

# CONNECTING YOUR TRANSPONDER TO MACINTOSH

Here we will show you how-to connect your AMEC AIS Transponder to your Macintosh (MAC) computer and display the received AIS Targets via OpenCPN as an example.

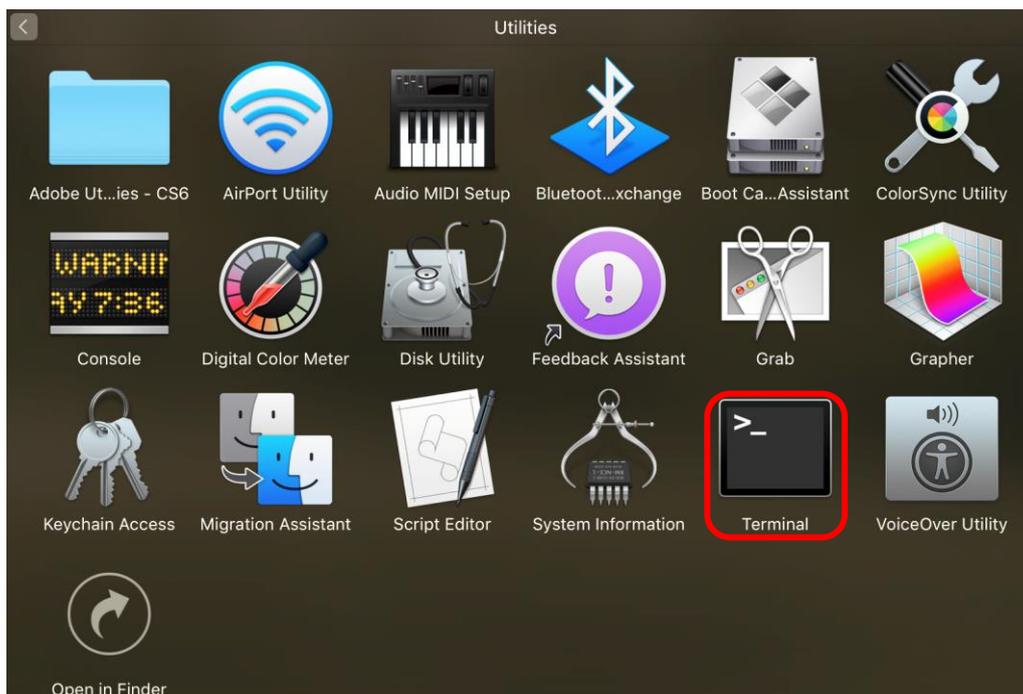
Note: AMEC AIS Transponder cannot be programmed (Static Data) via a MAC. It can only be done via a PC and for US customer that unit ship pre-programmed.

## Requirements:

1. Operating System: Yosemite 10.10.2 or later..
2. Apple Hardware: Any MacBook Air, MacBook Pro, iMac, Mac mini & Mac Pro shipped after 2010. Currently not compatible with MacBook.
3. Application: OpenCPN4.0.0 or later; similar compatible apps.
4. AMEC AIS Transponder with the latest firmware.

## Step 1: Figuring out your com port

Connect your AMEC AIS Transponder to your MAC USB Port (remember to power up your AIS Device. Go to the Utilities folder and launch Terminal.



**Important:** The Terminal application is a command-line based tool that is extreme powerful and the misused of such tool can cause irrevocable damage to your MAC. Do follow these instructions carefully by careful-spelling and spacing each command.

Once open, you should see a typical terminal screen. To see a list of all the available Serial ports on your Mac, type the following command: **ls /dev/tty.\*** and press return.



```
AMEC — bash — 118x33
Last login: Thu Jan 29 16:16:50 on ttys000
~ AMEC$ ls /dev/tty.*
```

By now you should see a list of all available serial ports connected to your MAC like below

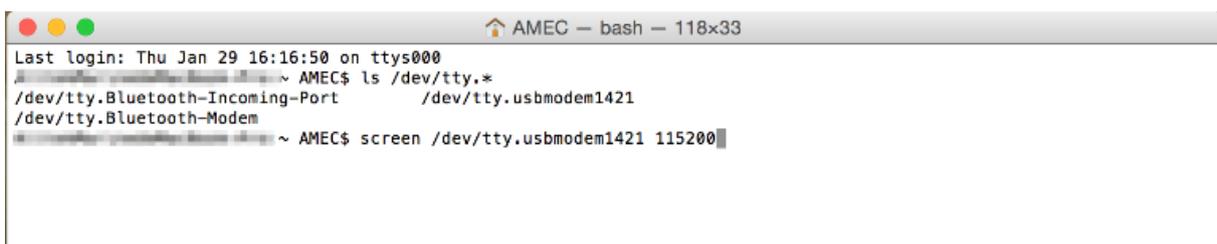


```
AMEC — bash — 118x33
Last login: Thu Jan 29 16:16:50 on ttys000
~ AMEC$ ls /dev/tty.*
/dev/tty.Bluetooth-Incoming-Port  /dev/tty.usbmodem1421
/dev/tty.Bluetooth-Modem
~ AMEC$ screen /dev/tty.usbmodem1421 115200
```

You may have more or less devices that show up depending on what devices have been connected to your MAC.

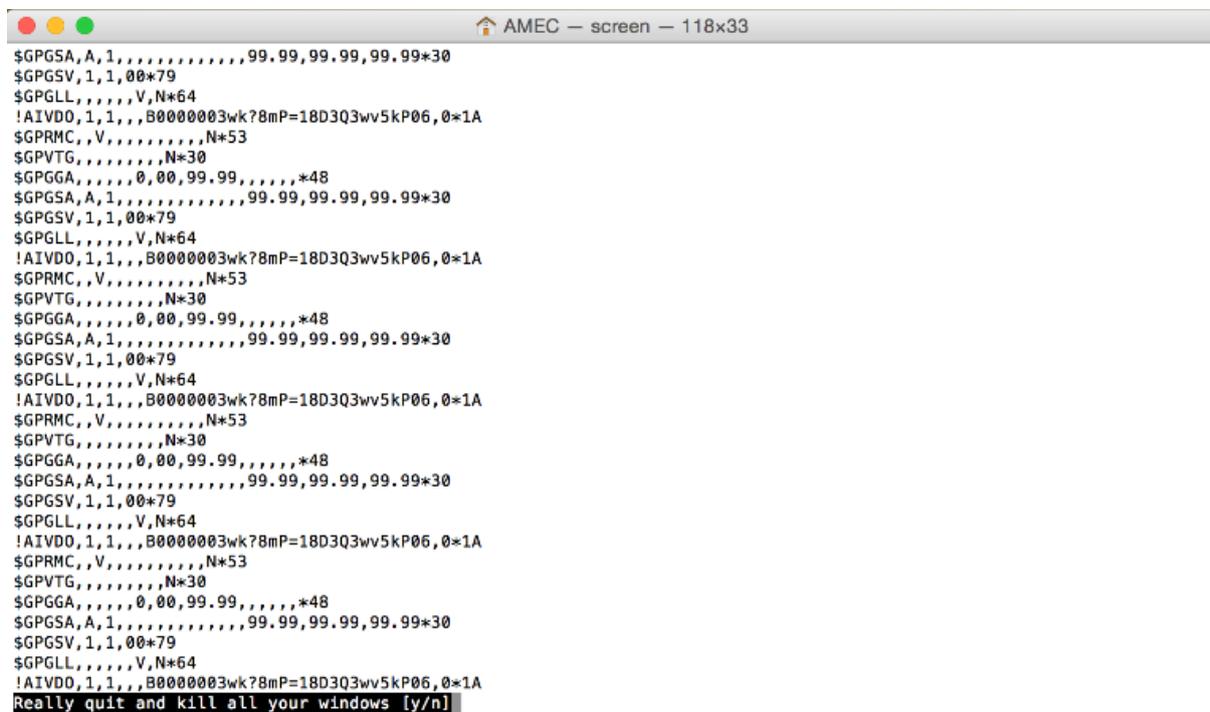
The important device(s) of note are the **tty.usbserial** and the **tty.usbmodem** in which is requires to connect the AIS Transponder to the MAC. If you see multiple **tty.usbxxxx** we can utilize the following command to establish a simple serial connection to determine which one is the AMEC AIS device.

Type **screen <port\_name><baud\_rate>** to create a connection. In the below example it is written **screen /dev/tty.usbmodem1421 115200**



```
AMEC — bash — 118x33
Last login: Thu Jan 29 16:16:50 on ttys000
~ AMEC$ ls /dev/tty.*
/dev/tty.Bluetooth-Incoming-Port  /dev/tty.usbmodem1421
/dev/tty.Bluetooth-Modem
~ AMEC$ screen /dev/tty.usbmodem1421 115200
```

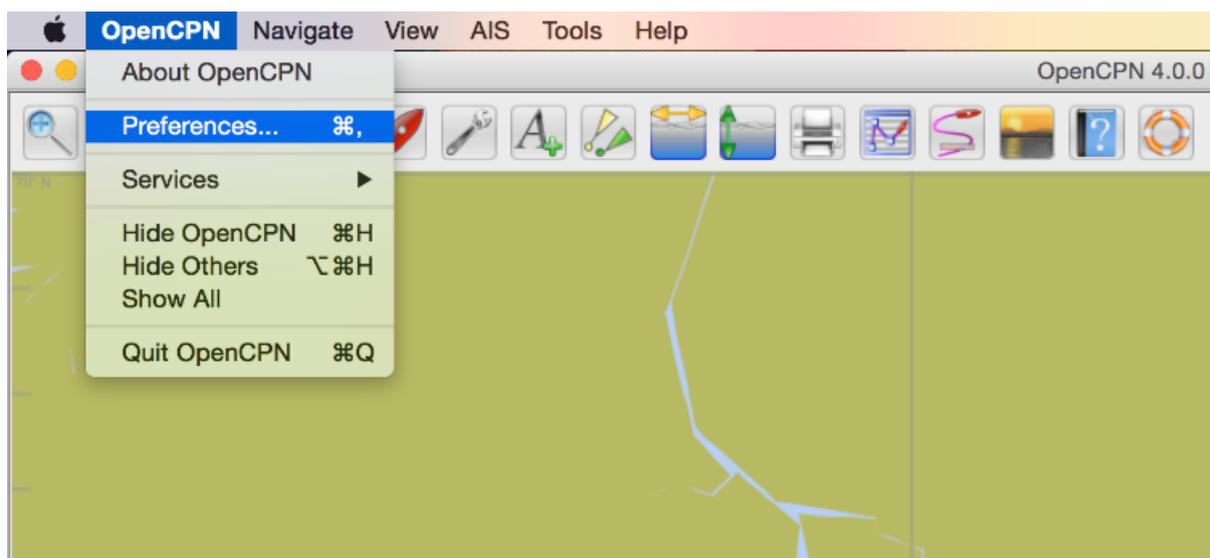
If you have successfully connected to AMEC AIS Transponder the Terminal will start displaying a large amount of text. Now, write down the port name which we will reuse for OpenCPN configuration. To disconnect, hold **control-a** followed by **control-\** . The screen will then ask if you want to quit, simply type **Y** to disconnect.



```
AMEC — screen — 118x33
$GPGSA,A,1,,,,,,,,,,,,,99.99,99.99,99.99*30
$GPGSV,1,1,00*79
$GPGLL,,,,,V,N*64
!AIVDO,1,1,,,B0000003wk?8mP=18D3Q3wv5kP06,0*1A
$GPRMC,,V,,,,,,,,,N*53
$GPVTG,,,,,,,,,N*30
$GPGGA,,,,,0,00,99.99,,,,,*48
$GPGSA,A,1,,,,,,,,,,,,,99.99,99.99,99.99*30
$GPGSV,1,1,00*79
$GPGLL,,,,,V,N*64
!AIVDO,1,1,,,B0000003wk?8mP=18D3Q3wv5kP06,0*1A
Really quit and kill all your windows [y/n]
```

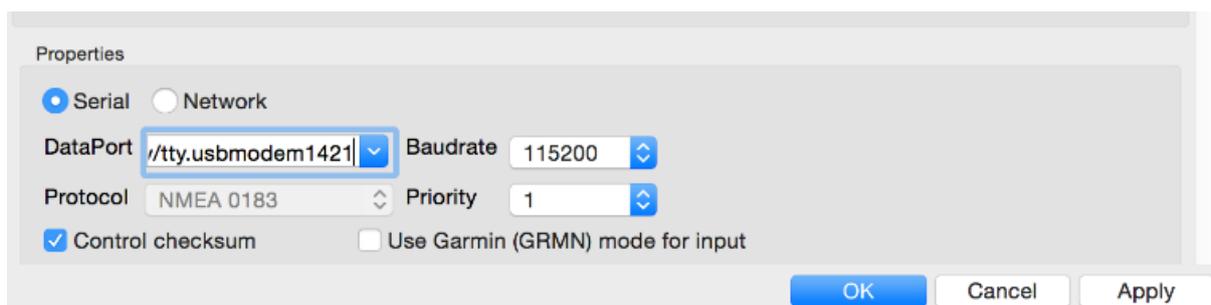
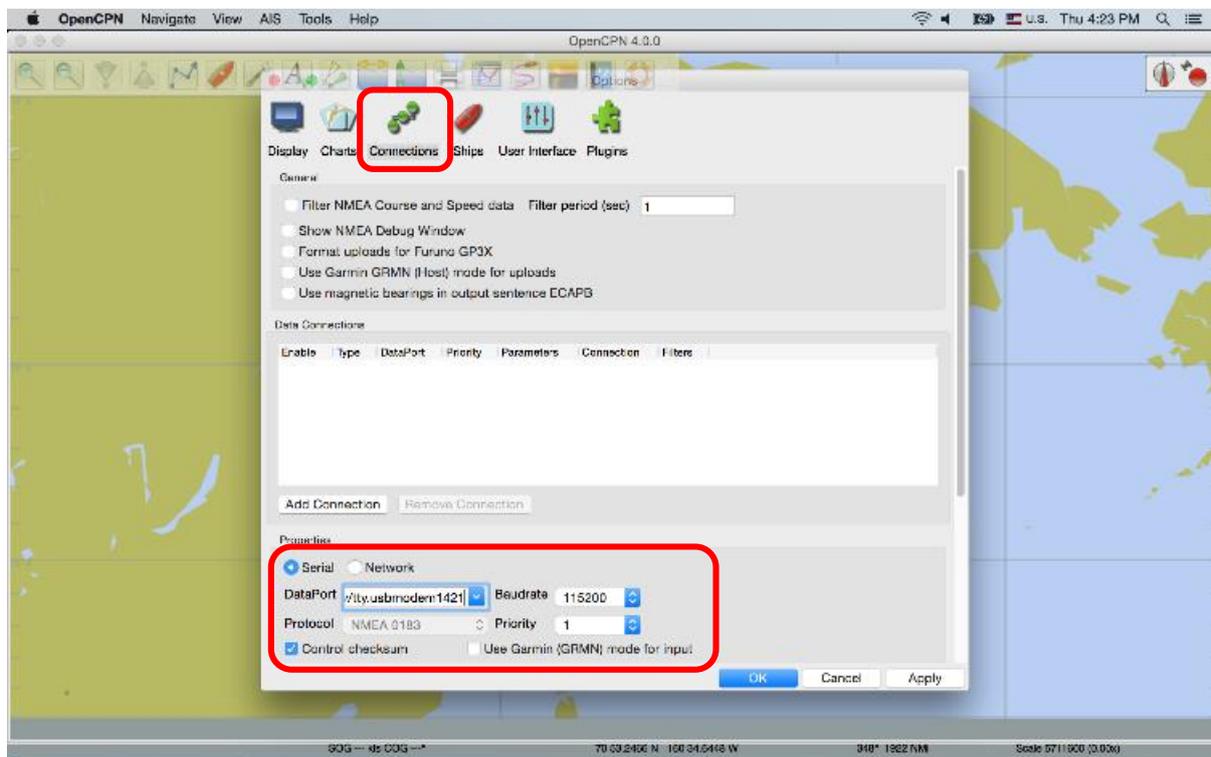
## Step 2: Setup OpenCPN to display AIS Targets

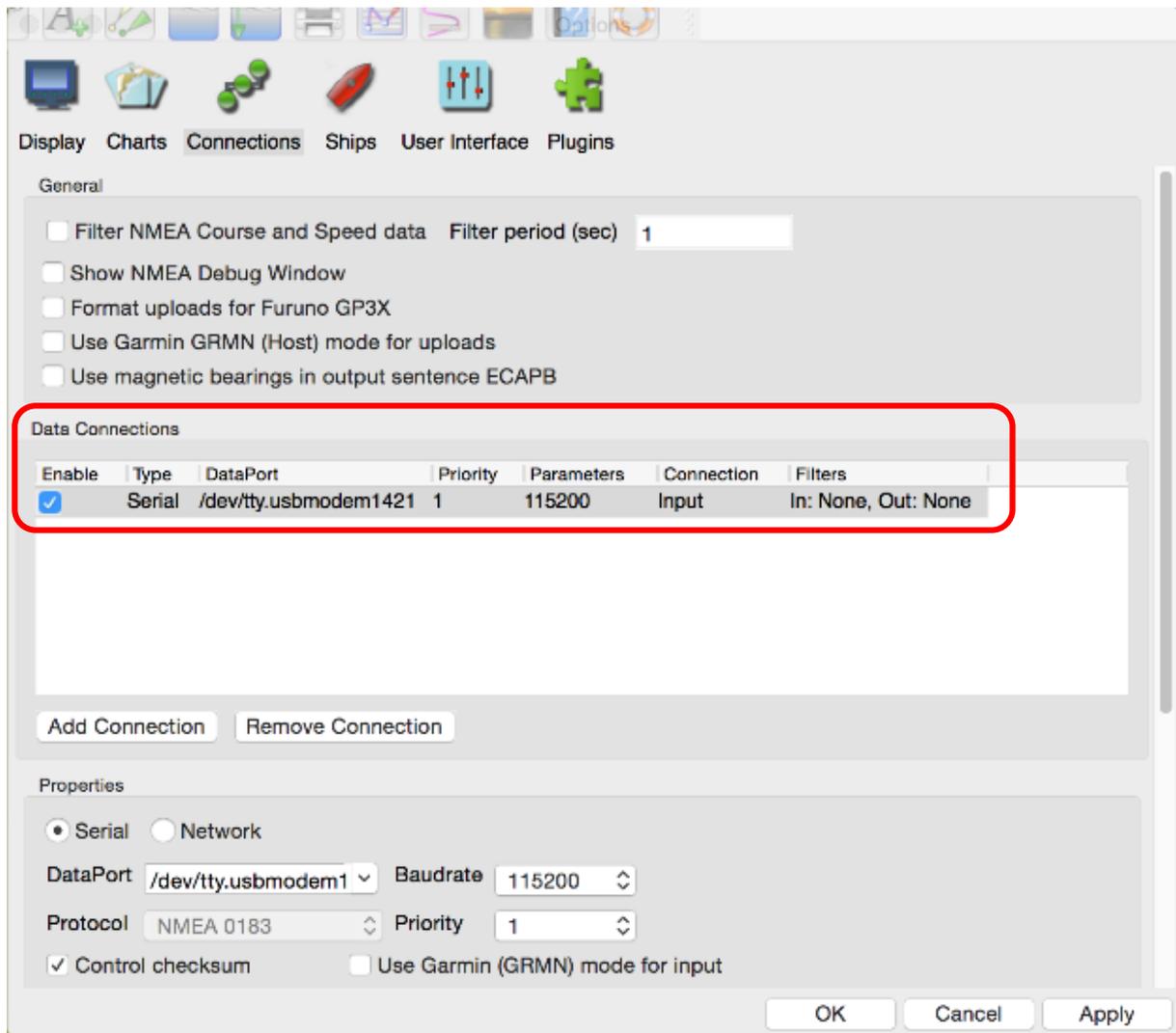
Launch OpenCPN and go to Preferences I.



In the **Preferences** window go to **Connections** setting page.

1. Under Properties
2. Select **Serial**
3. On the DataPort Field type in **/dev/tty.usbxxxx**
4. Set the Baudrate to **115200**
5. Click on **Add Connections**





6. Click **OK** to quit the setup page.
7. You should be able to see AIS Target on your OpenCPN program.