

System Power Supply 4

User Guide



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Situation at August 2017: All technical data as well as the weight and dimension information were carefully created – errors reserved. Any colour deviations are printing-related.

We reserve the right to make changes that serve further improvement.

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Overview

This device is a power supply with an integrated DMX router. It supplies the LED components of series B and L with power and data, and is the perfect solution for medium-sized and large systems.

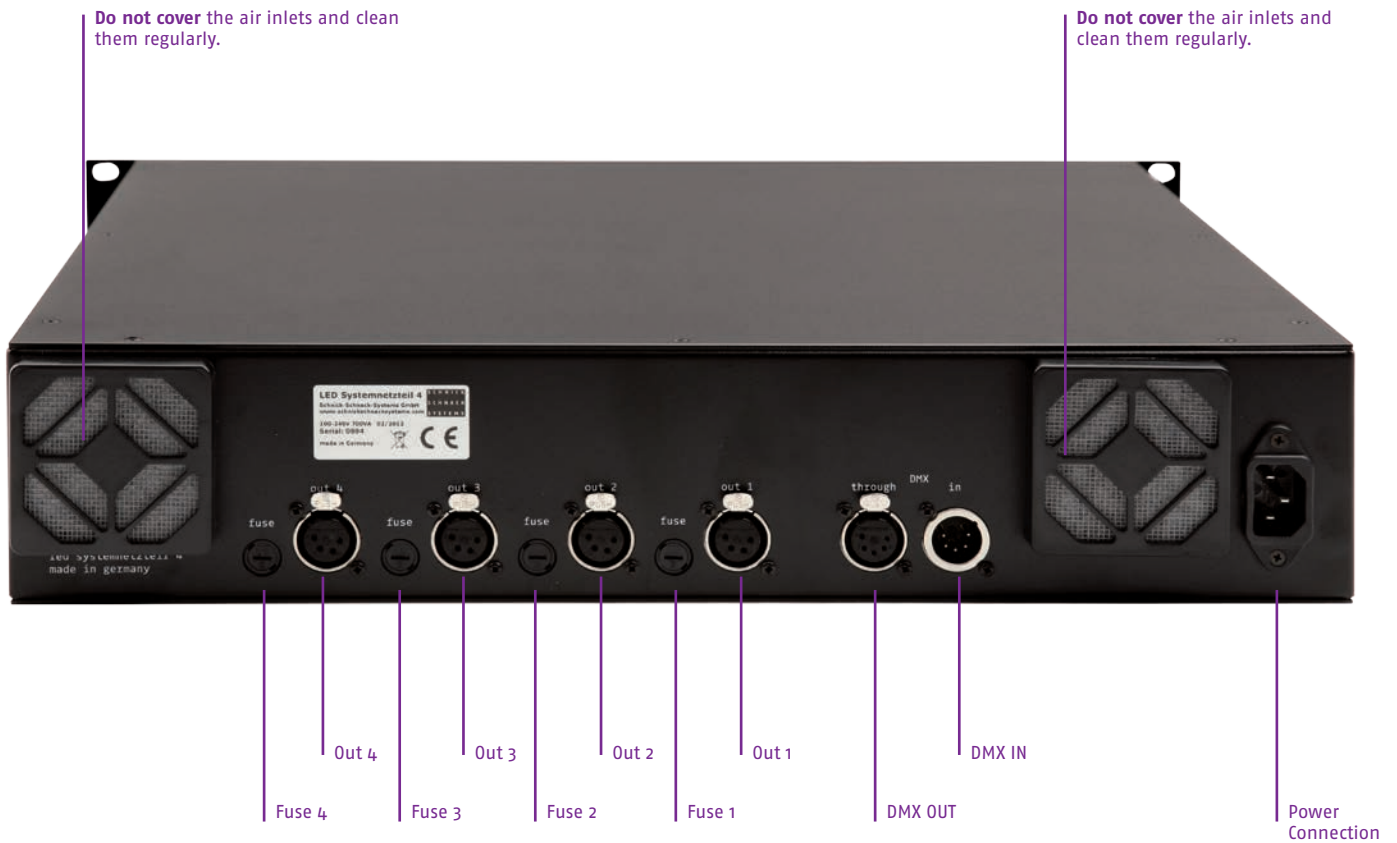
The control signal can be freely patched across the four outputs. Addressing of the components takes place directly at the system supply. As the addressing of the finalised LEDs takes place centrally, the installation and maintenance of the LED systems is much easier. For the maintenance of individual LED components, only the LEDs need to be replaced.

A new addressing process is not necessary. This task can be easily performed even without knowledge of the system.

Internal programmes such as a slow colour gradation or a manually adjusted colour enable the easy commissioning of the LED components even without addressing and DMX source.

Connectivity

The following connectors are located at the rear of the unit:



DMX in- and output	Neutrik XLR-5pin
LED output 1-4	Neutrik XLR-4pin, maximum 6A
Power connection	IEC plug
Fuse	safety 5mm × 20mm, slow, 6,3A

Installation

Check the device for any damage incurred during transit immediately after unpacking. A damaged unit should not be used.

If the System Power Supply 4 has been taken from a cold environment into a warm interior, allow at least three hours for it to warm up before it is put into operation. This allows possibly formed condensation to evaporate and therefore the electronics are not endangered.

When installing into a rack, ensure that there is sufficient circulating air supply to the front and rear sides. The supply air temperature should not exceed 35°C.

The System Power Supply 4 is to be fitted into the rack installation using the appropriate rails so that the rack-bars take the load off the front panel of the System Power Supply and the unit is clearly accessible for maintenance. Be sure to successively lock the cable connections for the DMX in- and output as well as the necessary LED outputs, when connecting cables. After all connections are made, turn on the device, ensuring that any power is also turned on at the sub-distribution. After approximately one hour the System Power Supply 4E is ready for use.

Keep the unit out of direct sunlight at all times. Never clean the device with aggressive cleaners. For cleaning purposes, the wiping of the device with a moist cloth is sufficient.

In the case of stubborn dirt, a mild cleaner can be used on the moistened cloth.

Cleaning of air filters

No tools are necessary in order to clean the air filters.

The fan guard can be removed easily by hand. After that the filter cartridge can be removed and cleaned using compressed air for example. The filter cartridge can then be replaced before refitting the fan guard. Please only use original filters.

Please fit filter cartridges only for main voltage of about 200V!

System Cabling

Cabling of system is very simple although the following points should be considered:

Schnick-Schnack-Systems' LED illuminants connect to each another using four pin PCB connectors, which are small, lightweight and ideal for this purpose. The conductor cross-section and the mechanical quality of these cables are not suitable for long and durable leads.

Therefore, rugged XLR4-pin cables are be used, that have two wires with large cross-section as well as a shielded twisted pair for data connection. The interface between both cable types serves as a costeffective adapter board. Decorative features can be fitted with LED panels internally and fed externally with XLR cables.

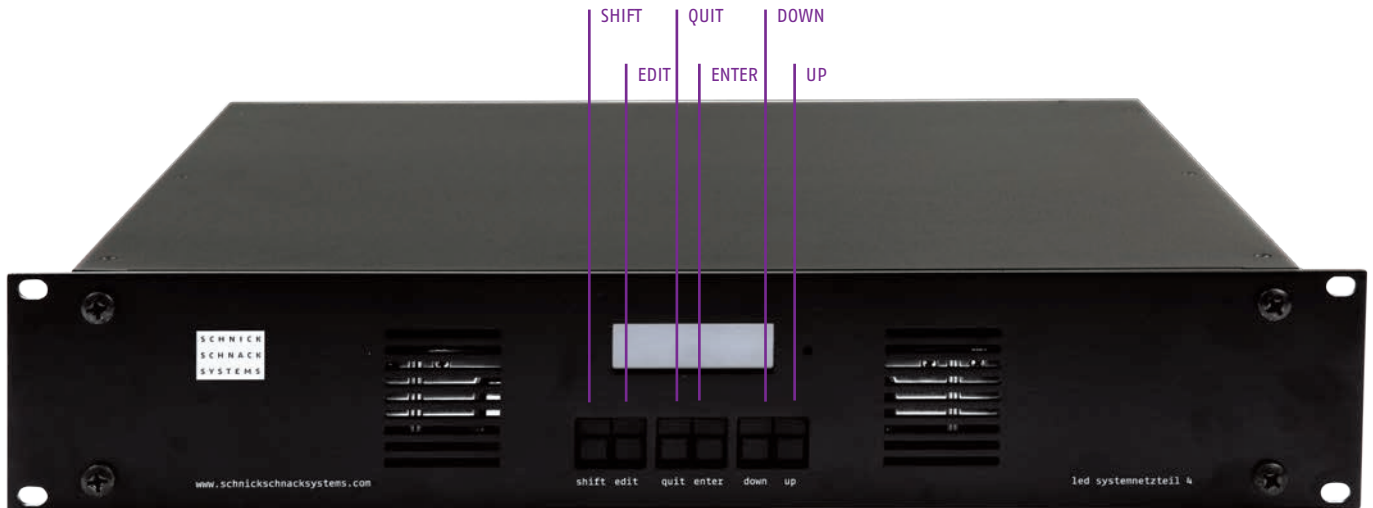
Please note: The length of the XLR-4pin cable between the System Power Supply 4 and the adapterboard should not be longer than 20m. The total length of system PCB cable run from the System Power Supply should not exceed 6m.

- Each output of System Power Supply 4 can supply up to 4 x 60 DMX-Kanäle.
- Each output of the adapterboard supply up to 3A

The exact number of the to be controlled LED products, cabling- and calculating examples can be found in the data sheets for each LED components.

Menu

The following connectors are located at the front of the unit:



SHIFT+

used in conjunction with...

EDIT

to move backwards through the data fields

ENTER

to confirm certain actions

EDIT

moves through the data fields

QUIT

exits the currently-selected mode or the sub menu

ENTER

to confirm certain actions e. g. mode changes

UP

moves upward through the mode list. Increases the value in the selected data field

DOWN

moves downwards through the mode list. Decreases the value in the selected data field

Menu Order

Main Menu:

QuickPatch

Main Menu:

Manual RGB

Main Menu:

Demo Fast

Main Menu:

Demo Slow

Main Menu:

Manual Patch

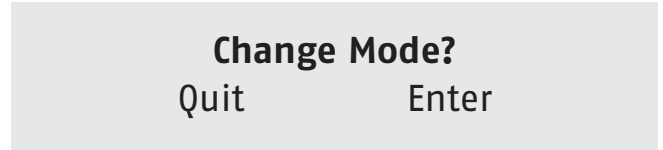
Main Menu:

Info

Menu Selection

To change mode, press the **QUIT** button. The display will show **CHANGE MODE?**.

Use the **UP/DOWN** button to select the desired mode and confirm the action by pressing the **ENTER** button or cancel by pressing the **QUIT** button again.



QuickPatch

There are two setup entries for each output.

Use the **EDIT** button to select the required field. The **DMX** field shows the status of the DMX signal. **NONE** shows that no DMX signal is being received. **GOOD** shows that a valid DMX signal is being received.

The upper field shows the **DMX start channel (Start-CH:)** for that output. The lower field offers the various repeat and combine options of the channels.

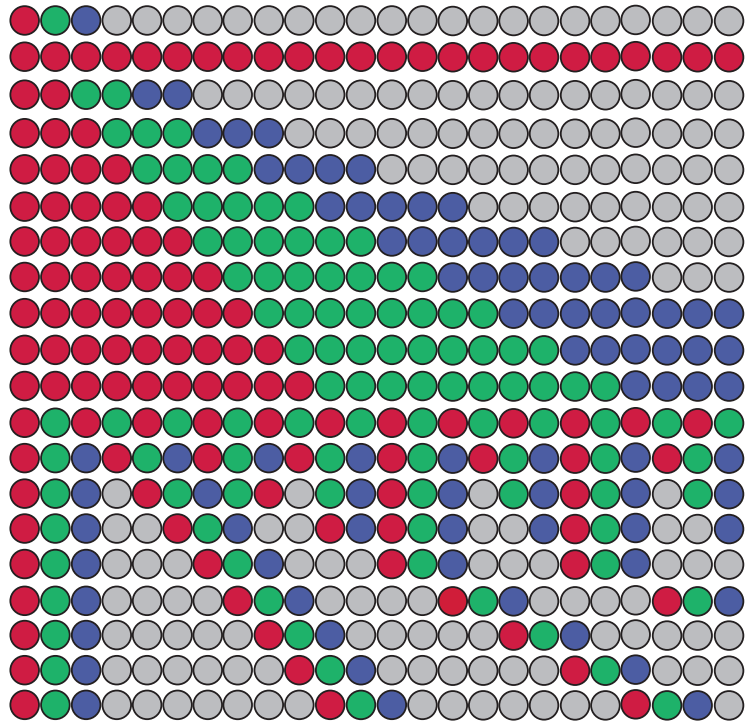
This function offers the possibility to control several LEDs with a few DMX channels.

The table on the following page offers the various repeat and combine options for the system.

DMX:	NONE	Out 1	Out 2	Out 3	Out 4
Start-Ch:	001	001	001	001	001
Combine:	ALL	ALL	ALL	ALL	ALL

Combine and Repeat Modes for QuickPatch

- OFF: no combine
- ALL: all LEDs are steered by three DMX channels
- C2: always two LEDs are interconnected
- C3: always three LEDs are interconnected
- C4: always four LEDs are interconnected
- C5: always five LEDs are interconnected
- C6: always six LEDs are interconnected
- C7: always seven LEDs are interconnected
- C8: always eight LEDs are interconnected
- C9: always nine LEDs are interconnected
- C10: always ten LEDs are interconnected
- R2: each second LED is interconnected
- R3: each third LED is interconnected
- R4: each fourth LED is interconnected
- R5: each fifth LED is interconnected
- R6: each sixth LED is interconnected
- R7: each seventh LED is interconnected
- R8: each eighth LED is interconnected
- R9: each ninth LED is interconnected
- R10: each tenth LED is interconnected



Manual RGB

In this menu option, it's possible to set a colour for all output channels in a very easy way by using the System Power Supply 4.

Like the other modes, use the **EDIT** button to select the required field and the **UP/DOWN** buttons to set the required values.

Manual Color Mode

R: **001** G: **001** B: **001**

Demo Fast/Slow

In this mode, all connected RGB luminaries show a repetitive predetermined colour change.

The two modes differ only in the throughput speed.

Demo Mode Fast

Demo Mode Slow

Manual Patch

When changing from the **QuickPatch** mode into the **Manual Patch** mode the following display is shown:

In this case it's possible to apply the QuickPatch values with the manual patch. This step is irreversible. That's why you must hit the **SHIFT**-Key and the **ENTER**-Key to confirm. If you don't want to proceed with this step, you can exit with **QUIT**.

Setup-Options in Manual Patch:

To select the section you wish to work in – press the **EDIT**-Key.

To select the desired XLR output (1-4) use **OUTPUT (OUT)**. To select the desired channel use **CHANNEL (CH)**.

With **Type: Int** can allocate this channel a fixed, unchangeable intensity via value.

With **Type: DMX** will assign a DMX input channel to this DMX output channel.

Overwrite Patch with QuickPatch?
Quit Shift+Enter

Output: **9** Channel: **15**
Type: **DMX** Value: **138**

Info

The menu function Info shows information on the unit type and the version of the software on the display.

**Schnick
Schnack
Systems** LED-PSU4
Version 1.7

Error Messages

If one of the fuses that protects the outputs from overload is blown, the display flashes and shows the message seen to the right.

In the example output 1 is failed. The other outputs function further. In this case please change the safety of the relevant output.

Output Error
Fuse: Out 1 Out 2 Out 3 Out 4
 BAD **OK** **OK** **OK**

Technical Data

Case	19 inch, two height unit
Dimensions	483 × 88 × 430mm (W × H × D)
Input voltage	110–240V AC, 50–60Hz
Input current	700VA
Power consumption	maximum 6A per channel
Main connector	IEC plug, lockable
DMX protocol	DMX 512 A–1990 USITT
DMX IN	Neutrik XLR–5pin
DMX THROUGH	Neutrik XLR–5pin
LED outputs 1–4	4 × Neutrik XLR–4pin, maximum 6A
Weight	7,7kg

Pin connection

DMX

1	2	3	4	5	Case
Data GND	Data-	Data+	n/a	n/a	n/a

XLR4-pin output

1	2	3	4	Case
GND	Data-	Data+	+24V	n/a

Declaration of EU Conformity

I hereby declare that the product

LED-Beleuchtungssystem bestehend aus „LED-Systemnetzteil 4“, „LED-Kachel B“, „LED Streifen 25“ mit „Intelligenz“ und Verkabelung nach Bedienungsanleitung.

(Name of product, type or model, batch or serial number)

meets the essential requirements referred to in Article 3 of the Council Directive 99/5/EC.

The following harmonized standards have been applied:

EN 60950-1:2003

EN 55015:2000

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Koeln, 7th. February 2005

(Place, Date of issue)



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(Name in block letters)

Why Schnick Schnack Systems?

As installation times become increasingly shorter the complexity of systems simultaneously increases as do the requirements of customers.

We are a supplier who delivers high-quality reliable systems – under tight deadline constraints that are not only quick to install but also simple to operate and service.

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