

# Midwest N Pioneer Module Standards

Date: 2018/7/14

Version 1.1

**Purpose** of this document is to collect and publish the standards for modules for the Midwest N Pioneer club's travel layout.

## Standards

We follow the N-trak standards for One-trak modules. These can be found on the web at [http://www.ntrak.org/documents/oNeTRAK\\_Guide.pdf](http://www.ntrak.org/documents/oNeTRAK_Guide.pdf). Note some differences – our layout is strictly to be used with DCC. (Our end loops will not work with DC power). Also, where the standard is vague, we have come up with certain conventions that are presented here.

## Track

1. We use Peco 55 as a rule, but most track will work. It's just more difficult to connect at shows. Anyway, use code 70 or 80 with other track. Don't use regular code 55 track. Kato track works well.
2. If Kato track is used they make a variable length connecting track which is useful but should be supplied with the module for connecting at show.
3. For connecting track you want a space of 2.5" on either end of any tracks that are to connect to another module. This is so a 5" section of track can fit in there.
4. The main track is the connector to the rest of the layouts and needs to be placed at 4" from the outside edge of the module. The 4" is measured at the center of the track.
5. A second track can be placed at a further 1.5" from the main track (making it 5.5" from the front of the module). Some newer modules are being built with this second track. The objective of this second track placement is to add bypass and siding tracks. When several of these are connected this track can extend over several modules and produces long, useful sidings.
6. Cork is the preferred roadbed. It seems to perform better than a few others tried. Micor is used on the main layout but is not recommended here for a roadbed.

## Switches / Turnouts

Especially if you have a second track you will want some turnouts or switches. These need to be DCC friendly. For more information see the following article; <http://www.wiringfordcc.com/switches.htm>

## Wiring

1. We use red and black colored wire (although the electricity doesn't care...) with a gauge of 14 or 12 for the buss wires. (Ntrak standards are for 12 gauge wire in order to avoid signal interference when connected in a large configuration. 14 works fine for our purposes). Stranded or solid wire is adequate. Gauge 22 is adequate for feeder wires to the track.

2. Use a terminal block for the ends of the modules. Terminate your wiring at blocks at each end and that is where you will connect to the wires from the other modules using a small cable with an Anderson 30 amp powerpole connector. These small connector wires are supplied by the club.
3. Red wire is to be used on the outside rail (front), black wire on the inside rail (back). The front is the side the end user looks upon, the back is where the operator/modeler is.