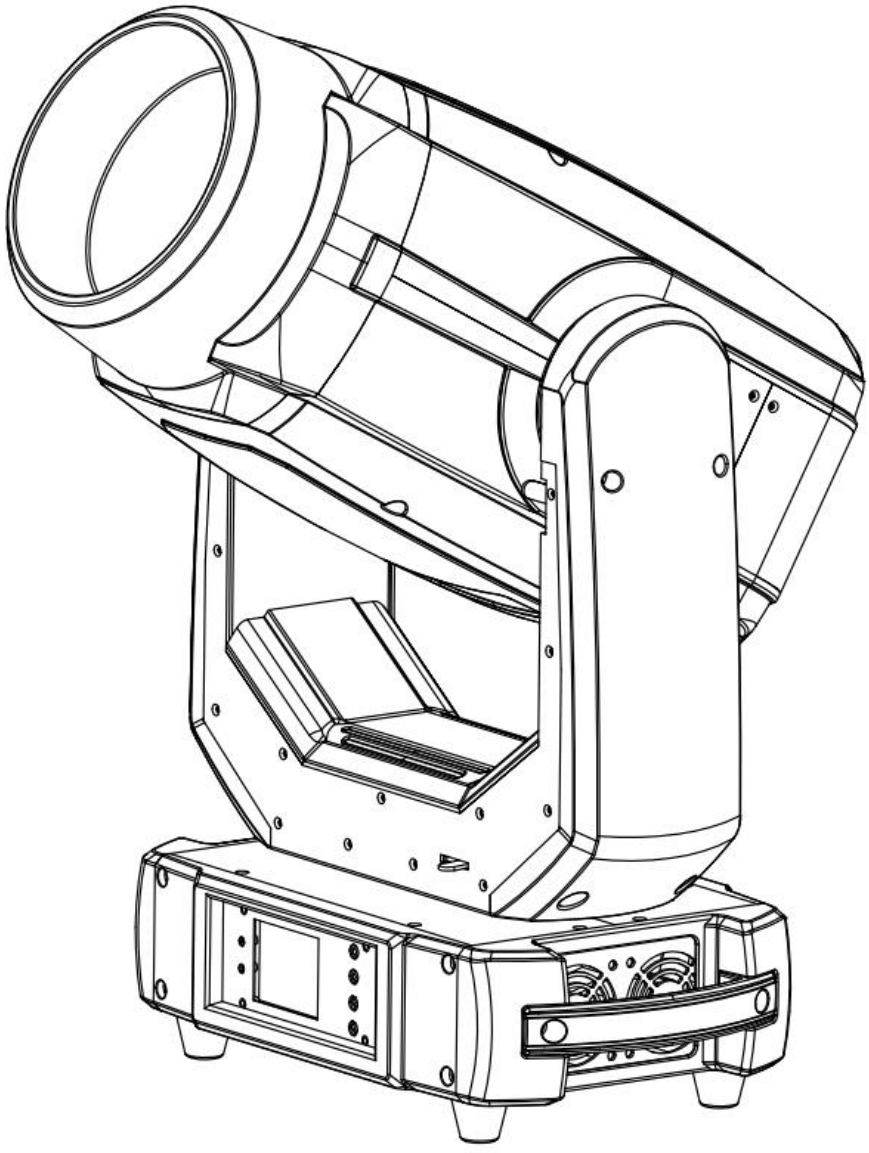
LED POINTE 480 BSW Moving Head Light



User Manual

Please read the instruction carefully before use

CONTENTS

1. Safety Instruction

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

WARNING

Please keep this User Guide for future consultation. If you sell the unit to another us er, be sure that they also receive this instruction manual.

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 th e power requirements of the unit.

It's important to ground the yellow/green conductor to earth in order to avoid electr ic 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 fro m adjacent surfaces. Be sure that no ventilation slots are blocked. Disconnect mai n power before replacement or servicing.

Make sure there are no flammable materials close to the unit while operating as it i s fire hazard.

Use safety cable when fixes this unit. DO NOT handle the unit by taking its head onl y, but always by taking its base.

Maximum ambient temperature is Ta: 40℃. DO NOT operate it where the temperat ure is higher than this.

Unit surface temperature may reach up to 85℃. DO NOT touch the housing bare-ha nd during itsoperation. Turn off the power and allow about 15 minutes for the unit t o cool down before replacing or serving.

In the event of serious operating problem, stop using the unit immediately. Never tr y to repair the unit by yourself. Repairs carried out by unskilled people can lead to da

mage 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.

For AC 120V, 60Hz power supply, maximum fixtures that can be connected together from the same mains outlet is 4pcs;
For AC 230V, 50Hz power supply, maximum fixtures that can be connected together from the same mains outlet is 8pcs;

Caution

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.

2. TECHNICAL PARAMETERS

Light source model: 420w white led

Maximum power: 600W

Power supply: 100v-240v 50-60Hz

Color temperature: 8500k-9000k

CRI:70

Lamp life: 20000 hours

Zoom angle: 3.2 ° - 42.6 °

Control mode: DMX512, master-slave operation, sound control

Support RDM function, DMX software upgrade function

Optional network function support: artnet, klingnet, sacn, network protocol

Channel mode: 39CH

Pan: 540 degree + fine continuous roration
（Magnetic encoder）

Tilt: 270 degree + fine （Magnetic encoder）

Color Wheel: 13colors + open, with rainbow effect

Virtual Colour wheel（Linear CMY）
CTO Wheel : 2700K-9000K (linear CTO)
Static Gobo Wheel: 10 gobos + open, with rotation and running water effect

（7 metal gobos and 4 beam reducers）

Rotation gobo wheel:9 gobos+open Animation Wheel

Prism: 2 prism wheel(4prism)

Prism1:Rotating 6-facet linear prism with continuous rotation in both directions

Prism2:Rotating 18-facet circular prism with continuous rotation in both directions

Prism wheel 2

Prism3:Rotating 6-facet linear prism with continuous rotation in both directions

Prism4:Rotating 8-facet circular prism with continuous rotation in both directions

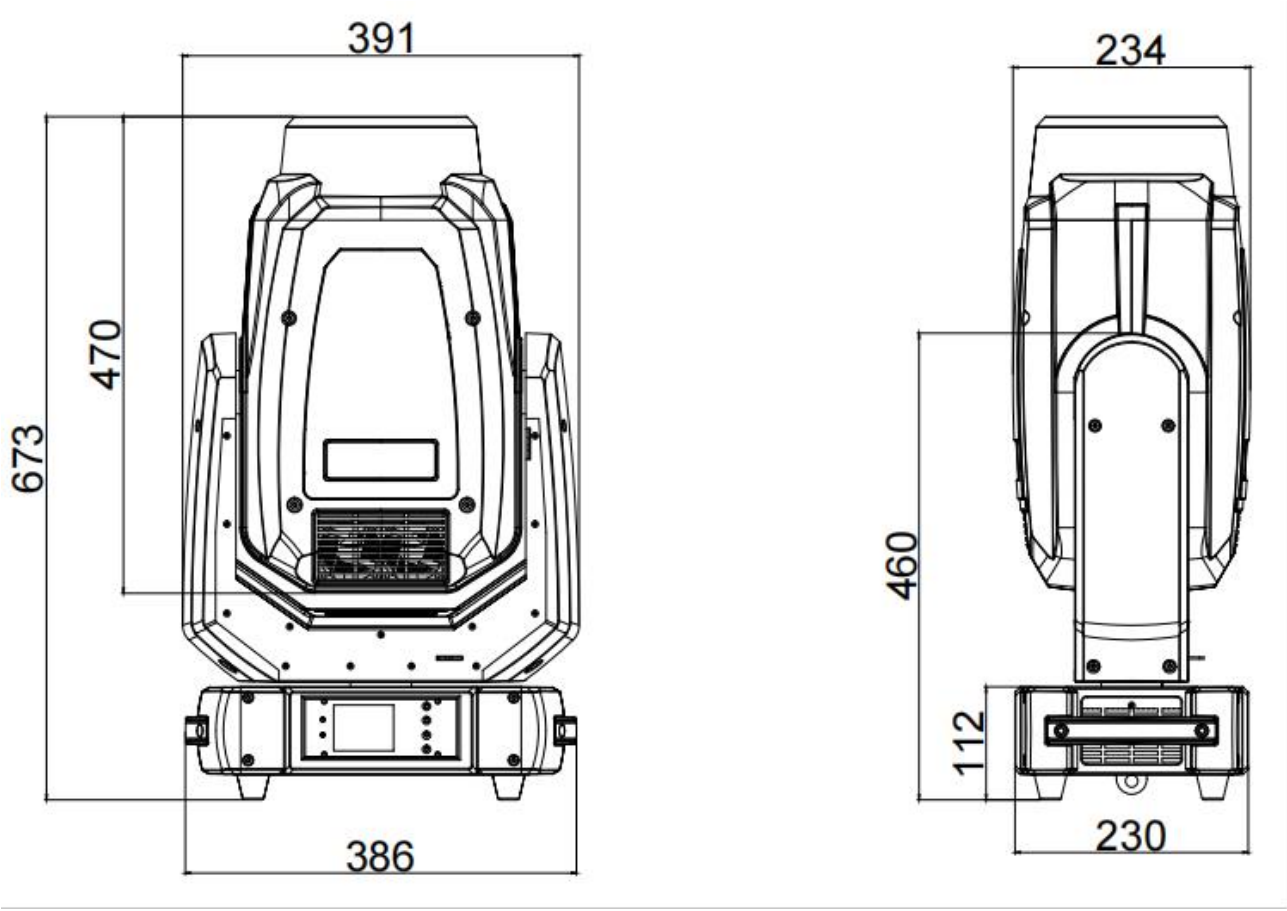
Frost: With Double frost effect

Focus: motorized focus

Display: Color LCD, Chinese and English display, reverse display

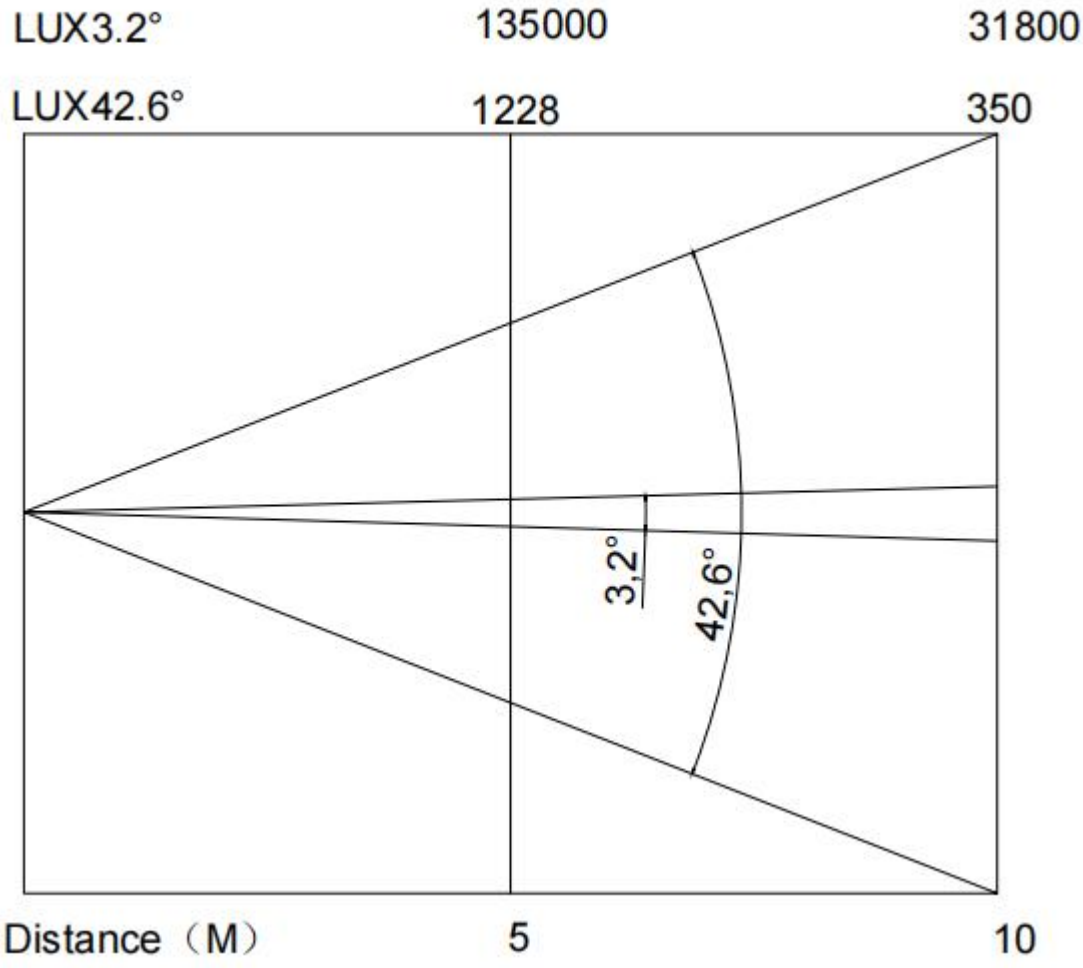
Package size:650*600*495MM

Net weight: 21.5kg



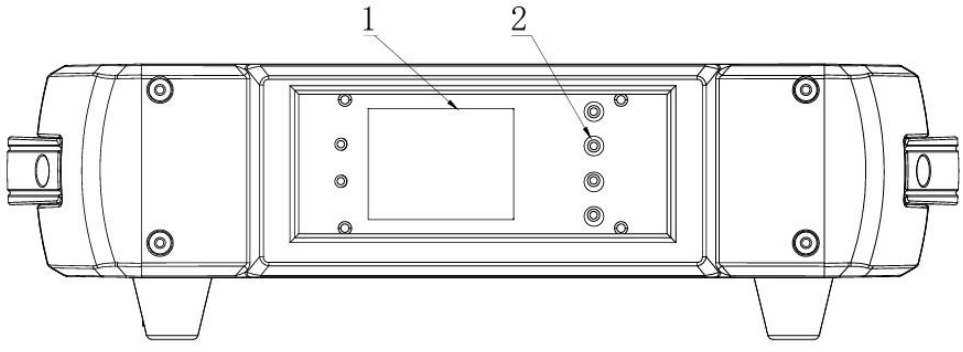
3. Optical Lumen Diagram

PHOTO METRICS DIAGRAM



4. Description

4.1 Fixture Overview

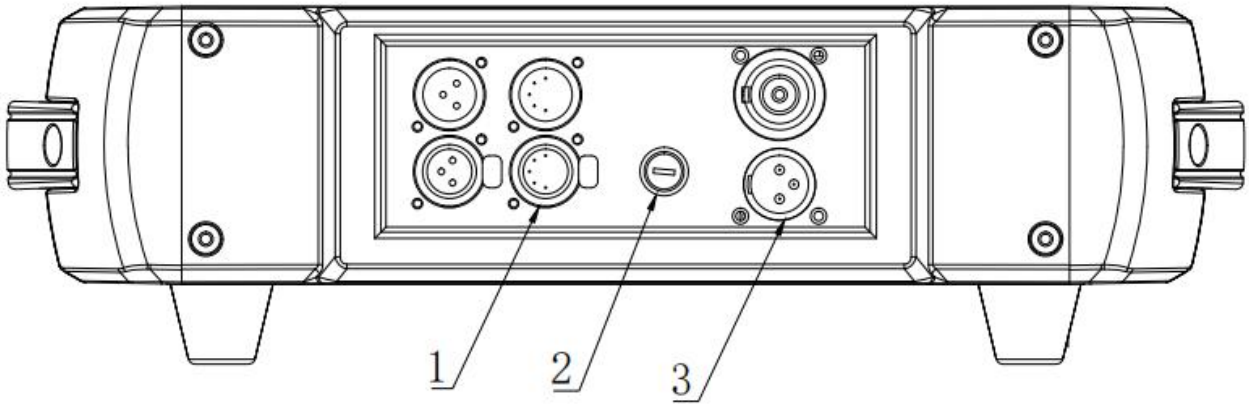


1. Display:

To show the various menus and the selected functions

2. Button:

MENU	To enter into move backward or leave the menu
▲ **UP**	To go backward to move up in the menu
▼ **DOWN**	To go forward to move down in the menu
ENTER	To perform the desired functions



1. DMX IN/OUT:

DMX512 link, use 3/5pin XLR cable to link the fixture and the DMX controller, use 3/5 pin XLR cable to link the next fixture

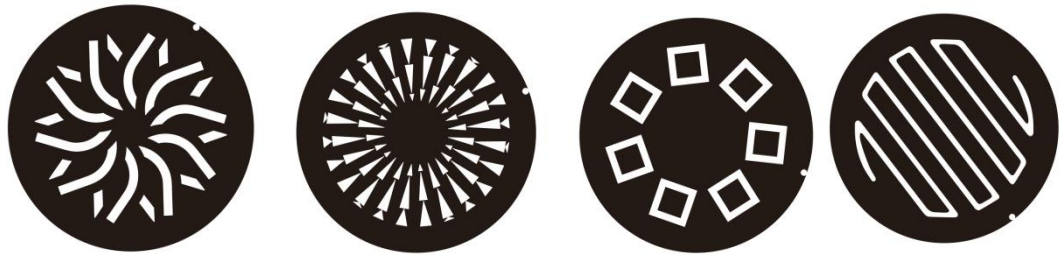
2. Fuse (T 10A):

Protects the unit from over-voltage or short circuit

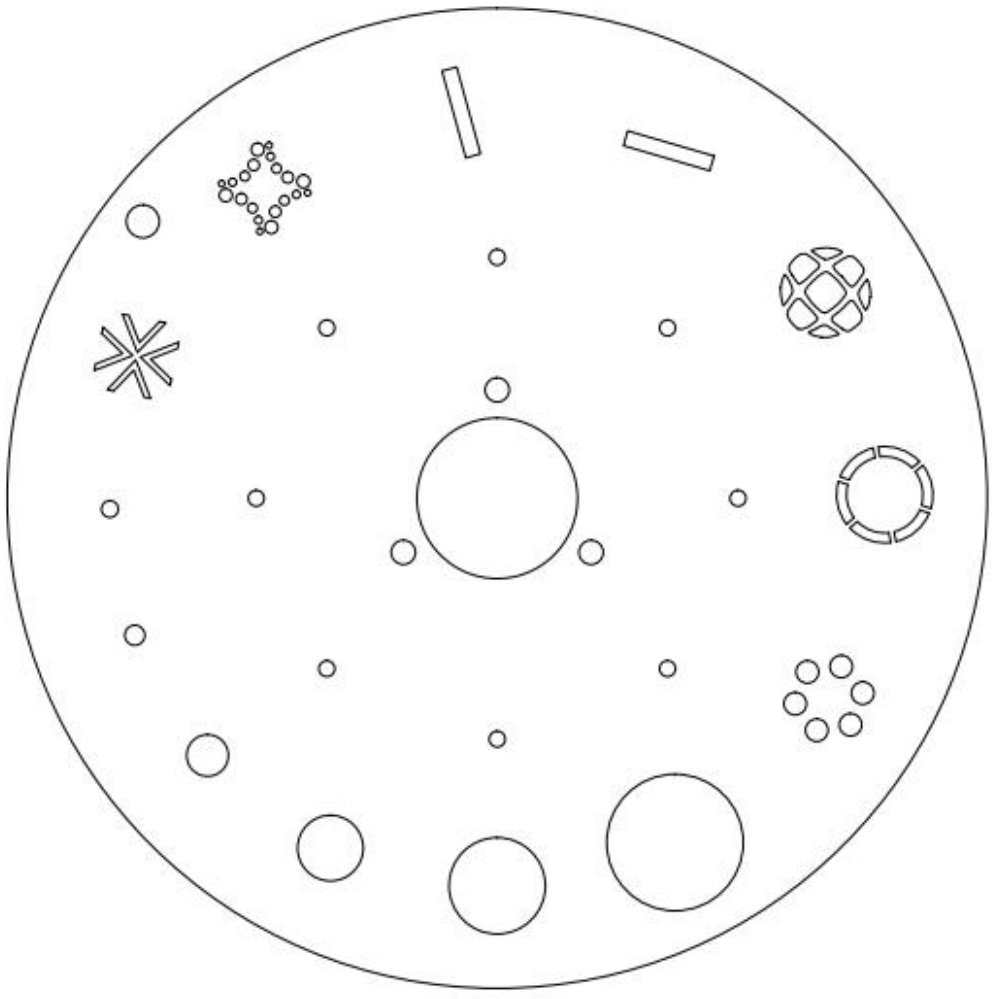
3. Power Cable:IN/OUT

4.2 Gobo and Color

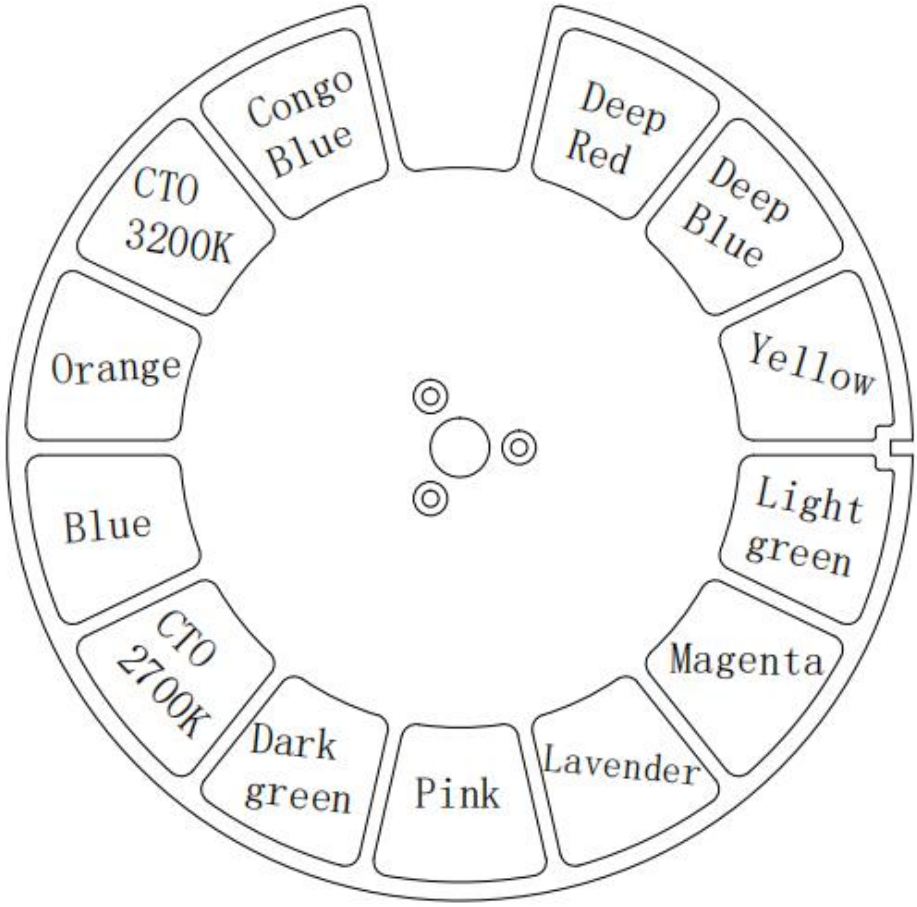
Rotating Gobo Wheel



Fixed Gobo Wheel



Colour wheel



Virtual Colour wheel

DANGER!

Install the gobos with the device switched off only.

Unplug from mains before changing gobos!

4.3 Main Function

To select any of the given functions, press the MENU button until the required functi on is showing on the display. Select the function by pressing the ENTER button and t he display will blink. Use the DOWN/UP buttons to change the mode. Once the requi red mode has been selected, press the ENTER button to setup, to go back to the func tions without any change press the MENU button again. Press and hold the MENU b utton for about one second or wait for one minute to exit the menu mode.

The main functions are shown overleaf:

MAIN MENU	SUBMENU	TERTIARY MENU
Dmx Address	Address	001 -512
	Dmx Mode	39CH
	SysRst	
Work Mode	Dmx Ctrl	
	Auto Run	
	Sound Ctrl	
	Scene Mode	Auto /1-10
	M/S Choose	Auto /1-10
	Light Switch	ON/OFF
Display	Language	English/中文
	Screen saver	Mode1-4/off
	Screen Rot	Auto/Forward
	DMX Indicate	Mode1-3

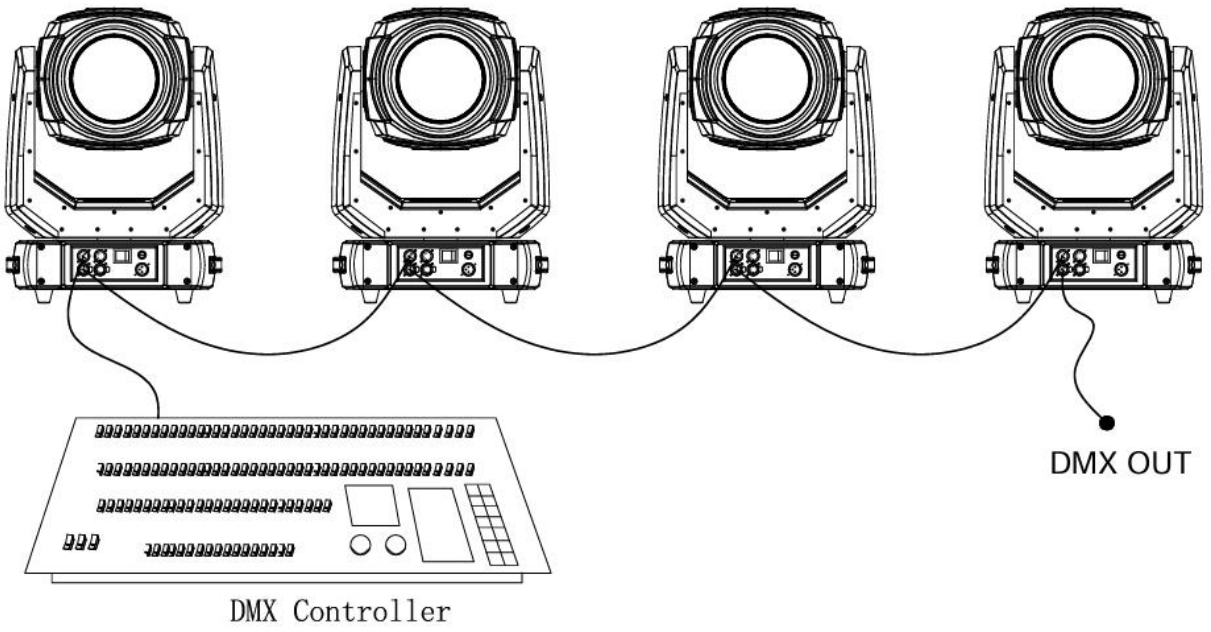
	Singnal Bright	1-10
	Screen Light	1-10
	Touch Enable	ON/off
	Touch Rectify	
Scene	Scene Select	1-10
	Scene times	0-255
	Control mode	ON/OFF
	01.Pan	0-255
	02.Pan Fine	0-255
	03.Tilt	0-255
	04.Reset	0 - 255
	05.Cyan	0 - 255
	06.Magenta	0 - 255
	07.Yellow	0 - 255
	08.Colour	0 - 255
	09.Colour F	0 - 255
	10.Eft Speed	0 - 255
	11.CMY times	0 - 255
	12.Colour3	0 - 255
	13.ZFFP times	0 - 255
	14.Eft Irt	0 - 255
	15.Eft gobo	0- 255
	16.MODE	0 - 255
	17.GOBO	0 - 255
	18.ROt gobo	0 - 255
	19.Gobe RF	0 - 255
	20.Prism1	0 - 255
	21.Prism 1R	0 - 255

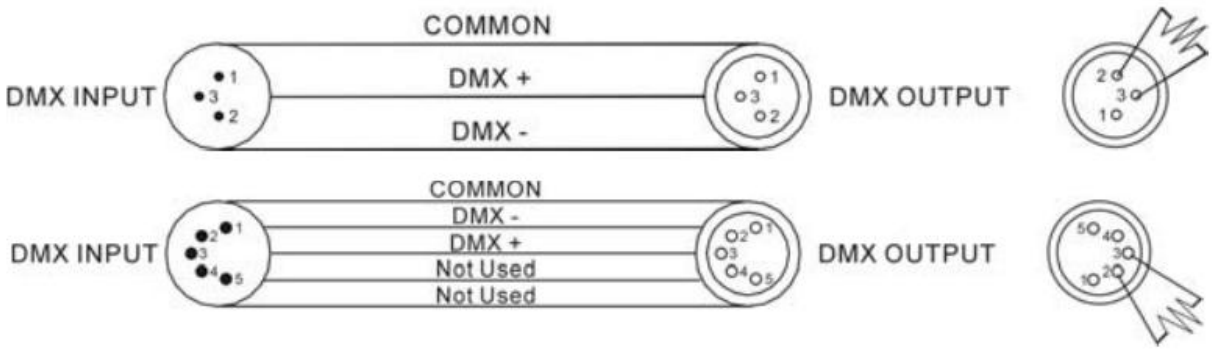
	22.Prism2	0 - 255
	23.Prism 2R	0 - 255
	24.Pattern	0 - 255
	25.Pattern R	0 - 255
	26.Beam Shpae	0 - 255
	27.Beam Shpae	0 - 255
	28.Frost	0 - 255
	29.Zoom	0 - 255
	30.Zoom F	0 - 255
	31.Focus	0 - 255
	32.Focus F	0 - 255
	33.Hot-spot	0 - 255
	34.Strobe	0 - 255
	35.Dimmer	0 - 255
	36.Dimmer Spd	0 - 255
Advanced	Pan Invert	Close/Open
	Tilt Invert	Close/Open
	P/T Rectrify	Close/Open
	Pan offset	1-150
	Tilt offset	1-150
	Data hold	On/off
	Scene time	1-255
	Lamp when	Manual time
Status	Stepper onfo	01.Pan
		03.Tilt
		GOBO1
		GOBO2
		GOBO3
		CMY1

		CMY2
		CMY3
		COLOR1
		COLOR2
		PRISM1
		PRISM2
		PRISM ROT1
		PRISM ROT2
		FOCUS1
		ZOOM1
		FROST
		MILD
		DIMMER
		MT2
	Error logging	
	Fixture Status	Communication prec 100%
		Error CNT
		LIGHT Temperature
		Panel Temperature
		Sensor1 Temperature
		Sensor2 Temperature
	Version	H3.12
	Light time	000000
	Total time	000000
	Serial Number	
Escape		

5.How to Set the DMX control

5.1 DMX 512 Connection





1. At last unit, the DMX cable has to be terminated with a terminator. Solder a 120 o hm 1/4W resistor between pin 2(DMX-) and pin 3(DMX+) into a 3-pin XLR-plug and pl ug it in the DMX-output of the last unit.

2. Connect the unit together in a `daisy chain` by XLR plug from the output of the uni t to the input of the next unit. The cable can not branched or split to a `Y` cable. DM X 512 is a very high-speed signal. Inadequate or damaged cables, soldered joints or c

orroded connectors can easily distort the signal and shut down the system.

3. The DMX output and input connectors are pass-through to maintain the DMX circu it, when power is disconnected to the unit.

4. Each lighting unit needs to have an address set to receive the data sent by the con troller. The address number is between 0-511 (usually 0 & 1 are equal to 1).

5. The end of the DMX 512 system should be terminated to reduce signal errors.

6. 3 pin XLR connectors are more popular than 5 pin XLR.

3 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

5 pin XLR: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)

Pin 4/5: Not used.

5.2 DMX Address Setting

By using a universal DMX controller to control the units, you will need to set DMX ad dress from 1 to 512 so that the units can receive DMX signal.

Press the MENU button up to when the DMX Address is showing on the display. Pres sing the ENTER button and the display will blink. Use the UP/DOWN buttons to chang e the DMX address.

Once the address has been selected, press the ENTER button to setup, to go back to t he functions without any change press the MENU button again. Press and hold the M ENU button about one second or wait for about one minute to exit the menu mode.

Please refer to the following diagram to address your DMX512 c hannel for the first 4 units：

Channel Mode	Unit 1 Address	Unit 2 Address	Unit 3 Address	Unit 4 Address
39CH	1	40	79	118

6.DMX Mode

39CH Mode

39CH	DMX value	Function
1	0 - 255	**Pan** Pan movement by 540° (128=default)
2	0 - 255	**Pan Fine** Fine control of pan movement (0=default)
3	0 - 255	**Tilt** Tilt movement by 270° (128=default)
4	0-255	**Tilt fine** Fine control of tilt movement (0=default)
5	0 1 2-127 128-189 190-193 194-255	**Pan control** Pan range 540°, shortcut Off (0=default) Pan range 360°, shortcut On No function (Pan range 540°, shortcut Off) Continuous rotation fast -> slow , Forwards Stop rotation Continuous rotation slow -> fast , Backwards
6	0 1 2 - 255 2 - 255	**Pan/Tilt speed , Pan/Tilt time** Standard mode (0=default) Max. Speed Mode *Pan/Tilt speed mode* Speed from max. to min. *Pan/Tilt time mode* Time from 0.2 s to 25.5 sec.
7	20-21 22-23 24-27 28-29 30-31 32-33 34-35 130-131 132-133 134-135 136-137 138-139	**Power/Special functions** Display On Display Off Reserved Dimmer curve: Square law Dimmer curve: Linear Fans mode: Auto Fans mode: High Total fixture reset (including pan/tilt) Pan/Tilt reset Colour wheels reset Gobo wheels reset Zoom/Focus/prisms/frost reset
8		**LED frequency selection** Factory display menu setting: 600Hz

	0-4 5-9 10-14 15-19 20-24 25-29 30-255	*Select PWM output frequency of LEDs. Selected PWM frequency can be fine adjusted in 127 steps up/down around selected PWM frequency on the channel below. Corresponding menu item is temporarily overridden.* PWM frequency from Display menu (fixture utilizes PWM frequency set in the display menu item Frequency Setup). 300 Hz 600 Hz (10=default) 1200 Hz 2400 Hz High Reserved (fixture utilizes PWM frequency set in the display menu item Frequency Setup).
9		Empty
10		Empty
11		**Colour wheel**
		Continual positioning
	0	Open/white
	9	Deep Red
	18 27 37 46 55 64 73 82 91 101 110 119 128-129 130-134 135-138 139-143 144-147 148-152 153-157 158-161 162-166 167-171 172-176 177-180 181-185 186-189 190 - 215	Deep Blue Yellow Light green Magenta Lavender Pink Dark green CTO 2700K Blue Orange CTO 3200K UV (Kongo blue) White ***Positioning*** Deep Red Deep Blue Yellow Light green Magenta Lavender Pink Dark green CTO 2700K Blue Orange CTO 3200K UV (Kongo blue) Forwards rainbow effect from fast to slow

	216 - 217	No rotation
	218 - 243	Backwards rainbow effect from slow to fast
	244 - 249	Random colour selection by audio control
		(Set microphone sensitivity in menu „Personality")
	250 - 255	Auto random colour selection from fast to slow
12		**Colour wheel - fine positioning**
	0 - 255	Fine positioning (0=default)
13		**Cyan**
	0 - 255	Cyan from min. saturation --> full cyan (0=default)
14		**Magenta**
	0 - 255	Magenta from min. saturation --> full magenta (0=default)
15		**Yellow**
	0 - 255	Yellow from min. saturation --> full yellow (0=default)
16		**Virtual CTO**
	0-255	Colour temperature change from 6700K --> 2700K (0=default)
17		Green correction
	0	Uncorrected white
	1-127	Minus green --> uncorrected white
	128	Uncorrected white (128=default)
	129-255	Uncorrected white --> Plus green
18		**Virtual colour wheel**
	0	No function (0=default)
	1-2	Filter 4 (Medium Bastard Amber)
	3-4	Filter 10 (Medium Yellow)
	5-6	Filter 19 (Fire)
	7-8	Filter 26 (Bright Red)
	9-10	Filter 58 (Lavender)
	11-12	Filter 68 (Sky Blue)
	13-14	Filter 71 (Tokyo Blue)
	15-16	Filter 79 (Just Blue)
	17-18	Filter 88 (Lime Green)
	19-20	Filter 90 (Dark Yellow Green)
	21-22	Filter 100 (Spring Yellow)
	23-24	Filter 101 (Yellow)
	25-26	Filter 102 (Light Amber)
	27-28	Filter 103 (Straw)
	29-30	Filter 104 (Deep Amber)
	31-32	Filter 105 (Orange)
	33-34	Filter 106 (Primary Red)
	35-36	Filter 111 (Dark Pink)
	37-38	Filter 115 (Peacock Blue)
	39-40	Filter 116 (Medium Blue-Green)
	41-42	Filter 117 (Steel Blue)
	43-44	Filter 118 (Light Blue)
	45-46	Filter 119 (Dark Blue)
	47-48	Filter 120 (Deep Blue)
	49-50	Filter 121 (Filter Green)
	51-52	Filter 128 (Bright Pink)

	53-54	Filter 131 (Marine Blue)
	55-56	Filter 132 (Medium Blue)
	57-58	Filter 134 (Golden Amber)
	59-60	Filter 135 (Deep Golden Amber)
	61-62	Filter 136 (Pale Lavender)
	63-64	Filter 137 (Special Lavender)
	65-66	Filter 138 (Pale Green)
	67-68	Filter 139 (Primary Green)
	69-70	Filter 141 (Bright Blue)
	71-72	Filter 147 (Apricot)
	73-74	Filter 148 (Bright Rose)
	75-76	Filter 152 (Pale Gold)
	77-78	Filter 154 (Pale Rose)
	79-80	Filter 157 (Pink)
	81-82	Filter 158 (Deep Orange)
	83-84	Filter 162 (Bastard Amber)
	85-86	Filter 164 (Flame Red)
	87-88	Filter 165 (Daylight Blue)
	89-90	Filter 169 (Lilac Tint)
	91-92	Filter 170 (Deep Lavender)
	93-94	Filter 172 (Lagoon Blue)
	95-96	Filter 179 (Chrome Orange)
	97-98	Filter 180 (Dark Lavender)
	99-100	Filter 181 (Congo Blue)
	101-102	Filter 197 (Alice Blue)
	103-104	Filter 201 (Full C.T. Blue)
	105-106	Filter 202 (Half C.T. Blue)
	107-108	Filter 203 (Quarter C.T. Blue)
	109-110	Filter 204 (Full C.T. Orange)
	111-112	Filter 205 (Half C.T. Orange)
	113-114	Filter 206 (Quarter C.T. Orange)
	115-116	Filter 247 (Filter Minus Green)
	117-118	Filter 248 (Half Minus Green)
	119-120	Filter 281 (Three Quarter C.T. Blue)
	121-122	Filter 285 (Three Quarter C.T. Orange)
	123-124	Filter 352 (Glacier Blue)
	125-126	Filter 353 (Lighter Blue)
	127-128	Filter 715 (Cabana Blue)
	129-130	Filter 778 (Millennium Gold)
	131-132	Filter 793 (Vanity Fair)
	133-255	Reserved
19		**CMY and Colour wheel time**
	0	Function is off (0=default)
	1 - 255	Time of CMY and Colour wheel movement (0.1sec-->25.5sec.)
20		**Zoom/Focus/Frost/Prism time**
	0	Function is off (0=default)
	1 - 255	Time of zoom, focus and frost movement (0.1 sec-->25.5 sec.)
	1-50	Time of prism movement (0.1 sec-->5 sec.)

21		**Static gobo wheel**
	0-1	Open/hole (0=default)
		Positioning
	2-8	Gobo 1
	9-15	Gobo 2
	16-22	Gobo 3
	23-29	Gobo 4
	30-36	Gobo 5
	37-43	Gobo 6
	44-50	Gobo 7
	51-57	Beam reducer 1
	58-64	Beam reducer 2
	65-71	Beam reducer 3
	72-78	Beam reducer 4
		Shaking gobos from slow to fast
	79-89	Gobo 1
	90-100	Gobo 2
	101-111	Gobo 3
	112-122	Gobo 4
	123-133	Gobo 5
	134-144	Gobo 6
	145-155	Gobo 7
	156-166	Beam reducer 1
	167-177	Beam reducer 2
	178-188	Beam reducer 3
	189-199	Beam reducer 4
	200-201	Open/hole
	202 - 222	Forwards gobo wheel rotation from fast to slow
	223 - 243	Backwards gobo wheel rotation from slow to fast
	244 - 249	Reserved
	250 - 255	Auto random gobo selection from fast to slow
22		**Rotating gobo wheel**
		Index - set indexing on channel 24
	0-4	Open/Hole (0=default)
	5-7	Gobo 1
	8-10	Gobo 2
	11-13	Gobo 3
	14-16	Gobo 4
	17-19	Gobo 5
	20-22	Gobo 6
	23-25	Gobo 7
	26-28	Gobo 8
	29-31	Gobo 9
		Rotation - set rotation on channel 24
	32-34	Gobo 1
	35-37	Gobo 2
	38-40	Gobo 3
		Gobo 4

	41-43	Gobo 5
	44-46	Gobo 6
	47-49	Gobo 7
	50-52	Gobo 8
	53-55	Gobo 9
	56-59	***Continual positioning***
		Index - set indexing on channel 24
		Open/hole
	60	Gobo 1
	67	Gobo 2
	74	Gobo 3
	81	Gobo 4
	88	Gobo 5
	95	Gobo 6
	102	Gobo 7
	109	Gobo 8
	116	Gobo 9
	123	Open/hole
	130	***Continual positioning***
		Rotation - set rotation on channel 24
	131	Open/hole
	138	Gobo 1
	145	Gobo 2
	152	Gobo 3
	159	Gobo 4
	166	Gobo 5
	173	Gobo 6
	180	Gobo 7
	187	Gobo 8
	194	Gobo 9
	201	Open/hole
	202 - 222	Forwards gobo wheel rotation from fast to slow
	223 - 243	Backwards gobo wheel rotation from slow to fast
	244 - 249	Reserved
	250-255	Auto random gobo selection from fast to slow
23		**Rotating gobo wheel - fine positioning**
	0 - 255	Fine positioning (0=default)
24		**Rot. Gobo indexing/rotation**
		Gobo indexing - set position on channel 22
	0 - 255	Gobo indexing (128=default)
		Gobo rotation - set position on channel 22
	0	No rotation
	1 - 127	Gobo rotation from fast to slow - CW (clockwise)
	128	No rotation (128=default)
	129 - 255	Gobo rotation from slow to fast - CCW (counterclockwise)
25		**Rot. Gobo indexing/rotation - fine**
	0-255	Fine indexing/rotation (0=default)

26		**Prism wheel 1** ***Note: prism wheel 1 and frost cannot be be inserted into light beam at the same time***
	0-3	Open position/hole (0=default)
		Index - set indexing on channel 27
	4-7	Prism 1- 18-facet circular
	8-11	Prism 2 - 6-facet linear
		Rotation - set rotation on channel 27
	12-15	Prism 1- 18-facet circular
	16-19	Prism 2 - 6-facet linear
	20-255	Reserved
27		**Prism wheel 1 indexing/rotation** ***Prism indexing - set position on channel 26***
	0 - 255	Prism indexing
		Prism rotation - set position on channel 26
	0	No rotation
	1 - 127	Prism rotation from fast to slow - CW (clockwise)**
	128	No rotation (128=default)
	129-255	Prism rotation from slow to fast - CCW (counterclockwise)**
28		**Prism wheel 2**
		Note: prism wheel 2 and frost cannot be be inserted into light beam at the same time
	0-3	Open position/hole (0=default)
		Index - set indexing on channel 29
	4-7	Prism 1 - 6-facet linear multicoloured
	8-11	Prism 2 - 8-facet 12° circular
		Rotation - set rotation on channel 29
	12-15	Prism 1 - 6-facet linear multicoloured
	16-19	Prism 2 - 8-facet 12° circular
	20-255	Reserved
29		**Prism wheel 2 indexing/rotation** ***Prism indexing - set position on channel 28***
	0 - 255	Prism indexing
		Prism rotation - set position on channel 28
	0	No rotation
	1 - 127	Prism rotation from fast to slow - CW (clockwise)**
	128	No rotation (128=default)
	129-255	Prism rotation from slow to fast - CCW (counterclockwise)**
30		**SpektraBeam (Beam effects)** ***When SpektraBeam is used, the following channels are not active: Prism Wheel 1, Prism Wheel 2, Prism Wheel 1 rot., Prism Wheel 2 rot., Static gobo, Rot. Gobo gobo, Rot. Gobo Rotation (for Effects 13,14,15 only: Cyan, Magenta, Yellow)***
		All effects were done at max. zoom (0 DMX)
	0 - 3	Open position/hole (0=default)
		Index - set indexing on channel 31
	4-5	Effect 1
	6-7	Effect 2

	8-9	Effect 3
	10-11	Effect 4
	12-13	Effect 5
	14-15	Effect 6
	16-17	Effect 7
	18-19	Effect 8
	20-21	Effect 9
	22-23	Effect 10
	24-25	Effect 11
	26-27	Effect 12
		Effects 13, 14, 15 block Cyan, Magenta and Yellow channels
	28-29	Effect 13
	30-31	Effect 14
	32-33	Effect 15
		Rotation - set rotation on channel 31
	34-35	Effect 1
	36-37	Effect 2
	38-39	Effect 3
	40-41	Effect 4
	42-43	Effect 5
	44-45	Effect 6
	46-47	Effect 7
	48-49	Effect 8
	50-51	Effect 9
	52-53	Effect 10
	54-55	Effect 11
	56-57	Effect 12
		Effects 13, 14, 15 block Cyan, Magenta and Yellow channels
	58-59	Effect 13
	60-61	Effect 14
	62-63	Effect 15
	64-255	Reserved
31		**SpektraBeam rotation and indexing**
		When SpektraBeam is used, the following channels are not active: Prism Wheel 1, Prism Wheel 2, Prism Wheel 1 rot., Prism Wheel 2 rot., Static gobo, Rot. Gobo gobo, Rot. Gobo Rotation (for Effects 13,14,15 only: Cyan, Magenta, Yellow)
		SpektraBeam effect indexing - set position on channel 30
	0 - 255	SpektraBeam effect indexing
		SpektraBeam effect rotation - set position on channel 30
	0	No rotation
	1 - 127	SpektraBeam effect rotation from fast to slow - CW (clockwise)**
	128	No rotation (128=default)
	129-255	SpektraBeam effect rotation from slow to fast - CCW (counterclockwise)**
32		**Frost**
		Note: prism 1or 2 and frost cannot be be inserted into light beam at the same time
	0	Open (0=default)

		(Frost cannot stay in intermediate position, it will auto-move to full/open position).
		Light Frost
	1-50	Light Frost from 0% to 100%
	51-53	100% Light Frost
	54-63	Pulse closing from slow to fast
	64-73	Pulse opening from fast to slow
	74-83	Ramping from fast to slow
	84-86	Open
		Medium Frost
	87-136	Medium Frost from 0% to 100%
	137-139	100% Medium Frost
	140-149	Pulse closing from slow to fast
	150-159	Pulse opening from fast to slow
	160-169	Ramping from fast to slow
	170-172	Open
		Combined Frost
	173-222	Medium Frost from 0% to 100% (Light Frost inserted)
	223-225	100% Medium Frost (Light Frost inserted)
	226-235	Pulse closing from slow to fast
	236-245	Pulse opening from fast to slow
	246-255	Ramping from fast to slow
33		Zoom
	0 - 255	Zoom from max. to min.beam angle (128=default)
34		Zoom - fine
	0-255	Fine zooming (0=default)
35		Focus
	0 - 255	Continuous adjustment from far to near (128=default)
36		Focus - fine
	0- 255	Fine focusing (0=default)
37		Shutter/ strobe
	0 - 31	Shutter closed
	32 - 63	Shutter open (32=default)
	64 - 95	Strobe-effect from slow to fast
	96 - 127	Shutter open
	128 - 143	Opening pulse in sequences from slow to fast
	144 - 159	Closing pulse in sequences from fast to slow
	160 - 191	Shutter open
	192 - 223	Random strobe-effect from slow to fast
	224 - 255	Shutter open
38		Dimmer intensity
	0 - 255	Dimmer intensity from 0% to 100% (0=default)

39		Dimmer intensity - fine
	0 - 255	Fine dimming (0=default)

7. Troubleshooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

A. The unit does not work, no light and the fan does not work

1. Check the connection of power and main fuse.

2. Measure the mains voltage on the main connector.

3. Check the power on LED.

B. Not responding to DMX controller

1. DMX LED should be on. If not, check DMX connectors, cables to see if link properly.

2. If the DMX LED is on and no response to the channel, check the address settings and

DMX polarity.

3.If you have intermittent DMX signal problems, check the pins on connectors or on PCB of theunit or the previous one.

4. Try to use another DMX controller.

5. Check if the DMX cables run near or run alongside to high voltage cables that may cause

damage or interference to DMX interface circuit.

C. Some units don’t respond to the easy controller

1. You may have a break in the DMX cabling. Check the LED for the response of the master/

slave mode signal.

2. Wrong DMX address in the unit. Set the proper address.

D. No response to the sound

1. Make sure the unit does not receive DMX signal.

2. Check microphone to see if it is good by tapping the microphone

E. One of the channels is not working well

1. The stepper motor might be damaged or the cable connected to the PCB is broken.

2. The motor's drive IC on the PCB might be out of condition

6. Fixture Cleaning

The cleaning of external optical lenses and/or mirrors must be carried out periodicall y to optimizelight output. Cleaning frequency depends on the environment in whic h the fixture operates: damp,

smoky or particularly dirty surrounding can cause greater accumulation of dirt on th e unit's optics.

Clean with soft cloth using normal glass cleaning fluid.

Always dry the parts carefully.

Clean the external optics at least every 30 days.