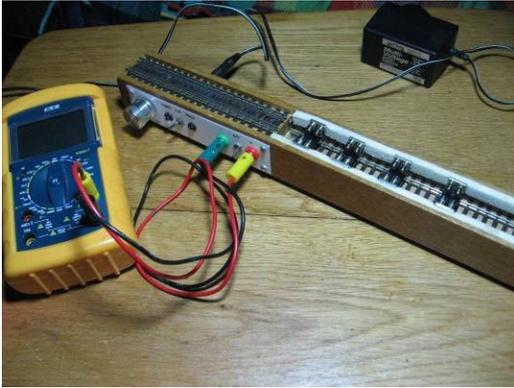


All Bells and Whistles Dual Gauge Loco Tester.



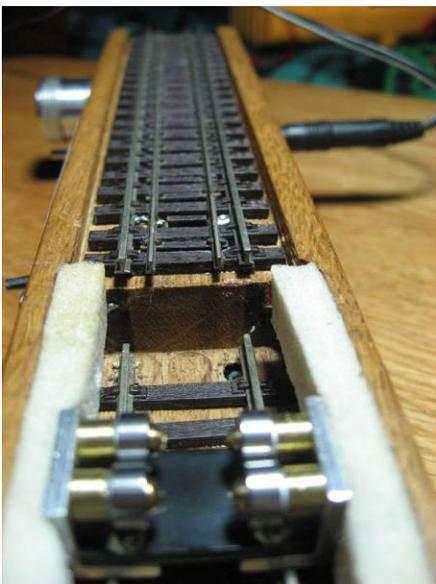
I had a need for a loco tester as following a loco down the track trying to work out why it wobbles was not much fun.

The main item in its construction is a set of 4 Micromark HO locomotive rollers No 83176
I made brass spacers to bring the miniature bearings in to the correct spacing of 9mm with new longer screws to hold them together.

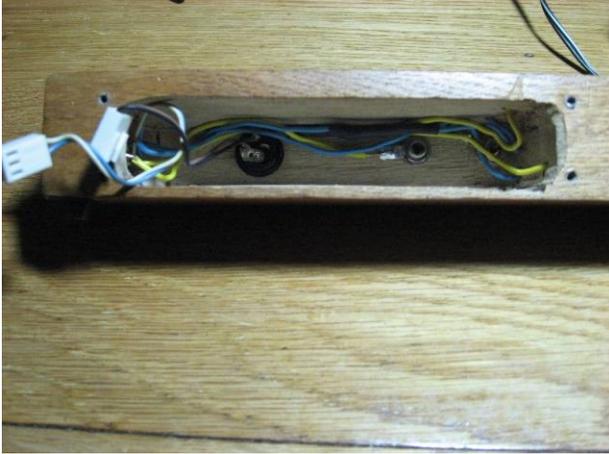


The track in the pit is code 100 OO track and the upper track is dual gauge with code 100 OO and code 55 N gauge tracks

The foam rubber is to hold the rollers steady.



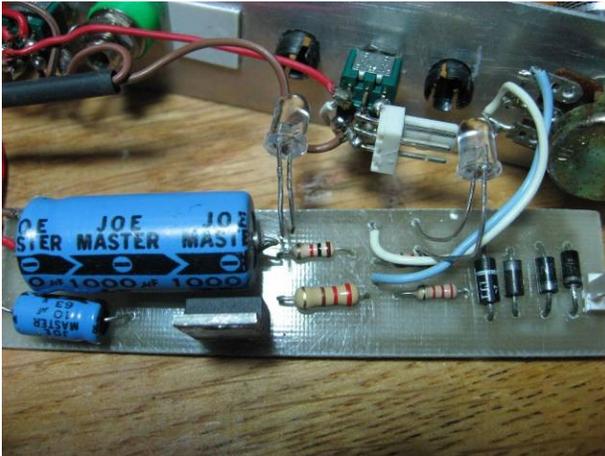
I installed a controller in it as I wanted to test locos on the work bench not on the layout.
There are holes in the base to let any heat out of the controller.



There is a heat sink not shown which goes on the Voltage regulator
Heat has not been a problem as it's not left on long enough.

The controller circuit is very simple with a LM317T Voltage regulator being the main component.
It is marvellous little thing

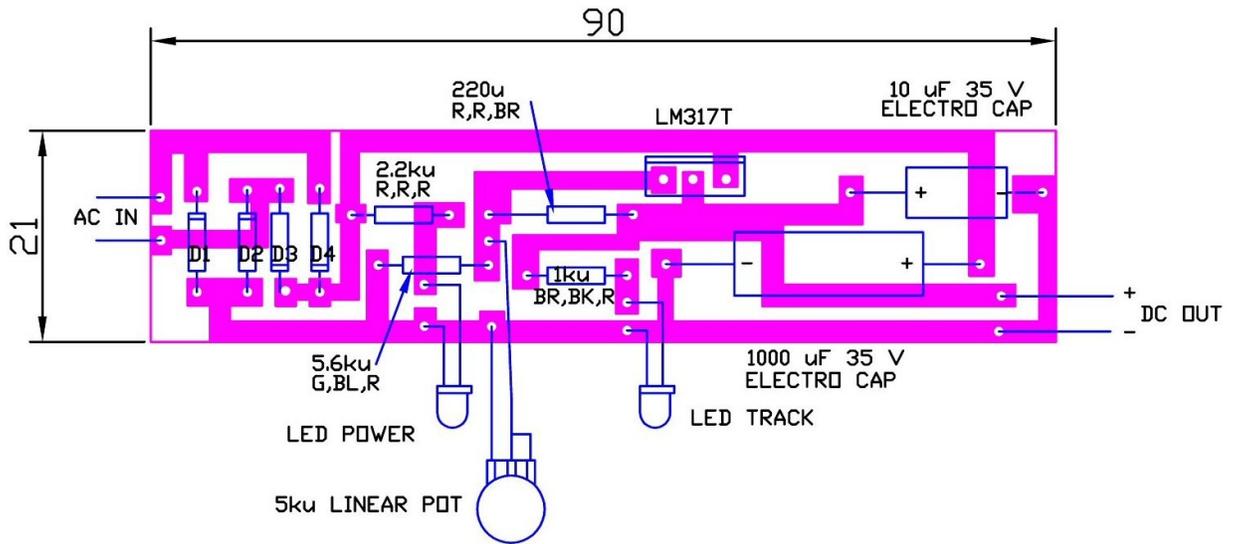
It will supply 1.5Amps over 1.2V to 37V output range, has current and thermal overload protection
I am feeding it with 12 Volts from a plug pack which gives a maximum track voltage of 9 volts
which is ample.



The controls are a throttle, a LED indicator to tell me there is power, a Forward /Reverse switch, a LED indicator which goes up and down with the track power
There are also terminals to plug in a multimeter and a switch depending which way it is flicked I can measure volts or amps.



The switch on the end changes it over to the external bypass
 The red and black terminals on the back are for the external bypass so I can feed it DCC or with a set of 00 rollers for Live Steam Loco testing
 That's my loco tester.



PCB BOARD COMPONENT SIDE