

# Quick Start Guide SmarterTrack Lite



### 1. Introduction

SmarterTrack Lite is a simple AIS Display program designed for Windows PCs. It is supplied with all Digital Yacht AIS products that have a USB connector and is designed to provide users with an introduction to using AIS data on a PC or as a backup to a dedicated chart plotter or more sophisticated navigation package.

If you like SmarterTrack Lite but want a package that offers Navionics electronic charts, full waypoint and route navigation, weather overlay, instrument data and many other features, why not consider upgrading to the full version of SmarterTrack. Contact your local dealer or Digital Yacht for more information on this upgrade.

## 2. Before you start

Make sure that your AIS unit is properly installed and working. The USB drivers will need to be installed and you will need to know what COM Port number the AIS has been allocated by Windows. For more information on USB drivers please consult our <u>Tech Note 00001-2010</u>.

### 3. Installation

The SmarterTrack software is easy to install by simply running the Setup.Exe program on the "SmarterTrack Lite" folder on the Digital Yacht Software and Driver CD-Rom.

Alternatively, you can download the latest version of SmarterTrack Lite from the "Support>Software" section of our website. Inside the ZIP file that you download will be the "SmarterTrackLITESetup.msi" installer file – simply double click this file to install.

Once installed, run SmarterTrack Lite by double clicking on the Desktop shortcut icon that will have been created during installation or run it from the new SmarterTrack Lite option in the Start Menu.

### 4. Configuring SmarterTrack Lite

When SmarterTrack Lite runs for the first time, you will see the following warning disclaimer window and warning. This is to remind you that the NMEA data connections need to be setup.

SmarterTrack
WELCOME TO SMARTERTRACK LITE LITE
This program is intended solely to provide support information as an aid to Navigation and is not to be used as the primary source for navigation or position determination.
The Electronic Charte used by this system are not designed to replace official Hudrographic office
Could not open the port used for the NMEA device. If the NMEA device (like the position fixer) is not connected, or connected to a different port, this can be changed by selecting the menu option "File", "Configuration" and then the "NMEA" tab. Currently configured to Serial Port9 (COM9)
ОК
Cancel Accept

Click on the "OK" button and then read and accept the Navionics Charts disclaimer by clicking the "Accept" button.

You will now see a screen similar to the one below. To configure the NMEA data, you need to click the "Configuration" button (spanner icon) in the top right hand corner as shown.



This will now open the Configuration window which allows you to setup all of the SmarterTrack settings. We will be concentrating on the NMEA-1 and NMEA-2 tabs.

If you are using an AIS Receiver, then it is strongly recommended that you also connect a GPS to the PC in order to accurately plot your position in relation to the AIS targets. Using SmarterTrack Lite without a GPS is not really practical and significantly reduces the usefulness of the program.

If you are using an AIS Transponder, your GPS position can be taken from the transponder along with the AIS data, assuming that the GPS output messages have been turned ON in the transponder (using proAIS or proAIS2 software).

#### **Configuration for AIS Receiver + GPS**

In the NMEA-1 tab use the default settings and select the relevant COM Port that the GPS is connected to (in this example it is COM 3) and that "*Standard NMEA (4800)*" is selected. Make sure the "*Position fixer – Primary*" setting is ticked (enabled).

Configuration
Units NMEA-1 NMEA-2 NMEA 2000 Language/Sprache/Langue/Idioma/Taal/Lingua
GPS
○ TCP/IP IP address 169.254.1.1 Port 2000
Position fixer - Primary Position fixer - Secondary (Disable position fixer messages) NMEA input Allow no checksums on NMEA messages.
OK Cancel Apply Help

Now click on the NMEA-2 tab and again use the default settings and select the relevant COM Port that the AIS receiver is connected to (in this example it is COM 4) and that "**NMEA(HS) 38400**" is selected.. Make sure the "**Position fixer – Secondary (Disable position fixer messages)**" setting is ticked (enabled).

Configuration	×
Units NMEA-1 NMEA-2 NMEA 2000 Language/Sprache	/Langue/Idioma/Taal/Lingua
AIS Receiver   Device Manufacturer gr and/or Model  Connected to  Com Port Com 4   NMEA(HS)38400  TCP/IP IP address 169.254. 1 . 1 Port 2000	Advanced NMEA configuration for NMEA1 and NMEA2 - Position Messages
<ul> <li>Position fixer - Primary</li> <li>Position fixer - Secondary (Disable position fixer messages)</li> <li>NMEA input</li> <li>Allow no checksums on NMEA messages.</li> </ul>	

Once the NMEA-1 and NMEA-2 tabs have been set correctly, click the "OK" button and you will see the following warning displayed twice (once for each tab). Simply click "OK" each time, then exit the program and run the program again.

Proceed to section "5) Operation of SmarterTrack Lite".

#### **Configuration for AIS Transponder**

SmarterTrackLite

NMEA port changed. Restart program before this new setting will

OK

In the NMEA-1 tab use the default settings and select COM Port "None" as shown below. The reason for this, is that we will be receiving the AIS and GPS data on the COM Port we setup on the NMEA-2 tab.

Configuration	×
Units NMEA-1 NMEA-2 NMEA 2	000 Language/Sprache/Langue/Idioma/Taal/Lingua
GPS  Connected to Connected to Connected to Connected to TCP/IP IP address 169.254 Position fixer - Primary Position fixer - Secondary (Disable NMEA input Allow no checksums on NMEA messages.	Understand       Standard CPS         Device Manufacturer Standard GPS         and/or Model         Standard NMEA (4800)         I . 1         Port         2000    Advanced NMEA configuration for NMEA1 and NMEA2 - Position Messages position fixer messages) MEA output
	OK Cancel Apply Help

Now click on the NMEA-2 tab and again use the default settings and select the relevant COM Port that the AIS data is connected to (in this example it is COM 4) and that "**NMEA(HS) 38400**" is selected.. Make sure the "**Position fixer – Primary**" setting is ticked (enabled).

Configuration		×
Units NMEA-1 NME	EA-2 NMEA 2000 Language/Sprach	e/Langue/Idioma/Taal/Lingua
AIS Receiver	<ul> <li>Device Manufacturer and/or Model</li> </ul>	Standard AIS 👻
Connected to Com Port Com 4 TCP/IP IP addre	▼ NMEA(HS)38400	<ul> <li>Advanced NMEA configuration for NMEA1 and NMEA2 - Position Messages</li> </ul>
Position fixer - Prime     Position fixer - Seco     NMEA input     Allow no checksu     NMEA messages.	IN Indary (Disable position fixer messages) NMEA output	
	)(	OK Cancel Apply Help

Note that we do not change the device dropdown "AIS Receiver" even though we have an AIS Transponder connected. This is because the SmarterTrack Lite program does not support the extra Transponder controlling software that the full SmarterTrack software supports – although it will receive and display AIS targets from an AIS Transponder.

Once the NMEA-1 and NMEA-2 tabs have been set correctly, click the "OK" button and you will see the following warning displayed twice (once for each tab). Simply click "OK" each time, then exit the program and run the program again.



<u>IMPORTANT NOTE</u> – Do not select the same COM Port number in the NMEA-1 and NMEA-2 Tabs as this will cause problems in reading data and the program will not operate properly.

#### 5. Operation of SmarterTrack Lite

Once the NMEA data has been configured in SmarterTrack Lite, you should be able to see your boat's position and any AIS targets displayed on the world chart.



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Your vessel will be shown in the centre of the screen with a series of range rings around you. To pan around use the keyboard arrow keys or double click on the chart. You can also select the "Click and Drag" mode and then click and drag the mouse to move the chart.

Zoom In/Out using the keyboard PageUp/PageDown keys, rotating the mouse wheel or clicking on the Zoom In/Out icons on the toolbar.



The AIS targets are shown on the chart in different colours, depending upon the type of vessel. A key to the colours is shown below.



If you wish to see a list of all the AIS targets in your area, click on the "AIS Properties" button and you will display the following window.

siger list Sho	w Display - Symbol, Lines, C	PA   Display -	Text Voyage data			_
Sort Nearest	To Vessel	-	Refresh	Number of ta	argets: 34	
MMSI	Name	Call sign	Target type	Latitude	Longitude	
235083862	SUNSAIL4029		Ship (Class B)	50° 50'.571N	001° 06'.176W	
235069806	VALKYRIE	2BWA9	Ship (Class A)	50° 50'.600N	001° 06'.140W	
235066953	KINGDOM OF FIFE	2BKR2	Ship (Class A)	50° 48'.832N	001° 07'.630W	
236063237	PILOT V/L HAMPSHIRE	MDFQ9	Ship (Class A)	50° 48'.516N	001° 07'.190W	=
235082006	AL RAHMANI	2DTU8	Ship (Class A)	50° 48'.420N	001° 06'.633W	
235086758	WARSHIP PROTECTOR	GXRK	Ship (Class A)	50° 48'.391N	001° 06'.402W	
235085967	BAHAMA MAMA	2EKU6	Ship (Class B)	50° 48'.133N	001° 07'.364W	
235073846	PORT OF SPAIN	2CLP9	Ship (Class A)	50° 48'.190N	001° 06'.710W	
235007413	WHITCHALLENGER	VQAU3	Ship (Class A)	50° 48'.003N	001° 06'.901W	
235066825	SD SOLENT SPIRIT	2AON888	Ship (Class A)	50° 48'.030N	001° 06'.620W	
235061621	SD SOLENT RACER	2AON9	Ship (Class A)	50° 48'.025N	001° 06'.615W	
2320787	QMH Portsmouth		Base station	50° 47'.978N	001° 06'.614W	
235008166	WESSEX EXPLORER	2WWE	Ship (Class A)	50° 47'.750N	001° 07'.045W	
235001314	SPIRIT OF GOSPORT	ZNBE7	Ship (Class A)	50° 47'.697N	001° 06'.953W	
235010000	CHALLENGER 4	ZQCN2	Ship (Class B)	50° 47'.696N	001° 06'.519W	
310216000	M.Y. LEANDER	ZCAS9	Ship (Class A)	50° 47'.680N	001° 06'.540W	-
005000077	WOUT DVDED II	001407	01.00 M	500 (7) 550V	0040 001 70711	

If you are using SmarterTrack Lite with a Class A transponder and Pilot Plug, you can use it to setup the Class A Voyage data, by clicking on the "Voyage Data" tab in the AIS Properties Windows above. This displays the following page.

	inter dem	00			•			
Destination								
Number of p	ersons on board	1	Estimated t	ime of arrival	(ETA) (DD/MM)	28 / 0	6	
Dian 2.33								
Ship type						-		
Cargo type					Ŧ			
	at the FROM 3	ranspond	ler	Upda	ate data in Trans	ponder		
Update	with data FROM 1							
Update	WITH DATA FROM 1							
Update	WITH DIATA FROM 1							
Update	WITH DATA FROM T							
Update :	WITH DATA FROM T							

Simply read the data currently set in the Class A transponder by clicking the "Update with data FROM transponder", change the voyage data as required and send it to the Class A Transponder by clicking the "Update data in Transponder" button.

That covers the main features of SmarterTrack Lite and for more information on operating it, please refer to the program's Help menu.