

OPERATING MANUAL

DMX Proportional Valve Driver S3004V Mk1

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Thank you for choosing a SOUNDLIGHT device.

The SOUNDLIGHT DMX Proportional Valve Driver S3004V is an intelligent DMX converter decoding digital data complying with standard USITT DMX512 and DIN 56930-2 to a PWM modulated output to drive magnetic valves. 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.
- **high linearity**
As the unit accepts and outputs data in digital format, excellent linearity characteristics result.
- **simple supply**
The power supply is achieved by its own PSU, power supply is 230V AC.
- **signal loss**
In the case of a loss of the drive signal a defined output state will be set
- **cost-effective**
The SOUNDLIGHT S3004V is a cost-effective solution for many purposes.

APPLICATIONS

The driver S3004V is designed to drive proportional acting valves by means of a pulse width modulated output. It can be used in conjunction with magnetic valves operating on 24V DC, max. 1A, supply voltage.

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 S3004V
- * this manual

CONNECTORS

The S3004V decoder has terminal input and output connectors for quick wiring..

CN8 DMX Input/Output

1	grey	GND
2	blue	DMX -
3	orange	DMX +

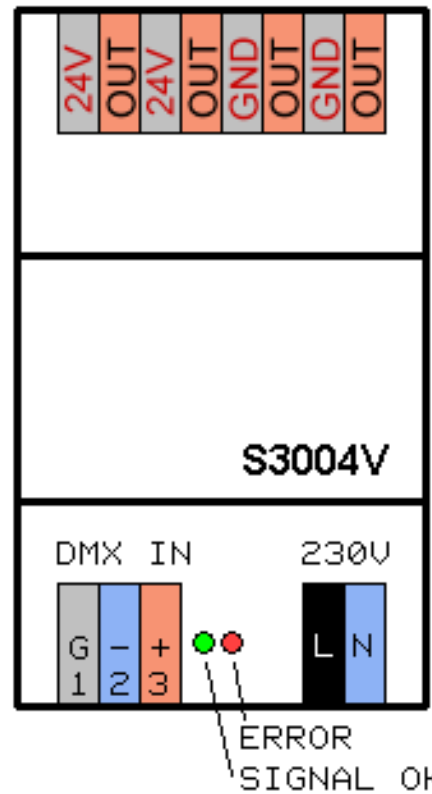
CN6 Power supply

1	grey	230V AC, LIVE
2	blue	230V AC, Neutral

CN1-4

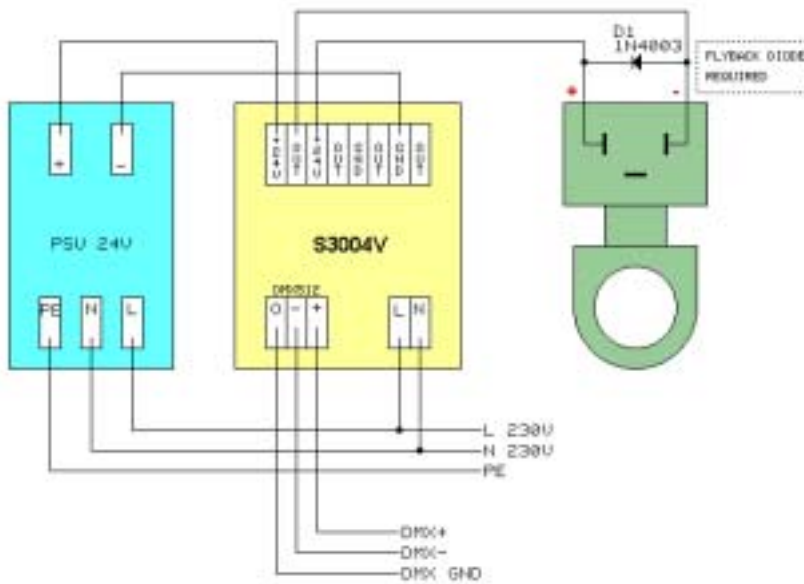
Output Connector

1	grey	24V DC ext. supply
2	orange	output
1	grey	24V DC ext supply
2	orange	output
1	grey	GND 0.0V ext supply
2	orange	output
1	grey	GND 0.0V ext supply
2	orange	output



VALVE CONNECTION

The magnetic valve is to be connected to the output connector. As the output is driven between the OUT terminal and the GND terminal, no voltage will occur and supply of the output valve is to be derived from a suitable external power supply. The diagram below illustrates how to connect external power supply, proportional valve driver S3004V and the valve.



NOTE:

The valve must be bypassed with a suitable suppressor diode, e.g. type 1N4003 thru 1N4007, to prevent damage of the output driver by inductive voltages.

Failure to add a suitable protection diode may result in malfunction or damage. Please make sure that correct orientation of the diode (reverse biased) is applied.

LED SIGNALLING

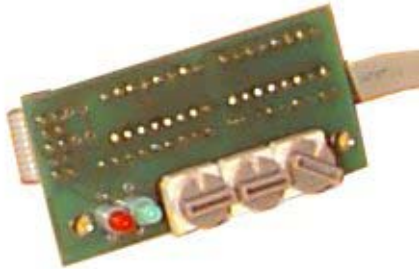
Status signalling is with LED indicators:

steady light:	DMX reception ok
flashing:	receive error or no receive signal

START ADDRESS SETTINGS

The DMX start address denotes the address of the DMX channel to drive the valve output. The setting is stored internally and can be set or overridden by means of a separate switch board. This address switch board is connected to the pin header, which is accessible after removing the top cover.

To set a new start address, simply set the switches to the desired value. Valid address settings are 001 thru 512.



The last switch setting is automatically stored in memory. If the unit is powered up without a switch board attached, this last setting will be loaded and set active.



connector to switch board

TECHNICAL DATA

Power supply:	230V AC
DMXIN:	1 Unit Load, optically isolated
DMXOUT:	fed thru
Valve Out:	Open Drain, FET control, max 24V DC, max. 1A, 300 Hz
Order code.:	S3004V

DISTURBANCES

If a trouble-free operation cannot be guaranteed, disconnect the decoder 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.

CE MARKING



The unit has been tested in our lab and has been marked to comply with CE requirements. To ensure compliance, use grounded power leads only and make sure that properly shielded data lines (CAT5, DMX data cable or Digital Audio cable to AES/EBU specifications) are used. Any modifications not approved by the manufacturer may void CE compliance.

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 proportional valve driver S3004V 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. We will check your message and reply accordingly.