SKYSTAR

PROFESSIONAL SHOW LIGHTING

THUNDER-200BSW

LED MOVING-HEAD

USER MANUAL

SKYSTAR

GUANGZHOU LIGHTSTAR LIGHT CO.,LTD

Http://www.lightskystar.com

1. Remove the packaging

For proper and safe use, read the instructions carefully before installing and using the product. This specification contains important installation and application information. Please strictly follow the operation procedures when installing and operating the product. At the same time, please keep this instruction manual properly.

The 150W three-in-one beam lamp is designed and produced in strict accordance with the CE standard, in line with the international standard DMX512 signal protocol, can be used alone for control, or used online, with the characteristics of fast rotation, low noise, powerful function, suitable for small and medium-sized concerts, theaters, studios, nightclubs and bars and other places.

Please remove the package carefully, check whether the product is damaged during transportation, and check whether the following contents are complete.

200W 3-in-1 beam lamp- - - - - - -1   Signal lines- - - - - - - - - - - - - - - -1

Instructions- - - - - - - - - - - - - - - -1   Power cord- - - - - - - - - - - - - - - - -1

2. Technical parameters

Input voltage: AC100V~240V / frequency: 50~60Hz

Bulb: 200 W LED module

Color temperature: 7,000 K

Bulb life: 50,000 hours

Color plate: 1 fixed color plate, 8 colors + white, rainbow effect speed is adjustable, half-step color effect

Pattern plate: 1 rotating pattern plate, 8 replaceable pattern plate + white light, pattern back and forth water from slow to fast

1 fixed pattern plate, 7 cases + white light, can be two-way variable speed rotation

Prism: 13-prism, prism rotation and speed adjustable function

Beam: multistage beam angle change effect

Focus: Linear focus

Dimming: 0-100% linearized

Light projection range: X to 540 degrees, Y to 270 degrees, can automatically correct

the positioning

Scan speed: X to 3.0 seconds / 540 degrees, Y to 2.0 seconds / 250 degrees

Beam angle: parallel beam angle of 0-3

Zoom-in angle: 3-30

Fog light Angle 8

Strobe: 0.5-14 times / second adjustable

Control mode: international standard DMX512 channel

Control protocol: DMX512, RDM

Appearance: high temperature resistant plastic shell, high strength alloy cold pressure

forming core material

Light body color: black

Protection level: IP20

Dimensions: 28X19X46CM

Net weight: 9.3 KG

3. Safety instructions

pay attention to!

Please be careful before operating this product, this product is high voltage product, if

contact wire may be electric shock!

This product is a good product before delivery. In order to keep the product in good

condition and ensure safe operation, users should follow the safety matters and the

instructions.

☞ Important: Damage caused by not following this instruction is not covered by

the warranty. The supplier is not responsible for the product problems arising from

this.

  If the product has been exposed to extreme unstable temperature conditions (e. g.,

after transportation), do not supply the product immediately because water drops due

to temperature changes may damage the product. Please use the product has returned

		245-249	Effect 49
		250-254	Effect 50
		255	Effect 51
19	Effect color	0-255	Prospect color gradient
20	Effect speed	0-127	Forward from slow to fast
		128-255	Reverse from slow to fast
21	reset	230-235	Effect motor is reset for more than 5 seconds
		240-245	The XY motor is reset over 5 seconds
		250-255	All motors are reset over 5 seconds

9. Product maintenance and cleaning

Please note the following points when testing this product:

1.All the screws and parts of the installed products must be tightly connected and do

not rust.

2.The shell, lens, fixture and installation site (e. g., ceiling, hanger, truss, etc.) cannot

be deformed.

3.Mechanical moving parts should not have wear and tear, can not rotate unbalanced.

4.The power cord should not have any damage, material broken skin or scar, etc.

The installation and use of the product must be carried out by trained professional and

technical personnel, and must ensure that the safety risks are eliminated.

Note: Please unplug the power cord before doing product maintenance!!

In order to maintain the product in good condition and extend the service life, we

recommend routine cleaning of the product.

1. Clean the external lens and internal lens of the product every week to prevent the

light output of the product from weakening due to the dust of the lens.

2. Clean the fan every week.

3. Every three months, professional electrical engineers will check the product in a

detailed circuit, to ensure that the circuit contact is good, to prevent the circuit contact

from aging due to overheating.

We recommend that the products be cleaned regularly. Please be careful not to use

damp or linen, or never use alcohol or solvents.

This product is not equipped with replacement parts, please refer to the "Installation

Instructions" section.

If users need any spare parts, please purchase them from any local dealer.

		30-34	Effect 6
		35-39	Effect 7
		40-44	Effect 8
		45-49	Effect 9
		50-54	Effect 10
		55-59	Effect 11
		60-64	Effect 12
		65-69	Effect 13
		70-74	Effect 14
		75-79	Effect 15
		80-84	Effect 16
		85-89	Effect 17
		90-94	Effect 18
		95-99	Effect 19
		100-104	Effect 20
		105-109	Effect 21
		110-114	Effect 22
		115-119	Effect 23
		120-124	Effect 24
		125-129	Effect 25
		130-134	Effect 26
		135-139	Effect 27
		140-144	Effect 28
		145-149	Effect 29
		150-154	Effect 30
		155-159	Effect 31
		160-164	Effect 32
		165-169	Effect 33
		170-174	Effect 34
		175-179	Effect 35
		180-184	Effect 36
		185-189	Effect 37
		190-194	Effect 38
		195-199	Effect 39
		200-204	Effect 40
		205-209	Effect 41
		210-214	Effect 42
		215-219	Effect 43
		220-224	Effect 44
		225-229	Effect 45
		230-234	Effect 46
		235-239	Effect 47
		240-244	Effect 48

to normal temperature.This product can be used in the voltage range of 90-240V, and is used for indoor products. Please ensure that the ground voltage is not higher than the tolerable range of the product!! The power plug must be plugged into a protective class I socket. Green or tea-cyan conductors must be grounded.

Please check the product-level power cord frequently. Ensure that the power cord is not folded or damaged and not connected to other wires! Special attention is required when connecting the power cord or the related wiring. Unplug the power supply without using the product or before cleaning.

Before using the product, please be familiar with the operation function of the product. Please do not expose children or no professionals to the product.

Please do not shake this product. Do not use brute force when installing or operating the product. Do not allow unprofessionals to operate the product. Most of the damage is caused by an unprofessional operation.

The product is not equipped with relevant repair accessories. Product maintenance and repair can only be carried out by professionals!

Please do not change this product without authorization, otherwise the product may be damaged, so the damage caused is not covered by the warranty. Also, unprofessional operations can lead to short circuits, burns or electric shocks, and so on.

4. Operating instructions

- -This product is a head dyeing beam lamp used to create dyeing performance.

- -If the product after a large temperature difference (for example, after transportation), do not immediately start the product, because the heat account cold shrinkage will damage the product. Please wait until the device reaches the normal room temperature before starting the product.

- -Pay attention to the shock shock. Avoid strong collisions during product installation.

- -Please do not raise the whole product through the lamp head, because the mechanical nature of the equipment may be damaged.

- -Make sure the product is not exposed to overheated, wet, or dusty places. Please do

not place any wires on the ground or you may be in danger of suffering an electric shock.

- -Before installing the product, please ensure the installation point of safety

- -Please attach the product to the safety rope and check that all the screws are correct during installation

- -Please ensure that the lens is in good condition. Replace the lens when the lens is damaged or scratched.

- -It is recommended that technicians familiar with the product operate the product. Non-technical personnel are prohibited from operating this equipment because many losses are the result of non-professional operations.

- -Please keep the packing materials properly for secondary transportation as required.

- -Do not change the product without the guidance from the manufacturer or distributor.

- -Any equipment failure caused by failing to use the equipment is not covered by the warranty. And any accident caused by short circuit, injury, electric shock, ultraviolet light caused by injury, bulb explosion accidents are not within the scope of warranty.

5. Product hanging and installation

Note: For more safety, install this product away from the walkway, seating area, or accessible area

Before hanging the product, ensure that the installation point supports 10 times the weight of the product.

Product installation must have a double protection device, such as a safety rope.

When hanging, removing or repairing the product, it is forbidden to stand under the installation point.

Please ensure that this product should be installed at least 0.5 meters away from the flammable materials.

Please remember to use the safety rope as a safety guarantee, in case the accident is dropped quickly.

Hanging point: the top hanging requires that the installation personnel must be

		45-59	Pattern 3	
		60-74	Pattern 4	
		75-89	Pattern 5	
		90-104	Pattern 6	
		105-119	Pattern 7	
		120-129	Pattern 1 shakes from slow to fast	
		130-139	Pattern 2 shakes from slow to fast	
		140-149	Pattern 3 shakes from slow to fast	
		150-159	Pattern 4 shakes from slow to fast	
		160-169	Pattern 5 shakes from slow to fast	
		170-179	Pattern 6 shakes from slow to fast	
		180-189	Pattern 7 shakes from slow to fast	
		190-221	From fast to slow counterclockwise flow water	
		222-223	Stop running water	
		224-255	From slow to fast clockwise flowing water	
11	Turn diagram rotation	0-127	0-400 degrees	
		128-190	From fast to slow forward flowing water	
		191-192	cease	
		193-255	From slow to fast, the reverse flow of water	
12	atomization	0-127	Fog cut out	
		128-255	Fog cut in	
13	prism	0-31	The prism cut out	
		32-63	Prism cut in	
		64-255	Prism from slow to fast flowing water	
14	focus	0-255	From far to near	
15	amplify	0-255	grow from a small beginning into a mighty	
16	Light with dimming	0-255	Dimming (from dark to bright)	
17	Light band flash	0-4	opening the light	
		5-250	Synchronous flash	
		251-255	opening the light	
18	Dynamic effect	0-4	of no avail	
		5-9	Effect 1	
		10-14	Effect 2	
		15-19	Effect 3	
		20-24	Effect 4	
		25-29	Effect 5	

		98-103	Color 6 + color 7
		104-109	Color 7 + color 8
		110-115	Color8 + color 9
		116-121	Colour 9 + color 10
		122-127	Color10 + white
		128-189	From fast to slow counterclockwise flow water
		190-193	Stop running water
		194-255	From slow to fast clockwise flowing water
9	Solid figure	0-9	White aperture
		10-16	Pattern 1
		17-23	Pattern 2
		24-30	Pattern 3
		31-37	Pattern 4
		38-44	Pattern 5
		45-51	Pattern 6
		52-58	Pattern 7
		59-65	Pattern 8
		66-72	Pattern 9
		73-79	Pattern 10
		80-86	Pattern 11
		87-93	Pattern 12
		94-101	Pattern 1 shakes from slow to fast
		102-109	Pattern 2 shakes from slow to fast
		110-117	Pattern 3 shakes from slow to fast
		118-125	Pattern 4 shakes from slow to fast
		126-133	Pattern 5 shakes from slow to fast
		134-141	Pattern 6 shakes from slow to fast
		142-149	Pattern 7 shakes from slow to fast
		150-157	Pattern 8 shakes from slow to fast
		158-165	Pattern 9 shakes from slow to fast
		166-173	Pattern 10 shakes from slow to fast
		174-181	Pattern 11 shakes from slow to fast
		182-189	Pattern 12 shakes from slow to fast
		190-221	From fast to slow counterclockwise flow water
		222-223	Stop running water
		224-255	From slow to fast, the clockwise flow of water
10	Turn the figure	0-14	White aperture
		15-29	Pattern 1
		30-44	Pattern 2

experienced, including calculating the load-bearing requirements, the installation materials used, and the periodic inspection of the safety status of the installation materials and products. If you lack this knowledge, please do not try to install it yourself. If not incorrectly, it may lead to serious consequences such as personal injury.

Make sure that all the required hanging and installation steps are completed before the product is powered on.

Quick lock hanging: there are specially designed professional pendants at the bottom of this product, including quick lock pendant and safety rope hanging points (please refer to the figure below).

When hanging this product to the truss, please remember to use a suitable quick lock, fix it to the quick lock pendant position of the product, and hang it with the screws of M10. To further ensure the safety, please install the safety rope to the safety rope hanging point at the bottom of the product, and fix it to the truss.

① Omega Bracket
② Safety Clamp
③ Safety Cable
④ 1/4 Turn Quick-Lock Fasteners

Turn around   Turn around
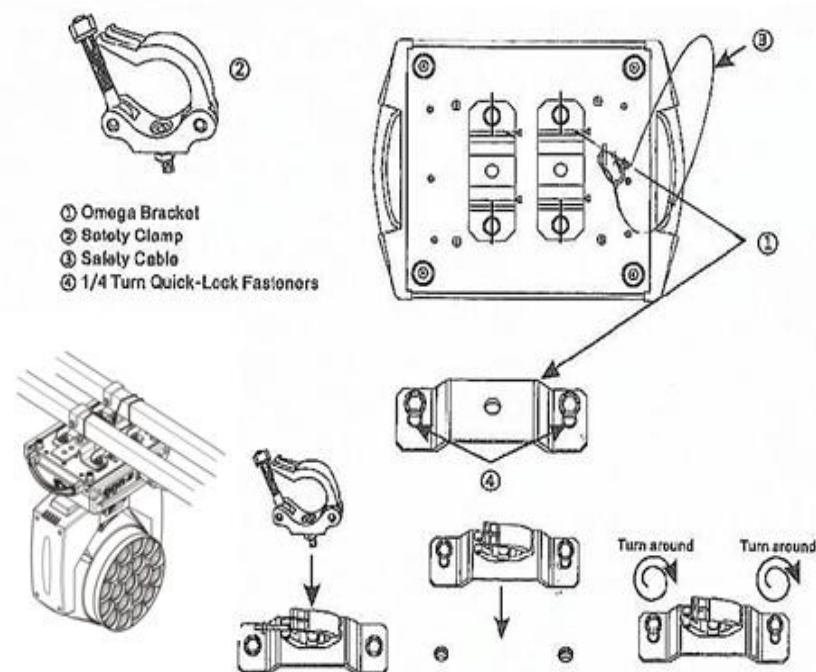
Whatever hanging you choose, remember to use a safety rope. The bottom of the product is equipped with a special safety rope hanging point, please refer to the above figure, and please remember to use the specially provided safety rope hanging point, do not put the safety rope in the handle position.

6.DMX-512 linkage

Please plug the male header of the XLR signal line into the signal output port of the controller and the master head into the signal input port on the rear board of the product. You can talk about multiple products in series, the signal line needs to be three-heart, shielded, with XLR input and output head. Please refer to the figure below.
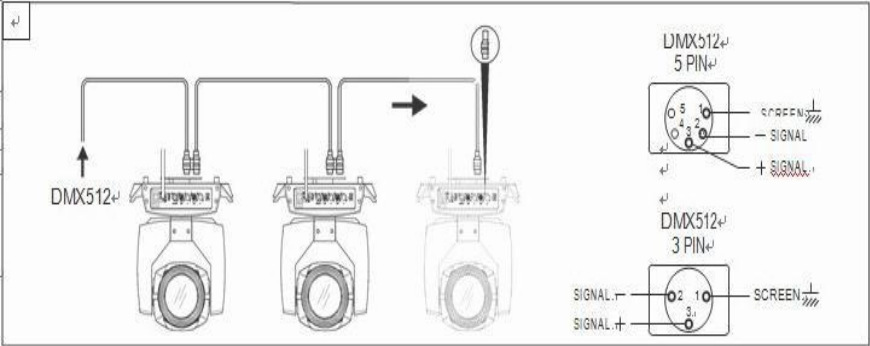
DMX-512 connection with terminal (loop connection)

During installation, a DMX terminal (loop connection) is recommended if the signal line is laid over a long distance, or in noisy electrical environments, such as dance halls. This avoids the digital control signal opacity due to electrical noise. The DMX terminal consists of a simple XLR connector 2 and 3 cores connecting a 120 ohm resistance. Please insert the terminal into the XLR output port of the last product, please refer to the following figure.
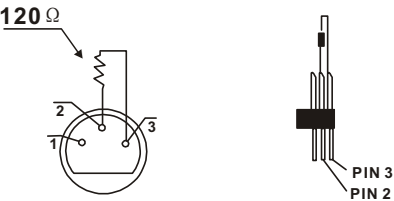
Hardware version number	Lighting hardware information XX_____ . XX_____ . XX_____ .XX ↓ ↓ ↓ Display board version . Motor version. Lamp version
Software version number	Lamp software version XX_____ . XX_____ . XX_____ .XX ↓ ↓ ↓ Display board version . Motor version. Lamp version

8. Channel table

21CH	The channel name	The channel value	Channel function
1	X	0-255	0-540degree
2	X fine	0-255	0-2degree
3	Y	0-255	0-270degree
4	Y fine	0-255	0-1degree
5	XY speed	0-255	From fast to slow
6	zoom	0-255	0-100% aiming
7	strobe	0-3	light up
		4-99	Synchronous flash
		100-149	Pulse flash
		150-199	Flash
		200-249	Random flash
		250-255	light up
8	Color	0-1	white
		2-7	Color 1
		8-13	Color 2
		14-19	Color 3
		20-25	Color 4
		26-31	Color 5
		32-37	Color 6
		38-43	Color 7
		44-49	Color 8
		50-55	Color 9
		56-61	Color 10
		62-67	White + color 1
		68-73	Color 1 + color 2
		74-79	Color 2 + color 3
		80-85	Color 3 + color 4
		86-91	Color 4 + color 5
		92-97	Color5 + color6

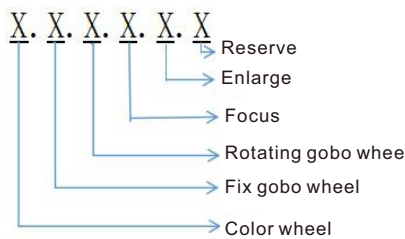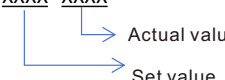| calibration of power	The maximum power of the adjustable whole lamp, and the adjustment range of 0~255,255 means no adjustment.
MIC sensitivity calibration	Adjust the sound control sensitivity.
change password	Set the system calibration password.

◆ reset

Press Up and Down to switch the reset mode, and press OK to reset directly.

option	illustration
Effect motor reset	Color plate, solid drawing plate and other motor reset
Scan the motor for reset	The XY axis was reset only
Full motor reset	Lamps reset

◆ system info

option	illustration
Reset the error message	If the red ERR indicator is illuminated, the lamp is running wrong: 1) IC1 communication fault (communication failure between motor and display board) 2) X / Y optical coupling error reporting 3) Motor reset of color plate and solid drawing plate has failed
And DMX data monitoring	From this, you can enter the subinterface to display the channel values for viewing and turn the page
sensor information	1）Hoare： X. X. X. X. X. X → Reserve → Enlarge → Focus → Rotating gobo wheel → Fix gobo wheel → Color wheel 2）sensor： X、Y optocoupler: XXXX--XXXX → Actual value → Set value

7. Menu

Menu structure

primary menu	Sublevel menu	Three-level menu / parameters
address	001 - 512	(Number of channels added each time, minus normal)
System Settings	Run mode	DMX / voice / self1/self2
	channel pattern	21CH
	Horizontal reversal	OFF/ ON
	Vertical reversal	OFF/ ON
	Hall crct	OFF/ ON
	Encoder crct	OFF/ ON
	Signal keep	OFF/ ON
	Screen saver	OFF/ ON
	Invert screen	Auto/off/on
	Update slave	OFF/ ON (This function should remove DMX offline)
	Language	Chinese/EN
	factory data reset	OK/cancel
manual mode	Manual control of the channel values	000-255
System calibration	enter password	Lighting calibration
system reset	Reset effect	Effect disc reset other than XY
	Reset scan	The XY axis was reset only
	Reset all	Lamps reset
system information	Reset information	Display the specific information and content
	And DMX data detection	Display the specific DMX detection content
	sensor information	Display the optical coupling, Hall specific information
	Hardware version	Displays the hardware version number
	software version	Displays the software version number

◆ **System Settings**

option	illustration	
Run mode	The lamps support three operating modes: DMX mode, self-travel mode and voice control mode	
	DMX pattern	The console mode, receive DMX signal, RDM signal
	Self-walking mode 1	The lamps are run automatically according to the built-in program 1
	Self-walking mode 2	The lamps are run automatically according to the built-in program 2
	Sound control mode	When the lamp detects a strong sound, the lamp automatically runs a scene according to the built-in program, otherwise maintain the last scene
channel pattern	The following channel values can be selected: 21 CH	
Horizontal reversal	Set the X-axis rotation direction	
	close	Don't reverse
	open	reverse
Vertical reversal	Set the Y-axis rotation direction	
	close	Don't reverse
	open	reverse
Hall crct	Check whether the color plate and solid plate motor are reset and out of step	
	close	Position is not corrected after a misstep
	open	Position is automatically corrected after loss of step
Encoder crct	XY was tested for loss of step and corrected	
	close	Position is not corrected after a misstep
	open	Position is automatically corrected after loss of step
Signal keep	Output status of the lamp with no DMX signal	
	close	There is no signal, so the motor and the light source return to the position and state when the reset is complete
	open	No signal, keeping the last frame of the DMX data output
Screen saver	The screen is bright for a long time	
	close	Often bright
	open	In a static environment, the screen timing off the screen

Invert screen	Set the display direction of the screen	
	close	No reversal is shown
	open	Reverse display
	voluntarily	The system can automatically rotate the screen according to the direction of gravity, without manual rotation
Update slave	Synchronize the setting parameters or calibration parameters of multiple lamps	
	close	The synchronous update function is turned off.
	open	Connect multiple lamps with DMX cable and update the calibration interface.(Note: Remove the DMX signal wire connected to the console)
Language	Chinese and English menu switch	
	Chinese	Chinese menu
	EN	English menu
factory data reset	Lighting parameters are returned to the factory settings	
	cancel	res sic stantibus
	confirm	Light ture to factory settings

◆ **manual control**

This interface is used to control the current lamp, as detailed in the channel table.

Press OK to enter the edit state. Press Up and Down to change the channel value.

Press OK again to save the modified value, exit editing, and press Exit not to save the modified value, and directly exit editing.

◆ **system calibration**

Here to set a layer of password to prevent non-professionals from misoperation. Press OK to verify the password.

option	illustration
Initial position calibration	After entering the sub-interface, the reset position of the motor such as X-axis, Y-axis, color disk, solid map, rotation, atomization, prism, focusing, zoom, and rotation can be adjusted to make up for the error on the hardware installation. The adjustment range of 0~255,127 indicates that there is no adjustment.
Schedule location calibration	After entering the sub-interface, the reset position of motors such as X-axis, Y-axis, atomization, prism, focus and zoom can be adjusted to make up for the error on the hardware installation. The adjustment range of 0~255,127 means that there is no adjustment.