

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.
- Linear and logarithmic dimming curve optional.
- DIM/CT/RGB/RGBW mode optional (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.



16bit

RoHS



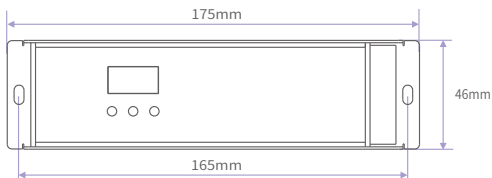
Product Parameters

Input Signal	DMX512, RDM
Input Voltage	12-48V $\overline{\text{=}}$
Output Type	Constant Voltage
Output Current	8A×3CH 6A×4CH Max.24A
Output Voltage	4×(12-48V $\overline{\text{=}}$)
Output Power	288W@12V 576W@24V 864W@36V 1152W@48V
Dimming Range	0-100%
Working Temp.	-25°C-55°C

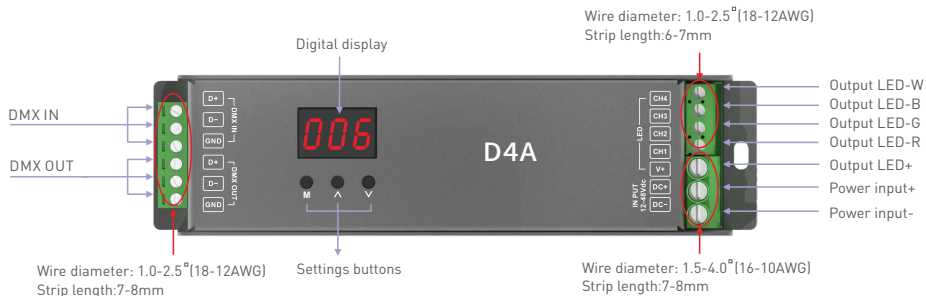
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Safety & EMC	EN 61000-3-3: 2013+A1: 2019+A2: 2021, EN 61547-1: 2021
	FCC Part 15 Class B
Dimensions	L175×W46×H30mm
Package Size	L187×W52×H36mm
Weight(G.W.)	325g±5g
Protection	Short circuit, over temperature, over current protection, auto recovery.

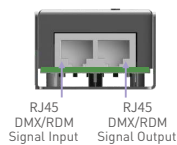
Product Size

Unit: mm

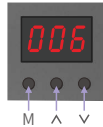


Main Component Description





Digital display:



- Access Configuration: Long press the M button for more than 2s.
- Adjust Value: Short press \wedge or \vee button.
- Exit Menu: Long press M button for 2s again to save the setting, then exit the menu.
- Long press M, \wedge and \vee 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.

Button Operations

DMX decoder mode



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

- **DMX address settings:** Press \wedge or \vee button to set the DMX address. DMX address range: 001-512.
- **Bit Depth:** Short press M button to switch the menu to "r". Press \wedge or \vee button to select bit depth and the third value on the screen will display 1 or 2. Options: r-1 (8bit), r-2 (16bit).
- **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 0 or A. Options: F-0 (300Hz), F-1 (600Hz), F-2 (1200Hz), F-3 (1500Hz), F-4 (1800Hz, default option), F-5 (2400Hz), F-6 (3600Hz), F-7 (7200Hz), F-8 (10800Hz), F-9 (14400Hz), F-A (18000Hz).
- **Time for fading to dim level:** Short press M button to switch the menu to "d". Press \wedge or \vee button to select the fading time and the third value on the screen will display 1 or 2. Options: d-1 (Smooth dimming), d-2 (Standard dimming).
- **Dimming mode:** Short press M button to switch the menu to "C". Press \wedge or \vee button to select the dimming mode and the third value on the screen will display 1, 2, 3 or 4. Options: C-1 (4 channel output occupies DMX address 1), C-2 (1 and 3 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), C-4 (4 channel output occupies corresponding 4 DMX addresses, default option).
- **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 (Always on display), n-2 (After 30 seconds of inactivity).



Customized mode

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

- **Lighting effects:** Short press M button to switch the menu to "E". 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-2 (Red), E-3 (Green), E-4 (Blue), E-5 (Yellow), E-6 (Purple), E-7 (Cyan), E-8 (White), E-9 (7-color jumping), E-A (7-color gradient).
- **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).
- **Brightness:** Short press M button to switch the menu to "B". Press \wedge or \vee button to select the brightness level and the second and the third value on the screen will display 00-FF, B00-BFF, 255 levels, default maximum level is 255. Options: B00 / B01.....BFF. (Brightness levels, brightness increases one by one).
- **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 (Always on display), n-2 (After 30 seconds of inactivity).

Fault code: F-0: Over-temperature protection

F-1: Over-temperature warning

F-2: Short circuit/over-current protection

APP Operations

1.D4A and D4B can work with a RDM-compliant address editor.

It is recommended to use the LTECH RDM editor (Model:WiFi-RDM01). Through the APP, set the screen timeout, unicast/multicast, and other parameters for D4A and D4B. For detailed operations, please refer to the WiFi-RDM01 manual.



APP

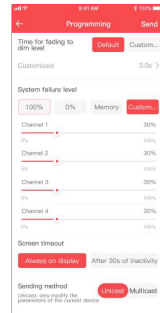
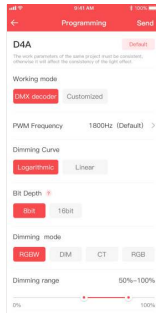
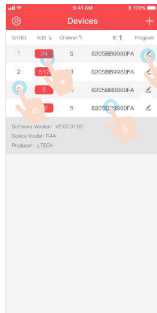


* The WiFi-RDM01 editor and the constant voltage decoder are sold separately.

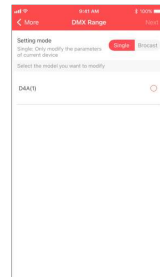
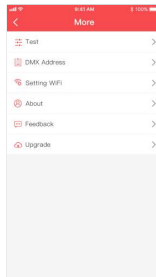
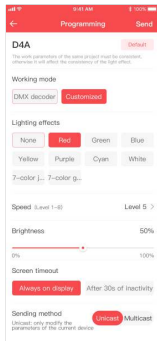
2. Select the working mode through the APP.

DMX mode: Set the dimming curve, bit depth, dimming mode, dimming range, etc.

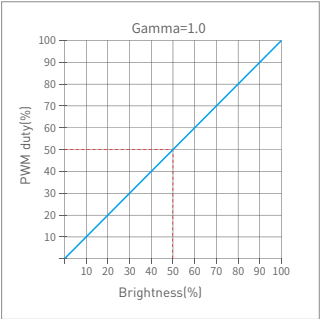
Customized mode: Set lighting effects, speed, brightness, etc.



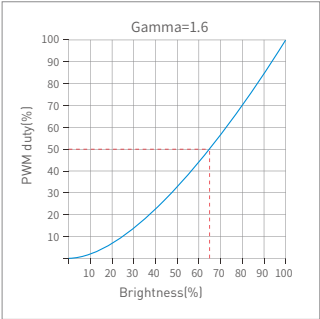
- a: Click "Add", edit the address in corresponding box.
- b: Click "ID", get more product details.
- c: Click "Edit", enter edited interface.
- d: Click "No.", issue the recognizing command.



Dimming Curve setting



Linear dimming curve



Logarithmic dimming curve

Address Setting Table

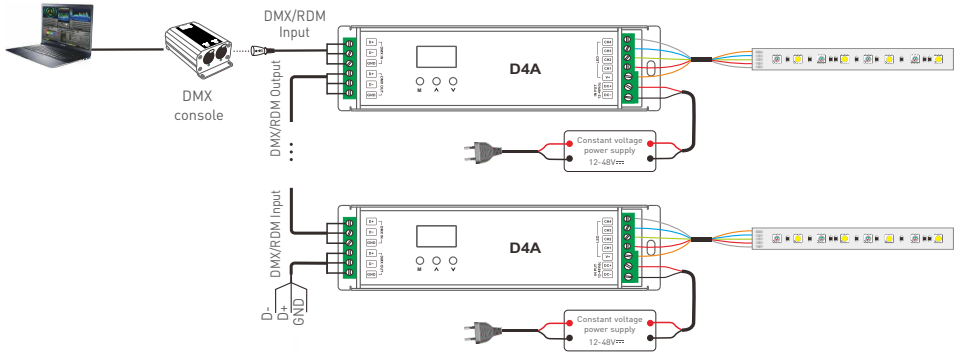
Mode	C-1[Dimming]	C-2[CT/CT2]	C-3[RGB]	C-4[RGBW]
Channel 1	001	001	001	001
Channel 2	001	002	002	002
Channel 3	001	001	003	003
Channel 4	001	002	003	004

Load Parameters

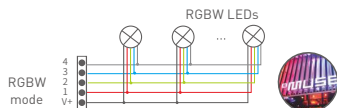
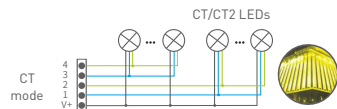
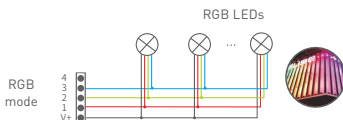
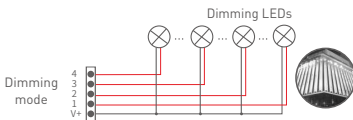
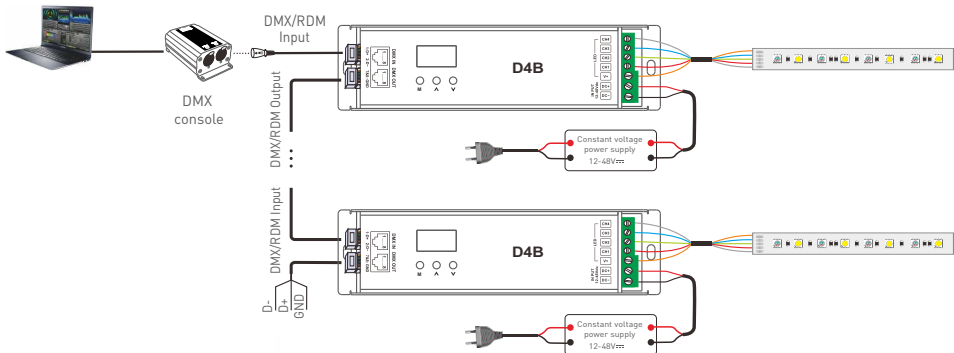
At different PWM frequencies and different voltages, the max. load current and the total power of each channel vary. Before you do the wiring, please strictly follow the load parameters in the table below to operate.

Max. current/ power/ Voltage	Frequency	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/ power/ Voltage	Frequency	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 90-120Ω terminal resistor at the end of each line.

Attentions

- Product installation and commissioning should be done by a qualified professional.
 - LTECH products are 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:

Following conditions are not within the guarantee range of free repairing or replacement services:

- 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.