

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!

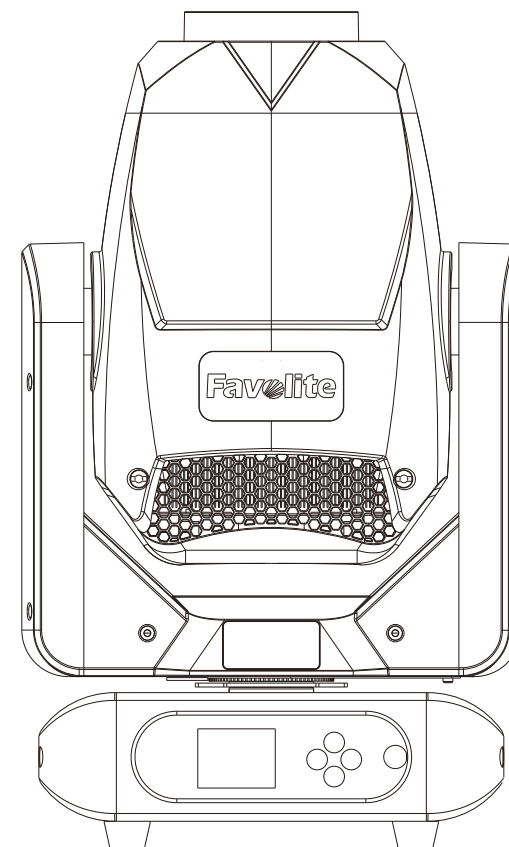
Disconnect from mains before starting maintenance operation.

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.

Favolite Vader BWS 250



USER MANUAL

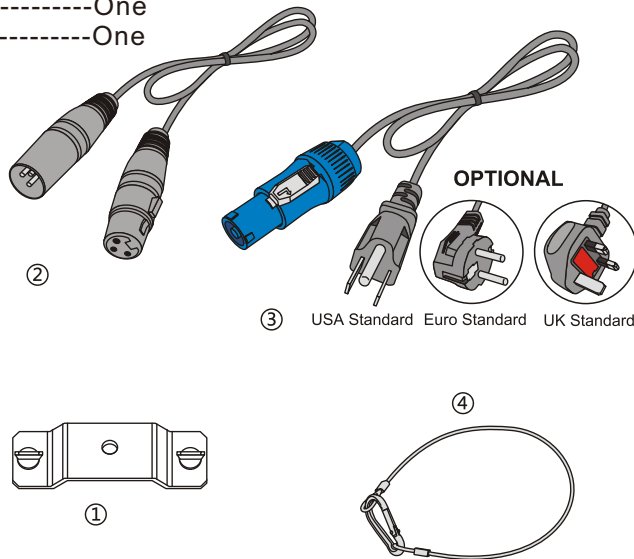
1.Unpacking

Thank you for choosing Vader BWS 250. For your own safety, please read this manual 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 250 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 cooperation. And it is applicable for large-scale live performance, theater, studio, nightclubs and disco.

Vader BWS 250 adopts powerful 250W 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 :250W White LED Module
- Lifetime: 50000 Hours
- Lumen: 10000
- Color temperature:
 - CRI: at least 70, CT 6500K
 - CRI: at least 90, CT 7000K

MOVEMENT

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

COLORS

- 1+10colors, Bi-directional rainbow effect

GOBOS

- Fixed gobo wheel: 16 gobos + open
- Rotating gobo wheel:
 - 8 HD interchangeable gobos +open
- Rotating Gobo size:Outside-MM
Inside-MM;Thickness-1.1 MM
- Bidirectional variable rotation, Index functions
Bi-directional changeable speed shake effect
changeable speed and flow effect

FEATURE

- Prism: 1 rotating 8-facet prism
(3,4,16,24 facet option)
- Frost: Linear light frost
- Focus: Motorized;AUTO-FOCUS
- Zoom: 3°-38°linear adjustment, smooth and fast
- Dimmer: 0-100% linear dimmer
- Strobe: Electronic strobe,0.3-20Times/SEC

CONTRALAND PROGRAMMING

- Standard mode: 18/24 channels
- Fan mode: NORMAL/PERFORMANCE/QUIET
- Control mode: DMX512, Protocols RDM
Wireless DMX (option) , Art-Net (option), sCAN (option)
DMX and RDM data in/out

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 light use time
- Low level linearity, flicker free film TV
- 100%brightness without stroboscopic problem
- Menu setting by internal rechargeable battery
without power supply
(3.7V rechargeable lithium-ion battery)
- Intelligent control of wind speed
- Reverse display
- Control panel lock
- Manual programming

POWER SUPPLY AND CONNECTIONS

- Input voltage:100V~240V AC 50/60Hz
- Rate power:336W@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

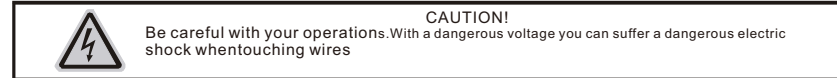
- Product Size: 357*322*540MM
- Carton size(1in1): 605 *435* 320MM

WEIGHT

- Net weight:12KG

12	11	Dimmer Frequency & Speed	0~31	600Hz Auto Fade
			32~63	600Hz No Fade
			64~95	300Hz Auto Fade
			96~127	300Hz No Fade
			128~159	1200Hz Auto Fade
			160~191	1200Hz No Fade
			192~113	8333KHz Auto Fade
			224~255	8333KHz No Fade
13		Dimmer Curve	0~31	Square Law
			32~63	Linear
			64~95	Inverse Square Law
			96~127	S-Curve
			128~255	Reserve
14	12	Prism	0~31	No Prism
			32~255	Prism On
15	13	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
16	14	Zoom	0~255	
17		Zoom16Bit	0~255	
18	15	Focus	0~255	
19		Focus16Bit	0~255	
20		Auto Focus Dist	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	16	Frost	0~9	No Effect
			10~255	Liner Frost
23	17	Scan Speed		
24	18	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



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 enviromental changes,do not switch it on immediately. The arising condensation could damage the device.Leave the device switched off until 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 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 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 appoinde drepairing agencies.
- It is no 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.

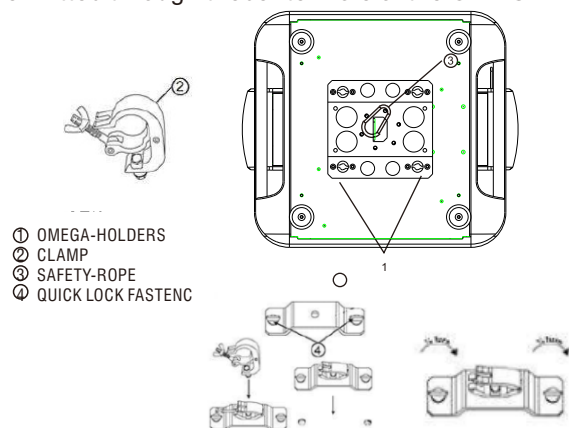
Mounting points:

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 250 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.



6	6	Fixed Gobo	72~77	Gobo1 Shake From Slow To Fast
			78~83	Gobo2 Shake From Slow To Fast
			84~89	Gobo3 Shake From Slow To Fast
			90~95	Gobo4 Shake From Slow To Fast
			96~101	Gobo5 Shake From Slow To Fast
			102~107	Gobo6 Shake From Slow To Fast
			108~113	Gobo7 Shake From Slow To Fast
			114~119	Gobo8 Shake From Slow To Fast
			120~125	Gobo9 Shake From Slow To Fast
			126~131	Gobo10 Shake From Slow To Fast
			132~137	Gobo11 Shake From Slow To Fast
			138~144	Gobo12 Shake From Slow To Fast
			144~149	Gobo13 Shake From Slow To Fast
			150~155	Gobo14 Shake From Slow To Fast
			156~161	Gobo15 Shake From Slow To Fast
			162~167	Gobo16 Shake From Slow To Fast
7	7	Rotating 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	Gobo8
			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
8	8	Gobo Rotation	112~119	Gobo6 Shake From Slow To Fast
			120~127	Gobo7 Shake From Slow To Fast
			128~135	Gobo8 Shake From Slow To Fast
			136~195	Rotate Left
			196~255	Rotate Right
9	9	Dimmer	0~3	No Effect
			4~123	Rotating Gobo Angle
			124~187	Rotate Left
			188~191	Stop
			192~255	Rotate Right
10	10	Dimmer16Bit	0~255	
11	10	Strobe	0~3	Open
			4~67	Open<-->Close
			68~99	Close->Open
			100~131	Open->Close
			132~175	Half Open And Half Close
			176~247	Pulse Strobe
			248~251	Synchronous Random Strobe
			252~255	Asynchronous Random Strobe

Note:

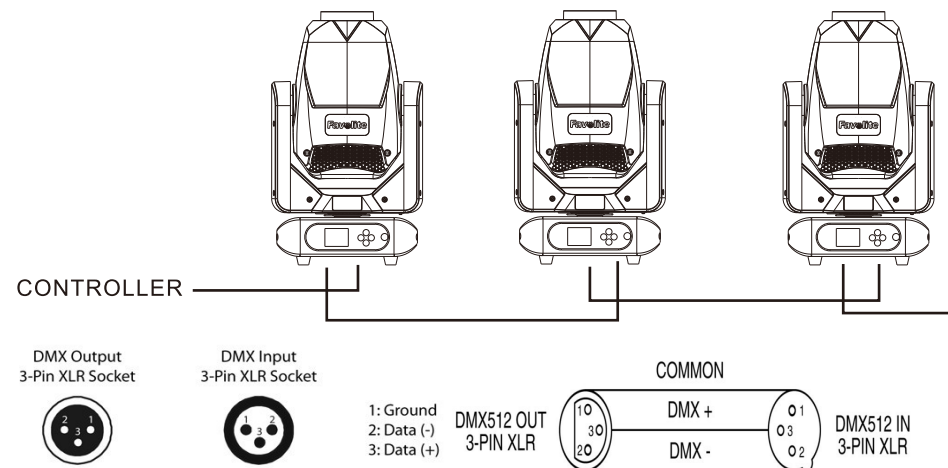
- 1.Above all projects to the actual lighting shall prevail, no notice if there is further modification;
- 2.The programming function provides only a very limited operation, in the case of no control units to use. Generally do not recommend the use of manual programming;
- 3.In the absence of the DMX512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

8. 24 Control Channels

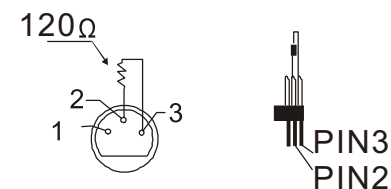
STD24CH	18CH	Function	DMX value	Feature
1	1	Pan	0~255	
2	2	Pan Fine	0~255	
3	3	Tilt	0~255	
4	4	Tilt Fine	0~255	
5	5	Colour Wheel	0~7	No Colour
			8~15	Colour1
			16~23	Colour2
			24~31	Colour3
			32~39	Colour4
			40~47	Colour5
			48~55	Colour6
			56~63	Colour7
			64~71	Colour8
			72~79	Colour9
			80~87	Colour10
			88~95	No Colour
			96~221	Colour Arbitrary Positioning
			222~238	Rotate Left
			239~255	Rotate Right
6	6	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	Gobo14
			60~63	Gobo15
			64~67	Gobo16
			68~71	No Gobo

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.

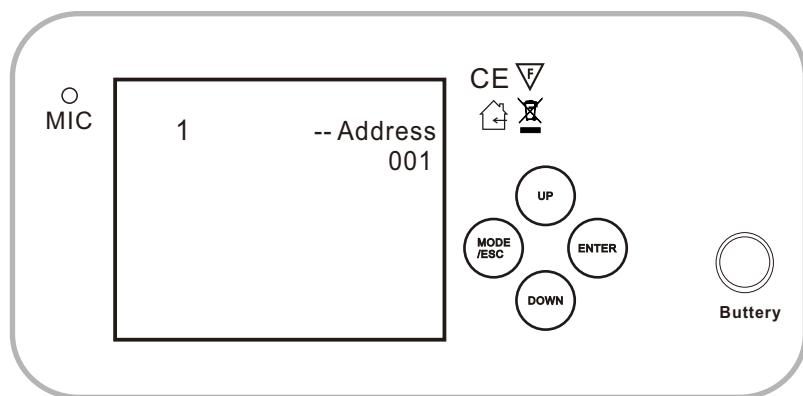


For installations where the DMX cable has to run a long distance or is in an electrically noisy enviromentsuch as in a disco,it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control singal by electrical noisy. The DMX terminator is simply an XLR plug with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

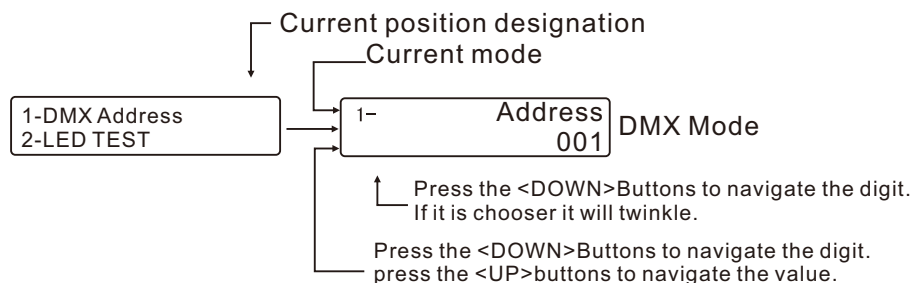


The control Display

6.Top menu,present the current operation



Press the <UP>or<DOWN>button repeated 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 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.

Press the Battery button to set the DMX address.Pls use **3.7V rechargeable lithium ion battery**, don't use others. Ni-MH batteries, lithium iron phosphate batteries, non-rechargeable batteries, and lithium batteries of other voltages cannot be placed,otherwise, it may cause an explosion after charging.

7.Menu for Control Display

UNIVERSAL MENU	PROJECT	OPERATION OPTIONS
INFORMATION	ADDRESS	1~512
	RUNTIME	TIME
	VERSION	
	TEMPERATURE	MAIN BOARD(NO FUNCTION) LIGHT SOURCE XX°C
	FAN SPEED	F1 F2(CASE FANS) G1 BLOWER FOR COLOR G2 NO DEFINITION L3 LIGHT SOURCE FANS
	ERROR MESSAGE	
SETTING	RESET	REBOOT DEFAULT DATA
	CHANNEL SET	24/18
	SIGNAL	DMX512/WDMX/DEMO/ARTNET/ WDMX->DMX/ARTNET->DMX/ DMX-WDMX/ARTNET->WDMX/ PROGRAM X
	OFFLINE SET	HOME/HOLD
	FAN MODE	NORMAL/PERFORMANCE/QUIET
	WIRELESS SET	DISCONNECT SEARCH RECEIVER
	ADJUST	PAN
		TILT
		COLOUR1
		GOBO1
		PRISM
		ZOOM
		FOCUS
		FOG
	ARTNET SET	IP ADDRESS SUBNET MASK UNIVERSE
	RDM UID	XXXXXXXXXXXX
LAMP		(NO FUNCTION)
DISPLAY	LANGUAGE	ENGLISH/CHINESE/RUSSIAN
	BACKLIGHT	ON/OFF/FLASH
	REVERSE	ON/OFF/AUTO
USER	SETTING LOCK	ENTER 1234 TO UNLOCK
	KEY LOCK	ON/OFF
	TEST	
	PROGRAM	SELECT PROGRAM 1~8 EDIT PROGRAM