

# digital signal amplifier and repeater

Ref: 41.077

**Features:**

- SPI signal amplifier
- Reverse rotation of the power supply with high voltage
- Easy and convenient to use
- Multi-cascade design and use with separate control.
- When using a full colour dimmer, the output voltage matches the input voltage.
- The single wire led control chip can output 8 channels at the same time, and dual signals can output 4 channels at the same time.
- Each channel can control the same amount of led pixels as the main controller.



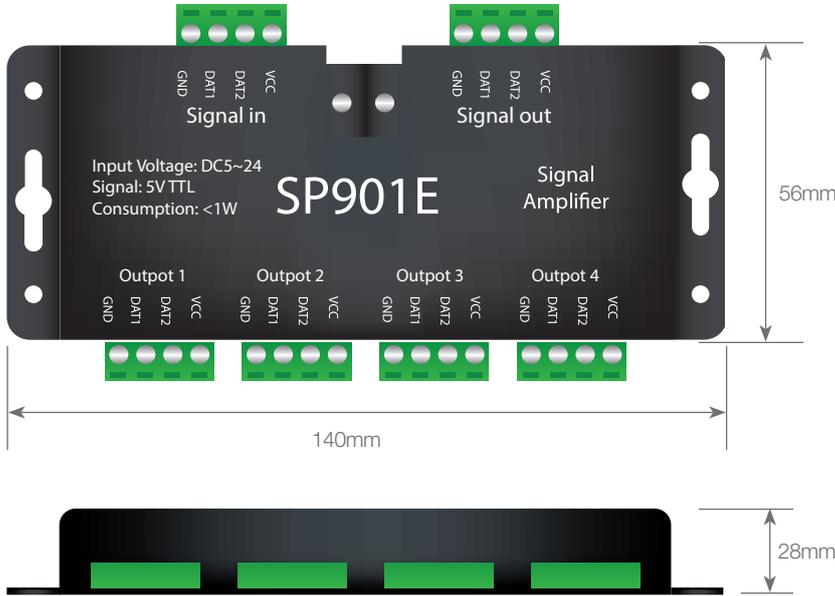
Electrical characteristics	Consumption	<1W
	Voltage	5V ~ 24V
	Channels	4 or 8
	Working current	3mA - 6mA
	Interface type	terminal
	Signal mode	SPI
	Compatible IC	WS2812B, WS2811, SK6812, SK6812-GBW, SM16703, WS2813, WS2815, CS8812, AL2815, WS2801, APA102, SK9822, UCS1903, LPD6803, LPD8806, APA102, etc.
Environment	Working temperature	-20°C / +60°C
	Operating temperature	-25°C / +85°C
Wiring	Connection mode	wiring
Other	Dimension	140x56x28mm
	Material	metal / plastic
	Weight	240g
	Guarantee	2 years



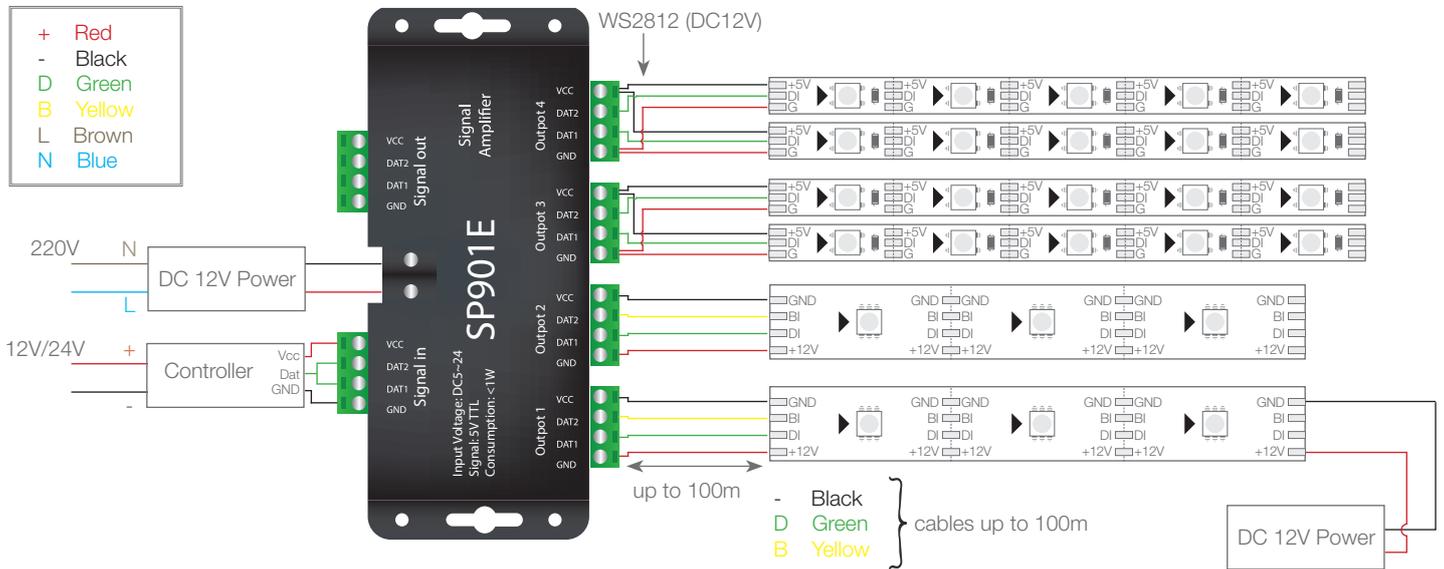
- This SPI signal amplifier is compatible with all kinds dual signals of 5V-TTL signal. It receives one signal and simultaneously outputs 4 or 8 channels of signals. Each channel can control the same quantity of pixels as main controller.
- The power supply has DC5V~24V wide range of working voltage, but it cannot regulate the output voltage. That means the output voltage of the power supply must be the same as the working voltage of your led lights. It can output 8 channels for addressable led strips with single data wire.
- If the current drawn from the amplifier is high, the power supply of the corresponding voltage must be added, since the current through the amplifier is limited. This will prevent the sub controller from overheating and getting damaged.
- The signal amplifier allows us to send the signal up to 100m.
- The repeater allows the same signal to be branched to 8 outputs.



Measurements:

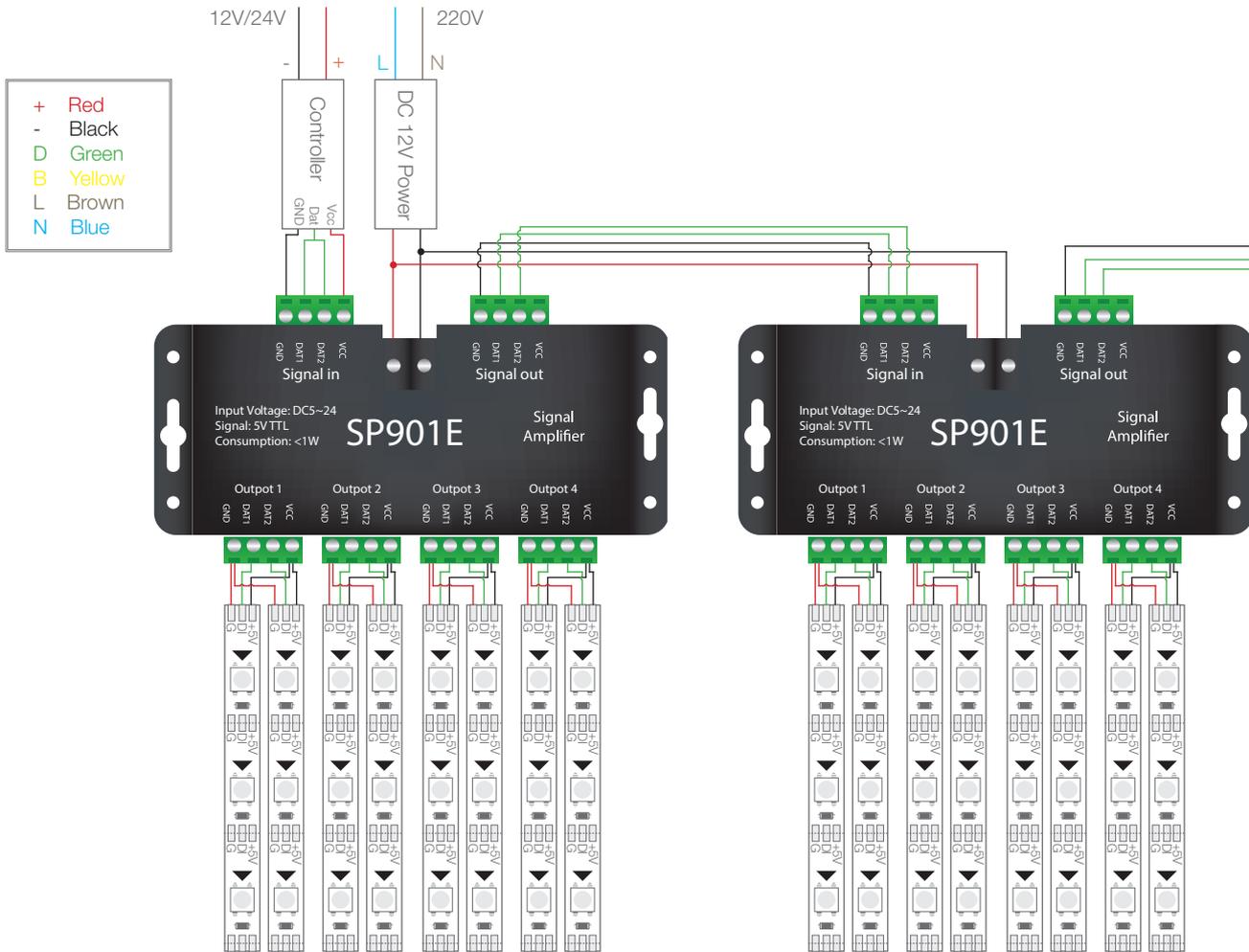


Wiring diagram for 5V / 12V / 24V RGB led strip





Wiring diagram with multiple SPI signal repeaters / amplifiers



Backup wiring diagram

