

### Introduction

Mini Extender is a simple wired transmitter and receive module pair that will enable you to extend serial data (<1mbps). This is especially useful when using WS2811/WS2812 (and similar NRZ-type variants) Pixel LEDs. The transmitter module will convert the data from single-ended to differential data to be sent down a standard ethernet cable, or twisted pair and ground. The receiver module converts the data back from differential to single-ended data. This gives the advantage of being able to use very long cable runs (<200m) between transmitter and receiver pairs.

Mini Extender can be powered from voltages of 5v or 7-12v, both ends need to be powered for the system to work.

### Specifications

Transmitter screw connections : 5V-12V input. Outbound data (<1mbps).

Transmitter RJ45 connection : Outbound data+/- and ground connections

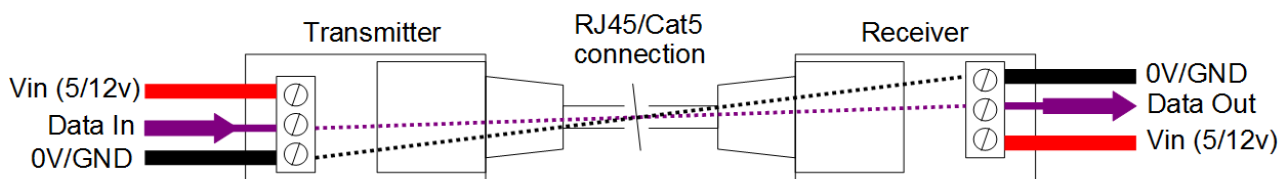
Receiver screw connections : 5V-12V input. Inbound data (<1mbps)

Receiver (Red) RJ45 connection : Inbound data+/- and ground connections

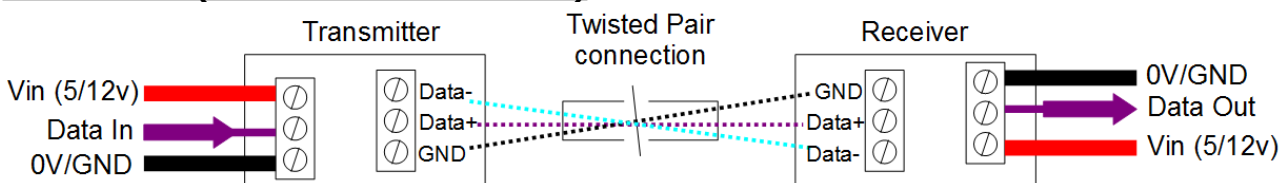
### Parts Supplied

1 x Mini Extender transmitter, 1 x Mini Extender Receiver

### Connections (RJ45 Version)



### Connections (Twisted Pair Connection)



### Voltage Selection

If powering either device from 5V then the 5V jumper link MUST be placed across the two headers pins marked as "5V Link". If powering from 7-12V then this link can be omitted. Both ends must be considered, and they can be run from different voltages if required.

### Indicators

On the RJ45 version, there are two LEDs on each RJ45 connector

Power is shown on the Yellow LED

Data is shown on the Green LED

### Dimensions

Both Transmitter and Receiver - Length : 41mm - Width : 18mm - Height : 18mm

### Technical Support

email : [sales@smartshow.lighting](mailto:sales@smartshow.lighting)