DIGITAL YACHT
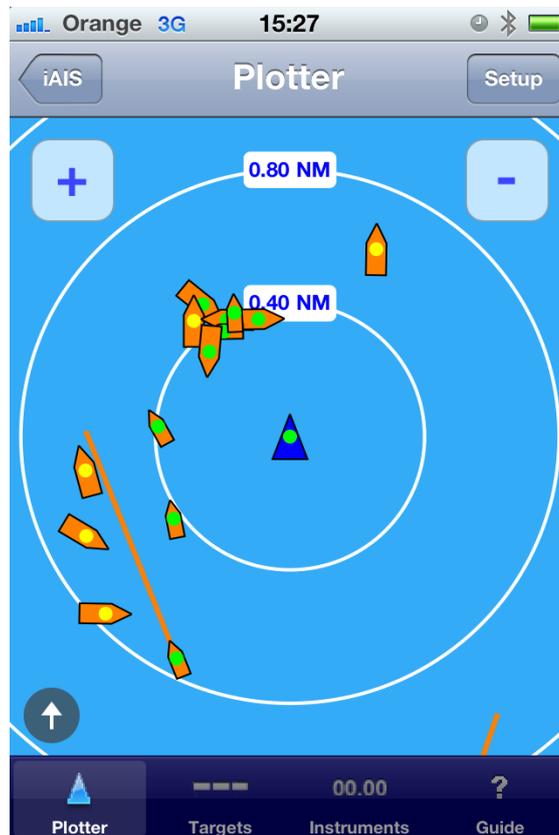
Software Guide
iAIS Application for iPad, iPhone and iTouch

1. Introduction

iAIS is a simple to use marine app for iPhone and iPod touch and iPad. Designed to work in conjunction with the Digital Yacht iAIS wireless AIS receiver, this application will display all of the received AIS targets on a radar like display. If you have installed this application and do not own a Digital Yacht iAIS, visit www.digitalyacht.co.uk to learn more about the iAIS hardware and what you will need to create a wireless AIS system on your boat.

If you are looking for more advanced marine navigation and charting software that is compatible with iAIS then visit **www.inavx.com** for more information.

To make sure you have the latest version of iAIS your device select "**App Store**", then select "**Updates**".

Before running the iAIS application, you must setup a WiFi conection between your Apple device and the iAIS receiver.

2. Setup WiFi Conection

To connect this application to the iAIS wireless AIS receiver, tap the "**Home**" button on your Apple Device (single button in the centre below the LCD) and from the home screen click on the "**Settings**" icon. From the Settings Menu click on the "**Wi-Fi**" option and you will see the Wi-Fi Networks page shown in Fig 1.

If the Wi-Fi is not already ON, click on the Wi-Fi button to turn the Wi-Fi on and then a list of available WiFi Networks (hotspots) will be displayed.

In the "**Choose a Network...**" list select the network "**DY-iAIS-XXXX**" where XXXX is a four digit code unique to your iAIS unit.

If another network is already selected, tap on the Blue disclosure button next to the selected network and select "**Forget the network**".

Figure 1

3. Setup TCP/IP Link

Run the iAIS application for the first time and you will see the disclaimer page shown in Fig 2. From this page you can see the version of the iAIS software you have installed, click on the link to the Digital Yacht website or click on the "MORE INFO" to learn more about the full iNavX version of the software which supports route and waypoint navigation on Navionics charts.

Once you have read the disclaimer and accepted it, click on the blue "Plotter" button to continue.

You will now be displaying the "Plotter" screen but in order to setup the TCP/IP link between your Apple device and the iAIS receiver, you must click on the "**Instruments**" tab, then click the "**Setup**" button, followed by the "**TCP/IP**" button.

Figure 2

You should now be displaying the TCP/IP setup screen shown in Fig 3. You can select UDP (multiple connections) or TCP (single connection) modes.

In UDP mode you just need to select Port = 2000, while in TCP mode you need to select Host = 192.168.1.1 and Port = 2000.

Set "**AIS Targets Only**" to "**ON**" if there is no GPS receiver connected to the iAIS. This will then use the internal GPS and/or "Location Services" of the Apple mobile device.

Enable "**Link**" and ensure that some green text NMEA 0183 data is shown, then select "**Save**" button.
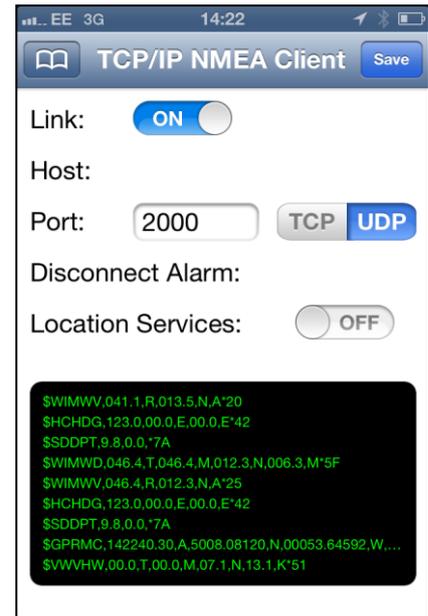
4. Using the iAIS Software

The main operating screen for the iAIS Software is accessed by clicking on the "Plotter" button in the bottom left corner of the screen. The Plotter screen is similar to a radar screen with your vessel centred in the middle of a series of concentric range rings – see Fig 4.

Figure 3

If a valid GPS signal is being received, your boat will be shown as a blue triangle in the middle of the screen. All of the received AIS targets will be shown around your vessel relative to your position.

Note that the iAIS display is Course up not North up, which is much better for AIS display. The little white arrow in a dark circle in the bottom left corner of the plotter screen is a North indicator so that you always know where North is.

Around your boat are a series of concentric range rings that are labelled with the distance the ring is from your boat. You can zoom in and out using the "**+**" and "**-**" buttons which expand or decrease the distances of the range rings.

A yellow dot in the target indicates that the static AIS data (Boat Name, Call Sign, Dimensions, Vessel Type, etc.) has not been received. This data is transmitted much less frequently than the MMSI and position, every 3-6 minutes, and will eventually come through at which point the dot will turn green. A gray dot indicates no data received in last 5 minutes.
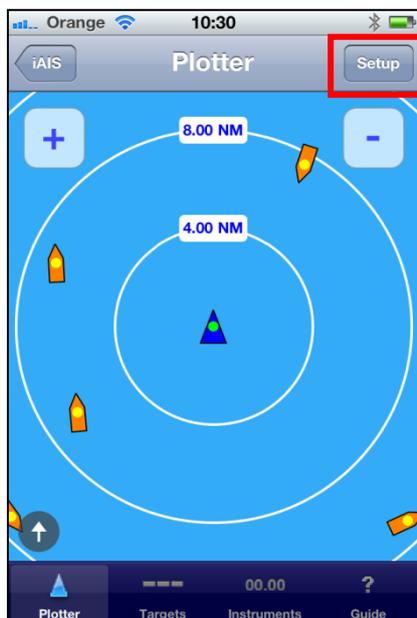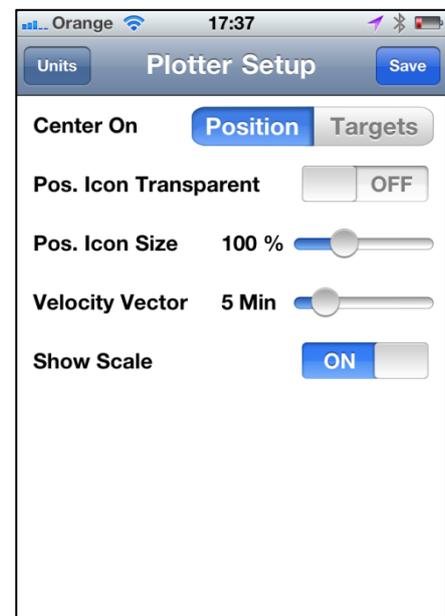

Figure 5

Figure 4

There are a number of Plotter settings that can be configured. From the Plotter screen, click on the "**Setup**" button which will take you to the Plotter Setup screen in Fig 5. The following settings are available;

1) **Centre On** – defaults to centring on your boat, but if you have no valid GPS position available,select "Targets" and the program will approximately centre on where the AIS targets are.
2) **Pos Icon Transparent** – defaults to Off, when set to On the boat's icon is transparent.
3) **Pos Icon Size** – defaults to 100%, but can be made smaller or larger by adjusting the slider control.
4) **Velocity Vector** – defaults to 5 Min, the velocity vector is a line that projects in front of each vessel indicating where they will be in the next 5 Mins or whatever value of time you set – this assumes the vessel maintains its current course.
5) **Show Scale** – defaults to On, setting this to Off causes the range rings to be turned off.

Selecting the "**Targets**" tab will display the AIS target list which is sorted alphabetically by boat name – as shown in the left hand image below. Tapping "**Sort**" button will change the order by distance from device position.

Tapping on a target in the list (Alcatraz in the example below) or tapping on an AIS icon on the plotter screen will show all of the information about the AIS target – as shown in the right hand image below.
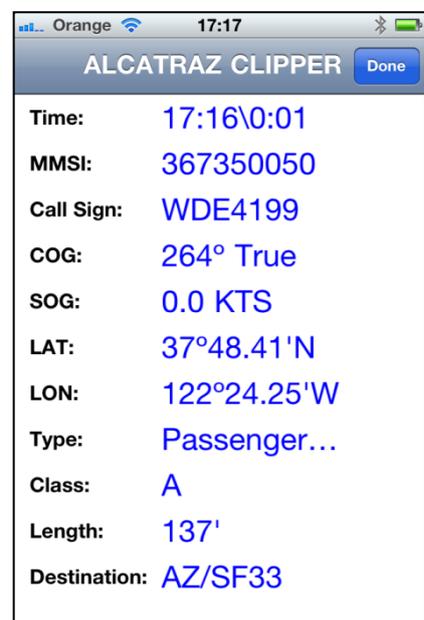

Figure 6

Figure 7

Tap "**Done**" button to return to the Target List screen.

Selecting "**Instruments**" tab from the Plotter screen will display additional GPS and Heading information if available.

If you wish to wirelessly send more instrument data such as; Depth, Speed, Wind, etc. or you would like to display charts, then visit **www.inavx.com** for more information about their full navigation application that is compatible with iAIS.

Figure 8