

Waterproof RGB Animation Laser Light

User Manual



30W RGB

Please read this manual carefully before use

Introduction

Thank you for purchasing this product. To optimize the performance of this product, prior to use, please read these operating instructions carefully to familiarize yourself with the basic operation of this unit. Please keep the manual in safe place for future reference.

This unit has been tested at our factory before being shipped to you, there is no assembly required.

Once after received this product, please take and put carefully. And check cautiously that whether the product was damaged or not during the transportation.

Checking Parts

Please check if the following parts are included:

1 x Laser light

1 x User manual

1 x Power cable

Caution

CAUTION!



Keep this device away from rain and moisture!



Unplug mains lead before opening the housing!



Warning!

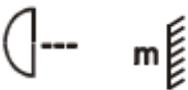
Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or

Symbol Instruction On The Device

CE Certificate

Only indoor use

Environmental protection

The minimum distance from lighted objects(meter)

$T_a = \text{---} \text{ } ^\circ \text{C}$ Max. Ambient Temp

$T_B = \text{---} \text{ } ^\circ \text{C}$ Max. Housing Temp

 Safety caution

Careful burns

Careful electric shock

Not suitable for directly installed on the surface of ordinary combustible materials

Safety Instructions

- 1) Please open and check whether break or not for transport once receive this fixture, if yes, not use it and contact dealer or manufacture as soon as possible.
- 2) The Max applicable temperature for the light is 40°C. Do not use the light under or above the temperature. $t_a=40^{\circ}\text{C}$
- 3) The fixture is applicable for many occasions, it should keep clean, and avoid long use in overheating or dusty environment. To prevent the fixture from the chemical liquid .
- 4) User must be careful of fire, heat, electric and fall-off that make heavy or fatal injury. Please read this user manual carefully before power on and installation, following safety and operation instruction in it. If still have any questions, please contact dealer or manufacture.
- 5) User must following this user manual, do not open fixture by yourself, if any problems, please contact professional technician, maintenance should by technician.

Do not power on or start the fixture before installation, please stop after working more than 8 hours, which will longer use life.

- 6) Fixed installation, do not by strong shocks.
- 7) The minimum distance between light and the illuminated surface must be more than 1 meter. 
- 8) Never look directly into the light source to avoid hurt to eyes (especially epileptics)! When dustproof glass at light output breaks, cracks or other visible damage, user should replace with new glass to continue to use.

Installation

- When install this equipment please make sure there's no flammable surfaces (decorated things, etc) and minimum distance of 0.5M from the equipment to the flammable.



- The installation of the effect has to be built and constructed in a way that it can hold 10 times the weight and without any harming deformation.
- The installation must always be secured with a secondary safety attachment, e.g. an appropriate safety rope. Never stand directly below the device when mounting, removing or servicing the fixture.

Technical Specifications

Input voltage: AC100-240V, 50/60Hz

Fuse: BGDP \varnothing 5x20mm 250VAC 3.15A

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Power consumption:260W

Light source: 30W

Control mode: Auto/Sound/DMX512/Master-slave/Illda/RJ45/SD

Channels: 12CH/16CH/18CH/25CH/27CH

Scanning system: 50Kpps Scanner, ± 30°

51 internal patterns for show

Surface temp: Tb=45°C (this data testing when the environment temp is 30°C)

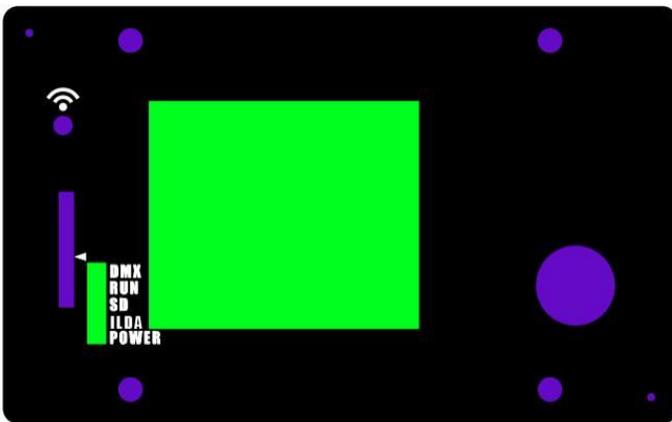
Working temp: 10°C--65°C

Store temp: 1°C--40°C

Modulation: Anglog

N.W: 32.5Kg

Laser control system



Yellow color: current position

Red letters: current working or last setting

Rotate button: edit or changed current position

Press rotate button: enter into edit or next menu.

Auto	SD List
Sound	exFlash
DMX: x	Setting
Slave	Device

MENU		Sub-Menu	Range	Default	Function	Instruction
Auto Menu		Auto Menu				
		Show	Max. 25	0	Inner program show option	
		Display inner program				
		step	Max. 128	Cycle		Cycle play

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		Series number			
		rate	1-49	5	Play speed Auto speed setting
Sound Menu		Sound Menu			
		Show	Max.25	0	Inner show option
		Inner programm show name			
		step	Max.128	Cycle	
		Series number			
		Sensitivity	1-25	5	Sound sensitivity
		Clear			Auto clear when power in, please make sure slience enviroment, press it clear noise after 1s. please press this button if like auto working
DMX Menu		DMX Menu/DMX Address			
		Type	1-9	6 26ch	DMX channel option
		start add	1-512	1	Dmx address setting
Slave Menu		Slave Menu			
		slave mode			Master cannot be in Slave, DMX, SD mode. Without DMX, just 1 piece master fixture, others all are slave.
SD		SD Program		name	
		Show	Max.10	Cycle	
		Show files name		Play the files with named XXX.csv	
		File	Max.83	Cycle	

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Program 【 SD List】	With SD card have this menu	Show files name					
		Mode	auto/sound	Auto			
		Rate	1-50	1			
exF List Menu 【 Storage list】		exF List Menu					
		Show	Max.5	Cycle			
		Show name		Files< updata> named: xxx.csv			
		File	Max.25	Cycle			
		Show files name					
		Mode	auto/sound	Auto			
		Rate	1-50	1			
			test pattern	Circle			
TOP							
color							
rect							
Linkage	Yes/no		Yes		Yes: scan rate , prelight , blanking following scanner speed changed. No:functions separately, not effect by scanner speed		
Scan Speed	"42K7" "39K1" "36K1" "33K5" "31K3" "29K3" "26K1"		33K5		Please setting <Linkage> to No, and <Scan rate> setting Max when testing the scan speed.		

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Setting Menu	Scan-speed	"20K4" "15K2" "10K"					
	-Scan rate	5-50	45				
	-prelight	1-50	5				
	-Blanking	1-50	2				
	DB25-IL DA XY	X Mirror X	Yes/no	No	X		
		Y Mirror Y	Yes/no	No	Y		
		ildaSwitch	Off/on/ auto	Auto	Ilda	Off: inner show On:Ilda Auto: play with ilda when ILDA plug in, plug out with inner show	
	XY	XY Size	0-100	100			
		X Size	0-100	100	X		
		Y Size	0-100	100			
		X Position	0-100	50			
		X					
		Y Position	0-100	50			
		X Mirror	Yes/no	No			
		Y Mirror	Yes/No	No			
XY Swap	Yes/No	No					

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	Color	Color	Single/Rto G,RtoB, GtoR, GtoB, BtoR, BtoG, RGB	RGB		RtoG,RtoB, GtoR, GtoB, BtoR, BtoG (Suitable with 2pcs laser diode or more, eg, using RtoG, original Red will overlay on Green color)
		type	Off/on/ full on			
		Laser	Analog/ TTL			
		ALL	0-100	100	RGB Full on	
		Red	0-100	100		
		Green	0-100	100		
		Blue	0-100	100		
	FFT/ Sound	Clear				Auto clear when power in, please make sure slience enviroment, press it clear noise after 1s.
		run times	5-30	5		
		black delay	1-50	10		0.1—5s
		Threshold	0-100	22		
		start Freq	0-31	6		
		end Freq	0-31	26		
SD	max point	100-1300	1300			

DMX Channel

12CH

CH	Function	Value
CH1	No function	0-39
	Sound	40-79
	Auto	80-119
	Animation(storage)	120-159
	Animation(SD)	160-199
	Static(storage)	200-255
CH2	No function	0
	Fixed color	1
	7-segments single color	2-15
	7-segments single color change	16-19
	7-segments full color	20-33
	7-segments full color change	34-37
	Color modulation	38-154
	Color modulation eotic	155-255
CH3	Patterns	0-255
CH4	vertical moving by manual	0-127
	Clockwise auto vertical moving	128-191
	Anti-clockwise auto vertical moving	192-255
CH5	horizontal moving by manual	0-127
	clockwise auto horizontal moving	128-191
	Anti-clockwise auto horizontal moving	192-255
CH6	Vertical flip by manual	0-127
	Vertical flip by auto	128-255
CH7	Horizontal flip by manual	0-127
	Horizontal flip by auto	128-255
CH8	Rotation by manual	0-127
	Clockwise rotation by auto	128-191
	Anti-Clockwise rotation by auto	192-255
CH9	Clockwise zoom by auto	0-85
	Anti-Clockwise zoom by auto	86-170
	Swap zoom by auto	171-255
CH10	Patterns size	0-255
CH11	Normal show	0-63
	Dots on line	64-127
	Segments show	128-191
	Dots show	192-255

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CH12	Drawing 1	0-127
	Drawing 2	128-255

12CH

CH		Value	Function
CH1	Dimmer	0	off
		255	100%
CH2	Patterns group	0-49	Static patterns
		50-126	storage animation patterns
		127-255	SD animation patterns
CH3	Patterns	0-255	Patterns option
CH4	Zoom	0-127	Manual
		128-255	From small to big, speed from slow to fast
CH5	X move	0-255	Horizontal moving by manual
CH6	Y Move	0-255	Vertical moving by manual
CH7	X rotation	0-255	X Rotation
CH8	Y rotation	0-255	Y Rotation
CH9	Z rotation	0-255	Z Rotation
CH10	Strobe	0-255	Speed from slow to fast
CH11	Show mode	0-255	Normal show to dots show
CH12	Color option	0-255	Color option
CH13	Red	0-255	0-100%
CH14	Green	0-255	0-100%
CH15	Blue	0-255	0-100%

16CH

CH		Value	Function
CH1	Access	0-31	No function
		32-96	Before 4 channels valid
		97-160	Before 8 channels valid
		161-224	Before 12 channels valid
		225-255	All 16 channels valid
CH2	Page	0-15	Page 1
		16-31	Page 2
		32-47	Page 3
		48-255	Every 16 values as one page
CH3	Cue	0-31	No function
		16-31	Cue 1
		32-35	Cue 2
		36-39	Cue 3

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		40-255	Every 4 values as one page		
CH4	Speed	0-15	Normal speed		
		17-31	No function		
		32-255	From slow to fast		
CH5	Brightness	0-10	No function		
		10-255	0-100%		
CH6	zoom	0-255	0-100%		
CH7	X Size	0-255	Max clockwise at 0, Max anti-clockwise at 255		
CH8	Y size	0-255	Max clockwise at 0, Max anti-clockwise at 255		
CH9	Z Angle	0-255	0-360		
CH10	Position X	0-255	0 left, 127middle ,255 right. Border or not by CH14		
CH11	Position Y	0-255	0 bottom,127 middle, 255 top. Border or not by CH14		
CH12	Color drawing	0-63	Manual	Drawing Out	
		64-127		Drawing in	
		128-159	auto	Drawing Out	
		160-191		Drawing in	
		192-223		Drawing cycle	
		224-255		Drawing link up	
CH13	Scan rate	0-31	Normal speed		
		32-255	From slow to fast		
CH14	Border	0-63	outside		
		64-127			
		128-191	off		
		192-255			
CH15	In color	0-255	See below sheet		
CH16	Out color	0-255	See below sheet		
CH		Value	function		
CH15 CH16	In color/ Out color	0-3	Color fixed		
		4-6	Color changed by CH7	Full color changed	Full color
		7-9			Single color
		10-127		In&out	
		128-191		Single color	
		192-255		TTL	7-Segment single color
RGB	analog				
		TTL	7-segment RGB color		

18CH

CH	function	Value	instruction		
CH1	Dimmer speed	0-63	No function		
		64-127	Default speed		
		128-255	From slow to fast		
CH2	Model	0-49	Auto		
		50-99	Sound		
		100-149	Storage		

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			animation		
		150-199	SD Animation		
		200-255	Patterns		
CH3	gobo /frame	0-249	Auto/sound		
		250-255	Cycle group		
CH4	Strobe	0-10	No function		
		11-199	Auto strobe from slow to fast		
		200-249	Strobe by sound		
		250-255			
CH5	Color option	0-1	Fixed color		
		2-15	7-segment single color		
		16-19	7-segment single color change		
		20-33	7-segment full color		
		34-37	7-segment full color change		
		38-154	Color modulation		
		155-255	Color modulation eotic		
CH6	Display mode	0-63	Normal show		
		64-127	Lightspot show		
		128-191	Segments show		
		192-255	Dots show		
CH7	X move	0-125	Adjust location by manual		
		126-185	Left to right cycle by auto moving		
		186-225	Left to right cycle by auto jumping		
		226-245	Random jumping by auto		
		246-255	Random jumping by sound		
CH8	Y move	0-125	Adjust location by manual		
		126-185	up to down cycle by auto moving		
		186-225	up to down cycle by auto jumping		
		226-245	Random jumping by auto		
		246-255	Random jumping by sound		
CH9	zoom	0-10	No function		
		11-87	Adjust size by manual		
		88-150	Zoom out		
		151-200	Zoom in		
		201-255	Zoom in and out		
CH10	Y rotation	0	No function		
		1-128	Adjust by manual		
		129-255	Rotation by auto		
CH11	X rotation	0	No function		
		1-128	Adjust by manual		
		129-255	Rotation by auto		
CH12	Z rotation	0	No function		
		1-128	Adjust by manual		
		129-192	Clockwise Rotation by auto		
		193-255	Anti-Clockwise Rotation by auto		

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CH13	drawing	0-10	No function
		10-74	Drawing by manual
		75-104	Auto drawing increase
		105-144	Auto drawing decrease
		145-184	Auto cycle drawing
		185-224	End to end cycle drawing increase
		225-255	End to end cycle drawing decrease
CH14	X wave	0-9	No function
		10-69	Small range wave
		70-129	middle range wave
		130-189	larger range wave
		190-255	Max. range wave
CH15	Y wave	0-9	No function
		10-69	Small range wave
		70-129	middle range wave
		130-189	larger range wave
		190-255	Max. range wave
CH16	Red dimmer	0-255	0-100%
CH17	Green dimmer	0-255	0-100%
CH18	Blue dimmer	0-255	0-100%

27CH

CH	Function	Value	Instruction
CH1	Dimmer	0-10	No function
		11-255	0-100%
CH2	Model	0-63	No function
		64-127	Auto effect
		128-191	SD
		192-255	Storage
CH3	gobo /frame	0-249	Every 2 values as one gobo
		250-255	Cycle CH4 effect
CH4	gobo list/ file	0-249	Every 10 values as one gobo
		250-255	Cycle all effect
CH5	file list/show	0-249	Every 20 values as one gobo
		250-255	Cycle all effect
CH6	Control	0-127	Auto
		128-255	Sound
CH7	In Color	0-3	Fixed color
		4-6	Full color change
		7-9	Single color change
		10-127	Color adjust
		128-191	Single color in and out
		192-255	Full color in and out

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CH8	Color Drawing	0-63	out by manual	In control by "In Color" channel. Out control by "Out Color" channel
		64-127	In by manual	
		128-159	Out by auto	
		160-191	In by auto	
		192-223	Cycle in and out by auto	
		224-255	Link-up in and out	
CH9	Out Color	0-3	Fixed color	
		4-6	Full color change	
		7-9	Single color change	
		10-127	Color adjust	
		128-191	Single color	
		192-255	Full color	
CH10	X Move	0	X Move by manual	
		1-255	location	
CH11	auto X Move	0-84	Clockwise auto X move	
		85-169	Anti-clockwise auto X move	
		170-255	Up and down cycle	
CH12	Y Move	0	Y Move by manual	
		1-255	location	
CH13	auto Y Move	0-84	Clockwise auto Y move	
		85-169	Anti-clockwise auto Y move	
		170-255	Up and down cycle	
CH14	Zoom	0	Original size	
		1-127	manual	
		128-169	Zoom out by auto	
		170-211	Zoom in by auto	
		212-255	Cycle zoom	
CH15	center rotate	0-127	Rotation by manual	
		128-191	Anti-clockwise rotation by auto	
		192-255	Clockwise rotation by auto	
CH16	X flip	0-127	X flip by manual	
		128-191	X flip by auto	
		192-255	Variant flip by auto	
CH17	Y flip	0-127	X flip by manual	
		128-191	X flip by auto	
		192-255	Variant flip by auto	
CH18	X Wave	0	No function	
		1-127	X wave by manual	
		128-191	Clockwise X Wave by auto	
		192-255	Anti-clockwise X wave by auto	
CH19	Y Wave	0	No function	
		1-127	Y wave by manual	
		128-191	Clockwise Y Wave by auto	
		192-255	Anti-clockwise Y wave by auto	
CH20	Wave ref	0-63	First period	

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		64-127	Second period
		128-191	Third period
		192-255	Forth period
CH21	dots show	0-9	No function
		10-129	Line scanner
		130-191	16 dots scanner
		192-255	8 dots scanner
CH22	Color strobe	0-2	open
		3-255	strobe
CH23	Array	0	No function
		1-63	8 location with one gobo
		64-127	4 location with two gobo
		128-191	3 location with three gobo
		192-255	2 location with four gobo
CH24	Border	0-63	Border
		64-127	Real time effect
		128-191	Border closed
		192-255	Real time effect
CH25	red	0-255	0-100%
CH26	green	0-255	0-100%
CH27	blue	0-255	0-100%

29CH

CH	Function	Value	Instruction
CH1	Dimmer	0-10	No function
		11-255	0-100%
CH2	Model	0-63	No function
		64-127	Auto effect
		128-191	SD
		192-255	Storeage
CH3	gobo /frame	0-249	Every 2 values as one gobo
		250-255	Cycle CH4 effect
CH4	gobo list/ file	0-249	Every 10 values as one gobo
		250-255	Cycle all effect
CH5	file list/show	0-249	Every 20 values as one gobo
		250-255	Cycle all effect
CH6	Control	0-127	Auto
		128-255	Sound
CH7	In Color	0-3	Fixed color
		4-6	Full color change
		7-9	Single color change
		10-127	Color adjust

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		128-191	Single color in and out	
		192-255	Full color in and out	
CH8	Color Drawing	0-63	out by manual	In control by "In Color" channel.
		64-127	In by manual	
		128-159	Out by auto	
		160-191	In by auto	Out control by "Out Color" channel
		192-223	Cycle in and out by auto	
		224-255	Link-up in and out	
CH9	Out Color	0-3	Fixed color	
		4-6	Full color change	
		7-9	Single color change	
		10-127	Color adjust	
		128-191	Single color	
		192-255	Full color	
CH10	X Move	0	X Move by manual	
		1-255	location	
CH11	auto X Move	0-84	Clockwise auto X move	
		85-169	Anti-clockwise auto X move	
		170-255	Up and down cycle	
CH12	Y Move	0	Y Move by manual	
		1-255	location	
CH13	auto Y Move	0-84	Clockwise auto Y move	
		85-169	Anti-clockwise auto Y move	
		170-255	Up and down cycle	
CH14	Zoom	0	Original size	
		1-127	manual	
		128-169	Zoom out by auto	
		170-211	Zoom in by auto	
		212-255	Cycle zoom	
CH15	center rotate	0-127	Rotation by manual	
		128-191	Anti-clockwise rotation by auto	
		192-255	Clockwise rotation by atuo	
CH16	X flip	0-127	X flip by manual	
		128-191	X flip by auto	
		192-255	Variant flip by auto	
CH17	Y flip	0-127	X flip by manual	
		128-191	X flip by auto	
		192-255	Variant flip by auto	
CH18	X Wave	0	No function	
		1-127	X wave by manual	
		128-191	Clockwise X Wave by auto	
		192-255	Anti-clockwise X wave by auto	
CH19	Y Wave	0	No function	
		1-127	Y wave by manual	
		128-191	Clockwise Y Wave by auto	

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		192-255	Anti-clockwise Y wave by auto
CH20	Wave ref	0-63	First period
		64-127	Second period
		128-191	Third period
		192-255	Forth period
CH21	dots show	0-9	No function
		10-129	Line scanner
		130-191	16 dots scanner
		192-255	8 dongs scanner
CH22	Color strobe	0-2	open
		3-255	strobe
CH23	Array	0	No function
		1-63	8 location with one gobo
		64-127	4 location with two gobo
		128-191	3 location with three gobo
		192-255	2 location with four gobo
CH24	Border	0-63	Border
		64-127	Real time effect
		128-191	Border closed
		192-255	Real time effect
CH25	red	0-255	0-100%
CH26	green	0-255	0-100%
CH27	blue	0-255	0-100%
CH28	Scan speed	0-9	Default speed
		10-255	From slow to fast
CH29	Sychronization	0-127	No function
		128-255	Synchronization when value changed

DMX Address setting

Each fixture must set a specific starting address. When receiving signal transmission, fixture will receive channel control signals which from the starting address.

According to different requirements or easy to use, the user can set many value fixtures to the same address, also can set up a separate address for every device.

If you set the same address, all the devices will receive from DMX channels signal. All connecting fixtures are jointly controlled, controller can't separate control a device.

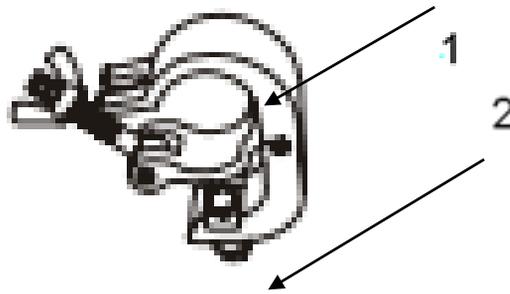
If you set a different address, each device will be separate from its particular set the starting address and begin accepting DMX512 control signal, so that more convenient separate control one device. Using this method must be based on channel quantity of device to determine a starting address.

This laser light has 16channels. you should set the starting address of the first unit to 1, the second unit to 17(1 + 16), the third unit to 33 (16*2+ 1), and so on.

Ringing

1 Mounting bracket

2 Handle



A).The ambient temperature range is 1°C--45°C, must never be exceeded.

B).The installation of the projector has to be built and constructed in a way that it can hold 10 times the weight for 1 hour without any harming deformation.

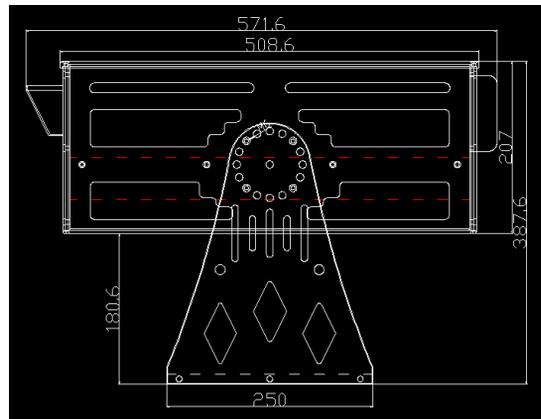
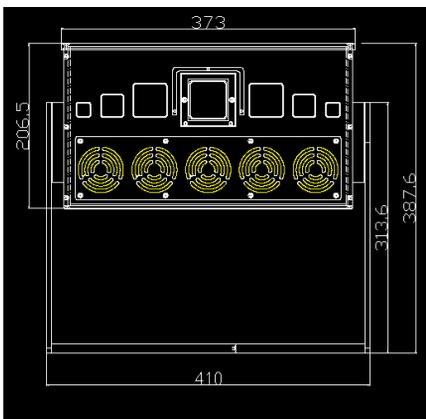
C).When rigging or servicing the fixture staying in the area below the installation place, on bridges,under high working places and other endangered areas is forbidden.

D).The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

E).The operator has to make sure that safety-relating and machine-technical installations are approved by a skilled person once a year.

F). Sure M8 screws on mounting bracket fixed middle hole ϕ 12.5mm of handle

product size



Cleaning and maintenance

Maintenance should be performed every 15-day period, by using a sponge which is dipped with alcohol, rather than wet cloth or other chemical liquid, to clean the mirror.

Always disconnect from the mains when the device is not in use or before cleaning it.



Caution

Make sure power off before cleaning and maintenance!

Warning



Warning!

Never look directly into the light source, as sensitive persons may suffer an epileptic shock (especially meant for epileptics)!



Warning!

Any power connected must be by professional person

Warranty Card

This product is made of high-brightness transistor. We will provide 1 year warranty under the condition that user has operated the light normally and lifetime service. We won't provide warranty if the damage is caused by artificial or force majeure event. Cost of fittings should be charged by user if product need maintenance after 1 year. Please cut this warranty card and shipped it along with the product to our factory when applying for warranty.

Product:

Purchasing date:

Code of invoice:

Warranty date: From

To

User's name:

Add:

Company:

Tel: