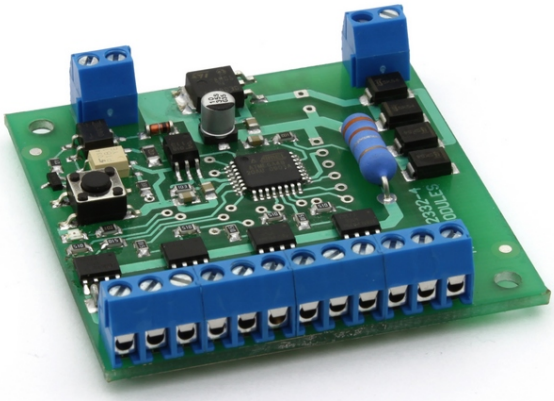
TM-22332

TRAINMODULES



Accessory decoder

User's manual

Magnetartikel- und Schaltdecoder

Handbuch

5 998975 300674

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Safety warning

During the operation of the device the specified technical parameters shall always be met. At the installation the environment shall be fully taken into consideration. The device must not be exposed to moisture and direct sunshine.
A soldering tool may be necessary for the installation and/or mounting of the devices, which requires special care.
During the installation it shall be ensured that the bottom of the device should not contact with a conductive (e.g. metal) surface!

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Features and properties

- Developed for DCC systems
- 8 short-circuit protected outputs (4 pairs)
- Individually addressed output pairs
- Quick programming
- Comprehensive DCC CV programming
- Keeping of the last output status
- Supplied from rail signal or separate power source
- Low idle mode current consumption
- High loadability

Technical parameters

Input supply voltage: 7-24V
Idle mode current consumption: 20 mA
Max. current consumption: 1500 mA
Dimensions: 62x58 mm

Short description

The devices serves for the control of traditional magnet coil switches, motor operated switch mechanisms (with accessory) and dual aspects light signals.

Wiring

The "POWER" input of the module is connected to the external supply voltage source (in case of individual supply) or to the rail sign (in case of common supply).
The connector labelled "DCC-IN" is connected to the digital centre or the rail signal output of the digital booster.

If common supply is applied, the supply voltage of the module is identical with the control sign; in this case the "POWER" and "DCC-IN" connectors are to be connected in parallel.

Programming – Quick programming

In case of quick programming the decoder address can be set by one button press without modifying the CV settings.
In this programming mode the address of the four outputs will take subsequent values.
Example for the programming of the 5, 6, 7, 8 addresses:

1. Shortly press the "PROG" button

The LED on the module flashes for indicating the programming mode.

2. Send the switch setting command on the digital centre

Give the required address (e.g. 5) using the switch setting mode of the digital centre and set the switch to any direction (turnout/straight).

3. The LED on the module gets dark

Programming was successful; the outputs are programmed to the required addresses.

Programming - CV mode

The parameters of the device can be modified also by the traditional Direct CV programming mode. To perform this operation select the programming menu of the digital centre. The detailed process is covered by the user's manual of the digital centre.

Alternative CV	Name	Value
129	Config 0/1 = Save last state	0-255 (1*)
130	Output 1 - Address Low	0-255 (1*)
131	Output 1 - Address High	0-7 (0*)
132	Output 1 - On-Time	0-255 (10*)
140	Output 2 - Address Low	0-255 (2*)
141	Output 2 - Address High	0-7 (0*)

142	Output 2 - On-Time	0-255 (10*)
150	Output 3 - Address Low	0-255 (3*)
151	Output 3 - Address High	0-7 (0*)
152	Output 3 - On-Time	0-255 (10*)
160	Output 4 - Address Low	0-255 (4*)
161	Output 4 - Address High	0-7 (0*)
162	Output 4 - On-Time	0-255 (10*)
7	Firmware version	
8	Mfg. ID / Reset	61

(*) Manufacturer's default setting

Address calculation

The decoder address is composed of two CV values.
Address Low = remainder (Selected address / 256)
Address High = integer part (Selected address / 256)

Example: Selected address = 1731
1731/256 = 6 with remainder 195
Address Low = 195
Address High = 6

Adjusting of the output pulse length

The activating time of the output can be given in 25 ms units by adjusting the "output x mode" CV.

CV = 0: Continuous mode
CV <> 0: Pulse mode, pulse length = CV*25ms

Example for a 2 second output pulse:
2 mp = 2000 ms. CV = 2000ms/25ms = 80

Optional accessories

TM-87380: Transformer 230V/16V AC (80VA)

TM-23661: Motor driver for accessory decoder

TM-52674: Bulb simulator

Guarantee and legal statement

Each parameter of the device will be submitted to comprehensive testing prior to marketing. The manufacturer undertakes one year guarantee for the product. Defects occurred during this period will be repaired by the manufacturer free of charge against the presentation of the invoice.

The validity of the guarantee will cease in case of improper usage and/or treatment.

Attention! By virtue of the European EMC directives the product can be used solely with devices provided with CE marking.

The mentioned standards and branch names are the trademarks of the firms concerned.

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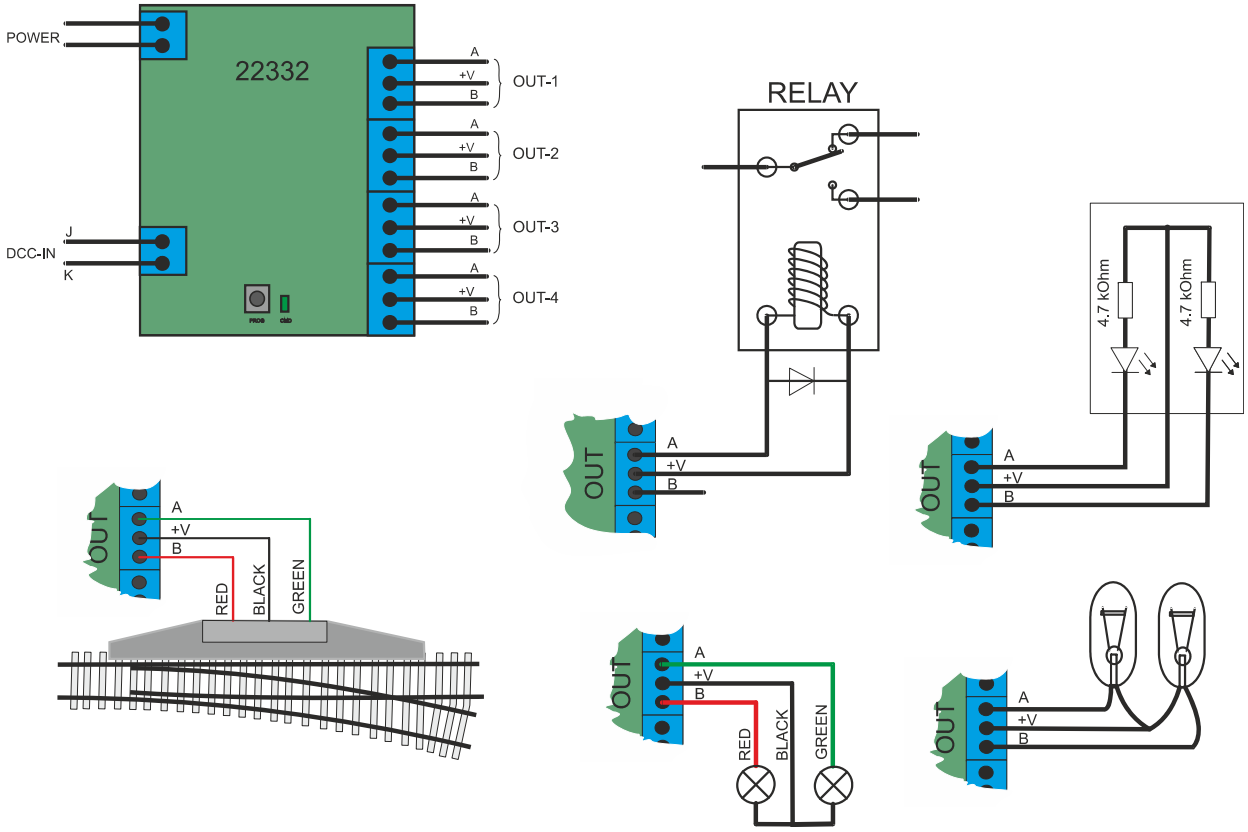
Figure 1


POWER
22332
DCC-IN
J
K
A
+V
B
OUT-1
OUT-2
OUT-3
OUT-4
RELAY
OUT
4.7 kOhm
4.7 kOhm
RED
BLACK
GREEN