

NASA AIS Receive Engine

Installation/Configuration Instructions



The NASA AIS Engine allows real-time tracking of AIS equipped ships on SOB's chart display screen.

Size: 115mm x 100mm x 30mm
Connections: 12V, RS-232, VHF BNC
Power Consumption : 43 mA

NMEA Sentences:
VDM for ITU messages 1,2,3,4,5,11 & 21
RMC Relayed from an optional GPS

Specifications:
www.digiboat.com.au/sales_products_sob.htm#ais

CONNECTING

If you only have one available SERIAL COM Port for connecting NMEA devices to your PC, or for whatever other reasons you need to connect a GPS and the NASA Engine to the same COM port on the computer, then use Option 1.

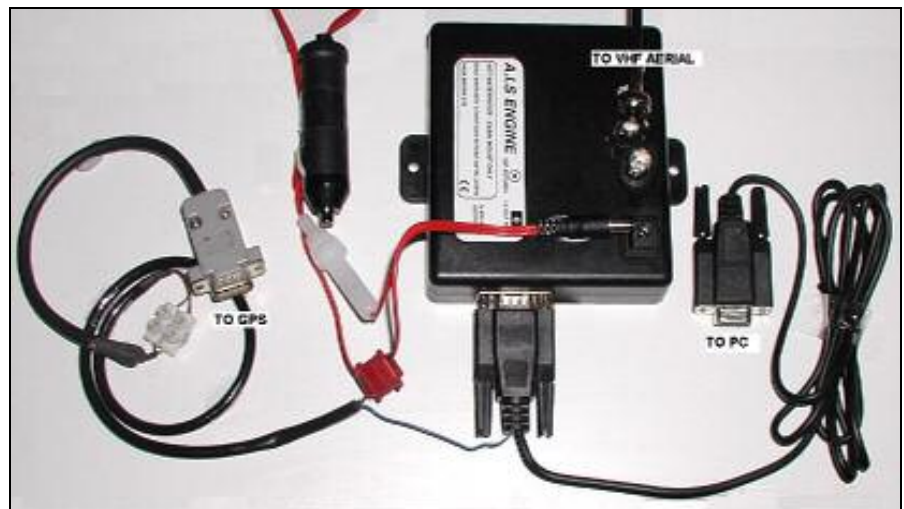
If you have your GPS connected to the computer already, and still have a spare COM port (either built-in or virtual) then connect the NASA Engine to the serial port without a GPS pass-thru, see Option 2.

OPTION 1:

Use this picture for help connecting a GPS to "pass-thru" the NASA Engine.

The GPS must be set for **WGS84** and **NMEA output** at 4800 baud (consult your GPS manual).

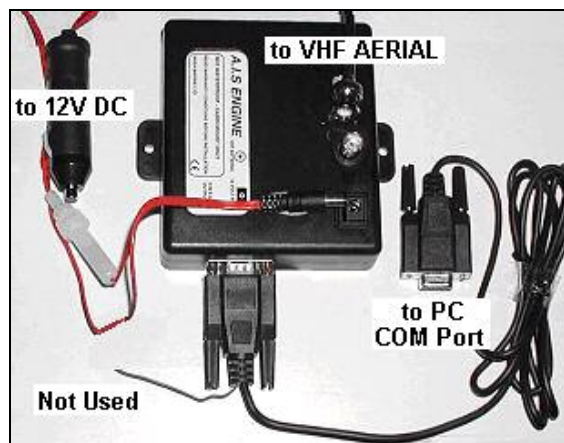
Then use **SOB_COM.EXE** to configure **SOB** for 38400 baud for the COM port that the NASA Engine connects to on the PC. (see over page)



OPTION 2:

If your GPS is connected separately to the PC (ie: USB, Bluetooth, or connected through a Multiplexer) then simply connect your NASA as illustrated.

Still use **SOB_COM.EXE** to set the PC's COM port for 38400 baud. (see over page)



Continue over the page to determine COM port to use and configure SOB to use it...

DRIVER INSTALLATION

No driver is required if connected to a Serial COM port.

If you have no available COM ports on your computer, then use a **USB-Serial Converter** to create a "virtual" COM port.

IDENTIFY AVAILABLE COM PORTS

Use **SOB_COM.EXE** or **Device Manager** to confirm the existence of COM ports and determine the COM numbers assigned to them.



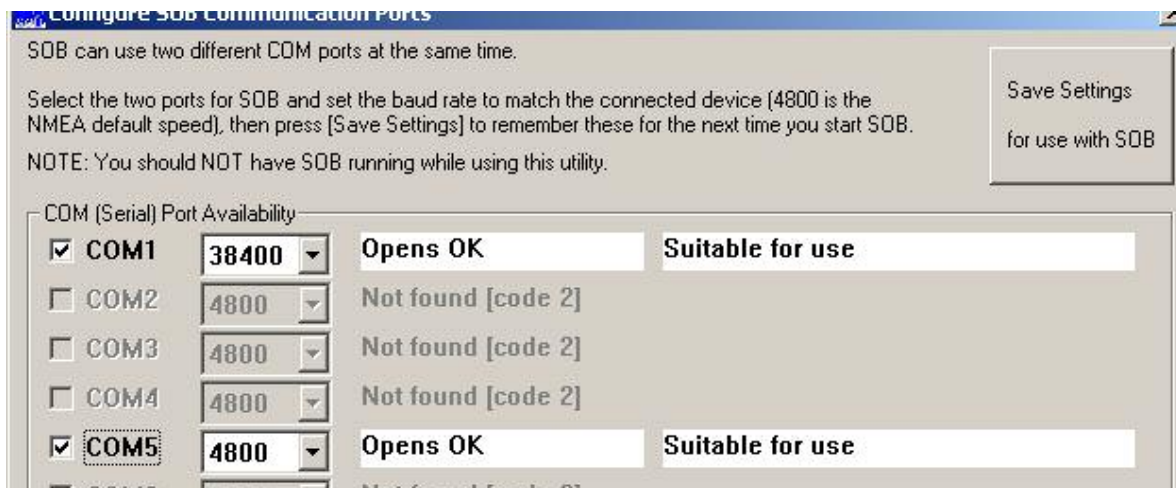
Running Device Manager

Device Manager is a Windows™ utility program that is very awkward to find.

The easiest way to run Device Manager is to select **Run** from the **Start** menu, then type **devmgmt.msc** and [OK].

SOB_COM.EXE is a SOB utility program for configuring the COM ports that SOB will use to communicate with GPS and other NMEA compatible instruments.

SOB_COM is installed in the **SOBv90** folder, or can be downloaded from the website www.digiboat.com.au



With this example, the NASA is configured to connect to COM1 on the PC (and 38400 baud).

A second COM port is available (this is a "virtual" COM port created by the **ATEN USB to Serial Converter**) and can be used for a GPS or any other NMEA device (eg: Multiplexer, separate wind, log depth sensors etc)

When your devices are correctly ticked with the right speed setting, press the [**Save Settings for use with SOB**] button. Note: SOB can connect through a maximum of two COM ports. When a second port is ticked, the rest will be disabled. To change selection, un-tick one of the chosen ports to enable the others for selection.

START SOB, CONFIRM DATA RECEPTION

When you next start SOB, double-click the chart surface to display the **Raw NMEA Data** form. The "NMEA data Source" box at the top right will reflect the settings made with SOB_COM.

A steady stream of GPS data, like the sample below, should be scrolling in the data window:

```
$GPGLL,3637.320,S,17452.979,E,234541  
$GPGGA,234542,3637.323,S,17452.980,E,1,11,0.9,26.9,M,28.9,M,0  
$GPGSA,A,3,05,06,10,15,17,18,23,24,26,29,30,0,1.5,0.9,1.  
$GPGSV,3,1,11,05,10,341,38,06,64,239,44,10,52,138,45,15,08,259,3
```

WARRANTY 3 MONTHS: Please return in original or suitable packaging with a copy of the Invoice/Receipt. Item will be repaired or replaced at the discretion of our technical department.

RETURNS/REFUNDS: Item will be refunded if returned within 30 days of the date of the invoice/receipt. Items must be returned in undamaged condition in original packaging. Refund amount will be purchase price less 10%.