LocoMotive DCC 2 (v50)
2.5 Amp

LocoMotive DCC 2

DCC245

Safe use of this product:
Suitable for use by persons over 14 years old only.
For indoor use only, do not expose to water or moisture.
Maximum environment temperature: 35 degrees Celsius
Ensure you use a safe 14 to 18 volt regulated DC power supply.
Power supplies with isolated outputs must be used. Isolated means that the output terminals of the supply are not electrically connected to the ground and/or neutral wires of the AC mains supply circuit. The power supply must be approved to meet national safety requirements.

LocoMotive DCC - Disposal:
Please return to supplier for disposal.
10 Cameron Drive, Falkland, KY157DL

Enclosure is made from 3D printed PLA filament

Contact: bill.falkland@gmail,com
Please leave a review of this App on Google Play Store.
[Doc Version: June 2025]



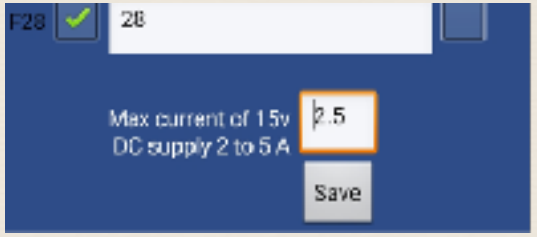
DC Power supply: DC ONLY - NOT AC
Do not use a model railway DC controller as a supply source. Any DC regulated 14 to 18v power adapter with a load rating of 3.0 or 2.0 amps is ideal. Please ensure the correct polarity of leads from the power supply before connecting. The centre pin on the power jack must be have the positive (+v) voltage.

LocoMotive DCC_2 Operating instructions
This App is available on the Google Play Store: Search for "LocoMotive DCC 2"
Go to Apps in phone/tablet settings then click on this App and Permissions - allow nearby devices. Older devices may also require you to allow storage settings for the App.

Initial setup:
1. Go to Bluetooth settings on your phone/ tablet and pair using ID of the Bluetooth module on hardware circuit. DCC245
The password is 1234
2. Go to App and press BT icon next to 'Get Bluetooth' and select DCC245 from the list of BT devices linked to your phone.
The panel mounted LED will be ON when the DCC output is available

Note : If the display does not fit the screen, go to device 'Settings', 'Display', 'Font size and style', then select a smaller font size.

Halt and E-Stop:
The App has a 'Halt' button and an 'E-Stop' button. The 'Halt' is used to stop the loco under control via the speed bars.
The E-Stop cuts out power from the track with all locos stopping. The E-Stop is also forced when a short or overload (>max current load) is detected. This gives fast cut-off to the power on the track. Thus avoiding damage to locos etc.
Power supply Max current: If you are using a 3 amp (or more) power supply. Go to Config' menu. Scroll down to the 'Max current input box.



Enter 2.5 in this box and press 'Save'
The App will now limit the output current to 2.5 amps. If you are using a 2 amp DC power supply, enter 2.0 into this box and press 'Save'. The App will limit the output to 2 amps.

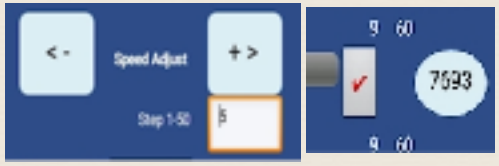
Configure each loco:
Press 'Config' on main menu to set up your roster of locos. Config layout - press 'Select'.



Choose a roster entry 1 to 100 and enter the loco number, name and max speed. Tick all of the required functions for visibility and momentary action. Edit each function name. Remember to 'Save' before proceeding. Export and import of data from another device may be done using fields at foot of this layout. Check for duplicates in your roster also.

Controls layout:
Once the configuration of your locos is completed, the roster list 1-100 is available and you may now select a loco to run on the layout by pressing the 'Get' button.
Up to 4 locos may be run from the controls at any time. Many more can be selected and run in the background.





Adjust the speed steps by changing the value in the 'Step 1-50' box.
Press <- or +> to decrease or increase the speed steps. Hold one of these buttons to activate continuous steps.
Press the 'tick' button to make that loco the one under control. Speed, direction, lights and functions relating to that loco will be visible.



List of Active Locos
The loco details on the 4 speed bars can be saved and re-loaded during later running sessions by pressing the 'Get' button in the top screen menu.
To activate each after loading, simply touch the speed bar or the tick button on each speed bar.

Adding a Slave device:
Requires access to Internet for devices to connect with each other.
To run trains from a 2nd device:
Use one as the MASTER and the other as a 'Slave'. Tick the 'Setup slave' box.
Enter the same 'User ID' on both devices.
Press 'Save ID' on both.
On the 'MASTER' connect to Bluetooth.
Press 'Enable'. Now indicates 'Active'
On the Slave device, press the 'on/off' button. Now indicates 'slave on'
Run different locos on the MASTER and Slave devices.

Read/Write CV's:
Place your loco on the program track i.e. an isolated piece of track connected to the controller.
Set CV's:
Press the 'Set CV's' button to access read or write CV's, including the loco address in short or long (4 digit) form.
To '**Write**' an address, press the 'Select' button and select a loco from the roster list.
To write this address to the loco on your program track, press 'Write'. When returning to main layout, press 'Reset'

To '**Read**' the address of the current loco on the program track, press 'Read'
Wait until completed after up to 30 seconds.
When returning to main layout, press 'Reset'



CV Sensitivity:
Normally a value of 60 applies to most decoders. Press 'Go' after each change in this value.
If an incorrect reading is suspected, increase this value and if an error is reported, check track to wheels connection and if ok, try reducing this value.



On the 'Read / Write CV's :' section, pressing 'Clear' will empty all of the boxes of data.
To read a CV value:
Enter 1-1024 in the 'Enter CV 1-1024' box.



Press 'Read'
Wait for a few seconds and the value will appear in the 'CV Value' box.
To write a new CV value, enter 0-255 in the 'New Value #0-255' box. Press 'Write'.
When returning to main layout, press 'Reset'

Basic CV's:
CV1 = Primary Address : CV2 = Vstart.
CV3 = Acceleration : CV4 = Decceleration
CV7 = Manf Version num : CV8 = Manufacturer ID
CV29 = Mode - basic values:-

DC	F0	Direction	CV29 value
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	0	0	4
1	0	1	5
1	1	0	6
1	1	1	7

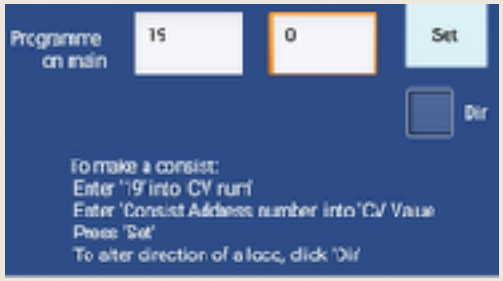
Turnout control:
Press 'T1-16' for the turnout buttons to appear. Any turnout address from 1 to 256 may be individually activated by entering the number in the 'Turnout number' box then press 'Tx' button.



Turnout Address:
Press 'T-Addr' to set up the addresses for turnout/accessories.

For accessory switching, the default main addresses are given as 1,2,3,4 which will operate decoder addresses 1 through 16.
Main addresses up to 64 may be entered, giving up to 256 turnout switches.
The number of packets sent to DCC system may be changed by entering 1 to 20 in 'Qty of packets sent' If your accessory decoder does not respond, try increasing this number to 10 or more.
The names on buttons T1 to T16 may be edited here also. Press 'Return' to main layout.
NB: You must select at least one loco in the slider controls for the turnout controls to operate correctly.

Program on the Main (PoM):
Operations mode is activated from the 'PoM' button. This allows most CV's to be written to the current loco under control on the main line. Exceptions being CV1, 29, 17, and 18 (these control the loco address which can only be changed on the program track)
Otherwise, the range of CV's available on program on the main is 1 to 512
To access CV's above 256, decoders use an index system. For the CV's 257-512,
CV 31 is set to 16 and CV 32 is set to 1 (indexed page 1). Then select CV 257-512
Please refer to the decoder data sheet for details on these CV's



'Consists' may be setup here, where 2 or more locos respond to a single address.
Select 19 in the 'CV num' box and the consist address in the 'CV Value' field
Consist address is limited to 1 - 100.

To have locos 3 and 9 in a consist controlled by address 12, select loco 3 and with 19 in the CV num box and 12 in the CV Value box. Press 'Set'. Repeat for loco 9. If you want to reverse the direction of a loco in the consist, tick the 'Dir' box.
Use CV21 and CV22 to allow F1 to F12 functions to operate on each loco in the consist. The function buttons for the consist address will control the functions activated on each loco in the consist.
Enter the total of the numbers below to activate the required range of functions:
CV21 values
F1 F2 F3 F4 F5 F6 F7 F8
01 02 04 08 16 32 64 128

CV22 values
F0F F0R F9 F10 F11 F12
01 02 16 32 64 128
For example enter 15 into CV21 for F1,F2,F3 and F4 to be controlled by the consist address.
To make all CVs be controlled by the consist address, set a value of 255 to both CV21 and CV22.
To change other CV's while a loco is on the main line, use the PoM feature.
Please refer to the specification for your decoder to find all CV's that can be controlled such as acceleration or deceleration.
Where fitted, sound decoders can have the volume changed.