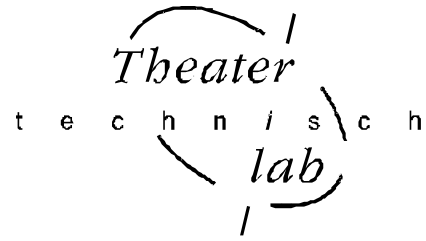


# Users manual TL-rgb-V3

from firmware-release V3.0

Please read this manual carefully before operation



## General description

TL-rgb-V3 is designed to control 4 (groups) dimmable fluorescent ballasts, whose dim function operate on adjustable control voltage of 1 till 10 [V]. With this module it is possible to use DMX512 to switch the mains power as well as to provide the control voltage of 1-10 [V] for the ballast. The mains voltage switch and de control voltage are controlled by the same DMX channel. The switching point is on 3% of the maximum DMX value. The maximum load for each group is 200[VA]. The mains power switch becomes active at mains voltage zero crossing. This way inrush currents are kept as low as possible. You can also set the lights to burn on any level without using DMX. This manual level setting has to be done for each channel separately and is stored in a non-volatile memory.

## Setting the DMX address

You can change it as follows: first select a digit by pressing button [SELECT DIGIT]. A flashing decimal dot indicates the selected digit. Now you can change the value of the selected digit with the buttons [<<] or [>>]. Repeat this for all the digits you want to change. Changes are stored automatically. As soon as the new address has been stored in a non volatile memory the flashing decimal dot goes off. At the moment you are changing the address the ballast fades to zero in 6 [s]. After an address changing has been stored, the new setting fades in, in 6[s].

### The DMX start address is displayed if:

1. the setting for 'hold DMX data (on loss of signal)' is Y(es) (default setting)
2. the setting for 'hold DMX data (on loss of signal)' is N(o) **AND** a DMX signal is present.

## Switching points and control curves

The mains power switches on at 3% of the maximum DMX signal and switches off at 1%. You can set the relationship between the DMX input signal and the analogue control voltage under setup. These relations are: linear (C1), linear with 'offset' (C2) en non-linear with 'offset' (C3).

- **C1** Linear: if DMX-in = 0,.....,100% than V-control out = 0,.....,10[V].
- **C2** Linear with offset: if DMX-in = 0,..,3% than V-control out = 0[V], if DMX-in >3%,.....,100% than V-control = 0,8[V],.....,10[V].
- **C3** Non-linear with offset: the same as above, except the increase of intensity per percent in the beginning of the control curve is smaller than at the end of the curve.

See under set up how to set these curves.

## Set up

### Holding the DMX data or not on loss of DMX-signal

Keep pressed button [SELECT DIGIT] for 8 seconds. The display shows: H=Y or H=N. The third dot is flashing.

With the buttons [<<] or [>>] you can change from Y to N and visa versa.

H=Y means: Hold DMX data on loss of signal, this means the output stays the same, when for instance a DMX cable fault occurs. If you have selected H=N, than the manual made level fades in. If there is no manual made level than it fades to zero in case of a DMX cable fault.

### To set a control curve

Keep pressed button [SELECT DIGIT] for 8 seconds. The display shows: H=Y or H=N, and the third dot flashes. Push again [SELECT DIGIT]. The display shows: C1 or C2 or C3 and the third dot flashes. With the buttons [<<] or [>>] you can change the number. See above for the different control curves you can select.

If you have not touched the buttons for 8 seconds, the memory stores the set up changes. The display shows either the DMX address or the format in which you can set the outgoing levels manually (see beneath)

## To set outgoing levels manually

You can set the outgoing levels manually if the setting 'hold DMX data (on loss of signal)' is N(o), **AND** there is no incoming DMX signal present. The display shows the format: K:XX. K is the outgoing number and XX is the level in percents of 00, ...,99. You select with button [SELECT DIGIT] an item; the flashing dot indicates your selection.

With the buttons [<<] or [>>] you can set the values. If you have not touched the buttons for 8 seconds, the changes are stored in a non-volatile memory. When mains power is put of, the set up levels are kept and if the power is put back on, these levels start fading in.

## CONNECTING THE UNIT

### Mains voltage

The TL-rgb-V3 must be connected on a mains voltage of 200-240[V]. The module is equipped with a mains euro connector, 10[A] with safety earth.

### The outputs

The module has four outputs. An output is the combination of a switched mains power and a 10[V] control voltage: N,L1,0,A1 / N,L2,0,A2 / N,L3,0,A3 / N,L4,0,A4. N is the zero of the mains power, Lx is the switched mains phase, 0 is the zero of the control voltage and Ax is the plus (positive) connection of the control voltage. These connections are grouped on two 8-fold WAGO spring terminal connection units. These are suitable for wire with diameter of 0,5 till 1,5 mm<sup>2</sup>. Maximum load for each output is 230[V]

### DMX input

The DMX connection consists of a 5 pole XLR male connector for 'IN' and a 5 pole XLR female connector for 'THROUGH'. The DMX connection is galvanic separated from the processing department. **At special request we can deliver the module with NEUTRIK RJ45 connectors.** To indicate DMX is present, there is a dot burning in the display, continuously.

### Remarks

At the moment you start changing the DMX address the ballast fades to zero in 6 [s]. After a new address has been stored, the new setting fades in, in 6[s].

**ATTENTION:** Never place the 3-fold jumper J7! This jumper will be used by the manufacturer to install firmware updates (if any). **Setting this jumper can cause damage to the firmware and malfunctioning of the unit!**

## DIMENSIONS

