

Product Specification

CL-404R controller



深圳市晨亮光电科技有限公司
Shenzhen Clen Optoelectronics Co., Ltd



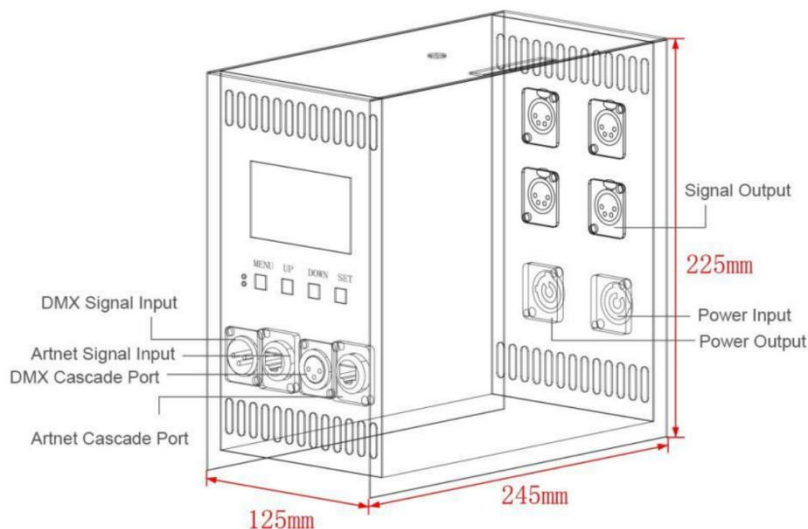


Product name: 4 ports controller(Built-in power supply)

Product mode: CL-404R

Overview: Based on the ARTNET protocol Ethernet network driver, the controller can convert the network data packets in the ARTNET protocol into standard DMX512 data or SPI data. The controller has four control modes: ARTNET, SD card, sACN and pixel ring, which can perform effect recording and can be used offline; it has 4 output ports, and each port support 680 pixels. This product can be widely used in stage performance lighting control system, stage performance, bar lighting and other occasions, and it is more convenient to use with our pixel tube.

Product picture:





◆ **Product features:**

- Input Voltage: AC110—220V
- 4ports output,each port 680pixels;
- Four signal modes, ARTNET mode,SD card, sACN mode and ring mode;
- The independent ring mode can control the unique pixel ring;
- Support recording effect, it can record 31 different lighting effect, support offline control;
- Built-in power supply, simple wiring, easy to use;

◆ **Parameter list**

Parameter	Unit	Min	Typical	Max
Working voltage(AC)	V	110	220	220
Power	W	—	—	1000W
Output port	PCS	—	4	4
Output voltage (V)	V	—	24	—
Port loading points	PIX	4*170	—	4*680
Support IC type	—	—	WS2811/SK6812/UCS1903/U CS8903/UCS9812/ DMX512	—
Supporting software	—	—	MAD-SHOW (MADRIX/MAD-MAPPER)	—
Control mode	—	—	ART-NET/DMX/sACN	—
Working mode	—	—	Video bar/pixel ring/SD card	—
Controller IP address	—	—	2.0.0.X	—
Subnet mask	—	—	255.0.0.0	—
Computer IP address	—	—	2.0.0.2	—
cascaded units	PCS	—	—	254
Product weight	KG	—	3.5	—
Product color		—	Black	—
Product material		—	Aluminum	—
Gross weight	KG	—	4.1	—
Product size(L*W*H)	MM	—	245*225*125	—
Packing size(L*W*H)	MM	—	380*335*200	—



◆ Connection

① connect controller input port



The network cable connects the computer and the controller signal input port



Power in (Blue color is power input)

② Connect lamps



Connect the XLR cable to the output of the controller and the input of the tube

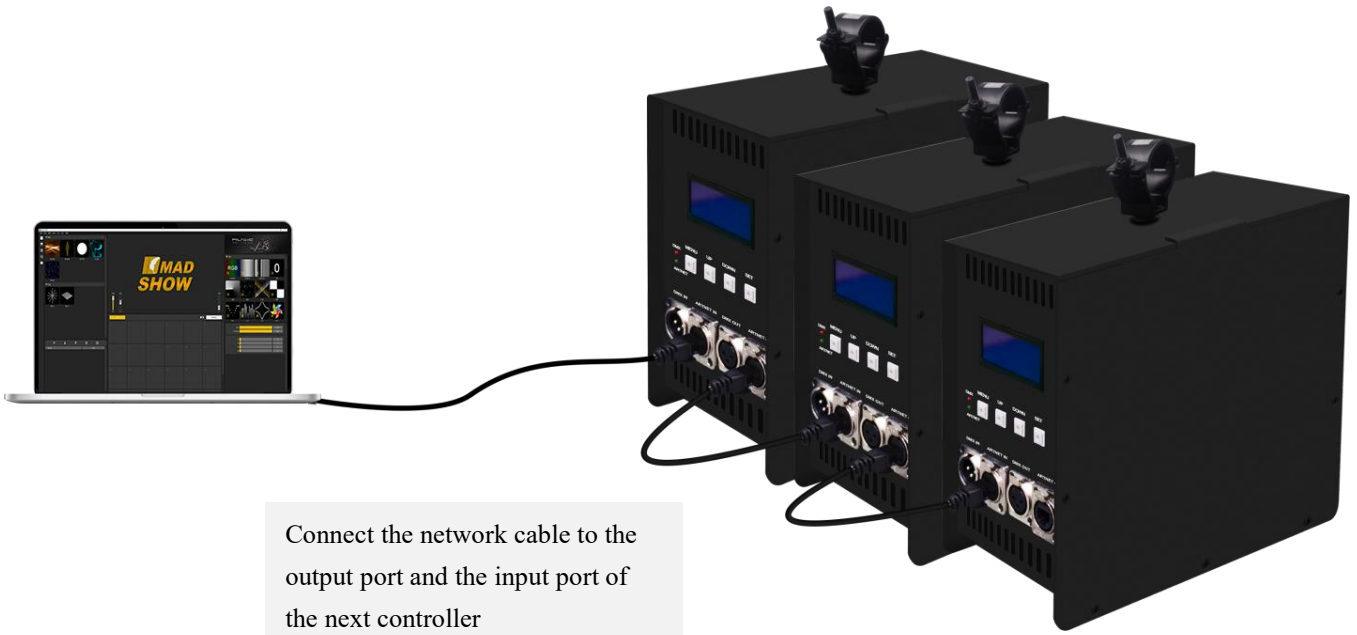


③ Console connect controller



The console can be directly connected to the DMX signal input port

◆ Multiple units can be used in cascade



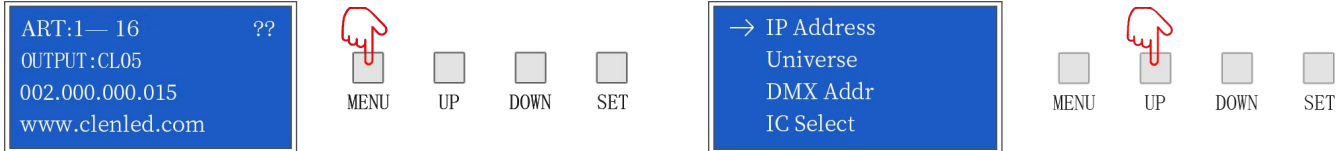
Connect the network cable to the output port and the input port of the next controller

Note: When multiple controllers are cascaded, each controller IP setting cannot be the same! (Except for sACN mode)



◆ Control mode

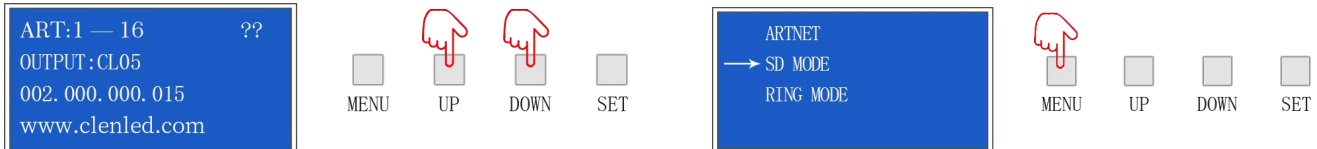
ARTNET mode: ①After the controller is powered on, it enters the "ART-NET" mode by default, long press "MENU" for 3 seconds to enter the parameter setting, and click "UP" or "DOWN" to select the parameter that needs to be modified;



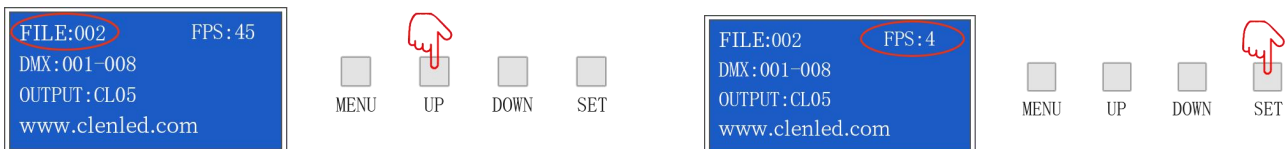
②Click "SET" to enter the parameter list to modify the parameters ("UP""DOWN" switch parameter values), click "SET" again to save, and long press "MENU" to return to the initial interface. The controller port output is an independent port output, one port maximum 680 pixels (IC UCS8903 has a maximum of 340 pixels)



SD card mode: ①After the controller is powered on, it enters the "ART-NET" mode by default, and simultaneously presses "UP" and "DOWN" for 3 seconds to enter the SD card mode;

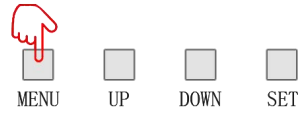


②Click "UP" or "DOWN" to switch the built-in effects; click "MENU" or "SET" to switch the effect speed; total 31 built-in effects can be selected; long press "UP" and "DOWN" for 3 seconds to exit the SD card model.

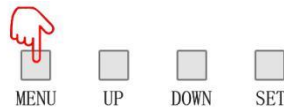
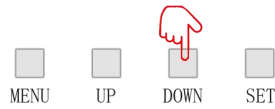
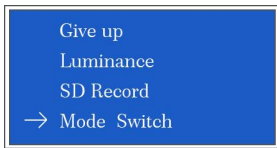




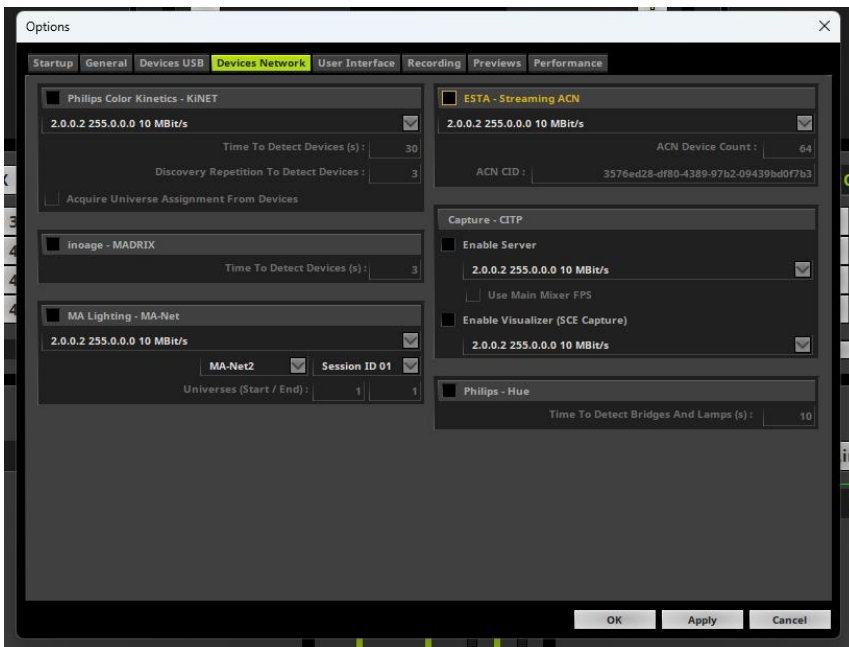
sACN mode: ①After the controller is powered on, it enters "ART-NET" mode by default. Press and hold MENU to enter the menu.



②Click "UP" or "DOWN" to switch options, select Mode Switch, click SET to enter the options, select sACN Mode, click SET and long press MENU to save the setting;

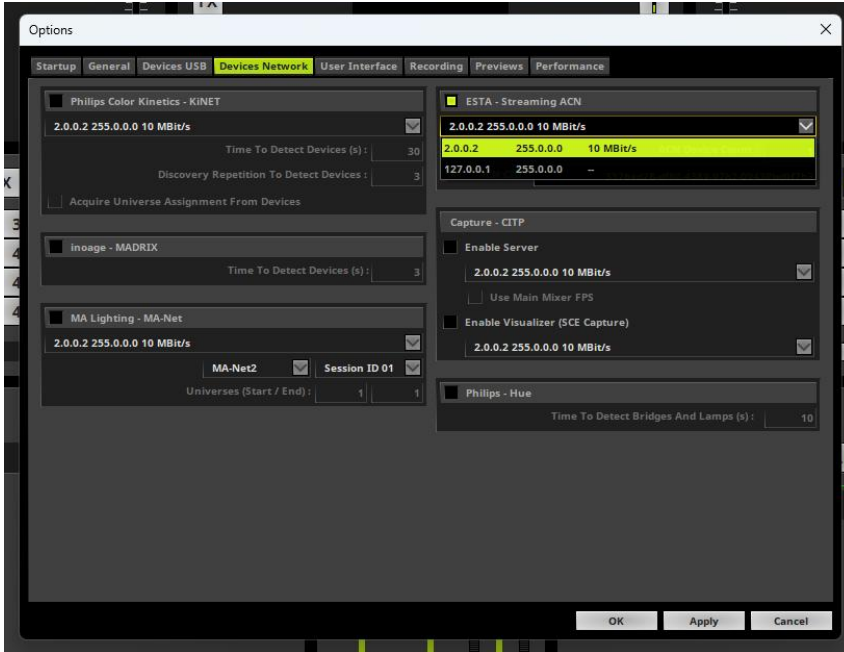


The sACN protocol is a lighting control protocol based on UDP. It uses Ethernet as the transmission medium. There is no need to set the IP address and it can be used immediately after connection; Take Madrix as an example. After connecting the computer and controller, there is no need to set the IP address to open it. Open Preferences-Options-Device Network Interface;

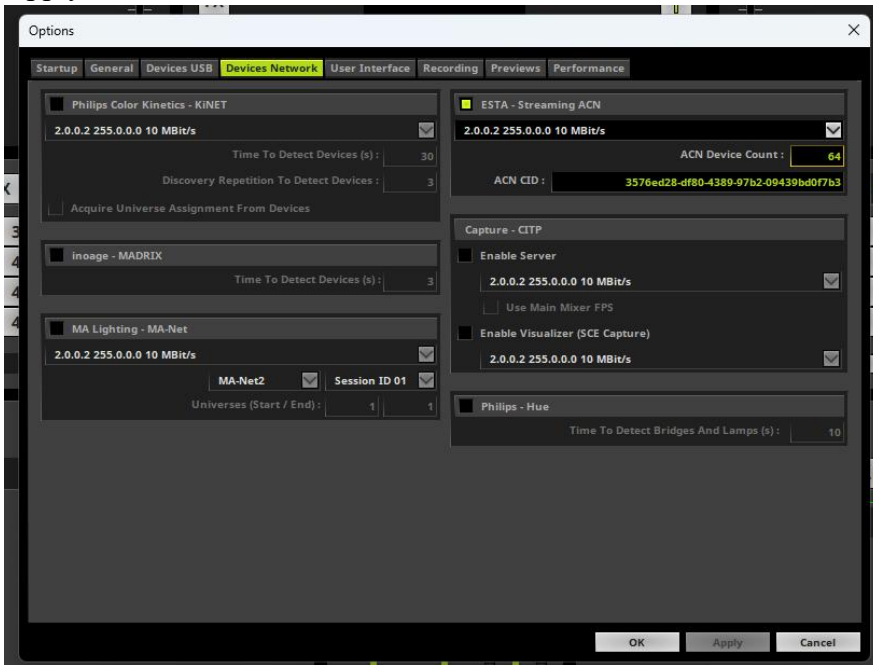




Turn on ESTA-Streaming ACN and select the IP address of the current computer;

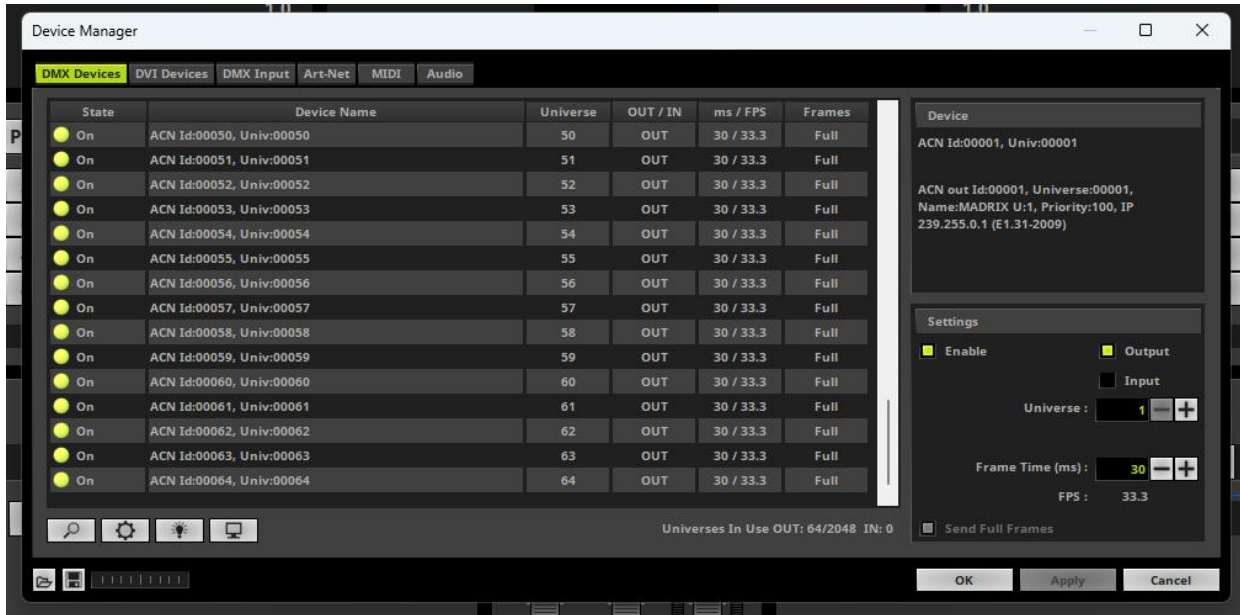


In the number of ACN devices, fill in the number of universe of the current controller and click the Apply button;





When we open the device manager list, we can see the list of connected universe;



◆ DMX Channel Table Description

Channel	Name	Figure	Instructions
1	Mode selection	000-247	Call internal 31 effects (one effect for every 8 addresses, and 0-7 for SD card effect 1)
		248-255	Switch to ART_NET mode
2	Speed	000-255	0 is the slowest speed, 255 is the fastest speed, SD card mode is valid
3	Brightness	000-255	0 is the brightness off, 255 is the brightest, SD card mode is valid
4	R- mask	000-255	Subtract red from the effect. 000 is the original effect, and 255 means subtract all red from the effect
5	G-mask	000-255	Subtract green from the effect. 000 is the original effect, and 255 is subtracting all green from the effect
6	B-mask	000-255	Subtract the blue in the effect. 000 is the original effect. 255 means subtract all the blue in the effect
7	invalid	000-007	
	Normally on	008-015	Constant bright white, color selection by mask (brightness,

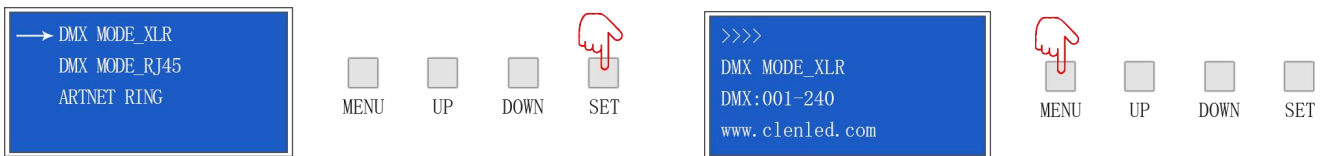


			mask channel available)
	stroboscopic	016-255	The higher the value, the faster the strobe (speed, brightness, mask channel is effective)
8	invalid	000-200	
	Record	201-255	When the value of channel 4.5.6 is 255, the recording is valid and the ART_NET effect is recorded to the file specified by channel 1

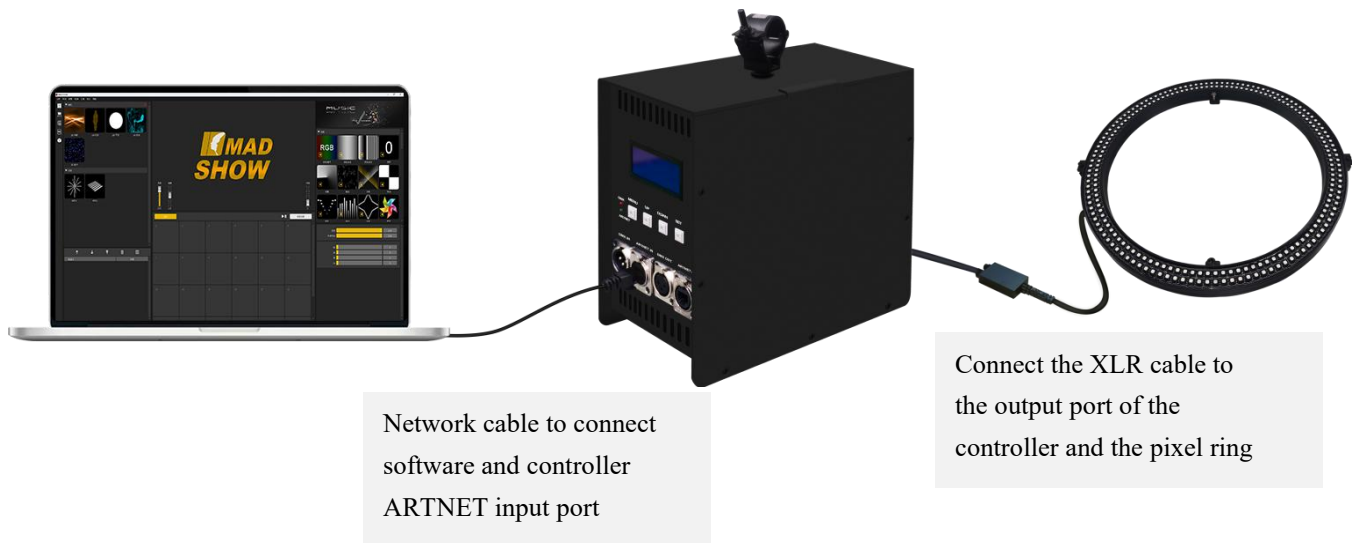
Ring mode: ①After the controller is powered on, it enters the "ART-NET" mode by default. At the same time, long press "UP" and "DOWN" for 3 seconds to enter the mode option, click "DOWN" to select the RING mode, and long press "MENU" to enter the RING mode;



DMX MODE_XLR is the external console mode; DMX MODE_RJ45 is the software analog console mode; ARTNET RING is the software control mode; select the corresponding control mode, click "SET" to save, the interface returns to the mode option, and then long press "MENU" to complete the setting .



◆ Ring mode wiring



Software control mode wiring



The console is directly connected to the controller DMX signal input port

Console control mode wiring

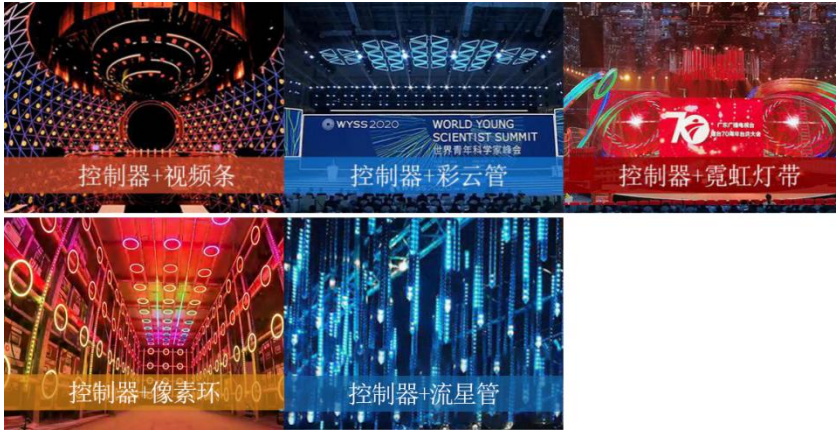
◆ **Corresponding DMX channel function description**

Channel	Name	Figure	Description
1	Brightness	000-255	Top total brightness adjustment
2	Red	000-255	Top red brightness adjustment
3	Green	000-255	Top green brightness adjustment
4	Blue	000-255	Top blue brightness adjustment
5	Effect	000-255	64 effects evenly distributed
6	Speed	000-255	Adjust the speed of the effect. The larger the number, the faster the speed
7	Flicker	000-255	The top color flicker, the larger the number, the faster the flicker
8	Angle	000-255	Choose a playback angle
9	Brightness	000-255	Bottom total brightness adjustment
10	Red	000-255	Bottom red brightness adjustment
11	Green	000-255	Bottom green brightness adjustment
12	Blue	000-255	Bottom blue brightness adjustment



◆ Application

1. Stage performance;
2. The site of the product/press conference;
3. Concert lighting control;
4. Bar and KTV lighting control



◆ Common problems

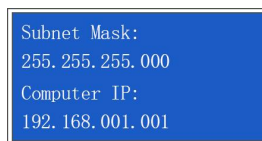
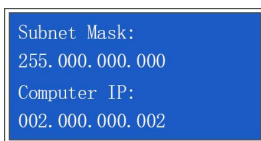
Question: After the wiring is completed, the controller cannot be connected?

Answer: Check whether the wiring is correct and whether the plug is loose; In Art Net mode, check if the computer IP and subnet mask of the controller are consistent.

The corresponding computer IP and subnet mask are as follows:

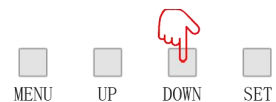
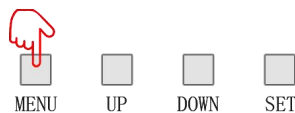
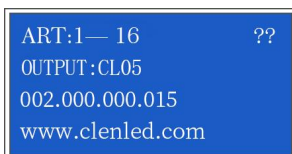
IP:002.000.000.002 Subnet mask will be 255.000.000.000

IP:192.168.001.001 Subnet mask will be 255.255.255.000



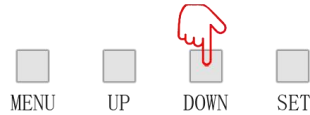
Question:The controller is connected, but only the first lamp lights up? (Controller IC model setting)

Answer: Check if the controller IC settings are correct.

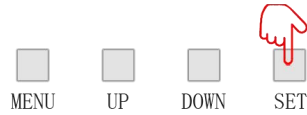
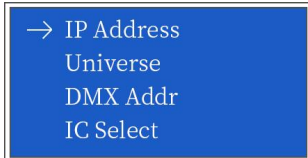


① long press“MENU”enter the parameter setting

② click“UP”or“DOWN”select IC module

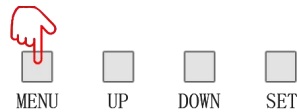
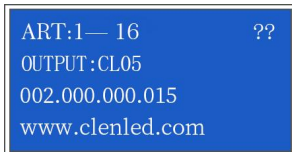


③ Click "SET" enter the parameter setting, press "UP" or "DOWN" choose the same IC with lamps



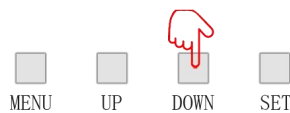
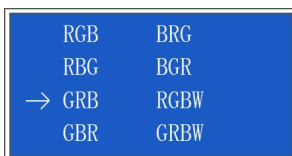
④ press "SET" to save the setting, check whether the lamp is work normally, long press "MODE" to return to the initial interface.

Question: The lighting effect is inconsistent with the playback order?(Controller channel order setting)

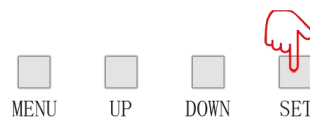


① long press "MENU" enter the parameter setting

② click "UP" or "DOWN" choose channel order



③ click "SET" enter the parameter setting, press "UP" or "DOWN" choose the same channel order with lamps



④ click "SET" save setting, check whether the lamp is work normally, long press "MENU" to return to the initial interface.

Setting other parameters of the controller, please refer to the above steps

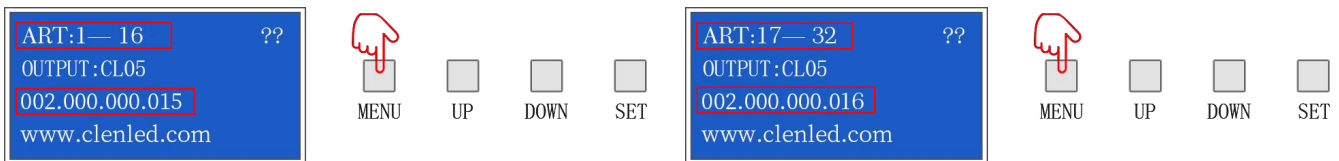


**Question: After the controllers are cascaded in Art-Net mode, some controllers have no signal?
(Controller Computer IP, Universe settings)**

Answer: Check whether the wiring is correct and whether the plug is loose; check the computer IP (Computer IP) of each controller when the connection is correct. When multiple controllers are cascaded, the computer IP of each controller cannot;

After the controllers are cascaded, the playback effect of each controller is the same?

When multiple controllers are cascaded, each controller space (Universe) should be added, for example, the first one is 1-32, the second one is 33-64, and so on.



Attention

1. Pay attention to the use environment and be waterproof and moisture-proof;
2. There is high voltage inside, non-professionals should not disassemble the machine, otherwise the consequences will be at your own risk;
3. The company does not guarantee man-made damage and natural damage;
4. If any abnormality is found during use, please contact us;