mode while the other track is running in DCC mode.

Power drops supplying current to the track are normally installed by drilling a 1/2-in. hole under a rail joint on each track and replacing the normal rail joiners between those tracks with a Kato Terminal Unijoiner (Kato part #20-818). Feed the power cords down through the hole to the bottom of the module, and the drop can be connected to the track bus when setting up the layout. Care should be taken to ensure that the blue wire is connected to the outside rail of each track, and the white wire is connected to the inside rail. Failure to follow that standard will result in short circuits when connecting to other modules in a large layout.

Each track bus is normally 8-ft. to 10-ft. in length terminated on each end with Anderson Power Pole connectors. The Power Pole connectors are placed vertically with each end having a different color on top. When using red and black cable, the blue wires should be connected to the black cable and the white wires should be connected to the red cable. In the middle of the cable, connecting wires are added to provide connection to the power drops coming from the individual modules. Normally, there should be at least two connectors per cable, allowing for connections to each side of an 8-ft. table. The connectors from the bus must mate with the module track feed.

### **Getting Started**

Use the "T-TRAK on the Web" resources in this brochure to help you get started today in T-TRAK modular railroading!



## T-TRAK on the Web



For membership and other information, go to: houstonttrak.org

#### **Standards and Resources**

nrail.org/T-TRAK-Home
nrail.org/T-TRAK-Standards
ttrak.wikidot.com
T-TrakHandbook.com
www.nationalt-traklayout.com
Facebook.com/groups/114352855242229

### **Supplies**

katousa.com/n-unitrack www.osbornmodelkits.com/t-track-modules www.rslaserkits.com/T-trak\_c\_46.html



## **Welcome To**



# N-Scale Modular Railroading

**T-TRAK** is a system of small modules that makes up a portable model train layout. A "standard" module is only 12-in. wide. The modules' small size makes them economical and easy to build, store and transport. Layouts are set up on standard 30-in. by 96-in. folding banquet tables.

Lee Monaco-FitzGerald and her husband Jim (of NTRAK fame) introduced T-TRAK modules to the U.S. in the Fall 2001 NTRAK Newsletter. The introduction noted that the T-TRAK modules were based on a Tram Module design by RM Models of Japan. The T-TRAK concept has since spread worldwide, and clubs have formed in North America, Europe, Asia and Australia.



### **T-TRAK Layout Basics**

T-TRAK layouts are composed of individual modules with track that snaps together to form two parallel rail lines which are operated as individual mainline circuits. The layout is designed to have two rows of modules arranged around one or more standard 30-in. wide folding banquet tables. T-TRAK is normally built in N scale with Kato Unitrack, although similar concepts are used in other modeling scales as well.

The basic T-TRAK layout starts with a circular track created by either two end cap modules, an end cap and two corner modules, or four corner modules. The layout then grows by inserting more modules between these "ends". So, if you want your own operating layout, you will need to have at least two 180 degree turns to create a loop, and then expand from that start.



### **Group Activities**

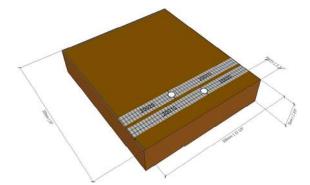
T-TRAK is one of the easiest ways for an individual to get started in model railroading. T-TRAK also has a unique advantage in that, being highly portable and flexible in its layout, T-TRAK is well-suited to group activities. Joining or forming a local club will enhance your experience and speed up your learning process, as well as giving you a means to show off your modules at train shows and other events. See the back of this flyer for online resources to help you find a club near you.

### **Modules**

There are several modules defined within the T-TRAK standard. The basic module is a "straight" module in one of three sizes: Single, Double or Triple. At the ends of the layout, the track must loop back, and this is done with either an end cap or two corner modules. There are other types for specialized applications. You can refer to the Wikidot site listed on the back of this brochure for more information and examples of these types.

T-TRAK modules are normally made of four wood sides and a top surface of either wood or foam. Scenery choices are up to the modeler, unless building to a club standard. You'll see some very imaginative scenes on some modules!

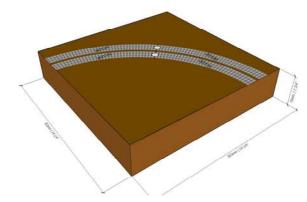
Modules are 2-3/4-in. tall with adjustable legs to allow for leveling at a height of up to 4-in. Modules vary in width depending on the track that will be used on them. Module depth can vary based on modeler or club preference from 8.5-in. to 14-3/8-in. Module depth is usually kept at or below 13-in. to create a "cable trough" between the two rows of modules on the table. The two parallel tracks are mounted so that the outer edge of the front track roadbed is 1.5-in. from the front of the module. The centerline of the two tracks are 33mm apart.



Basic single module. Image: NRail

Basic specifications for modules are as follows: **Single:** 308mm wide x 216mm-365mm deep 1 Kato #20-010 + 1 #20-020 for each track Or 1 Kato #20-014 + #20-025 for dual track Double: 618mm wide x 216mm-365mm deep 2 Kato #20-000 + 1 #20-020 for each track Or 2 Kato #20-006 + 1 #20-025 for dual track Triple: 928mm wide x 216mm-365mm deep 3 Kato #20-000 + 1 #20-010 for each track Or 3 Kato #20-006 + 1 #20-012 for dual track Corner: 365mm wide x 365mm deep 2 Kato #20-110 for inner track 2 Kato #20-120 for outer track Or 1 Kato #20-183 + 2 #20-184 for dual track End Cap: 365mm wide x 730mm deep 4 Kato #20-110 for inner track 4 Kato #20-120 for outer track

Or 3 Kato #20-183 + 2 #20-184 for dual track



Corner module. Image: NRail

### Wiring

In its most basic form, such as a small display or home layout, T-TRAK consists of two tracks which are wired independently of each other. This allows for at least two trains to operate on the layout at the same time.

With larger layouts, power is usually provided to the tracks using an individual wiring bus for each track. The track bus is normally 12-gauge zip cable with drops provided every few feet to allow connection to the individual modules. It is best to have at least one drop per track on each side of the standard 8-ft. table. By keeping the track buses separate, the layout can be configured to run both tracks in DC mode, both tracks in DCC mode, or one track in DC