EuControls
COLORS AND LIGHTS UNDER YOUR CONTROL

XD-TA03A
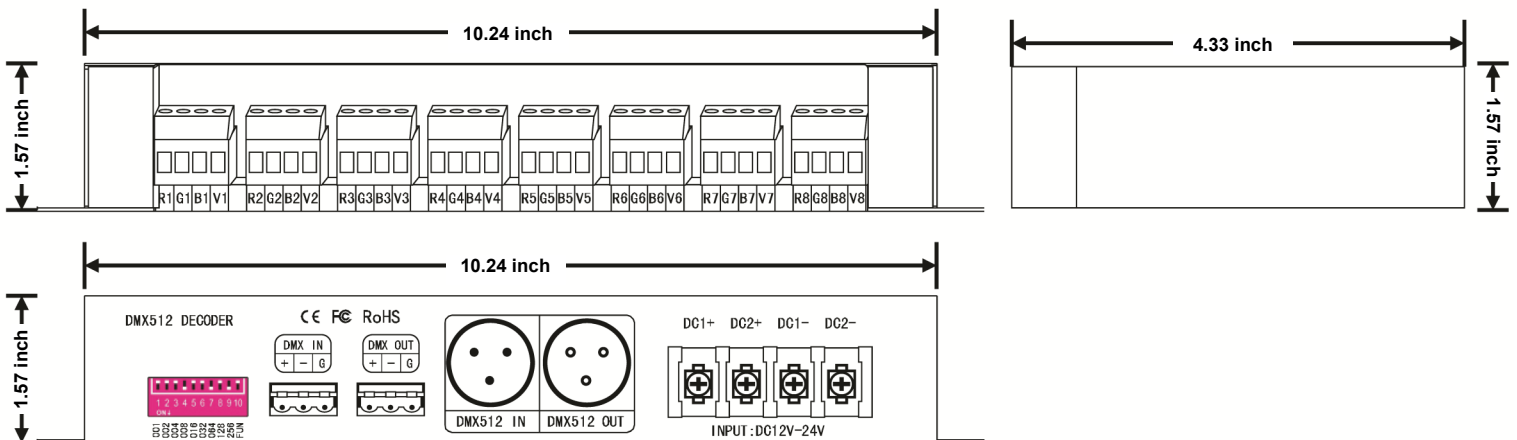### RGB DMX Decoder

Product Features

- Meets DMX512(1990) International Standard.
- Set DMX address with DIP Switches.
- Input voltage 12-24VDC.
- 24-Channel output, 256 grey level changes each channel with full-color control.
- 8-Level speed adjustment.
- 10 color change modes.

Product Specifications

- Input Voltage Range   12-24VDC
- Input Signal   DMX512/1990
- Output Signal   24-Channel Constant Voltage PWM
- Max. Load Current   3A per Channel
- Max. Output Power   860W @12V; 1,720W @24V
- Channels   24
- Product Dimensions   L 10.24 x W 4.33 x H 1.57 (inch)
- Weights   2.03 lbs

Dimensions

EuControls
COLORS AND LIGHTS UNDER YOUR CONTROL
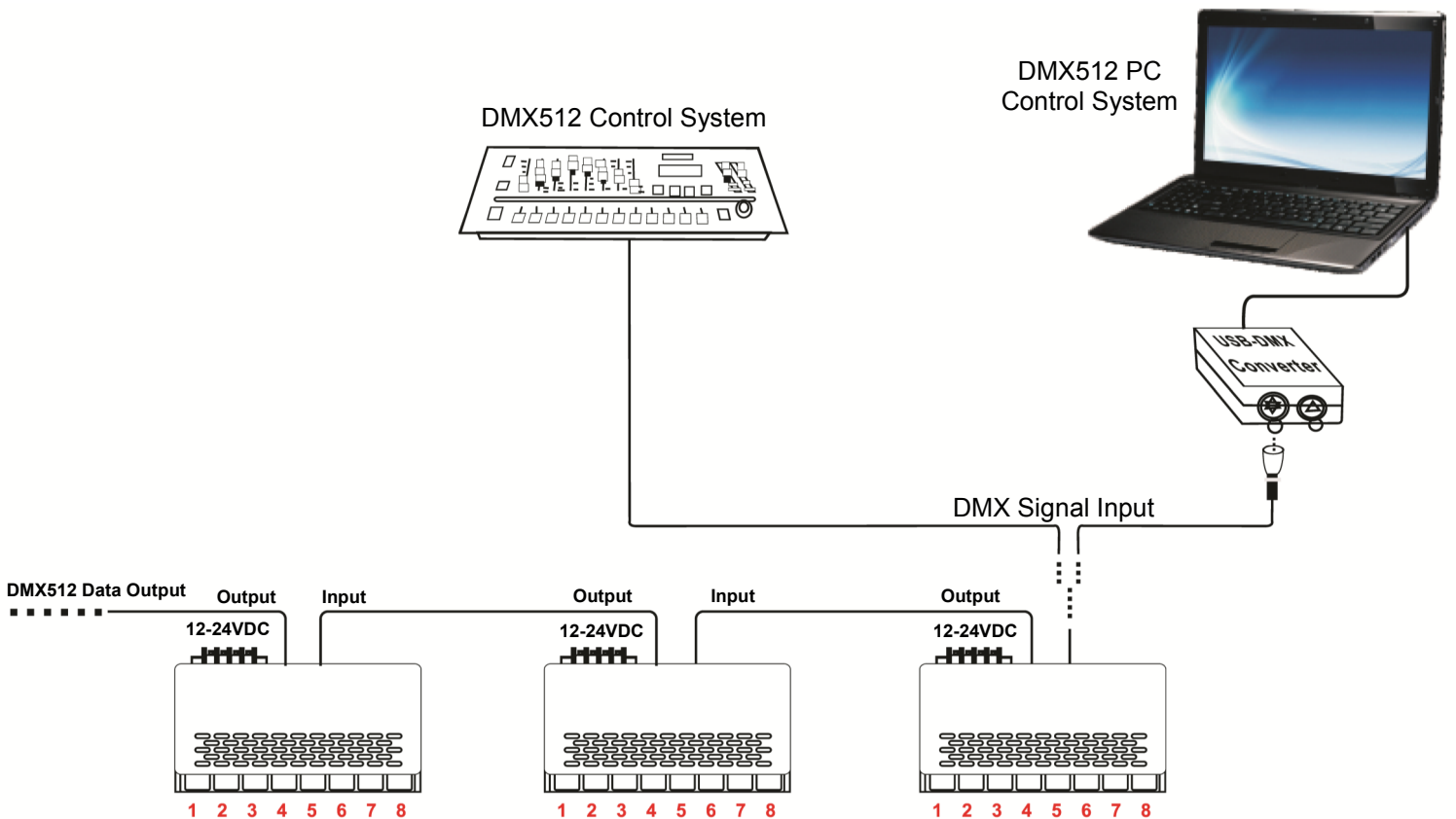
XD-TA03A
RGB DMX Decoder

Safety Warnings

1. **Please read the instructions carefully before use.**
2. **Do not install this driver near thunder fields or high voltage lines or strong magnetic fields.**
3. **Check and ensure all wiring connections are correct and to avoid a short circuit prior to damage driver or cause fire.**
4. **Installation should be in a well ventilated area. Not rated for wet or damp locations.**
5. **12-24VDC constant voltage power supply is required. Please make sure the power supply is correct before installation.**
6. **Do not install this driver with the power on. After installation, please check all connections and make sure there is not short circuit before power on.**
7. **Do not try to repair it by yourself. If you have any question, please contact the vendor.**

Typical Layouts

- **Connection diagram: DMX512 Decoder connects to DMX System.**

Note: In order to ensure an accurate and stable signal transmission when using the DMX512 protocol, a 90-120Ω1/4 W small metal film terminal resistors has to be welded between the pin #2 and pin #3 at the end of each DMX signal wire. The resistance will refer to the specifications of DMX dimming system.

DMX512 PC Control System

DMX512 Control System

USB-DMX Converter

DMX Signal Input

DMX512 Data Output   Output   Input   Output   Input   Output

12-24VDC   12-24VDC   12-24VDC

1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8   1 2 3 4 5 6 7 8

Specifications subject to change without notice

EuControls
COLORS AND LIGHTS UNDER YOUR CONTROL

## XD-TA03A
RGB DMX Decoder

## Operating Instructions

- **Set DMX DIP address:**

Each decoder occupies 3 DMX DIP addresses and uses a switch to set addresses.

Switch 1 to 9 set DMX512 initial address code by binary values. Switch 1 is the lowest position, the Switch 9 is the highest position. Each switch has top and bottom position. The switch at top position means the value of this switch is "0" (OFF), and the switch at bottom position means the value of this switch is "1" (ON). There are total of 511 address codes available.

DMX512 initial address code = the sum of the value from switch 1 to 9.
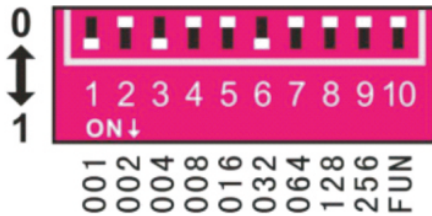
Example 1, DMX512 initial address code 37 means that the value of switch 1, 3 and 6 is "1", and the value of the rest of switches is "0", so the total value of the switches is 1+4+32=37.
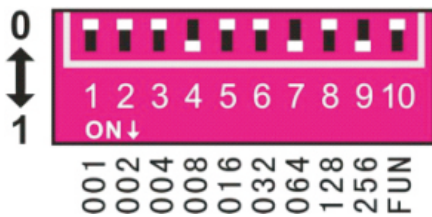
Example 2, DMX512 initial address code 328 means that the value of switch 4, 7 and 9 is "1", and the value of the rest of switches is "0", so the total value of the switches is 8+44+256=328.

Note: Switch 10 (**FUN**) has to set to "0" to receive DMX512 signals.

- **Color Change Function:**

Switch 10 (**FUN**) is color change function switch.
Switch 10 = "0" (OFF) , the decoder starts to receive DMX512 signals;
Switch 10 = "1" (ON), the decoder starts up the color change. Please see below table for details.

Colors	Switch 1	Switch 2	Switch 3	Switch 4	Switch 5	Switch 6	Switch 7	Switch 8	Switch 9	Switch 10
Black	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**
Red	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**
Green	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**
Blue	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	OFF	**ON**
Yellow	OFF	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	OFF	**ON**
Purple	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	OFF	OFF	**ON**
Cyan	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	OFF	**ON**
White	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	OFF	**ON**
7-Color Jump	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	OFF	**ON**
Full-Color Fading	OFF	OFF	OFF	OFF	OFF	OFF	OFF	OFF	**ON**	**ON**

Specifications subject to change without notice

XD-TA03A

RGB DMX Decoder

Troubleshooting Guides

Problem	Reason	Solution
No Light (s)	No power	Check power supply and wiring
	Reversed polarity	Check wiring
	Signal terminal not connected or reversed	Check wiring
	Long circuit	Add DMX signal terminator or use amplifier
Wrong color (s)	Wrong RGB wiring	Check wiring
	Wrong decoder address entered	Enter the correct address
1 or more colors are lit, but no change	Signal terminator has wrong connection or reversed	Check wiring
	Long circuit	Add DMX signal terminator or use amplifier
Abnormal flickering	Signal terminator has wrong connection	Check wiring
	Long circuit	Add DMX signal transmitter or use amplifier

Specifications subject to change without notice