DMX512 DATA Decoder

(Please read through this manual carefully before use)

1.Summarize

Welcome to use the DMX512 signal deocder, it is developed specially for LED lamps. It adapts the most advantage microchip technology, to convert the universal standard DMX512/1990 signal into various LED driving IC signals,and allows the LED lamps controlled by DMX512 protocol.

2.Specifications

| Mode	DMX512 DATA Decoder DE8802
Input power	DC5V-DC24V
Input signal	DMX-512/1990
Max current Load	Max 16A
Output signal	5803/8806/2811/2801/3001/9813selectable
Driving channel	510 Channels
Control Pixel	170
Dimension	L160*W47*H24(mm)
Weight(G.W)	220g

3.Specifications

1.Automatically adapts input voltage DC5V-24V.
2.Input standard DMX512 protocol.
3.Adapts LCD display, user friendly.
4.Support various LED dream color driving ICs
5.Support DMX master mode or slave mode.
6.Over current fuse protection at output port, Wrong wiring protection at DMX input port

4.Dimensions
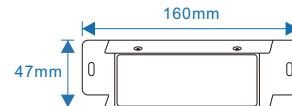
5.Conjunction Diagram

1.Wiring diagram of master Mode:(Only one decoder is allowed to work as a master)
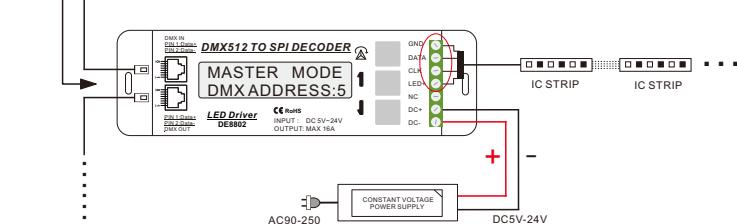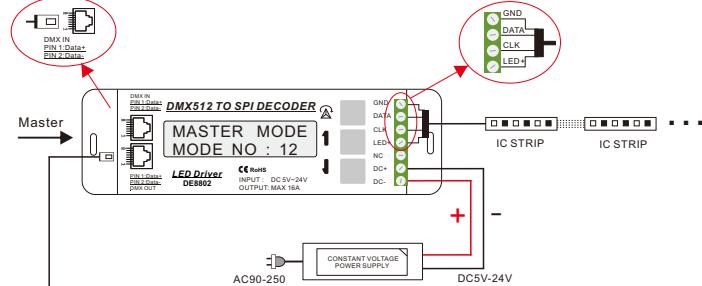
2.Wiring diagram of Slave Mode

DMX512 CONSOLE

PC CONSOLE

DMX IN
PIN 1:Data+
PIN 2:Data-

DMX data input

&

Output

GND
DATA
CLK
LED+

DMX IN
PIN 1:Data+
PIN 2:Data-

DMX512 TO SPI DECODER

MASTER MODE
MODE NO : 12

GND
DATA
CLK
LED+
NC
DC+
DC-

IC STRIP   IC STRIP

PIN 1:Data+
PIN 2:Data-
DMX OUT

LED Driver
DE8802

INPUT : DC 5V~24V
OUTPUT: MAX 16A

CONSTANT VOLTAGE
POWER SUPPLY

AC90-250   DC5V-24V

+   −
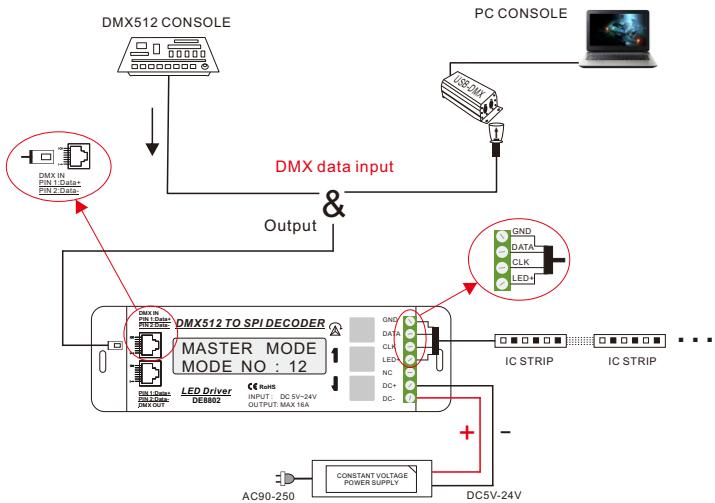
Output LPD6803/LPD8806/P9813/WS2801 signal,three lines:

DATA	6803/8806/9813/2801 DATA
CLK	6803/8806/9813/2801 CLK
GND	GND,connect with the chip GND

Output WS2811/TLS3001 signal,two lines:

DATA	WS2811/TLS3001 DATA-CLK
DND	GND,connect with the chip GND

Note: According to DMX512 protocol, in order to ensure a stable data transmission, you should add a metalster(Metal Thin Film resistor, 90-120 1/4 W)at the end of each layout of DMX data cable (between Foot 2 and Foot 3, Data -),please also refer to your dmx console manual to select a correct rseistor .

6.Operating instructions

There are 3 buttons on the decoder: △(Manu),↑(increase),↓(decrease)

△	parameter setting,long press for 2seconds to switch between master mode and slave mode
↑	Increase value
↓	Decrease value

after operation, if no action within 30s, the key locks, backlight of the screen will turn off.long press "△" for 2s to unlock the keys, and the backlight turns on.
When at master mode, the first line of LCD shows: MASTER MODE
When at slave mode, the first line of LCD shows:DECODER MODE
the second line of the LCD shows the current parameter,such as:

Setting	LCD Display	Value	Mode
Built-in sequence	DECODER MODE MODE NO： 2	1-26	Master
Built-in speed	DECODER MODE RUN SPEED： 1	0-7	Master
DMX Address	DECODER MODE DMX ADDRESS: 1	1-512	Slave
DMX Signal RGB	DECODER MODE DMX RGB SEQ:RGB	"RGB""BGR"	Slave
Pixel	DECODER MODE PIX NUMBER: 170	1-170	Master&Slave
IC type	DECODER MODE IC TYPE2811	2811 2801 6803 3001 8806 9813	Master&Slave
RGB Sequence	DECODER MODE LED RGB SEQ:RGB	RGB RBG GRB GBR BRG BGR	Master&Slave
Integral Control	DECODER MODE ALL CONTROLNO	YES, NO	Master&Slave
Reverse Control	DECODER MODE REV-CONTROLNO	YES, NO	Master&Slave

ControlICs type

IC Type	Compatible ICs
2811	Tm1803. Tm1804. Tm1809. Tm1812. UCS1903. UCS1909. UCS1912. UCS2903. UCS2909. UCS2912. WS2811 etc.
2801	WS2801. WS2803 etc.
6803	LPD6803. LPD1101. D705. UCS6909. UCS6912 etc.
3001	TLS3001. TLS3002 etc.
8806	LPD8803. LPD8806 etc.
9813	P9813 etc.