

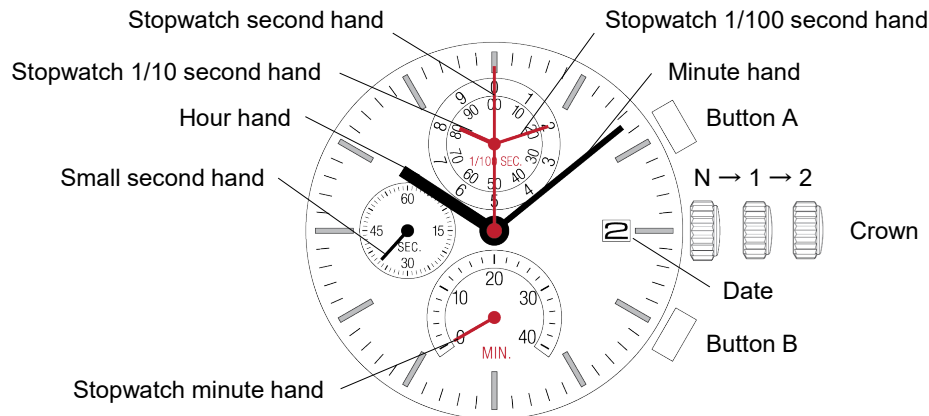
## Instruction of Watch Movement

# Cal. YM82A

### CHRONOGRAPH

- 1/100 sec. chronograph

### ◆ Display



### ◆ Crown and button operation

	Crown position		
	N : normal	1 : 1st click	2 : 2nd click
Crown	Free	Turn clockwise for date change	Time setting
Button A	Stopwatch Start Stop Restart	Stopwatch Start Stop Restart	[*1]
Button B	Stopwatch Reset Split Split release Demonstration	Stopwatch Reset Split Split release	[*1]

#### [\*1] Stopwatch hand position adjustment

If the stopwatch hands are not in the "0" position, follow the procedures below to set them.

##### (1) Pull the crown out to the 2nd click position.

- When the stopwatch is measuring, if the crown is pulled out to the 2nd click position, it will be automatically reset.

##### → (2) Set the stopwatch 1/10 second and stopwatch 1/100 second hands.

Press the button A for 2 seconds.

- The stopwatch 1/10 second and stopwatch 1/100 second hands turn a full round and can now be set to the correct position.

Press the button B repeatedly to set it to the "0" position.

##### (3) Set the stopwatch second hand.

Press the button A for 2 seconds.

- The stopwatch second hand turns a full round and can now be set to the correct position.

Press the button B repeatedly to set it to the "0" position.

##### (4) Set the stopwatch minute hand.

Press the button A for 2 seconds.

- The stopwatch minute hand turns a full round and can now be set to the correct position.

Press the button B repeatedly to set it to the "0" position.

Press the button A for 2 seconds here will allow you to resume the procedure again as indicated by the arrow if necessary.

##### (5) Push the crown back to the normal position.

Tips : When setting the hands, the hand moves quickly if the button B is kept pressed.

## ◆ How to set time

- (1) Pull the crown out to the 2nd click position when the second hand is at the 12 o'clock position.
  - When the stopwatch is measuring, if the crown is pulled out to the 2nd click position, it will automatically reset the stopwatch hands to "0" position.
- (2) Turn the crown to set the hour and minute hands.

Take a.m./p.m. into consideration when setting the hour and minute hands to the desired time.

  - The hands be set to the time a few minutes ahead of the current time, taking into consideration the time required to adjust the stopwatch hands position if necessary.
  - When setting the minute hand, advance it 4 to 5 minutes ahead of the desired time and then turn it back to the exact time.
- (3) Push the crown back to the normal position.

## ◆ How to set date

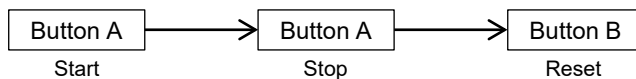
- (1) Pull the crown out to the 1st click position.
- (2) Turn the crown to set the date.
  - Do not set the date between 9:00 p.m. and 1:00 a.m..
- (3) Push the crown back to the normal position.

Tips : When the date change during daytime, it happens when a.m./p.m. is wrongly set. Advance the hour hand by 12 hours.

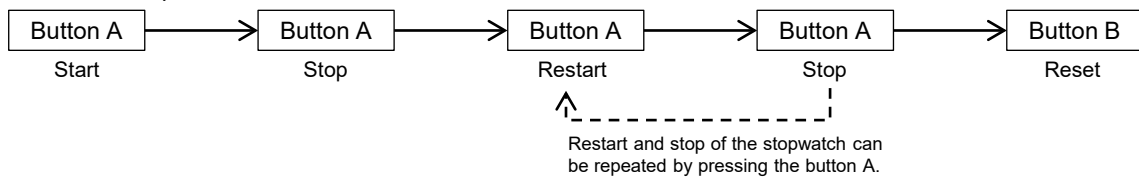
## ◆ How to use stopwatch function

- The stopwatch can measure up to 40'59"99 in 1/100 second increments.
- When the measurement reaches 120 minutes, the stopwatch automatically stops counting.

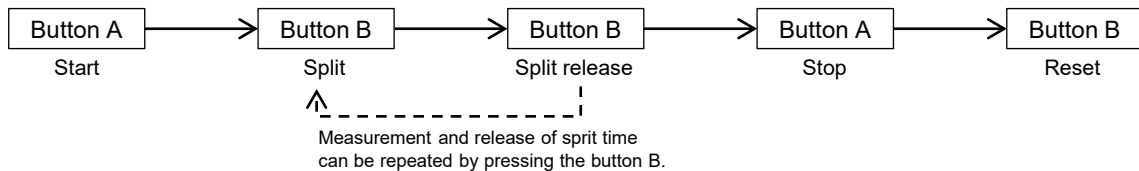
### ■ Standard measurement



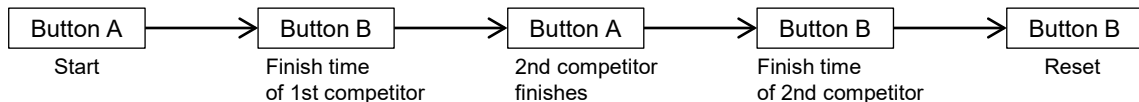
### ■ Accumulated elapsed time measurement



### ■ Split time measurement



### ■ Measurement of two competitors



- The stopwatch 1/100 second hand is capable of timing 3 minutes. (1/10 second x 1,800 times)
- The stopwatch 1/10 second hand is capable of timing 3 minutes. (1 second x 180 times)
- The stopwatch second hand is capable of timing 120 minutes. (60 seconds x 120 times)
- The stopwatch minute hand is capable of timing 120 minutes. (40 minutes x 3 times)
- After the stopwatch is started or restarted or split time is released, the stopwatch 1/10 second and stopwatch 1/100 second hands moves about 3 minutes and automatically stops at the "0" position.  
When the measurement is stopped or split time is measured, it moves to indicate the elapsed 1/10 and 1/100 seconds.
- Before using the stopwatch, be sure to check that the crown is set at the normal position and that the stopwatch hands are reset to the "0" position.
  - If the stopwatch hands do not return to the "0" position when the stopwatch is reset to "0", follow the procedure in "Stopwatch hand position adjustment".

### ◆ How to view the demonstration

The demonstration function allows you to view the movement of the four stopwatch hands. Each of the four stopwatch hands demonstrates high-speed movements and when the demonstration is finished, they return to the original position.

- If either the button A or B is pressed during a demonstration, the demonstration will be stopped and the stopwatch will be reset.

- (1) Reset the stopwatch.
- (2) Press the button B for 3 seconds or longer.

### ◆ Power depletion warning function

When the battery nears its end, the small second hand moves at two-second intervals instead of the normal one-second intervals. In that case, have the battery replaced with a new one as soon as possible.

- The watch remains accurate while the small second hand is moving at two-second intervals.

### ◆ System reset

When an abnormal display appears, reset the built-in integrated circuit.

- (1) Pull the crown out to the 2nd click position.
- (2) Press the buttons A and B at the same time for longer than 2 seconds.
- (3) Push the crown back to the normal position.