

## Channel table (simplified version)

1	Color wheel	0 - 9	Color 1
		10 - 14	Color 1+Color 2
		15 - 19	Color 2
		20 - 24	Color 2+Color 3
		24 - 29	Color 3
		30 - 34	Color 3+Color 4
		35 - 39	Color 4
		40 - 44	Color 4+Color 5
		45 - 49	Color 5
		50 - 54	Color 5+Color 6
		55 - 59	Color 6
		60 - 64	Color 6+Color 7
		65 - 69	Color 7
		70 - 74	Color 7+Color 8
		75 - 79	Color 8
		80 - 84	Color 8+Color 9
		85 - 89	Color 9
90 - 94	Color 9+Color 10		
95 - 99	Color 10		
100-104	Color 10+Color 11		
105-109	Color 11		
110-114	Color 11+Color 12		
115-119	Color 12		
120-124	Color 12+Color 13		
125-129	Color 13		
130-134	Color 13+Color 14		
135-139	Color 14		
140-149	Color 14+Color 1		
150-203	Forward flow (from fast to slow)		
204-255	Reverse flow (from slow to fast)		

2	Strobe	0-3	Close the light
		4-103	Pulse strobe (from slow to fast)
		104-107	Consecrate
		108-207	Effect strobe (from slow to fast)
		208-255	Consecrate
3	Dimming	0-255	from dark to light

4	Color wheel	0-5	Fixed pattern 1
		6-11	Fixed pattern 2
		12-17	Fixed pattern 3
		18-23	Fixed pattern 4
		24-29	Fixed pattern 5
		30-35	Fixed pattern 6
		36-41	Fixed pattern 7
		42-47	Fixed pattern 8
		48-53	Fixed pattern 9
		54-59	Fixed pattern 10
		60-65	Fixed pattern 11
		66-71	Fixed pattern 12
		72-77	Fixed pattern 13
		78-83	Fixed pattern 14
		84-89	Fixed pattern 15
90-134	Forward flow (from fast to slow)		
135-139	Reverse flow (from slow to fast)		
140-185	Fixed pattern 2 Jitter (from slow to fast)		
186-190	Fixed pattern 3 Jitter (from slow to fast)		
191-195	Fixed pattern 4 Jitter (from slow to fast)		
196-200	Fixed pattern 5 Jitter (from slow to fast)		
201-205	Fixed pattern 6 Jitter (from slow to fast)		
206-210	Fixed pattern 7 Jitter (from slow to fast)		
211-215	Fixed pattern 8 Jitter (from slow to fast)		
216-220	Fixed pattern 9 Jitter (from slow to fast)		
221-225	Fixed pattern 10 Jitter (from slow to fast)		
226-230	Fixed pattern 11 Jitter (from slow to fast)		
231-235	Fixed pattern 12 Jitter (from slow to fast)		
236-240	Fixed pattern 13 Jitter (from slow to fast)		
241-245	Fixed pattern 14 Jitter (from slow to fast)		
246-250	Fixed pattern 15 Jitter (from slow to fast)		
251-255	Fixed pattern 15 Jitter (from slow to fast)		

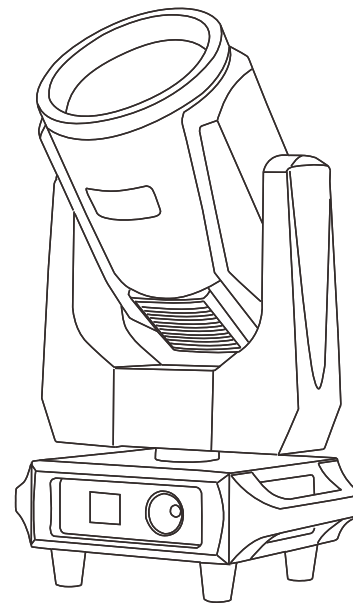
5	prism 1	000-127 128-255	Prism 1 pop up Prism 1 cut in
6	Prism 1 rotation	000-064	index
		065-127 128-191 192-255	Forward flow (from slow to fast) Reverse flow (from slow to fast) Forward and reverse rotation (from slow to fast)

7	prism 2	000-127 128-255	Prism 2 pop up Prism 2 cut in
8	Macro function	000-255	Macro function
9	focusing	000-255	Pattern clarity from far to near
10	X axis	000-255	Horizontal 540 degree scan
11	X-axis fine adjustment	000-255	Horizontal 1,2 degree fine adjustment
12	Y axis	000-255	Vertical 270 degree scan
13	Y axis fine adjustment	000-255	Vertical 1,2 degree fine adjustment
14	XY speed	000-255	from fast to slow
15	Atomization Colorful	129-255 64-255	Atomization (129-255) Colorful (64-128)
		000-255	Reset (255) Defoaming (100-105) Open bubbles (200-205)

## 12.Dimension



**ROVELED**  
LIMITLESS QUALITY



**CIELO400 MANUAL**

Thank you for using the products produced by our company. In order to ensure your safe and effective use of this product before using the product, please carefully and completely read this user manual. This manual includes: the performance characteristics of the product  
Please keep the instructions and important information on how to install it safely, as well as how to use it properly, so that you can use it safely please strictly follow the relevant instructions during installation and use

## 1. Technical Parameter

Power supply: AC100V-240V  
Frequency: 50Hz-60Hz  
Total power: 600W  
Fuse: 10A  
Ballast: electronic ballast  
Light source: OSRAM 371 long life bulb  
Bulb power: 371W  
Color temperature: 8500K  
Average lifespan: 3000H (the bulb and reflector are integrally packaged, with higher light efficiency and longer service life)  
Control signal: international standard DMX512  
Appearance: high temperature resistant plastic  
Lamp body color: black  
Protection level: IP20  
Net weight 17.KG

## 2. Function Introduction

1. International standard control signal: DMX512
2. Number of channels: 16CH channels can be switched
3. Number of motors: 13 silent motors in total
4. LCD 650000 color touch TFT interface, easy to operate, beautiful interface, and 180 degree reverse display.
5. The X-axis rotates horizontally at 540 ° and the Y-axis rotates vertically at 270 °, with automatic correction and positioning
6. The X and Y axes can be adjusted and adjusted, and the software has calibration and positioning functions, with high accuracy!
7. Dimming: 0-100% linear adjustment.
8. Strobe: Dual chip strobe (0.5-9 times/second), complete linear dimming and variable strobe speed
9. Color wheel: With 14 colors and blank spaces (capable of creating sharp aerial beam effects)
10. Pattern wheel: With 14 fixed pattern pieces and blank (allowing you to quickly change the beam shape)
11. Prism: A rotating octahedral prism that can rotate in both directions, with adjustable rotation speed for richer pattern projection effects
12. Atomization: Soft light effect, easy to achieve soft and dreamy pattern effects.
13. Focusing: Using a combination of three optical lenses, the effect is much better than that of a typical beam lamp, and it can project high-definition patterns
14. Beam angle: Parallel beam angle: 0-3.8
15. Intelligent protection against overheating
16. Intelligent bulb switch control (extending bulb service life)

## 4. DMX512 signal connection

This lamp uses DMX512 signal control mode, and the control signals of each lamp are in parallel. When connecting multiple lamp signals, it is best to use a dual core shielded cable. When connecting, each lamp is connected through the DMX512 signal jack (XLR socket), Input (input), and Output (output) on the lamp. The 3-core XLRXL plug terminals of the signal wire connecting the lamp must correspond to each other. When connecting lamp signals, It is recommended to use a DMA signal terminator. To avoid damaging the control signal due to electrical noise, a 120 ohm 1W resistor is connected between the 2 and 3 pins of an XLR plug and connected to the OUTPUT socket of the last lamp

## 5. Starting address code calculation method

The starting address code of the current lamp is equal to (the starting address code of the previous lamp)+(the number of channels of the lamp) Description:

- 1: The starting address code value of the first lamp is A001
- 2: The basic number of channels in the controller should be greater than or equal to the total number of channels used by the lamp
- 3: Note: When using any controller, each lamp must have its own starting address code. If the starting address code of the first lamp is set to A001, and the number of lamp channels is 16CH; So, the beginning of the second light fixture set the address code to A017; The starting address code of the third lamp is set to A033; By analogy, (this setting the setting method also needs to be determined according to different consoles

## 6. Installation instructions

This lamp can be placed horizontally, slanted or upside down. When slanting or upside down, it is important to pay attention to the installation method 1. Fixed installation of lighting fixtures: Before positioning the lighting fixtures, it is necessary to ensure the stability of the installation site. When reverse hanging installation, it is necessary to ensure that the lighting fixtures do not fall off the support frame, and safety ropes should be used to pass through the support frame and lighting handle for auxiliary hanging; To ensure safety and prevent the lamp from falling and sliding, pedestrians are prohibited from passing below during installation and debugging of the lamp. The safety rope is regularly checked for wear, and the hook screws are not loose. If the hanging installation is not stable and causes the lamp to fall, the manufacturer shall not be responsible for any consequences

## 7. Installation of light bulbs

1. When installing and replacing a light bulb, first remove the plastic shell of the lamp head
2. It is recommended to use high-quality light bulbs
3. Do not install or disassemble the bulb with electricity
4. Do not touch the spherical part of the bulb with your hands
5. After replacing the bulb, be sure to tighten the screws properly
6. When the light bulb is working, it will reach extremely high temperatures and the physical characteristics of the vapor discharge bubble being unable to continue power supply. Therefore, it must be completely cooled for 10 minutes after each power outage before operation can be carried out, otherwise it will cause high voltage discharge, short circuit, and burn out the components on the computer control board

## 8. Safety tips

To ensure your safe and correct use of lighting fixtures, please carefully read the following safety instructions before use to avoid unnecessary malfunctions and injuries

1. Non professional personnel are not allowed to dismantle lamps and accessories inside the lamps without authorization
2. AC power supply: Check if the local power supply meets the rated voltage requirements of the product.
3. This lamp is designed according to the type of electric shock protection. The lamp should be connected to a fully grounded power supply system for use, and the ground wire of the lamp must be connected to the ground wire of the power supply system. Do not use a power cord with damaged insulation layer, and do not lap the power cord on other wires
4. When installing and positioning the lamp, the minimum distance between any point on the surface of the lamp and any combustible or explosive object is 10 meters, and the distance from the illuminated object is 2.5 meters. Please do not install the lamp directly on the surface of combustible materials
5. The ambient temperature for lamp use: (-10 ° C+40 ° C), with a maximum surface temperature of 80 ° C. The lamp should be kept away from liquid substances and humid environments
6. Before using the lamp, it is necessary to ensure that the lamp is well grounded and that no parts of the lamp can be installed or disassembled with electricity
7. When installing lighting fixtures, the fixing screws must be tightened, equipped with safety ropes, and regularly inspected
8. 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, it may not be triggered properly due to the overheating protection of the lamp
9. During use, if there are any abnormalities in the lighting fixtures, they should be stopped in a timely manner
10. When the bulb reaches its rated service life, it should be replaced in a timely manner, otherwise there may be a risk of bubble explosion
11. The rotating parts and attached accessories of the lamp must be regularly inspected, and any looseness or shaking must be reinforced in a timely mann

## 9. Troubleshooting methods

The following is a list of lamp malfunctions and their solutions. Other maintenance work will be handled by qualified maintenance personnel

### 1. The light bulb does not light up

- 1.1. Due to abnormal operation and incomplete cooling of the bulb, the lamp body should be allowed to cool for more than 10 minutes to fully restore the internal bulb to its normal state, and then power on again
- 1.2. Check if the bulb has reached its service life and replace it with a new one
- 1.3. Check if there is any leakage, detachment, or poor contact between the light bulb and the bubble point circuit
- 1.4. Replace with a new spotter

### 2. The beam appears dim

- 2.1. Check if the bulb has reached its service life and replace it with a new one
- 2.2. Check if the optical components or bulbs are clean, and if there is dust accumulation on the optical components such as bulbs, it is necessary to regularly clean and maintain the bulbs and various components inside the lamp

### 3. The projected image is blurry

- 3.1. Check if the electronic focusing channel value is suitable for the current projection distance

### 4. The computer light intermittently works

- 4.1. Check if the fan is operating normally to see if it is dirty
- 4.2. Check if the internal temperature control switch is in a closed state
- 4.3. Check if the bulb has reached its service life and replace it with a new one

### 5. Although it emits light, the computer light is no longer controlled by the controller

- 5.1. Check the starting address code and the connection of the communication line (1 ground, 2 negative, and 3 positive)
- 5.2. Signal amplifier
- 5.3. When the light bulb is not fully cooled, it undergoes abnormal startup operations, and the instantaneous ultra-high voltage generated by the bubble generator leaks, resulting in the burning of the circuit board channel chip CPU

### 6. The computer light cannot be turned on

- 6.1. Check if the fuse on the power input socket is blown
- 6.2. Poor contact of lighting fixtures due to vibration during long-distance transportation
- 6.3. Check input power supply, computer board, and other plug-in devices

### 8. During power on operation, there is an abnormal sound when the X and Y axes return to the 0 position in other data

- 8.1. During abnormal startup, high bubble voltage leakage caused burning of the X and Y axis photoelectric induction circuit board (optical coupling)
- 8.2. Restart the computer light according to the normal program
- 8.3. Push all channel values of the controller to 0 and remotely reset the computer light

## 10. Maintenance and upkeep

Shutdown operation: Before each power outage, turn off the light bulb for 10 minutes in advance. Let the cooling fan quickly remove the heat generated during use inside the lamp, which can extend the service life of the accessories inside the lamp, especially the light bulb!

To ensure the stable operation of the lighting fixtures, they should be kept clean, disassembled for repair or maintenance

Before starting work, it is important to confirm whether the power supply is disconnected. It is important to keep the lighting fixtures clean and tidy. You should regularly clean them to not only maintain maximum brightness output, but also extend the service life of the lighting fixtures. It is recommended to use high-quality glass cleaning agents and clean with a clean soft cloth. The interior of the lighting fixtures should be cleaned with a vacuum cleaner at least once every six months

## 11.After-sale service

Attention! When the lamps leave the factory, they undergo strict quality inspection and the packaging is intact. Please operate according to the user manual Machine malfunctions caused by human factors are not covered by the warranty

1. Our company provides lifelong technical consultation for customers
2. If the product malfunctions and requires repair, please present the product warranty card and truthfully fill in the relevant information. Also, please we hope that customers can provide us with timely feedback on any issues with the product, so that we can improve it as soon as possible.
3. In addition to lighting fixtures, the following accessories can also be optional:  
Attachment: 1 power cable, 1 signal cable, 1 instruction manual

Optional parts  
Light bulb (according to customer requirements)  
Light hook safety rope (according to customer selection)

## 12.Software features

1. LCD 650000 color TFT interface, easy to operate, and beautiful interface
2. High intelligence
3. For example, during reset, check for errors in Hall and optocoupler and provide prompts.
4. Reset calibration (zero calibration)
5. X-axis, Y-axis, color wheel, pattern wheel



## 12.Setting interface

Mode Options	Function Options		Function Description
System settings	DMA address	1-512	Press the "OK" button to enter the editing status. At this point, select the hundreds. Press the "Up" and "Down" buttons to change the address code. Press the "OK" button again to select the ten digit editor. Press the "OK" button again to select the one digit editor. Press the "OK" button again to exit the editing status
	Encoder	open	Using an encoder (optocoupler) to determine out of step and automatically correct the position
		close	Continue running in its original state
	X Invert	On-Off	
	Y Invert	On-Off	
	No signal	keep	Correction of position without encoder (optocoupler)
		Zeroing	Motor returns and stops running
	Turn on the bright bubble	open	When the lamp is activated, the light bulb automatically lights up
		close	When starting the lamp, the light bulb does not light up
	Return		Return to previous page menu

Mode Options	Function Options		Function Description
Operating mode	Operating mode	DMX	Slave state: receiving DMA signals from the control console or host
		Auto	Host status: automatically running and sending a DMA signal to the slave
		Voice control	Receive external sound or vibration, run built-in program effects
	Channel Mode	16CH	Channel 17-20 invalid
	Return		Return to previous page menu
Manua control	Reset		After pressing the "OK" key, you will see the confirmation dialog box, press "OK" againkey to enter the reset interface and reset all motors.
	Light bulb control	On-Off	
	Color wheel	0-255	Press the "OK" key to enter the editing state. Now it is selected, press "Up""Down" key to change the channel value, and then press "OK" key again to exit programming,editing status.
	.....	0-255	
	Pattern wheel speed	0-255	
Display setting	Language selection	CN	Press the "OK" key to switch the interface to Chinese mode.
		EN	Press the "OK" key to switch the interface to English mode.
	Inverted display setting	On-Off	Press the "OK" key, the interface can be reversed 180 degrees.
	Screensaver settings	open	Turn off backlight after 40 seconds of idle time
close		Backlight always on	
	Return		Return to previous page menu
Display setting			Please enter password: XXXXXX; specific operation process: pressDown key selects the number once (an * appears). Password entered completelyFinally, press the "OK" key to verify the password.
Return			Return to the main interface (displays the currently set address code)

### Channel table (simplified version)

Channel	Channel value	Function
1	0-255	color wheel
2	0-255	Turn on/strobe
3	0-255	dimming
4	0-255	Gobo
5	0-255	prism 1
6	0-255	Prism rotating
7	0-255	prism 2
8	0-255	Macro function
9	0-255	focus
10	0-255	X axis
11	0-255	X-axis fine adjustment
12	0-255	Y axis
13	0-255	Y axis fine adjustment
14	0-255	XY axis speed
15	0-255	Atomization (129-255) / Colorful (64-128)
16	0-255	Reset (255) / Defoaming (100-105) / Opening (200-205)