



# AD-LC6 MKII LED driver



The AD-LC6 MKII is a high power 6 channel LED driver. This versatile LED driver can be used for our RGB, single colour and tunable white LED modules as well as our LED spot range. The driver is controllable through DMX-512 but also offers stand-alone functions and is configurable with its internally selectable user modes. The refresh rate of this driver is adjustable up to 1800Hz which makes this driver suitable for studio applications.

This LED driver is also available as a 12 channel version.

## Features

**High power**  
480 Watt

**Multi channel**  
6 channels

**Stand alone**  
User configurable options

**Adjustable refresh rate**  
Up to 1800Hz

## Technical specifications

### Power

Input voltage:	12~24VDC
Output voltage:	12~24VDC
Output power:	240~480W*
Channels:	6
Current per channel:	3,3A

### Control

Control in/out:	DMX-512 / 1990 galvanically isolated
Refresh rate:	100~1800Hz user adjustable

### Miscellaneous

Housing:	DIN-rail (4 module width)
Input connector:	Print connector / 8 pin RJ45 (optional)
Screw terminal power inputs:	Max. 2,5mm <sup>2</sup>
Screw terminal power outputs:	Max. 2,5mm <sup>2</sup>
Mounting:	DIN-rail
Lifespan:	50.000 hours

\*Dependent on input power



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## Dimensions



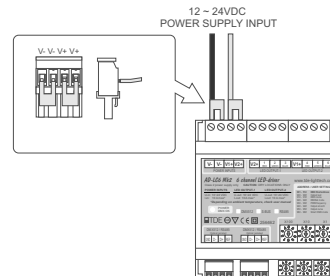
## Order Code

ADLC.6.24 - AD-LC6 MKII LED driver; 6 channel; 480W; DMX512

## Power input

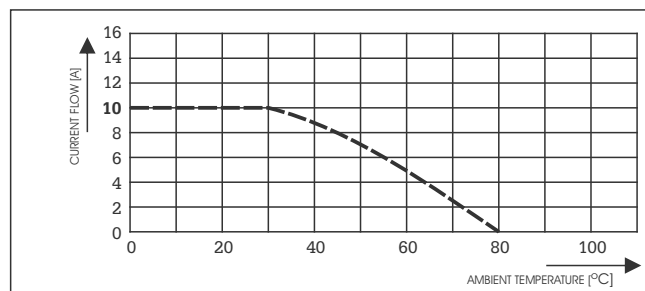
The AD-LC6 MKII LED driver has two power inputs. When using a single connection please use the supplied jumpers. This is to prevent the connector from overheating.

Place the jumper between V- and V- and between V + and V + of the power input. See the illustration on the right.



## Output power

The output of the LED driver depends on the current flow and the ambient temperature. As seen in the graphic below the maximum amount of current that can flow through the LED driver decreases in higher temperatures.



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## Screw terminals

The screw terminals allow a maximum cable core of 2,5mm<sup>2</sup>. When connecting the wiring of the LED product to the AD-LC6 MKII make sure to use flexible cable with ferrules to ensure a proper connection. Also note when fastening the wires please make sure not to overtighten the screws.

## DMX wiring



UTP / FTP (ANSI E1.27-2)  
 Orange: (DMX-) Data 1  
 Orange/White: (DMX+) Data 2  
 Brown: (-) Common  
 Brown/White: (-) Common



XLR-3P  
 Pin 1: (-) Common  
 Pin 2: (DMX-) Data 1  
 Pin 3: (DMX+) Data 2

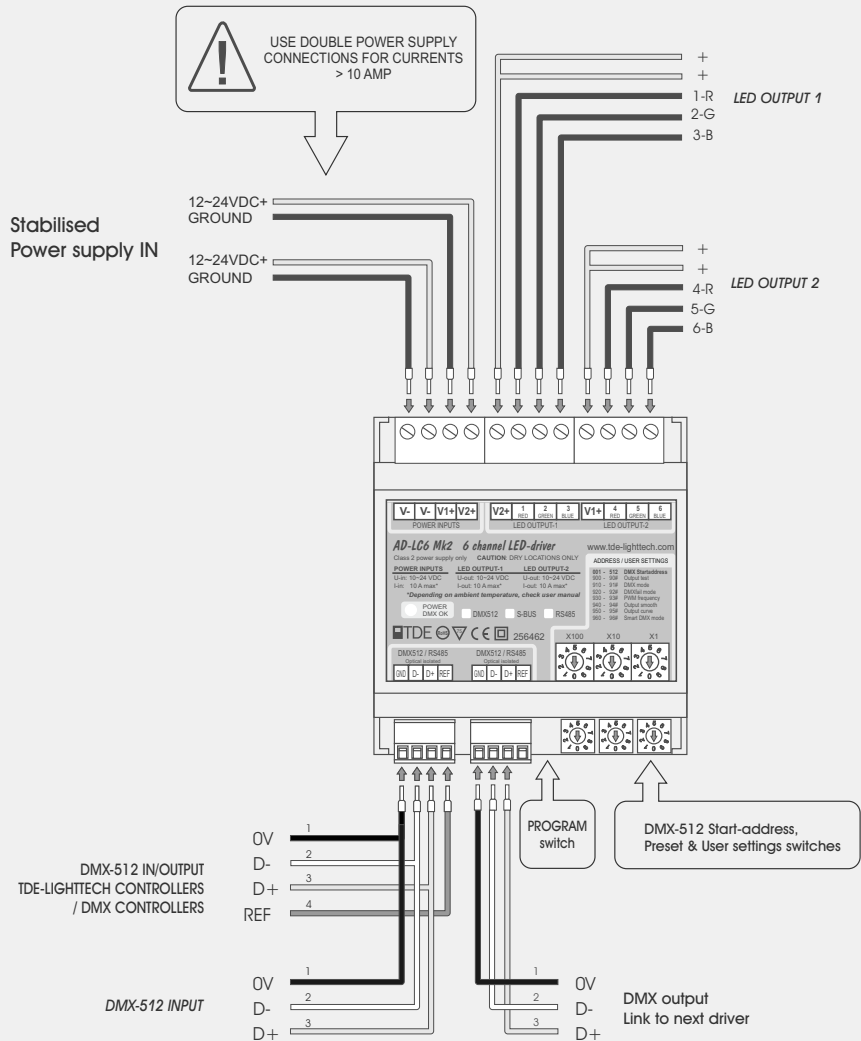


XLR-5P  
 Pin 1: (-) Common  
 Pin 2: (DMX-) Data 1  
 Pin 3: (DMX+) Data 2  
 Pin 4: Not used / (REF Supply)  
 Pin 5: Not used

## Connection overview

### LED indication:

LED = OFF	No power
LED = RED	Power OK, No DMX
LED = ORANGE blinking	Power OK, DMX OK
LED = GREEN	Output channel testmode
LED = GREEN blinking	Selected user setting
LED = RED blinking	Not selected user setting
LED = ORANGE	Not a valid user setting



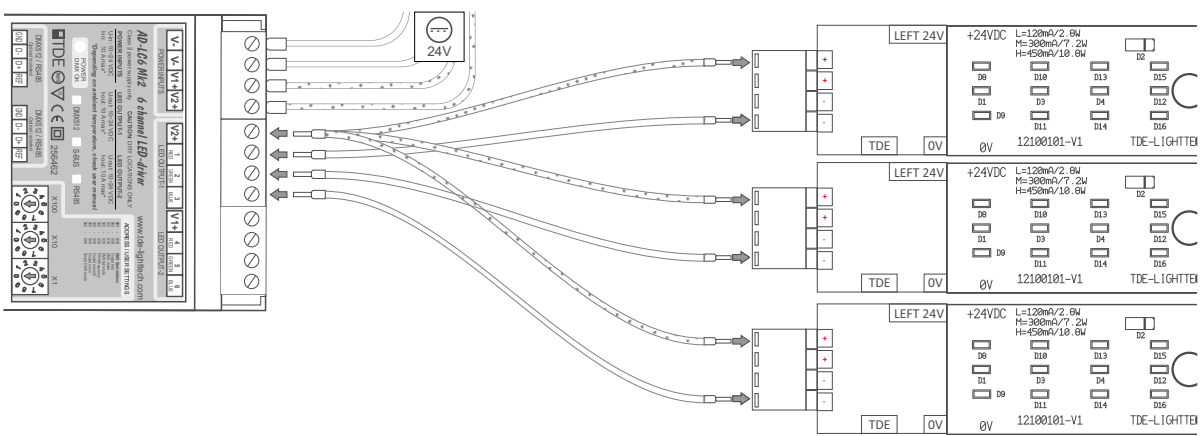


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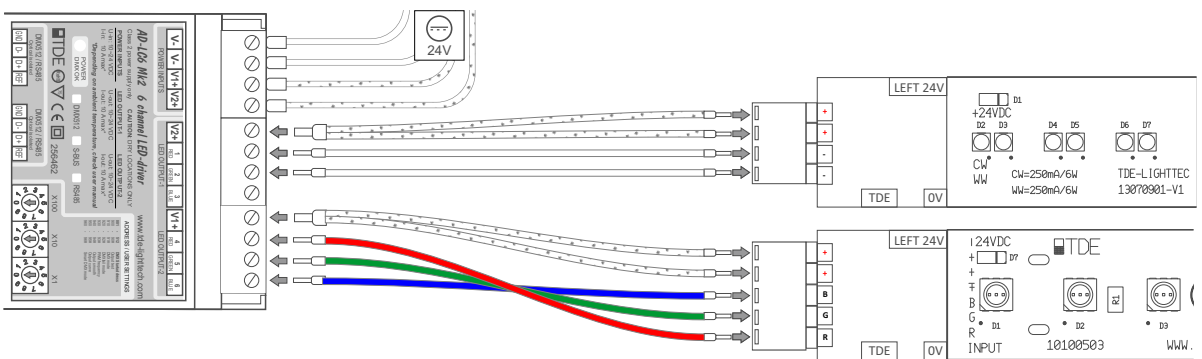
## Typical applications

All our suitable products are extensively tested with our LED-drivers please see the illustrations below for examples of possible configurations. The configurations below are only show a few configurations, there are numerous of configurations possible

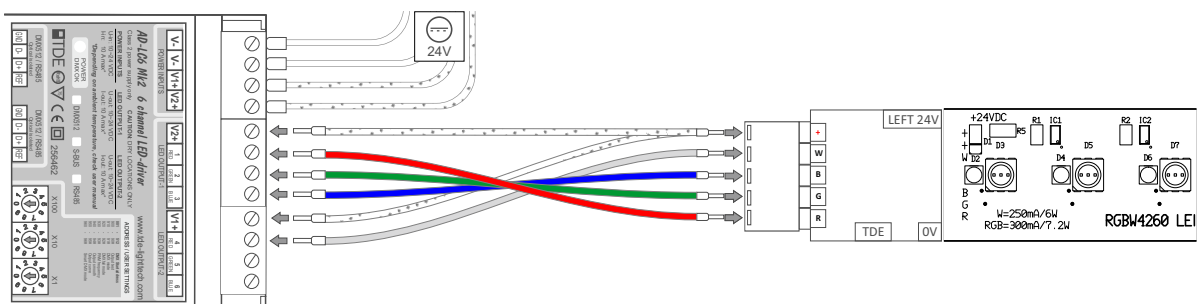
### 3 x Single colour LED module in combination with our AD-LC6 MKII LED driver



### Tunable white LED module in combination with RGB LED line and AD-LC6 MKII LED driver



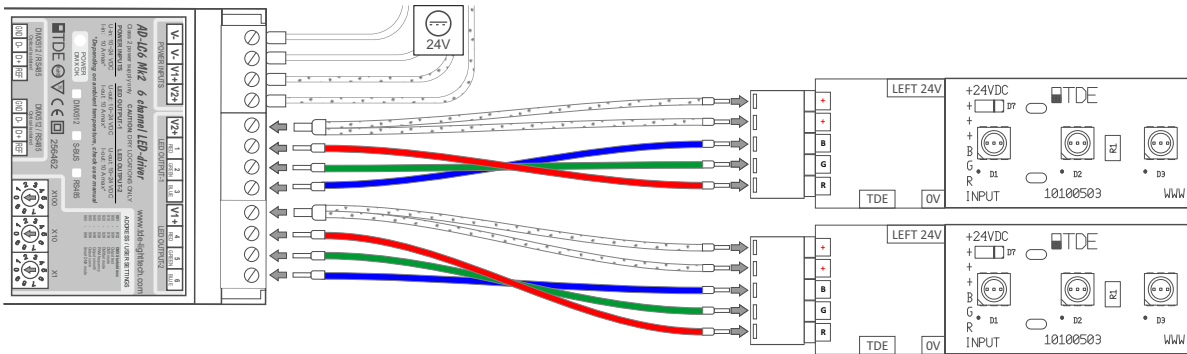
### RGBW4260 LED module connection



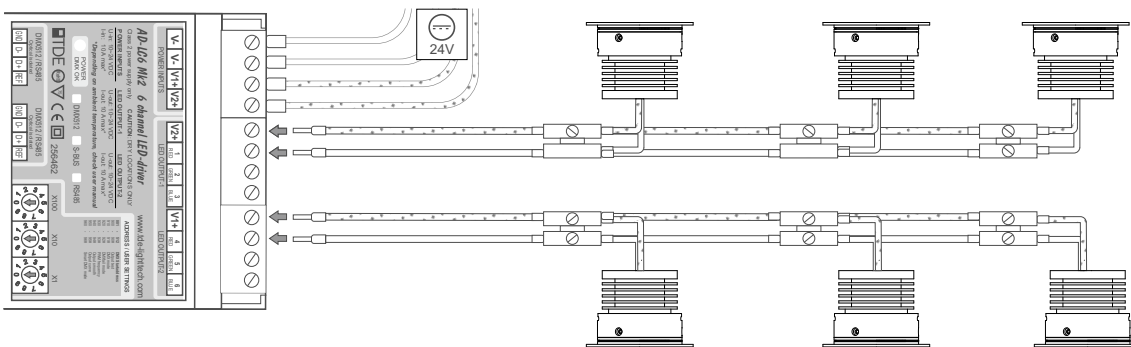


# AD-LC6 MKII LED driver

2 x RGB LED module and AD-LC6 MKII LED driver



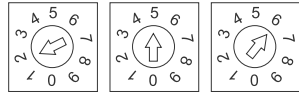
Cursa / Canopus single colour LED spot in combination with AD-LC6 MKII LED driver



## Configure DMX

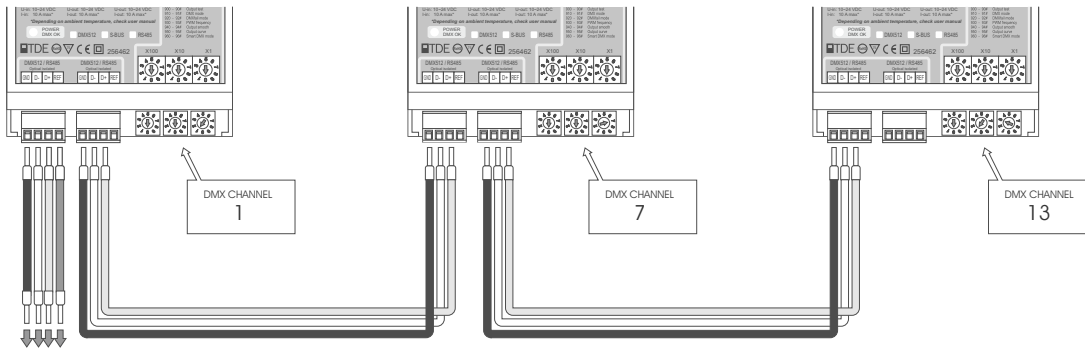
To set a DMX startadres on the AD-LC6 MKII LED driver turn the dipswitches on the LED driver to the desired address.

Example start adres 256 :



In order to control multiple AD-LC6 MKII LED drivers please make sure to set the DMX startadres on the LED-driver. When the default usermode (910) is set, every additional LED driver has to add +6 to their start adres in order for individual control. See an example below:

The drivers have the default user mode 910 which is 6 channel mode every additional driver starts six channels further.



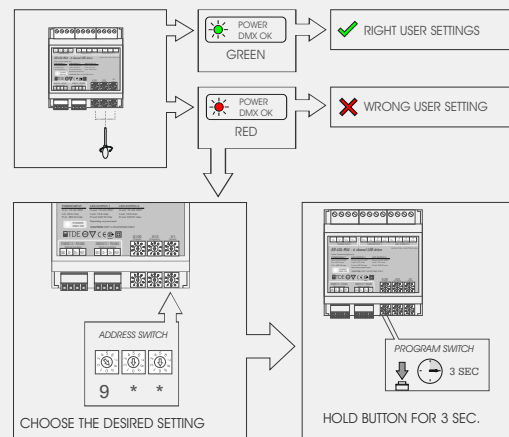
TDE lighttech controller / DMX Controller

## Programming usermodes

The AD-LC6 MKII has the unique feature to allow different configurations. The dipswitches on the driver allows the user to set a custom usermode. Please view the next page for the different usermode settings.

How to adjust the usermodes

- Set the desired usermode number with the dipswitches (see next page for usermodes).
- When set either a red or green LED will light up on the display. (when green the desired usermode has been configured previously).
- When the LED is red you can set the usermode by holding the programming button, which can be found on the left of the dipswitches.
- Hold the programming button for 3 seconds or longer.
- The LED will now turn green and the right usermode has been set





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## User modes

### [90#] Output test:

Select this option to test the output channels

- 900 All channels on
- 901 Ch1 = 100%
- 902 Ch2 = 100%
- 903 Ch3 = 100%
- 904 Ch4 = 100%
- 905 Ch5 = 100%
- 906 Ch6 = 100%
- 907 RGB-loop Ch1..3
- 908 RGB-loop Ch4..6
- 909 RGB-testloop Ch1..6

### [91#] DMX-mode:

Set the required DMX-mode to one of the different output patch settings

- 910 DMX [1..6] = Ch [1..6]\_\_\_\_\_ (Default)
- 911 DMX [1..3] = Ch [1..3+4..6]
- 912 DMX [1] = Ch [1+2+3+4+5+6]
- 913 DMX [1],[2] = Ch [1+2+3],[4+5+6]
- 914 DMX [1],[2],[3] = Ch [1+2],[3+4],[5+6]
- 915 DMX [1..3],[4] = Ch [1..3],[4+5+6]
- 916 DMX [1],[2],[3],[4]= Ch [1+2],[4+5],[3],[6]

### [92#] DMXfail-mode:

Set the required DMXfail-mode to set the output behaviour when DMX-signal fails

- 920 All outputs unchanged \_\_\_\_\_ (Default)
- 921 All outputs OFF (0%)
- 922 All outputs ON (100%)
- 923 RGB-loop Ch1..6
- 924 Ch1 = 100%
- 925 Ch2 = 100%
- 926 Ch3 = 100%
- 927 Ch4 = 100%
- 928 Ch5 = 100%
- 929 Ch6 = 100%

### [93#] PWM-output frequency:

Select this option to adjust the PWM-frequency

- 930 137Hz
- 931 220Hz
- 932 320Hz\_\_\_\_\_ (Default)
- 933 457Hz
- 934 582Hz
- 935 712Hz
- 936 916Hz
- 937 1282Hz
- 938 1603Hz
- 939 50...2000Hz, selectable with DMX channel-7

### [94#] Output smooth settings:

In this setting the smoothing effect of the output brightness can be set. This can be used when using low DMX-framerate controllers or for super smooth architectural lightcontrols.

- 940 Off (No smoothing effect)
- 941 Minimum
- 942 Standard \_\_\_\_\_ (Default)
- 943 Extra
- 944 Maximum

### [95#] Output-curve selection:

Set the required Output-curve. In the constant output modes (with RGB-LED's) one colour has the same brightness as two or more colours.

- Normal = R+G+W = 300% (= standard)
- Mode 953 = R+G+W = 200%
- Mode 954 = R+G+W = 100%

- 950 Standard curve \_\_\_\_\_ (Default)
- 951 Linear curve
- 952 Deep curve (TV-studio applications)
- 953 Constant output brightness (max. 200%)
- 954 Constant output brightness (max. 100%)

To ensure proper functioning of the LED driver with a third party product please contact us for information.

In the view of a constant development of our products, we reserve the right for changing technical data and features without prior notice.