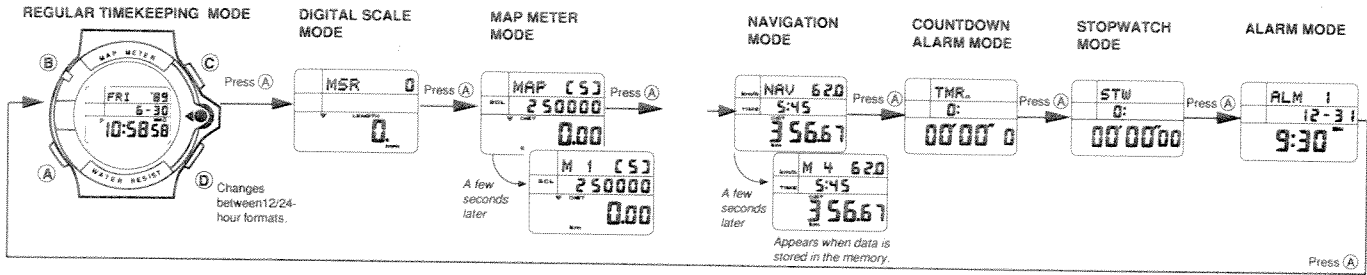


# Module No. 693

## READING THE DISPLAY

Press (A) for an outline of all functions. Each function is explained on the following.



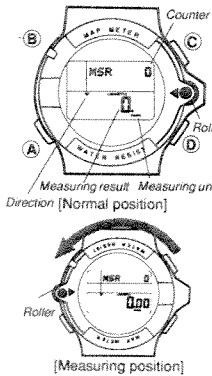
## SETTING TIME AND DATE



- 1) Press (B) in the time display to set the correct time.
  - 2) Press (D) on a time signal to correct seconds.
  - 3) Press (A) to shift flashing digit(s). Digit(s) to be changed will flash.
- 
- 4) Each press of (C) or (D) changes the digit. Hold down for rapid advance.
  - 5) Press (B) to complete setting.

Display automatically returns to the time display if left unused for a few minutes.

## USING DIGITAL SCALE MODE

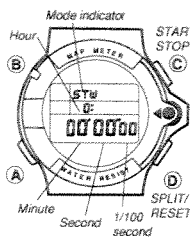


Length can be measured by tracing the roller over objects.

- 1) Press (A) in the REGULAR TIMEKEEPING MODE to enter the DIGITAL SCALE MODE.
- 2) Press (D) to select the measurement unit. The unit will advance in the following order: mm, cm, meter, inches, and feet-inches.
- 3) Hold down (C) to select the measurement direction. The direction will be indicated by  $\blacktriangle$  or  $\blacktriangledown$ .
- 4) To measure the length, turn the roller 180° counterclockwise so that the roller is in the measuring position. Make sure the roller is turned until it is locked firmly.
- 5) Press (C) and the  $\blacktriangle$  or  $\blacktriangledown$  mark blinks indicating that the watch is ready to measure length.
- 6) Place the roller on the surface to be measured and trace slowly. The measured length is shown at the upper right of the display. The length will be measured first in millimeters, then converted to the selected unit at the bottom of the display.
- 7) Press (C) to complete the measurement. (the  $\blacktriangle$  or  $\blacktriangledown$  mark will stop blinking.)
  - Press (D) to convert to a different unit.
  - Press (B) to clear the measuring result.

- If the roller is moved in the reverse direction, length measurement will be a minus value.
- Always press (B) to clear the display and prevent a previously measured value from being added to a new measurement.
- The measurement range is from 0mm — 9.99m and 0 inch — 32 feet, 9 inches (from 0 — 9999 counts). When measurement exceeds this range, the count will restart from 0.

## USING STOPWATCH



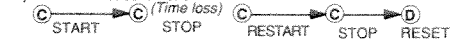
A signal confirms start/stop and split/reset operation.

### Working range

Total elapsed time display is limited to 99 hours 59 minutes 59.99 seconds.

Thereafter it will be automatically reset and started again.

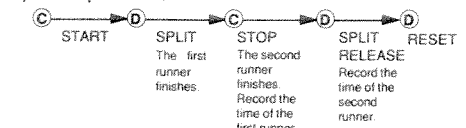
### a) Net time measurement



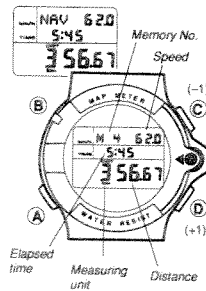
### b) Split time measurement



### c) 1st-2nd place times



## USING NAVIGATION MODE



This mode is convenient for planning activities such as a drive.

The required time and speed can be calculated from distance data obtained from the Map Meter function. The Navigation countdown alarm function can also be used while driving to calculate the remaining time.

- 1) Press (A) at the REGULAR TIMEKEEPING MODE three times to enter the NAVIGATION MODE.
- 2) Press (D) to recall the distance data previously stored in the MAP METER MODE. Hold down for rapid movement.
- 3) Press (B) to input the available time or target speed per hour. ("—" displays).
- 4) Press (A) to shift flashing position.



- 5) Each press of (C) (-1) or (D) (+1) changes the digit. The digit to be changed will flash. Hold down for rapid movement.
- 6) Press (B) to complete setting. The desired data (the required speed or time) will be calculated on the display.

- The total of all data will be displayed on the final memory display screen. Distance and required time are the total of all data; speed is the average speed for all data.
- Should one of the units of memory calculation differ, the speed and distance cannot be totaled. In this case, E (error) will be displayed.

### Navigation Countdown Alarm Function

The time data stored can be used as a starting value for counting down the preset time.

- 1) If normal operation of the NAVIGATION MODE is completed, press (C) to start the Navigation countdown. When the display reaches zero, the buzzer will sound for 10 seconds unless any button is pressed. The watch continues counting until (C) is pressed.
- 2) Press (C) to start or stop.
- The Navigation timer will use only one record (of the Navigation mode memories) at a time.

### Erasing the stored data

- 1) Press (D) in the NAVIGATION MODE to recall stored data.
- 2) Press (B) and the bar of the hour digit will blink.
- 3) Press (C) and (D) simultaneously to clear the stored data. The "CLR" will appear on the display.

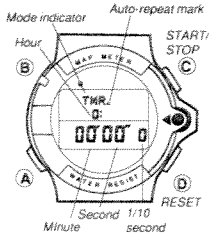
### PRECAUTIONS

1. Measure the length while holding the bezel with your finger.
2. Carefully trace the map at a speed of approx. 10 cm per second or slower.
3. The roller must contact the surface of the paper to ensure accurate measurement.
4. Be aware that some spoor may remain on the map surface after the roller moves. So, pressing the roller forcibly against the map may damage the paper surface.
5. If the roller contacts salt water, rinse it with normal water.
6. Should foreign matter enter the roller mechanism, consult a Casio Service Center.
7. Set the roller at normal position when it is not in use.
8. If the alarm or timer buzzer sounds while the watch is ready for measurement, the measurement is automatically switched to OFF.

### NOTE:

Sensor accuracy: Within 1mm of measurement (Skid, mishandling and other errors are ignored.)

## USING COUNTDOWN ALARM



The countdown alarm can be set from one second to 100 hours (display shows 0.00'00'0), and times to an accuracy of 1/10 second. Start/Stop operation is possible by pressing (C), and is confirmed by a signal. When the display reaches zero, the buzzer will sound for 10 seconds unless any button is pressed.

### Repeat function

When the display reaches zero, the pre-entered time will be recalled automatically.

### Auto-repeat function

When the display reaches zero, the pre-entered time will be recalled and started again.

### Pre-entering countdown alarm time

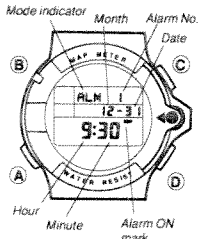
- 1) Press (B) to set new countdown alarm time.
- 2) Press (A) to shift flashing position. The digit(s) to be changed will flash.
- 3) Each press of (C) or (D) corrects flashing digits one by one. Hold down for rapid movement.
- 4) Press (D) to change between AUTO REPEAT(AUT A) and REPEAT(—).



- 5) Press (B) to complete setting.

Display automatically returns to initial countdown alarm mode if left unused for a few minutes.

## FIVE MULTI-FUNCTION ALARM



Five alarms can be set independently. Each alarm can be used in 4 different ways. Daily alarm, Monthly alarm, Daily alarm for a month or Date alarm. The alarm buzzer sounds for 20 seconds at the preset time. To stop the buzzer, press any button. When the time signal is ON, the watch chimes every hour on the hour.

### Presetting alarm times

- 1) Press (D) in the alarm mode to select an Alarm No.
- 2) Press (B) to set new alarm time.
- 3) Press (A) to shift flashing position. The digit(s) to be changed will flash.
- 4) Each press of (C) or (D) corrects flashing digits one by one. Hold down for rapid movement.
- 5) Press (B) to complete setting.

### Sound demonstration

Press and hold (D) in each alarm mode to sound the buzzer.

### 4 TYPES OF ALARMS

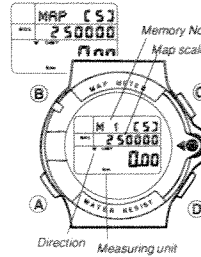
Daily alarm		Month and date not set	Beeper sounds at preset time every day
Monthly alarm		Only date set	Beeper sounds on preset date and time once every month
1 month alarm		Only month set	Beeper sounds at preset time every day during the set month
Date alarm		Month and date set	Beeper sounds at preset time, month and date

### ON/OFF SETTING OF ALARM AND TIME SIGNAL

Press (C) in each alarm number (AL1 to AL5) to set alarm on (ON) or off (no mark). Press (C) in time signal to set time signal on (ON) or off (no mark).

\*Pressing (B) in alarm mode automatically sets alarm on.

## USING MAPMETER MODE



In the MAP METER MODE, actual distances can be measured on maps using a variety of scales. Up to 10 measured values can be stored in the memory, and those can be used in the NAVIGATION MODE described on Page 11.

### Measuring distance on the map

- 1) Press (A) twice in the REGULAR TIMEKEEPING MODE to select the MAP METER MODE.
  - 2) The 5 scales are already stored in scale memories [1]-[5]. Press (D) to select the desired scale. When the desired map scale is not included, see "Inputting map scale unit."
  - 3) Hold down (C) to select the measurement direction. The direction will be indicated by ▲ or ▼.
  - 4) To measure distance, turn the roller 180° counterclockwise to the measurement position. Make sure the roller is turned until it is locked firmly.
  - 5) Press (C) and the ▲ or ▼ mark blinks indicating that the watch is ready to measure distance.
  - 6) Place the roller on the surface to be measured and trace slowly. The measured distance is shown at the upper right of the display. The distance will be measured first in millimeters and then converted to the selected scale at the bottom of the display.
  - 7) Press (C) to complete the measurement. (the ▲ or ▼ mark will stop blinking.)
  - 8) To store a measured distance, press (D) until the beeper sound stops.\* Or press (B) to clear displayed numerical values.
- \* Up to 10 measuring results can be stored in memory. When the memory is full, measurements can be made but the results will not be stored in memory. See "NAVIGATION MODE" to erase the stored data.

### Inputting map scale unit

You can replace one of the preset scales with a new scale.

- 1) Press (D) and select the scale memory to be erased.
- 2) Press (B) to input the new scale.
- 3) Press (C) or (D) to select the measuring unit, then input the map scale.

nm: nautical miles mm: millimeter cm: centimeter  
m: meter km: kilometer in: inches  
ft-in: feet-inches mi: miles

- 4) Press (A) and the scale numerical value will blink.
- 5) Each press of (C) or (D) changes the digit.
- 6) Press (A) to shift flashing digit(s). Digit(s) to be changed will flash.
- 7) Press (B) to complete.

### Setting scales by an actual distance

Even if a scale figure is not indicated on a map, as long as there is an index indicating what a fixed distance on the map represents in terms of actual distance, the scale can be automatically calculated and determined by using the roller to measure that index.

- 1) From the REGULAR TIMEKEEPING MODE, press (A) twice to select the MAP METER MODE.
- 2) Press (B) twice to set the measuring scale.
- 3) Press (C) or (D) to set the measuring unit.
- 4) **Entering distance value:** press (A) to shift flashing digit(s). Digit(s) to be changed will flash.
- 5) Each press of (C) or (D) changes the digit. Hold down for rapid movement.
- 6) **Measuring of index length:** press (C) and the ▲ or ▼ mark blinks indicating that you can measure the distance on the map using the roller. Measure the distance.
- 7) Press (B) to complete. The calculated scale will be displayed.

5 Preset scales

SCALE 1	1	(mm)
SCALE 2	10000	(km)
SCALE 3	50000	(km)
SCALE 4	100000	(km)
SCALE 5	250000	(km)



Automatic conversion is:  
120 x 250000 x 1/1000000 = 30 km

120: measured length(mm)  
250000: scale ratio  
1/1000000:  
value corresponding to 1mm.

