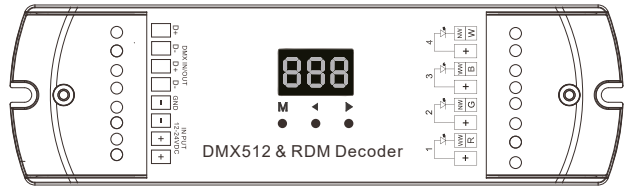# DMX Decoder

FLDC4Y-DMX

Product Description

Our 4 channel DMX decoder can control single colour, tunable white, RGB and RGBW LED Strip. This is equipped with a digital display allowing users to set manual or automatic signal addresses.

Features

- 1/2/4 DMX channels.
- DMX512 compliant control interface, DMX address can-be set freely and shown on the digital numeric display
- Control single colour, tunable white, RGB and RGB/W

- Smooth PWM dimming.
- Can work as a standalone RGB/W controller with 30 dynamic modes, adjustable speed and brightness.

Technical Specifications

Input Voltage	12-24VDC
Current	4x5A
Output	4x(60-120)W
Note	Constant voltage
Dimension	50x170x23mm (WxLxH)

Safety

- This product must be installed and serviced by a qualified person.
- The product is non-waterproof.
- Good heat dissipation will prolong the working life of the decoder, please ensure within adequate ventilation
- Please check if the output voltage of any power supplies used comply with the working voltage
  of the product.
- Ensure all wire connections and polarities are correct
- If a fault occurs please return the product to your supplier. Do not attempt to fix this product by yourself.

Decoder wiring diagram
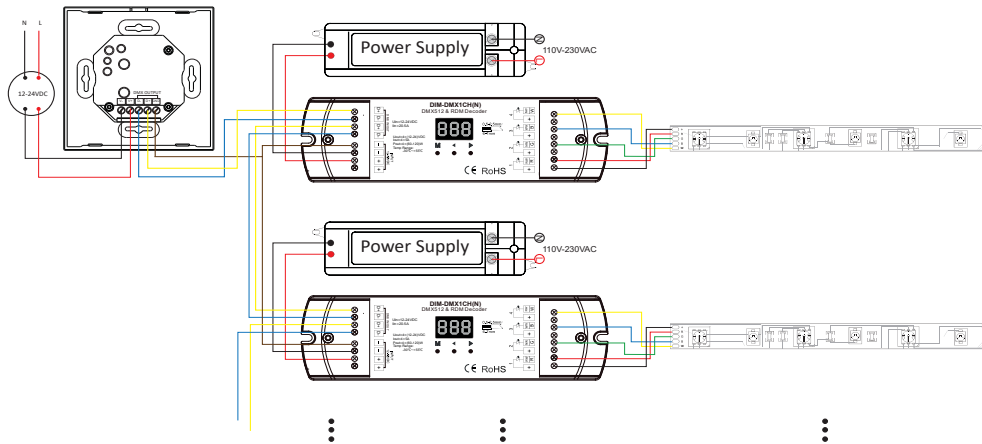
When wiring the decoders, it is important to make sure the total wattage of LED strips doe not exceed the maximum rated wattage per channel. Each channel is rated at 5A, so the maximum wattage per channel is 24x5A=120w.

The power supply has to match the rated voltage and be superior to the total LED strip wattage by a recommended 10%.

System parameter setting

Press the M button and ◄(backwards button) together for 2s. This will enable initial system parameter setup.

To scroll through each of the 4 parameters below short press the M button each time:

- Parameter 1) Decoder mode: This is set to D-4 (4 channel) output as standard and can be changed to, D-1 (1 Channel), D-2 (2 Channel) or D-4 (4 channel) output by pressing the backwards and forwards scroll button.
- Parameter 2) Output PWM frequency: Short press◄ or ►buttons to switch between 500Hz("F-L") or 2KHz("F-H").
- Parameter 3) Output Brightness Curve and Automatic blank screen: Short press ◄ or ► buttons to switch between linear curve("C-L") or logarithmic curve ("C-E").
- Parameter 4) Automatic blank screen: Short press◄ or ►buttons to switch enable ("bon") or disable("boF") automatic blank screen.

*Note On "bon" mode the screen will go blank after 10 seconds. To activate the screen short press any button.

Finally: To exit the Parameter settings long press the M button for 2s or timeout will trigger after 10s of inactivity to quit system parameter settings.

DMX address indicator

Forward button
Backward button
Manual button
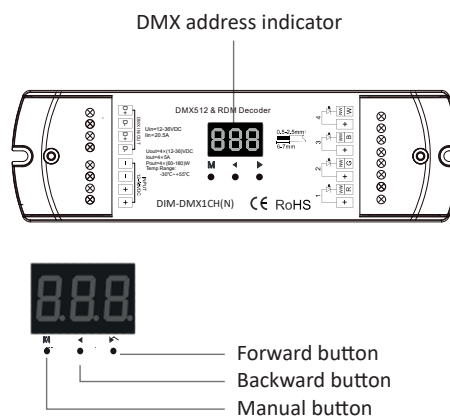
DMX Mode

- Short press the M button, until the address numbering 001~999 is displayed to enter DMX mode

- Press ◄ or ► buttons to change the DMX decoder address (001~999), long press for fast adjustment.

001

DMX mode
(001-999)

Stand-alone RGB/RGBW mode

(Follow these instructions only if the decoder is used as a standalone product)

- Short press the M button and this will display P01~P30 (programme 1-30), which is a stand-alone RGB/RGBW mode
- Press ◄ or ► buttons to change to the desired dynamic mode programme number(P01~P30).

P01

Stand - alone RGB/RGBW mode
(P01~P030)

- Each mode enables adjustment of speed and brightness.
- Long press M button for 2s, prepare for setup mode speed, brightness and W channel brightness adjustments.
- Short press M button to switch between the three parameters.
- Press◄ or ►button to setup value of each item.

      Parameter 1) Speed Mode : 1-10 level speed adjustment(S-1, S-9, S-F).
      Parameter 2) Brightness Mode : 1-10 level brightness (b-1, b-9, b-F).
      Parameter 3) W channel brightness: 0-255 level brightness (400-4FF).

S-8   **b-F**

Speed   Brightness
(8 levels)   (10 levels, 100%)

Stand – alone Dimmer mode

- Short press the M button until the display shows L-1~L-8 (Level 1-8), which is the stand-alone dimmer mode.
- Press ◄ or ► buttons to change dimmer mode number(L-1~L-8).
- Each dimmer mode enables adjustment of each channel brightness independently.
- Long press M button for 2s, prepare for setup of the four channels brightness.
- Short press M button to switch between the four channels.
- Press ◄ or ► button to setup brightness value of each channel.
- Once selection is confirmed long press M button for 2s to quit settings or alternatively timeout is set to 10 seconds.

L-1

Stand-alone
dimmer mode
(L-1 ~L-8)

Restore factory default parameter

- Long press ◄ and ►key for 2s, restore factory default parameter, display"RES".
- These are the factory default parameters: DMX decoder mode, DMX first address is 001, four channel decoder, high frequency PWM output, logarithmic brightness curve, RGB mode number is 1, dimmer mode number is 1, automatic blank screen is disabled.

RGB change mode list

No	Name	No	Name	No	Name
P01	Static red	P11	Green strobe	P21	Red yellow smooth
P02	Static green	P12	Blue strobe	P22	Green cyan smooth
P03	Static blue	P13	White strobe	P23	Blue purple smooth
P04	Static yellow	P14	RGB strobe	P24	Blue white smooth
P05	Static cyan	P15	7 colour strobe	P25	RGB+W smooth
P06	Static purple	P16	Red fade in and out	P26	RGBW smooth
P07	Static white	P17	Green fade in and out	P27	RGBY smooth
P08	RGB jump	P18	Blue fade in and out	P28	Yellow cyan purple smooth
P09	7 colour jump	P19	White fade in and out	P29	RGB smooth
P10	Red strobe	P20	RGBW fade in and out	P30	6 colour smooth

Troubleshoot

Problem	Cause	Corrective
No light	• No power. • Wrong connection or unsecure connection.	• Check the power. • Check the connection.
Wrong Colour	• Wrong connection of tunable, RGB/W wires.	• Retrace and reconnect tunable, RGB/W wires.
Uneven intensity between front and rear of the strip, with voltage drop	• Output cable is too long. • Cable diameter is too small. • Overload beyond driver capability. • Overload beyond receiver capability.	• Reduce cable or loop supply. • Change to a thicker cable. • Replace with a suitable higher power driver. • Add a power repeater.