V-TAC®
INNOVATIVE LED LIGHTING

WEEE Number: 80133970

INSTALLATION INSTRUCTION
DMX 512 DECODER

TECHNICAL DATA:

Model	VT-DMX 512
Output	3 Channels
Static Power Consumption	<1W
Output Current	<4A(Each Channel)
Output Power	12V:<144W, 24V:<288W
Supply Voltage	DC: 12V-24V



2 YEARS WARRANTY*

INTRODUCTION & WARRANTY
Thank you for selecting and buying V-TAC product. V-TAC will serve you the best. Please read these instructions carefully before starting the installation and keep this manual handy for future reference. If you have any another query, please contact our dealer or local vendor from whom you have purchased the product. They are trained and ready to serve you at the best. The warranty is valid for 2 years from the date of purchase. The warranty does not apply to damage caused by incorrect installation or abnormal wear and tear. The company gives no warranty against damage to any surface due to incorrect removal and installation of the product. The products are suitable for 10-12 Hours Daily operation. Usage of product for 24 Hours a day would void the warranty. This product is warranted for manufacturing defects only.

WARNING
1. Please make sure to turn off the power before starting the installation.
2. Installation must be performed by a certified person.

This marking indicates that this product should not be disposed of with other household wastes.

Caution, risk of electric shock.

PRODUCT DESCRIPTION
This DMX512 decoder adopts the advanced micro control unit. It can receive the DMX-512 standard digital control signals that widely used internationally. It changes the signal into PWM control signal to actuate the LED lamp. It can also connect the DMX digital console to change the light or each dynamic effect. In addition, when the decoder is not connected with the DMX console, it can be used as a synchronous controller. That is to say you can synchronously control number of decoders and LED lights

DIRECTION OF USE
This product is in compliance with DMX512 protocol, and compatible auto index addressing and manual establishment address.

Each universal DMX controller takes up 3 DMX addresses. It adopts 2 ways (auto-index addressing and code switch) to set up the address. When adopting the auto-index addressing, all switches are "off" status. When adopting the code switch to set up address, the 10th bit (FUN) is "off" status, and other 9 bits are binary value code switch which are used to set up the DMX starting address code. The first bit is the lowest order bit, and the ninth is the highest order bit. That can set up 511 address codes. The DMX starting address code is equal to the sum of 1st to 9th bit. If move down one bit of code switch ("ON" set "1"), you can get the place-value of this bit. If move up (set "0"), the place-value is 0. For example: if you want to set up DMX starting address code for 73, you should move down the 7th, 4th, and 1st bit of code switch for "1", and others for "0", Then the place-value's sum of 1st to 9th bit is 64+8+1. That is to say, the DMX512 starting address code is 73. (The correspondence dials code position is as follows).

To choose the channel from the Dial in-line Package (DIP) Switch:

Decimals	1	2	3	4	5	6	7	8	9	10
Weight-number	1	2	4	8	16	32	64	128	256	FUN

1. Example 1:
Like figure 1, to set up the DMX starting address code for 37, should move down the 6th, 3th, 1st bit for "1", others for "0". Then the place-value's sum of 1st to 9th bit is 32+4+1, as is for 37.

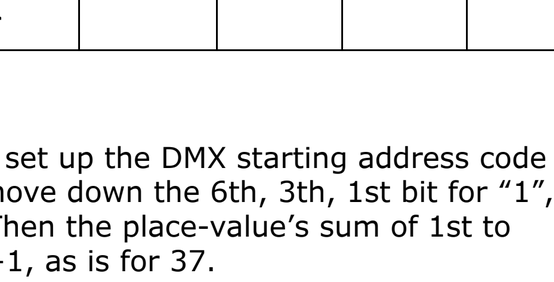


FIGURE 1

2. Example 2:
Like figure 2, to set up the DMX starting address code for 328, should move down the 9th, 7th, 4th bit for "1", others for "0". Then the place-value's sum of 1st to 9th bit is 256+64+8, as is for 328.

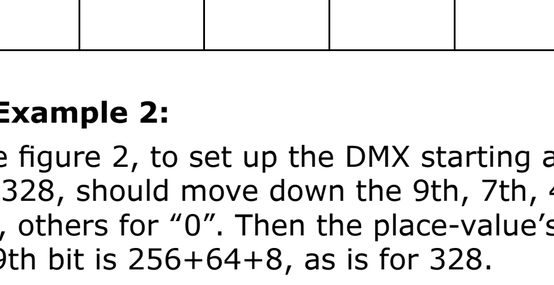


FIGURE 2

Other function's direction for use:

1. Test function:
The DIP switch's 10th bit is "FUN", for built-in function key. When "FUN"="OFF", is for DMX decoder function. This is used to adopt DMX signal. When "FUN"="ON", the test function like figure 3:

1-9 switch OFF: black
Switch 1=ON: red
Switch 2=ON: green
Switch 3=ON: blue
Switch 4=ON: yellow
Switch 5=ON: purple
Switch 6=ON: cyan
Switch 7=ON: white
Switch 8=ON: Seven-color jumpy changing (8 grades of speeds are available)
Switch 9=ON: All-color gradual changing (8 grades of speeds are available)

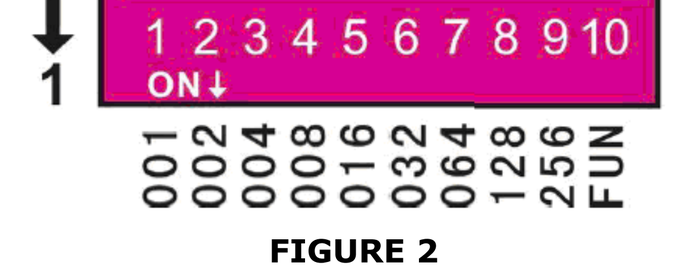


FIGURE 3

2. Speed choice of jumpy changing and gradual changing effect:
In test function, when switch 8=ON, is for seven-color jumpy changing effect. When switch 9=ON, is for seven-color gradual changing effect. 8 grades of speeds are available for each effect:

1-7 switch OFF: 0 grades of speeds
Switch 1=ON: 1 grade of speeds
Switch 2=ON: 2 grades of speeds
Switch 3=ON: 3 grades of speeds
Switch 4=ON: 4 grades of speeds
Switch 5=ON: 5 grades of speeds
Switch 6=ON: 6 grades of speeds
Switch 7=ON: 7 grades of speeds
(maximum speed)

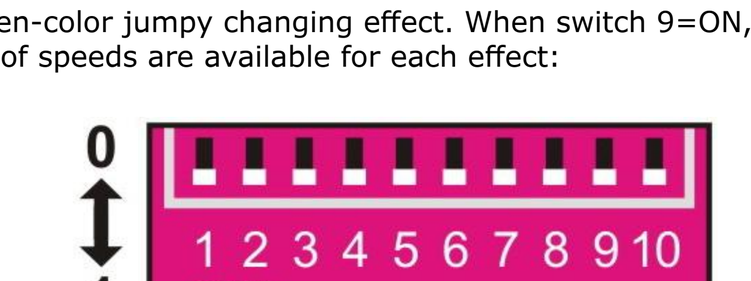
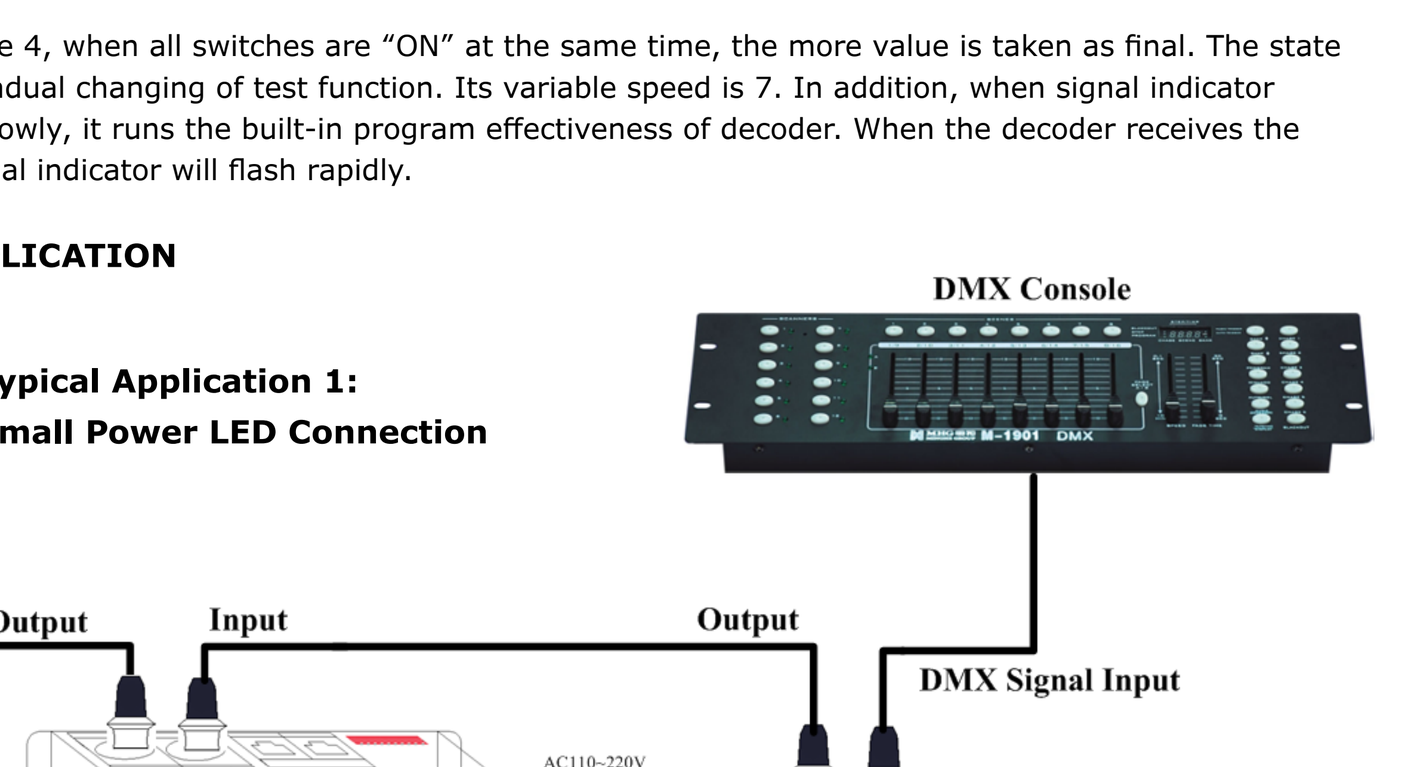


FIGURE 4

Like figure 4, when all switches are "ON" at the same time, the more value is taken as final. The state of decoder is gradual changing of test function. Its variable speed is 7. In addition, when signal indicator (green) blinks slowly, it runs the built-in program effectiveness of decoder. When the decoder receives the DMX signal, signal indicator will flash rapidly.

TYPICAL APPLICATION



CAUTION
- This products Input voltage is DC: 12~24V. Other input voltages are not allowed.
- Lead wire should be connected correctly, according to the wire color and the connecting diagram offers.
- Overloads are prohibited.

IN CASE OF ANY QUERY/ISSUE WITH THE PRODUCT, PLEASE REACH OUT TO US AT: SUPPORT@V-TAC.EU FOR MORE PRODUCTS RANGE, INQUIRY PLEASE CONTACT OUR DISTRIBUTOR OR NEAREST DEALERS. V-TAC EUROPE LTD. BULGARIA, PLOVDIV 4000, BUL.L.KARAVELOW 9B