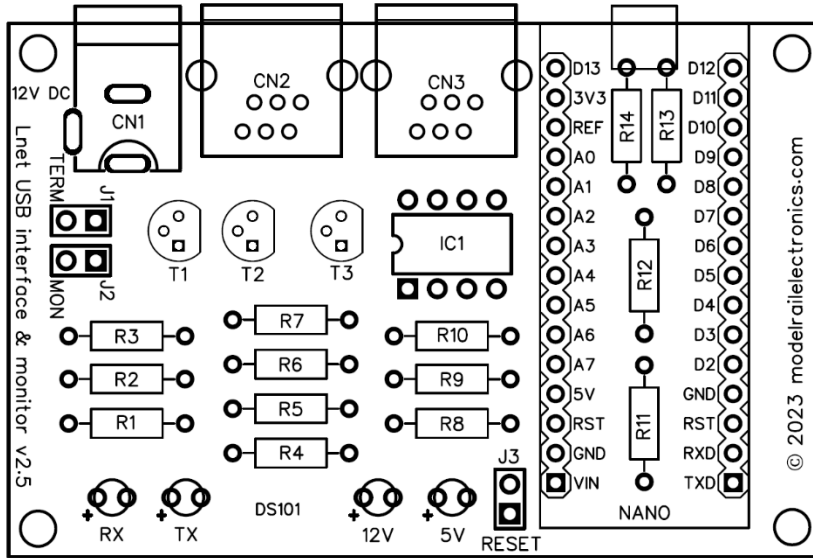


DS101 – Lnet USB interface & monitor v2.5

For the interface to work as a LocoNet interface, jumper J1 needs to be placed to enable the necessary termination current. Without the jumper the LocoNet bus will not function. Only one device must act as LocoNet termination device. If you want to connect the DS101 to the LocoNet bus and use it to monitor the commands send over the bus, the jumper must be moved to J2.



J1 – Termination current

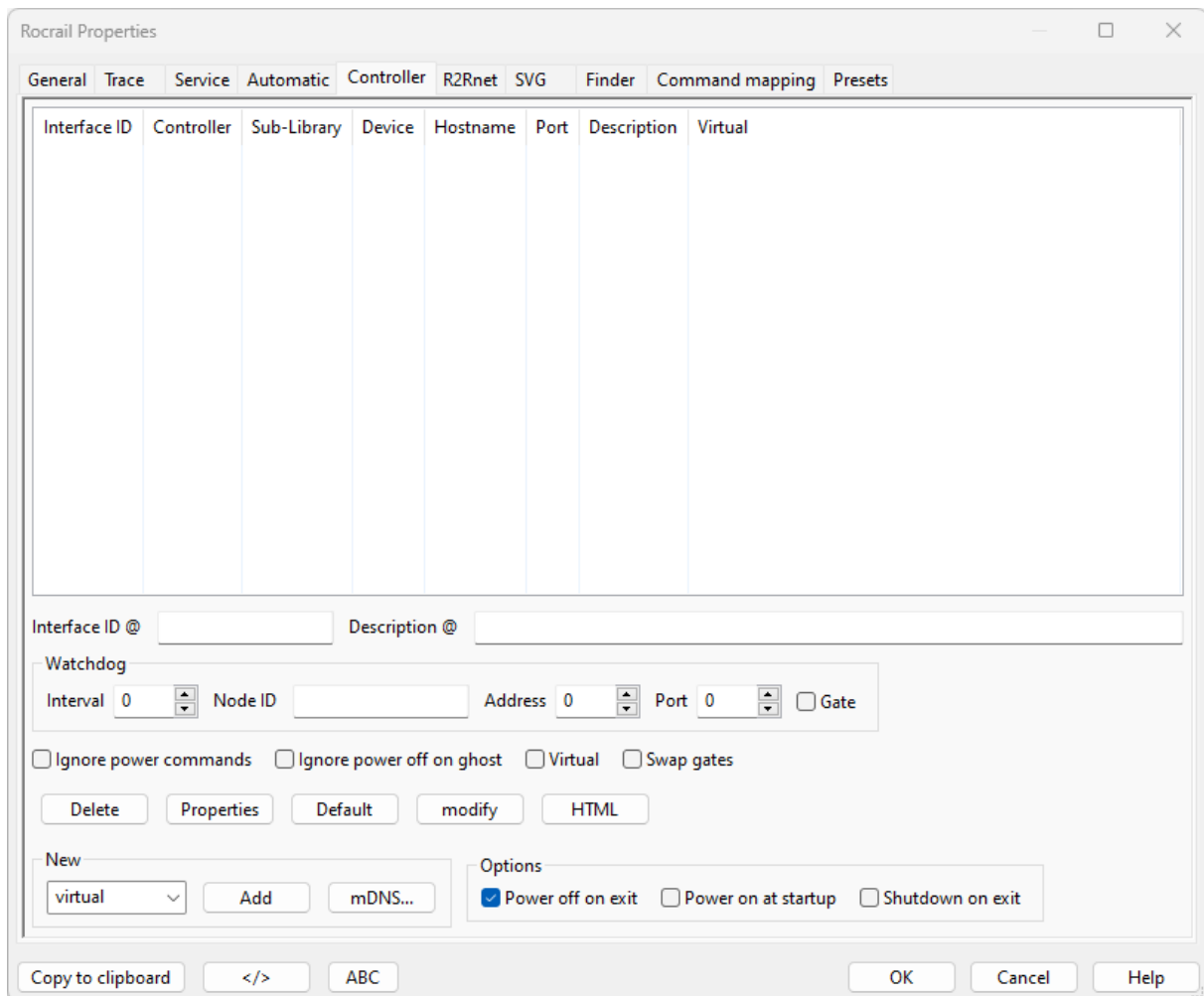
J2 – Monitor function

RESET = Arduino reset

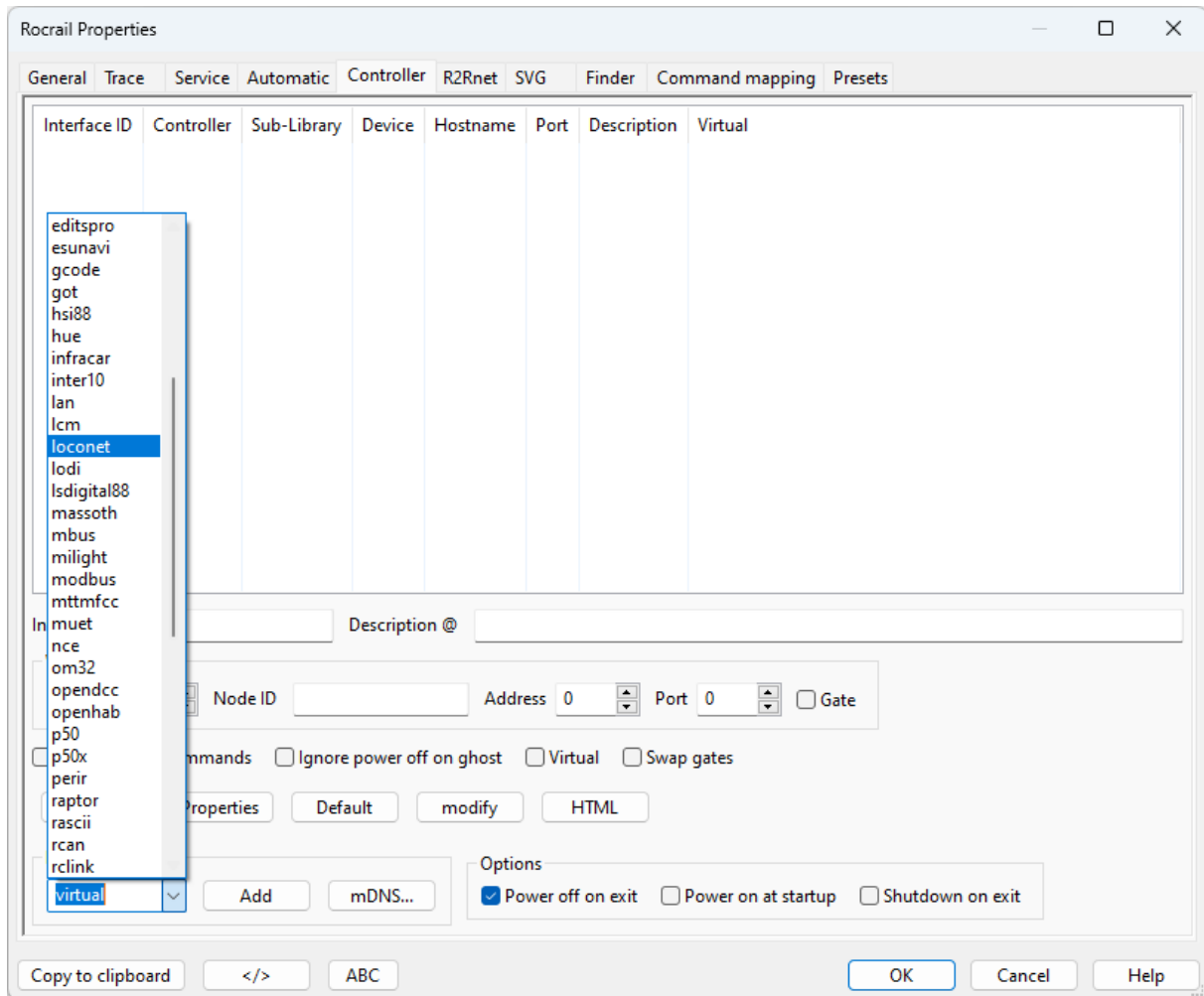
Serial interface settings:
19200, N, 8, 1

Rocrail configuration:

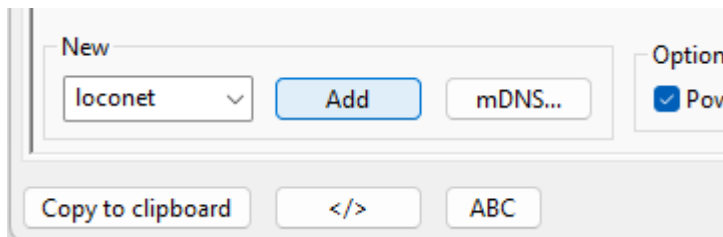
In Rocrail the DS101 needs to be added in the list of Controllers found under File, Rocrail properties and the Controller tab:



In the bottom part of the window a new controller can be selected and added. Select loconet from the list:



Once selected, choose Add:



In the following window the Interface tab is opened.

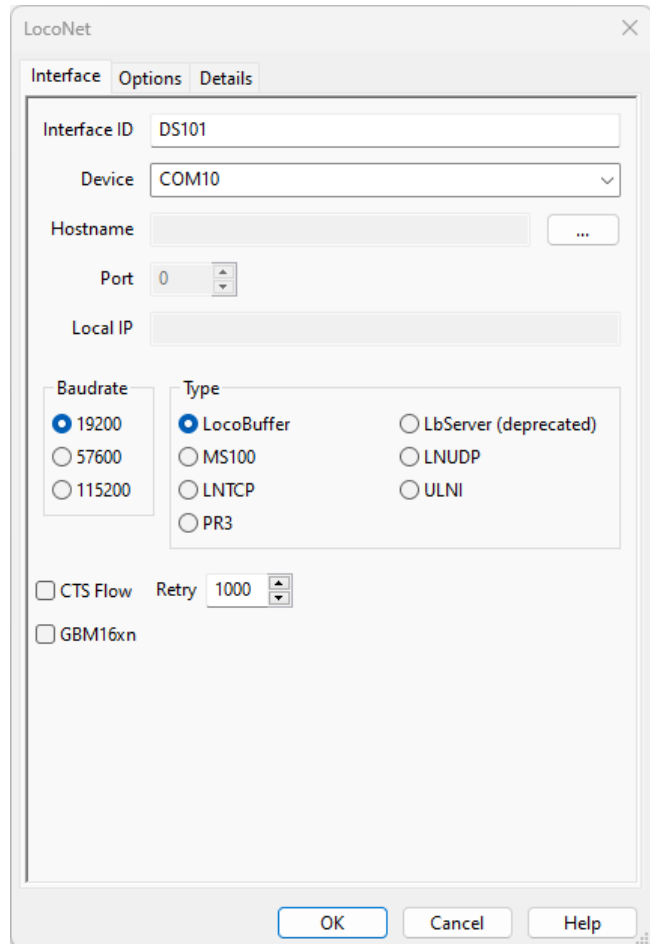
You can assign an Interface ID like DS101.

In the Device dropdown box select the com port which was assigned to the DS101.

Uncheck CTS flow.

Other settings remain as they are.

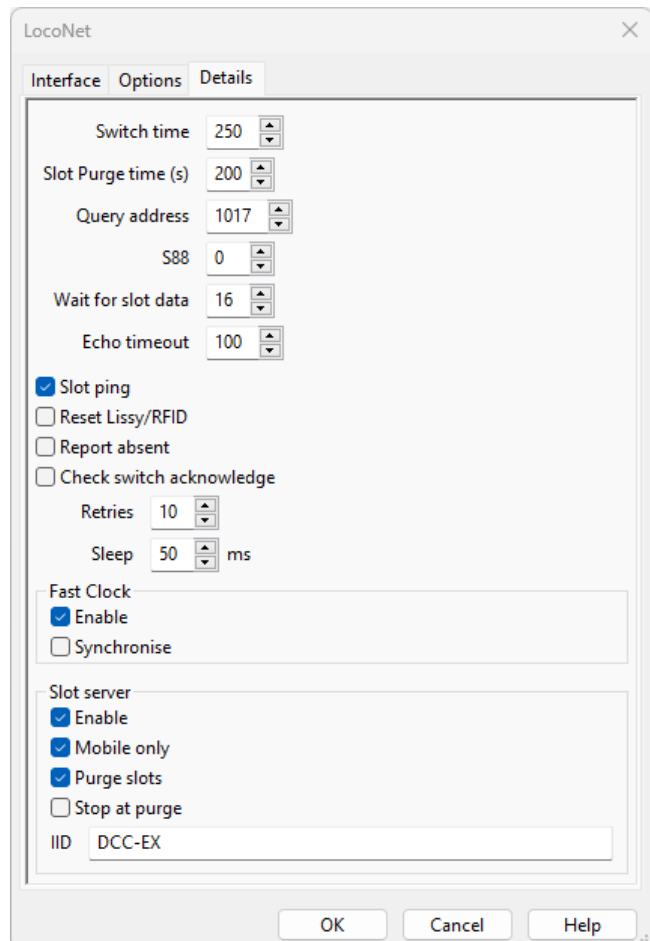
In the Options tab no changes are required.



If you want to connect a LocoNet throttle to the bus, we need to enable the Slot server function.

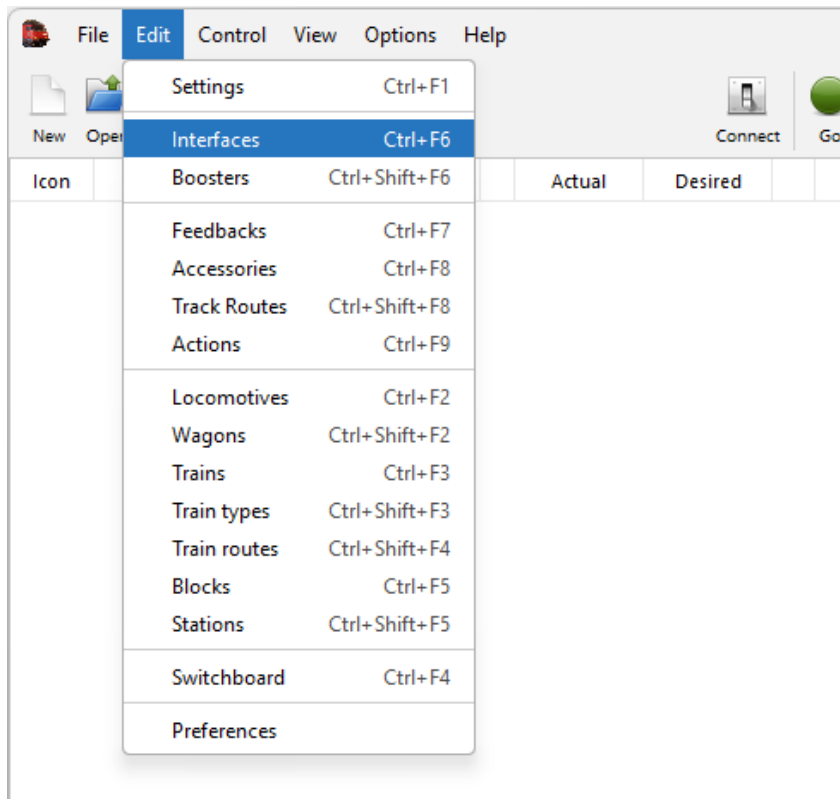
In the Details tab, Slot server section, check Enable.

In the IID field fill in the Device ID of your command station. This will instruct Rocrail to exchange LocoNet communication to the command station.

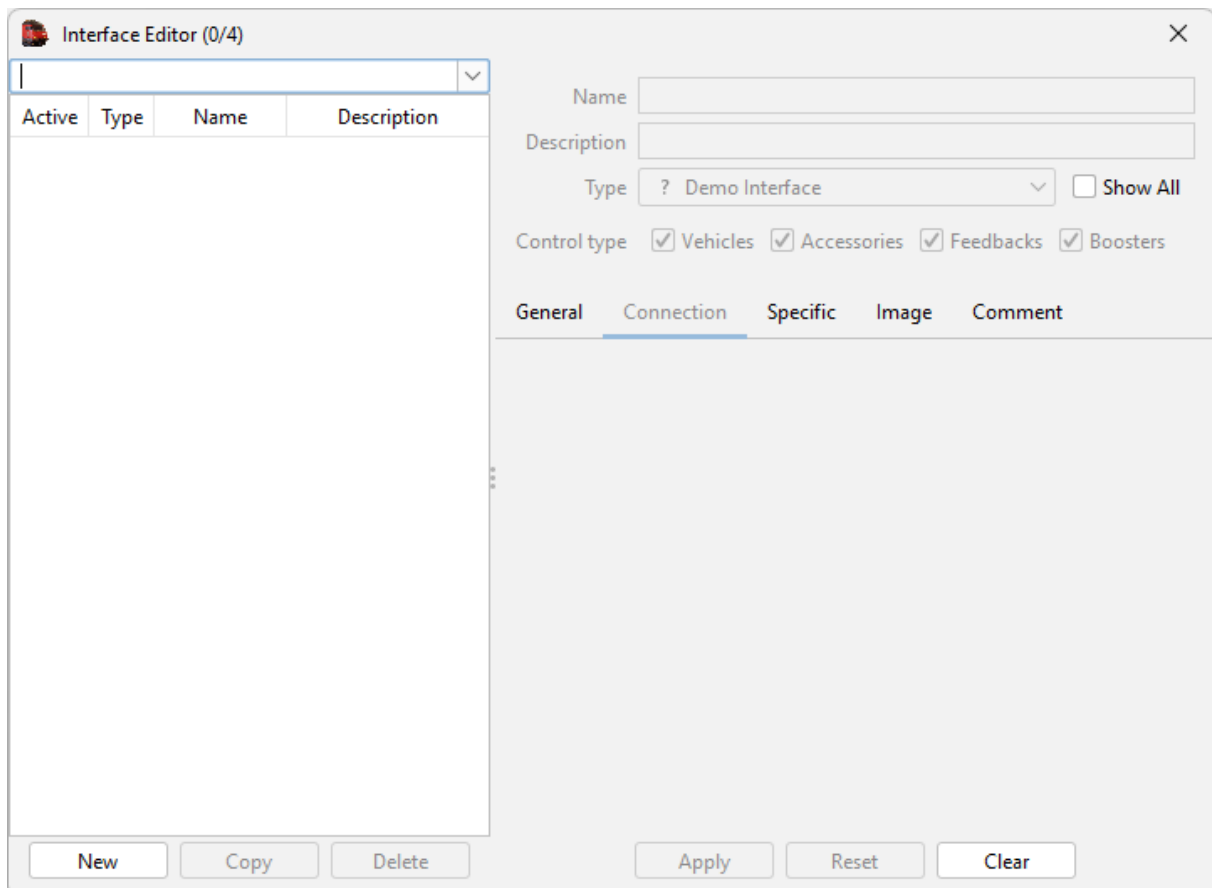


iTrain configuration:

In iTrain the DS101 needs to be added to the list of interfaces via the Edit menu and Interfaces (or press Ctrl+F6):

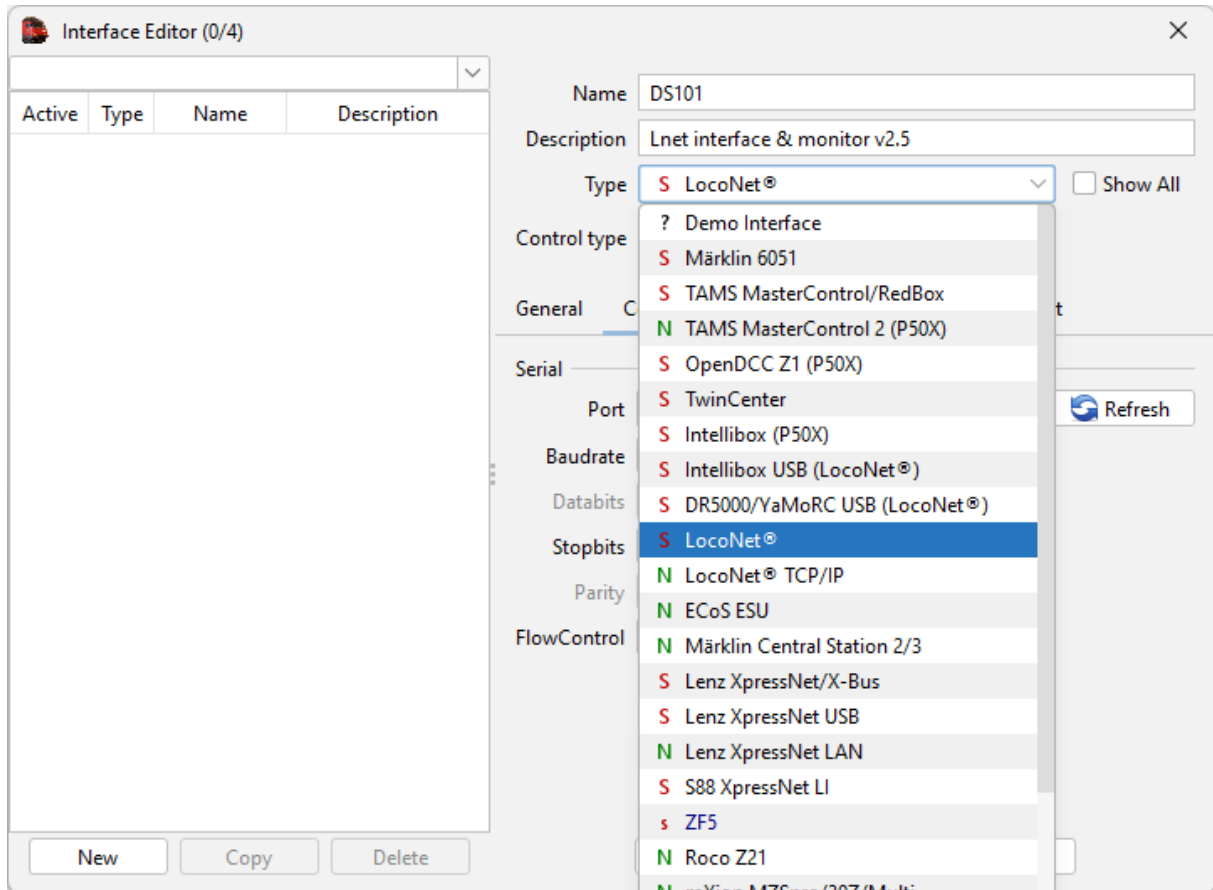


Select New and the parameter fields on the right side will be enabled:

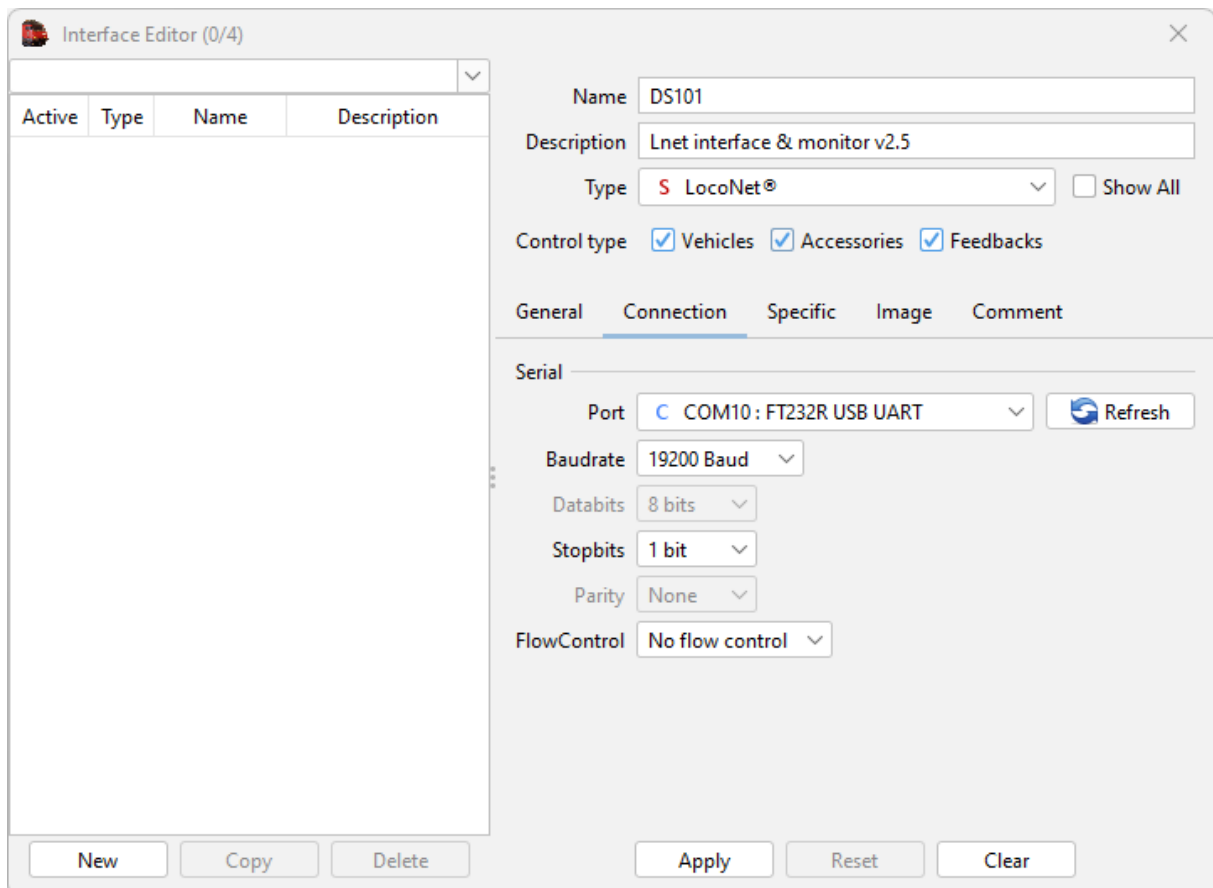


Give the device a name like DS101 and configure any description you like.

For Type select LocoNet from the list:



Select the COM port for the interface and for other settings see below:



JMRI Configuration:

In JMRI the DS101 needs to be added to the list of Connections via the Edit menu and Preferences. Configure like below and click on Save:

The screenshot shows the 'Preferences' dialog box in JMRI, with the 'Connections' tab selected. The configuration is for a 'LocoNet' connection. The settings are as follows:

- System manufacturer:** Digitrax
- System connection:** LocoNet LocoBuffer
- Settings:**
 - Serial port:** COM10
 - Command station type:** DCS100 (Chief)
 - Connection Prefix:** L
 - Connection Name:** LocoNet
 - Additional Connection Settings**
 - Baud rate:** 19,200 baud (11 on 1&2)
 - Serial connection uses:** no flow control
 - Interrogate Sensors/Turnouts On Start:** Yes
 - Expanded Protocol (XP Slots):** No
 - Packetizer type:** Normal (recommended)
 - Transponding present:** No
 - Turnout command handling:** Normal
 - Output Interval (ms):** 250 (with a 'Reset' button)

At the bottom of the dialog, there is a 'Save' button and a checkbox labeled 'Disable this Connection' which is currently unchecked.