

Layout Wiring and Voltage Drop

There is a fallacy out in the world of model railroading concerning digital command control (DCC) and layout wiring.

The pundits exclaim, “only two wires are needed to wire your layout for DCC!”

Well this might be true of a small layout, lets say “tiny,” with maybe 1 or 2 small trains running.

Larger more complicated layouts should use proper wiring techniques. There are plenty of books available through the hobby press on layout wiring. Whether the book is recent and is about layout wiring for DCC, or if the book is 50 years old and deals with Cab control and block sections, *proper wiring is proper wiring*. “That’s it!” More problems can be traced to poor wiring practices than anything else.

With DCC, a lot of small block sections are not needed. The layout should be divided into larger block sections, known as divisions, with on/off toggle switches to control track power. Wiring the layout in this fashion will let you isolate sections of the layout if you do encounter short circuit related problems.

Additionally, extra short circuit protection can be used in the wiring of these sections to let you know right away where a problem has developed.