

OPERATION CHART:MODULE QW-1268

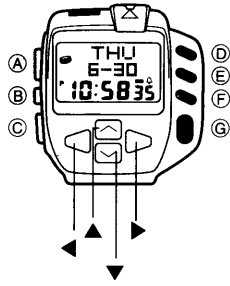
GENERAL GUIDE

About this manual...

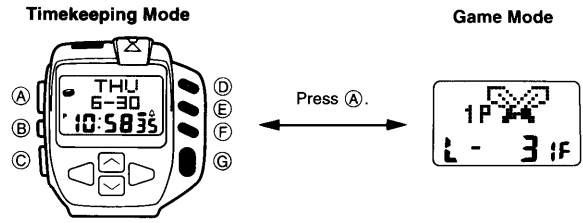
The operations in this manual are explained using the button names shown in the illustration nearby.

Example:

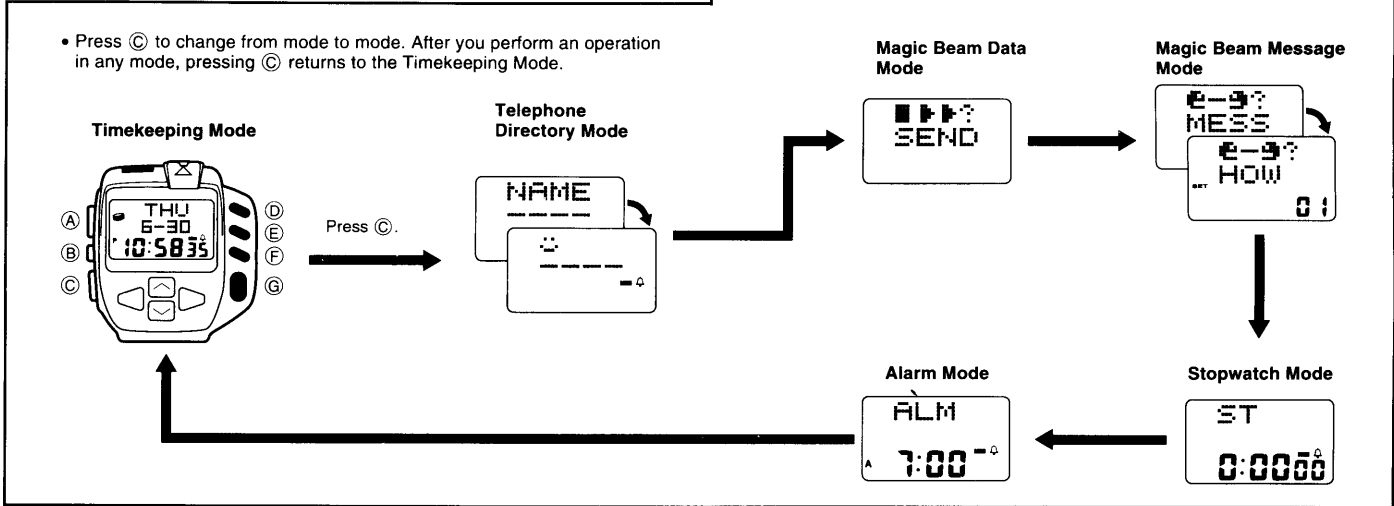
- Press **(A)** to enter the Game Mode.
- Press **(▲)** to scroll through the Telephone Directory data.



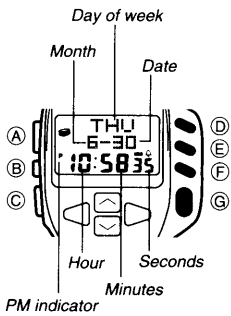
- Pressing **(A)** while in the Timekeeping Mode enters the Game Mode. Press **(A)** again to switch back to the Timekeeping Mode from the Game Mode.



- 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



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

- Symbols from the game (X, ♣, ♠, ♡, ♢) appear alternately on the timekeeping display with each passing second.

About the 12-hour/24-hour formats...

The 12-hour format divides each day into two 12-hour halves, called "a.m." (midnight to noon) and "p.m." (noon to midnight). The 24-hour format, on the other hand, counts each hour of the day from 00:00 (midnight) to 23:59 (11:59 p.m.). Three o'clock in the afternoon, for example, could be called

3:00 p.m. using the 12-hour format, or 15:00 using the 24-hour format.

This watch can tell time using either the 12-hour or the 24-hour format.

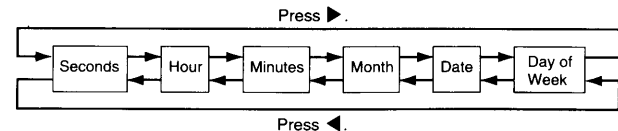
With the 12-hour format, the letter **A** on the display means a.m. while the letter **P** means p.m.

For details on how to switch between the two time formats, see "To set the time and date" below.

To set the time and date



- Hold down **(B)** while in the Timekeeping Mode until the seconds digits start to flash on the display.
- The seconds digits flash because they are selected.
- Press **(▲)** or **(▼)** to change the selection in the following sequence.



- While any number or letter is flashing on the timekeeping display, you can press **(A)** to switch between the 12-hour (indicated when **A** or **P** is on the display to indicate a.m. or p.m.) and 24-hour formats.

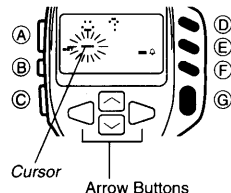
- While the seconds digits are selected (flashing), press **(▲)** or **(▼)** to reset the seconds to "00".
- If you press **(▲)** or **(▼)** while the seconds count is in the range of 30 to 59, the seconds are reset to "00" and 1 is added to the minutes. If the seconds count is in the range of 00 to 29, the minutes do not change when the seconds are reset to "00".
- While any other digits (besides the seconds) are selected (flashing), press **(▲)** to increase the number or **(▼)** to decrease it. While the day of the week is selected, pressing **(▲)** advances to the next day and **(▼)** goes to the previous day.
- Holding down either the **(▲)** or **(▼)** button changes the current selection at high speed.
- After you set the time and date, press **(B)** 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.
- The watch does not make any allowance for leap years. Be sure to manually set February 29 when one occurs.

INPUTTING LETTERS, NUMBERS, AND SYMBOLS

This section explains how to input Telephone Directory Mode names, telephone numbers, and other data. It also tells you how to input text as a Magic Beam message.

Basically, this section tells you how to use the **(A)** button and the arrow buttons. Be sure to enter the Telephone Directory Mode when inputting telephone directory data, or the Magic Beam Message Mode when inputting message text.

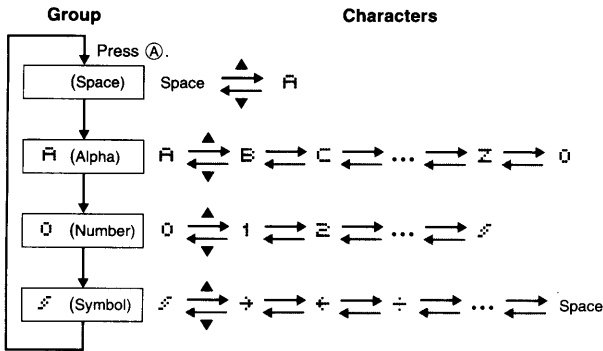
About the cursor...



The *cursor* is a small line that shows where the next character you input will be located. You can input characters only when the cursor is flashing on the display. See "Telephone Directory Mode" and "Magic Beam Message Mode" for details on how to make the cursor appear on the display.

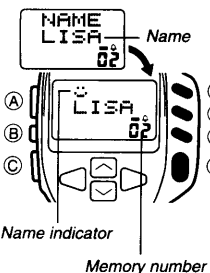
■ To input characters

While the cursor is flashing on the display, press (A) to jump between the character groups that are available for input. Use (▲) and (▼) to scroll through the characters.



- Pressing (▲) while the last character of a group is displayed will advance to the next group. Pressing (▲) while Z is displayed, for example, will advance to 0 (zero) of the number group.
- Pressing (▼) while the first character of a group is displayed will move back to the previous group. Pressing (▼) while 0 (zero) is displayed, for example, will move back to Z of the alpha-character group.
- Holding down (▲) or (▼) scrolls at high speed.
- Once the character you want is displayed, press (▶) to move the cursor to the right.
- You can use (◀) and (▶) to move the cursor to any character to change it. Holding down either button moves the cursor at high speed.
- For a complete list of characters that you can input, see "Character Lists".

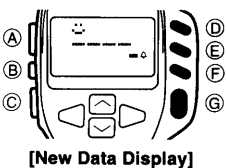
TELEPHONE DIRECTORY MODE



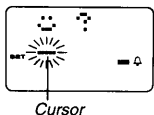
The Telephone Directory Mode lets you store information (name, telephone number, memo) for up to 10 people. Data is automatically sorted based on the names (see the Sort Table at the back of this manual for details on how the watch sorts). You can recall data by scrolling through the sorted data.

- To enter the Telephone Directory Mode, press (C) once while in the Timekeeping Mode.
- You can input such information as the address or birthday of the person as memo data.
- If you do not operate any button for a few minutes while in the Telephone Directory Mode, the watch automatically goes back to the Timekeeping Mode.

■ To input new Telephone Directory data

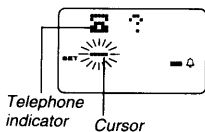


1. In the Telephone Directory Mode, press (▲) or (▼) until the new data display appears.
- The new data display is the one that is blank (contains no name).
- If there is no Telephone Directory data stored in memory yet, the new data display appears as soon as you enter the Telephone Directory Mode.

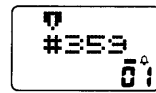
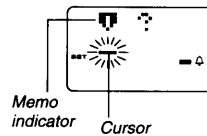


Use (A) and the arrow buttons to input letters at the cursor location. For details, see "To input characters".

- Make sure that you distinguish between the letter 0 and the number 0 (zero). Inputting a zero for the letter 0 will affect automatic sorting.



4. After inputting the name, press (D) to advance to the telephone number input display.
5. Input the telephone number.
 - Use the procedures under "To input characters" to input characters.



6. After inputting the telephone number, press (D) to advance to the memo input display.
7. Input any other information that you want.
 - Use the procedures under "To input characters" to input characters.
8. After inputting all of the data that you want, press (B) to store it and return to the Telephone Directory Mode display.
 - The Telephone Directory Mode display shows the first four characters of the memo data that you input.

- See "To recall Telephone Directory data" for details on how to display Telephone Directory data.
- If you do not operate any button for a few minutes while the cursor is flashing on the display, the watch automatically goes back to the Telephone Directory Mode.

■ About memory capacity...

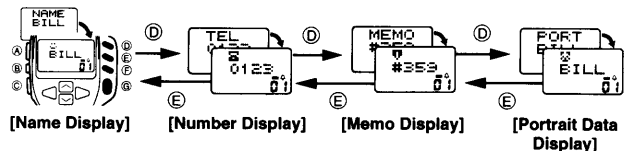
The Telephone Directory Mode can hold data for up to 10 people. The actual number of people you can store, however, depends on how many characters you use for each one. Look at the following table.

Number of People	Total Number of Characters	Example
10	43	Name:6 • Number:12 • Memo:25
7	64	Name:8 • Number:15 • Memo:41
5	91	Name:8 • Number:18 • Memo:65

- If you receive data from a Digital Diary that includes portrait data, the number of characters you can store is reduced. See "Magic Beam Data Mode" for details on how to perform data communications.
- The message MEM FULL appears and further data input becomes impossible when memory becomes full. When this happens, use the procedures under "To delete Telephone Directory data" to delete data you no longer need in order to make room for new data.

■ To recall Telephone Directory data

1. Enter the Telephone Directory Mode.
2. Use (▲) and (▼) to scroll through the names of the people whose data is stored.
 - Holding down either button scrolls at high speed.
3. When the name of the person whose data you want to view is on the display, use (D) and (E) to look at the other data.



Notes

- The portrait data display appears only if you used Magic Beam to receive portrait data from a CASIO Digital Diary unit. Note that you cannot actually view the portrait data with this watch, even though it is in memory. The only indication you have of portrait data in watch memory is the B+ indicator. You can delete portrait data using the procedure under "To delete Telephone Directory data".
- The display of the watch can show only four characters at a time. Whenever you use (D) or (E) to change the display, the text for that display scrolls once automatically from right to left (when there are more than four characters). The first and last characters of the text are separated by ◀ .
- You can also press (◀) and (▶) to manually scroll displayed text left and right.
- Whenever you enter the Telephone Directory Mode, the name data you were looking at when you last left the Telephone Directory Mode appears on the display first.
- All data received from a Digital Diary (see "Magic Beam Data Mode") is displayed by this watch using upper-case characters only, regardless of whether the original data was upper-case or lower-case. Accented characters are displayed as shown in the "Display Characters".

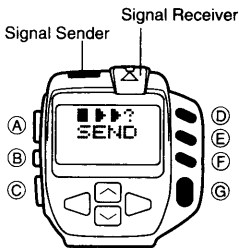
■ To edit Telephone Directory data items

1. In the Telephone Directory Mode, scroll through the data items and display the one you want to edit.
 - Use the name display to edit the name, the number display to edit the number, and the memo display to edit other information.
 - For details on the different displays, see "To recall Telephone Directory data".
2. Hold down (B) until the cursor appears on the display.
3. Use (◀) and (▶) to move the cursor to the character you want to change.
4. Change the character.
 - Use the procedures under "To input characters" to input characters.
5. After making the changes that you want, press (B) to store then and return to the Telephone Directory Mode display.

■ To delete Telephone Directory data

- In the Telephone Directory Mode, scroll through the data items and display the one you want to delete.
 - Use the name display if you want to delete the entire data item. Use the number display to delete the number only, the memo display to delete the other information only, or the portrait data display to delete portrait data only.
 - For details on the different displays, see "To recall Telephone Directory data".
- Hold down (B) until the cursor appears on the display.
 - With the name, number, and memo displays, the cursor appears under the first (far left) character. With the portrait data display, the message appears on the display.
- Hold down (F) until the watch emits a short beep, indicating that the item is deleted.
- At this time, the new data display appears, ready for input.
- Input data or press (B) to return to the Telephone Directory Mode display.

MAGIC BEAM DATA MODE



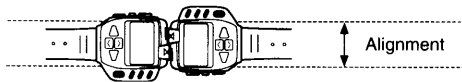
The Magic Beam Data Mode uses infrared light to exchange Telephone Directory data with another watch or with a CASIO Digital Diary.

- To enter the Magic Beam Data Mode, press (C) twice while in the Timekeeping Mode.
- To return to the Timekeeping Mode from the Magic Beam Data Mode, press any button and then press (C).
- If you do not operate any button for about 80 seconds while in the Magic Beam Data Mode, the watch automatically goes back to the Timekeeping Mode.

Important!

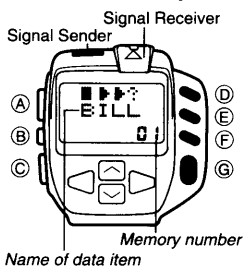
Two units being used for data exchange must be arranged as shown below.

Indoor fluorescent lighting (500 lux)



- Both units should be situated so that they are actually touching each other (you should remove the watch from your wrist) when performing a data exchange.
- The following conditions may make it difficult to exchange Telephone Directory data. Keep trying the data exchange operation until you are successful.
 - When exchanging Telephone Directory data that contains a large number of characters.
 - When the watch's body is very warm.

■ To send Telephone Directory data



- In the Magic Beam Data Mode, press (▲) or (▼) to scroll through the data items until the name display of the one you want to send appears.
 - Pressing (▲) scrolls forward through the data, while (▼) scrolls back.
 - The message DATA appears if there is no data stored in the Telephone Directory Mode. You must follow the procedures described under "To input new Telephone Directory data" to input data before you can use the Magic Beam Data Mode to send it.

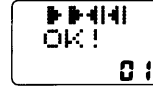
- The display of the watch can show only four characters at a time. When longer data is shown, it scrolls once automatically from right to left. The first and last characters of the text are separated by <. .
- You can also press (◀) and (▶) to manually scroll displayed text left and right.

Note that your partner must also set up the receiving unit to receive. If your partner is using another watch, use the procedure under "To receive Telephone Directory data". If your partner is using a CASIO Digital Diary, see the manual that comes with that unit for details on receiving data.

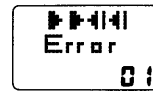
- After setting up this watch to send data and the receiving unit to receive, press (C) to start the data send operation.
- You can interrupt the send operation at any point by pressing (B).



This display appears while the send operation is in progress. The send operation takes up to 10 seconds to complete.



This display appears when the send operation is completed successfully. After a short while, the watch returns to the Magic Beam Data Mode display (SEND).



This display appears when an error occurs. The watch returns to the Magic Beam Data Mode display. See "Magic Beam Trouble Sources" for details on what to do when you have Magic Beam problems. After correcting the problem, try again.

■ To receive Telephone Directory data

- Press (C) twice while in the Timekeeping Mode to enter the Magic Beam Data Mode.
 - The watch is now ready to receive Telephone Directory data.

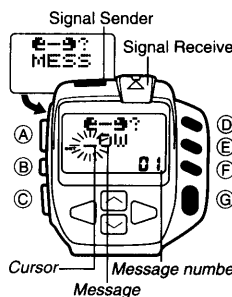
Note that your partner must also set up the sending unit to send. If your partner is using another watch, use the procedure under "To send Telephone Directory data". If your partner is using a CASIO Digital Diary, see the manual that comes with that unit for details on sending data.

- If the receive operation is completed successfully, the following messages appear.



- Only the name entry of received data can be displayed at this time. Other data (telephone number, memo) cannot be displayed.
 - The display of the watch can show only four characters at a time. When longer name data is received, it scrolls once automatically from right to left. The first and last characters of the text are separated by <. .
 - You can also press (◀) and (▶) to manually scroll the name left and right.
- Use (▲) and (▼) to change the confirmation message between 'YES' and 'NO'.
 - Select 'YES' if you want to store the data, or 'NO' if you do not want to store the data.
 - After selecting the confirmation message that you want, press (C) to store the data into memory (when 'YES' is selected) or to delete the data (when 'NO' is selected). Pressing (C) also returns to the Magic Beam Data Mode display.
 - After you store the data, you can view name, number, memo, and portrait data displays using the procedures described under "To recall Telephone Directory data".
 - The message FULL appears for about one second when you press (C) if there is not enough memory to store the received data. When this happens, use the procedures under "To delete Telephone Directory data" to delete data you no longer need in order to make room for new data.

MAGIC BEAM MESSAGE MODE



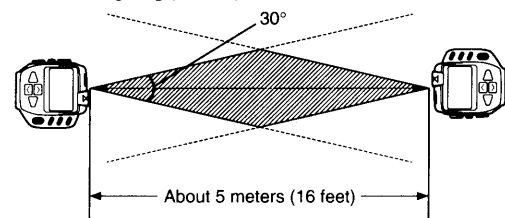
The Magic Beam Message Mode lets you exchange messages with another watch or with a CASIO Digital Diary using infrared light.

- To enter the Magic Beam Message Mode, press (C) three times while in the Timekeeping Mode.
- To return to the Timekeeping Mode from the Magic Beam Message Mode, press any button and then press (C).
- If you do not operate any button for about 80 seconds while in the Magic Beam Message Mode, the watch automatically goes back to the Timekeeping Mode.

Important!

Two units being used for message exchange must be arranged as shown below.

Indoor fluorescent lighting (500 lux)



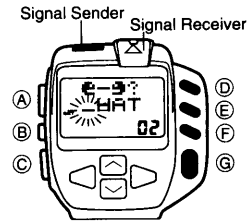
■ Preset Messages

The following table shows the preset messages that are available, along with their message numbers.

No.	Message
1	HOW ARE YOU?
2	WHAT ARE YOU DOING?
3	DO YOU WANT TO GET TOGETHER?
4	WHAT DO YOU WANT TO DO?
5	WHEN?
6	WHERE?
7	WHY?
8	ARE YOU READY?
9	SEE YOU LATER!
10	COOL!

- You can use the above messages as they are, or you can edit them and create your own messages. See "To create your own Magic Beam message" for details on creating your own message.

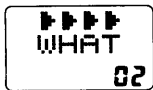
■ To send a message



- In the Magic Beam Message Mode, use **D** and **E** to scroll through the preset messages until the one you want to send is displayed.
 - D** scrolls forward, while **E** scrolls back.
- To send your own original message, use the procedures under "To create your own Magic Beam message" to create the messages and proceed with the following.

Note that your partner must also set up the receiving unit to receive. If your partner is using another watch, use the procedure under "To receive a message". If your partner is using a CASIO Digital Diary, see the manual that comes with that unit for details on receiving data.

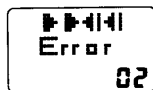
- After setting up this watch to send the messages and the receiving unit to receive, press **C** to start the message send operation.
 - You can interrupt the send operation at any point by pressing **B**.



The display nearby appears while the send operation is in progress. The send operation takes up to 10 seconds to complete.



This display appears when the send operation is completed successfully. After a short while, the watch returns to the display of the message you sent.



This display appears when an error occurs. After a short while, the watch returns to the display of the message you tried to send. See "Magic Beam Trouble Sources" for details on what to do when you have Magic Beam problems. After correcting the problem, try again.

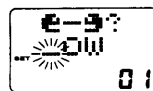
■ To receive a message

- Press **C** three times while in the Timekeeping Mode to enter the Magic Beam Message Mode.
 - The watch is now ready to receive a message.

Note that your partner must also set up the sending unit to send. If your partner is using another watch, use the procedure under "To send a message". If your partner is using a CASIO Digital Diary, see the manual that comes with that unit for details on sending data.



Message



- If the receive operation is completed successfully, the message shown nearby appears.
- The display of the watch can show only four characters at a time. When a longer message is received, it scrolls once automatically from right to left. The first and last characters of the text are separated by \leftarrow .
- After the message scrolls automatically, the display returns to show the message that was on the display in step 1, above. At this time, the cursor is located under the first character of the message (on the far left) so you can input your reply.
- You can make the received message reappear and scroll from right to left by pressing **B**.

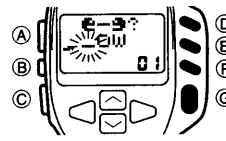
- You can press **◀** and **▶** to manually scroll the message left and right.

- All data received from a Digital Diary is displayed by this watch using upper-case characters only, regardless of whether the original data was upper-case or lower-case. Accented characters are displayed as shown in the "Display Characters".
- Use the procedure described under "To send a message" to input and send your reply.

■ To create your own Magic Beam message

Important!

You cannot store messages that you create in memory. As soon as you select another preset message or exit the Magic Beam Message Mode, the message that you input is cleared.



- Enter Magic Beam Message Mode.
- While any preset message is displayed, edit the text to create the message that you want.
 - Press **F** to clear the entire preset message that is on the display.
 - You can also partially change the text of a preset message to create a new one. Use **D** and **E** to scroll through the messages to find the one you want to use as a base.

- Use the procedures under "To input characters" to input the text of your messages.
 - You can input up to 28 characters for a message.
- Set up the receiving unit and then proceed from step 2 under "To send a message" to perform the send operation.

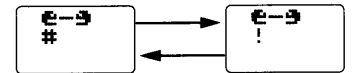
■ Using secret message codes

You and your friends can also use your own secret message codes to keep your messages private.

Example:

= "Are you free today?" • **!** = "Yes."

Code	Meaning
#	Are you free today?
!	Yes./OK!



A1E2E3E4E5E6 = "I want to meet you at the park today."
! = "OK!"

Code	1	2	3	4	5	6
A	I	can	play	me/my	house	today
E	You	want to	meet	you/your	at the park	tomorrow

MAGIC BEAM TROUBLE SOURCES

This section describes things that can cause problems when using Magic Beam.

- Note that the two units must be in the correct mode to exchange data. The following table shows the required mode for this watch. See the manual that comes with the unit you are exchanging data with for details on its required mode.

Data Type	Required Mode (Watch)
Telephone Directory	Magic Beam Data Mode
Messages	Magic Beam Message Mode
Game	Game Mode

- Magic Beam operations are impossible if the path between the two units is blocked.
- When the angle between the communicating units is greater than 30 degrees, the two units must be brought very close together.
- When communicating with a Digital Diary, make sure that the distance between the two units and the angle between them are as described in this manual (not in the manual of the Digital Diary).
- Communication may be impossible if the two units are too close to each other.
- Outdoors, near a window, or anywhere else lighting is very bright, communication may be impossible or may require that the two units be located close to each other.
- Under very bright fluorescent or incandescent indoor lighting, the two units may need to be located close to each other.
- Magic Beam operations between two units may be impossible if there are other units performing Magic Beam operations nearby.
- The watch cannot perform a Magic Beam send operation while text is scrolling on the display.
- No data is received if both units are sending data.
- Weak batteries may require that units be located closer together.
- You can exchange data with the following CASIO watch and Digital Diary models (as of January 1995).

Watch: JG-100C, JG-100D
 Digital Diary: JD-5500, JD-6000, JD-7000, JD-7000R

CHARACTER LISTS

This section contains tables that show all of the characters that can be handled by this watch.

Input Characters

The following tables show the characters that you can input in the Telephone Directory Mode and the Magic Beam Message Mode. Characters are divided into the groups shown below.

Alpha Characters

A	B	C	D	E	F	G	H	I	J
À	É	Ç	Ð	È	Ê	Ë	Ï	Î	Ï
K	L	M	N	O	P	Q	R	S	T
Ƙ	Ɩ	Ɯ	Ɲ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ	Ɔ
U	V	W	X	Y	Z				
Ù	Ú	Û	Ü	Ý	ÿ				

Numbers

0	1	2	3	4	5	6	7	8	9
0	1	2	3	4	5	6	7	8	9
-	.	/							
-	.	/							

Symbols

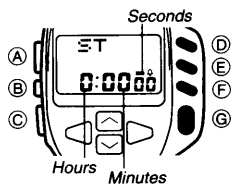
\$	→	←	+	x	!	*	#	\$	%
↔	→	←	÷	×	!	??	#	\$	%
&	'	()	*	+	,	:	:	<
&	'	()	*	+	,	:	:	<
>	?	@	.	¥	"	!	!	"	£
>	?	@	.	¥	"	!	!	"	£
~	~								
~	~								

Display Characters

In addition to the characters described above, the following characters can also be displayed when they are received from a CASIO Digital Diary.

Á/á	É/é	Í/í	Ó/ó	Ú/ú	À/à	Ö/ö	Ñ/ñ	Ä/ä	È/è
Š	Ž	ı	š	č	š	š	š	š	š
ı	Ö/ö	Ú/ú	Ç/ç	Ł/ł	Ž/ž	À/à	É/é	İ/ı	Ó/ó
ı	š	č	š	č	š	š	š	š	š
Ú/ú	Æ/æ	Œ/œ	Ó/ó	À/à	É/é	İ/ı	Ö/ö	Ú/ú	Ä/ä
č	ř	ř	š	š	š	š	š	š	š
Ú/ú	Ú/ú	À/à	É/é	Ç/ç	Ð/ð	Ñ/ñ	Ŕ/ř	Š/š	Ť/ť
č	š	š	š	š	š	š	š	š	š
Ä/ä	È/è	Ç/ç	Ñ/ñ	Š/š	Ý/ý	Ž/ž	Ž/ž	Ø/ø	ß
ŕ	ř	š	š	š	š	š	š	š	š
=									
=									

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 seconds.

- To enter the Stopwatch Mode, press (C) four times while in the Timekeeping Mode.

To measure elapsed time

- Press (A) to start the stopwatch.
- Press (A) to stop the stopwatch.
- Press (B) to clear the stopwatch to 0:00 00.

To measure cumulative elapsed time

- Press (A) to start the stopwatch.
- Press (A) to stop the stopwatch.
- Press (A) again to resume timing from the time shown on the display.
- You can repeat steps 2 and 3 as many times as you like.
- Press (B) to clear the stopwatch to 0:00 00.

To record split times



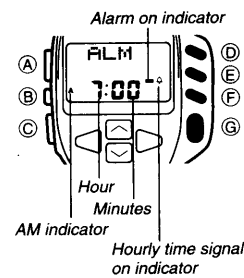
- Press (A) to start the stopwatch.
- Press (B) to display the timing up to that point. Stopwatch timing continues internally.
- Press (B) to clear the split time and to continue time measurement on the display.

- You can repeat steps 2 and 3 as many times as you want.
- Press (A) to stop time measurement.
- Press (B) to clear the stopwatch to 0:00 00.

To time first and second place finishers

- Press (A) to start the stopwatch.
- Press (B) when the first finisher crosses the line, and record the time.
- Press (A) 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 0:00 00.

ALARM MODE



When the Daily Alarm is switched on, the alarm sounds for 20 seconds at the preset time each day. Press any button to stop the alarm after it starts to sound.

When the Hourly Time Signal is switched on, the watch beeps every hour on the hour.

- To enter the Alarm Mode, press (C) five times while in the Timekeeping Mode.
- The alarm does not sound if you are in the Magic Beam Data Mode, the Magic Beam Message Mode, or the Game Mode when the alarm time is reached.

To set the alarm time

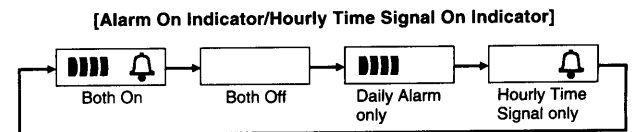
- Hold down (B) while in the Alarm Mode until the hour digits start to flash on the display. The hour digits flash because they are selected.
- This operation will switch the Daily Alarm on automatically.
- Press (A) or (B) to change the selection in the following sequence.



- Press (A) to increase the selected digits and (B) to decrease them. Holding down either button changes the selection 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 A or afternoon P.
- After you set the alarm time, press (B) to return to the Alarm Mode.

To switch an Alarm and Hourly Time Signal on and off

Press (A) while in the Alarm Mode to change the status of the Daily Alarm and Hourly Time Signal in the following sequence.



To test the alarm

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

GAME MODE



In the Game Mode, you can challenge the built-in computer or a friend who also has a JG-100C/D watch to the Tower Master Adventure Game or an exciting Magic Beam Battle Game.

- To enter the Game Mode, press (A) once while in the Timekeeping Mode.
- If you do not operate any button for a few minutes while in the Game Mode, the watch goes back to the Timekeeping Mode automatically.

■ To switch the game sound effects on and off

While in the Game Mode, press **(B)** to switch the game sound effects on and off.

- The watch beeps when you press **(B)** to switch sound effects on. No sound is produced when you press **(B)** to switch sound effects off.
- Game sound effects include a confirmation tone that sounds when you press a button and sound effects that sound during the games.
- Note that the daily alarm and hourly time signal still sound even if you switch the game sound effects off.

■ Types of games

This watch provides two types of games, a Tower Master Adventure Game and a Magic Beam Battle Game.

Tower Master Adventure Game: This is a role playing game that requires you to overcome a variety of opponents and battles. The object of the game is to take the Tower Master Orb from a demon named ZEX. Legend says that only a warrior of great honor and courage will be able to succeed.

You can play the Tower Master Adventure Game against the watch's built-in computer (1 Player), or you can use Magic Beam to play against a friend who also has a JG-100C/D watch (2 Player).

Magic Beam Battle Game: This exciting game lets you play against your friends using Magic Beam.

Important!

You can use Magic Beam to play only against friends who have a JG-100C/D watch.

■ To switch between games

1. Enter the Game Mode.
2. Use **(▲)** and **(▼)** to switch between games.



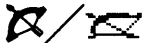
■ Weapons and Items

There are a number of weapons and items that are used when playing the games.

Weapons

Before fighting a battle, you must select one of three different weapons that are available.

Bow and Arrow



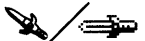
The short bow is easy to use. It is stronger than the whip, but weaker than the sword.

Whip

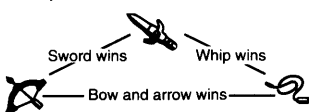


This is a long barb-tipped whip. It is stronger than the sword, but weaker than the bow and arrow.

Sword



This is a large and sharp sword. It is stronger than the bow and arrow, but weaker than the whip.



- This illustration shows the relative relationships between the various weapons. If both fighters use the same weapon, the battle ends in a draw.

Items

Items are used only during the 2-player Tower Master Adventure Game. Each item is available only on certain levels inside the tower.

Magic Salve



This item is available only when you are on levels 30 to 39. Applying this salve temporarily heals an injury. You can use this magic salve to change a defeat into a draw.

Power Wrist Band



This item is available only when you are on levels 40 to 49. Putting on this wrist band temporarily increases your strength. You can use this power wrist band to change a draw into a victory.

Important!

Note the following rules when using the items described above. Remember that the following rules apply to the 2-player Tower Master Adventure Game.

- You can possess only one item at a time.
- You can use only one item per round.
- The effect of an item is cancelled if your opponent uses the same item.
- The Power Wrist Band is more powerful than the Magic Salve. If your opponent uses the Magic Salve and you use the Power Wrist Band, you can still change a draw into a victory.
- When a battle in which an item is used ends in a draw, that item is no longer available to you.

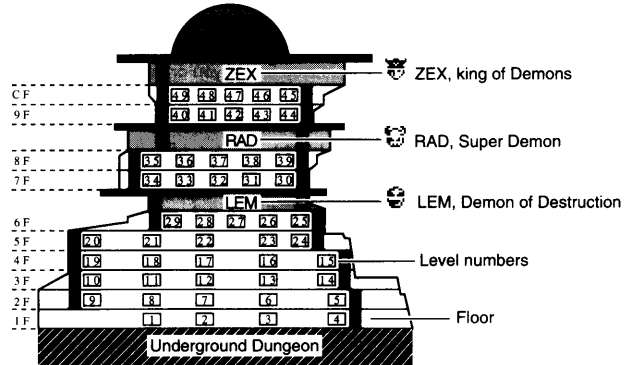
■ About the Tower Master Adventure Game...

Once upon a time, a great war was fought during a period known as the Seven Days of the Demons. Only a few humans survived the war. The super-powerful atomic weapons used during the war gave birth to mutants who made the Earth into a dire planet dominated by magic and violence.

But there was still hope. The world waited for a noble and courageous warrior with the power to defeat the demons and recover the Tower Master Orb, which will change the Earth back to a place of light and beauty. The task is now yours. It is up to you to climb to the top of the dreaded Devil's Tower to recover the Orb and become the hero of the entire world!

Tower Layout

Devil's Tower has 10 floors, divided between a lower level, a middle level, and an upper level. To advance from one floor to the next, you must advance through each level and then correctly open a trick gate. The middle level of the tower is guarded by a Demon of Destruction named LEM, while the upper level is the realm of a Super Demon named RAD. The Tower Master Orb is the possession of the King of Demons named ZEX, who lives at the top of Devil's Tower.



- You are on the first floor, third level when the Tower Master Adventure Game starts.

Scoring



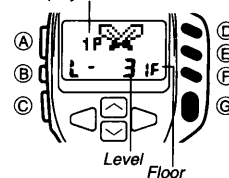
Hit points
Battle points

The winner and loser of the Tower Master Adventure Game are determined by hit points (HP) and battle points (BP). Each player specifies the number of battle points to be used in the battle and then selects a weapon. The battle is fought, and the total number of battle points specified by each player is deducted from the hit point total of the loser of the battle.

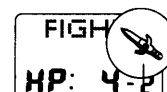
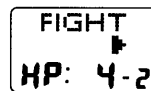
The first player whose hit point total is reduced to zero loses, and the round ends. All of this means that you must carefully decide how many battle points to use in each battle, while keeping track of the hit point total of your opponent.

■ To play the 1 player Tower Master Adventure Game

One-player indicator



Hit points
Battle points

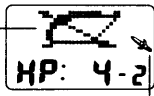


Indicates sword is selected

1. In the Game Mode, use **(▲)** or **(▼)** to display the 1P (one-player) Tower Master Adventure Game screen.
- The initial 1P Tower Master Adventure Game screen shows what floor you are on and your current level.
2. Press **(C)** to change to the battle point screen.
- This battle point screen shows your current hit point total and battle point specification.
3. Use **(▲)** (increase) and **(▼)** (decrease) to change the battle point specification.
- The minimum number of battle points you can specify is 1. The maximum number depends on the number of hit points you have left (up to 9).
4. After specifying the number of battle points you want to use, press **(C)**.

5. Use **(D)** (bow and arrow), **(E)** (whip), or **(F)** (sword) to select the weapon you want to use.
- An icon appears on the display to indicate the weapon that you select.

Opponent's weapon

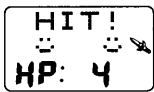


Your weapon

6. After selecting a weapon, press **(G)** to start the battle.

- Once the battle starts, the weapon selected by your opponent (the computer) appears on the display, followed by a screen that shows the result of the battle.

- The following shows the three possible screens that can appear to indicate the result of a battle.



Win



Lose



Draw

- If you win, the total number of battle points used (by you and your opponent) is deducted from your opponent's hit point total. If you lose, the battle points are deducted from your hit point total. No battle points are deducted if the battle ends in a draw. Note that your opponent's hit point total does not appear on the display, so you must keep track of them yourself.
 - After a few seconds, the battle point specification screen appears so you can specify the battle points you want to use for the next battle.
7. Repeat the above procedure from step 3 until you or the computer runs out of hit points to end the round.
- If the battle ends in a draw, proceed from step 5 (weapon selection) of this procedure.
 - If you win the round, the message **WIN LV+1** appears for a short while to indicate that you have been promoted to the next higher level, and then the initial 1P Tower Master Adventure Game screen appears. If you lose the round, the message **LOSS LV-1** appears to indicate that you have been demoted to the preceding level, followed by the initial 1P Tower Master Adventure Game screen.
 - The round and level where you end up is stored in memory.
8. After completing a round, proceed from step 2 above to start a new round.
- After passing certain levels, you will confront trick gates (123) or demons (LEM, RAD, ZEX). In these cases, the game advances to the trick gate screen or the demon battle screen instead of the Tower Master Adventure initial screen. For details on these screens, see "Opening a trick gate" and "Battling a demon".



- If your loss drops you down to Level 0, you are thrown into a dark dungeon under the tower. See "Getting out of the dungeon" for details on how to get out of the dungeon.
- You can terminate a battle at any time and return to the Timekeeping Mode by pressing **(A)**.

Opening a trick gate

Gate combination



Remaining time (seconds)

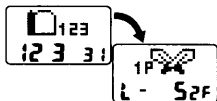
Changing numbers

When you come to a trick gate, a rapidly changing three-digit number appears on the display. You must stop the numbers so they form the correct combination that opens the gate. You get only a limited amount of time to come up with the right combination.

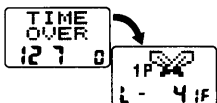
- When the trick gate screen appears, press **(G)**.
- At this time the three-digit number on the screen starts to change at high speed.

2. Use **(G)** to stop each digit one-by-one.

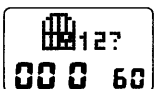
- If the digit you stop does not match the corresponding gate combination digit, the three digits start to change again at high speed. Keep using **(G)** again to stop them until you get all three to form the correct combination.



- If you come up with the correct combination, the gate opens and you are allowed to move up to the next floor. At that time you can start from step 2 under "To play the 1 player Tower Master Adventure Game" or "To play the 2 player Tower Master Adventure Game" to begin the next round.



- If the remaining time countdown reaches zero before you can come up with the correct combination, you return to the level immediately before the trick gate. There you must fight another round to get another try at the trick gate.



- The gate combination that appears on the display provides a hint of what the correct combination is. In some cases, one of the digits is replaced by **?**, which means that you must guess the correct number for this digit.

- You can quit the trick gate screen and return to the Timekeeping Mode at any time by pressing **(A)**. When you do, the watch stores your current level as the level you were at before you reached the trick gate.

Battling a demon

Weakness number

Demon hit point total



Changing numbers Remaining time (seconds)

When you fight against one of the demons who guard Devil's Tower, you must specify the battle points you want to use and then try to reduce the demon's hit points to zero. But before the battle can begin, you must first stop the changing number on the display so that it matches the demon's weakness number.

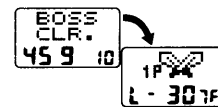
- When the demon screen appears, press **(G)**.
- At this time the two-digit number on the screen starts to change at high speed.
- Press **(G)** two times to stop each digit.



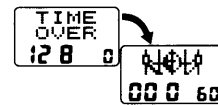
Battle point

- If the two-digit number does not match the weakness number, press **(G)** to make the 2-digit number change at high speed again. Keep trying until you get the two-digit number to match the weakness number.
- After you get the two-digit number to match the weakness number, the display changes to the battle point screen.

- Press **(G)**, and the battle point number starts to change at high speed.
- Press **(G)** to stop the battle point number, trying to make it stop at the highest value possible.
- The demon's hit point total is reduced by the battle point number that appears on the battle point screen.
- After the battle points are deducted, the two-digit changing number appears. Repeat the above procedure from step 1 (with a different weakness number). Repeat the procedure to match the weakness number and select your battle points again.

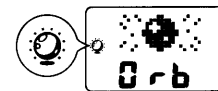


- If you are able to reduce the demon's hit point total to zero, you can advance to the next floor of the tower. There you can start from step 2 under "To play the 1 player Tower Master Adventure Game" or "To play the 2 player Tower Master Adventure Game" to begin the next round.



- If you are unable to defeat the demon within the time counting down on the display, you are thrown into a dark dungeon under the tower. See "Getting out of the dungeon" for details on how to get out of the dungeon.

- You can quit the demon battle screen and return to the Timekeeping Mode at any time by pressing **(A)**. But doing so causes you to be thrown into the dungeon the next time you play.
- As a general rule, a demon remains dead after being defeated. However, if you are defeated and drop down to Level 0 (entering the dungeon) or if you succeed in obtaining the Tower Master Orb, all of the demons come back to life.



- If you are able to defeat ZEX, you become the owner of the Tower Master Orb. While you own the Tower Master Orb, the orb symbol remains on the display in all modes.

Getting out of the dungeon

If a battle causes you to drop down to Level 0 or if you are defeated by one of the demons, you are thrown into a deep, dark dungeon below Devil's Tower. You cannot play any game while you are in the dungeon.

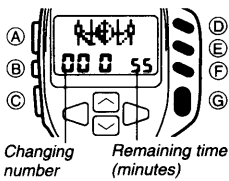
- When you get out of the dungeon after being defeated by a demon, you return to the first round on the level you were at before you fought against the demon.
- You are automatically released from the dungeon after serving a time of about 60 minutes. Note that you can also escape from the dungeon as described in "To select an escape route".
- The time of your sentence in the dungeon continues to be counted even if you press **(A)** to change to the Timekeeping Mode.

How to escape from the dungeon

The following procedure describes how you can shorten the amount of time left in your dungeon sentence. If you were thrown into the dungeon because you dropped down to Level 0, the following procedure can be used to shorten or to completely eliminate the time left in your dungeon sentence. If you were thrown into the dungeon by being defeated by a demon, you can only shorten your dungeon sentence.

- Some escape routes make it possible to reduce the amount of time you must spend in the dungeon. Others let you escape to various levels inside of the tower. Try different escape routes to find out which one is best.

To select an escape route



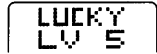
Changing number Remaining time (minutes)

- While the dungeon screen is shown, press **(G)**.
 - The three-digit number begins to change at high speed on the display.
 - No one knows which numbers open up escape routes. Use the following operation to try your luck.

- Press **(G)** three times to stop each digit one-by-one.
 - If the number is wrong, the numbers start changing again. Use **(G)** again to stop them one-by-one and form a different number.
 - If you find a number that opens up an escape route, one of the following screens appears.



Reduces remaining time by 10 minutes



Lets you return to Level 5

- To return to the Timekeeping Mode, press **(A)**.

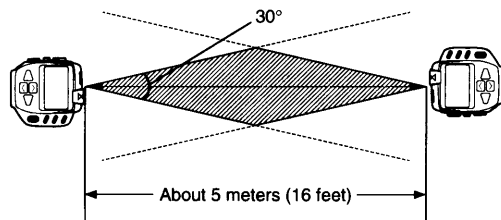
Using Magic Beam to play against a friend

When playing a game against a friend, you must establish contact between the two watches using Magic Beam.

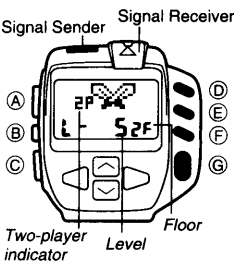
Important!

Two watches being used for game data exchange must be arranged as shown below.

Indoor fluorescent lighting (500 lux)



To play the 2 player Tower Master Adventure Game



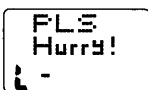
- In the Game Mode, use **(▲)** or **(▼)** to display the 2P (two-player) Tower Master Adventure Game screen.
 - The initial 2P Tower Master Adventure Game screen shows what floor you are on and your current level.
 - Your level and floor (and those of your friend) are the ones you achieved when playing against the computer.

- Press **(G)** to change to Magic Beam contact screen.

- If you do not perform any key operation within about 80 seconds after the Magic Beam contact screen appears, the watch automatically returns to the 2P (two-player) Tower Master Adventure Game screen.

- Decide between you and your friend who will go first to establish Magic Beam contact.

- It makes no difference who goes first.
- After correctly aligning the signal senders and receivers of the two watches, the person you chose to go first should press **(G)** to establish Magic Beam contact.
- The display of the watch whose **(G)** button was pressed shows the messages **SENDING** and **RECEIVING** as signals are exchanged to establish Magic Beam contact.
- After contact is established by the first watch, the message **FLS Hurry!** (Please hurry) appears on the display of the second watch.

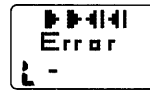
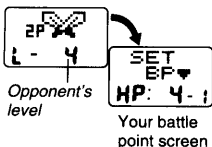


- While the **FLS Hurry!** message is displayed, the person you chose to go second should press **(G)** to establish Magic Beam contact.

- The display of the second watch shows the message **SENDING** as signals are exchanged to establish Magic Beam contact.

- After the watches successfully establish Magic Beam contact, the display changes to show your opponent's level and then your battle point screen.

- The battle point screen shows your current hit point total and battle point specification.



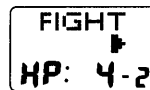
- If the two watches are unable to successfully establish Magic Beam contact, an error message appears for a few seconds. The display of the player who went first to establish contact then returns to the Magic Beam contact screen. The display of the player who went second changes to the **FLS Hurry!** message. Check "Magic Beam Trouble Sources" and try again.



- Use **(▲)** (increase) and **(▼)** (decrease) to change the battle point specification.
- The minimum number of battle points you can specify is 1. The maximum number depends on the number of hit points you have left (up to 9).



- If your level is high enough, there may be an item (Magic Salve or Power Wrist Band) available to you. If you want to use an item during the battle, use **(◀)** (Magic Salve) or **(▶)** (Power Wrist Band) to select it. The display icon for the item disappears when you use it in a battle. See "Items" for details on using items.

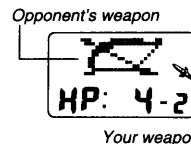


- After specifying the number of battle points you want to use, press **(G)**.



Indicates sword is selected

- Use **(D)** (bow and arrow), **(E)** (whip), or **(F)** (sword) to select the weapon you want to use.
 - An icon appears on the display to indicate the weapon that you select.



- After selecting a weapon, align the signal senders and signal receivers of the two watches and press **(G)** to start the battle.

- Both players must press **(G)** to start the battle. After one player presses **(G)**, the message **FLS Hurry!** appears on the other player's watch.
- Once the battle starts, the weapon selected by your opponent appears on the display, followed by a screen that shows the result of the battle.

- The following shows the three possible screens that can appear to indicate the result of a battle.



Win



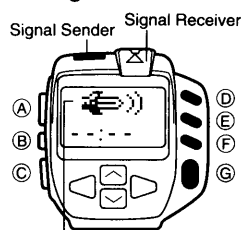
Lose



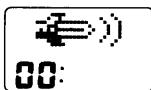
Draw

- If you win, the total number of battle points used (by you and your opponent) is deducted from your opponent's hit point total. If you lose, the battle points are deducted from your hit point total. No battle points are deducted if the battle ends in a draw. Note that your opponent's hit point total does not appear on the display, so you must keep track of it yourself.
 - After a few seconds, the battle point screen appears so you can specify the battle points you want to use for the next battle.
- Repeat the above procedure from step 7 until you or your opponent runs out of hit points to end the round.
 - If the battle ends in a draw, proceed from step 9 (weapon selection) of this procedure.
 - If you win the round you are promoted, and if you lose the round you are demoted. The size of your promotion or demotion depends on the current level of your opponent.
 - When you win a round, the message **WIN** appears on the display for a short while, and then the initial 2P Tower Master Adventure Game screen appears. If you lose the round, the message **LOSE** appears, followed by the initial 2P Tower Master Adventure Game screen.
 - The round and level where you end up is stored in memory.
 - You can terminate a battle at any time and return to the Timekeeping Mode by pressing **(A)**.
 - You must open trick gates and battle demons just as you do in the 1 Player game. No Magic Beam communication is necessary when opening trick gates and battling demons, so the watches do not have to be pointed at each other.

■ Magic Beam Battle Game



Magic Beam Battle Game indicator



1. In the Game Mode, use ▲ or ▼ to display the Magic Beam Battle Game screen.

2. Press Ⓞ to change to Magic Beam contact screen.

• If you do not perform the key operation within about 80 seconds after the Magic Beam contact screen appears, the watch automatically returns to the Magic Beam Battle Game screen.

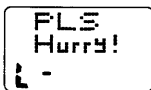
3. Decide between you and your friend who will go first to establish Magic Beam contact.

• It makes no difference who goes first.

4. After correctly aligning the signal senders and receivers of the two watches, the person you chose to go first should press Ⓞ to establish Magic Beam contact.

• The display of the watch whose Ⓞ button was pressed shows the messages SENDING and RECEIVING as signals are exchanged to establish Magic Beam contact.

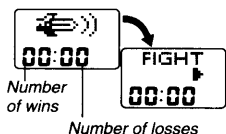
• After contact is established by the first watch, the message PLS Hurry! (Please hurry) appears on the display of the second watch.



5. While the PLS Hurry! message is displayed, the person you chose to go second should press Ⓞ to establish Magic Beam contact.

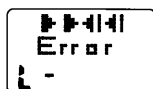
• The display of the second watch shows the message SENDING as signals are exchanged to establish Magic Beam contact.

6. After the watches successfully establish Magic Beam contact, the display changes to show you number of wins and losses and then the battle screen.



Number of wins

Number of losses



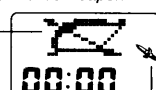
• If the two watches are unable to successfully establish Magic Beam contact, an error message appears for a few seconds.

The display of the player who went first to establish contact then returns to the Magic Beam contact screen. The display of the player who went second changes to the PLS Hurry! message. Check "Magic Beam Trouble Sources" and try again.



Indicates sword is selected

Opponent's weapon



Your weapon

7. Use Ⓞ (bow and arrow), Ⓞ (whip), or Ⓞ (sword) to select the weapon you want to use.

• An icon appears on the display to indicate the weapon that you select.

8. After selecting a weapon, align the signal senders and signal receivers of the two watches and press Ⓞ to start the battle.

• Both players must press Ⓞ to start the battle. After one player presses Ⓞ, the message PLS Hurry! appears on the other player's watch.

• Once the battle starts, the weapon selected by your opponent appears on the display, followed by a screen that shows the result of the battle.

• The following shows the three possible screens that can appear to indicate the result of a battle.



Win



Lose



Draw

• If you win, your total number of wins increases, and if you lose your total number of losses increases. Nothing increases if the battle ends in a draw.

9. To fight another battle, repeat the above procedure from step 7.

• You can terminate a battle at any time and return to the Timekeeping Mode by pressing Ⓞ.

REPLACING THE BATTERY

If characters on the display become dim, if the alarm fails to sound, or if Magic Beam does not work properly, it probably means that battery power is low. Replace the battery as soon as possible after you notice any of these symptoms.

Important!

- Be sure to ask an adult or older family member to replace the battery for you.
- Touching the inside of the watch except as required when replacing the battery can cause serious damage.
- Note that a dead battery and battery replacement will cause Telephone Directory data, game data, the current time setting, and the current alarm setting to be cleared. Before replacing the battery, be sure to write down your Telephone Directory data somewhere. A Telephone Directory Memo is provided at the back of this manual.

■ About the battery

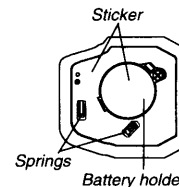
The watch is powered by a single CR2032 lithium battery. Be sure to replace the battery only with a CR2032 battery. Other battery types can cause malfunction or damage to your watch.

• The battery that comes installed in this watch when you purchase it is for factory test purposes, so the battery will probably not provide normal service life.

Keep batteries out of the reach of small children. If swallowed, consult with a physician immediately.

■ Important battery replacement precautions!

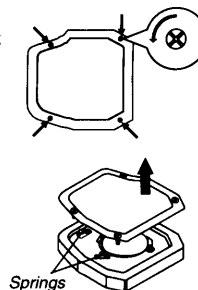
- Be sure you are sitting at a desk or table when replacing the battery.
- Take care to avoid injuring your fingers on the watch's battery holder, springs, or back cover.
- Take care that you do not bend, break, or otherwise damage the springs while they are raised. If a spring becomes damaged, take the watch to an authorized CASIO distributor or service center.
- Note that any repairs required for malfunction or damage caused as a result of battery replacement will be charged, even if the watch is still within its warranty period.
- Never remove the sticker on the inside of the watch.
- Never attempt to take the watch apart, except as required to replace the battery.
- Take care that there is no water, dust, or other foreign objects in the watch when closing the back cover. Such objects can interfere with the moisture resistance of the watch and cause malfunction.
- If you have any trouble replacing batteries, consult with an authorized CASIO distributor or service center.
- Make sure that the plus (+) and minus (-) sides of the battery are facing properly when you insert it into the watch.
- Remove a dead or weak battery from the watch as soon as possible.
- Never expose batteries to direct flame, short them, take them apart, or attempt to modify them in any way.
- If you discover that a battery has leaked inside the watch, take care that none of the battery fluid gets on your skin. Remove the battery as soon as possible and clean the inside of the watch by wiping it. Consult with an authorized CASIO distributor or service center as soon as possible.
- Store batteries in a cool, dry place. Avoid direct sunlight.



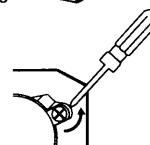
■ How to replace the battery

Use the (+) screw driver that comes with the watch to loosen the four screws that hold the back cover of the watch in place, and remove the back cover.

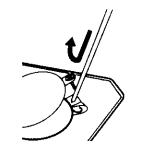
- Be careful that you do not damage the heads of the screws as you loosen them.
- The screws cannot be removed from the back cover. Do not try to pull them out.
- Take care that you do not injure yourself or damage the watch while the springs are raised.
- The numbering of the following procedure matches the numbering of the instructions on the sticker inside the watch.



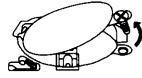
1. Pressing down on the battery holder, loosen its screw.
- Do not try to completely remove the screw from the battery holder.



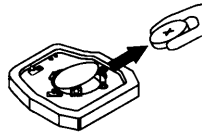
2. Insert a thin, pointer object into the slot next to the battery holder screw hole, and lift the battery up.



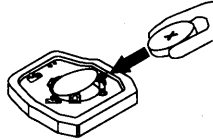
- Do not try to raise the battery holder too much. Rough handling of the battery holder can damage it.



- Remove the old battery from the watch.
 - Take care to avoid damage to your fingers from the battery holder.

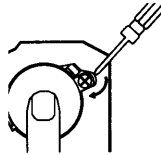


- Wipe off the surfaces of a new battery with a soft, dry cloth, and insert the battery into the watch.
 - Insert the battery sideways underneath the battery holder as shown in the illustration nearby.

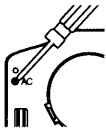


- Do not grasp the top and bottom surfaces of the battery at the same time with your fingers, metal tweezers, etc. Doing so will short the battery.
- Insert the battery into the watch with its plus (+) side facing up (so you can see it).

- Pressing down on the battery holder, tighten its screw.

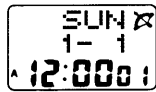


- Use a thin, pointed object to hold down the reset (AC) button in the upper left corner of the watch's interior for about two seconds.



- Check to make sure that the digital display of the watch shows **12:00**.

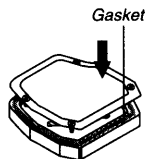
- If **12:00** is not shown on the display, repeat step 6.



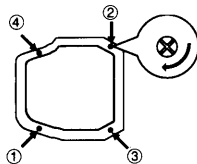
- Hold down the reset (AC) button again for about two seconds.

Replace the back cover, and tighten the four screws with the screwdriver.

- Make sure that the watch's rubber gasket sits correctly in the groove provided.



- Lightly tighten the screws at first in the sequence noted in the illustration nearby. Then fully tighten the screws using the same sequence.



- After tightening the screws, double check to make sure that the cover and all the screws look normal and are not sticking up anywhere.



SORT TABLE

1	↗	16	*	31	9	46	H
2	→	17	+	32	:	47	I
3	←	18	⋄	33	;	48	J
4	÷	19	-	34	<	49	K
5	×	20	.	35	=	50	L
6	Space	21	/	36	>	51	M
7	!	22	0	37	?	52	N
8	”	23	1	38	⊗	53	O
9	#	24	2	39	⊕	54	P
10	\$	25	3	40	⊖	55	Q
11	%	26	4	41	⊗	56	R
12	&	27	5	42	⊕	57	S
13	'	28	6	43	⊖	58	T
14	(	29	7	44	⊕	59	U
15	)	30	8	45	⊖	60	V

61	W	77	8	93	8	109	8
62	X	78	9	94	9	110	9
63	Y	79	0	95	0	111	0
64	Z	80	1	96	1	112	1
65	”	81	2	97	2	113	2
66	”	82	3	98	3	114	3
67	”	83	4	99	4	115	4
68	i	84	5	100	5	116	5
69	6	85	6	101	6	117	6
70	7	86	7	102	7	118	7
71	8	87	8	103	8	119	8
72	9	88	9	104	9	120	9
73	0	89	0	105	0	121	0
74	1	90	1	106	1	122	1
75	2	91	2	107	2	123	2
76	3	92	3	108	3		