

## Introduction

The proAIS<sup>2</sup> application allows you to configure and monitor the performance of your Class B AIS transceiver. proAIS<sup>2</sup> is compatible with both Microsoft<sup>®</sup> Windows<sup>®</sup> and Intel based Apple<sup>®</sup> Mac OS X operating systems. The system requirements are as follows:

- Microsoft<sup>®</sup> Windows<sup>®</sup> XP, Windows<sup>®</sup> Vista<sup>®</sup>, Windows 7 (including both 32 and 64 bit versions)
- Mac OS X 10.5 / 10.6 (Intel based systems only)
- A free USB port for connection to the AIS transceiver

## Installing the application

The application is installed from the CD provided with your Class B AIS transceiver. Insert the CD into you PC or Mac and navigate to the 'Windows' or 'OSX' folder.

### Windows


Double click the 'setup.exe' item to start the installer and follow the on screen instructions. When installation of the application is completed installation of the USB drivers will commence automatically.

### OS X

Double click the 'proAIS2.dmg' item to start the installation and follow the on screen instructions.

## Connecting to your AIS transceiver

1. Before launching the proAIS<sup>2</sup> application connect your Class B AIS transceiver to your PC or Mac using a USB cable. Follow the on screen instructions to complete USB driver installation if required. You can now launch proAIS<sup>2</sup> from the Windows<sup>®</sup> Start menu or the OS X Applications folder.

 **It is not necessary to connect power to the AIS transceiver in order to carry out configuration. During configuration power can be supplied by the USB connection. When powered from USB AIS messages will not be transmitted or received and the AIS GPS receiver will be disabled.**

2. Select the serial port corresponding to your AIS transceiver from the drop down menu at the top left of the proAIS<sup>2</sup> window. The port will normally be listed as “AIS Virtual COM Port” and click the ‘Connect’ button.
3. proAIS<sup>2</sup> is now communicating with your AIS transceiver and will display any pre-configured vessel data in the ‘Configuration’ page.

## proAIS<sup>2</sup> pages

The proAIS<sup>2</sup> application has a number of pages with specific functions:

- The ‘Configuration’ page shows the current vessel information and AIS transceiver configuration. Vessel information and configuration can also be edited and saved to the AIS transceiver.
- The ‘GPS Status’ page shows the status and signal strength information for the AIS internal GPS receiver.
- The ‘Other vessels’ page shows a list of AIS targets currently being received by the AIS transceiver.
- The ‘Diagnostics’ page shows a range of information relating to operation of the AIS transceiver which may be useful during installation.
- The ‘Serial Data’ page shows real time data from the AIS transceiver in NMEA0183 format and provides functions to record this data.

## Configuring your AIS transceiver



### Important information for US Customers

There are specific laws in the USA regarding the configuration of AIS class B transceivers. If you are a US resident and intend to use your AIS class B transceiver in US waters, you should make sure that your retailer has configured your product prior to supplying it to you. If your AIS transceiver has not been pre-configured please contact your dealer for details of how to have it configured.



**WARNING:** It is a violation of the rules of the Federal Communications Commission to input an MMSI that has not been properly assigned to the end user, or to otherwise input any inaccurate data in this device.

1. Select the 'Configuration' page to configure the vessel data that will be transmitted by your AIS transceiver
2. Enter your vessel's name (20 characters maximum), Call sign (optional, 7 characters maximum) and MMSI number. An MMSI number is required for the transceiver to operate. The MMSI configured in your AIS transceiver should be the same as that configured in any other radio equipment on board. If you do not have an MMSI number contact the relevant authority in your country for more information.



### Once programmed the MMSI number cannot be changed.

3. Select the vessel type most appropriate to your vessel from the drop down list.
4. Enter the dimensions of your vessel and the location of the GPS antenna in the 'Ship's Dimensions and GPS Antenna Location' box. The dimensions should be entered in metres and rounded up to the nearest whole metre (1 foot is approximately 0.3 metres).

5. Save the configuration to your AIS transceiver by clicking the 'Write configuration' button at the top right of the configuration page. Please read the warning message and check the MMSI number is correct before clicking the programme button.
6. Your AIS transceiver is now fully configured and ready for use.

## Optional configuration

The Configuration page includes additional options for NMEA port baud rates and GPS data output.

### **NMEA baud rate configuration**

Your AIS transceiver has two bidirectional NMEA0183 data ports. Typically the NMEA1 port is connected to a chart plotter or other display and is configured to operate at 38400 baud. This baud rate is required for AIS data transfer.

Your AIS transceiver provides a multiplex function between the NMEA2 port and the NMEA1 port. Any data provided to the NMEA2 port will be multiplexed to the NMEA1 port output along with AIS data. Typically the NMEA2 port is configured to operate at 4800 baud for connection to a heading sensor or other NMEA0183 device. The multiplex function is bidirectional and will also multiplex data provided to the NMEA1 port to the NMEA2 port. Please refer to the user manual supplied with your AIS transceiver for further information and wiring diagrams.

The 'Configure baud rates' box allows the baud rates for the two NMEA0183 ports to be adjusted independently if required. After making changes to the baud rate settings click the 'Write configuration' button to save these settings to your AIS transceiver.

## GPS data output

Your AIS transceiver incorporates an internal GPS receiver and can be configured to output GPS position fix information via the NMEA1 NMEA0183 port. Check the GPS data sentences required in the 'Output GPS Sentences' box. After making changes to the GPS output settings click the 'Write configuration' button to save these settings to your AIS transceiver.

## GPS status page

The GPS status page shows the current GPS signal strength along with current GPS position fix information. Satellite signals shown in green are actively being used to calculate a position. If a position fix is not available then no position information will be displayed and the signal strength bars will be shown in blue.

## Other vessels page

The other vessels page provides a list of all AIS vessels from which AIS position reports are being received. For each vessel the MMSI, Name, Call sign, AIS Class, Speed, Course, Latitude, Longitude, Range and Bearing are shown along with the age (in seconds) of the position report. It is possible to sort the displayed information by clicking on the column headings.



**This information is provided for installation and diagnostic purposes only and should not be relied upon for navigation.**

## Diagnostics page

The diagnostics page provides a range of information about your AIS transceiver's operation and status. This information may be useful during installation or when attempting to diagnose a potential issue with the operation of your AIS transceiver. If your AIS transceiver is operating normally all items in the checklist at the top left of the page will show a green tick / check mark.

## Serial data page

The serial data page shows all data output from your AIS transceiver in NMEA0183 format. It is also possible to send NMEA0183 commands to transceiver if required for technical support or custom configuration. A facility to record the data to a file is provided by clicking the 'Log to File' button.

## Menu bar

The application menu bar includes the following functions and features:

### File menu

- Open log file – opens a previously recorded log file for review in proAIS<sup>2</sup>.
- Save log file – start recording data received from the connected AIS transceiver to file.
- Exit – exits the proAIS<sup>2</sup> application.

### Options menu

- Alert on AIS transmission – an brief sound is output from your PC or Mac on each AIS transmission.

### Help menu

- User manual – displays this user manual.
- About – shows proAIS<sup>2</sup> application version and copyright information.