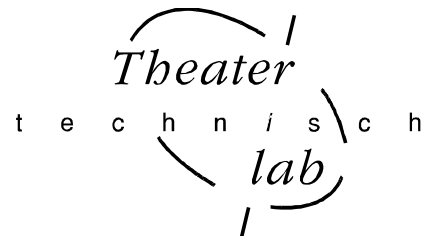


Manual *FLATpack*

From software-release V1.1



First read the manual completely, before you start to use the dimmer

FLATpack is a DMX512 controlled 25-fold dimmer pack that functions on a single phase 230[V].

The maximum load for each channel is 220W; the maximum total load for the pack is 3700W.

The dimmer is based on leading edge phase control ('inductive' dimmer) and is equipped with a new type TRIAC. This new type TRIAC is internal protected against over voltage and needs no snubber circuitry; it can resist voltage spikes of 2000V caused by inductive loads.

FLATpack is extreme compact and light weighted. The dimensions are 416x140x47[mm]; weight is 2,45[kg]. You can mount *FLATpack* in a 19inch rack with the optional 19inch brackets-set or you can fasten it to a wall with the optional wall-stand-off straps. The build-in height for a 19inch rack is 2HE. *FLATpack* is equipped with a little blower at the topside. The blower is controlled electronically, and it has a step-free speed-adjustment.

The pack is protected against internal over temperatures. In case the internal temperature gets higher than 70 degrees Celsius, the output goes down to zero. As soon as the temperature gets below 60 degrees, the output gets gradually to the level corresponding the DMX input.

The mains connection consists of a 3-pole WAGO clamp, suitable till 16[A]. The outlets consist of five 7-pole WAGO connectors: 5x Out, Neutral, Ground. *FLATpack* will be delivered include the cable part of these outlet connectors.

They are equipped with clamp-connections and a strain relief.

For each dimmer channel you can choose a specific control curve: non-dim, linear, electronic trafo and S-curve. The latest option is adjust to a standard light bulb. The default set up is: 'S-curve'. Besides, you can set a global 'Pre-HEATING'.

The user-interface is equipped with a button [SELECT digit]. With this button you can set quickly the DMX address. Each output is fused internal with a sub-miniature fuse of 1[A]/slow. On the printed circuit board you find 4 spare fuses.

The dimmer pack must be placed well ventilated. The maximum environment temperature is 32 degrees Celsius

Operating instructions

Changing the DMX address

Push button [SELECT digit]. The decimal point of the first digit starts to blink meaning this digit can be changed by pushing the buttons [<<] or [>>]. If you push [SELECT digit] more than ones you can select any digit. Changes you have made, have to be permanently stored in memory by pushing [STORE] => the blinking decimal dot disappears.

Changing the control Curve

Push on [SET curve]. The display shows X:01, X=1,2,3,4. These numbers represent respectively: non-dim, linear, electronics trafo and S-curve. The number after the double dot represents the dimmer channel number. Push [SELECT digit] to select the curve number or the digits of the channel number. The blinking dot indicates which one you have selected for changing. With the scroll buttons [<<] and [>>] you can change the digit. Changes you have made have to be permanently stored in memory by pushing [STORE]. After that the DMX address will be displayed.

You can give each channel the same curve as channel 1 at once. Push [SET curve]. The display shows, for example: 2:01. Select with [SELECT digit] the curve number. Change this with [>>] in symbol A. Push now [STORE]. Now you have selected for each channel curve 2.

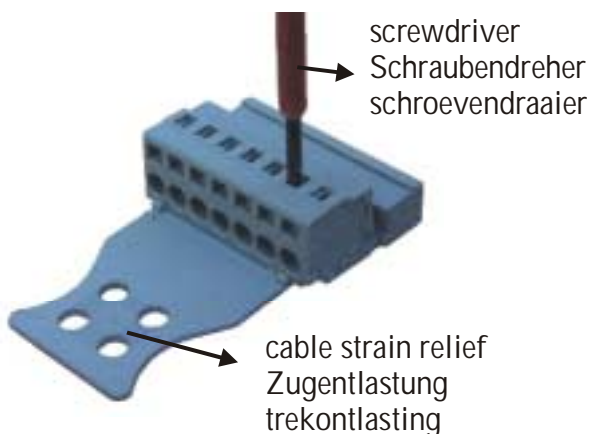
Turn on/off Pre-HEATING

Push [SET curve]. The display shows for example 2:01. Select with [SELECT digit] the curve-number. Change this number met [>>] in the symbol P. Push now [STORE]. Now you have set a pre-heating of 8% for all the dimmer channels.

Remarks

- **Over-temperature.** In case the internal temperature rises above 70 degrees Celsius, the led <over temperature> starts to blink and the output of all dimmer channels goes down to zero.
The maximum total load of the dimmer pack is 3700W. Put the dimmer in a well-ventilated environment. The maximum environment temperature should not be higher than 32 degrees Celsius. Make sure that there is an open space of at least 30[mm] height above the blower.
- Each output is internal protected against overload and short-circuit with a fuse. The type is Subminiature TR5 according IEC 127-3/4, 1[A], slow. There are 4 spare fuses on the printed circuit board. In case of a blown fuse, the led <replace internal fuse> starts to blink and the display shows the number of the corresponding dimmer channel. To replace a fuse you first have to turn off the equipment and disconnect the mains. Than you screw the top panel of the pack.
- You can suppress the display information about blown fuses by pushing any button; the user interface of the pack is available again to change the pack settings. If you have not pushed a button for 6[s] than the announcement appears again.
- If you power-on the pack, the software version is shown on the display. At the same time the micro controller checks the blower function by starting the blower at half speed. In case the blower malfunctions, the display shows the text 'FAN'. The dimmer pack won't start. If you cannot detect the cause of this malfunction at first sight, you have to return the dimmer pack to your supplier.

How to open WAGO clamps with screwdriver



Put the screwdriver perpendicular on the connector (see photo) and push the screwdriver inside in a straight line. The cage clamp will open up.