# Users manual TL-rgb-1

Please read this manual carefully before operation

## General description

TL-rgb-1 is designed for controlling dimmable fluorescent ballast by DMX512. With this module it is possible to control the mains power and to control dimming voltage for the ballast with the same DMX channel. The ballast meant here are those, whose dimming function is controlled by 1-10[V]. The unit has three channels; you can control three groups of ballast with each unit. The maximum load for each channel is 200[VA]. The mains power switch becomes active at mains voltage zero crossing. This way we overcome large inrush currents.

## Setting the DMX address

The DMX address is displayed on a three digit led display. You can change it with an up and down scroll button. Changes are stored automatically. A flashing decimal dot designates that the address is changed. As soon as the new address is stored in a non volatile memory the flashing dot goes off. At the moment you change the address the ballast fades to zero and switches off. After an address changing the new setting fades in.

## Switching points and control curves

The mains power switches on at a 3% DMX value and switches off at 1%. The relationship between the DMX input signal and the analogue control voltage is either linear or linear with offset.
Linear: DMX-in = 0,.....,100% => V-control = 0,.....,10[V].
Linear with offset: DMX-in = 0,..,3% => V-control = 0[V],
DMX-in >3%,.....,100% => V-control = 0,8[V],.....,10[V].
For the second arrangement you have to put jumper-1 on jumper block J7.

## Holding the DMX values at lost of signal

Default setting is: At lost of signal the latest DMX information is kept. You can choose for fading to zero for all levels at lost of signal, than you must place the third jumper on jumper block J7.

## CONNECTING THE UNIT

**Mains voltage**.
The TL-rgb-1 must be connected on a mains voltage of 200-240[V]. For this purpose there is a three fold WAGO gage clamp J4 on the PCB. VA= safety ground, N = neutral and L = phase.

**Analogue out, 0-10[V].**
The analogue control voltage is wired on a six fold WAGO gage clamp, J5. Channel-1 on clamp 0 & A1, channel-2 on 0 & A2 and channel-3 on 0 & A3. Signal ‘0’is the common.

**Switched ballast mains connection.**
The ballast mains connection has to be connected on WAGO gage clamps J6. The switched phase is wired on clamp 1, 2 and 3. The neutral of the ballast has to be connected on clamp ‘N’ (neutral).

**ATTENTION**
Never place jumper J1! **Setting this jumper can cause damage to the firmware and malfunction of the unit!**