FOCUS SPEED-SOUNDER

OWNERS MANUAL

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EXCELLENCE IN MARINE ELECTRONICS

Contents

Introduction

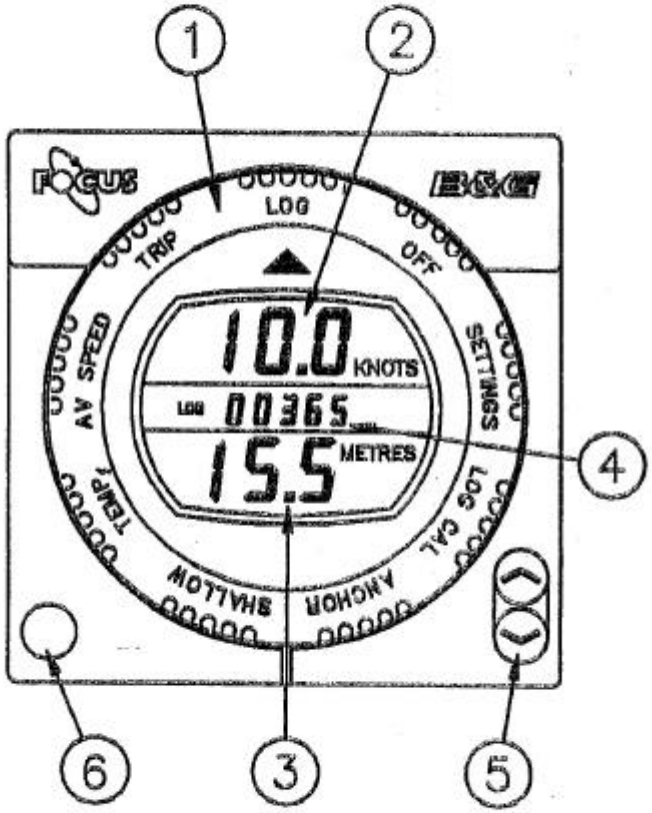
The Focus Depth Speed and Multifunction unit utilises the latest technology in electronic design and manufacture to allow simple operation by means of the ROTO-SELECT DIAL (1).

The available functions are displayed by using the roto-select dial (1) so that a quick selection and changes can be made.

The Speed (2) and Depth (3) read-outs are displayed constantly. A third function selected by the ROTO-SELECT DIAL (1) is displayed on the centre display section (4).

The large push button (5) is used for functions such as changing values (i.e. knots to mph).

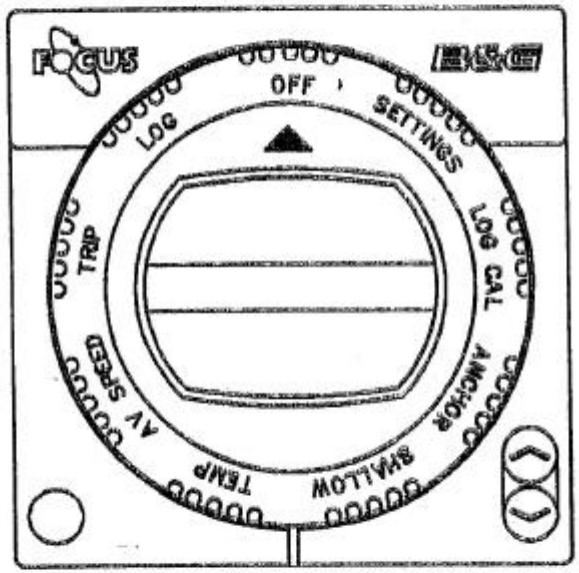
The smaller push button (6) is used for functions such as activating and deactivating the alarms.



Operation - OFF

When the dial is set to OFF, Focus is in a sleep mode. Under these conditions the depth sounder and displays are turned off. (However, the log reading and depth alarm settings are retained in the memory for future recall).

Focus will remain inactive until the ROTO-SELECT DIAL is moved.



Operation - LOG

With the ROTO-SELECT DIAL (1) positioned to "LOG" the displays will become active showing:-

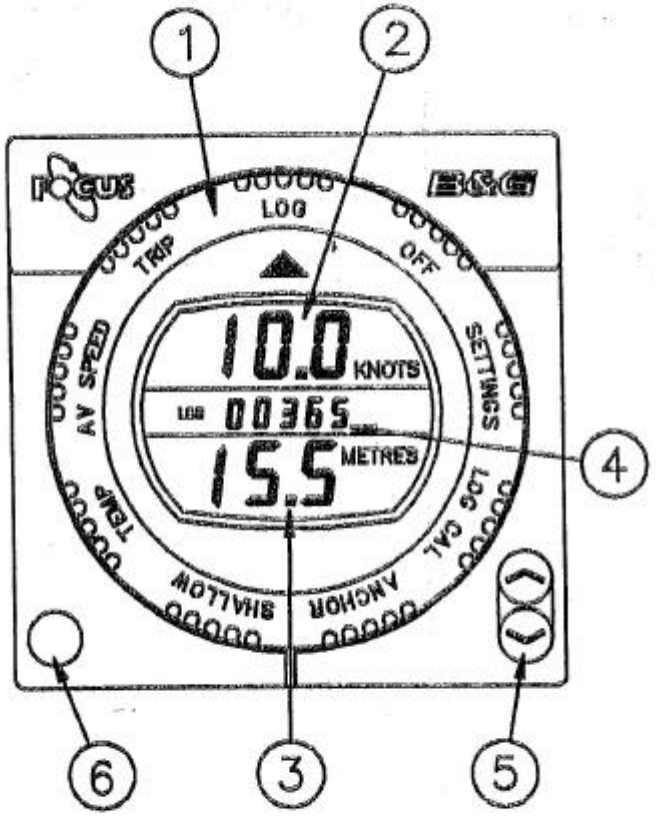
- Speed (2)
- Depth (3)
- Log (Nautical Miles) (4)

Button (5) will change the log (4) to include a decimal point,eg.

i) 00365

ii) 365.21

Button (6) is inactive.



Operation - TRIP

With the ROTO-SELECT DIAL (1) positioned to "TRIP" the display will be active showing:-

- Speed (2)
- Depth (3)
- Trip log (4)

Button (5) will change the trip log (4) format to include a decimal point, eg.

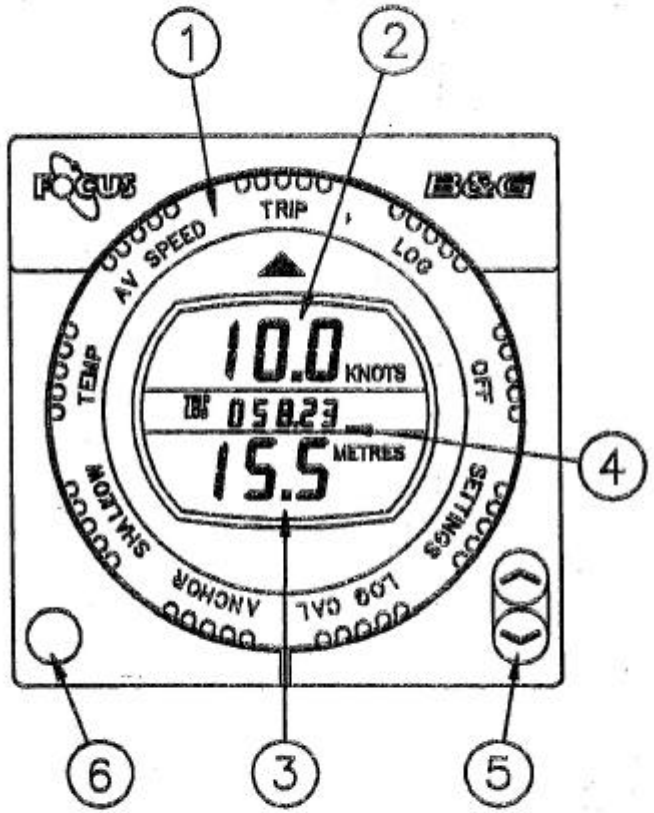
i) 058.23

ii) 00058

Button (6) - On first press will flash trip log value, eg. 058.23

While value is flashing, press (6) to zero and reset trip functions.

If (6) is not pressed within 4 secs of flashing the original trip information is returned; no information is lost.



Operation - AV SPEED

With the ROTO-SELECT DIAL (1) positioned to "AV SPEED" the display will be active showing:-

- Speed (2)
- Depth (3)
- Average Speed (4)

Button (5) changes read-out to show, eg.

i) 023.56 AV Speed - Average Speed

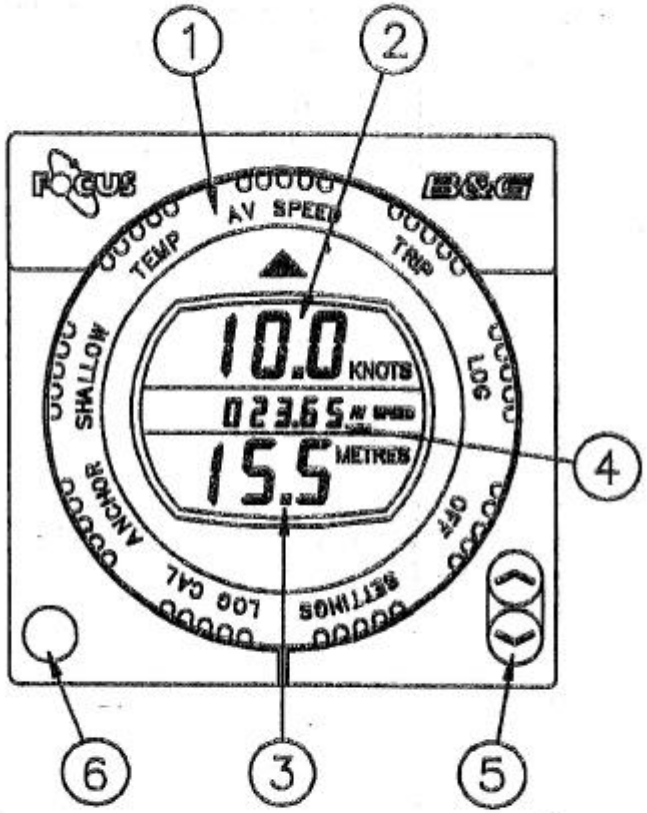
ii) Log 059.04 Av -Dist.Covered

iii) 30:40 Av - Time Taken (Hrs:Mins)

Button (6) - On first press the the average value will flash, eg. 023.56

Press (6) again while flashing to zero and reset trip functions.

After 4 secs of flashing the original average value is returned, no information is lost.



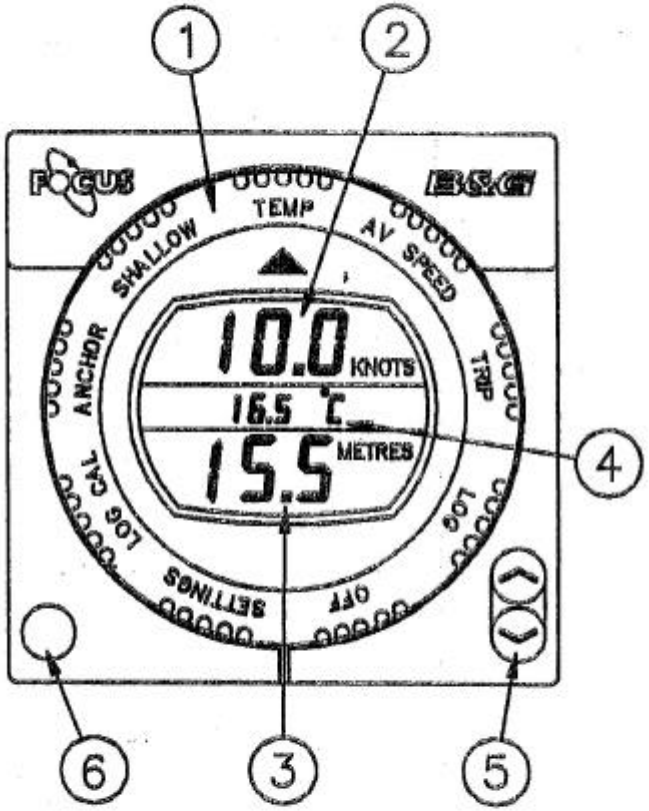
Operation - TEMP

With the ROTO-SELECT DIAL (1) positioned to "TEMP" the display will be active showing:-

- Speed (2)
- Depth (3)
- Seawater Temperature (4)

Button (5) is inactive

Button (6) is inactive



Operation - SHALLOW

With the ROTO-SELECT DIAL (1) positioned to "SHALLOW" the display will be active showing:-

- Speed (2)
- Depth (3)
- Shallow Depth Alarm Level (4)

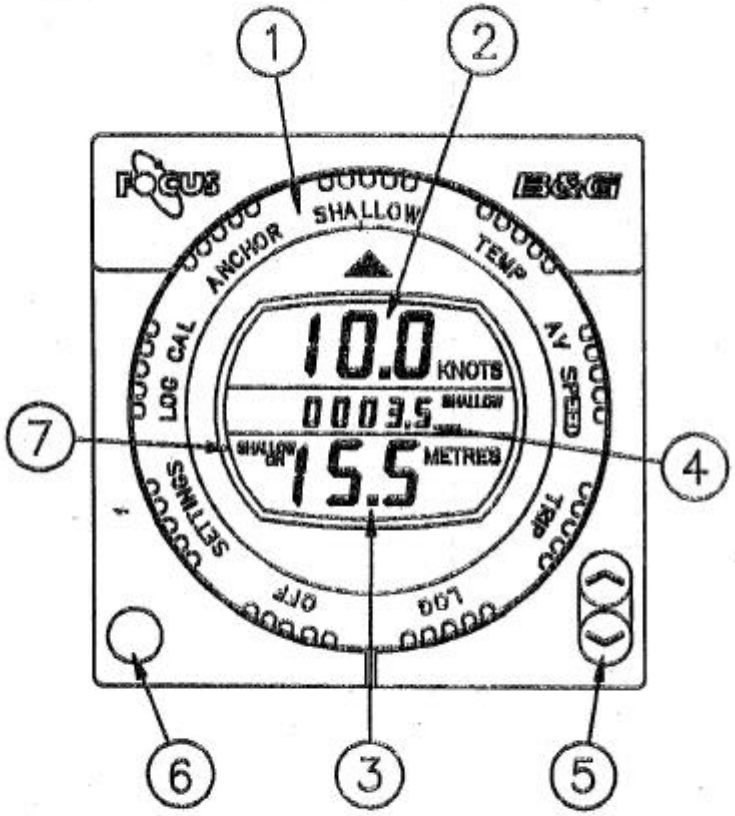
Button (5) changes the alarm setting value higher or lower by pressing the appropriate arrow.

When the button is held down the value will increase or decrease as long as the button is pressed.

Button (6) turns the Shallow Alarm Function ON and OFF. The SHALLOW alarm annuciator (7) will be ON when the alarm is active.

When an alarm is triggered the display flashes and irrespective of functions selected any externally connected alarm will sound.

Press (6) to reset the alarm and resume normal operation.



Operation - ANCHOR

With the ROTO-SELECT DIAL (1) positioned to "ANCHOR" the display will be active showing:-

- Speed (2)
- Depth (3)
- Shallow Anchor Depth Alarm Level (4)
- Deep Anchor Depth Alarm Level (4)

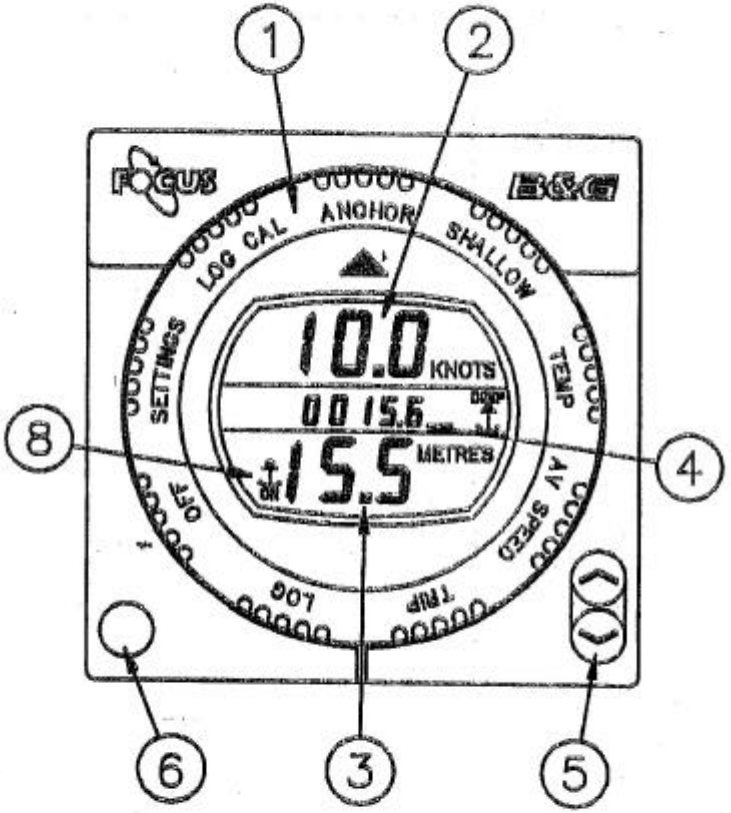
Button (5) - The display will slowly alternate between the SHALLOW ANCHOR level and the DEEP ANCHOR level in display (4).

DEEP SHALLOW

0015.6 ⚓ <=> 002.3 ⚓

Pressing the up/down buttons (5) will halt the alternating allowing adjustment to be made to the appropriate ANCHOR alarm level.

After 4 secs the display will resume SHALLOW/DEEP alternating ready for the next adjustment.



Operation - ANCHOR

Button (6) turns the ANCHOR alarm function ON or OFF. The ANCHOR alarm annunciators (8) will be ON when the alarm is active.

When the alarms are triggered the display flashes irrespective of function selected and any externally connected alarm will sound.

Press (6) to reset the alarm and resume normal operation.

Operation - LOG CAL

With the ROTO-SELECT DIAL (1) positioned to "LOG CAL" the display will be active showing:-

- Speed (2)
- Depth (3)
- Distanced travelled (4)

The centre display will flash when this position is first selected.

to calibrate the LOG

i) Press (6) at the start of a measured run. The length of the run does not matter, but it should be easily identifiable both on the ground and the chart.

ii) At end of the measured distance, press (6) again. The "Log Cal" displayed digits (4) will flash again and freeze the distance run.

iii) Turn the boat round for a second run in the opposite direction over the same measured distance.

iv) Press (6) at the start of the return run.

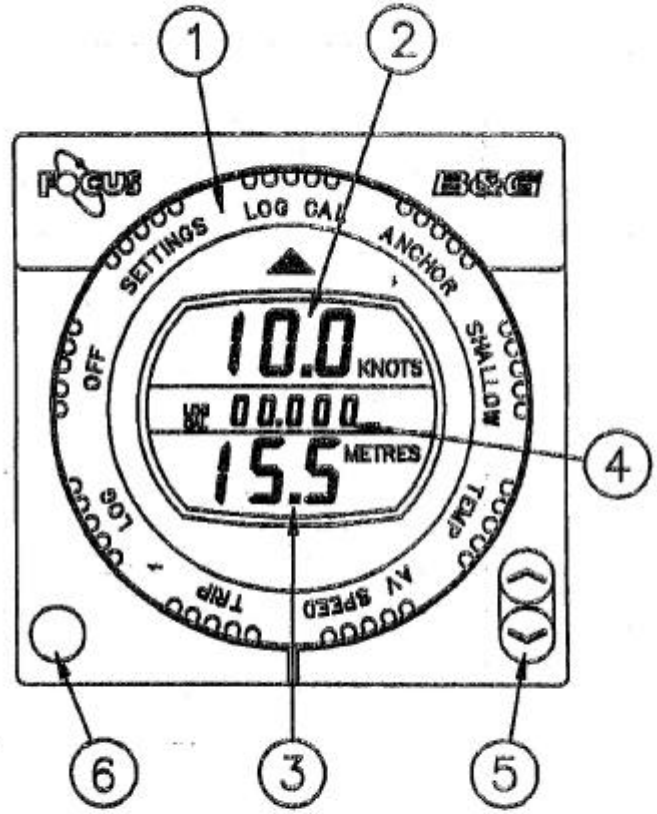
v) Press (6) at the end of the return run.

vi) Repeat i) to v) as many times as required. A minimum of 3 runs is suggested. Display (4) will show the total distance covered over the runs.

vii) Measure the true distance from the chart and multiply by the number of runs made e.g. 3.

viii) Press (5) to change the flashing displayed value to the correct calculated value.

ix) Rotate the ROTO - SELECT DIAL to any function and the calibration is automatically retained in memory, and the unit resumes normal operation.



With the ROTO-SELECT DIAL (1) positioned to "SETTINGS" the display will be active showing:-

- Speed(2)
- Depth (3)
- Speed Damping (4)

This position allows the displayed units to be changed and constant factors used in the instrument to be altered.

Factors

Initially the display will show Speed Damping time in seconds.

Press (5) to change from 1 sec to 64 secs. Light secs typically 1-8 secs. See Heavy seas typically 8-64 secs.

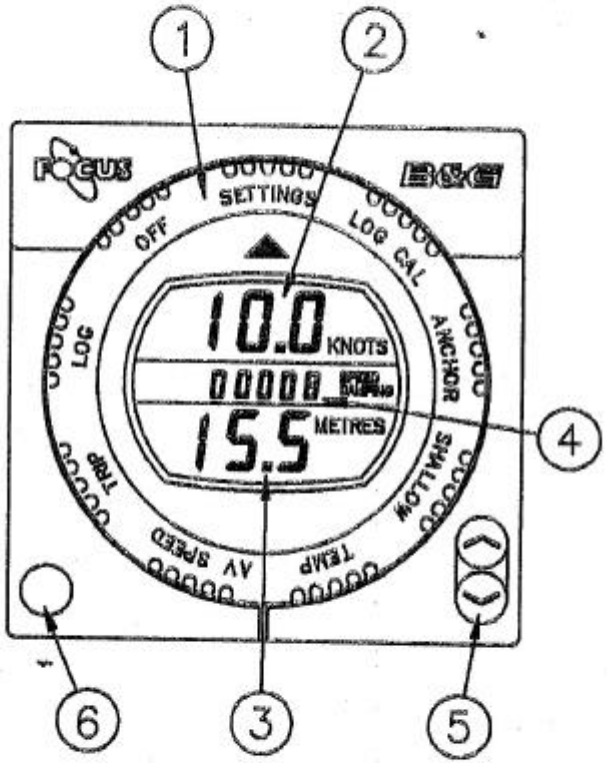
Press (6) - The depth units will flash.

Press (5) to change between feet/metres.

Press (6) - The speed units will flash.

Press (5) to change between mph/knots.

Press (6) - The centre display will flash Temperature.



Press (5) to change between °C/ °F.

Press (6) - The centre display will show Datum Depth, this is used to correct for the depth of the sensor unit below the water level or depth of keel from the sensor unit depending on reference choice.

Press (5) to increase or decrease the value.

Press (6) - The centre display will show the LOG CAL factor, this is normally used for factory setting.

This is a fine tune function with default value = 0.

Press (5) to change to the required value.

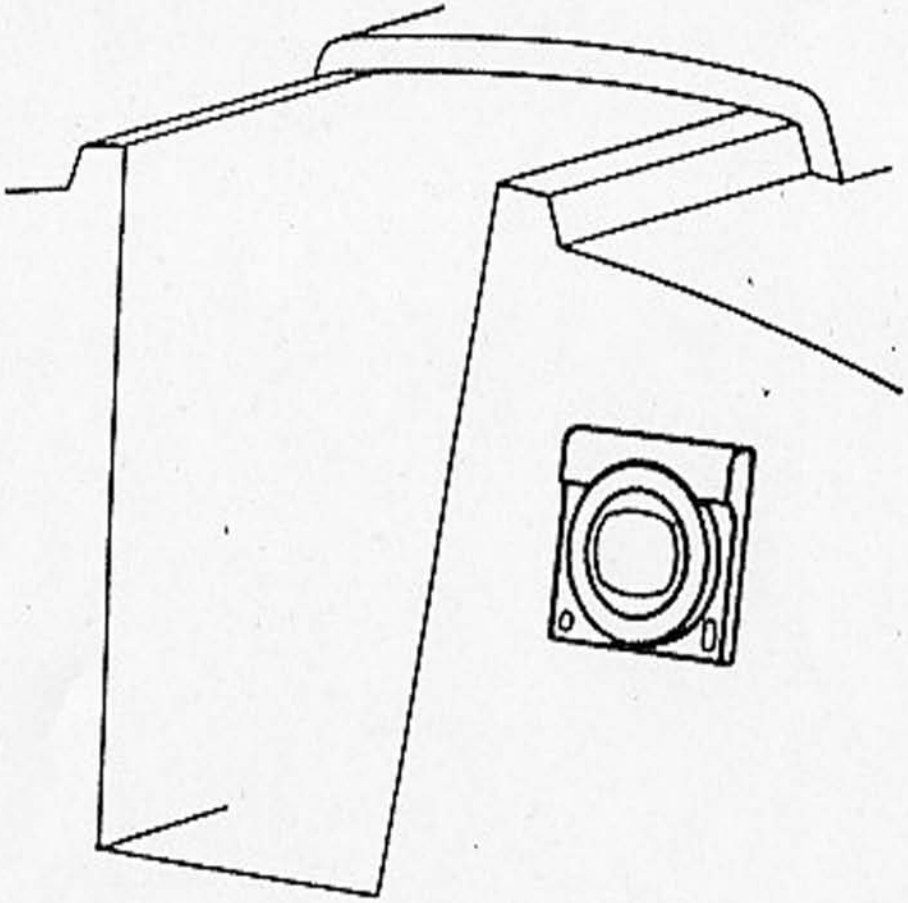
Further presses of (6) will step through the functions again, beginning with Speed Damping.

For FOCUS SPEED-SOUNDER installation details see separate Drawing Number 210-IS-0344.

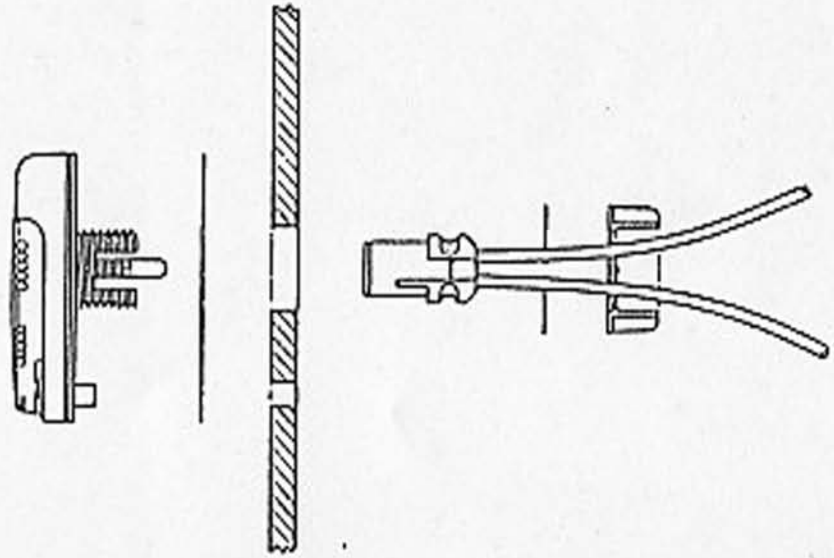
For interconnections with FOCUS WINDWATCH see separate Drawing Number 210-IS-0371.

Speed-sounder display unit

Select a suitable position on the required bulkhead, position typically preferred is shown. Ensure the display unit is a minimum 300mm/12ins from compass.



Fitting the SPEED-SOUNDER Display unit:



1 Site the display unit in the required place ensuring there will be 60mm (2.5") clearence between the front of the mounting panel and any inside bulkhead.

2 Stick the template to the display area and drill the 38mm (1.5") and 10mm (3/8") hole in the display bulkhead. Ensure the 10mm hole is drilled completely through the bulkhead.

3 Run the service cable from the display panel (leaving the plug half hanging out of the larger of the two display mounting holes) to provide the power source:

a *Connect the power wires:*

Red wire to Battery +ve and Black and Blue wires to Battery -ve.

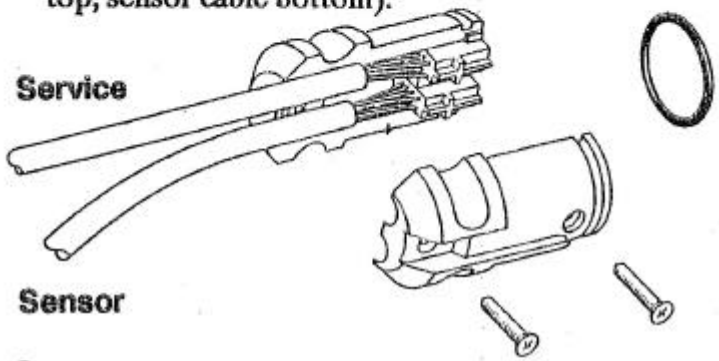
b *Connect the lighting wires:*

Yellow to Lighting +ve and White to Lighting -ve.

c If an alarm is required, connect the Brown wire to the Alarm -ve and connect a wire from the Battery +ve to Alarm +ve.

4 Feed the Sensor Cable with the connector to the back of the Display mounting bulkhead and out of the larger display mounting holes next to the plug half and Service Cable.

5 Assemble the two plug halves using the two screws provided, as shown in the diagram (service cable top, sensor cable bottom).



6 Withdraw plug into bulkhead and slide display fixing nut and rubber washer over plug assembly.

7 Push SPEED-SOUNDER Display Unit, with large rubber seal, into holes. Push the Plug into the back of the unit until the tabs engage the plug cutouts and screw up the nut until hand tight. Do not use wrench or spanners.

8 Remove Yellow Protective film over display window. The unit is now ready for use.

General

Lighting The illumination for the instrument is by Pins 4 & 5 of the Service Connector. Standard 12v 'P' lamps are used (Do not over volt).

Buzzer An alarm buzzer rated at 12V (0.4A max) can be connected between the brown wire of service cable (210-0A-041) and +12V supply. An in-line fuse must be fitted between the supply and alarm buzzer +VE terminal. Refer to installation sheet 210-IS-0344.

Repeater A single repeater unit visually and functionally identical to this unit is also available. Contact your local agent for further details.

Mounting When mounting the unit ensure the correct holes are made (38 mm); (1.5") dia and 10mm (3/8") dia. 57.5mm apart vertically.) The rear mounting gaskets are fitted on each side of the bulk head.

Water Resistance The display unit and repeater are designed for mounting in the cockpit. The unit utilises micro-climatic control; this ensures the best operation under any conditions.

Cleaning Do not clean display or transom mounted sensor with solvents. Use soapy warm (not hot) water. The Roto-Select dial can be removed for cleaning; salt build up may cause sticking. Take care not to loose the spring and ratchet when removing dial.

Specification

Display unit details

Dimentions	122mm x 122mm x 30mm
Screen	2 function simultaneous LCD display
Lighting	Backlit

Installation

Location	Chart table or cockpit (minimum 200mm from compass)
Bulkhead	Maximum thickness 20mm
Power supply	12V DC nominal. OP range 9.7V to 15V. Current drain without lighting typically 115mA at 12V
Lighting	12V DC nominal. OP range 9.7V to 15V. Current drain 85mA
Cables/ connectors	24m MHU display cable with single plug connections. plus power cable.
Operating temp.	-10° to +60°C
Sensor	Combined wind angle and wind speed masthead unit