

Digitisation of Brawa scirt coaches (Schürzenwagen Gruppe 39) with built-in interior lighting boards

Brawa manual:

https://www.brawa.de/fileadmin/user_upload/produkte/downloads/bedienungsanleitungen/51043_BRAWA_BA.pdf

This manual contains the following important note: "The three zero-ohm resistors (R16 to 18) must be removed (desoldered) for digital operation.

Also important: Please insulate the circuit board to the decoder (with adhesive tape).

ZIMO function decoder MX671 (with cables) ready to install:



Connexions to the Brawa lighting board:

Left rail (black) to TL

Right rail (red) to TR

Function output (FO0v) front (white) to FF

FO (FO0r) rear (yellow) to FR

FO1 (green) to AUX1

Positive pole (blue) to ZVS

Electrolytic capacitor ground (black/white) to GND

After installation:

The interior light can now be switched on using button 1 (= FO1).

FO0v and FO0r are not connected to red rear lights. These LEDs can be soldered separately to the solder pads provided for this purpose on the car circuit board (per LED 'FR' as FO and '+5V' as positive pole).

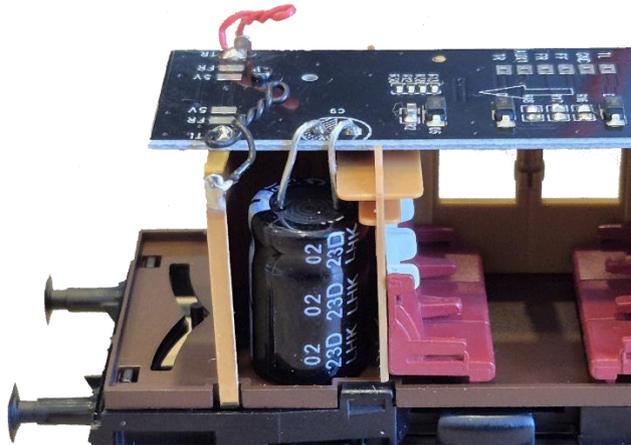
Unfortunately, the built-in capacitors do not supply the decoder. If a power storage device is desired, a capacitor must be soldered to the designated solder pads on the car circuit board. ZIMO recommends the Elko 1000 μ F/25 V, 10 x 15.4 mm for this purpose. This fits exactly into the second toilet. The dotted area is intended for the negative pole (ground). Now the power is also stored, and the LEDs continue to glow after a power interruption.

If the car is operated on AC analogue systems, a capacitor with a voltage resistance of at least 35 V is required.

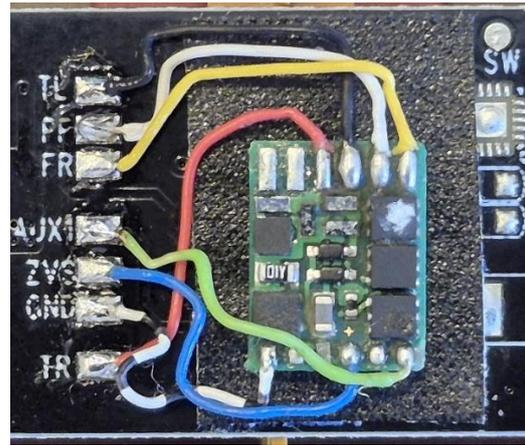
Images:



Overview of the interior lighting circuit board after installing the decoder and capacitor



The built-in ZIMO capacitor



The ZIMO MX671 function decoder

Note:

Modifications to the circuit board will void the manufacturer's warranty.

The interior lighting boards of other Brawa coaches are built in a similar way.

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