CITIZEN.

Setting Instructions for
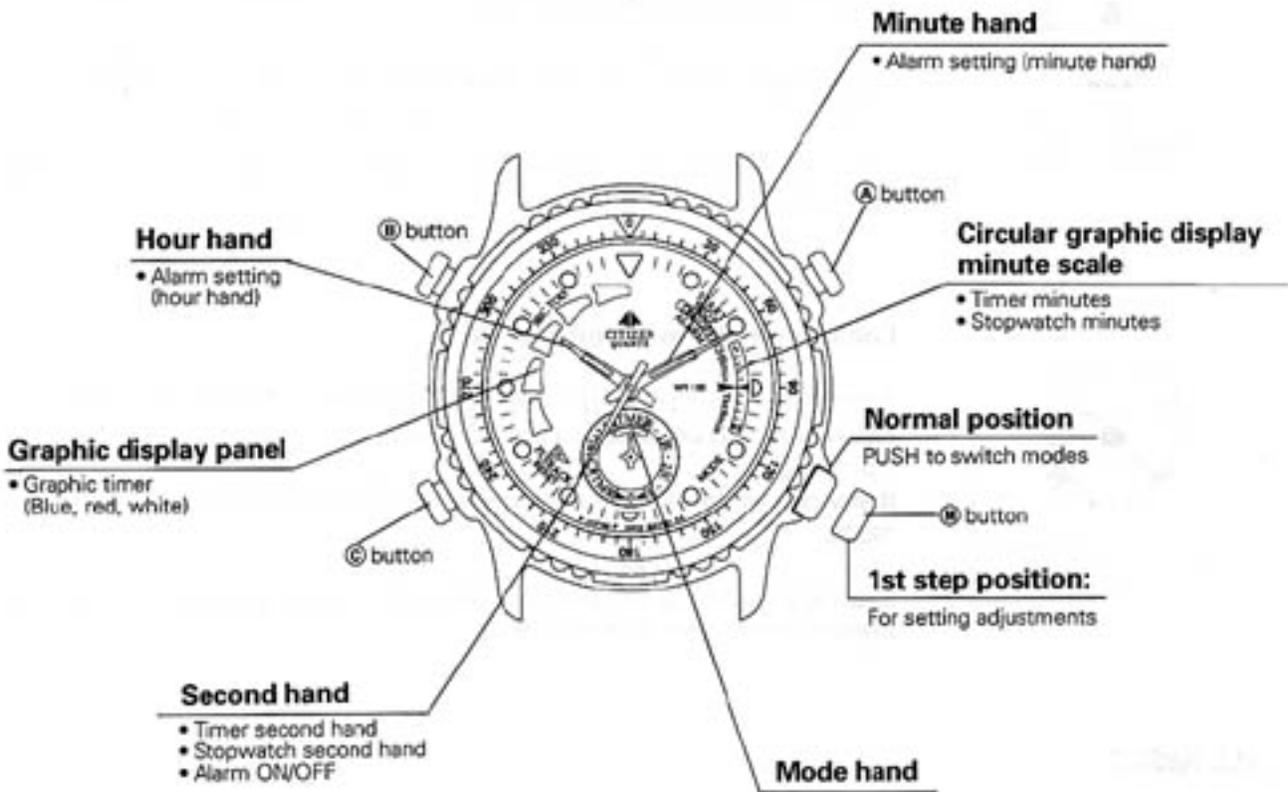## Movement Caliber 6840

Contents (click on a topic)

1. OUTLINE
This is an analog multi-function quartz watch having eight operation modes that can be changed with the push button.

Main Features

Race 1:	10-minute graphic timer Auto-Chronograph after time up Repeated timer
Race 2:	10, 5-minute graphic timer Auto-Chronograph after time up
Race 3:	3-,5-,10-minute graphic timer
Timer:	90-minute timer
Chronograph	
Alarm	

2. Main Components

Minute hand
• Alarm setting (minute hand)

Ⓐ button

Circular graphic display minute scale
• Timer minutes
• Stopwatch minutes

Normal position
PUSH to switch modes

Ⓑ button

1st step position:
For setting adjustments

Mode hand

Hour hand
• Alarm setting (hour hand)

Ⓓ button

Graphic display panel
• Graphic timer (Blue, red, white)

Ⓒ button

Second hand
• Timer second hand
• Stopwatch second hand
• Alarm ON/OFF

3. MODE CHANGE OVER

Push the (M)(lower right) button to switch between modes as shown below

| TME
Normal
time mode | ⟹ | R-1
Race 1 | ⟹ | R-2
Race 2 | ⟹ | R-3
Race 3 |

(flow continues down and back to left)

| ALM
Alarm
Mode | ⟸ | CHR
Stop-Watch
Mode | ⟸ | TMR
Timer
Mode | ⟸ | >0<
Zero Position
Confirmation |
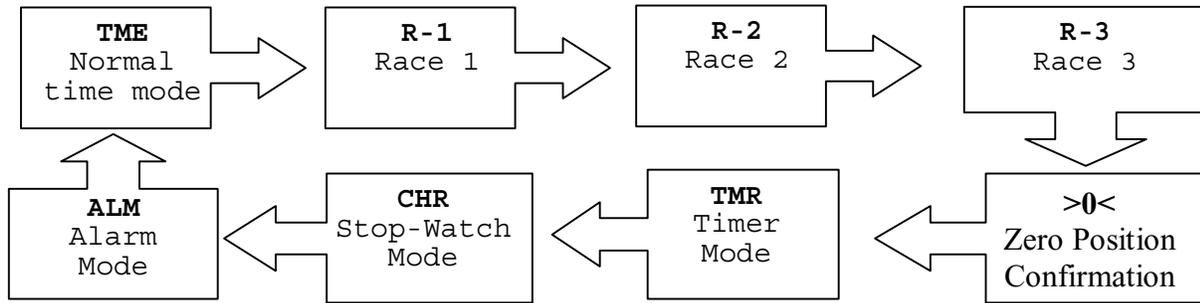
Note: Be sure to check the mode hand to ensure that the watch is set in the desired mode for use. Pressing the (M)(lower right) accidentally during operation may occur.

4. BEFORE USE

Before use, follow the procedure below to ensure that all watch components are in proper working order.

Zero Position Confirmation Check

1. Check each hand positioned as listed below
   Confirm and correct if necessary
   Hour Hand   12:00
   Minute Hand   0 minutes
   Second Hand   0 seconds
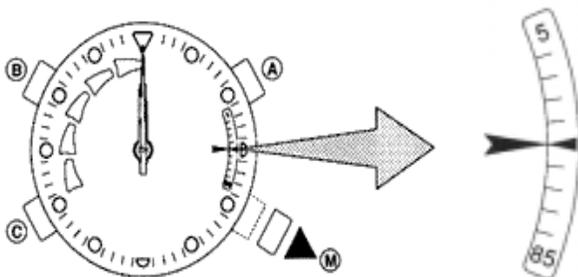
to "0" mode
(Zero Position confirmation mode)

Circular graphic display
minute scale

(2) If the watch hands are not positioned as above, follow the Zero position setting procedures to ensure proper use

❖ Push the (A) (B) or (C) button, with the (M) button in the normal position, to activate the circular graphic display minute scale, hand movement check

ZERO POSITION SETTING

1. Pull the (M) button out to the 1st step position.
Reset the Watch, see section "All Reset Function"
Push the (A) button to move the second hand to the 0 position.
Push the (B) button to align the arrows on the minutes scale and dial.
Push the (C) button to move the hour/minute hands to the 12:00 position.

2. Push the (M) button in to the normal position to complete setting procedures.
   ❖ Any strong shock to the watch may cause the hands to shift from the "0" position. In this case, reset to the correct Zero position.
   ❖ Press and hold down either (A) (B) or (C) buttons for the quick-advance feature
   ❖ Occasionally check to ensure the hands are in the correct Zero Position
   ❖ Slight irregular movement may occur when setting the second hand Zero position. This movement is normal and has no adverse effect on any watch function.
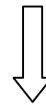
5. HOW TO SET AND OPERATE EACH MODE

5A. SETTING THE TIME

Setting Procedures
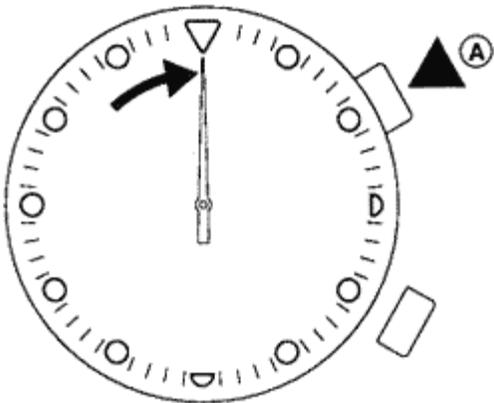**1)** Pull button (M) out to the first step position

To "TME Mode

After setting is completed, **push the (M) button into the normal**

2) Press the (A) button to use the second hand reset function

3) Press the (B) button to move the hour/minute hands clockwise

Press the (C) button to move the hour/minute hands counterclockwise

(Clockwise)

- Pressing button (A) while the second hand is in the 0-29 position will not alter the minute hand position.

- Pressing the (A) button while the second hand is in the 30-59 second position will advance the minute hand to the next full minute position
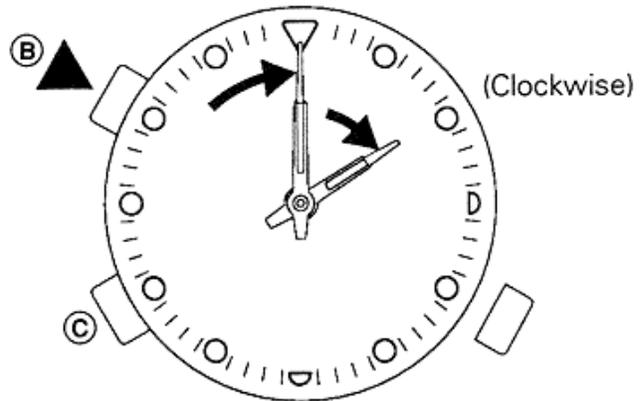
- Press and hold down the (B) or (C) buttons to use the quick-advance feature.

5B. Using Race Mode 1

To **"R-1"** mode

Race Mode 1
- R-1 Timer   (1)
- Timer Repeat Function   (2)
- Second Hand Reset Function   (3)
- Fly-back Feature   (4)
- Time-Up Confirmation Beep   (5)

Reading the graphic display panel
10-Minute Timer
*Stand-by Mode
All windows are BLUE

After 5 minutes,
All windows are **RED**

Race Mode 1 Features
(1) R-1 Timer
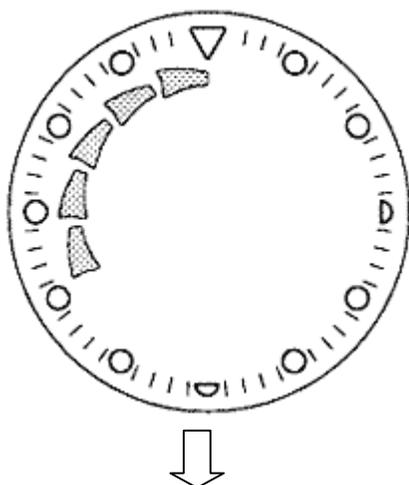
—10-Minute Timer—
Graphic timer display (R-1, R-2, R-3)
- The stopwatch starts automatically after timer operation is complete **SEE** Using the R-1 Timer Instructions
- Time remaining during timer countdown is displayed with the second hand and the color (blue, red, white) graphic display panel.

Graphic Timer Display
Second hand   Seconds
Graphic display panel minutes
- ❖ The timer countdown hand (second hand) moves the counterclockwise subtracting time from the timer setting.
- ❖ The graphic display panel moves clockwise.

TimeUp
All Windows are **WHITE**

Reading the graphic timer display

Ex. 1

9 min. 39 sec. remaining

Ex. 2

6 min. remaining

Ex. 3

2 min. 21sec. remaining

(2) **Timer repeat function** General recall* - R-1 mode only
- The stopwatch starts automatically after timer operation is completed. Pressing the C button for more than I second in the stopwatch mode will restart the 10-minute timer with the graphic timer displayed. Fig. 1
- Timer-repeat function is convenient for use at the start of a (yacht) race.
- General Recall - Flying start at the beginning of a yacht race.

Fig. I
The example below shows the start of the timer repeat function after the 10-minute timer has completed operation and the stopwatch has run for 3 minutes.
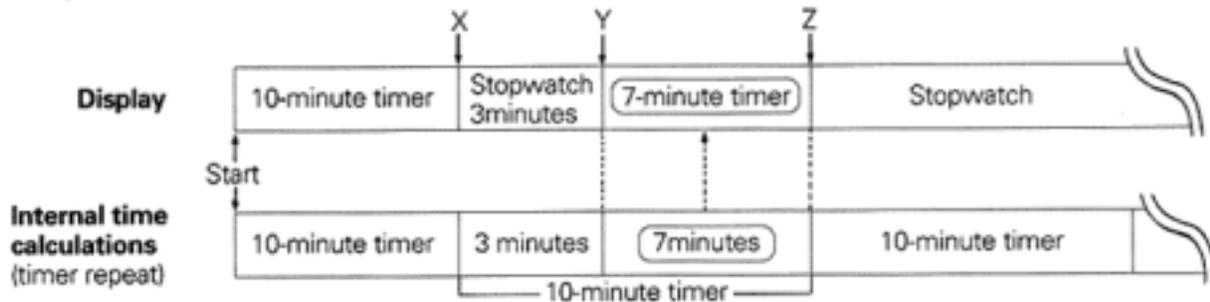

- o X-> The stopwatch starts automatically after timer operation is completed. Stopwatch operation continues for 3 minutes.
- o Y-> Pressing the (C) button for more than 1 second will automatically start the timer for the time remaining on the 10-minute timer and display the results graphically. Time remaining is automatically calculated by subtracting stopwatch time from a continuously running internal 10-minute timer. (In this example, 10-3=7 minutes of time remaining.)
- o Z-> The stopwatch starts automatically at zero after timer operation is completed.

(3) Second hand reset (R-1, R-2, R-3)
Press and hold down the (B) button for more than 1 second when using the graphic timer to reset the second hand.

When the second hand is between:
59-50 sec. position - The second hand quick-advances clockwise to zero, the elapsed time display remains the same and the countdown

49- 1 sec. position - The second hand quick-advances to zero, 1 minute is subtracted from the elapsed time display and the countdown restarts.
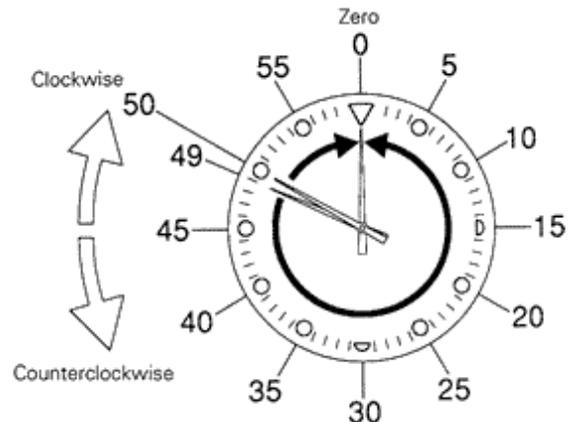
(4) Fly-back feature - timer restart - (R-1, 4-2, 4-3)
- o To automatically restart the timer from the beginning, press and hold down the (B) button for more than 1 second while the timer is running.

(5) Time-up confirmation beep (R-1, R-2, R-3)
A confirmation beep sounds during timer operation at:

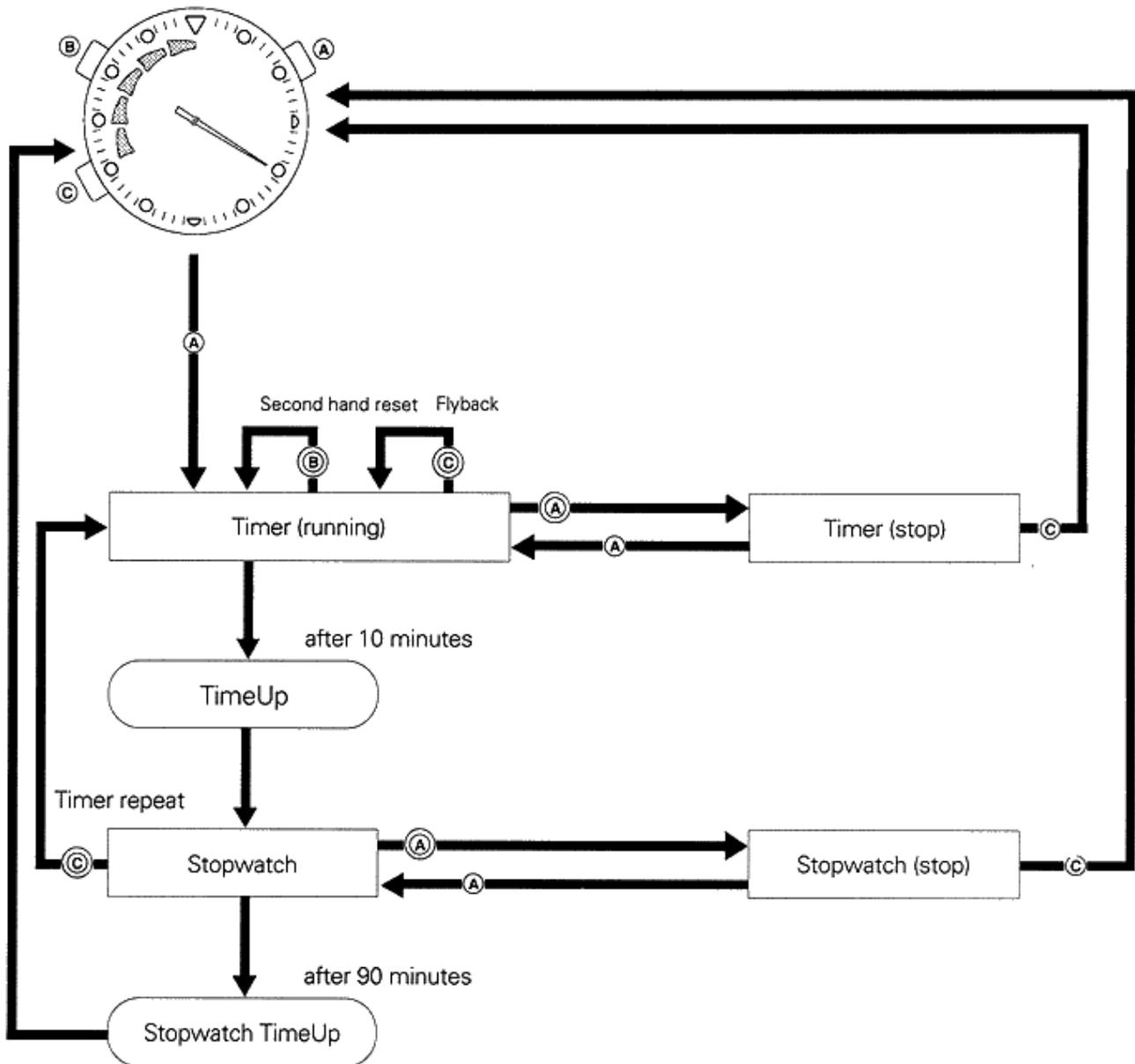|	
5-1 minutes	(1-minute intervals)
50-10 seconds	(10-second intervals)
9-1 seconds	(1-second intervals)

Using the R-1 Timer

Timer Standby mode: 🔵 BLUE   ◎ Press and hold down for more than 1 second

- Elapsed time display changes as watch switches from timer to stopwatch.
  Stopwatch minutes - read off the circular graphic display minute scale
  Stopwatch seconds – read off the second hand
  * In timer standby mode, the current time is displayed

- When the timer is running, the hour/minute hands display the current time; the second hand displays the timer countdown seconds.
- Once the timer is started, it will compensate for time lost while the graphic display panel moves into the correct position. Elapsed time data is accurately displayed on the graphic display panel.

5C. USING RACE MODE 2

to **"R-2"** mode

Race Mode 2
R-2 Timer   (1)
Second Hand Reset Function (2)
Fly-back feature   (3)
Time-Up Confirmation beep (4)

RACE MODE 2 FEATURES

(1) R-2 timer
- The stopwatch starts automatically after timer (10-minute) operation is completed. Press and hold down the @button for more than 1 second while stopwatch is running to move to the 5-minute timer standby mode. See using the R-2 Timer on the next page.

- Time remaining during timer countdown is displayed on the graphic display panel.
  *The timer countdown hand (second hand) moves counterclockwise subtracting time from the timer setting.

(2) Second hand reset function

(3) Fly-back - timer restart feature

(4) Time-Up confirmation beep
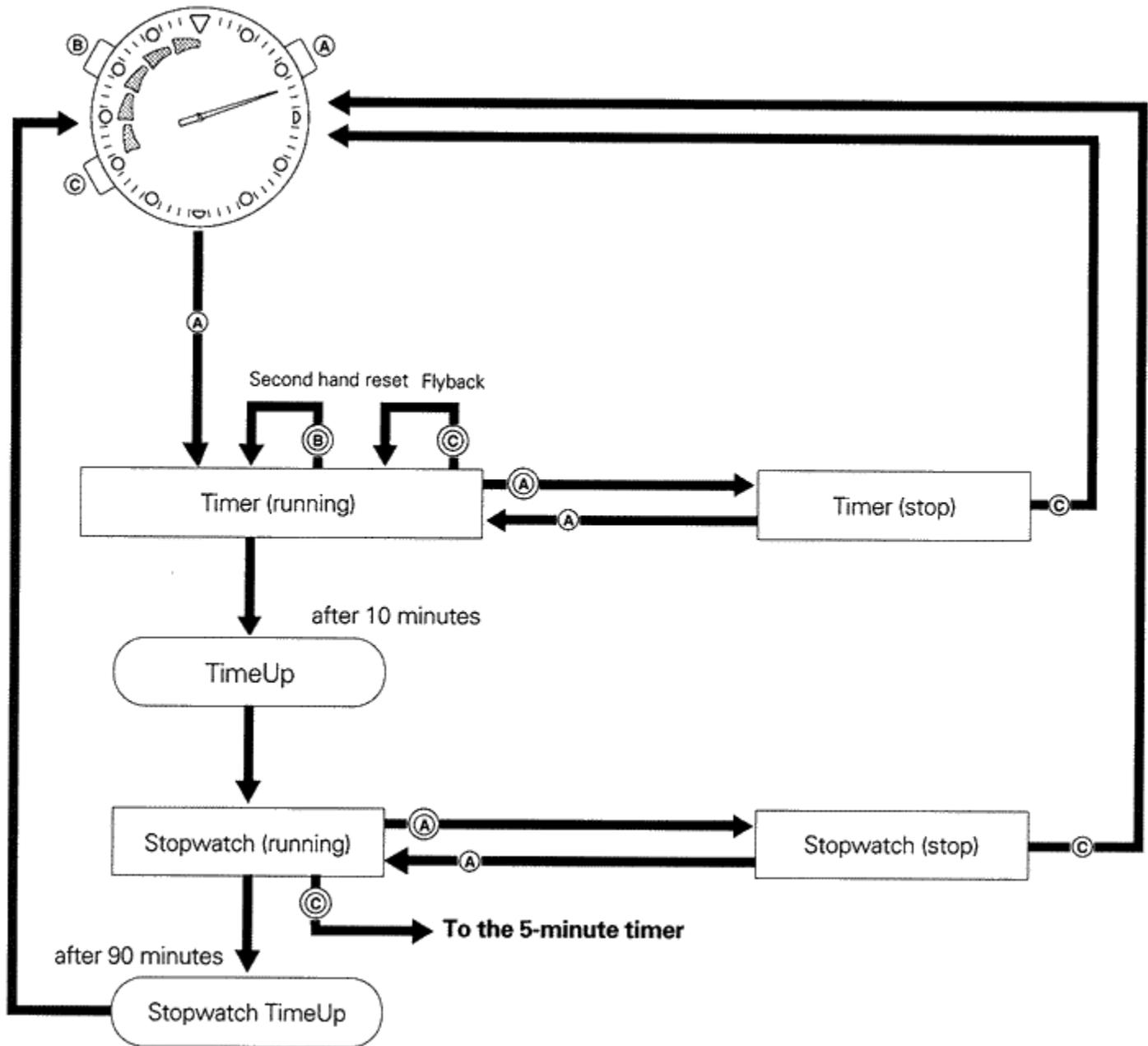 *(2), (3), (4) are the same as in Race mode 1. See Using Race Mode 1
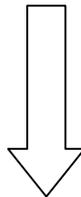
Using the R-2 timer
10-minute timer

timer standby mode: 🔵 BLUE

◎ Press and hold down for more than 1 second

Second hand reset Flyback

Timer (running)

Timer (stop)

after 10 minutes

TimeUp

Stopwatch (running)

Stopwatch (stop)

To the 5-minute timer

after 90 minutes

Stopwatch TimeUp

- Switching to the 5-minute timer is possible only while the stopwatch is running.
- Elapsed time display changes as watch switches from timer to stopwatch:
  Stopwatch minutes-read off the circular graphic display minute scale
  Stopwatch seconds - read off the second hand
- In timer standby mode, the current time is displayed.
- When the timer is running, the hour/minute hands display the current time;
  the second hand displays the timer countdown in seconds.
- Once the timer is started, it will compensate for time lost while the
  graphic display panel moves (if switched while stopwatch is stopped, timer
  into the correct position. Elapsed time data is accurately displayed on the
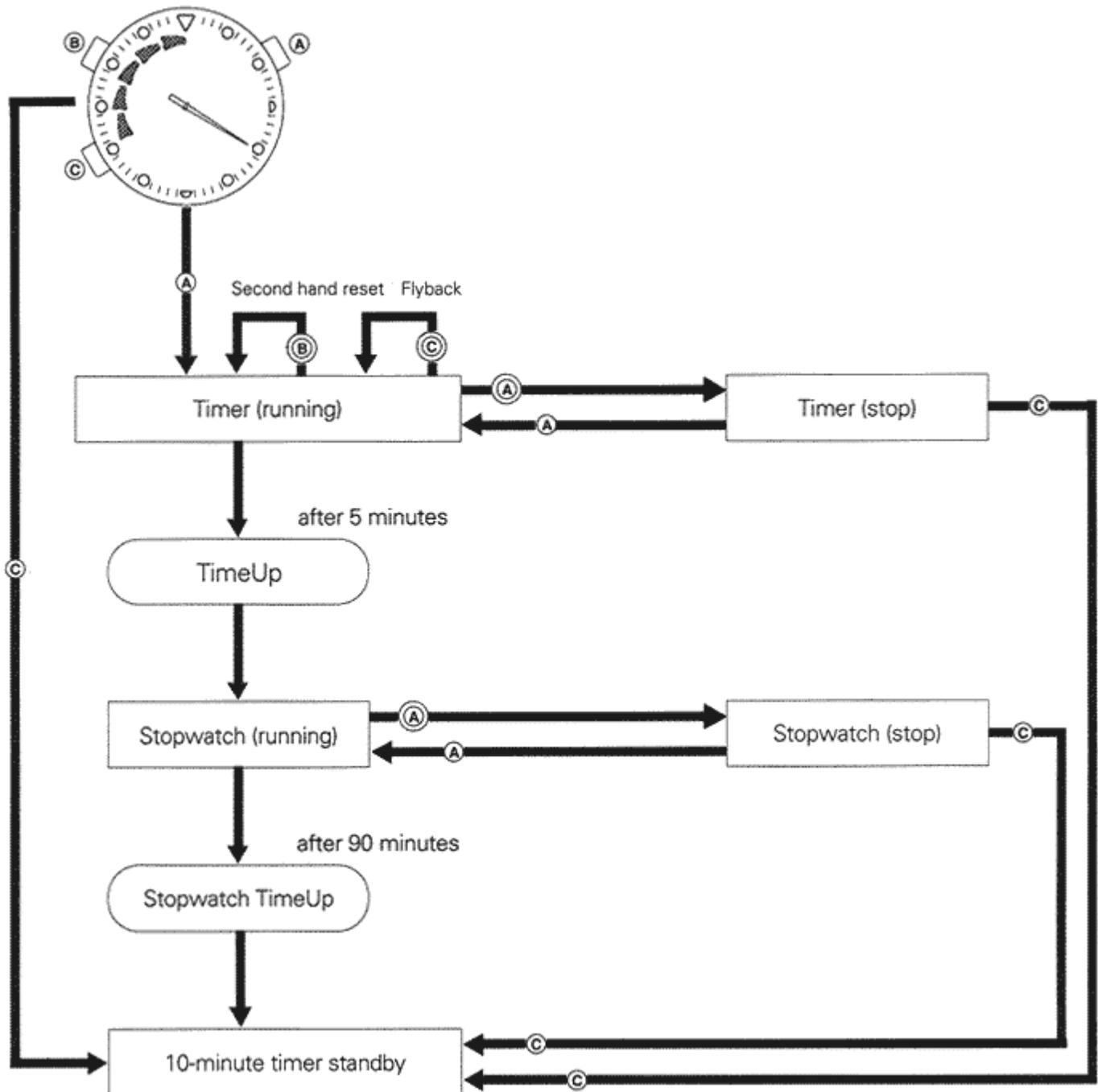 graphic display panel.

5-Minute Timer
timer standby mode: 🔴 RED

◎ Press and hold down for more than 1 second

- Elapsed time display changes as watch switches from timer to stopwatch
  Stopwatch minutes - read off the circular graphic display minute scale
  Stopwatch seconds- read off the second hand

- In timer standby mode, the current time is displayed.

- When the timer is running, the hour/minute hands display the current time; the second hand displays the timer countdown in seconds.

- Once the timer is started, it will compensate for time lost while the graphic display panel moves into the correct position. Elapsed time data is graphic display minute scale accurately displayed on the graphic display panel.

5D. USING RACE MODE 3

To **"R-3"** mode

Race mode 3
R-3 Timer   (1)
Second hand reset function (2)
Fly-back feature   (3)
Time-Up confirmation beep (4)

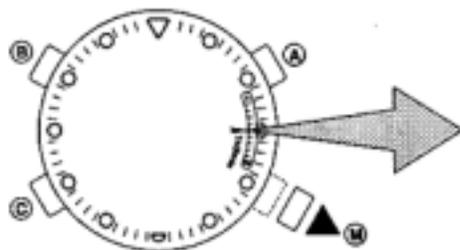**Race Mode 3 Features**

(1) R-3 timer
- **R-3timer settings for 3,5,10,15 minutes are possible by pulling out the (M) button to the 1st stop position.** (See following section)
- Time remaining during timer countdown is displayed on the graphic display panel.
- The timer countdown hand (second hand) moves counterclockwise subtracting time from the timer setting.
  (2) Second hand reset
 (3) Fly-back - timer restart feature
  (4) Time-Up confirmation beep
  *(2), (3) are the same as in Race mode 1. (4) is the same as in Race mode 1, 2, with an additional warning beep 10-minutes before time up. See sections Setting the time and Using Race Mode 1.

Setting the R-3 Timer
  Setting Procedures

- Timer settings for 3, 5, 1 0, I 5 minutes are possible on the circular graphic display minute scale.

- After selecting the timer setting push the (M) button in to the normal position. The timer setting will now be displayed on the graphic display panel as in the R-1 andR-2 timer modes.

- Time conversion from the circular graphic display minute scale to the graphic display panel.
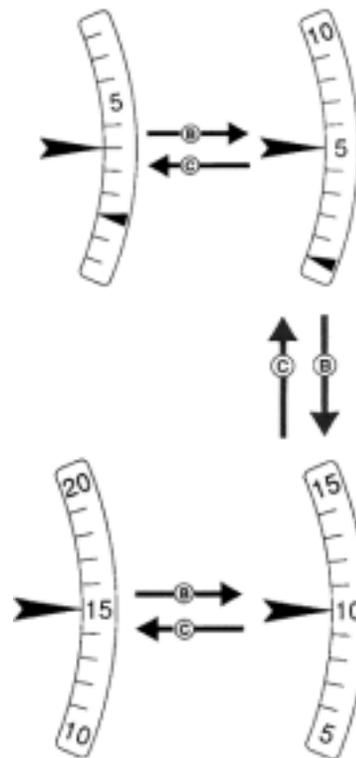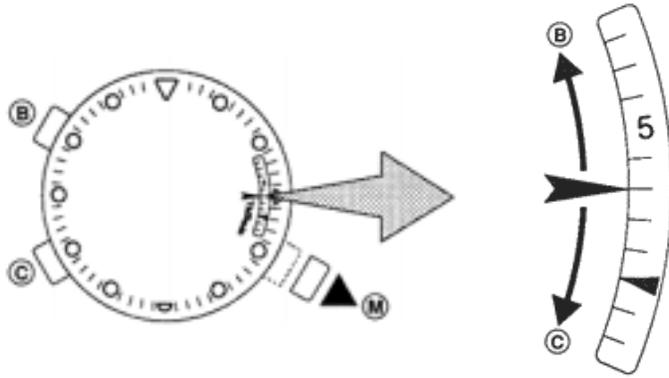
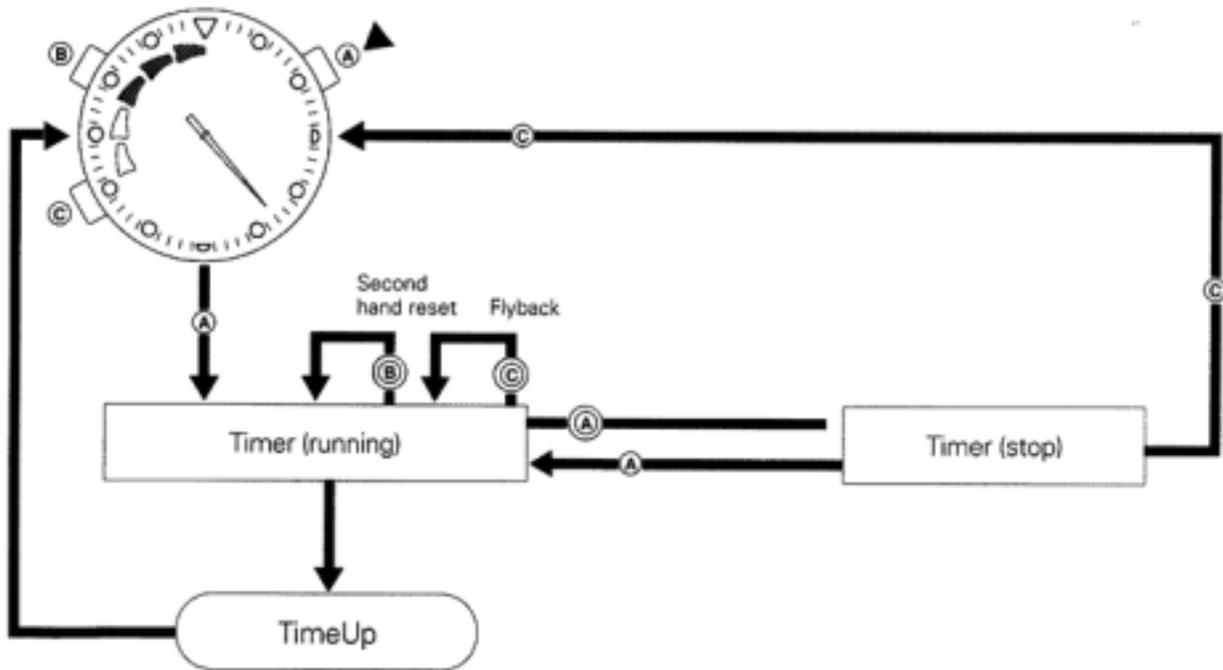| Circular graphic display minute scale	Graphic display panel
3 min.	3 red, 2 white
5 min.	5 red
10 min.	5 blue
15 min.	5 white

Using the R-3 Timer – Example: 3 minute setting
   Setting Procedures

Timer Stand-by Mode

- In timer standby mode, the current time is displayed.

- When the timer is running, the hour/minute hands display the current time; the second hand displays the timer countdown in seconds.

- Once the timer is started, it will compensate for time lost while the graphic display panel moves into the correct position. Elapsed time data is accurately displayed on the graphic display panel
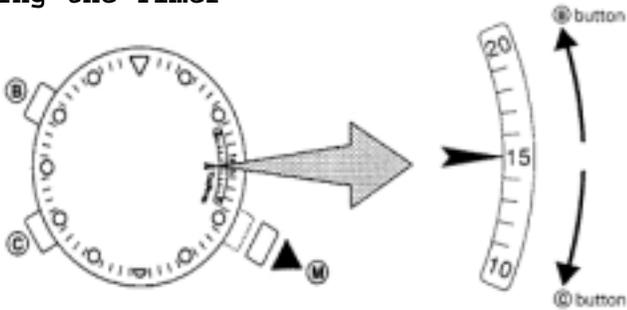
5E. SETTING THE TIMER

To **"TMR"** mode

- Set the timer using the circular graphic minute display scale

- Timer Calibration: 1-second increments

- Maximum time range: 90 minutes in 1-minute increments
  The "0" position is used as the "90-

Using the Timer

- Fly-back feature see section 2 using race mode 1
❖ The timer countdown hand(second hand) moves counterclockwise subtracting time from the timer setting

- After setting are complete, be sure to push the (M) button in to the normal position.

Timer (running)

Flyback

Timer (stop)

TimeUp
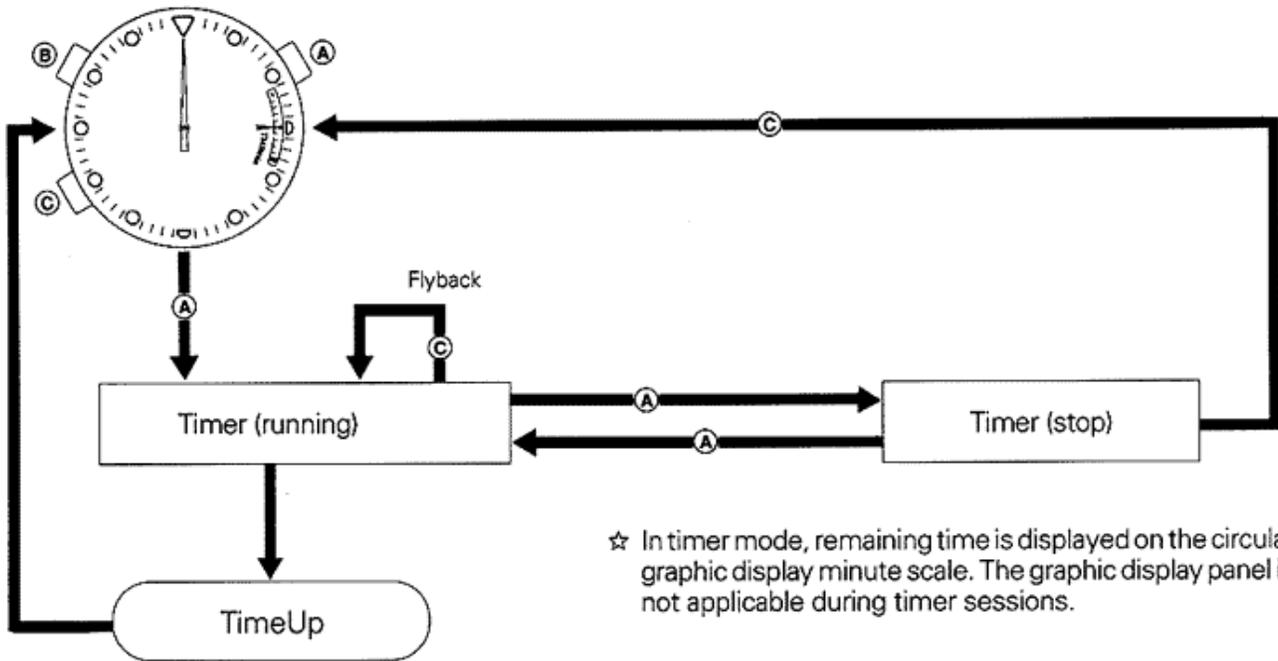
☆ In timer mode, remaining time is displayed on the circular graphic display minute scale. The graphic display panel is not applicable during timer sessions.

5F. STOPWATCH OPERATION
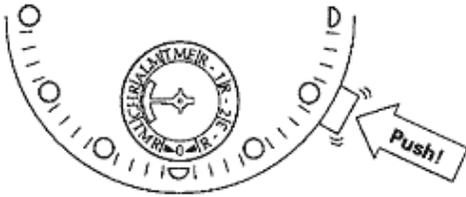
To **"CHR"** mode

- **Stopwatch calibration:**
  1 -second increments

- **Maximum time range:**
  90 minutes; Operation automatically
  stops after 90 minutes

- **Minutes display:**
  easy-to-read the circular graphic
  display minute scale

- **Seconds display:** second hand
- The current time is displayed by the
  hour and minute hand while in
  stopwatch mode.

Using the Stop Watch

5G. SETTING THE ALARM

To **"ALM"** Mode

- Once the alarm has been set, it will sound everyday at the same time for 15 seconds

Setting Procedures
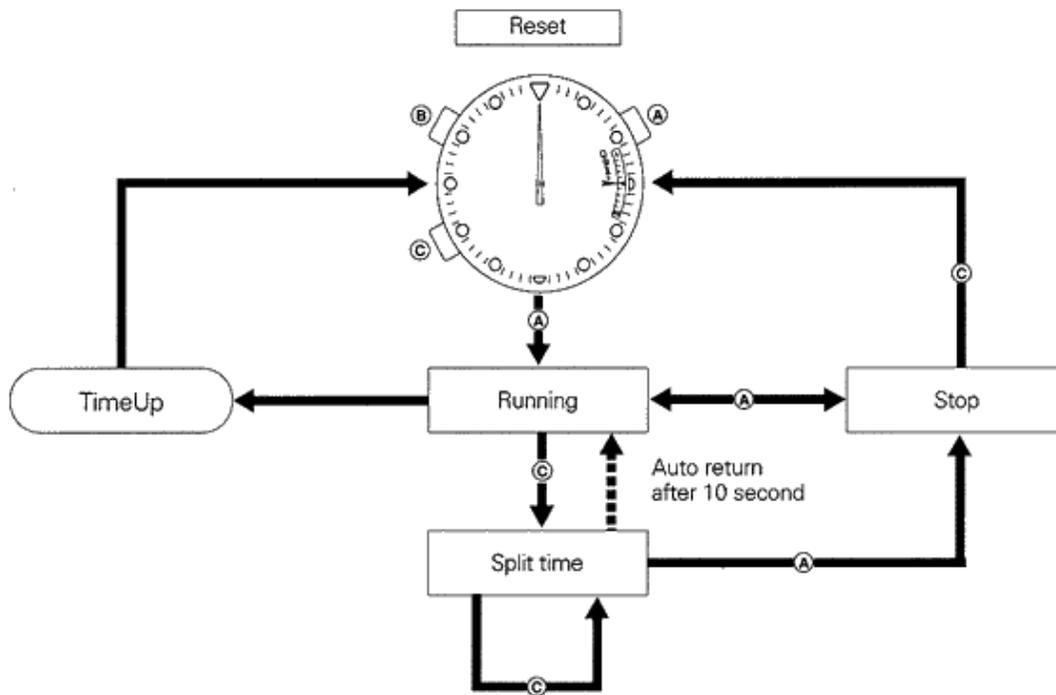
1)
- (M) button normal position

2)
- Pull the (M) button out to the 1st step position

- 3) Press the (B) button to move the hour/minute hands clockwise.
- Press the (C) button to move the hour/minute hands counterclockwise

- Pull the (M) button out to the first position and the alarm is automatically turned ON

- Press the (A) button when the (M) button is in the 1st step position to select OFF or ON

Press and hold down the (B) or (C) button to use the quick-advance feature.

5H. MONITORING IN THE NORMAL TIME MODE

Alarm time set monitor
Press the (B) button while in the normal time mode to monitor the alarm
setting.
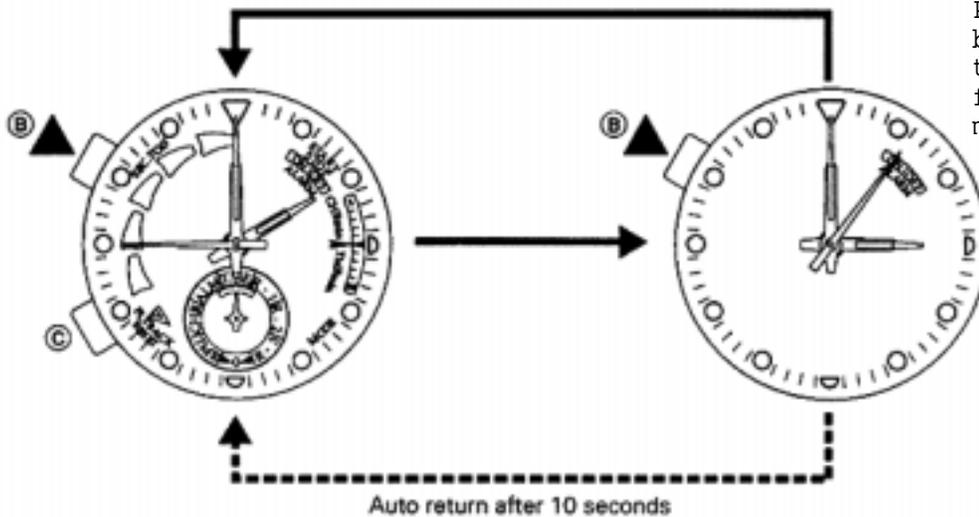
Press the (B) or (C)
button to return to
the normal time mode
from the alarm
monitoring mode.

Auto return after 10 seconds

5I. ALL RESET FUNCTION

**The all reset function is used after battery changes or when watch movement is
less than normal.**

(1) The all reset function can be activated in any mode.
   Pull the (g) button out to the 1ST step position.

(2) Push and hold down the (A), (B), (C) buttons simultaneously for more than 2
   seconds.
   Release all three buttons and a confirmation beep will sound.
   Push the (M) button in to the normal position after the above procedures are
   complete and set the watch to zero in the Zero position confirmation mode.
   (See Zero position setting section)
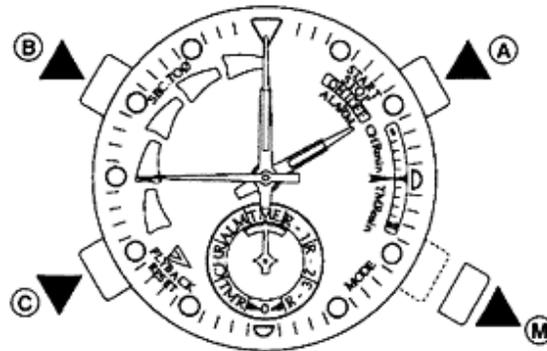
6. Rotating Bezel

Many yacht races are set in triangulated course layouts such as the one described here where the winner is the boat that navigates the designated course around the marks in the fastest times.
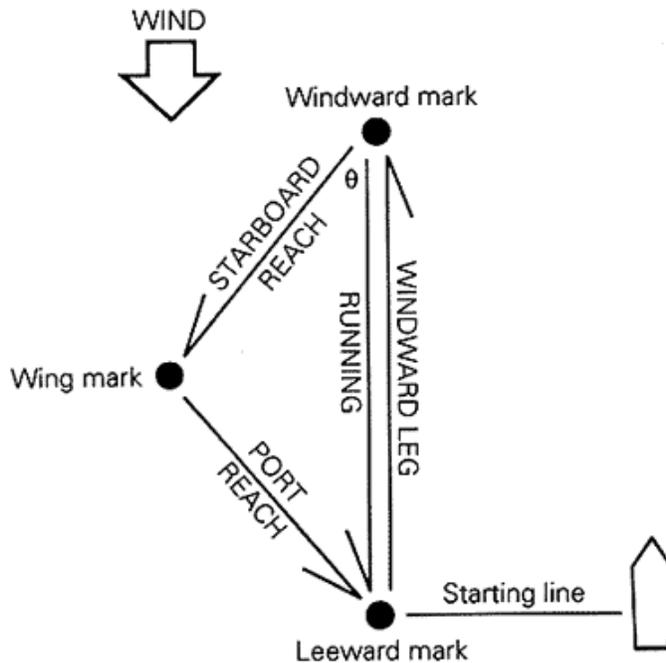
Direction:
Navigational bearings are most often given in terms of degrees.
North: 0° East 90°
South 180° West: 270°

Starboard:
The right-hand side of a yacht looking forward from the rear

Port:
The left-hand side of a yacht looking forward from the rear

Using the rotating bezel (1)

a. Before a race, determine the direction of the wind from the direction and position of the windward marker. Line up the number representing the wind direction (in degrees) on the bezel with the triangle /\ mark at the 12:00 position. EX: northeasterly wind at 45°)

b. The course bearing from the windward mark to the wing mark (starboard reach) is read off the bezel in degrees at the green triangle /\ on the bottom left side of the dial.

c. The course bearing from the wing mark to the leeward mark (port reach) is read off the bezel in degrees at the red triangle /\ on the bottom right.

d. When sailing from the windward mark to the leeward mark, the small white triangle at the bottom of the watch dial becomes the reference point for determining course bearings.
By following the procedures above to determine the course bearings, the proper bearings to the markers can be determined even during poor visibility when the course markers cannot be seen.
Note that the above explanation is only valid for times then the 0 angle is 45°. At 60°, use the values lying above the red and green triangles; at 30°, use the values lying below the two triangles.
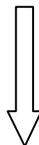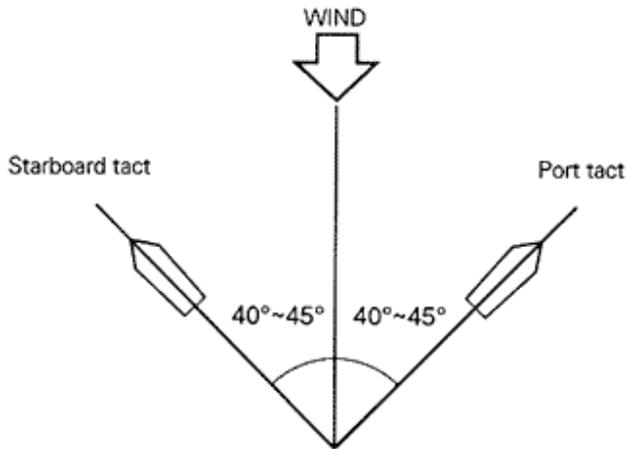
Using the rotating bezel (2)

Most present day yachts are capable of sailing 45o to the wind.
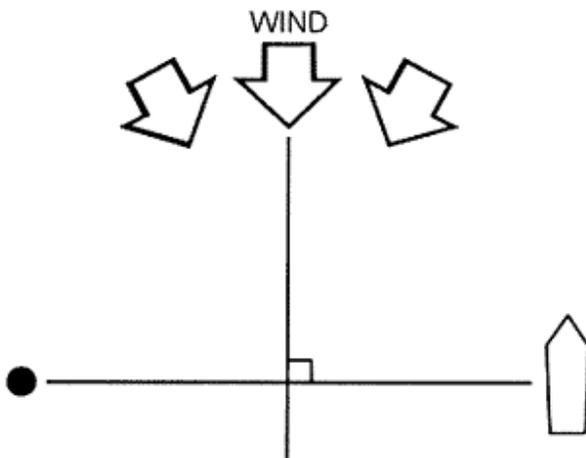To be in a position of being able to read the wind shift after the start of a race, make several runs before the race matching your course as close as possible to the red (or green) bars on the left (or right) upper portion of the watch dial.

Using the rotating bezel (3)

By using the rotating bezel in the following way, you can determine the angle between the start/finish line and the direction from which the wind is blowing.

The start/finish line is usually set at right angles to the direction of the wind, but because the wind is always shifting direction, it is a rare occasion when a true 90' angle is met.

In this case, line up the white triangle at the 12 o'clock position on the watch with the direction from which the wind is blowing. Sail from one end of the start finish line to the other, using the white lines marked (at 3 or 9 o'clock) on the watch to site your destination. If the course steered falls on the plus (+) side of the white line, you are on a favorable heading to start the race when you cross the start finish line.

If the course steered falls to the minus (-) side of the white line on the watch, you know it is favorable to cross the start/finish line on a heading from the opposite direction.

Use any one or a combination of the three methods described above to help you maneuver your boat into and maintain the position you feel is the most advantageous during a race.

7. SPECIFICATIONS

Movement Caliber Number   6840

Type   Analog Quartz Multi Function, Multi Hand

Accuracy   +/- 20 sec./month At normal operating temp. (5°c –35°c)

Functions

- Time: Hour, Minute and Second

- Daily Alarm

- Chronograph: Maximum setting range 90 minutes in 1-second increments

- Timer: 90 minutes in one minute increments

- Race 1
  10-minute graphic timer
  Auto-Chronograph after time-up (90 minutes)
  Flyback
  Second Hand Reset

- Race 2
  10, 5-minute graphic timer
  Auto-Chronograph after time-up (90 minutes)
  Flyback
  Second Hand Reset

- Race 3
  3, 5, 10, 15-minuted graphic timer
  Auto-Chronograph after time-up (90 minutes)
  Flyback
  Second Hand Reset

Power Cell   Silver Oxide Battery (SR927W)

Life of Power Cell

     Average life is approximately 2 years. Note: age of watch as well as alarm, graphic timer, timer, chronograph use affect the life of the battery.

PRECAUTIONS ABOUT CARE AND HANDLING OF WATCHES

CITIZEN®

TEMPERATURE CARE
Avoid temperature extremes. Exposing your watch to high temperatures, such as placing it on the dashboard of a vehicle or use in a hot tub, may cause the watch to malfunction, shorten battery life or damage certain components. Leaving the watch in extreme cold temperatures may cause irregular timekeeping until the watch returns to normal operating temperature.

SHOCK-RESISTANT
The watch may be worn while playing golf or other activities, but avoid severe shocks such as dropping it on a hard surface.

MAGNETIC-RESISTANT
No problem should occur from using the watch around ordinary household electric appliances such as TV sets or stereos. Keep away from magnets.

CHEMICAL/GAS RESISTANT
Do not expose the watch to chemicals or gases for long periods.

WATCH CLEANING
Stains, waterspots and accumulated dirt on the case, crystal or band should be removed with a soft cloth to prevent damage and premature wear.

HANDLING OF WATER-RESISTANT WATCHES
Although water-resistant watches are warranted, steps should be taken to avoid damage that may result from accidents or mishandling:

■ Do not operate the crown or push-button in the water or while the watch is wet. Tighten screw lock crown completely.

■ Should the watch become immersed in water, dry it off right away. If the watch comes in contact with salt water, be sure to rinse it thoroughly in warm fresh water to remove any trace of salt.

■ If a watch is wet from cleaning or by accident, never store it in a closed container. It should be dried immediately or taken to a watchmaker or jeweler if moisture is inside the case to prevent damage from rust.

■ Vital components necessary to resist the entrance of moisture deteriorate with time and use. Gaskets, crowns and other materials should be replaced every year or two to ensure that water resistant quality remains at factory specifications.

CARE FOR METAL BRACELETS
To extend the life and maintain the good appearance of the metal watch bracelet, the following recommendations are given:

■ Be aware that since the watch and bracelet is worn next to the skin, it collects dust and perspiration and becomes soiled if not cleaned regularly. This is particularly true of the inner parts of the links or mesh of the bracelet.

■ Soil and rust, when present in a bracelet, are dissolved by perspiration and can cause staining of cuffs and irritation of the skin in some instances.

■ Heavy perspiration should be wiped off the watch and bracelet with a soft dry cloth. The bracelet should be cleaned occasionally by using an old toothbrush and warm soapy water after which the soap is thoroughly rinsed with clear water and the bracelet dried completely. The foregoing manner of cleaning should not be done if the watch is not water-resistant but should instead be done by your jeweler.

CARE FOR STRAPS
LEATHER
■ Heavy perspiration, if not removed from a leather strap, can wash out the natural oils and cause the leather to become dry and deteriorate. Any moisture should be blotted with a soft dry cloth or paper towel and the strap allowed to dry naturally.

■ Salt residue and soil can be removed from the leather by cleaning with a dampened soft cloth and mild soap or saddle soap.

■ Occasionally, the inside surface of the strap should be cleaned by using a soft cloth dampened with alcohol.

■ The strap should always be worn a little loosely (one finger space between wrist and strap) to allow air to circulate thus causing any moisture to evaporate.

RUBBER
■ Rubber straps should be washed frequently with mild soap and warm water using a soft brush.

■ Thorough cleaning, using the same method, should especially be done after use in salt water.

■ Solvents, oils, perspiration, tanning lotion and salt can cause rubber to deteriorate if not removed.

Marking on the Dial	Marking on the Caseback	Face washing, splashes, sweat, raindrops, etc.	Swimming	Skin diving (diving without air tanks)	Scuba diving (diving with air tanks)	Water-resistant characteristics
NONE	NONE	NO	NO	NO	NO	Non water-resistant watch and must be kept away from water.
NONE	WATER RESIST	OK	NO	NO	NO	An ordinary water-resistant watch and can withstand splashes, sweat, rain-drops and etc. for daily life use.
WR100M WR10bar WR150M	WATER RESIST	OK	OK	OK	NO	For frequent use with water. It is not specially designed for scuba diving.
WR200M	WATER RESIST	OK	OK	OK	OK	For skin and scuba diving. Usable up to the respective indicated depths.

Water Resistance

The water-resistant quality of our timepieces is offered in varying degrees depending on the model. This ranges from non-water resistant models to those suitable for SCUBA diving. Water resistance of our timepieces is measured in BAR or Barometric Pressure. Each BAR of pressure is equal to 14.5 pounds per square inch of pressure.

Water resistance is measured when the watch is at a static, or motionless state. As the watch is moved in water, such as from the motion of swimming, pressure is added from velocity. While you may be swimming in a pool at surface level, the watch may be experiencing forces equal to that of 100 feet of water pressure (3 BAR). Diving into a pool can cause forces on the watch to exceed those pressures. As such, you should always allow a margin of safety when exposing your watch to moisture. Never "push the limit" of the degree of water resistance of your timepiece.

A primary factor to keep in mind about water resistance is that periodic maintenance is needed to maintain original factory specifications for water resistance. When a watch is new, it meets specifications for water resistance as indicated on the case back. However, as the watch ages, the gaskets that seal the watch become dry and brittle, diminishing its water resistant quality. Exposure to environments such as chlorinated pools, salt water or soaps from showering can accelerate drying of the gaskets. We recommend that the gaskets be changed at least every 18 to 24 months to maintain the water resistant quality of your timepiece. If the watch is frequently exposed to chlorinated pools, soaps salt water, etc., we recommend that the gaskets be changed on a yearly basis.

From time to time, you may notice condensation that appears then goes away after a short period of time. This is a normal occurrence and happens primarily from sudden temperature changes. When there are sudden temperature changes such as entering a cool building from the hot out of doors, or jumping into pool on a hot day the watch may fog. Conversely, if you go to the cold outdoors from a warm building, fogging may occur. As long as the fogging clears in a short period of time, there is no need for concern.

Be sure the crown is completely pushed in prior to any contact with moisture. If your model is equipped with a screw down crown, be sure it is properly seated against the case. Do not operate the crown or any push button when the watch is wet as this may allow the entrance of moisture. . If at anytime, you notice moisture in your timepiece that does not clear in a short period of time, you should send your timepiece as soon as possible to the nearest Authorized Service Center for inspection.

You can determine the level of water resistance of our watches from the markings on your case-back. Additionally, models that are water resistant to 100 or 200 meters have an indication on the dial as well. The case-backs and dials are normally marked as follows:

The case back has no indication of water resistance
This indicates the watch is a non water-resistant model and is not designed for contact with moisture at all. Caution should be exercised to avoid any contact with moisture, such as when washing your hands or from a rainstorm.

"Water Resist"
This watch is designed to withstand water from accidental splashing, such as from washing your hands or rain. Any submersion into water may result in the entrance of moisture.

"Water Resist 10BAR" or "W.R. 10BAR", Dial marked "WR100"
This watch is designed to withstand water pressure up to 333 feet. This includes water exposure from accidental splashing and rain, but also from showering, swimming in a pool and snorkeling. Be sure to rinse the watch with fresh water after exposure to a chlorinated pool, salt water, soaps, etc. After rinsing with fresh water, be sure to dry the exterior with a soft cloth.

"Water Resist 20BAR" or "W.R. 20BAR", Dial marked "WR200"
This watch is designed to withstand water pressure up to 666 feet. This includes all exposure to water up to and including recreational SCUBA diving. Be sure to rinse the watch with fresh water after exposure to a chlorinated pool, salt water, soaps, etc. After rinsing with fresh water, be sure to dry the exterior with a soft cloth.

Special Note about Jacuzzis and Hot Tubs
The various components used in the manufacture and assembly of your watch expand at various rates. This results in a loss of the sealing capabilities of gaskets, which may allow moisture to enter. In addition, heat from these sources can cause deformation of certain materials leading to mechanical failures. For these reasons, you should remove your watch before entering a hot tub or Jacuzzi.