LTECH

Constant Voltage 4 Channel DMX/RDM Decoder

- Standard DMX/RDM interfaces: Set addresses via the digital display and buttons.
- RDM protocol; Browse parameters and change DMX addresses via a RDM master or via the mobile APP.
- · DMX mode and customized mode can be switched.
- PWM frequency options: 300/600/1200/1500/1800/2400/3600/7200/10800/ 14400/18000Hz.
- 16bit (65536 levels)/8bit (256 levels) gray scale optional.
- · Two dimming mode options: standard and smooth dimming.
- · Set 1/2/3/4 DMX channel output.
- Provide 10 lighting effects, 8 speed levels of dynamic modes, and 255 brightness levels.
- · Set screen timeout, LCD screen always on, and screen turning off after 30s of inactivity.
- · Short circuit, over-temperature, over-current protection and auto recovery.
- · D4A has green terminal DMX interfaces, D4B has RJ45 DMX interfaces.



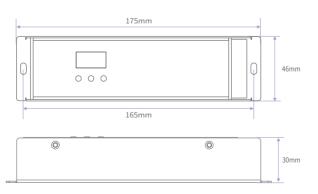


Product Parameters

Model	D4A	D4B			
Input Signal	DMX512,RDM				
Input Voltage	12-48V 				
Output Type	Constant Voltage				
Output Current	8Ax3CH 6Ax4CH Max.24A				
Output Voltage	4×(12-48V==)				
Output Power	288W@12V 576W@24V 864W@36V 1152W@48V				
Dimming Range	0-100%				
DMX Signal Port	Green terminal	RJ45			
Working Temp.	-25°C-55°C				
Safety & Emc	CE, EN 55015: 2019/A11: 2020, EN IEC 61000-3-2:2019+A1: 2021, EN 61000-3-3: 2013+A1: 2019+A2: 2021, EN 61547-1: 2021				
	FCC Part 15 Class B				
Dimensions	L175×W46×H30mm				
Package Size	L187×W52×H36mm				
Weight(G.W.)	325g±5g				
Protection	Short circuit, over temperature, over current protection, auto recovery.				

Product Size

Unit- mm



Main Component Description



Digital display:



- · Access Configuration: Long press the M button for more than 2s.
- · Adjust Value: Short press ∧ or ∨ button.
- · Exit Menu: Long press M button for 2s again to save the setting, then exit the menu.
- Long press M, \land and \lor button simultaneously for 2s. When the screen displays RES, it has been reset to factory defaults.
- The display locks automatically after 15 seconds of inactivity.







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OLED Display Interface

DMX decoder mode



Long press M and \vee button simultaneously. When the screen displays "L-1", it enters the DMX decoder mode. Long press M button for 2s to enter the menu.

1. DMX address settings



Press \land or \lor button to set the DMX address. DMX address range: 001~512

2. Resolution



Short press M button to switch the menu to "r".

Press \wedge or \vee button to select resolution and the third value on the screen will display 1 or 2.

Options: r-1 (8bit) r-2 (16bit)

3. PWM frequency



Short press M button to switch the menu to "F".

Press \wedge or \vee button to select PWM frequency and the third value on the screen will display H or L.

 Options:
 F-4 (1800Hz)
 F-0 (300Hz)
 F-1 (600Hz)
 F-2 (1200Hz)

 F-3 (1500Hz)
 F-5 (2400Hz)
 F-6 (3600Hz)
 F-7 (7200Hz)

F-8 (10800Hz) F-9 (14400Hz) F-A (18000Hz)

4. Dimming mode



Short press M button to switch the menu to "d".

Press \wedge or \vee button to select the dimming mode and the third value on the screen will display 1 or 2.

Options: d-1 (Smooth dimming) d-2 (Standard dimming)

5. DMX channels



Short press M button to switch the menu to "C".

Press \land or \lor button to select the channels and the third value on the screen will display 1, 2, 3 or 4.

Options: C-4 (4 channel output occupies corresponding 4 DMX addresses)

C-1 (4 channel output occupies DMX address 1)

C-2 $\{1 \text{ and } 3 \text{ channel output occupy DMX address 1, 2 and 4 channel output occupy DMX address 2} \}$

C-3 (1 channel output occupies DMX address 1, 2 channel output occupies

DMX address 2, 3 and 4 channel output occupy DMX address 3)

6. Screen timeout



Short press M button to switch the menu to "n".

Press \wedge or \vee button to select screen timeout and the third value on the screen will display 1 or 2.

Options: n-1 (Screen stays on)

n-2 (Screen turns off after 30seconds of inactivity)

Customized mode



Custom Mode Interface

Long press M and ∨ button simultaneously. When the screen displays "L-2", it enters the customized mode. Long press M button for 2s to enter the menu.

1. Liahtina effects



e.g. E-1 (no lighting effect)



Press \wedge or \vee button to select the lighting effect and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7, 8, 9 or A.

Options: E-1 (No lighting effect) E-6 (Purple)

Short press M button to switch the menu to "E".

F-2 [Red] E-7 (Cyan) E-8 (White) E-3 (Green)

F-4 (Blue) E-9 (7-color jumping) E-5 (Yellow) E-A (7-color gradient)

e.g. E-A (7-color gradient)

2. Color-changing speed



Short press M button to switch the menu to "S".

Press \wedge or \vee button to select speed and the third value on the screen will

display 1, 2, 3, 4, 5, 6, 7 or 8. Default: S-5

Options: S-1/S-2....S-7/S-8

Speed levels, speed increases one by one

3. Brightness



Short press M button to switch the menu to "B".

Press \wedge or \vee button to select the brightness level and the third value on the screen will display 1, 2, 3, 4, 5, 6, 7 or 8.

B00-BFF, 255 levels, default maximum level is 255

Options: R00 / R01 ----- BFF

Brightness levels, brightness increases one by one

4. Screen timeout



Short press M button to switch the menu to "n".

Press \wedge or \vee button to select screen timeout and the third value on the screen will display 1 or 2.

Options: n-1 (Screen stays on)

n-2 (Screen turns off after 30 seconds of inactivity)

Fault code



F-0: Over-temperature protection

F-1: Over-temperature warning

F-2: Short circuit/over-current protection

Address setting table

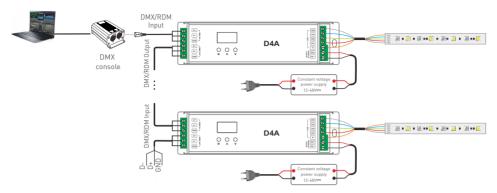
Mode	C-1(Dimming)	C-2(CT/CT2)	C-3(RGB)	C-4(RGBW)	
Channel 1	001	001	001	001	
Channel 2	001	002	002	002	
Channel 3	001	001	003	003	
Channel 4	001	002	003	004	

Load Parameters

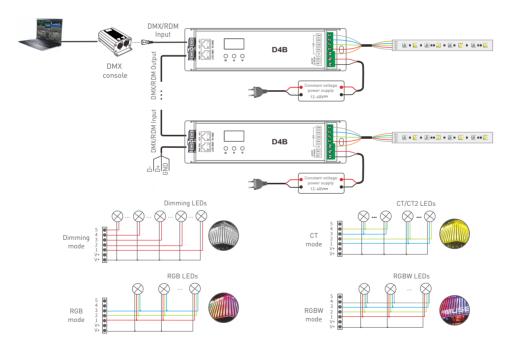
At different PWM frequencies and different voltages, the max. load current and the total power of each channel vary. Before you do the wiring, please strictly follow the load parameters in the table below to operate.

Max. current/ Frequency Voltage	300Hz (F=0)	600Hz (F=1)	1.2kHz (F=2)	1.5kHz (F=3)	1.8kHz (F=4)	2.4kHz (F=5)
12V	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W 8A×3CH/288W	6A×4CH/288W	6A×4CH/288W
24V	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W 8A×3CH/576W	6A×4CH/576W	6A×4CH/576W
36V	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	6A×4CH/864W	5A×4CH/720W
48V	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	6A×4CH/1152W	5A×4CH/960W
Max. current/ Frequency power Voltage	3.6kHz (F=6)	7.2kHz (F=7)	10.8kHz (F=8)	14.4kHz (F=9)	18kHz (F=A)	
12V	6A×4CH/288W	4A×4CH/192W	3.5A×4CH/168W	3A×4CH/144W	2.5A×4CH/120W	
24V	5A×4CH/480W	3.5A×4CH/336W	3A×4CH/288W	2.5A×4CH/240W	2.5A×4CH/240W	/
36V	4.5A×4CH/648W	3A×4CH/432W	2.5A×4CH/360W	2.5A×4CH/360W	2A×4CH/288W	
48V	4A×4CH/768W	3A×4CH/576W	2.5A×4CH/480W	2.5A×4CH/480W	2A×4CH/384W	

D4A Wiring Diagram



D4B Wiring Diagram

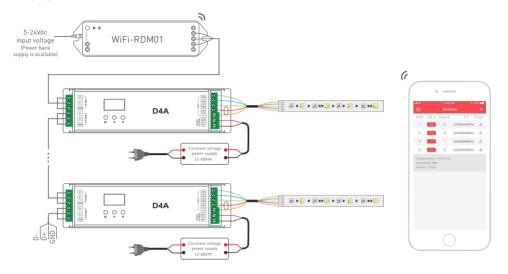


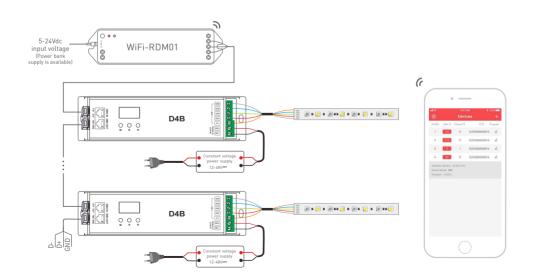
- * When more than 32 DMX decoders are connected, DMX signal amplifiers are needed and signal amplification should not be more than 5 times continuously. If you need to modify the parameter settings of connected DMX/RDM decoders that exceed 32, you can add 1 RDM signal amplifier. Or you can add 1-5 DMX signal amplifiers after completing the parameter settings.
- * If the recoil effect occurs because of long signal line or poor quality wires, please try to connect a 0.25W 90-1200 terminal resistor at the end of each line.

Use with RDM Editor

D4A, D4B can work with the address editor that complies with standard RDM protocol.

It is recommended to use LTECH's RDM editor (model WiFi-RDM01), which can achieve more functions such as remote browsing and parameter setting. Wiring diagram as below:





RDM editor App interface instruction

1.Download the App, setting the D4A, DAB parameters dimming range after well connecting the RDM editor, more details, please check the manual of WiFi-RDM01.



2. Well installation of products first, then working with WiFi -RDM01 to realize setting parameters and firmware upgrade by App.







a:Click"Add", edit the address in corresponding box. b: Click"ID", get more product details. c: Click" 🚣 ", ente edited interface. d: Click"No.", issue the recognizing command.

Supporting WiFi-RDM01 upgrade and DMX driver upgrade

Attentions

- This product must be installed and adjusted by a qualified professional.
- · LTECH products are and not lightningproof non-waterproof (special models excepted). Please avoid the sun and rain. When installed outdoors, please ensure they are mounted in a water proof enclosure or in an area equipped with lightning protection devices.
- · Good heat dissipation will extend the life the product. Please install the product in a environment with good ventilation.
- When you install this product, please avoid being near a large area of metal objects or stacking them to prevent signal interference.
- · Please keep the product away from a intense magnetic field, a high pressure area or a place where lightning is easy to occur.
- · Please check whether the working voltage used complies with the parameter requirements of the product.
- · Before you power on the product, please make sure all the wiring is correct in case of incorrect connection that may cause a short circuit and damage the components, or trigger a accident.
- · If a fault occurs, please do not attempt to fix the product by yourself. If you have any question, please contact the supplier.
- * This manual is subject to changes without further notice. Product functions depend on the goods. Please feel free to contact our official distributors if you have any question.

Warranty Agreement

Warranty periods from the date of delivery: 5 years.

Free repair or replacement services for quality problems are provided within warranty periods.

Warranty exclusions below:

- · Beyond warranty periods.
- · Any artificial damage caused by high voltage, overload, or improper operations.
- · Products with severe physical damage.
- Damage caused by natural disasters and force majeure.
- · Warranty labels and barcodes have been damaged.
- · No any contract signed by LTECH.
- 1. Repair or replacement provided is the only remedy for customers. LTECH is not liable for any incidental or consequential damage unless it is within the law.
- 2. LTECH has the right to amend or adjust the terms of this warranty, and release in written form shall prevail.