

DMX Relais/Analog Interface 1

User Manual



DMX [®]
4
ALL

Description

The **DMX-Relais/Analog Interface 1** is designed for several kinds of controlling tasks.

There is 1 switch contact (Closer) and 1 analog output with 0-10V / 1-10V available.

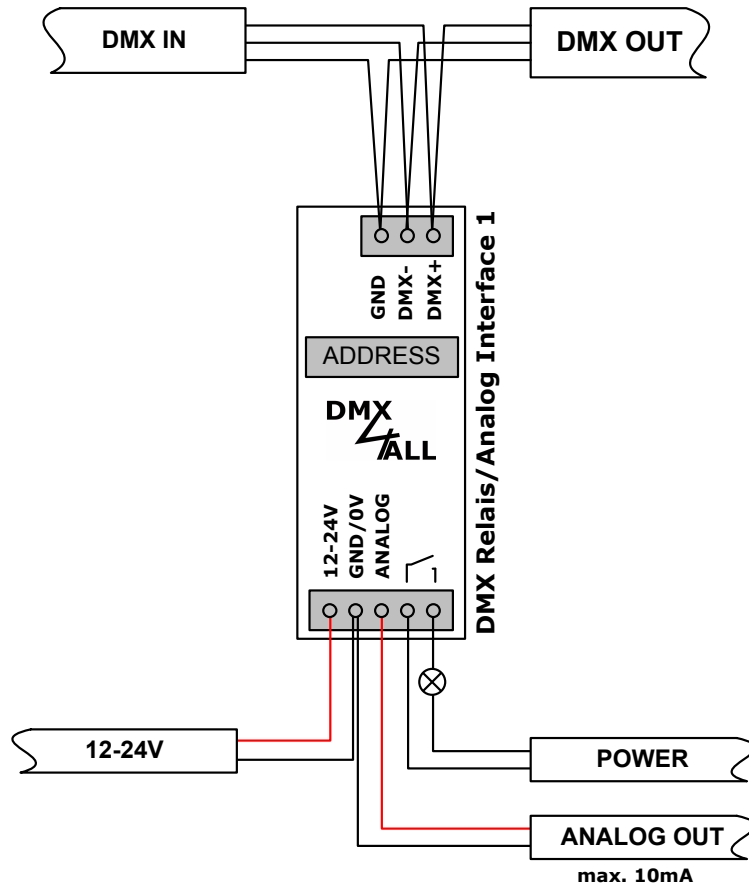
The switch contact is suitable for switching DC voltage as well as AC voltage.

A DMX-HOLD function, which can be activated optionally, leaves the switch condition as well as the analog value unchanged in the case of a DMX-failure.

Data sheet

Power supply:	12-24V DC / 250mA
Input:	1 or 2 channels
Output:	1 switch contact (1xON) max. 8A / 250V~ (165A/20ms Power up current peak) 1 analog signal 0-10V or 1-10V / 1-10V
DMX-FAIL:	Hold / Off
Connections:	Screw terminals
Dimensions:	29,2mm x 82mm

Connection



LED-Display-Codes

The integrated green LED is a multi functional display.

During the normal operation the LED lights permanently. In this case the device is working.

Furthermore the LED shows the current status. In this case the LED lights up in short pitches and then is missing for longer time.

The number of the flashing lights is equal to the event number:

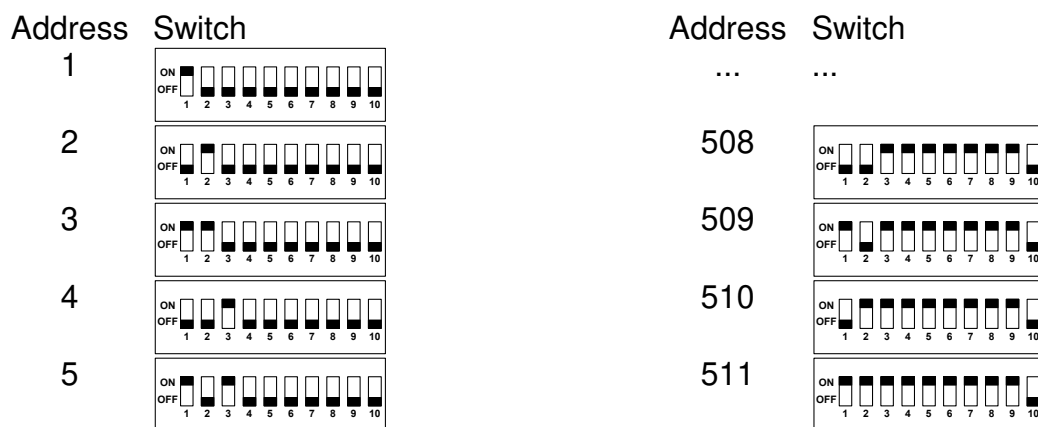
Status-Number	Error	Description
2	No DMX	There is no DMX-Signal recognized
3	Addressing error	Please check the adjusted DMX address

DMX-Addressing

The start address is adjustable about switch 1-9.

Thereby, switch 1 has the valency $2^0 (=1)$, switch 2 the valency $2^1 (=2)$ and so on, up to switch 9 with the valency $2^8 (=256)$.

The sum of the switches showing ON is equal to the start address.



Setting the operation mode

The **DMX-Relais/Analog Interface 1** has several operation modes (MODE) set as follows:

- Turn on the device
- Set switch 9 and 10 on OFF
- Set switch 10 on ON
- Adjust the operation mode via switch 1-8
- Set switch 9 on ON
- Set switch 10 on OFF
- The LED lights up 4x to confirm the takeover
- Adjust the DMX-address via switches 1-9

Switch 1 OFF: Relay and Analog output are controlled by separated DMX-channels
Relay switches by DMX-value > 127

Switch 1 ON: Relay and Analog output are controlled by common DMX-channels
Relay switches by DMX-value > 0

Switch 2 OFF: Analog output 8Bit (256 Steps)

Switch 2 ON: Analog output 10Bit (1024 Steps)

Switch 3 OFF: Analog output 0-10V

Switch 3 ON: Analog output 1-10V

Switch 8 OFF: DMX-HOLD not active

Switch 8 ON: DMX-HOLD active

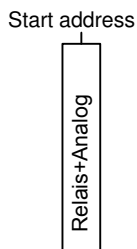
Relay and analog output are controlled by common DMX-channels

This mode uses no separated DMX-channel for the relay. The relay switches as soon as the analog value is higher than 0V respectively the DMX-value for the analog output is higher than 0.

This mode can be activated via switch 1 during the operation mode setting.

In the activated case the DMX-channel assignment is as follows:

DMX-Channel assignment
for 8 Bit:



DMX-Channel assignment
for 10 Bit:



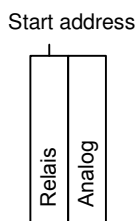
Set the resolution of the analog output

The resolution of the analog output will be set via switch 2 during the operation mode setting.

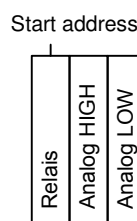
The analog output is to operate with a definition of 8 Bit (256 steps) or 10 Bit (1024 steps).

According to the definition of the analog output settings there is one or two DMX-channels needed, representing in the picture.

DMX-Channel assignment
for 8 Bit:



DMX-Channel assignment
for 10 Bit:



Setting the output voltage 0-10V / 1-10V

The output voltage for the analog output is adjustable via switch 3 during the operation mode settings.

DMX-HOLD Function

The **DMX-Relais/Analog Interface 1** has a DMX-HOLD function which stores the last value in the case of a DMX-signal failure. The relay and the analog output leaves unchanged.

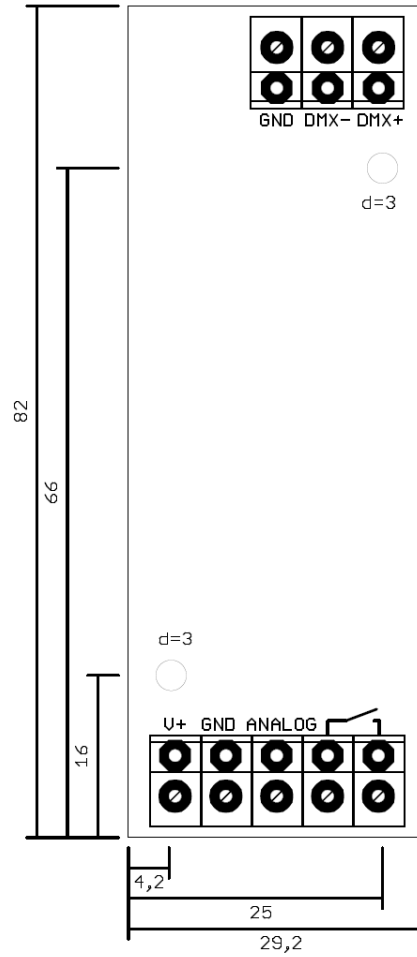
In the case of a power failure the stored value will be rejected !

If the DMX-HOLD function is not activated so the relay will be switched off in the case of a DMX-signal failure and 0V outputted to the analog output.

The DMX-HOLD function can be activated via switch 8 during the operation mode setting:

- Switch 8 ON → DMX-HOLD active
- Switch 8 OFF → DMX-HOLD not active

Dimensions



(all details in mm)

Accessory

Top-hat rail mounting 350



Power supply 12V / 20W



CE-Conformity



This assembly (board) is controlled by a microprocessor and uses high frequency. In order to maintain the properties of the module with regard to CE conformity, installation into a closed metal housing in accordance with the EMC directive 2014/30/EU is necessary.

Risk-Notes

You purchased a technical product. Conformable to the best available technology the following risks should not be excluded:

Failure risk: The device can drop out partially or completely at any time without warning. To reduce the probability of a failure a redundant system structure is necessary.

Initiation risk: For the installation of the board, the board must be connected and adjusted to foreign components according to the device paperwork. This work can only be done by qualified personnel, which read the full device paperwork and understand it.

Operating risk: The Change or the operation under special conditions of the installed systems/components could as well as hidden defects cause to breakdown within the running time.

Misusage risk: Any nonstandard use could cause incalculable risks and is not allowed.

Warning: It is not allowed to use the device in an operation, where the safety of persons depend on this device.

Disposal



Electrical and electronic products must not be disposed in domestic waste. Dispose the product at the end of its service life in accordance with applicable legal regulations. Information on this can be obtained from your local waste disposal company.



DMX4ALL GmbH
Reiterweg 2A
D-44869 Bochum
Germany

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