


# 330W CMY LED Moving Head Spot Light

VG-SBW330CMY



## CE RoHS User Manual

 Please read this user manual before using this product!

Keep it for further reference!

<http://www.vangaa.com>



- Multi-Colors+goboes
- Color strobe
- Electronic Dimming 0-100%
- DMX-512 protocol
- Master/Slave synchronization
- LCD operation menu with function buttons
- Daisy Chain Units Together in DMX Mode

## II SAFETY INFORMATION

### ※Important

Every person involved with the installation, operation and maintenance of this device has to be qualified and follow the instructions of this manual. Manufacturer will not with responsibility for those operations which are not according to this Instruction.

Verify that the voltage matches the rated voltage.

When the voltage is 110V , Do not connect more than 10 lightings in total to AC mains power in one interconnected daisy chain

When the voltage is 220V , Do not connect more than 20 lightings in total to AC mains power in one interconnected daisy chain

Before using the fixture, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.

Always ground (earth) the fixture electrically.

Avoiding hit the Light when you are move or install the light.

The minimum distance between light←→output and the illuminated surface must be more than 0.5 meters. Keep all combustible materials (for example fabric, wood, paper) at least 0.2 meters away from the fixture.

Do not expose the fixture to rain or moisture.

Avoid looking directly into the light source (especially those who suffer from epileptic fits)

Maximum ambient temperature (Ta) is 40°C. Do not operate fixture at temperatures higher than this.

The Maximum surface temperature is 50°C

When suspending the fixture above ground level, verify that the structure can hold at least

10 times the weight of all installed devices.

Verify that all external covers and rigging hardware are securely fastened and use an approved means of secondary attachment such as a safety cable.

To determine the power requirements for a particular fixture, see the label affixed to the back plate of the fixture or refer to the fixtures specifications chart. A fixture listed current rating is its average current draw under normal conditions. All fixtures must be directly powered off a switched circuit and cannot be run off a rheostat(variable resistor) or dimmer circuit, even if the rheostat or dimmer source voltage matches the fixtures requirement. Check the fixture or device carefully to make sure that if a voltage selection switch exists that it sets to the correct line voltage you will use.

**Warning!** Verify that the voltage select switch on your unit matches the line voltage applied. Damage to your fixture may result if the line voltage applied does not match the voltage indicated on the voltage selector switch. All fixtures must be connected to circuits with a suitable Earth ground.

## III OPERATION INSTRUCTIONS

- The moving head is an LED wash light for onsite decoration purpose.
- Don't turn on the fixture if it's been through severe temperature difference like after transportation because it might damage the light due to the environment changes. So make sure to operate the fixture until it is in normal temperature.
- This light should be keep away from strong shaking during any transportation or movement.
- Don't pull up the light by only the head, or it might cause damages to the mechanical parts.
- Don't expose the fixture in overheat, moisture or environment with too much dust when installing it. And don't lay any power cables on the floor. Or it might cause

electronic shock to the people.

- Make sure the installation place is in good safety condition before installing the fixture.
- Make sure to put the safety chain and check whether the screws are screwed properly when installing the fixture.
- Make sure the lens are in good condition. It's recommended to replace the units if there are any damages or severe scratch.
- Make sure the fixture is operated by qualified personnel who knows the fixture before using.
- Keep the original packages if any second shipment is needed.
- Don't try to change the fixtures without any instruction by the manufacturer or the appointed repairing agencies.
- It is not in warranty range if there are any malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

#### IV TECHNICAL SPECIFICATION

##### Electrical:

Power supply:.....electronic auto↔ranging

Input voltage range:.....supply 90↔250V, 50/60Hz

Fuse:..... 5 A@220V

Power consumption:.....450W@230V

##### Optic :

Light source: LED Apportronics 1piece \*330W White LED

LED lifespan: 6,0000 hours

Dimmer: Smooth dimmer from 0↔100%

Fixed gobo wheel: 9gobos+Open

Rotating gobo wheel:7gobos+Open

Color system: 9 different colors+CMY

8↔facet prism

3.5↔35deg electronic zoom

Focus+Frost +Iris

Beam+Spot+Wash

##### Motorized:

Pan/Tilt

Pan movement range: 540°

Tilt movement range: 270°

16 bit movement resolution

Automatic Pan/Tilt position correction

Pan movement 0°

↔540°at max.....Speed: 2.2 sec.

Tilt movement 0°

↔270°at max..... Speed: 1.2 sec.

##### LCD operation:

Built↔in demo sequences

Silent fans cooling

Strong two↔phase motors

Stand↔alone operation

Supported protocols: DMX512

2 DMX modes (21/26 control channels)

##### Connection:

DMX data in/out: Locking 3↔pin and 5↔pin XLR

AC power input: 1.5m power cord with plug

##### Rigging :

Mounting points: 2 pairs of 1/4↔turn locks

Mounting horizontally or vertically via 2 Omega brackets

##### Temperatures:

Maximum ambient temperature: 45°C

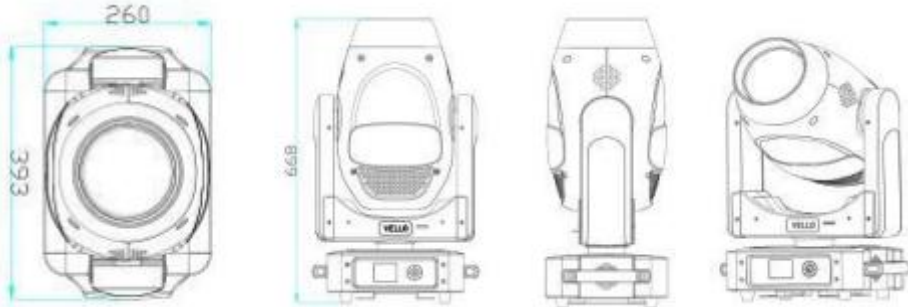
Maximum housing temperature: 75°C

##### Minimum distances:

Min. distance from flammable surfaces: 3.0m

Min. distance to lighted object: 2.0m  
 Total heat dissipation: 1200 BTU/h (calculated)  
 Net dimension: 393(L) x 260(W) x 668(H) mm  
 Weight (net): 24.50kg

**V DIMENSION**



Fixture dimension (mm)

**VI INSTALLATION AND CONNECTION**

**1. Installation**

**Caution:** Fixture may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the moving head!

Before rigging make sure that the installation area can hold a minimum point load of 10 times the fixture's weight.

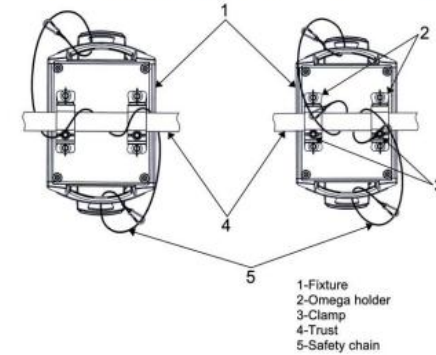
When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 1.0 m.

**CAUTION!**

Use an appropriate clamp to ring the fixture on the truss.  
 Follow the instructions mentioned at the bottom of the base.  
 Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the

fixtures is secure.

Securing the fixture via one safety wire      Securing the fixture via two safety wires

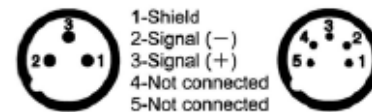


**2. DMX connection**

The fixture is equipped with 3-pin or 5-pin XLR sockets for DMX input and output. The sockets are wired in parallel. Only use a shielded twisted pair cable designed for RS485 and 3-pin or 5-pin XLR plugs and connectors in order to connect the controller with the fixture or one fixture with another.

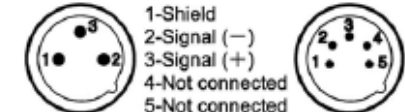
**DMX-output**

XLR mounting-sockets (rear view):



**DMX-input**

XLR mounting-plugs (rear view):



**DMX Linking:** To ensure proper DMX data transmission, when using several DMX fixtures try to use the

shortest cable path possible. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example; a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line, at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

## VII OPERATION AND CONTROL

### 1. Control panel

**Operating Modes:** You can use the LED BSW330 CMY in 3 ways:

- Auto Mode ↔ The unit will automatically chase through the different colors and built ↔ in programs.
- Slave Mode – The unit will run under slave mode.
- DMX control mode ↔ This function will allow you to control each individual fixtures traits with a standard DMX 512 controller.

**DMX Mode:** Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. This function also allows you to use your fixtures as spot lights.

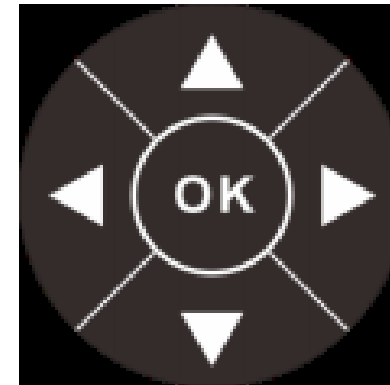
1. This function will allow you to control each individual fixture’s traits with a standard DMX 512 controller.
2. The LED BSW330 CMY uses 21/26 DMX channels modes to operate. Please see “DMX Values and Functions” for the DMX traits.
3. To run your fixture in DMX mode, plug in the fixture via the XLR connections to any standard DMX

controller. Set your desired DMX address following the setup specifications that come with your DMX controller.

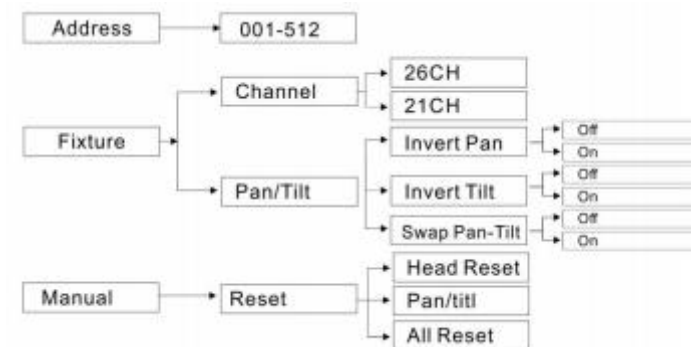
### Touch Buttons :

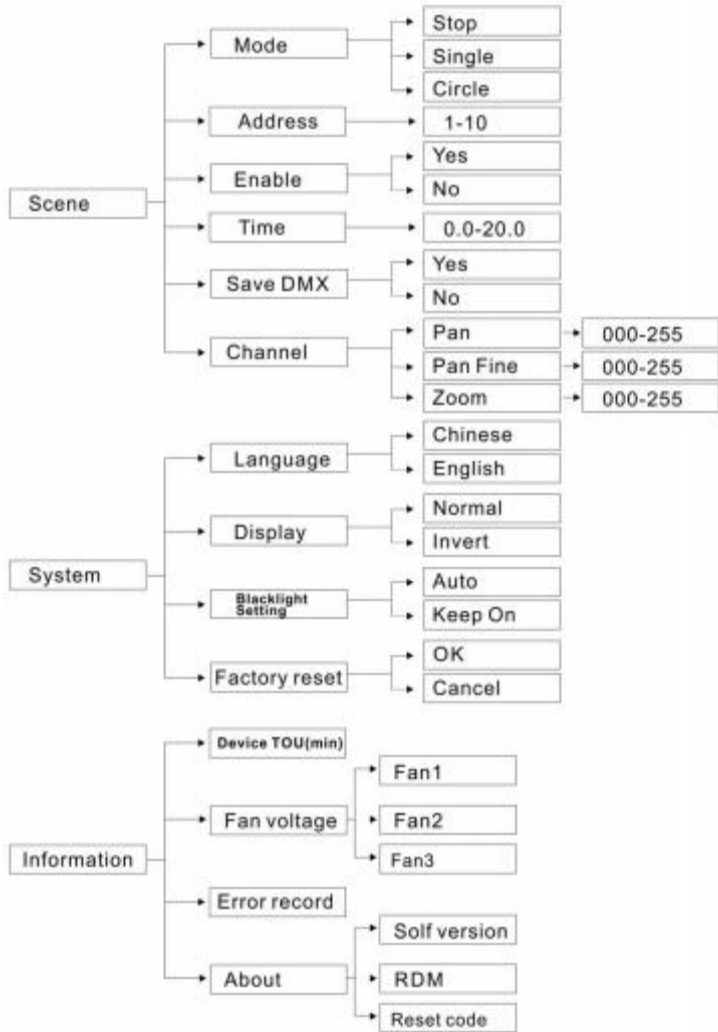
There are Five touch buttons nearby the LED display: Menu, Up, Down, Enter and Invert, the LED will display the current DMX address code of the fixture. At this time, presses up and down to choose the functions you want.

### LCD Operation Menu: LCD screen with Five touch buttons: **MENU, UP, DOWN ENTER and INVERT**



### LCD display operation:





**VIII ADDRESS SETTING AND DMX CHANNEL OPERATION**

**26 DMX CHANNELS MODE [STANDARD MODE]**

DMX CH	DMX Value	Function
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CH1	000↔255	<b>Pan</b> 0~100degree
CH2	000↔255	<b>Pan fine</b> 0~100degree
CH3	000↔255	<b>Tilt</b> 0~100degree
CH4	000↔255	<b>Tilt fine</b> 0~100degree
CH5	000↔255	<b>Pan/Fine Speed</b> Fast - > Slow
CH6	000↔255	<b>Dimmer</b> , 0~100degree
CH7	252↔255	<b>Strobe/Shutter</b> Open
	239↔251	Random Strobe(Fast)
	226↔238	Random Strobe(Medium)
	213↔225	Random Strobe(Slow)
	208↔212	Open
	108↔207	Pulse:Slow ↔> Fast
	104↔107	Open
	004↔103	Strobe:Slow ↔> Fast
000↔003	Close	
CH8	000↔255	<b>Cyan</b> , 0~100degree
CH9	000↔255	<b>Magenta</b> , 0~100degree
CH10	000↔255	<b>Yellow</b> , 0~100degree
CH11	000↔255	<b>Color1</b> , 0~100degree
CH12	000↔255	<b>Color2</b> , 0~100degree
CH13	000↔255	<b>Color3</b> , 0~100degree
CH14	192↔255	<b>Static Gobo</b> Rotation(CCW): Slow ↔> Fast
	128↔191	Rotation(CW): Fast↔> Slow
	120↔127	Gobo9 Shake: Slow ↔> Fast
	112↔119	Gobo8 Shake: Slow ↔> Fast
	104↔111	Gobo7 Shake: Slow ↔> Fast
	096↔103	Gobo6 Shake: Slow ↔> Fast

	088↔095 080↔087 072↔079 064↔071 056↔063 050↔055 045↔049 040↔044 035↔039 030↔034 025↔029 020↔024 015↔019 010↔014 005↔009 000↔004	Gobo5 Shake: Slow ↔> Fast  Gobo4 Shake: Slow ↔> Fast Gobo3 Shake: Slow ↔> Fast Gobo2 Shake: Slow ↔> Fast Gobo1 Shake: Slow ↔> Fast Open Gobo9 Gobo8 Gobo7 Gobo6 Gobo5 Gobo4 Gobo3 Gobo2 Gobo1 Open
CH15	188↔255 120↔187 112↔119 104↔111 096↔103 088↔095 080↔087 072↔079 064↔071 056↔063 048↔055 040↔047 032↔039	<b>Rotating Gobo</b> Rotation(CCW): Slow ↔> Fast Rotation(CW): Fast ↔> Slow Gobo7 Shake: Slow ↔> Fast Gobo6 Shake: Slow ↔> Fast Gobo5 Shake: Slow ↔> Fast Gobo4 Shake: Slow ↔> Fast Gobo3 Shake: Slow ↔> Fast Gobo2 Shake: Slow ↔> Fast Gobo1 Shake: Slow ↔> Fast Gobo7 Gobo6 Gobo5 Gobo4 Gobo3

	024↔031 016↔023 008↔015 000↔007	Gobo2  Gobo1 Open
CH16	193↔255 191↔192 128↔190 000↔127	<b>Gobo Rotation</b> Gobo Rotation(CCW): Slow ↔> Fast Stop Gobo Rotation(CW): Fast ↔> Slow Gobo Position
CH17	192↔255 128↔191 000↔127	<b>Iris</b> Iris Pulse Closing: Slow ↔> Fast Iris Pulse Opening: Slow ↔> Fast Iris Index
CH18	000↔127 128↔255	<b>Prism</b> Open Prism
CH19	193↔255 191↔192 128↔190 000↔127	<b>Prism Rotation</b> Prism Rotation(CCW): Slow ↔> Fast Prism Static Prism Rotation(CW): Fast ↔> Slow Gobo Position
CH20	000↔255	<b>Frost</b> Frost
CH21	000↔255	<b>Focus</b> 0~100degree
CH22	000↔255	<b>Focus Fine</b> 0~100degree
CH23	000↔255	<b>Zoom</b> 0~100degree



CH24	000↔255	<b>Zoom Fine</b> 0~100degree
CH25	216↔255	<b>Auto Focus</b> Auto Focus 13m
	176↔215	Auto Focus 11m
	136↔175	Auto Focus 8m
	096↔135	Auto Focus 5m
	056↔095	Auto Focus 3m
	000↔055	Auto Focus Disable
CH26	200↔255	<b>System Control</b> All reset
	150↔199	Head reset
	100↔149	Pan and tilt reset
	000↔99	Unused

	004↔103	Strobe:Slow ↔> Fast
	000↔003	Close
CH6	000↔255	<b>Cyan</b> , 0~100degree
CH7	000↔255	<b>Magenta</b> , 0~100degree
CH8	000↔255	<b>Yellow</b> , 0~100degree
CH9	000↔255	<b>Color1</b> , 0~100degree
CH10	000↔255	<b>Color2</b> , 0~100degree
CH11	000↔255	<b>Color3</b> , 0~100degree
CH12		<b>Static Gobo</b>
	192↔255	Rotation(CCW): Slow ↔> Fast
	128↔191	Rotation(CW): Fast↔> Slow
	120↔127	Gobo9 Shake: Slow ↔> Fast
	112↔119	Gobo8 Shake: Slow ↔> Fast
	104↔111	Gobo7 Shake: Slow ↔> Fast
	096↔103	Gobo6 Shake: Slow ↔> Fast
	088↔095	Gobo5 Shake: Slow ↔> Fast
	080↔087	
	072↔079	Gobo4 Shake: Slow ↔> Fast
	064↔071	Gobo3 Shake: Slow ↔> Fast
	056↔063	Gobo2 Shake: Slow ↔> Fast
	050↔055	Gobo1 Shake: Slow ↔> Fast
	045↔049	Open
	040↔044	Gobo9
	035↔039	Gobo8
	030↔034	Gobo7
	025↔029	Gobo6
	020↔024	Gobo5
	015↔019	Gobo4
010↔014	Gobo3	
005↔009	Gobo2	

**21 DMX CHANNELS MODE [REDUCE MODE]**

DMX CH	DMX Value	Function
CH1	000↔255	<b>Pan</b> 0~100degree
CH2	000↔255	<b>Tilt</b> 0~100degree
CH3	000↔255	<b>Pan/Fine Speed</b> Fast - > Slow
CH4	000↔255	<b>Dimmer</b> , 0~100degree
CH5		<b>Strobe/Shutter</b>
	252↔255	Open
	239↔251	Random Strobe(Fast)
	226↔238	Random Strobe(Medium)
	213↔225	Random Strobe(Slow)
	208↔212	Open
	108↔207	Pulse:Slow ↔> Fast
104↔107	Open	

	000↔004	Gobo1 Open
CH13	188↔255	<b>Rotating Gobo</b> Rotation(CCW): Slow ↔> Fast
	120↔187	Rotation(CW): Fast ↔> Slow
	112↔119	Gobo7 Shake: Slow ↔> Fast
	104↔111	Gobo6 Shake: Slow ↔> Fast
	096↔103	Gobo5 Shake: Slow ↔> Fast
	088↔095	Gobo4 Shake: Slow ↔> Fast
	080↔087	Gobo3 Shake: Slow ↔> Fast
	072↔079	Gobo2 Shake: Slow ↔> Fast
	064↔071	Gobo1 Shake: Slow ↔> Fast
	056↔063	Gobo7
	048↔055	Gobo6
	040↔047	Gobo5
	032↔039	Gobo4
	024↔031	Gobo3
	016↔023	Gobo2
	008↔015	
000↔007	Gobo1 Open	
CH14	193↔255	<b>Gobo Rotation</b> Gobo Rotation(CCW): Slow ↔> Fast
	191↔192	Stop
	128↔190	Gobo Rotation(CW): Fast ↔> Slow
	000↔127	Gobo Position
CH15	192↔255	<b>Iris</b> Iris Pulse Closing: Slow ↔> Fast

	128↔191	Iris Pulse Opening: Slow ↔> Fast
	000↔127	Iris Index
CH16	000↔127	<b>Prism</b> Open
	128↔255	Prism
CH17	193↔255	<b>Prism Rotation</b> Prism Rotation(CCW): Slow ↔> Fast
	191↔192	Prism Static
	128↔190	Prism Rotation(CW): Fast ↔> Slow
	000↔127	Gobo Position
CH18	000↔255	<b>Frost</b> Frost
CH19	000↔255	<b>Focus</b> 0~100degree
CH20	000↔255	<b>Zoom</b>  0~100degree
CH21	200↔255	<b>System Control</b> All reset
	150↔199	Head reset
	100↔149	Pan and tilt reset
	000↔99	Unused

## IX MAINTENANCE AND CLEANING

### Cleaning

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out

periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

**Unit not respond to DMX:**

1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is "hot"; on some other DMX devices pin 5 may be 'hot'). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

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

**Innovation, Quality, Performance, Achieving Users' Value!**