

Laser Beam 100 IP

User Manual



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TECHNICAL PARAMETERS

Light source

Input Voltage Range: 100-240Vac; 50/60Hz

Total Power: 150W

Light Source Power: 100W Laser

Auxiliary Light Beads: 36 0.5W 3-in-1 LEDs

Light Source Lifespan: >20,000 hours

Optical

Beam Angle: 1.2°

Controls

DMX channels: 33/41

Standard DMX512, RDM, master-slave, auto-propelled, and voice control

Built-in wireless (optional)

Art-Net control (optional)

Connectors: Three-pin waterproof XLR connector for signal input/output; waterproof power socket for input/output

Effect

Color: 15 color filters + 1 white light, half-color effect, bidirectional rotation

Linear CMY color mixing system

Gobo: 24 fixed gobos + white light, variable speed dithering and bidirectional variable speed water flow

Prism: 1 row lens + 1 octave prism combination, bidirectional variable speed rotation

Focus: 0-100% electronic linear high-definition focus

Dimmer: 0-100% rotating linear dimming, soft and flicker-free

Atomization: 1 independent atomizer for a soft light effect

Strobe: 1-25 hours, multiple strobe modes and speeds

Construction

Movement: 540° pan and 270° tilt movement , 16 bit smooth and precise resolution for PAN/TILT movement

Body Structure: Aluminum Alloy Die-Cast + plastic

Working Environment: -20°C ~ 45°C

IP Rate: IP65 waterproof grade design

Dimensions

Product Size: 17x26.5x47cm

N.W: 17kgs

Packing Size: 54.5x37.5x38mm

G.W: 17.44kgs

Precautions and Installation

Thank you for choosing our products! This product was shipped in perfect condition and packaged intact. For safe and effective use, please read this instruction manual carefully and completely before using this product. This manual contains important information regarding installation and operation. Please follow the instructions in this manual and keep this manual in a safe place for easy reference. Our company assumes no responsibility for any damage to the lamp or other performance issues caused by personal failure to follow this manual during installation, use, or maintenance.

This manual is subject to technical changes without prior notice.

1.1 Maintenance

- Disconnect the power supply before performing any maintenance.
- Keep the lamp dry and avoid operating in humid environments.
- Intermittent use will effectively extend the life of the lamp.
- To ensure good ventilation and lighting performance, regularly clean the fan, fan screen, and lens.
- Do not use alcohol or other organic solvents to clean the lamp housing to avoid damage.

1.2 Product Precautions

- This lamp is for professional use only.
- Before operation, ensure that the power supply voltage matches the required power supply voltage for the device.
- Do not place this product in a loose or vibrating location.
- If the lamp malfunctions during use, discontinue use immediately.
- To ensure the product's service life, do not place this lamp in a humid or leaky location, and do not operate in environments with temperatures exceeding 60° C.
- During operation, the power supply voltage should not fluctuate by more than $\pm 10\%$. Excessive voltage will shorten the lamp's life, while excessive voltage will affect the light color.
- After a power outage, allow the lamp to cool thoroughly for 20 minutes before re-energizing.
- Regularly inspect the lamp's rotating parts and mounting hardware. Reinforce any loose or shaky parts immediately to prevent accidents.
- To ensure the proper operation of this product, please read these instructions carefully.

1.3 Signal Cable Connection

Lighting fixtures are equipped with standard 3- or 5-pin XLR sockets for DMX input and output. Use shielded twisted-pair signal cables designed for DMX 512. The typical signal cable connection distance is 150 meters. For longer-distance signal transmission, a DMX 512 signal amplifier is required.

Use a shielded twisted-pair signal cable to connect the controller's DMX output to the DMX input of the first fixture. Then, connect the first fixture's DMX output to the DMX input of the second fixture, and so on, until all fixtures are connected. Install a terminator plug on the last fixture's output 3-pin socket in each connection. (Solder a 4/1W, 120 Ω resistor between pins 2 and 3 of the 3-pin XLR plug.)

Important: The cables must not touch each other or the metal casing.

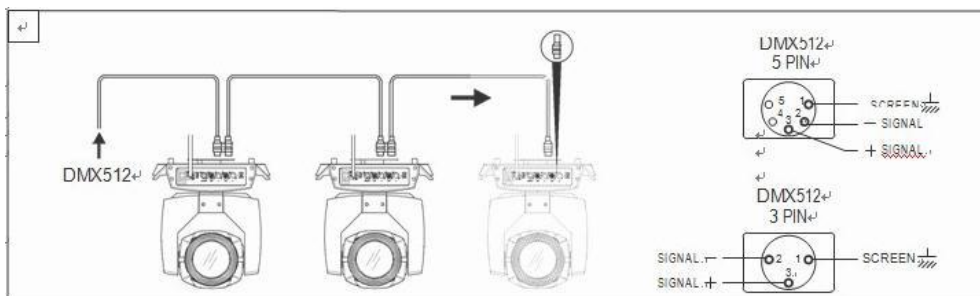


Figure 1 DMX signal line connection diagram

➤ Light fixture starting address code calculation method:

The starting address of the current fixture is equal to (the starting address of the previous fixture) + (the number of channels in the fixture). Note:

- 1: The starting address of the first fixture is A001.
- 2: The number of basic channels on the controller should be greater than or equal to the total number of channels used by the fixture.
- 3: Note: When using any controller, each fixture must have its own starting address. If the starting address of the first fixture is set to A001 and the number of channels is 16, then the starting address of the second fixture should be A017; the starting address of the third fixture should be A033; and so on. (This setting method varies depending on the controller.)

1.4 Luminaire Installation

Luminaires can be placed horizontally, hung at an angle, or hung upside down. When hanging at an angle or upside down, pay careful attention to the installation method.

As shown in Figure 1, before positioning the luminaire, ensure the stability of the installation site. When hanging the luminaire upside down, ensure that the luminaire does not fall from the support frame. A safety rope must be passed through the support frame and the luminaire handle to assist in hanging the luminaire. This ensures safety and prevents the luminaire from falling or sliding.

During installation and commissioning, pedestrians are prohibited from passing underneath the luminaire. Regularly check the safety rope for wear and the hook screws for looseness. Our company assumes no responsibility for any consequences resulting from the luminaire falling due to insecure hanging.



Figure 1 Schematic diagram of inverted lamp

2.2 Menu Description

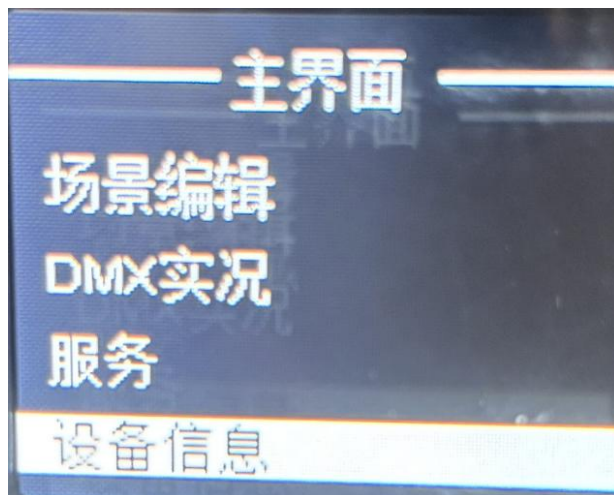


Figure 4: Main menu diagram

Channel Function

3.1 Channel Table

Channel		function	Channel Value	effect
33CH	41CH			
1	1	Pan	000-255	0-100%
2	2	Pan Fine	000-255	0-100%
3	3	Tilt	000-255	0-100%
4	4	Tilt Fine	000-255	0-100%
5	5	PanTilt Speed	000-255	Horizontal and vertical speed, fast to slow
6	6	Pan Rota	000-005	No function
			006-130	Rotate forward from slow to fast
			131-255	Reverse rotation from fast to slow
7	7	Tilt Rota	000-005	No function
			006-130	Rotate forward from slow to fast
			131-255	Reverse rotation from fast to slow
8	8	Strobe	000-009	Turn on the light
			010-199	Synchronous strobe slow to fast
			200-249	Random strobe slow to fast
			250-255	Turn on the light
9	9	Dimmer	000-255	Dimming from 0% to 100%
10	10	Dimmer Fine	000-255	Dimming from 0% to 100%
11	11	Focus	000-255	0-100%
12	12	Focus Fine	000-255	0-100%
13	13	Colour	000-003	white light
			004-007	white+color1
			008 011	color1
			012 015	color1+color2
			...	
			124-127	127color15+color16
			128-191	Forward fast to slow

			192-255	Reverse slow to fast
14	14	Colour Fine	000-255	
15	15	Cyan	000-255	0-100%
16	16	Cyan Fine	000-255	0-100%
17	17	Magenta	000-255	0-100%
18	18	Magenta Fine	000-255	0-100%
19	19	Yellow	000-255	0-100%
20	20	Yellow Fine	000-255	0-100%
21	21	No function	000-255	
22	22	No function	000-255	
23	23	No function	000-255	
24	24	Fix Gobo	000-002	white light
			003-005	Gobo1
			006-008	Gobo2
			009-011	Gobo3
			...	
			084-086	Gobo28
			087-089	Gobo29
			090-092	Gobo1 Jitter from slow to fast
			093-095	Gobo2 Jitter from slow to fast
			096-098	Gobo3 Jitter from slow to fast
			...	
			174-176	Gobo28 Jitter from slow to fast
			177-179	Gobo29 Jitter from slow to fast
			180-217	Fast forward to slow
			218-255	Reverse slow to fast
25	25	Prism 1	000-127	No prism1
			128-255	Prism 1 cut in
26	26	Prism1Rot	000-127	Prism Angle Adjustment

			128-190	Prism fast to slow
			191-192	Prism rotation stopped
			193-255	Reverse prism from slow to fast
27	27	Prism1RotFine	000-255	
28	28	Prism2	000-127	No Prism 2
			128-255	Prism 2 cut in
29	29	Prism2Rot	000-127	Prism Angle Adjustment
			128-190	Prism fast to slow
			191-192	Prism rotation stopped
			193-255	Reverse prism from slow to fast
30	30	Prism2RotFine	000-255	0-100%
31	31	Frost	000-127	No frost
			128-255	Frost cut in
32	32	No function	000-255	
33	33	Function	250-255	Reset the entire device
/	34	Led Dimmer	000-255	Dimming from 0% to 100%
/	35	Led Strobe	000-009	Turn on the light
			010-199	Synchronous strobe slow to fast
			200-249	Random strobe slow to fast
			250-255	Turn on the light
/	36	Led Red	000-255	0-100%
/	37	Led Green	000-255	0-100%
/	38	Led Blue	000-255	0-100%
/	39	Led Color Macro	000-255	Color Effect
/	40	Led Effect	000-005	No effect
			006-010	effect1
			011-015	effect2
			016-020	effect3
			...	
			241-245	effect48

			246-255	effect49
/	41	Led Effect Speed	000-255	Effect Speed from slow to fast

Common Faults

Solutions are provided for some common faults. Any unresolved issues should be handled by a professional. Before performing any maintenance on the fixture, disconnect the power supply.

Light Bulb Does Not Illuminate

- Check that the voltage is compatible with the fixture.
- Check the fixture's power supply connections or control switch for loose connections.
- Check for insufficient power.
- Check that the DMX512 controller has sent commands.

The fixture does not accept control from the console after a normal reset.

- Check that the fixture's digital start address and function options are correct.
- Check that the communication control line is properly connected, long, or disconnected.
- Check for malfunctioning control devices and signal amplifiers connected in series.
- Check that the communication line is too long or is interfering with other devices.
- Optimize wiring, shorten the control signal line, and separate high-voltage and low-voltage lines.
- Add a signal amplifier.
- Use high-quality shielded twisted-pair cable for the signal line.
- Connect a 120-ohm signal termination resistor to the fixture.

The lamp will not start.

- Check the power supply parameters to ensure they match the lamp.
- Check for loose connections or disconnections caused by deformation, vibration of internal components, or moisture during long-distance transportation.
- Check the internal wiring and connectors for loose or detached components.
- Check the lamp's electronic components (such as the electronic transformer, PCB, motor control board, etc.) for looseness, short circuits, or burnout.

The lamp's X-axis or Y-axis movement is abnormal during operation.

- Follow the previous steps to check each component individually.
- Check the drive belts for the X and Y axes inside the lamp for loose or broken components.
- Check the data feedback receivers (optocouplers) for the X and Y axes inside the lamp for damage.
- Restart the lamp and reset it.

REMARK

The product has perfect performance and integrity packing. All users should be strictly comply with the warning and operating instructions as stated.

Or we aren't in charge of any result by misusing.

Any damage resulting by misuse is not within the Company's warranty.

Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Errors and omissions for every information given in this manual excepted.

All information is subject to change without prior notice.