

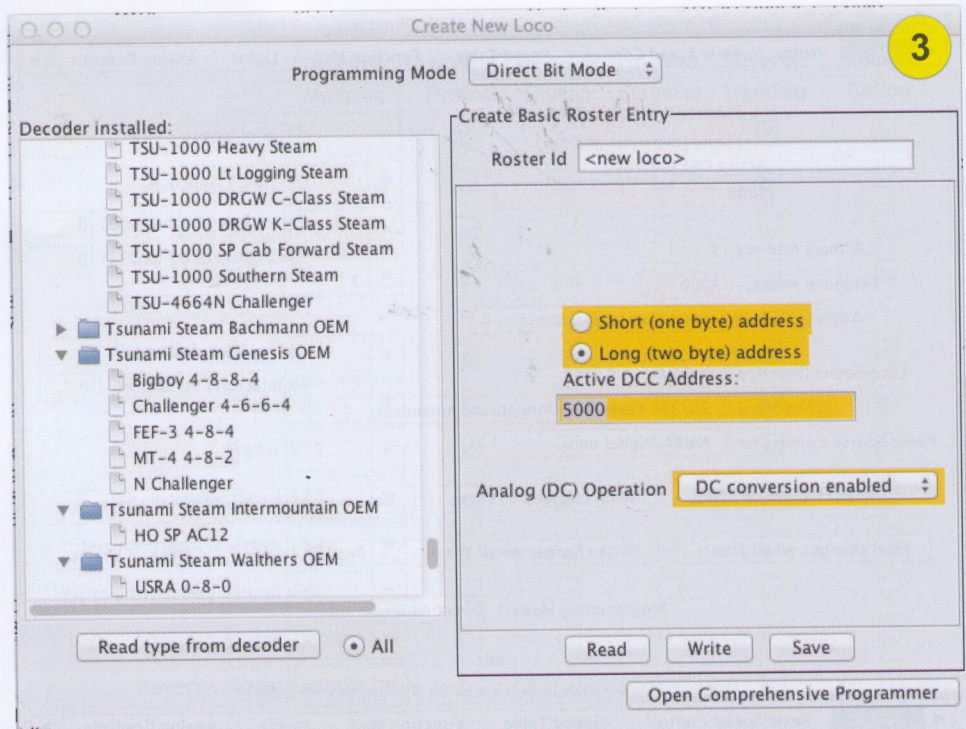
tions and CVs. These are grouped logically, making the setting of CVs easier. Everything is on the screen in front of you. When you want to change the type of horn on a locomotive, just pull down the menu, click on the one you want, click the button to write the changes to the decoder, and it is done. There is no looking up a table to see what value I put in that field to select a Nathan three-chime air horn. The process is the same for changing any CV. Plus, you can test your changes right then and there. When I started using DCC decoders, I had to make notes about CV29, which does several things such as using a long address or short, what is the normal direction of travel, and so forth. Now, you just click what you want on the screen, and there is not even simple math addition required any longer. Another feature I really like is that all my decoder information and settings are stored in a roster. Should I have a decoder go bad, I can program another from the saved data.

DecoderPro is computer-based software running on JAVA, and you will need a computer. Most of us have at least one, sometimes several. I have DecoderPro on two laptops and one tower. There are JMRI versions to run on Mac OS X, Windows, and Linux. You will also need to download a copy of JAVA, which is also free.

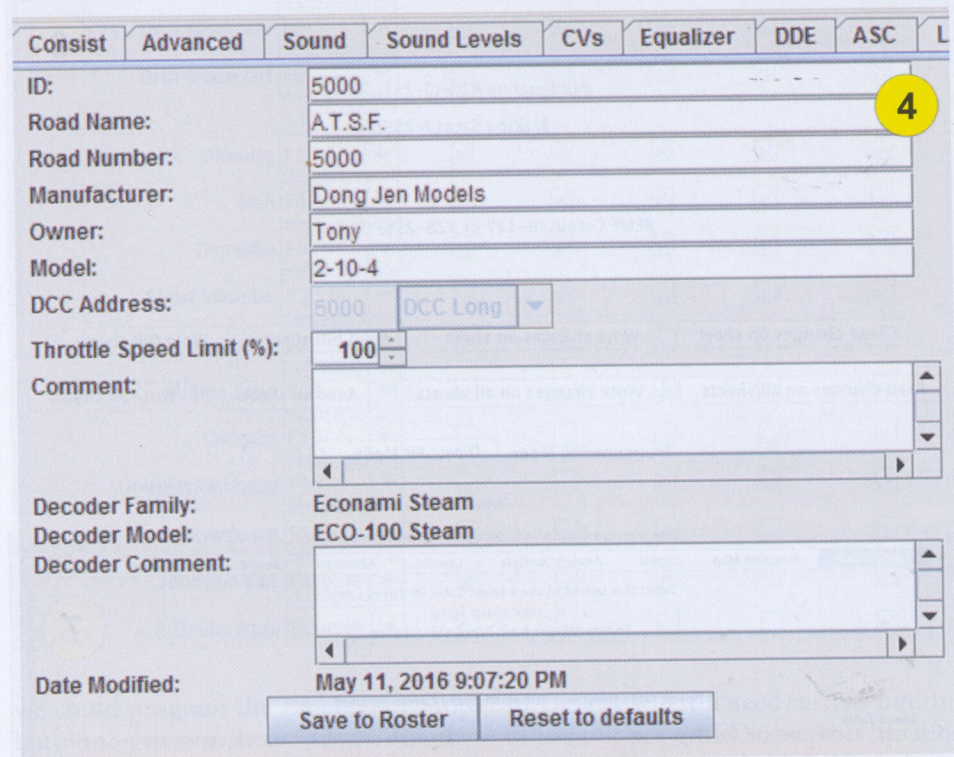
Windows 7-10 and Vista SP2 can run the current version of JMRI. You will need a current copy of JAVA 8. Windows 2000 SP3 and XP systems can run JMRI 2.14.1 using JAVA 1.6. Windows 98 can run JMRI 2.8. So, you don't need the latest new computer and operating system to use JMRI.

MAC OS X version 10.8.3 "Mountain Lion," 10.9 "Maverick," 10.10 "Yosemite," and 10.11 "El Capitan" can run the current version of JMRI. Go to <https://sourceforge.net/projects/jmri/?source=directory> to download a current copy to your computer.

You will also need a device between your computer and a programming track



idle



such as LocoBuffer-USB from RR-CirKits, Digitrax PR3, or one of the SPROG versions. I have used SPROG3 and PR3 with success. My friend Paul Myers uses LocoBuffer-USB and is very pleased with it. They all work.

Lastly, you will need a programming track. I made my programming track several years ago before using DecoderPro. It started as a car test track with a coupler height gauge at each end and an Atlas re-railer in the middle to make quick work

of getting a car on the rails for checking coupler height, and so forth. I made this on a 1x4 oak board 25 inches long (see **opposite page**). Any type of wood will suffice, and any length long enough to get your longest cars on the track with about 50 percent room to spare will work. I marked several car lengths from 30 to 90 feet with corresponding target weights in ounces and grams to conform to NMRÁ RP20 for car weights. All my rolling stock goes through an 18-point check for appear-