VOYAGER

User Guide

Everything you need to know about:

Voyager GPS Configuration

This guide explains how to get started with Voyager GPS Configuration from Voyager Worldwide.

It includes a summary of the service, how it works, answers to questions you may have and other useful information. If you need any further support you can contact any of the following Voyager Worldwide offices at any time. We will be pleased to help 24/7.

Get Voyager support
For technical support email:
customerservices@voyagerww.com
or contact your preferred Voyager Worldwide office from the options listed on the right:

Greece
Athens
T: +30 216 400 5000

Japan
Kobe
T: +81 78 332 3422

Yokohama
T: +81 45 650 1380

Hong Kong
T: +852 2854 3688

Singapore
T: +65 6270 4060

Turkey
Istanbul
T: +90 216 493 7401

UK
Aberdeen
T: +44 1224 595 045

North Shields
T: +44 191 257 2217

USA
California
T: +1 562 590 8744

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Introduction to Voyager GPS Configuration

Voyager GPS Configuration tool enables you to view your vessel's position in real-time, overlaid on ENCs in Voyager Planning Station (VPS), as well as subscribe to our Voyager PAYS (Pay as you Sail) service. This service tracks the vessel position and only charges for ENCs that a vessel sails through during a voyage.

To get started you need:

- Latest version of Voyager Planning Station installed on your PC.
- Latest version of Voyager GPS Config installed on your PC.
- GPS USB input (hardware).

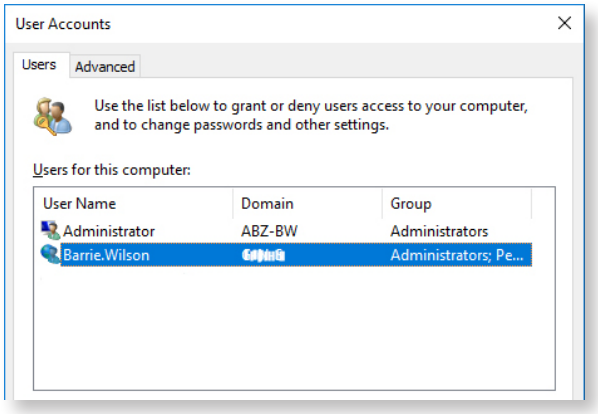
Administrator Rights

To check if you have administer rights on your computer;

For Windows XP, press Windows+R, type Control Userpasswords2 and press Enter.

For Windows 10 or later, press Windows+R, type Netplwiz and press Enter.

If “Administrators” is displayed in the Group column of your User Name, you have Administrator rights.



If “Administrators” is not displayed, you will need to contact the system administrator or IT department to grant you Administrator rights to complete the installation.

External Domain Whitelisting

Our application needs to make external calls to a specific domain:
https://nmeaupload.voyagerww.com (20.74.237.163)

Helpful hint:
If you or your organization has implemented strict security measures on your system, these necessary external calls might be blocked. To prevent this from interfering with the smooth operation of our application, it will be essential to add this domain to your system's whitelist, essentially granting it the necessary permission to communicate with your system.

If you are the administrator of your system, you can undertake this task by referring to the documentation for your particular system or security software. However, if your system is managed by an IT department or a third-party, you may need to contact them to complete this task. Please provide them with the necessary domain and request that they add it to the system's whitelist to ensure our application can function optimally without restrictions

The whitelisting process might differ slightly based on the specifics of your IT environment, including the software and hardware you are using. If you or your IT department need additional assistance or have questions about this process, don't hesitate to reach out to our Support team.

PLEASE NOTE: this step is **not** an optional component of the setup. Failure to perform this could result in reduced functionality or unsuccessful operation of our application.

General information

New VPS Users: To install VPS and Voyager GPS Configuration latest version, use the VPS USB drive provided.

Existing VPS Users: To install VPS and Voyager GPS Configuration latest version, contact our Support team.

Installing Voyager GPS Configuration

PLEASE NOTE: Voyager GPS Configuration must be installed on the same computer as Voyager Planning Station.

Installing Voyager GPS Configuration is easy, but please note you will require Administrator rights on your PC/laptop for this installation to be successful. You may need to contact your IT team to arrange this. To find out how to check if you have admin rights see page 4.

If you have received the Voyager Planning Station software on USB, simply follow the installation instructions in the box and click to install Voyager GPS Configuration from the menu options.

If you have downloaded the installer, you will see a file GPS Configuration_ Setup.exe. Click on this to initiate the installation process.

Tick 'I agree to the Licence Terms' and click 'INSTALL'.

The installation should take less than a minute.

Press the blue **LAUNCH** button when it completes.

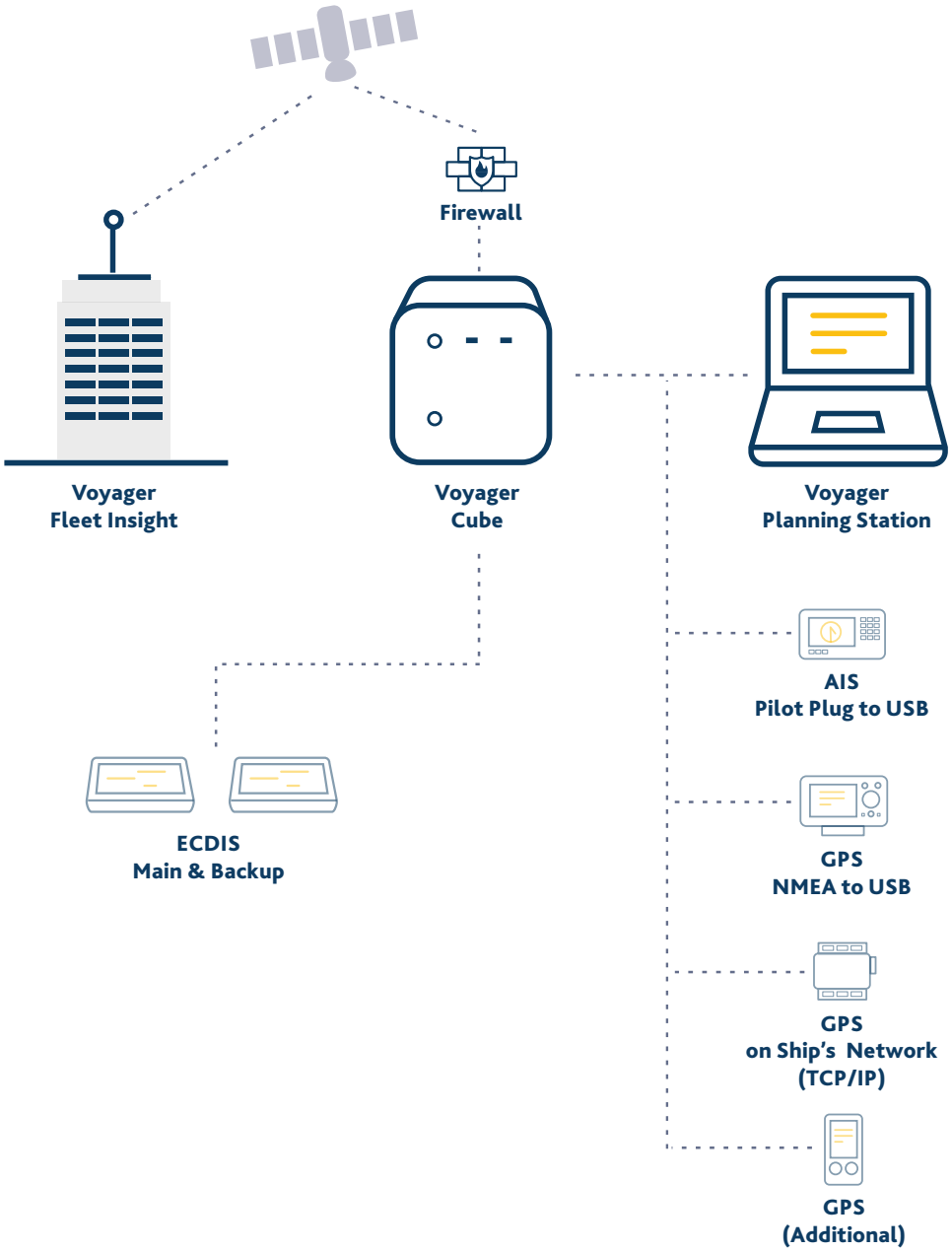
The installation process will add a new icon to your Windows desktop. Click this to run Voyager GPS Configuration at any time.

Once the VPS software* and Voyager GPS Configuration is installed, simply connect your GPS USB to see the vessel's position, heading, course, and speed vector in VPS.

When this feature is activated, we'll collect some additional information, including your tracking data to help us improve our service. You'll need a data connection to use this feature.

* Refer to VPS User Guide for further information at: https://voyagerww.com/user-guides/

Voyager Ecosystem



Getting started with the AIS Pilot Plug

If you received the supported AIS pilot plug, then please refer to the following instructions.

The box will include the AIS pilot plug and an installation disc for windows drivers if required.

Installing AIS pilot plug

Connect the Female plug to the ship's pilot plug.

PLEASE NOTE: The male plug extension allows the pilot to connect to the ship's pilot plug without interrupting the NMEA feed to the PC USB connection.

Connect the USB connection to the computer where the Voyager GPS software is installed.

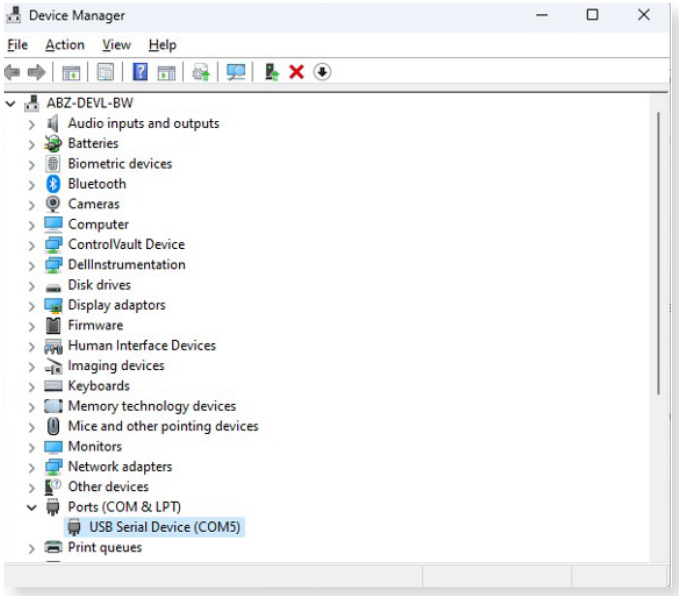
Install AIS Pilot Plug USB Drivers Automatically.

When the AIS Pilot Plug USB connection is first plugged in, the USB drivers will be installed automatically.

Install AIS Pilot Plug USB Drivers Manually
If Windows doesn't automatically install the USB drivers, the drivers can be installed manually from the disc provided. **DVD > AIS Wired Splitter Pilot Plug > CDM21228_Setup.exe**

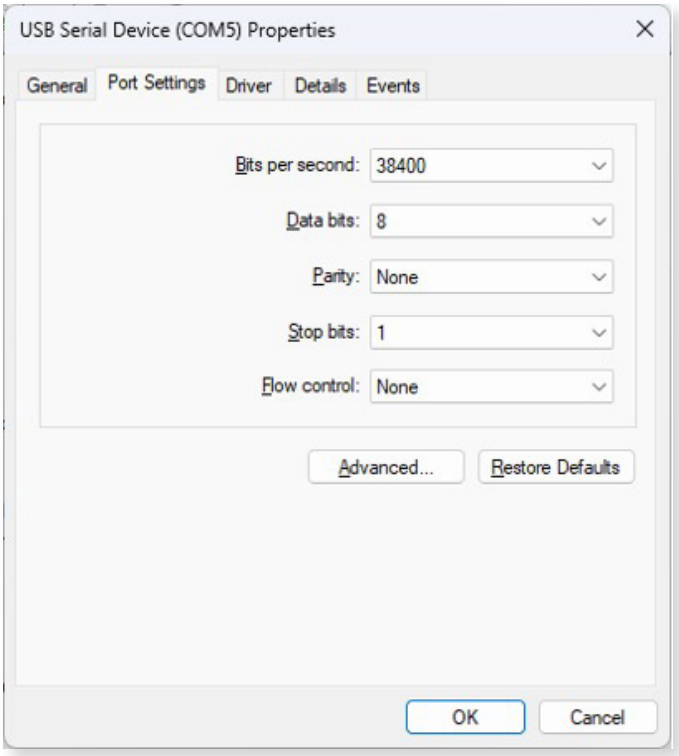
Check Device Manager for the allocated COM port number
To find out which COM port the device has been allocated, open Windows Device Manager by searching in the 'Start' menu or Press Windows+X on the keyboard, and select Device Manager from the list.

Expand the 'Ports (COM & LPT)' list. The **USB Serial Port** device will be displayed with '(COM X)' (X refers to the COM Port number) next to it. Please make a note of this when configuring the Voyager GPS Configuration App.



Double-click the **USB Serial Port** name under the menu, navigate to the **Port Settings** tab of the pop-up window and change the **Bits per second:** band/baud rate to 38400.

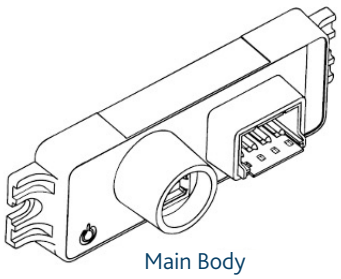
If you wish to change the COM Port Number then click advanced. For example, you may set it to COM1, 38400, 8, 1 if required.



Getting started with the USG-2 USB to Serial Gateway

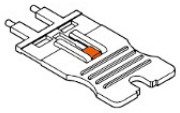
If you received the supported USG-2 USB to Serial Gateway device, then please refer to the following instructions. Alternatively, if you received a different device then please refer to the user manual supplied with your device.

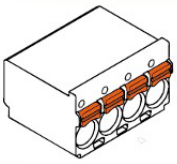
In the USG-2 Box

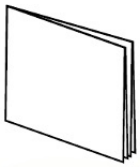

Main Body

Mounting screws

High-quality USB lead


Strain relief clip


Pluggable screwless connector


Quick start guide

Actsinsence CD

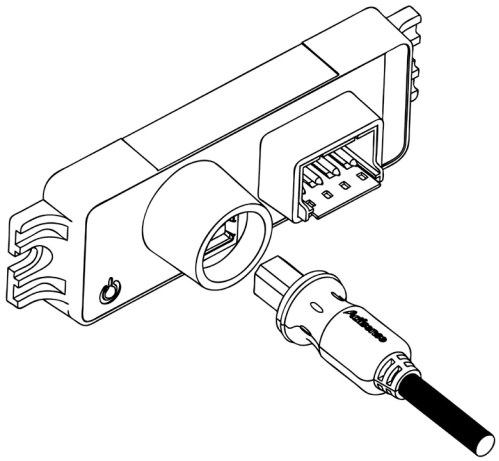
Simple connection to a computer with no serial port

Laptop and desktop computers no longer come equipped with RS232 type serial ports. The USG-2 creates a fully isolated marine standard NMEA 0183 port from any computer USB port. This COM port appears on the computer system as a Virtual COM port, and so can be used with all standard marine navigation and display software such as Voyager Planning Station.

Installing USG-2 USB Device

Before getting started
The wire colours used in this user guide are in accordance with the NMEA 0183 specification (v.4.11, November 2018) and are for illustration purposes only.

Power Supply
The USG-2 is powered by the USB connection. Simply connect the USG-2 USB cable to the USG-2 device as shown below. Then connect to a USB port on the Computer where Voyager Planning Station is installed.

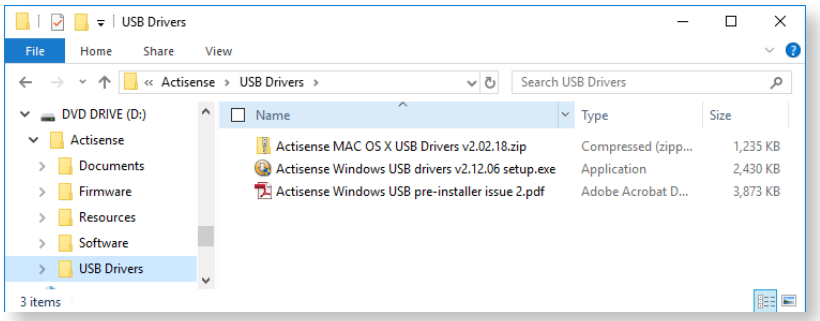


Install USG-2 Device Drivers Automatically
If an internet connection is present when the USG-2 USB device is first plugged in, the USB drivers will be downloaded and installed automatically.

Install USG-2 Device Drivers Manually
If no internet connection is present the first time your USG-2 USB device is plugged in, or if Windows doesn't automatically install the USB drivers, the drivers can be installed manually from the USG-2 CD provided.

PLEASE NOTE: Ensure the **USG-2 USB device is NOT plugged in** before continuing.

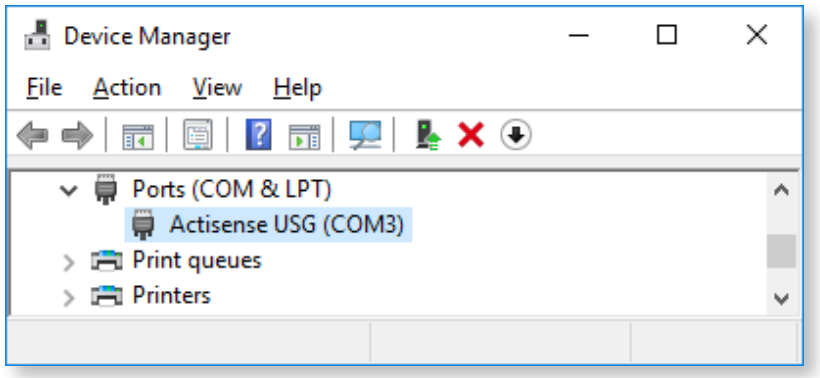
1. Insert the USG-2 CD into the CD drive of the Computer that the USG-2 USB device needs to connect with.
2. Click 'Autorun' if the option is available.
3. If 'Autorun' doesn't appear, locate the USG-2 CD in Windows Explorer.
4. Browse to the DVD Drive:\Actisense\USB Drivers



5. Double-click the latest available Windows USB Driver and follow the on screen instructions when prompted.
6. Once complete, plug in the USG-2 USB device to the computers USB port.

Check Device Manager for the allocated COM port number
To find out which COM port the device has been allocated, open WindowsDevice Manager by searching in the 'Start' menu or Press Windows+R on the keyboard, type **devmgmt.msc** and press Enter or click OK.

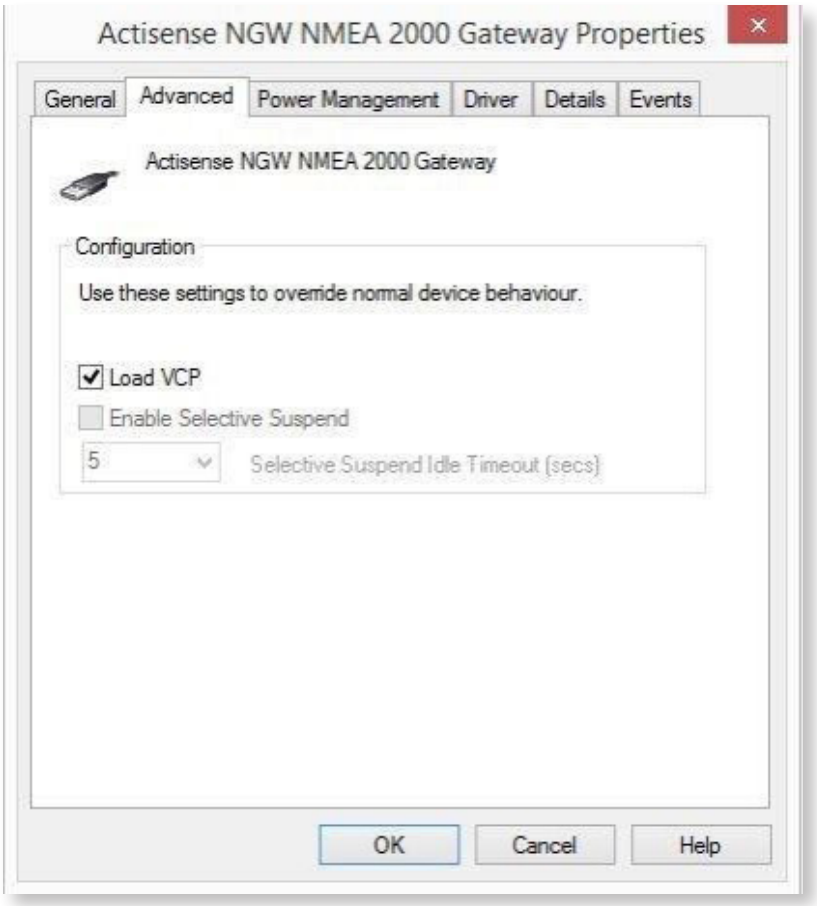
Expand the 'Ports (COM & LPT)' list. The Actisense USB device will be displayed with '(COM X)' (X refers to the COM Port number) next to it. Please make a note of this when configuring the Voyager GPS Configuration App.



If your Actisense device is in the Universal Serial Bus Controllers menu, but not the Ports (COM & LPT) menu, here's what to do:

Double-click the name under the menu where it is present and navigate to the Advanced tab visible along the top row of the pop-up window.

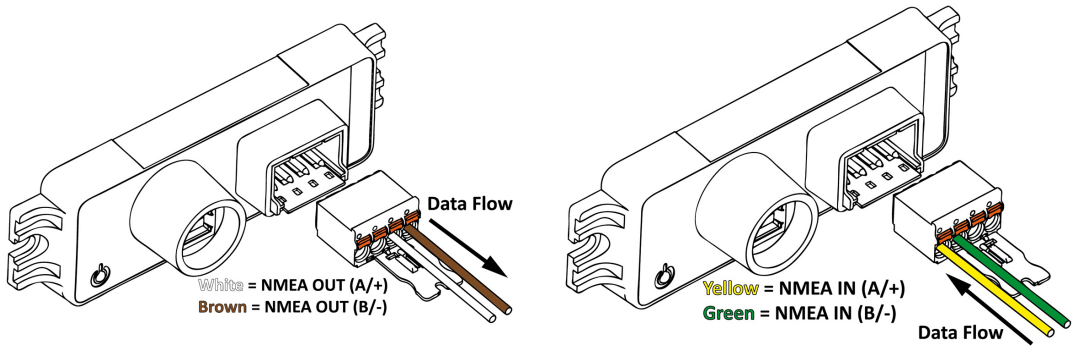
Ensure that the 'Load VCP' option is ticked. If it isn't, tick it. You may need to restart your computer to re-initialise the installation of the USB drivers.



Connecting to GPS NMEA 0183 Devices

Identify the GPS NMEA output location. This will either be directly from the GPS device or from a NMEA multiplex distribution box located on the bridge. Run 2 or 4 core shielded signal cable from the GPS NMEA output to the USG-2 USB device.

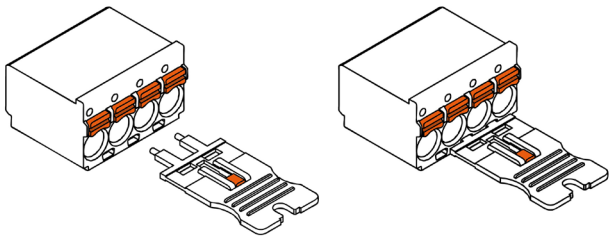
Strands of wire must not be twisted before inserting in to the screwless connector, this will ensure a much more secure termination than if the wires are twisted. A small flat headed screwdriver (2-3mm) is needed to press down on the orange buttons and open the terminal for the wires to be inserted or removed.



USG-2 Label:	Conects to:
Talker A/+	NMEA D183 Listener 'RX A+' or 'NMEA IN A/+'
Talker B/-	NMEA D183 Listener 'RX B -' or 'NMEA IN B/+'
Listener A/+	NMEA D183 Talker 'TX A+' or 'NMEA OUT A/+'
Listener B/-	NMEA D183 Talker 'TX B -' or 'NMEA OUT B/-'

Inserting the Strain Relief Clip

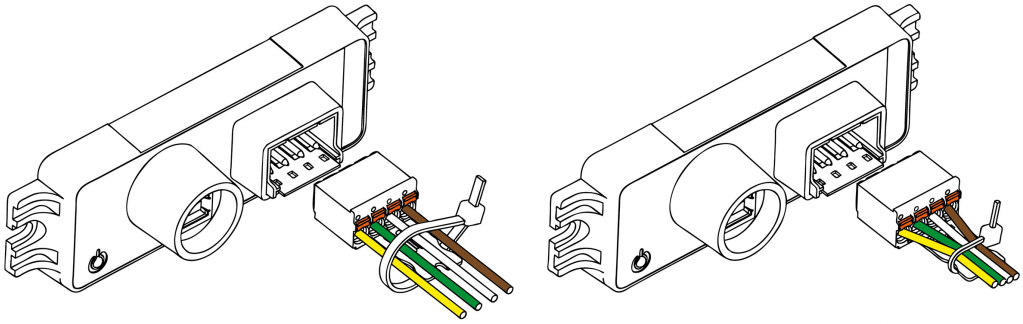
Once the strain relief clip is inserted it cannot be removed. Insert the strain relief clip on the left hand 'Listener' side.



PLEASE NOTE: Use of the strain relief clip is optional, however, it is required to remove the screwless header from the screwless connector.

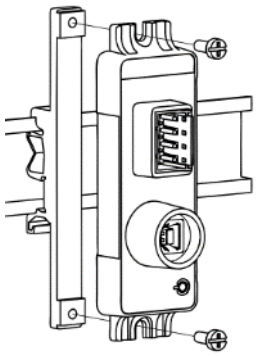
Securing Data Wires

To protect against vibration, wrap the supplied cable tie around the terminated wires and in-line with the groove on the strain relief clip. Pull the cable tie tight enough that it secures the data wires to the strain relief clip, but not too tight that it begins to crush the wire.

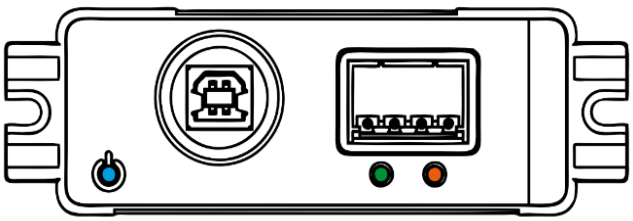


Mounting the USG-2

The USG-2 should be installed in a suitable protected location (e.g. below deck but close enough to connect to the Voyager Planning Station PC) and where it will not come in to direct contact with water. The USG-2 can be mounted with or without a DIN rail. DIN rail mounts are sold separately.



LED Behaviour

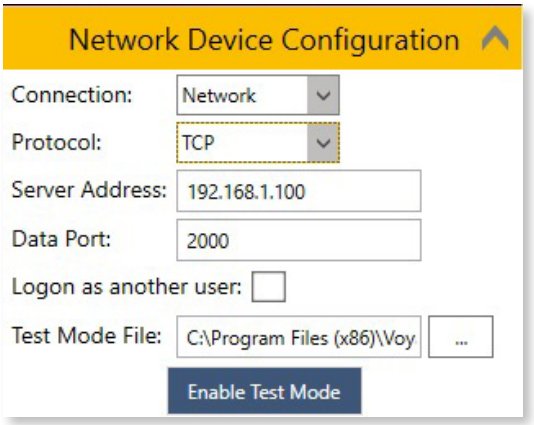


Type	Blue	Green	Orange
Name	Power indicator	Receive LED	Transmit LED
Function	Illuminates solid blue when USB driver has successfully loaded and USB port powered	Flashes to indicate data is being received on the USG-2 input	Flashes to indicate data is being transmitted on the USG-2 output

Getting Started with Ships Network Wireless GPS Configuration

The Voyager GPS can connect to a wireless GPS device connected to the Ship Network

1. Open the Voyager GPS.
2. Select Network Device Configuration.
3. Select the Dropdown menu for Connection and Select Network
4. Enter the Wireless GPS device settings below:

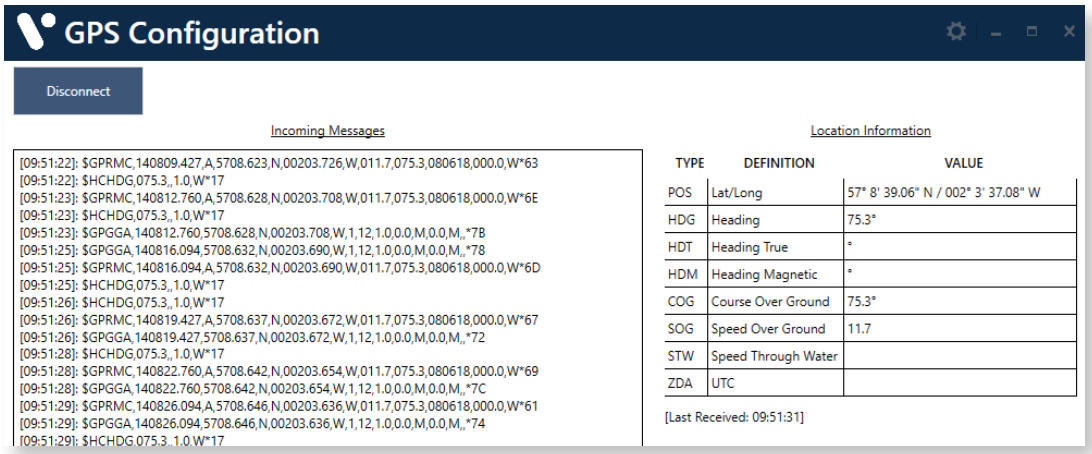


Please refer to your GPS Device Manual or speak to your IT team to obtain the GPS Wireless settings to configure the Voyager GPS with your wireless GPS Device.

Setting up Voyager GPS Configuration

Once you have installed the one of the above device settings, you will need to setup the Voyager GPS Configuration app to connect to your GPS Device.

1. Launch the Voyager GPS Configuration app and select the settings menu icon.
2. Select GPS Service Settings.
3. Confirm the box is checked for 'Local Service'.
4. Select 'Device Configuration' and select the allocated COM Port number noted from Device Manager in the last section of this user guide.
5. Set the Baud rate of your GPS output configuration to match the Baud rate set in Device Manager.
6. Click 'Save' then click the Connect button.
7. You should now see the NMEA sentence data as per the following.

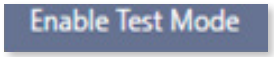


8. If the NMEA sentence data looks to be valid and the location information is displaying correctly then you have now configured the Voyager GPS Configuration successfully.
9. Now you can open VPS to monitor your vessel's position.
10. If there is no data feed, then please check the wiring and USG-2 device LED status.

Voyager GPS Configuration
Test Mode

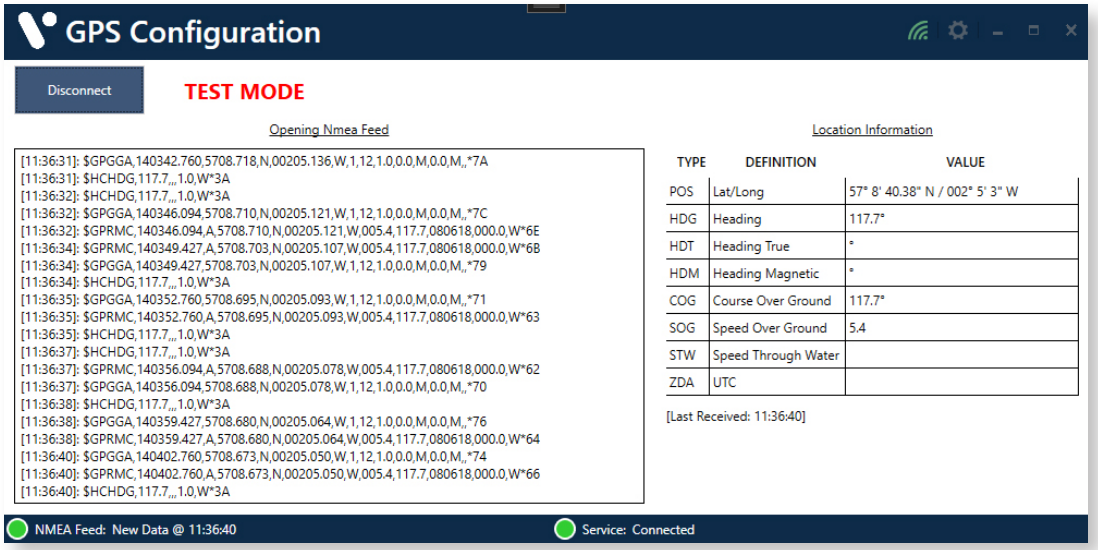
The Voyager GPS Configuration app has a Test Mode function to test the connectivity with Voyager Planning Station.

1. Launch the Voyager GPS Configuration app and select the settings menu icon.
2. Select Configuration and click 'Enable Test Mode'.



3. This will run the application in **TEST MODE.**
4. Closing the application will disable Test Mode automatically.

PLEASE NOTE: Do not leave the test mode **ON** and leave the application running.



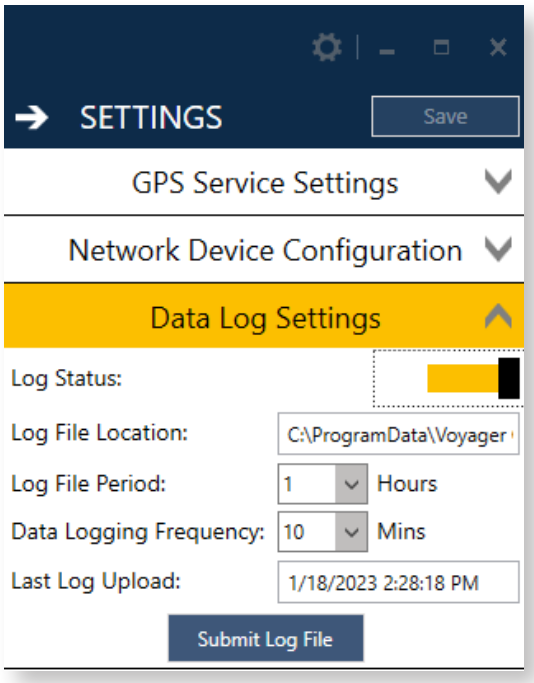
Enable Data Logging

The Voyager GPS Configuration app has the functionality to submit your GPS log file to the Voyager web server.

PLEASE NOTE: Voyager Planning Station must be installed for this functionality as Voyager Planning Station manages the data file upload.

1. Launch the Voyager GPS Configuration app and select the settings menu icon.
2. Select Data Log Settings in the settings menu
3. Select the required Log File Period. (This is the frequency that your log file will be submitted automatically) The default is every 6 hours
4. Select the required logging frequency. (This is the frequency that your NMEA GPS data will be logged) The default is every 10 minutes
5. Click on the Log Status toggle button to enable logging.

PLEASE NOTE: Data logging does not work in Test Mode.



GPS Remote configuration

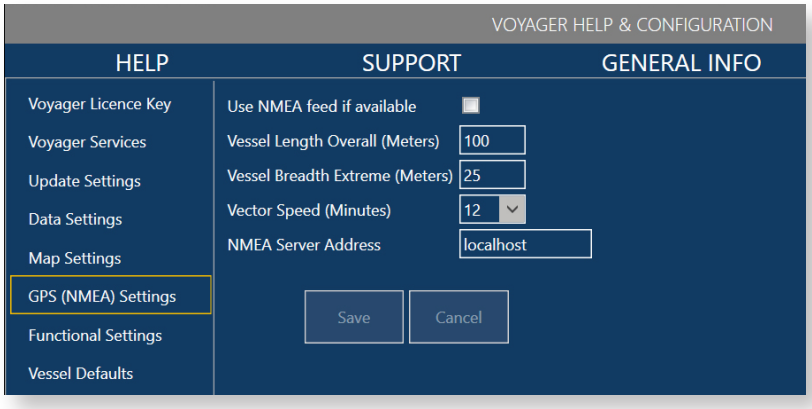
The Voyager GPS Configuration app has the functionality to be set up remotely.

If the GPS device is installed on a different computer than VPS, the Voyager GPS can be configured to remotely connect to the GPS device over the Network. Voyager GPS software will need to be installed on both computers first.

Once the GPS device is installed on the VPS computer and on the other computer where the GPS device is plugged in to.

Then VPS needs to be configured to connect to the Voyager GPS service on the remote PC.

1. Open Voyager.
2. Select Configuration.
3. Select GPS (NMEA) Settings.



4. Select 'Use NMEA feed if available'.
5. Enter the IP address of the computer the GPS device is plugged into.

If unsure, you can obtain this by following the steps below or speak with your IT team.

For Wi-Fi connection

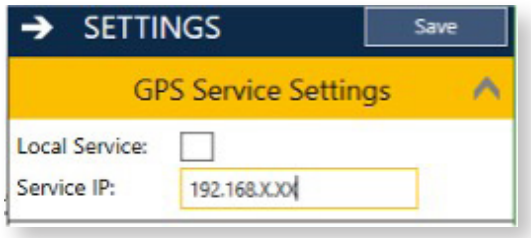
- Select Start > Settings > Network & internet > Wi-Fi and then select the Wi-Fi network you're connected to.
- Under Properties, look for your IP address listed next to IPv4 address.

For Ethernet connection

- Select Start > Settings > Network & internet > Ethernet.
- Under Properties, look for your IP address listed next to IPv4 address.

6. Select Save
7. Then close the configuration window.
8. Open Voyager GPS on the VPS computer.

9. Select the settings menu icon to expand the settings menu.
10. Select GPS Service.
11. On the Voyager computer, open Voyager GPS and click Connect.

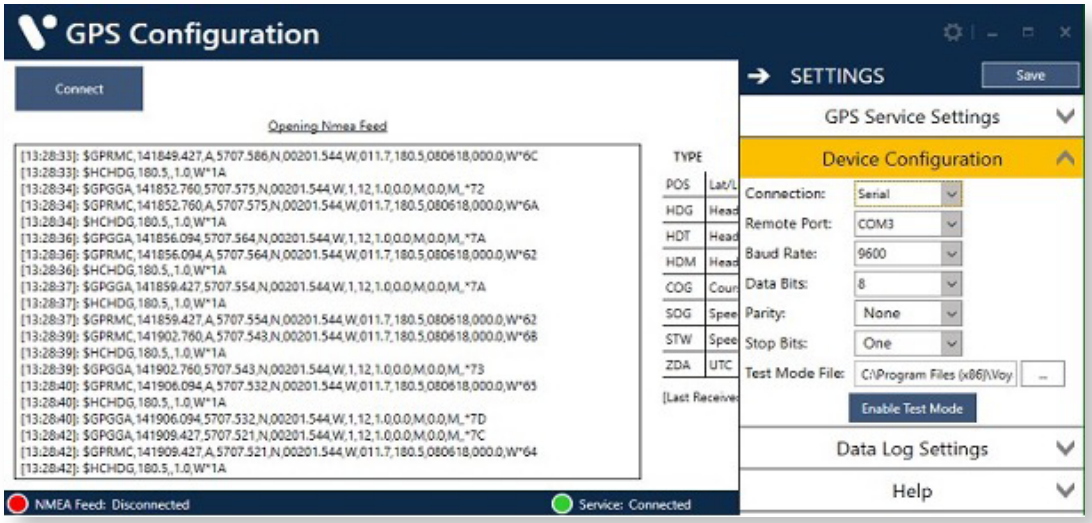


12. You should now see the NMEA sentence data on both computers as per the following.
13. Click Save.

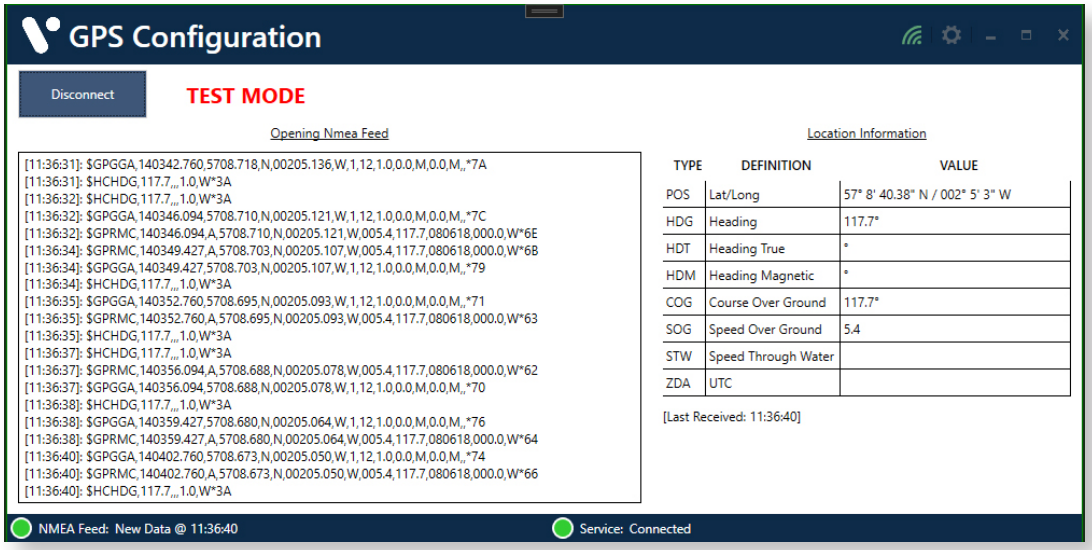
Once you have installed the GPS feed on the non-Voyager computer, you will need to set up the Voyager GPS Configuration app to connect to your GPS Device.

1. Launch the Voyager GPS Configuration app and select the settings menu icon.
2. Select Data Log Settings in the settings menu
3. Confirm the box is checked for 'Local Service'.
4. Select 'Network Device Configuration' and select the allocated COM Port number noted from Device Manager in the last section of this user guide

5. Set the Baud rate of your GPS output configuration. The Baud rate is usually 4800, 9600 for GPS units but some units can use 38400.



6. Then Click 'Save'
7. On the Voyager computer, open Voyager GPS and click Connect.
8. You should now see the NMEA sentence data on both computers as per the following.



The Service: Connected and NMEA Feed: shouldhave a green stutus for commnnected

Voyager Planning Station Monitoring mode:

This is an ON/OFF toggle control. When clicked, the map will centre and scale to the vessel position and will automatically follow and centre the vessel to keep it within view. If you move the map to a different location whilst this feature is toggled ON, the map will automatically centre and scale to the vessel position every 20 seconds until you toggle OFF. **Supported NMEA Sentences**

The Voyager GPS Configuration tool supports the following NMEA sentences:

Type	Definition	NMEA Sentences	Source Device
POS	Latitude/Longitude Position	GGA / GLL / GNS / RMC	GPS
COG	Course Over Ground	RMC / VTG	GPS
SOG	Speed Over Ground	RMC / VTG / VBW	GPS
ZDA	UTC Date & Time	ZDA	GPS
HDG	Heading Degrees	HDG	Compass
HDT	Heading Degrees True	HDT / VHW	Compass
HDM	Heading Degrees Magnetic	VHW	Compass
STW	Speed Through Water	VBW / VHW	Speed Log

Troubleshooting

If you require any support with the Voyager GPS Configuration tool or the PAYS service, please contact the Customer Service or Support team.

For more details on PAYS please visit https://voyagerww.com/navigation-packages/voyager-pay-as-you-sail/

To upgrade your Voyager Planning Station software to the latest version you can request a patch upgrade by emailing support@voyagerww.com

If you have any other enquiries, please contact our Customer Service team at customerservices@voyagerww.com

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