

LT-SYSTEM-8030 DMX512 Decoder

User Manual



(Kindly read through this manual carefully before use)

www.hiline-lighting.com

Foreword

Thanks for choosing LT-SYSTEM-8030 DMX512 Decoder. We strongly recommend you to read this manual carefully before the installation and usage. Make sure you have completely understood the instructions so as to ensure normal working of the controller, be familiar with all of the operating skills.

Before opening the package, please check if there's damage or defect during transportation, if damage occurs, please consult with your supplier immediately.

After Service

If our product proves to be defective, being used properly (in accordance with the written Operation Instructions), during a period of up to ONE year from the date of purchase, the product will be repaired or replaced, free of charge.

This warranty does not cover the following and the customer will be required to pay repair charge, even for defects occurring within the one year period.

1. Any defect that occurs due to mishandling such as an operation performed not permitted in the operating instructions.
2. Any defect that occurs due to privately dismantling, repairing, incorrect modification of the circuitry, improper jointing and disassembling the chip on the base.
3. Any defect or damage that occurs due to transport, a fall, shock, etc. after purchase of the product.
4. Any defect or damage that occurs due to fire, earthquake, flood damage, thunderbolt, environmental pollution and irregular

voltages.

5. Any defect or damage that occurs due to carelessness or improper storage such as keeping the products in high temperature or humidity area, near harmful drugs etc improper maintenance.
6. New product has been updated.

Safety Warnings

In order to ensure a perfect quality of the product and a safe usage, please kindly follow the instructions.



Watch out! To avoid careless damages, please read the following statements carefully.

- 1、 Please don't install this controller in lightening, intense magnetic and high-voltage fields.
- 2、 Make sure correct connection to avoid fire and damages caused by short circuit.
- 3、 Always be sure to mount this unit in an area that allows proper ventilation to ensure a fitting temperature
- 4、 Please check if local voltage and power adapter meet the controller requirements, and if the anode or cathode definition is in accordance with this controller.
- 5、 Don' t risk the connection with power on, check & make sure a correct connection & no short circuit before power on.
- 6、 Please don't open controller cover and operate if problems occur.

If you need spare parts, please choose genuine version.

If you have any questions, please contact your supplier.

This manual applies to this model product only, for update information, please consult with our staff.

Function Brief

Thanks for choosing LT-SYSTEM-8030 Decoder, LT-SYSTEM-8030 Decoder is designed via advanced microchip technology to convert the universal standard DMX512/1990 signal into analog signal, it allows user to choose 1~3 output channel, 256-level brightness control, max 512 output channels. This compact decoder connects to light console, analog device and various Led terminal products such as RGB Led lamps, RGB Led tubes, building lamps, LED wall washers or lighting and other compatible devices allowing its user to create endless possibilities of light shows.

I . Product Specifications:

- 1.) Input Power: DC5V--DC24V
- 2.) Output Current: 6A per channel
- 3.) Output Power: 90W(5V),220W(12V), 450W(24V)
- 4.) Brightness Control : 256 scales
- 5.) DMX Address: 3 channels
- 6.) DMX512 Standard: DMX512/1990
- 7.) Product Dimension: 125×52×40 (mm)
- 8.) Casing Size: 135×70×50 (mm)
- 9.) Weight: 0.3KG

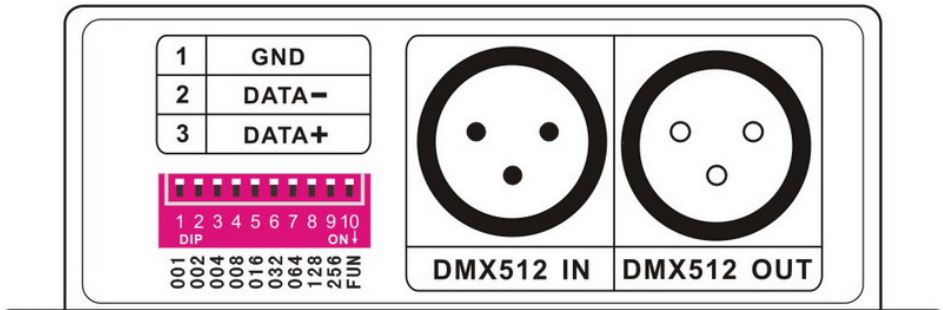
II . Basic Functions

- 1.) 256 scales of smooth brightness adjusting.
- 2.) User addressable DMX interface-with easy dip-switch settings

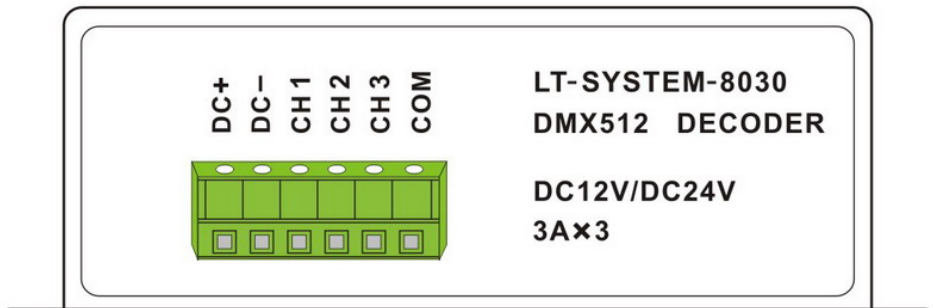
and testing modes.

- 3.) High power output, 3 output channels.
- 4.) Over load auto protection.
- 5.) DMX pass through and in/out connector for daisy chain configurations.

III. Configuration Diagram



Input Port



Output Port

IV. Decoder address setting

This decoder occupies 3 addresses, adopted Dip switch to set the address, the Dip switches from 1 to 9 are a kind of binary value coding switches used to set DMX512 initial address code, the correlative bits is the 1-9 bits of the DIP switch, the 1st bit is LSC, the 9th bit MSC , 512 addresses totally.

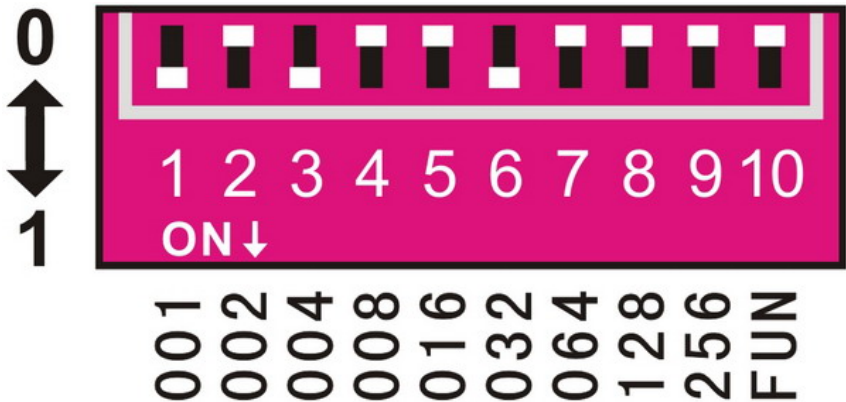
DMX512 initial address code is equal to the total amount of the Dip switches' number from 1 to 9, press Dip switch downward (ON: at position "1"), user can get the number of its position, if pressing upward (at position "0"), the number of its position is 0.

Example 1: Set to 37

Set the 6th, 3rd, 1st bit of the DIP switch downward to "1", others to "0" (picture 1), the total sum from 1 to 9 is 32+4+1, so the DMX512 initial address code is 37.



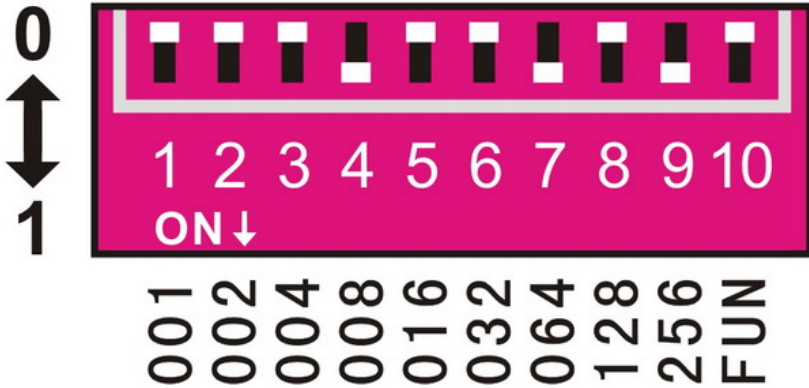
Accept DMX512 signal only when the DIP switch FUN=OFF (at position "0")



Picture 1

Example 2:

Set DMX512 original address code as 328: Set the 9th, 7rd, 4st bit of the DIP switch downward to “1”, the rest to “0” (as picture 2), the total sum from 1 to 9 is 256+64+8, so the DMX512 original address code is 328.



Picture 2

V. Instructions for other functions

1、 Testing function:

The 10th DIP switch is FUN, acting as the function key.

DMX512 Decoder works when FUN is at OFF, receiving DMX512 signals.

Decoder testing mode works when FUN is at position” ON” as Picture 3:

SWITCH1—9 OFF: BLACK

SWITCH1 IS ON: RED

SWITCH2 IS ON: GREEN

SWITCH3 IS ON: BLUE

SWITCH4 IS ON: YELLOW

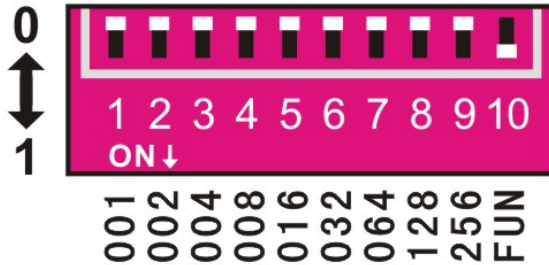
SWITCH5 IS ON: PURPLE

SWITCH6 IS ON: CYAN

SWITCH7 IS ON: WHITE

SWITCH8 IS ON: 7 COLOR JUMPING (8 SPEED LEVELS)

SWITCH9 IS ON: 7 COLOR SMOOTH (8 SPEED LEVELS)



Picture 3

2、 Color jumping & color smooth speed

When decoder is at testing mode, DIP Switch 8 is at “ON” , it’ s the 7 Color Jumping, when DIP Switch 9 is at “ON” , it’ s the 7 Color Smooth, with 8 speed levels for each effect.

SWITCH 1—7 OFF: SPEED 0

SWITCH 1=ON: SPEED 1

SWITCH 2=ON: SPEED 2

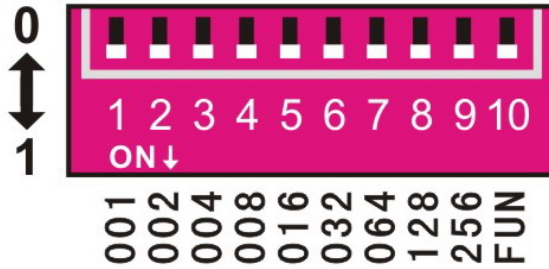
SWITCH 3=ON: SPEED 3

SWITCH 4=ON: SPEED 4

SWITCH 5=ON: SPEED 5

SWITCH 6=ON: SPEED 6

SWITCH 7=ON: SPEED 7



Picture 4



As Picture 4. When several DIP SWITCH at “ON” at the same time, comply with the largest value switch, the testing function is when FUN=ON, DIP SWITCH 8 & 9 for the color changing function, DIP SWITCH1 – 7 for the speed function, comply with the largest value switch , SPEED 7 is the fastest speed, .

VI. Conjunction Diagram

