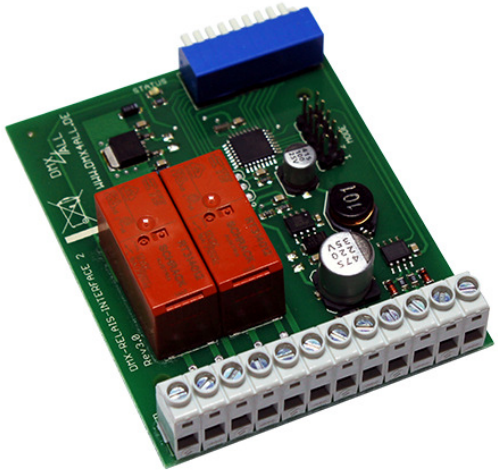
DMX-RELAIS 2

User manual



DMX 4 ALL ®

Specification

The **DMX-RELAIS 2** is designed for switching tasks of several kinds.

Two potential free contacts with up to 8A switching power are available.

This relay interface is suitable for switching DC voltage or AC voltage.

A DMX FAIL function which can be activated optionally allows relays states unchanged at a loss of DMX signal.

The following operating modes are available:

- **Standard 2 channel Relaisinterface**
  2 autonomous switching outputs will be activated as soon as the DMX value reaches the range 128-255.

- **FogControl**
  2 switching outputs controlled by a DMX-channel. Thereby output 1 is for the heating element and output 2 for the pump control. An internal timer allows the automatic fog output.

- **Jalousie-Control**
  2 mutual locked switching outputs, controlled by 2 DMX-channels. Thereby is only one relay switched on, if the DMX value reaches the range 128-255.

- **Impulse**
  If the DMX value goes in the range of 128-255, the corresponding output for 1 second turns on. Thereafter, the value must be return back below 128 to triggering an impulse again.

- **DMX value not 0**
  2 autonomous switching outputs will be activated as soon as the DMX value reaches the range 1-255.

Technical data

Power supply:	12-24V DC / 250mA
DMX-channels:	1 or 2 channels, depending on operating mode
DMX-HOLD:	available
Operating modes:	Standard switching output Jalousie controlling FogControl Impulse DMX-Value not 0
Output:	2 relay max. 8A / 250V~ (resistive loads)
Board dimensions:	64,2mm x 82mm

LED-Display-Codes

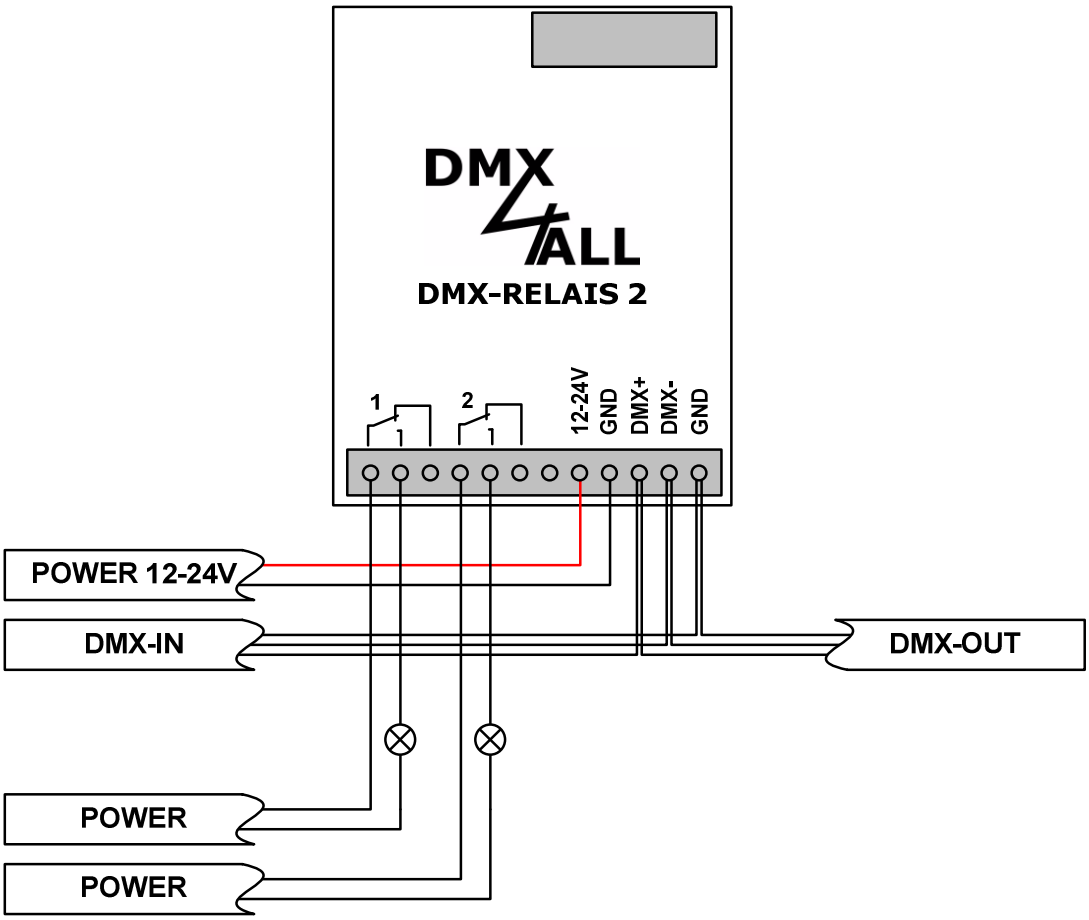
The integrated DMX-LED is used as a multifunctional display.

This LED lights non-stop in normal operation. If the LED does not light, there is no DMX512-input-signal.

Also the LED signalled the operation status. In this case the LED lights up in short pitches and then turns into off modus. The Number of flashing signals is equal to the Number of the error status.

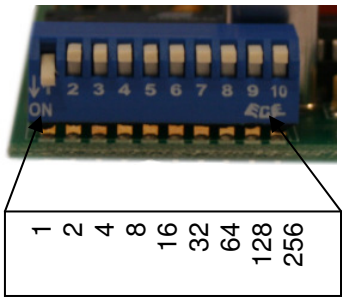
Error Status	Error	Description
1	No DMX	There is no DMX-input signal
2	Address error	Check if a valid DMX- starting address is adjusted at the DIP-switch
3	DMX error	An invalid DMX input signal is established

Connection


DMX4ALL
DMX-RELAIS 2
1
2
12-24V
GND
DMX+
DMX-
GND
POWER 12-24V
DMX-IN
DMX-OUT
POWER
POWER

Addressing

The starting address is adjustable about the DIP-switch. Switch 1 has the valency 2^0 (=1), switch 2 the valency 2^1 (=2) and so on … finally switch 9 has the valency 2^8 (=256). The sum of the switches which are moved to ON position, represents the starting address.



Address	Switch
1	
2	
3	
4	
5	

Address	Switch
...	...
508	
509	
510	
511	

DMX-HOLD function

The DMX-RELAIS 2 has a DMX-HOLD function that leave the state of the relais unchanged if the DMX signal fails.

If the DMX-HOLD function is not active so all relays are switched off during a failed DMX signal.

In a power failure the stored value is discarded!

DMX-HOLD is activated with switch 10:

Switch 10 ON ➔ DMX-HOLD activated

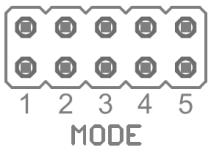
Switch 10 OFF ➔ DMX-HOLD not activated

Operating mode

Standard

2 autonomous switching outputs will be activated as soon as the DMX value reaches the range 128-255.

Open all MODE-Jumper 1-5 for this operating mode:

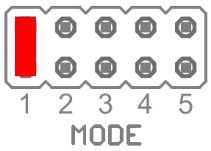


DMX channel	DMX value	Function
1	0-127	Output 1 OFF
	128-255	Output 1 ON
2	0-127	Output 2 OFF
	128-255	Output 2 ON

FogControl

2 switching outputs controlled by a DMX-channel. Thereby output 1 is for the heating element and output 2 for the pump control. An internal timer allows the automatic fog output.

Close only MODE-Jumper 1 for this operating mode:

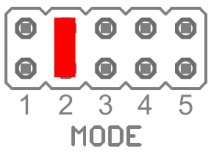


DMX channel	DMX value	Function
1	0-7	Device off
	8-20	Device on, no fog-emission
	21-40	Timer 10s on / 300s off *
	41-60	Timer 20s on / 350s off *
	61-80	Timer 30s on / 200s off *
	81-100	Timer 40s on / 150s off *
	101-120	Timer 50s on / 100s off *
	121-140	Timer 60s on / 75s off *
	141-160	Timer 70s on / 50s off *
	161-180	Timer 80s on / 40s off *
	181-200	Timer 90s on / 30s off *
	201-220	Timer 100s on / 20s off *
	221-240	Timer 110s on / 10s off *
	141-255	Permanent fog-emission

Jalousie-Control

2 mutual locked switching outputs, controlled by 2 DMX-channels. Thereby is only one relay switched on, if the DMX value reaches the range 128-255.

Close only MODE-Jumper 2 for this operating mode:

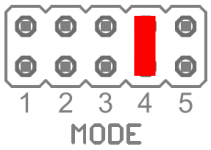


DMX channel	DMX value	Function
1	0-127	Output 1 OFF
	128-255	Output 1 ON, if Output 2 OFF
2	0-127	Output 2 OFF
	128-255	Output 2 ON, if Output 1 OFF

Impulse

If the DMX value goes in the range of 128-255, the corresponding output for 1 second turns on. Thereafter, the value must be return back below 128 to triggering an impulse again.

Close only MODE-Jumper 4 for this operating mode:

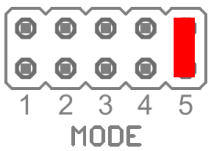


DMX channel	DMX value	Function
1	0-127	Output 1 OFF
	128-255	Output 1 1x 1-Second ON
2	0-127	Output 2 OFF
	128-255	Output 2 1x 1- Second ON

DMX-Value not 0

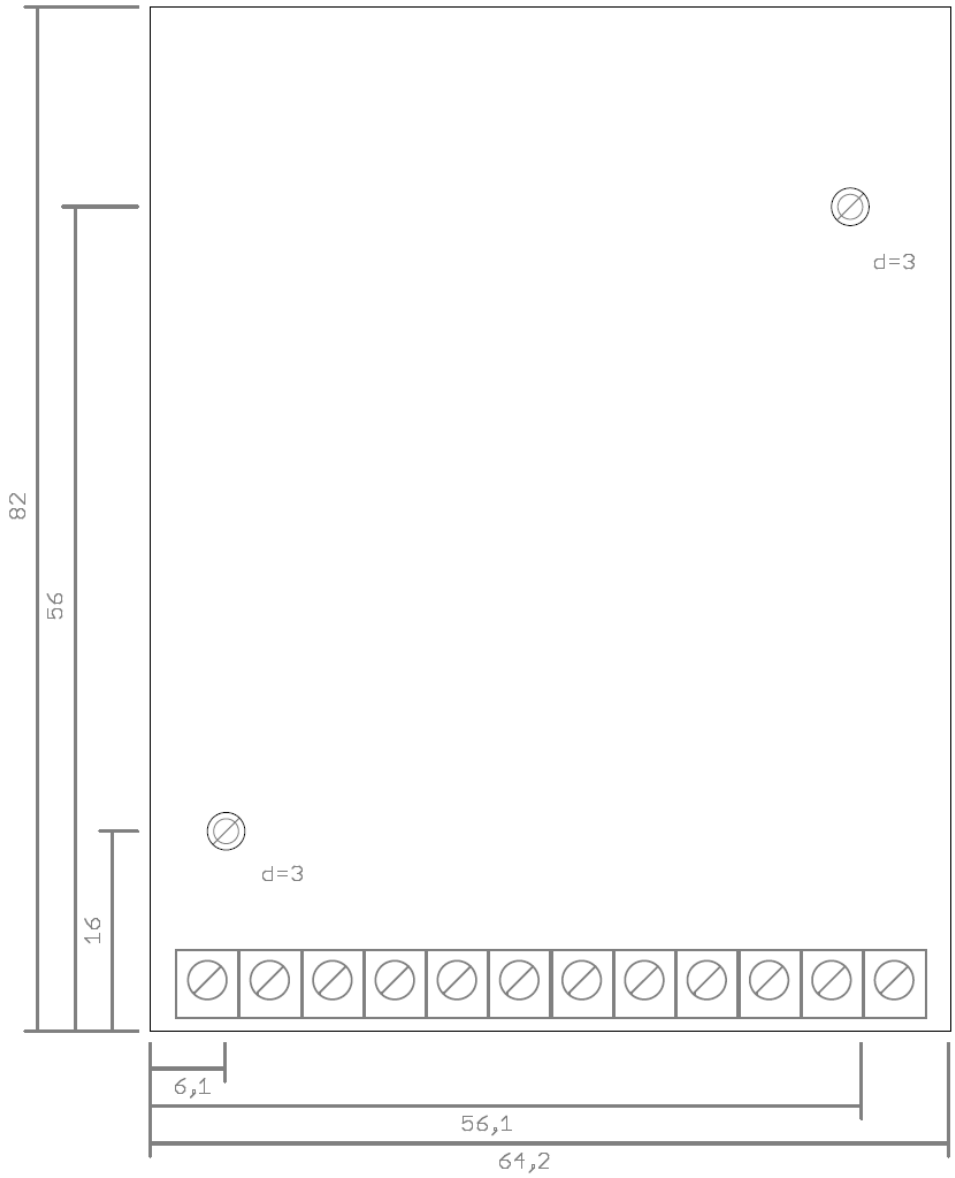
2 autonomous switching outputs will be activated as soon as the DMX value reaches the range 1-255.

Close only MODE-Jumper 5 for this operating mode:



DMX channel	DMX value	Function
1	0	Output 1 OFF
	1-255	Output 1 ON
2	0	Output 2 OFF
	1-255	Output 2 ON

Dimensions



All units are mm

Equipment

DIN-Rail housing 700

Power Supply 12V / 20W

CE-conformity

This assembly (board) is controlled by a microprocessor and uses high frequency. To get the characteristics of the assembly in relation to the CE-conformity, an installation in a compact metal casing is necessary.

Risk-Notes

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

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