

COB 600 ZOOM IP

User Manual



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TECHNICAL PARAMETERS

Light source

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

Power: 600/800W

Light Source: 1 x 600W LED

Light Source Lifespan: Average $\geq 50,000$ hours

Optical

Color Temperature: 2800K-6800K

CRI: Ultra-high Color Rendering Index (CRI) ≥ 90

Focus Angle: 8°-50° linear focus

Controls

Control Functions: DMX/Master-Slave/Auto/Fade/RDM

Channel Mode: 13 channels

Power Interface: Available as waterproof single input or hand-in-hand waterproof input/output

Signal Interface: 3-pin XLR waterproof input/output

Effect

Color Wheel: 1 color wheel with 3 colors (blue + red + green); linear CTO color temperature adjustment: 2,800K-6,800K

Dimming: 0-100% linear dimming

Strobe: 1-25Hz/s, high-speed strobe effect

Construction

Horizontal/Tilt: 540° horizontal scanning angle, 270° vertical scanning angle, 16-bit scanning accuracy

Calibration: The X/Y axis motors are equipped with the latest magnetic rotary encoder sensor positioning system for more precise fixture positioning. The system features automatic error correction and signal feedback.

Heat dissipation design: Copper tube + fan heat dissipation structure and intelligent temperature monitoring technology automatically adjust the heat dissipation system to effectively control the lamp temperature.

Ingress Protection: IP65

Weight&Dimension

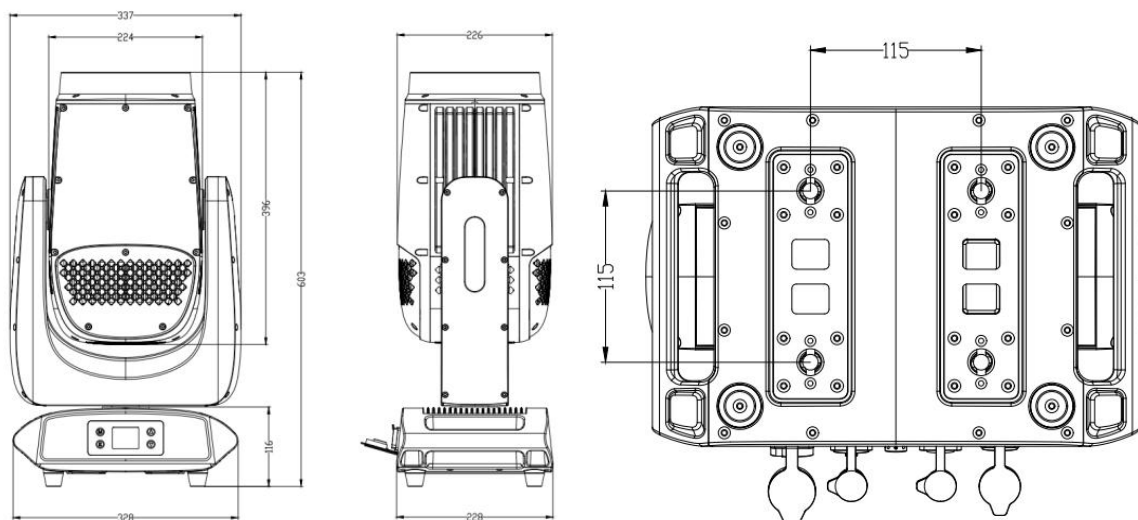
Lamp Dimensions: 329*228*603mm

Net Weight: 17.5KG

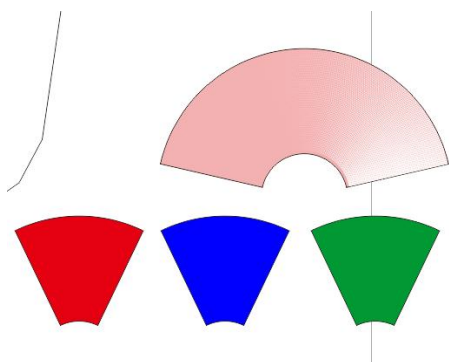
Packaging Dimensions: 645*490*420mm

Gross Weight: 21.5KG

SIZE DRAWING



Color + CTO



Effect



Chapter 1 Installation and attention

Maintenance

- To reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.
- Intermittently using will extend this item's service life.
- Please clear the fan, fan net, and optical lens in order to keep good work state.
- Do not use the alcohol or any other organic solvent to wipe the shell.

Statement

The product has perfect performance and integrity packing. All users should be strictly complying with the warning and operating instructions as stated. Or we aren't in charge of any result by misusing. Any damage resulting by misuse is not within the Company's warranty. Any fault or problem caused by neglecting the manual is also not in the charge of dealers.

Note: All information is subject to change without prior notice.

Safety Precaution

- In order to guarantee the product's life, please don't put it in the damp places or even the environment over 60degrees.
- Always mount this unit in safe and stable matter.
- Install or dismantle should operate by professional engineer.
- Using lamp, the change rate of power voltage should be within $\pm 10\%$, If the voltage is too high, it will shorten the light's life; If it's not enough, will influence the effect.
- Please restart it 20 minutes later after turning off light, until full-cooling. Frequent switching will reduce the life span of lamps and bulbs; intermittent using will improve the life of bulbs and lamps.
- In order to make sure the product is used well, please read the Manual carefully.

Cable connection (DMX)

Use a cable conforming to specifications EIA RS-485: 2-pole twisted, shielded, 120Ohm characteristic impedance, 22-24 AWG, low capacity. Do not use microphone cable or other cable with characteristics differing from those specified. The end connections must be made using XLR type 3 or 5-pin male/female connectors. A terminating plug must be inserted into the last projector with a resistance of 120Ohm (minimum 1/4 W) between terminals 2 and 3.

IMPORTANT: The wires must not make contact with each other or with the metal casing of the connectors. The casing itself must be connected to the shield braid and to pin 1 of the connectors.

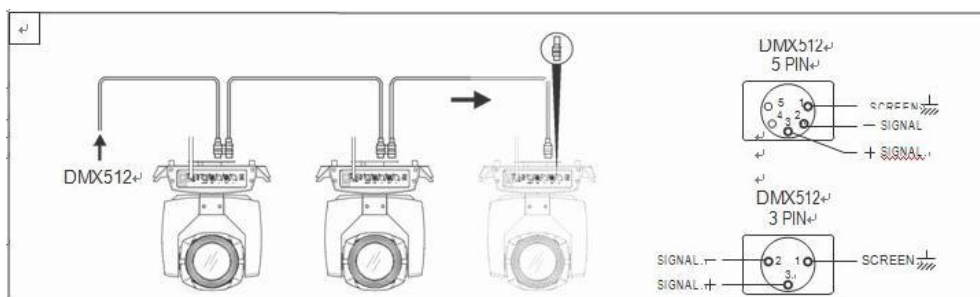


Figure 1 DMX Cable connection

Rigging (Optional)

This equipment can be positioned and fixed by clamp in every direction of the stage. Locking system makes it easy to fasten to the bracket.

Attention! Two clamps is needed to fix the equipment. Every clamp is locked by fastener of 1/4 kind. Fastener can only be locked clockwise.

Attention! Fasten a safety string to the additional hole of side aluminum piece. The secondary accessory can not hang on the delivery handle. Nip the equipment on bracket.

- Check if rigging clamp (not including the one inside) damaged or not? If stand ten times weight as the equipment. Make sure the architecture can stand ten times weight as all the equipments, clamps, wirings and other additional fixtures.
- Screws for clamping must be fixed firmly. Take one M12 screw (Grade 8.8 or higher) to clamp bracket, and then screw the nuts.
- Level the two hanging points at the bottom of clamp. Insert fastener to the bottom, lock the two levers by 1/4 rotating clockwise; then install another clamp.
- Install on safety string which stands at least ten times weight as equipment. Terminal of the accessory is designed for clamps.
- Make sure pan/tilt lock unlocked or not. Keep the distance more than 1M from equipment to flammable material or lighting source.

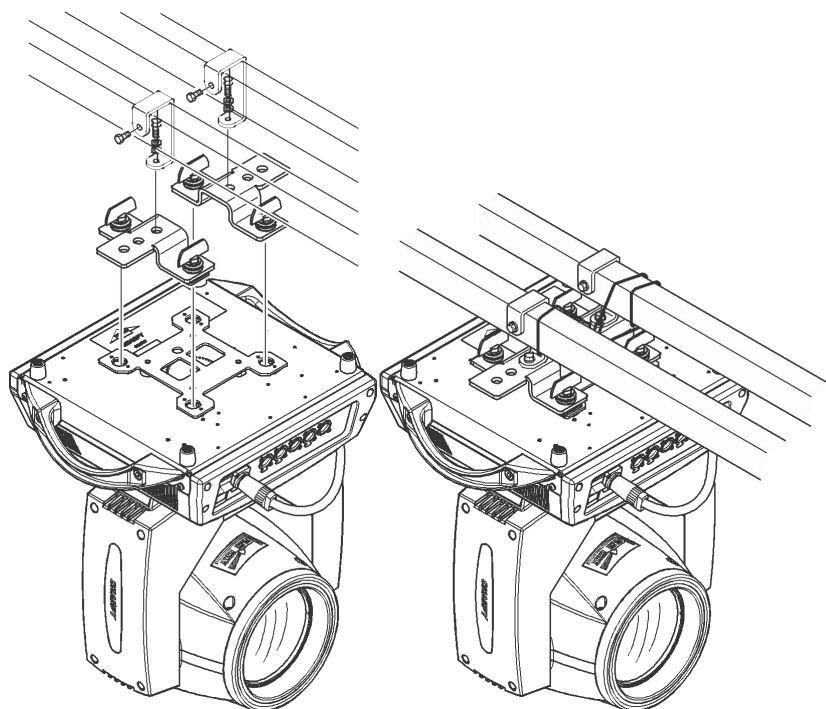


Figure 2 Installation

RDM Note

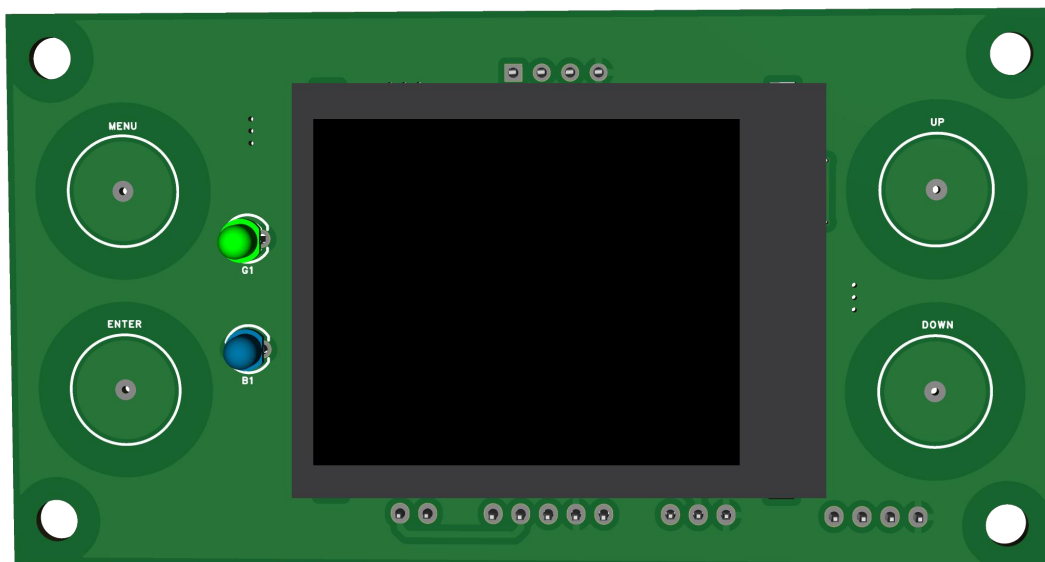
RDM is an extended version of DMX512-A protocol. It is a remote device management protocol. Traditional DMX512 protocol communication is one-way communication. The protocol is based on RS-485 bus. RS-485 is a time-sharing multi-point, half-duplex protocol. Only one port is allowed to output at the same time. So, when using RDM, we should pay attention to it. The following points:

- To use console or host device that supports RDM host protocol.
- Use bidirectional signal amplifier, traditional one-way signal amplifier is not suitable for RDM protocol, because the RMD protocol needs feedback data, the use of one-way amplifier will block the return of data, resulting in no search fixture;
- All fixture must be set to DMX mode to ensure only one host on the cable.

- A 120 ohm impedance matching resistor must be inserted between terminals 2 and 3 of the terminal plug. When the signal line is longer, reducing the signal reflection will make the differential signal more stable and beneficial to the quality of communication.
- When the fixture appears to accept DMX control, but can not be search by RDM host, first check the signal amplifier, and then check whether the signal line 2, 3 lines have bad contact.

Chapter 2 Panel operation

1. Control instructions



The function of the 'return' button is to return to the previous interface and exit the function

The function of the 'up' button is to select the previous item or increase the value by pressing for 2 seconds to quickly increase it

The function of the "down" button is to select the next item or decrease the value by pressing 2 seconds to quickly decrease it

The functions of the "OK" button are: confirm save, execute functions, start editing, and exit editing

2. Interface Description

Two LED indicators on the left

Green - (DMA signal indicator light)

Blue --- (constantly on (self running voice control of the host) flashing (error indication))

The three buttons in the upper right corner are used for language switching and screen rotation.

The sub interfaces corresponding to the four buttons in the bottom row are introduced below.

3. Setting interface

option	illustrate	
mode	DMX	Slave state: receiving DMX signals from the control console or host
	AUTO	Host status: automatically running and sending a DMX signal to the slave
	Sound	Host status: Voice controlled operation and sending DMX signal to the slave
	scene	Host status: self programmed to run and send a DMX signal to the slave

DMX Address	1~512	Press the "OK" button to enter the editing status. The "up" and "down" keys change the address code. Press' OK 'again to exit editing status
Channel Mode	13	13CH
X inversion	OFF	
	ON	
Y inversion	OFF	
	ON	
X inversion	OFF	
	ON	Swap channels for the XY axis (including fine tuning)
Reset		Select 'Yes' to confirm and initiate reset
XY encoder	ON	Using an encoder (optocoupler) to determine out of step and automatically correct the position
	OFF	Correction of position without encoder (optocoupler)
NO DMX Signal	KEEP	No signal, continue to maintain the original state
	CLEAR	No signal. The motor returns to its starting position
Screensaver	ON	Turn off backlight after idle for 30 seconds
	OFF	lights on
Color linear		Select 'On' or 'Off' to enable or disable the color wheel linear function
Indicator mode	MODE 1	Green with DMXs constantly on, blue with host status constantly on
	MODE 2	Green with DMXs constantly on, blue with host status constantly on, flashing with error messages
Load Default		Select 'Yes' to confirm and restore the default settings

4. Information interface

option	illustrate
Version	Current software version
Total Fix	accumulated use time
Fixture time	Usage time since this startup
Total Lamp	Accumulated bright bubble time
Lamp time	Total bright bubble time
Sensor Status	Display the temperature information of the optocoupler Hall fan motherboard

5. Customized interface

This interface is used for self programming and self running programs. When in the DMX mode, there is a DMX signal to view the current data and save the current state

When there is no DMX signal, the desired data can be manually set and saved

option	illustrate
RUN STEP	1-16 How many steps do I need to run in custom mode
NOW STEP	1-16 What steps are currently in progress
Stop time	1-99 Set the current step running time
Save	Save the current state and proceed to the next step
Pan	0~255 Press the "OK" button to enter the editing status. Press the "Up" and "Down" keys to change the channel value. Press the 'OK' button again to exit editing status
Tilt	
Pan Fine	
Tilt Fine	
.....	

6. Advanced interface

option	illustrate
Time zero	Clear the usage time of the bright bubble to zero Retime
Channel Mode	MODE1 MODE2
Calibration	After entering the sub interface, the reset positions of the X-axis, Y-axis, and other motors can be adjusted to compensate for hardware installation errors Attention: Do not perform reset calibration while the motor is running! If the motor is running, please stop it before performing reset calibration If necessary, please perform a reset operation before performing a reset calibration
Channel order	Select the channel value to change the function Multiple functions cannot select the same value
System Errors	The error message generated by resetting can be cleared by selecting error reset

Chapter 3 Channel description

1. Channel table

channel	name	value	describe
CH1	PAN	0-255	0-540°
CH2	PAN Fine	0-255	0-2.1°
CH3	TILT	0-255	0-270°
CH4	TILT Fine	0-255	0-1.0°
CH5	XY SPEED	0-255	fast to slow
CH6	DIMMER	0-255	0-100%
CH7	DIMMER Fine	0-255	
CH8	STROBE	0-3 4-127 128-191 192-251 252--255	Dark Slow strobe to fast strobe Pulse flicker slow fast Random flicker slow fast Open
CH9	COLOR	0 20 40 60 80 100 120 140-199 200-255	White White + Color 1 Color 1 Color 1+ Color 2 Color 2 Color 2+ Color 3 Color 3 Rotate forward (fast to slow) Rotate reverse (slow to fast)
CH10	CTO	0-9 10-255	Color CTO 0%-100%
CH11	FOCUS	0-255	far to near
CH12	LED	0-9 10-255	None Every 10 values have a slow fast effect
CH13	RESET	0-25 26-76 77-127 128-255	non-functional Reset EFT over 5 seconds Reset XY over 5 seconds Reset ALL over 5 seconds

REMARK

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