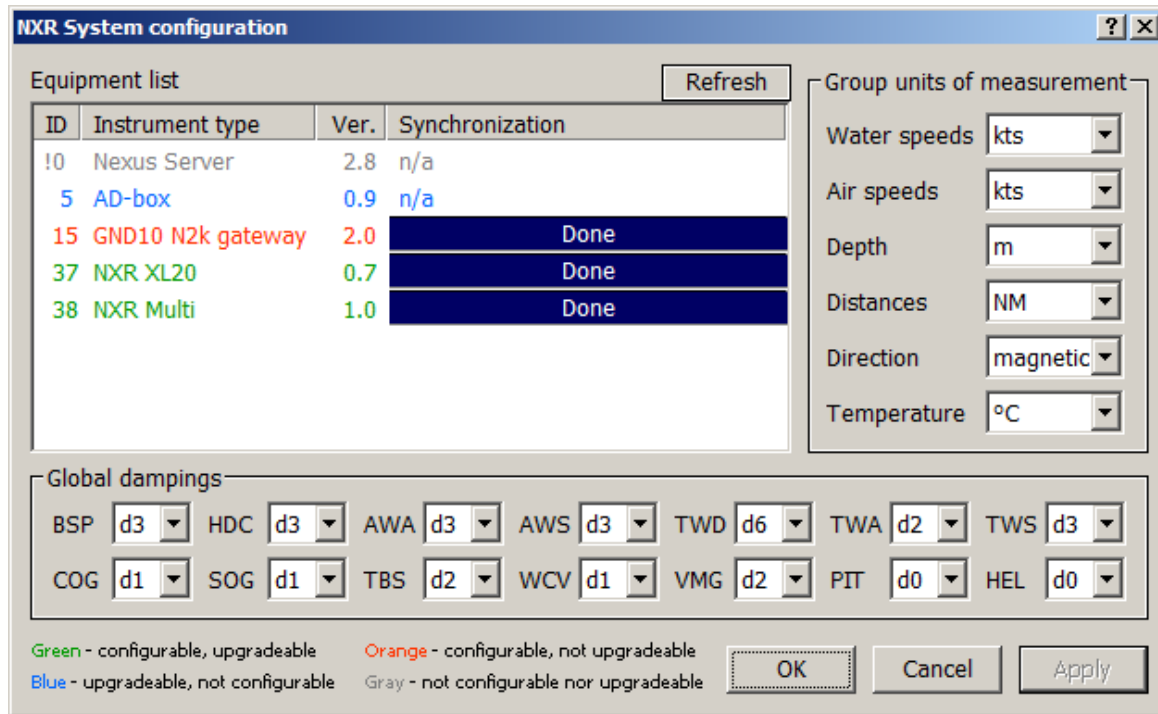


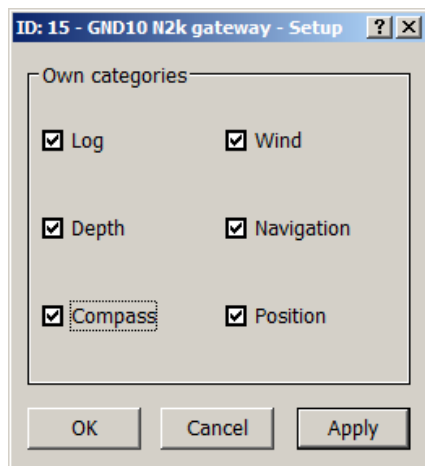
# The GND10

The GND10 is a converter from Nexus Network to NMEA2000 (used for Garmin and other manufacturer). Most of the data is converted both ways from Nexus to NMEA2000 and NMEA2000 to Nexus.

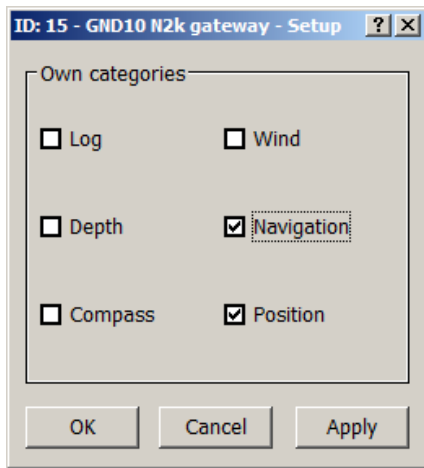
The GND10 is delivered with the default settings where all preferred sources are from the NMEA2000 to the Nexus Network. If you have an existing Nexus Network with Nexus transducers, you have to change the preferred sources. Select Tools and Configure and a list of your Nexus Network components are showed:



To change preferred sources for the GND, double click on the GND N2k gateway in the list.



As you can see all tick boxes are checked and the GND10 will convert NMEA2000 data and send it out on the Nexus Network. For the transducers/functions you want the Nexus Network to provide for, un-check the equivalent box:

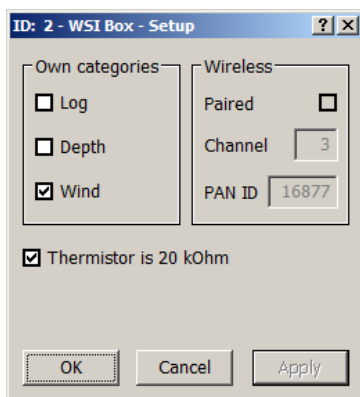


In the example above, a NX2 Server is used and the Log, Depth, Wind and Compass will all come from the Nexus transducers. GPS Position and Navigation data will come from the NMEA2000 network and be send out on the Nexus Network. Log, Depth, Wind and Compass will be send out on the NMEA2000 network from the GND10.

Note:

If a nWind transducer, a HPC Compass or a nGPS antenna. Is connected, they will always send out the data on the Nexus Network. If you have a nGPS antenna and want the position data from the NMEA2000 GPS to be used in the Nexus syste, you have to physically disconnect the nGPS (the same goes for nWind and HPC Compass)

The WSI-box will also be responsible for Log, Depth and Wind on the Nexus Network unless these functions are un-checked in the WSI-setup box



This WSI-box will only provide Wind information on the Nexus Network!

## Install the NexusRace SW

First you download the driver for the GND10:

[http://www8.garmin.com/support/download\\_details.jsp?id=6889](http://www8.garmin.com/support/download_details.jsp?id=6889)

Then you download and install the NexusRace SW:

[http://www8.garmin.com/support/download\\_details.jsp?id=6885#Instruct](http://www8.garmin.com/support/download_details.jsp?id=6885#Instruct)

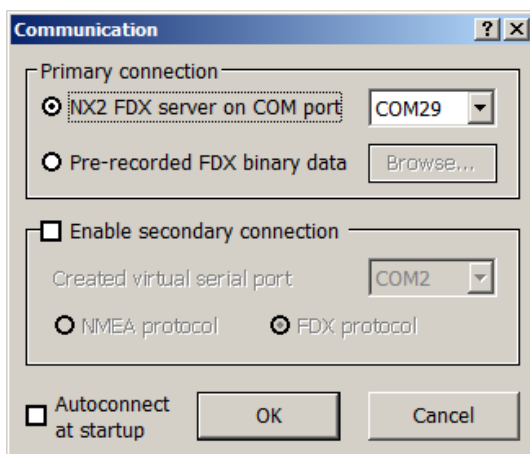
## Run the NexusRace SW

When you start NexusRace, you have to connect it to the GND10.

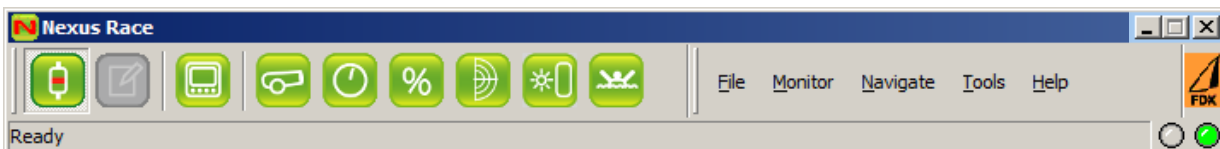
Press the Connection icon in the top left corner of the tool bar:



Select the comport the GND10 has created. The comport no is displayed during the installation but if you did not see that, it is normally the last comport in the list.



Press OK and after a couple of seconds, the green connection LED lights up in the top right corner.



Now you are connected to the GND10 and you can monitor data and more.

For a full user manual of the NexusRace SW, follow this link:

<http://www.nexusmarine.se/wp-content/uploads/2011/11/FDX-Manual.pdf>

## Full list of data that is translated by the GND10

Data	Nexus to NMEA2000	NMEA2000 to Nexus	Comment
Apparent Wind Angle	Y		
Apparent Wind Speed	Y		
Boat Speed Through Water	Y	Y	See Note 1
Course Over Ground		Y	See Note 3
Course to Waypoint		Y	
Cross Track Error		Y	
Depth	Y	Y	See Note 2
Distance to Waypoint		Y	
Latitude		Y	See Note 3
Longitude		Y	See Note 3
Magnetic Heading	Y	Y	See Note 4
Magnetic Variation		Y	
Speed Over Ground		Y	See Note 3
True Heading	Y	Y	See Note 4
True Wind Angle	Y		
True Wind Speed	Y		
UTC Date		Y	See Note 7
UTC Time		Y	See Note 7
Water Temperature	Y	Y	See Note 5
Barometric Pressure	Y		See Note 6

**Note 1:** If a WSI box is used on the Nexus Side, it will not automatically hand over the responsibility to send speed out on the Nexus Network to the GND10 unless this categories are disabled in the WSI-box. Only boat speed and Maximum boat speed will work in the Nexus Network. Trip, Log and average speed will not work!

**Note 2:** If a WSI box is used on the Nexus Side, it will not automatically hand over the responsibility to send depth out on the Nexus Network to the GND10 unless this categories are disabled in the WSI-box. Only will work in the Nexus Network. Shallow and Deep alarm will not work!

**Note 3:** If a nGPS Antenna is connected to the Nexus Network, it will not hand over the responsibility for Position, SOG and COG to the GND10. The nGPS will always send position related data as long as it is connected. To get position data from the GND10 to the Nexus Network, the nGPS has to be disconnected from the Nexus Network. If a NMEA0183 Antenna is connected to the Nexus Server, the data will come from NMEA2000 (via the GND10) if the tick box for Position is checked for the GND10

**Note 4:** If a HPC Compass is connected to the Nexus Network, it will not hand over the responsibility Heading. The HPC Compass will always send Heading related data as long as it is connected. To get Heading data from the GND10 to the Nexus Network, the HPC has to be disconnected from the Nexus Network. If a 35 or 45 degree Compass is connected to the Nexus Server, the data will come from NMEA2000 (via the GND10) if the tick box for Heading is checked for the GND10

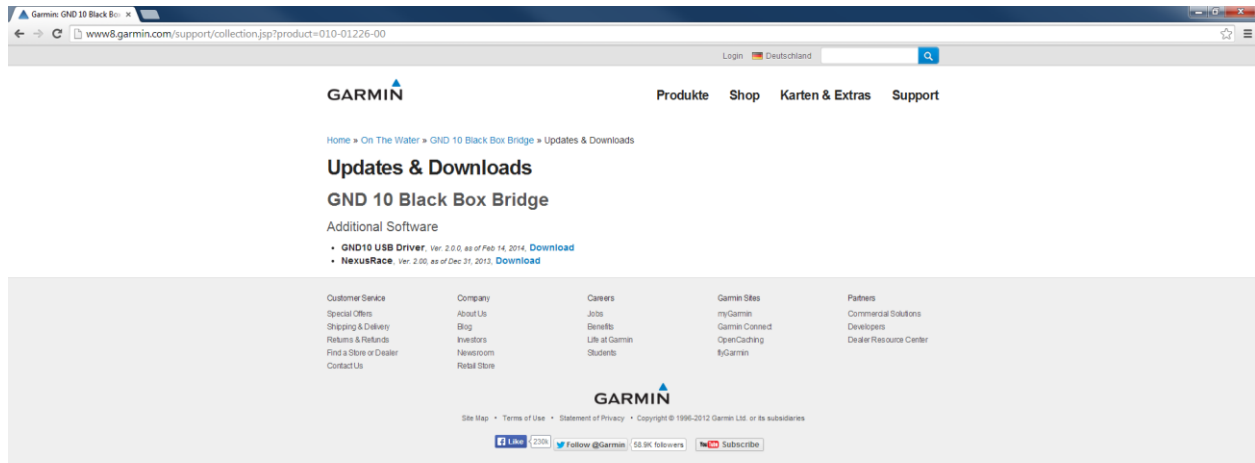
**Note 5:** The selection if Water temp should come from NMEA2000 (via the GND10) and be send out on the Nexus Network is determined by the tick box for Log is checked for the GND10

**Note 6:** Barometric Pressure is send from the Wireless Wind and WSI box. The wired wind sensor does not provide this information

**Note 7:** The time is transferred from the NMEA2000 via the GND10 to the Nexus Network. Also the time zone is send. However, the time zone is always -5h (Olathe time) and right now it cannot be changed.

## How to select the direction of data conversion

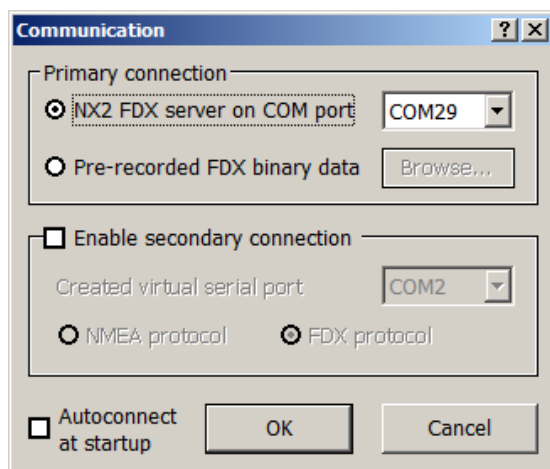
1. Goto [www.garmin.com](http://www.garmin.com) and the GND10
2. Go to Software and install the drivers and the NexusRace SW



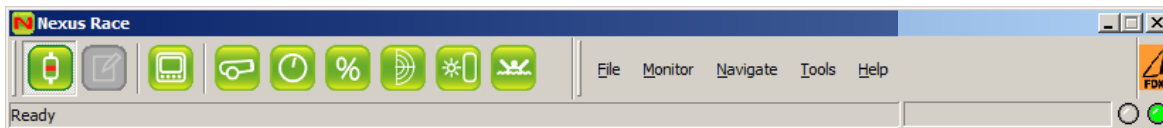
3. Connect the GND10 and connect the USB connector to your PC
4. The GND10 will be installed and you will see what Comport it was assigned
5. Start the NexusRace Software
6. Click on the Connect icon



7. Select the COM-port the USB got assigned (If you do not know, it is normally the last in the list)

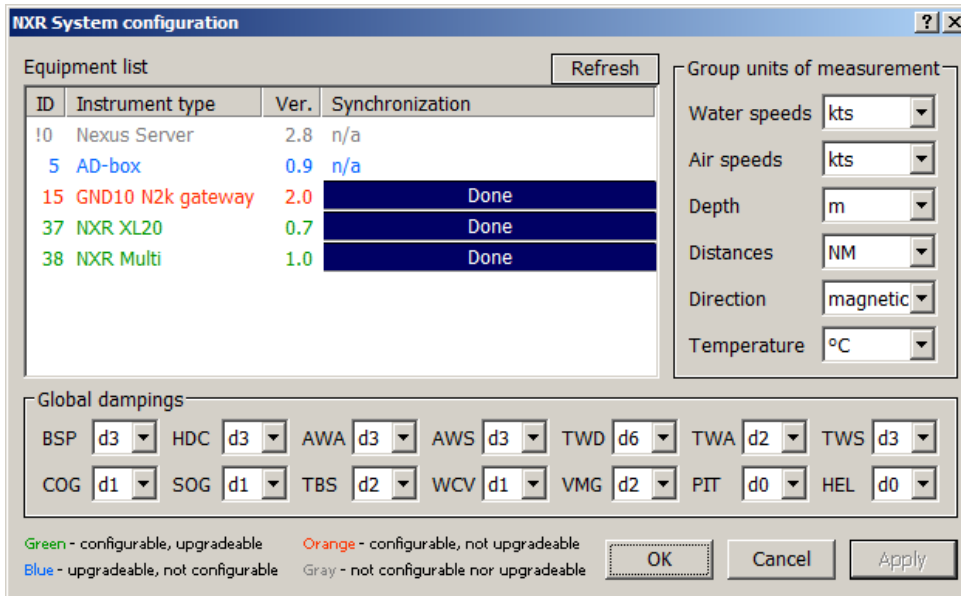


8. You are now connected

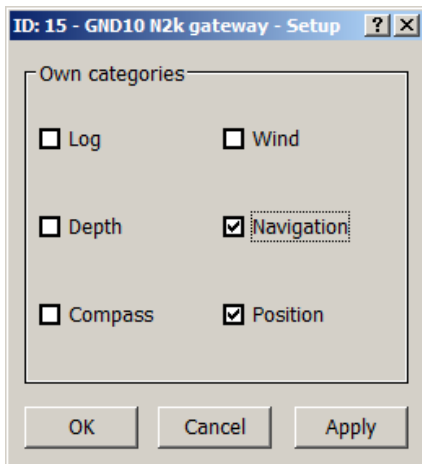


9. Click on Tools/Configure

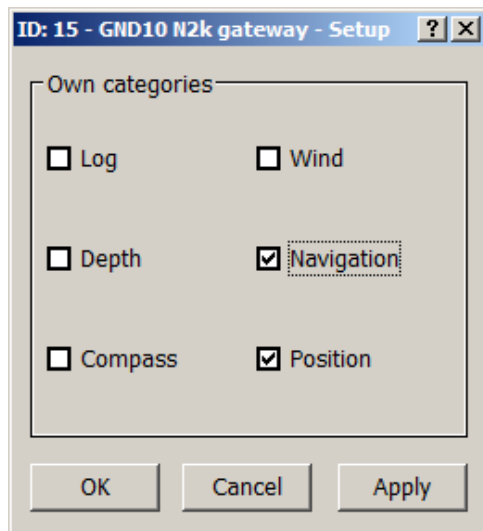
10. A list of all Network units is displayed



11. Double click on the GND10 N2k gateway



## Settings for the GND10



ID: 15 - GND10 N2k gateway - Setup

Own categories

Log       Wind

Depth       Navigation

Compass       Position

OK      Cancel      Apply

If a box is checked, the data will go from NMEA 2000 to Nexus Network. If a box is unchecked, the data will go from Nexus Network to NMEA2000