
THE TARGET RANGE

WIND SPEED & DIRECTION

INSTALLATION AND USER INSTRUCTIONS

BY

NASA → **MARINE**

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INTRODUCTION

The Target wind speed and direction instrument is supplied complete with display unit, mast head sensor and mounting kit. It is designed to operate from the vessels 12v battery supply.

PRETEST OF INSTRUMENT

Before mounting check that the instrument is complete and undamaged. Plug the sensor into the display unit and apply 12 volts. Gently spin the wind cups and the wind vane and check the operation of the display.

INSTALLING THE DISPLAY

Select a convenient position for the display on a panel or bulk head.

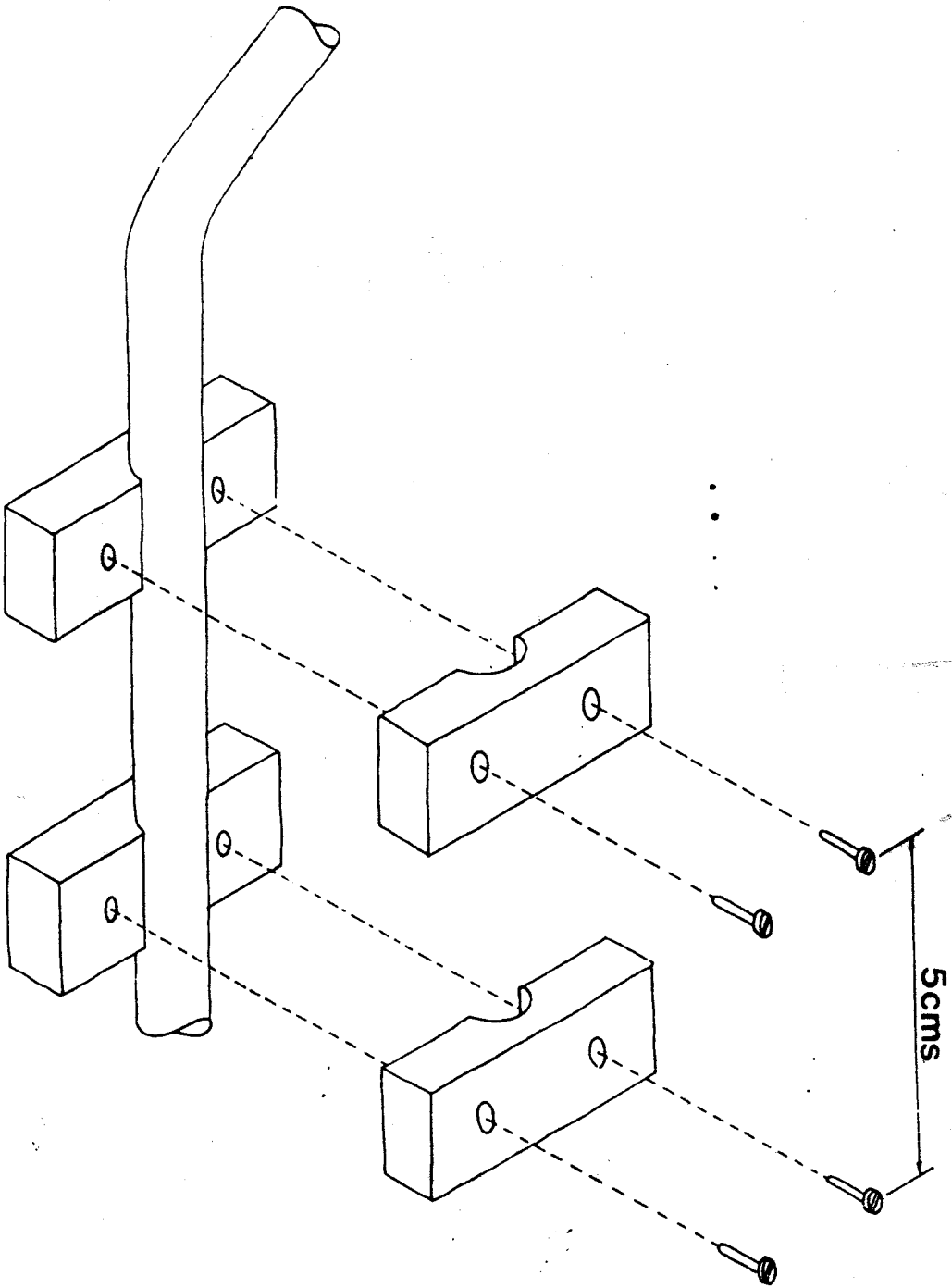
The site must be flat and the cavity behind the panel must remain dry at all times. (The cable entry boss is not sealed to allow free passage of air to and from the unit. This prevents misting of the display.)

The positions for the fixing holes can be marked on the panel using the drill template which is an integral part of the packing carton. Before drilling check that there is sufficient space behind the panel to route the cables and to allow access to tighten up the wing fixing nuts.

Drill the five holes and check that the unit fits. It may be wise to connect the cables before finally fixing the unit in position. Connect the black wire to negative and the red to positive. It is wise to use a fuse to provide protection should a fault occur. The current consumption is very small, a 1/4 AMP fuse is more than adequate. For display illumination the orange lead is also connected to positive. This can be connected through a switch which controls illumination for other instruments.

A sponge rubber seal is provided which should be fitted into the slot in the back of the instrument.

Fit the instrument into the panel and tighten the four wing nuts finger tight only.



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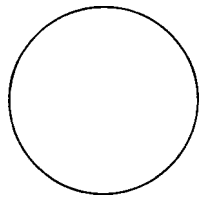
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DRILL TEMPLATE



25mm



← 5mm



It is important that the sponge rubber seal makes good contact with the panel or water may get behind the unit and enter the cavity behind the panel.

It is always good practice to take the cables vertically down from the unit.

INSTALLING THE SENSOR


The sensor is designed for mast mounting and is supplied with 15 metres of cable. Choose a position where the sensor can receive an unobstructed flow of air from all directions. The sensor must be substantially horizontal, the orientation with respect to the boat is unimportant. Four mounting blocks together with four stainless steel self tapping screws are supplied to screw the sensor to a metal mast. If the sensor is to be fitted to a wooden mast suitable screws should be used.

After the sensor is securely fitted run the cable to the display unit and plug into the socket on the display. Stow any excess cable, do not cut off the plug. If the cable is not long enough, a 10 metre extension cable is available.

ADJUSTMENT OF MASTHEAD ALIGNMENT

If power is applied to the instrument the wind speed will now function. The wind direction however will not necessarily display the correct angle until the alignment procedure has been completed. With the wind vane pointing forward along the axis of the boat, turn off the supply to the unit. Press the **ALIGN** key and keep depressed whilst the supply is turned back on. Release the key and the indicating arrow will step round the display to the correct position. Turn off the supply and turn back on and the unit will be fully aligned.

READING THE DISPLAY

The numbers on the left of the display indicate the wind speed directly in knots. The arrow on the right of the display shows the direction of the wind relative to the boat's heading. When the wind angle is between two arrows then both arrows will indicate. The keys and  have no function but are included to make the unit compatible with any future software developments. When the unit is not in use replace the cover over the display to prevent physical damage.

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

THE TARGET RANGE

ALSO COMPRISES

LOG

- 0 - 30 KNOTS
- TRIP DISTANCE
- TOTAL DISTANCE

ECHO SOUNDER

- 0.8 - 100 METRES
- DEEP & SHALLOW ALARMS
- KEEL OFFSET

COMPASS

- SELECTABLE DAMPING
- FULLY GIMBALLED SENSOR
- 0 - MAGNETIC HEADING