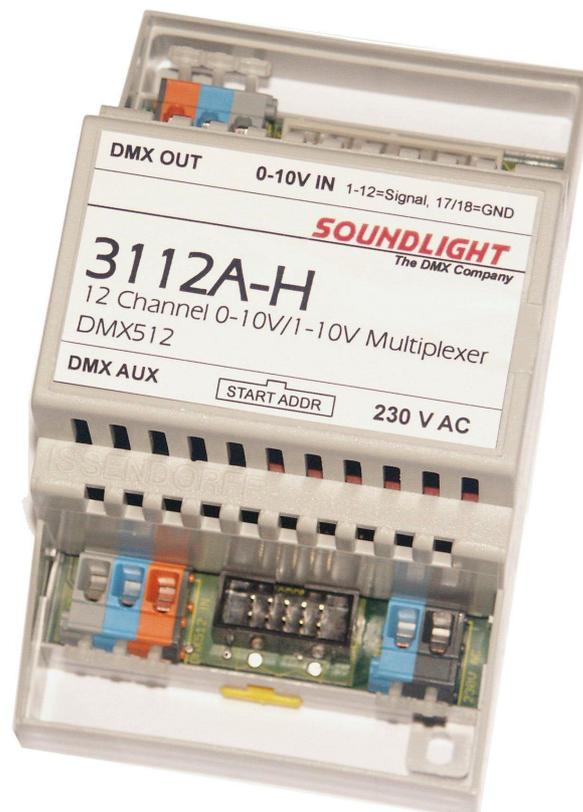


OPERATING MANUAL

DMX Multiplexer 3112A-H Mk2



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Thank you for choosing SOUNDLIGHT products.

The SOUNDLIGHT DMX Multiplexer 3112A-H will convert analog input voltages to digital DMX512 signals according to USITT DMX512/1990 (United States Institute for Theatre Technology, www.usitt.org) or DIN56930-2 (www.din.de). All types of equipment labeled with "DMX-512" or "DMX-512/1990" may be connected.

Advantages of the DMX multiplexer 3112A-H include:

- addressable
The start address of the output signal may be selected by rotary BCD switches. All 512 DMX channels can be selected.
- extended channel count
The interface supports up to 12 analog inputs.
- buffered output
The DMX data output is actively buffered.
- simple supply
The supply voltage is 230V AC. All printed circuit boards are equipped with on-board stabilized voltage regulators.
- high safety level
The multiplexer uses low voltage throughout.
- cost effective
The SOUNDLIGHT 3112A-H DMX multiplexer is a cost effective solution to retrofit existing legacy equipment based on standard 0...+10V control.

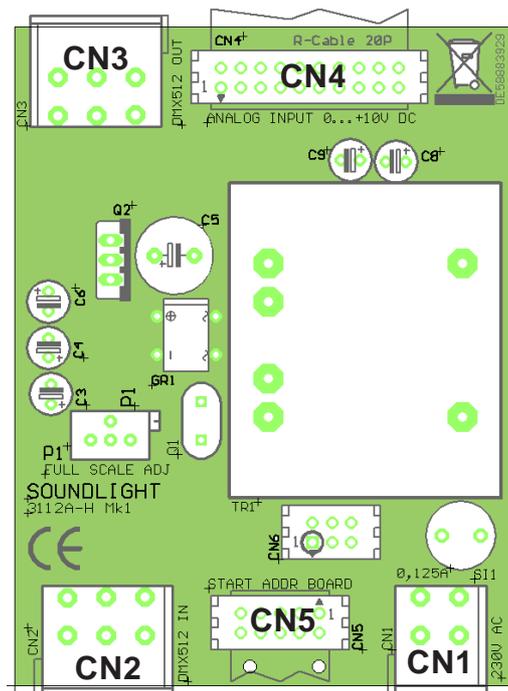
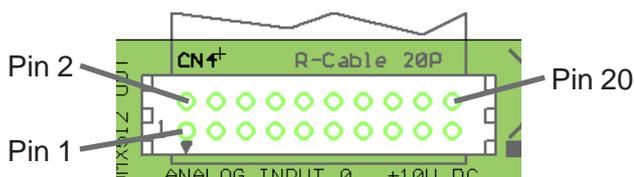
CONNECTORS

The DMX multiplexer 3112A-H features these connectors:

CN1	POWER SUPPLY	2-pin Connector	1	blue	0V AC (N)
			2	black	230V AC (L)
CN2	AUX OUT	3-pin connector	1	grey	GND, Shield
			2	blue	DMX -
			3	orange	DMX +
CN3	DMX OUT	3-pin connector	1	grey	GND, Shield
			2	blue	DMX -
			3	orange	DMX +

CN4 ANALOG IN 20-pin connector

- 1 Analog input 1
- 2 Analog input 2
- 3 Analog input 3
- 4 Analog input 4
- 5 Analog input 5
- 6 Analog input 6
- 7 Analog input 7
- 8 Analog input 8
- 9 Analog input 9
- 10 Analog input 10
- 11 Analog input 11
- 12 Analog input 12
- 13 nc
- 14 nc
- 15 nc
- 16 nc
- 17 **Shield, 0V, GND**
- 18 **Shield, 0V, GND**
- 19 +5V stab out
- 20 +10V DC stabilized out



SIGNALANZEIGEN

The Multiplexer 3112A-H consists of two signalling LEDs:

- red: Standby
- green: unit is active, at least one input signal is present.

UNPACKING

Please unpack carefully and check that all items complete and are intact. When leaving our factory, the card has been in good condition. In case of damage during transport please notify the carrier immediately. Without a written and carrier acknowledged report we cannot process damaged shipments.

When unpacking, you should identify these items:

- * the interface 3112A-H
- * this manual

IMPORTANT NOTICE:

All decoders intended for DIN rail mount may need a DMX start address board to set the desired start address. DMX start address boards cat no. 3000P (switches) or 3003P (display) may be used. Since one start address board can be used to program any DIN rail unit this is NOT contained with this product and must be ordered separately.

0-10V / 1-10V

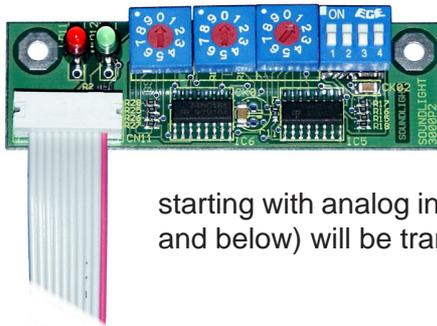
The multiplexer can be used for signal input voltages from 0..10V or 1...10V, respectively. (to change the input range see chapter "DIP SWITCHES"). If active inputs are required to comply with unpowered 1-10V driving gear, please proceed as follows:

- Connect a 2k2 resistor from each signal input to pin 20/CN1 or to +12V DC

SIGNALLING

Upon connection of power (230V AC) to connector CN2 (see page 2) the multiplexer is ready to work. The red LED will light. As soon as any signal input (1-12) is driven from an input voltage of more than 100mV the green LED will come up to indicate activity.

SWITCH SETTINGS



To program the multiplexer configuration the DMX start address board may be connected to CN5. The multiplexer may be used with or without start address board connected; if the board is disconnected the last valid settings will be retained in nonvolatile memory. The DMX start address denotes the data slot number

starting with analog input #1, followed by inputs #3 thru #12. All other data slots (above and below) will be transmitted as ZERO.

DIP-SWITCHES

The DIP switches are used to configure the multiplexer.

DIP-SWITCH 1	OFF: Normal ON: Switch mode activated
DIP-SWITCH 2	OFF: input voltage 0...+10V DC ON: input voltage 1...+10V DC
DIP-SWITCH 3	OFF: Normal ON: AUX OUT enabled
DIP-SWITCH 4	OFF: Normal ON: AUX OUT triggered from input #12 (see chapter: Trig-Mode)

TRIG-MODE

The multiplexer features two independent DMX outputs. One output is permanent, the other output (AUX) can be activated by DIP-switch (see DIPswitch #3) or remotely via input signal#12 (see DIP switch #4).

When using analog input #12 to trigger the AUX output, the output will only be activated if the input signal exceeds 50% (or 5v, respectively). When disabled, the output line is idle (tri-state mode). No other DMX512 output should be connected to this output.

TESTMODI

The DMX multiplexer contains test programs to easily verify the correct operation of the DMX512 data link. These functions may be called via special start address settings.

Test addresses include:

801...812	single channel outut 100%
997	test program "blink"
998	test program "fade"
999	test program "running light"

Test program settings are NOT retained in memory and thus can only be invoked with a start address board attached to the multiplexer.

TECHNICAL DATA

Dimensions:	65 mm x 105 mm x 65 mm
Weight:	ca. 278 g
Power Supply:	230V AC approx. 2 W
DMX OUT:	>20 Unit Load, buffered
Order code:	3112A-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 ist warranted against defects in metaterials and workmanship for a period of 12 month, beginning with the date of purchase. The warranty is limited to repair or exchange of thehardware 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 arccordance with the manual;
- connection to wrong voltage or current;
- misuse.

CE CONFORMITY

This DMX demultiplexer is microprocessor controlled and uses high frequency (16 MHz quartz). The interface has been tested in our EMC lab to comply with EN5022B and IEC65/144.



To ensure the best performance regarding radiated and conducted emissions we suggest to install the interface card in a closed, conductive (e.g. metal) housing, which must be connected to GND.

Please make sure that shielded data cable is used and the shield is connected properly to the GND pin. Shield must never make contact to other signal lines.

FCC STATEMENT

This product has been tested and complies with the specifications for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used according to the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which is found by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment or devices
- Connect the equipment to an outlet other than the receiver's
- Consult a dealer or an experienced radio/TV technician for assistance

FCC Caution: Any change or modification to the product not expressly approved by SLH could void the user's authority to operate the device.

END OF LIFETIME



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. Consult your local authorities to find the nearest collection point of used electric and electronic devices. SOUNDLIGHT is a WEEE registered company (Reg Nr. DE58883929).

SERVICE

There are no parts within the DMX multiplexer 3112A-H which require the user's attention. Should your unit require servicing, please send it to the factory, freight paid.