

Relay PCB for function decoders, Part no 8110

The PCB 8110 is used for function decoders and is specially designed for switching the lighting in rolling stock by means of a relay via current carrying couplers.

The PCB is equipped with a 21 pin MTC socket. All of the important signals are routed to easily accessible, large solder pads.

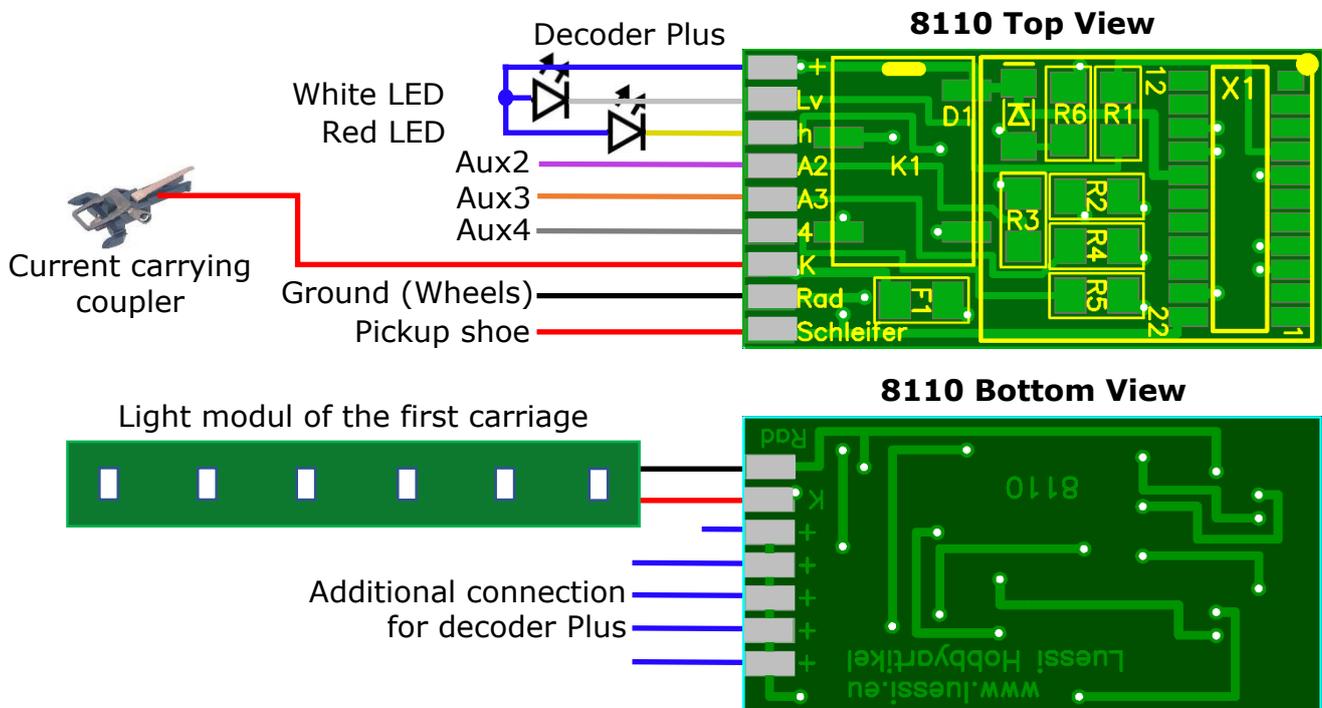
The **Aux1** output of the decoder switches the relay, that itself switches the current to the couplers on an off. The line used for this current is the main power coming from the pickup shoe. The relay can handle a maximal current of 1 A.

In order to protect the couplers against over current this line is protected by a resettable. The PCB is built with a small foot print of only 31 x 16 mm and is only 6 mm in height (without the decoder attached) and therefore fits into most rolling stock without problems. You may use any function decoder with a 21MTC interface, such as ESU (54621) or Zimo (MX689).



Connection

Colour according to ESU / NEM Standard



Wiring principle

The PCB is usually placed in the first (end) carriage, e.g. the driving trailer. The white front lights and red taillights can be connected directly to the PCB. No additional resistors are required when using LED, as the PCB is already fitted with accurate resistors.

All following carriages are then connected via single-pole current carrying couplers.

These carriages need a pickup on the wheels as the second connection for the lighting. The lighting modules used should be able to handle AC (e.g. the digital current from the tracks).

Technical data of the resettable

Manufacturer and type	Bel Fuse 0ZCG0050AF2C
Non tripping current	0.5 A
Tripping current	1.0 A
Max. voltage	30 V