
- Press (E) while in the Countdown Timer Mode to start the countdown timer.
- When the end of the countdown is reached and auto-repeat is turned off, the alarm sounds for 10 seconds or until you stop it by pressing any button. The countdown time is automatically reset to its starting value after the alarm stops.
 - Press (E) while a countdown operation is in progress to pause it. Press (E) again to resume the countdown.
 - To completely stop a countdown operation, first pause it (by pressing (E)), and then press (A). This returns the countdown time to its starting value.

To turn auto-repeat on and off



- While the countdown start time is displayed on the Countdown Timer Mode screen, press (C) to toggle auto-repeat on (A displayed) and off (A not displayed).
- When the end of the countdown is reached and auto-repeat is turned on, the alarm sounds, but the countdown starts again automatically whenever the countdown reaches zero. You can stop timing by pressing (E), and manually reset to the starting countdown time by pressing (A).
 - Frequent use of auto-repeat and the alarm can run down battery power.

STOPWATCH



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

- The display range of the stopwatch is 23 hours, 59 minutes, 59.99 seconds.
- The stopwatch continues to run, restarting from zero after it reaches its limit, until you stop it.
- All of the operations in this section are performed in the Stopwatch Mode, which you enter by pressing (D).
- 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.

To measure times with the stopwatch

Elapsed time



Split time



Two Finishes



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.

Auto Display



Auto Display continually changes the contents of the digital display. Note that you cannot use any of the watch's other functions (except for the backlight) while Auto Display is turned on.

To turn off Auto Display

Press any button (except for the (B) button). This returns to the Timekeeping Mode.

To turn on Auto Display

Hold down (D) for about one to two seconds until the watch beeps.

- Note that Auto Display cannot be performed while a setting screen is on the display.

Auto Return Features

- After you perform an operation in any mode, pressing (D) returns to the Timekeeping Mode.
- If you leave the watch in the Data Bank, Alarm, or Hand Setting Mode for two or three minutes without performing any operation, it automatically changes to the Timekeeping Mode.
- If you leave a screen with flashing digits or a cursor on the display for two or three minutes without performing any operation, the watch automatically saves any settings you have made up to that point and exits the setting screen.

Data and Setting Scrolling

The (B) and (E) buttons are used in various modes and setting screens to scroll through data on the display. In most cases, holding down these buttons during a scroll operation scrolls through the data at high speed.

Initial Screens

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

World Time

- The current time in all World Time Mode cities is calculated in accordance with the Greenwich Mean Time (GMT) differential for each city, based on the current Home City time setting in the Timekeeping Mode.
- The GMT differential is the time difference between the time zone where the city is located and Greenwich Mean Time.
- GMT differential is calculated by this watch based on Universal Time Coordinated (UTC) data.

Backlight Precautions

In any mode, press (B) to illuminate the display for about one second.

- The electro-luminescent panel that provides illumination loses power after very long use.
- The illumination provided by the backlight 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.
- The backlight automatically turns off whenever an alarm sounds.
- Frequent use of the backlight shortens the battery life.

CITY CODE TABLE

City Code	City	GMT Differential	Other major cities in same time zone
----		-11	PAGO PAGO
HNL	HONOLULU	-10	PAPEETE
ANC	ANCHORAGE	-9	NOME
LAX	LOS ANGELES	-8	SAN FRANCISCO, LAS VEGAS, VANCOUVER, SEATTLE, DAWSON CITY
DEN	DENVER	-7	EL PASO, EDMONTON
CHI	CHICAGO	-6	HOUSTON, DALLAS/FORT WORTH, NEW ORLEANS, MEXICO CITY, WINNIPEG
NYC	NEW YORK	-5	MONTREAL, DETROIT, MIAMI, BOSTON, PANAMA CITY, HAVANA, LIMA, BOGOTA
CCS	CARACAS	-4	LA PAZ, SANTIAGO, PORT OF SPAIN
RIO	RIO DE JANEIRO	-3	SAO PAULO, BUENOS AIRES, BRASILIA, MONTEVIDEO
----		-2	
----		-1	PRAIA
GMT LON	LONDON	+0	DUBLIN, LISBON, CASABLANCA, DAKAR, ABIDJAN
PAR	PARIS	+1	MILAN, ROME, MADRID, AMSTERDAM, ALGIERS, HAMBURG, FRANKFURT, VIENNA, STOCKHOLM, BERLIN
CAI	CAIRO	+2	ATHENS, HELSINKI, ISTANBUL, BEIRUT, DAMASCUS, CAPE TOWN
JRS	JERUSALEM	+3	KUWAIT, RIYADH, ADEN, ADDIS ABABA, NAIROBI, MOSCOW
JED	JEDDAH	+3.5	SHIRAZ
THR	TEHRAN	+4	ABU DHABI, MUSCAT
DXB	DUBAI	+4.5	
KBL	KABUL	+5	MALE
KHI	KARACHI	+5.5	MUMBAI, CALCUTTA
DEL	DELHI	+6	COLOMBO
DAC	DHAKA	+6.5	
RGN	YANGON	+7	JAKARTA, PHNOM PENH, HANOI, VIENTIANE
BKK	BANGKOK	+8	SINGAPORE, KUALA LUMPUR, BEIJING, TAIPEI, MANILA, PERTH, ULAANBAATAR
HKG	HONG KONG	+9	SEOUL, PYONGYANG
TYO	TOKYO	+9.5	DARWIN
ADL	ADELAIDE	+10	MELBOURNE, GUAM, RABAUL
SYD	SYDNEY	+11	PORT VILA
NOL	NOUMEA	+12	CHRISTCHURCH, NADI, NAURU ISLAND
WLG	WELLINGTON		

*Based on data as of December 2000.

CHARACTER LIST

1	(space)	12	K	23	V	34	6
2	A	13	L	24	W	35	7
3	B	14	M	25	X	36	8
4	C	15	N	26	Y	37	9
5	D	16	O	27	Z	38	-
6	E	17	P	28	0	39	.
7	F	18	Q	29	1	40	/
8	G	19	R	30	2	41	:
9	H	20	S	31	3		
10	I	21	T	32	4		
11	J	22	U	33	5		