

## Building a Layout

**Clubs**—While T-Trak is one of the easiest ways for an individual to get started in model railroading, one of its unique advantages is its ability to participate in group activities. Joining a local club will enhance your experience and speed your learning process, as well as giving you a means to show off your modules at train shows and other events. A club near you is listed on the back of this brochure.

**Scale**—T-TRAK is normally built using N scale equipment and track. T-Trak can be done in other scales, but since most clubs use N scale, we will too.

**Track**—T-TRAK is double tracked, using Kato Unitrack. The track is spaced 33mm apart, corresponding to Kato Unitrack's double track configuration.

**Module Types**—There are several modules defined within the T-TRAK standard. The normal module is a "straight" module in one of three sizes—Single, Double, or Triple. At the end of the layout, the track must loop back, and this is done with either an End Cap or 2 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.

**Layout Plan**—Most layouts start with a circular track created by either 2 End Cap modules, an End Cap and 2 Corner modules, or 4 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, then expand from that start.

**Wiring**—T-TRAK consists of 2 tracks which are wired independently of each other. This allows for at least two trains to operate on the layout at the same time.

**Skyboards**—Many T-TRAK modelers use background boards behind their modules to enhance their scenes. This is purely at the modeler's discretion, and some clubs have recommended practices as to whether or not they use them.

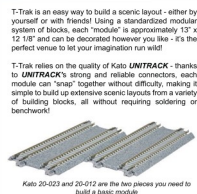
## T-TRAK on the Web

### Reference Material and Standards

- [www.NRail.org](http://www.NRail.org)
- [TTrak.Wikidot.com](http://TTrak.Wikidot.com)
- [T-TrakHandbook.com](http://T-TrakHandbook.com)
- [www.nationalt-traklayout.com](http://www.nationalt-traklayout.com)
- [Facebook.com/groups/114352855242229/](https://www.facebook.com/groups/114352855242229/)

### Supplies

- [KatoUSA.com/N/Unitrack.html](http://KatoUSA.com/N/Unitrack.html)
- [osbornmodelkits.com](http://osbornmodelkits.com)
- [Stuart Denniston dennind@gmail.com](mailto:Stuart.Denniston@dennind@gmail.com)



Kato 20-023 and 20-012 are the two pieces you need to build a basic module.



Assembling a T-Trak module is as simple as 1-2-3! Build the base according to the freely available diagram (available at t-trak.org), glue down the track, then decorate!

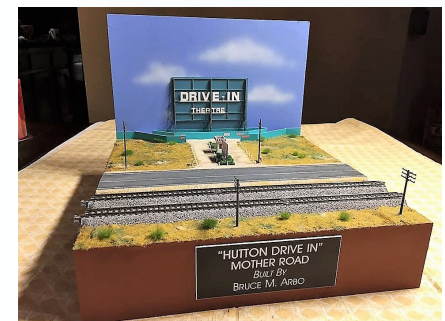
Since everything is built to a specific standard, you can be as creative as you want without worrying whether or not your module will or won't fit with your local club layout or friends' modules. It just works!



## Introduction to T-TRAK Model Railroading

T-TRAK is a system of small modules that make up a portable model train layout. A "standard" module is only 12" wide. Their small size makes modules easy to build, store, and transport. Layouts are set up and run on standard banquet tables (30" x 96")

In the Fall 2001 issue of the NTRAK Newsletter, Lee Monaco-Fitzgerald, and her husband Jim (of NTRAK fame), introduced America to T-TRAK, and it has spread worldwide with clubs throughout the US, Australia, Japan, Europe, and South America.

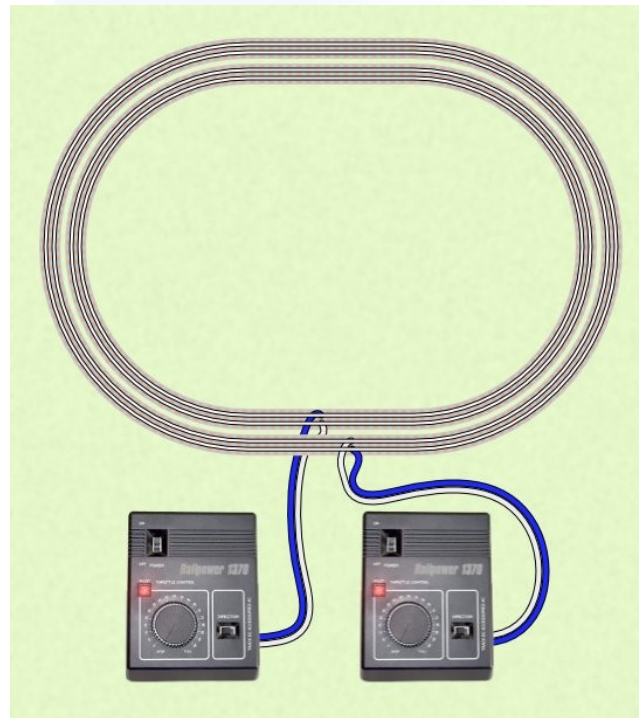
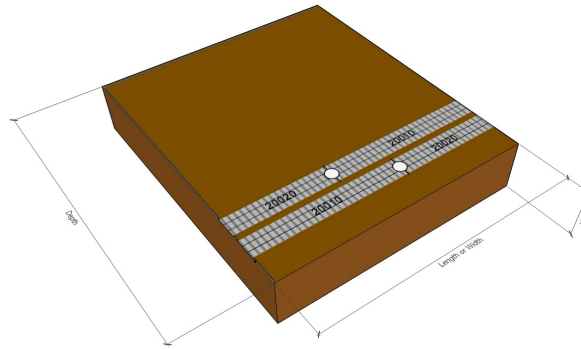


# Wiring

## Modules

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 rail lines which are operated as individual mainline circuits. The layout is designed to have 2 rows of modules arranged along a standard 30" wide banquet table. The modules are normally made of 4 wood sides and a top surface of either wood or foam. Modules are 2-3/4" tall with adjustable legs to allow for leveling at a height of up to 4". The modules are varying widths, based on the track that will be used on them. And the depth of the modules can vary based on modeler or club preference from 8.5" to 14 -3/8" - the latter creating abutting modules if used on either side of the table. Normally, module depth is kept at or below 13" to create a "cable trough" between 2 rows of modules on the table. The 2 parallel tracks are mounted so that the outer edge of the front track roadbed is 1.5" from the front of the module and the centerline of the two tracks are 33mm apart. The specs for the different 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



Power is provided to the tracks through the use of an individual track 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 foot 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 mode while the other track is running in DCC mode.

**Track Wiring** - Power drops supplying current to the track are normally done by drilling a 1/2" hole under a rail joint on each track and replacing the normal rail joiners between those tracks with a Kato Terminal Unijoiner (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.

**Bus Cable** - Each track bus is normally 8' to 10' 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' table. The connectors from the bus should have connectors to mate with the module track feed.