

# Cwm Bach: a guide for operators

## Introduction

Thanks for offering (or accepting my request) to help me operate my 7mm scale/O gauge model railway layout, “Cwm Bach” at an upcoming show.

I’ve put these notes together to help you, but also so we’re clear on a few things that are designed to keep everything in good condition and running well.

## Cwm Bach website

Much of the information regarding the layout is available from the Cwm Bach website at <https://cwmbach.markwilson.co.uk/>.

The Operator Zone (<https://cwmbach.markwilson.co.uk/operator.html>) has information and resources that may be useful to layout operators. Key information is explained in this guide.

## Managing locomotives and rolling stock

### Locating stock

All the stock is transported in foam-lined boxes. Each box has an NFC tag on the front and if you hold an NFC-enabled mobile phone next to it (as you would to make a contactless payment), it should offer to open a web page with details of the contents of the box.

The contents are also printed and attached to the inside of the lid of each box.

### Handling stock

Despite their size, O gauge models are surprisingly fragile, and detail parts often become detached. If this happens, it’s regrettable, but please keep the parts safe and I will attempt to glue them back on when I feel brave enough.

Some of my models have been customised, including weathering. Depending on how it’s been applied, the weathering can be damaged by the oils on our skin, so please take care when handling these models. The plastic sleeves in the stock boxes are useful to avoid the need to touch the models, but I have supplied cotton gloves for use when you do need to.

I have insured the layout and its stock, but hopefully I won’t need to make a claim!

## Running trains

The main reason I ask for help at exhibitions is so that we can keep plenty of action on the layout to entertain paying visitors.

Running to a timetable is restrictive, so instead, I have a rough pattern of movements that we can use to provide plenty of interest and keep trains moving.

Example moves:

- DMU move from traverser to station. The DMU can then stay in the platform for a while, whilst other movements take place.
- DMU move from station to traverser. Don't forget to sound the horn as you pass the SW board!
- Alternative station movements:
  - Parcels DMU (DPU), with optional trailing parcels van. This movement allows for shunting the parcels van away and then back into the platform, to be reattached to the DPU.
  - Inspection train. Inspection coach and locomotive in a push-pull arrangement.
- Yard shunting between station moves:
  - Shunting wagons in the sidings in preparation for a loco to collect them.
  - Loco-hauled freight trains, which then need a shunter to move the wagons and release the loco. These could terminate in any of the sidings, or the station, and then be shunted to an appropriate siding.
- Yard moves from head shunt to kick-back siding. Only small locos can fit there, but you can get a couple of shunters in, or the Wickham, or a couple of wagons/brake vans (perhaps the abandoned "Toad").
- Throughout the day, stock can be swapped on and off the layout, to provide some variety.

## Note about the traverser

The rebuilt traverser is stronger than the original version; however, O gauge locos can be heavy, so please be mindful of the weight and don't leave too many locos on the traverser at one time (or too much weight on the front/back tracks).

The front track cannot align with the line to the scenic section, so has limited use. I may rewire it as a programming track one day.

## Points and signals

There is a lever frame for operating points and signals. Prototypical colours are used for the levers:

- Blue and black for points.
- Red for signals.
- White for spare/out of use.

The points are ordered 1-3 with the switch blades of 1 being closest to the station and 3 being closest to the traverser. 2 is the middle set of points.

Signals are similarly ordered.

All of this is back-to-front when operating the layout from behind!

## Station announcements

I have some pre-recorded station announcements that can be used when trains arrive at or leave the station. These are available in both English and Welsh – I tend to play the English version first and then the Welsh one immediately after.

You can find the announcements on the Operator Zone of the Cwm Bach website but it may be an idea to download them to your phone in case of poor mobile signal.

I use a Bluetooth speaker for announcements, which presents itself as “Anker Soundcore”.

## DCC-fitted locos and rolling stock

### DCC addresses

With very few exceptions, long DCC addresses are used. The numbering standard that I follow is to use the first two and last two characters of the vehicle’s running number.

For example: 09105 is 0905; 37008 is 3708; 56060 is 5660.

### DCC functions

Most of the DCC-fitted locos and stock have pages on the Operator Zone of the Cwm Bach website, that can be accessed from the NFC-enabled stock lists, or directly.

The page will normally be named using the number of the vehicle being controlled – for example: <https://cwmbach.markwilson.co.uk/55029.html> is 55029, the class 121 “Bubble Car”.

Each page includes details of the various DCC functions available when operating the vehicle.

## Operating two trains at once

It is possible to operate two trains at once, but it’s tricky for one person.

To allow two operators to work at the same time (e.g. one shunting in the yard and another running a passenger service), I have provision for multiple throttles, using either:

- Digitrax DCS-52 controller.
- Digitrax LocoNet Wi-Fi Interface (LNWI).

## Using the DCS-52



The DCS-52 is simple to operate.

To select a loco (or coach or wagon), press the loco button, then enter the DCC address of the vehicle, and press the loco button again. Once you have control, you can use forward/reverse/brake as needed with the regulator for speed.

Note that many of my locos have inertia so will not stop immediately. You might have to use a function key to brake. If you panic, press the power button to kill track power.

When a loco is selected, use the numbers to operate the respective function key. Button A will allow you to cycle between F0-9, F10-19 and F20 upwards, effective adding 0, 10 or 20 to the respective button press.

There are more features, but that covers the basics.

## Using the LNWI

The LNWI is an accessory that provides a Wi-Fi interface, that can be used with a mobile phone app to control trains (a “throttle app”).

There are various apps available and which throttle app you use will depend on platform and preference.

The app I currently use (on iOS) is SRCP Client. WiThrottle is good too, but the Lite version doesn't support all the DCC functions. For Android, Engine Driver seems to be popular.

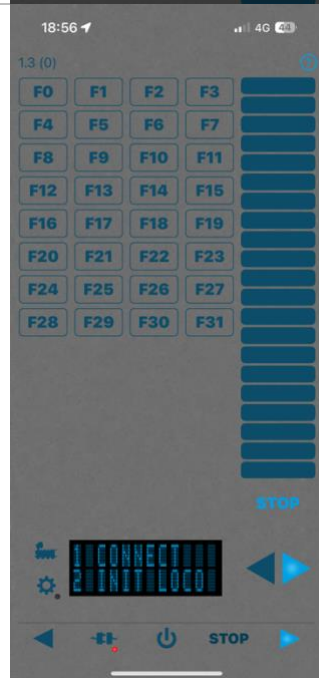
You will need to connect to the Wi-Fi network called Dtx1-LnServer\_297D-7. When connected to this network, the Internet will not be available, but you can still use your mobile data for Internet access.



After connecting to the network, open your Throttle app.

Depending on the app you use, it may look different but they are all similar in principle.

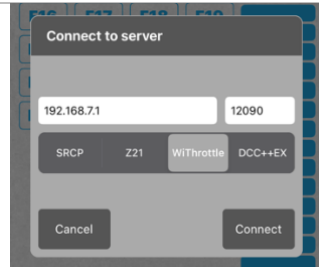
The following instructions are for the SRCP Client app.



After loading SRCP Client, press the connection icon at the bottom of the screen (it looks a bit like a dumbbell) to connect to the LNWI.



Enter the IP address of the LNWI (192.168.7.1) and port number 12090. Make sure WiThrottle is selected and press Connect.

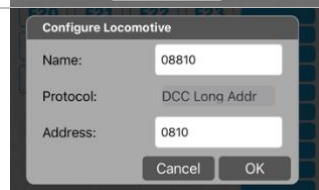


The light next to the connection icon will turn green.

Now, press the loco icon on the left of the “digital display”.



Enter the loco details. The name doesn't really matter – it's the address that counts. Press OK.

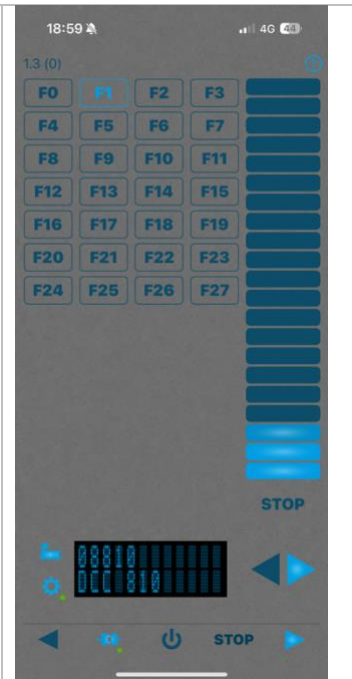


There should now be a green light next to the settings icon, and the “digital display” will show the loco details.



Use the function keys to turn functions on/off, the direction arrows for forward/reverse and the slider for speed control.

If you panic, hit the STOP icon.



## One last point

It's great for us to chat as we operate together, but we need to give priority to running trains and talking to the public. The day will fly by, but future exhibition invitations will depend on putting on a good show.

That's about all I can think of. Have fun!