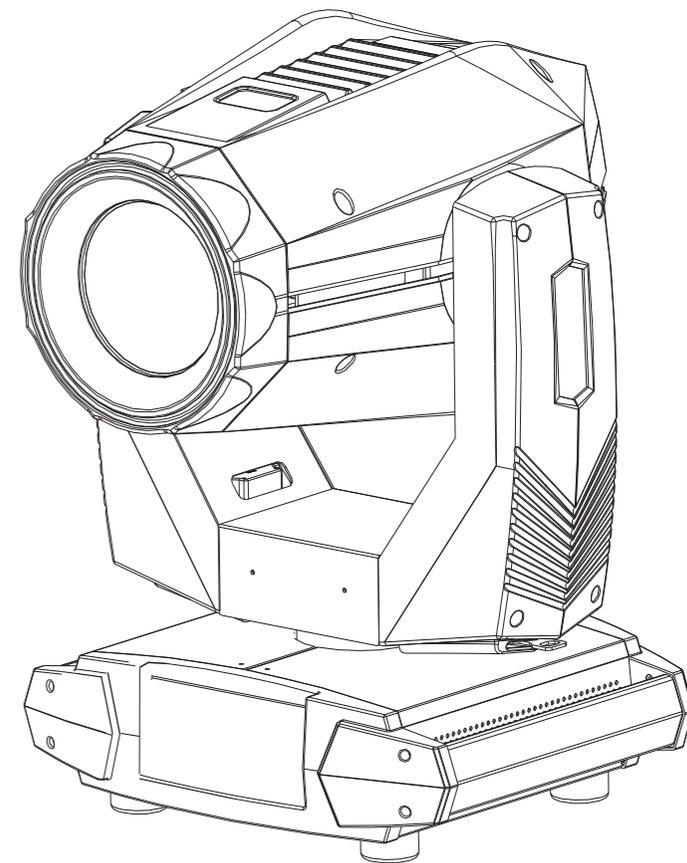# 330W 3in1
(Beam-spot wash)

User Manual

FORWORD

Thanks for choosing RAMBO330 3in1 series products, it is our newest the latest independent research and development of a high-grade quality. Compared with other same power 15R lights, it's more lightweight and convenient, and with perfect combination of international advanced electronic control technology and excellent human chemical. 330W beam is In full compliance with the CE standard supports the international DMX512 signal control mode.

The newest moving head light used imported Yodn 330W 16R lamp. More brightness than 15R, strong light effect, clear pattern, fast and smooth pan&tilt running, precise positioning and uniform pure color high standards of color disc.

15R have a super high and super long distance range, also has 12 gobos with open circle copper gobo wheel, a frost lens, 14 color with white color wheel, and a prism can quickly zoom.

330W 15R moving head beam lights are widely used in TV station, large gymnasium, disco, dance halls, nightclubs, large-scale performances and other professional occasion.
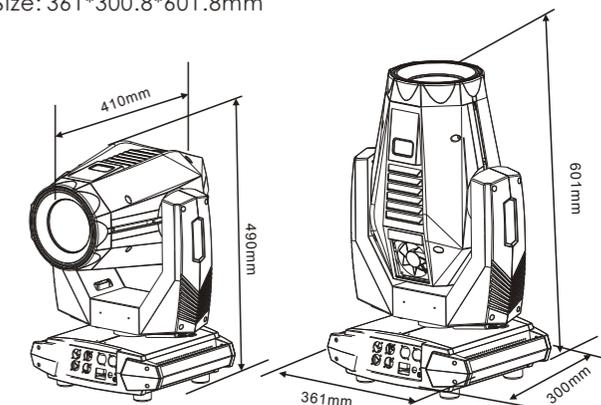
PRODUCT CATALOG

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 Channel:16/24CHs

◇Control model:DMX512,Auto model

◇LED LCD Display+Press button,English/Chinese,

Diplsay board intelligent flip function.

◇Light Source:Yodn 16R lamp

◇Super fast and ultra silence 3-phase step motots

◇Color temperature is 8000K,life span is 2000Hs.

◇13 Color with white,dual color effect.

◇14 fixed gobo with open circle

◇9 changeable rotating three-dimensional gobo withwhite.

◇Any two-kinds prism stack can combine dynamic effect

positive and negative rotation switching effect.

◇Optical lens: High precision glued optical lens combination

◇Focus: Linear focus

◇Zoom: Linear zoom.

◇Dimmer: 0-100% linear dimmer.

◇Beam angle: 2.5-35 degree.

◇Strobe: two-pieces plate strobe(0.5-9FPS

◇16pcs super silence motors,pan&tilt 3-phase step motors,16bit.

◇Housing: High temperature resistant alloy plastic
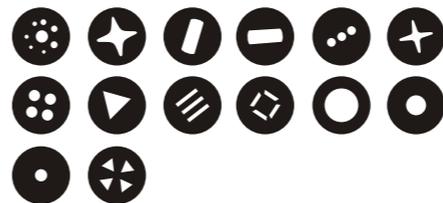
◇IP Rate: IP20

◇Weight:18.6KG

◇Size: 361*300.8*601.8mm

410mm
490mm
601mm
361mm
300mm

③ SCHEMATIC LIGHTING COMPONENTS

light head cover

top cover

Am cover

3-pin output

5-pin output

power input

power output

LCD

5-pin input

3-pin input

Insurance Block

Power switch

control rotating button

Gobo :

spot rotating gobo wheel :

color :

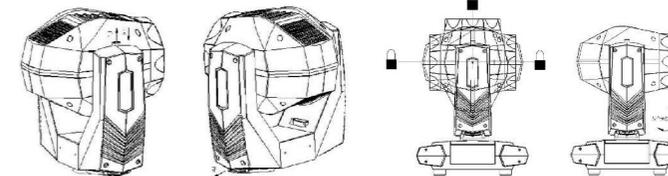| 大红 Red | 深绿 Deep Green | 琥珀色 Amber | 蓝色 Blue | 橙色 Orange |
| CTO | UV | 白光 White | 深红 Deep red | 深蓝 Deep Blue |
| 黄色 Yellow | 绿色 Green | 玫红 Rose red | 浅蓝 Light blue |

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 PACKING AND SHIPPING

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

5 INSTALLATION

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
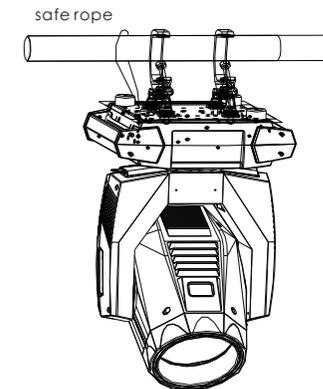
5.1 Installating rigging

RAMBO-330W 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.
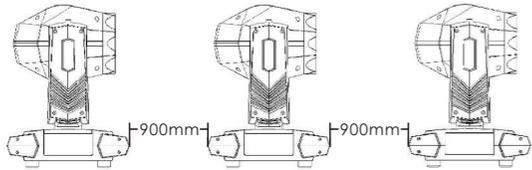
5.2 Fixed equipment

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.

safe rope

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

Note: Lights be placed vertically upward,the shortest distance between working lights must be more than or equal 900mm, lighting installation layout as following

├─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 thislight 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.
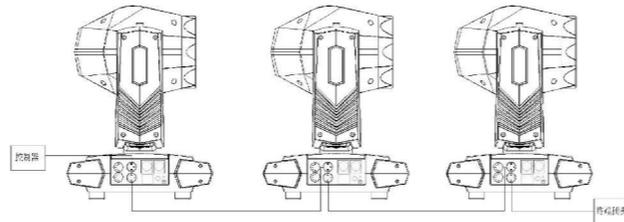
3XLR plug
1.Grounding
2.Signal-
3.Signal+

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.

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.Fuse Size

Power :100-240v

Fuse: 8A 5 * 20 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

7.1 Lamp Description

RAMBO330w 3in1 moving head beam light is used with Yodn Single-ended lamp is short arc point light source, and its color temperature is 8000K and very stable, CRI>90.Life span is over 2000 hours(according the using situation)
Attention
1.1. Do not install other similar lamps, and will cause safety hazards or equipment damage.
2.To reduce the risk of damage to the lamp, replacing the lamp before the lamp life over.
3. Do not use scratches and has 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.

Note: when replacing a lightlamp does not touch the bulb with bare hands at the ball, avoiding oil stained hands on the ball.
2 When you install and dismantle the lamp into the lamp gently put on, can not let the bulb hit hard objects around it to prevent damage the bulbs.

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.
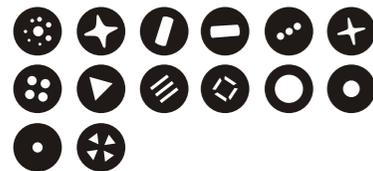2 Using Phillips screwdriver to open the light body one bonnet side which is printed "this cover to replace the lamp"
3 Using a flathead screwdriver to adjust the lamp bracket adjustment screw, turn the screw clockwise or counter clockwise, and the lamp can be right or left to adjust.

8.1 Gobo wheel

Metal gobo with 12 gobos, simple customized is supported.

Gobo：

spot rotating gobo wheel：

color：

8.2 Color wheel

Color wheel is made by14 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 focusing

Super silence motors with belt synchronous working,and two sets Adjust optics lenses to adjust focus from 2.5 degree to 36 degree make perfect focus function.

8.4 prism wheel and the prism enlarge

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 Display

1:DMX Address
Address setting, operate touch screen to set the address,thepress
the 6th enter key to save the selected address.
2:! information
Fixture times ,powe ontimes,   power on number,lamp on times , lamp on number
3:Setting
1.DMX presets 1.mode1 16CH   2.model 24CH
2.Display Intensity Display brightness 0-255 can optionally from dark to light
3.Display saver Delay 0-600 Screensaver time settings
4.pan Reverse off/on
5.tilt Reverse off/on
6.Blackout pan/tilt off/on
9: internal control
1.Reset   Total system Reset
pan/tilt reset
color system reset
gobo system reset
strobe reset
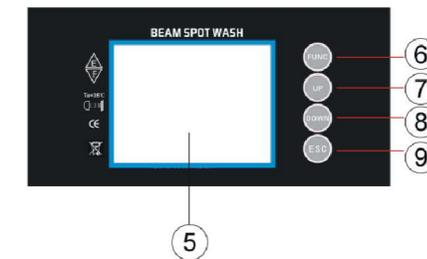optics reset
3.manual control
4.uto mode1/2/3
5.alibrations

Enter Access Code
Select 003 code then press enter into setting
Pan,tilt,color,static gobe,Rot.gobo, rotating gobo,prism
1 prism rotation, prism 2, prism 2Rotaion,zoom, frost, focus ,immer
Right1 lamp Icon
1 lamp status on/off
2setting lamp on power   off/on
7.control mode DMX/AUTO/SOUND
8.Default settings
9.2Menu operating

9CHANNEL

1: PAN	0-255:PAN 540 degree
2: pan: fine	0-255:Pan fine
3: Tilt	0-255:Tilt 270 degree
4: tilt: fine	0-255: Pan fine
5: pan/tilt: speed	0-255:Pan&tilt speed adjustment
6: function	130-139 lamp on
	140-149pan&tilt reset
	150~159color wheel reset
	160~169gobo wheel reset
	170-179strobe reset
	180-189zoom/focus/prism reset
	200~209complete reset
	230-239lamp off
7: color: wheel	0 white
	9 dark red
	18 dark blue
	27 yellow
	37 green
	46 carmine
	55 skyblue
	64 red
	73 dark green
	82 amber
	91 blue
	101 orange
	110CTO
	119 uv
	128-129 white
	130~134 dark red
	135~138 dark blue
	139~143 yellow
	144~147 green
	148~152carmine
	153~157sky blue
	158~161red
	162~166 dark green
	167-171 amber
	172-176 blue

7: color: wheel	177~180 orange
	181~185 CTO
	186~189 uv
	190~220 clockwise rainbow effect from fast to slow
	221~224 static
	225~255 anticlockwise rainbow effect from slow to fast
8: colour: wheel(fine: positioning)	0-255 color wheel fine
9	empty
10: static: gobo: wheel	0~3 white
	4-9 gobo 1
	10~15 gobo 2
	16~21 gobo 3
	22~27 gobo 4
	28~33 gobo 5
	34~39 gobo 6
	40~45 gobo 7
	46~51 gobo 8
	52~57 gobo 9
	58~63 gobo 10
	64~69 white 1
	70~75 white 2
	76~81 white 3
	82~87 white 4
	88~95 gobo 1 shake
	96~103 gobo 2 shake
	104~111 gobo 3 shake
	112~119 gobo 4 shake
	120~127 gobo 5 shake
	128~135 gobo 6 shake
	136~143 gobo 7 shake
	144~151 gobo 8 shake
	152~159 gobo 9 shake
	160~167 gobo 10 shake
	168~175 white 1 shake
	176~183 white 2 shake
	184~191 white 3 shake
	192~199 white 4 shake
	200~201 white
	202~227 clockwise from fast to slow
	228~229 static
	230~255 anticlockwise from slow to fast

11: spot: gobo: wheel	0 white
	1-4 the biggest fixed open circle
	5-7spot gobo 1
	8-10 spot gobo 2
	11-13 spot gobo 3
	14-16 spot gobo 4
	17-19 spot gobo 5
	20-22 spot gobo 6
	23-25 spot gobo 7
	26-28 spot gobo 8
	29-31 spot gobo 9
	32-34 spot gobo 1 auto rotating
	35-37 spot gobo 2 auto rotating
	38-40 spot gobo 3 auto rotating
	41-43 spot gobo 4 auto rotating
	44-46 spot gobo 5 auto rotating
	47-49 spot gobo 6 auto rotating
	50-52 spot gobo 7 auto rotating
	53-55 spot gobo 8 auto rotating
	56-59spot gobo 9 auto rotating
	60-67 spot gobo 1
	68-75 spot gobo 2
	76-83 spot gobo 3
	84-91 spot gobo 4
	92-99 spot gobo 5
	100-107 spot gobo 6
	108-115 spot gobo 7
	116-123 spot gobo 8
	124-129 spot gobo 9
	130-1371 spot gobo 1 auto rotating
	138-145 spot gobo 2 auto rotating
	146-153 spot gobo 3 auto rotating
	154-161 spot gobo 4 auto rotating
	162-169 spot gobo 5 auto rotating
	170-177 spot gobo 6 auto rotating
	178-185 spot gobo 7 auto rotating
	186-193 spot gobo 8 auto rotating
	194-199 spot gobo 9 auto rotating
	200-201 white
	202-227gobo clockwise from fast to slow
	228-229 static
	230-255 gobo anticlockwise from slow to fast

12 spot gobo auto rotating	1-127Gobo rotating from fast to slow
	128-255 gobo rotating anticlockwise from slow to fast
13 rotating gobo position	0-255 auto rotation fine
14: prism	0-19 open circle
	20-49 prisn 1 static
	50-75 prism rotation
	76-105 prism 1 static
	106-127 prism 2 rotating
15: prism: rotating	0 static prism
	1-127 clockwise from fast to slow
	128-129 static
	130-255 anticlockwise from slow to fast
16: frost	0-255 linear frost
17: zoom	0-255
18: zoom: fine	0-255
19: focus	0-255
20: focus: fine	0-255
21	empty
22: strobe	0-31 strobe off
	32-63 strobe on
	64-95 strobe from fast to slow
	96-127strobe on
	128-143strobe on from fast to slow
	144-159shutter from slow to fast
	160-191strobe on
	192-223 random strobe from slow to fast
	224-255strobe on
23: dimmer	0-255 0-100%
24: dimmer: fine	0-255 dimmer fine

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

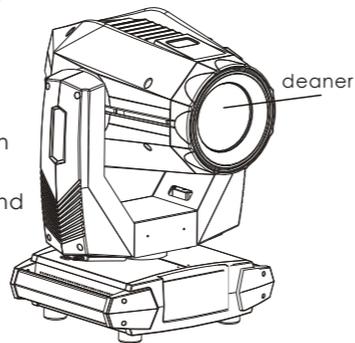Must regularly clean the outside of the optical lens focusing the dust。
Based on the number of lamps use a clean environment to determine:
Are moist, smoked or the surrounding environment is particularly dirty, which can cause dust deposition lamps.
Please use a glass cleaning solution and a soft cloth 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.

deaner

12 330W moving head beam light shine table

PHOTOMETRICS DIAGRAM 2°
PHOTOMETRICS DIAGRAM 38°

lux 2°	600000	330000	240000	150000	90000
lux 38°	22000	11000	7400	5100	3000

38° 2°

Distance (m)	5	7	9	11	14
Wash dia.(φ)m 2°	0.23	0.31	0.39	0.47	0.59
Wash dia.(φ)m 38°	1.22	1.7	2.16	2.72	3.36