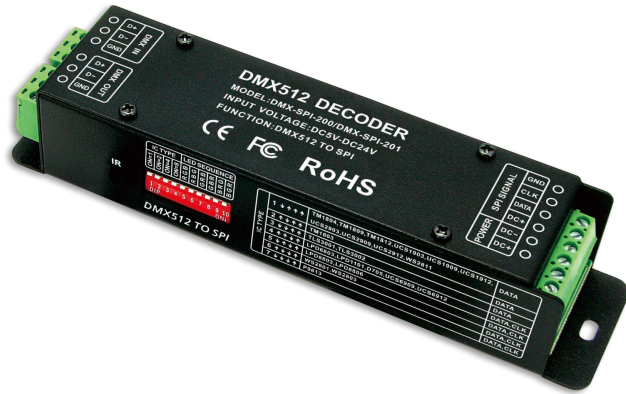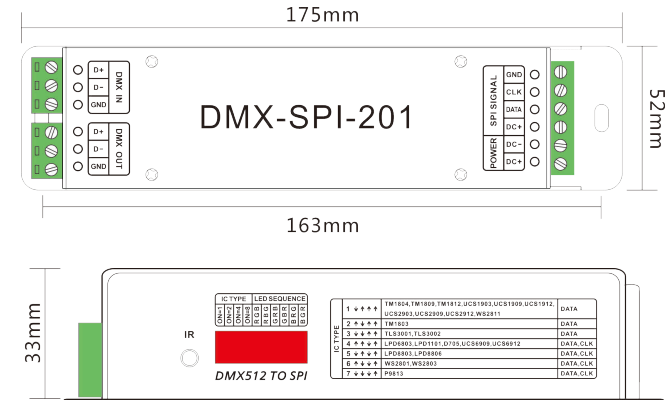# DMX-SPI-201
DMX-SPI Decoder

DMX-SPI-201 is DMX-SPI signal decoder, which convert the DMX512 digital signal into SPI(TTL) digital signal. It can work on the DMX console to control the LED lights with compatible driving ICs. DMX console can control every channel of the LED lights, outputting 256 grey scales per channel, realizing 0-100% dimming and various changing effect.

DMX-SPI-201 can switch 7 kinds of IC type, support more different lamps types of IC driver.

1. Technical Specs

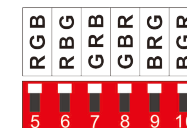| DMX-SPI-201	
Input signal	DMX512
Input voltage	DC5V~DC24V
Decoder channels	512 DMX CH/unit
Gray scale level	256 levels/CH (8bit/CH)
Compatible IC	TM1804, TM1809, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, TM1803, TLS3001, TLS3002, LPD6803, LPD1101, D705, UCS6909, UCS6912, LPD8803, LPD8806, WS2801, WS2803, WS2811, WS2812, P9813
Dimming range	0~100%
Working temperature	-30℃~65℃
Dimension	L175×W42×H33mm
Package Size	L178×W46×H58mm
Weight (G.W)	310g

2. Product dimension

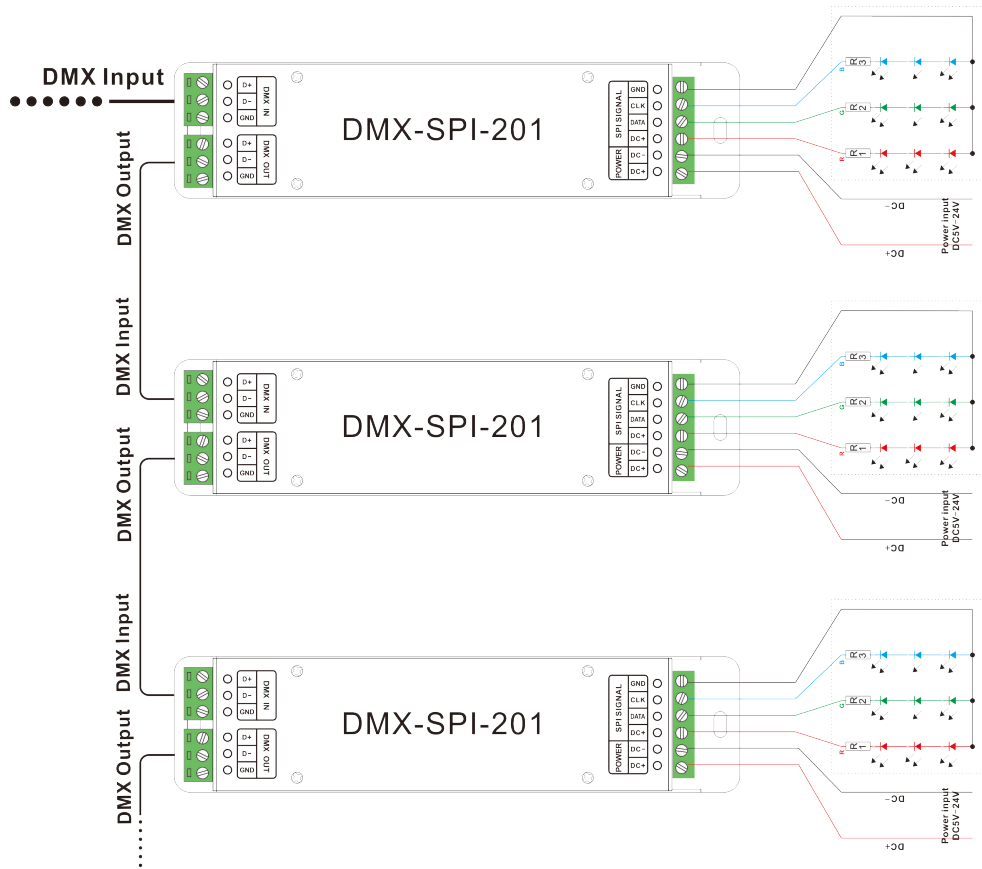## 3. Selection for IC types and RGB Sequence

1. Through the top 4 dip switches to select the IC types. Default 1# IC types when 4 dip switches are OFF

No.	4 dip switch selection	IC types	Output signal
1		TM1804, TM1809, TM1812, UCS1903, UCS1909, UCS1912, UCS2903, UCS2909, UCS2912, WS2811	DATA
2		TM1803	DATA
3		TLS3001, TLS3002	DATA
4		LPD6803, LPD1101, D705, UCS6909, UCS6912	DATA, CLK
5		LPD8803, LPD8806	DATA, CLK
6		WS2801, WS2803	DATA, CLK
7		P9813	DATA, CLK

2. 6 kinds of RGB sequence through after 6 dip switches to select, dip " ON" means current LED sequence. If multi-dip switches are ON, default the minimum dial-up is effective.

4 Conjunction diagram

DMX Input

5. Attention

1. The product shall be installed and serviced by a qualified person.
2. This product is non-waterproof. Please avoid the sun and rain. When installed outdoors please ensure it is mounted in a water proof enclosure.
3. Good heat dissipation will prolong the working life of the controller. Please ensure good ventilation.
4. Please check if the output voltage of any LED power supplies used comply with the working voltage of the product.
5. Please ensure that adequate sized cable is used from the controller to the LED lights to carry the current. Please also ensure that the cable is secured
    tightly in the connector to avoid the accidents due to overheat and poor contact on the wire.
6. Ensure all wire connections and polarities are correct before applying power to avoid any damages to the LED lights.
7. If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

6. Warranty Agreement

1. We provide lifelong technical assistance with this product:
   ● A 5-year warranty is given from the date of purchase. The warranty is for free repair or replacement and covers manufacturing faults only.
   ● For faults beyond the 5-year warranty we reserve the right to charge for time and parts.
2. Warranty exclusions below:
   ● Any man-made damages caused from improper operation, or connecting to excess voltage and overloading.
   ● The product appears to have excessive physical damage.
   ● Damage due to natural disasters and force majeure.
   ● Warranty label, fragile label and unique barcode label have been damaged.
   ● The product has been replaced by a brand new product.
3. Repair or replacement as provided under this warranty is the exclusive remedy to the customer. Ltech
    shall not be liable for any incidental or consequential damages for breach of any stipulation in this warranty.
4. Any amendment or adjustment to this warranty must be approved in writing by Ltech only.

★ This manual only applies to this model. Ltech reserves the right to make changes without prior notice.