

Notes:

All specifications subject to change.

Correct as of Firmware RC_05—June 2010.



305 led driver

Instructions and wiring guide

Roughcut



Designed and Manufactured in Australia by bluecog

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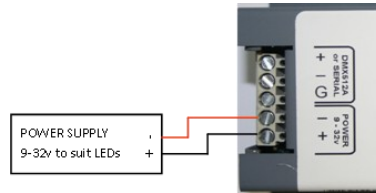
V1.2 14.06.10

Wiring Guide

DC Power Input

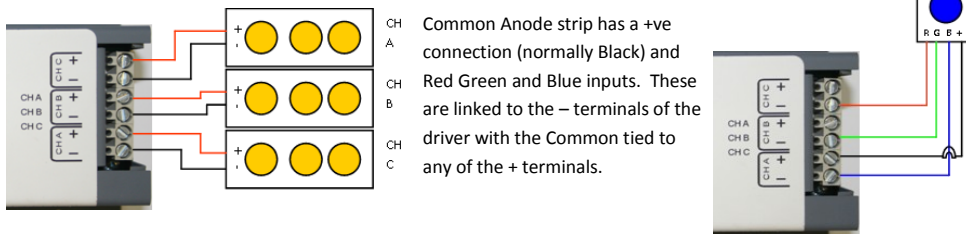
The controller is designed to be powered from a DC power supply of between 9 and 36v. This is connected to the Power Input side of the driver. If the Power LED does not come on when power is turned on you should immediately turn the power OFF and check wiring Polarity.

The Power voltage is used to also drive the LEDs. This allows simplified wiring as only a single power supply is required.



LED Connections

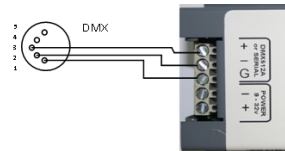
The unit is designed for Common Anode RGB LED strip, or three separate channels of led strip.



DMX / Serial Data Connections

DMX Mode (DIP Switch 10 OFF)

If connecting the unit to a DMX source the cable should be connected as follows : Pin 1 (G) to G terminal. Pin 2 (DMX-) to Data -, Pin 3 (DMX+) to DATA +. The DATA LED will show a valid DMX signal is being received.



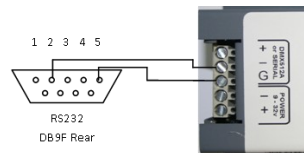
9600 Mode (DIP Switch 10 ON)

If connecting the unit to a 9600 baud RS232 source the cable should be connected as follows :

Data TX to Data - Input, Data GND to Data GND input.

The Data + Input on the unit is not connected in this mode.

The DATA LED will flash when a command has been received.



Data format:

ch@lvl(f)(ftime)<CR> eg 001@255f010 -> Fade Channel 1 to 255 (Full) over 2 seconds

ch— channel 001—003. Channels other than 1-3 are ignored

lvl— Level 000-255

f— optional ASCII 'f' - triggers optional fade command

Ftime— optional fade time 000-255 (0s to 512s) — each step is equal to 20mS.

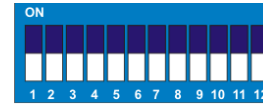
If the fade time is not sent the fade will default to 010 (2 seconds)

Channel 000 commands control all 3 channels at the same time. Sending 000@255F will fade all channels to full over 2 seconds.

Channel 090 Commands will stop any running fades. Ch 91 will stop Ch1, Ch 92 will stop Ch2, CH93 will stop Ch3.

DMX Mode—DIP 10,11,12 OFF

When in DMX mode the Start address is set using DIP 1—9. Switch 10, 11 and 12 must be off.



Channel	Value	Function
1	0—255	PWM 0% - 255%
2	0—255	PWM 0% - 255%
3	0—255	PWM 0% - 255%

TEST Mode—DIP 12 ON



Test mode is activated by turning on DIP 12. it will override all other modes and start a three channel chase. The chase speed can be adjusted by setting DIP switches 1—9. This allows the units to be used for stand alone colour changing modes.

Fixed colour Mode—DIP 11 ON

By turning on DIP switch 11 the unit will set the channel output levels based on the values of three dip switches for each channel. Channel A output is set using DIP Switch 1-3, Channel B used DIP switch 4-6 and Channel C using DIP Switches 7-9.

This allows the creation of a mixed static colour without having to have a controller present.

The illustration below shows the output levels—in this case using channel A as an example. The three channels can have different level setting allowing for some nice colour mixing.

