

Converting a Layout to DCC – Part 2

Text and Photos by Robert Perkins – Eastern Iowa Division Clerk

In part one of this series, I talked about the layout preparation work that was necessary before I started the layout control system conversion. As you may recall, I relocated the turnout controls from the main control panel to the fascia. This will facilitate walk around control.

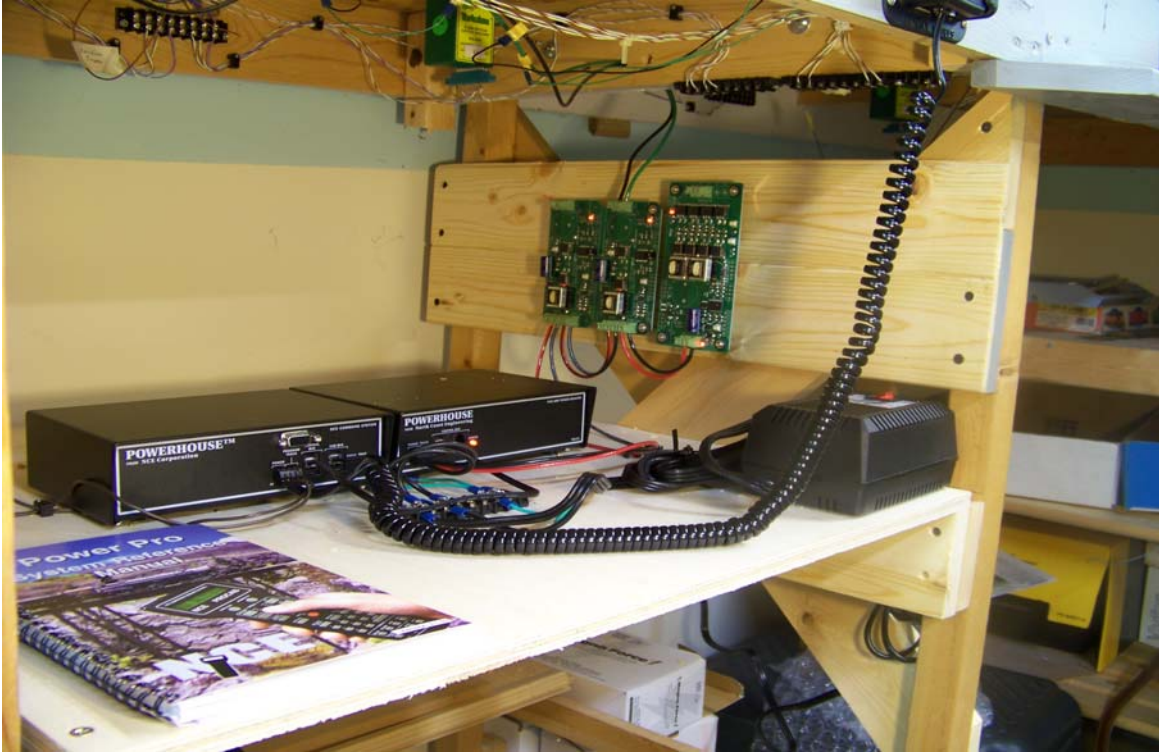


It was now time to take the plunge. I held the last operating session with DC control on March 6th. I disconnected and removed the main control panel the following weekend on March 11th. There was no turning back now. I was fully committed to the change over.

A small shelf was installed in the area where the control panel had sat. The programming track was installed on this shelf. Therefore, the programming track is physically isolated from the rest of the layout.



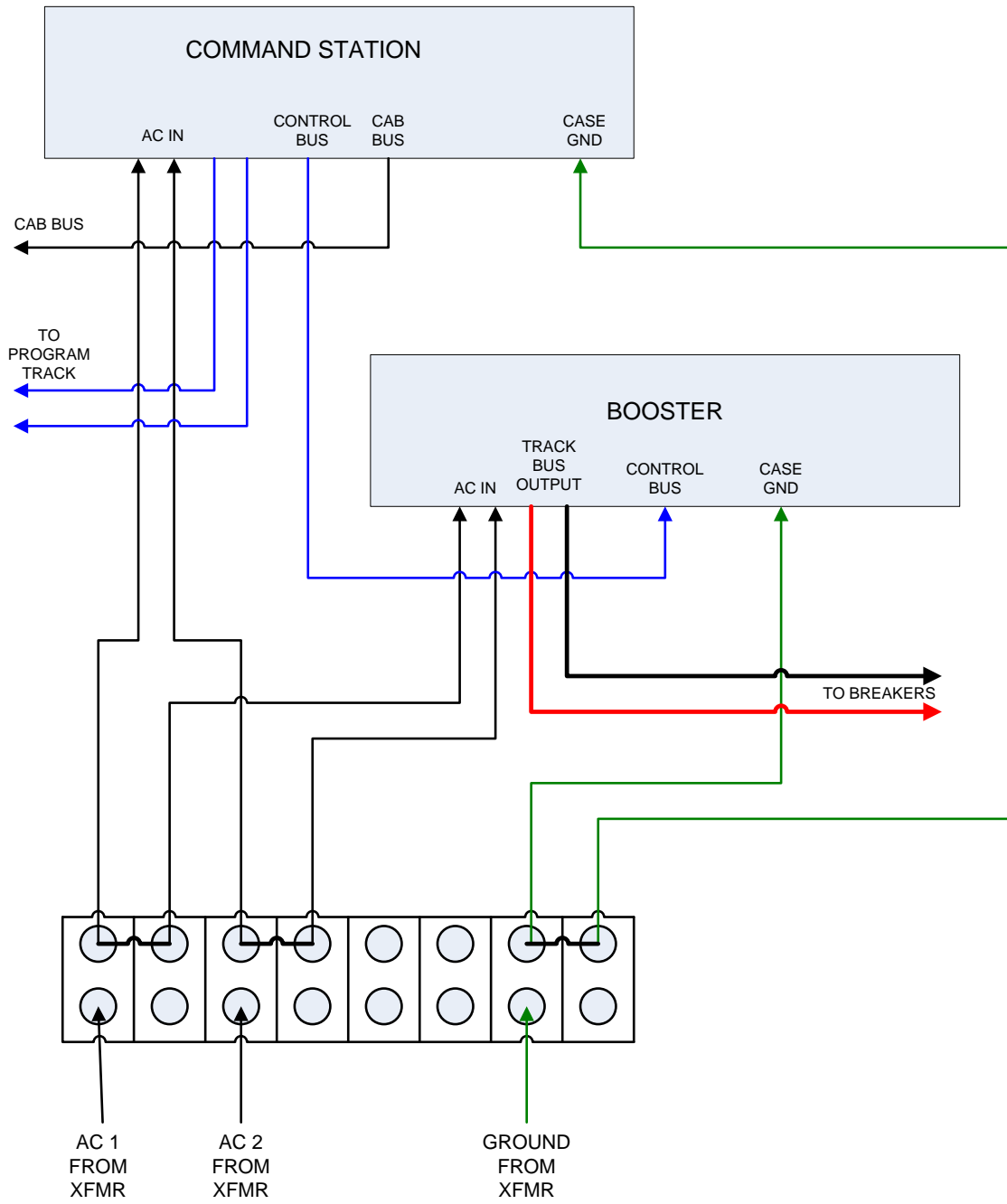
A 24 inch square shelf was installed under the layout. This shelf holds the major components of the DCC system. The DCC system consists of the NCE command station, a NCE 5 Amp booster, a DCC Specialties Magna Force power transformer, a DCC Specialties PSX-2 dual circuit breaker, and DCC Specialties PSX-AR auto reverse circuit breaker.



The layout has been divided into three power districts. The yard district is supplied by the one side of the PSX-2 breaker. The mainline and staging are supplied by the other side of the PSX-2 breaker. The PSX-AR auto reverse breaker supplies the tail of the wye.

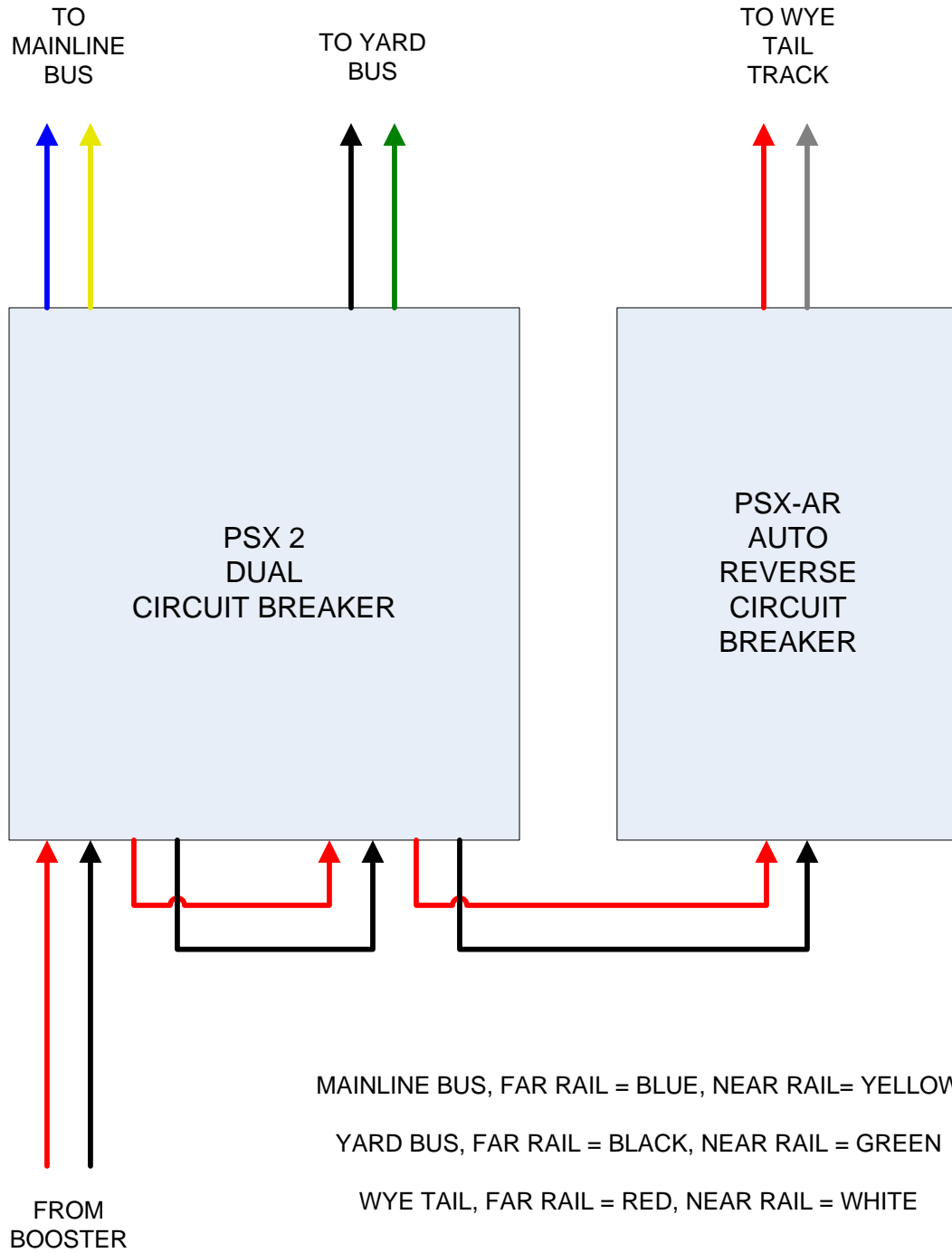
DCC SYSTEM

4/14/11



DCC SYSTEM

4/11/11



By April 8th I had fully wired the yard district. I used a bus of black and green of 12 gauge stranded wire for the yard district. The feeder wires are 22 gauge stranded wire. I used 12 gauge wire taps that I obtained through Mouser Electronics. The wire taps are made to accept a male quick disconnect terminal. One quick disconnect terminal is crimped onto each group of feeder wires.



One of my next tasks will be to wire the two remaining districts. I will color code these districts for easy visual identification by using different colors of 12 gauge bus wire. The mainline district will use blue and yellow wires. The auto reverse district will use red and white wires.

In the next installment of the series, I will talk about wiring the cab bus and installing the cab bus panels.