



Photo by Bruce Arbo

## **T-TRAK – MINI MODULES!**

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**March 6, 2016**

**NMRA MCR Division 10**

# AGENDA

- Introduction to T-TRAK
- Module and Layout Types
- Module Construction
- Standards and Variations
  - Dimensions
  - Track and Electrical
- Examples and Gallery
- Questions



# WHAT IS T-TRAK?

- Modular Model Railroad System
  - Minimal standards focused on interconnect
  - Very small size
  - Simple base construction
  - Flexible scenery options
  - Easy to transport, set up, and take down
  - Global standard
  - N scale (but see below)



Photo by Russell Straw



# BENEFITS OF T-TRAK

- Compact Size
  - Easy to build, store, and transport
- Collaborative
  - Small format “encourages” group activity
  - Low impact / footprint for more venues to show
- Creative
  - Play outside your main layout / scale / era / etc.
  - Try out or practice new scenery techniques
- Outreach
  - Encourage new folk to “dip their toes”
  - Good for youth groups like Scouting
  - Easy to set up in non-traditional “show” spaces



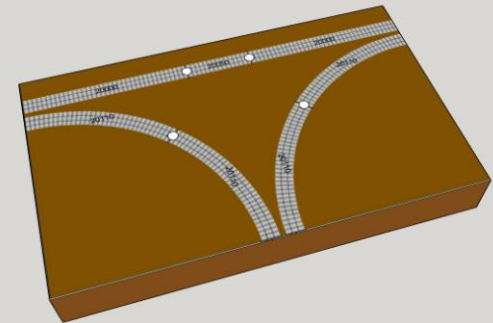
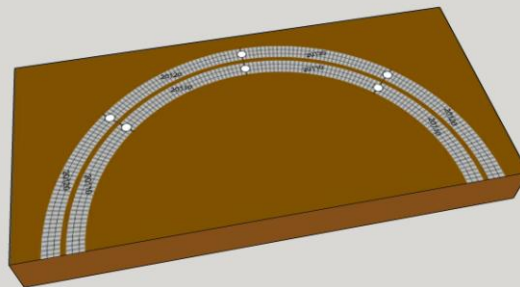
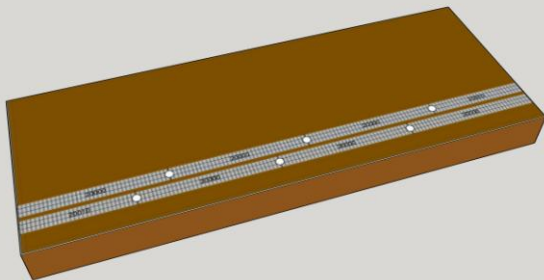
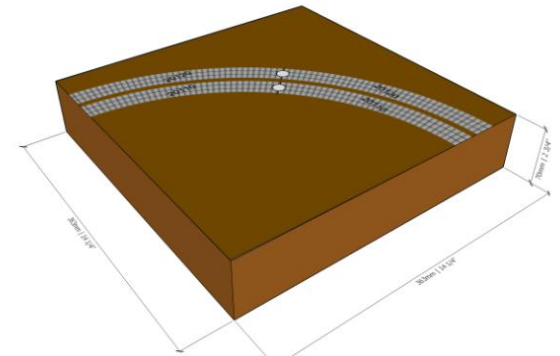
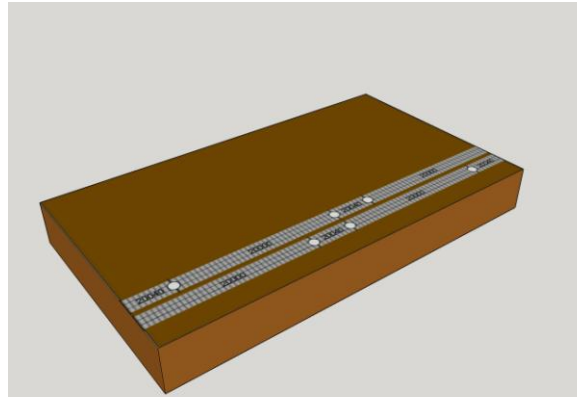
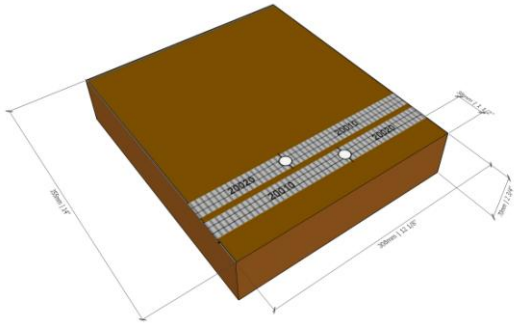
# EXAMPLE LAYOUT



Photos by Craig Sonnen, MMR

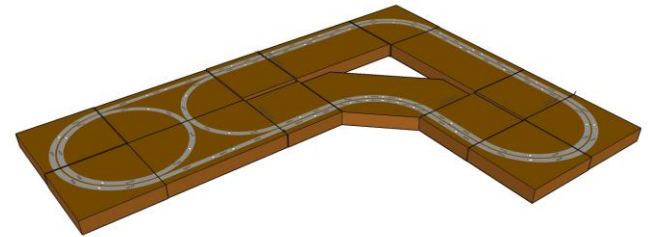
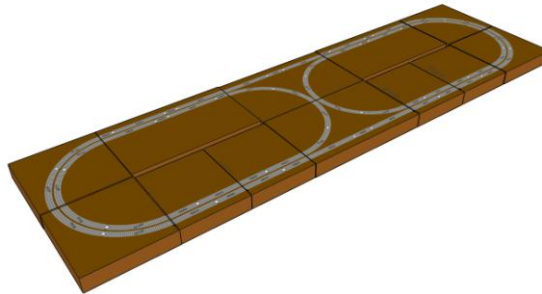
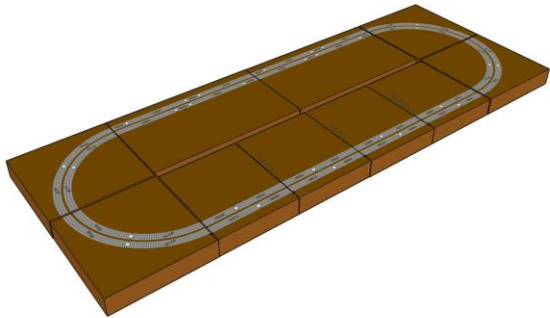
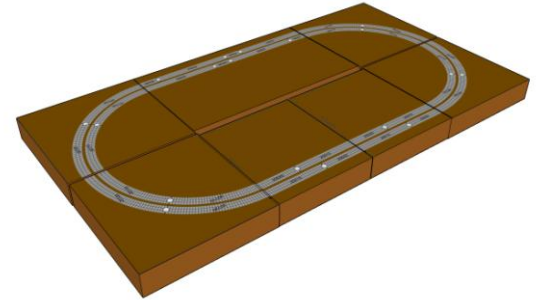
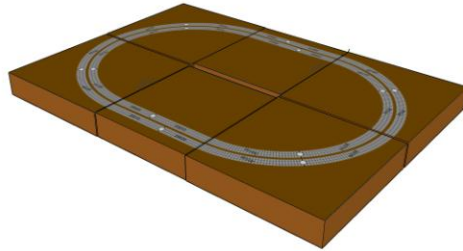
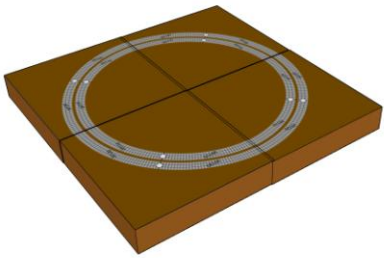


# DIFFERENT TYPES OF MODULES

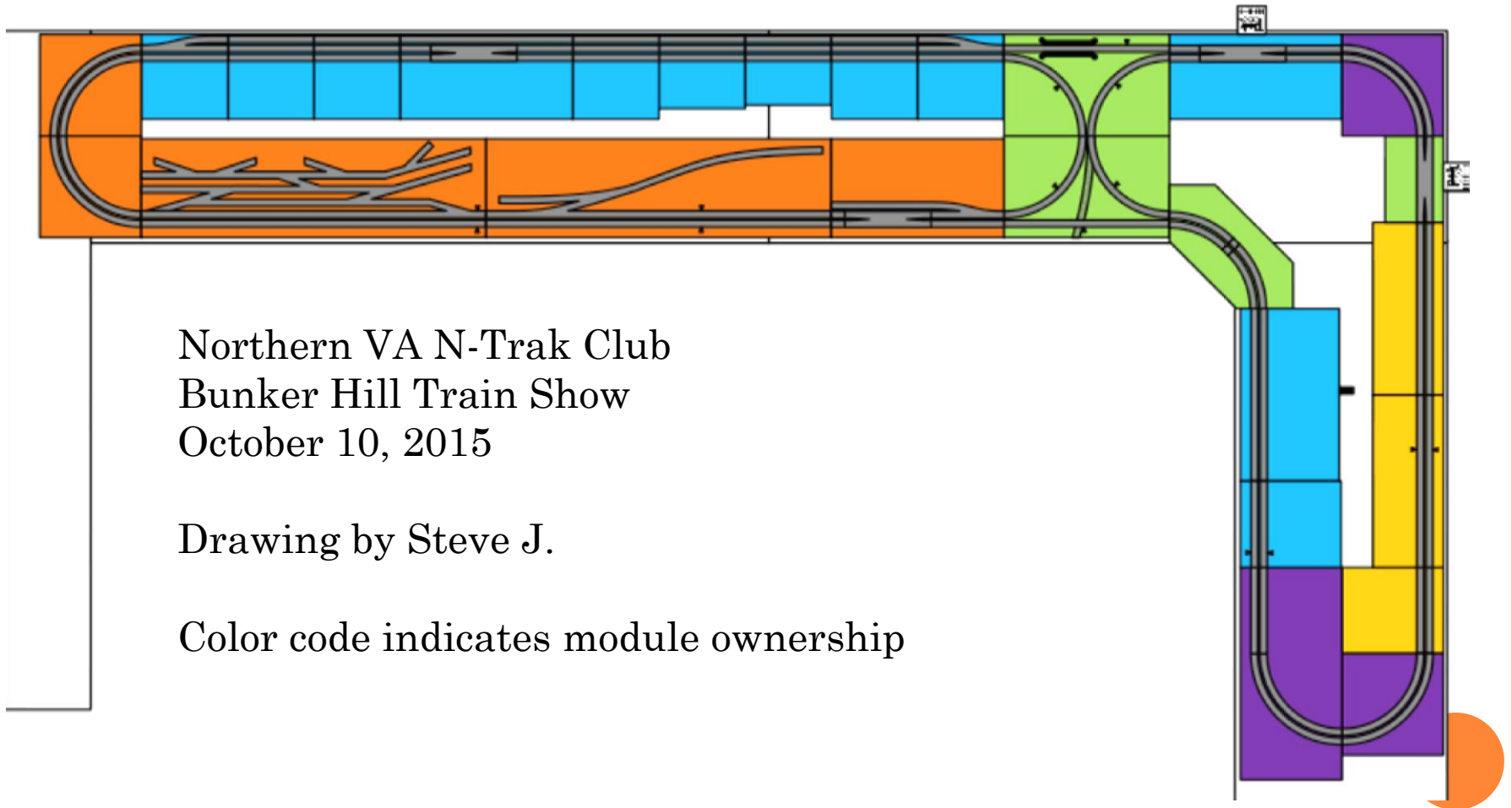


Images courtesy ttrak.org

# EXAMPLE LAYOUT SHAPES

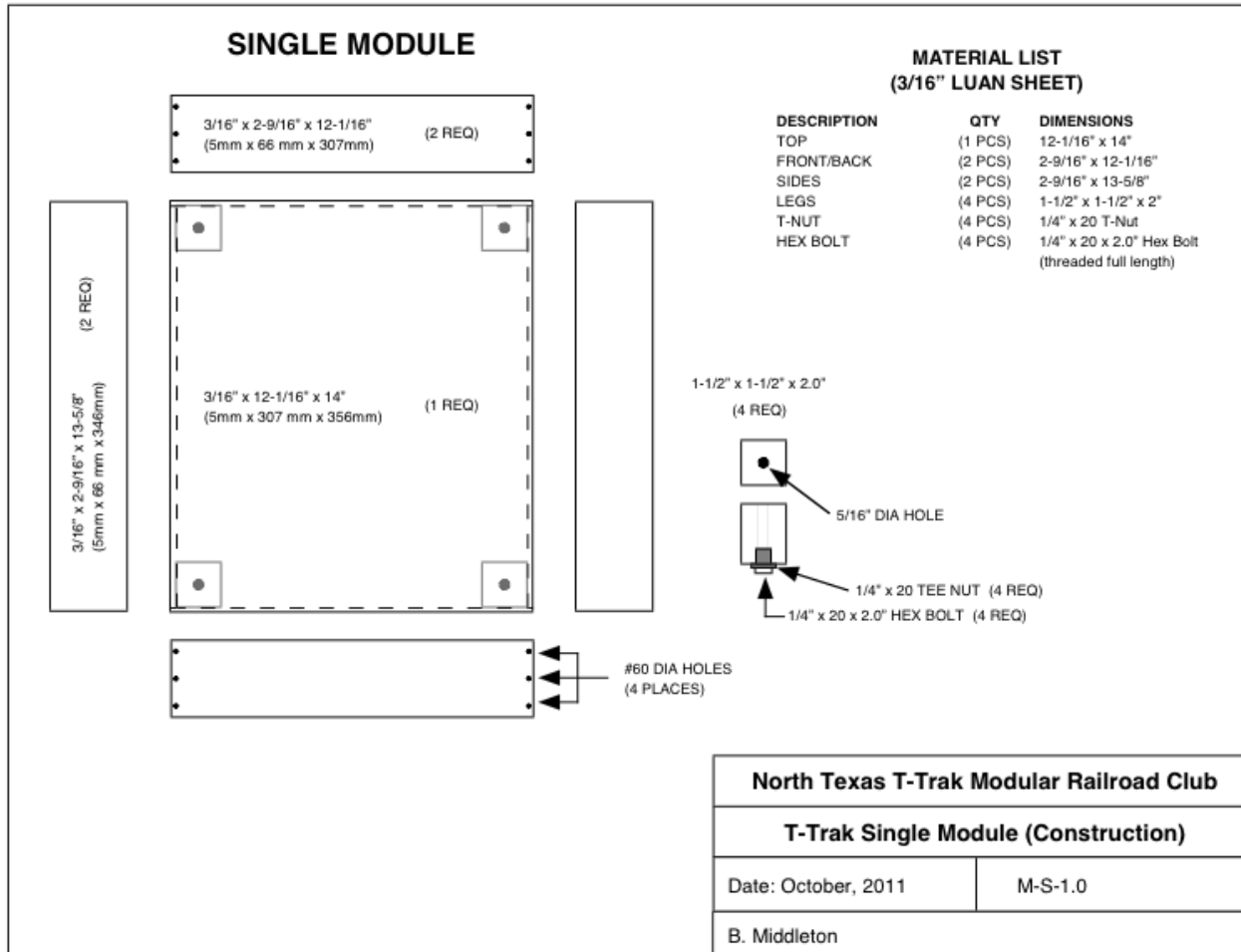


# EXAMPLE SHOW LAYOUT DIAGRAM



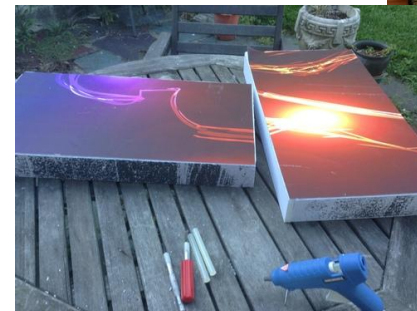
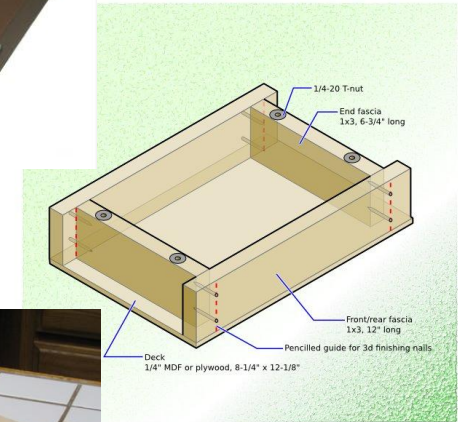


# BASE MODULE DESIGN



# CONSTRUCTION OPTIONS

- 1/4" Plywood Box
- 1x3
- Open Framework
- Foam-on-plank
- Foam Board / Gatorboard
- Corrugated Cardboard
- "Cuties" orange crate
- T-Kits.com
- MasterpieceModules.com



# MODULE SIZE STANDARDS

- Standard “Single” module
  - Base Width: 308mm (12-1/16”)
  - Base Depth: 8-1/4” up to 14”
  - Base Height: 2-3/4” adjustable up to 4” with legs
  - Tracks: 2x Kato Unitrack, 33mm spacing, offset 1-1/2” from fascia to edge of ballast.
- Double, Triple, Corner modules
  - Double, Triple, etc. are multiples of Single width
  - Corners constructed to mate to Singles on either end.
  - Corners usually in 90° or 180°
- Optional Skyboards
  - Full width of module, no set height



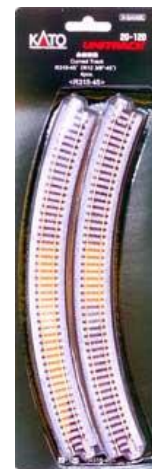
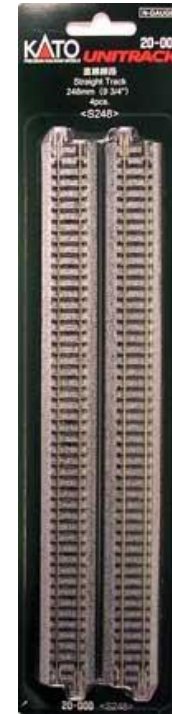
# DIV 10 STANDARDS

- Apply to Club-Owned Modules Only
  - Recommended but not required for member-owned modules.
- Dimensions:
  - Maximum 13" depth
  - Maximum 4" height above track base
    - Applies only if module to be carried in club tote
  - Width to T-Trak standards (multiples of 308mm)



# TRACK STANDARDS

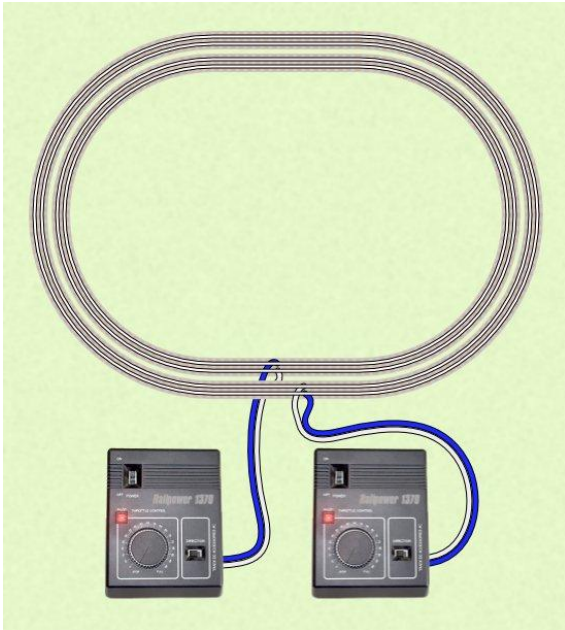
- Kato Unitrack is Standard
- 33mm (double track) spacing
- Single Module:
  - 2 pcs 20-000 248mm Straight (1pkg = 2 modules)
  - 2 pcs 20-040 62mm Straight (1pkg = 2 modules) OR
  - 2 pcs 20-041 62mm Feeder (2 pkg = 1 module)
  - (or equivalent)
- Curve Module:
  - 2 pcs 20-110 282mm 45° Curve (1pkg = 2 modules)
  - 2pcs 20-120 315mm 45° Curve (1pkg = 2 modules)



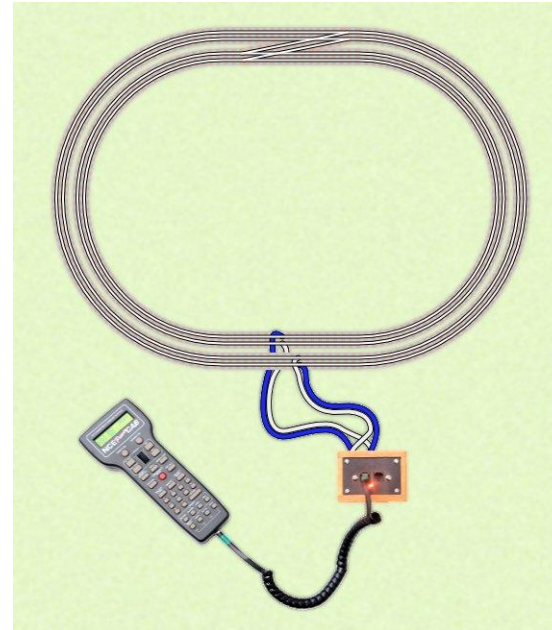
# ELECTRICAL

- From “Wiring for T-Trak” by Jeff Faust
  - <http://ttrak.wikidot.com/wiring-for-t-trak>

DC



DCC



Note the pattern of blue & white wires!



## ELECTRICAL (CONT'D)

- One powered module every 4-6, minimum
- DC Power: Tracks wired opposite
  - Opposing direction running
  - Wires: Blue-White-White-Blue
- DCC: Must reverse wires at the Booster
  - Modules should be wired to DC standard with opposite-wired tracks.
- Large layouts: use bus structure, larger wires
  - Implementation varies by club
  - Several good standards available



# VARIATIONS

- Unitrack is only required at endpoints
- Sets of modules can have non-standard internal joints
- Fascia may extend beyond the standard depth
- S-Curve module can be used to move tracks to the background



Photo by Craig Sonnen, MMR





# OTHER SCALES – NOT JUST N

Scale:	Z	N	HO	S	O
Module Length	328mm (12-15/16")	308mm (12-1/8")	486mm (19-1/8")	29-7/8"	39-7/8"
Max Depth	11-1/4"	14"	28"	24"	24"
Corner Radius	195mm / 220mm	282 mm / 315 mm	550 mm / 610 mm	20" / 25"	18" / 24"
	7.7" / 8.7"	11.1" / 12.4"	21.6" / 24"		
Track Standard	Micro Trains	Unitrack	Unitrack	MTH S-Trax	Lionel Fastrack



# SINGLE MODULE: “DOG PARK”



Design & Photo: Walt P. <http://ttrak.wikidot.com/dog-park>



# DOUBLE MODULE: “INDUSTRIAL AREA”



Design & Photo: Mark W. Smith. <http://ttrak.wikidot.com/industrial-area>  
One of two-module set



# CORNER MODULE: “EQUESTRIAN CORNER”



Design & Photo: Walt P. <http://ttrak.wikidot.com/equestrian-corner>



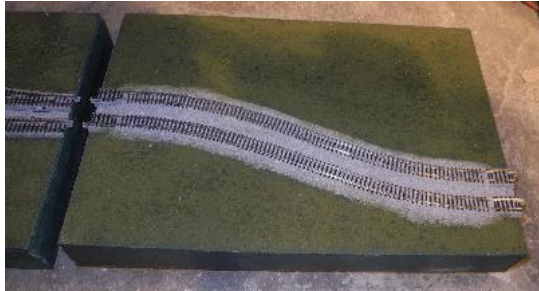
# TRIPLE JUNCTION MODULE



Design & Photo: Walt P. <http://ttrak.wikidot.com/crossover-junction-1>



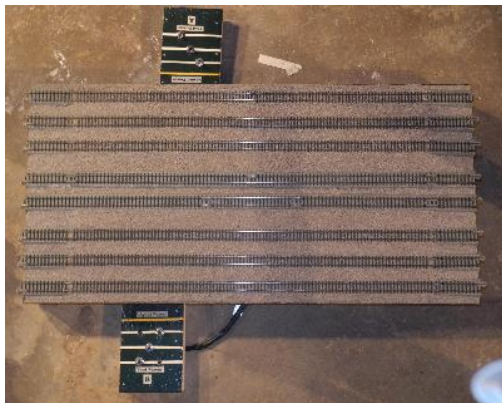
# EXAMPLE YARD MODULE



2x Transitions  
18" each



2x Ladders  
24" each



Yard Modules (any #)  
24" each



# PHOTO GALLERY



Photo: David N. Clyde, Jr.



Photo: Cliff Enz



Photo: David N. Clyde, Jr.



# PHOTO GALLERY



Photo: David Rarig



Photo: David Rarig



Photo: Michael Maloney





# PHOTO GALLERY



Photo: Joseph Martin



Photo: Rob Zatta

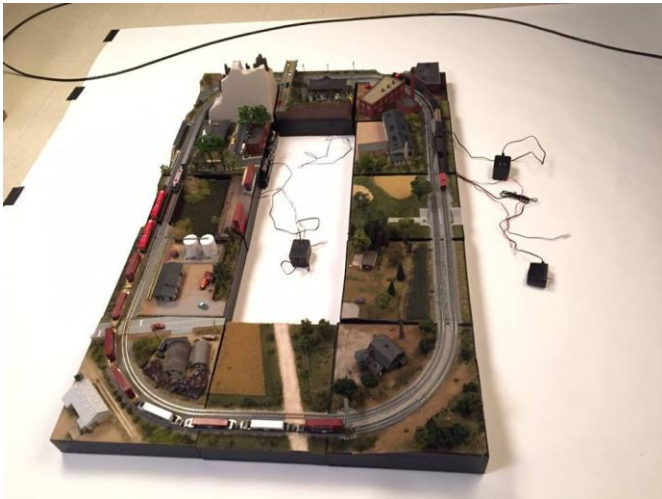
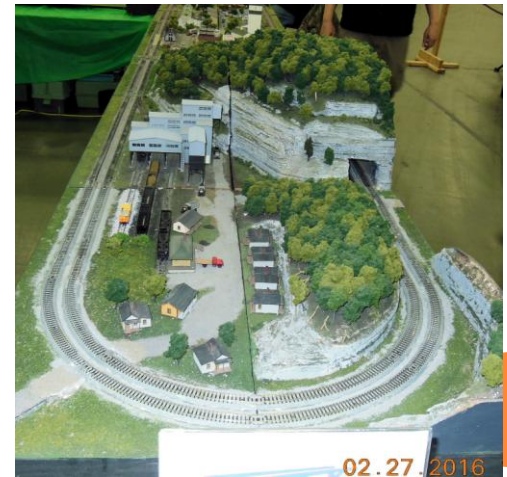
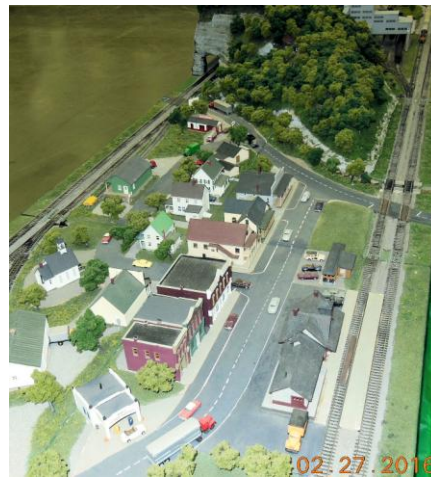


Photo: Model Railroader Magazine



# PHOTO GALLERY



Modules: Middle Tennessee T-Trak

Photos: Stew Winstandley

QUESTIONS?



# VIDEO: WORLD RECORD T-TRAK

- 15.6 scale miles continuous mainline
- Video: [https://youtu.be/ZBUKNHy\\_mCM](https://youtu.be/ZBUKNHy_mCM)
- Statistics:
  - 272 Modules
  - 73 Singles
  - 128 Doubles
  - 26 Triples
  - 4 Quads
  - 27 Junctions
  - 11 Curves or Endcaps



# LINKS AND CREDITS

- Official Site: <http://ttrak.org/>
- Unofficial Handbook: <http://t-trakhandbook.com/>
- T-Kits (commercial kits): <http://www.t-kits.com/>
- T-Trak Wiki: <http://ttrak.wikidot.com/>
- Commercial Kit Vendors:
  - T-Kits: <http://www.t-kits.com/>
  - Masterpiece Modules:  
<http://www.masterpiecemodules.com/>

