FRACTAL
L I G H T S

MORPH 100

USER MANUAL
KEEP THIS MANUAL FOR FUTURE NEEDS

1. General Information:

Thank you very much for choosing our product. For safety purpose, please read this manual carefully before your operation. This manual included installation and using information. Please install and operate it according to this manual.
Unpacking:Once receive it,please handle it carefully and check if there is some shatter because of transportation and the following fittings are OK.
In the carton,there are four things available:

- Moving head light: 1PC
- Power cable: 1PC
- Fast Lock: 1PC
- User manual: 1 PC

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

Caution! There are no user serviceable parts inside this unit. Do not attempt any repairs yourself. Doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact us.

2. Safety Instructions

⚠️
WARNING

Please read carefully the instruction, which includes important information about the installation, usage and maintenance.

- Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.
- Unpack and check carefully there is no transportation damage before using the unit.
- Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.
- It's important to ground the yellow/green conductor to earth in order to avoid electric shock.
- The unit is for indoor use only. Use only in a dry location.
- The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.
- Disconnect main power before replacement or servicing.
- Make sure there are no flammable materials close to the unit while operating as it is fire hazard.
- Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.
- Maximum ambient temperature is Ta: 40°. DO NOT operate it where the temperature is higher than this.
- Unit surface temperature may reach up to 85°. DO NOT touch the housing bare--hand during its operation. Turn off the power and allow about 15 minutes for the

unit to cool down before replacing or serving.
- In the event of serious operating problem, stop using the unit immediately. Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- DO NOT touch any wire during operation as high voltage might be causing electric shock.

Warning:

- To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.
- DO NOT open the unit within five minutes after switching off.
- The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.

Caution:

If using a 230V 50Hz power supply, DO NOT connect in series more than 11 units; use another main supply for the next 11 fixtures.
If using a 120V 60Hz power supply, DO NOT connect in series more than 5 units; use another main supply for the next 5 fixtures.

There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.
The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

3. Technical Specifications

Voltage: AC100-240V,50-60Hz
Power Consumption: 150W
DMX Channel: 14 CH
LED Source: ultra bright 100W white LED
Beam Angle: 15°
Lumin: 3420 Lux @ 5m
Control Mode: DMX512, Master/Slave, Auto, Sound.
Support RDM
Color Wheel: 7 colors + white, spilt colors , rainbow effect.
Fixed Gobo Wheel: 7 gobos + blank, rainbow effect, gobo shake.
Rotation Gobo Wheel: 6 glass gobos + blank , Rainbow effect, gobo shake.
Prism: 3-facet prism, can adjustable rotating speed and direction.
Movement: Pan: 540° Tilt: 270°,Pan/Tilt speed adjustable.
Strobe: 1-20t/s
Dimmer: 0-100% linear dimming
Focus: motorized focus
Size: 28*21.5*37 cm
N.W.: 5.9 kg
G.W.: 7.0 kg

4. Interface Description

Main Interface

Top right corner 2 button for screen rotation and language switching.
Bottom row four button corresponding subinterface is introduced, it's in the back.

5. Subinterface

Setting

Option	Description	
Run Mode	DMX	Slave status: Receive DMX signals from the console or Master
	Sound	Auto run ; Master status: Auto run and send DMX signal to slave
	Random	
	Auto	
DMX Address	001-512	Press "OK" key enter into edit status, then press "UP" "DOWN" to change DMX address. press "OK" key save and exit edit status.
Channel Mode	Std.14CH	Standard 14 Channel Mode
Top Lamp Temp	001-110	
Sound Regulator	-006 --- +006	
Invert Pan	OFF	ON for starting and ending , the default is OFF.
	ON	
Invert Tilt	OFF	ON for starting and ending , the default is OFF.
	ON	
Pan-Tilt Swap	OFF	
	ON	Exchange Pan/Tilt channel (include Pan/Tilt Fine)
Pan-Tilt Encoder	ON	Use encoder (optocoupler) to determine out of step and automatically correct position
	OFF	Correct position without encoder (optocoupler)
RDM	ON	Support RDM function
	OFF	
No DMX Signal	KEEP	Continue running as it is
	CLEAR	All motors return to the position and stop running.
Display	ON	
	OFF	
Lamp On@Startup	OFF	
	ON	
Load Default		Press the "OK" button to see the confirmation dialog, press "OK" again The key restores the default settings

Manual Control

This interface is used to control the current fixture and automatically enters the Master state (does not receive the DMX signal and sends a DMX signal to the slave).

Option	Description	
Pan	0-255	
Pan Fine	0-255	
Tilt	0-255	
Tilt Fine	0-255	
Pan-Tilt Speed	0-255	
Dimmer	0-255	Orange indicates selected, Press "OK" key enter into Edit status, then press "UP" "DOWN" to select, press "OK" save and Exit edit status.
Shutter/Strobe	0-255	
Color	0-255	
Gobo	0-255	
Gobo 1	0-255	
Gobo1 RT	0-255	
Prism	0-255	
Focus	0-255	
Reset		Press "OK" to see the confirmation dialog box, press "OK" again to enter the reset interface, all motor reset

System

Option	Description	
Lamp Temp		
DMX Monitor		This enters the sub-interface and displays the channel values as values for viewing.
System Errors	(See common mistakes Rear)	If the red ERR indicator is lit, the luminaire is running. An error can be made by going to the sub-interface for details. After viewing, you can press the "Clear" button to clear the error record.
DIS: J017-J11D-LSPOT-A01	Version No.	
N: J017-J11D-LSPOT-A01	Version No.	
DATE:		
TIME:		

Advanced

Password is "Up Up Up Down Down Down", then press the OK key enter into the Advanced Interface.

Option	Description	
Sensor Monitor	Hall 1-6 State	
	Hall XY State	
	Pan Tilt Codewheel State	
	Pan Codewheel Step	
	Tilt Codewheel Step	

Reset Calibration	Pan Calibration	After entering the sub-interface, you can adjust the motor such as X-axis and Y-axis. Reset position to compensate for errors in hardware installation, Adjustment range -128~+127, +0 means no adjustment.
	Tilt Calibration	
	Color Calibration	
	Gobo Calibration	
	Focus Calibration	
	Prism Calibration	
	Rt Gobo Calibration	
Zero Point Correction	ON	

6. DMX Channel Table

CH	14 Channel Mode
1	Pan
2	Pan Fine
3	Tilt
4	Tilt Fine
5	Pan/Tilt Speed
6	Dimmer
7	Shutter/Strobe
8	Color
9	Fixed Gobo Wheel
10	Rotation Gobo Wheel
11	Gobo rotate
12	Prism
13	Focus
14	Reset

PAN – channel 1
PAN FINE – channel 2
TILT – channel 3
TILT FINE – channel 4
PAN-TILT TIME – channel 5

	Timing Channel	Channel function	Remark
0-255	Pan-Tilt time	Pan-Tilt-(Pan fine-Tilt fine)	255 SLOW SPEED …… …… 0 FAST SPEED

DIMMER – channel 6

BIT	EFFECT	Note
255	Brightness 100%	
……	……	
0	Brightness 0%	

STOP/STROBE – channel 7

BIT	EFFECT	Note
252-255	UNUSED	Controlled by Dimmer CH
251	FAST STROBE	
……	……	
4	SLOW STROBE	
0-3	UNUSED	Controlled by Dimmer CH

COLOUR WHEEL – channel 8

BIT	EFFECT	Note
255	FAST ROTATION	
……	……	
80	SLOW ROTATION	
75-79	ORANGE + WHITE	
70	CYAN + ORANGE	
65	PINK+ CYAN	
60	YELLOW+ PINK	
55	BLUE+ YELLOW	
50	GREEN+ BLUE	
45	RED+ GREEN	
40	WHITE+ RED	
35-39	ORANGE	
30	CYAN	

25	PINK	
20	YELLOW	
15	BLUE	
10	GREEN	
5	RED	
0	WHITE	

FIXED GOBO WHEEL – channel 9

BIT	EFFECT	Note
251-255	GOBO 7 SHAKE, SLOW to FAST	
……	……	
221-225	GOBO 1 SHAKE, SLOW to FAST	
220	FAST ROTATION (Clockwise)	
……	……	
135	SLOW ROTATION (Clockwise)	
130-134	WHITE	
129	SLOW ROTATION (Counterclockwise)	
……	……	
80	FAST ROTATION (Counterclockwise)	
70-79	GOBO 7	
60	GOBO 6	
50	GOBO 5	
40	GOBO 4	
30	GOBO 3	
20	GOBO 2	
10	GOBO 1	
0	WHITE	

ROTATION GOBO WHEEL – channel 10

BIT	EFFECT	Note
251-255	GOBO 6 SHAKE, SLOW to FAST	
……	……	
226-230	GOBO 1 SHAKE, SLOW to FAST	
225	FAST ROTATION (Clockwise)	
……	……	
135	SLOW ROTATION (Clockwise)	
130-134	WHITE	
129	SLOW ROTATION (Counterclockwise)	
……	……	
70	FAST ROTATION (Counterclockwise)	
60-69	GOBO 6	
50	GOBO 5	
40	GOBO 4	
30	GOBO 3	
20	GOBO 2	
10	GOBO 1	
0	WHITE	

GOBO ROTATE – channel 11

BIT	EFFECT	Note
255	FAST ROTATION (Counterclockwise)	
……	……	
193	SLOW ROTATION (Counterclockwise)	
191-192	STOP	
190	SLOW ROTATION (Clockwise)	

......	......	
128	FAST ROTATION (Clockwise)	
127	FAST ROTATION (Clockwise)	
......	......	
64	SLOW ROTATION (Clockwise)	
0-63	POSITION	

PRISM – channel 12

BIT	EFFECT	Note
255	PRISM FAST ROTATION	
......	......	
15	PRISM SLOW ROTATION	
10-14	PRISM INSERTED	
0-9	PRISM EXCLUDED	

FOCUS – channel 13

BIT	EFFECT	Note
255	Focus 100%	
......	......	
0	Focus 0%	

RESET – channel 14

BIT	EFFECT	Note
250-255	COMPLETE RESET	Reset is activated passing through the unused range and staying 5 seconds.
0-249	UNUSED RANGE	

7. CLEANING

To make sure the stable run of the moving head, you should keep it clean. All fans, lens and color filters, do not use any soluble detergent when cleaning the color filter avoiding the damage to LED.