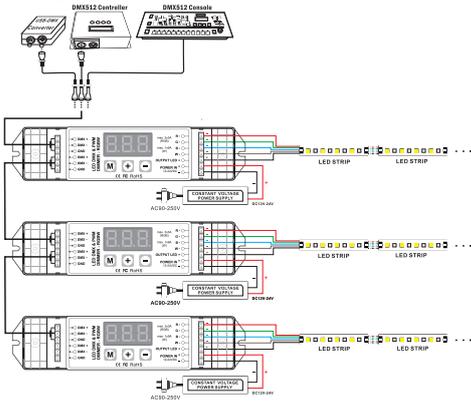


2) Wiring diagram of Slave Mode:



7. Exception Handles

| Malfunction | 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. Signal terminal not connected or reversed |
| | 4. Long circuit such as longer than 200m | 4. Add signal terminator or amplifier |
| Wrong color | 5. RGB wrong wiring | 5. Re-wire RGB |
| | 6. Wrong input of decoder address | 6. Re-input |
| One or several color(s) alight but no change | 7. Signal terminator wrongly connected or reversed | 7. Check the wiring re-wire it properly |
| | 8. Long circuit such as longer than 200m | 8. Add signal terminator or amplifier |
| Abnormal shake during | 9. Signal terminator not be properly connected | 9. Connect it properly |
| | 10. Long circuit such as longer than 200m | 10. Add DMX signal transmitter or splitter |

8. After Sales

From the day you purchase our products within 3 years, if being used properly in accordance with the instruction, and quality problems occur, we provide free repair or replacement services except the following cases:

- Any defects caused by wrong operations.
- Any damages caused by inappropriate power supply or abnormal voltage.
- Any damages caused by unauthorized removal, maintenance, modifying circuit, incorrect connections and replacing chips.
- Any damages due to transportation, breaking, flooded water after the purchase.
- Any damages caused by earthquake, fire, flood, lightning strike etc force majeure of natural disasters.
- Any damages caused by negligence, inappropriate storing at high temperature and humidity environment or near harmful chemicals.

DMX512 Constant Voltage Decoder User Manual



(Please read through this manual carefully before use)

1. Brief Introduction

Welcome to use the DMX512 Constant Voltage Decoder which is developed only for constant voltage LED lamps. It adopted advanced micro-computer control technology to transfer standard DMX512/1990 signal to PWM signal. user can choose 1-4 output channels, 4096 Grey Scales. It can be used as DMX512 master or as DMX decoder to connect computerized digital output consol with analog silicon case and controls LED lamps of architecture and lighting.

2. Specifications

| Model | 4CH DMX512 decoder |
|------------------|---|
| Input voltage | DC12V-DC24V |
| Max load current | RGB: 3A×3CH W: 9A×1CH |
| Max Output Power | RGB:36W×3CH W:108W(12V) / RGB:72W×3CH W:216W(24V) |
| Grey Scale | 4096 levels×4 |
| Input Signal | DMX512/1990 |
| Output Signal | Constant Voltage PWM×4 |
| Decode Channel | 4CH |
| DMX512 socket | Terminal Block |
| Dimension | L176×W46×H30(mm) |
| Weight (G,W) | 175g |

3. Basic Features

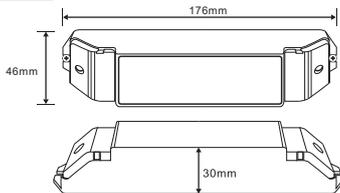
- Automatically adapts input voltage DC12V-24V.
- Input standard DMX512 signal; 3-digital-display shows DMX address code..
- 4 channels output; 4096 grey scales each; logarithmic dimming;lamp light soft & stable without strobe flash.
- DMX Master mode, Slave mode available.
- 8 color changing modes and 10 speed scales in master mode .
- Indicator of the DMX512 signal receiving status.
- Wrong wiring protection at DMX port. Over current protection and short circuit protection.
- Power loss memory function.

4. Safety warnings

- To ensure your safety and product properly usage, please read the user manual carefully.
- To avoid installed the product in minefield, strong magnetic field and high voltage area.

- To ensure the wiring is correct and firm avoiding short circuit damages to components and cause fire.
 - Please install the product in a well ventilated area to ensure appropriate temperature environment.
 - The product must be worked with DC constant voltage power supply.
- Please check the consistence of input power with the product, if the output voltage of the power comply with that of the product.
- Connect the wire with the power on is forbidden. Ensure proper wiring first then check to ensure no short-circuit, then power on !
 - Don't repair it by yourself whenever an error occur. Contact the supplier for any inquiry.

5. Dimensions



6. Operating instructions

Three touch buttons: M, +, -

| M | Change order in 3 digital display |
|---|-----------------------------------|
| + | Increase value |
| - | Decrease value |

Three-digital-display indicates the current setting value; different value indicates different operating status. Three-digital-display goes off without operation for 1 minutes, press any key to turn it on. When it is overload or short-circuits, the decoder will automatically stop output, LED display shows: "ERR", as below:



The decoder has an automatic key lock. If no settings are made to the decoder, the key lock function is activated after approximately 15 seconds automatically. Pressing M button for about 2 seconds to deactivated. Subsequently, the decoder can be set.

- DMX Slave Mode: The value is: 001-512, such as: "001"



The decimal point of last digital of the display tube will twinkle regularly when receives DMX512 signal normally. When no signal is received, the decimal point does not twinkle, and showing current DMX address.

DMX master mode preset patterns list :

| | |
|-----|----------------------|
| 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 (Fading mode) |
| 530-539 | white, magenta, red, orange, yellow, green, cyan, blue (Fading mode) |
| 540-549 | yellow/orange, red (Fading mode) |
| 550-559 | magenta blue (Fading mode) |
| 560-569 | cyan, blue (Fading mode) |
| 570-579 | green, yellow, (Fading mode) |
| 580-589 | All 4 channels make a pulsating move from 1% to 100% (Fading mode) |
| 590-599 | Strobo for all 4 channels 0% to 100% (Jumping 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, First two digital indicate the modes, the third one shows the speed. 10 speed levels, from 0-9 speed decreasing. Total: 8 modes, such as :



Speed for Program 520 – 589 (Color Changing Fading Mode) for one step and not for the whole program:
 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 Program 590 - 599 (one step and not for the whole program):
 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.

2. Wiring Indication

1) Wiring diagram of Master Mode: (Only one decoder is allowed to work as a master)

