

How to install a Nextion 3.5" display on a Pi-Star

The Nextion display uses a 5V serial interface to communicate with the Pi-Star modem.

The wiring to connect the display to the modem is shown below:

| Modem | Display board |
|-----------|---------------|
| VCC (+5V) | VCC(+5V) |
| RX | TX |
| Tx | RX |
| GND | GND |

The Nextion display requires a software driver for the display to work with the Pi-Star. The driver software is specific to the model type display. Model numbers Nx4832k035 and Nx4832t035 use different software drivers. The example here is the use the Nx4832k035.

The following github site has driver for this device: https://github.com/PD0DIB/Nextion_HAM-radio-screens/tree/master/G4KLX_Masters. You will observe that both k035 and t035 HMI files are on this site. You will need the Nx4832k034 HMI files to build the software driver in this example.

The Nextion editor needs to be down loaded to convert the HMI file into a tft file used by the display to setup the information fields on the display from the modem. Here is the website for the Nextion editor: <https://nextion.tech/nextion-editor/> Install the Nextion editor on the computer and open it. Use the file tab and open the NX4832k035.HMI file. Next, select the Compile tab to make a tft. Save the tft file to a sda card. Install the sda card in the slot on the Nextion display.

Power up the Pi-Star/modem with the Nextion display. The Nextion display will then begin loading the driver software into the display memory. Once the installation is complete, remove the sda card from the display board. The display will now show MMDVM across the top portion of the display.

Bring up the web browser for the Pi-Star and select the configuration tab. You will be required to login to the Pi-Star. Select the Expert tab, then select the MMDVM tab. Under the General section, type Nextion in the display box. Go to the Transparent section and type 1 in the Enable box. At the bottom change the Uart Speed to 9600. Now Apply Changes to the MMDVMHost panel. Go back to the Configuration and change the Nextion Layout to ON7LDS L3 HS and the port box should read modem and the MMDVM Display Type should read Nextion. Now Apply Changes box needs to be selected. The display should now start displaying the mode and call sign information for incoming signals.

