

## Module track ideas

1. Our current exclusive use of K track presents many issues. While K track is a marvel of German engineering, its track connectors do not stand up well to repeated installation and removal. Bending of track during installation also causes problems. At shows, two or three hours have often been spent getting the layout running properly. Even then gaps in the track or humps can cause trains to uncouple or derail. K track isn't stocked at local dealers, creating the risk of our not being able to operate at all if a needed track section is broken and there are no spares.
2. It has been suggested that we replace all module track work with Marklin C track. C track is designed to stand up to frequent handling.
3. Because the geometry of curves differs between C and K track, the scenery on the four curved modules would have to be entirely redone to accommodate installation of C track curves. That seems like a lot of unnecessary work.
4. Here is a solution enabling a combination of K and C track:
  - Leave the present K track curves in place just as they are.
  - According to my quick measurements, the curved modules have 25 cm of straight track on each side of the curve.
  - Marklin makes a C to K track connector, stock number 24922. This piece is 180 mm in length.
  - The 250 mm total length could be made up as follows: 1 24922 @ 180 mm plus one 24071 straight @ 70.8 mm. This is awfully close to 250 mm. Assuming that the curves are all laid out similar to the one I measured, we would need four of this combination for each module (two for each track), for a total of 16 overall for the four corner modules.
  - Assuming a 48" (1219.2 mm) length for the straight modules, the following C tracks are very close:
    - 6 24172 straights @ 171.7 mm
    - 1 24188 straight @ 188.3 mm
    - total is 1218.5 mm
  - If these straight tracks don't fit perfectly, existing small segments of K track could be used at either end to create the proper fit. Once this is determined the K track and corresponding 24922 connector would be permanently mounted to their modules. Straight track pieces would be removed as necessary to facilitate break down of the modules. The gap between track sections would not necessarily have to occur exactly at the gap between modules.
5. Tradeoffs:
  - Realism of K track vs. ease of quick assembly and take down
  - C track doesn't have as many track lengths as K track, so the initial fitting of track could be challenging.

- The use of C track could allow digital power to be hooked up. While the railroad is somewhat small right now for two trains on one track, this could be done. Also, digital would enable locomotives with horns, etc... to display to their full potential. In addition to the creative scenery we already have in place, train sounds can also entice visitors to linger at the layout. A DPDT switch could allow one to switch between Marklin digital and Marklin regular AC operation.
- The railroad could also be wired so that either DC or AC trains could run on either loop. The modules' display potential can be maximized when trains are running on both loops. We've typically had few DC trains present, causing one DC train to run all day, or nothing at all to run on the outside loop when that one loco needs a rest. Trains parked for display purposes on the outer loop provoke visitor questions like "Why isn't that train running?"
- Without having priced it out, C and K track is likely similar in cost.
- To accommodate DC power, C track would need to be modified underneath to isolate the running rails.