



IFM6W40

MULTICHRONOGRAPH

INSTRUCTION MANUAL

Thank you for purchasing this FESTINA QUARTZ WATCH.

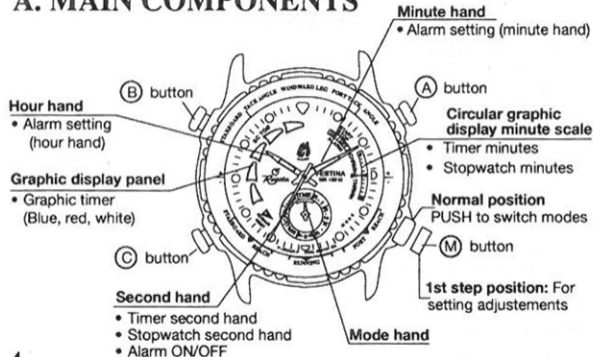
To ensure correct use, read these instructions carefully.

Please verify at the time of purchase that the FESTINA International Guarantee Card has been included with your watch to ensure any and all claims for service under the terms of the guarantee.

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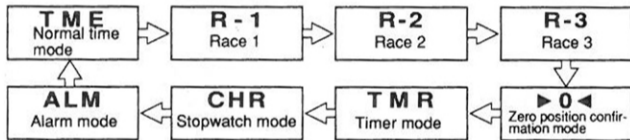
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A. MAIN COMPONENTS



B. MODE SWITCHING

Push the (M) button in the normal position to switch between modes as shown below.

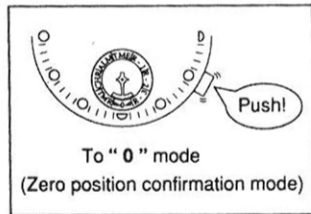


Note

Be sure to check the mode hand to ensure that the watch is set in the desired mode for use. Pressing the (M) button accidentally during operation may occur.

C. BEFORE USE

Before use, follow the procedures below to ensure that all watch components are in proper working order. **Zero position confirmation check.**



- 1 Each hand positioned as listed below confirms the Zero position setting is correct.

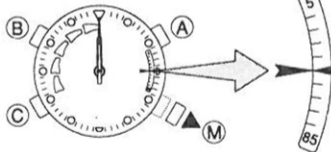
Hour hand 12 o'clock.
Minute hand ... 0 min.
Second hand .. 0 sec.

**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

(in the Zero position confirmation mode)



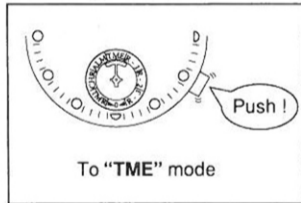
- 1 Pull the (M) button out to the 1st step position. **Reset the watch. See pg 39. Push the (A) button** to move the second hand to the 0 sec. position. **Push the (B) button** to align the arrows on the minutes scale and dial. **Push the (C) button** to move the hour/minute hands to the 12 O'clock/ 0 min. 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 Zero position. In this case, reset to the correct Zero position.
- ☆ Press and hold down either of the (A), (B), (C) buttons for the quick-advance feature.
- ☆ Check from time to time to see whether the hands are in the correct Zero position.
- ☆ Slight irregular movement may occur when setting the second hand Zero position. This movement has no adverse effect on any of the watch functions.

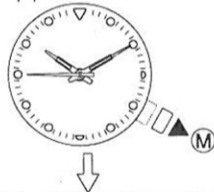
D. HOW TO SET AND OPERATE EACH MODE

1. Setting the Time



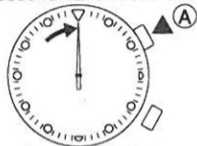
Setting procedures

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



After setting is complete push the (M) button in to the normal position.

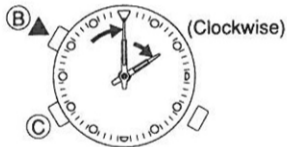
- 2 Press the (A) button to use the second hand **reset** function.



- Pressing the (A) button while the second hand is in the **0-29 sec. position** will not alter the minute hand position.
- Pressing the (A) button while the second hand is in the **30-59 sec. position** will advance the minute hand to the next full minute position.

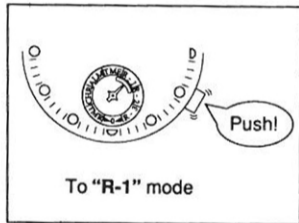
- 3 Press the (B) button to move the hour/minute hands **clockwise**.

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



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

2. Using Race mode 1



Race mode 1

- R-1 timer.....(1)
- Timer repeat function.....(2)
- Second hand reset function.....(3)
- Flyback feature.....(4)
- TimeUp confirmation beep.....(5)

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 completed.
See Using the R-1 timer, pg 18,19.

- Time remaining during timer count-down is displayed with the second hand and the color (blue, red, white) graphic display panel.

Graphic timer display

Second handseconds

Graphic display panel ..minutes


- ☆ The timer countdown hand (second hand) moves counterclockwise subtracting time from the timer setting.

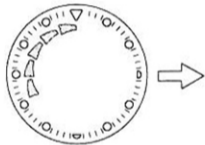
- ☆ The graphic display panel moves clockwise.

Reading the graphic display panel


10-minute timer

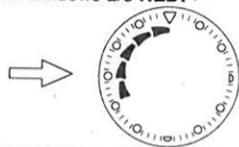
- Standby mode

All windows are **BLUE**: 




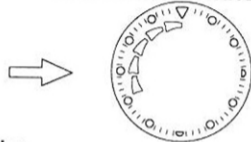
- after 5 minutes

All windows are **RED**: 



- TimeUp

All windows are **WHITE**: 



Reading the graphic timer display

Ex. 1



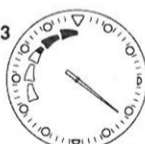
9min. 39sec. remaining

Ex. 2



6min. remaining

Ex. 3



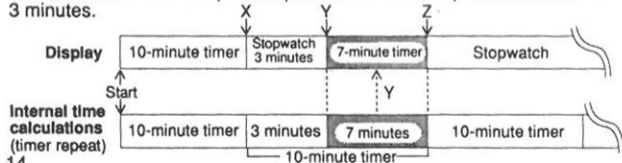
2min. 21sec. remaining

(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 1 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. 1

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.



- X → The stopwatch starts automatically after timer operation is completed. Stopwatch operation continues for 3 minutes.
- 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.)
- Z → The stopwatch starts automatically at **zero** after timer operation is completed.

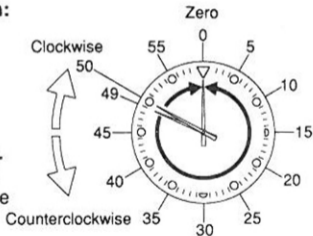
(3) Second hand reset (R-1, R-2, R-3)

- 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 restarts.

49~1 sec. position—The second hand quick-advances **counterclockwise** to zero, 1 minute is subtracted from the elapsed time display and the countdown restarts.




(4) Flyback feature — timer restart — (R-1, R-2, R-3)


- To automatically restart the timer from the beginning, press and hold down the (C) button for more than 1 minute while the timer is running.

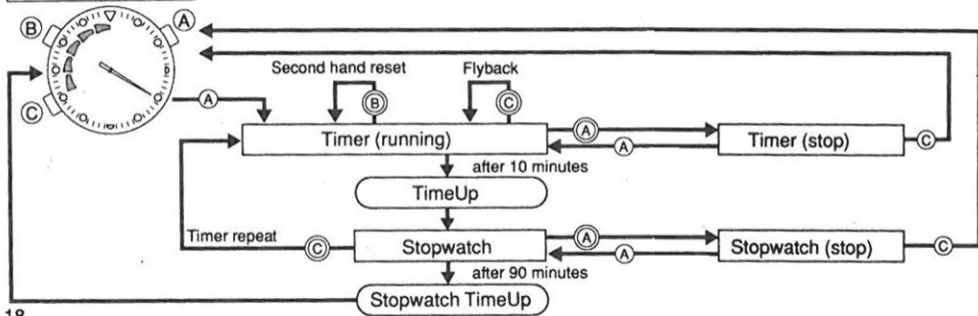
(5) TimeUp confirmation beep (R-1, R-2, R-3)

- 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

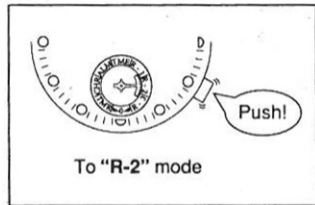
Timer standby mode  : BLUE

 : 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 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.

3. Using Race mode 2



Race mode 2

- R-2 timer(1)
- Second hand reset function ... (2)
- Flyback feature.....(3)
- TimeUp 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 (C) button for more than 1 second while stopwatch is running to move to the 5-minute timer standby mode. See pg 22-25.
- 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) Flyback — timer restart feature

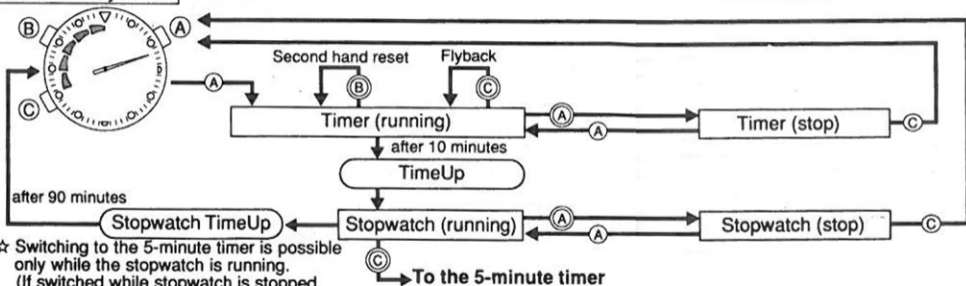
(4) TimeUp confirmation beep

- (2), (3), (4) are the same as in Race mode 1. See pg 16, 17

Using the R-2 timer 10-minute timer

Timer standby mode  : BLUE

: Press and hold down for more than 1 second



☆ Switching to the 5-minute timer is possible only while the stopwatch is running. (If switched while stopwatch is stopped, timer will go to 10-minute standby mode.)

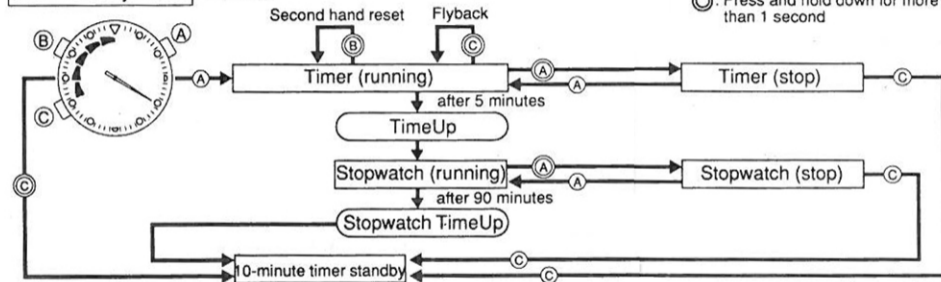
- ☆ Elapsed time display changes as watch switches from timer to stopwatch:
Stopwatch minutes — read off the circular graphic display minute scale
Stopwatch seconds — read off the second hand
- ☆ In timer standby mode, the current time is displayed.
- ☆ When the timer is running, the hour/minute hands 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 accurately displayed on the graphic display panel.

5-minute timer

Timer standby mode

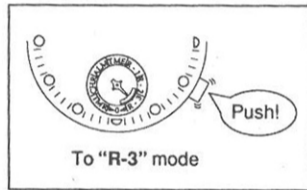
▶ : RED

Ⓞ: 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 accurately displayed on the graphic display panel.

4. Using Race mode 3



Race mode 3

- R-3 timer (1)
- Second hand reset function (2)
- Flyback feature (3)
- TimeUp confirmation beep (4)

Race mode 3 features

(1) R-3 timer

- R-3 timer settings for 3, 5, 10, 15 minutes are possible by pulling out the (M) button to the 1st step position. See pg 28, 29
- 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

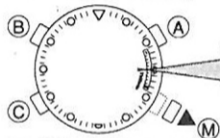
(3) Flyback — timer restart feature

(4) TimeUp 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 pg 16,17

Setting the R-3 timer

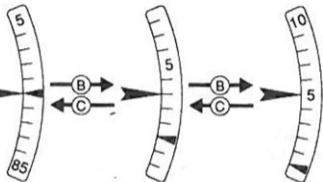
Setting procedures



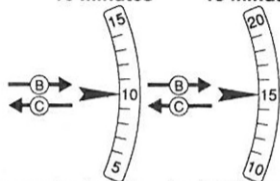
Pull the (M) button out to the 1st step position

- Timer settings for 3, 5, 10, 15 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 and R-2 timer modes.

3 minutes 5 minutes



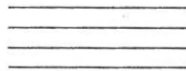
10 minutes 15 minutes



- Time conversion from the circular graphic display minute scale to the graphic display panel

Circular graphic display minute scale

3 min.
5 min.
10 min.
15 min.

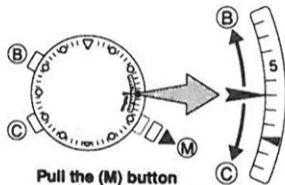


Graphic display panel

3 red, 2 white
5 red
5 blue
5 white

Using the R-3 timer — Example: 3 minute setting

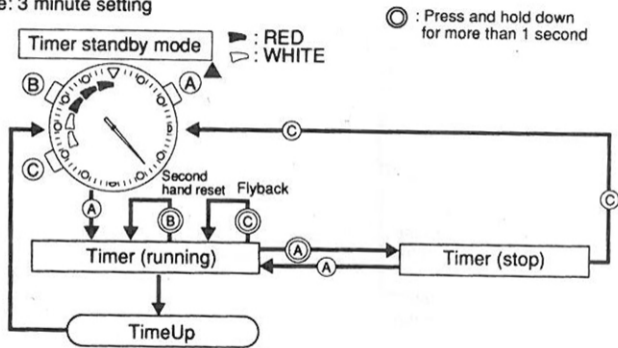
Setting procedures



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

- After settings are complete push the (M) button in to the normal position.

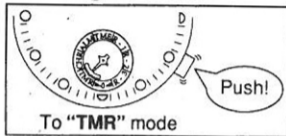
30



- ☆ 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.

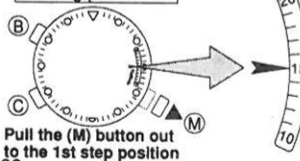
31

5. Setting the Timer



Using the timer Ex. 15 minute setting

Setting procedure



32

- Set the timer using the circular graphic display minute scale.
 - **Timer calibration:** 1-second increments
 - **Maximum time range:** 90 minutes in 1-minute increments
- The "0" position is used as the "90-minute" setting.

(B) button • Flyback feature See pg 17
 ☆ The timer countdown hand (second hand) moves counterclockwise subtracting time from the timer setting.

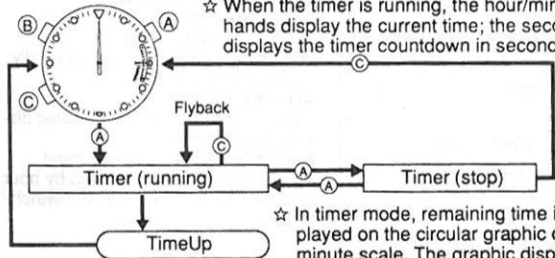
- After settings are complete push the (M) button in to the normal position.

(C) button

Timer standby mode

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

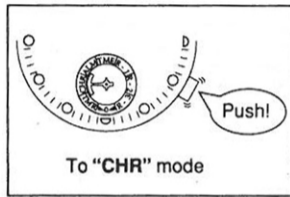
☆ When the timer is running, the hour/minute hands display the current time; the second hand displays the timer countdown in seconds.



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

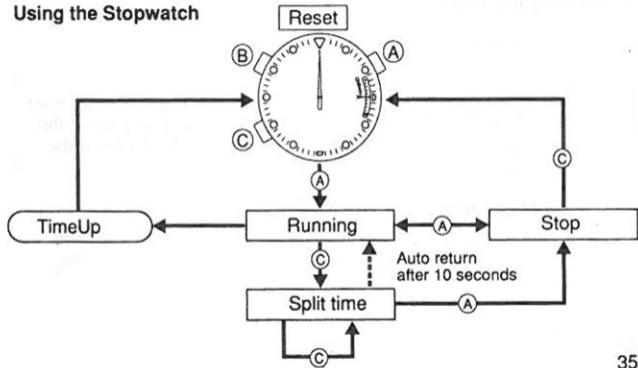
33

6. Stopwatch Operation



- **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 hour and minute hand while in stopwatch mode.

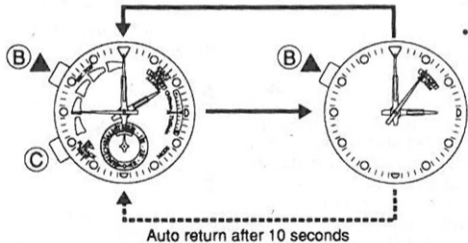
Using the Stopwatch



8. Monitoring in the Normal Time Mode

Alarm set time monitor

Press the (B) button while in the normal time mode to monitor the alarm setting.

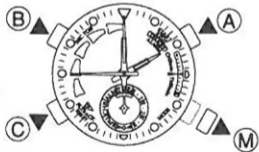


- Press the (B) or (C) button to return to the normal time mode from the alarm monitoring mode.

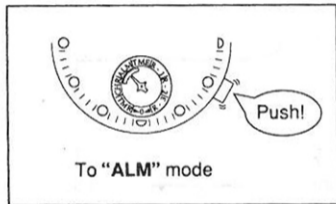
9. All reset function

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 (M) 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, pg 7.



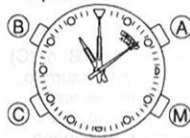
7. Setting the Alarm



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

Setting procedures

1 (M) button normal position



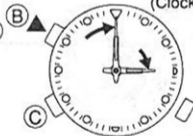
2 Pull the (M) button out to the 1st step position



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

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

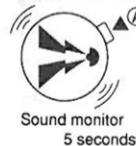
(Clockwise)



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

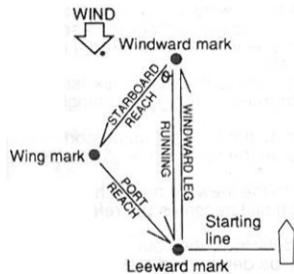
- Press and hold down the (B) or (C) button to use the quick-advance feature.



Sound monitor
5 seconds

E. 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 time.



Direction:

Navigational bearings are most often given in terms of degrees. North: 0° East: 90° South: 180° West: 270°

Starboard:

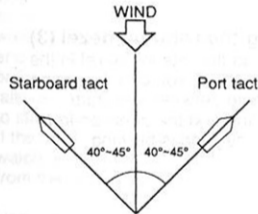
The right-hand side of a yacht looking forward.

Port:

The left-hand side of a yacht looking forward.

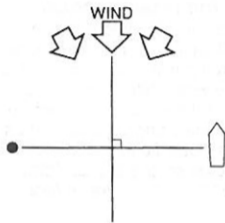
Using the rotating bezel (1)

- 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 (Δ) mark at 12 o'clock. (Ex.: northeasterly wind at 45°)
- The course bearing from the windward mark to the wing mark (starboard reach) is read off the bezel, in degrees, at the green triangle (Δ) on the bottom left side of the dial.
- The course bearing from the wing mark to the leeward mark (port reach) is read off the bezel, in degrees, at the red triangle (Δ) on the bottom right.
- 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 when the θ angle is 45° . At 60° , use the values lying 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 at 45° 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 face.



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.

F. USE PRECAUTIONS

1. Water resistance

Indication			Water-related use				Water-resistant characteristics
Water-resistant performance ranking	Watch face	Caseback	 Light spray, perspiration, light rain, bathing, etc.	 Swimming, etc.	 Skin diving (Without oxygen tank)	 Scuba diving (With oxygen tank)	
A	—	—	NO	NO	NO	NO	Not water resistant; must be kept away from water.
B	—	WATER RESISTANT	OK	NO	NO	NO	Water resistant; can withstand light spray, perspiration, light rain, etc.,
C	WATER RESISTANT 50M(5 bar)	WATER RESISTANT	OK	OK	NO	NO	Suitable for swimming, but not diving.
D	WATER RESISTANT 100M(10 bar)	WATER RESISTANT	OK	OK	OK	NO	Suitable for skin diving.
E	WATER RESISTANT 150M(15 bar) or DEEPER	WATER RESISTANT	OK	OK	OK	OK	Suitable for scuba diving.

*"WATER RESISTANT" may sometimes be abbreviated as "WATER RESIST"

* Always set the crown in the normal position. * Tighten screwlock crown completely.

2. Avoid temperature extremes

Avoid leaving your watch in direct sunlight or in extremely warm locations for long periods of time.

- This will cause malfunctioning and shorten the life of the battery. Do not leave your watch in the cold for long periods of time.
- Place your watch on your wrist to restore its original movement accuracy should it begin to gain or lose time.

3. Avoid wet conditions

Do not operate the buttons when your watch is wet.

4. Avoid strong shock

Your watch will withstand the bumps and jars normally incurred while playing and during sports activities.

Avoid dropping or otherwise imparting severe shock to your watch.

5. Avoid strong magnetic fields

Keep your watch out of the immediate vicinity of strong magnets. Generally, your watch is not affected by magnetic fields from such household appliances as televisions and stereos.

6. Avoid harmful chemicals, solvents and gases

Avoid wearing your watch in the presence of strong chemicals, solvents and gases. If your watch comes in contact with materials such as gasoline, benzine, paint thinner, alcohol, spray cosmetics, nail polish, nail polish remover, adhesives or paint, discoloration, deterioration or damage to the case, band and other components may occur.

7. Keep your watch clean

It may become difficult to pull out the crown due to dirt and dust getting caught between the crown and the watch case when the watch is worn for long periods of time. To help prevent this from happening, turn the crown freely back and forth occasionally while it is in the normal set position. Wipe off any water and moisture that adheres to the case, glass and band with a soft, clean cloth. Any dirt left on the case or band may cause skin irritation.

A watchband will easily become soiled with dust and perspiration because it is in direct contact with the skin. Even a stainless or gold-plated band may begin to corrode if it has not been cleaned for a long period of time.

Mesh bands, because the meshes are very fine, will lose their particular flexibility if they are left soiled for a long time.

Metal watchbands should be washed periodically to keep them looking beautiful at all times.

Metal watchbands are usually washed with a brush in mild, soapy water and well wiped with a soft, absorbent cloth to make sure all water is removed. Caution should be taken to prevent any water from getting inside your watch when the band is washed.

8. Periodic inspection

Getting your watch checked periodically is recommended to ensure long use and trouble-free operation.

9. Make sure all batteries are kept out of reach of infants and small children. Should accidental ingestion occur, consult a doctor at once.

G. SPECIFICATIONS

- 1. Type:** Analog multi-hand quartz watch
- 2. Accuracy:** ± 20 seconds between 5°C - 35°C (41°F to 95°F)
- 3. Quartz oscillation frequency:** 32,768 hertz
- 4. Effective temperature range:** -10°C to 60°C (14°F to 140°F)
- 5. Converters:** Bipolar step motors (3 pcs)
- 6. Time adjustment:** DFC (no terminal)
- 7. Additional features**
 - ◆ **Race 1** • 10-minute graphic timer after TimeUp
 - Auto-switchover to 90 min. stopwatch
 - Flyback
 - Second hand reset
 - ◆ **Race 2** • 5-min./10-min. graphic timer switching
 - Auto-switchover to 90 min. stopwatch after TimeUp
 - Flyback • Second hand reset
 - ◆ **Race 3** • 3,5,10,15-minute timer selection settings • Flyback
 - Second hand reset

- ◆ **Timer** • 1 to 90 minute timer with selection settings in 1 minute increment.
- ◆ **Stopwatch** • Max. range: 90 minutes in 1-second increments
- ◆ **Alarm** • Daily alarm

8. Battery: 1 Silver oxide

- ◆ **Battery No.:** 280-44 (SR927W)
- ◆ **Battery Life:** about 2 years after installation of new battery under the following conditions:

(1) **Sound**

Daily alarm: once/day

Timer: once/2 days

Race 1, 2: once/week

Race 3: once/day

(2) **Graphic timer display**

Race 1, 2: once/week

Race 3: once/day

(3) **Timer:**

Stopwatch:) 30min; once/day

9. IC: 1 CMOS-LSI