



NEWSLETTER

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Current Central Station 3 Version – 2.4.1 (0)
Current Central Station 2 Version – 4.3.0 (11)
Current Mobile Station 2 Version – 4.1

We have just returned from the National Garden Railway Convention in California where we displayed LGB trains and revealed our new show booth! We also had a team at EuroWest the following week, and now we are gearing up to go to the NMRA National Train Show in Grapevine, Texas. We hope to see you there!

I'll begin by saying there is an update to the CS2/CS3. While this update does not change the software version number in the CS, it addresses an issue with Mobile Stations that are stuck in the German language. When this update is performed on a Mobile Station using an updated Central Station, the software version will be 4.1. This update will fix the German language issue.

Our first article is a narrative of Märklin accessories while our second article revisits the layout in the May/June 2023 digital newsletter to create events and do programming.

Marklin H0 Accessories

With the articles I have written lately about H0 accessories, I have commented on their usefulness. What I keep coming back to is most, if not all, of them are really are not practical. I am not saying they are a waste of money because they are some of the coolest items that any model train manufacturer has made. All I am saying is while they operate like the real thing, they cannot be used to perform tasks like the real thing. Below I have composed a top 10 list of accessories that have no practical purpose but are too cool not to have on your layout.

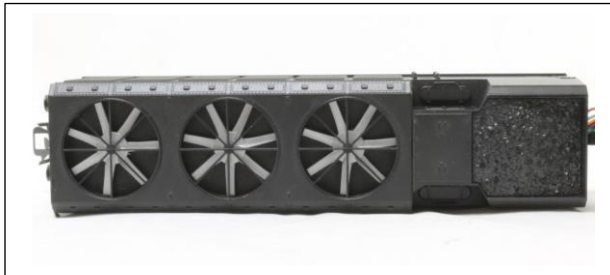
10. Catenary

The modern catenary system is a great leap forward from the old style. The modern catenary is much easier and faster to set up with the 70011 Mast Positioning Jig Set. This jig is pretty much essential and well worth getting. While many might take offense at this being on my list, it is because we do not recommend powering a locomotive from the overhead wire. The contact patch of a pantograph is too small for reliable data transfer, and since electricity cannot be seen, there is no reason to power it. I believe catenary looks great and finishes off your layout, sort of like a white picket fence in front of a house, it adds a lot of “curb appeal”.



9. Condensation Tender Locomotives

Though not available as a separate accessory, these are some of the greatest models that Märklin has made. The fans in the tender operate and if you have a model that has sound, you will notice that it almost sounds like a diesel locomotive. This was a very nice detail and very thoughtful on the part of the Märklin engineers. I admit that I thought it was a mistake the first time I heard one but then I realized the sounds were prototypically correct. This is because the steam is not released to the atmosphere, it gets channeled back to the tender to be condensed into water. So, there is no “Chuff” for these models.



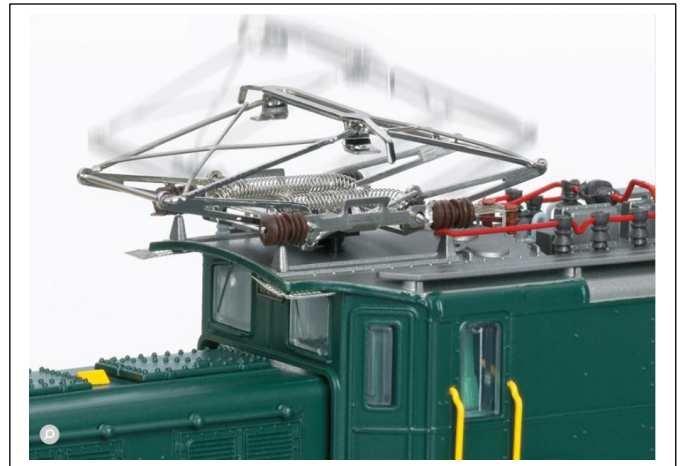
8. Schimmel Piano Car (49981)

When this car came out in 2004, it was very impressive. It had great sounds and played four short songs on a piano. Even though the sound quality was great, one must wonder why a piano needed to be played on a model train layout. Short story, it was a great step forward in showing sound quality for H0 trains and a preview of things to come.



7. Automatic Pantographs

Without reciting my viewpoint of catenary, the automatic pantographs go hand in hand with catenary. It is fun, and prototypical, to watch the mechanisms raise and lower. They have been well thought out as one can still take a locomotive body off the frame for maintenance.



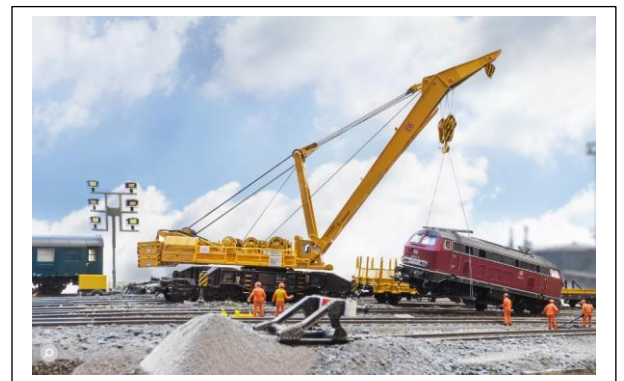
6. Rotary Snow Blower

While these are nice accessories, I doubt anyone has plowed snow from their HO layout. They have amazing detail and sound in these blowers and the blade assembly on the front will rotate in either direction, along with headlight/work lights. You can also have a smoke generator installed.



5. Rail Cranes

The digital rail cranes from the Goliath to the 57t Ardel and the smaller rail cranes are a wonderful accessory. They have many features, and some have lights and sounds. While it is not very practical to rig up a locomotive to the hook and put it on the track after a derailment, these are fun accessories to operate.

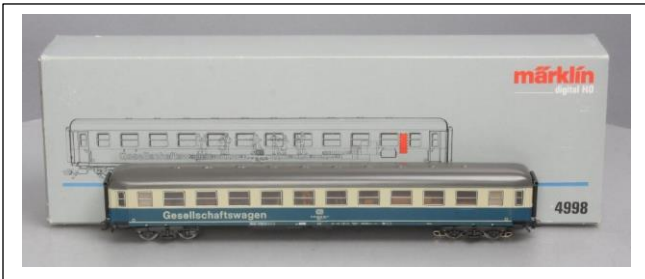


4. Animated Passenger Cars (4998 – 4999)

The “Dance Car” and “Waiter Car” are very sought after collectables. As far as I know, they were the first digitally operated animated cars. The 4998 Dance Car would play music and figures would dance around inside the car. Although the technology of the time meant that the music was made from electronic devices, not high-quality audio machines.

The Waiter Car is a Panorama car where the waiter will travel down the aisle. When he gets to the end, he turns around. Then he will travel forward once activated again.

Again, these are great accessories. I think the Dance Car would be a great re-issue with a modern Micro SD card like the Party Car (43948) from 2017. Imagine being able to listen to your own music with modern sound quality in this car and have the figures dancing too! I hope someone is listening in Germany and remember, you heard it here first!



3. Catenary Maintenance Rail Car

There have been five versions of this model. There is wonderful detail and the engineering that went into it to make the platform operate is worth recognition. To watch it operate is great, although technically it would be blocking a line of track if used prototypically.



2. Robel Powered Track Car

This is one that is well worth the price. The detail on and in this model is amazing. There are many light functions and figures in the cab. If one looks closely, there are tools on the table in the cab, dials on the control panel for the operator and a crane control panel. This is one of the most detailed interiors in a cab. The best part is the crane boom will operate, although it is a set pattern of movement, it looks very realistic.



1. Ballast Tamping Machine (39935)

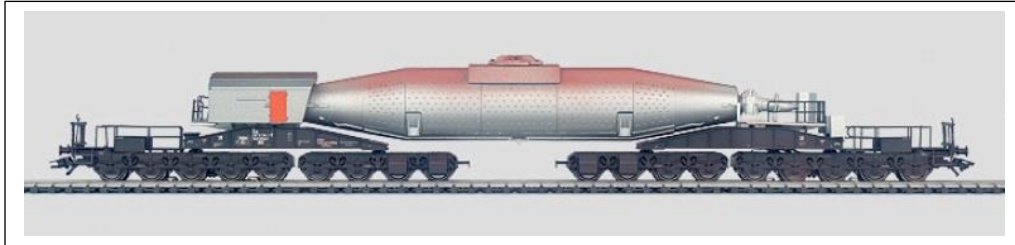
This model is the coolest thing by far. The Unimat Ballast Tamping Machine has many light functions, sounds, automatic pantograph, figures inside, detailed cabs and yes, the tamper operates. The spikes do not drive into the ballast, but they simulate it. When we take this to shows, people stop to watch in amazement while it moves along like an inchworm. When in tamping operation, it runs slow, just like the real thing, so, this means it will be the only thing operating on the line, but what a show it puts on! It will also run at normal locomotive speed, just not while tamping. If you like operating models, this is a must have accessory.



Honorable Mentions

Torpedo Ladle Car (48291)

This car had nice details and the model would spin and glow as if it had molten iron in it. This was a nice feature for these cars and if a couple were running together in the same consist, it looks even better.



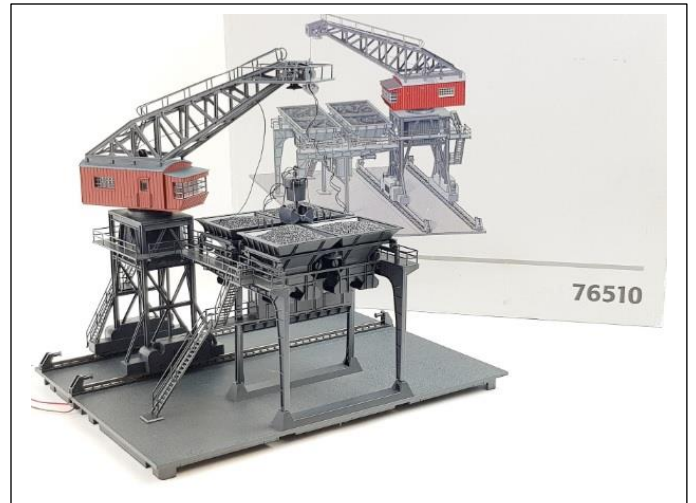
Gantry Crane (76500) / Rotary Cranes (7051 – 7651) etc.

These cranes are always a classic and an accessory with play value. Unlike other accessories, these cranes can be played with, and one can load ferrous metals into a wagon with the electromagnet (BB's work well).



Coaling Station (76510)

While this is another wonderful accessory, it does operate but is not intended to load coal. This Coaling Station is always fun to operate, and for those who have the Gantry Crane (76500), the wireless remote will work for the Coaling Station also.



Grade Crossings 74924

The current offering of the grade crossing has been in the product line since the '70s. This is a wonderful, animated accessory that adds a lot of detail and fun to a layout. No plastic figures have died because of the grade crossing so, I guess I must give it a 100% success rate.



There you have it; this is my list of items that are not really useful, but everyone should have a few of them to enhance the enjoyment of a layout. I would love to hear some feedback whether people agree or not.

Enjoy your hobbies!

Rick Sinclair

Programming the Layout in the May/June 2023 Märklin Digital Newsletter

In my previous article, I wrote about procedures that I think through when planning for automated events. These include decisions I make when placing track components like Braking Modules (slow down modules), signals and control sensors. In this article, I will show variations on writing out events for the same track plan used.

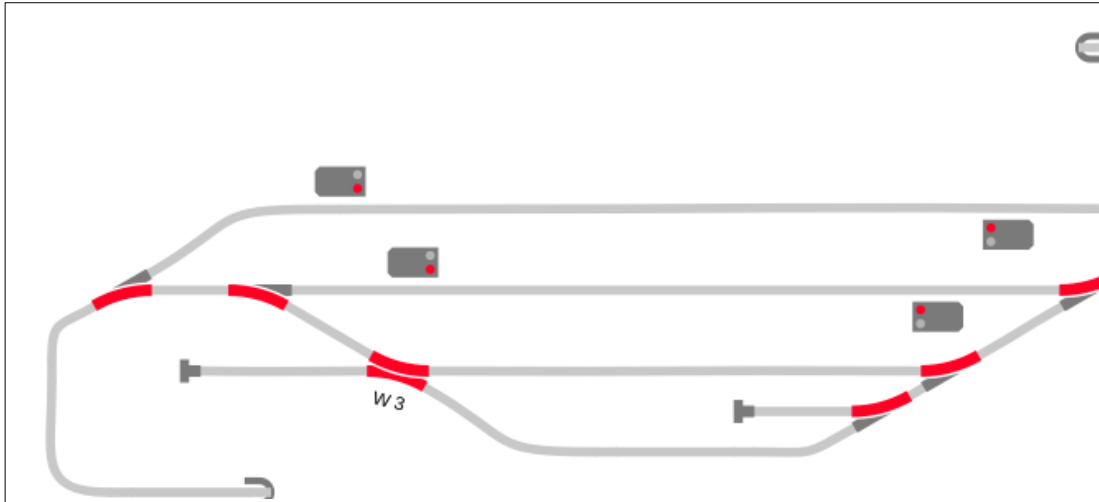
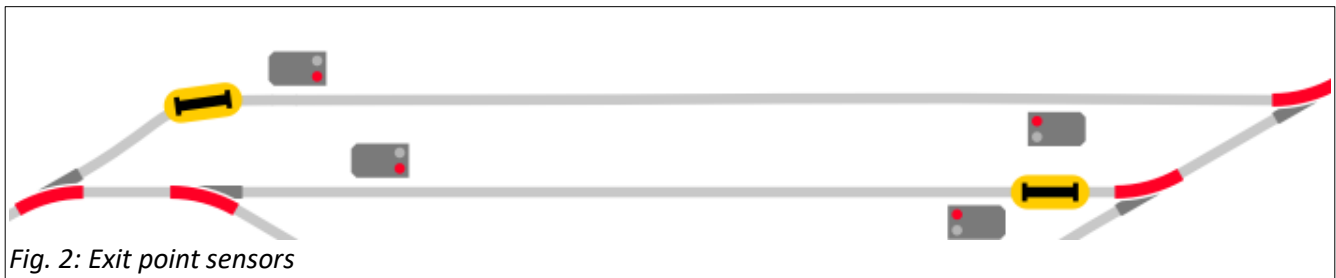


Fig.1 represents the track plan used in article #3 of 2023. All event sensors described in the article can be included in the track plan shown.

Opposing travel through Depot

The first variant of automation looks at opposing travel through the depot station. I like to set up my stop events first, as they tend to be the simplest and easiest to get off my list of requirements. I want to place my sensors at the point my first car/engine passes the signals (seen in Fig. 2). Placements are set according to right hand travel/signals.

Here, the events created can vary depending on whether you are using a signal alone, or a signal/slow down module combination. It can also vary if you are using circuit tracks, magnetic reed or contact tracks. The CT or MR methods tend to restrict themselves to signals only, or if the combinations are set to work in unison (as opposed to operating independently). These examples will use contact tracks as they are more versatile (for 3-rail users) and the only method that tends to need addressed.



Before I begin with some of the examples, I would like to explain some metaphors used in the settings of our event triggers, especially the contact tracks. For those more experienced, you can

skip this and proceed to 'The Simple Stop'. When rolling stock on the track reaches a contact track (i.e., makes contact), a couple of metaphors have been used to describe this action. Currently, this action is as an Arrival contact. Prior to this, the description was iconic and hard to describe. Thus, I will often use the term as either an 'entry' or 'arrival' trigger. Conversely, when rolling stock that departs from a contact track is described as either a 'departure' or 'exit' trigger.

Luckily, this concept should be easier to understand than the original (and technically accurate) representation of 'rising edge' and 'falling edge' icons. I will not bother explaining these terms as that should be reserved for Nerds or electronics nuts.

The Simple Stop (good for any type of sensor)

Fig. 3 shows the events associated by the nearby contact. The icon settings for K1 or K2 are set as 'arrival' triggers, which activates the actions displayed in the step editor. I have displayed two sets of options. The underlying variations are shown if using slow down modules along with the simple signals.

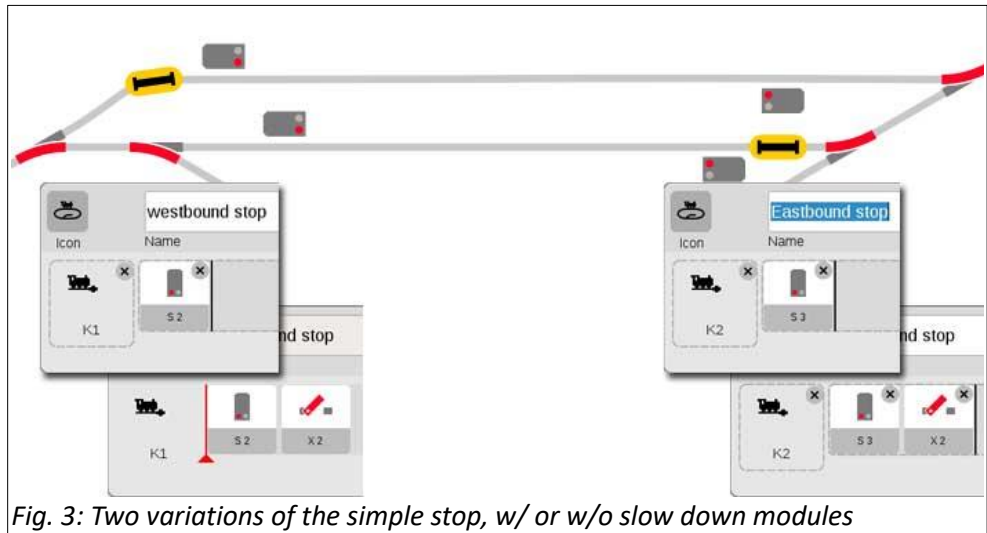


Fig. 3: Two variations of the simple stop, w/ or w/o slow down modules

The slowdown modules are not represented in the track display but would normally be seen as shown in Fig. 4.

Independent Signal and Slow Down Module Event Stop

(Using Contact Sensors)

Operating the signals independently from the slow down (brake) module allows for a more prototypical operation without causing any adverse effects on track (like affecting passenger car lighting or rolling stock with multiple center rail contacts). Fig. 4 shows two separate events for each corresponding contact. Unlike the examples in Fig. 3, the underlying events are triggered by 'departure' signals when rolling stock exits the contact tracks. Compare the K1 and K2 icons, in each of the '...stop a' and '...stop d' events (shorthand for 'stop arrival' and 'stop departure').

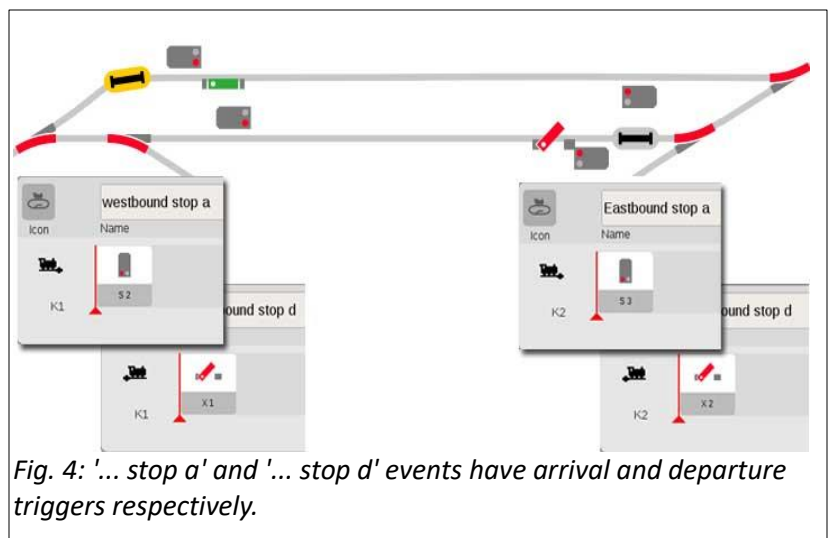


Fig. 4: '... stop a' and '... stop d' events have arrival and departure triggers respectively.

Controlling Moving Traffic

Now that we have managed to safely stop any train travel, we must make decisions on how and when we can make trains move. You may run into instances where you try to prioritize certain actions, but many processes can overlap, and they just become part of a checklist of tasks that need to be addressed. In the track plan for this article, I have had to decide on train routing or train departures first, whereas neither has a priority over the other.

Train departures (from the depot, not the event trigger)

I usually have two primary locations for when I want to set a signal to 'green' and disengage any stop or brake module. One at an entry point of the station line, the other, along the same length of track as any stop or slow down section. I have highlighted this blue for the westbound line in Fig. 5.

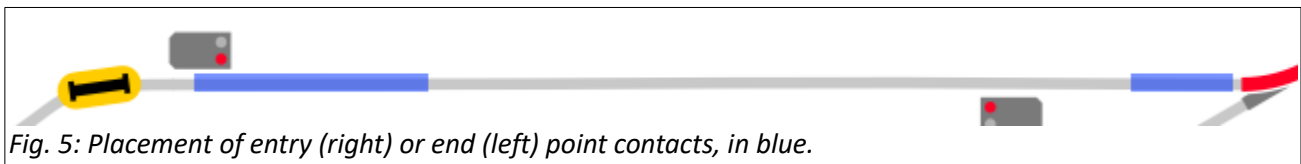


Fig. 5: Placement of entry (right) or end (left) point contacts, in blue.

The variations between the two positions can involve your choices of timing, routing and sometimes even length of train. Having a train stop and wait until the next train departs is ideal for the end point (left side trigger in Fig. 5). This placement can also mean that you should be sure that none of the rolling stock is blocking the turnout at the right. On the other hand, you can ensure a train has cleared the turnout and minimize any static display between arriving and departing traffic, by using the entry point trigger. Make note of the type of trigger used for each (arrival or departure.) Events for the two positions could look like the following in Fig. 6.

Both examples are triggered by the top line and affect the articles on the bottom line. Both have the same set of actions, but the type of trigger can make a difference depending on operational factors not based on your layout.

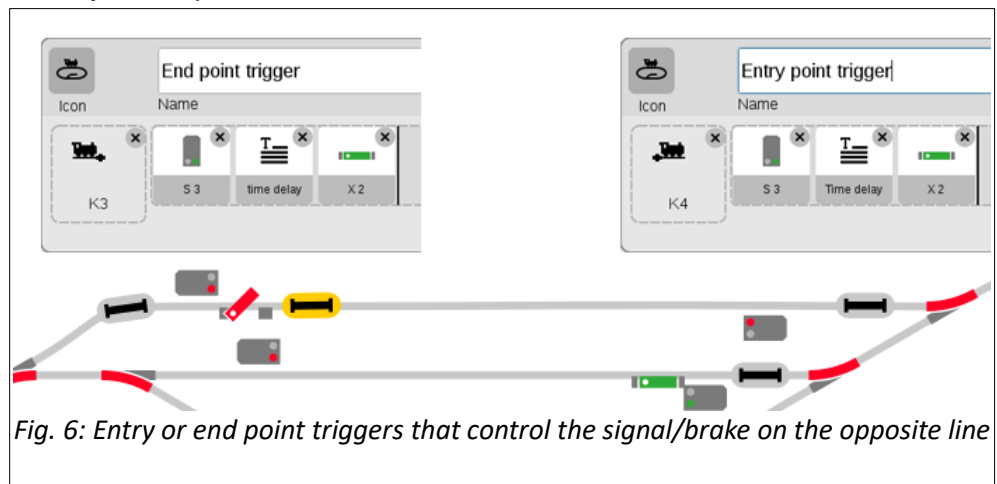


Fig. 6: Entry or end point triggers that control the signal/brake on the opposite line

Routing control

Track routing can ensure that any train leaving the station is guaranteed to return to the same empty line. This two-lane station can lock the turnout settings for each direction, but you may encounter a switch that can be nudged into a semi switched state and cause some derailments. Then track routing events would be desired.

Deciding which contact to use for routing can be accomplished with any of the contacts currently shown. I could create a separate event just for this purpose, or I can add an extra step into one of the existing events, in this case, one of the stop events (examples of both are shown in Fig 7.) In this manner, I am using the exiting train to re-route any incoming traffic to enter the soon to be vacant line.

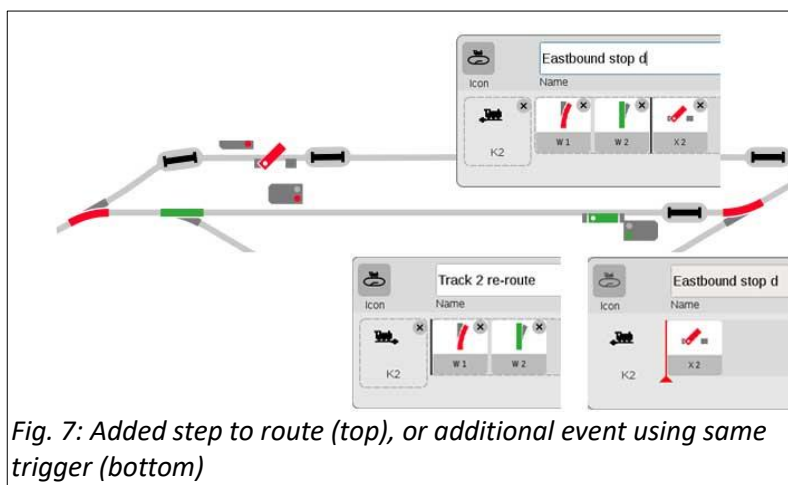


Fig. 7: Added step to route (top), or additional event using same trigger (bottom)

Depot Travel in Same Direction

As the layout shows, there are signal pairs at each end of the depot. This could indicate that the layout is set up for a different traffic pattern previously described. The only logical alternative would be that trains could travel through the depot in the same direction of travel, rather than opposing.

Save First; What it is and Why

To manage this, it is typical that novice users will try and program events in addition to the events already described. I do not recommend trying this because there are too many variables in creating multiple traffic patterns within a single operational 'profile', and eventually there will always be an error. An operational profile is simply a 'save' backup file. Anytime you do a save function, you are saving all the operation parameters in active memory of the Central Station. When you start the CS3, it will work under the last conditions from the active memory when powered up. This may include or lose any edits that you may have created at last power up. Active memory changes do not affect any of the Saved profiles, which is why doing saves after major changes to your files is important.

It is important to note that when you initialize the save function, the Central Station will automatically give it a default name that NEVER changes. Every time you save and NOT change the name, you will be overwriting the same file. Saving the profile with the already described events into a uniquely named file allows you to create independent profiles with specifically different operational events. Then, you can restore a saved file when you want to run your layout using a different traffic pattern. You will find that differing traffic patterns are easier to maintain, because you will not have to program as many traffic variables.

Where to start with the changes

You could load in a blank profile, or you can edit and save the active system parameters into a new profile. The blank profile means that you may have to re-add all your track elements and start completely from scratch. It can be easier to edit the currently active system and save it into a new file.

The third option is editing a file that has events programmed into it. This may be more efficient, because events can be reused with or without some simple tweaks and you may already have all the track elements loaded. In this case, be sure to save it first using an alternative name. This

prevents you from corrupting the original profile and gives you a reminder of the file to save into with the adaptations. I will take this latter process, so you can see how alterations can be completed easily.

You can see how I have created several profiles as I've created this article: the original, initial backup with cross traffic, and a newly created backup for creating a westbound only station. (Fig. 8)

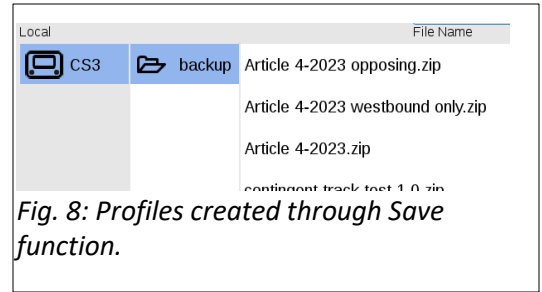


Fig. 8: Profiles created through Save function.

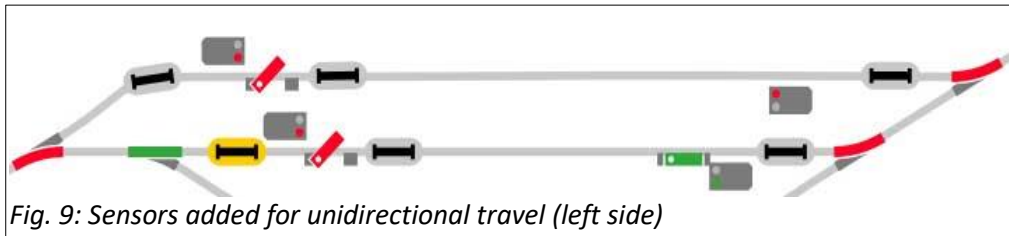


Fig. 9: Sensors added for unidirectional travel (left side)

Overall, we are only regarding the programming aspect of running a multi directional layout. The physical layout itself may be your limitation on what you can accomplish. In a layout, there could be more sensors than needed for a single variant in running operation, but they will be used for another. Once installed, unused sensors will not affect the running operation of the layout that are not intentional. Added sensors are shown at the left end of Fig. 9.

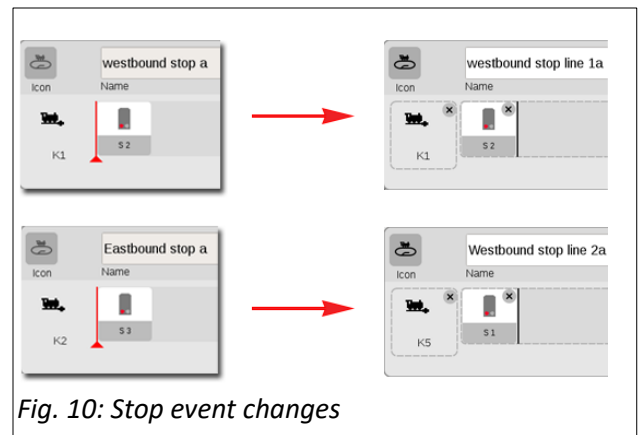


Fig. 10: Stop event changes

The first alteration for the new profile will be to edit the stop events. Remember the original profile had opposing traffic, so we need to adjust one of the stops for traffic at the same end. I will make the name changes in the events so you can follow the edits. This will use some sensors not previously entered in the system (Fig.10).

To set the departure of each line, I will use the end-point contacts in front of the signals to manage both train departure AND routing back into the station. The routing can be set up here because this layout only allows for one train on the mainline, which connects at each end to and from the station.

My procedure here will be to just create new events and delete any unnecessary events from the profile (recall that I am adapting my operating profile to be saved into the

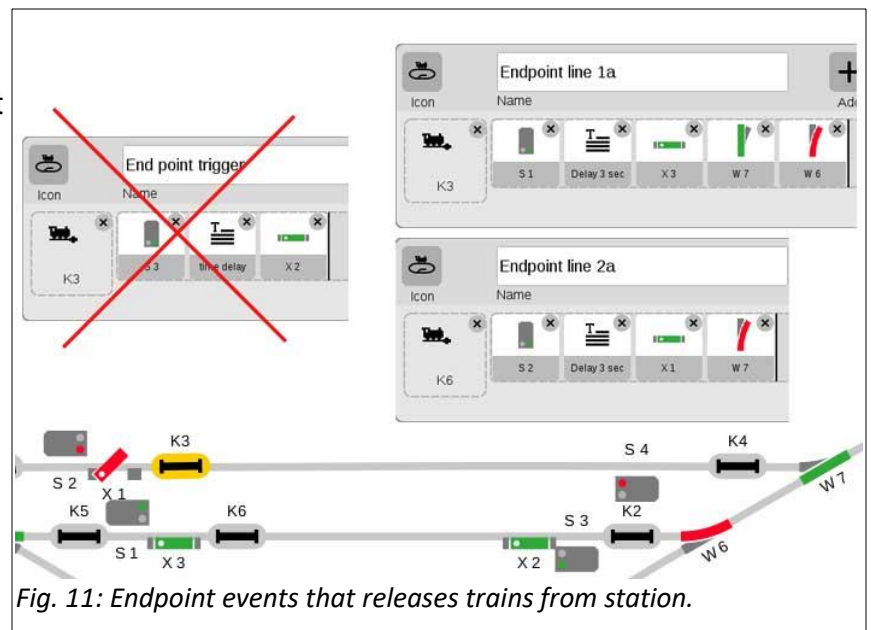


Fig. 11: Endpoint events that releases trains from station.

new profile). This just saves time from having to evaluate existing events for changes. Fig. 11 shows the events created and deleted from my operating profile. The track plan display illustrates the results programmed into the event 'Endpoint line 1a'.

One More Variation

The previous example sets the trains off from the station in a set or alternating pattern. If so desired, you can test your layout using a random release from the station. To test, be sure to make changes into a new profile rather than risk making changes to a working or unsaved operating profile.

To randomize the unidirectional traffic out of the station, I do not want the events to be triggered independently so I will remove the triggers from the endpoint events. I will rename the events for clarity of purpose as displayed in Fig. 12.

Next, I will create a Random MACRO event and nest the two events into it (line 1 go, line 2 go). Remember to set your 'Track: Protocols and operations' settings to enable 'Events - Extended Mode'. Each block in the step editor is part of the randomizing. If multiple actions are necessary, then placing them into a manually triggered event will be required.

To trigger the RANDOM event, it is placed within the events triggered by each line. Fig 13. shows the RANDOM event and how it is nested within two Events with track triggers ('K3' and 'K6').

A Final Note About Testing

Adapting alternate profiles may result in operational errors. It can be easy to overlook working details that may only reveal themselves through testing. This article revealed an oversight, which I reserved to mention until the end of the instruction.

The setup of the layout has been built to allow for more than one method of travel. Therefore, we have more components than necessary for any variant of operation discussed. In the example



Fig. 12: Removing Triggers from event.

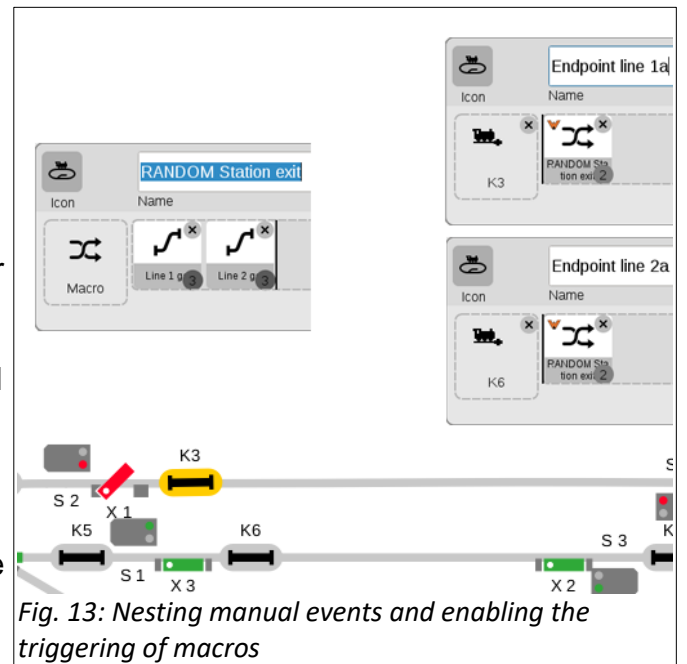


Fig. 13: Nesting manual events and enabling the triggering of macros

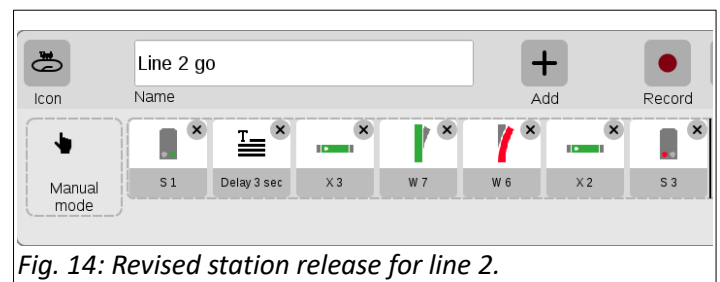


Fig. 14: Revised station release for line 2.

discussed in Fig. 11 you can see the extra signal and brake module in the track plan (X2, S3). If these were to be set to stop traffic, then you can see that it would be a problem with station entry. Whether or not it is caught before or after testing, I would have to adapt one of my scripts to safely automate this potential gaff. The fix is shown in Fig. 14. Please note that the name and trigger has been altered from that of Fig. 11.

Curtis Jeung

Upcoming appearances:

NMRA - 2023 National Train Show
WHEN: Friday, August 25 thru Sunday, August 27, 2023
WHERE: Gaylord Texan Resort & Convention Center
1501 Gaylord Trail
Grapevine, TX 76051

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