RailRunner

by YouChoos

Universal DCC WiFi Throttle

for digital model railways

Android & iOS

Quick Start Guide

v1.0.7 July 2025

Introduction

Welcome to *RailRunner* – the easy way to drive your DCC digital model railway from an Android and Apple iOS phone or tablet device!

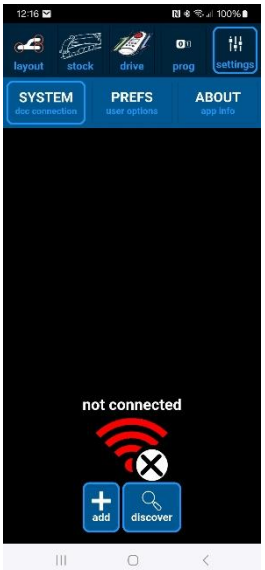
Install *RailRunner* from Google Play or Apple App Store onto your device. For Android you must be using Android 5.1 or later, and for iOS, 15.6 or later.

Connecting to a DCC System

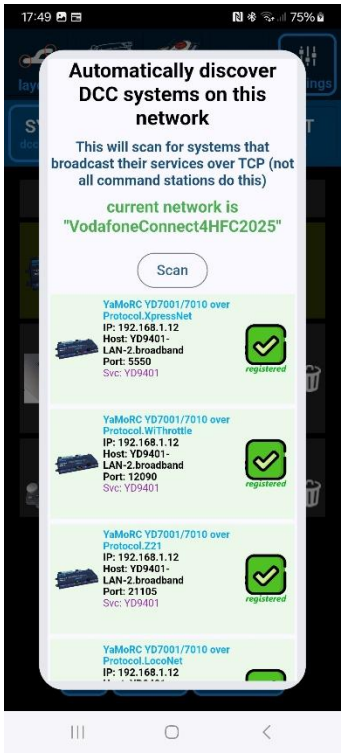
Before you can start to run trains, you need to connect to your DCC command station. Almost any command station can be used as long as it is accessible by WiFi from your device.

RailRunner is designed to work with one command station at a time (single connection), with all the popular protocols supported including DCC-EX, Z21, WiServer, ECoS, LocoNet and XpressNet.

When you first launch *RailRunner*, it will take you to the **SYSTEM** screen where you can give details of the command station that you wish to connect to. Some DCC systems broadcast their services using something called *MDNS* (Apple call this *Bonjour*), so you can use the **discover** button to find those automatically, saving you the bother of entering connection details manually. Examples of systems that broadcast like this include YAMORC YD7010, ESU ECoS, PIKO SmartBox, DCC-EX and many systems that provide WiServer connection.



For other systems you will need to select from a list and enter the network (IP) address and port to connect to, and for those systems that support more than one protocol, choose which protocol you wish to use.



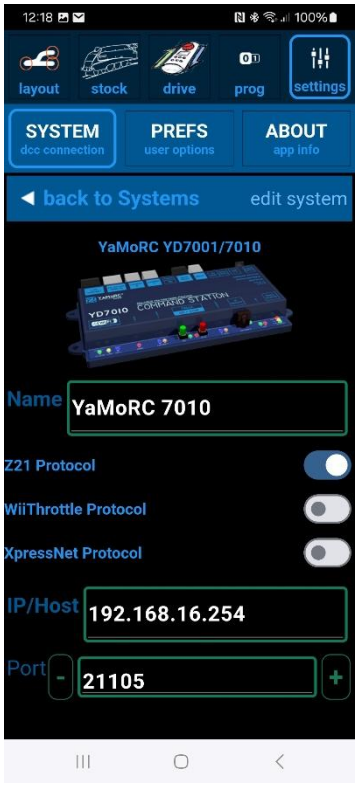
Try **discover** first, as that is much easier!

Any systems that are detected on your network are listed and you can press the **add** button beside one to add it to *RailRunner*. Any discovered system that is already known to *RailRunner* appears with a green tick next to it.

Note that some systems provide more than one protocol, so the system may appear more than once in the discovery list, once with each protocol.

Some protocols have more capabilities than others, so if you have the choice, go with Z21, or ECoS as these provide the most complete set of features. XpressNet and LocoNet provide most facilities, and finally, WiServer is the most basic, providing driving facilities only (no programming). WiServer is the most widely provided though, and is quite sufficient for running trains and accessories.

If **discover** does not find your DCC system, you will need to add it yourself. Press the **add** button, select your system type and enter connection details (network address). Network port is usually the same for a particular protocol so you won't normally have to change that.



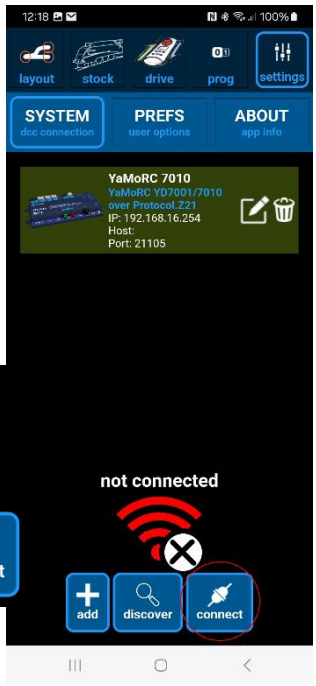
Give your system a name if you want to too.

Some DCC systems provide more than 1 protocol, so make your selection with the switches if you get that option.

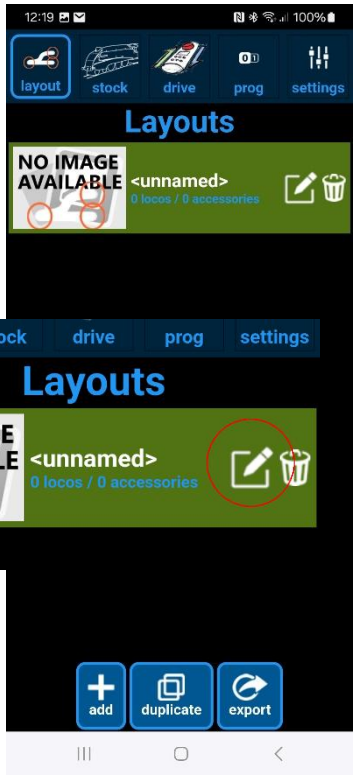
Once you have the command station defined to *RailRunner*, go **back to Systems** and press the **connect** button. The WiFi symbol should change from red to green if successful.

If not, you normally receive a connection error message or timeout message within a few seconds - if that happens, check the details, and double-check that your device is connected to the same WiFi network that your command station is actually on!

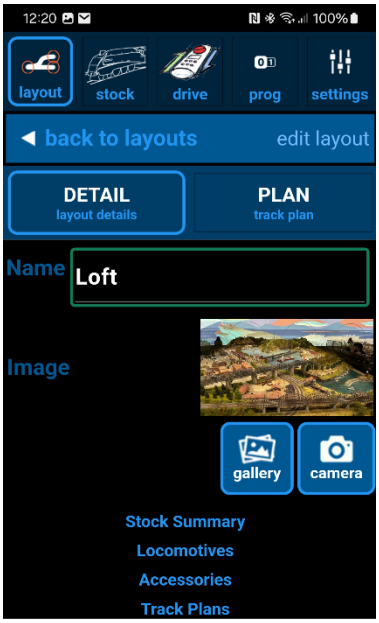
Failure to connect may also be the result of anti-virus software installed on your device, blocking network traffic - if you have connection issues and use such software, it is worth temporarily disabling/pausing protection to see if that resolves the issue. If it does, you should consult your anti-virus software on how to unblock the ports being used.



Your First Layout



RailRunner allows you to define one or more *layouts*, for example your home layout vs a club layout. A layout is the top-level collection that groups track plans, locomotives and accessories together. You might share a locomotive between layouts, but they would normally be separate collections with their own private list of locos and accessories.



An empty layout will have been created automatically when you started *RailRunner*, which you can give a name to if you like. Layouts are defined and managed by pressing the big button in the top-left labelled **layout**. You don't have to do anything here if you don't want to yet - just use the default Layout provided to begin with.

If there are multiple layouts listed, the *'current'* layout will be highlighted in green.

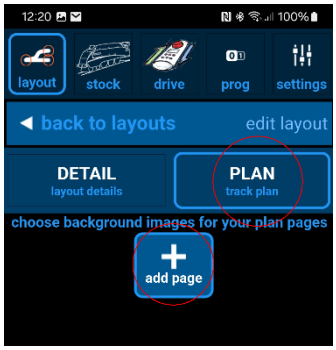
Press the **edit** icon on that row to change the layout's name, or set a picture.

Track Plans

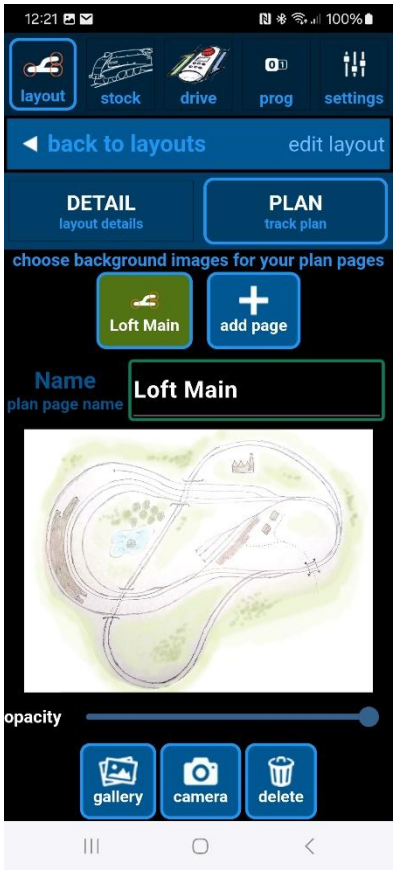
If you have accessory decoders planted in your layout, it can be useful to create *track plans*... these are simply one or more photos or drawings of your layout, or schematics where you will be able to visually place accessory decoders at their physical locations.

Examples include things like points (turnouts), signals, uncouplers and lighting devices.

The track plan image is simply a background picture onto which you position the devices.



Switch to the **PLAN** button of the layout and tap **add page**.



A default track plan drawing is given by default, but of course this won't look like your layout, so use **gallery**, or **camera** to choose a background image more appropriate for your own layout.

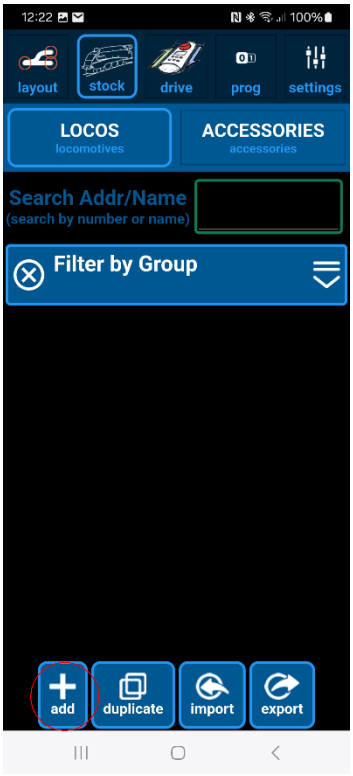
Give the track plan a name if you like.

You can add as many track plan pages as you need – it might be useful to have an overall plan, but also more detailed plans for busy areas of your layout, such as fiddle yards and stations, so add more pages as you feel appropriate.

Define a Locomotive

However, for most people, the first thing you'll want to do is run a train! If your locomotive's decoder is on default address #3 then you can just go to the **drive** screen (middle button at the top) and start running immediately.

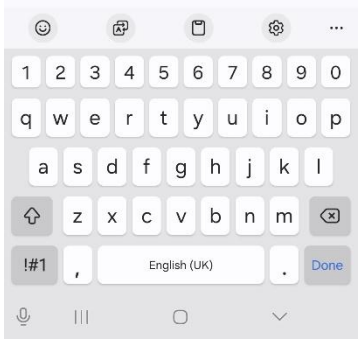
For locomotives with any other DCC address you will need to add a new locomotive to your stock. Press the big **stock** button at the top of the screen to see a list of the locomotives currently defined - this will be empty the first time you use *RailRunner*.

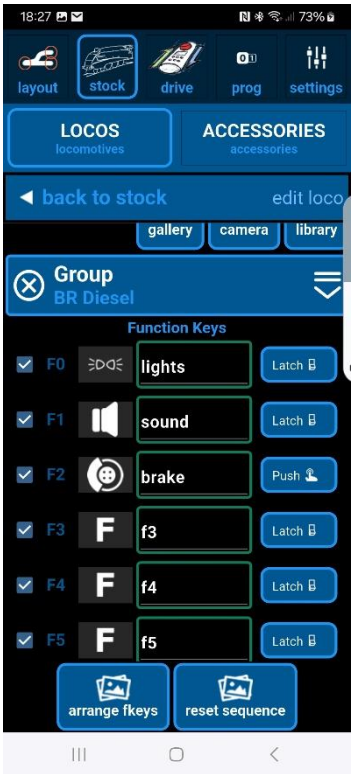


Press the **add** button (at the bottom of the screen), enter the DCC address, give the loco a name, and optionally choose a picture. Everything else can be left as default for now. Press the **drive** button and you can start to control that loco!

You may want to investigate the other properties of a locomotive later, where you can choose the function keys available, with names, icons and other attributes.

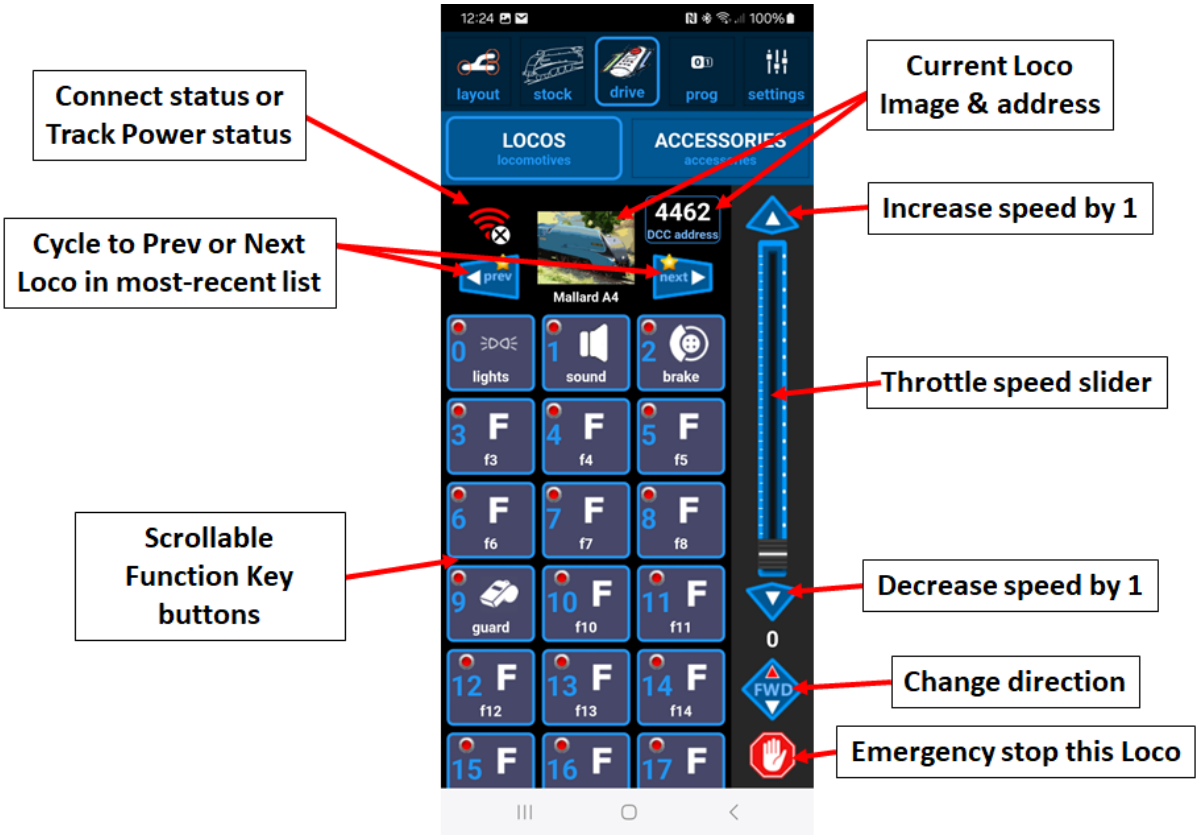
There are also some useful and powerful **import** functions, as well as a collection of locomotive class images available to download (UK). Import is particularly useful if you have Zimo sound decoders with YouChoos sounds, as you can download complete definitions for many of them.





Drive a Locomotive

Driving a locomotive with *RailRunner* couldn't be simpler... you have a slider for the speed/throttle control, a grid of the function keys and a direction button - all very intuitive!

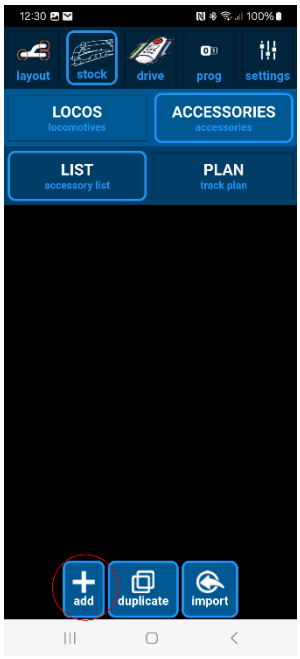


Switch between your most recently used locomotives using the **prev** and **next** buttons, or if you haven't used a loco for a while, choose the one you want from the **stock** list.

While on the **drive** screen, tap the loco's picture to bring up its' details page for editing.

Define an Accessory (list)

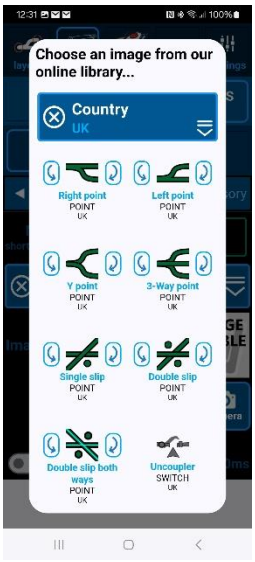
For layouts that have accessory decoders planted around the track, such as point decoders and light signals, you can define those too. Do this on the **stock** screen, switching from the **LOCOS** sub-menu to **ACCESSORIES**.

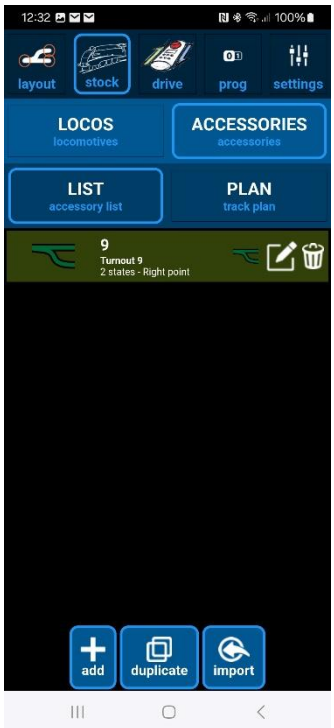


Accessories are presented in a list (sequenced by the accessory DCC address), but can also be placed on a track plan, so you can visually see where they are located relative to everything else.

Various types of accessories are supported, including numerous points (turnouts), aspect light signals and semaphore signals. Choose the most appropriate type and set the DCC address that is being used for it.

Some accessories have a single address (left or right for example), and others need 2 DCC addresses (3-way point, or 4-aspect light signal for example).





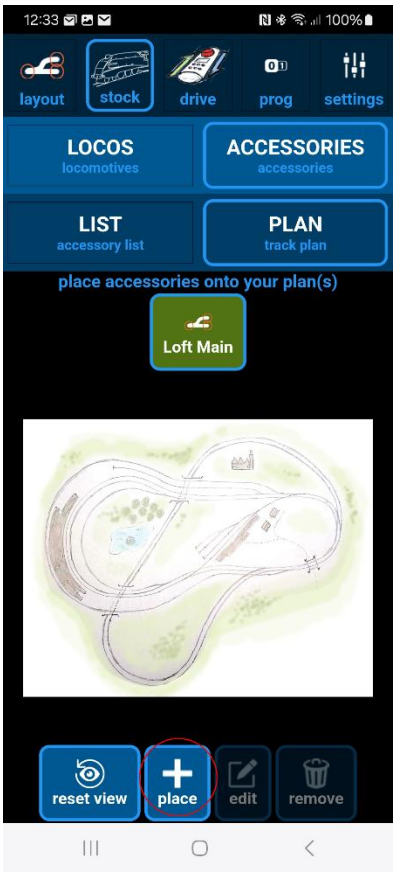
Initially the list of accessories will be empty as this is a new Layout. Press the **add** button at the bottom to define one.

Use the **Type of Accessory** drop-down to select an appropriate type. In the above example we choose a right-hand point.

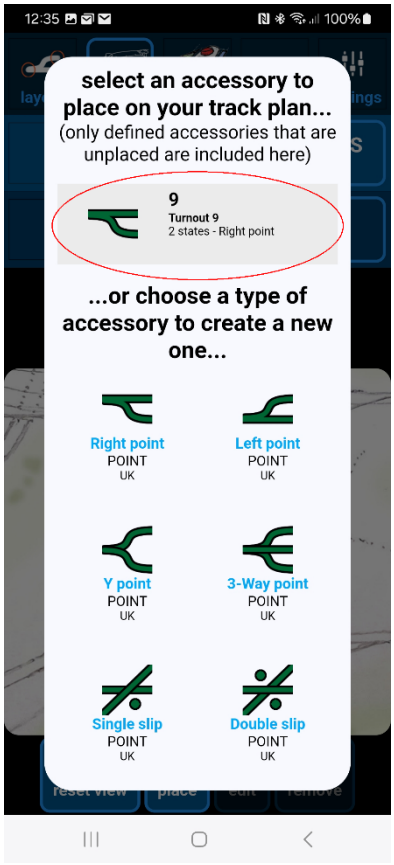
Give it a useful name (just the DCC address is often sufficient), and enter the DCC address in the entry field too. Your newly defined accessory should now appear in the list.

Define an Accessory (track plan)

For many people, it is easier to use a track plan to visually place accessories around the layout. So instead of using a list of accessories, switch to **PLAN** under **stock** and we'll place them onto the image of the layout.



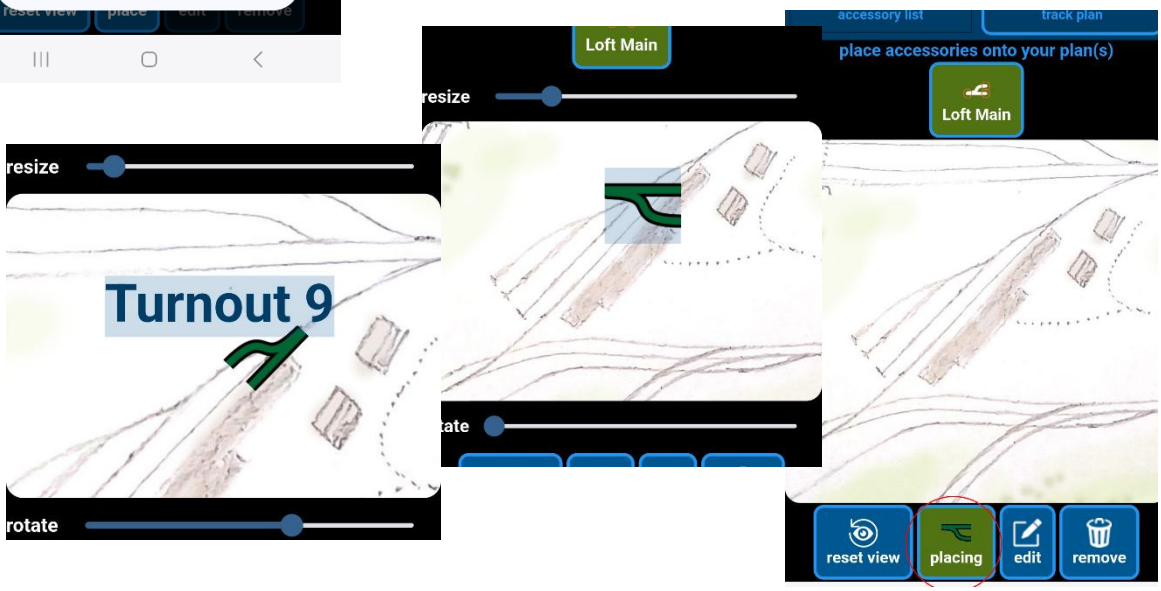
Tap the **place** button at the bottom.



This will show any accessories that you already have defined first (only those not yet placed onto this track plan). Note that you can place the same accessory on more than one track plan!

If you want to add a brand new accessory, then use the icons below that – this will go into a *painting* mode so you place a whole series of accessories of the same type onto the Track Plan.

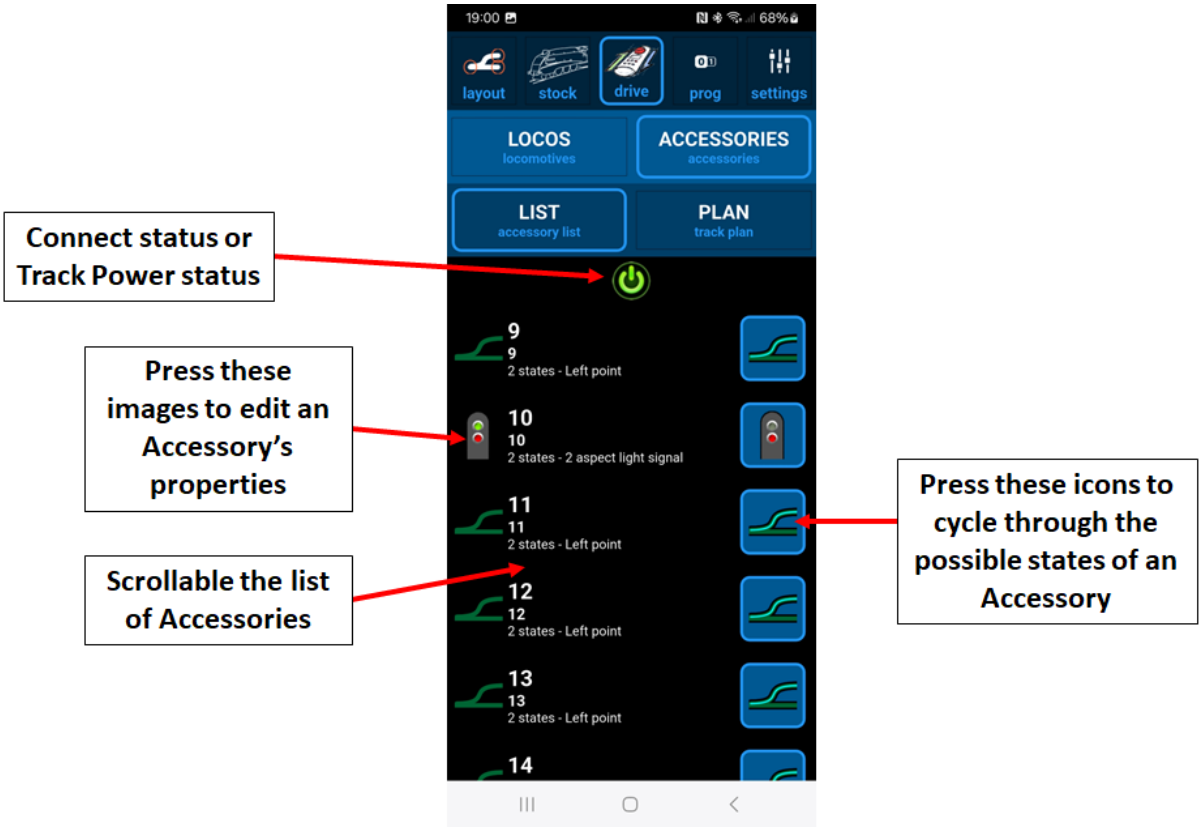
See how the **placing** button is highlighted. Pinch and pan the track plan image so you can see the part where you want to place the accessory, then tap that location.



Drag the placed icon to the desired location and use the **resize** and **rotate** sliders to adjust. The accessory's label can be positioned too – just tap it until it is highlighted, then drag it around.

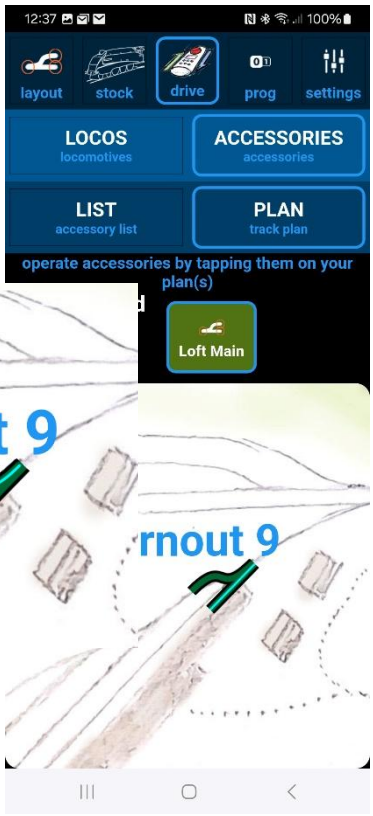
Drive an Accessory (list)

Once your accessories are defined to *RailRunner*, go to the **drive** screen and switch from the **LOCOS** sub-menu to **ACCESSORIES**. You can then tap on each accessory to change its' current state i.e. switch a point, or cycle a light signal etc.

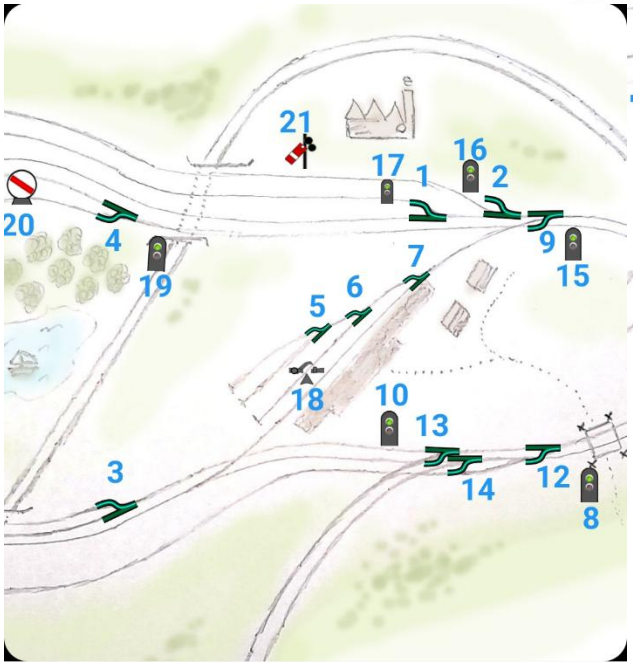


Drive an Accessory (plan)

If you drew your accessories onto a track plan, then this provides a more intuitive way to *drive* the accessories. Switch to **ACCESSORIES**, and **PLAN** on the **drive** screen.

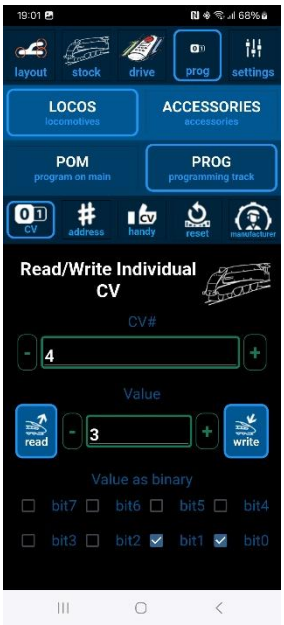


Pinch and pan the track plan to find the accessory that you want to drive (change the status of), and simply tap it to cycle through its' possible states.



The benefits of a larger-screened device, such as an iPad, become apparent if you have complex track plans!

Programming



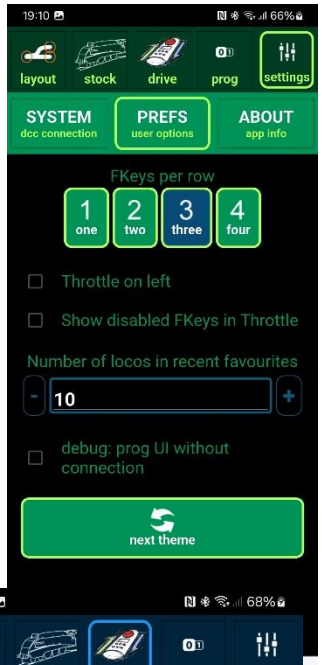
RailRunner also provides screens for programming CVs in your decoders. This is split into **LOCOS** and **ACCESSORIES** (similar to the **stock** and the **drive** screens).

Facilities are available for *reading* and *writing* individual CVs, as well as convenience functions for DCC **Address**, **Resetting** and **Identifying** a decoder. Where available, *RailRunner* also provides CV read/write on the MAIN track - only those systems that support RailCom feedback can read CV values on the MAIN.

Note that the WiServer protocol does not provide any support for programming at all - it is designed purely for driving.

Further information on programming can be found in the *RailRunner* User Manual, as it is beyond the scope of this Quick Start guide.

Customising & Personal Preferences



Various aspects of how *RailRunner* looks and operates can be customised to suit your own tastes.

3 colour schemes are available – default, green and light.

You can decide how many function keys appear on each row of the loco drive throttle (between 1 and 4 on smaller devices, and up to 6 on wider devices such as an iPad).

If you are left-handed, you may find it more convenient to place the throttle/speed slider on the left of the loco drive throttle too.

Summary

Hopefully that's enough to get you started using *RailRunner* - it should be quite intuitive, but if you need more help, there is a detailed user manual available and support is provided online through a Discord channel.