

play railroads. When operating on DCC, I disable this function, choosing to have the decoder respond only to NMRA DCC command packets.

There is a tab for setting up multiple-unit consists. I wrote about consisting in the December 2014 column, and this is my preferred way to do it as compared to Basic Consisting where all units in the consist have the same address or Command Station Consisting where the consist is command station specific. In advanced consisting, you can make some functions such as engine and pop-off valve sounds come from all units while you disable headlight and horn functions from following units. With this feature of DecoderPro, you can set following units to run forward or backward, depending on your need (Screen Shot 9).

Under the Advanced tab, there are functions to lock the decoder to prevent accidental reprogramming, as well as functions for braking rate. I usually add the braking function to my locomotives. This subject was covered in the April 2015 column. I've not had an issue with accidentally changing CVs; therefore, I have never locked the decoder, but it is a nice feature if you need it.

In the Sound and Sound Level tabs, you select the type of horn/whistle and bell appropriate to your locomotive. In some cases, there is the ability to select the type of prime mover for diesels or light, medium, or heavy steam; type of air compressor; and the overall sound level, as well as adjusting the sound levels of individual components (Screen Shots 10 and 11).

If you are so inclined, there is even a tab listing each CV and the value in it. I look at this sometimes, but not often. Because DecoderPro is so easy to use, and all selections are there on the screen, easy to read, and understand, I have little need to look at individual CVs any longer.

Some sound decoders have an equalizer to adjust sound levels to compensate for the frequency response of the speaker used. In short, if the speaker in use is weak in the low frequency range, you can boost the amplitude of the voltage in that range to attempt to compensate for the speaker shortfall. Likewise, you can reduce the gain on other frequencies that the speaker is more efficient in reproducing. You are attempting to equalize the sounds until it is adjusted to your preferences. Hence, the term "equalizer." It is the same concept used on stereo equipment and in recording studios.

For this particular decoder that we have been using in this example, there is a tab for DYNAMIC DIGITAL EXHAUST CONTROLS. When a steam engine is working hard, the stack exhaust "barks." It is loud. However, when drifting downhill with little load, what we hear is the clank of the side rods. These fields let you adjust this to your liking.

The tabs and the fields behind them in DecoderPro will vary by decoder manufacturer and model. We have shown you a couple of different examples here. Other decoders will have different tabs and fields because the volunteers who keep DecoderPro updated write the software specifically for each new decoder as it is released. This makes setting the CVs and fine-tuning our locomotives much easier than the old way of using an advanced throttle and programming track.

Another convenient feature of DecoderPro is that as you change CVs, you can do some testing right there on the programming track. Just click on the button for the throttle, and it comes up on the screen (Screen Shot 12). As you select the type of horn/whistle, bell, lighting, and other features, you can test how it sounds or looks right there and adjust as desired until you are satisfied with the effect. Some of the controls such as V start can be tested on the short test track, but checking for top speed and doing speed matching will require a longer track.

You can also change the labels on each function key in the DecoderPro throttle to match what it does. Simply right click on that function key, click on Properties, edit

