

NLED WS2814 MOSFET Driver Module

Based on the new WS2814 chipset this module features 4 channels for RGBW LED control. It allows standard 12v or 24 volt constant voltage LED strips and modules to be controlled just like an addressable pixel. This module can be used by itself, in a string of multiple modules, or connected to other addressable LED pixel strips that use a compatible protocol.

Easy to interface from an Arduino, PIC, ESP, NLED pixel controllers or other logic devices that can control addressable pixels.

| | |
|--------------------------------|--|
| Input Voltage | 7 – 24 volts |
| Max Current, Total | 15 Amps |
| Max Current, Per Output | 4 Amps |
| Quiescent Current Draw | < 5mA |
| Number of Channels | 4 (RGBW) |
| Connectors | Solder Pads or Screw Terminals |
| Protocol | WorldSemi WS2814 |
| Data Voltage, Input | TTL, 5 volt (3.3v levels possible, controller dependent) |
| PWM Frequency | 2KHz |
| PWM Resolution | 8-bit |
| Color Order | RGBW |
| ESD Protection, Data | ±4kV on DATAIN, ±12kV on DATAOUT |
| ESD Protection, Power | ±8kV / ±15kV |
| Board Dimensions | 50mm x 35mm, Height: 13mm / 3mm(unpopulated) |

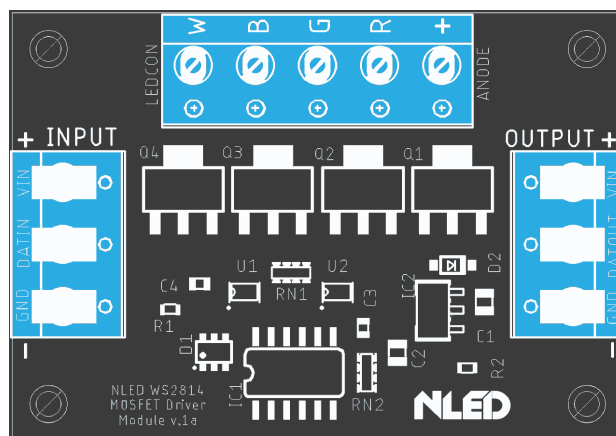
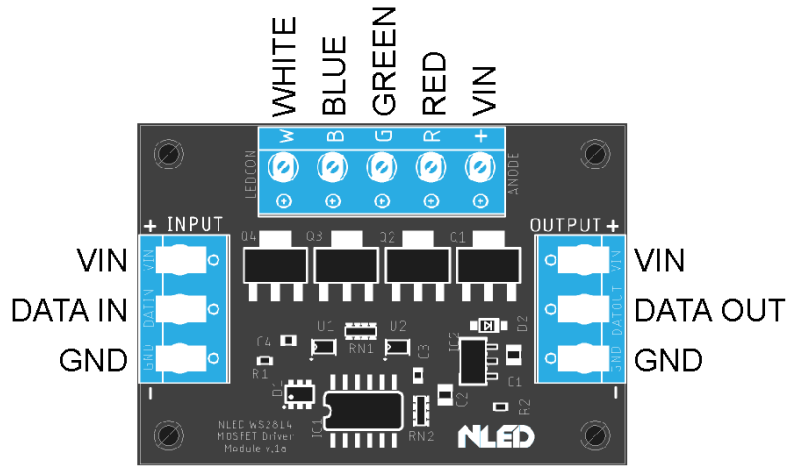


Fig. 1a

Pinout



All external connections have large solder pads for directly attaching wires to the top of the PCB
Or standard screw down terminals may be used, hole pitch is 5.08mm

Fig. 2a

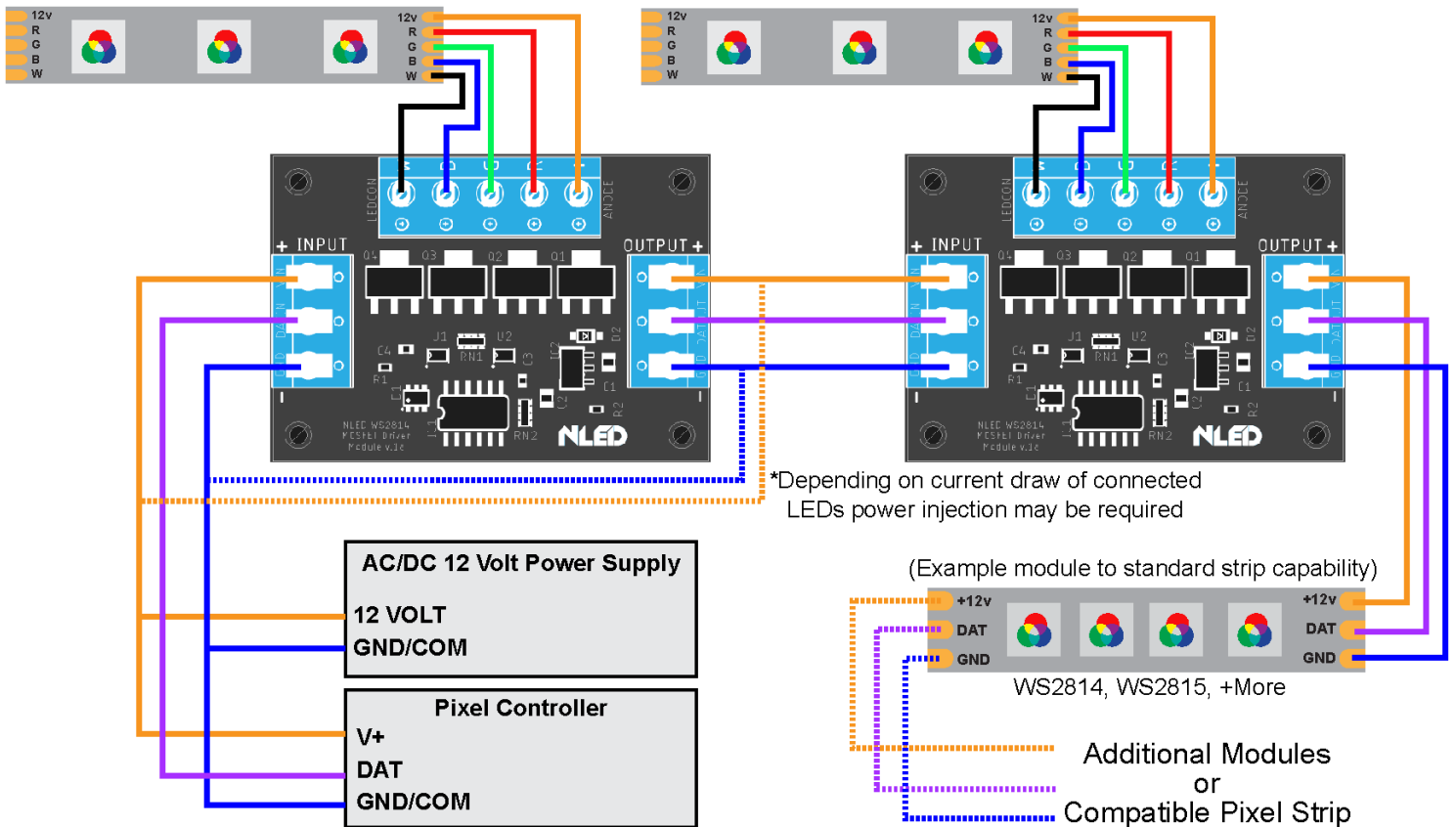


Fig. 2b

Dimensions and Mounting

3D .step models can be found on the device's webpage.

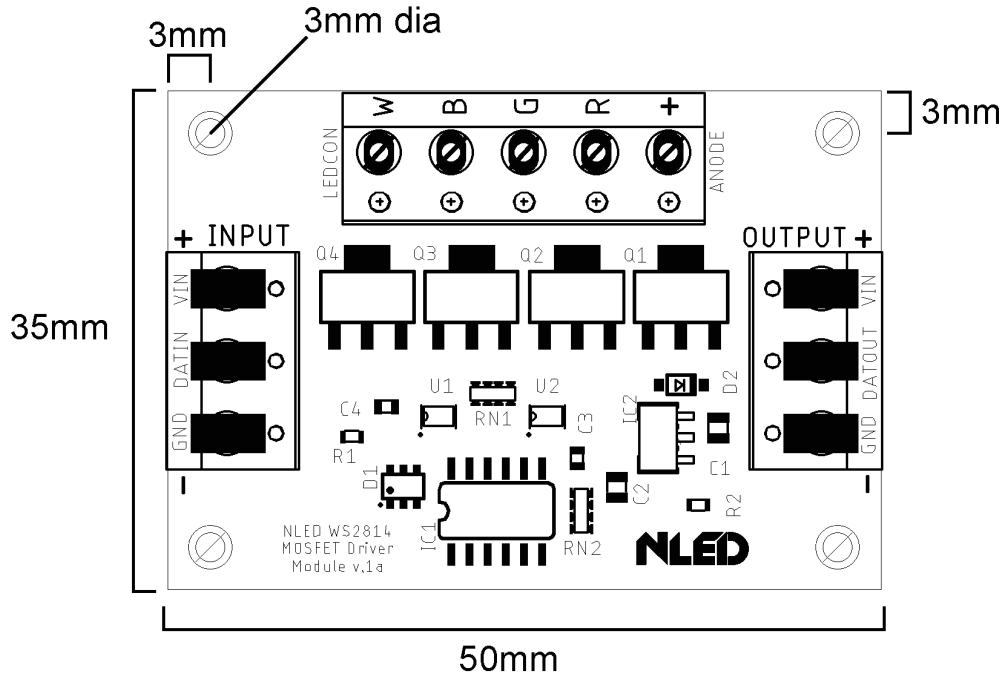


Fig. 3A

Height, Standard/Screw Terminals: 13mm

Height, Unpopulated: 3mm

Mounting Notes:

Do not allow the PCB to touch anything conductive.

Do not allow foreign material to fall onto or accumulate on the device.

The device should be kept dry and clean. If the device becomes wet or dirty, do not use until it is cleaned and dried. Contact Us for assistance.

NLED is available to create new designs and derivatives of current designs customized to the clients requirements, please Contact Us with your specifications.