

## 10.Maintenance Cleaning

The following points have to be considered during the inspection:

- 1)All screw for installing the devices or parts of the device have to be tightly connected and must be corroded.
- 2)There must not any deformations on the housing,color lenses,fixations and installation spots(Ceiling,suspension,trussing)
- 3)Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4)The electric power supply cables must not show any damage,material fatigue or sediments

Futher instruction depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



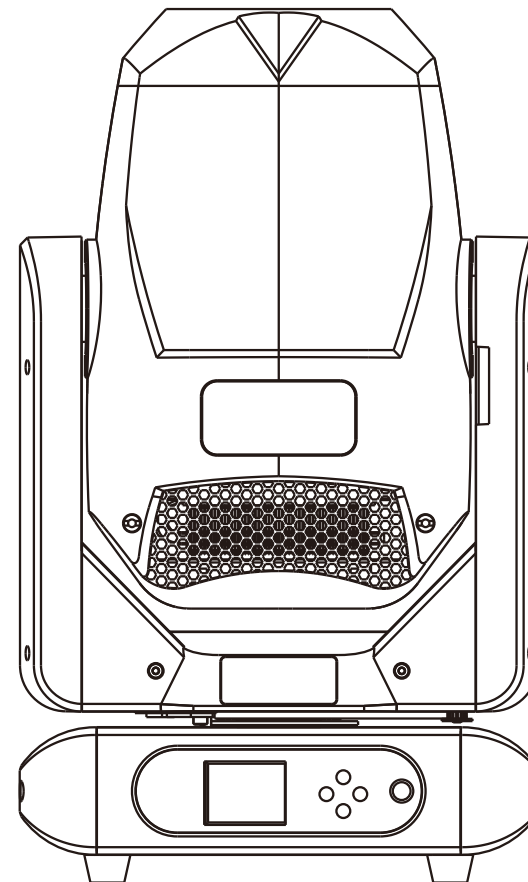
### CAUTION!

Disconnct from mains before starting maintenance operation.

In order to male the lights in good condition and extend the life time, we suggest a regular clearning to the lights.

- 1)Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2)Clean the fan each week.
- 3)A detail electric check by approved electrical engineer each three month, make sure the circuit contacts are good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device.Please use a mosit,lint-free cloth.Never use alcohol or solvents.  
There are no seviceable parts inside the device.Please refer to the instructions under Installation instructions.



## USER MANUAL

## 1.Unpacking

Thank you for choosing Vader BWS.For your own safty,please read this mannual before installing the device.This manual covers the important information on installation and applications.Please operate the fixture with following instructions.Meanwhile,please keep this manual well for future needs.

The Vader BWS is made of new type of high temperature strength of engineer plastics and cast aluminum casing with nice outlook.The fixture is designed and manufactured strictly following CE standards,complying with international standard DMX 512 PROTOCOL.It`s available independently controlled and linkable with each other for coperation.And it is applicable for large-scable liveperformance,theater,studio,nightclubs and disco.

Vader BWS adopts powerful 300W LED which features high brightness and stability.Please carefully unpack it when you receive the fixture and check whether it is damaged during the transportation.And please check whether the following items are including inside the box:

Moving head light -----One  
Omega-----Two  
Signal Cable-----One  
Power Cable-----One  
User Manual-----One

## 9.Specification

### OPTICS

- Light Source :300W White LED Module
- Lifetime: 50000 Hours
- Color temperature:7000K

### MOVEMENT

- Pan movement:540°(16 bit)
- Tilt movement :270°(16 bit)
- Automatic reset function

### COLORS

- 1+7colors, Bi-directional rainbow effect
- Linear CMY+CTO

### GOBOS

- Fixed gobo wheel: 14 gobos + open
- Rotating gobo wheel: 7 HD interchangeable gobos +open

### FEATURE

- Prism:1 interchangeable rotating and indexable prism (3,8,16,24 facet option)
- Iris: Linear adjustable with macro
- Frost: 1 pcs Frost Filter, linear frost
- Focus: DMX 512 linear focus
- Zoom: 5°-45°linear adjustment
- Dimmer: 0-100% linear dimmer
- Strobe: Electronic strobe,0.3-20Times/SEC

### CONTRAOL AND PROGRAMMING

- Standard mode: 24 channels
- Control mode: DMX512, 3-pin/5-pin DMX512; protocols RDM; wireless (option) and Art-Net (option)
- Manual programming: DMX and RDM data in/out
- Fan mode: NORMAL/PERFORMANCE/QUIET

### OTHER FUNCTION

- 2.4inch color LCD screen
- High reliability touch button
- Support Multi-language
- Automatic monitoring of light source temperature, high temperature automatic protection
- Intelligent cooling system
- DMX512 Software update
- Display lamps use time
- 100% brightness without stroboscopic problem
- Internal rechargeable battery (3.7V rechargeable lithium-ion battery)
- Maintenance mode
- Intelligent control of wind speed
- Reverse display
- Control panel lock

### POWER SUPPLY

- Input voltage:100V~240V AC 50/60Hz
- Rate power:500W@220V
- Power socket: power connector input and output
- DMX and RDM data in/out: Locking 3-pin & 5-pin XLR

### HOUSING

- Environmentally friendly flame retardant materials
- High temperature resistant engineering plastics
- Device locking PAN and TILT mechanisms for transportation and maintenance.
- Intellectual property rights of appearance and structure design

### IP GRADE

- IP:20

### DIMENSION AND WEIGHT

- Product Size:
- Carton size:
- Flight case size(2in1):
- Net weight:18KG

13	Dimmer	0~255	
14	Strobe	0~3	Open
		4~67	Strobe 1
		68~99	Strobe 2
		100~131	Strobe 3
		132~175	Strobe 4
		176~247	Strobe 5
		248~251	Random Strobe1
		252~255	Random Strobe2
15	Dimmer Mode	0~63	Refresh Rate 1200 Auto
		64~127	Refresh Rate 1200 Fast
		128~191	Refresh Rate 13672 Auto
		192~255	Refresh Rate 13672 Fast
16	Prism	0~31	No Prism
		32~255	Prism1 On
17	Prism Rotation	0~3	Prism Stop
		4~123	Prism Angle
		124~187	Rotate Left Fast To Slow
		188~191	Stop
		192~255	Rotate Right Slow To Fast
18	Zoom	0~255	
19	Focus	0~255	
20	Auto Focus Distance (Reserved)	0~3	Do Not Use Auto Focus
		4~63	5M
		64~127	7.5M
		65~191	10M
		192~255	15M
21	Auto Focus Distance Fine (Reserved)	0~255	Continuous Adjustment Within The Above Distance Range
22	Iris Open	0~127	Open To Close
		128~135	Close
		136~173	Iris Movement 1
		174~211	Iris Movement 2
		212~249	Iris Movement 3
		250~255	Close
23	Frost	0~9	No Effect
		10~255	Liner Frost
24	Scan Speed	0~255	Fast To Slow
25	Control	0~19	no used
		20~29	reset all
		30~39	reset pan,tilt
		40~49	reset colour,gobo,CMY,CTO
		50~59	reset zoom,focus,prism,frost
		60~69	No effect
		70~74	display default
		75~79	display off(don't Keep after shutdown)
		80~84	display on(don't Keep after shutdown)
		85~89	fan speed low(Keep after shutdown)
		90~94	fan speed medium(Keep after shutdown)
		95~99	fan speed high(Keep after shutdown)
			Please Hold The Value For More Than 8 Seconds To Take Effect,And Then Return To 0 To Avoid Repeated Activation.

## 2.Safety instructions



**CAUTION!**  
Be careful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires

This device has left the factory in perfect condition. In order to maintain this condition to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.

If the device has been exposed to temperature change due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

## 3. Operate on instruction

- The moving head is for beam spot wash effect 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 normal temperature.
- This light should be kept 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 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 person 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 malfunctions from not following the user manual to operate or any illegal operation, like shock short circuit, electronic shock, lamp broke, etc.

## 4.Mounting and Installation

### Cautions:

For added protection mount the fixture in areas outside walking paths, seating areas, or in areas where the fixture might be reached by unauthorized personnel. Before mounting the fixture to any surface, make sure that the installation area can hold a minimum point load of 10 times the device's weight. Fixture installation must always be secured with a secondary safety attachment, such as an appropriate safety cable.

Never stand directly below the device when mounting, removing, or serving the fixture from a ceiling, or set on a flat level surface (see illustration below). Be sure this fixture is kept at least 0.5m (1.5ft) away from any flammable materials (decoration etc.)

Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

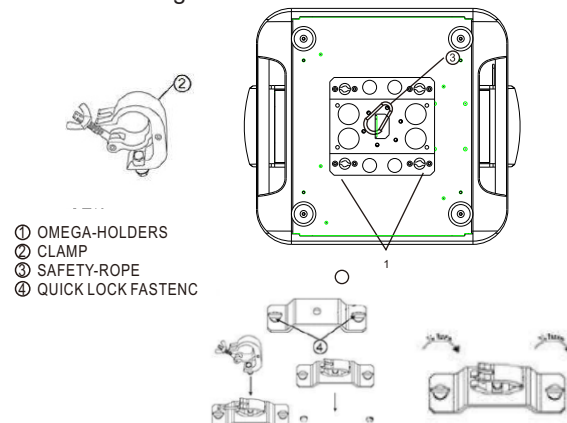
### Mounting points:

Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

Be sure to complete all rigging and installation procedures before connecting the main power cord to the appropriate wall outlet

### Clamp mounting:

The Vader BWS provides a unique mounting bracket assembly that integrates the bottom of the base, the included OMEGA BRACKET, and the safety cable rigging point in one unit (See the illustration below). When mounting this fixture to truss, be sure to secure an appropriately rated clamp to the included omega bracket using a M10 screw fitted through the center hole of the OMEGA BRACKET.



10	Fixed Gobo	0~3	No Gobo
		4~7	Gobo1
		8~11	Gobo2
		12~15	Gobo3
		16~19	Gobo4
		20~23	Gobo5
		24~27	Gobo6
		28~31	Gobo7
		32~35	Gobo8
		36~39	Gobo9
		40~43	Gobo10
		44~47	Gobo11
		48~51	Gobo12
		52~55	Gobo13
		56~59	No Gobo
		60~67	Gobo1 Shake From Slow To Fast
		68~75	Gobo2 Shake From Slow To Fast
		76~83	Gobo3 Shake From Slow To Fast
		84~91	Gobo4 Shake From Slow To Fast
		92~99	Gobo5 Shake From Slow To Fast
		100~107	Gobo6 Shake From Slow To Fast
		108~115	Gobo7 Shake From Slow To Fast
		116~123	Gobo8 Shake From Slow To Fast
		124~131	Gobo9 Shake From Slow To Fast
		132~139	Gobo10 Shake From Slow To Fast
		140~147	Gobo11 Shake From Slow To Fast
		148~155	Gobo12 Shake From Slow To Fast
		156~163	Gobo13 Shake From Slow To Fast
11	Rotating Gobo	164~167	No Gobo
		168~211	Rotate Left
		212~255	Rotate Right
		0~7	No Gobo
		8~15	Gobo1
		16~23	Gobo2
		24~31	Gobo3
		32~39	Gobo4
		40~47	Gobo5
		48~55	Gobo6
		56~63	Gobo7
		64~71	No Gobo
		72~79	Gobo1 Shake From Slow To Fast
		80~87	Gobo2 Shake From Slow To Fast
		88~95	Gobo3 Shake From Slow To Fast
		96~103	Gobo4 Shake From Slow To Fast
		104~111	Gobo5 Shake From Slow To Fast
		112~119	Gobo6 Shake From Slow To Fast
		120~127	Gobo7 Shake From Slow To Fast
		128~135	No Gobo
		136~195	Rotate Left
		196~255	Rotate Right
12	Gobo Rotation	0~3	No Effect
		4~123	R-Gobo Angle
		124~187	Rotate Left
		188~191	Stop
		192~255	Rotate Right

Note:

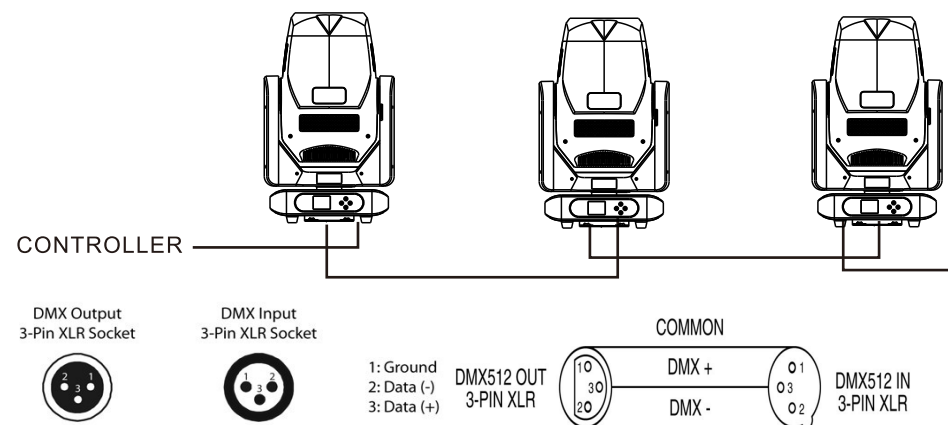
1. Above all projects to the actual lighting shall prevail, no notice if there is further modification;
2. The programming function provides only a very limited operation, in the case of no control units to use. Generally do not recommend the use of manual programming;
3. In the absence of the DMX512 signal, only need to set up first items, namely the address code can be used lamps.

## 8. 25 Control Channels

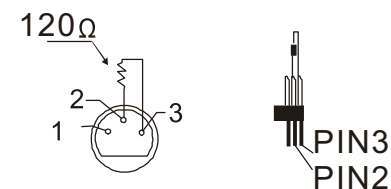
25CH	Function	Value	Feature
1	Pan	0~255	
2	Pan Fine	0~255	
3	Tilt	0~255	
4	Tilt Fine	0~255	
5	Colour Wheel	0~7	No Colour
		8~15	Colour1
		16~23	Colour2
		24~31	Colour3
		32~39	Colour4
		40~47	Colour5
		48~55	Colour6
		56~63	Colour7
		64~71	Colour8
		72~79	Colour9
		80~87	Colour10
		88~95	Colour11
		96~103	No Colour
		104~221	Colour Arbitrary Positioning
		222~238	Rotate Left
		239~255	Rotate Right
6	Cyan	0~255	
7	Magenta	0~255	
8	Yellow	0~255	
9	Colour Temperature	0~255	

## 5. DMX 512 Control connection

Connect the provide XLR cable to the female 3 pin XLR Output of your control and the other side to the male 3-pin XLR input of the moving head, You can chain multiple Moving head together through serial linking. The cable needed should be two core, screened canle with XLR input and output connectors. Please refre to the diagram below. DMX-512 Connection with DMX terminator.

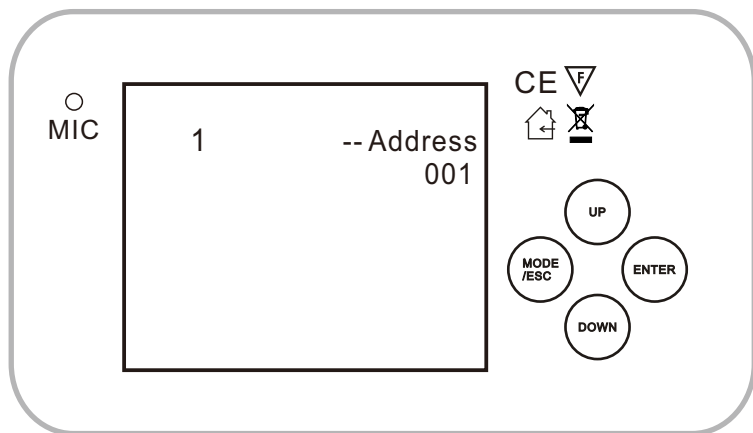


For installations where the DMX cable has to run a long distance or is in an electrically noisy enviromentsuch as in a disco, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control singal by electrical noisy. The DMX terminator is simply an XLR plug with a 120 resistor connected between pins 2 and 3, which is then plugged into the output XLR Socket of the last fixture in the chain. Please see illustrations

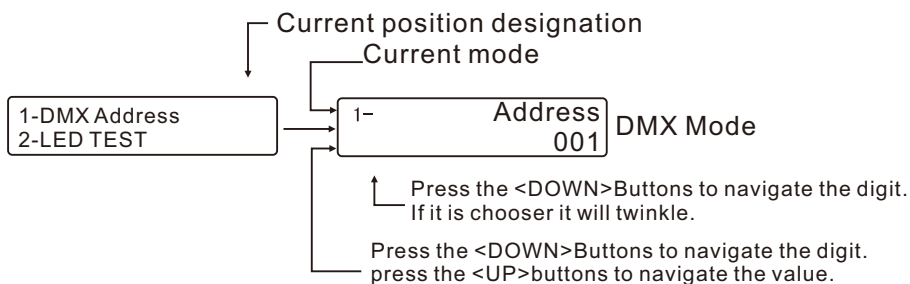


## The control Display

### 6.Top menu,present the current operation



Press the <UP> or <DOWN> button repeatedly until you reach the desired menu function. Press the <ENTER> button to select the menu function currently displayed, or to enable menu option. To return to the previous option or menu without changing the value, press the <MODE/ESC> button.



Power on the moving head light, press the <MODE/ESC> or <ENTER> button, no any movement.

## 7.Menu for Control Display

GENERAL MENU	FUNCTION	OPERATION OPTIONS
INFORMATION	ADDRESS	1~512
	RUNTIME	TIME
	VERSION	
	TEMPERATURE	MAIN BOARD LIGHT SOURCE
	FAN SPEED	
	ERROR MESSAGE	
SETTING	RESET	REBOOT DEFAULT DATA
	CHANNEL SET	
	SIGNAL	DMX512/ARTNET/PROGRAM
	OFFLINE SET	HOME/HOLD
	FAN MODE	NORMAL/PERFORMANCE/QUIET
	WIRELESS SET	ON/OFF
	ADJUST	
	ARTNET SET	IP ADDRESS
		SUBNET MASK
		UNIVERSE
	RDM UID	
LAMP	AUTO ON	NC
	LIGHT UP	NC
	LAMP ADJUST	NC
	LAMP FAIL	NC
DISPLAY	LANGUAGE	ENGLISH/CHINESE
	BACKLIGHT	ON/OFF/FLASH
	REVERSE	ON/OFF/AUTO
USER	SETTING LOCK	INPUT CODE
	KEY LOCK	ON/OFF
	TEST	ON/OFF
	PROGRAM	SELECT PROGRAM 1~8
		PROGRAM 1~8