Sunrise Herald

June 2021 Volume 14, Number 6

Sunrise Division Officers

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Asst. Superintendent……Dennis Hagen
Secretary……Bob Hochstetter
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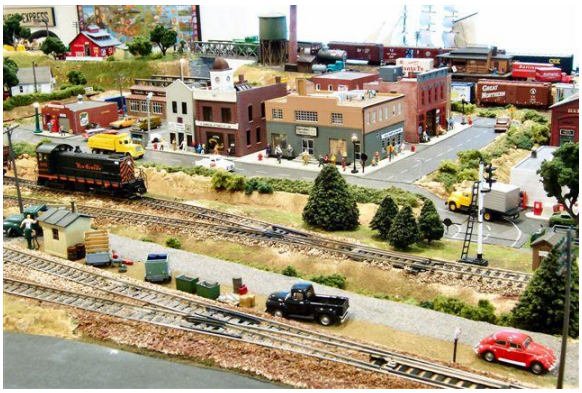
In the Herald

Layout of the Month

This month's photos are from the late John Kerbaugh's layout the "Lake City" a BN branchline, set in the northwest in June 1972.



From the Editor

If you read this column last month, you know that I encouraged everyone to participate in the Show 'n' Tell portion of the monthly meeting.
Well, my request was answered in a big way. A total of seven participants showed examples of passenger rolling stock. Now, I would like to encourage you again to participate. July's theme is "Depot". Show us a depot on your layout, a depot that you are building or even a prototype depot that you find interesting or that you wish to model someday.
As always, please send me a photo for the Herald and a caption or explanation to include with it. Don't worry about your writing skill, that's what an editor is for.

Bob

June Meeting Notes

Signing in to the virtual Zoom meeting began at 6:30 p.m. The meeting began promptly at 7:00 p.m. with 22 participants in attendance. The meeting began with Announcements followed by Tool Time, the presentation by Stu Jones, and Show 'n' Tell, all of which are reported on in greater detail in this edition. The meeting concluded at 9:00 p.m.

Next Meeting

All future Division meetings will be via Zoom until the COVID-19 guidelines allow us back into Holy Love Lutheran Church.

The next meeting will be Thursday, July 1, 2021.

Log-in will start at 6:30 p.m.

The meeting will start at 7:00 p.m.

URLs of the Month
https://www.youtube.com/watch?v=Qxs1meOAkCA The Pikes Peak Visitor Center
https://www.youtube.com/watch?v=XKplgSey1a4 Pikes Peak Summit Complex

Upcoming Mini-Clinics

Steel bridge gusset plates-Stu Jones

Alternate wiring for Diamond Scale Turntable-Gary Myers

Upcoming Tool Time

Maintaining the (Model) Railroad Empire - Track Tools - Dave Clifford

Upcoming Show 'n' Tell Themes for 2021

July – Depot
August – Scratchbuilt Model
September – Roundhouse/Turntable
October – Covered Hoppers
November – Maintenance of Way
December – Snow is the Season

Announcements

July 24 & 25, 2021 Spring Creek Model Train Show & Open House, Deshler, NE

September 10 & 11 Rocky Mountain Regional Convention, Pueblo, CO

The Manitou and Pikes Peak Cog Railway has reopened with new track, trains, depot and cog. The new visitors center is expected to open June 24, 2021.

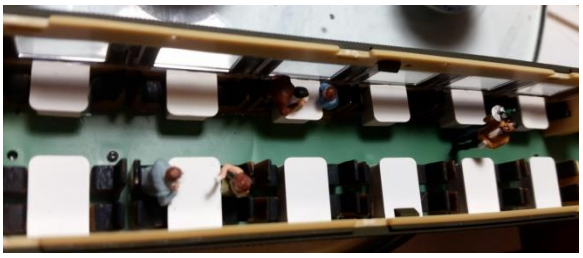
Coming attraction

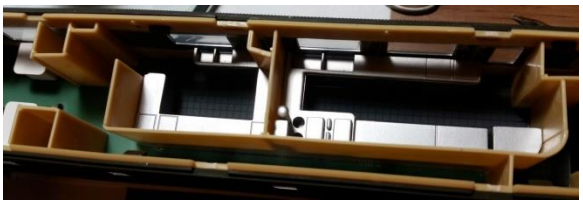
We are working on a layout tour. It will take place on Saturday, August 14th. So put it on your schedule in pencil for now. Specific information will be coming next month in the Herald.

Show 'n' Tell

June's Show 'n' Tell subject was Passenger Rolling Stock. There were seven submissions.

First up: Gary Myer's Walthers Heavyweight Dining Car for the Burlington/Exposition Flyer (1939-1949). The photographs of his model show the painted seats, butler painted in the proper EF color and Preiser figures added to the cars. Gary noted that this was a joint train for the CB&Q-D&RGW-WP and that the D&RGW did not supply any dining cars for the train.





Rich Flammini showed his CN sleeper. This is a Branchline model that is nicely detailed. He chose it because it is a Canadian National 8-1-2 Pullman that he likely saw running into Chicago on the Grand Trunk International train from Toronto. Because of the underbody detail, he tackled it when he was recovering from surgery with plenty of time to do it right.

Stu Jones showed his scratch built Boreas Diner Lounge.

Adam Crews submitted the following:
"Here is my passenger consist for Show 'n' Tell tonight-The Burlington California Zephyr 11 car set I've been modifying. I consider it more of a modern Excursion Consist that's been de-skirted. Those darn Amtrak maintenance people were tired of them.
I still have interiors to complete and add people and lighting. I've decaled all of them to names that would have run on the Zephyr and of cars that were still serviceable when Amtrak took over."









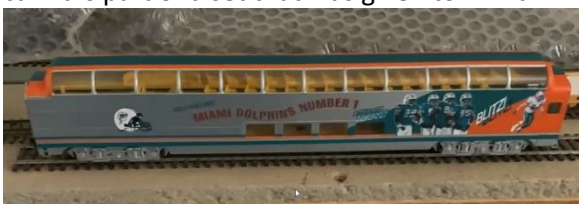
Adam also showed the following:

Top: Amtrak Great dome lounge 10031 named Ocean View, a Bachmann silver Series Budd car.
Bottom: An older Bachmann to be repainted as Amtrak 10030 "Mountain View".

Larry Stevens presented his RPO with postal clerks sorting mail; coach that has the hall, main seating and bathroom separately lighted; and observation with the main seating area and dome lighted separately. All three cars are tethered together using one TF4 decoder and custom current keeper.

Ken Cruise submitted photos of his observation car. He detailed the car to represent the prototype built by Budd in 1957, numbered 5002 and named the "Topeka". It was rebuilt in May, 1990 and renumbered #51. It was last photographed in June, 2014 near Seattle. After the BN merger the vestibule was enclosed and renumbered #6.

William Boorman showed his Miami Dolphins car. It is part of a set that was given to William.



My own submission was the following:

This model represents the Missouri Pacific's one and only Slumbercoach, the Southland, built by the Budd Company in 1959.

The Slumbercoach is an 85-foot-long, 24 single room, eight double room sleeping car. To maximize the number of rooms per car, the designers chose a duplex or staggered design for the single rooms such that every other room was accessible by a small flight of steps. This allowed beds in the car to either overlay or underlay the room in front of it. The Slumbercoach contained a central aisle flanked on each side of the car by one-person and two-person rooms with one or two narrow, six-foot-long beds provided with basic sheets and blankets. Each room featured a fold-away wash basin and private toilet similar in design to contemporary standard Pullman, but on a smaller scale.

Other types of economy sleeping car did not have the capacity of the Slumbercoach: sixteen roomette-four double bedroom car slept only 24, while the traditional sixteen section tourist Pullman slept 32. Thus, the Slumbercoach, sleeping 40, allowed railways to offer coach passengers private sleeping car accommodation at little more than coach fare.

Current location: Museum of the American Railroad, Frisco, Texas.

Ref: Wikipedia

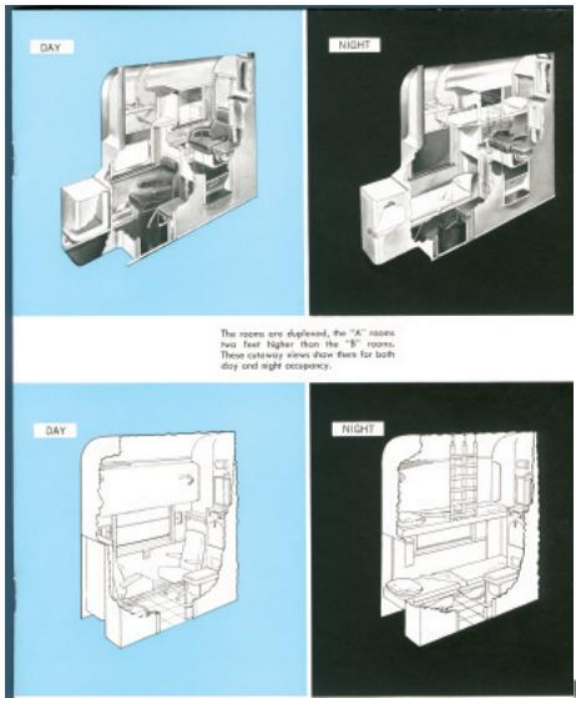


Illustration from the original Budd brochure showing the arrangement of the compartments.

Bonus Show 'n' Tell

David Clifford provided the following for inclusion in this issue of the Herald.

"On April 24, 2021, I attended virtually (via Zoom) the Pacific Coast Region NMRA Annual Convention Sugar Pine Centennial 2021 in Fresno, CA and purchased a Convention Car as a

memento.

This year's convention car is a custom-made resin casting flat car with Kadee couplers and wheel sets. The Sugar Pine Lumber Railroad owned six of these all-steel moving cars, numbered 1 through 6, to transport its electric yarders and loaders. The yarders pulled themselves onto the cars by means of a brow log and cable hook-up. Yarders are a critical link in the chain of tools required to get lumber from a mountainside to a loading area, where it can be transported to the mill. See page 101 in Rails to the Minarets, by Hank Johnston, for a photo of the prototype.

This HO-scale ready-to-run extremely limited edition cars was made for the convention by our own Milton SanSoucie. A resin casting crate load with the Sugar Pine Centennial 2021 logo is included and may be displayed as a load on or off the car. The weight of the car is 2.5 oz, 3.9 oz with crate. A separate decal sheet with car numbers 1 through 6 is also included, so you can number it as you wish.

Milton explained how he made the cars during a recent TSG Live Crew Lounge podcast (starts @ 54:50)"

[https://www.youtube.com/watch?v=xWoDrxHafjk]'

See - http://www.pcrnmra.org/conv2021/index.html#convcar

Tool Time

Gary Myers demonstrated the Glue Looper, a micro glue applicator for applying a very small amount of thin CA or low viscosity model cement.

Available from Micro-Mark for $16.95/package

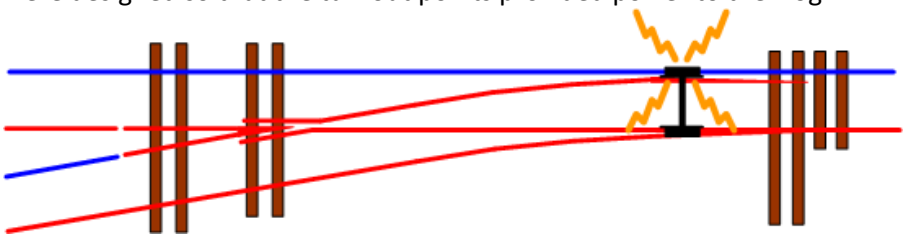
V2 Pack of 12; 3 sizes
V4 Pack of 7

Clinic

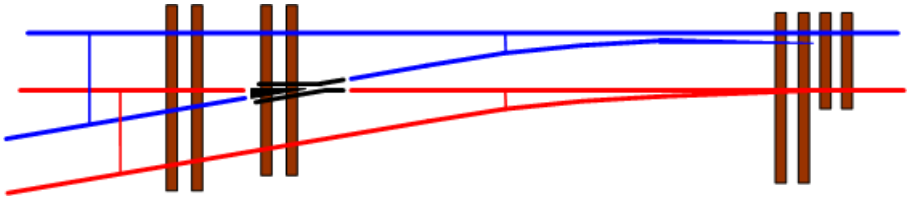
Stu Jones presented the clinic **"DCC Wiring Traps"** reproduced here in its entirety.

Although DCC control is much easier than DC control and the layout wiring is much simpler, there are still situations that need to be recognized to prevent unforeseen short circuits. These include turnout wiring, return loops, crossings and turntables. Throughout this clinic I provide track and wiring examples to both tracks with contrasting colors (typically red-blue or red-black) so we can observe the polarity.

Most of us have heard the term 'DCC friendly turnouts'. But what does that mean? Some early turnouts were designed so that the turnout points provided power to the frog:

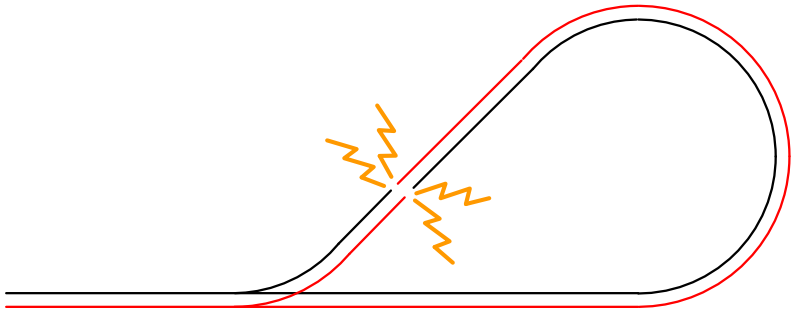


The problem with such turnouts is that metal wheels can briefly bridge the stock rail with a turnout point, as shown above. DCC power circuits can be very sensitive to brief shorts like this and often include internal breaker protection to avoid damaging components. Such interrupts can be quite annoying to overall operation. Plastic wheels eliminate much of this nuisance, but they tend to pick up dirt more quickly that metal wheels, and do not have as good a rolling quality. A DCC-friendly turnout is wired like this:

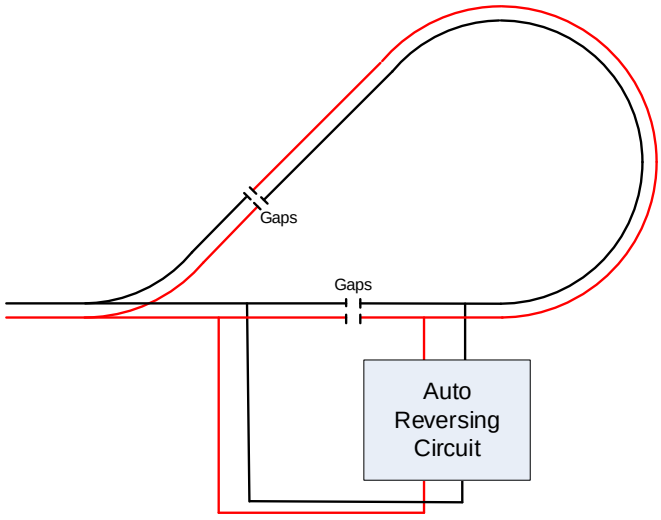


Obviously, the frog now requires a separate electrical connection, but many turnout machines, such as Tortoise, provide contacts to power the frog. Hand-thrown turnouts require a separate wiring mechanism. But low-number frogs (#4, 5 and 6) can often be left unpowered since most modern locomotives have enough powered wheels that they won't lose electrical contact.

The simplest wiring occurs in a point-to-point layout where all tracks will have the same polarity. Sooner or later, you will want to turn the locomotive or the entire train, requiring a turnback loop, a wye or a turntable. Now we introduce problems:

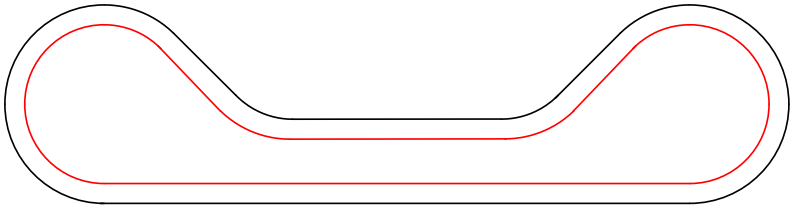


The turnback loop shown in the diagram above traces the track polarity around the loop. Eventually it will encounter a short. This is unavoidable. The best solution is shown below:

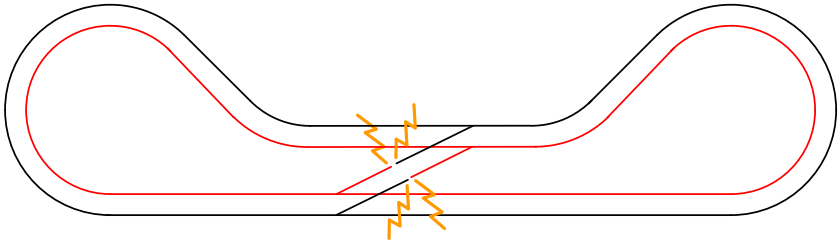


The loop is gapped at both ends and an auto-reversing circuit is connected to the loop. When a locomotive or other wheel set encounters the short the reverser quickly reverses the polarity and the train continues as if nothing happened. Electronic reversers can be purchased for about $25-$30. A cheaper solution is to use a DPDT toggle, but this requires the operator to remain alert. Changing polarity doesn't interrupt DCC direction because the decoder determines the direction. Caution: don't use an auto-reverser with DC. Changing the polarity will also reverse the locomotive instantly which is punishing on motors and may derail the train behind it. A second caution: make sure the track section between gaps is longer than your longest train. You may have lighted cabooses or passenger cars that will generate conflicts

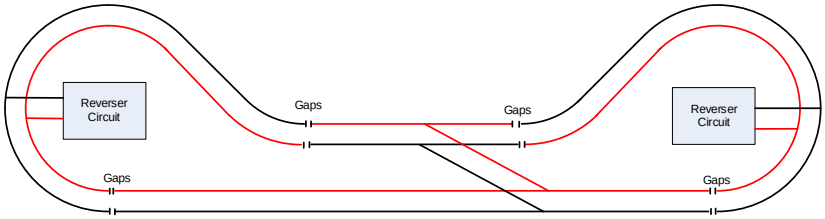
This is a well-published situation and most modelers are aware of it. However there are more complicated trackplans that may disguise the loop. Consider the "dogbone" trackplan below:



Everything looks ok until you decide to add a crossover:

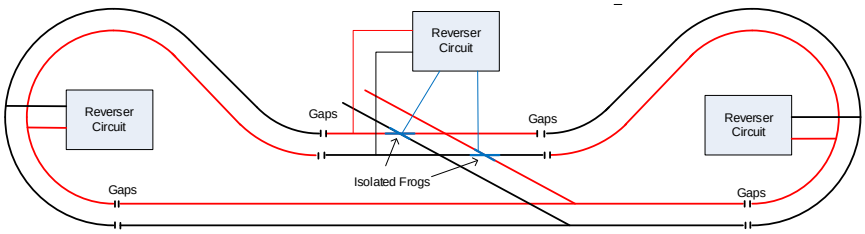


Oops! A polarity problem manifests itself. A good solution is similar to the turnback problem:



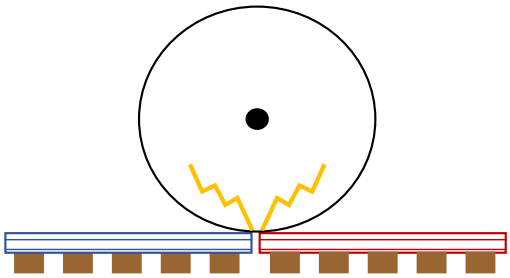
The auto-reverser comes to our rescue. The April issue of *Model Railroader* also discussed this problem, but placed the auto-reverser on the straight section. But the straight section may be very long with multiple crossovers and multiple trains running. Fribulation (rapid reversing) conflicts may arise.

Another trap is a crossing from one track across another:

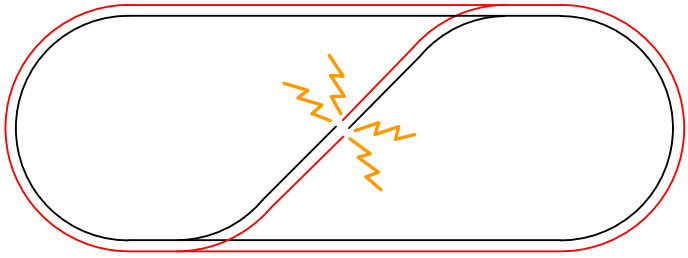


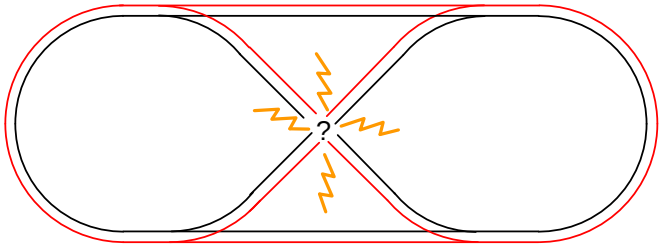
This may not be a problem if the two routes of the crossing are insulated from each other. We will discuss crossing wiring below.

Any metal wheel crossing a gap may trigger the reverser:

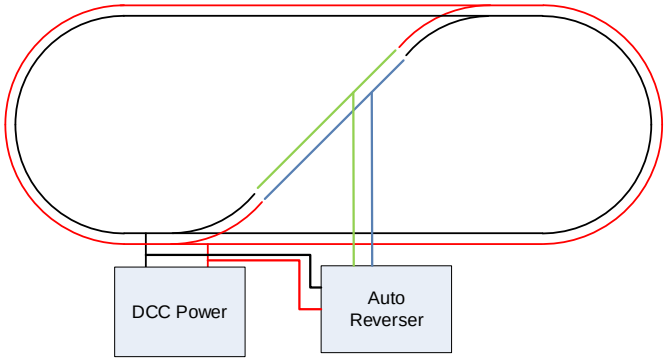


The oval trackplan is simple enough, even mulit-track and very large ovals, but there are hidden temptations here. Consider the following variation on the 'dogbone':

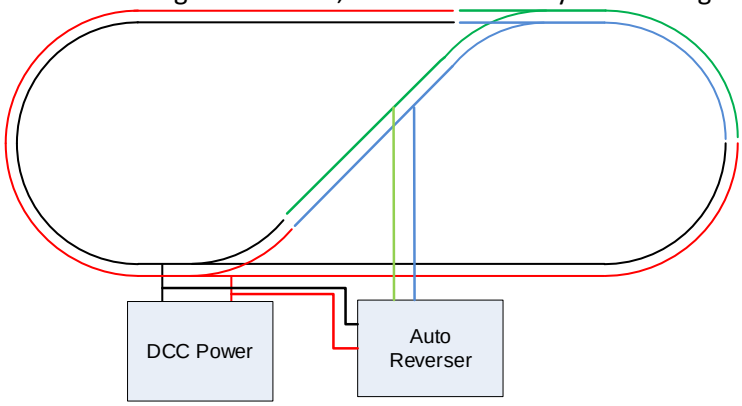




This is similar to the ‘dogbone’ crossover, but not so obvious. Also the crossing may be a problem. More about that later. Solutions include:

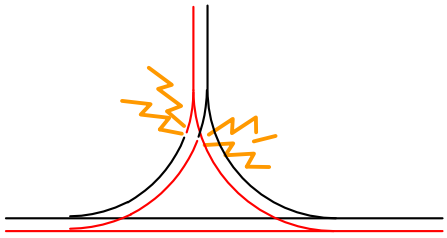


While this is a good solution, the crossover may not be long enough. I prefer the second solution:

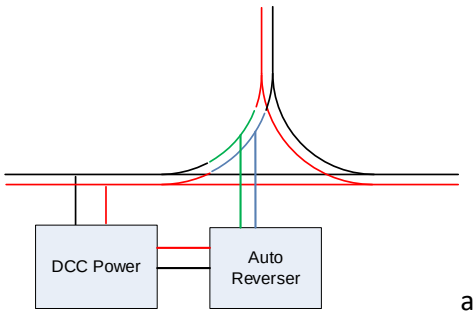


The reversed section is now longer than your longest train.

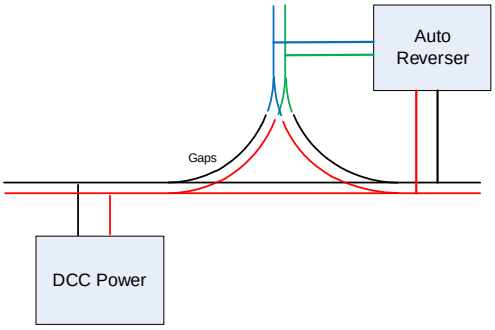
The Wye is a good method for reversing locomotives but it too presents problems:



There are two solutions now:

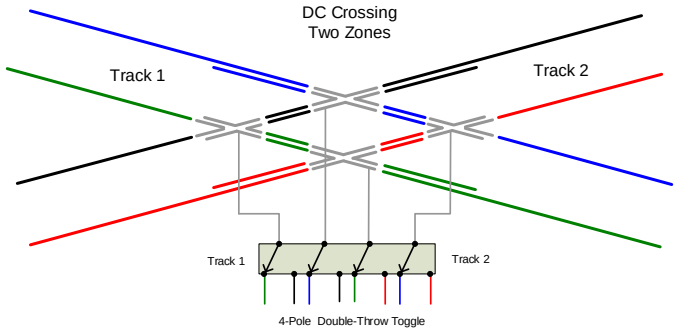


and

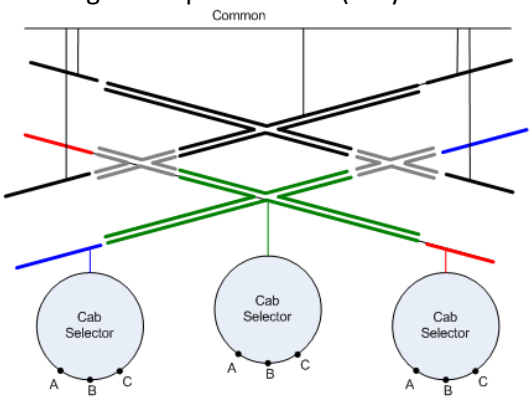


I like the second solution better because it can accommodate a long train. Also the leg may not be a stub but a longer branch line.

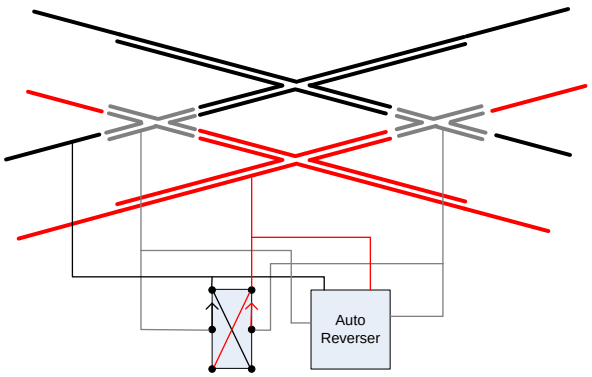
Now about crossings. These can be a problem both in DC and DCC. Since the two routes can be connected to different cabs in DC ,control is complicated and may require a fur-pole, double-throw toggle:



Many decades ago, this problem was addressed in *Model Railroader*. The solution was to treat the crossing as a separate block (they labeled it an X-section) with a separate cab selector for the crossing:



Crossing wiring is much easier with DCC. If you use commercial crossings, the two routes will probably be isolated, but your choice may be limited to wider angle crossings. For crossings with #6 or #8 angles, matching turnout frog angles, you may be reduced to scratchbuilding:

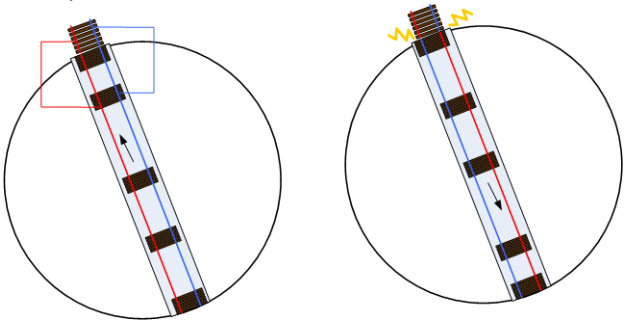


Alternate Controls

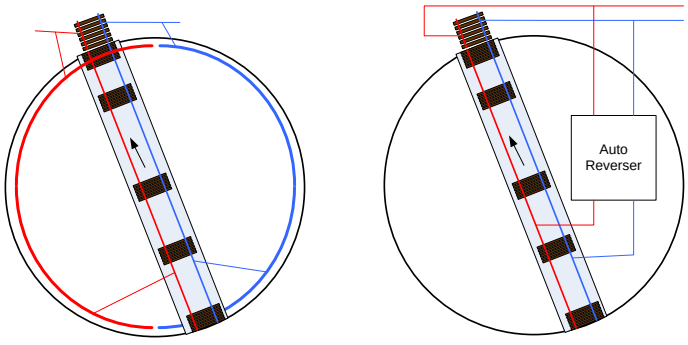
Here you may leave the frogs unpowered, but these crossings may be on the mainline so frog power may be desirable. You may use either an auto-reverser or a DPDT toggle. The Toggle will require an alert operator, so I recommend the reverser. This is one situation where the auto-reverser will work for DC.

Another variation is the single or double slip-switch that is a crossing with multiple routes. I will not discuss them here, but the wiring is remarkably simple, at least for DCC. Frog polarity can be controlled by the turnout machines.

Finally the turntable. Note thant when the table is rotated 180^{o} The polarity reverses:



There are several solutions:



Solution 1: Wipers Solution 2: Auto Reverser

The first is to use a conductive pit rail with a wiper to convey current to the turntable rails; the second is to use an auto-reverser. If you use the pit rail, the are several caveats: Make sure the gaps are approximately evenly spaced between the two active ends of the table (poorly shown in the diagram) and there is a dead area between the electrified rails so that the wipers cannot bridge the electrified rails.

I have discussed auto-reversers a few times. Below is a photo to a unit offered by Digitrax in the $30 range. Circuitron and others offer similar units for about the same price.

I have not discussed mixing DC and DCC on the same layout. It is possible, but DC wiring is much more complicated, particularly if you have multiple DC cabs requiring cab control. It can be simplified a bit by treating DCC as another "cab". When I converted my layout to DCC, I made provisions to use DC also, but only provided for one cab. However in the 20+ years since I made the conversion, I have never used the DC capability.

Oops