LT-880
DMX/RDM CV Decoder

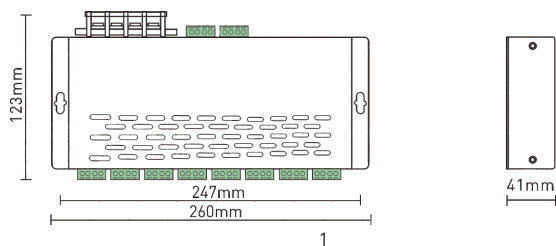

FC CE RoHS COMPLIANT warranty 5 years ISO9001:2008

LT-880 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 XLR-3, RJ45 and green terminal interface, easy to operate. And it can control single color, bi-color, RGB LED lights.
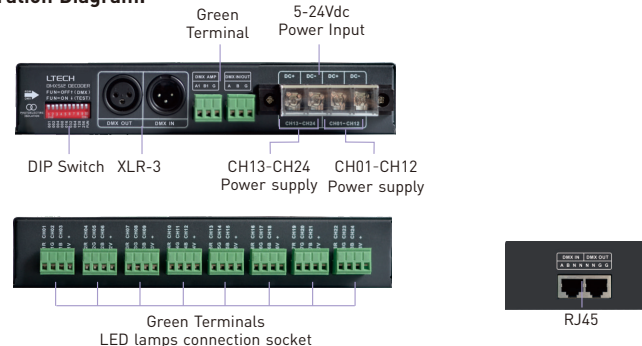
1. Product Parameter:

LT-880

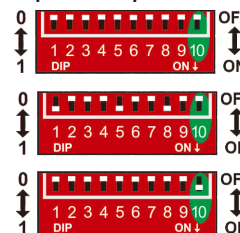|			
Input Signal:	DMX512/RDM	Output DMX Channel:	24CH
Input Voltage:	5~24Vdc	Working Temperature:	-30℃~65℃
Max Current Load:	3A×24CH Max 72A	Dimensions:	L260×W123×H41mm
Max Output Power:	(0-15...72W)×24CH Max. 1728W	Package Size:	L276×W128×H46mm
DMX512 Socket:	XLR-3, RJ45, Green Terminal	Weight(G.W.):	885g
Photoelectric Isolate:	Yes		

2. Product Size:

123mm

247mm
260mm

41mm

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3. Configuration Diagram:

Green Terminal   5-24Vdc Power Input

DIP Switch XLR-3   CH13-CH24 Power supply   CH01-CH12 Power supply

Green Terminals
LED lamps connection socket

RJ45

4. Dip Switch Operation:

RDM Mode: The dip switch 1-10 are OFF.

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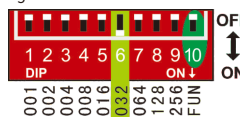Setting DMX addresses with dip switch 1-9

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.
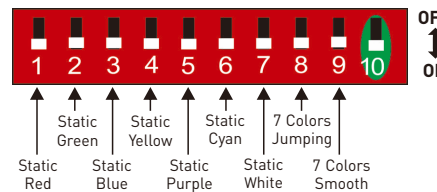
E.g.1: Set Initial Address To 32.   E.g.2: Set Initial Address To 37.   E.g.3: Set Initial Address To 178.

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

4.2 Self-testing Mode:

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

Dip Switch	1-9=off	1=on	2=on	3=on	4=on	5=on	6=on	7=on	8=on	9=on
Self-test Function	Static Black	Static Red	Static Green	Static Blue	Static Yellow	Static Purple	Static Cyan	Static White	7 Colors Jumping	7 Colors Smooth

Static Green   Static Yellow   Static Cyan   7 Colors Jumping

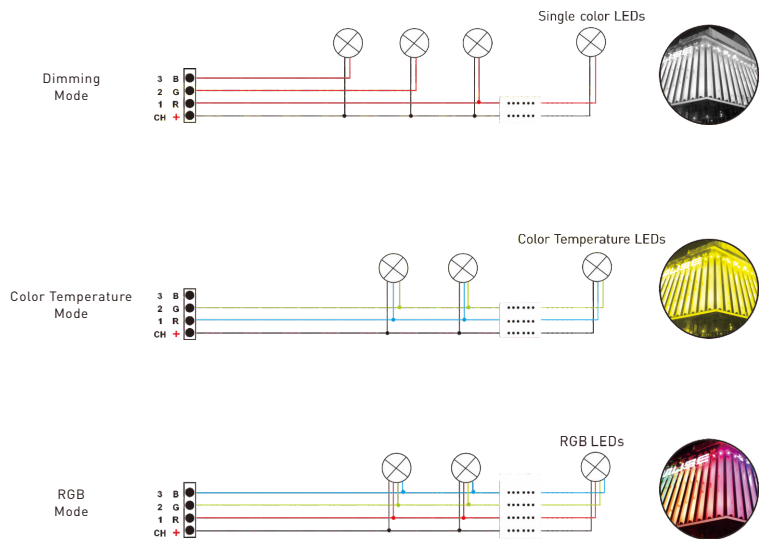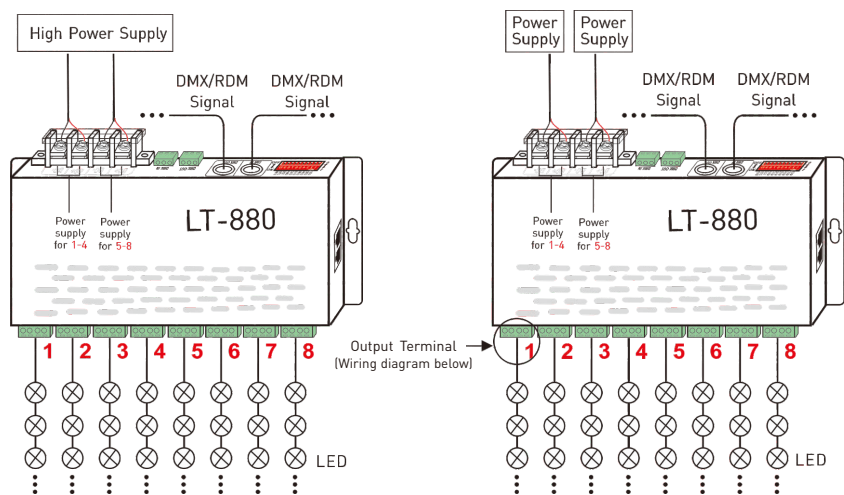Static Red   Static Blue   Static Purple   Static White   7 Colors Smooth

For changing effects (Dip Switch 8/9=on):
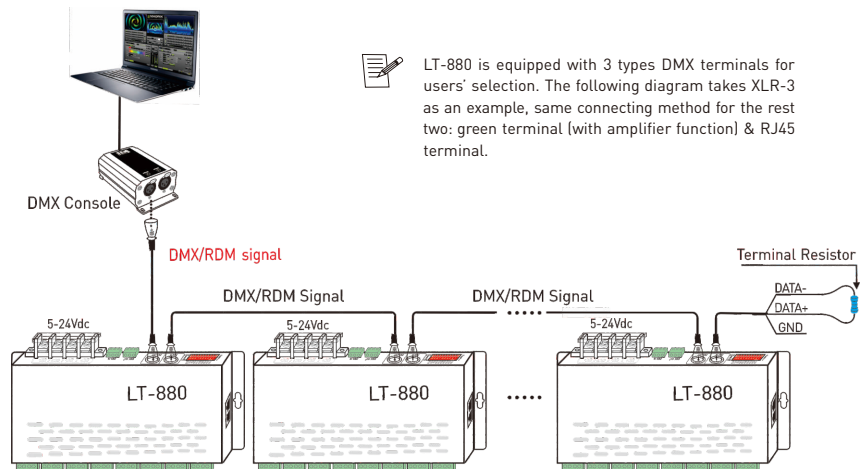DIP switch 1-7 is used to realize 7 speed levels. (7=on, the fastest level)

[Attn] When several dip switches are on, subjected to the highest switch value.
As the figure above shows, the effect will be 7 colors smooth at 7 speed level.
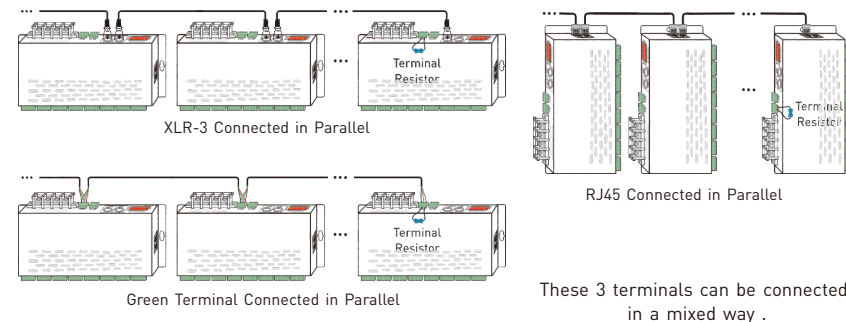
5. Wiring Diagram:

5.1 Connecting LED lights:

High Power Supply

DMX/RDM Signal — DMX/RDM Signal

LT-880

Power supply for 1-4 — Power supply for 5-8

1 2 3 4 5 6 7 8

LED

Power Supply — Power Supply

DMX/RDM Signal — DMX/RDM Signal

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Power supply for 1-4 — Power supply for 5-8

Output Terminal (Wiring diagram below)

1 2 3 4 5 6 7 8

LED

Dimming Mode

Single color LEDs

3 B
2 G
1 R
CH +

Color Temperature Mode

Color Temperature LEDs

3 B
2 G
1 R
CH +

RGB Mode

RGB LEDs

3 B
2 G
1 R
CH +

5.2 DMX console connection:

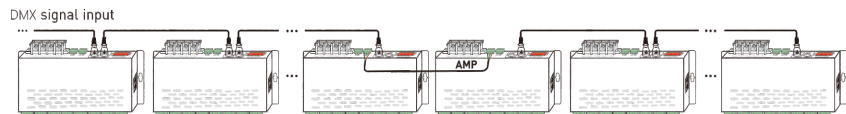

DMX Console

DMX/RDM signal

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

Terminal Resistor

DATA-
DATA+
GND

DMX/RDM Signal — DMX/RDM Signal

5-24Vdc — 5-24Vdc — 5-24Vdc

LT-880 — LT-880 — LT-880

✱ 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

XLR-3 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

✱ 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.