DMX Single Motor Controller

v3102x

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DMX Single Motor Control Instructions v3102x

Controller direction and speed works with two channels of DMX-512 Available Channels 1-511

Logic controller on V3102x powered by Motor Input Power Supply. 12-24 VDC

Fuse According to your Motor's Rated Current Do NOT Excede 13 Amps of Continuous Draw.

DMX ADDRESSING: This Motor driver uses 2 Channels of DMX (1-511) Use DIP Switches on Box to choose your DMX START address. UP==ON

Adjust DIP Switch DMX Address with POWER OFF Once set, this DMX address will be initiated & retained after a power cycle.

DMX DIP Switch Calculator https://www.laserworld.com/en/laserworld-toolbox/dmx-address-setting.html

DMX values are represented as 0-255 (NOT percent)

Set START address to: < 50 == MOTOR DISABLED (Blue LED Blinks Fast)
Set START address to: > 50 && < 127 == MOTOR ENABLED ROTATES CW
Set START address to: > 127 == MOTOR ENABLED ROTATES CCW

Use the NEXT channel after Start address to control Speed of Motor (most motors begin rotation about 10% power DMX 25)

EXAMPLE Programming:

Light cue to move the motor Clock Wise (CW) at full speed.

The Controller Box set to DMX Channel 9 as the start address.

Ch9 @ 20 Ch10 @ 255

Light cue to turn off motor.

The Controller Box set to DMX Channel 9 as the start address.

Ch9 @ 0 Ch10 @ 0

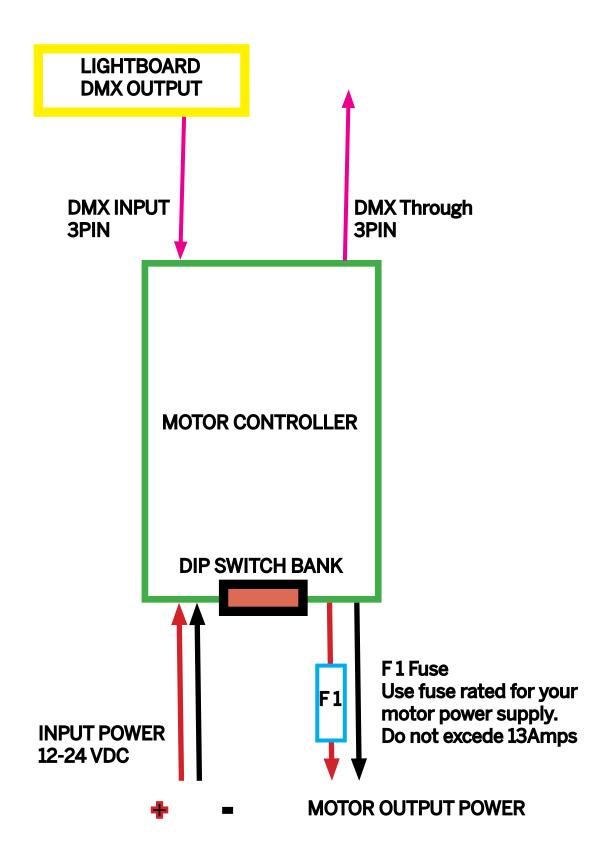
LED Blink Logic:

External Blue LED Indicator.

Blinking rapidly = Motor Disabled & waiting for DMX

Steady ON = Motor ENABLED and Working Properly

Internal LED (seen through top air vents) Blinks on startup and if FAULT with Motor Driver





DMX INPUT AND THROUGH 3 PIN SOCKETS INPUT ON THE RIGHT IN THE PICTURE ABOVE DIRECTIONS MARKED ON BOX.

NOTE: ON CONTROLLER VERSION V3102A&B USB AND POWER JACKS ARE NOT IN USE.



DIP SWITCH DMX ADDRESSING, EXAMPLE OF START ADDRESS 3 CHANGE DMX ADDRESS WITH POWER OFF



POWER SUPPLY IN AND OUT LINES INLINE FUSED MOTOR OUTPUT

Components

Motor Drivers

V3102A Pololu G2 High-Power Motor Driver 24v13. https://www.pololu.com/product/2992

V3102B Pololu G2 High-Power Motor Driver 24v21 https://www.pololu.com/product/2995

Pololu 6V, 1A Step-Down Voltage Regulator D24V10F6 https://www.pololu.com/product/2832

Libraries:

photodude G2 library

https://github.com/photodude/G2MotorDriver

DMXSerial

https://www.mathertel.de/Arduino/DMXSerial.aspx

MCP23017

https://github.com/blemasle/arduino-mcp23017

