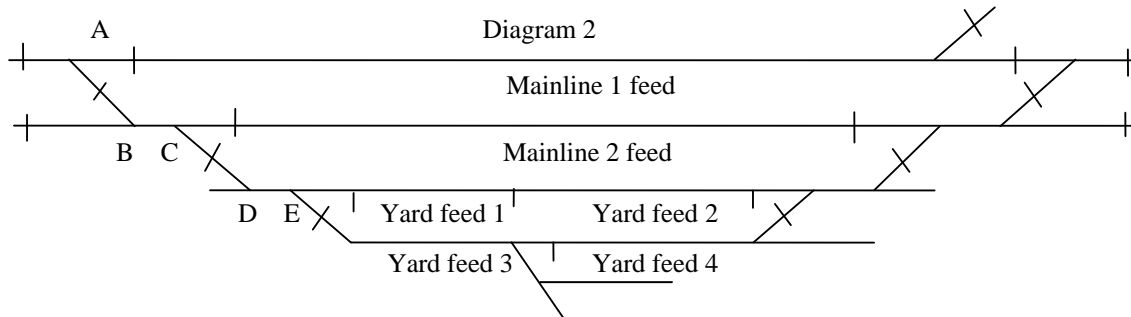


IRREGULAR FEATURE

Electricker Pt.2 Smart Track

Last issue I left you with just a hint of what was to come by saying that ‘Smart Track’ as I like to call it is basically the opposite of the conventional method that I had just described. With this method the feed in points are wherever locomotives are to be held, these are connected via isolation switches. In our example this is on each mainline at the platforms and in four places in the yard. (Don’t include the stub tracks as these are fed by the appropriate yard track) The relay connected to each point picks up the track power from the track that the point is switched to and feeds it to the next section of track and the next relay in the chain and supplies its own frog with the correct polarity. This process goes on from one section to the next until all are supplied with the track power from the section that has been selected and blocking all conflicting movements. It is the position of the points that decide which controller is in charge. Taking the example from last issue of crossing from mainline 1 to the yard Point relay E would pick up track power and earth from either yard feed 1 or 3 depending on which way the point is set and apply it to the track section D E and to the frog of E it also passes power and earth to relay D. Relay D supplies power to the frog of point D and passes power and earth to relay C. Relay C applies power to the track section B C and supplies power to the frog of point C and passes power and earth to relay B. Relay B supplies power to the frog of point B and passes power and earth to relay A. Relay A applies power to the track section A and to the frog of A so that the loco can be driven all the way into the yard using only one controller.



If we want to get to mainline 2 then point C would pick up power and earth from mainline 2 and pass it on to B and A as before and the loco would be controlled from mainline 2. It may sound a little complicated but it means that if any point is not set properly or if the isolator for the receiving track is not set the loco will not move and also all the rest of the block is available for independent use by other operators.

The various spur tracks are powered / isolated by the relevant point. I wish to stress something here, there are people and books that will say “you should always use insulating points – they’re easier to wire” and “never use the point to isolate – when a second loco crosses the point the isolated loco will jump.” These people have obviously only ever wired or operated a simple train set! If you want smooth slow running across points then use live frogs, it’s much easier and cheaper than adding extra pickups or a compensated chassis to all your locos, although both of these will certainly help your locos run smoother. Remember dead means DEAD plastic does not conduct electricity. As far as locos jumping when isolated are concerned, proper isolation and wiring will prevent this and those “mysterious” shorts across live frogs. If you look closely at the points on both the permanent layout and Paradigm you will see that they have been modified for this purpose, it is an easy job and perhaps this could be a good subject for a future issue.

The more observant reader will have noticed that diagram 2 has a few more isolators than diagram 1 from last issue this is because diagram 1 was for common earth whereas diagram 2 is for a modified common earth so that the topic for the next issue ‘clever controllers’ can be added later.

Catch you down the track....Tony Mikolaj.