### 7. After-Sales

From the day you purchase our products within 3 years, if being used properly in accordance with the instruction, and quality problems occur, we provide free repair or replacement services except the following cases:

- 1. Any defects caused by wrong operations.
- 2. Any damages caused by inappropriate power supply or abnormal voltage.
- 3. Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
- 4. Any damages due to transportation, breaking, flooded water after the purchase
- 5. Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
- 6. Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals 7.Product has been updated.

# SPI Single Channel Remote Transmitter/Receiver User manual





(Please read through this manual carefully before use)

# 1. Brief Introduction

Welcome to use SPI single channel remote transmitter/receiver, this model is designed for the SPI signal due to the distance problem is not enough. The transmitter is TTL to differential signal output, and the receiver is differential signal to TTL, in this way, it can solve the problem of SPI signal distance limitation in many projects. It's simple and small, easy to weld.

### 2. Specifications

Model	SPI single channel remote transmitter	SPI single channel remote receiver
Input voltage	5V-24V	
Input signal	TTL (SPI)	Differential signal
Output signal	Differential signal	TTL (SPI)
Input signal interface type	Pad ( Wire bonding can be made according to customer needs )	Pad(2P terminals or wires can be welded according to customer needs)
Output signal interface type	Pad(2P terminals or wires can be welded according to customer needs)	Pad ( Wire bonding can be made according to customer needs )
Working Temp	-20°C~55°C	
Dimension	L31 × W10 × H5 (mm)	
Weight(G.W.)	2g	

#### (3. Basic Features

- 1. 5V-24V input, suitable for a variety of engineering wiring voltages.
- 2. Both input and output have protection circuits.

SPI Single Channel Remote Transmitter/Receiver

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- 3. Differential signal input and output.
- 4. The 3P pads can be welded directly to the LED strip or wire, and the 2P pads can be welded to the terminals with a 5mm pitch and wires.
- $5. \ The \ wiring \ distance \ between \ the \ transmitter \ and \ receiver \ can \ reach \ more \ than$ 100 meters

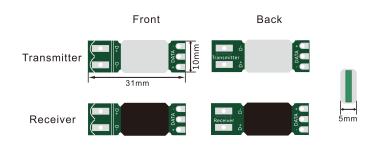
# 4. Safety warnings

Please don't install this controller in lightening, intense magnetic and high-voltage fields. 1.To reduce the risk of component damage and fire caused by short circuit, make sure

- correct connection
- 2. Always be sure to mount this unit in an area that will allow proper ventilation to ensure a fitting temperature.

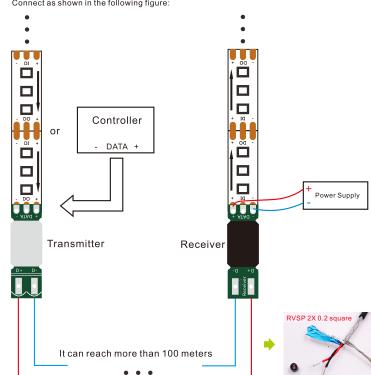
  3. Check if the voltage suit the controller
- 4.Don't connect cables with power on; make sure a correct connection and no short circuit checked with instrument before power on.
- 5. Please don't open controller cover and operate if problems occur.
   The manual is only suitable for this model; any update is subject to change without prior notice

# 5. Dimensions



# 6. Conjunction Diagram

It's suitable for remote amplification transmission of single-wire SPI signals. And if the distance of the controller SPI signal output is not enough, the transmitter can be connected, and then the receiver can be used to receive the signal, which can solve the problem of insufficient distance in engineering.
Connect as shown in the following figure:



Notes: The "- DATA +" of the transmitter and receiver needs to be welded, either to thewire or directly to the LED strip, which needs to be based on actual engineering. "D+D-" can use a small inner diamete signal line, and the transmission distance of twisted pair will be longer.