superbrightleds.com

User Manual

Important: Read all instructions prior to installation.

DS-DMX125

12-Channel DMX/RDM Decoder

Safety and Notes

- Product should be installed and serviced in accordance with applicable national, state, and local building and electrical codes.
- To reduce the risk of electric shock, ensure that the main power source and circuit breakers are switched off before performing any installation or wiring procedures.
- A DMX signal amplifier will be required if more than 32 decoders are connected or if using excessively long signal wiring. No more than five signal amplifiers should be used in series.
- If recoil effect occurs because of long signal wires or bad signal quality, try to connect 0.25 W 90–120 Ω terminal resistor at the end of each DMX signal line.

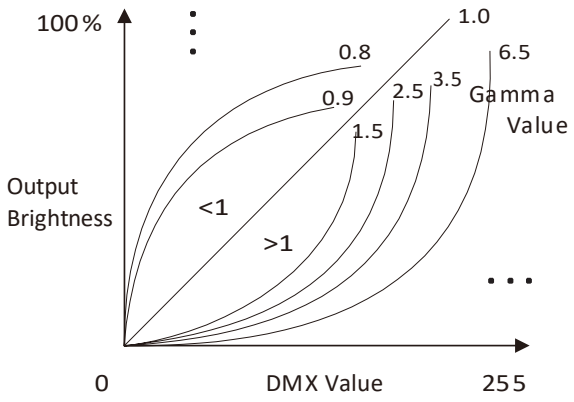
Check product label for specific electrical specifications related to installation. Improper installation will void warranty.

General Operation

1. Press the MODE button to switch between DMX decoder mode, dimmer mode, and RGB controller mode.
2. Press the SETUP button to enter settings for the selected mode, and press again to switch between settings when there are more than one. Once the desired setting is selected, press < or > buttons to adjustment.
3. Hold the SETUP button for several seconds or wait 30 seconds to leave setting.
4. Simultaneously hold the M and > buttons for 3 seconds to enter self-testing.
5. Hold the < and > buttons for 3 seconds to restore factory default settings.

DMX Decoder Mode Settings

- DMX decode start address range is from 001–999
- DMX decode modes are DIM (1 channel, single color), CCT (2 channel, color temperature), and RGB (3 channel)
- Output PWM frequencies are Low (250 Hz), Mid (500 Hz), Std (2 kHz), and High (8 kHz)
  Note: Higher PWM frequency will cause lower output current and higher noise, but is more suitable for camera (less flicker).
- Grey level can be set to 8 bit or 16 bit depending on DMX master support.
- Output dimming curve can be set to standard (Gamma 1.6), linear, or manually set from 0.1–9.9 for special requirements.



12-Channel Dimming

Each dimming channel has an adjustable brightness setting from 0–255. Press < or > button to switch between pages, each containing three dimming channels.

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Standalone Dynamic RGB Mode List

Speed and brightness can be adjusted from 10% to 100%.

No.	Name
01	White Chase Jump
02	White Synchronous Fade
03	White Chase Fade
04	R,G,B,W Synchronous Jump
05	R,G,B,W Chase Jump
06	Color Synchronous Gradual
07	Color Jump Gradual
08	R,G,B,W Synchronous Fade
09	R,G,B,W Chase Fade
10	All Mode Loop Play

DMX Channels Used Per Mode

The below tables show the number of addresses (DMX channels) required in each of the three operating modes (DIM, CCT, and RGB).

8-Bit

Mode		DIM	CCT	RGB
Address Quantity		4	8	12
Channel	1	001	001	001
	2	001	002	002
	3	001	002	003
	4	002	003	004
	5	002	004	005
	6	002	004	006
	7	003	005	007
	8	003	006	008
	9	003	006	009
	10	004	007	010
	11	004	008	011
	12	004	008	012

16-Bit

Mode		DIM	CCT	RGB
Address Quantity		8	16	24
Channel	1	001 002	001 002	001 002
	2	001 002	003 004	003 004
	3	001 002	003 004	005 006
	4	003 004	005 006	007 008
	5	003 004	007 008	009 010
	6	003 004	007 008	011 012
	7	005 006	009 010	013 014
	8	005 006	011 012	015 016
	9	005 006	011 012	017 018
	10	007 008	013 014	019 020
	11	007 008	015 016	021 022
	12	007 008	015 016	023 024

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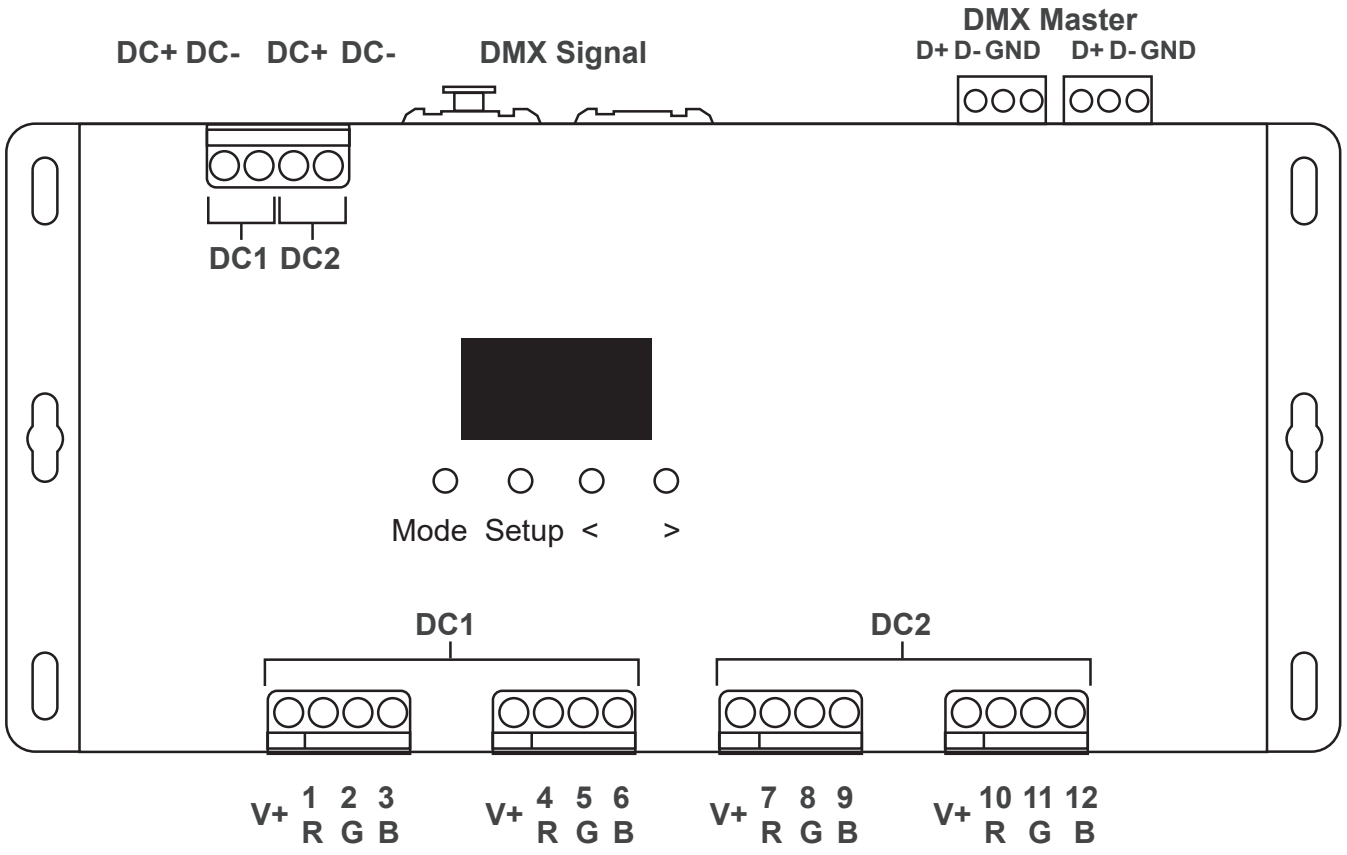
DMX Wiring Diagrams

DS-DMX125



Troubleshooting

Malfunctions	Causes	Troubleshooting
No light	1. No power 2. Incorrect or loose connection	1. Check power 2. Check the connection
Wrong color	1. Incorrect wiring 2. DMX decode address error	1. Check wiring 2. Set correct decode address
Uneven intensity between front and rear, with voltage drop	1. Output cable is too long 2. Wire diameter is too small 3. Overload beyond power supply capability 4. Overload beyond controller capacity	1. Reduce cable length 2. Change to higher gauge wire 3. Replace with a higher wattage power supply 4. Add power repeater.