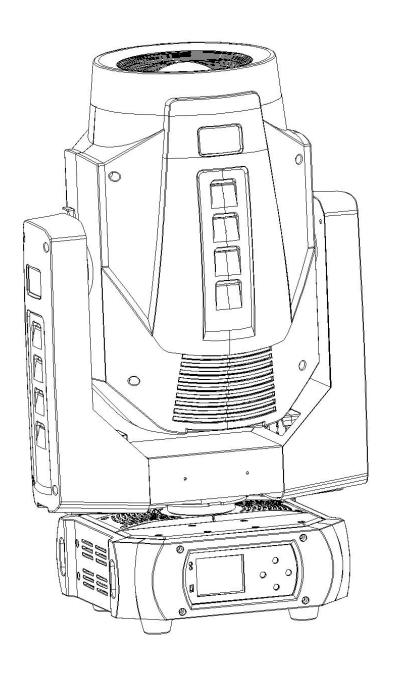


# **USER MANUAL**



420 LED 3 IN 1



### **Foreword**

Thanks for choosing 420 LED BSW 3IN1 CMY light, it is our newest the latest independent research and development of a high-grade quality. Compared with other same power lights, it's more light weight and convenient, and with perfect combination of international advanced electronic control technology and excellent human chemical. 420 led BSW 3in1 CMY is in full compliance with the CE standard supports the international DMX512 signal control mode.

420 led BSW 3in1cmy adopts top-level LED module with strong light effect, XY axis fast and smooth movement, precise positioning, pure and uniform beam color.

420 led BSW 3in1 CMY has super high altitude and super long range, and it is fitted with a static gobo wheel (5 gobos + 3 open), rotating gobo wheel(7 gobos +1 open), a frost lens, a color wheel with 5 colors with open, 8 facet prism and T-shape prism stack could combine 3 kinds prism effect. And with rich CMY independent linear color mixing effect.

This model is widely used in TV stations, weddings, discos, dance halls, night clubs, performances and other professional places.



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Please carefully read the instructions, this guide consists of Important information about installation, use and maintenance



# 1. Safety Instructions

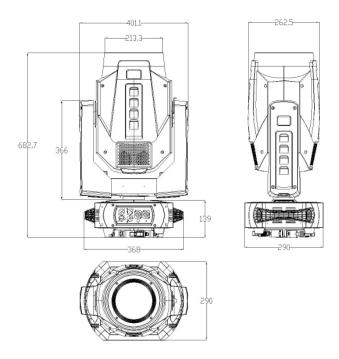
- ♦ Before using this product, please observe carefully the product is not unwrap or damage during transportation. As a result of damage during transporting, please do not use the lights, and contact with the dealer or manufacturer.
- ♦ Before running products, to ensure that the voltage and Hertz in accordance with the requirements of lights.
- ♦ It's very important, connecting ground wire to avoid the electric shock •
- ♦ This product is for dry indoor environment.
- ♦ This product must be installed on the sufficient space, adjacent to interface the shortest distance of 50 cm, to ensure that the lights will not crash each other.
- ♦ Before moving or repairing the product, please unplug the power.
- ♦ When it working, ensure that no inflammable and explosive near objects.
- ♦ When installing this product, please use the safety rope. When handling this product, lift the armrest base, rather than the lamp body.
- ♦ This product is suitable for a maximum temperature of 40 degrees Celsius, when the surrounding environment is higher than 40 degrees Celsius, please do not use this product.
- ♦ Do not touch. When working, the product running very fast, to prevent bruising.
- ♦ Problems happens when operating performances, should immediately stop using the lights. Do not carry out maintenance, repair damage caused or likely to cause other problems. Please contact the company's maintenance repair. During the repair process, use the same type of accessories.
- ♦ Please read the instructions carefully, especially regarding the installation, using, maintenance parts. Important that the lighting in the transport process, must be packed anti-shock protection carton or flight case.



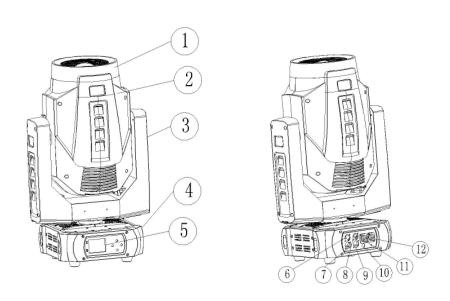
# 2. Technical Parameters

- ♦ DMX Channel: 20/25CHs
- ♦ Control model: DMX512, RDM etc
- ♦ LED LCD touch screen + press button control, Chinese/English mode
- ♦ top-level LED module 360w led light source
- ♦ Luminous flux 19500lm
- ♦ Super fast and ultra silence 3-phase step motors
- ♦ Color temperature is 9000K, life span is 20000Hs
- ♦ 7 colors +open, semi color effect
- ♦ 5 fixed gobo+ 3 open
- ♦ 7 rotating gobo + white
- ♦ prism: rotating 8-facet prism + Linear prism could rotate reversible, prisms can combine multilayer beam effect.
- ♦ Optical lens: High precision glued optical lens
- ♦ Soft light effect: the angle of the spot that can adjust the soft light
- ♦ Focus: Linear Focus
- ♦ Dimmer: 0-100% linear dimmer.
- ♦ Beam angle: 3-50°
- $\Diamond$  Strobe: electronic strobe (0.5-20FPS)
- ♦ 14pcs super silence motors, pan & tilt 2pcs 3-phase step motors,16bit.
- ♦ Housing: High temperature resistant alloy plastic + plastic handle
- ♦ Parallel beam angel: 3-50°, max frost angel is: 60
- ♦ Rated power: 450 W
- ♦ IP rate: IP20
- ♦ Weight: 26.9KG
- ♦ Size: 401\*290\*682.7mm





# 3. Lighting Components



1.Lens front cover 2. Lamp body cover 3. Light arm 4. Bottom case cover 5. LCD Display 6. 5 pin XLR DMX input 7. 5 pin XLR DMX output 8. 3 pin XLR DMX input 9. 3 pin XLR DMX input 10. Insurance 11. Power in 12.Power out



# 4. Packing And Shipping

### 4.1 Packing Material and Accessories

420W LED is packaged by carton or standard 2-in-1 flight case (Other options are the 1-in-1 flight case and 4-in-1 flight case).

Accessories as below.

Item	Quantity	Unit
User Manual	1	Piece
Signal Line	1	Piece
Safety Rope	1	Piece
Bracket+ Clamp	2	Piece
Power Cable	1	Piece

#### 4.2 Protection Lock for Transport

For the convenience of transportation, the light has 2 protection locks (Each of it is on the X-axis and Y-axis.). There are 4 locked buttons on the X-axis and 3 locked buttons on the Y-axis to lock the light 's position. The lock position is locked at the center and the light body is in a vertical position with the arm.

## 4.3 Packing

- 1. Power off to let the lamp cool completely before packaging at least 15 minutes or more
- 2. Lock the light protection locks when cleaning the surface of the light.
- 3. Use the packing bag to cover the light, grab the handle on both sides of the equipment and put it upside down and put it into the box gently.
- 4. Put the light's accessories into packing box after putting the light into the box.
- 5. It's only up to two crates stacked and is prohibited upside down.



#### 4.4 Unpacking

- 1. Open the packing box and packing bag
- 2. Grab the equipment's handles, lifting and carrying away the light from the packing box or opening the flight case cover placing lift boom close to the light base, then equipping light hook on light base bottom tightening quick Install locks. At last rising away boom to the top of the lamp from flight case, put the flight case away.
- 3. Unlock the light protection lock before turning on the light

Note: Upon receipt of light, please check if there is damage to the light caused by transport, please do not use the fixture if any damage, and contact us as soon as possible.

Users should ensure that light and installation materials are checked for regular safety check. Please do not install it yourself if you do not have the professional work condition and similar experience. Please ask the professionals to operate it. Incorrect installation will cause danger.

The working temperature for the equipment is available between -20 degrees and 40 degrees Celsius. Do not use the equipment outside of this environment. Don't stand under the light when the light is installed, dismantled, moved or serviced. The operator must ensure that the fixtures are securely connected. Installing the light after professionals approving electrical parameters make sure that these installation must be checked at least once per year by experts



#### 5.1 Hook Clamp Installation

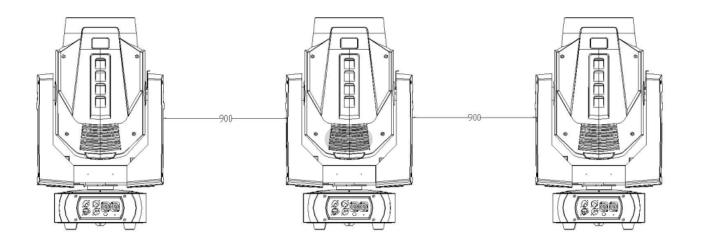
420 L E D can be placed on the stage or on a stand in any direction, quick lock system can quickly and easily remove or install a light hook.

Note: The light is fitted with folding hook, please pull up the folding hook and ensure they' re all in the same direction if use.

#### 5.2 Fixing Equipment

- 1. Please confirm the rigging equipment is not damaged and can bear at least 10 times of light's weight before installing. Also check the building can be bore at least 10 times of total weights of light, fixture, and cable accessories.
- 2. Insert the locked hook fastener into base mounting holes horizontally, grab the handle clockwise 90 degrees fasteners, in the same way to install a second fastener, make sure the fastener is fastened under the light base
- 3. If truss can be lifted the equipment can be directly clamped from flight case and locked fixture base. Then hung on the light and fixed it. Before rising the light to right height, connect the power line and signal line.

Note: Add a safety rope attached the light's base insurance shelf, do not connect the light's handle.





Note: Lights be placed vertically upward, the shortest distance between working lights must be more than or equal 900mm, lighting installation layout as following

#### 5.3 Data cable

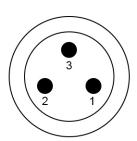
Data cable is DMX512 signal

Caution: Signal line connections is X-type connector

X-type connector-----If the external flexible cable or cord of this light is damaged, please replace the professional cable or cord from the manufacture or its agent.

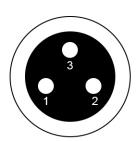
Lights' DMX input and output connects to a 3&5pin XLR, first pin is grounded, then negative signal is second pin, third pin connects to the positive polarity signal, the fourth and fifth is empty.

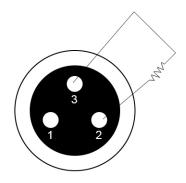
In order to prevent reception reflection and interference control signal, a terminal plug must be installed on the first branch of the connected device last 3-pin output jack



3XLR Plug

- 1. Grounding
- 2. Signal-
- 3. Signal+

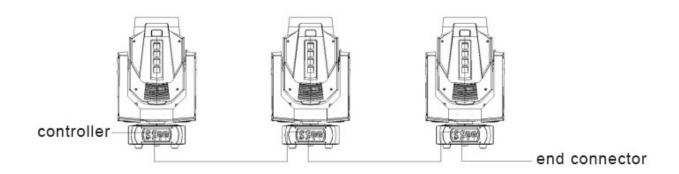




Terminal plug connect with XLR plug second orthird by a 0.25w 120ohm resistor, then connectthe resistor into last light's DMX output jack



The controller connects to the nearest input XLR 3-pin, then from the output of the device connects to the input of the next device, continuous connection one by one, the final output data cable terminal equipment plug one end into the terminal.



If the signal transmission is long-distance, 512 signal amplifier must be added. DMX512 signal controller connect to the input of the amplifier first, then connect to the fixture from its output, couple with the terminal plug last.

#### Note:

- 1. Do not use two separate output connections. To connect the branch, a separating consecutive DMX512 signal amplifier must be used to separate.
- 2. Please use the specialized DMX512 shielded twisted-pair cable. Standard microphone cables can not be reliably controlled long-distance data.

# 6. AC Power

#### 6.1 Fuse Size

Power: 100-240v~

Fuse: 8A 5 \* 20 main fuse



#### 6.2 Power Connection

If the external flexible cable or cord of this light is damaged, the line is up to the manufacturer or its service agent or a similar qualified person to replace, in order to avoid danger. Connect the power supply personnel must have the appropriate qualifications before proceeding, you must make sure you are using the power supply voltage matches the voltage identified and have overload or leakage protection. Directly connect the device to the power supply, do not connect to the silicon box dimming system, otherwise damage to the equipment.

# 7. Light Source

#### 7.1 Light Source Description

420LED 3 in 1 CMY LED module, this LED module provides a very stable color temperature of 9000K, color rendering index greater than 85, and average life of more than 20,000 hours (depending on the lighting environment)

#### note:

- 1. Please do not install other similar light bulbs, otherwise it will cause safety hazards or damage the equipment.
- 2. To reduce the risk of damage to the luminaire, replace the lamp before it exceeds the life of the lamp.
- 3. It is forbidden to use scratched and damaged LED light source

# 8. Dynamic Effects

#### 8.1 Gobo Wheel

A metal Gobo Wheel consisting of 5 fixed gobos + 3 white open, customers can change their own customized simple gobo as needed.

A dynamic rotating Gobo Wheel consisting of 7 glass gobos + white Fixed Gobo Wheel



#### Fixed Gobo Wheel

















### Rotating Gobo Wheel















#### 8.2 Color Wheel & CMY

The color wheel is composed of 7 fixed colors of high standard. Users can easily choose the color they like and create a perfect lighting effect. At the same time, it can be used with the gobo wheel. The effect is better, and the colorful gobo can be changed at will. (You can change your own custom color plates at any time according to customer needs). The CMY is composed of three sets of pure C, M, and Y pieces. It can control C, M, and Y separately, and the CMY piece can be freely combined with the five solid colors on the color wheel. It can be freely switched and linearly adjusted color.

### **Rotating Gobo Wheel**

