

USING YOUR STINGRAY DUAL ALARM ECHO SOUNDER

GENERAL

Your depth sounder has been designed to give good results, even under adverse conditions, but to obtain the very best from your instrument, the following hints should be read carefully and followed as far as practicable.

- A) The position of the instrument should be at least 2ft. (61cms) away from the craft's magnetic compass.
- B) To reduce the possibility of induced interference from the engine's generator and/or ignition system, choose a position as far away from the engine as possible and run the cable from the transducer as far as practicable from the engine. Do not cut the transducer cable. But stow any excess away from any possible source of electrical interference.

NOTES ON ELECTRICAL INTERFERENCE

External electrical interference is characterised by persistent, random flashes around the scale which obscure the true depth reading on the depthsounder.

This is caused by large amplitude voltage "spikes" generally associated with the engine's alternator and/or ignition system which has not been properly suppressed. These "spikes" may find their way into the sensitive amplifier section of the depthsounder in two ways:

- A) Through the craft's common power supply or
- B) Through direct radiation from the source of interference.

The effects of radiated interference will be very much reduced if the recommendations in 1 (b) are followed. Should the interference still be apparent try reducing the "GAIN" control which discriminates against interference whilst still allowing adequate signal strength from the transducer.

CONNECTING THE EXTERNAL POWER SUPPLY

The instrument will operate from a supply of 10-16 volts DC. Current consumption is typically 130mA.

Each instrument is supplied with a 3 pin plug and power cable which fits into a special socket at the rear of case. Connect the power lead into the ship's power supply, brown (positive+) and blue (negative-).

**UNDER NO CIRCUMSTANCES SHOULD A POWER SUPPLY
HIGHER THAN 16V BE CONNECTED**

SITING OF THE TRANSDUCER

The transducer can be mounted in three ways:

- A) Using an in-hull transducer mounting kit available from your dealer or direct from NASA Marine – see reverse for details
- B) The transducer face can be bonded directly to the inside of the hull. (Some energy is lost to the hull but the loss in performance is, for most G.R.P. hulls, hardly noticeable)
- C) A transom mount is available from your dealer or direct from NASA Marine.

Whichever is selected the best location still has to be found.

Select a position below the water level where the transducer will point substantially towards the sea bed and where the transducer and cable are kept well clear of interference generating equipment. This position should be well clear of large masses of bubbles or cavitation which would disrupt the signal.

To test the suitability of the location, press a little sticky chewing gum on the surface of the transducer and stick it down to the inside of the hull (it may be necessary to remove dirt and oily residue first). The unit can then be tested. If the location is satisfactory the chewing gum can be removed and the transducer mounted in the in-hull kit following the installation instructions or the face glued down with quick setting epoxy. **(Note: Do not shorten the transducer cable).**

It is important that the face of the transducer is thoroughly bonded down to the hull. A single air bubble will cause a considerable loss in performance.

The transducer or the place of mounting must be kept entirely free of any antifouling compound as this can also affect the performance of the unit.

OPERATING CONTROLS

The stingray echo sounder has only four control knobs.

Top left is the deep water alarm.

Top right is the shallow water alarm. When the vessel enters deep or shallow water corresponding with either of the preset window positions an audible alarm will sound.

The bottom left hand knob operates; on/off, A=0-25 mtr range, B=0-100 mtr range.

The bottom right hand knob operates the "GAIN" control.

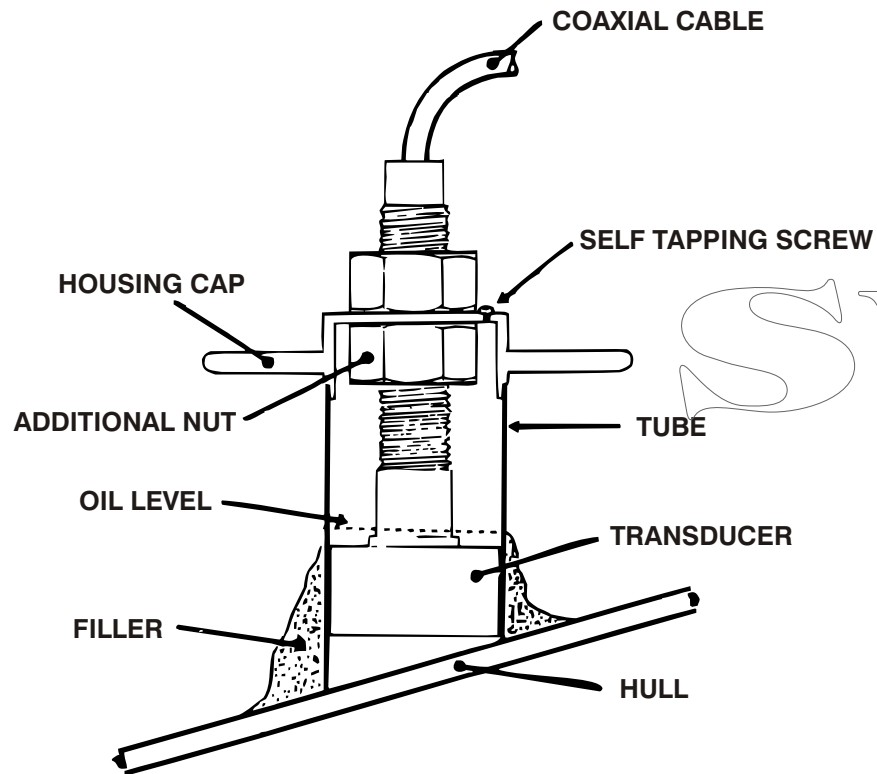
USE OF THE GAIN CONTROL

In general terms, the sensitivity of the instrument should be increased by rotating the "GAIN" control clockwise for deep water and reduce for shallow. However, this is by no means always necessary and experience will soon determine a satisfactory compromise where the setting need not be altered. Because of the large increase in transmit power built into current instruments, in very shallow water more than one echo (i.e. rebound - echoes) are certain to occur. Reducing the gain in this case will make interpretation of the display much easier.

IN HULL TRANSDUCER KIT

Fit your echo sounder with a NASA in-hull transducer kit. This contains all the components required to install a standard transducer within the hull of a glass fibre constructed vessel and is accompanied by comprehensive illustrated instructions.

Suitable for all standard 1½" (38mm) diameter echo sounder transducers.



NOTE: THIS INSTRUMENT IS SIMPLY AN AID TO NAVIGATION AND SHOULD NOT BE CONSIDERED AS A SUBSTITUTE FOR GOOD SEAMANSHIP.

STINGRAY RANGE

ECHO SOUNDER

BY
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