Navico MFD Integration

1. Introduction

Navico is the overall brand behind the B&G, Simrad and Lowrance MFDs.

This document explains how to connect to Navico MFDs using an Ethernet connection. The integration technology used is called LightHouse Apps by Raymarine.

Make sure to also study the Marine MFD Integration by App chapter in the manual.

Note that there is an alternative method to connect, which is NMEA2000. See the NMEA2000 chapter in the main manual.

2. Compatibility

Navico compatible hardware:

	Product	Display Size						Comments
Simrad	NSO EVO3				16	19	24	
	NSO EVO2				16	19	24	
	NSS EVO3	7	9	12	16			
	Go	7*	9	12				5 is not compatible; no Ethernet port; *Go7 XSE not compatible – only Go7 XSR
B&G	Zeus3 Glass Helm				16	19	24	
	Zeus3	7	9	12	16			
	Vulcan	7	9	12				
Lowrance	HDS Live	7	9	12	16			
	HDS Carbon	7	9	12	16			
Information display	IDS		9	12				

Note that this feature also works on the NSS EVO2. But only limited. And its not officially supported and also there will be no new software releases made by either Victron nor Navico to fix any issues that may arise. In other words, it is not a supported configuration by Navico but the consumer can feel free to use it (if they contact Navico or Victron service, our team will tell them it is not a supported configuration). More testing and user feedback will have to show what does and what does not work on the EVO2.

At this moment it is not possible to control the Victron MFD App other than the touchscreen.
This means that you cannot use

- Local controls, i.e. WheelKey and arrow keys
- Simrad OP50
- B&G ZC2

3. Wiring

The Navico device needs to be connected to the GX device using Ethernet. Its not possible to connect over WiFi. For the ethernet connection, a Navico adapter is required as the Navico MFDs feature a round water proof connector on the back. The adapters can be purchased from Navico:

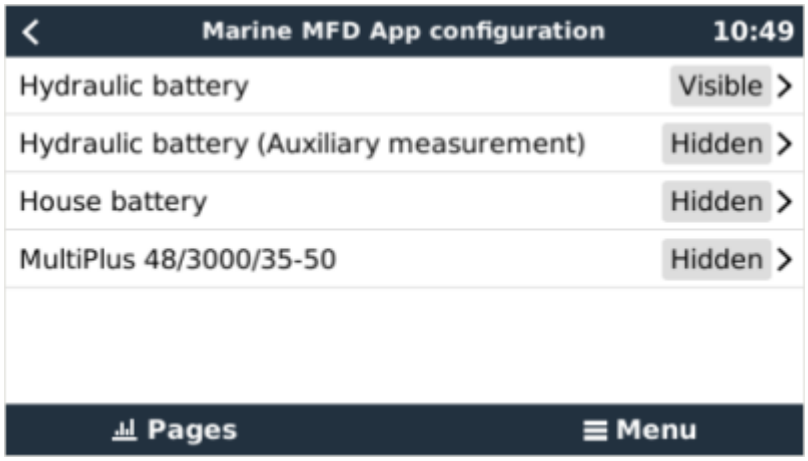
- ETHADAPT-2M 127-56
- CABLE RJ45M-5F ETH ADPTR NONWATERPRF

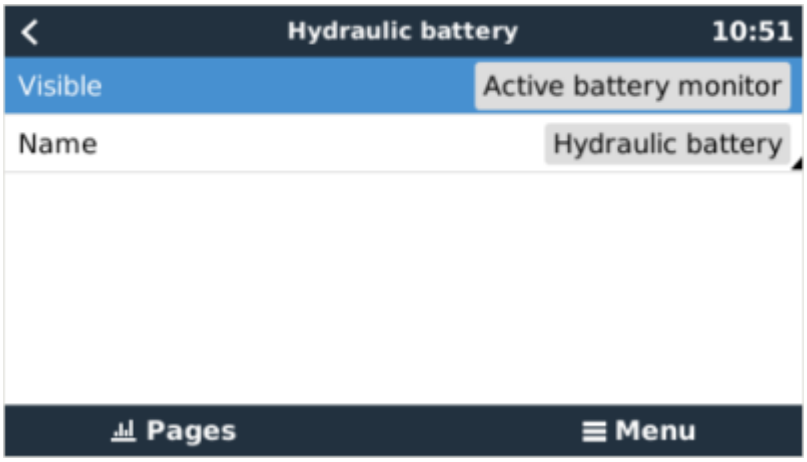
4. Configuration

On the Victron GX Device, go to *Settings* → *Services*, and there enable both *MQTT on LAN (SSL)* and *MQTT on LAN (Plaintext)*.



Next, go to *Settings* → *System Setup* → *Scroll to the bottom* → *Marine MFD App configuration*. And there set up what batteries you want to see on the MFD; and by what name.



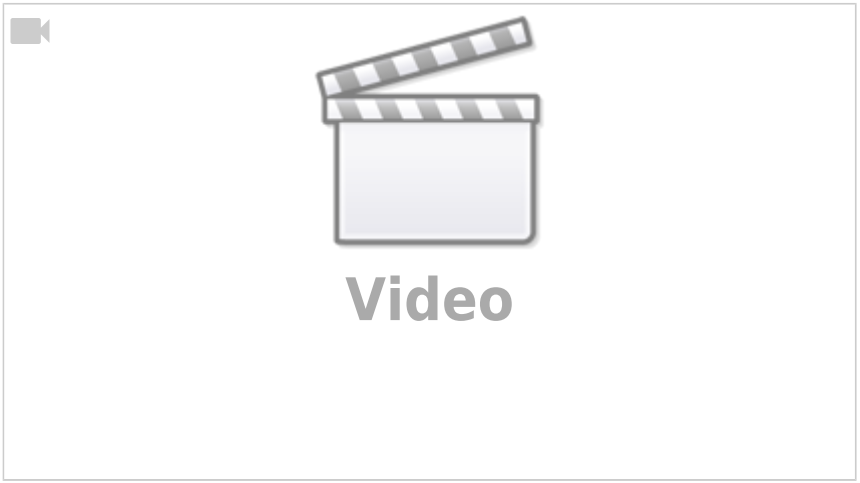


No other settings, such as IP addresses or similar are required. The GX device and the Navico devices connect to each other using a technology called linklocal addressing.

It is possible to connect the a router to the same LAN; and that way connect the GX Device to the internet. The GX device can also be connected to the internet via Wi-Fi or with a GX GSM.

Note that the GX GSM can only be used if the MFD and GX device are directly connected to each other, without a router.

5. Configuring Multiple Battery Monitors

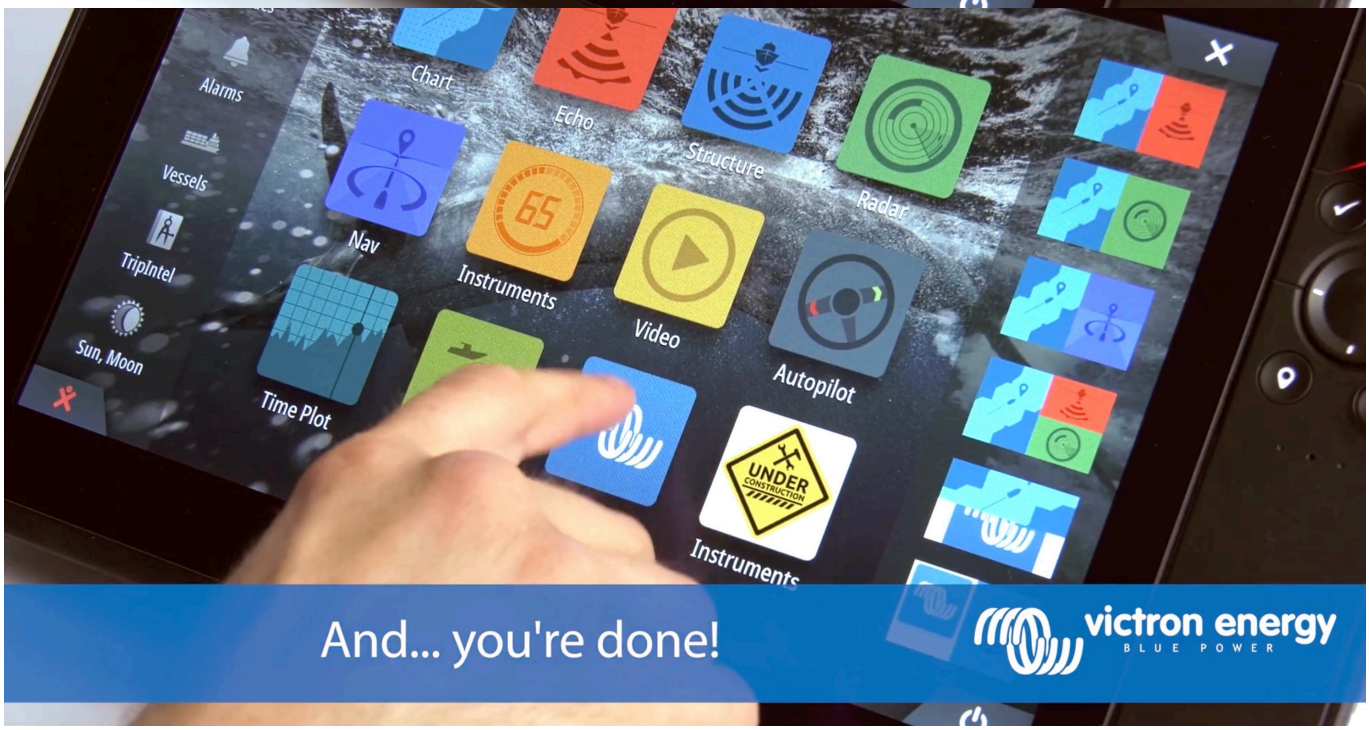


6. Step by step

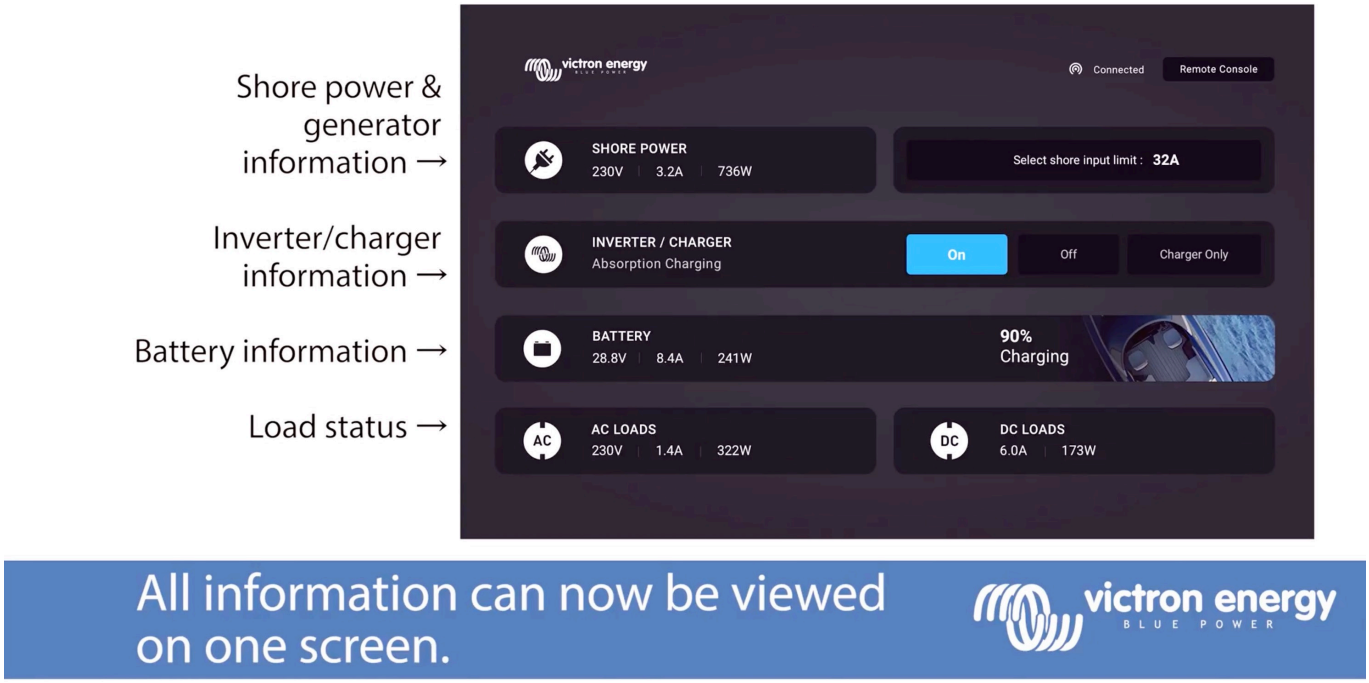

Autopilot
Edit
Step 1: Connect UTP into display
victron energy
BLUE POWER


SIMRAD
Waypoints
Tides
Alarms
Vessels
TripIntel
Sun, Moon
Chart
Nav
Instruments
Video
Autopilot
Time Plot
ForwardScan
Instruments
Edit
Venus GX
Step 2: connect UTP cable into Victron Venus GX, Color Control GX or Octo GX
victron energy
BLUE POWER


Alarms
Vessels
TripIntel
Sun, Moon
Chart
Echo
Structure
Radar
Nav
Instruments
Video
Autopilot
Time Plot
ForwardScan
Victron
Instruments
UNDER CONSTRUCTION
After a few seconds the Victron Energy icon appears
victron energy
BLUE POWER


Alarms
Vessels
TripIntel
Sun, Moon
Chart
Echo
Structure
Radar
Nav
Instruments
Video
Autopilot
Time Plot
Instruments
UNDER CONSTRUCTION
And... you're done!
victron energy
BLUE POWER





7. NMEA 2000

The MFD can also be connected to the GX device using NMEA 2000, see NMEA2000 chapter in the main manual.

The MFD can be configured easily to display the data from the GX device. There is no need to change any instance.
To setup the data sources on the MFD, go to *Settings* > *Network* > *Sources* > *Advanced...*

The following Victron related PGNs are supported:

- 127505 - Fluid level (tanks)

- 127506 - DC Detailed Status; State-of-charge, Time-to-go
- 127508 - Battery Status; Voltage, Current
- 127508 - Battery Status
- 127509 - Inverter Status
- J1939 AC PGNs

8. Troubleshooting

Q1: The MFD page shows outdated information or shows the connection issue page, but the GX device is running and connected and the Victron icon is present on the home page.
A1: Try reloading the page by pressing the menu on the top right corner and select HOME.



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Last update: **2020-06-25 10:25**