DMX/RDM CC Decoder

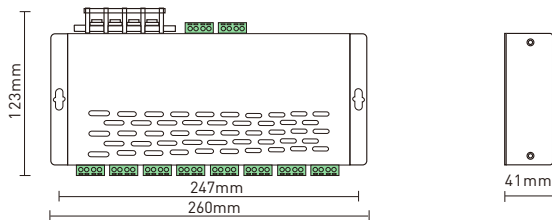FC CE RoHS   warranty 5 years   ISO9001:2008

LT-880-350/LT-880-700 with the standard RDM remote device management protocol, supports DMX512 signal bi-directional communication, achieves remote management of reading and writing DMX address (DMX master controller must recognize the RDM protocol).

This compact decoder works with DMX512 console. Realize 0-100% brightness and various changing effect. Equiped with DMX standard 3-pin XLR, RJ45 and green terminal interface, easy to operate. And it can control single color, bi-color, RGB LED lights.
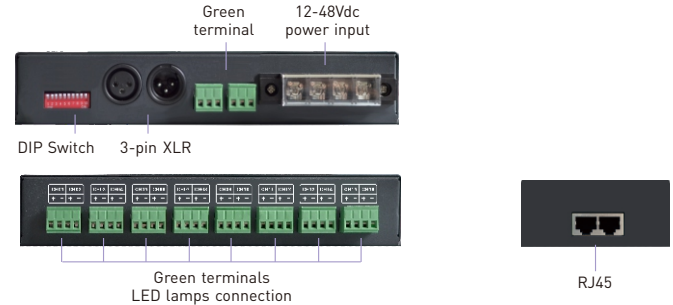
1. Product parameter：

Model	LT-880-350	LT-880-700
Input signal	DMX512/RDM	
Input voltage	12~48Vdc	
Output voltage	3~46Vdc	
Output current	CC 350mA×16CH	CC 700mA×16CH
Output power	1.05~16.1W×16CH Max. 257.6W	2.1~32.2W×16CH Max. 515.2W
Photoelectric isolate	Yes	
DMX512 socket	3-pin XLR, RJ45, Green terminal	
Working temp.	-30℃~65℃	
Dimension	L260×W123×H41mm	
Package size	L276×W128×H46mm	
Weight(G.W.)	950g	

2. Product size：

123mm

247mm
260mm

41mm

3. Configuration diagram：

Green terminal   12-48Vdc power input

DIP Switch   3-pin XLR

Green terminals
LED lamps connection

RJ45

4. Dip switch operation：
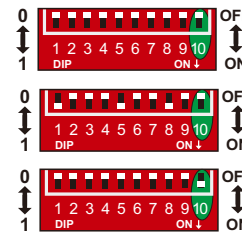
RDM mode: The dip switch 1-10 are OFF.

DMX mode: FUN = OFF (the 10th dip switch = OFF)
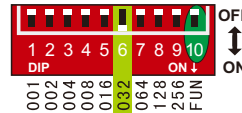Setting DMX addresses with dip switch 1-9

Self-testing mode: FUN = ON (the 10th dip switch = ON)

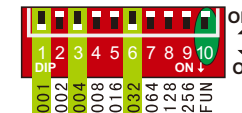4.1 How to set DMX address via dip switch:

FUN=OFF (the 10th dip switch = OFF)   **DMX mode**

DMX address value = the total value of (1-9), to get the place value when in "ON" position, otherwise will be 0.
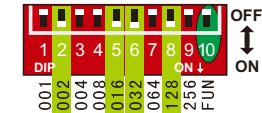
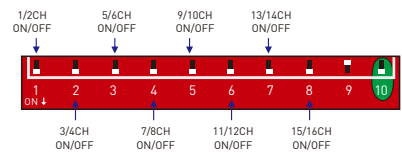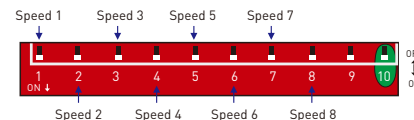E.g.1: Set initial address to 32.   E.g.2: Set initial address to 37.   E.g.3: Set initial address to 178.

001+004+032=37   002+016+032+128=178

4.2 Self-testing mode:

FUN=ON (the 10th dip switch = ON)   **Self-testing mode**

1/2CH ON/OFF   5/6CH ON/OFF   9/10CH ON/OFF   13/14CH ON/OFF

3/4CH ON/OFF   7/8CH ON/OFF   11/12CH ON/OFF   15/16CH ON/OFF

When Dip switch 9 = off, Dip switch 1-8 is to turn on/off 16 channels.

Speed 1   Speed 3   Speed 5   Speed 7

Speed 2   Speed 4   Speed 6   Speed 8
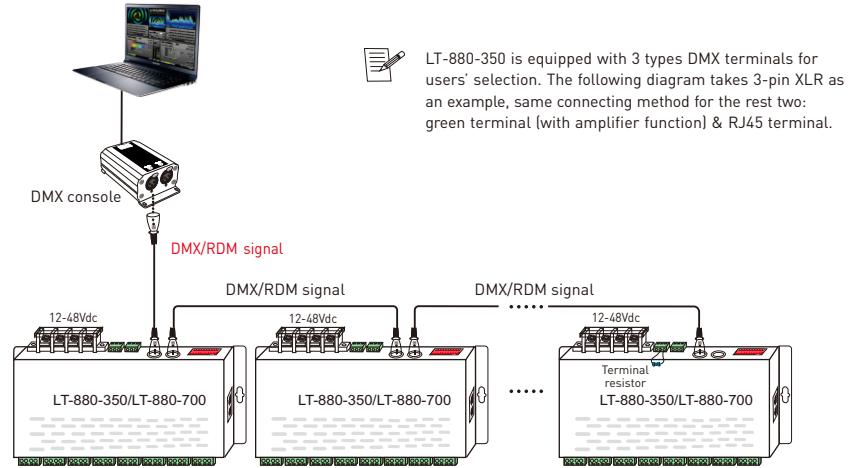
When Dip switch 9 = on, Dip switch 1-8 is to realize 8 speed levels (8=on, the fastest level).
Channel 1 light up gradually then dark down; channel 2 light up gradually then dark down……every channel changes in this way until channel 16 light up then dark down.
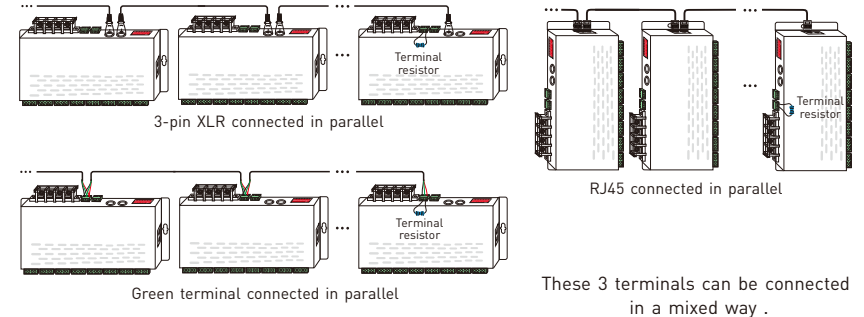
5. Wiring diagram:

5.1 Connecting LED lights:

High power supply

DMX/RDM signal   DMX/RDM signal

LT-880-350/LT-880-700

1 2 3 4 5 6 7 8

LED

Power supply   Power supply

DMX/RDM signal   DMX/RDM signal

LT-880-350/LT-880-700

Output terminal (Wiring diagram below)

1 2 3 4 5 6 7 8

LED

Dimming mode

CH02 / CH01

Single color LEDs

Color temperature mode

CH02 / CH01

Color Temperature LEDs

RGB mode

CH03 / CH02 / CH01

RGB LEDs
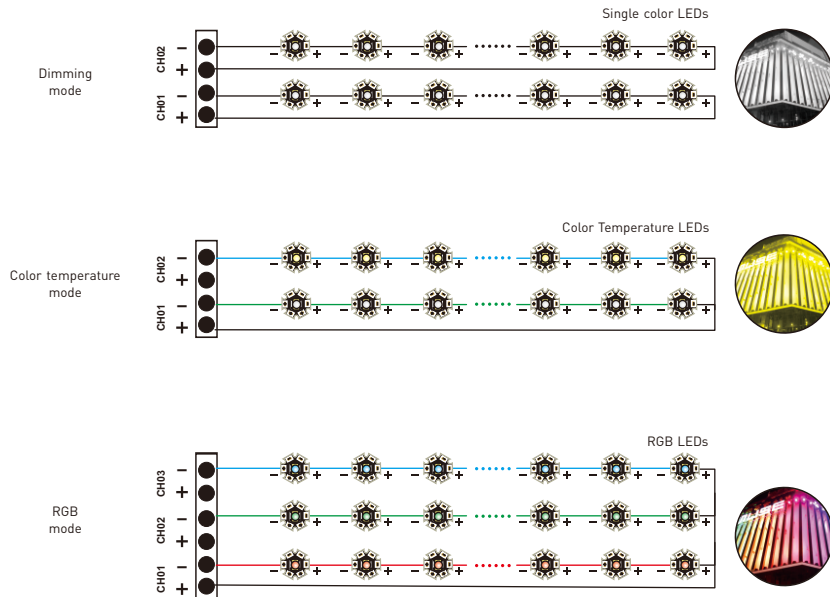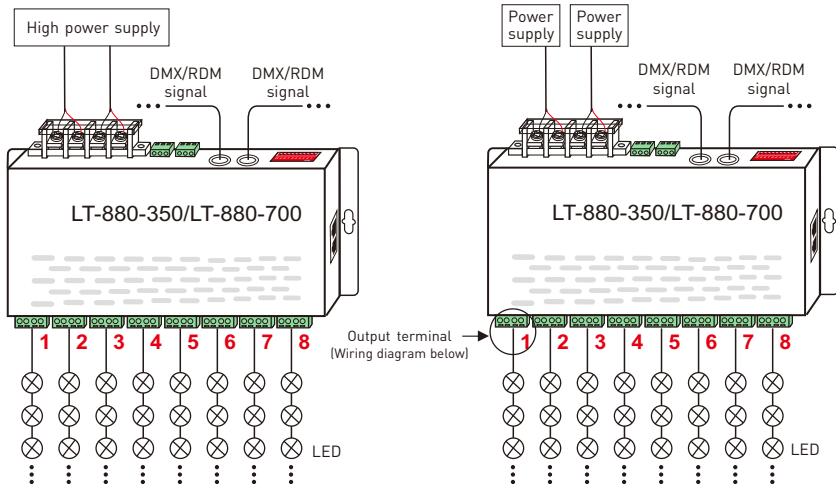
5.2 DMX console connection:
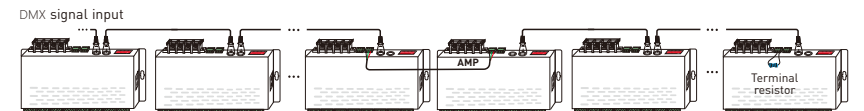

DMX console

DMX/RDM signal

LT-880-350 is equipped with 3 types DMX terminals for users' selection. The following diagram takes 3-pin XLR as an example, same connecting method for the rest two: green terminal (with amplifier function) & RJ45 terminal.

DMX/RDM signal   DMX/RDM signal

12-48Vdc   12-48Vdc   12-48Vdc

LT-880-350/LT-880-700   LT-880-350/LT-880-700   Terminal resistor   LT-880-350/LT-880-700

＊ If the recoil effect occurs because of longer signal line or bad line quality, please try to connect 0.25W 90-120Ω terminal resistor at the end of each line.

＊ An amplifier is needed when more than 32 decoders are connected, signal amplification should not be more than 5 times continuously.

5.3 The connection diagram of three DMX terminals:

Terminal resistor

3-pin XLR connected in parallel

Terminal resistor

RJ45 connected in parallel

Terminal resistor

Green terminal connected in parallel

These 3 terminals can be connected in a mixed way.

5.4 The connection diagram of AMP signal amplifier terminal:

DMX signal input

AMP

Terminal resistor

＊ AMP interface can be used for signal amplification when too many DMX decoder are connected or signal line is too long, signal amplification should be no more than 5 times continuously.