mXion BM Train Detection Module User Manual

Contents

MAXION

mXion BM Train Detection Module

Introduction

Dear customer, we strongly recommend that you read these manuals and the warning notes thoroughly before installing and operating your device. The device is not a toy (15+).

NOTE: Make sure that the outputs are set to appropriate value before hooking up any other device. We can't be responsible For any damage if this is disregarded.

General information

We recommend studying this manual thoroughly before installing and operating your new device.

NOTE: Some functions are only available with the latest firmware. Please make sure that your device is programmed with the latest firmware.

Summary of Funktions

Train detection module for feedback system 8A power each output, 10A peak current 4 train detection inputs for 4 track sections 4 contact outputs for train detection Integrated LEDs will show the detection state Isolated inputs for all systems DC/AC/DCC operation all kind of voltage Current detection configurable for each ch. Analog and digital operation with all systems Analog only one direction possible Add-on for our RBM module Also usable for all manufactures CV programming (CV, Register, Bitwise, POM) Screw drives for stable mounting

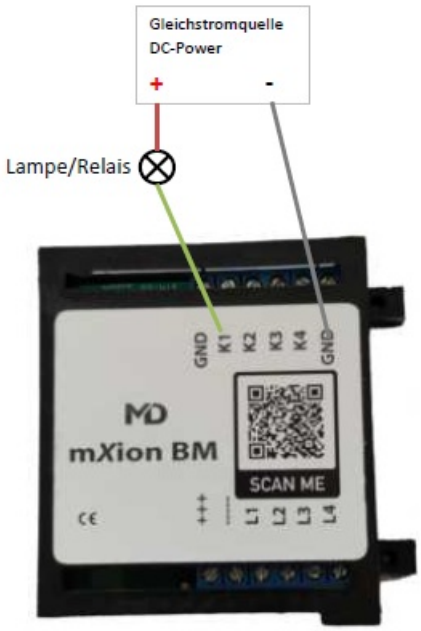
Scope of supply

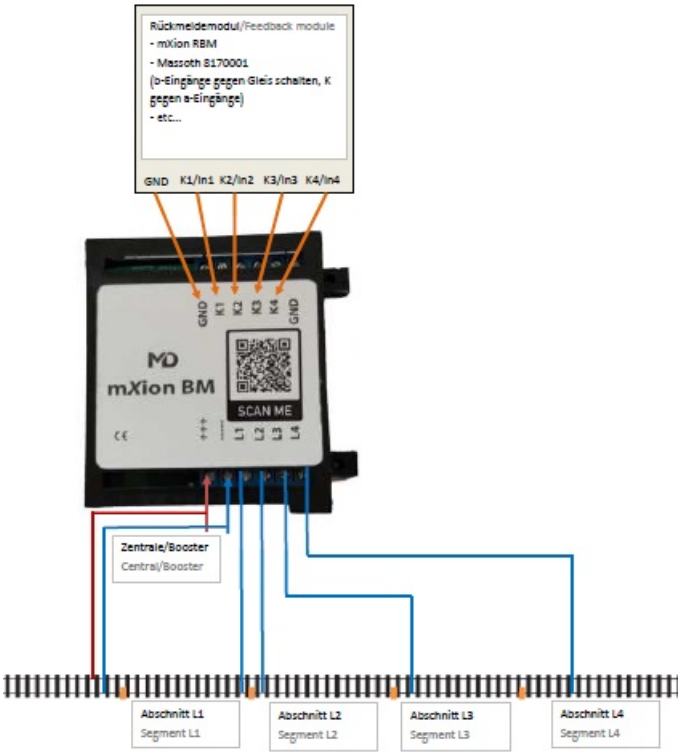
Manual
mXion BM

Hook-Up

Install your device in compliance with the connecting diagrams in this manual. The device is protected against shorts and excessive loads. However, in case of a connection error e.g. a short this safety feature can't work and the device will be destroyed subsequently.
Make sure that there is no short circuit caused by the mounting screws or metal.

Connection to feedback modules is easy to every feedback module of every manufacturer possible. You can also contact our module mXion RBM (Art No-7001) for XpressNet® and S88 as also LocoNet® to connect another BM module.





Product description

The mXion BM is a universal, analog and digital (any format/system) usable occupancy detector for the detection of electricity consumers within a section. The module supports 4 sections and can these ads or as switch contact feedback. Is loaded consumer within a segment, switches the corresponding output (for L1 K1, L2 K2 etc.) to ground (GND).

Ideal for displaying track plans with display of currently occupied track sections, PC control and much more. For feedback to the central is a corresponding feedback module required. For S88, LocoNet and XpressNet there is our feedback module Art No-7001 which feedback and occupancy detector is combined in one module and can be extendet with one BM.

The current detection limit can be set via CV in very small sets.

CV-Table

CV	Beschreibung	S	L/ W	Bereich	Bemerkung	
3	debounce	20		0 – 255	100ms / value debounce time inputs	
6	programming lock	160		0/160	2 = 915 Mhz (US)	
7	software version	–		–	radio channel	
7	**Decoder-Resetfunktionen**					
	2 Reset ranges selectable			11 16	Module is completely reset Programming lock (CV 6)	
8	Manufacturer ID	160		–	read only	
7+ 8	**Registerprogramiermodus**					
	Reg8 = CV address Reg7 = CV value				CV 7/8 retain their value First describe the CV 8 with destination address, then write or read CV 7 with value (eg: CV 19 should have 3) è CV 8 = 19, CV 7 = 3 send	
30	current detection for L1	5		0 – 255	current sensitivity value	
31	current detection for L2	5		0 – 255	current sensitivity value	
32	current detection for L3	5		0 – 255	current sensitivity value	
33	current detection for L4	5		0 – 255	current sensitivity value	

34	current hysterese	0		0 – 255	current sensitivity value	
50	POM address high	4		1 – 2048	POM programming address for switch mode (Standard = 2048)	
51	POM address low	0				

Technical data

- Power supply:
  5-25V DC/DCC
  5-18V AC
- Current:
  50mA (without functions)
- Maximum function current:
  each channel L1-L4 8A
- Temperature range:
  -20 up to 80°C
- Dimensions L*B*H (cm):
  5.5*5.3*2

NOTE: In case you intend to utilize this device below freezing temperatures, make sure it was stored in a heated environment before operation to prevent the generation of condensed water. During operation is sufficient to prevent condensed water.

Warranty, Service, Support

micron-dynamics warrants this product against defects in materials and workmanship for one year from the original date of purchase. Other countries might have different legal warranty situations. Normal wear and tear, consumer modifications as well as improper use or installation are not covered. Peripheral component damage is not covered by this warranty. Valid warrants claims will be serviced without charge within the warranty period. For warranty service please return the product to the manufacturer. Return shipping charges are not covered by micron-dynamics. Please include your proof of purchase with the returned good. Please check our website for up to date brochures, product information, documentation and software updates. Software updates you can do with our updater or you can send us the product, we update for you free.

Errors and changes excepted.

Hotline
For technical support and schematics for application examples contact:

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www.micron-dynamics.de
https://www.youtube.com/@micron-dynamics.

Documents / Resources

	mXion BM Train Detection Module [pdf] User Manual BM Train Detection Module, BM, Train Detection Module, Detection Module, Module

References

- Top Fahrradbekleidung für Damen & Herren - Ride your Style
- micron-dynamics
- micron-dynamics