60W   LED   SPOT

USER   MANUAL

light
BIG
DESIGN BY GERMANY

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1 PRODUCT (GENERAL)

1.1 PRODUCT INTRODUCTION

This product is designed for indoor use only. Suitable for stage, bar or nightclub applications. Direct input of DMX512 signal allows the fixtures to be controlled from any DMX512 controller. The fixture is fully programmable with one custom program available and is supplied with two automatic programs (all accessible from DMX512 controller). This product can be operated as a single unit or with multiple units for large applications.

1.2 PRODUCT OVERVIEW

1.3 PRODUCT SPECIFICATIONS

Electrical
◆Voltage:AC100~240V, 50/60Hz
◆Rated Power:150W

LED
◆LED:1PC(60W white)
◆Cooling:Forced air convection

Optical System
◆Focus:Electronic focus
◆Dimmer:0~100%
◆Strobe:0~20Hz
◆Rotating 3-facet Prism

Operation
◆Control mode: DMX512/Master-Slave/Auto/Custom/Sound
◆LCD display
◆DMX512 Chs:11CHS/ 14CHS

Pan/Tilt
◆Pan 540° Tilt 270°
◆Pan/Tilt speed
◆User-selectable Pan/Tilt ranges
◆Reverse Pan/Tilt movement

Rotating Gobo
◆7 Gobo (interchangeable)
◆Gobo-flow effect
◆Gobo shake
◆Bi-directional rotation
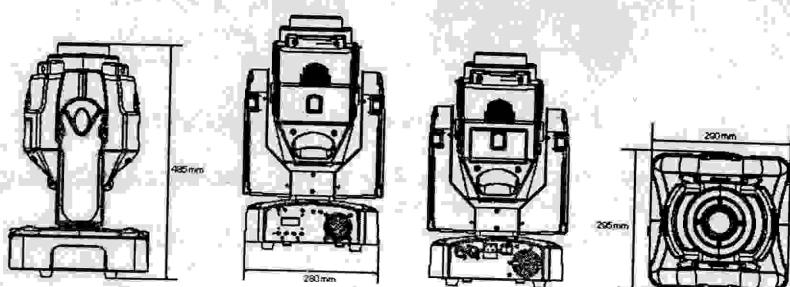
Static Gobo
◆9 Gobo
◆Gobo-flow effect
◆Gobo shake
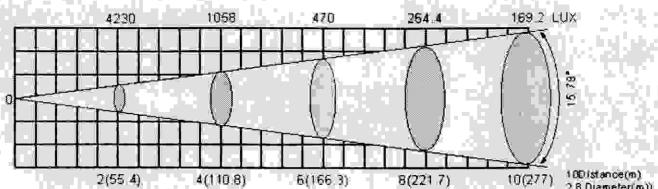
Color
◆8 dichroic - filters + white
◆Rainbow - flow effect

Other features
◆Custom program (255 steps)

◆ Size:295x290x485mm
◆ Weight:14kg


1.4 PHOTOMETRIC DATA

1.5 SAFETY WARNING

IMPORTANT:
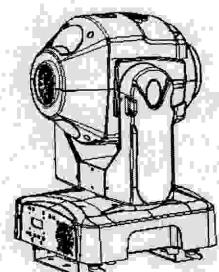
● This product must be installed by a qualified professional.
● Always operate the equipment as described in the user manual.
●A minimum distance of 0.5m must be maintained between the equipment and combustible surface.
● The product must always be placed in a well ventilated area.
● Always make sure that the equipment is installed securely.
●DO NOT stand close to the equipment and stare directly into the LED light source.
● Always disconnect the power supply before attempting and maintenance.
● Always make sure that the supporting structure is solid and can support the combined weight of the products.
● The earth wire must always be connected to the ground.
● Do not touch the power cables if your hands are wet.

● This product left the place of manufacture in perfect condition. In order to maintain this condition and for safe operation, the user must always follow the instructions and safety warnings described in this user manual.
● Avoid shaking or strong impacts to any part of the equipment.
● Make sure that all parts of the equipment are kept clean and free of dust.
● Always make sure that the power connections are connected correct and secure.
● If there is any malfunction of the equipment, contact your distributor immediately.
● When transferring the product, it is advisable to use the original packaging in which the product left the factory.
● Shields, lenses or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
● The lamp (LED) shall be changed if it has become damaged or thermally deformed.

2 INSTALLATION
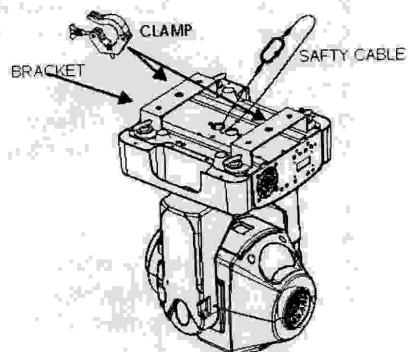
2.1 MOUNTING:

● The LED fixture can be operated in any position at any angle. When mounted on a flat surface, the surface must be strong enough to support 10 times the weight of the fixture and stable so that there will be no damage caused to the fixture or surrounding people or objects because of movements of the fixture on the surface.

● When the unit is mounted in a hanging position, the fixture is attached using the mounting brackets and a standard truss clamp or other clamping device. The mounting brackets supplied are mounted using quick-release locks allowing simple mounting or removal.

CLAMP
BRACKET
SAFTY CABLE

UPRIGHT

HANGING
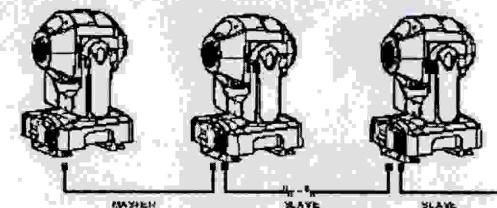
IMPORTANT SAFETY NOTE!!
Always use a safety cable when installing this unit!!
Be sure that the safety cable is connected to a solid load-bearing structure.

2.2 SETTING UP (MASTER/SLAVE)

When units are connected in series using DMX512 signal cable connect the units as shown in the diagram below
● Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the first (MASTER) fixture
● Connect the end of the cable coming from the MASTER fixture which will have a (female) 3 pin connector to the input connector of the next fixture consisting of a (male) 3 pin connector.
● Then proceed to connect from the output as stated above to the input of the following fixture and so on.
● Set the first unit in the series to one of the STAND ALONE modes as described in section 2.2
● All other units in the series should be set to <SLAVE> from the <operation> menu.
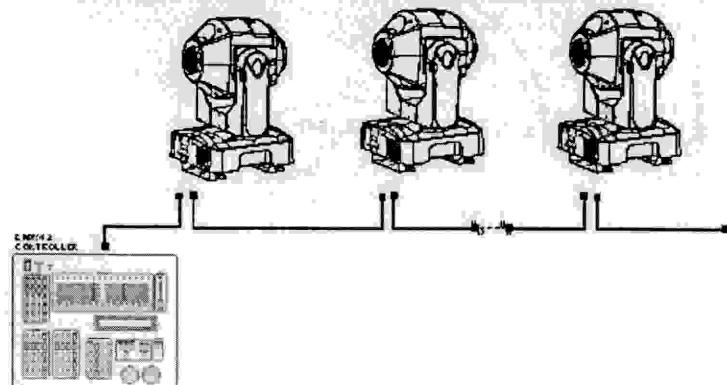
2.3 SETTING UP (DMX512 CONTROLLER)
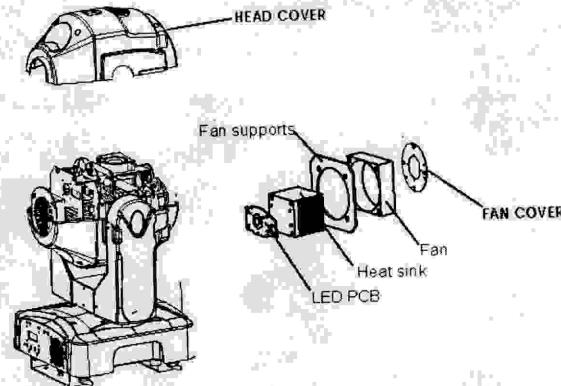
When units are connected in series to a DMX512 controller and other DMX512 equipment, connect the equipment as shown in the diagram below.
● Connect the (male) 3 pin connector side of the DMX cable to the output (female) 3 pin connector of the controller
● Connect the end of the cable coming from the controller which will have a (female) 3 pin connector to the input connector of the next fixture
● consisting of a (male) 3 pin connector.
Then proceed to connect from the output as stated above to the input of the following fixture and so on.
● If over 32 pcs fixtures connected, the amplifier is needed.
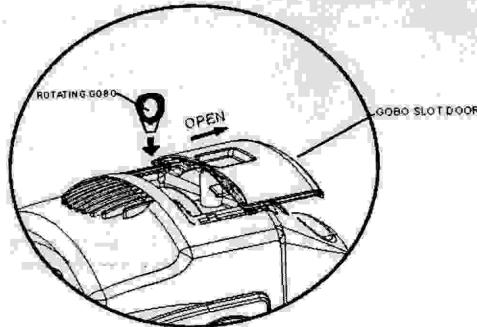
2.4 LED PCB REPLACEMENT

- Take off the head cover.
- Remove the fan cover, fan, fan supports, heat sink step by step.
- Replace the new LED PCB.
- Install all parts on the original position.

HEAD COVER
Fan supports
FAN COVER
Fan
Heat sink
LED PCB
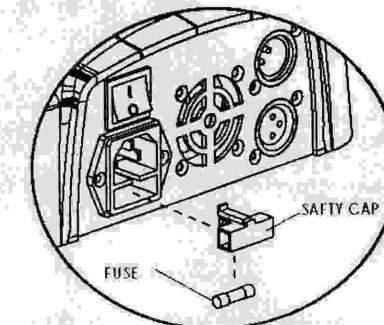
2.5 GOBO REPLACEMENT

- Unlock the gobo cover;
- Take out the target rotating gobo.
- Install the new rotating gobo, lock the gobo slot door.

ROTATING GOBO   OPEN   GOBO SLOT DOOR

2.6 FUSE REPLACEMENT
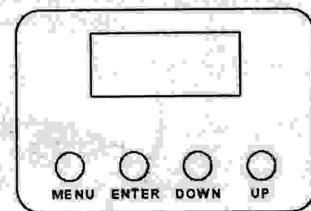
- Remove the safety cap by a screwdriver.
- Fetch the old fuse from safety cap.
- Install a new fuse.
- Install the safety cap.

SAFTY CAP
FUSE
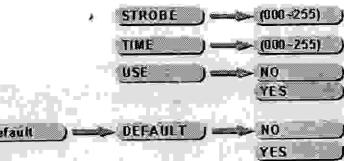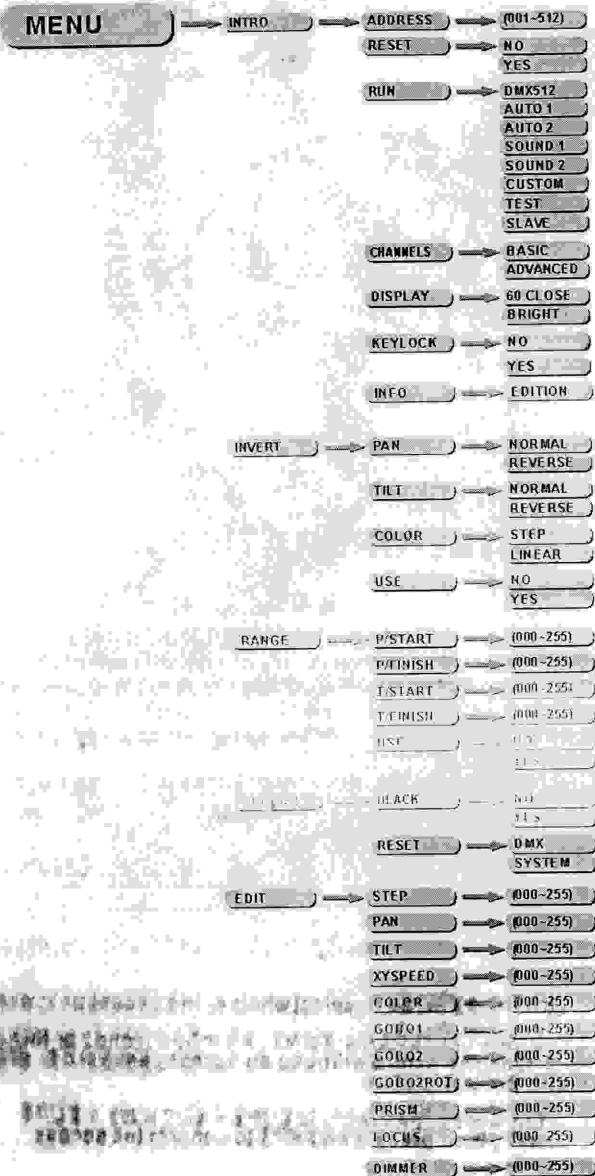
3 DISPLAY PANEL OPERATION

3.1 BASIC
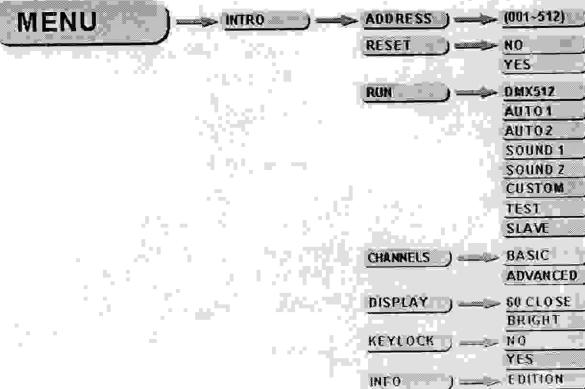
【MENU】 Scroll through the main menu or exit from the current sub-menu

【ENTER】 Enter the currently selected menu or confirm the current function value

【DOWN】 Scroll 'DOWN' through the menu list or decrease the value of the current function

【UP】 Scroll 'UP' through the menu list or increase the value of the Current function

MENU ENTER DOWN UP

3.2 MENU

```
MENU ──→ INTRO ──→ ADDRESS ──→ (001~512)
                   RESET   ──→ NO
                                YES
                   RUN     ──→ DMX512
                                AUTO 1
                                AUTO 2
                                SOUND 1
                                SOUND 2
                                CUSTOM
                                TEST
                                SLAVE
                   CHANNELS ──→ BASIC
                                ADVANCED
                   DISPLAY ──→ 60 CLOSE
                                BRIGHT
                   KEYLOCK ──→ NO
                                YES
                   INFO    ──→ EDITION

         INVERT ──→ PAN     ──→ NORMAL
                                REVERSE
                   TILT    ──→ NORMAL
                                REVERSE
                   COLOR   ──→ STEP
                                LINEAR
                   USE     ──→ NO
                                YES

         RANGE ──→ P/START  ──→ (000~255)
                   P/FINISH ──→ (000~255)
                   T/START  ──→ (000~255)
                   T/FINISH ──→ (000~255)
                   USE      ──→ NO
                                YES

                   BLACK    ──→ NO
                                YES
                   RESET    ──→ DMX
                                SYSTEM

         EDIT ──→ STEP     ──→ (000~255)
                  PAN      ──→ (000~255)
                  TILT     ──→ (000~255)
                  XYSPEED  ──→ (000~255)
                  COLOR    ──→ (000~255)
                  GOBO1    ──→ (000~255)
                  GOBO2    ──→ (000~255)
                  GOBO2ROT ──→ (000~255)
                  PRISM    ──→ (000~255)
                  FOCUS    ──→ (000~255)
                  DIMMER   ──→ (000~255)
```

```
                   STROBE ──→ (000~255)
                   TIME   ──→ (000~255)
                   USE    ──→ NO
                                YES
         Default ──→ DEFAULT ──→ NO
                                YES
```

3.3 INTRO

```
MENU ──→ INTRO ──→ ADDRESS  ──→ (001~512)
                   RESET    ──→ NO
                                YES
                   RUN      ──→ DMX512
                                AUTO 1
                                AUTO 2
                                SOUND 1
                                SOUND 2
                                CUSTOM
                                TEST
                                SLAVE
                   CHANNELS ──→ BASIC
                                ADVANCED
                   DISPLAY  ──→ 60 CLOSE
                                BRIGHT
                   KEYLOCK  ──→ NO
                                YES
                   INFO     ──→ EDITION
```

【Address】
● Enter 【Address】 to set the DMX Address, which is from (001~512)

【Reset】
● In order to reset custom mode to default, select 【Reset】

【Run】
● Enter 【Run】 to select the operation mode: 【DMAX512】; 【Auto1】;
【Auto2】; 【Sound1】; 【Sound2】; 【Custom】; 【Test】; 【Slave】

【Channels】
● Enter 【Channels】 to select the DMX channel modes: 【Basic】;
【Advanced】.

【Display】
● Enter 【Display】 to select the lighting time of the LCD display panel.
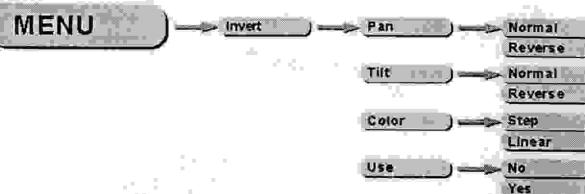
【Keylock】
● Enter the 【Keylock】 mode to select whether the access password is on
or off.
● When the fixture is set as PASS 【ON】, after 30 seconds or turn on the
fixture next time, the fixture will need an access password to enter the
display menu control.

Note: The factory access password is 【UP】 + 【DOWN】 + 【UP】
+ 【DOWN】, then press 【ENTER】 to confirm the access.

【Info】
● Enter 【Info】 to see the version of the software.

3.4 Invert

```
MENU ──→ Invert ──→ Pan ──→ Normal
                                Reverse
                    Tilt ──→ Normal
                                Reverse
                    Color ──→ Step
                                Linear
                    Use ──→ No
                                Yes
```
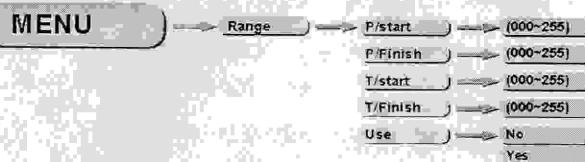
【 *Invert*】
- Select 【*Pan*】/ 【*Tilt*】 to set 【*Normal*】 or 【*Reverse*】
- Select 【*Color*】 to select the color wheel flow way 【*Step*】 or 【*linear*】
- Enter 【*Use*】 and set 【*Yes*】 to run the new setting

3.5 Range

```
MENU ──→ Range ──→ P/start ──→ (000~255)
                   P/Finish ──→ (000~255)
                   T/start ──→ (000~255)
                   T/Finish ──→ (000~255)
                   Use ──→ No
                              Yes
```

【*P/start*】
- Set pan start value 【*000~255*】

【*P/Finish*】
- Set pan finish value 【*000~255*】

【*T/start*】
- Set Tilt start value 【*000~255*】

【*T/Finish*】
- Set Tilt finish value 【*000~255*】

【*Use*】
- Enter 【*Use*】 and select 【*Yes*】 to open the operation of X/Y angle

3.6 Special

```
MENU ──→ Special ──→ Black ──→ No
                                 Yes
                     Reset ──→ Dmx
                                 System
```
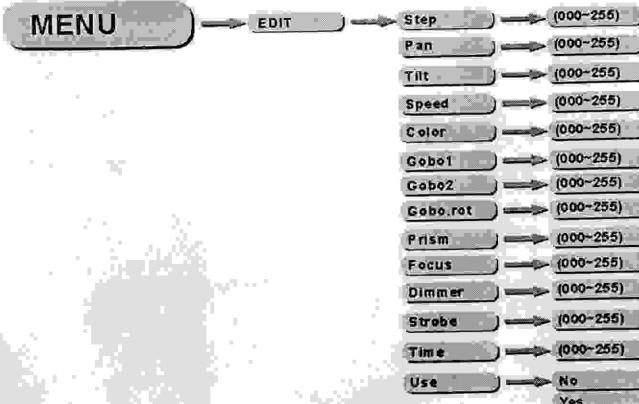
【*Black*】
- Enter 【*Black*】 to choose 【*No*】 without delay or 【*Yes*】 3 seconds delay

【*Reset*】
- Enter 【*Reset*】 to choose 【*DMX*】 DMX control reset or 【*System*】 DMX cannot control reset

3.7 EDIT

```
MENU ──→ EDIT ──→ Step ──→ (000~255)
                  Pan ──→ (000~255)
                  Tilt ──→ (000~255)
                  Speed ──→ (000~255)
                  Color ──→ (000~255)
                  Gobo1 ──→ (000~255)
                  Gobo2 ──→ (000~255)
                  Gobo.rot ──→ (000~255)
                  Prism ──→ (000~255)
                  Focus ──→ (000~255)
                  Dimmer ──→ (000~255)
                  Strobe ──→ (000~255)
                  Time ──→ (000~255)
                  Use ──→ No
                            Yes
```

【 *Edit* 】

- Enter the 【*Edit*】 mode to edit the custom programs by adjusting the value of 【*Step*】, 【*Pan*】, 【*Tilt*】, 【*Speed*】, 【*Color*】, 【*Gobo 1*】, 【*Gobo 2*】, 【*Gobo.rot*】, 【*Prism*】, 【*Focus*】, 【*Dimmer*】, 【*Strobe*】, 【*Time*】
- Enter 【*Use*】 and select 【*Yes*】 to run the steps user need.

Note: if user want to circulate the created steps, please set the last step's 【*Time*】 as 0

For example, there are 3 steps, the setting should be like belowed:

Step 1 【*Time*】= 4 【*Use*】= Yes
Step 2 【*Time*】= 5 【*Use*】= Yes
Step 3 【*Time*】= 0 【*Use*】= Yes

3.8 DEFAULT

```
MENU ──→ Default ──→ Default ──→ No
                                   Yes
```

【 *Default*】
- This functions will reset all setting to the original factory setting

4 USING A DMX512 CONTROLLER

4.1 BASIC ADDRESSING

● Connect all of the units in series using standard DMX512 signal cable.
● Set the DMX512 address in the 【DMX】 menu.
● It is possible to have the same DMX address or independent addresses for each fixture.

4.2 CHANNEL ASSIGNMENT

● Note: This product have two DMX512 channel configuration:
【ADVANCED】 and 【BASIC】.

ADVANCED

CHANNEL	VALUE	FUNCTION
1	0⟷255	PAN 0~540°
2	0⟷255	PAN FINE Fine control of pan movement
3	0⟷255	TILT 0~270°
4	0⟷255	TILT FINE Fine control of tilt movement
5	0⟷255	PAN/TILT SPEED From fast to slow
6	0⟷16 17⟷33 34⟷50 51⟷67 68⟷84 85⟷101 102⟷118 119⟷135 136⟷152 153⟷255	COLOR WHEEL White Red Yellow Magenta Green Orange Blue Light blue Light Green Rainbow linear effect
7	0⟷9 10⟷19 20⟷29 30⟷39 40⟷49 50⟷59 60⟷69 70⟷79 80⟷89 90⟷99 100⟷114 115⟷129 130⟷144 145⟷159 160⟷174 175⟷189 190⟷204 205⟷219 220⟷234 235⟷255	FIXED GOBO WHEEL NO GOBO GOBO 1 GOBO 2 GOBO 3 GOBO 4 GOBO 5 GOBO 6 GOBO 7 GOBO 8 GOBO 9 Shaking gobo 9 Shaking gobo 8 Shaking gobo 7 Shaking gobo 6 Shaking gobo 5 Shaking gobo 4 Shaking gobo 3 Shaking gobo 2 Shaking gobo 1 Flow effect

CHANNEL	VALUE	FUNCTION
8	0⟷9 10⟷19 20⟷29 30⟷39 40⟷49 50⟷59 60⟷69 70⟷79 80⟷99 100⟷119 120⟷139 140⟷159 160⟷179 180⟷199 200⟷219 220⟷255	GOBO WHEEL 1&GOBO SHAKE NO Gobo Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Shaking gobo 7 Shaking gobo 6 Shaking gobo 5 Shaking gobo 4 Shaking gobo 3 Shaking gobo 2 Shaking gobo 1 Flow effect
9	0⟷60 61⟷158 159⟷255	GOBO ROTATION Gobo indexing Clockwise rotating from slow to fast Anti-clockwise rotating from slow to fast
10	000⟷004 005⟷009 010⟷127 128⟷132 133⟷255	ROTATING PRISM NO FUNCTION Rotation Anti-clockwise rotating from slow to fast NO FUNCTION Clockwise rotating from slow to fast
11	000⟷255	Focus
12	0⟷255	DIMMER Dark —————— Bright
13	0⟷31 32⟷63 64⟷95 96⟷127 128⟷159 160⟷191 192⟷223 224⟷255	STROBE Close Open Strobe: Slow>Fast Open Pulse strobe effect: Slow>Fast Open Random strobe effect: Slow>Fast Open
14	0⟷19 20⟷39 40⟷59 60⟷79 80⟷99 100⟷119 120⟷139 140⟷159 160⟷179 180⟷199 200⟷219 220⟷255	CONTROL No function Pan/tilt black activated (activated after 3 secs) Pan/tilt black deactivated (activated after 3 secs) Auto1 (activated after 3 secs) Auto2 (activated after 3 secs) Sound 1 (activated after 3 secs) Sound 2 (activated after 3 secs) Custom Test (activated after 3 secs) No function Reset (activated after 3 secs) No function

BASIC

| CHANNEL	VALUE	FUNCTION
1	0 ⇔ 255	**PAN** 0~540°
2	0 ⇔ 255	**TILT** 0~270°
3	0 ⇔ 16 17 ⇔ 33 34 ⇔ 50 51 ⇔ 67 68 ⇔ 84 85 ⇔ 101 102 ⇔ 118 119 ⇔ 135 136 ⇔ 152 153 ⇔ 255	**COLOR WHEEL** White Red Yellow Magenta Green Orange Blue Light blue Light Green Rainbow or linear effect
4	0 ⇔ 9 10 ⇔ 19 20 ⇔ 29 30 ⇔ 39 40 ⇔ 49 50 ⇔ 59 60 ⇔ 69 70 ⇔ 79 80 ⇔ 89 90 ⇔ 99 100 ⇔ 114 115 ⇔ 129 130 ⇔ 144 145 ⇔ 159 160 ⇔ 174 175 ⇔ 189 190 ⇔ 204 205 ⇔ 219 220 ⇔ 234 235 ⇔ 255	**FIXED GOBO WHEEL** NO GOBO GOBO 1 GOBO 2 GOBO 3 GOBO 4 GOBO 5 GOBO 6 GOBO 7 GOBO 8 GOBO 9 Shaking gobo 9 Shaking gobo 8 Shaking gobo 7 Shaking gobo 6 Shaking gobo 5 Shaking gobo 4 Shaking gobo 3 Shaking gobo 2 Shaking gobo 1 Flow effect
5	0 ⇔ 9 10 ⇔ 19 20 ⇔ 29 30 ⇔ 39 40 ⇔ 49 50 ⇔ 59 60 ⇔ 69 70 ⇔ 79 80 ⇔ 99 100 ⇔ 119 120 ⇔ 139 140 ⇔ 159 160 ⇔ 179 180 ⇔ 199 200 ⇔ 219 220 ⇔ 255	**GOBO WHEEL 1 &GOBO SHAKE** NO Gobo Gobo 1 Gobo 2 Gobo 3 Gobo 4 Gobo 5 Gobo 6 Gobo 7 Shaking gobo 7 Shaking gobo 6 Shaking gobo 5 Shaking gobo 4 Shaking gobo 3 Shaking gobo 2 Shaking gobo 1 Flow effect
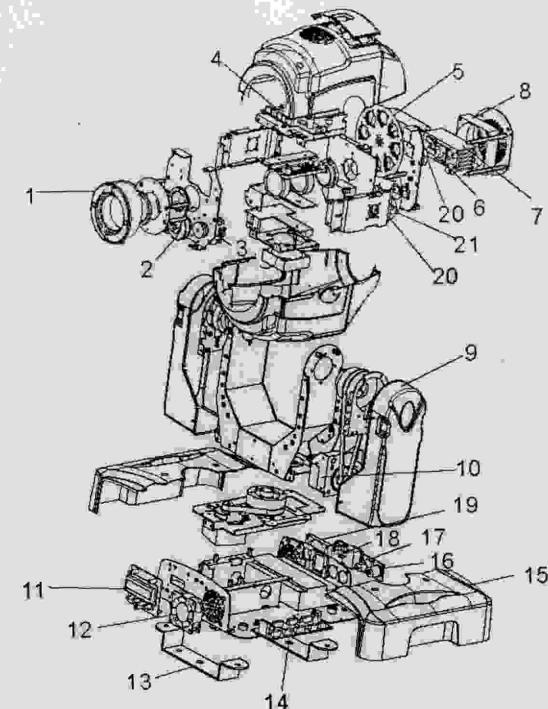
CHANNEL	VALUE	FUNCTION
6	0 ⇔ 60 61 ⇔ 158 159 ⇔ 255	**GOBO ROTATION** Gobo indexing Clockwise rotating from slow to fast Anti-clockwise rotating from slow to fast
7	000 ⇔ 004 005 ⇔ 009 010 ⇔ 127 128 ⇔ 132 133 ⇔ 255	**ROTATING PRISM** NO FUNCTION Rotation Anti-clockwise rotating from slow to fast NO FUNCTION Clockwise rotating from slow to fast
8	000 ⇔ 255	Focus
9	0 ⇔ 255	**DIMMER** Dark —————————— Bright
10	0 ⇔ 31 32 ⇔ 63 64 ⇔ 95 96 ⇔ 127 128 ⇔ 159 160 ⇔ 191 192 ⇔ 223 224 ⇔ 255	**STROBE** Close Open Strobe Slow > Fast Open Pulse strobe effect. Slow > Fast Open Random strobe effect. Slow > Fast Open
11	0 ⇔ 19 20 ⇔ 39 40 ⇔ 59 60 ⇔ 79 80 ⇔ 99 100 ⇔ 119 120 ⇔ 139 140 ⇔ 159 160 ⇔ 179 180 ⇔ 199 200 ⇔ 219 220 ⇔ 255	**CONTROL** No function Pan/tilt black activated (activated after 3 secs) Pan/tilt black deactivated (activated after 3 secs) Auto1 (activated after 3 secs) Auto2 (activated after 3 secs) Sound 1 (activated after 3 secs) Sound 2 (activated after 3 secs) Custom Test (activated after 3 secs) No function Reset (activated after 3 secs) No function

5 APPENDIX

5.1 TROUBLE SHOOTING

SITUATION		CAUSE	ACTION
No power		Power connection error	Check all Power connections
		Fuse damaged	Replace Fuse
		Power supply damaged	Replace Power supply
		Power switch damaged	Replace Power switch
LED not lit		LED driver PCB damaged	Replace LED driver PCB
		LED PCB damaged	Replace LED PCB
		LED PCB connection error	Check the connections
Fan do not work		Head fan error	Fan # (80x60x20)
			Check the LED driver PCB
		Base fan error	Fan #(40x40x10)
			Check the power supply
Fixture reset normal, But not be controlled		Display PCB damaged	Replaced Display PCB
		DMX PCB damaged or DMX signal connection error	Check DMX signal connection or replace DMX PCB
Prism error	LED607 CONTROL PCB ERROR	Motor damaged	Replace motor
		Prism belt broken	Replace belt
Color wheel error		Motor damaged	Replace motor
		Sensor PCB damaged	Replace sensor
Gobo wheel error		Motor damaged	Replace motor
		Gobo wheel blocked	Check or replace the gobo wheel
		Sensor PCB damaged	Replace the sensor
Pan movement error		Motor damaged	Replace Pan motor
		Pan belt broken	Replace pan belt
		Magnetic sensor PCB damaged	Replace the magnetic sensor
		Optical sensor damaged	Replace the optical sensor
Tilt movement error		Motor damaged	Replace Tilt motor
		Tilt belt broken	Replace tilt belt
		Magnetic sensor PCB damaged	Replace the magnetic sensor
		Optical sensor damaged	Replace the optical sensor

5.2 MAINTENANCE

No	ITEM	No	ITEM
1	Front lense cover	12	Base fan
2	Prism	13	Bracket
3	Motor	14	X/Y PCB
4	Motor driver PCB	15	Base cover
5	Rotation gobo wheel	16	XLR socket B
6	LED PCB	17	XLR socket A
7	Heat sink	18	Power socket
8	Head fan	19	On/Off
9	Arm	20	Fixad gobo wheel
10	Motor	21	Color wheel
11	Display PCB		