

## OPERATING MANUAL

### DMX Relay Card 3002R-H



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## PREFACE

Thank you for choosing a SOUNDLIGHT device.

The SOUNDLIGHT DMX Relay Card 3002R-H is an intelligent DMX demultiplexer decoding digital data complying with standard USITT DMX512 and DIN 56930-2 to contact relay output. The card can be used with all standard light control systems. Its special advantages include:

- **universal protocol decoding**  
Recognizes all variants of the protocol as defined by USITT / ESTA / DIN
- **future-proof**  
The unit is software controlled and can easily be adapted to any change in protocol definition.
- **integrated hysteresis**  
Integrated hysteresis ensures flicker free switching
- **simple supply**  
The power supply is from standard mains voltage 230V AC
- **signal loss hold function**  
In the case of a loss of the drive signal the last setting will remain intact.
- **cost-effective**  
The SOUNDLIGHT 3002R-H is a cost-effective solution for many purposes.

## UNPACKING

Please unpack carefully and check that all items are intact. When leaving our factory, the card has been in good condition. In case of damage during transport please notify the carrier immediately.

When unpacking, you should identify these items:

- \* the interface card 3002R-H
- \* this manual

## INSTALLATION

The unit snaps onto a standard DIN rail. To remove the unit, tear the yellow locker tab using a screwdriver and remove the relay module.

All connections to the relay module are via spring loaded terminals. To insert a wire, press the appropriate lever, insert the wire and release.

**NOTE:** to program the interface, a programming adapter (addressboard 3000P or 3003P, available as accessory) is needed. This must be ordered separately and can be used for all of our interfaces.

## POWER SUPPLY

The power supply connector colors are:

- dark grey: 230V AC (Phase)
- blue: 0 V AC (Neutral)

Upon application of supply voltage the card is ready for operation.

Power supply is fused internally. If the unit fails replace the fuse with same type and rating (SMD, 125mA, fast)

## DMX INPUT / OUTPUT

Connection to the DMX512 data line is by two connector terminal blocks. Either block can be used as signal input or as signal output, with both terminal blocks being fed-thru.

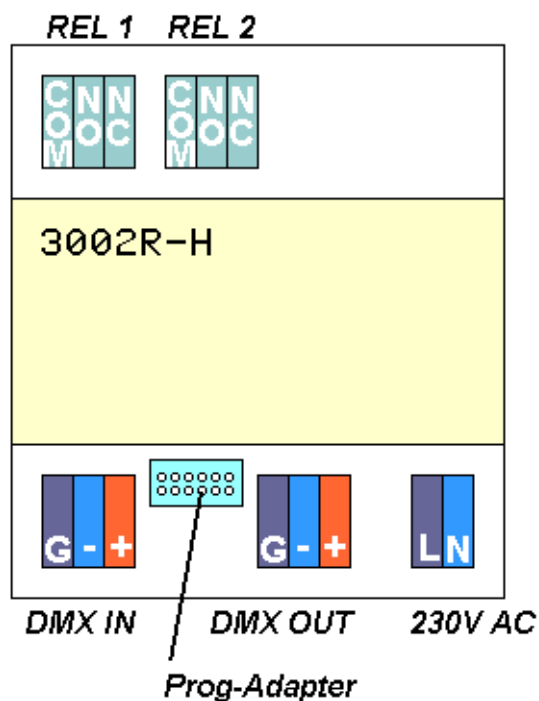
### DMX INPUT

1: grey	GND
2: blue	DMX -
3: red	DMX +

### DMX OUTPUT

1: grey	GND
2: blue	DMX -
3: red	DMX +

Use the shown pinout to connect to a standard DMX XLR connector.



The drawing shows the position of the onboard connectors. Please refer to the text for functionality of the connectors.

## SIGNAL INDICATORS

The state of the demultiplexer card is signalled with two indicator LEDs.

green:	OPERATION (blinking)
red:	ERROR (blinking)
	Error blinking at data errors or loss of communication.

## START ADDRESS SETTING

As the unit is intended for use within building site installations, there are no switches for any type of configuration. Start address setting is via internal EEPROM (electrically erasable programmable read only memory). Every time the card is powered up, it reads the preprogrammed start address and sets the internal decoder accordingly. To set a different start address, attach the optionally available programming adaptor (switch board). There are different types of switch boards available, any SOUNDLIGHT address board will work.

## START ADDRESS PROGRAMMING

to program a different start address, proceed as follows:

- attach the address board 300P (below) or 3003P (right)
- apply a valid DMX signal
- power up the 3002R-H relay interface
- set the start address to the desired value
- the unit will program that address and indicate programming through blinking both LEDs four times. It may take up to 5 seconds for the unit to respond, so be patient. If the unit does not respond, the selected address may already be set. To verify, try a different address first.



EXAMPLE: set start address 122

- unpower the interface
- attach the start address board
- apply DMX512
- power up the decoder
- set a start address of 122
- watch the unit do the programming (blink both LEDs red-green four times)
- detach the start address switch board



Next time the unit is powered up, the programmed start address will be read from memory.

## CONFIGURATION SWITCH SETTING

On the address board 3000P, there are four DIP-switches which allow setting some parameters of the DMX relay card 3002R-H. Again, these settings are saved in internal memory and recalled at power-up. On the start address board 3003P, program S1-S4 accordingly.

Please refer to the table below for the settings supported.

<b>DIP-SWITCH 1:</b>	<b>HOLD MODE</b>	Selects the output behaviour at loss of DMX data
	OFF	Output goes to level as defined by DIP SWITCH #2
	ON	Output will remain at last valid setting
<b>DIP-SWITCH 2:</b>	<b>OUT VALUE</b>	Selects the non-HOLD output value at loss of DMX data
	OFF	all Outputs OFF
	ON	all Outputs ON
<b>DIP-SWITCH 3,4:</b>	<b>HYSTERESIS</b>	Selects the switching trip points
	S3=OFF, S4=OFF	both outputs are switching at 45% / 55%
	S3=ON, S4=OFF	both outputs are switching at 25% / 75%
	S3=OFF, S4=ON	both outputs are switching at 1%
	S3=ON, S4=ON	Output 1 switches from 25-50% and from 75% to 100%
		Output 2 switches from 50% to 100%

## TECHNICAL DATA

Dimensions: 85 mm x 66 mm x 112 mm (W x H x D)  
Power Supply: 230V AC approx. 5VA  
DMX IN: 1 Unit Load  
DMX OUT: fed-through  
Relay Out: 2x changeover, contact rating max. 10A resistive load  
Order Code.: 3002R-H

## DISTURBANCES

If a trouble-free operation cannot be guaranteed, disconnect the relay card interface and secure it against unwanted operation. This is especially necessary, when

- the unit has visible damages;
- the unit does not operate;
- internal parts are loose;
- connection cables show visible damages.

## LIMITED WARRANTY

This instrument is warranted against defects in materials and workmanship for a period of 12 months, beginning with the date of purchase. The warranty is limited to repair or exchange of the hardware product; no further liability is assumed. SOUNDLIGHT is not responsible for damages or for loss of data, sales or profit which arise from usage or breakdown of the hardware product. In Germany, SOUNDLIGHT will repair or replace established defects in hardware, provided that the defective part is sent in, freight paid, through the responsible dealer along with warranty card and/or sales receipt prior to expiration of warranty.

Warranty is void:

- when modifying or trying to repair the unit without authorisation;
- modification of the circuitry;
- damages by interference of other persons;
- operation which is not in accordance with the manual;
- connection to wrong voltage or current;
- misuse.

## SERVICE

There are no parts within the DMX relays card 3002R-H which require the user's attention. Should your unit require servicing, please send it to the factory, freight paid.

## INTERNET-HOTLINE

Please check our internet domain <http://www.soundlight.de> for new versions, updates etc. If you have any comments which may be worth considering, please send a message to [support@soundlight.de](mailto:support@soundlight.de). We will check your message and reply accordingly.

## END-OF-LIFETIME

**SOUNDLIGHT**  
The DMX Company



When the useful lifetime of this product has been reached, it must be disposed of properly. Electronic devices must not be placed in domestic waste. SOUNDLIGHT is a WEEE registered company (WEEE DE 58883929)