

**INSTRUCTION MANUAL**

**DMX-MULTI-C01 Constant Voltage DMX512 Decoders**



**INTRODUCTION**

Welcome to the Constant Voltage DMX512 Decoder, specifically developed for constant voltage LED lamps. It uses advanced micro-computer control technology to transfer the standard DMX512/1990 signal to a PWM signal. Users can choose from 1-4 output channels and 4096 grey scales. Multiple DMX512 signal interface.

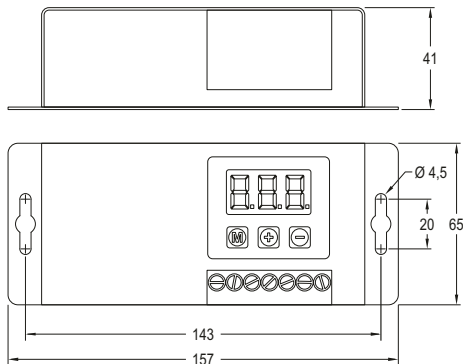
**SPECIFICATIONS**

<b>Model</b>	<b>4CH Decoder</b>
Input voltage	DC12V-DC24V
Max. Output Current	RGB: 4A×3CH W: 12A×1CH
Max. Output Power	RGB: 48W×3CH W: 144W(12V)/RGB 96W×3CH W: 288W(24V)
Grey Scale	4096 levels×4
Input Signal	DMX512 / 1990
Output Signal	Constant Voltage PWM×4
Output Channels	4CH
DMX512 socket	XLR-3R port / RJ45 port / terminal block
Dimensions	L157 × W65 × H40 (mm)
Weight (G.W)	450 g

**KEY FEATURES**

1. Automatically adapts input voltage 12V-24V DC.
2. Standard DMX512 input signal; 3-digit display shows DMX address.
3. 4 channel output; 4096 grey scales per channel; logarithmic dimming; soft and constant light with no strobe effect.
4. Supports Master or Slave modes.
5. 8 colour change modes and 10 speeds in Master mode.
6. Indicator displays the DMX512 signal receiving status.
7. Memory function in the event of a power outage.
8. Overload and short circuit protection. Incorrect wiring protection at DMX port.
9. Multiple DMX512 signal interface.

**DIMENSIONS**



**SAFETY WARNINGS**

1. Do not install the decoder during lightning or near intense magnetic and high-voltage fields.
2. To reduce the risk of component damage from fire due to a short circuit, ensure connections are correct.
3. Always ensure the device is installed in a properly ventilated area to avoid overheating.
4. Check the voltage and power adapter are compatible with the decoder (select 12-24V DC power supply with constant voltage).
5. Never connect any cables while the power is on. To avoid short circuits, check the connections are correct before switching on.
6. If problems occur, do not open or operate the decoder.
7. This manual applies to this model only and may be updated at any time without prior notice.

**OPERATION**

Three touch buttons: M, +, -

M	Change mode on 3-digit display
+	Increase value
-	Decrease value

The 3-digit display indicates the current setting value; different values indicate different operating status. The display goes off if inactive for 1 minute. Press any key to activate the display. If there is an overload or short-circuit, the decoder automatically stops output, and the LED displays shows the error message "ERR".



The decoder has an automatic key lock. If, after around 15 seconds, no setting has been input, the key lock function automatically activates.

Press the M button for around 2 seconds to deactivate the lock so that the decoder can be adjusted to the required setting.

DMX Slave Mode: values range from 001-512, e.g. "001"

The decimal point on the digital display blinks steadily when the DMX512 signal is being received normally.



When no signal is received, the decimal point does not blink and the LED display shows the current DMX address.

000	All channels to 100%
513	Red
514	Green
515	Blue

516	Magenta
517	Cyan
518	Yellow
519	Orange

520-529	Red, Orange, Yellow, Green, Cyan, Blue, Magenta (Dimming mode)
530-539	White, Magenta, Red, Orange, Yellow, Green, Cyan, Blue (Dimming mode)
540-549	Yellow / Orange, Red (Dimming mode)
550-559	Magenta, Blue (Dimming mode)
560-569	Cyan, Blue (Dimming mode)
570-579	Green, Yellow (Dimming mode)
580-589	All 4 channels move in steps from 1% to 100% (Dimming mode)
590-599	Strobe for all 4 channels 0% to 100% (Strobe mode)
600-699	Red from 0 to 99%
700-799	Green from 0 to 99%
800-899	Blue from 0 to 99%
900-999	White from 0 to 99%

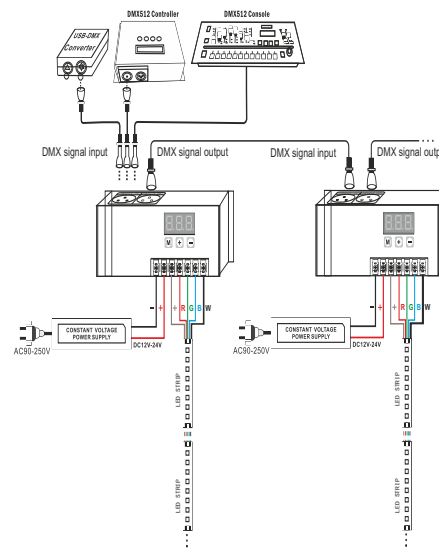
\*520-599: the first 2 digits indicate the mode; the third shows the speed. There are 10 speed levels, from 0-9, increasing in steps as follows:



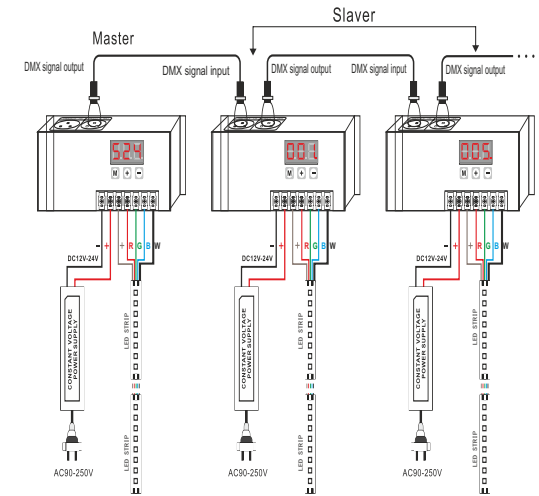
Speed for Programmes 520 – 589 (colour change dimming mode) for one step only, not the whole programme:  
0=0.5 sec. | 1=1 sec. | 2=2 sec. | 3=3 sec. | 4=5 sec. | 5=10 sec. | 6=15 sec. | 7=30 sec. | 8=60 sec. | 9=120 sec.  
Speed for Programmes 590 - 599 (one step only, not the whole programme):  
0=0.02 sec. | 1= 0.04 sec. | 2=0.1 sec. | 3=0.2 sec. | 4=0.5 sec. | 5=1 sec. | 6=2 sec. | 7=5 sec. | 8=10 sec. | 9=15 sec.

**Wiring instructions**

1) Slave mode wiring diagram :



2) Master mode wiring diagram: only one decoder can work as Master :



**TROUBLESHOOTING**

Error	Reasons	Solutions
No light	1. No power supply	1. Check power supply
	2. Reversed polarity	2. Reverse it
	3. Signal terminal not connected or reversed	3. Connect / reverse signal terminal
	4. Circuit more than 200m long	4. Add signal terminal or amplifier
Wrong color	5. RGBW incorrectly wired up	5. Re-wire RGBW
	6. Incorrect decoder address input	6. Input again
One or several colour(s) it up but no change	7. Signal terminal wrongly connected or reversed	7. Check the wiring / re-wire it properly
	8. Circuit more than 200m long	8. Add signal terminal or amplifier
Abnormal vibration during operation	9. Signal terminal incorrectly connected	9. Re-connect it properly
	10. Circuit more than 200m long	10. Add DMX signal transmitter or splitter