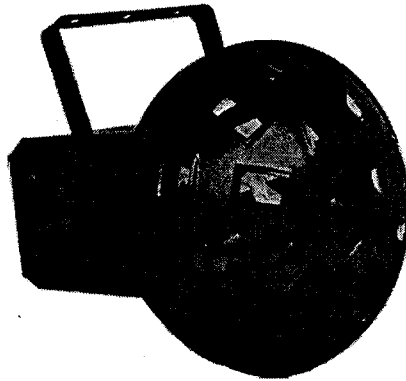# Francis

FR-005
LED MUSHROOM
User's Manual

Thank you for choosing our product, please carefully read this manual
and operate it obey the specification in order to make sure you can
correct and safety installing、 operating and maintaining it; We will not
take any responsibility for the damage and body injury which caused
by the abnormal operation.

A3

This Manual includes the important information of installation and operation. Please install and operate the light according to the instructions strictly. And it must be power off when open the light or before repair and replace the lamp.

A:Please read the complete contents of this manual (please keep this manual attach with the light for any preview)

B:In order to make sure the correct and safety installation, operation and maintenance, well know and follow to the instructions of Manual is necessary.

C:We will not take any responsibility to the light damage, property loss or body injure which caused by the incorrect installation, operation and maintenance.

NOTICE:The data which inside the Manual maybe changed due to the continuous improvement, and we'll not make another notice. We will keep the right to any specification update during improvement.

Warning:If the protection screen, lens or UV screen got a visible damage, eg: scratch or chasm.

■Packing Contents

    (accessories)   (Selectable)
1:Power Cable (1PCS)   a:Bracket
2:Signal Cable (1PCS)   b:Clamp
3:User's Manual (1PCS)   c:Safety Cable

■Unpacking Instruction:

Please check if all the contents are completed after unpacking. then, check if the light is undamaged? Please you can keep the original package and return to the factory if it's damaged.

■AC Power:Check if the voltage is accordance with the rated power.

■Safety Specifications:all the safety items of operation(includes installation) and before operating.

1.Unpacking the carton and take out all the accessories,and open the poly package, take out the light from the flight case, and put it in a certain platform for operation.

2.This device for indoor use only, the protection grade is: IP20. the light must keep dry and avoid to use under the Moist, Overheat or Dusty surroundings. And keep the light far away from the water or other liquid.

3.Installing of the light must keep a distance with any flammable objects by 5m at least. The distance between the light and the projected objects must be no less than 1m..

4.Please never install the light on the surface of the flammable objects.

5.The installation, operation and maintenance must be managed by the qualified professional, and make sure to operate it under the instruction of the Manual.

6.Make sure the work environment temperature of the light maximum 45℃, and minimum −20℃

7.The temperature of the light surface will up to 130℃ even under the normal cooling, so never touch it by hand.

8.The light was designed as electric shock protection type, and must connect to the power supply system which well earthed. Furthermore, the ground wire of the light must connect to the ground wire of the power supply system, ground

wire interface of the light must well connect with the light body(or light must well earthed)

9. Please check if the voltage is accordance with the rated power before installing.
10. Please never use the power cable which was damaged the insulation cover, meanwhile, never put the power cable on any other wire. Please pull out the power cable by handle the plug when light is stop working or cleaning, never pull out it roughly or handle the wire directly.
11. The light doesn't include any spare parts for repair, please check if all the parts are well installed and screws are drove tightly before operating. It's prohibited to use the light when the cover is opened.

Notice : Please make sure it's power off before any installation、 repair and clean!

Introduction

■Technical Features
1. Control channel: 9 DMX channels
2. Color: RGB three basic color, color shade
3. Operating modes: standard DMX512 controller control mode
4. Other function: rotate angle 180° , master and slave mode, sound control
5. Appearance: metal shell, streamlined designs.
6. Working environment: indoor, −20 ℃ ~ 40 ℃
7. IP degree: IP20

Technology Parameter

1. Voltage:AC220~240V 50Hz (110V–120V 60Hz, can be select)
2. Power:35W
3. Fuse:F1A, 250VAC
4. LED lamp: 6X3W(R2、 G2、 B2)

Installation

1. Install/replace LED lamp

First, after unscrewed the screw at the head of shell and then pull out it. You can see the LED. If found the LED are not bright, then replace them. Installation method is just the opposite.

Warning
1:The light power supply must be disconnected when replacement of the LED does not bright
2:you can repair the light before you must use a thermostat with anti-static electric iron,and wear anti-static rings.
●**Power supply, wire Connection**
Using a dedicated plug to connect the device and power. The devicemini mushroom should pay attention to whether the voltage and frequency between signs and on the power supply are the same or not. Suggested that each light has a separate power supply switch, this can be turned on or off at random for each device. The device selection of input voltage and frequency parameters as follows:

Voltage	AC220V~240V	Frequency	50Hz
Voltage	AC110V~240V	Frequency	60Hz

If the power cable is damaged, please contact the area agents or ask professional to replace; please use the same specification cable when you replace the power cable. Tip: When connecting the power, ground wire must (yellow / green color wire) safety grounding, electrical installation must comply with all relevant standards.

●Fixed installation of lighting (including light hook and safety rope how to use)

Before positioned the light, ensure the stability of the installation site. In the reverse hanging installation, use two sets of M10 bolts with a professional big hook, link the hanging screw hole on the bottom of the light, must be ensure that the light will not fell down from support rack, through the support rack and light hand use the safety rope for auxiliary lifting handle to ensure safety, to prevent the light falling and sliding.

Whether there is wear and tear, whether there is loose hook. The manufacturer does not take any responsibility if the light falling because hanging installation is not stable.

Warning

1. Hook use only for light lifting.

2. Hook as a handle move the light to prohibit, carrying, please use the handle.

Operation

●DMX Address Code Setting

Every light should be set with DMX address code when you are using the controller to control multi lights, it is used to receive the signal from the controller. Since the product uses "address code dial code" set the address code, so each dial code corresponding to address values are as follows:

Dial code	1	2	3	4	5	6	7	8	9
Corresponding to address code value	1	2	4	8	16	32	64	128	256

The present address code of the light =(address code of last light)+(channel quantity of the light).The light with 9 Channels,so it should be under the "16channel" control mode, the DMX address code of the first light is 1,the corresponding dial code is "1" (or all of the dial code not dial),the second should be:1+16=17,the corresponding dial code is "1 +5", the third light address value is 1+16 * 2 = 33, the corresponding dial code is "1 +6 ", The fourth should be 1 +16 * 3 = 49, the corresponding dial code is" 1 +5 +6 ", analogously.

●Auto-mode

Dial the code 10 and 8 to ON, the device will be in auto running mode. The dial codes 1,2 and 3 are the conversion of the different modes of auto running. Following the list:

DIP number	Function description	Remark
10+8	Auto	Auto-running show(include shade、 strobe、 change color and so on)
10+8+1	R shade	
10+8+2	G shade	
10+8+3	B shade	
10+8+2+1	R shade (speed1fast)	
10+8+3+1	R shade(speed2)	
10+8+3+2	G shade (speed3slow)	
10+8+3+2+1	R+G+B shade	

●Sound control mode

Dial the code 10 and 7 to ON, the device will be in sound control mode. The dial code 1、2、3、4 and 5 are the conversion of the different modes of sound control mode.

DIP number	Function	Remark
10+7	Sound mode1	
10+7+1	2	
10+7+2	3	
10+7+3	4	
10+7+4	5	
10+7+5	6	

Setting master machine is when dial the code 10 to ON, control the slave machine can by DMX connect interface. All dial code to OFF, when dial 10 to OFF, 1 to 9 is the light address code setting (8421 binary code format), are all OFF, the address is 001.

●Master-slave mode

Setup master machine and dial code 10 to ON, can control slave machine by DMX connect interface. All dial code to OFF when slave machine receiving; 1-9 is the light address code setup(8421 Binary encoding format) when dial 10 to OFF, the address code is 001 when all OFF.

Warm Tip: The light auto running effect, are selected from the control channel with the proceeds, so users can use the DMX controller of have storage capabilities to make out the changers effect of your need. ·

DIP number	Function description	remark
10+1	R	
10+2	G	
10+3	B	
10+2+1	R+G	Fixed color(away brightness)
10+3+1	R+B	
10+3+2	G+B	
10+3+2+1	R+G+B	
10+8	Auto running	Auto running show(include shade、 strobe、 change color and so on)

10+8+1	R shade		
10+8+2	G shade		
10+8+3	B shade		
10+8+2+1	R shade(speed 1 fast)	shade	
10+8+3+1	R shade(speed 2 middle)		
10+8+3+2	G shade(speed 3 slow)		
10+8+3+2+1	R+G+B shade		
10+9	RGB change each other		
10+9+1	R strobe		
10+9+2	G strobe		
10+9+3	B strobe		
10+9+4	R+G strobe	Strobe	
10+9+5	R+B strobe		
10+9+6	G+B strobe		
10+9+2+1	R+G+B strobe(speed adjustment)	(DIP3-DIP7)adjustment strobe speed	
10+7	Sound control1		
10+7+1	Sound control2		
10+7+2	Sound control3		
10+7+3	Sound control4		
10+7+4	Sound control5		
10+7+5	Sound control6		

Appendix

●Usage of the Signal Cable、Connector

The connection between the output and input, it's available to use the 3 pins XLR cable which provided by the manufacturer. Signal cable from the DMX output of the controller to the input of the first master light, and connect to the DMX input of second slave light from the DMX output of the first master light, analogously,till connected all the slave lights, and insert the last connector to the output of the final light. If you want to prolong the connection of signal cable, the connection of the pins between male connector and female connector should be:1 to 1; 2 to 2; 3 to 3,or it will cause communication interruption.(Notice: the diameter of core of every cable should be 0.5mm at least,double core shelter cable should be used).The signal connecting must use the attached 3 pins XLR cable. Notice, all the internal lead wire of the 3 pins XLR cable should not touch to each other or connect to the connector. The light is available to receive the DMX512 signal, connect the signal plug to the panel which marked with "IN",and connect it to the next light. then, connect to the "In" of next light from the "OUT". The DMX signal terminal organ is recommended when the lighting signal is connecting. It will avoid to damage the signal which caused by the noise, DMX terminal organ is a XLR connector, connect with a 120Ω resistor between the pin 2 and pin 3 of the XLR connector, and connect it to the last OUTPUT socket of the final light. Follow picture:

IN OUT 1nd light IN OUT 2nd light IN OUT 3nd light Resistor 120R 1W
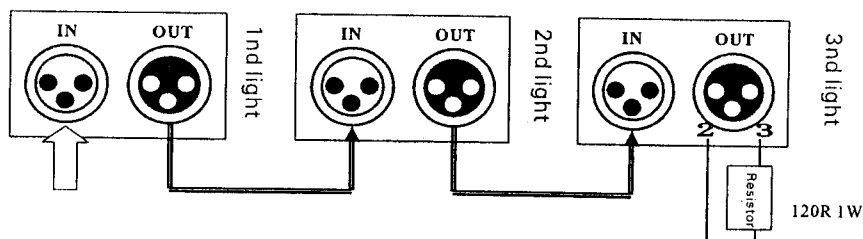
● **DMX channel value list**

After completion all operations, press the power switch check if everything is normal

Channel	Function	value	Description	
CH1	Motor function	0-15	position(adjust position by Ch2)	
		16-215	Rotate come and back(adjust range 16255, shortlong)	
CH2	Motor speed/position	0-255	fasts-low /position(0-170degree)	
CH3	dimmer/strobe On off	0-7	Off	
		8-232	strobe (slow----fast)	
		233-255	on	
CH4	Strobe space %	0-255	Adjust the value,Obtain a stronger sense of visualimpact	
CH5	Fixed color/shade	0-17	none(CH6、CH7、CH8 dimmer)	
		18-34	R+G+B	
		35-51	Red	
		50-68	Green	
		69-85	Blue	
		86-102	Yellow	
		103-119	Magenta	
		120-136	Cyan	
		137-153	Red shade	shading,can be adjustment CH6 change speed
		154-170	Green shade	
		171-187	Blue shade	
		188-204	White shade	
		205-221	Color shade	
		222-238	RGB Swat change	
		239-255	RGB shade	
CH 6	Shade speed	0-255	fastslow (CH5 >137 effective)	
	R dimmer	0-255	R	
CH 7	G dimmer	0-255	G	
CH 8	B dimmer	0-255	B	
	Off	0-19	OFF	
		20-39	Auto running mode1	

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