

VLB(Mn)-D50×60mm
CTR-DIGITAL-12V

**FULL COLOR LED DIGITAL TUBE
SYSTEM**

MANUAL

Please read through this manual before using this system

May 2008

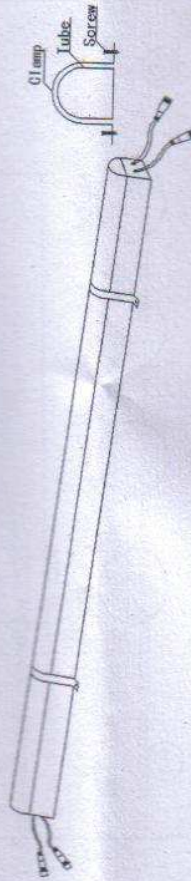
BRIEF INTRODUCTION OF THE FUNCTION

This system consists of CTR-DIGITAL-12V digital signal controller and VLB-D digital tube. It's a full-color lamp-house effects lighting for outdoor and indoor decoration Professionally, What an attractive lighting effects with unique personality, provides a profuse imagination space for architectural designer and lighting designer. This system is widely used in the lighting decorations at the places such as buildings profile, bridges, squares, the Exhibition Hall, stage lighting, shopping malls, hotels, entertainments and advertising etc .

VLB-D Full Color LED Digital Tube

First, BASIC CHARACTER:

1, shape picture:



- 2, Model No: VLB(Mn)-D50×60-144-1M-240V (151.090)
- 3, Dimension: 1000×50×60 (mm)
- 4, weight: 0.7kgs
- 5, voltage: 90V-260V, 50/60HZ
- 6, input power: P ≤ 12 W
- 7, IP Rating: IP65
- 8, pressure: 3000V
- 9, Life: about 50,000 hours

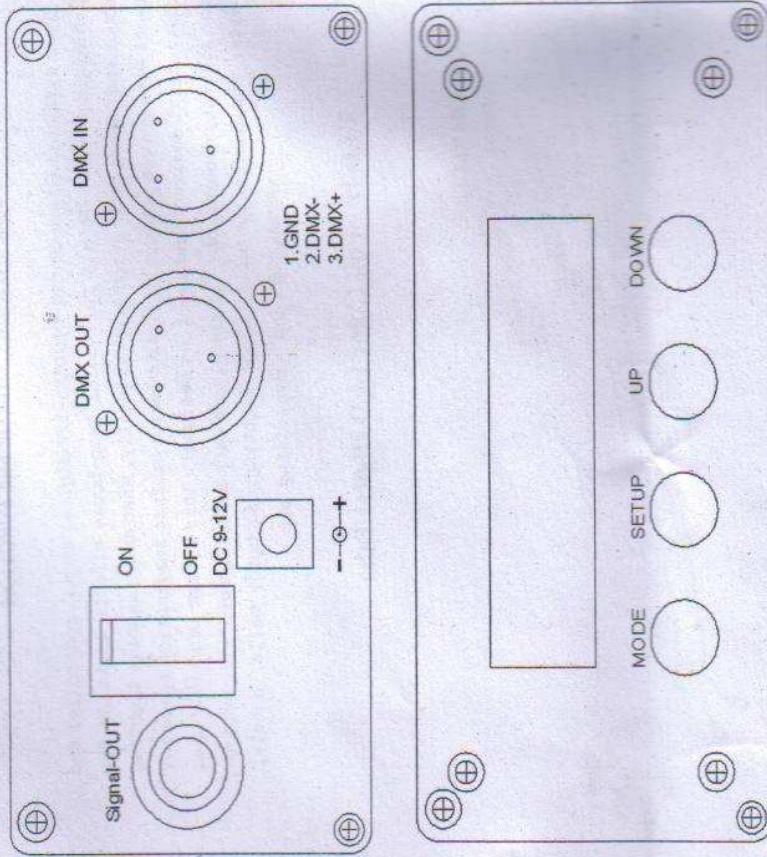
Second, MAIN STRUCTURE:

It makes up of the high-performance R, G, B trichromatic LED light source, built-in switch power and high-performance SCM control circuit, etc.

CTR-DIGITAL-12V Digital Signal Controller

First, BASIC CHARACTER:

1, before and after view



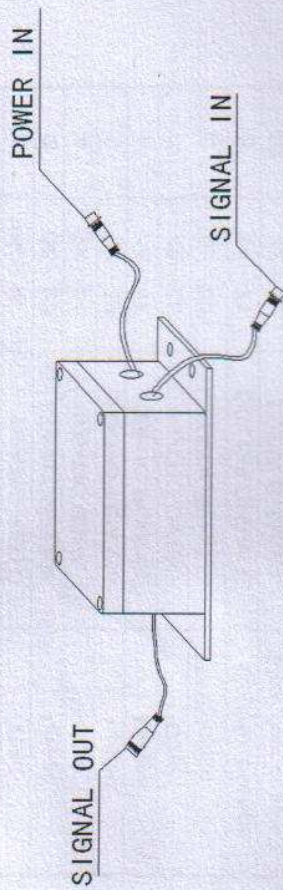
- 2, Model No: VLC-001 (151.096)
- 3, Shell material: Aluminum alloy
- 4, Dimension: 175x150x58 (mm)
- 5, Weight: 0.62kgs
- 6, voltage: DC9-12V, 50/60HZ
- 7, Input power: P ≤ 1 W

Second, GENERAL INTRODUCE:

- a) basic functions:
- 1, support DMX512 remote control interface.
 - 2, 33 selectable effects model can be configured independent of the operating parameters of each effect.
 - 3, edit automatic operation mode, choose the appointed results.
 - 4, the maximum number of connections: 1000pcs discoloration LED tubes (through the signal amplification).

Digital signal Amplifier introduce:

1), View:



- 2), Model No.: VLC-002 (151.093)
 - 3), Dimension: L200(160)xW90xH65(mm)
 - 4), Weight: 0.62 kgs
 - 5), Input volt.: 240V
 - 6), Protection: IP44
 - 7), Power consumption: 6W
 - 8), DMX signal amplifier,
 - 9), Signal-in: male connector
 - 10), Signal-out: Female connector
 - 11), signal amplifier numbers: 30pcs
- 5, automatic storage setting parameters.
- 6, In advance setting parameters re-loaded function.

b) the Lines of Control Data

Data lines	function
1	Title line A signal plus (black)
2	Title line B signal negative (green)
3	Address A signal plus (blue)
4	Address B signal negative (red)

c) USAGE INTRODUCTION

* Special Note:

First, open the electrical source, and then open the switch of controller.

number	value		
1	0-7	BLACK	Black
2	8-15	STATIC RED	Red
3	16-23	STATIC GREEN	Green
4	24-31	STATIC BLUE	Blue
5	32-39	STATIC YELLOW	Yellow
6	40-47	STATIC PURPLE	Purple
7	48-55	STATIC CYAN	Cyan
8	56-63	STATIC WHITE	White
9	64-71	COLOR CHANGE	Colorful change
10	72-79	FLOW CHASE1	Slow flow chase 1
11	80-87	FLOW CHASE2	Slow flow chase 2
12	88-95	COLOR CHASE2	Colorful chase
13	96-103	CORUSCANT RUN	Coruscant run
14	104-111	FAST FLOW1	Fast flow chase 1
15	112-119	FAST FLOW2	Fast flow chase 2
16	120-127	ROLL CHASE	Roll chase
17	128-135	ROLL COLOR	Roll color
18	136-143	MULCOLOR1	Mulcolor change 1
19	144-151	MULCOLOR2	Mulcolor change 2
20	152-159	MULCOLOR3	Mulcolor change 3
21	160-167	STROBE FLOW	Strobe flow
22	168-175	FROM MIDDLE	Form middle chase
23	176-183	FROM SIDE	From side chase
24	184-191	R & G FLOW	Red and green flow
25	192-199	G & B FLOW	Green and blue flow
26	200-207	R & B FLOW	Red and blue flow
27	208-215	R & G CHASE	Red and green chase
28	216-223	R & B CHASE	Red and blue chase
29	224-231	Y & P CHASE	Yellow and purple chase
30	232-239	FADING1	Fading 1
31	240-247	FADING2	Fading 2
32	248-255	RAINBOW CHASE	Rainbow chase

2, the second DMX channel, control gray or speed:

Numerical value	Gray or speed numerical value
0	0
255	10

Serial number	display Parameters	explain	
		Max	Min
1	TUBE QTY(The number of tube)	1000	1
2	RUN SPEED (Operating speed)	10	0
3	AUTO SELECT (Choose to run automatically)	YES or NO	

*** 1 for the fastest speed.

3, UP: increased the function, key parameters / re-set parameters.
 4, DOWN: decreased the function, key parameters / re-set parameters.
 5, SETUP: in the same function, the parameters switch each other.
 6, preset parameters: each has its own pattern of an independent parameters, and it's preserved in the controller solely. After the parameters of the factory, in AUTO PROGRAM mode, the use of LOAD DEFAULT (preset parameters) can be synchronized all the parameters of unity back to the factory parameters.

7, AUTO SELECT (choose to run automatically): whether the compiler of the designs in AUTO PROGRAM operation mode is selected. YES selected, NO cancellation.

8, TUBE CODING (taxi of digital tube)

One-time sort: Set the start and end of the serial number sequence, identified by MODE operation.

Sort points: on a project-N part of writing, set up the first part of the beginning of the address, the end address, identified by MODE began writing, to automatically write down; charge of setting the start of the second address, the end of address, by MODE OK to start writing, to automatically write down; till No. part N to be written down.

Note

*** Each tube ties up a serial number, all the serial number must be connected ;

*** The tube turn to red after end of the sequence, and serial number automatically is saved from memory;

*** Digital tube can be normal used that must first be scheduled after the sequence;

d) DMX set

Into the DMX512 model, the initial address by the UP, DOWN to adjust address (1-512). Each controller occupied six DMX512 channels. Each the function of DMX signal control is corresponding displayed automatically on the LCD display.

1, the first DMX channel, data set and the corresponding state form:

serial	Numerical	display content	explain
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There are four function buttons namely MODE, SETUP, UP and DOWN on this controller.

1. Press MODE to get the following effects in turn:

Serial number	display contact	explain
1	BLACK	Black
2	STATIC RED	Red
3	STATIC GREEN	Green
4	STATIC BLUE	Blue
5	STATIC YELLOW	Yellow
6	STATIC PURPLE	Purple
7	STATIC CYAN	Cyan
8	STATIC WHITE	White
9	COLOR CHANGE	Colorful change
10	SLOW FLOW CHASE1	Slow flow chase 1
11	SLOW FLOW CHASE2	Slow flow chase 2
12	COLOR CHASE	Colorful chase
13	CORUSCANT RUN	Coruscant run
14	FAST FLOW CHASE1	Fast flow chase 1
15	FAST FLOW CHASE2	Fast flow chase 2
16	ROLL CHASE	Roll chase
17	ROLL COLOR	Roll color
18	MULCOLOR1	Mulcolor change 1
19	MULCOLOR2	Mulcolor change 2
20	MULCOLOR3	Mulcolor change 3
21	STROBE FLOW	Strobe flow
22	FROM MIDDLE CHASE	Form middle chase
23	FROM SIDE CHASE	From side chase
24	R & G FLOW	Red and green flow
25	G & B FLOW	Green and blue flow
26	R & B FLOW	Red and blue flow
27	R & G CHASE	Red and green chase
28	R & B CHASE	Red and blue chase
29	Y & P CHASE	Yellow and purple chase
30	FADING1	Fading 1
31	FADING2	Fading 2
32	RAINBOW CHASE	Rainbow chase
33	AUTO PROGRAM	Run automatically selected procedures
34	DMX512 MODE	DMX512 control mode
35	TUBE CODING	Digital tube taxis

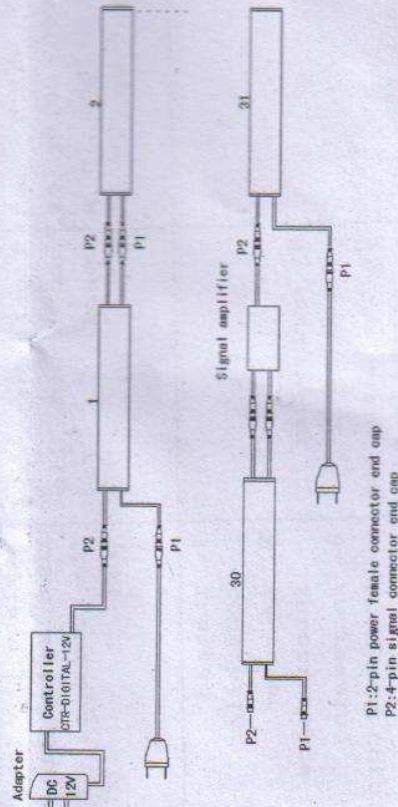
2. Press SETUP to adjust in turn (no adjustment function for 1-8)

- 3, the third DMX channel, R, red and gray control.
- 4, the fourth DMX channel, G, Green gray control.
- 5, the fifth DMX channel, B, blue gray control.
- 6, the sixth DMX channel, in front of third, fourth, fifth overall regulation of the gray channel.

*** The first and second channels are priority distinction!

e) Note Things:

- 1, avoid minefields, strong magnetic field and high-pressure area at the time of installation.
- 2, the controller should be installed in the room, if it's installed outdoor, should be waterproof.
- 3, the rated load of power cord is 3 A, a electrical source socket can be plused when the power load over 3 A, such as tubes in series connection, that is, if the 220 V power supply, power lines with up to 30; if the 110 V power supply, power lines with up to 15.
- 4, the installation of wiring sample (220 V power supply):



5, Please write-in the address of tube after complete the installation, and please write to confirm success.

f) failure analysis and solutions:

Failure to the	Analysis	solution
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phenomenon	<ol style="list-style-type: none"> 1, no electricity for plugs 2, in BLACK-control led model for console 	<ol style="list-style-type: none"> 1, replace the sockets 2, change the lights going mode
Several before bright-and after several not	<ol style="list-style-type: none"> 1, the number of tubes were set in console is wrong 	<ol style="list-style-type: none"> 1, change the settings for number of tubes in console
The middle-not bright, all the rest is bright	the circuit board are bad on the place of not bright	replace the lamp tube
There is a part of in which an uneven color or not bright in a line tube	lights bead are bad in line board	Replace the lamp tube, and rewrite the sequence of tube
Instability, not be controlled for console	<ol style="list-style-type: none"> 1, controller bad 2, the area has strong signal interference 3, the power cord over load, strike fire interference 	<ol style="list-style-type: none"> 1, instead controller 2, improved interference 3, increasing the power cord and socket load or reduce the number of lamp tube in series connection, increase in the number of socket