

Welcome to the March edition of our lockdown newsletter. This is the usual mix of news, chat and snippets, hopefully similar to that which we get at our meetings. There is no structure to it and if you feel that it is not the right balance then please send me your contribution!

The End of the Tunnel:

We believe that the earliest we can restart our meetings is the end of June. The Twyning Hall Committee are keen to see all their programmed activities getting back to at least some semblance of normality and we are working with them to ensure our meetings remain safe. To fit in with the hall's arrangements we will be moving our meetings to the fourth Monday of each month from 7.30pm to 10pm. This isn't much of a change for most months but it does mean that we won't be meeting on the August Bank Holiday Monday. The details await more information behind the Governments intentions beyond 21st June. We have to start planning at some point and it feels appropriate to aim for 28th June though this is of course conditional on any restrictions still in place at that time.

The proposed meeting dates are 28th June, 26th July, **23rd August**, 27th September, 25th October and **22nd November**.

I am looking forward to our meetings and the opportunity for social interaction and catching up of everyone's modelling progress.

In the meantime these newsletters will continue to be published each month to coincide with when we would have been meeting.

As usual, my thanks go to everyone who has sent in contributions and look forward to hearing about your own news.

March Competition – Who is this?



Here's a photo of a young chap having his first train ride, so this is where the seeds of his lifelong interest were sown.

But who is it?

It's instant disqualification if you also know where it is!

Email your answer/suggestion/guess to me at:

robin.ngtewkesbury@gmail.com

Feel free to send in your own photo challenge.

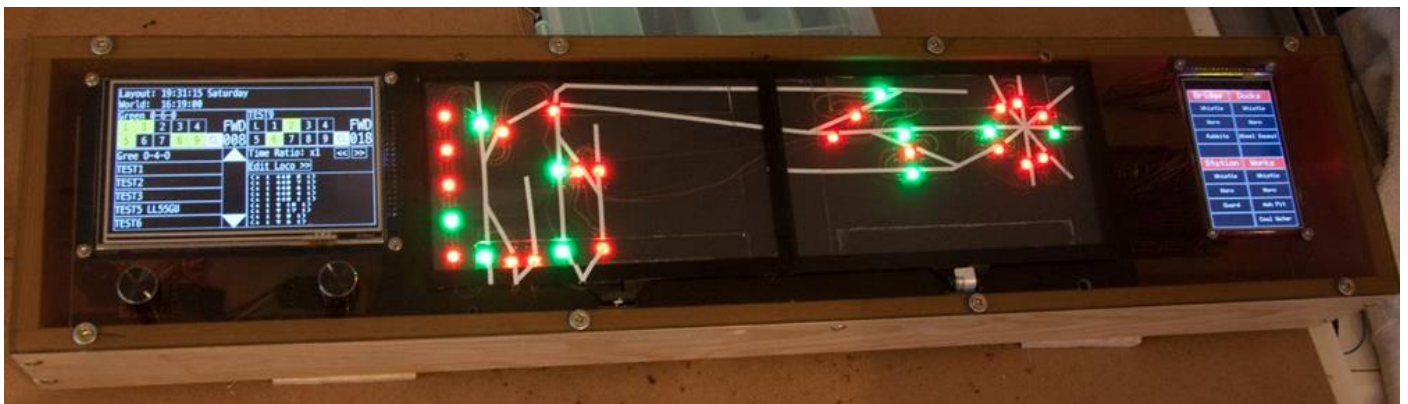
A Touch Screen Controller – Simon Coward:

Over the last couple of years I have been messing around with micro controllers, trying to build my own DCC controllers.

My issue with conventional DCC controllers is they look like a hand held calculator and the joy of running trains is often reduced by having to know what number a loco is and what address to type in to change the points so playing trains is reduced to an endless button pushing session. At the same time with having to know all this information it becomes very difficult at an exhibition to be able to hand the layout over to an untrained operator.

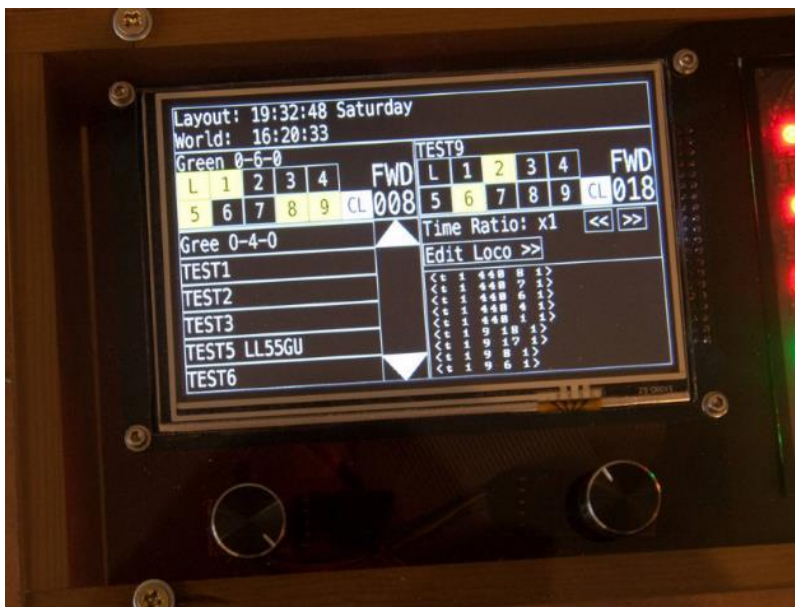
As a 14 year old visiting an exhibition, after watching a particular layout for some time, the operator asked me to have a go at controlling the layout, a simple controller and probe and stud track diagram that took a couple of minutes to learn and I was away. I wanted that same level of simplicity while being able to keep all the nice extras that DCC can offer.

After various attempts and knowledge learnt each time I finally came across a set of components that have given me pretty much what I wanted even if it does look like I stole the design from Star Trek. I had some smoked Perspex lying around so decided to use that for the front, it does allow you to see some of the components through it.



As people are very used to touch screen phones I have used them throughout so no probe to drop or come loose.

The left hand screen is the main loco control, it has a couple of rotary controllers so that the operator can control the loco in a traditional manner while everything else is controlled by touching the screen.



At the top is the actual time and the layout time that is saved when the controller is turned off. Time can also be sped up by touching the Time ratio buttons on screen.

Next are the two locos under control. Touching the CL button allows the operator to pick a loco from the roster bottom left. The loco names/descriptions can easily be edited but I wanted something that reflected the loco being selected rather than some crazy code as none of my locos have numbers on them.

The other buttons are the various loco functions with "L" being lights. Great for advanced operation while allowing the novice to ignore them and get on with playing trains.

Bottom right is a display that shows me what commands are actually being sent to the DCC base station and doubles up for the loco editing area so will be ignored by most operators.

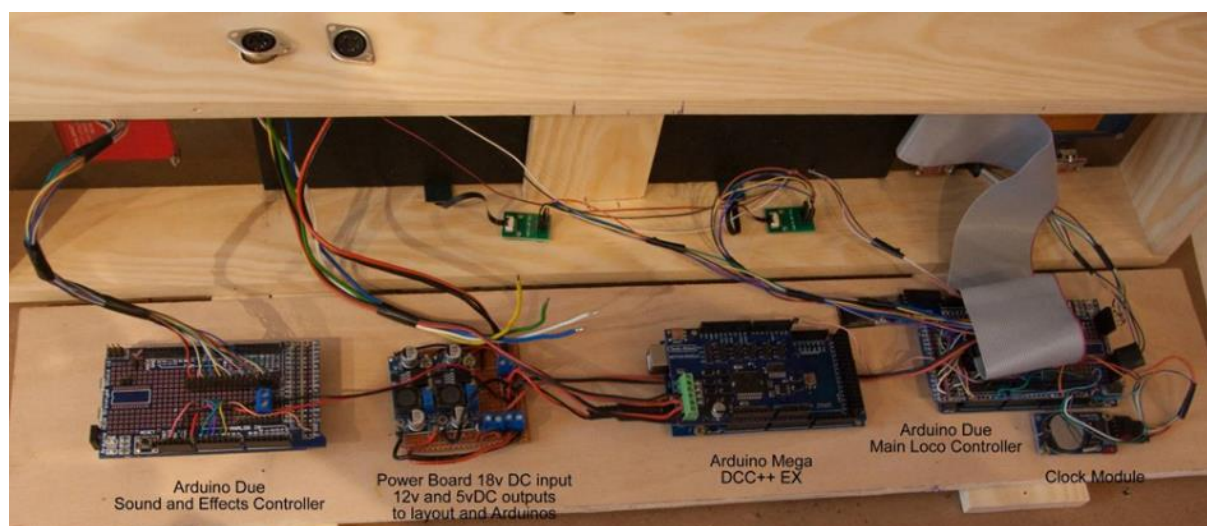
I haven't bothered with a close up of the centre section as it's just a track diagram with a Neopixel (a type of LED that can be varied to any colour) for each exit of the points, sector plate, turntable, lift bridge and the traverser for the fiddle yard. Direction can be selected by touching the screen as I have fitted touch screens from car sat navs in front of them. This makes it as simple as stud and probe but your finger is the probe. Although hard to see in the photo the turntable at the right of the track diagram has two green displays at the same time, one being brighter than the other to emphasis the number 1 end of the turntable.

Finally on the right hand side is another touch LCD touch screen, this one controls light and sound effects around the layout that is currently under construction. So touching Ash Pit gives the sound of a loco being cleaned out as well as a glowing ember effect below the loco.



The sounds for these will play from small speakers mounted into various positions on the layout. The four headings are the four boards so it makes sure when a background sound is selected it plays on the correct board.

The final picture is what is inside the case.



It is quite complicated and might at first look like a lot of wires but compared to previous versions the wiring has been reduced to a minimum.

Basically 18v DC is supplied to the power board, this has some step down convertors that give me 12v and 5v that not only power the controller but is also led on to the layout to power accessories.

The Arduino Mega DCC++ EX is the equivalent of a commercial DCC base station except it only costs about £10 to build. Although many connect it to a computer I wanted to avoid that to go as old school as possible, hence the touch screen controllers which are again controlled by a couple of Arduino Due's and just pass instruction to the base station that translates them into DCC signals that get sent to the track. The system has some inbuilt memory so remembers all the settings when it is turned back on.

The great advantage of using touch screens is that I can make alterations in software without having to alter anything else. I have already built in a Bluetooth module so that I can add a hand held controller for shunting in the future.

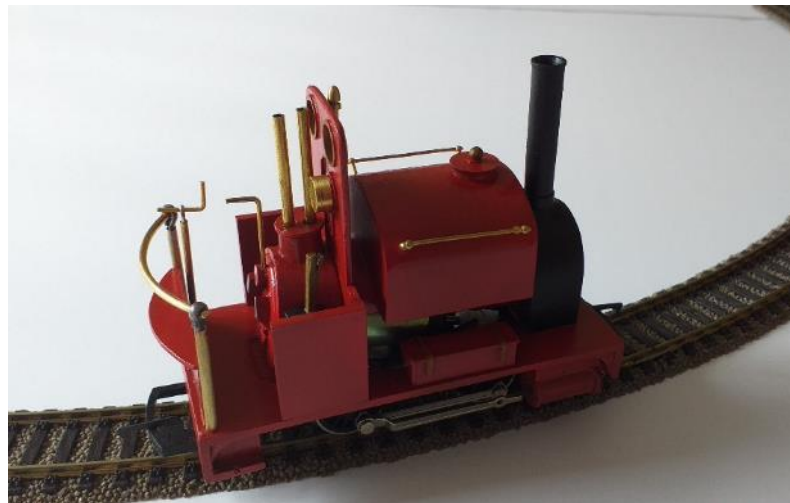
The layout it's made to control is coming along nicely, lift bridge, sector plate and turntable are all finished and run really well. The traverser for the fiddle yard has led to a lot of head scratching as it automatically selects the track when the appropriate pixel on the left hand of the pixel display is touched. The physical side is just about there and it's now just a case of programming up its accessory decoder to do what I want.

Even more Gn15 from Dave Dyer:



Regular contributor Dave has just completed this locomotive which has been built from a Smallbrook Studio kit (Gn15 body kit) and is called 'Harlequin'. Mainly built as intended but with a few modifications. The resin whistle has been changed to a home-made brass one and the gauge (part of the resin back plate) has been changed to a brass one. The chassis is from a second hand Hornby Smokey Joe.

The locomotive is now waiting for a suitable name plate.



Trade News

7mm Scale Tub Wagons - 422 Modelmaking:

422 Modelmaking who produce a range of 7mm narrow gauge coach and wagon resin kits, have two new tubs on offer. The pictures show the two tubs which were built and distressed by Ron Houghton. They also do buildings and odds and ends, see <https://www.422modelmaking.co.uk/>



Locos n Stuff - The Larger Diesel Chassis kit – Handy 9mm Gauge Tip:

This chassis was covered in the September 2020 Newsletter and is designed for anything between 9mm and 16.5mm gauges. 09 modeller Colin Peake has found that the wheels supplied by Mark Clarke are a profile better suited to 14mm and 16.5mm gauges and he found that the 009 8mm diameter [Greenwich wheels](#) were a better option for his 9mm gauge track standards.

Glazing Tip – Neil Smith:

I have always had difficulty in glazing the windows in whatever kit I have been building, I never seem to get the clear plasticard I use both well stuck and also clear and mark free. Then a friend recommended Deluxe Materials Glue 'n' Glaze and I have to say it is brilliant, dries clear and sticks the glazing sheet down well even if the window frame has already been painted. The glue bottle itself comes with a very fine applicator but I have found the best tool is a fine paint brush to spread a thin film round the window frame. As well as using the glue to stick clear plasticard glazing, small windows can be glazed by pulling a film of glue over the window and letting it dry.

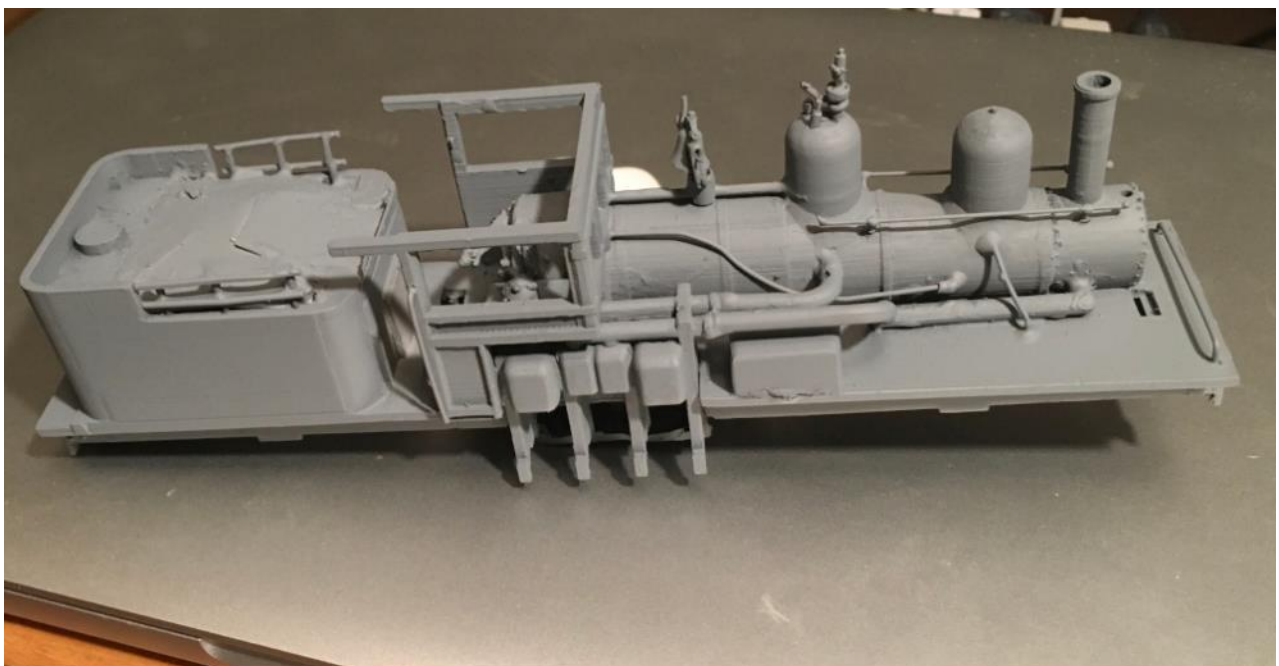


The photos show one of the three bogie coaches I have been making – loosely based on those on the Tallyllyn Railway. This one is an observation coach with wheelchair access and a guard's compartment. The glazing is done as described above but the roof isn't yet finished and I'm still pondering about a more detailed paint job on the sides. The coach is lit inside by a Traintech lighting strip and the modern image passengers are Preiser.

A 7mm scale 3d printed Shay by Michael Beer:

Michael reports that his Double Fairlie is almost finished apart from the cab details that he hopes to go and see this summer.

In the meantime he has started his next project which is a Shay. He had made good progress with the body before realising that the cab was too low for the crew. He is now printing a taller cab before progressing with the chassis and drive components.



We are going to have one heck of a “catch-up show and tell” session when we all finally get to meet up again!

A new loco for Tony's Forest – Robin Edwards:



I have had a mixed media kit for a Baldwin 50HP gas mechanical loco from Neil Sayer for a number of years and Lockdown-3 provided the opportunity to finally get on with it. The Baldwin Locomotive Works of Philadelphia, USA constructed 126 of these locos in 1917 for the American Expeditionary Forces use in France. In addition the French Army had around 600 locos built to the same design for use on its artillery railways in mainland France and its colonies.

The locos were fitted with 4 cylinder petrol engines driving the 4-coupled wheels via a two-speed gearbox and rod coupling. Speed was a stately 4 mph in bottom gear and 8 mph in top gear. Surprisingly few, given the number produced, have lasted into preservation and perhaps the most well-known one for those of us in the UK is *Moelwyn* on the Ffestiniog Railway.

It is primarily an etched kit with resin castings for the bonnet, radiator, fuel tank and jack-shaft gearbox. I found it to be well thought out but I struggled with the small fabrications from etched brass due to my clumsy stiff fingers. It comes with plastic cranks which I had heard could be problematic. One of mine was already cracked before I even started and I decided to sleeve them with brass top hat bearings. The gearbox crank on the left is the one that was cracked. At the time I did these I could only find some 'fat' bushes and I had to be careful that I was not only drilling concentrically but also square. The idea of using the brass bearings came from their use in a Branchlines kit where etched outside cranks were built up in layers around a top hat bush. The cranks are retained on the axles with Loctite and were very straight-forward to set up. The brass bush takes all the compressive force from the Loctite without stressing the plastic.



Proposed Zoom video meeting:

A few members have expressed their interest in a Zoom video meeting so I will try to organise one over the next few weeks. I suggest an informal format with the opportunity for each attendee to talk a bit about what they have been doing and to perhaps show some items? Please email me at robin.ngtewkesbury@gmail.com if you are interested and I will try to find a suitable date. I have the free version of zoom so the meeting would only last 40 minutes but we can easily log back in and I have found that a short break provides the opportunity to grab a fresh drink!

I hope you are all keeping well and using your free time to good effect. Thank you to the contributors to this issue and don't forget to send us your news so that we can all stay in touch. I would appreciate any contributions for the next newsletter by the 23rd April.

In the meantime stay safe and happy modelling,

Robin Edwards

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Or

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