

## No 14 – DCC test rig

Fitting a DCC decoder to a loco can be as simple as plugging it in, if the loco already has a socket for it (known as a 'DCC ready' loco). Otherwise, you have to solder it in place.

But that is only the beginning. You then have to set up the decoder. As a minimum, it has to given a unique loco number but you can set all sorts of parameters such maximum speed, acceleration, lights, sound, etc.

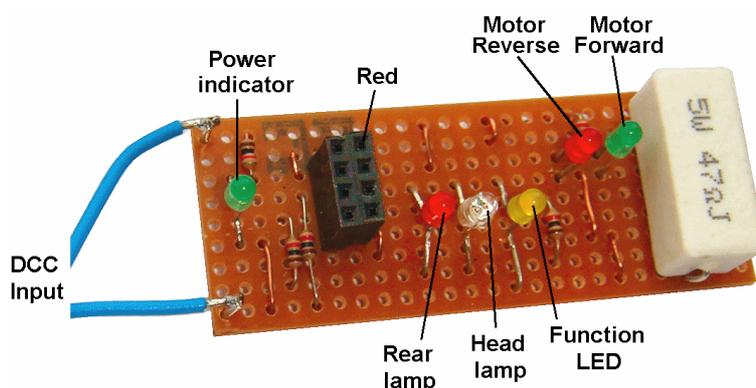
Configuring the decoder can be carried out before fitting to the loco, using a DCC test rig like the one shown here.

This has many features such as lights, a motor and a speaker but costs around £40.

PMP14 is a simplified version and has a socket for DCC decoders that have 8-pin plugs at the end of their connecting leads.

The module can:

- Test a newly-purchased decoder prior to fitting to a loco.
- Set up a decoder's CVs.



The DCC decoder is plugged into the module's 8-pin socket and must be inserted with the plug's red lead at the top right-hand corner of the socket.

The module is then connected to your command station's output, resulting in the 'track power' LED illuminating.

To save on cost, the test motor is replaced on the module by a high-wattage resistor. If you have an unused motor, this could be used in place of the resistor (in which case you would not need the forward and reverse LEDs).

Typical basic tests are:

- Increasing the speed in the forward direction should make the 'Motor Forward' green LED light with increasing brightness.
- Increasing the speed in the reverse direction should make the 'Motor Reverse' red LED light with increasing brightness.
- The three lamp and function LEDs should be switched on and off using the functions keys on the command station. This will depend on the capabilities of the decoder being tested (read the decoder's manual).



In this way, all the main functions of the decoder can be testing prior to it being brought into use.

If you wire a motor instead of the large high-wattage resistor, you can also set and test other features such as the loco address, acceleration/deceleration, etc.

A decoder's manual provides details on what CVs are supported on the decoder (the basic ones are all identical but the more sophisticated settings are usually only available on the more expensive models – check the manual).

This contribution does not cover configuring decoders; there are plenty of articles available on the Internet, or in user manuals, that describe the process.

The kit is available at all West of Scotland activities (for £1.10) or can be purchased from the national MERG website as PMP 14.