

Converting a Layout to DCC – Part 3

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In part two of this series, I wrote about installing the track bus wiring. At the time that I wrote part 2, I had all of the yard wired and I was ready to start wiring the mainline. I am happy to report that I finished wiring the mainline and the wye on July 5th.

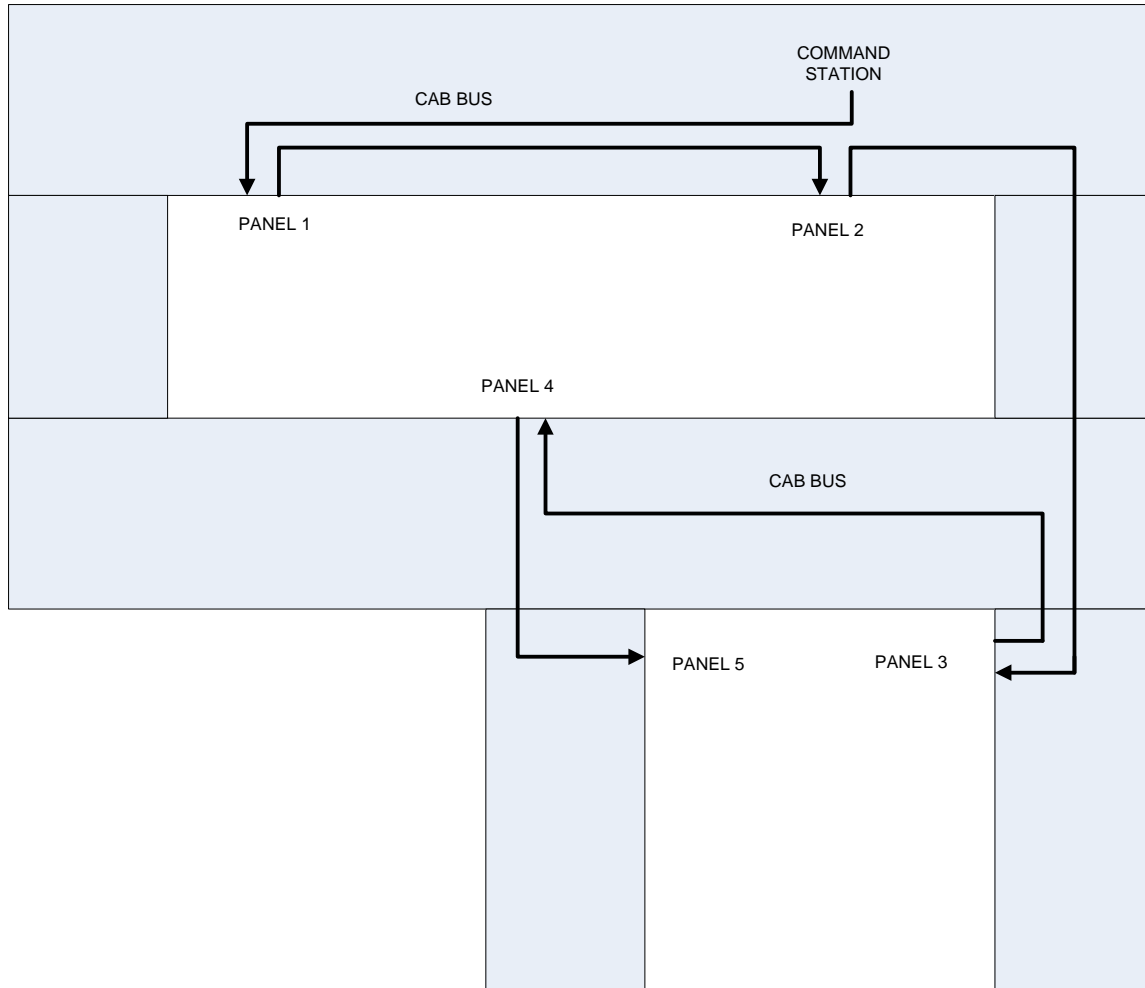


I have also installed the cab bus panels. There are five NCE DIN panels mounted at strategic points around the layout. I chose the DIN panels because they provide a more robust physical connection than the RJ12 panels.



The DIN panels were fairly easy to install. I started by marking out a 1 ¼ by 2 ¾ inch rectangle on the fascia. Holes were drilled in all four corners of the rectangle. Then a jig saw was used to cut out the rectangle. The cab panels were fastened to the fascia using #6 wood screws. One universal throttle holder was installed next to each cab bus panel.

NCE's cab bus consists of a six wire cable. Two RJ12 connectors are provided on the rear side of the cab bus panels for the cab bus connections. I chose to connect my five cab bus panels in one long serial chain. Refer to the diagram to see the connection scheme.



The NCE manual did not have much to say about cab bus configuration. It could have been possible to use a double ended chain with the command station in the middle. However, if had chosen this option, I would have had to acquire or make a splitter for the six wire cable. NCE does not list a splitter in their product catalog.

Each DIN panel includes a 12 volt power jack on the rear side. My cab bus extends about 45 feet. In my case, the cab bus did not have enough signal loss to require an additional power connection. I have had no problem using my throttle at cab bus panel number 5.

The NCE manual was lacking information on the requirements for using additional power on the cab bus. Therefore, I made an inquiry to customer service. Here is the answer that I received concerning long cab buses. If your throttle has trouble reliably communicating to the command station at a certain cab bus panel, move back one panel toward the command station and add the 12 volt power connection there.

It took just about 4 months to convert the layout. The layout is now fully functional again. I am quite satisfied with the results. I am now looking forward to taking a break from wiring. I will be shifting my focus to other layout projects.

