

IP500 LED Beam Spot Wash Moving Head Light

User Manual



This manual contains important information.
Please read before operating fixture.

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1. GETTING STARTED

What's In The Box?

- 1 x Beam IP500 light
- 1 x AC Power Cord
- 1 x Signal Cord
- 2 x Omega Bracket
- This Lovely User Manual

Getting It Out Of the Box

Congratulations on purchasing the Beam 500, the ultra-bright Beam wall wash fixture. Now that you've got your Beam 500, you should carefully unpack the box and check the contents to ensure that all parts are present and in good condition. If anything looks as if it has been damaged in transit, notify the shipper immediately and keep the packing material for inspection. Again, please save the carton and all packing materials.

Powering Up!

All fixtures must be powered directly off a switched circuit and cannot be run off a rheostat (variable resistor) or dimmer circuit, even if the rheostat or dimmer channel is used solely for a 0% to 100% switch.

Warning! All fixtures must be connected to circuits with a suitable Ground (Earthing).

Getting A Hold Of Us

If something happens goes wrong, please feel free to contact me. We'll be happy to help, honest.

Disclaimer: The information and specifications contained in this document are subject to change without notice. We assume no responsibility or liability for any errors or omissions that may appear in this user manual. We reserve the right to update the existing document or to create a new document to correct any errors or omissions at any time.

Safety Instructions



Please read these instructions carefully. They include important information about the installation, usage and maintenance of this product.

- Please keep this User Guide for future use. If you sell the unit to someone else, be sure that they also receive this User Guide.
- ALWAYS make sure that you are connecting to the proper voltage, and that the line voltage you are connecting to is not higher than that stated on the decal or rear panel of the fixture.
- Make sure there are no flammable materials close to the unit while operating.
- It is recommended that the continuous working time of the lamp should not exceed 10 hours, and the interval between continuous starting of the lamp should not be less than 10 minutes, otherwise
The bulb will not trigger properly due to overheating protection.
- The unit must be installed in a location with adequate ventilation, at least 20in (50cm) from adjacent surfaces. Be sure that no ventilation slots are blocked.
- ALWAYS disconnect from the power source before servicing.
- ALWAYS secure mounted fixtures with a safety cable. NEVER carry the fixture by its head. Use its carrying handles.
- DO NOT operate at ambient temperatures higher than 104°F (40°C).
- In the event of a serious operating problem, stop using the unit immediately. NEVER try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.
- NEVER connect the device to a dimmer pack.

- Make sure the power cord is never crimped or damaged.
- Never disconnect the power cord by pulling or tugging on the cord.
- Avoid direct eye exposure to the light source while it is on.

Caution! There are no user serviceable parts inside the unit. Do not open the housing or attempt any repairs yourself.

2. MEET THE BEAM IP500

Optical

Light source:500W LED

Expected average lifetime: 20000 hours

2 prisms: independent rotation prism disk, can produce a variety of prism combination effect

Gobo

Static gobo wheel: 12 gobos+blank,with shake and bilateral rotation

Rotating gobo wheel:7 gobos+biank,with shake and bilateral rotation

Color

Color wheel: 13 fixed color+blank,with half color and linear adjustment function,can achieve bilateral Rainbow effect

Frost

1 frost wheel

Thermal

Maximum ambient temp:40 °C

Maximum surface temp:90 °C

Minimum operating temp:0 °C

Electrical

Power input, nominal: AC 100-240V 50/60Hz

Max. Power consumption: 700W

Control and programming

Control channels (DMX): 26

Protocol: DMX-512 ,Master-slave,Auto,RDM

Display: LCD display

Easy-to-use 5-button control panel with LCD display

16bit Control: Dimmer, colors, focus, zoom, pan/tilt, gobo indexing & rotation

Operating modes: DMX512, master/slave, auto,RDM

Dynamic effects

Pan/Tilt movement: 540°/210°

Strobe:1-20Hz per second, with pulse strobe, synchronous asynchronous strobe effect.

Dimmer: 0-100% smooth dimming

Zoom: Motorized

Physical / Installation

Weight: 35KG

IP rating: IP65

Material: Aluminium, plastic

Connections

AC power: 4.92 ft.(1.5 m) cable with water proof plugs

DMX data input/output: 4.92 ft.(1.5 m) cable with DMX3pin+5pin

DMX Quick Reference (26)

CH	Channel	DMX value	Description
1	Pan	0-255	Pan movement range 540°
2	Pan fine	0-255	Pan fine
3	Tilt	0-255	Tilt movement range 270°
4	Tilt fine	0-255	
5	Pan/Tilt speed	0	top speed
		1-255 Speed mode	Speed from fast to slow
		1-255 Time mode	The time period ranged from 0.1s to 25.5 ses
6	Dimmer	0-255	Dimmer from dark to brightness
7	Dimmer fine	0-255	
8	Strobe	0-3	Strobe close
		4-103	Strobe effect1from slow to fast
		104-107	Strobe open

		108-155	Strobe effect2 Fast open and slow out, from slow to fast
		156-207	Strobe effect3 Fast go out and slow open, from fast to slow
		208-212	Strobe open
		213-251	Random strobe, from slow to fast
		252-255	Strobe open
9	Color wheel	0-2	Color1 (white)
		3-7	Color1+Color2
		8-12	Color2
		13-17	Color2+Color3
		18-22	Color3
		23-27	Color3+Color4
		28-32	Color4
		33-37	Color4+Color5
		39-42	Color5
		43-47	Color5+Color6
		48-52	Color6
		53-57	Color6+Color7
		58-62	Color7
		63-67	Color7+Color8
		68-72	Color8
		73-77	Color8+Color9
		78-82	Color9
		83-87	Color9+Color10
		88-92	Color10
		93-97	Color10+Color11
		98-102	Color11
		103-107	Color11+Color12
		108-112	Color12
		113-117	Color12+Color13
		118-122	Color13
		123-127	Color13+Color1
		128-190	Rainbow effects from fast to slow
		191-192	Rainbow effects stop
		193-255	Rainbow effects from slow to fast
10	CMY-C	0-255	The linear changes from shallow to deep
11	CMY-M	0-255	The linear changes from shallow to deep
12	CMY-Y	0-255	The linear changes from shallow to deep
13	CTO	0-255	The linear changes from shallow

			to deep
14	Gobo wheel	0-4	open
		5-12	Gobo1
		13-20	Gobo2
		21-28	Gobo3
		29-36	Gobo4
		37-44	Gobo5
		45-52	Gobo6
		53-60	Gobo7
		61-68	Gobo8
		69-76	Gobo9
		77-84	Gobo10
		85-92	Gobo11
		93-102	Gobo12
		103-110	Gobo1 shake from slow to fast
		111-118	Gobo2 shake from slow to fast
		119-126	Gobo3 shake from slow to fast
		127-134	Gobo4 shake from slow to fast
		135-142	Gobo5 shake from slow to fast
		143-150	Gobo6 shake from slow to fast
		151-158	Gobo7 shake from slow to fast
		159-166	Gobo8 shake from slow to fast
		167-174	Gobo9 shake from slow to fast
		175-182	Gobo10 shake from slow to fast
		183-190	Gobo11 shake from slow to fast
		191-199	Gobo12 shake from slow to fast
		200-201	open
		202-226	The gobo rolls forward, from fast to slow
		227-228	Stop rolling
		229-255	The gobo scroll in reverse, from slow to fast
15	Rotate gobo	0-5	Open / white hole
		6-15	Gobo1
		16-25	Gobo2
		26-35	Gobo3
		36-45	Gobo4
		46-55	Gobo5
		56-65	Gobo6
		66-75	Gobo7
		76-92	Gobo1 shake from slow to fast
		93-109	Gobo2 shake from slow to fast
		110-126	Gobo3 shake from slow to fast

		127-143	Gobo4 shake from slow to fast
		144-160	Gobo5 shake from slow to fast
		161-177	Gobo6 shake from slow to fast
		178-199	Gobo7 shake from slow to fast
		200-201	stop
		202-227	Forward gobo flow effect: from fast to slow
		228-255	Reverse gobo flow effect: from slow to fast
16	Rotate gobo transposition and rotate	0	No function
		1-127	Rotate gobo transposition
		128-191	Forward gobo rotate: from fast to slow
		192-255	Reverse gobo rotate: from slow to fast
	Rotate gobo remote fine tuning	0-255	spin fine-tuning
17	Prism1	0-63	no prism
		64-255	Prism 1 was inserted
18	Prism rotation	0-127	Prism 1 positioning and rotation
		128-190	Prism 1 rotates backwards, from fast to slow
		191-192	Prism 1 stopped the rotation
		193-255	Prism 1 rotates forward, from slow to fast
19	Prism2	0-63	no prism
		64-255	Prism2 was inserted
20	Prism rotation	0-127	Prism 2 positioning and rotation
		128-190	Prism 2 rotates backwards, from fast to slow
		191-192	Prism 2 stops the rotation
		193-255	Prism 2 rotates forward, from slow to fast
21	Frost	0-63	no
		64-255	Frost
22	Focus	0-255	from small to large
23	Focus Fine	0-255	from small to large
24	Zoom	0-255	By the far and near continuous regulation
25	Zoom fine	0-255	from far to near

26	Reset	0-199	No function
		200-209	PanTilt reset
		210-219	Effect reset
		220-229	All motor reset
		230-255	No function

3. SETUP



Before replacing a fuse, disconnect the power cord.
ALWAYS replace with the same type and rating of fuse.

Fuse Replacement

The 500 utilizes a high-output switch-mode power supply with an internal fuse. Under normal operating conditions, the fuse should not require replacement. The fuse is field replaceable, however it is an advanced procedure suited to qualified individuals. Should the fuse require replacement, please contact us for instructions.

Connecting A Bunch of Beam 500Fixtures

You will need a serial data link to run light shows using a DMX-512 controller or to run shows on two or more fixtures set to sync in master/slave operating mode. The combined number of channels required by all the fixtures on a serial data link determines the number of fixtures the data link can support.

Fixtures on a serial data link must be daisy chained in one single line. Also, connecting more than 8 fixtures on one serial data link without the use of a DMX optically-isolated splitter may result in deterioration of the digital DMX signal. The maximum recommended cable-run distance is 500 meters (1640 ft). The maximum recommended number of fixtures on a serial data link is 8

fixtures.

Data/DMX Cabling

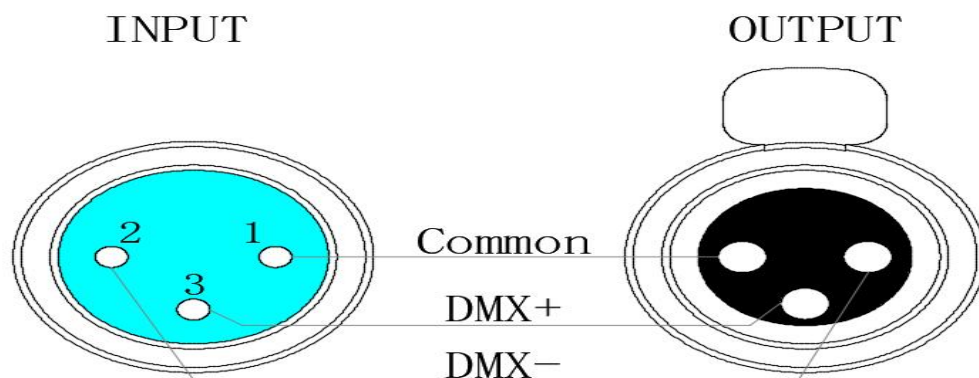
To link fixtures together you'll need data cables. You should use data-grade Cables that can carry a high quality signal and are less prone to electromagnetic interference.

In any event, the cable should have the following characteristics:

- 2-conductor twisted pair plus a shield
- Maximum capacitance between conductors – 30 pF/ft.
- Maximum capacitance between conductor & shield – 55 pF/ft.
- Maximum resistance of 20 ohms / 1000 ft.
- Nominal impedance 100 – 140 ohms

Cable Connectors

Cables must have a male XLR connector on one end and a female XLR connector on the other end. (Duh!)



CAUTION: Do not allow contact between the common and the fixture's chassis ground. Grounding the common can cause a ground loop, and your fixture may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

Take It To The Next Level: Setting Up DMX Control

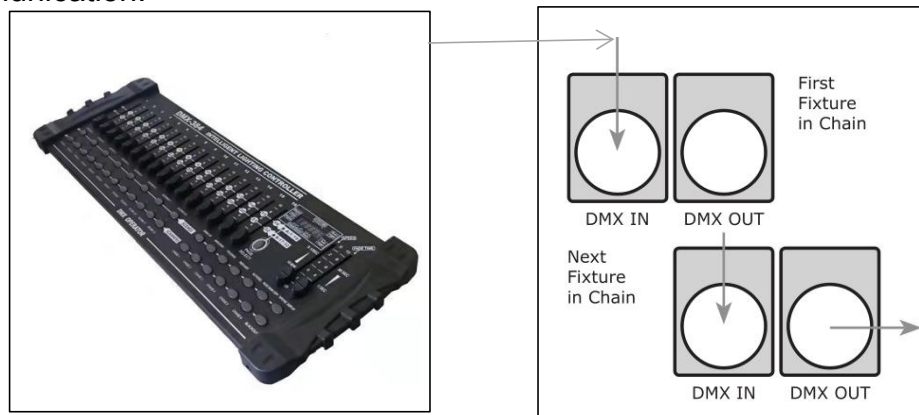
Step 1: Connect the male connector of the DMX cable to the female connector

(output) on the controller.

Step 2: Connect the female connector of the DMX cable to the first fixture's male connector(input).

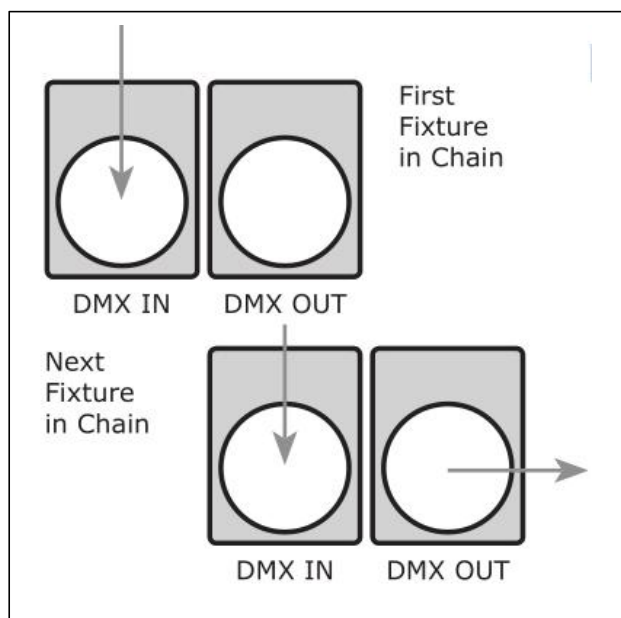
Note: It doesn't matter which fixture address is the first one connected. We recommend connecting the fixtures in terms of their proximity to the controller, rather than connecting the lowest fixture number first, and so on.

Step 3: Connect other fixtures in the chain from output to input as above. Place a DMX terminator on the output of the final fixture to ensure best communication.



Fixture Linking (M/S Mode)

1. Connect the male connector side of the DMX cable to the output female connector of the first fixture.
2. Connect the end of the cable coming from the first fixture which will have a female connector to the input connector of the next fixture consisting of a male connector. Then, proceed to connect from the output as stated above to the input of the following fixture and so on.



A quick note: Often, the setup for Master-Slave and Standalone operation requires that the first fixture in the chain be initialized for this purpose via either settings in the control panel or DIP-switches. Secondly, the fixtures that follow may also require a slave setting.

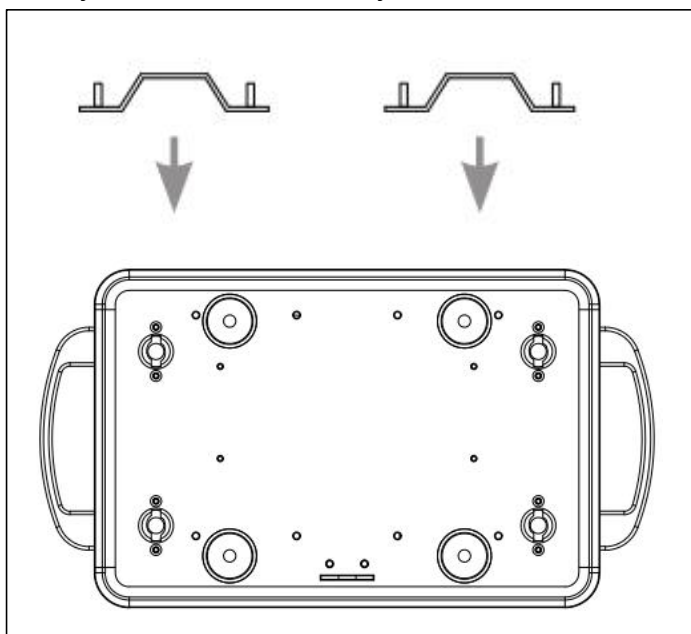
Check the “**Operating Adjustments**” section in this manual for complete instructions for this type of setup and configuration.

Mounting & Rigging

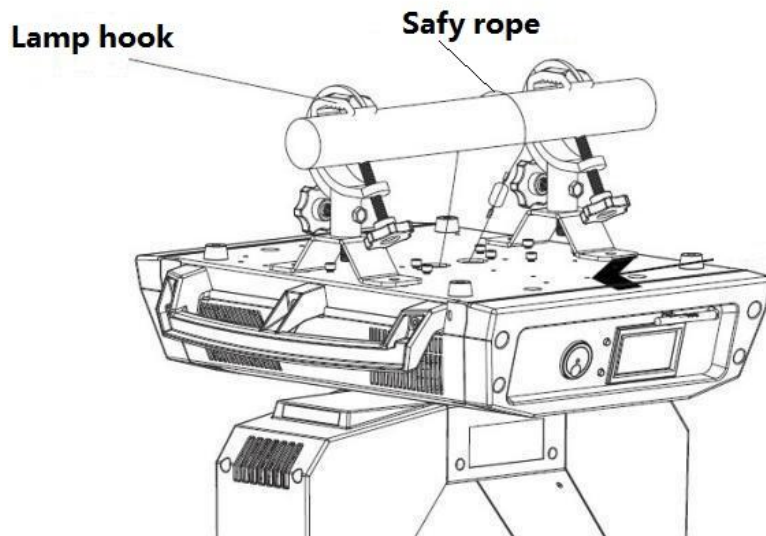
This fixture may be mounted in any SAFE position provided there is enough room for ventilation. The fan or vents pathway must never obstructed.

A mounting bracket assembly is provided that secures the bottom of the base, the Omega bracket, and the safety cable rigging point together. When mounting to truss, be sure to secure an appropriately rated clamp to the omega bracket.

IMPORTANT: Regardless of the rigging option you choose for your fixtures, always be sure to secure your fixture with a safety cable.



Attach the 2x ¼-turn quick lock Omega brackets to the base, and the clamps to the brackets.



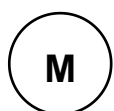
Mount the fixture using a suitable "C" or "O" type clamps. The clamps should be rated to hold at least 10x the fixture's weight to ensure structural stability. Do not mount to surfaces of unknown strength, and ensure properly rated rigging is used when mounting fixtures overhead.

Overhead mounting requires extensive experience, which includes calculating working load limits, knowledge of the installation material being used, and periodic safety inspections. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

4. OPERATING ADJUSTMENTS

The Control Panel

All of the features and different modes possible with this fixture are accessed by using the control panel on the front of the fixture. There are 4 control buttons next to the LED display which allow you to navigate through the various control panel menus.



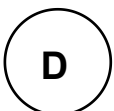
<MENU>

Is used to navigate to the previous higher-level menu item.



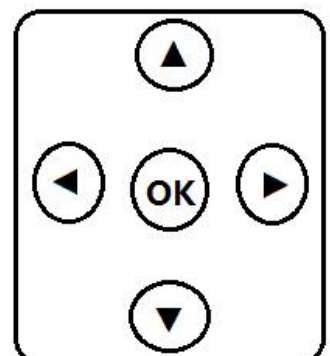
<UP>

Scrolls through menu items and numbers in ascending order.



<DOWN>

Scrolls through menu items and numbers

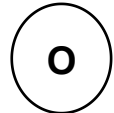


in descending order.



<ENTER>

Is used to navigate to the previous higher-level menu item.



<OK>

Execute the function, start editing, exit editing

Pressing any button from the home screen will show the selectable menu items from the menu map on page #15. When a menu function is selected, the display will immediately show the first available option for the selected menu function. To select a menu item, press **<OK>**.

Use the **<UP>** and **<DOWN>** buttons to navigate the menu options. Press the **<OK>** button to select the menu function currently displayed, or to enable a menu option. To return to the previous option or menu without changing the value, press the **<MENU>** button.

Control Panel Menu Structure

DMX Address	1-512	Press the "OK" button to enter the edit state, the initial address code is 001, press the "Up" or "down" key to change the location Address code. Press the "OK" key to exit the editing state.	
Display	Disp Flip	Off/On	
	Disp Dim	100%	
	Bck Light	1Min/On/3Min/2Min	
	Menu Back	Off/3Min/2Min/1Min	
	DMX Flash	On/Off	
	Language	English/Chinese	
Feature	PT Option	Pan Rev	Off/On
		Tilt Rev	Off/On
		PT Fback	On/Off
	ECO Mode	On/Off	
	Chan Mode	Standard/Simp	
	Run Mode	Slave/Sound/Auto	
	Signal Clr	Clr/Keep	
	DMX Rst	On/Off	
	Auto Time	02s-20s	
Lamp	Default	L on/L off	
	Manual	L on/L off	

	Lamp stat	L on
	Lamp Off	Off/10Min
Info	Light Typ	AT25
	Fan1 spd	0000
	On Time	0025
	Run Time	0014
	Dip Time	2204300056
	Mor	2207301444
Control	Chanl 01-20	000-255
Factory	Fac Cofig	Fac sett
	Def Cofig	Checksum
	Redress	
	Chanl Def	
Show DMX	Chanl 01-20	000-255
All Ret	No/Yes	
Exit Menu		

DMX Mode

Allows the unit to be controlled by any universal DMX controller.

Starting DMX Address

- 1.) Navigate the main menu until you reach DMX, and press the **<OK>** button.
- 2.) Then highlight Address, and press **<OK>**.
- 3.) Use the **<UP/DOWN>** buttons to select a starting DMX address ranging from 001-512, and press the **<OK>** button to confirm.

Run Mode

Run Mode

- 1.) Navigate the main menu until you reach Run, and press the **<OK>** button.
- 2.) Use the **<UP/DOWN>** buttons to highlight **DMX512,Auto, Sound** and press the **<OK>** button.
- 3.) To stop an **Auto** or **Sound** program, use the **<UP/DOWN>** buttons to highlight **DMX512**, and press **<OK>**.

5. APPENDIX

Keeping Your Beam 500 As Good As New

The fixture you've received is a rugged, tough piece of pro lighting equipment, and as long as you take care of it, it will take care of you. That said, you'll need to take care of it if you want it to operate as designed. You should keep the fixture clean, especially if you are using it in an environment with a lot of dust, fog, haze, wild animals, wild teenagers or spilled drinks.

Cleaning the optics routinely with a suitable glass cleaner will greatly improve the quality of light output. Keeping the fans free of dust and debris will keep the fixture running cool and prevent damage from overheating.

In transit, keep the fixtures in cases. You wouldn't throw a prized guitar, or other piece of expensive gear into a gear trailer without a case, and similarly, you shouldn't even think about doing it with your shiny new light fixtures.

Common sense and taking care of your fixtures will be the single biggest thing you can do to keep them running at peak performance and let you worry about designing a great light show, putting on a great concert, or maximizing your client's satisfaction and "wow factor." That's what it's all about, after all!

Shipping Issues

Damage incurred in shipping is the responsibility of the shipper, and must be reported to the carrier immediately upon receipt of the items. Claims must be made within seven (7) days of receipt.

Tech Specs

Power	
Operating Voltage	100-240V 50/60Hz
Power Consumption	700w
Light Source	
LED	500w
Optical	
Zoom angle	2-40°
Movement Range	
Pan	540° , 16 bit

Tilt	270° , 16 bit
Thermal	
Maximum ambient temp	40 °C(104°F)
Maximum surface temp	90 °C(194°F)
Minimum operating temp	20 °C(68°F)
Control	
Protocol	DMX-512
DMX Channels	26CH
Input/Output	DMX3-pin /5pin
Other Operating Modes	DMX 512, Auto, Master-slave, RDM
Warranty	2-year limited warranty, does not cover malfunction caused by damage to LAMP.



Enjoy your product!

Our sincerest thanks for your purchase!