

Universal light module for Märklin locomotives, item no. 8090

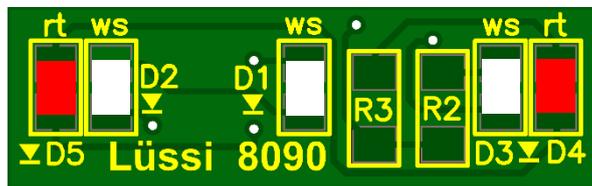
The light module 8090 has been developed for Märklin locomotives as well as many locomotives of other manufacturers, which are to be converted from incandescent lamps to LEDs.

The circuit board has three white LEDs for the front light and two red LEDs for the rear light. From the white LEDs, the LED on the right can be controlled separately, which can be used for locomotives based on the Swiss model for the Swiss light change.

The LEDs are switched by resistors, so the circuit board can be connected directly to the decoder outputs.

All connections are located on the back of the PCB and are doubled. These can be used as required. The printed circuit board comes with another, smaller printed circuit board. This can be soldered to the light module at a 90° angle and serves as a mounting for the light module, for example by gluing it to the locomotive floor. The connections are thus also led out on this smaller circuit board.

The module has a size of 23 x 7mm and therefore fits in a variety of locomotives.



Front View

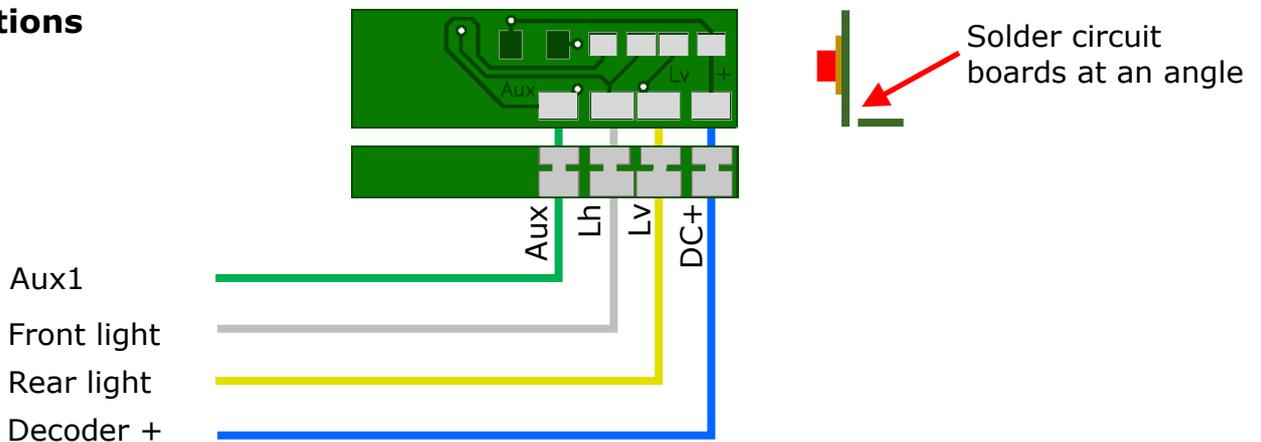
8090 Connections (Pads):

- + Decoder plus
- Lv White LED, A-Light
- Lh Single LED white, bottom right
- Aux Red LED bottom

Decoder Connections and Wire Colours (according to NEM standard):

- | | | |
|--------|--------------|-----------------------|
| Blau | Decoder plus | Return wire functions |
| White | F0 forward | Front light (Lv, F0v) |
| Yellow | F0 reverse | Rear light (Lh, F0h) |
| Green | Aux1 | Function key 1 |
| Purple | Aux2 | Function key 2 |

Connections



* The two connections Lv and Lh are deliberately arranged close together. When the Swiss light change is not used, these connectors can be connected together in order to active all three white LEDs together from one output of the decoder.