

Adding a Locomotive to JMRI

Before we can program a decoder in JMRI, it must be read into the system. Once we have done that, the full spectrum of programming options available for the decoder in your locomotive will be available.

These instructions assume a functioning installation of JMRI and an interface such as a PR4 to communicate between the PC with JMRI and the decoder.

Open JMRI and select your railroad from the opening screen. Alternatively, you can allow the software to select the default instance.

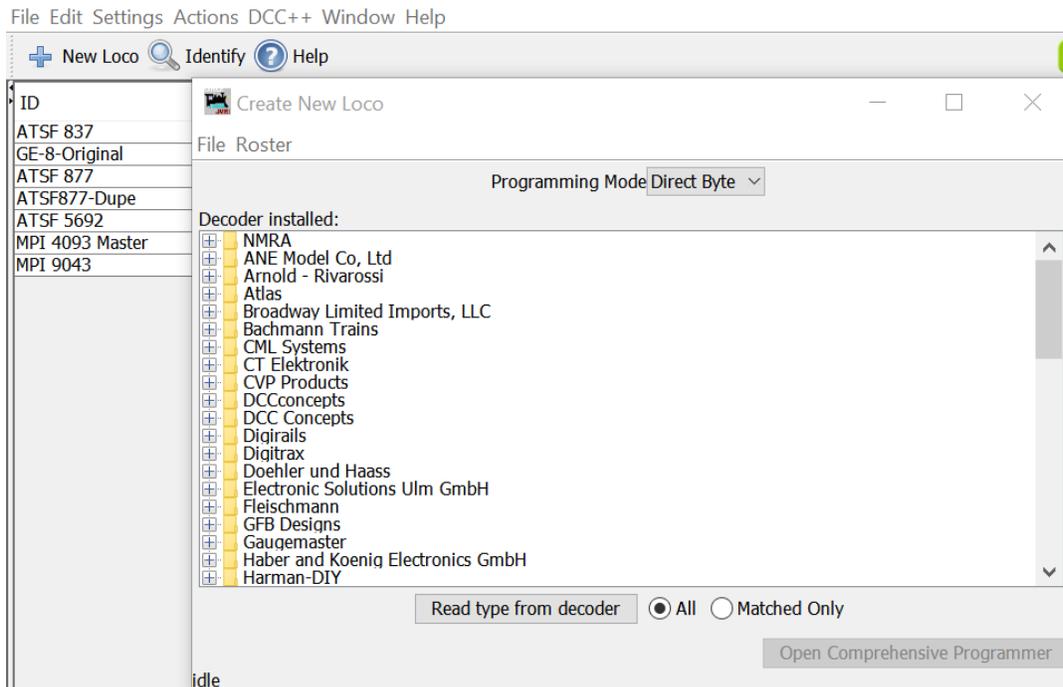
If the software is not set to Programming Track, select it now and then close the software. Re-open JMRI and select your railroad.

Click on the large Plus sign/New Loco button.

The Create New Loco dialog window will open.

You can browse directly to your decoder if you know the model, or you can read the CV from the decoder.

To read from the decoder, click the Read Type From Decoder button.



You'll be presented with a list of options that generally match the decoder type.

Select the decoder type that was included with your packaging, or listed as pre-installed with your locomotive.

Create New Loco

File Roster

Programming Mode Direct Byte

Decoder installed:

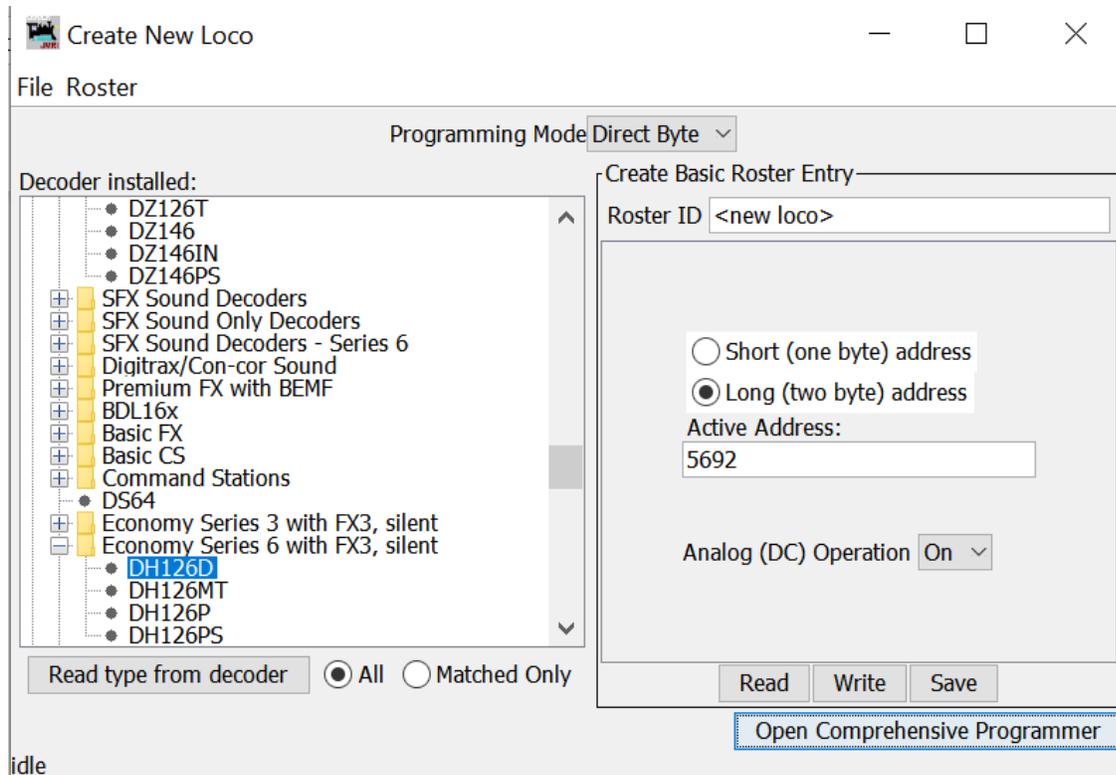
- DZ126T
- DZ146
- DZ146IN
- DZ146PS
- ⊕ SFX Sound Decoders
- ⊕ SFX Sound Only Decoders
- ⊕ SFX Sound Decoders - Series 6
- ⊕ Digitrax/Con-cor Sound
- ⊕ Premium FX with BEMF
- ⊕ BDL16x
- ⊕ Basic FX
- ⊕ Basic CS
- ⊕ Command Stations
- DS64
- ⊕ Economy Series 3 with FX3, silent
- ⊕ Economy Series 6 with FX3, silent
 - DH126D
 - DH126MT
 - DH126P
 - DH126PS
- ⊕ PM4x
- SE8c
- ⊕ Basic STD
- ⊕ Basic STD*
- ⊕ Function Only, with transponding
- ⊕ Early decoders
 - DS54
- ⊕ Doehler und Haass
- ⊕ Electronic Solutions Ulm GmbH
- ⊕ Fleischmann
- ⊕ GFB Designs
- ⊕ Gaugemaster
- ⊕ Haber and Koenig Electronics GmbH
- ⊕ Harman-DIY

Read type from decoder All Ma

Multiple possible Decoders detected - Manually select from highlighted Decoders or Family

Select your locomotive from the list.

You'll be presented with the "Create Basic Roster Entry" dialog.



On this dialog, you can set your Roster ID, long address and whether to allow analog operation.

Roster ID

Set the roster ID here. For decoders inventoried at the club, use your name and locomotive number. Note that the text here does not have to match the actual Active Address. The actual decoder number would be entered in the Active Address box.

Enter the log address.

You can either save the entry at this point or open the comprehensive programmer to access all of the features of your decoder.

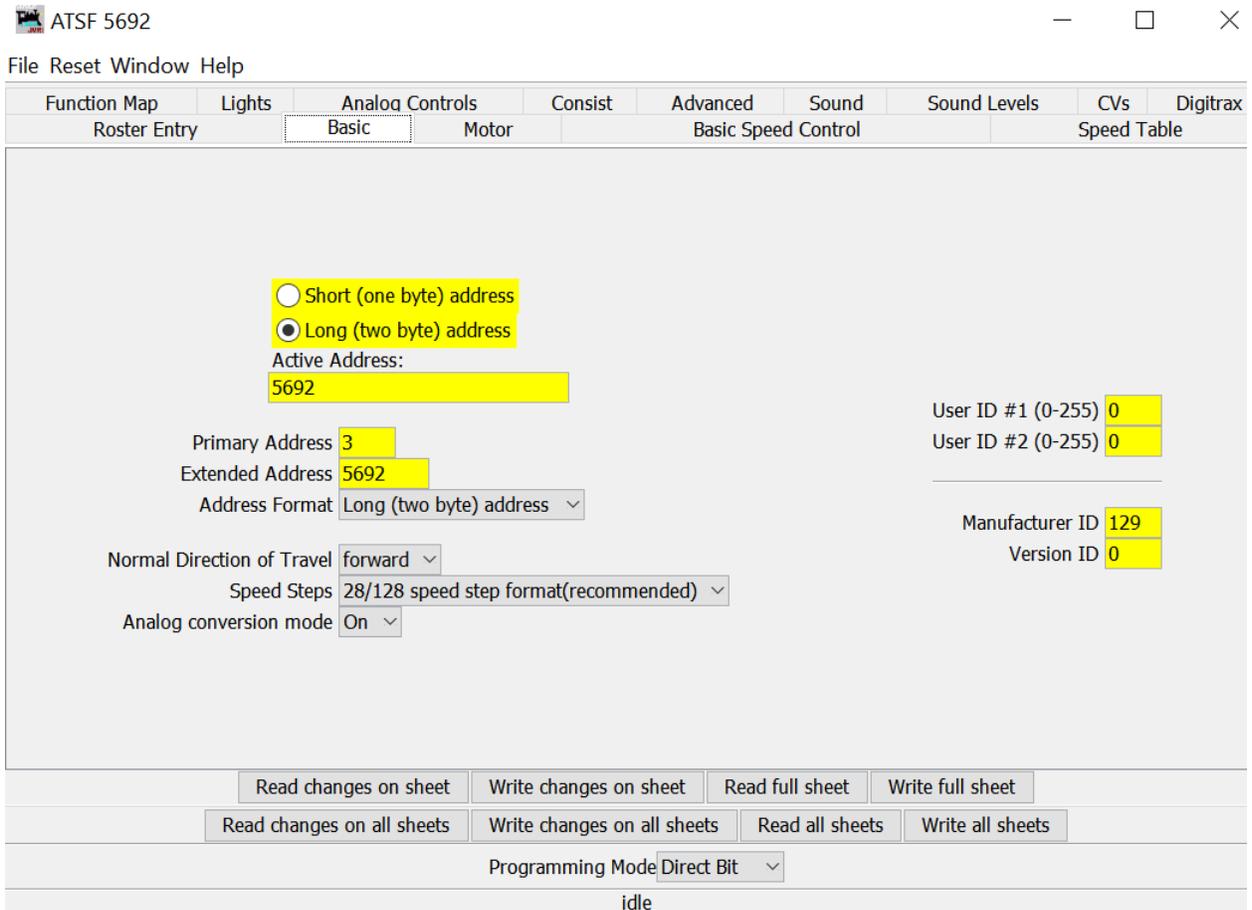
For this lesson, we will open the comprehensive programmer.

To set parameters for your initial entry, we will be working in the Basic and Roster entry pages.

On the basic sheet, you will be presented with the window shown below. Double check your Active address, set Normal Direction of Travel and whether to allow analog conversion.

To save these preferences to the LOCOMOTIVE DECODER, select "Write Changes on Sheet."

Once the changes have been saved, the yellow boxes will turn white. If there is an error with the programming, the boxes will turn red.



Click the Roster Entry tab.

This tab holds data that is informational only and does not affect the operation of the locomotive.

This information can be read from any installation of JMRI along with the rest of the decoder settings for ease of identification when moving a locomotive decoder from layout to layout, or even from your home programming station to a club.

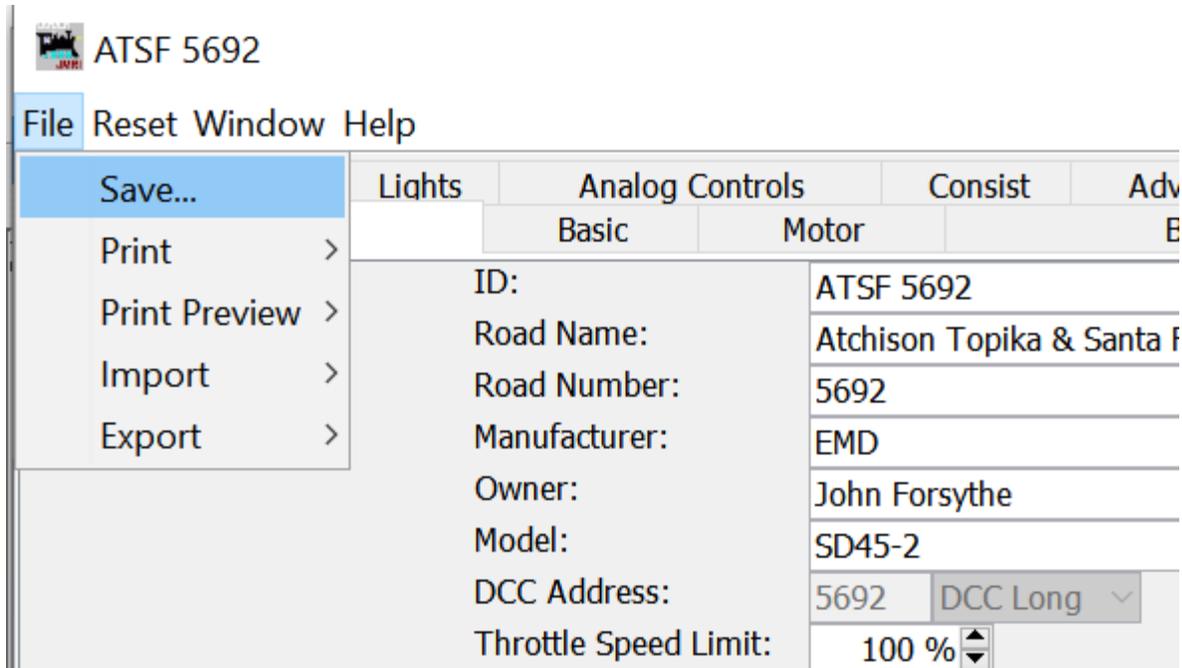
The screenshot shows the JMRI software window titled "ATSF 5692". The interface includes a menu bar with "File", "Reset", "Window", and "Help". Below the menu bar is a tabbed interface with the following tabs: "Function Map", "Lights", "Analog Controls", "Consist", "Advanced", "Sound", "Sound Levels", "CVs", and "Digitrax". The "Roster Entry" tab is selected and active. It contains several sub-sections: "Basic" (ID: ATSF 5692, Road Name: Atchison Topika & Santa Fe, Road Number: 5692, Manufacturer: EMD, Owner: John Forsythe, Model: SD45-2, DCC Address: 5692, Throttle Speed Limit: 100%), "Motor" (Decoder Family: Economy Series 6 with FX3, silent, Decoder Model: DH126D), and "Speed Table" (empty). At the bottom of the window, there are buttons for "Read changes on all sheets", "Write changes on all sheets", "Read all sheets", and "Write all sheets". The "Programming Mode" is set to "Direct Bit" and the status is "idle".

Fill out the details as appropriate. Once complete, click Save to Roster.

Your locomotive/decoder entry is now entered in the JMRI database.

If you wish to have all of the decoder settings read into JRMI, click the button marked "Read All Sheets" This can take some time depending on the decoder type. However, it will read and allow you to save all of the default decoder settings for all functions.

Once this full read is complete, click File | Save, or click the floppy disk icon. This will save all of the settings to the JMRI roster entry.



When you desire to make changes to your locomotive decoder settings, simply open JMRI, right click your roster entry and select Open Comprehensive Programmer. Your settings from the last point in time that were saved will be shown. From here, you can make changes to the Active Address, roster entry settings or advanced programming pages.

When complete, simply write the changes to the sheet and then save the file.