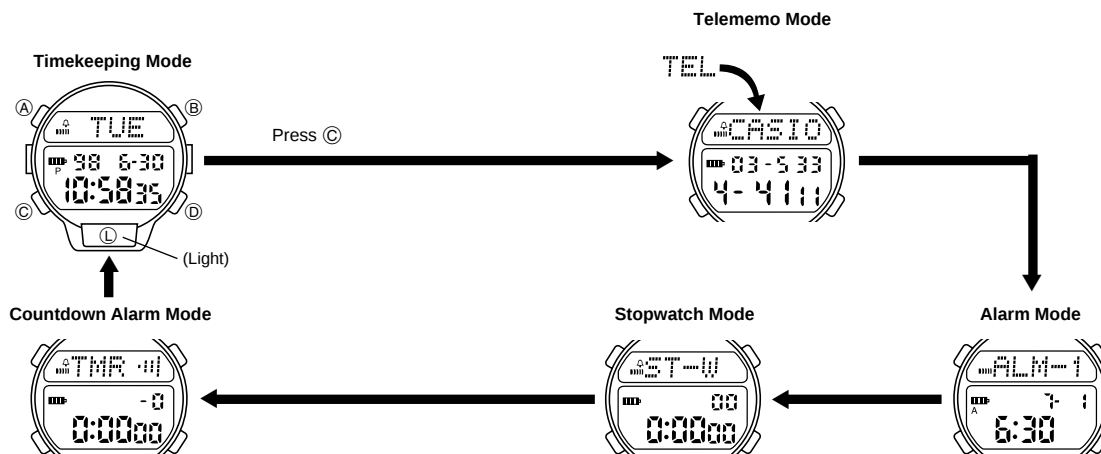


GENERAL GUIDE

- If the digital display of your watch is continually changing, see "About Auto Display" for information on how to stop it.

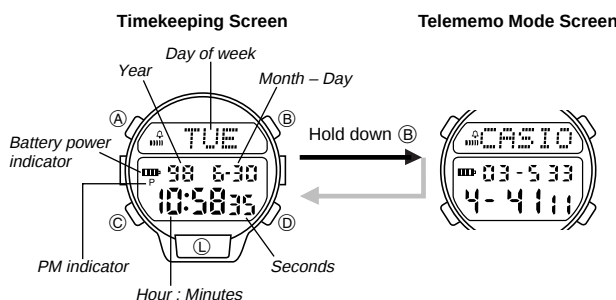
- Press **C** to change from mode to mode. After you perform an operation in any mode, pressing **C** returns to the Timekeeping Mode.



TIMEKEEPING MODE

In addition to normal timekeeping, use the Timekeeping Mode to set the current time and date.

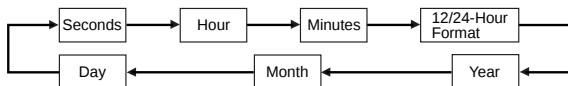
- Holding down **B** in the Timekeeping Mode displays the data item that was on the display when you last exited the Telememo Mode.



- In the Timekeeping Mode, press **L** to illuminate the display. Pressing **L** illuminates the display even while you are setting the time and date.
- The battery power indicator shows current remaining battery capacity. Certain functions of this watch may be temporarily disabled when battery power is low. For details, see "Battery Power Indicator".

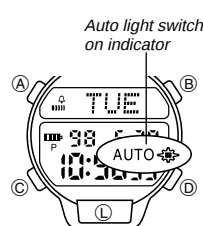
To set the time and date

- Hold down **A** while in the Timekeeping Mode until the seconds digits start to flash on the display. The seconds flash because they are *selected*.
- Press **C** to change the selection in the following sequence.



- While the seconds digits are selected (flashing), press **D** to reset the seconds to **00**.
- If you press **D** 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 hour, minutes, year, month, or day is selected (flashing), press **D** to increase the selection or **B** to decrease it. The 12/24-hour setting is selected (flashing), press **D** to switch between the 12-hour (12H) and 24-hour (24H) formats.
- Holding down either button changes the current selection at high speed.
- 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 pm and the **A** (AM) indicator appears to the left of the hour digits for times in the range of midnight to 11:59 am.
- The 24-hour format is indicated by **24** on the display. Times are shown in the range of 00:00 to 23:59.
- After you set the time and date, press **A** to return to the Timekeeping Mode.
- The day of the week is automatically set in accordance with the date.
- The date can be set within the range of January 1, 1995 to December 31, 2039.
- 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.

BACKLIGHT



The backlight uses an EL (electro-luminescent) panel that cause the entire display to glow for easy reading in the dark. The watch's auto light switch automatically turns on the backlight when you angle the watch towards your face.

- The auto light switch must be turned on (indicated by the auto light switch on indicator) for it to operate.

Note

- The electro-luminescent panel 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 is caused by vibration of the EL panel when it is lit. It does not indicate malfunction of the watch.
- The backlight automatically turns off whenever an alarm sounds.

To manually turn on the backlight

Depending on the mode, pressing **L** or **D** turns on the backlight for about two seconds. See the sections that cover each mode for information on whether you should press **L** or **D**.

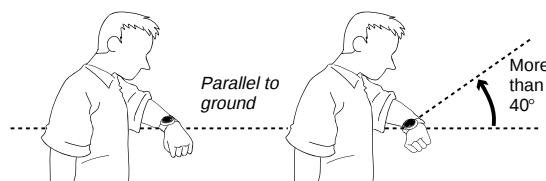
- The backlight remains lit for about two seconds from the point you press the button, even if it is already lit when you press the button. If you keep the button depressed for five seconds or more, the backlight automatically turns off.
- The above operation turns on the backlight regardless of the current auto light switch setting.

About the Auto Light Switch

Turning on the auto light switch causes the backlight to turn on whenever you position your wrist as described below. Note that the auto light switch of this watch will operate only when available light is below a certain level. It does not turn on the backlight under bright light.

- Avoid wearing the watch on the inside of your wrist. Doing so causes the auto light switch to operate when it is not needed, which shortens battery life.

Moving the watch to a position that is parallel to the ground and then tilting it towards you more than 40 degrees causes the backlight to light.



- The backlight turns off in about two seconds, even if you keep the watch pointed towards your face.
- The backlight may not light if the face of the watch is more than 15 degrees off the parallel as shown below. Make sure that the back of your hand is parallel to the ground.

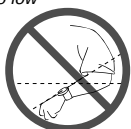
Parallel to ground



More than 15 degrees too high



More than 15 degrees too low



- Static electricity or magnetic force can interfere with proper operation of the auto light switch. If the backlight does not light, try moving the watch back to the starting position (parallel with the ground) and then tilt it back toward you 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.
- Under certain conditions the backlight may not light until about one second or less after turn the face of the watch towards you. This does not necessarily indicate malfunction of the backlight.

Warning!

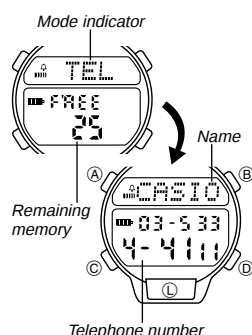
- **Never try to read your watch when mountain climbing or hiking in areas that are dark or in areas with poor footing. Doing so is dangerous and can result in serious personal injury.**
- **Never try to read your watch when running where there is danger of accidents, especially in locations where there might be vehicular or pedestrian traffic. Doing so is dangerous and can result in serious personal injury.**
- **Never try to read your watch when riding on a bicycle or when operating a motorcycle or any other motor vehicle. Doing so is dangerous and can result in a traffic accident and serious personal injury.**
- **When you are wearing the watch, make sure that its auto light switch is turned off before riding on a bicycle or operating a motorcycle or any other motor vehicle. Sudden and unintended operation of the auto light switch can create a distraction, which can result in a traffic accident and serious personal injury.**

To turn the auto light switch on and off

In the Timekeeping Mode, hold down **(D)** for one second to turn the auto light switch on (AUTO displayed) and off (AUTO not displayed).

- Frequent use of the auto light switch greatly reduces the charge of the storage battery. If you use the auto light switch often, be sure to leave the watch where it is exposed to sunlight during the day time so it can recharge the storage battery. 10 minutes exposure to sunlight provides enough of a charge for about 10 to 20 auto light switch operations.
- The Auto indicator is on the display in all modes while the auto light switch is turned on.

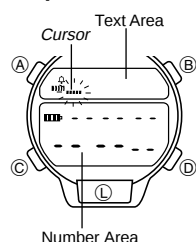
TELEMemo MODE



The Telememo Mode lets you store up to 30 pairs of name and telephone number data. Data is automatically sorted based on the characters of the name. You can recall data by scrolling through it on the display.

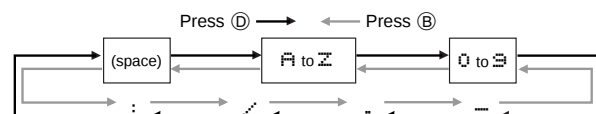
- See the "CHARACTER LIST" at the back of this manual for details on how the watch sorts data.
- If there is no data stored in the Telememo Mode, the message **NO-DATA** appears following the remaining memory screen.
- The data item on the display when you exit the Telememo Mode appears first the next time you enter the Telememo Mode.
- In the Telememo Mode, press **(L)** to illuminate the display. Pressing **(L)** illuminates the display even while you are inputting data.

To input new Telememo data

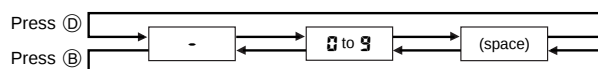


[New Data Screen]

1. In the Telememo Mode, press **(B)** and **(D)** at the same time to display the new data screen.
- The new data screen is the one that is blank (contains no name and telephone number).
- If the message **FULL** appears in the text area of the display, it means that memory is full. To store more data, you will first have to delete some of the data stored in memory.
2. Hold down **(A)** until the flashing cursor appears in the text area of the display.
3. Use **(B)** and **(D)** to change the character at the cursor position in the text area. The character changes in the following sequence.



- Holding down either button changes the character at high speed.
- 4. When the character you want is at the cursor position, press **(C)** to move the cursor to the right.
- 5. Repeat the steps 3 and 4 until your text is complete.
- You can input up to eight characters for the name.
- 6. After you input a name, use **(C)** to move the cursor to the number area.
- The text area can hold up to eight characters. When the cursor is located at the eighth space of the text area, moving the cursor to the right causes it to jump down to the first digit in the number area. When the cursor is at the 12th digit of the number area, moving it to the right causes it to jump back up to the first character of the text area.
- 7. Use **(B)** and **(D)** to change the character (hyphen, number, or space) at the cursor position in the number area. The character changes in the following sequence.



- Holding down either button changes the character at high speed.
- 8. When the character you want is at the cursor position, press **(C)** to move the cursor to the right.
- 9. Repeat steps 7 and 8 until you complete number input.
- You can input up to 12 digits for the number.
- 10. After inputting your data, press **(A)** to store it.
- When you press **(A)** to store data, the message **SHORT** appears on the display for a few seconds. After the sort operation is complete, the cursor appears in the text area, ready for input a new Telememo data item.
- 11. Input more data (starting from step 3) or press **(A)** again to return to the Telememo Mode data screen (without the cursor).
- If you do not perform any button operation for few minutes while the cursor is on the display, the watch automatically returns to the Telememo Mode data screen.
- The text area of the display can show only five characters at a time, so longer text scrolls continuously from right to left.

Caution

The following causes all data stored in memory to be deleted. Be sure to always keep separate written copies of all important data.
Malfunction or repairs/Dead battery/Battery replacement
In no event will CASIO be liable for loss of data or any damages arising out of such loss.

To recall Telememo data

In the Telememo Mode, press **(D)** to scroll forward through stored data items or **(B)** to scroll in reverse.

- Holding down either button scrolls through the data at high speed.

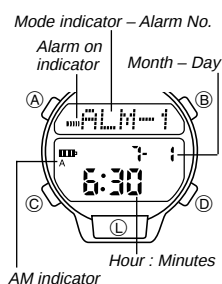
To edit Telememo data items

1. In the Telememo Mode, scroll through the data items and display the one you want to edit.
2. Hold down **(A)** until the flashing cursor appears in the text area of the display.
3. Use **(C)** to move the flashing cursor to the character you want to change.
4. Use **(B)** and **(D)** to change the character.
- For details on inputting characters, see "To input new Telememo data" (steps 3 for name input and 7 for number).
5. After making the changes that you want, press **(A)** to store them and return to the Telememo Mode data screen.

To delete Telememo data

1. In the Telememo Mode, scroll through the data items and display the one you want to delete.
2. Hold down **(A)** until the flashing cursor appears in the text area of the display.
3. Press **(B)** and **(D)** at the same time to delete the data item.
- At this time the cursor appears in the text area, ready for input.
4. Input data or press **(A)** to return to the Telememo Mode data screen.

ALARM MODE



You can set up to five independent alarms with hour, minutes, month, and day. When an alarm is turned on, an alarm tone sounds for 20 seconds when the time is reached. Press any button to stop the alarm after it starts to sound. When the Hourly Time Signal is turned on, the watch beeps every hour on the hour.

- In the Alarm Mode, press (L) to illuminate the display. Pressing (L) illuminates the display even while you are setting an alarm.

Alarm Types

The alarm type is determined by the settings you make, as described below.

To set a Daily alarm

Set the hour and minutes for the alarm time. Set -- for the month and day (see step 4 under "To set an alarm time"). This type of setting causes the alarm to sound everyday at the time you set.

To set a Date alarm

Set the month, day, hour and minutes for the alarm time. This type of setting causes the alarm to sound at the specific time, on the specific date you set.

To set a 1-Month alarm

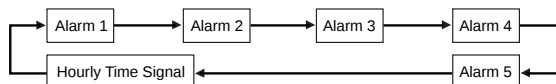
Set the month, hour and minutes for the alarm time. Set -- for the day (see step 4 under "To set an alarm time"). This type of setting causes the alarm to sound everyday at the time you set, only during the month you set.

To set a Monthly alarm

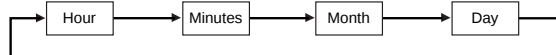
Set the day, hour and minutes for the alarm time. Set -- for the month (see step 4 under "To set an alarm time"). This type of setting causes the alarm to sound every month at the time you set, on the day you set.

To set an alarm time

- Press (D) while in the Alarm Mode to select the alarm whose time you want to set.



- After you select an alarm, hold down (A) until the hour digits start to flash on the display. The hour digits flash because they are *selected*.
- This operation automatically turns on the alarm.
- Press (C) to change the selection in the following sequence.



- Press (D) to increase the selection or (B) to decrease it. Holding down either button changes the selection at high speed.
- To set an alarm that does not include a month (Daily alarm, Monthly alarm), set -- for the month. Press (B) or (D) until the -- mark appears (between 12 and 1) while the month digits are flashing.
- To set an alarm that does not include day (Daily alarm, 1-Month alarm), set -- for the day. Press (B) or (D) until the -- mark appears (between 31 and 1) while the day digits are flashing.
- The format (12-hour and 24-hour) of the alarm time matches the format you select for normal timekeeping.
- When setting an alarm time using the 12-hour format, take care to set the time correctly as morning (A indicator) or afternoon (P indicator).
- After you set the alarm, press (A) to return to the 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 Alarm Mode automatically.

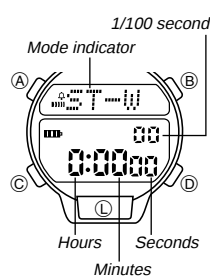
To turn an alarm and Hourly Time Signal on and off

- In the Alarm Mode, press (D) to select an alarm or the Hourly Time Signal.
- When the alarm or Hourly Time Signal you want to is selected, press (B) to turn it on and off.
 - Indicates alarm is ON.
 - ⌚ Indicates Hourly Time Signal is ON.
- The alarm on indicator (■■■■) and the Hourly Time Signal on indicator (⌚) are shown on the display in all modes while these functions are turned on.
- An "X" mark next to the alarm on indicator or Hourly Time Signal on indicator means that battery power is too low to produce the alarm tone or signal. The alarm tone or signal will sound again after normal battery power is restored.

To test the alarm

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

STOPWATCH MODE



The Stopwatch Mode lets you measure elapsed time, split times, and two finishes. You also get Auto-Start function. The range of the stopwatch is 23 hours, 59 minutes, 59.99 seconds.

- In the Stopwatch Mode, press (D) to illuminate the display.

To measure elapsed time

- Press (L) to start the stopwatch.
- Press (L) to stop the stopwatch.
- You can resume the measurement operation by pressing (L) again.
- Press (B) to clear the stopwatch to all zeros.

To record split times

- Press (L) to start the stopwatch.
- Press (B) to display the time up to that point. Stopwatch timing continues internally.
- Press (B) to clear the split time and to continue time measurement on the display.
- You can repeat steps 2 and 3 as many times as you want.
- Press (L) to stop the time measurement.
- Press (B) to clear the stopwatch to all zeros.

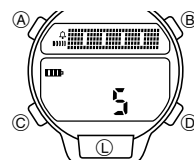
To time first and second place finishes

- Press (L) to start the stopwatch.
- Press (B) when the first finisher crosses the line, and record the time.
- Press (L) when the second finisher crosses the line.
- Press (B) to display the finishing time of the second finisher.
- Press (B) again to clear the stopwatch to all zeros.

About the Auto-Start function

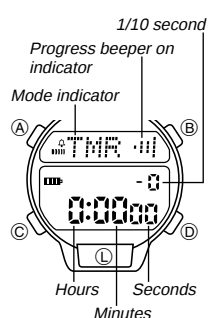
With the Auto-Start function, the watch performs a 5-second countdown. When the countdown reaches zero, stopwatch operation starts automatically. During the final three seconds of the countdown, a beeper sounds with each second.

To use the Auto-Start function



- While the stopwatch screen is showing all zeros in the Stopwatch Mode, press (A).
 - This displays a 5-second countdown screen.
 - To return to the all zeros screen, press (A) again.
- Press (L) to start the countdown.
 - When the countdown reaches zero, a tone sounds and a stopwatch timing operation starts automatically.
 - Pressing (L) while the Auto-Start countdown is in progress immediately start the stopwatch.

COUNTDOWN ALARM MODE

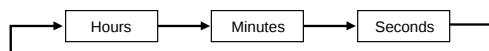


The countdown timer can be set within a range of 1 second to 24 hours. When the countdown reaches zero, an alarm sounds.

- You can also select auto repeat, which automatically restarts the countdown from the original value you set whenever zero is reached.
- You can also use a progress beeper, which causes the watch to beep at various points along the countdown.
- In the Countdown Alarm Mode, press (D) to illuminate the display.

To set the countdown time

- Hold down (A) while in the Countdown Alarm Mode until the hours digit starts to flash on the display. The hours digit flashes because it is *selected*.
- Press (C) to change the selection in the following sequence.



- Press **(D)** to increase the selection or **(B)** to decrease it. Holding down either button changes the selection at high speed.
- To set the starting value of the countdown time to 24 hours, set **0:00 00**.
- After you set the countdown 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.

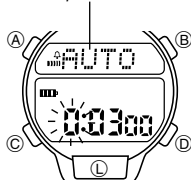
To use the countdown timer

Press **(L)** while in the Countdown Alarm Mode to start the countdown timer.

- When the countdown reaches zero 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 **(L)** while a countdown operation is in progress to pause it. Press **(L)** again to resume the countdown.
- To completely stop a countdown operation, first pause it (by pressing **(L)**), and then press **(B)**. This returns the countdown time to its starting value.

To turn auto repeat on and off

Auto repeat on indicator



- Hold down **(A)** while in the Countdown Alarm Mode until the hours digit starts to flash on the display.
 - Press **(L)** to turn auto repeat on (**AUTO** displayed) and off (**AUTO** not displayed).
 - Press **(A)** to return to the Countdown Alarm Mode.
- The auto repeat on indicator (**AUTO**) appears in the upper part of the display only in the start time setting screen (starting time digits flashing).

- When the end of the countdown is reached while auto repeat is on, the alarm sounds, but the countdown starts again automatically whenever the countdown reaches zero. You can stop timing by pressing **(L)**, and manually reset to the starting countdown time by pressing **(B)**.
- Normally, an alarm tone sounds for about 10 seconds when the end of the countdown is reached. If you use auto repeat with start time of 10 seconds or less, the alarm tone sounds for only one second.
- Frequent use of auto repeat with a short countdown time can reduce the charge of the storage battery and cause the countdown time alarm to become disabled, so it does not sound.

To turn progress beeper on and off

Press **(B)** while in the Countdown Alarm Mode (while the countdown is completely stopped or ongoing) to turn the progress beeper on (•••• displayed) and off (•••• not displayed).

- When the progress beeper is turned on, the watch beeps as the countdown time passes the 10, 5, 4, 3, 2, and 1-minute marks, and the 50, 40, 30, 20, 10, 5, 4, 3, 2, and 1-second marks.

BATTERY

Battery power indicator



Solar cell panel

This watch is equipped with a solar cell and a storage battery (secondary battery) that is charged by the electrical power produced by the solar cell.

- The area outside of the LCD digital areas is a solar cell panel that picks up available light to charge the storage battery.
- A Sleep Mode is provided to conserve battery power.

Important!

- Storing the watch for long periods in an area where there is no light or wearing it in such a way that it is blocked from exposure to light can cause storage battery power to run down. Be sure that the watch is normally exposed to light whenever possible.
- This watch employs a solar cell that converts light into electricity that charges a built-in storage battery. Normally, the storage battery should not need replacement, but after very long use over a number of years, the storage battery may lose its ability to achieve a full charge. Should you notice problems with getting the storage battery to a full charge, contact your dealer or CASIO distributor about having the storage battery replaced.
- The storage battery should be replaced with a CASIO-specified ML-2020 battery only. Other storage batteries can cause damage to the watch.
- Be sure to put the watch into its Sleep Mode and keep in an area normally exposed to light when storing it for long periods. This helps to keep the storage battery from going dead.

Battery Power Indicator

The battery power indicator on the display shows you the current status of the storage battery's power.

Level	Indicator	Functional Status
1		All functions enabled.
2		All functions enabled.
3		Alarms, Hourly Time Signal, backlight disabled.
4		Alarms, Hourly Time Signal, backlight, display disabled; timekeeping enabled.
5		Alarms, Hourly Time Signal, backlight, display, timekeeping disabled.

- At Level 4, the display is disabled but timekeeping and other functions continue to operate internally. Pressing any button causes the Timekeeping Mode screen to appear for two or three minutes.
- At Level 5, all functions are disabled. Functions are enabled once again after the storage battery is charged, but anything previously stored in memory is lost. Because of this, you must set the current time and alarms, and re-input Telememo data items after the storage battery is charged.

Charging Precautions

Certain charging conditions can cause the watch to become very hot. Avoid leaving the watch in the areas described below whenever charging its storage battery.

Warning!

Leaving the watch in sunlight to charge its storage battery can cause it to become quite hot. Take care when handling the watch to avoid burn injury.

- On the dashboard of a car parked in direct sunlight
- Too close to an incandescent lamp
- Under direct sunlight or in any other area exposed to intense heat for long periods

Charging Guide

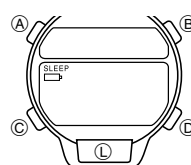
Required charge time when the backlight is used for two seconds and the alarm sounds for 20 seconds per day:

- Approximately 8 hours of 500 lux (indoor fluorescent lighting) per day
- Approximately 1 hour 15 minutes of 3,000 lux (direct fluorescent lighting) per day
- Approximately 50 minutes of 36,000 lux (afternoon outdoor sunlight) per week (7 minutes per day)

Required charge time when the backlight is used for 30 seconds and the alarm sounds for 20 seconds per day:

- Approximately 4 hours 30 minutes of 3,000 lux (direct fluorescent lighting) per day
- Approximately 2 hours 20 minutes of 36,000 lux (afternoon outdoor sunlight) per week (20 minutes per day)

Using the Sleep Mode



[Sleep Mode]

In any mode (except while figures are flashing on the display for input), hold down **(C)** for about two seconds.

- This enters the Sleep Mode, which causes all figures (except **SLEEP**) to disappear from the display. Timekeeping and other functions continue to be performed internally, however.
- Alarms, the Hourly Time Signal, and the backlight are disabled while the watch is in the Sleep Mode.
- Pressing any button (except **(A)**) exits the Sleep Mode and enters the Timekeeping Mode.

About Auto Display

Auto Display is a demonstration feature that continually changes the contents of the digital display. Note that you cannot use any of the watch's other functions while Auto Display is operating.

To turn off Auto Display

Hold down **(A)** for about two seconds until the watch beeps.

To turn on Auto Display

- In any mode (except while figures are flashing on the display for input), hold down **(C)** for about two seconds to enter the Sleep Mode.
 - Hold down **(A)** for about two seconds until the watch beeps. This indicates that Auto Display is on.
- You cannot turn on Auto Display while a setting screen (indicated by flashing digits) is on the display.
 - Leaving the watch in a dark area can cause Auto Display operation to stop. Normal operation should resume when the watch is again exposed to light.
 - Auto Display cannot be turned on while the storage battery is at Level 4 or Level 5. Auto Display also turns off automatically whenever the storage battery drops to Level 4 or Level 5.

CHARACTER LIST

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