GEFASOFT

quick reference guide

Switch from LUCON® to LUCON® 2
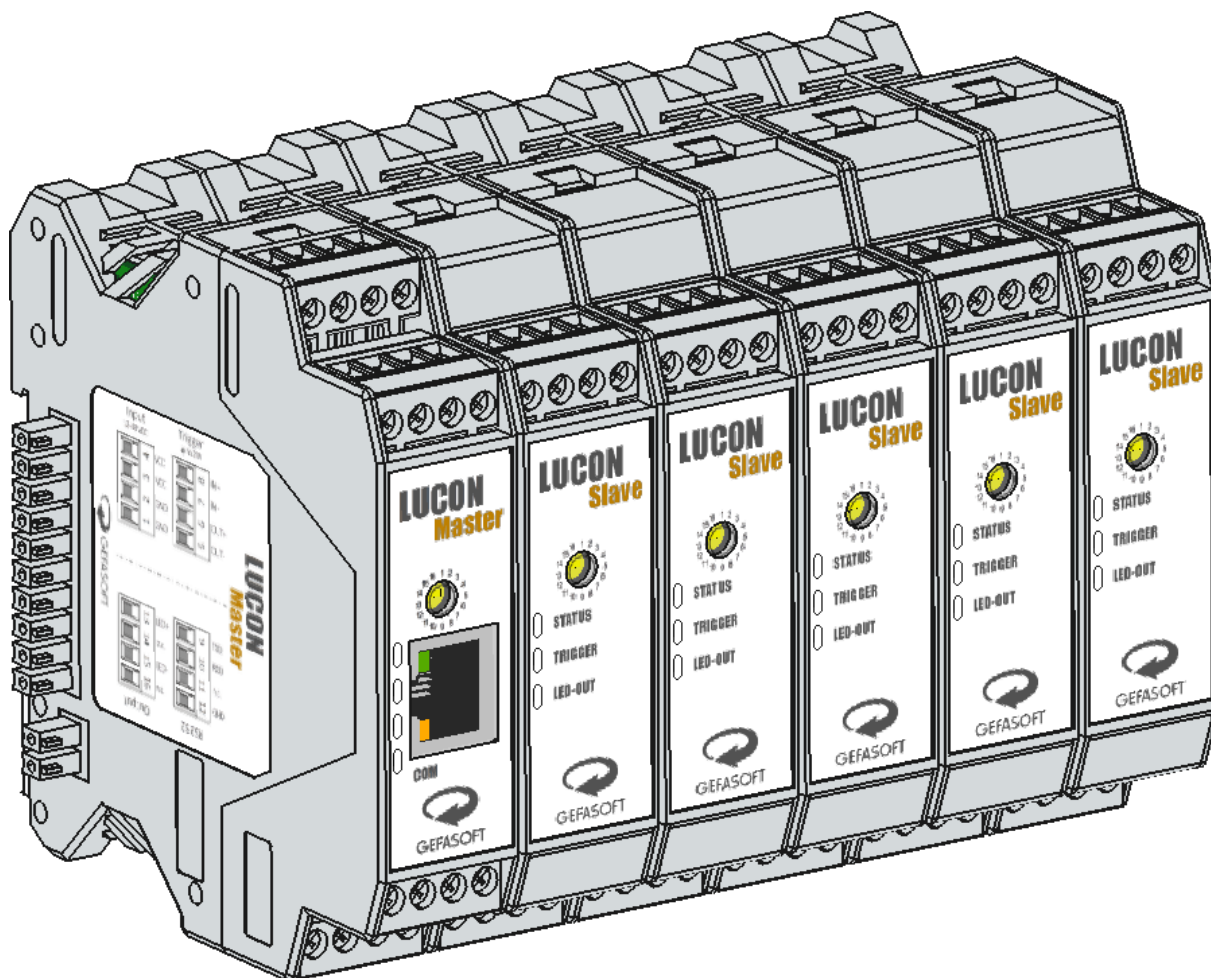
Brief description

During the development of the LUCON® 2 (Master 00039600 and Slave 00039601), attention was always paid to being compatible with the LUCON® of the first generation (Master 00020425 and Slave 00020426). This has also been achieved with regard to command-based communication. All commands related to the actual function of the light controller have been retained. Only the hardware had to be changed. The communication protocol between Master and Slave has changed. **This means that green and grey LUCONs must not be combined!** All connected Master and Slave modules must always be exchanged. Furthermore, the assignment of the trigger interface has changed. This is optically isolated in the LUCON® 2.

Copyright

MANUFACTURER

GEFASOFT

Automatisierung und Software GmbH Regensburg
Franz-Mayer-Str. 10 / D-93053 Regensburg

Tel. +49(0)941 788 30-0 / Fax +49(0)941 788 30-66
info@gefasoft.com   www.gefasoft.com

Service and Support

Supporthotline
Tel. +49(0)941 788 30-33

lucon@gefasoft.com

1   Restrictions

LUCON® 1 and LUCON® 2 are largely compatible with each other. However, it is not allowed to use them together. It is not allowed to connect a Master of the first generation with Slaves of the new generation. Also, a Master of the new generation must not be connected to Slaves of the old generation.
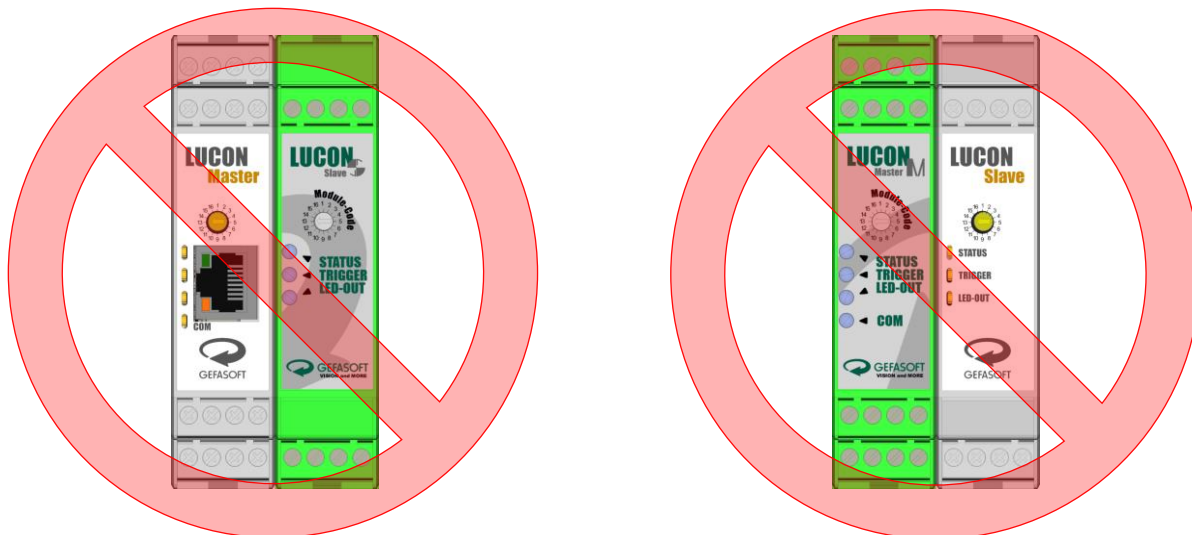
If old devices have to be replaced, all interconnected devices must always be replaced!
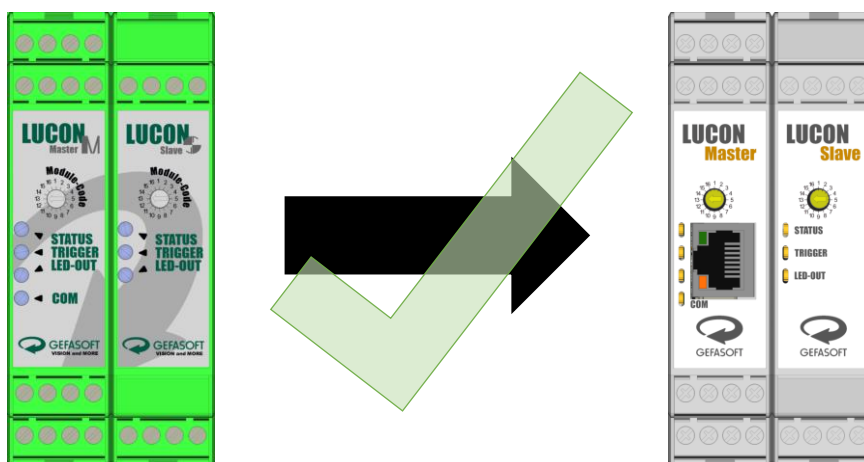
2 Hardware adaptations

The trigger interface of the LUCON® 2 is optically isolated, which is why a **ground connection is necessary** (Pin 7, second line in the lower picture).

The power supply, the output and communication interface via RS232 remain identical (first, third and last line in the picture below).
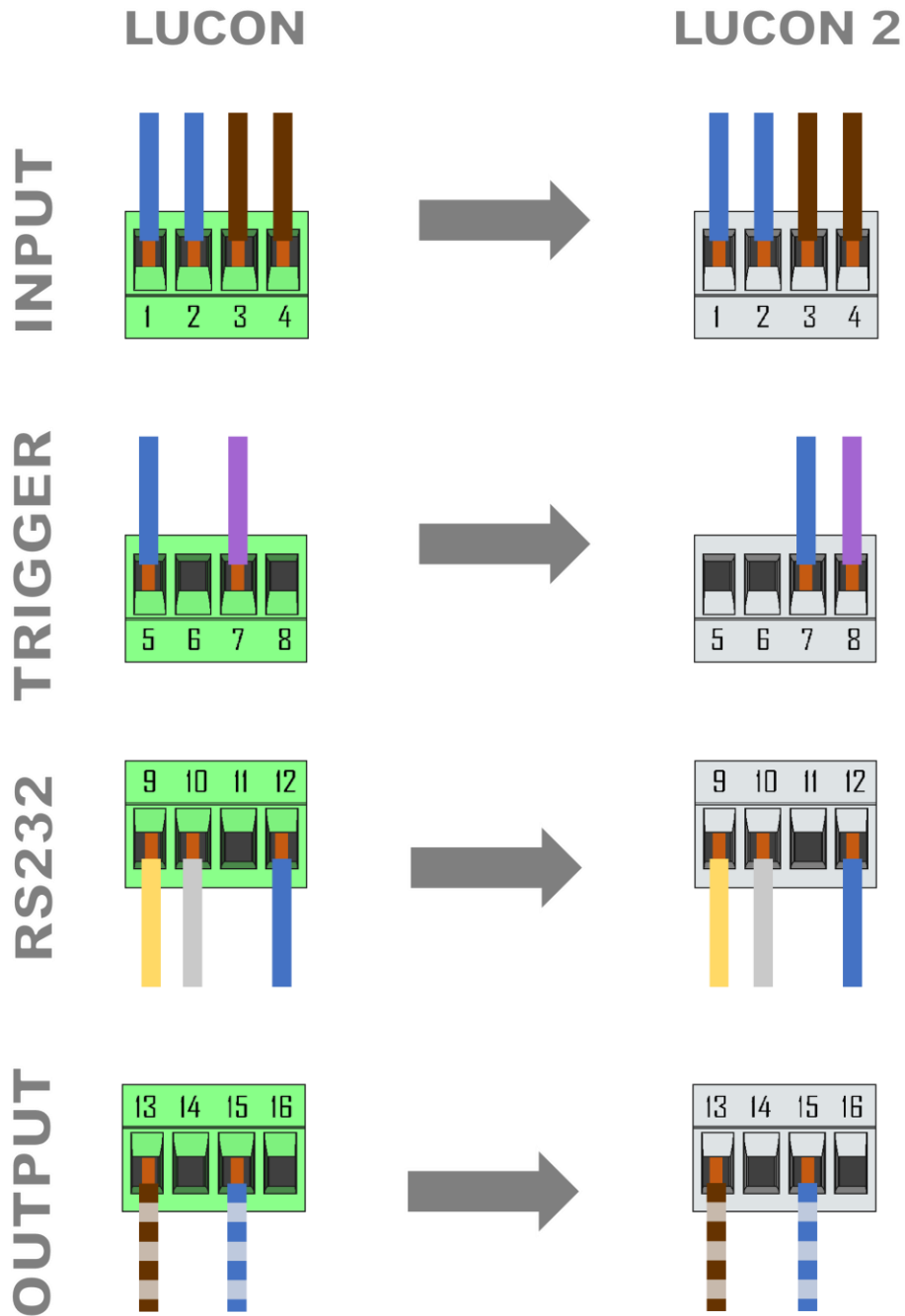
3 Software adaptations

In the following, the commands are always shown on channel 01. However, they also apply to channels 02-16.

Almost all commands used with the LUCON® are also available with the LUCON® 2. Below are some examples:

```
// mode continuous
S01MC|<current>

Current: 1 to 1600 mA (in steps of 1 mA)


// mode pulse
S01MD|<current>|<delay-ms>|<length-µs>

Current: 1 to 1600 mA (in steps of 1 mA)
Delay:   1 to 5 000 ms
Length:  1 to 500 000 µs


// mode switch
S01MT|<current>

Current: 1 to 1600 mA (in steps of 1 mA)


S01L|<current-limit>

Current-Limit: 1 to 1600 mA
```

With the LUCON® 2, larger currents and voltages are possible, which is why the limits are shifted here:

```
// mode continuous
S01MC|<current>

Current: 1 to 3000 mA (in steps of 1 mA)


// mode pulse
S01MD|<current>|<delay-ms>|<length-µs>

Current: 1 to 20 000 mA (in steps of 1 mA)
Delay:   1 to 59 000 ms
Length:  5 to 59 000 000 µs


// mode pulse with µs delay
S01MDU|<current>|<delay-µs>|<length-µs>

Current: 1 to 1600 mA (in steps of 100 µA, e.g. 34.5)
Delay:   1 to 59 000 000 µs
Length:  5 to 59 000 000 µs


// mode switch
S01MT|<current>

Current: 1 to 20 000 mA (in steps of 1 mA)


S01L|<current-limit>

Current-Limit: 1 to 20 000 mA
```

When switching from LUCON® to LUCON® 2, essentially no adjustments to hardware and application are necessary. Only if the input trigger is used, it must be rewired.