

1. Introduction

Thank you for purchasing SmarterTrack our sophisticated Navigation Software package for Windows PCs. In the package you received should be; Installation CD, Navionics Card Reader and USB Security Key (Dongle). The following Quick Start Manual will guide you through installing and configuring SmarterTrack and for more specific details of particular features, please consult the SmarterTrack Help Files that are included in the program.

2. Before you start

Make sure that any NMEA devices such as GPS, AIS, Instruments, etc. are connected to the PC and any drivers and software correctly installed. If you are using USB connections, then the drivers will have installed "Virtual COM Ports" and Windows will have allocated a COM Port number for each connection, which will be listed in the Windows Device Manager. It is important that you have discovered and noted the COM port numbers for each connected device, so that you can configure the devices in SmarterTrack. For more information about the Digital Yacht USB drivers please consult our [Tech Note 00001-2010](#).

3. Installation

The SmarterTrack software is easy to install. Simply insert the SmarterTrack CD and an Autoplay Window should appear (see Fig 1). If this does not occur, browse the CD and run the Setup.Exe program.

Once the installer starts, follow the on-screen instructions as directed until installation is completed.



Figure 1

During the installation or when you first run SmarterTrack, if your PC is fairly old (Windows XP), you may receive a warning or error that certain Visual C++ or DotNET libraries are not present on your computer. These files are available on the CD and you should run the setup program in the relevant folder on the CD, depending upon which files you are missing.

In the SmarterTrack pack, you will have received a security dongle (see Fig 2 below). You can install SmarterTrack on as many PCs as you like, but you will always need to have this security dongle plugged in to the PC you wish to run SmarterTrack on. The security dongle is a very important device and should be carefully looked after. If the dongle is lost, you will not be able to run SmarterTrack and you will be charged for a replacement.

After installation is complete, plug the security dongle in to a free USB port and make sure that Windows recognises it and automatically installs the SafeNet software (drivers) for the device. If everything is OK, the red LED on the dongle will illuminate whilst it is plugged in.

Now plug in the Navionics Card Reader and insert your Navionics chart cartridge in to the correct slot for the type of cartridge it is i.e. Compact Flash Card or SD Card. Please note that if you are using one of the older square Navionics branded card readers (see Fig 3) then any card can be read. If you have one of the new light blue and black rectangular card readers, you must have a Navionics Cartridge that has the latest nTag file on it (all cartridges sold since April 2010). If in doubt as to whether your card is one of the latest nTag ones, check in the root directory of the cartridge for a file called nTag.txt.

The benefit of the new nTag cartridges is that you can register them automatically on up to 6 PCs and then copy the card to the PC's hard drive, meaning that you do not have to have the card reader permanently connected to your PC. If you have an older cartridge and want the new nTag facility, simply get the chart cartridge updated by Navionics and the new card will have the nTag feature enabled.



Figure 2



Figure 3

4. Configuring SmarterTrack

Run SmarterTrack for the first time, by clicking on the Desktop Icon that has been created or by selecting SmarterTrack from the newly created SmarterTrack program group in the Start>Programs menu. When you run SmarterTrack for the first time, you will see a Warning Window (Fig 4). This is to remind you that the NMEA data connections need to be setup, which we will configure later in this section.

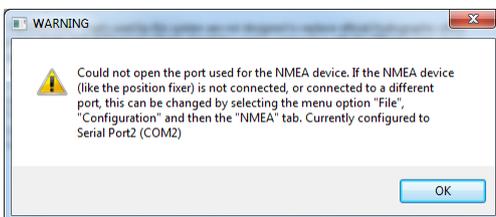


Figure 4

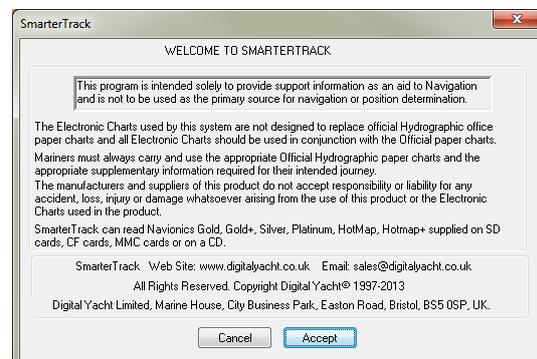


Figure 5

Click on the "OK" button and then a Welcome to SmarterTrack Window will be visible (Fig 5). Read and accept the Navionics Charts disclaimer by clicking the "Accept" button.

You will now see a screen similar to the one below.

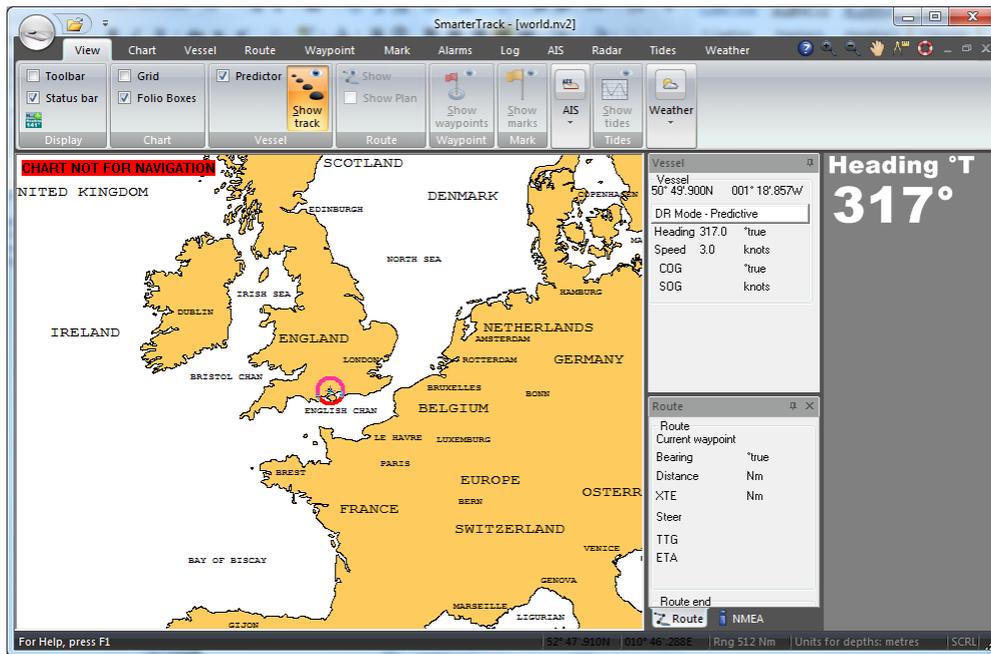


Figure 6

To configure the NMEA data, you need to click the round Boat icon in the top left hand corner of the main window, which displays the menu shown in Fig 7.

Select the “Configuration” option (spanner icon) and this will display the window shown in Fig 8.

In this window you can setup all SmarterTrack settings, but we will be concentrating on the NMEA-1 and NMEA-2 tabs which control the two NMEA ports that SmarterTrack supports.

There are lots of different configurations but we will cover the most common – GPS and AIS.

Configuration for GPS and AIS Receiver

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).

This tells SmarterTrack that there is a GPS on COM port 3 and that you want to use this as the Primary source of position, in case you have two GPS units on the boat.

If there is more data coming in COM 3 than just GPS data, for example instrument data, SmarterTrack will automatically read and display this data as well.

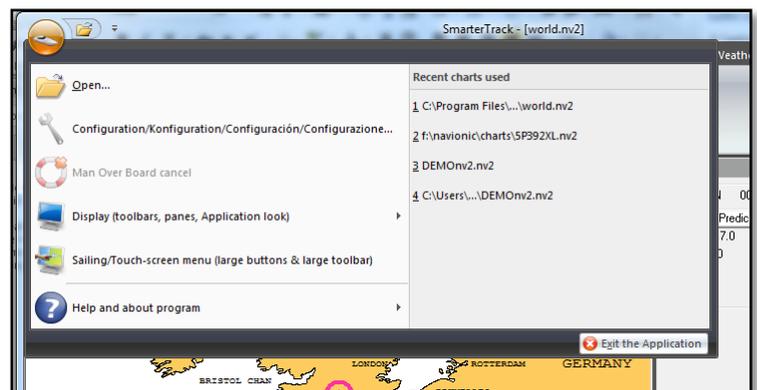


Figure 7

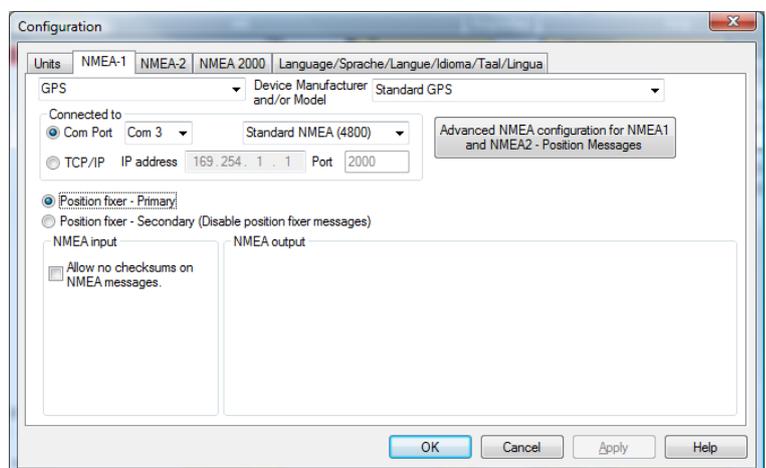


Figure 8

Now click on the NMEA-2 tab and again use the default settings and select the relevant COM Port that the AIS 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).

If you are using wireless NMEA or NMEA2000, then you can also set up these interfaces on the NMEA-1 and NMEA-2 tabs.

For those customers wanting even more complex installations, SmarterTrack can be configured to multiplex and filter different NMEA sentences. Click on the Advanced NMEA button to bring up more options.

Configuration for AIS Transponder

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.

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).

Now change the device dropdown from the default which is “AIS Receiver” to “AIS Transponder” and then select one of the Digital Yacht models in the Manufacturer/Model drop down. SmarterTrack does allow the control of the Silent Mode on some Digital Yacht transponders and this is why you need to tell the program what unit is connected.

It is not critical but for our latest AIT2000, select the AIT1000 option. Currently SmarterTrack does not support the switching of Silent Mode on our AIT2000/CLB2000 transponders.

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.

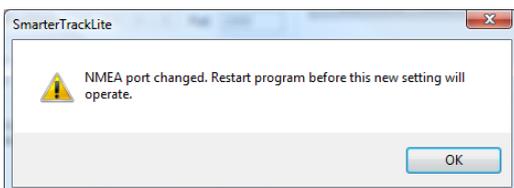


Figure 12

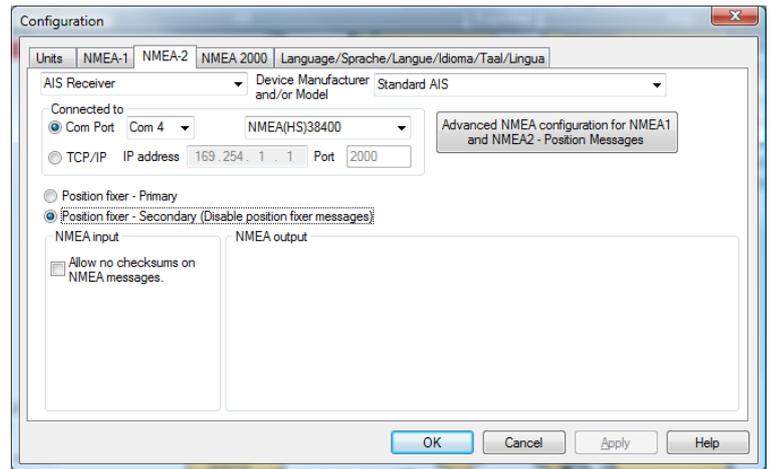


Figure 9

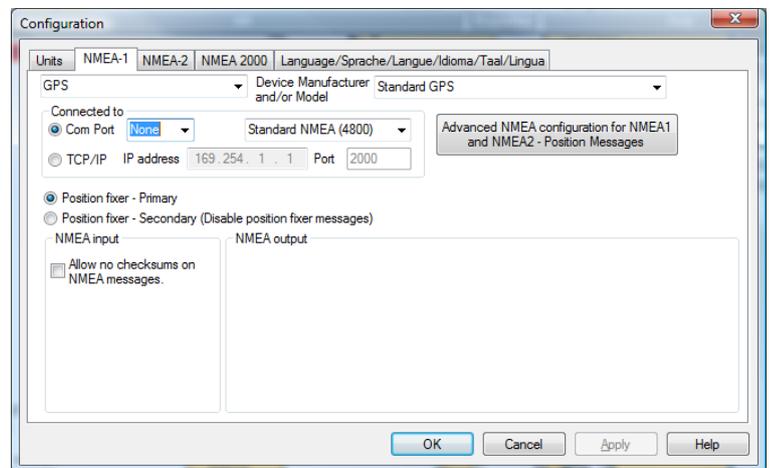


Figure 10

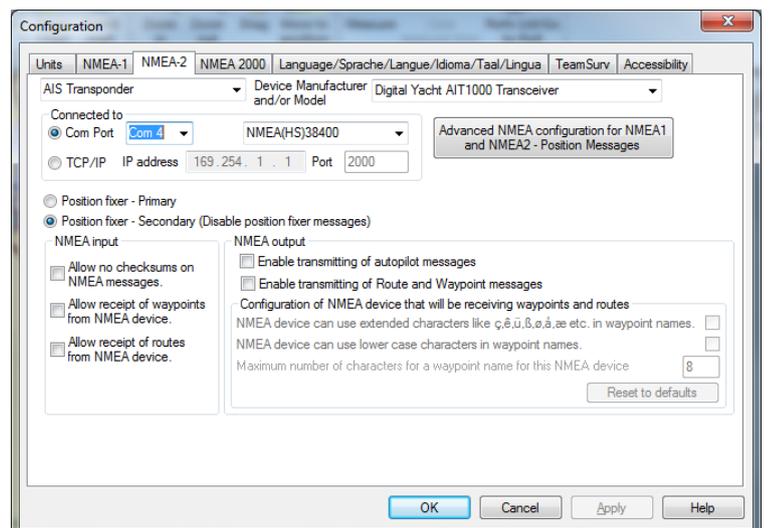


Figure 11

IMPORTANT NOTE – 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. Loading Navionics Charts in SmarterTrack

Once the NMEA data has been configured in SmarterTrack, you should be able to see your boat's position and any AIS targets displayed on the world chart. Now we want to display the detailed Navionics charts on your cartridge/s.

From the main screen, click the Chart tab and then click the "Open Chart" icon. This will display the Load/Copy chart window shown in Fig 13.

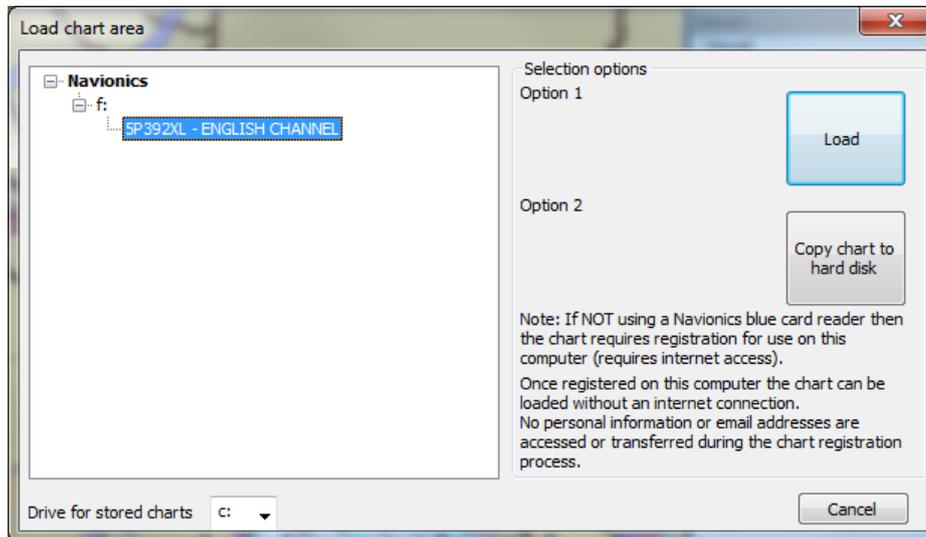


Figure 13

Assuming your card reader is connected to the USB port of your PC and a Navionics Chart Cartridge is plugged in, you should see the cartridge shown as a disk drive in this case drive F. Click the plus sign to see the cartridge Part Number and Name – in this case "SP392XL – English Channel". Select this file and then decide if you want to Load the Cartridge in to memory, which takes up no disk space but is temporary and will need to be done each time you run SmarterTrack or if you want to Copy the Chart to your hard drive. Generally if you have enough space, copying to hard drive is recommended, as you can then access it every time you run SmarterTrack without the card reader connected.

Click the relevant button based on whether you want to copy the chart to your hard drive or not and then wait for the charts to load. Once complete you will be returned to the main window where you will see a detailed chart.

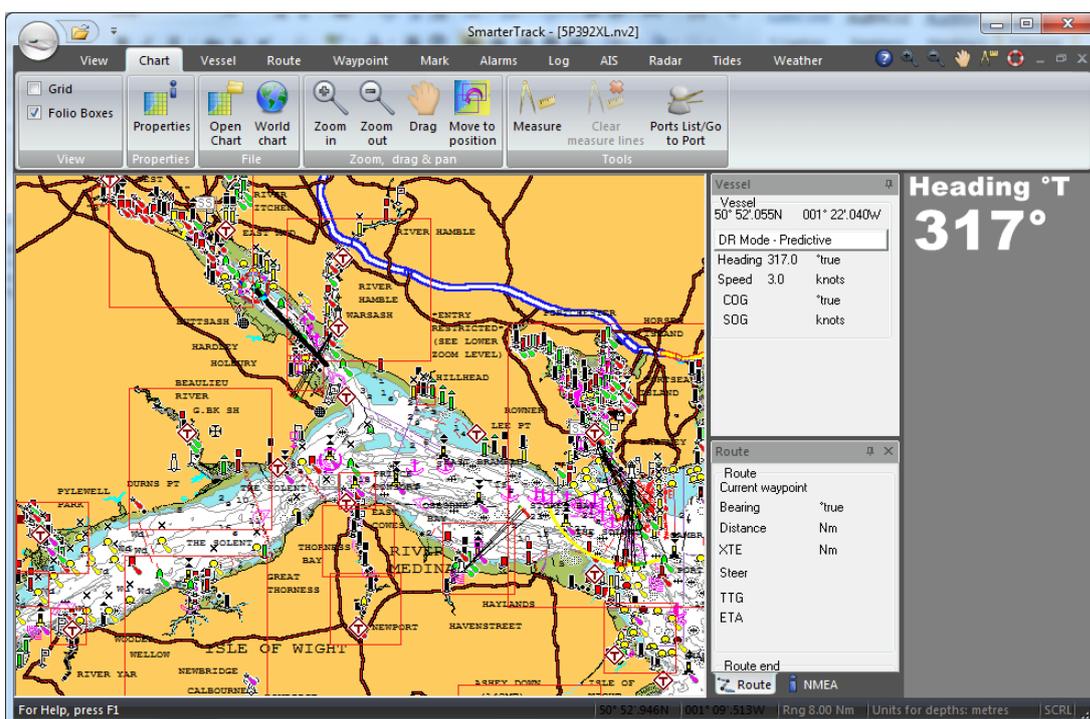


Figure 14

Your SmarterTrack is now setup and you should be able to view your Navionics charts, receive GPS, AIS and other data via NMEA. There are many other features and options in SmarterTrack, too many to cover in this Quick Start Guide, but there is a comprehensive Help Menu within SmarterTrack, simply click the F1 key to open the Help Window.

It is also worth visiting our website <http://www.digitalyacht.co.uk> for other product information and our Blog at <http://digitalyacht.net> for useful articles on all of our products. If you need specific technical support please email support@digitalyacht.co.uk