



# Super Compact 3 Channel DMX512 Power LED drivers

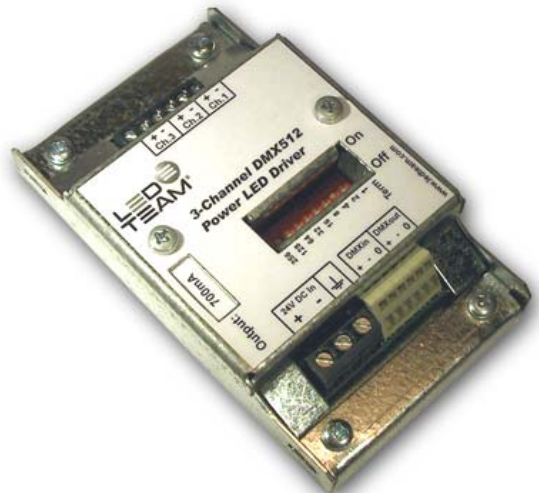
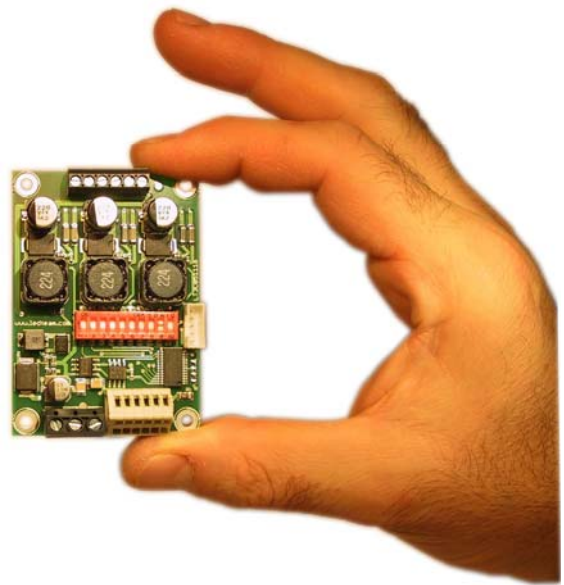
The Alto350 and Alto700 are super compact 3 Channel DMX512 drivers, especially developed to drive strings of Power LEDs.

## Main features:

- 3 Output Channels
- Constant current outputs
- Power Supply voltage : 24V-32V DC
- Up to 8 power LEDs in series per channel
- LED dimming through PWM
- DMX512 compatible
- Auto running modes available through DIP switch
- Different versions available (Alto350 = 350mA per channel, Alto700 = 700mA per channel)
- Very compact design
- High efficiency
- PCB and Cased versions
- Easy to install

## Typical Applications:

- RGB Colour mixing
- Architectural lighting
- Signage
- Cove lighting
- Flood Lighting
- Landscape lighting





### Specifications:

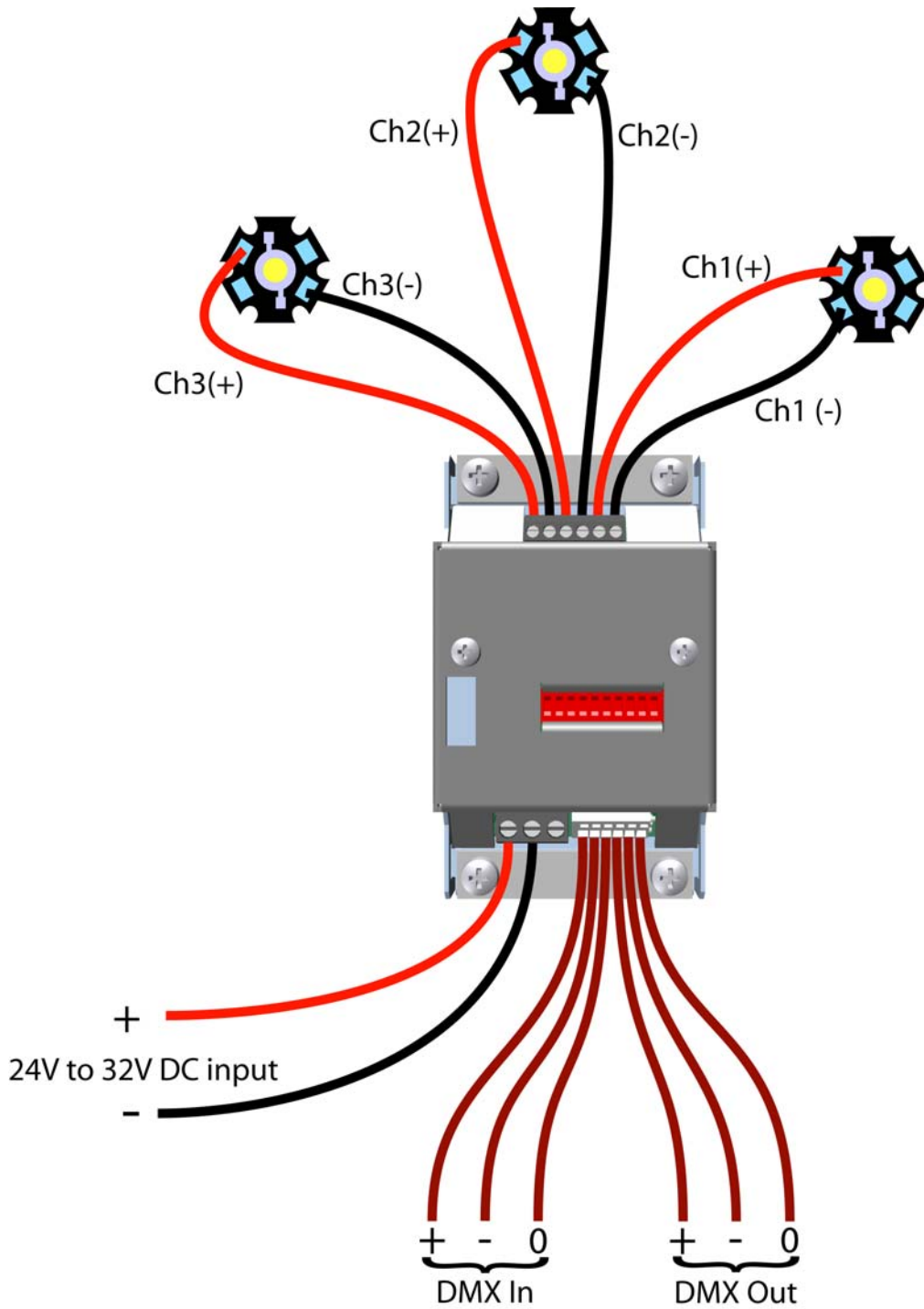
Input voltage range	: 24 - 32VDC
Input current	: 2A maximum (depends on the model, the input voltage and load configuration)
Output channels	: 3
Output Current	: 350mA per channel (Alto350) 700mA per channel (Alto700)
Control protocol	: DMX512
Address range	: 1-506 through DIP switch
Special addresses	: 511 = Auto-running colour change 510 = All channels full on 509 = Channel 3 full on, channels 1 & 2 off 508 = Channel 2 full on, channels 1 & 3 off 507 = Channel 1 full on, channels 2 & 3 off
DMX Terminator	: Built-in, accessible through DIP switch position 10
Dimming method	: PWM
PWM frequency	: 160Hz
Operating ambient temperature	: -10°C to +40°C
Storage ambient temperature	: -20°C to +70°C
Dimensions	: 50 x 70 x 16 mm (PCB model) 58,2 x 96 22 mm (cased version)

### Product Numbering:

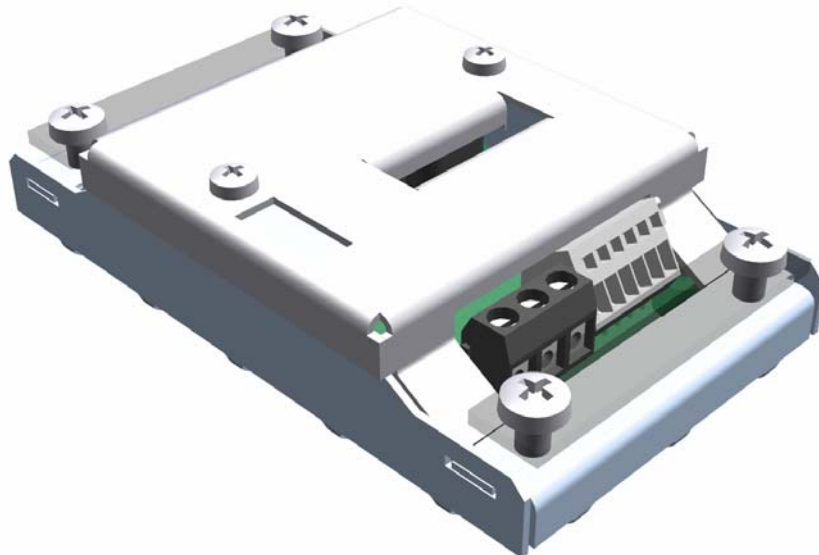
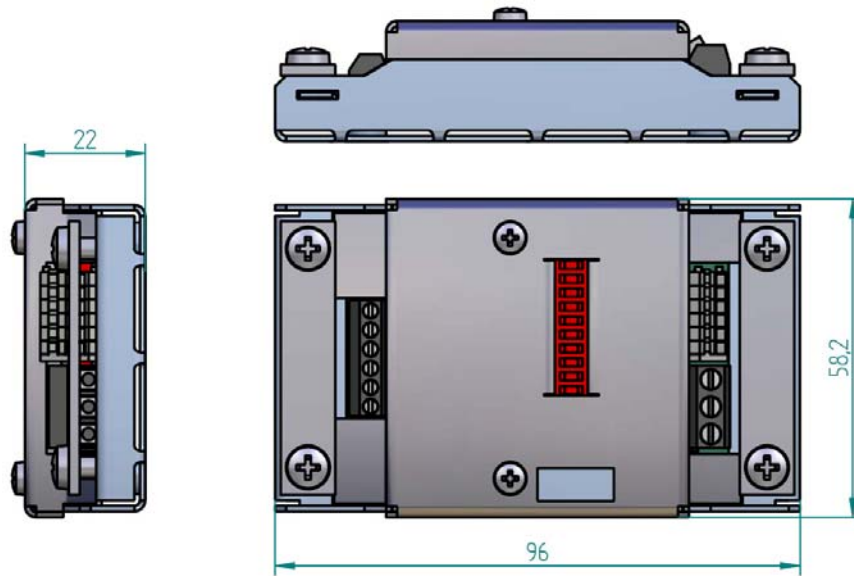
When ordering or referring to a specific Alto product, please use the following product numbering:

LT-ALTO350-P	: Alto350, PCB version
LT-ALTO350-C	: Alto350, cased version
LT-ALTO700-P	: Alto700, PCB version
LT-ALTO700-C	: Alto700, cased version

**Driver Connections :**



**Cased Version (dimensions in mm):**



### Application figures:

Every output channel can drive a maximum load of 15W.

So one should take care when designing the load configuration.

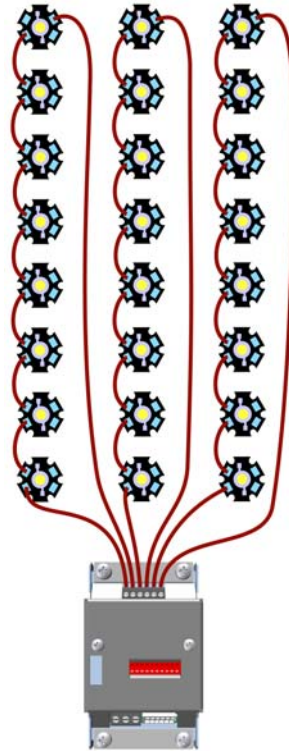
The load per channel can easily be calculated by adding the power consumption of each led connected to the specific channel.

To calculate the power of each led, one should take the forward voltage drop of the LED used and multiply this by the current going through it.

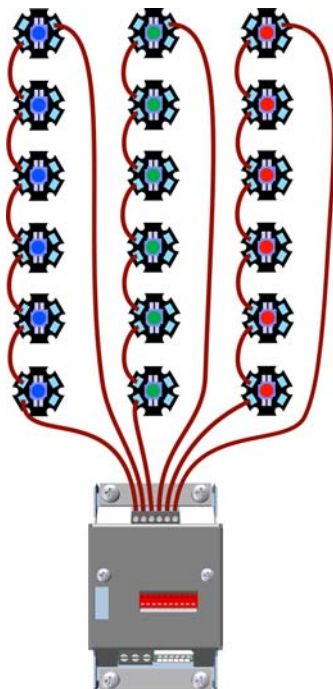
The forward voltage drop ( $V_F$ ) can be found in the data sheet of the LED in question. Please note that  $V_F$  is always mentioned for a specific current through the LED.

Example 1, picture to the right: every channel has a load of:  $(3,42V * 0,35A) * 8 = 9,58W$

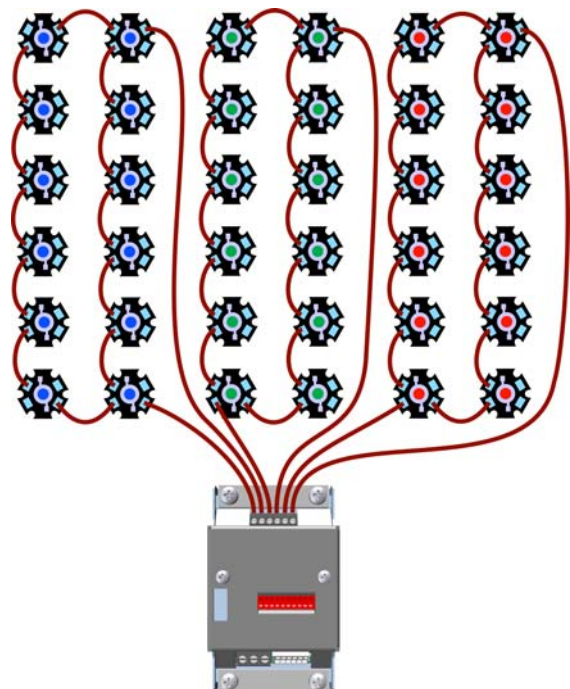
Example 2, picture in lower right corner:  
 Ch1, red leds:  $(2,95V * 0,35A) * 12 = 12,39W$   
 Ch2, green leds:  $(3,42V * 0,35A) * 12 = 14,36W$   
 Ch3, blue leds:  $(3,42V * 0,35A) * 12 = 14,36W$



Alto350 driving 24 Luxeon I LEDs (White), 8 in series per channel, total power = 28,7W



Alto700 driving 18 Luxeon K2 LEDs (Red, Green & Blue), 6 in series per channel, total power = 44,5W



Alto700 driving 36 Luxeon I LEDs (Red, Green & Blue), 12 in series/parallel per channel, total power = 41,1W



**Notice:**

The information herein is subject to change without notice.

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