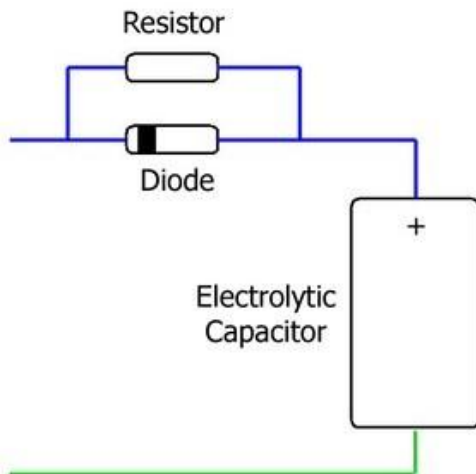


Stay Alive For DCC Automatic Coach Lighting

This article is based on the PMP19 Automatic Coach Lighting Kit DCC conversion. For details of the DCC conversion please refer to the article by Davy in the MERG Journal June 2015 Vol 49.2 on the MERG website.

Further details of the DCC conversion and the PCB version can be found in the article Automatic Coach Lighting for DCC, MERG Journal Dec. 2018 Vol 52.4

Stay alive circuit



A basic stay alive circuit will prevent LED flicker due to dirty track, points etc.

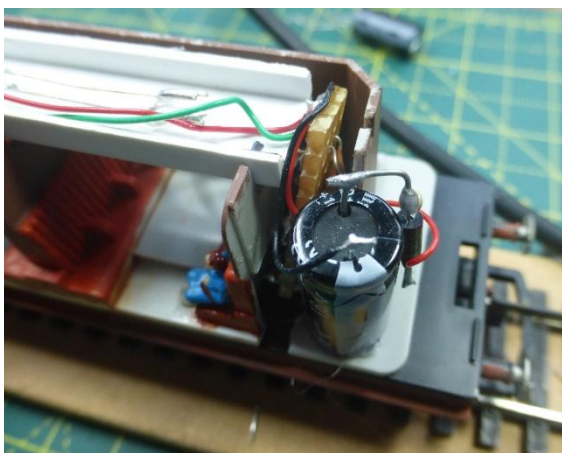
The electrolytic capacitor acts as a rechargeable battery which powers the circuit when track power is lost.

The resistor prevents current inrush which may be detected as a short circuit by the controller.

The diode provides a low resistance path to discharge the capacitor.

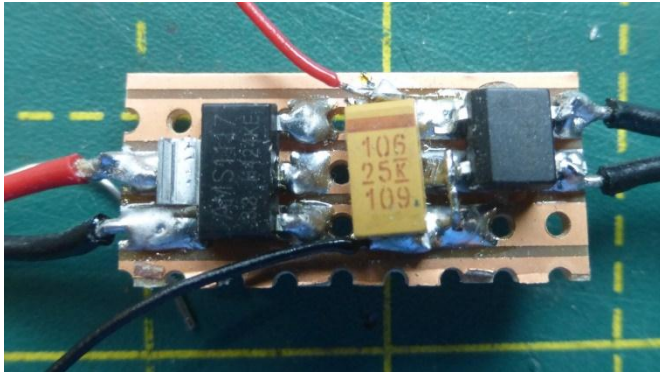
C=2200 uF, R=100 ohm, Diode 1N5819

Installation

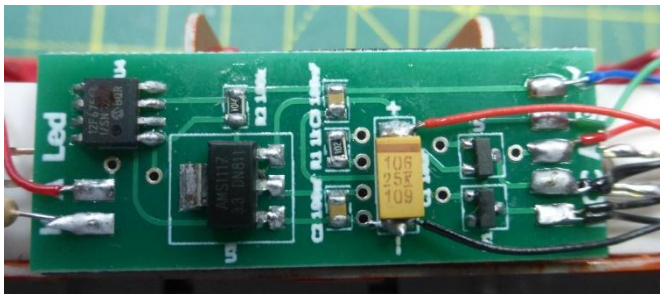


The stay alive circuit can be mounted within the coach or underneath, disguised as an air tank

Connection points



For the stripboard version the +/- of the stay alive are connected to the +/- of the electrolytic capacitor on the DCC/DC convertor as shown.



For the PCB version the +/- of the stay alive are connected to the +/- of the electrolytic capacitor as shown.

The video shows a test coach fitted with a stay alive circuit and the effect of switching the stay alive on/off.



[Click on image to view video](#)

Keith 31/08