Raymarine MFD Integration

1. Introduction

This document explains how to connect to Raymarine 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

The MFD integration is compatible with the Axiom, Axiom Pro and Axiom XL MFDs running on LightHouse 3. The eS & gS Series multifunction displays which have been upgraded to LightHouse 3 are **not** compatible.

Raymarine MFDs need at least LightHouse v3.11 for compatibility, which was released in November 2019.

3. Wiring

The MFD needs to be connected to the GX device using ethernet. It is **not** possible to connect over Wi-Fi. For the ethernet connection, a RayNet adapter is required.

The RayNet adapters can be purchased from Raymarine:

- A62360 - RayNet (F) to RJ45 (M) - 1m
- A80151 - RayNet (F) to RJ45 (M) - 3m
- A80159 - RayNet (F) to RJ45 (M) - 10m
- A80247 - RayNet (F) to RJ45 (F) Adapter
- A80513 - RayNet male to RJ45 adaptor cable

To connect the GX device to the internet as well, use Wi-Fi. If the Axiom MFD is connected to internet (using Wi-Fi), it will automatically share its connection with the GX device over ethernet.
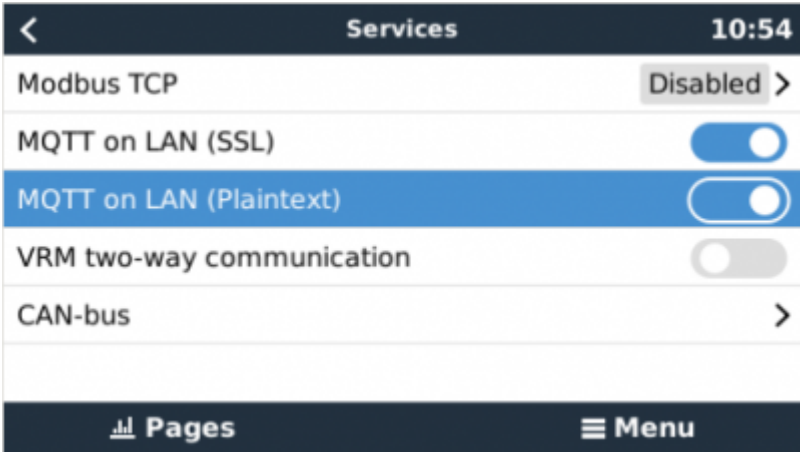
⚠️ Connecting a Axiom MFD to a network router over Ethernet leads to IP address conflicts, due to the integrated DHCP server.

⚠️ It is not possible to use a GX GSM, due to the integrated DHCP server of the Axiom MFD.
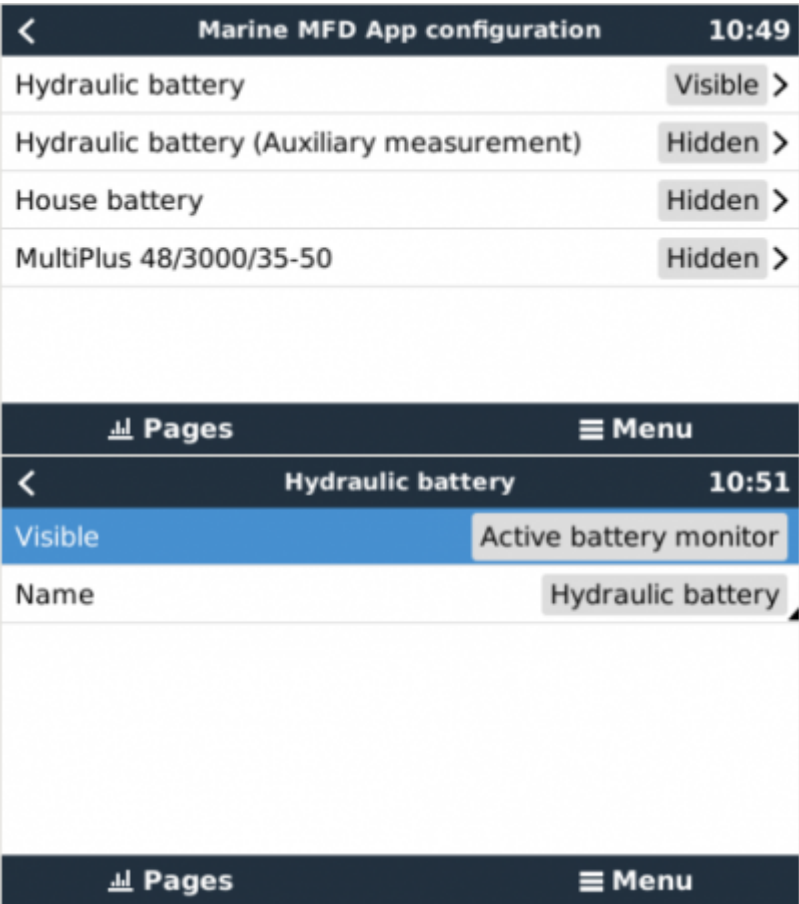
4. Configuration

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, since the Axiom MFDs have an integrated DHCP server.
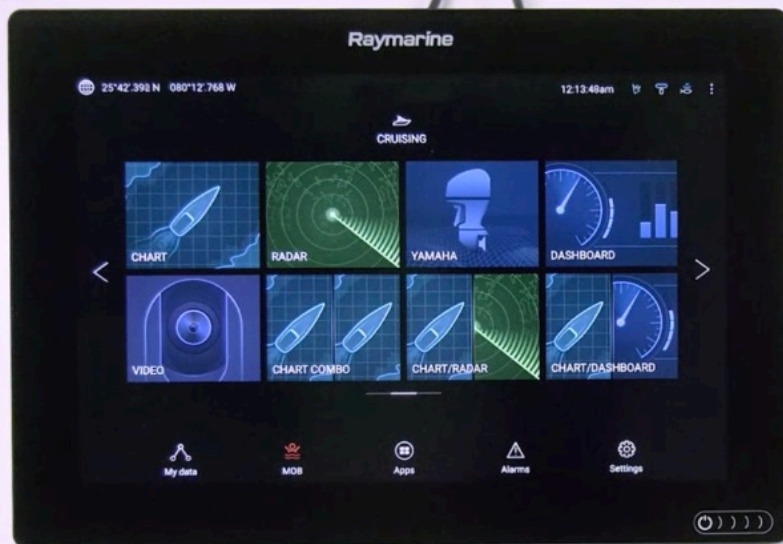
5. Configuring Multiple Battery Measurements

This video explains how to setup multiple battery measurements, and naming them.
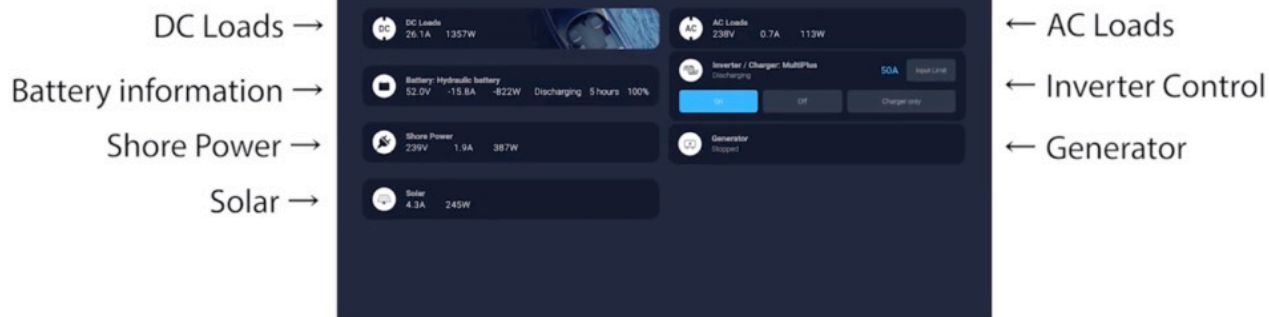
Video

6. Step by Step

Step 2: Connect RJ45 into Victron Venus GX, Color Control GX or Octo GX.

Then go to Apps and select the Victron logo.

Then go to Apps and select the Victron logo.

And... you're done!

Video