AIS Engine 2

The NASA AIS Engine has been updated to include extra features.

Two LED's have been added to show the status. The red LED indicates that power is present and the green LED flashes each time a valid AIS message is received and each time a valid RMC message is detected on the GPS input. The AIS Engine 2 software has also been updated to include class B messages from leisure craft transponders.

The AIS Engine 2 can be connected directly to a PC via 9 pin serial port or to a USB input using a serial to USB converter. It can also be connected to a chart plotter capable of displaying AIS data. PIN 2 of the 9 pin plug is the data output. Connect this to the relevant input of the plotter and connect PIN 5 (ground reference) to the reference input of the plotter.

Alternatively cut off the data lead plug and connect the BLACK wire to the relevant input and the screen wire to reference. (Ignore the RED wire).

Nasa Marine A.I.S. Engine

The AIS Engine receives AIS data, converts it to an NMEA format, and sends it on to any display equipped to receive it. The engine can also receive NMEA information from a GPS receiver (at 4800 baud) which it then sends on to the display with the AIS data (at 38,400 baud).

Installing the AIS Engine

The AIS Engine requires its own marine VHF antenna and cannot be shared with a transceiver antenna. It should be mounted as high as possible to maximise range but should be spaced not less than 1 metre from a transmitting antenna. The antenna cable should be at least 3 metres long and the antenna should be sited at least 2 metres from the AIS receiver. The antenna should be a 50 ohm general purpose marine VHF antenna.

The AIS Engine is not watertight so it must be mounted in a position, which is dry at all times.

Few display units will have a socket for both a GPS receiver and an AIS Engine so provision has been made in the Engine to relay the GPS position.

Connect the power cable to the 12-volt supply. The red wire to positive and the wire with a black stripe to negative. If a GPS is to be fitted then connect the GPS NMEA output (or NMEA+VE) to the blue fly lead of the data cable. If the GPS has a NMEA - VE (or NMEA REF) connect this to the supply negative. Ensure the GPS is connected to the same negative supply as the AIS Engine. The NMEA 0183 signal from the GPS must swing above and below 2 volts (ref to the supply negative) and contain the **RMC** sentence.

A Serial to USB adaptor is available direct from Nasa Marine at £19-50inc carriage and vat in the UK. It is suitable for Windows 98, ME, 2000 and XP. Call 01438 221023 to order.

This instrument, and software are used at your own risk. Use prudently and check operation from time to time against other data. Inspect the installation from time to time and seek advice if any part thereof is not fully seaworthy.

SeaClear PC Plotter CD software

Sea Clear software is freeware and is given freely with the AIS Engine.

Before use consult Sea Clear license conditions, particularly the last paragraph.

Nasa Marine accepts no liability for page 28 of the instruction file.

Insert the disc in your CD drive and double click on the seaclear.exe icon

CAUTION

Some vessels do not carry A.I.S. It is important at all times to keep a proper lookout.
The AIS Engine is not a substitute for good seamanship