

7x7 IP double-layer matrix headlights with network

User Manual



Please read the instructions carefully before use

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Chapter 1 Precautions and installation

1. Tending

- This lamp should be kept dry and avoid working in a humid environment.
- Intermittent use will effectively extend the life of this lamp.
- In order to obtain good ventilation and lighting effect, it is necessary to clean the fan and fan screen as well as the lens frequently.
- Do not use organic solvents such as alcohol to wipe the lamp shell to avoid damage.

2. Statement

To use this product correctly and safely, please read the instructions carefully before installing and using this product. This manual contains important installation and application information, and you should strictly follow the instructions when installing and operating the product. At the same time, please keep this manual properly.

This product is shipped in good condition with complete packaging. All users should strictly adhere to the warnings and operating instructions stated above any damage caused by misuse is not covered by our warranty and any faults or issues arising from neglecting to read the manual are not within the dealers responsibility. We reserve the right to make any technical changes without prior notice.

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

7x7 IP double-layer matrix headlights with network----	1 unit,	signal line----	1 unit
Instructions----	1 copy,	power cable----	1

3. Product precautions

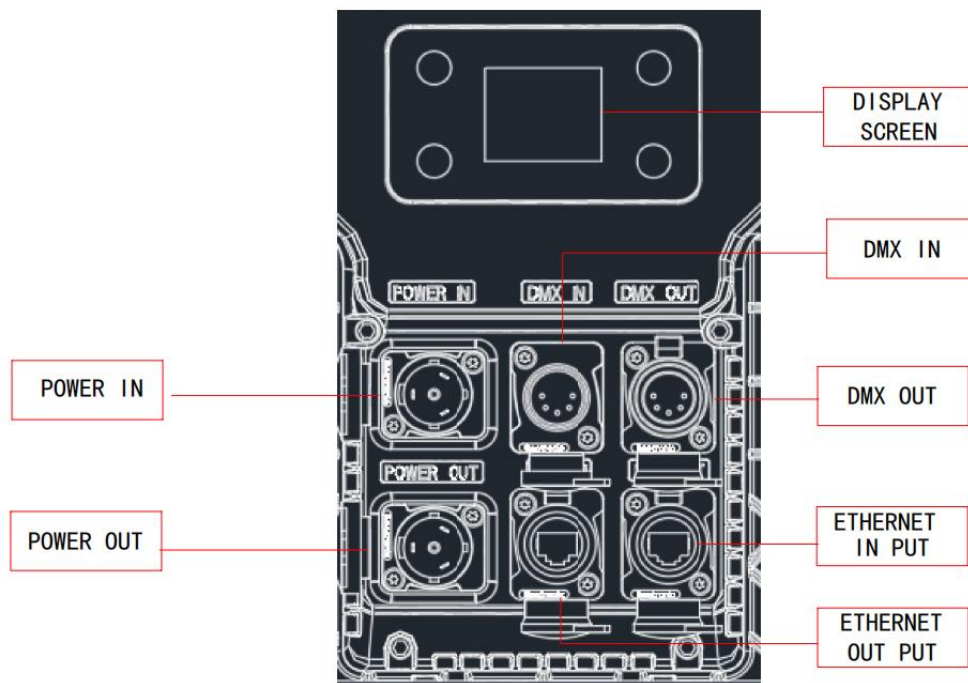
- To ensure the service life of the product, do not place this product in damp or waterlogged areas, and it must not be operated in environments with temperatures exceeding 60 degrees Celsius. If the product has been exposed to extremely unstable temperature conditions (such as after transportation), do not immediately connect the power supply to the product as moisture generated by temperature changes may damage it. Please use the product only after it has returned to normal temperature.
- This product can be used within a voltage range of 100-240V and is intended for indoor use. Please ensure that the voltage at the point of use does not exceed the range in which the product is rated!! The power plug must be inserted into a well-protected Class I socket. The green or brown conductor must be grounded.
- Please frequently check the power cord of this product to ensure it is not folded or damaged by scratches and to prevent it from being connected with other wires! Special attention should be paid when connecting the power cord or related wires. When not in use or before cleaning, be sure to unplug the power cord.
- Please do not change this product without authorization, otherwise it may damage the product, and the damage caused is not within the warranty scope. In addition, unprofessional operation may lead to short circuit, burning or electric shock, etc.
- Do not place this product in a place that is prone to looseness or vibration.
- Before using the product please familiarize yourself with its operational functions. Do not shake this product. When installing or operating the product do not use excessive force. Do not allow untrained

personnel to operate the product. Most damages are caused by unprofessional operation.

- To avoid the danger of electric shock, the maintenance of this product should be assisted by professionals.
- When the bulb is used, the power supply voltage should not exceed $\pm 10\%$, the voltage is too high, will shorten the life of the bulb, the voltage is too low, will affect the color of the bulb.
- After power failure, the lamp should be fully cooled for 20 minutes before it can be used again.
- To ensure the normal use of this product, please read this instruction carefully.
- Signal line connection (DMX)

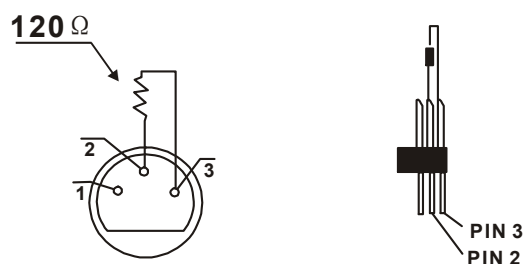
Use compliant RS-485 cable: shielded, 120ohm characteristic impedance, 22-24 AWG, low capacitance. Do not use microphone cables or cables with different specified characteristics. Terminal connections must use 3 or 5-pin XLR male/female connectors (minimum 1/4 W). As shown in Figure 1 is a signal line connection diagram (the lamp in the figure is an example image and does not represent the actual appearance of this product).

Important note: The wires should not touch each other or the metal casing.



graph1Diagram of DMX signal line connection

During installation, if the signal cable is laid over a longer distance or in a noisy environment such as a karaoke lounge, it is recommended to use a DMX terminal (loop connection). This can prevent digital control signals from becoming muddled due to electrical noise. The DMX terminal consists of a simple XLR connector with two or three pins connected to a 120 ohm resistor. Please insert the terminal into the XLR output port of the last product, refer to the following diagram.



4. Light fixture installation

Note: The lamp can be placed horizontally, slanted or upside down. When slanted or upside down, be sure to pay attention to the installation method.

For safety, hang and install this product away from walkways, seating areas, or areas accessible to people. Before hanging this product, please ensure that the installation point can bear 10 times the weight of this product.

The installation of the product must be protected by a double protection device, such as a safety rope.

Do not stand under the installation point when hanging, removing or repairing this product.

Please ensure that the product is installed at least 0.5 meters away from flammable materials.

Please remember to use safety ropes as a safety guarantee to prevent accidents when the lock is fastened and loosened.

Suspension Point: Top suspension requires the installer to be highly experienced including calculating load requirements using installation materials and periodically checking the safety condition of installation materials and products. If you lack this knowledge do not attempt to install it yourself. Incorrect operation may result in serious consequences such as personal injury.

Before the product is powered on, please make sure that all required hanging and installation steps are completed.

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

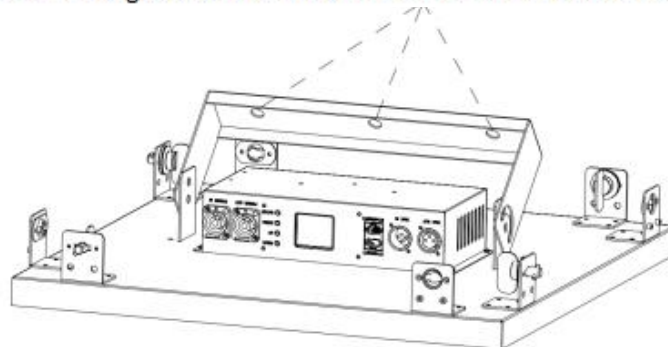
When hanging this product from the truss, please remember to use a suitable quick-release lock to secure it to the quick-release lock mounting point of the product, and hang it up with an M10 screw. To further ensure safety, install the safety rope at the bottom of the product on the mounting point and secure it to the truss.

in compliance with graph 2As shown, (the lamp in the figure is an example image and does not represent the actual appearance of the product) before positioning the lamp, ensure the stability of the installation location. When installing by hanging upside down, it is essential to prevent the lamp from falling off the support frame. Use a safety rope to pass through the support frame and the lamp handle for assisted hanging to ensure safety and prevent the lamp from falling or sliding.

When installing and debugging the lamp, pedestrians are not allowed to pass under the lamp, and the safety rope should be checked regularly to see if it is worn and the hook screws are loose.

If the hanging installation is not stable, resulting in the fall of the lamp and all consequences thereof, our company shall not be liable for any consequences.

The mounting bracket is fixed to the wall with three M12 screws



graph2 Diagram of inverted lamp

Chapter 2 Panel operation

1. Light panel

The schematic diagram of the lamp panel is shown as followsgraph 3As shown:

1) Temperature: as shown in the figure, the temperature of the lamp board is 30 degrees Celsius; if the temperature shows- - - °C, the temperature of the lamp is abnormal. It may break the temperature control connection line. If the temperature shows * * * °C, and the obvious difference from the ambient temperature is too large, it may be the temperature control cable short circuit. Need professionals to repair and troubleshoot, before normal use.

2) Address code: It can display the range of 001-512, and the address code displayed on the map is 001.

3) DMX mode: 512 mode.

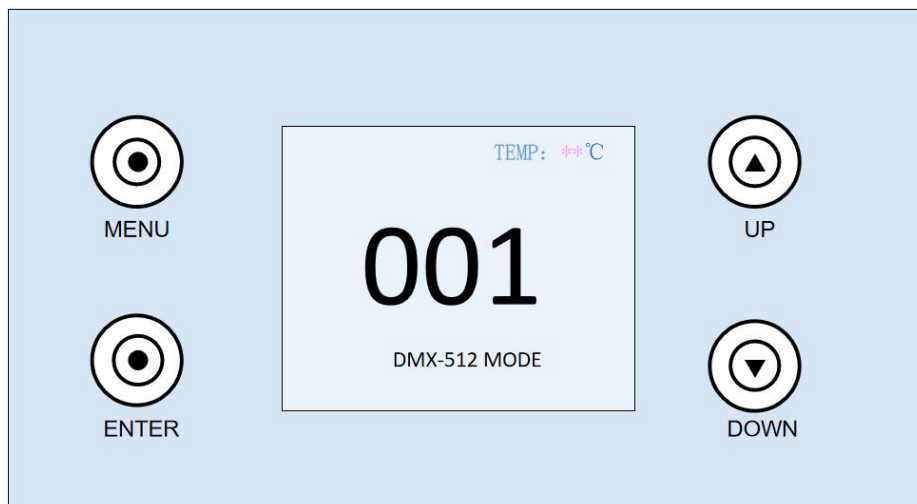
4) Button: UP: Up key

MENU: Return key

ENTER: Confirm key

DOWN: Down key

Note: Do not use a sharp or pointed object to strike the display screen to prevent damage.



Graph 3 Diagram of four-key display panel

2. Menu first interface

The first menu interface contains 6 submenus. By pressing "UP" key and "DOWN" key to select the corresponding submenus, and then pressing "ENTER" key to enter the corresponding submenu interface. The first menu interface is shown in Figure 4:

1) Address: Click to enter the address code setting. The address code displayed on the lamp panel will be updated synchronously by pressing "UP" or "DOWN" keys to increase or decrease one address code.

2) Settings: Click to enter the system Settings, you can change the working mode, working parameters and panel display Settings of the lamp.

3) Manual: Click to enter the manual mode, you can control the function of the lamp, see the passage table for details.

4) Calibration: Click to enter the password to enter the calibration interface, and you can

adjust the parameters such as the power of the lamp, motor travel, and sound control sensitivity.

5) Advanced: Click to enter the advanced Settings interface to perform corresponding operations on the performance in the SD card.

6) Information: Click to enter to view the system error correction, software and hardware version and other information.

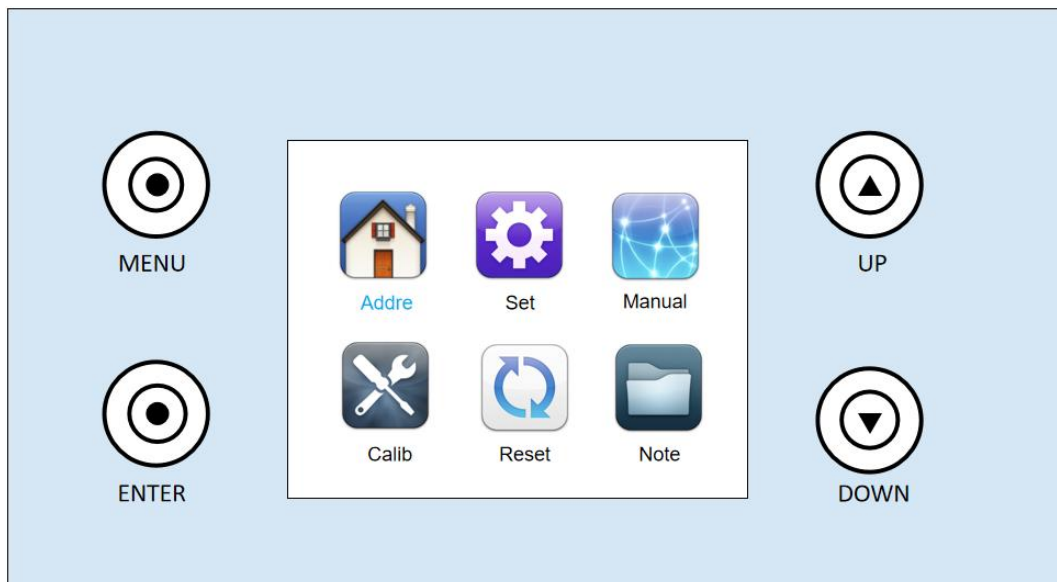


Figure 4 Determine the input window

2.1 System Settings

System Setup		System Setup	
Run Mode	DMX	Screen lock	ON
Channel	5CH	Invert Screen	OFF
Net Work		Update Slave	OFF
Pixel Flip	0°	Language	EN
Signal Keep	ON	Load Default	NO
Screen Saver	ON		

Figure 5 System Settings Interface

The system setting interface is shown in Figure 5. Enter the system setting, click the "ENTER" key to select the setting that needs to be modified, then select the content to be changed through the "UP" and "DOWN" keys, and finally confirm with the "ENTER" key. The working mode, working parameters and panel display settings of the lamp can be changed. See Table 1 for details.

option	explain	
running mode	Lamp operation mode: DMX/sound control/self walk 1/self walk 2	
	DMX pattern	Console mode, receive DMX signal

	DMX+Art	Receive dual control signals from DMX and Artnet (only 1813CH, 1817CH, and 1825CH are effective)	
	Artnet	Artnet mode, receiving Artnet signals	
	Self-drive mode 1	The lamp runs automatically according to the built-in self-starting program 1	
	Self-drive mode 2	The lamp runs automatically according to the built-in self-starting program 2	
	Voice control mode	When the lamp detects a strong sound, it automatically runs a scene according to the built-in program, otherwise it keeps the last scene	
channel pattern	HSV/1CH/5CH/7CH/10CH/12CH/13CH/16CH/1813CH/1817CH/1825CH		
network settings	IP	Set the IP address of the lamp	
	subnet mask	Set the subnet mask of the lamp	
	land within certain boundaries	Set the domain (Universe) for the lamp	
		Domain 1	000-32767 (universal mode for all channels)
		Domain 2	001-32767 (used only for 1813CH, 1817CH, and1825CH channel modes)
		Domain 3	002-32767 (used only for1813CH, 1817CH, and1825CH channel modes)
	Domain 4	003-32767 (used only for 1813CH, 1817CH, and1825CH channel modes)	
Starting channel	001		
Pixel flip	Set the pixel flip Angle		
	0°	Pixel flip 0 degrees	
	90°	Pixel flip 90 degrees	
	180°	Pixel flip 180 degrees	
	270°	Pixel flip 270 degrees	
Signal hold	The output state of the lamp when there is no DMX signal		
	close	No signal, so the motor and light return to the position and state when the reset is completed	
	open	No signal, keep the last frame of DMX data output	
Screen protection	Screen brightness duration		
	close	Chang Liang	
	open	In a static environment, the screen is turned off at regular intervals	
Screen lock	Lock the screen when there is no operation		
	close	Turn off the screen lock	
	open	Enable the screen lock	
Screen flips	Set the display direction of the screen		

	close	Do not reverse display
	open	Reversed display
Synchronize updates	Synchronize the setting parameters or calibration parameters of multiple lamps	
	close	The sync feature is turned off.
	open	After starting, connect multiple lights with DMX cable, and the information can be updated synchronously in the Settings interface and calibration interface. (Note: Please disconnect the DMX signal cable connected to the console)
language	Switch between Chinese and English menus	
	centre	the Chinese language
	EN	English menu
factory data reset	The lamp parameters return the factory Settings	
	cancel	res sic stantibus
	affirm	Restore the factory setting of the lamp

primary menu	Secondary menu	Level 3 menu/parameters
address	001 - 512	(Add or subtract 1 each time)
System Settings	running mode	DMX /DMX+Art /Artnet /self-walk 1 / self-walk 2 / voice control
	channel pattern	HSV/1CH/5CH/7CH/10CH/12CH/13CH/16CH /1813CH/1817CH/1825CH
	network settings	IP/subnet mask/domain/Starting channel
	Pixel flip	0°/90°/180°/270°
	Signal hold	On/off
	Screen protection	On/off
	Screen lock	On/off
	Screen flips	On/off
	Synchronize updates	On/off
	language	CH /EN
	factory data reset	Confirm/cancel
manual mode	Current channel mode channel	0-255
system calibration	enter password	Lamp calibration
advanced setup	Record the performance	Switch / 1-50
	Play the performance	Guan/1-Number of effective performances

	Synchronous performance	On/Off/1-Number of effective performances / All
system info	Reset information	Device error message
	DMX data monitoring	Receive the channel value from the console
	SD card information	SD card status information
	Hardware version	Displays the hardware version
	software release	Displays the software version

Table 1

2.2 System calibration

Calibration		Calibration		Calibration	
Balance-Red	255	Balance 15-White	255	Balance 34-White	255
Balance-Green	255	Balance 16-White	255	Balance 35-White	255
Balance-Bule	255	Balance 17-White	255	Balance 36-White	255
Balance-White	255	Balance 18-White	255	Balance 37-White	255
Power	255	Balance 19-White	255	Balance 38-White	255
Balance 1-White	255	Balance 20-White	255	Balance 39-White	255
Balance 2-White	255	Balance 21-White	255	Balance 40-White	255
Balance 3-White	255	Balance 22-White	255	Balance 41-White	255
Balance 4-White	255	Balance 23-White	255	Balance 42-White	255
Balance 5-White	255	Balance 24-White	255	Balance 43-White	255
Balance 6-White	255	Balance 25-White	255	Balance 44-White	255
Balance 7-White	255	Balance 26-White	255	Balance 45-White	255
Balance 8-White	255	Balance 27-White	255	Balance 46-White	255
Balance 9-White	255	Balance 28-White	255	Balance 47-White	255
Balance 10-White	255	Balance 29-White	255	Balance 48-White	255
Balance 11-White	255	Balance 30-White	255	Balance 49-White	255
Balance 12-White	255	Balance 31-White	255	MIC	127
Balance 13-White	255	Balance 32-White	255	Change Password	>>
Balance 14-White	255	Balance 33-White	255		

Figure 6 System calibration interface

Enter the password "6688" to enter the system calibration interface, and modify the value through the "UP" key and "DOWN" key to modify the power of the lamp and the motor travel parameters. The system calibration interface is shown in Figure 6, and the detailed content is shown in Table 2.

option	explain
Whole machine white balance	After entering the sub-interface, you can adjust the white balance of red, green, blue and white. The adjustment range is 0~255,255 indicates no adjustment
power	After entering the sub-interface, you can adjust the maximum power of the whole lamp, 255 indicates the maximum power

Main light white balance	After entering the sub-interface, you can adjust the white balance of the main light LED1-LED49, and the adjustment range is 0~255,255 indicates no adjustment
Voice control sensitivity	After entering the sub-interface, you can adjust the sensitivity of the voice control, 0 indicates the most sensitive
change password	Set the system calibration password

Table 2

2.3 Advanced Settings

Built Show	
Record Effect	OFF
Play Effect	OFF
Sync Effect	OFF

Figure 7 Advanced Settings Interface

The system reset interface is shown in Figure 7. Press "UP" and "DOWN" keys to switch the reset mode, and press "ENTER" to reset directly. See Table 3 for details.

option	explain
Record a performance	Enter the specific recording signal and click to enter the recording, press the confirm key to end the recording
Play the performance	You can choose to preview the performance that has been recorded, and press the confirm button to end the playback
Synchronized performance	You can choose to synchronize a recorded performance to the server

Table 3

2.4 System information

System Info	
Reset Info	>>
DMX Data	>>
SD Card Info	>>
Hardware : 52.00.00.0	
Software : 04.00.00.0	

Figure 8 System Information Interface

Press the "ENTER" key directly to enter the system information interface, and select the information to be viewed by pressing the "UP" key and "DOWN" key, and then click "ENTER" to view the corresponding

content. The system calibration interface is shown in Figure 8, and the detailed content is shown in Table 4.

option		explain
Reset information		System is normal
DMX data monitoring		Enter the sub-interface, and display the channel value in numerical form for viewing
SD card information		Show SD card type, capacity, capacity ratio and other related information
Hardware number	version	Lamp hardware information <u> XX </u> . <u> XX </u> . <u> XX </u> . <u> XX </u> ↓ Display board version..
Software number	version	Lamp software version <u> XX </u> . <u> XX </u> . <u> XX </u> . <u> XX </u> ↓ Display board version.

Table 4

Chapter 3 Channel description and technical parameters

1. channel table

The specific and detailed data of the channel are shown in Table 5, which can also be viewed in the manual operation interface:

1-channel mode (mode 1):

1CH	The channel name	The channel value	Channel function
1	Dimmer	000-255	0 ~100%

5-channel mode (mode 2):

5CH	The channel name	The channel value	Channel function
1	Red	000-255	0 ~100%
2	Green	000-255	0 ~100%
3	Blue	000-255	0 ~100%
4	White	000-255	0 ~100%
5	Warm White	000-255	0 ~100%

7 channel mode (mode 3):

7CH	The channel name	The channel value	Channel function
1	Dimmer	000-255	0 ~100%
2	Red	000-255	0 ~100%
3	Green	000-255	0 ~100%
4	Blue	000-255	0 ~100%
5	White	000-255	0 ~100%
6	Warm White	000-255	0 ~100%
7	Strobe	000-010	No Function
		011-255	Strobe Slow to Fast

10 channel mode (mode 4):

10CH	The channel name	The channel value	Channel function
1	Dimmer	000-255	0 ~100%
2	Dimmer Fine	000-255	0 ~100%
3	Red	000-255	0 ~100%
4	Green	000-255	0 ~100%
5	Blue	000-255	0 ~100%
6	White	000-255	0 ~100%
7	Warm White	000-255	0 ~100%
8	Strobe	000-010	No Function
		011-255	Strobe Slow to Fast
9	Fixed Color	000-005	No Function

		006-013	R
		014-021	G
		022-029	B
		030-037	W
		038-045	WW
		046-053	RG
		054-061	RB
		062-069	RW
		070-077	R-WW
9	Fixed Color	078-085	GB
		086-093	GW
		094-101	G-WW
		102-109	BW
		110-117	B-WW
		118-125	W-WW
		126-133	RGB
		134-141	RGW
		142-149	RG-WW
		150-157	RBW
		158-165	RB-WW
		166-173	RW-WW
		174-181	GBW
		182-189	GB-WW
		190-197	BW-WW
		198-205	RGBW
		206-213	RGB-WW
		214-221	GBW-WW
		222-229	RBW-WW
		230-237	RGBW-WW
		238-255	No Function
10	Color Temperature	000-005	No Function
		006-018	2700K
		019-031	2800K
		032-044	3000K
		045-057	3200K
		058-070	3500K
		071-083	4000K
		084-096	4500K
		097-109	5000K
		110-122	5600K
		123-135	6000K
		136-148	6500K
		149-161	7000K
		162-174	7500K
		175-187	8000K
		188-200	8500K

		201-213	9000K
		214-226	9500K
		227-239	10000K
		240-255	No Function

12 channel mode (mode 5):

12CH	The channel name	The channel value	Channel function
1	Dimmer	000-255	0 ~100%
2	Red	000-255	0 ~100%
3	Green	000-255	0 ~100%
4	Blue	000-255	0 ~100%
5	White	000-255	0 ~100%
6	Warm White	000-255	0 ~100%
7	Strobe	000-010	No Function
		011-255	Strobe Slow to Fast
8	Fixed Color	000-005	No Function
		006-013	R
		014-021	G
		022-029	B
		030-037	W
		038-045	WW
		046-053	RG
		054-061	RB
		062-069	RW
		070-077	R-WW
		078-085	GB
		086-093	GW
		094-101	G-WW
		102-109	BW
		110-117	B-WW
		118-125	W-WW
		126-133	RGB
		134-141	RGW
		142-149	RG-WW
		150-157	RBW
		158-165	RB-WW
		166-173	RW-WW
		174-181	GBW
		182-189	GB-WW
		190-197	BW-WW
		198-205	RGBW
		206-213	RGB-WW
		214-221	GBW-WW
		222-229	RBW-WW

		230-237	RGBW-WW
		238-255	No Function
9	Color Temperature	000-005	No Function
		006-018	2700K
		019-031	2800K
		032-044	3000K
		045-057	3200K
		058-070	3500K
		071-083	4000K
		084-096	4500K
		097-109	5000K
		110-122	5600K
		123-135	6000K
		136-148	6500K
		149-161	7000K
		162-174	7500K
		175-187	8000K
		188-200	8500K
		201-213	9000K
		214-226	9500K
		227-239	10000K
		240-255	No Function
10	Auto programs	000-010	No Function
		011-040	Auto Program 1
		041-080	Auto Program 2
		081-120	Auto Program 3
		121-160	Auto Program 4
		161-200	Auto Program 5
		201-240	Auto Program 6
		241-255	No Function
11	Auto speed	000-255	Auto speed slow to fast
12	Control (Hold 3 Seconds)	000-007	No function
		008-015	Dimmer Reset
		016-023	Red Shift: ON
		024-031	Red Shift: OFF
		032-039	Dimmer: S-Curve
		040-047	Dimmer: Linear
		048-055	Dimmer: Square
		056-063	Dimmer: Inverse Square
		064-071	Dimmer speed mode off
		072-079	Dimmer speed mode 1
		080-087	Dimmer speed mode2
12	Control (Hold 3 Seconds)	088-095	Dimmer speed mode3
		096-103	Pixel Flipping:Normal

		104-111	Pixel Flipping:Flip Right 90°
		112-119	Pixel Flipping:Flip Right 180°
		120-127	Pixel Flipping:Flip Right 270°
		128-255	Future Use (No Function)

13 channel mode (mode 6):

13CH	The channel name	The channel value	Channel function
1	Dimmer	000-255	0 ~100%
2	Dimmer Fine	000-255	0 ~100%
3	Red	000-255	0 ~100%
4	Red Fine	000-255	0 ~100%
5	Green	000-255	0 ~100%
6	Green Fine	000-255	0 ~100%
7	Blue	000-255	0 ~100%
8	Blue Fine	000-255	0 ~100%
9	White	000-255	0 ~100%
10	White Fine	000-255	0 ~100%
11	Warm White	000-255	0 ~100%
12	Warm White Fine	000-255	0 ~100%
13	Strobe	000-010	No Function
		011-255	Strobe Slow to Fast

16 channel mode (mode 7):

16CH	The channel name	The channel value	Channel function
1	Dimmer	000-255	0 ~100%
2	Dimmer Fine	000-255	0 ~100%
3	Red	000-255	0 ~100%
4	Red Fine	000-255	0 ~100%
5	Green	000-255	0 ~100%
6	Green Fine	000-255	0 ~100%
7	Blue	000-255	0 ~100%
8	Blue Fine	000-255	0 ~100%
9	White	000-255	0 ~100%
10	White Fine	000-255	0 ~100%
11	Warm White	000-255	0 ~100%
12	Warm White Fine	000-255	0 ~100%
13	Strobe	000-010	No Function
		011-255	Strobe Slow to Fast
14	Fixed Color	000-005	No Function
		006-013	R
		014-021	G
		022-029	B
		030-037	W
		038-045	WW

		046-053	RG
		054-061	RB
		062-069	RW
		070-077	R-WW
		078-085	GB
		086-093	GW
		094-101	G-WW
		102-109	BW
		110-117	B-WW
		118-125	W-WW
		126-133	RGB
		134-141	RGW
		142-149	RG-WW
		150-157	RBW
		158-165	RB-WW
		166-173	RW-WW
		174-181	GBW
		182-189	GB-WW
		190-197	BW-WW
		198-205	RGBW
		206-213	RGB-WW
		214-221	GBW-WW
		222-229	RBW-WW
		230-237	RGBW-WW
		238-255	No Function
15	Color Temperature	000-005	No Function
		006-018	2700K
		019-031	2800K
		032-044	3000K
		045-057	3200K
		058-070	3500K
		071-083	4000K
		084-096	4500K
		097-109	5000K
		110-122	5600K
15	Color Temperature	123-135	6000K
		136-148	6500K
		149-161	7000K
		162-174	7500K
		175-187	8000K
		188-200	8500K
		201-213	9000K
		214-226	9500K
		227-239	10000K

		240-255	No Function
16	Control (Hold 3 Seconds)	000-007	No function
		008-015	Dimmer Reset
		016-023	Red Shift: ON
		024-031	Red Shift: OFF
		032-039	Dimmer: S-Curve
		040-047	Dimmer: Linear
		048-055	Dimmer: Square
		056-063	Dimmer: Inverse Square
		064-071	Dimmer speed mode off
		072-079	Dimmer speed mode 1
		080-087	Dimmer speed mode2
		088-095	Dimmer speed mode3
		096-103	Pixel Flipping:Normal
		104-111	Pixel Flipping:Flip Right 90°
		112-119	Pixel Flipping:Flip Right 180°
		120-127	Pixel Flipping:Flip Right 270°
		128-255	Future Use (No Function)

1813 channel mode (mode 8):

1813CH			The channel name	The channel value	Channel function
ArtNet	ArtNet+DMX		/	/	/
ArtNet	ArtNet	DMX	/	/	/
1			Red 1	000-255	0 ~100%
2	2		Green 1	000-255	0 ~100%
3	3		Blue 1	000-255	0 ~100%
4	4		White 1	000-255	0 ~100%
5	5		Red 2	000-255	0 ~100%
6	6		Green 2	000-255	0 ~100%
7	7		Blue 2	000-255	0 ~100%
8	8		White 2	000-255	0 ~100%
...	...		...	...	...
1757	1757		Red 440	000-255	0 ~100%
1758	1758		Green 440	000-255	0 ~100%
1759	1759		Blue 440	000-255	0 ~100%
1760	1760		White 440	000-255	0 ~100%
1761	1761		Red 441	000-255	0 ~100%
1762	1762		Green 441	000-255	0 ~100%
1763	1763		Blue 441	000-255	0 ~100%
1764	1764		White 441	000-255	0 ~100%
1765		1	Warm White 1	000-255	0 ~100%
1766		2	Warm White 2	000-255	0 ~100%

...			...	...	...
1812		48	Warm White 48	000-255	0 ~100%
1813		49	Warm White 49	000-255	0 ~100%

1817 channel mode (mode 9):

1817CH			The channel name	The channel value	Channel function
ArtNet	ArtNet+DMX		/	/	/
ArtNet	ArtNet	DMX	/	/	/
1			Red 1	000-255	0 ~100%
2	2		Green 1	000-255	0 ~100%
3	3		Blue 1	000-255	0 ~100%
4	4		White 1	000-255	0 ~100%
5			Red 2	000-255	0 ~100%
6	6		Green 2	000-255	0 ~100%
7	7		Blue 2	000-255	0 ~100%
8	8		White 2	000-255	0 ~100%
...	...		...	...	...
1757	1757		Red 440	000-255	0 ~100%
1758	1758		Green 440	000-255	0 ~100%
1759	1759		Blue 440	000-255	0 ~100%
1760	1760		White 440	000-255	0 ~100%
1761	1761		Red 441	000-255	0 ~100%
1762	1762		Green 441	000-255	0 ~100%
1763	1763		Blue 441	000-255	0 ~100%
1764	1764		White 441	000-255	0 ~100%
1765		1	Warm White 1	000-255	0 ~100%
1766		2	Warm White 2	000-255	0 ~100%
...			...	...	...
1812		48	Warm White 48	000-255	0 ~100%
1813		49	Warm White 49	000-255	0 ~100%
1814		50	Master Dimmer	000-255	0 ~100%
1815		51	RGBW Dimmer	000-255	0 ~100%
1816		52	WW Dimmer	000-255	0 ~100%
1817		53	Control (Hold 3 Seconds)	000-007	No function
				008-015	Dimmer Reset
				016-023	Red Shift: ON
				024-031	Red Shift: OFF
				032-039	Dimmer: S-Curve
				040-047	Dimmer: Linear
				048-055	Dimmer: Square
				056-063	Dimmer: Inverse Square
				064-071	Dimmer speed mode off
				072-079	Dimmer speed mode 1

				080-087	Dimmer speed mode2
				088-095	Dimmer speed mode3
				096-103	Pixel Flipping:Normal
				104-111	Pixel Flipping:Flip Right 90°
				112-119	Pixel Flipping:Flip Right 180°
				120-127	Pixel Flipping:Flip Right 270°
				128-255	Future Use (No Function)

1825 channel mode (mode 10):

1825CH			The channel name	The channel value	Channel function
ArtNet	ArtNet+DMX		/	/	/
ArtNet	ArtNet	DMX	/	/	/
1			Red 1	000-255	0 ~100%
2	2		Green 1	000-255	0 ~100%
3	3		Blue 1	000-255	0 ~100%
4	4		White 1	000-255	0 ~100%
5			Red 2	000-255	0 ~100%
6	6		Green 2	000-255	0 ~100%
7	7		Blue 2	000-255	0 ~100%
8	8		White 2	000-255	0 ~100%
...	...		...	...	...
1757	1757		Red 440	000-255	0 ~100%
1758	1758		Green 440	000-255	0 ~100%
1759	1759		Blue 440	000-255	0 ~100%
1760	1760		White 440	000-255	0 ~100%
1761	1761		Red 441	000-255	0 ~100%
1762	1762		Green 441	000-255	0 ~100%
1763	1763		Blue 441	000-255	0 ~100%
1764	1764		White 441	000-255	0 ~100%
1765		1	Warm White 1	000-255	0 ~100%
1766		2	Warm White 2	000-255	0 ~100%
...			...	...	...
1812		48	Warm White 48	000-255	0 ~100%
1813		49	Warm White 49	000-255	0 ~100%
1814		50	Master Dimmer	000-255	0 ~100%
1815		51	Master Dimmer Fine	000-255	0 ~100%
1816		52	RGBW Dimmer	000-255	0 ~100%
1817		53	RGBW Dimmer Fine	000-255	0 ~100%
1818		54	WW Dimmer	000-255	0 ~100%
1819		55	WW Dimmer Fine	000-255	0 ~100%
1820		56	Strobe	000-010	No Function

				011-255	Strobe Slow to Fast
1821		57	Fixed Color	000-005	No Function
				006-013	R
				014-021	G
				022-029	B
				030-037	W
				038-045	WW
				046-053	RG
				054-061	RB
				062-069	RW
				070-077	R-WW
				078-085	GB
				086-093	GW
				094-101	G-WW
				102-109	BW
				110-117	B-WW
				118-125	W-WW
				126-133	RGB
				134-141	RGW
				142-149	RG-WW
				150-157	RBW
				158-165	RB-WW
				166-173	RW-WW
				174-181	GBW
				182-189	GB-WW
				190-197	BW-WW
				198-205	RGBW
				206-213	RGB-WW
				214-221	GBW-WW
				222-229	RBW-WW
				230-237	RGBW-WW
				238-255	No Function
1822		58	Color Temperature	000-005	No Function
				006-018	2700K
				019-031	2800K
				032-044	3000K
				045-057	3200K
1822		58	Color Temperature	058-070	3500K
				071-083	4000K
				084-096	4500K
				097-109	5000K
				110-122	5600K
				123-135	6000K
				136-148	6500K
				149-161	7000K

				162-174	7500K
				175-187	8000K
				188-200	8500K
				201-213	9000K
				214-226	9500K
				227-239	10000K
				240-255	No Function
1823		59	Auto programs	000-010	No Function
				011-040	Auto Program 1
				041-080	Auto Program 2
				081-120	Auto Program 3
				121-160	Auto Program 4
				161-200	Auto Program 5
				201-240	Auto Program 6
				241-255	No Function
1824		60	Auto speed	000-255	Auto speed slow to fast
1825		61	Control (Hold 3 Seconds)	000-007	No function
				008-015	Dimmer Reset
				016-023	Red Shift: ON
				024-031	Red Shift: OFF
				032-039	Dimmer: S-Curve
				040-047	Dimmer: Linear
				048-055	Dimmer: Square
				056-063	Dimmer: Inverse Square
				064-071	Dimmer speed mode off
				072-079	Dimmer speed mode 1
				080-087	Dimmer speed mode2
				088-095	Dimmer speed mode3
				096-103	Pixel Flipping:Normal
				104-111	Pixel Flipping:Flip Right 90°
				112-119	Pixel Flipping:Flip Right 180°
				120-127	Pixel Flipping:Flip Right 270°
				128-255	Future Use (No Function)

HSV channel mode (mode 11):

HSV	Function	Value	Percent/Setting
1	Hue	000-255	0 ~100%
2	Saturation	000-255	0 ~100%
3	Value	000-255	0 ~100%

Table 5

2. Technical parameters:

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

Total lamp power: 700W;

Main light source: 49*8W;

Radiant: 441*0.5W RGBW LED module;

Type: Single-head 8W warm white LED module;

Life expectancy:>20,000 hours;

Display and control

Display screen and main control: LCD display screen, support switching between Chinese and English; can query lamp information;

Channels: HSV channels / 5channels/ 7channels / 10 channels / 12 channels / 13 channels / 16 channels / 1813 channels / 1817channels / 1825 channels;

Control: DMX512 Control, support RDM function; upgrade lamps through DMX signal line pair. Art-Net control;

Dimming and flashing: linear electronic dimming from 0 to 100%; fast electronic flashing;

Pixel matrix: overall control + single point control;

Pixel, beam free transformation, superposition use, the effect is rich;

configuration parameter

Heat dissipation system: natural heat dissipation;

Appearance: case (metal, black sandblasting), panel (acrylic);

Size: 500*500*104mm ;

Waterproof rating: IP65;

Chapter 4 Common faults and usage precautions

1. Common fault handling

The lamp contains professional components such as microcomputer circuit board and high voltage power supply. For your safety and product life, non-professionals should not dismantle the lamp and related accessories without authorization.

1. Light bulb is not on (except for LED light source)

Possible cause: The bulb is not completely cooled, or the bulb has reached its life. The following treatment is applied:

- Due to abnormal operation, the bulb has not been completely cooled. The lamp body should be cooled for more than 10 minutes to make its internal state fully restored to normal, and then the power supply can be started again;
- Check whether the bulb has reached its service life, and replace it with a new one;
- Check whether the bulb and lamp wiring is leaking, falling off or poorly connected;
- Replace with a new light bulb.

2. The beam appeared dim

Possible causes: long use time of the bulb or unclean optical path, deal with as follows:

- Check whether the bulb has reached its service life, and replace it with a new bulb;
- Check whether the optical parts or bulbs are clean and whether there is dust on the optical devices such as bulbs. The lamp bulb and other components should be cleaned and maintained regularly.

3. Pattern projection blur

- Check the value of the electronic focusing channel to see if the current projection distance is appropriate.

4. The lamps work intermittently

Possible cause: Internal lines enter the protection state, handled as follows:

- Check whether the fan is running normally or whether it is dirty, resulting in the internal temperature of the lamp is increased;
- Check whether the internal temperature control switch is closed;
- Check whether the bulb has reached its service life and replace it with a new one.

5. The lamp does not accept control from the console after normal reset

Possible causes: signal line fault or lamp parameter setting is not normal, deal with as follows:

- Check the starting address code and check the connection of the DMX signal line (whether the signal cable is intact and whether the connector is loose);
- Add signal amplifier, add 120 ohm terminal resistor;

6. The lamp cannot start

Possible cause: poor power line, handle as follows:

- Check whether the fuse on the power input socket is blown and replace the fuse;
- The lamp is transported over long distances, and the contact of the line is poor due to vibration
- Check the input power supply, computer board and other connecting devices.

2. Usage precautions

- Check whether the local power supply meets the requirements of the rated voltage of the product, and whether the leakage protection device, overcurrent protection device and so on meet the requirements of the load;
- Do not use power lines with damaged insulation, do not connect power lines to other wires;
- The lamp adopts strong wind cooling, which is easy to accumulate dust. It must be cleaned once a month, especially the heat dissipation air outlet. Otherwise, it will be blocked by accumulated dust and cause poor heat dissipation, resulting in abnormal lamp.
- When installing the lamp, the fixing screws must be tight, and safety ropes should be added and checked regularly;
- When installing and positioning the lamp, the minimum distance between any point on the surface of the lamp and any flammable and explosive material shall be 10 meters, and the distance from the illuminated object shall be 2.5 meters. Please do not install the lamp directly on the surface of combustible substances;
- The continuous working time of the lamp is recommended not to exceed 10 hours, and the interval time of continuous start-up of the lamp should not be less than 10 minutes, otherwise it will not be able to be normally triggered due to the overheating protection of the bulb;
- The closing time of the switch valve should not exceed 5 minutes. If it is necessary to close the light for a long time, the control console (light cannon control channel) should be used to turn off the light cannon;
- In order to ensure that multiple lamps better comply with the scene effect, the lamps should not always be unfinished for the current scene, that is, start the next scene action, and it is best that this state should not exceed 3 minutes to ensure that multiple lamps can run synchronously;
- During the use, if the lamp is abnormal, the lamp should be stopped in time to prevent other faults.

3. RDM usage notes

RDM is an extended version of the DMX512-A protocol, it is a Remote Device Management (Remote Device Management) protocol. Traditional DMX512 communication is unidirectional communication, the protocol is based on the RS-485 bus, RS-485 is a time-division multiple points, half-duplex protocol, allowing only one port to be the host output at any given time. Therefore, when using RDM, the following points should be noted:

- Use a console or host device that supports the RDM protocol;
- To use a two-way signal amplifier, traditional one-way signal amplifier is not suitable for RDM protocol, because RMD protocol needs feedback data, using a one-way amplifier will block the return of data, resulting in the search for the lamp;
- All lamps must be set to DMX mode, ensuring that there is only one host on the signal line;
- A 120ohm impedance matching resistor must be inserted between terminal 2 and terminal 3 of the terminal plug. When the signal line is relatively long, the use of differential signal will reduce the signal reflection more stably, which is conducive to the quality of communication;
- When the lamp is accepted by DMX control but cannot be searched by RDM, first check the signal amplifier, then check whether there is a poor contact between line 2 and line 3 of the signal line.