LL-Array 6RGB
USER MANUAL
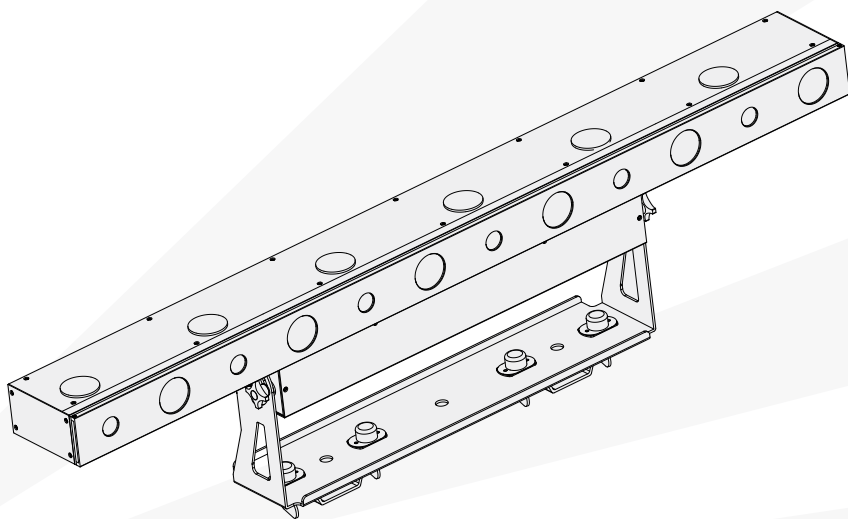
Unpacking Instructions

Dear user,
Thanks for choosing our device, believing this brand new product will bring you unlimited marvel and happiness. Before operating this device, please read this manual thoroughly, and retain it for future reference.

Warning Data

Please note the warnings in bold which will ensure the safe and smooth operation. These warnings are important to a certain extent.

Attention! Indicates a skill or other useful information for special situations.

Important! Indicates important information to protect personnel from incident or injury.

Caution! Prevent damage or injury from incorrect operation.

Laser! Laser safety warnning labels.

Warning!
If the external flexible cable or cord of this luminaire is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or his service agent.
Shields, lenses or ultraviolet screens shall be changed if they have become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches.
The lamps shall be changed if it has become damaged or thermally deformed.
The lamps shall be changed if it has become damaged or thermally deformed.

Unpacking Instructions

As receiving a fixture, carefully unpacking the carton, checking contents to ensure that all parts are in good condition. Informing the shipper immediately and retaining packing material for inspection if any parts damaged from shipping or device damaged. Keeping packing materials as evidence for shipper's confirmation.

Attention!

This unit is in perfect condition before delivery, please check all accessories when unpacking the unit. User should follow this user manual to operate this unit, and make sure that you are clear on all laser safety information and unit operation before power it on. Any wrong operation will make this unit out of warranty.
Carefully moving after receiving it, checking whether there is any damage from shipping, and all the accessories in it.

NAME	QTY
Light fixture	1
Power Cord	1
User manual	1

Unpacking Instructions

Laser Safety Warnings

⚠ According to EN 60825-1:2014, this product belongs to class 3b. Direct eye contact may cause injury.

◆ This product is for laser show only. The class 3b laser light should be operated by professional operator only.

◆ This is so-called show laser, emitting radiation with a wavelength spectrum between 400 and 700nm and producing lighting effects for shows.

◆ International laser safety regulations require that lasers must be operated in the fashion illustrated below, with a minimum of 3 meters (9.8 ft) of vertical separation between the floor and the lowest laser light vertically. Additionally, 2.5 meters of horizontal separation is required between laser light and audience or other public spaces.

◆ Never direct the laser beam to people or animals and never leave this device running unattended.

◆ The legal requirements for using laser entertainment products vary from country to country. The user is responsible for the legal requirements at the location/country of use.

Warning! Avoid direct eye contact with laser beams during operation, especially when the laser beams stay still, or injury to eyes may occur.

Laser Safety Protection Feature

Caution! The laser security measures are designed according to the specific terms of the relevant international laser safety standards and has the following laser safety protection means.

Laser key switch: laser is available only when the key is turned on.
Laser Emergency switch: remote connecting switch, it will cut off the laser light path emergently once the device in potential hazard;
Laser indication : laser indication indicating the front panel of the laser light" laser-ready ".
Laser safety labels: affixed line with European standards for multiple chassis laser safety stickers.

Safety Instructions

To protect the environment, please try to recycle the packing material as much as possible.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other fluids, or metallic objects

Don't throw this product away just as general trash, please deal with the product follow the abandon electronic product regulation in your country.

Locate the fixture in a well ventilated spot, away from any flammable materials and/or liquids. The fixture must be fixed at least 20cm from surrounding walls

◆ To avoid condensation to be formed inside, allow this unit to adapt to the surrounding temperatures when bringing it into a warm room after transport. Condense sometimes prevents the unit from working at full performance or may even cause damages

◆ Don't cover any ventilation openings as this may result in overheating.

◆ Don't install it on flammable object.

◆ Don not use it when maximum ambient temperature is higher than 40 degree,

◆ Unplug the unit when it is not used for a longer time or before replacing the bulb.

◆ Don't open the top cover to avoid unit damage.

◆ Please use the original packing when the device is to be transported.

⚠ **Never expose the lens to direct sunlight, even for a short period, This may damage the light effect or even cause fire!**
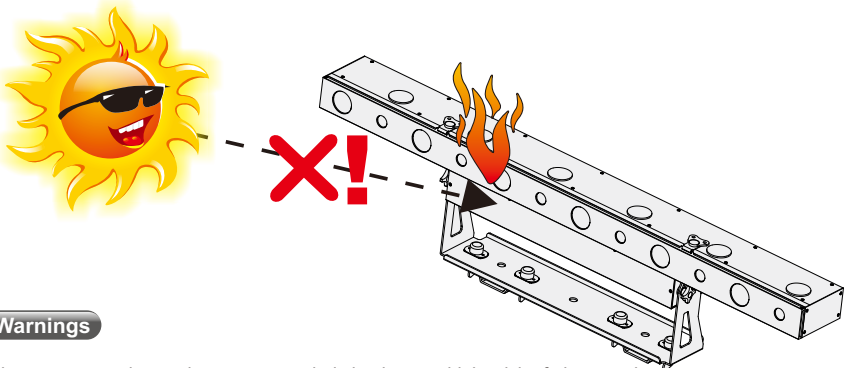
Safety Warnings

◆ Always connect the product to a grounded circuit to avoid the risk of electrocution.

◆ Always disconnect the product from the power source before cleaning or replacing the fuse.

◆ Avoid direct eye exposure to the light source while the product is on.

◆ Make sure the power cord is not crimped or damaged.

◆ Never disconnect the product from power by pulling or tugging on the cord.

◆ If mounting the product overhead, always secure to a fastening device using a safety cable.

◆ Make sure there are no flammable materials close to the product when operating.

◆ Do not touch the product's housing when operating because it may be very hot.

Keep this User Manual for future use. If you sell the product to another user, be sure to give this document to the next owner.

Overhead Rigging

Attention! The installation must be carried out by qualified service personal only. Improper installation can result in serious injuries and /or damage to property. Overhead rigging required extensive experience! Working load limits should be respected, Certified installation materials should be used, the installed device should be inspected regularly for safety.

◆ Make sure the area below the installation place is free from unwanted persons during rigging, de-rigging and servicing.

◆ Locate the fixture in a well ventilated spot, far away from any flammable materials and/or liquids. The fixture must be fixed at least 20cm from surrounding walls

◆ The device should be installed out of reach of people and outside areas where persons may walk by or be seated.

◆ The device should be well fixed; a free swinging mounting is dangerous and may not be considered!

◆ Do not cover any ventilation opening as this may result in overheating

◆ Before the first time use, it must be inspected by professional staff to make sure safety, inspection regularly every year.

Before rigging make sure that installation area can hold the 10 times weight of device. Using the steel rope which can hold 12 times weight of device, through the eye-bolt for assisting hang installment.

Clamp

Adjust Angle
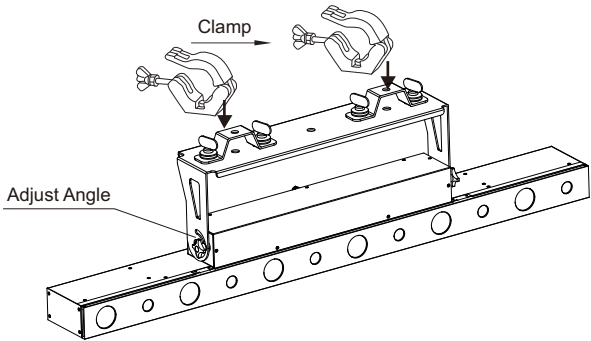
AC Power

Please use the attached power, note that power voltage and frequency are the same as the marked voltage and frequency of device when connecting power. Every device's power should be connected separately, so that device can be controlled individually.

L E N

FUSE: 5×20mm
250V 1.6A slow
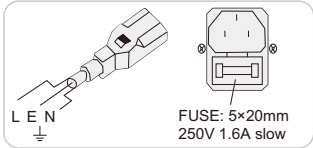
Cable spec:

Cable(EU)	Cable(US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Yellow/Green	Earth	⏚

Product Installation

DMX-512 connection

◆ Connection between lights and DMX must use the shied cable of diameter more than 0.5mm. Please use the attached 5 pin XLR plug/socket to connect the DMX output/input interface. The connection between socket and cable as below(note the plug/socket's 5 pin number and position).
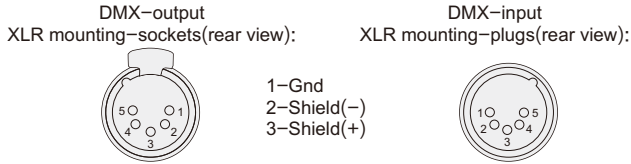
DMX−output
XLR mounting−sockets(rear view):

DMX−input
XLR mounting−plugs(rear view):

1−Gnd
2−Shield(−)
3−Shield(+)

◆ Note, XLR plug/socket's 5pin can not be touched by inner hull, connection between pins is not allowed. Except above connection, XLR plug/socket can not be connected with XLR control line. Device receives international standard DMX512(1990) control signal.

◆ When using standard DMX512 control signal, the last device's output interface must be connected to a DMX plug. This plug is putting a 120 ohm resistance between "canon" plug's 2 pin and 3 pin. Showing as below pic. Sticking this plug into the last device's signal output interface, it will avoid the interference during the process of signal transmission.

PIN3   PIN2
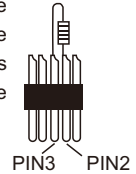
Operation instructions
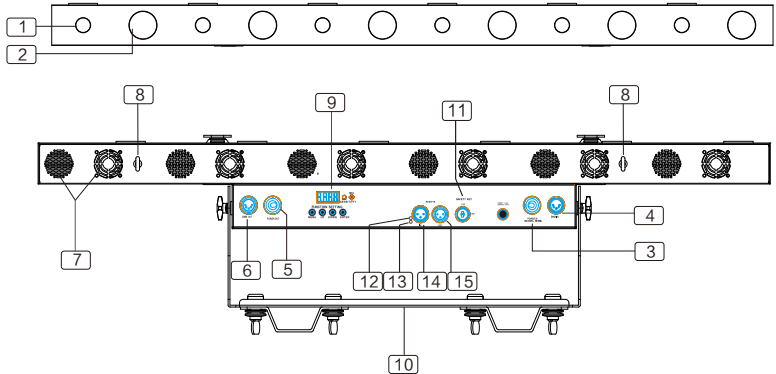
NO	Name	Function
1	Laser aperture	RGB laser beam (480mW)×6Pcs
2	LED aperture	Warm white LED (3W)×6Pcs
3	Power Input(Bule)	Blue neutrik power ouput socket
4	DMX Input	5PIN male XLR interface, for DMX communication
5	Power output(White)	White neutrik power output socket,connect to next fixtrue
6	DMX Output	5PIN female XLR interface, for DMX communication
7	Cooling system	6 sets of fan cooling in/out system
8	Safety eye	Attach the safety cable
9	LED Display	For setting model
10	Hanging bracket	For hang and angle adjustment
11	Key switch	Make sure the professional person use
12	Remote status LED	Remote controller connected ready
13	Laser status LED	Laser emission indicator
14	Remote control IN	Connect to the remote controller or previous laser projector
15	Remote control OUT	Connect to the remote control IN of next laser projector.

Menu operating instruction

Once after every power on the device, the VERSION and MANUFACTURE INFORMATION will be shown in LED monitor of rear panel. When the device is powered on, LED monitor on rear panel shows the current operating standalone mode or DMX address of DMX mode. With help of LED control panel, is very easy to set and change the operating mode of. After every resetting and saved, the new mode information will be shown on LED monitor at next power.

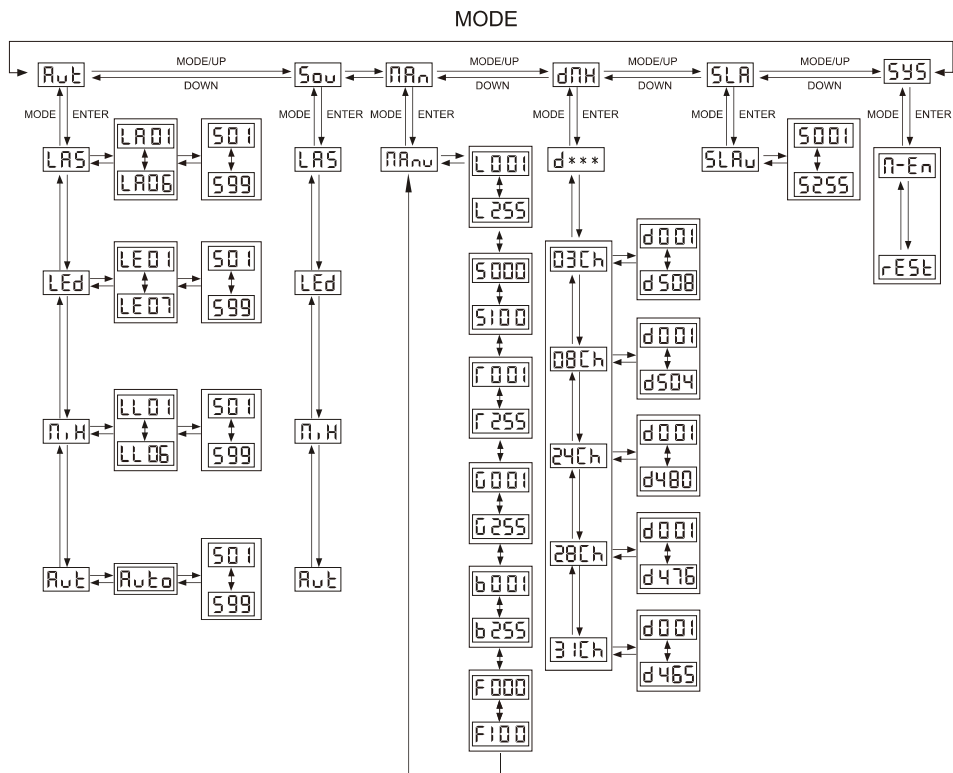| MODE | Mode selection or back to the last function. |

| ENTER | Confirm, enter into the deeper menu. Press it to save the chosen model or DMX initial add. |

| UP | DOWN | For changing DMX initial add or function value |

MODE

Menu operating instruction

LED display		Function description
Auŧ	LAS	LASER Auto shows(LA01-LA06)
	LEd	LED Auto shows(LE01-LE07)
	ɪ̈, H	MIX Auto shows(LL01-LL06)
	Auŧ	Auto shows
	S01-S99	Setting effect speed.01 is the slowest, 99 is the fast
Sou	LAS	LASER Sound shows(LA01-LA06)
	LEd	LED Sound shows(LE01-LE07)
	ɪ̈, H	MIX Sound shows（LL01-LL06）
	Sou	Sound shows
ɪ̈Aɪ̈	ɪ̈Aɪ̈ʋ	Manual
dɪ̈H	d***	Setting channel address
	03/08/24/28/3!	Choosing DMX channel modes
SLA	S001-S255	Enter slave mode
SYS	ɪ̈-Eɪ̈	Master enable
	rESŧ	Restore the factory default settings

Note: In sound mode, the fixture will turn off after 5 seconds automatically, if there isn't any sound signal and will light on again once sound signal received.

Initial Setting

MENU			UP	DOWN		ENTER
AUT	−LAS	LA01-LA06	S. 01 to S. 99, speed from slow to fast 01 is slowest, 99 is fastest			Press ENTER to Save
	-LED	LE01-LE07				
	-MIX	LL01-LL06				
	-AUT	AUTO				
SOU	−LAS					Press ENTER to Save
	-LED					
	-MIX					
	-SOU					
MAN	MANU		L.001-L.255 (LED brightness)			ENTER
			S.000-S.100(LED strobe) S. 000: off, S.099: on , S. 100: sound control strobe			ENTER
			R.001-R.255 (Red laser brightness) G.001-G.255 (Green laser brightness) B.001-B.255 (Blue laser brightness)			ENTER
			F. 000-F. 100(Laser strobe) F. 000: off, F.099: on , F.100: sound control strobe			ENTER
DMX	03CH(d001-d508) 08CH(d001-d504) 24CH(d001-d480) 28CH(d001-d476) 31CH(d001-d465)					choose channel mode Press ENTER to Save
	dXXX		d001-dxxx			Set starting address Press ENTER to Save
SLA	SLAV		S. 001 to S. 255			Press ENTER to Save
SYS	M-EN		Enable/disable master			Press ENTER to Save
	REST		Restore default settings			Press ENTER to Save

8

DMX operation instructions

👆 This device adopts large storage and high speed chip, which has been written lots of effect based on DMX application. **Before control other DMX channels, please be sure that the channel 1 was set in proper mode (value).**

3CH

Channel		Value	Description
CH1 MODE		000-009	Blackout
		010-039	Auto Laser&LED show
		040-069	Auto Laser show
		070-099	Auto LED show
		100-129	Auto mixed show
		130-159	Sound Laser&LED show
		160-189	Sound Laser show
		190-209	Sound LED show
		210-255	Sound mixed show
CH2 AUTO	LASER + LED SHOW	000-039	Auto LED+Laser show #1
		040-079	Auto LED+Laser show #2
		080-119	Auto LED+Laser show #3
		120-159	Auto LED+Laser show #4
		160--199	Auto LED+Laser show #5
		200-255	Auto LED+Laser show #6
	LASER SHOW	000-039	Auto Laser show #1
		040-079	Auto Laser show #2
		080-119	Auto Laser show #3
		120-159	Auto Laser show #4
		160-199	Auto Laser show #5
		200-255	Auto Laser show #6
	LED SHOW	000-039	Auto LED show #1
		040-079	Auto LED show #2
		080-119	Auto LED show #3
		120-159	Auto LED show #4
		160-199	Auto LED show #5
		200-239	Auto LED show #6
		240-255	Auto LED show #7
	MIXED SHOW	0−255	Not used
CH3		0−255	Auto speed

DMX operation instructions

8CH

Channel	Value	Description
CH1	000-255	All LEDs brightness
CH2	000-002	LEDs ON
	003-249	Strobe from slow to fast
	250-255	Sound control strobe
CH3	000-255	All red lasers brightness
CH4	000-002	Red lasers ON
	003-249	Strobe from slow to fast
	250-255	Sound control strobe
CH5	000-255	All green lasers brightness
CH6	000-002	Green lasers ON
	003-249	Strobe from slow to fast
	250-255	Sound control strobe
CH7	000-255	All blue lasers brightness
CH8	000-002	Blue lasers ON
	003-249	Strobe from slow to fast
	250-255	Sound control strobe

24CH

Channel	Value	Description
CH1	000-255	#1 Led light brightness
CH2	000-255	#2 Led light brightness
CH3	000-255	#3 Led light brightness
CH4	000-255	#4 Led light brightness
CH5	000-255	#5 Led light brightness
CH6	000-255	#6 Led light brightness
CH7	000-255	#1Red laser brightness
CH8	000-255	#2 Red laser brightness
CH9	000-255	#3 Red laser brightness
CH10	000-255	#4 Red laser brightness
CH11	000-255	#5 Red laser brightness
CH12	000-255	#6 Red laser brightness
CH13	000-255	#1 Green laser brightness
CH14	000-255	#2 Green laser brightness
CH15	000-255	#3 Green laser brightness
CH16	000-255	#4 Green laser brightness
CH17	000-255	#5 Green laser brightness
CH18	000-255	#6 Green laser brightness
CH19	000-255	#1 Blue laser brightness
CH20	000-255	#2 Blue laser brightness
CH21	000-255	#3 Blue laser brightness
CH22	000-255	#4 Blue laser brightness
CH23	000-255	#5 Blue laser brightness
CH24	000-255	#6 Blue laser brightness

DMX operation instructions

28CH

Channel	Value	Description
CH1	000-255	#1 Led light brightness
CH2	000-255	#2 Led light brightness
CH3	000-255	#3 Led light brightness
CH4	000-255	#4 Led light brightness
CH5	000-255	#5 Led light brightness
CH6	000-255	#6 Led light brightness
CH7	000-255	All Leds brightness control
	000-255	All Leds strobe from slow to fast
	000-255	All Leds strobe by sound
CH8	000-255	#1Red laser brightness
CH9	000-255	#2 Red laser brightness
CH10	000-255	#3 Red laser brightness
CH11	000-255	#4 Red laser brightness
CH12	000-255	#5 Red laser brightness
CH13	000-255	#6 Red laser brightness
CH14	000-255	All red lasers brightness control
	000-255	All red lasers strobe from slow to fast
	000-255	All red lasers strobe by sound
CH15	000-255	#1 Green laser brightness
CH16	000-255	#2 Green laser brightness
CH17	000-255	#3 Green laser brightness
CH18	000-255	#4 Green laser brightness
CH19	000-255	#5 Green laser brightness
CH20	000-255	#6 Green laser brightness
CH21	000-255	All green lasers brightness control
	000-255	All green lasers strobe from slow to fast
	000-255	All green lasers strobe by sound
CH22	000-255	#1 Blue laser brightness
CH23	000-255	#2 Blue laser brightness
CH24	000-255	#3 Blue laser brightness
CH25	000-255	#4 Blue laser brightness
CH26	000-255	#5 Blue laser brightness
CH27	000-255	#6 Blue laser brightness
CH28	000-255	All blue lasers brightness control
	000-255	All blue lasers strobe from slow to fast
	000-255	All blue lasers strobe by sound

DMX operation instructions

31CH

Channel	Value	Description	
CH1	000-255	#1 Led light brightness	
CH2	000-255	#2 Led light brightness	
CH3	000-255	#3 Led light brightness	
CH4	000-255	#4 Led light brightness	
CH5	000-255	#5 Led light brightness	
CH6	000-255	#6 Led light brightness	
CH7	000-255	All Leds brightness control	
	000-255	All Leds strobe from slow to fast	
	000-255	All Leds strobe by sound	
CH8	000-255	#1Red laser brightness	
CH9	000-255	#2 Red laser brightness	
CH10	000-255	#3 Red laser brightness	
CH11	000-255	#4 Red laser brightness	
CH12	000-255	#5 Red laser brightness	
CH13	000-255	#6 Red laser brightness	
CH14	000-255	All red lasers brightness control	
	000-255	All red lasers strobe from slow to fast	
	000-255	All red lasers strobe by sound	
CH15	000-255	#1 Green laser brightness	
CH16	000-255	#2 Green laser brightness	
CH17	000-255	#3 Green laser brightness	
CH18	000-255	#4 Green laser brightness	
CH19	000-255	#5 Green laser brightness	
CH20	000-255	#6 Green laser brightness	
CH21	000-255	All green lasers brightness control	
	000-255	All green lasers strobe from slow to fast	
	000-255	All green lasers strobe by sound	
CH22	000-255	#1 Blue laser brightness	
CH23	000-255	#2 Blue laser brightness	
CH24	000-255	#3 Blue laser brightness	
CH25	000-255	#4 Blue laser brightness	
CH26	000-255	#5 Blue laser brightness	
CH27	000-255	#6 Blue laser brightness	
CH28	000-255	All blue lasers brightness control	
	000-255	All blue lasers strobe from slow to fast	
	000-255	All blue lasers strobe by sound	
CH29	000-009	NA	
	010-039	Auto Laser & Led show	
	040-069	Auto Laser show	
	070-099	Auto Led show	
	100-129	Auto mixed show	WHEN OPERATING ON THIS MODE, 1-28 CHANNELS ARE NOT AVAILIABLE
	130-159	Auto Laser & Led show	
	160-189	Auto Laser show	
	190-219	Auto Led show	
	220-255	Auto mixed show	
CH30	000-255	Refer Ch2 of 3CH mode	
CH31	000-255	Playback Speed	

Product parameter

Model	LL-Array 6RGB
Laser power	Red(638nm/180mW, dimmable)
	Green(520nm/100mW, dimmable)
	Blue(450nm/200mW, dimmable)
Beam diameter	4mm
Beam divergence	<2mrad
Laser classification	Class IIIb (IEC60825-1)
Rate LED power	3W warm wihte LED×6pcs
LED Beam angle	7°
Connectors	3 Pin XLR DMX in/out
Power consumption	100-240V 50/60Hz 60W Max
Power linking	Neutrik PowerCon
Operation temperature	10-40°C
Protection rating	IP44
Product Dimensions(WxDxH)	1000×128×117mm (without handle)
Net Weight	7.5Kg