

Non-Module Club Participant

Notify the Layout Superintendent of your desire to participate in the show.

Plan on providing help in setting up and/or tearing down the layout. Ask the Layout Superintendent what needs to be done and where your help is most needed. Feel free to check back often.

Bring the following items to the show with you:

- **GRVS Name Badge:**
- **Rolling Stock: Cars and engines all marked for easy identification with your personal code.**
- **Engines need to be in good working order. A show is not the time to make repairs on your equipment.**
- **Tools you may need to make small repairs or fine tune your rolling stock.**

During the show:

- **Set up your trains at the direction of the Layout Superintendent and do so as quickly as you can, so the display has trains running for visitors.**
- **Leave items on the layout at your own risk.**

GRVS NTRAK Participant Show Checklist

Notify the show coordinator of your intent to bring modules. Let the Layout Supervisor know when you plan to arrive and if you are going to be absent for part of the show.

The module owner *MUST* provide and bring *ALL* these items to the show. To be fair to others – please bring all items on check-list.

- **Connecting Track: Bring at least 6 sectional tracks is per module.**
- **Skirt: Skirt must cover entire open space below each module.**
- **Clamps: 2 C-Clamps or quick clamps must be provided with each module. “Deep Reach” type is recommended.**
- **Crowd Control Barrier: A barrier pole or stanchion to allow a rope to be held in front of module at 38 inch height**
- **Power cords: Work with your layout supervisor to determine if you need to bring power cords or power strips to the show.**
- **GRVS Name Badge:**
- **Rolling Stock: Cars and engines all marked for easy identification with your personal code. Leave items on the layout at your own risk.**
- **Tools: Necessary tools to be self-sufficient at the train show. These should include:**
 - **Rail cutters**
 - **Extra rail joiners**
 - **Insulated rail joiners**
 - **Extra joiner track**
 - **Re-railer**
 - **Bright boy**
 - **Flat head and Philips screwdrivers**

Other recommended items

- **Alcohol for track cleaning**
- **Rags to use for track cleaning**
- **Jewelers screw drivers**
- **Small needle nose pliers**
- **Modeling knife**
- **Battery powered drill (bits and tips)**
- **Flash light**
- **Level**
- **Extra track spikes**
- **Glue**

All your items should be marked as to who the ‘owner’ is. A permanent marker works well on most items. Color coding your items work well too, especially on smaller items like rail cars and locomotives.

Your Modules

Module Requirements: Module must conform to minimum NTRAK modular standards. Before a new module (or heavily modified module) can be put into the layout, it must be checked by one of the Module Superintendents. Modules that have already previously been checked and have not been modified do not need to be rechecked.

An NTRAK Booklet that describes the standard is available from the [NTRAK website](#)

- Have all flangeways clear of ballast and turnouts working properly.
- Check wheel gauge and couplers. Try your engines and long cars to be sure everything operates and that you have the proper clearances.
- Have your controls working, clearly marked, and color coded.

GRVS recommended practices (RP) is that the skirt be the GRVS green color. GRVS does have a supply of the green material that can be used to make skirt. It is a GRVS recommended practice to use Velcro as the method to fasten the skirt to the module. Apply the *hook* side to the front of the module and the *loop* side to the skirt. This enables the show coordinator to possibly put a GRVS banner in place of a skirt if your module is the best place to display the banner.

Sometimes we will have an opportunity or desire to share running the trains with children. We have called this our Junior Engineer program. No one is required to allow anyone else to run their train, it is completely at the owner's discretion. The following are general rules to be used when children operate our trains and reviewed with the children.

1. These are trains not race cars. You need to run at a reasonable train speed.
2. You must always pay attention to your train. You should always be able to see it.
3. If a train comes off the track, DO NOT try to put it back on, always ask a club member to help you.
4. If you get tired of running the train or bored for a while, hand your throttle back to a club member.
5. If you have an incident where you cause a derailment, you will be asked to stop being an engineer for a while.
6. You will have a time limit. Please be ready to give up your train when your turn is done.

GRVS T-TRAK Participant Show Checklist

Notify the show coordinator of your intent to bring modules. Let the Layout Supervisor know when you plan to arrive and if you are going to be absent for part of the show.

The module owner *MUST* provide and bring *ALL* these items to the show. To be fair to others – please bring all items on check-list.

- **GRVS Name Badge:**
- **Rolling Stock:** Cars and engines all marked for easy identification with your personal code. Leave items on the layout at your own risk.

- **Power cords:** Work with your layout supervisor to determine if you need to bring power cords or power strips to the show.

- **Tools:** Necessary tools to be self-sufficient at the train show. These should include:
 - Extra rail joiners
 - Tool to remove rail joiners
 - Re-railer
 - Bright boy
 - Flat head and Philips screwdrivers

Other helpful items

- Battery powered drill (bits and tips)Flash light
- Level
- Extra track spikes
- Glue
- Jewelers screw drivers
- Small needle nose pliers
- Modeling knife

All your items should be marked as to who the ‘owner’ is. A permanent marker works well on most items. Color coding your items work well too, especially on smaller items like rail cars and locomotives.

Your Modules

Module Requirements: Module must conform to minimum T-TRAK modular standards. Before a new module (or heavily modified module) can be put into the layout, it must be checked by one of the Module Superintendents. Modules that have already previously been checked and have not been modified do not need to be checked.

T-TRAK has extensive documentation that describes the standards which can be found on the [T-TRAK website](#) and the GRVS website.

GRVS requires Kato connectors as the mechanism for connecting the wiring bus. It is helpful if some of your modules have power drops so we have consistent power to the tracki

Check wheel gauge and couplers. Try your engines and long cars to be sure everything operates and that you have the proper clearances.

GRVS NTRAK Layout Supervisor

Prior to Show:

The Layout Supervisor is chosen by the leadership team.

Contact the participants who signed up and make sure they are coming and aware of the setup time and the location. Also check that they will be there for the entire show, or when they intend to be absent so that the layout has enough operators.

Print a copy of the Layout Plan from the GRVS Website

Show/Layout Setup:

Arrive early to allow 3 to 4 hours of setup time.

- Contact the event show coordinator and locate the space they have for the layout.
- Double check the Measurements of the space and confirm that the plan will fit in that space. (The hotel or exhibit hall drawings are often quite optimistic Note locations of pillars that might interfere with the layout.)
- Check the location of electrical outlets. Avoid having cords across an aisle if possible. Have tape available to tape down cords in aisles as needed. In some exhibit halls they can place outlets overhead to suit.
- As people start arriving, have them move their modules to the space where they will be setup and start preparing their module(s).
- Using the layout drawing, start arranging the modules into the general layout shape without clamping them together.
- Adjust legs so that the module is level and the rail height is 40 inches. (It is easier to measure to the roadbed -- be sure everyone is measuring to the same height.)
- Bridge modules: 2ft and 4ft bridge modules can be useful in case some module doesn't show, or if the module lengths that are available don't come out even. The bridge makes a good 'duck under' entrance to the operating pit.

Once the layout shape has been defined, the following tasks can be started:

- Pick a starting *module* and level (verify 40 inch height).
- Working from the starting module, clamp and level the next module. An 'eyeball' check for dips, humps, zigs and zags is also helpful. A team of two or three people can be quite efficient at this.
- Keep working around the whole layout until the whole layout is clamped together.

Once the whole layout is clamped together, the following tasks need to be done:

- Mark block boundaries if the layout requires multiple blocks

- **Run the power cords around the layout as needed.**
- **At the direction of the Power Coordinator(if a different person) Connect all Red, Blue, and Yellow wire connectors at each module joint. Except at marked block boundaries.**
- **Have the module owners install connecting tracks.**
- **If DCC is being used, install the loconet wires before hanging skirts.**
- **Test all lines for shorts and problem solve as needed.**
- **Have the module owners install (hang) skirt on their modules.**
- **Install backboard if needed.**
- **For public shows a barrier about two feet out from the layout is recommended.**
 - **Arrange crowd barrier poles around layout: usually 24 inches in front of modules. 36 inches if there are handicapped members present.**
 - **Feed rope through poles to form the fence.**
- **Connect the DC throttles and/or DCC Command Station or assign some to do so:**
 - **Determine where power is coming from.**
 - **Install GRVS GFCI pigtail extension cord at power source.**
 - **Run extension cord (if needed) and tape to floor.**
 - **Route power around layout using GRVS power cords and/or member supplied power strips.**
- **Throttles:**
 - **Verify Lines:**
 - **Clean all tracks.**
 - **Verify all throttles and tracks are functional (test run locomotive to verify).**
 - **Troubleshoot and fix any problems before show time.**
- **Clean / Organize layout area: make presentable to public.**
- **Store excess equipment under the modules**

It is the goal to have the layout running trains on all three lines from the beginning of the show to the end of the show. It is preferable to have one track going the opposite direction of the other two.

It is the responsibility of the Layout Supervisor to coordinate the running of trains so people who have trains to run are able to do so.

If someone's train is not running well, the Layout Supervisor can ask that person to remove the train from display so visitors can enjoy trains that are running well.

Show Winding Down:

Be sure that everyone knows when layout tear down will start. One person can't pull his module out ahead of time and leave without advance warning and planning.

The layout shouldn't be torn down while other exhibits are still open. DO NOT take down early unless the show allows it. Take down is pretty much opposite of setup.

- **15 minutes before show ends (or at the announced time) gather for a group picture.**
- **10 minutes (or more) before show ends start removing unfastened details from modules**

Show Teardown - DO NOT UNCLAMP MODULES until designated to do so.

- Remove rope crowd barrier.
- All trains moved to location where they can be taken off
- Shut off AC power.
- Remove skirts - either fold neatly and hang on sky board or put them away.
- Remove connector tracks before unclamping modules.
- Remove stored things under modules.
- UNCLAMP modules and prepare for transport.
- DCC team removes loconet wires, clamp on boxes and AC adapters. Bring them to designated location.
- Remove power cords and AC wiring.
- Disconnect wiring connectors at each module junction. If you find borrowed CJ-PP adapters return them to their owner
- Make sure equipment is returned to the proper owner.
- Loadup - Assist out of town guests as needed and then process GRVS modules.
- Verify area is clean before leaving.
- Police the area to be sure nothing is left behind

At a following club meeting discuss *likes* and *dislikes* to help with the next show effort.

GRVS T-TRAK Layout Supervisor

Prior to Show:

The Layout Supervisor is chosen by the leadership team.

Contact the participants who signed up and make sure they are coming and aware of the setup time. Also check that they will be there for the entire show, or when they intend to be absent so that the layout has enough operators.

Print a copy of the Layout Plan from the GRVS Website

Show/Layout Setup:

Arrive early to allow about 2 hours of setup time.

- Contact the event show coordinator and locate the space they have for the layout.
- Double check the Measurements of the space and confirm that the plan will fit in that space.
- Check the location of electrical outlets. Avoid having cords across an aisle if possible. Have tape available to tape down cords in aisles as needed. In some exhibit halls they can place outlets overhead to suit. Locate circuit breakers and light switches.
- Set up tables per the published layout plan.
- Put on Table Cloths.
- As people start arriving, have them move their modules to the space where they will be setup and start preparing their module(s).

- Adjust legs so that the module is level and the rail height is 3 1/4 inches. Bridge modules: Occasionally a bridge module may need to be added to make the layout connect properly.
- Working from a starting module, connect and level the next module. An 'eyeball' check for dips, humps, zigs and zags is also helpful. A team of two people can be quite efficient at this. Make sure power connectors are able to be connected and are color coded. Assess for additional power drops and add as needed.
- Keep working around the whole layout until the whole layout is connected together.

Once the whole layout is connected together, the following tasks need to be done:

- If DCC is being used, install the loconet wires.
- Test all lines for shorts and problem solve as needed.
- Install backboard if needed.
- For public shows a barrier about six inches out from the layout is recommended.
 - Install the GRVS clamps on the tables
 - Feed rope through poles to form the barrier.
- Connect the throttles or assign someone to do so:
 - Determine where power is coming from.
 - Run extension cord (if needed) and tape to floor.
 - Before table cloths are put on, route power around layout if needed using member supplied power strips or the GRVS cords.

- **Throttles:**
 - **Connect throttles as per layout plan.**
 - **Verify Lines:**
 - **Clean all tracks.**
 - **Verify all throttles and tracks are functional (test run locomotive to verify).**
 - **Troubleshoot and fix any problems before show time.**
- **Clean / Organize layout area: make presentable to public.**
- **Store excess equipment under the tables.**

It is the goal to have the layout running trains on all lines from the beginning of the show to the end of the show.

It is the responsibility of the Layout Supervisor to coordinate the running of trains so people who have trains to run are able to do so.

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Show Winding Down:

Be sure that everyone knows when layout tear down will start. One person can't pull his module out ahead of time and leave without advance warning and planning.

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- **15 minutes before show ends (or at the announced time) gather for a group picture.**
- **10 minutes (or more) before show ends start removing unfastened details from modules**

Show Teardown - DO NOT DISCONNECT MODULES until designated to do so.

- **All trains moved to location where they can be taken off**
- **Remove clamps and rope crowd barrier.**
- **Shut off AC power.**
- **Remove stored things under tables.**
- **Disconnect modules and prepare for transport.**
- **DCC team removes loconet wires, DCC boxes and AC adapters. Bring them to designated location.**
- **Remove power cords and AC wiring.**
- **Remove Table Cloths - fold neatly and place in container.**
- **Make sure equipment is returned to the proper owner.**
- **Loadup - Assist out of town guests as needed and then process GRVS modules.**
- **Verify area is clean before leaving.**
- **Police the area to be sure nothing is left behind**

At a following club meeting discuss *likes* and *dislikes* to help with the next show effort.

Show Coordinator

A schedule with all pertinent show information is usually kept on the GRVS website. The Show Coordinator may seek out show opportunities and keep in contact with previous shows we have done to maintain our participation.

- **Publicize the show to the members at meetings and with emails and/or phone calls as needed.**
- **Based on available modules that have signed up, figure out a layout plan.**
- **Make drawing of layout plan and post it on website.**
- **Contact the show coordinator and arrange a space for the proposed layout.**
- **Include the layout size and additional space needed for crowd control barrier**
- **Request number of tables needed.**
- **Final Layout plan: Have a layout plan made up ahead of time. Copies should go to the Layout Supervisor.**