

## Operation Manual

The 24CH LED controller can be controlled by DMX 512 console. You can select the controller for different kinds of power output which is DC12V/15V/18V/24V for your demand to control the different LEDs. It is widely applied to entertainment hall, stage, social club and indoor building decoration.

The picture of the controller:



### A Specification:

1. Power input:110-120VAC (3.2A) / 220-240VAC (1.6A), 50/60Hz.
2. Power consumption: 200W
3. Power output:eight 4-pin phoenix terminal sockets. 1A per output 12V/15V/18V/24V
4. DMX input:3-pin male XLR socket
5. DMX output:3-pin female XLR socket
6. Control:DMX-512 (1990)
7. LED digital display
8. Built-in microphone
9. IR remote available
10. Each export of the controller can be controlled individually.

- AC110-120V /AC 220-240V input voltage switch

- LED digital display for DMX addressing and work mode setting

- universal DMX512 (1990) multiplexed digital control

- DMX and Stand Alone operation modes

- 0~100%, stand alone, fade time function

- stand alone, chase speed function

- Selectable 8 jumping modes&8 dreaming modes&8 sound active modes&1 auto mode in stand alone mode

For use with the following led devices:LED ceiling light and LED underground light and LED underwater light

It has six kinds of operation modes,they are as follows:

**Manual dimmer color mode**

**Sound active mode**

**Auto-run program mode**

**Static color select mode**

**Other program select mode**

**DMX mode**

Here above six kinds running mode are selected by MODE button. The DP dot of fourth digital tube will be flicker when you operate it, then the DP dot will be automatically off after 60 seconds if there is no operation. The four digital tube will display the current operation mode. You have to press the MODE button if you want to operate the 24CH LED CONTROLLER again.

MODE manual	SET UP manual	UP/DOWN manual	instruction
DMX MODE	Address	ADD1~AS12	Sets the DMX starting address
	Channels	CH03	The unit occupies 3 channels
		CH04	The unit occupies 4 channels
		CH05	The unit occupies 5 channels
		CH06	The unit occupies 6 channels
		CH12	The unit occupies 12 channels
	CH24	The unit occupies 24 channels	
DIMMER MODE	Red dimmer	R000~R255	Adjust the intensity of the red color
	Green dimmer	G000~G255	Adjust the intensity of the green color
	Blue dimmer	B000~B255	Adjust the intensity of the blue color
	Flash	FS00~FS15	Adjust the flash speed, FS00 is flash off, FS01 is slowest, FS15 is fastest
SOUND MODE	Mode select	SO-1~SO-8	Select the built-in sound mode
	Sensitivity select	SJ-1~SJ-8	Adjust the sensitivity of the sound-active, SJ-1 is the lowest level, SJ-8 is the highest level
AUTO RUN MODE	Dreaming mode set	AF-1~AF-8	Select the built-in dreaming mode
	Jumping mode set	AJ-1~AJ-8	Select the built-in jumping mode
	Auto Dreaming&Jumping mode	A-JF	Set the light in auto dreaming&jumping mode, the dreaming mode and jumping mode will run in a continuous cycle
	Speed set	SP01~SP16	Adjust the speed of the dreaming/jumping mode
STATIC COLOR SELECT MODE	Color select	CL00~CL07	Select the eight static colors
	Flash	FS00~FS15	Adjust the flash speed, FS00 is flash off, FS01 is slowest, FS15 is fastest
OTHER MODE	Display on/off	doOn	LED digital tube display always on
		doFF	LED digital tube display off
	Display normal/inversed	Stnd	LED digital tube display normal
		IN3P	LED digital tube display inversed
Initialization mode	DEFA	Initialize the unit at the extra factory setting	

## 1. Manual dimmer color mode

### 1) Manual dimmer color select

Press "MODE" button, select the manual dimmer color select mode. At this time, the four digital tube displays red "0000 ~ 0.255", press the "SET UP" to choose different color, green "0000 ~ 0.255", blue "0000 ~ 0.255", then press "UP" or "DOWN" button to set the dimming rate 0-255.

#### 2) Flash speed select

Press "SET UP" to choose the flash speed select mode. At this time, the four digital tube displays "F5.00 ~ F5.15". Press "UP" or "DOWN" button to select the flash speed 00-15, 00 is flash off, 01 is the slowest flash speed, 15 is the fastest flash speed.

### 2. Sound active mode

Press "MODE" button, select the sound active program mode. There are two modes in the sound active program mode. You can select them by pressing the "SET UP" button.

#### 1) Sound active program mode select

Press "SET UP" button until the four digital tube displays "S0-1 ~ S0-8", then press "UP" or "DOWN" to select the sound active program mode 1-8 under this mode.

#### 2) Sensitivity select mode

Press "SET UP" button until the four digital tube displays "S1-1 ~ S1-8", then press "UP" or "DOWN" to select the sound active the sensitivity 1-8. 1 is off sound-active, 2 is the lowest sensitivity, 8 is the highest sensitivity.

### 3. Auto-run program mode

Press "MODE" button, select the auto-run program mode. There are three modes in the auto-run program mode. You can select them by pressing the "SET UP" button.

#### 1) Color dreaming program mode select

Press "SET UP" button until the four digital tube displays "AF-1 ~ AF-8", then press "UP" or "DOWN" button to select the eight color dreaming programs 1-8.

#### 2) Color jumping program mode select

Press "SET UP" button until the four digital tube displays "AJ-1 ~ AJ-8", then press "UP" or "DOWN" button to select the eight color jumping programs 1-8.

#### 3) Auto dreaming & jumping mode

Press "SET UP" button until the four digital tube displays "A-JF", and then the dreaming mode and jumping mode will run in a continuous cycle then press "UP" or "DOWN" button is no use in this mode.

#### 4) Color dreaming/jumping speed select

Press "SET UP" button until the four digital tube displays "SP.01 ~ SP.16". Press "UP" or "DOWN" button to select the color dreaming/jumping or the auto dreaming & jumping speed 01-16, 01 is the slowest speed, 16 is the fastest speed.

### 4. Static color select mode

Press "MODE" button, select the static color select mode. There are two modes in the static color select mode. You can select them by pressing the "SET UP" button.

#### 1) Static color select

Press "SET UP" button until the four digital tube displays "CL-0 ~ CL-7", then press "UP" or "DOWN" to select static color 0-7 under this mode.

0---black 1---red 2---green 3---blue 4---cyan 5---yellow 6---purple 7---white

#### 2) Flash speed select

Press "SET UP" button until the four digital tube displays "FS.00~FS.15", then press "UP" or "DOWN" button to select the static color flash speed 00-15, 00 is flash off, 01 is the slowest flash speed, 15 is the fastest flash speed.

### 5. Other program select mode

#### 1) Display off/on select mode

Press "SET UP" button, select display off/on mode. Press UP or DOWN to select the four digital tube display on/off. When the digital tube displays "don" means that the display will on in any situation, when the digital tube displays "doff" means that the display will be automatically off after 60 seconds if there is no operation.

#### 2) Display normal/inversion select mode

Press "SET UP" button, select display normal/inversion mode. Press UP or DOWN to select the four digital tube display normal/inversion. When the digital tube displays "SEnd" means that the digital tube displays normally, when the digital tube displays "003" means that the digital tube displays inversion.

#### 3) Initialization select mode

4) Press "SET UP" button until the four digital tube displays "dEFA", and the display is flicker. Now press UP button and DOWN button at the same time, you can initialize it at extra factory setting, running into the auto dreaming & jumping mode, and the four digital tube displays "R-JF".

### 6. DMX mode

You can control the devices individually via your DMX-controller.

**Notice: The 24CH LED controller is under slave mode in any situation of the DMX mode (any DMX address, any DMX channels mode) when it is combined to other 24CH LED controller but not 512DMX-controller.**

#### 1) DMX address select mode

The control Board allows you to assign the DMX address which is defined as the first channel of the 24CH LED CONTROLLER. Press "MODE" button until the display is "A001~A512", then press UP or DOWN to set the DMX address. You can set 510 pcs address at most when it is in 3 channel DMX mode, 509 pcs address at most when it is in 4 channels DMX mode, 508 pcs address at most when it is in 5 channels DMX mode, 507 pcs address at most when it is in 6 channels DMX mode, 501 pcs address at most when it is in 12 channels DMX mode, 489 pcs address at most when it is in 24 channels DMX mode. The four digital tube display will be flicker when there is no controller signal.

#### 2) DMX-PROTOCOL

Press "SET UP" button until the display is "CH.03/CH.04/CH.05/CH.06/CH.12/CH.24", then press UP or DOWN to set the desired channels (3, 4, 5, 6, 12, 24). There are total six DMX modes.

CH.03: 3 channels mode

CH No.	DMX value	Function
CH1	000~255	Red(dim→bright)
CH2	000~255	Green(dim→bright)
CH3	000~255	Blue(dim→bright)

CH.04: 4 channels mode

CH No.	DMX value	Function
CH1	000~255	Red (dim→bright)

CH2	000~255	Green (dim→bright)
CH3	000~255	Blue (dim→bright)
CH4	000~255	Dimming (dim→bright)

**CH.05**:5 channels mode

CH No.	DMX value	Function
CH1	000~255	Red(dim→bright)
CH2	000~255	Green(dim→bright)
CH3	000~255	Blue(dim→bright)
CH4	000~255	Dimming(dim→bright)
CH5	000	No function
	001~005	Sound active
	006~010	No function
	011~255	Strobe slowest to fastest flash frequency is 0.1HZ-20HZ

**CH.06**:6 channels mode

CH6			CH5	CH4	CH3	CH2	CH1
MODE	DMX VALUE	FUNCTION					
1	0-15	No function	Strobe slowest to fastest 16-255 flash frequency is 0.1HZ-20HZ	Dimming 0-255 (dim→ bright)	Blue 0-255 (dim→ bright)	Green 0-255 (dim→ bright)	Red 0-255 (dim→ bright)
2	16-31	Red					
3	32-47	Green					
4	48-63	Blue					
5	64-79	Cyan					
6	80-95	Yellow					
7	96-111	Purple					
8	112-127	White					
9	128-135	Color dreaming 1	Speed 0-255 (slow→fast)		No function	No function	No function
10	136-143	Color dreaming 2					
11	144-151	Color dreaming 3					
12	152-159	Color dreaming 4					
13	160-167	Color dreaming 5					
14	168-175	Color dreaming 6					
15	176-183	Color dreaming 7					
16	184-191	Color dreaming 8					
17	192-199	Color change 1					
18	200-207	Color change 2					
19	208-215	Color change 3					
20	216-223	Color change 4					

21	224-231	Color change 5	Sensitivity 0-255 (insensitive→ sensitive)				
22	232-239	Color change 6					
23	240-247	Sound mode1					
24	248-255	Sound mode2					

### CH12:12 channels mode

CH No.	DMX value	Function
CH1	000~255	R1 (dim→bright)
CH2	000~255	G1 (dim→bright)
CH3	000~255	B1 (dim→bright)
CH4	000~255	R2 (dim→bright)
CH5	000~255	G2 (dim→bright)
CH6	000~255	B2 (dim→bright)
CH7	000~255	R3 (dim→bright)
CH8	000~255	G3 (dim→bright)
CH9	000~255	B3 (dim→bright)
CH10	000~255	R4 (dim→bright)
CH11	000~255	G4 (dim→bright)
CH12	000~255	B4 (dim→bright)

### CH24:24 channels mode

CH No.	DMX value	Function
CH1	000~255	R1 (dim→bright)
CH2	000~255	G1 (dim→bright)
CH3	000~255	B1 (dim→bright)
CH4	000~255	R2 (dim→bright)
CH5	000~255	G2 (dim→bright)
CH6	000~255	B2 (dim→bright)
CH7	000~255	R3 (dim→bright)
CH8	000~255	G3 (dim→bright)
CH9	000~255	B3 (dim→bright)
CH10	000~255	R4 (dim→bright)
CH11	000~255	G4 (dim→bright)
CH12	000~255	B4 (dim→bright)
CH13	000~255	R5 (dim→bright)
CH14	000~255	G5 (dim→bright)
CH15	000~255	B5 (dim→bright)
CH16	000~255	R6 (dim→bright)
CH17	000~255	G6 (dim→bright)
CH18	000~255	B6 (dim→bright)
CH19	000~255	R7 (dim→bright)

CH20	000~255	G7 (dim→bright)
CH21	000~255	B7 (dim→bright)
CH22	000~255	R8 (dim→bright)
CH23	000~255	G8 (dim→bright)
CH24	000~255	B8 (dim→bright)

## 11. Operation by IR remote:

You can also operate this product by IR remote, the distance available is at most 13M.

**Notice:IR remote can also be used when the unit is in the DMX mode.**

The picture of the IR remote:



### AUTO RUN mode

Press “AUTO RUN” to choose Auto run mode. The flat par will run into the Auto Dreaming&Jumping mode. Press SPEED to set the program running speed mode and press “+” or “-” to adjust it.

### Select program Mode

1. Press PROG to go into built-in program select mode, it contains static color select mode, color dreaming mode and color jumping mode.

2. Press “+” or “-” to scroll through the seven static colors, the eight dreaming modes and the eight jumping modes. You can also press button 1-9 to choose static color, the seventh jumping mode and the seventh dreaming mode.

1--- red 2---green 3---blue 4---cyan 5--- yellow 6---purple 7---white

8---the seventh color jumping mode 9---the seventh color dreaming mode

3. When the flat par goes into the static color mode, you can press FLASH to turn on/off flash and press “+” or “-” to adjust the flash speed. When the LED controller goes into the color dreaming mode or color jumping mode, you can press SPEED to set the program running speed and press “+” or “-” to adjust it.

### Sound Active Mode

Press SA to display sound active mode and press “+” or “-” to select the eight sound active mode. Once the sound active mode has been selected, press Press SP to display sound active sensitivity select mode and press “+” or “-” to adjust the sensitivity level.

### Select light program mode

Press R/G/B to choose R/G/B color, press SL to choose white color and pressing “+” and “-” buttons to adjust the intensity of the light. Press FLASH to turn on/off flash effect to in this situation, pressing “+” and “-” buttons to adjust the flash speed.

## **DMX MODE**

Press D to display DMX mode.

### **Set ADDR**

Press this button to set the DMX address or initialize the program, then the red, green and blue lights will flash 2~3 times. Please put in 3 number ,for example, 1 2 3. After the red light is on, please put in the first number. After the first number is accessed the green light will be on, then put in the second number. When the blue light will be on, please put in the third number. After all the three number are put in, the red, green and blue lights will flash 2~3 times, which indicate that the DMX address is right and it go in to the DMX MODE automatically. If the address is wrong the red light will be on. New DMX address should be put in.

If the 951 are put in, red and green lights will be on.Put “0” to initialize the program. If the wrong address is put in, the red light will be on, indicating new address should be put in. Then the system will run in the auto dreaming&jumping mode.

### **Black Out mode**

Press “BLACK OUT” to set the LED lights power on or power off by pressing this button.