Module No. 905/913

READING THE DISPLAY

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

REGULAR TIMEKEEPING MODE Changes between 12/24-hour format
Month, Date, Day, PM Mark, Hour, Minute, Second
[Module No. 905]
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DISTANCE SETTING/COUNTDOWN ALARM MODE
DISTANCE SETTING MODE — Distance — Mode indicator — Press Ⓑ
COUNTDOWN ALARM MODE — Preset countdown time

TACHYMETER MODE — Average speed — Mode indicator — Stopwatch display

DAILY ALARM MODE — Mode indicator — Alarm time — Alarm ON mark — Hourly time signal ON mark

Press Ⓐ

SETTING TIME AND DATE

Month, Date, Day, Hour, Second, Minute

1) Press Ⓑ in the REGULAR TIMEKEEPING MODE to set correct time.
2) Press Ⓓ on a time signal to correct seconds.
3) Press Ⓐ to shift flashing digit(s).
   Digit(s) to be changed will flash.

Press Ⓐ
SECOND → HOUR → MINUTE
DAY ← DATE ← MONTH
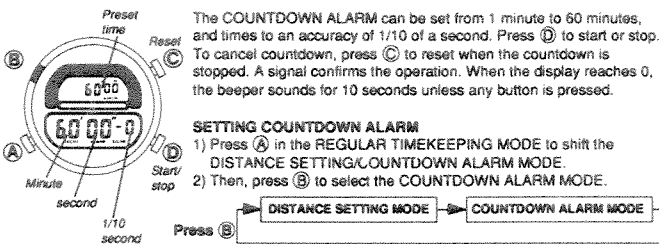
4) Each press of Ⓓ increases the digit one by one.
   Hold down for high speed movement.
5) Press Ⓑ to complete setting.

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

USING COUNTDOWN ALARM

Preset time, Reset, Minute, second, 1/10 second, Start/stop

The COUNTDOWN ALARM can be set from 1 minute to 60 minutes, and times to an accuracy of 1/10 of a second. Press Ⓓ to start or stop. To cancel countdown, press Ⓒ to reset when the countdown is stopped. A signal confirms the operation. When the display reaches 0, the beeper sounds for 10 seconds unless any button is pressed.

SETTING COUNTDOWN ALARM
1) Press Ⓐ in the REGULAR TIMEKEEPING MODE to shift the DISTANCE SETTING/COUNTDOWN ALARM MODE.
2) Then, press Ⓑ to select the COUNTDOWN ALARM MODE.
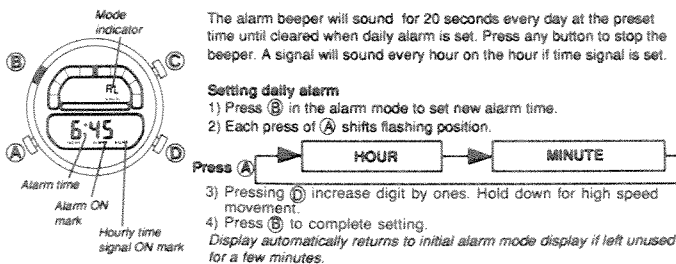
Press Ⓑ
DISTANCE SETTING MODE → COUNTDOWN ALARM MODE

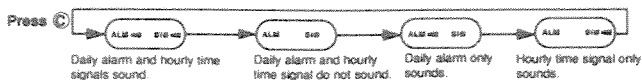3) Each press of Ⓒ in the COUNTDOWN ALARM MODE increments the digit one by one. Hold down for high speed movement.

AUTO-REPEAT FUNCTION
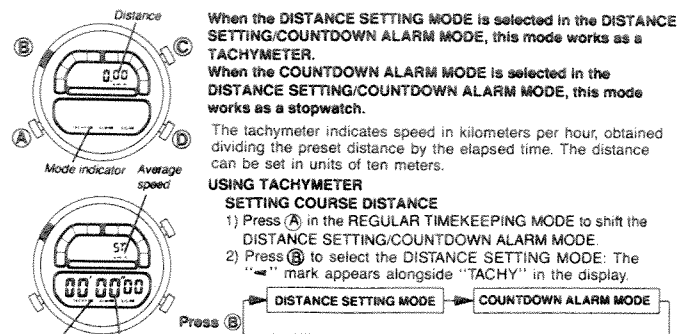Pre-entered time is retrieved and started again when display reaches 0.

USING DAILY ALARM

Mode indicator, Alarm time, Alarm ON mark, Hourly time signal ON mark

The alarm beeper will sound for 20 seconds every day at the preset time until cleared when daily alarm is set. Press any button to stop the beeper. A signal will sound every hour on the hour if time signal is set.

Setting daily alarm
1) Press Ⓑ in the alarm mode to set new alarm time.
2) Each press of Ⓐ shifts flashing position.

Press Ⓐ
HOUR → MINUTE

3) Pressing Ⓓ increase digit by ones. Hold down for high speed movement.
4) Press Ⓑ to complete setting.
Display automatically returns to initial alarm mode display if left unused for a few minutes.

On or off setting of alarm and time signal

Press Ⓒ
ALM·◄ SIG ... → ALM S·◄ → ALM·◄ SIG ... → ALM S·◄

Daily alarm and hourly time signals sound. | Daily alarm and hourly time signal do not sound. | Daily alarm only sounds. | Hourly time signal only sounds.

USING TACHYMETER

Distance, Mode indicator, Average speed, Mode indicator, Stopwatch display

When the DISTANCE SETTING MODE is selected in the DISTANCE SETTING/COUNTDOWN ALARM MODE, this mode works as a TACHYMETER.
When the COUNTDOWN ALARM MODE is selected in the DISTANCE SETTING/COUNTDOWN ALARM MODE, this mode works as a stopwatch.

The tachymeter indicates speed in kilometers per hour, obtained dividing the preset distance by the elapsed time. The distance can be set in units of ten meters.

USING TACHYMETER
SETTING COURSE DISTANCE
1) Press Ⓐ in the REGULAR TIMEKEEPING MODE to shift the DISTANCE SETTING/COUNTDOWN ALARM MODE.
2) Press Ⓑ to select the DISTANCE SETTING MODE: The "◄" mark appears alongside "TACHY" in the display.

Press Ⓑ
DISTANCE SETTING MODE → COUNTDOWN ALARM MODE

3) Press Ⓓ to shift the flashing digit.
4) Each press of Ⓒ increments the digit one by one. Hold down for high speed movement.
5) Press Ⓐ to complete setting. The display will change to the TACHYMETER MODE.

MEASURING LAP TIME AND LAP SPEED
(Example) Measuring 4 lap times and lap speeds.
1) Press Ⓒ in the TACHYMETER MODE to reset the display, if the measuring results appear.
2) Press Ⓓ to start timing.
3) Press Ⓒ to take your 1st lap time and lap speed. At the same time the timer starts for 2nd lap. Press Ⓒ to show the timing for 2nd lap.
4) Press Ⓒ to take the 2nd lap. Then press Ⓒ.
5) Press Ⓒ to take the 3rd lap. Then press Ⓒ.
6) Press Ⓓ to stop. 4th lap time and lap speed is taken.
7) Press Ⓒ to reset.

Average speed, Stopwatch display

NOTE:
The "E" display appears when the lap speed exceeds "999.9". The stopwatch can measure up to 60 minutes. When this time is exceeded, timer will be reset and started again: lap speed can no longer be taken.

USING STOPWATCH

Mode indicator, Minute, Second, 1/100 second

Press Ⓓ to start or stop.
Press Ⓒ to take a split time.
To reset, press Ⓒ when the stopwatch is stopped.

A signal confirms the operation.
(Working range) Total elapsed time display is limited to 59 minutes 59.99 seconds.
For longer times, it is automatically reset and started again.
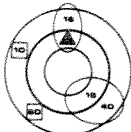
USING THE SLIDE RULE BEZEL

Speed index

Distance conversion index

Inner scale
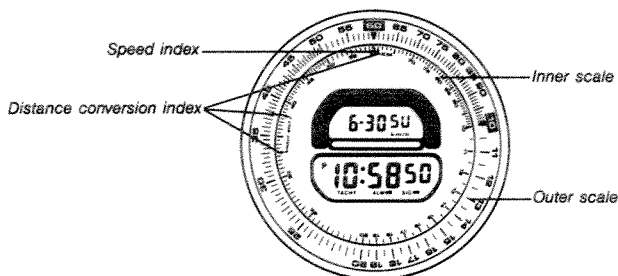
Outer scale
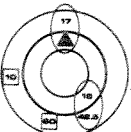
1) NAVIGATION CALCULATION
• Time Calculation

Example:
You want to know how long it will take you to fly 400 nautical miles. Your air speed is 160 knots.
<Steps>
Set the Speed Index (▲) on the inner scale to 16 (160 knots) on the outer scale. Find 40 (400 nautical miles) on the outer scale. The number opposite 40 is the answer in minutes (15→150 minutes or 2 hours and 30 minutes).

• Speed Calculation
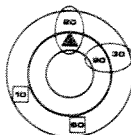
Example:
You want to know what speed will allow you to fly 300 nautical miles in 1 hour and 30 minutes.
<Steps>
Set the distance 30 (300 nautical miles) on the outer scale to 90 (90 minutes) on the inner scale. Find the Speed Index (▲). The number opposite the Speed Index is the answer (20→200 knots).

• Distance Calculation

Example:
You want to know how far you fly in 15 minutes when your air speed is 170 knots.
<Steps>
Set the Speed Index (▲) on the inner scale to 17 (170 knots) on the outer scale. Find 15 on the inner scale. The number opposite 15 is the answer (42.5 nautical miles).

• Fuel Consumption Rate Calculation
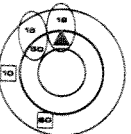
Example:
You want to know the hourly fuel rate in gallons when 150 gallons are consumed over 50 minutes of flight time.
<Steps>
Set 15 (150 gallons) on the outer scale to 50 on the inner scale. Find the Speed Index (▲). The number opposite the index is the answer (18→180 gallons per hour).

• Fuel consumption calculation
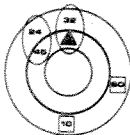
Example:
You want to know how much fuel is needed to fly 7 hours and 30 minutes. Your fuel consumption rate is 320 gallons per hour.
<Steps>
Set the Speed Index (▲) on the inner scale to 32 (320 gallons per hour) on the inner scale. Find 45 (450 minutes) on the inner scale. The number opposite 45 is the answer (24→2400 gallons).
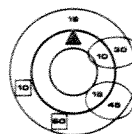
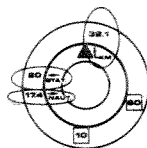## 2) GENERAL-PURPOSE CALCULATION FUNCTION
• Multiplication
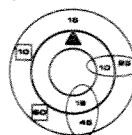
Example: 25 x 18
<Steps>
Set 25 on the outer scale to 10 on the inner scale. Find 18 on the inner scale. The number opposite 18 is the answer (45→450).

• Division

Example: 450 ÷ 15
<Steps>
Set 45 on the outer scale to 15 on the inner scale. Find 10 on the inner scale. The number opposite 10 is the answer (30).

• Conversion

Example:
You wish to convert 20 statute miles into nautical miles or kilometers.
<Steps>
Set STAT on the inner scale to 20 on the outer scale. Find NAUT on the inner scale. The number opposite NAUT is the answer (17.4 nautical miles). For kilometers, find KM on the inner scale. The number opposite KM is the answer (32.1 kilometers).

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