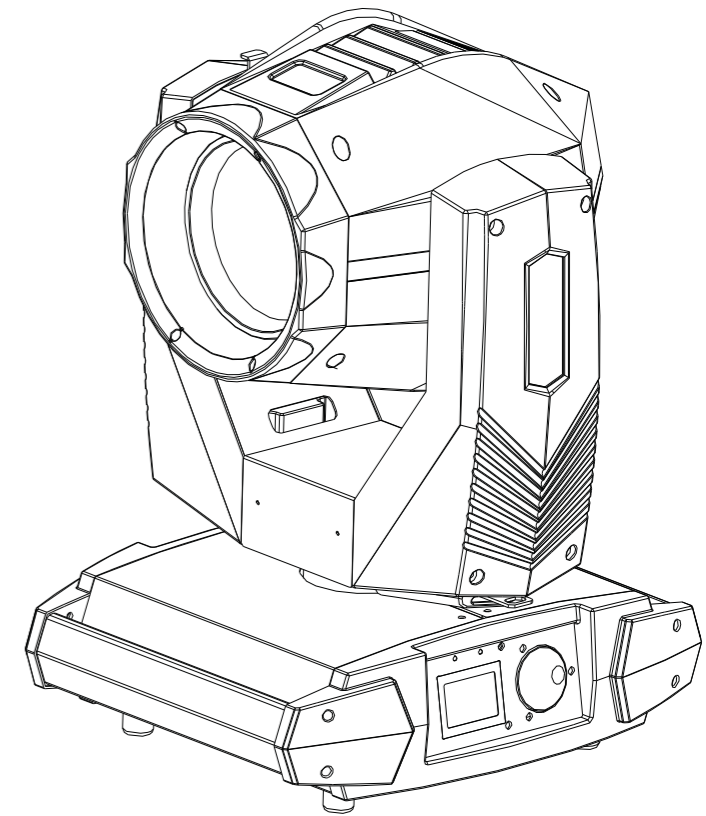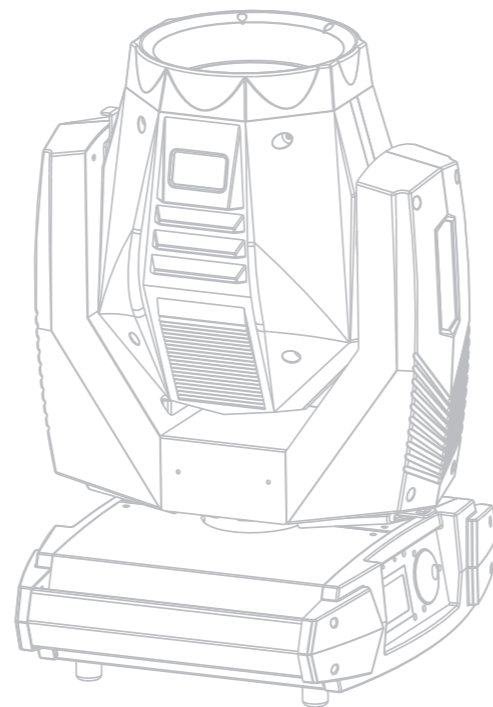# Moving Head Beam

User Manual

FORWORD

Thanks for choosing 230W 7R beam, it is our newest the latest independent research and development of a high-grade quality. Compared with other same power 7R lights, it's more lightweight and convenient, and with perfect combination of international advanced electronic control technology and excellent human chemical. 230W beam is In full compliance with the CE standard supports the international DMX512 signal control mode.

The newest moving head light used imported Osram SIRIUS HRI 230W light source, strong light effect, clear pattern, fast and smooth pan&tilt running, precise positioning and uniform pure color high standards of color disc.

7R have a super high and super long distance range, also has 17 gobos with open circle aluminum gobo wheel, a frost lens, 14 color with white color wheel, and a prism can quickly zoom.

230W 7R moving head beam lights are widely used in TV station, large gymnasium, disco, dance halls, nightclubs, large-scale performances and other professional occasion.
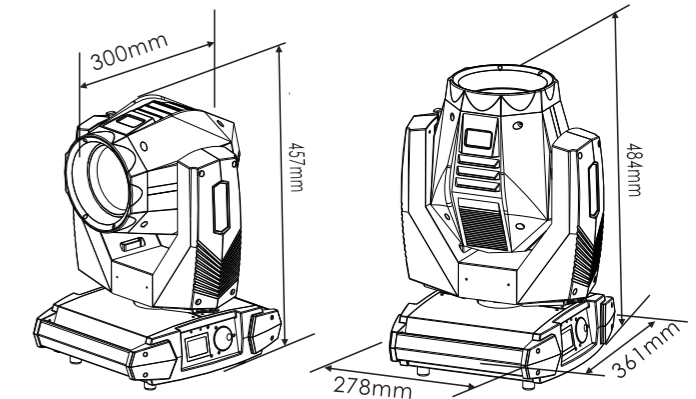
PRODUCT CATALOG

1 SAFETY TIPS

◇Before using this product, please observe carefully the product is not unwrap or damage during transportation.

As a result of damage during transporting , please do not use the lights, and contact with the dealer or manufacturer.

◇Before running products, to ensure that the voltage and Hertz in accordance with the requirements of lights.

◇It's very important, connecting ground wire to avoid the electric shock.

◇This product is for dry indoor environment.

◇This product must be installed on the sufficient space, adjacent to interface the shortest distance of 50 cm,

to ensure that the lights will not crash each other.

◇Before moving or repairing the product , please unplug the power.

◇When it working, ensure that no inflammable and explosive near objects.

◇When installing this product, please use the safety rope. When handling this product, lift the armrest base,

rather than the lamp body.

◇This product is suitable for a maximum temperature of 35 degrees Celsius, when the surrounding environment

is higher than 35 degrees Celsius, please do not use this product.

◇Do not touch. When working, the product running very fast, to prevent bruising hands.

◇Problems happens when operating performances, should immediately stop using the lights.

Do not carry out maintenance, repair damage caused or likely to cause other problems.

Please contact the company's maintenance repair. During the repair process, use the same type of accessories.

◇Please read the instructions carefully, especially regarding the installation, using, maintenance parts.

Important that the lighting in the transport process, must be packed anti-shock protection carton or flight case

2 TECHNICAL PARAMETERS

◇DMX Channels:16CHs

◇Control model:DMX512,auto models

◇Blue LED LCD and rotating button control

◇230W Yodn Sirius lamp

◇XYmotos:Ultra-quiet andUltra high-speed three-phase motor

◇ Color temperature is 8500K,span life time is 2000Hs

◇14 colors+white,half color effect

◇17 fixed gobo+open circle

◇8-facet prism:prism can be rotated counter-rotating, beam effect can be opened and closed

◇Optical lens: Precision cemented optical lens

◇Frost effect: Adjustable soft spot angle

◇Fpcus: linear focus

◇Dimmer: 0-100% linear dimmer

◇Beam angle: 0-3.8°parallel beam

◇Strobe: Two pieces strobe(0.5-9F.P.S)

◇Motors:13 Ultra-quiet motors, two piece3-phase motors，16bit

◇Housing: high temperature alloy plastic with Die-cast handle

◇IP rate: IP20

◇N.W:15.2KG

◇Size:355*300*484mm

300mm
457mm
278mm
484mm
361mm

③ SCHEMATIC LIGHTING COMPONENTS

light head cover

top cover

Am cover

3-pin output

5-pin output

power input

power output

5-pin input

3-pin input

LCD

control rotating button

Insurance Block

Power switch

Gobo:

Color wheel:

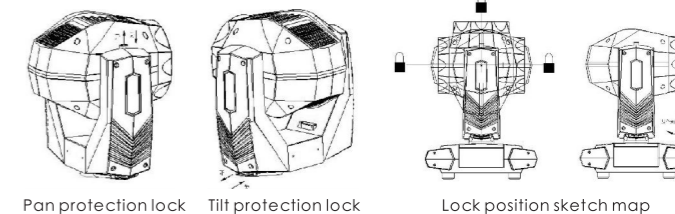| Red | White | Dark blue |
Orange		ctb
Light Green		cto1
Dark Green		cto2
Green		cyan
Light Purple	Pink	A01Y	Rose Red

④ PACKING AND SHIPPING

4.1 Packing

Moving Head Beam light is packaged by carton or standard 2in1 flight case.(selectable 1in1 or 4in1), Random accessories items shown below
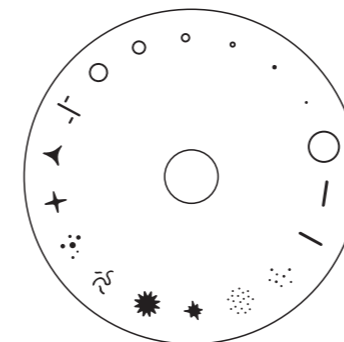
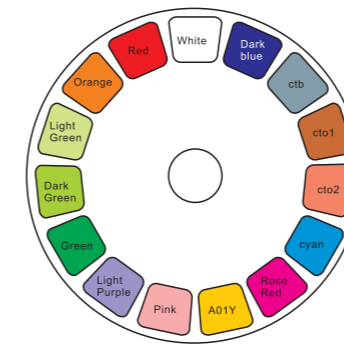| Name	Quantity	Unit
User manual	1	piece
Signal line	1	piece
safe rope	1	piece
Hanging lamp hook and fastener	2	piece
Power line	1	piece

4.2 Transport protection locks

In order to transport it easy to protect the lamp body has two locks (XY axes each a lock), X-axis has four lock position, Y-axis triple lock, lock locked in the center position in the transport and light a vertical position with the arm member

Pan protection lock   Tilt protection lock   Lock position sketch map

4.3 Packing

1.Disconnect the power supply so that the lamp to cool completely before packaging equipment, at least 15 minutes or more.

2.Closing the light protect lock, when clean the surface of the light dust

3.Cover the light , seize the equipment both sides aluminum handles on to make it upside down and gently placed in the box.

4.Add lighting accessories after placing the light in box.

5.Up to two crates stacked prohibited upside down.

4.4 Unpacking

1.Open the box and bag

2.Seizing the equipment handles, lifting and carrying away the light from the box .Or opening the flight case cover,

placing lift boom close to the light base, then equiping light hook on light base bottom.

tightening Quick Install locks. At last rising away boom to the top of the lamp from flight case, put the flight case away.

3.Before turing on the light,should open the light protecting lock

Note: Upon receipt of lamps, please check if there is damage to the fold closure caused by transport, where there is transportation damage, please do not use this fixture, and as soon as possible contact

Users should ensure that light and installation materials are checked for regular safety checks, Unprofessional incorrect installation can lead to dangerous, if the lack of working conditions and professional standards, please operate the light by professionals. Do not use the light if the working temperature isn't 15° -40° .When the lighting installation, dismantling, moving, or servicing, do not stand directly beneath the lamp. The operator must ensure that the fixtures are secure connection, installing the light after professionals approving electrical parameters， make sure that these installation must be checked at least once per year by experts
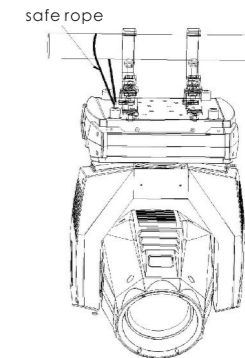
5.1 Installating rigging

RAMBO-I beam moving head lights can be placed on the stage or on a stand in any direction， Quick lock system can quickly and easily remove or install a light hook.

Note: must use two clamps fixed equipment, and are 1/4 buckle fastening jig, only fully rotated 90 degrees clockwise to lock fastener.
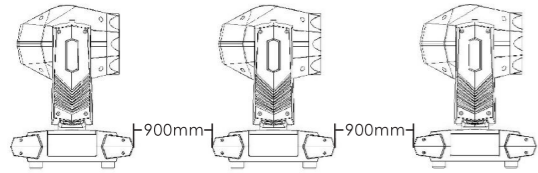
5.2 Fixed equipment

1. Before installing fixtures， must verified rigging equipments are not damaged, and can bear at least 10 times of light's weight. Check the building can be beared at least 10 times of total weights of light, fixture, and cable accessories

2.Insert the locked hook fastener into base mounting holes horizontally, grab the handle clockwise 90 degrees fasteners, in the same way to install a second fastener, make sure the fastener is fastened under the light base.

3.If truss can be lifted， the equipment can be directly clamped from flight case and locked fixture base. Then hung on the light and using safety rope fixed it. Before rising the light to right height, connect the power cord and signal cable.

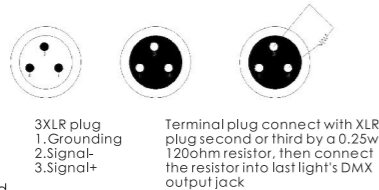Note: add a safety rope attached the light's base insurance shelf, do not connect the device handle.

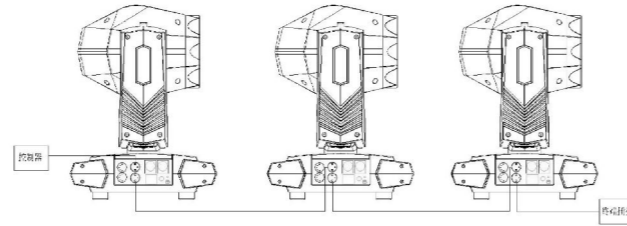safe rope

5 INSTALLATION

900mm   900mm

5.3 Data cable

Data cable is DMX512 signal

Note: Signal line connections is X-type connector。

X-type connector-----If the external flexible cable or cord of this light is damaged, please replace professional cable or cord from the manufacture or its agent.Lights' DMX input and output connects to a three-pin XLR and five-pin XLR insert, first pin is grounded, then negative signal is second pin, third pin connects to the positive polarity signal, fourth and fifth are empty.In order to prevent reception reflection and interference control signal, a terminal plug must be installed on the first branch of the connected device last 3-pin output jack.

3XLR plug
1.Grounding
2.Signal-
3.Signal+

Terminal plug connect with XLR plug second or third by a 0.25w 120ohm resistor, then connect the resistor into last light's DMX output jack

controller is connects to the nearest input XLR 3-pin, then from the output of the device connects to the input of the next device, continuous connection one by one, the final output data cable terminal equipment plug one end into the terminal.

控制信号

终端插头

If the signal transmission is long-distance , 512 signal amplifier must be added. DMX512 signal controller connect to the input of the amplifier first, then connect to the fixture from its output, couple with the terminal plug last.

1 Do not use two separate output connection, if connect the branch separating consecutive DMX512 signal amplifier must be used to separate.
2 Please use the shielded twisted-pair cable, standard microphone cable can not be reliably controlled long-distance data.

6 AC POWER

6.Fuse Size

Power :100-240v
Fuse: 8A 6 * 30 main fuse
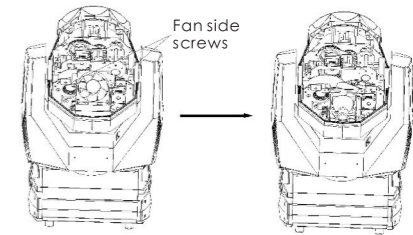
6.2 Power Connection

If the external flexible cable or cord of this light is damaged, the line is up to the manufacturer or its service agent or a similar qualified person to replace, in order to avoid danger. Connect the power supply personnel must have the appropriate qualifications before proceeding, you must make sure you are using the power supply voltage matches the voltage identified and have overload or leakage protection. Directly connect the device to the power supply, do not connect to the silicon box dimming system, otherwise damage to the equipment.

Note:
1 Do not install other similar bulbs, otherwise it will produce safety hazards or equipment damage.
2.To reduce the risk of damage to the light, replacing the lampbefore its life is over
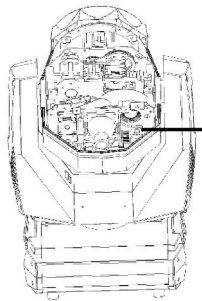3.Mustn't use the banned scratched and damaged bulb

7.2 Changing lamp

1 Disconnect the power, so that the lamp cooling, the arm of the lamp body lock locked in a horizontal position.
2 split bulbs:Remove thecover which is written "split this cover to replace the lamp head cover"
3 Use a Phillips screwdriver to remove the fan two thumbscrews fixed side.
4 with the appropriate force to push down the bulb when the lamp cup beyond the edge of the
stainless steel shrapnel, taking up the lamp.
5 Install the bulb is the opposite of the operation.

Fan side screws

7.3 Correction bulbs

(lamp has been corrected before selling, if the individual case happens when changing the lamp, could following this way, the light is reseted by turning on the power,using the menu or console light bulb to play a bunch of white beam.
2 Using Phillips screwdriver to open the light body one bonnet side which is printed "this cover to replace the lamp"
3 Using a flathead screwdriver to adjust the lamp bracket adjustment screw, turn the screw clockwise or counter clockwise, and the lamp can be right or left to adjust.
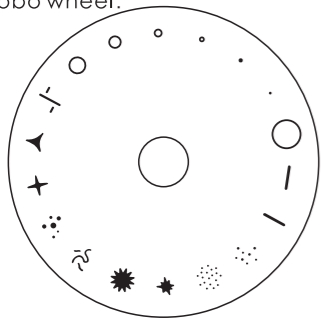

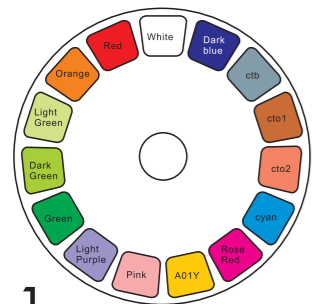Use a Phillips screwdriver to adjust the lamp adjustment screw

8.1 Gobo wheel

Metal gobo wheel with 17 gobos.
Customized is supported

Gobo wheel:

Color wheel:

8.2 Color wheel

Color wheel is made by 14 high standard fixed color, the user can easily
select their own favorite color, to create a perfect lighting effect.
Use the gobo wheel at same time is better. It can be easily transformed
a colorful gobo effect. (According to customer needs may change at any
time own custom various color wheel).

8.3 Optical lens focus

Useing two high-precision double-screw motor synchronization,
adjusting the optical lens to complete the pattern definition.

8.4 prism wheel and the prism enlarge

Prism wheel with a 8-facet prism, clockwise and counterclockwise
rotating, speed is adjustable. Prism wheel can be created a variety of
brilliant lighting effects with color wheel and gobo wheel. Prism wheel
through two high-precision ultra-fast eight-head screw motor spot size
adjustment cut prisms, and creates a wonderful prism dynamic effects.

8.5 Dimming and strobe

0-100% mechanical dimmer, you can instantly switch freely adjustable
strobe speed up to 12 times / sec, along with random strobe special
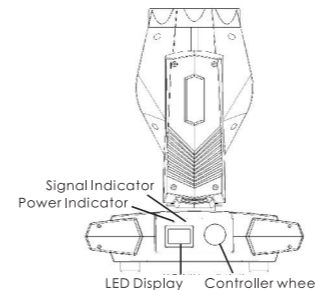features.

8.6 Frost

Frost is a piece of atomizing lens, according to the actual control to
complete the frost effect as your want .

8.7 horizontal and vertical scanning

Pan:540°, Tilt 270°, With 16BIT precise positioning capabilities.
Horizontal and vertical speed is adjustable.

8.1 LCD

Signal Indicator
Power Indicator

LED Display   Controller wheel

8.1 Menu operation

Main Menu
1.Setup   DMX Address
              Address: 001
              Channel Mode
              Standard(16ch)
              Vector(20ch)
2.Option   Invert
Invert Pan   Off
                            On
Invert Tilt   Off
                            On
Display   Reversal   Off
                            On
BackLight   Open
Auto Close(15s)

3.Information System Version
XY: V3.10
MCU1: V1.01
MCU2: V1.01
MCU3: V1.00
Fixture Hours
Total:0000(hrs)
Cur.:0000(hrs)
Lamp Hours
Total:0000(hrs)
Cur.:0000(hrs)
Time Clear
Clear PWRON Time
Clear LAMP Time
Fans Monitor
Fan1:(0000)RPM
Fan2:(0000)RPM
Fan3:(0000)RPM
DMX Monitor
1.Color (000)
2.Strobe (000)
3.Dimmer (000)
4.Gobo (000)
5.GoboRota.(000)

6.PrismIns.(000)
7.PrismRot.(000)
8.PrismMove(000)
9.Frost (000)
10.Focus (000)
11.Pan (000)
12.PanFine(000)
13.Tilt (000)
14.TiltFine(000)
15.Function(000)
16.Lamp (000)
17.P/T Time(000)
18.Col.Time(000)
19.BeamTime(000)
20.GoboTime(000)
4.Manual Control
Lamp: Off / On
5.Reset
System Reset
Pan/Tilt Reset
Effect Reset
6.Factory default
Input:0000
(Enter 2121 into the
parameter adjustment)

Parameter
Color Adjust
Value: 000
Gobo Adjust
Value: 000
Shutter Adjust
Value: 000
Pan Adjust
Value: 000
Tilt Adjust
Value: 000
Fan MaxSP Adjust
Value: 000

9 CHANNEL

Channel 1 COLOR	0-3:white
	4-7:white/color1
	8-11:color1
	12-16:color1/color2
	17-20:color2
	21-24:color2/color3
	25-28:color3
	29-33:color3/color4
	34-37:color4
	38-41:color4/color5
	42-45:color5
	46-50:color5/color6
	51-54:color6
	55-58:color6/color7
	59-63:color7
	64-67:color7/color8
	68-71:color8
	72-75:color8/color9
	76-80:color9
	81-84:color9/color10
	85-88:color10
	89-92:color10/color11
	93-97:color11
	98-101:color11/color12
	102-105:color12
	106-109:color12/color13
	110-114:color13
	115-118:color13/color14
	119-122:color14
	123-127:color14/white
	128-255:Rainbow colors from slow to fast
Channels 2 SHUTTER	0-3:close beam
	4-7:open beam
	8-97:Strobe from fast to slow
	98-101:close beam
	102-126:Strobe from fast to slow pulse open
	127-151:close the from fast to slow pulse strobe
	156-180:Random open the pulse strobe from fast to slow
	181-205:Random close the pulse strobe from fast to slow
	206-209:open beam
	210-249:Random strobe from fast to slow
	250-255:open beam

Channel 3 DIMMER	0-255:From dark to light dimming
Channel 4 GOBO	0-3:white
	4-7:From slow to fast swing1
	8-11:gobo2
	12-15:gobo3
	16-19:gobo4
	20-23:gobo5
	24-27:gobo6
	28-31:gobo7
	32-35:gobo8
	36-39:gobo9
	40-43:gobo10
	44-47:gobo11
	48-51:gobo12
	52-55:gobo13
	56-59:gobo14
	60-63:gobo15
	64-67:gobo16
	68-71:gobo17
	72-115:Clockwise from fast to slow rainbow pattern
	116-159:Counterclockwise pattern from slow to fast rainbow
	160-165:gobo1 From slow to fast swing
	166-171:gobo2 From slow to fast swing
	172-178:gobo3 From slow to fast swing
	179-184:gobo4 From slow to fast swing
	185-191:gobo5 From slow to fast swing
	192-197:gobo6 From slow to fast swing
	198-203:gobo7 From slow to fast swing
	204-210:gobo8 From slow to fast swing
	211-216:gobo9 From slow to fast swing
	217-222:gobo10 From slow to fast swing
	223-239:gobo11 From slow to fast swing
	240-245:gobo12 From slow to fast swing
	246-251:gobo13 From slow to fast swing
	252-255:gobo14 From slow to fast swing
Channel5 PRISM	0-127:without prism
	128-255:with prsim
Channel6 PROTA	0-63:0 to 360 degrees positioning
	64-127:Clockwise rotation from fast to slow
	128-191:Counterclockwise rotation from slow to fast
	192-207:90Degree swing from slow to fast
	208-223:180Degree swing from slow to fast
	224-239:270Degree swing from slow to fast
	240-255:360Degree swing from slow to fast

Channel 7: ZOOM	0-255: empty
Channel 8: FROST	0-255:
Channel 9: FOCUS	0-255:
Channel 10: PAN	0-255:
Channel 11: PANFINE	0-255:
Channel12: TILT	0-255:
Channel 13: TILTFINE	0-255:
Channel14: PTTIME	0-255:From fast to slow speed
Channel 15 FUNCTION	0-13:No function
	14-24:Pan/Tilt moves exchange light
	25-35:Gobo moves exchange light
	36-46:Color changes exchange light
	47-57:Prism selects exchange light
	58-68:Frost selects exchange light
	69-79:XY、GOBO、color、focus、FROST changes exchange light
	80-90:GOBO、color、focus、FROST head function transfers exchange light
	91-123:No function
	124-134:Display Reverse (5 seconds)
	135-145:Forward screen (5 seconds)
	146-155:No function
	156-165: Internal motor reset, except pan&tilt
	166-167 No function
	168-189 All function reset
	191-255 No function
Channel 16 LAMP function	0-31:No function
	32-63:Lamp down power (immediate action)
	64-159:No function
	160-191:Turn off lamp(5's)
	192-223:no function
	224-255turn on lamp(5's)

10 FAILURE SCOREBOARD AND SOLUTIONS

Listed below is a common approach in the operation of a few common problems.
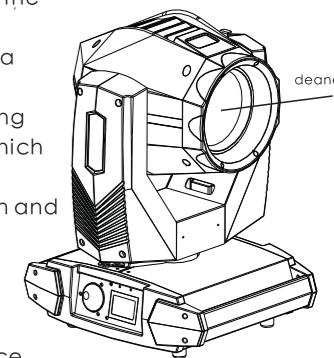◇Fault A: The lamp is not working, the bulb is not lit, the fan does not work
Solving 1: Check the power supply or the fuse is burned
Solve 2: The main power connector on the voltage detector
◇Fault B: connect control units, lighting does not respond
Solving 1: After connecting control units, lighting should be working. If it is not working properly, check the signal cable plugs and wires are connected correctly.
Solve 2: If the lamp is lit display, but the channel does not respond, check the address code is set correctly and DMX output voltage polarity.
Solve 3: DMX signal problems if your lighting is off, check the input terminal and the circuit board
Solve 4: Please change another one DMX controller
Solve 5: Check whether the signal cable near high voltage power lines caused DMX display board inside the wire damage.
◇Fault C: some channel is not working
Solving 1: stepper motor may be damaged, or the line connecting the motherboard burned out
Solve 2: IC driver board on the motherboard may be damaged

11 CLEAN LIGHTS

Must regularly clean the outside of the optical lens focusing the dust。
Based on the number of lamps use a clean environment to determine:
Are moist, smoked or the surrounding environment is particularly dirty, which can cause dust deposition lamps.
Please use a glass cleaning solution and a soft cloth to wipe the focusing optical lens. Carefully Qi dry each part. At least 20 days to clean the dust outside a lens, the lens inside 30-60 days to clean up the dust once.
Regular inspection lamp fan and bottom case fan, a fan of at least 20\days to clean up dust deposition. Above cleaning must be executed in case of power failure.

12 230W MOVING HEAD BEAM LIGHT SHINES TABLE

PHOTOMETRICS DIAGRAM 3.8°

lux 3.8°	540000	150000	64000	35000	14000

Distance (m)	5	10	15	20	25
Wash dia.(∅)m 3.8°	42	82	122	165	250

14