



Article Number - 00030-2012

Date - 2nd April 2012

Article applies to - iAIS, WLN10 and WLN10HS wireless NMEA servers

ISSUE: Configuring Wireless NMEA Products for Multiple Connections

The iAIS, WLN10 and WLN10HS are pre-configured for operation in TCP/IP mode which is the most compatible method of transmitting wireless NMEA data. However, only one wireless data connection can be supported in this mode and in order to allow multiple wireless devices to receive the same wireless NMEA data, it is necessary to configure a different “UDP” mode of connection.

This Tech Support note explains how to configure the iAIS, WLN10 or WLN10HS products to work in this mode. Please note that, at this time, only the iNavX software for iPads and iPhones supports UDP mode. If you are using the iNavX app and want to connect multiple iPads or iPhones to our wireless products then please follow the procedure below.

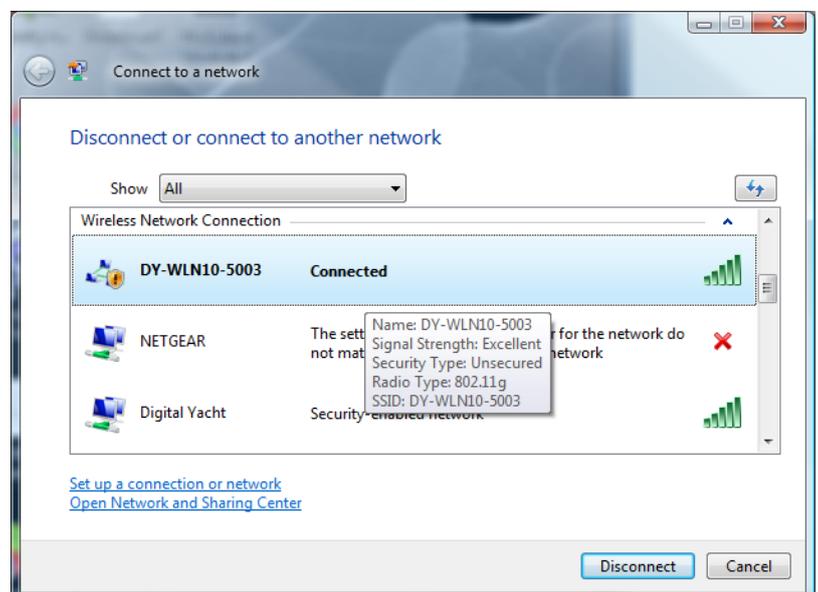
SOLUTION:

Configuration of these units for UDP mode involves sending the iAIS, WLN10 or WLN10HS unit a series of commands via a terminal program. It is recommended that this is only performed by authorised Digital Yacht Dealers.

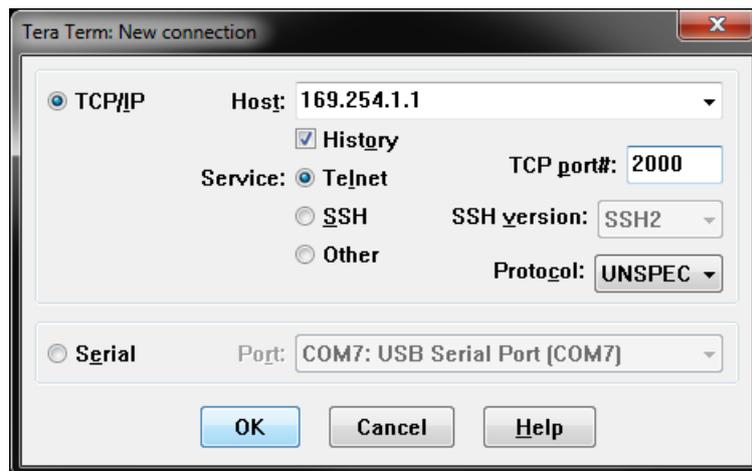
To carry out this configuration, it is necessary to have a Windows PC that has a wireless adaptor and a copy of “Tera Term” installed. A copy of this program is included on the Digital Yacht “Software and Drivers” CD-Rom (in the Utilities folder), or is available for download at the link below;

<http://en.sourceforge.jp/projects/ttssh2/downloads/51174/teraterm-4.69.exe/>

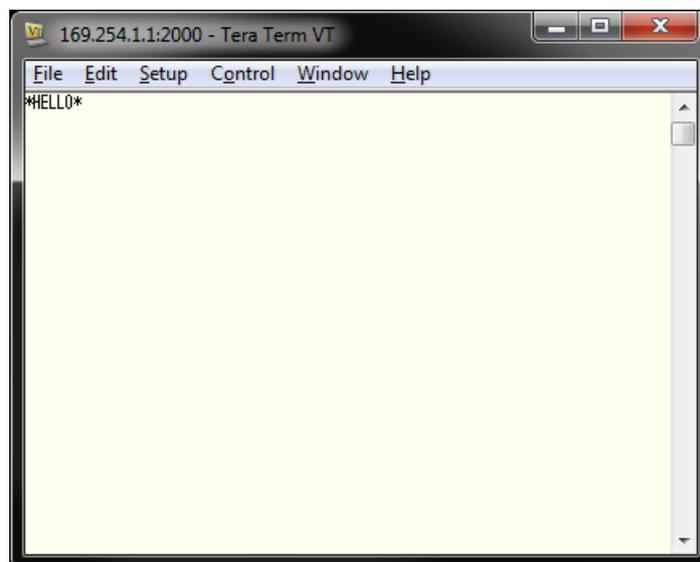
After installing Tera Term, it is necessary to connect the PC to the iAIS, WLN10 or WLN10HS using the Windows Wireless Network utility, scan for available networks and connect to the device to be configured.



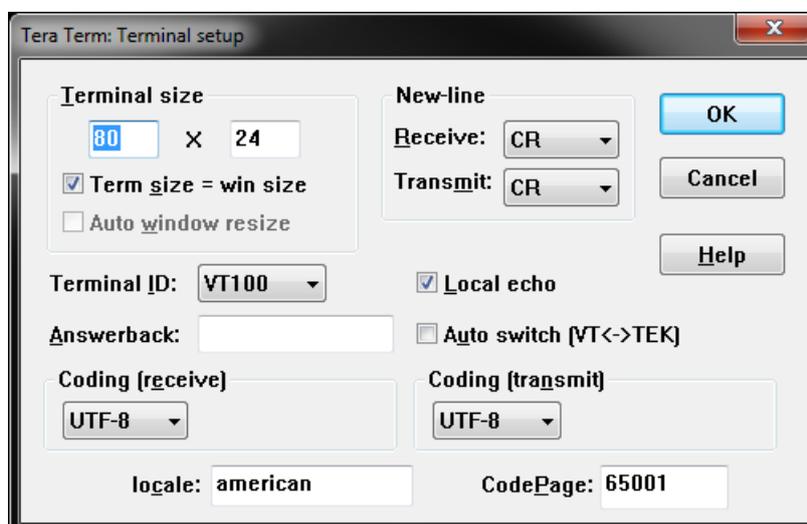
Once connected, run Tera Term and when the “New Connection” window is displayed, select the TelNet service, enter the IP address and Port number of the iAIS, WLN10 or WLN10HS – which is always 169.254.1.1 Port 2000.



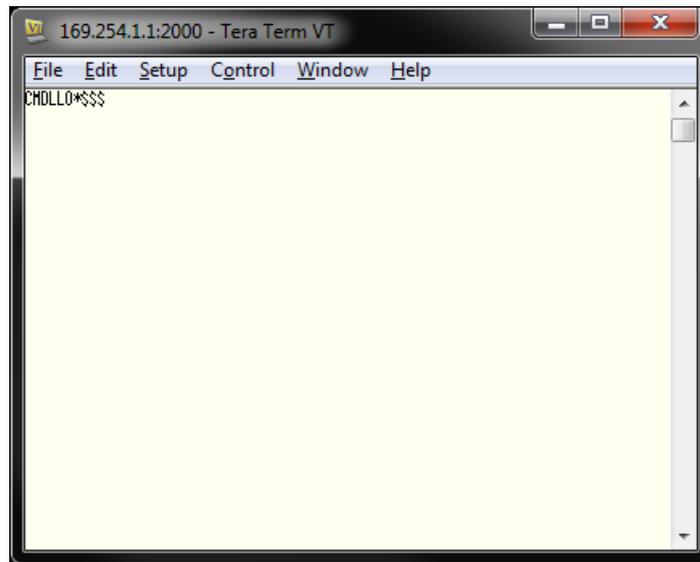
If Tera Term successfully creates a TCP/IP connection to the iAIS, WLN10 or WLN10HS, then you should see the window below with the word “*HELLO*” displayed.



In order to see what you are typing in Tera Term, click on Setup>Terminal and then make sure the “Local Echo” option is ticked (see below). Once you have done this click “OK” to return to the terminal window.



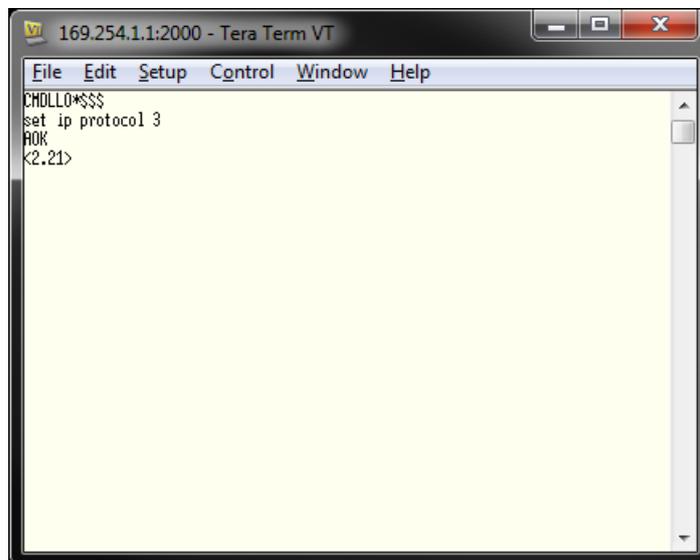
To place the iAIS, WLN10 or WLN10HS in to Command Mode type three dollar signs \$\$\$ and then press the ENTER key. You should see the following screen where the text CMD has been over typed on the *HELLO* text – you’re now in Command Mode and can send configuration commands to the iAIS, WLN10 or WLN10HS.



To set the unit in UDP mode, type the following command and then press the ENTER key.

set ip protocol 3

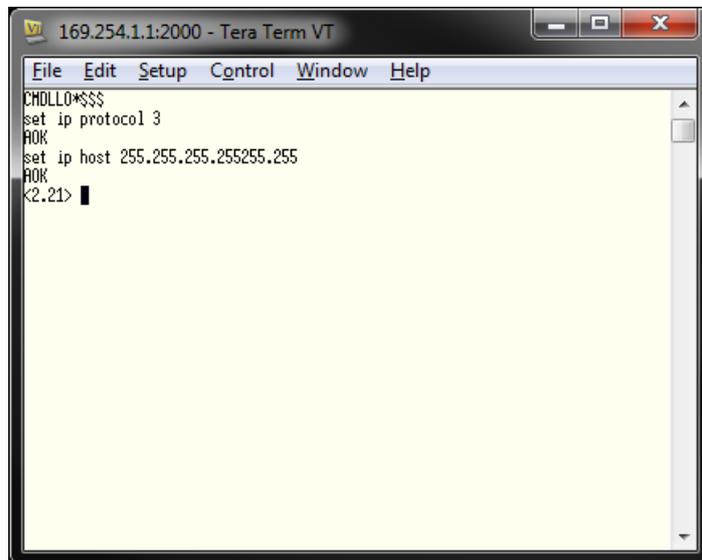
The iAIS, WLN10 or WLN10HS should respond with an Acknowledgement "AOK" as shown below.



To set the correct IP address for the UDP messages to be sent to type the following command and press the ENTER key;

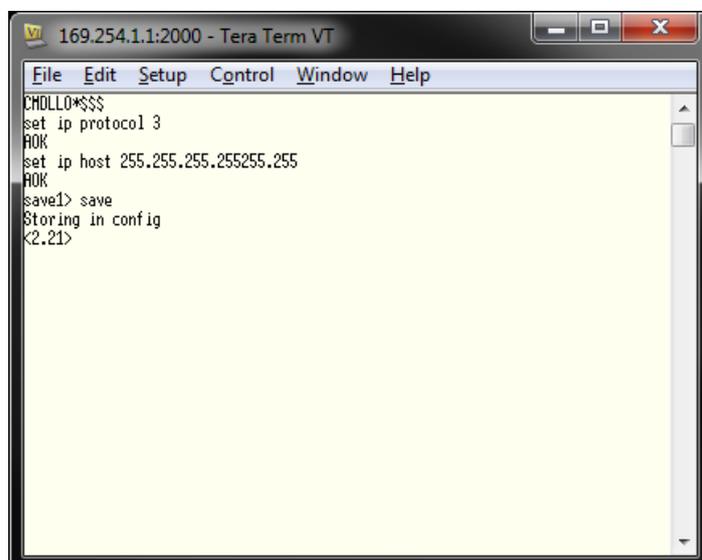
Set ip host 255.255.255.255

The iAIS, WLN10 or WLN10HS should respond with an Acknowledgement "AOK" as shown below.



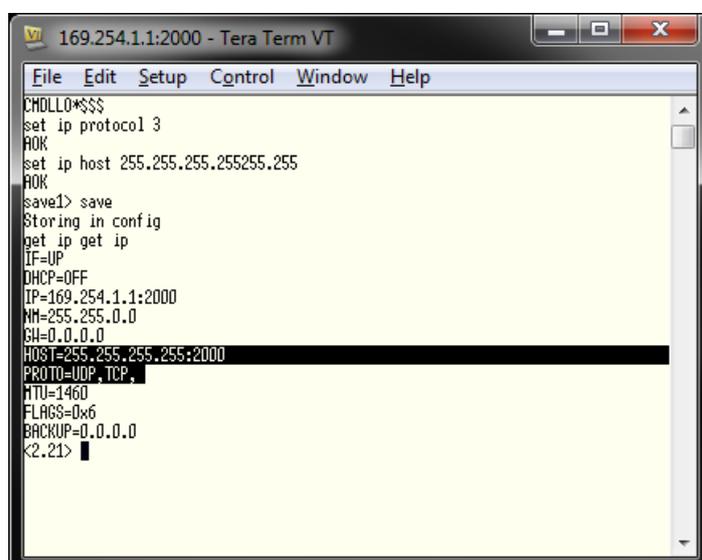
```
169.254.1.1:2000 - Tera Term VT
File Edit Setup Control Window Help
CHOLLO*$$$
set ip protocol 3
AOK
set ip host 255.255.255.255
AOK
<2.21>
```

Now you should save the settings you have changed by typing **save** and then pressing the ENTER key, which should cause the following message to be displayed.



```
169.254.1.1:2000 - Tera Term VT
File Edit Setup Control Window Help
CHOLLO*$$$
set ip protocol 3
AOK
set ip host 255.255.255.255
AOK
save1> save
Storing in config
<2.21>
```

You can double check that the new setting has been accepted by typing **get ip** and then pressing the ENTER key, which will display the following information



```
169.254.1.1:2000 - Tera Term VT
File Edit Setup Control Window Help
CHOLLO*$$$
set ip protocol 3
AOK
set ip host 255.255.255.255
AOK
save1> save
Storing in config
get ip get ip
IF=UP
DHCP=OFF
IP=169.254.1.1:2000
MM=255.255.0.0
GM=0.0.0.0
HOST=255.255.255.255:2000
PROTO=UDP, TCP,
MTU=1460
FLAGS=0x6
BACKUP=0.0.0.0
<2.21>
```

The two highlighted lines in the previous image are the two settings you have changed and your unit should show the same values (but not highlighted).

Now you should turn off your iAIS, WLN10 or WLN10HS, wait a couple of seconds and then turn it on again and the unit should now be in UDP mode.

To test that everything is working OK, run the iNavX application go to the Instruments>Setup>TCP/IP menu and select UDP mode. You should see the raw NMEA 0183 data being received in the monitor window as shown below;

