

# CONNECTING YOUR RECEIVER TO MACINTOSH

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

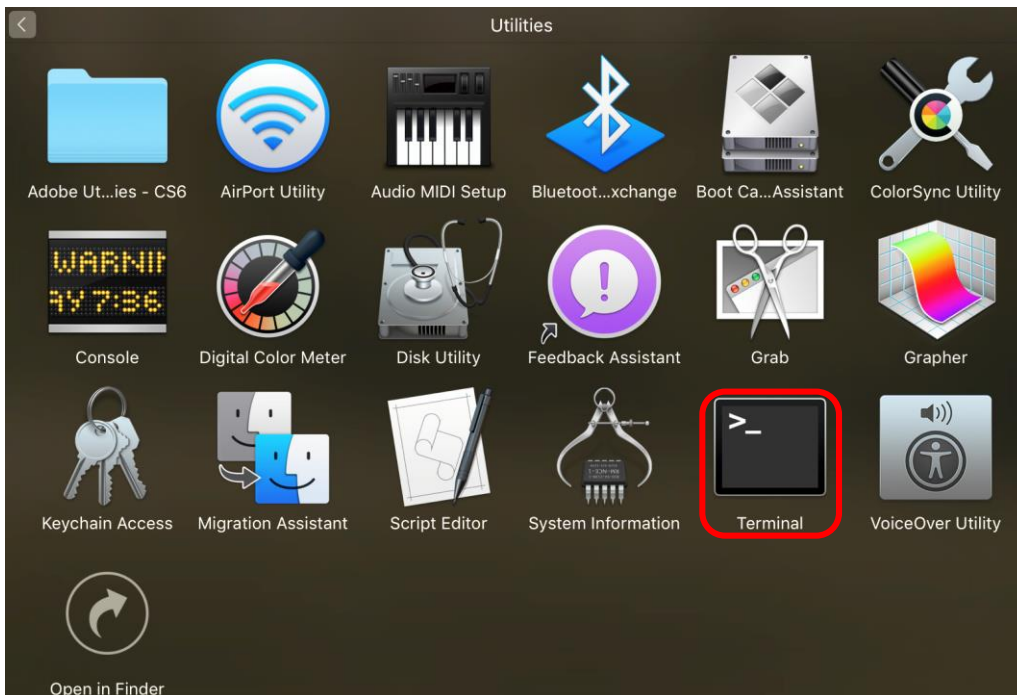
## Required Items

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 Receiver to your MAC USB Port (AMEC AIS Receiver can be powered up via the USB port).

Go to the Utilities folder and launch Terminal



**Important:** The Terminal application is a command-line based tool that is extremely powerful and the misuse 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.

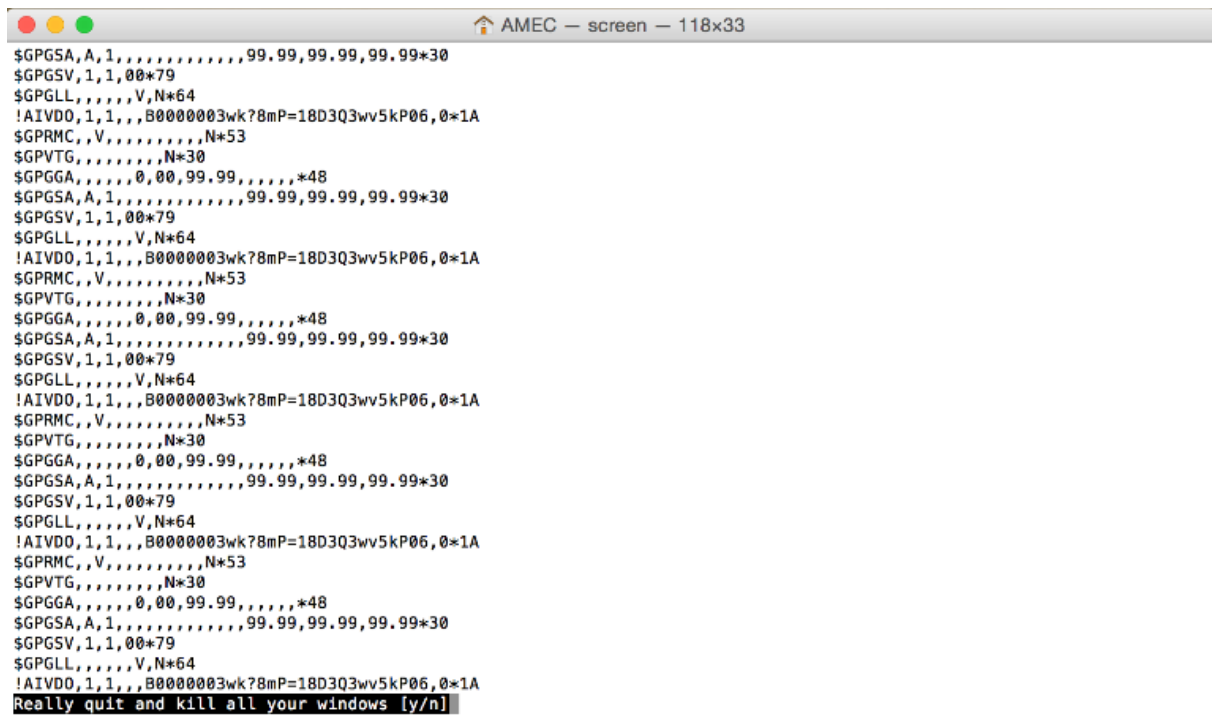
The important device(s) of note are the **tty.usbserial** and the **tty.usbmodem** in which is requires to connect the AIS Receiver to the MAC. If you see multiple **tty.usbxxxx** we can utilize the following command to establish a simple serial connection to determine which one is the AMEC AIS device.

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
```

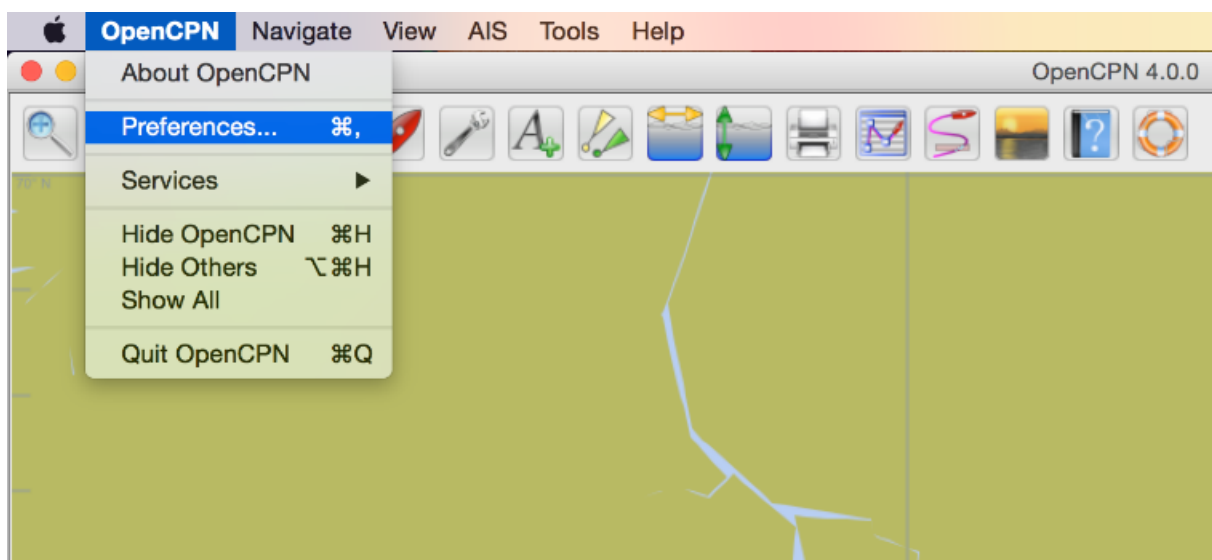
If you have successfully connected to AMEC AIS Receiver the Terminal will start displaying a large amount of text like figure 26. Now, write down the port name which we will reuse for OpenCPN configuration. To disconnect, hold **control-a** followed by **control-\** . The screen will then ask if you 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
$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
$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
$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]
```

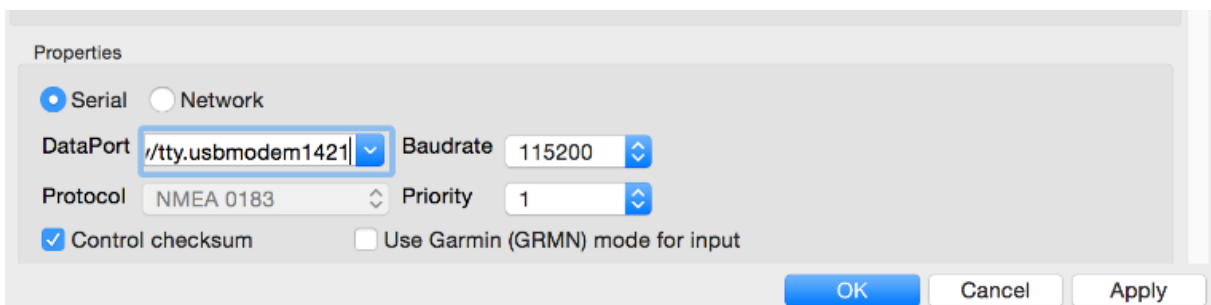
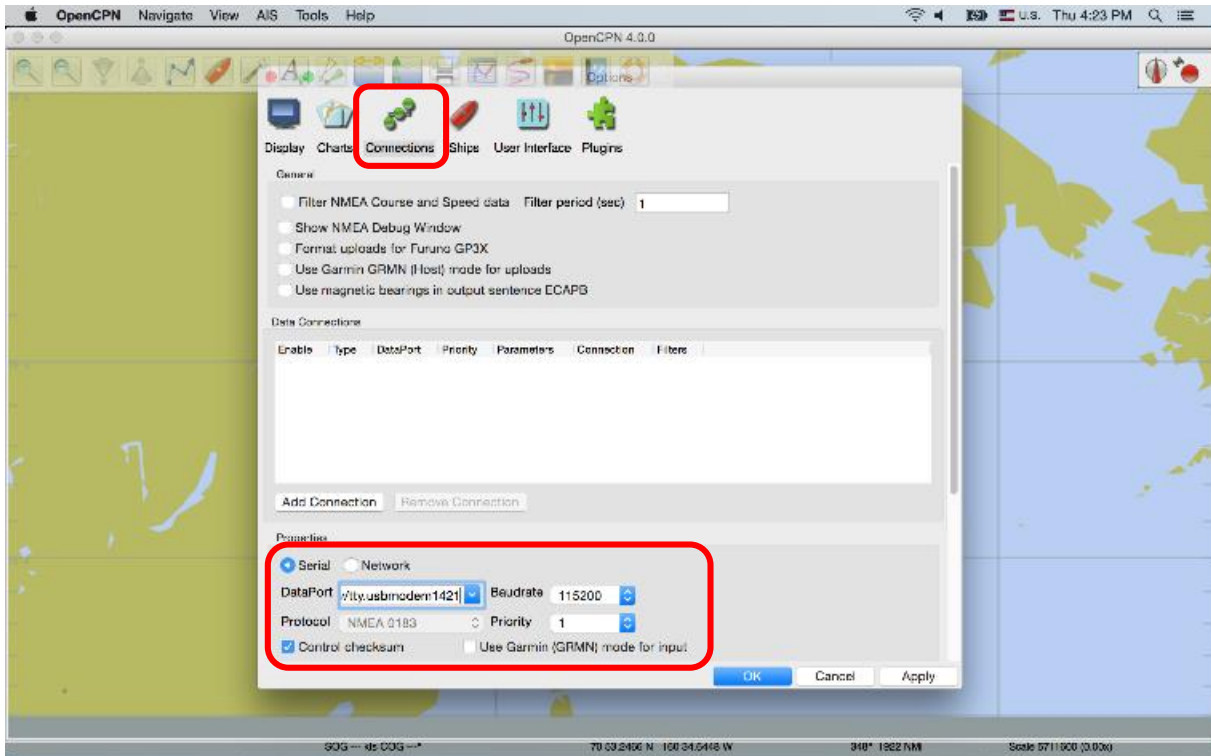
## Step 2: Setup OpenCPN to display AIS Targets

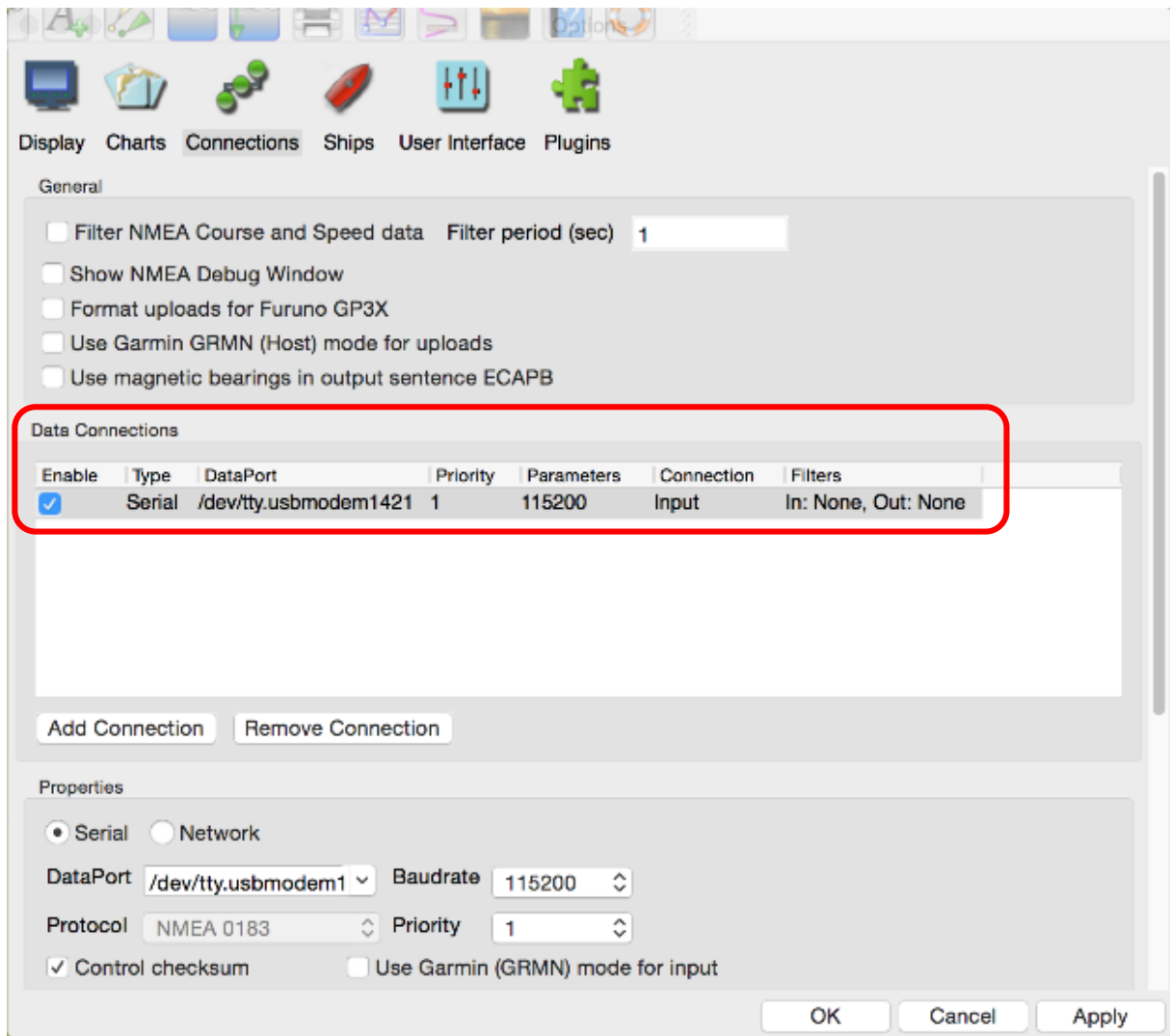
Launch OpenCPN and go to Preferences like on figure 24.



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.