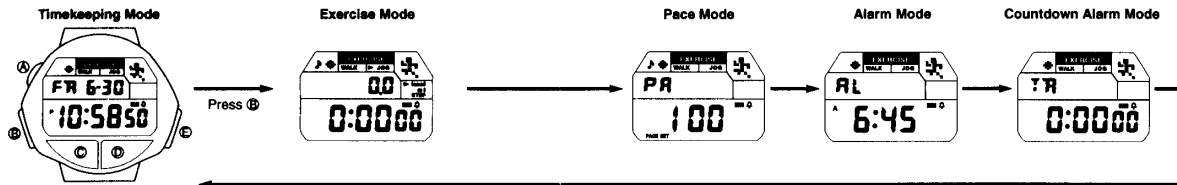


2. OPERATION CHART: QW-1613

GENERAL GUIDE

- Press **Ⓜ** to change from mode to mode. Each mode is explained in detail on the following pages.

- In any mode, press **Ⓜ** to illuminate the display for about two seconds. The watch can be set so that the backlight flashes whenever an alarm sounds.



TIMEKEEPING FUNCTION

- In the Timekeeping Mode, press **Ⓜ** to switch between the 12-hour and 24-hour formats.
- This watch is equipped with a backlight that can be set to flash whenever an alarm sounds. For details, see "About the backlight".

To set the digital time and date

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

Seconds	Hour	Minutes	Year
Day of week	Date	Month	
- The year is not displayed in the normal Timekeeping Mode display. It appears for setting purposes only.

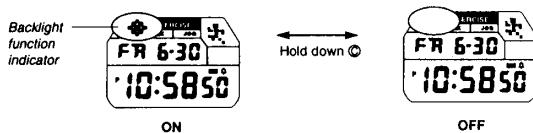
- While the seconds digits are selected (flashing), press **Ⓜ** to reset the seconds to "00". If you press **Ⓜ** while the seconds count is in the range of 30 to 59, the seconds are reset to "00" and 1 is added to the minutes. If the seconds count is in the range of 00 to 29, the minutes count is unchanged.
- While any other digits (besides seconds) are selected (flashing), press **Ⓜ** to increase the number. While the day of the week is selected, pressing **Ⓜ** advances to the next day. Holding down **Ⓜ** changes the current selection at high speed.
 - The date can be set within the range of January 1, 1990 to December 31, 2029.
- After you set the time and date, press **Ⓜ** 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.

About the backlight

- When you switch the backlight function on, the backlight of the watch flashes whenever an alarm is sounding.
- The backlight of this watch employs an electro-luminescent (EL) light, which loses its illuminating power after very long term use.

To switch the backlight function on and off

In the Timekeeping Mode, hold down **Ⓜ** for a second to switch the backlight function on and off.



- The backlight function indicator remains on the display in all modes.
- Pressing **Ⓜ** at any time illuminates the display for about two seconds, regardless of the backlight's on/off setting.
- The watch emits an audible sound whenever the display is illuminated. This is caused because the EL light vibrates slightly when lit. It does not indicate malfunction of the watch.

EXERCISE FUNCTION

Once you have set your basic data (pace, stride, age, weight), Exercise Mode measures calorie consumption, distance covered, number of steps and exercising time by walking or jogging to the pacer signals.

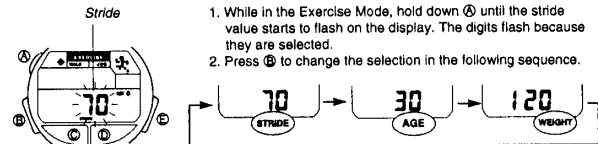
Important !

- The number of calorie consumption, distance covered and number of steps during exercise are calculated according to basic data that you must set. Be sure that you preset your basic data before using the Exercise Mode.
- Your body constantly consumes calories, even when you are sitting down and doing nothing (basic calorie consumption). It consumes more calories when you exercise or otherwise exert yourself (additional calorie consumption). Your total calorie consumption is the total of your basic calorie consumption plus the additional calorie consumption. The calorie consumption value displayed by this watch represents your total calorie consumption. It is calculated based on the normal caloric needs of a male. To convert the displayed value to that for a female, reduce it by about 5% (multiply it by .95).
- The number of calories consumed for a given amount of exercise differs from individual-to-individual (because of differences in levels of fitness, etc.) This watch calculates its values based on general trends, and so the data it produces should be regarded as a reasonably facsimile only.
- Be sure to consult with a physician before embarking on a program of strenuous physical activity.

To input basic data (except your pace)

Notes

- Set your data as accurately as possible to ensure accurate calculation.
- You cannot set basic data while a measurement operation is being performed in the Exercise Mode or while there are measurement values on the display. Press **Ⓜ** to stop the operation and then press **Ⓜ** to clear measurement values from the display before trying to set basic data.



- While in the Exercise Mode, hold down **Ⓜ** until the stride value starts to flash on the display. The digits flash because they are selected.
- Press **Ⓜ** to change the selection in the following sequence.

STRIDE	AGE	WEIGHT
--------	-----	--------
- While any item (Stride, Age, Weight) is selected (flashing), press **Ⓜ** to increase the value or **Ⓜ** to decrease it. Holding down either button changes the current selection at high speed.
- After you input your basic data, press **Ⓜ** to return to the Exercise Mode.
 - Stride is settable from 16 to 76 inches, in units of 2 inches.
 - Age is settable from 13 to 19 years, in units of one year, and from 20 to 70 years, in units of 10 years (display shows 20-, 30-, 70-).
 - Weight is settable from 90 to 318 pounds, in units of two pounds.
- This display automatically returns to the initial Exercise Mode display if no button is operated for a few minutes.

To calculate your stride

You can calculate your stride by walking or jogging a predetermined distance in feet. Then you should divide the distance covered by the number of steps it took, and then multiply by 12 (to convert to inches). After calculating how long your stride is, input a value for walking (WALK) or jogging (JOG).

To calculate your walking stride

Walk 95 feet and divide 95 by the number of steps it took. Multiply by 12 to convert to inches.

To calculate your jogging stride

Jog 1000 feet and divide 1000 by the number of steps it took. Multiply by 12 to convert to inches.

Example: After taking 239 steps to jog 1000 feet.

$1000/239 \times 12 = 50.2$ inches.

Input 50 inches as your jogging stride.

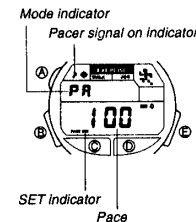
About the pacer signal

While in the Pace Mode, press **Ⓜ** to switch the pacer signal on and off. When pacer signal is switched on, a pacer tone sounds at the pace noted on the display whenever the watch is in the Pace Mode.

The pacer signal also sounds for the first 30 seconds of each minute during an Exercise Mode measurement operation. The pacer signal stops sounding in the Exercise Mode whenever a measurement exceeds one hour.

- The indicator "P" is shown on the Pace Mode and Exercise Mode displays while the pacer signal is switched on.
- During an Exercise Mode measurement operation, you can press **Ⓜ** to switch to the Pace Mode and then press **Ⓜ** to switch the pacer signal on and off.

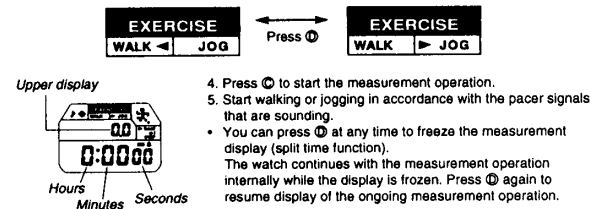
To set your pace



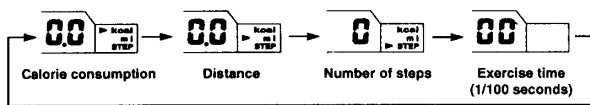
- While in the Pace Mode, press **Ⓜ** to switch the pacer signal on.
- Change the speed of the pacer signal to match the pace you want to keep.
- Press **Ⓜ** to speed up the pace, and **Ⓜ** to slow it down.
- You can set a pacer signal in the range of 100 to 200 times per minute, in units of five.
- You can change the current pace setting only while the "SET" indicator is shown on the Pace Mode display. If you find that you cannot change the pace setting, go into the Exercise Mode and clear the display by pressing **Ⓜ**. This should make it possible to change the pacer setting in the Pace Mode.

To use the Exercise Function

1. While in the Pace Mode, press **(A)** to switch the pacer signal on.
2. Press **(C)** to enter the Exercise Mode.
3. Press **(D)** to select WALK (walking) or JOG (jogging).
- If measurement results appear on the display, press **(C)** to clear them.



4. Press **(C)** to start the measurement operation.
 5. Start walking or jogging in accordance with the pacer signals that are sounding.
 - You can press **(C)** at any time to freeze the measurement display (split time function). The watch continues with the measurement operation internally while the display is frozen. Press **(C)** again to resume display of the ongoing measurement operation.
- After you press **(C)** to freeze the measurement display, the value in the upper display shows the 1/100 second count for the time.
 - 6. After you finish your exercise, press **(C)** to stop the measurement operation.
 - You can press **(C)** while the measurement operation is ongoing, while the display is frozen, or after the measurement operation is stopped to successively change the upper display to show calories consumed, distance, and number of steps taken.



- Press **(C)** to clear measurement values from the display.

Important !

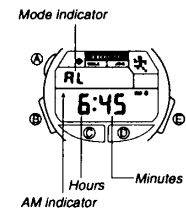
- Make sure that you start the Exercise Mode measurement operation and you exercise at the same time. You should also stop the measurement operation as soon as you stop exercising. Besides helping to make sure that your measurement data is accurate, this also helps to prolong the life of the battery that powers the watch.

Measurement Ranges

The following shows the maximum for each of the values produced in the Exercise Mode. In each case, the value reverts to zero after the maximum is reached.

Measurement	Maximum
Calorie Consumption	9999.9
Distance	99.9
Number of Steps	99999
Exercise Time	23 hours, 59 minutes, 59.99 seconds

ALARM FUNCTION

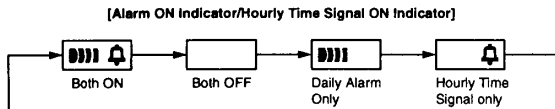


When the Daily Alarm is switched on, the alarm sounds for 20 seconds at the preset time each day. Press any button to stop the alarm after it starts to sound.
 When the Hourly Time Signal is switched on, the watch beeps every hour on the hour.

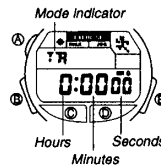
To set the alarm time

1. Hold down **(A)** 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.
2. Press **(D)** to change the selection in the following sequence.
3. Press **(D)** to increase the selected digits. Holding down **(D)** increases 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).
4. After you set the alarm time, press **(A)** to return to the Alarm Mode.

To switch the Daily Alarm and Hourly Time Signal on and off
 Press **(C)** while in the Alarm Mode to change the status of the Daily Alarm and Hourly Time Signal in the following sequence.



COUNTDOWN ALARM FUNCTION



The countdown timer can be set within a range of 1 minutes to 24 hours. When the countdown reaches zero, an alarm sounds for 10 seconds or until you press any button. Note that you can also select auto repeat timing that automatically restarts the countdown from the original value you set whenever zero is reached. This continues until you manually stop the countdown.

To set the countdown time

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

3. Press **(D)** to increase the selection. Holding down **(D)** increases the selection at high speed.
 - To set the starting value of the countdown time to 24 hours, set "0:00".
4. After you set the countdown time, press **(A)** to return to the Countdown Alarm Mode.

To use the countdown timer

1. Press **(C)** while in the Countdown Alarm Mode to start the countdown timer.
2. Press **(C)** again to stop the countdown timer.
 - You can continue countdown timer operation by pressing **(C)**.
3. Stop the timer and then press **(D)** to reset the countdown time to its starting value.
 - When the end of the countdown is reached and auto repeat timing is off, the alarm sounds for 10 seconds or until you stop the alarm by pressing any button. Countdown timing stops, and the countdown time is automatically reset to its starting value after the alarm stops.

To switch auto repeat timing on and off

1. Hold down **(A)** while in the Countdown Alarm Mode until the hour digit starts to flash on the display. The hour digit flashes because it is selected.
2. Press **(C)** to switch auto repeat on and off.
3. Press **(A)** to return to the Countdown Alarm Mode.
 - The "AUTO" indicator is shown on the display while auto repeat is on.
- Whenever the countdown reaches zero while auto repeat is on, the alarm sounds and the countdown is restarted from the original countdown time. You can stop the countdown operation by pressing **(C)**, and manually reset the countdown time to its original value by pressing **(D)**.