

17	15	17	91..93	Gobo motor reset
			94..96	Strobe motor reset
			97..99	Other motor reset
			100..119	Internal program 1
			120..139	Internal program 2
			140..159	Internal program 3
			160..179	Internal program 4
			180..199	Internal program 5
			200..219	Internal program 6
			220..239	Internal program 7
Vector Mode			Value	Function
		18	0..255	Color Time max to min speed
		19	0..255	Gobo Time max to min speed

10. Maintenance and cleaning

It is absolutely essential that the fixture is kept clean and that dust, dirt and smoke-fluid residues must not build up on or within the fixture. Otherwise, the fixture's light-output will be significantly reduced. Regular cleaning will not only ensure the maximum light-output, but will also allow the fixture to function reliably throughout its life. A soft lint-free cloth moistened with any good glass cleaning fluid is recommended, under no circumstances should alcohol or solvents be used!

DANGER !
Disconnect from the mains before starting any maintenance work

The front objective lens will require weekly cleaning as smoke-fluid tends to building up residues, reducing the light-output very quickly. The cooling-fans should be cleaned monthly.

The interior of the fixture should be cleaned at least annually using a vacuum-cleaner or an air-jet. Remove dust and dirt from the fans and cooling vents using a soft brush and vacuum-cleaner.

Important! Check the air filters periodically and clean before they become clogged!

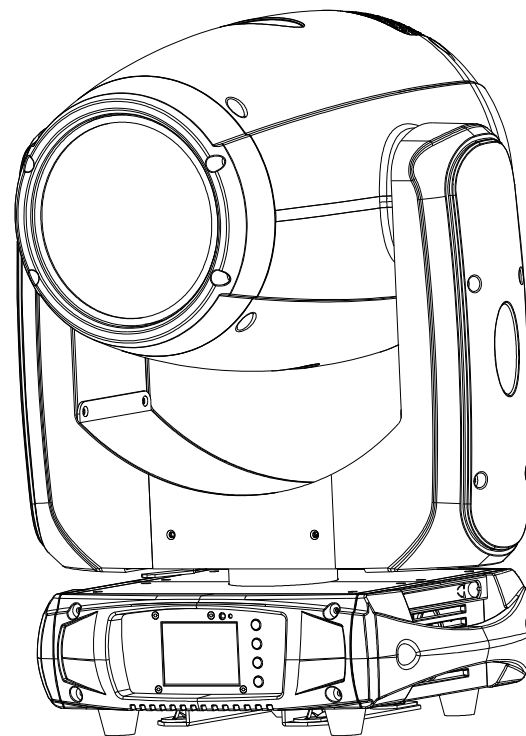
Clean two air filters placed in the fixture's covers and two in the fixture base. Use a vacuum cleaner, compressed air or you can wash them and put back dry.

After replacing the air filters, reset the elapsed time counter in the menu "Information" (Information---> Air Filters---> Elapsed Time).

Replacing the fuse. Before replacing the fuse, unplug mains lead.

- 1) Remove the fuse holder on the rear panel of the base with a fitting screwdriver from the housing (anti-clockwise).
- 2) Remove the old fuse from the fuse holder.
- 3) Install the new fuse in the fuse holder (only the same type and rating).
- 4) Replace the fuseholder in the housing and fix it.

FOS NItro BSW



Version 1.0

USER MANUAL

- Be sure to read the USER MANUAL carefully before using this product.
- Be sure to keep the USER MANUAL properly for future needs.
- Use this product correctly when you can fully understand the User Manual

1.Safety instructions

Thank you for FOS Nitro BSW. FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY BEFORE YOU INITIAL START - UP!

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

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

CAUTION!
Keep this device away from rain and moisture!
Unplug mains lead before opening the housing!

Important:

The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

Please consider that damages caused by manual modifications to the device are not subject to warranty.

During the operation the housing becomes hot). Allow the fixture to cool approximately 20 minutes prior to manipulate with it.

Make sure that the available voltage is not higher than stated on the rear panel.

WARNING! This unit does not contain an ON/OFF switch. Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.

Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time.

Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power-cord by the plug. Never pull out the plug by tugging the power cord.

This device falls under protection class I. Therefore it is essential to connect the yellow/green conductor to earth.

The electric connection, repairs and servicing must be carried out by a qualified employee.

Do not connect this device to a dimmer pack.

Do not switch the fixture on and off in short intervals as this would reduce the lamp's life.

During the initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective.

Do not touch the device's housing bare hands during its operation (housing becomes hot)!

For replacement use lamps and fuses of same type and rating only.

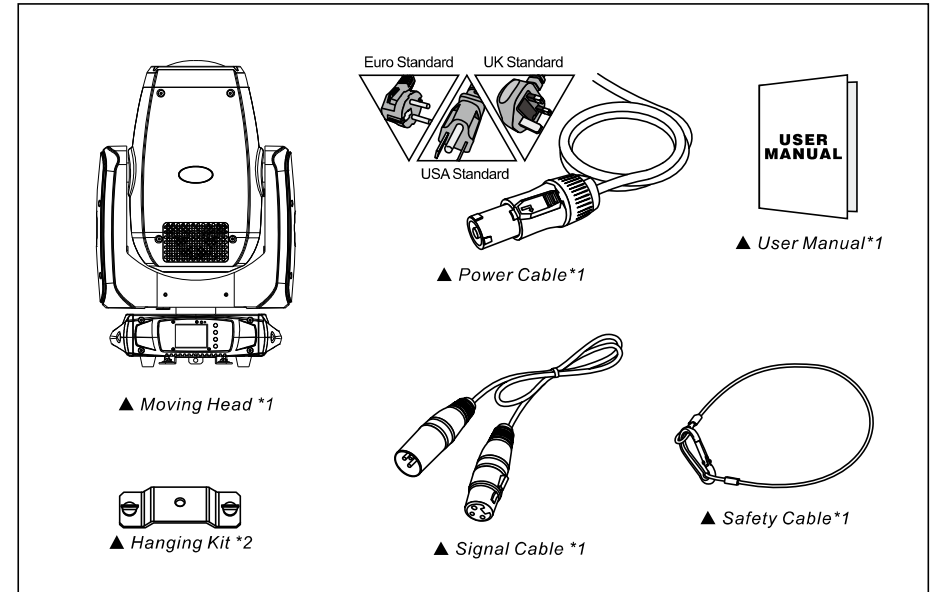
CAUTION ! EYE DAMAGES !
Avoid looking directly into the light source
(meant especially for epileptics) !

8	6	8	99..105	Gobo 2 shake slow to fast
			106..112	Gobo 3 shake slow to fast
			113..119	Gobo 4 shake slow to fast
			120..126	Gobo 5 shake slow to fast
			127..133	Gobo 6 shake slow to fast
			134..140	Gobo 7 shake slow to fast
			141..147	Gobo 8 shake slow to fast
			148..154	Gobo 9 shake slow to fast
			155..161	Gobo 10 shake slow to fast
			162..168	Gobo 11 shake slow to fast
			169..175	Gobo 12 shake slow to fast
			176..182	Gobo 13 shake slow to fast
			183..189	Gobo 14 shake slow to fast
			190..196	Gobo 15 shake slow to fast
			197..203	Gobo 16 shake slow to fast
			204..255	Rot. gobo wheel cont. rotation slow to fast
9	7	9		Shutter
			0..31	Shutter closed
			32..63	shutter open
			64..95	Strobe effect slow to fast
			96..127	shutter open
			128..159	Pulse-effect in sequences slow to fast
			160..191	shutter open
			192..223	Random strobe effect slow to fast
224..255	shutter open			
10	8	10		Dimmer
			0..255	Dimmer 0%...100%
11	9	11		Focus
			0..255	In(near) to out(far)
12	10	12		Zoom
			0..255	In(near) to out(far)
13	11	13		Prism
			0..5	Prism OFF
			6..127	Prism 1 ON
			128..255	Prism 2 ON
14	12	14		Rotating Prism
			128..189	Forwards rotation from fast to slow
			190..193	Prism rotation stop
			194..255	Forwards rotation from slow to fast
15	13	15		Frost
			0..199	Frost OFF
			200..255	Frost ON
16	14	16		Speed pan/tile
			0..225	max to min speed
			226..235	blackout by movement
			236..245	blackout by all wheel changing
			246..255	no function
17	15	17		Special function
			0..19	No function
			20..29	No function
			30..39	No function
			40..59	Lamp on
			60..79	Lamp switch off
			80..84	All Motor reset
			85..87	Scan motor reset
88..90	Colors motor reset			

5	3	5	90..94	Color 9			
			95..99	Color 9 + Color 10			
			100..104	Color 10			
			105..109	Color 10 + Color 11			
			110..114	Color 11			
			115..127	Color 11 + White			
			128..189	Forwards rainbow effect from fast to slow			
			190..193	Color rotation stop			
			194..255	Backwards rainbow effect from slow to fast			
6	4	6		Gobo wheel 1			
			0..9	Open			
			10..19	gobo 1			
			20..29	gobo 2			
			30..39	gobo 3			
			40..49	gobo 4			
			50..59	gobo 5			
			60..69	gobo 6			
			70..79	gobo 7			
			80..94	Gobo 1 shake slow to fast			
			95..109	Gobo 2 shake slow to fast			
			110..124	Gobo 3 shake slow to fast			
			125..139	Gobo 4 shake slow to fast			
			140..154	Gobo 5 shake slow to fast			
			155..169	Gobo 6 shake slow to fast			
			170..184	Gobo 7 shake slow to fast			
			185..255	Rot. gobo wheel cont. rotation slow to fast			
			7	5	7		Gobo 1 rotation
						0..127	Gobo indexing
128..189	Forwards gobo rotation from fast to slow						
190..193	Gobo rotation stop						
194..255	Backwards gobo rotation from slow to fast						
8	6	8		Gobo wheel 2			
			0..4	Hole with spot			
			5..9	gobo 1			
			10..14	gobo 2			
			15..19	gobo 3			
			20..24	gobo 4			
			25..29	gobo 5			
			30..34	gobo 6			
			35..39	gobo 7			
			40..44	gobo 8			
			45..49	gobo 9			
			50..54	gobo 10			
			55..59	gobo 11			
			60..64	gobo 12			
			65..69	gobo 13			
			70..74	gobo 14			
			75..79	gobo 15			
			80..84	gobo 16			
			85..91	Hole with spot shake slow to fast			
92..98	Gobo 1 shake slow to fast						

2.UNPACKING

The FOS Nitro BSW adopts a 295W lamp 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 included inside the box:



The FOS Nitro BSW is made of a new type of high temperature strength of engineering plastics and cast aluminum casing with nice outlook . The fixture is designed and manufactured strictly following CE standards, complying with international standard DMX512 protocol. It's available independently controlled and linkable with each other for operation. And it is applicable for large-scale live per formances, theater, studio, nightclubs and discos.

This manual covers the important information on installation and applications. Meanwhile, please keep this manual well for future needs.

3. TECHNICAL INFORMATION

SPECIFICATIONS:

1* 295W lamp, 8000K, 1500 hours life span.
 Input Voltage: AC90-260V 50/60Hz
 Power Consumption: 390W
 Control Signal: DMX512, master-slave and sound activated or auto operation (8 built-in programs)
 Control Channel: 17/15/19 DMX channels USITT DMX-512.
 Dimensions: 379(D)*255(W)*585(H)mm
 Packing Dimensions: 510(D)*470(W)*650(H)mm
 Net Weight: 20kgs
 Gross Weight: 22kgs

FEATURES:

Low power consumption
 Linear motorized zoom with Linear motorized zoom with 3-27° beam mod, 7-36° spot mode
 2.5m-15m electric focus
 1 Double prism, 4+8 facet prism
 0-100% Linear LED dimmer
 Aperture effect: 5% -100% smooth adjustment of the focal length.
 DMX512, master-slave and sound activated or auto operation
 25T/sec high speed LED shutter/strobe effect with variable speed
 Preset variable/random strobe and dimming pulse effect
 2.4" TFT LCD touch display (320*240pix) with 4 control buttons
 Powercon IN/OUT
 3-Pin XLR connectors IN/OUT
 IP20 protection rating
 55dB at 3'dB rating
 2* 1/4 turn fastening Omega clamps
 * Safety attachment point

MOVEMENT:

8/16 bit smooth and precise resolution for PAN/TILT movement

540°/630°/360° PAN and 270°/180°/90° TILT movement

COLORS:

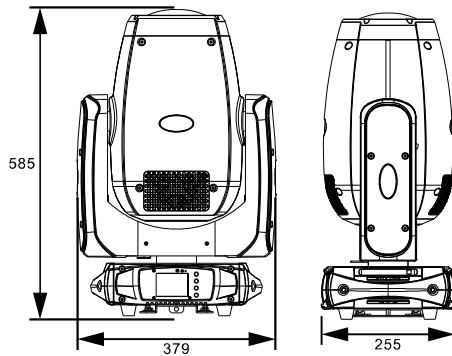
1 Color wheel with 11 colors plus open

GOBOS:

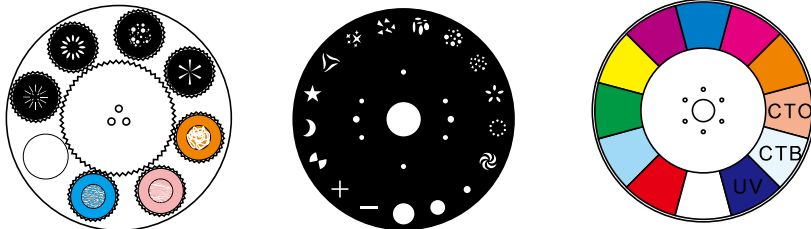
1 Static gobo wheel with 16 gobos plus open
 1 Rotatable gobo wheel with 7 rotatable and interchangeable glass gobos plus open with speed adjustable, stream effect, dithering effect and rotatable clockwise or anticlockwise
 Rotatable gobo wheel can be Gobo indexing

FUNCTION:

Improved optics and flat beam field
 Variable direction rainbow effect with speed adjustable
 Fan cooling system
 Constant temperature readout and management function
 -35°C ~ 45°C max ambient temperature



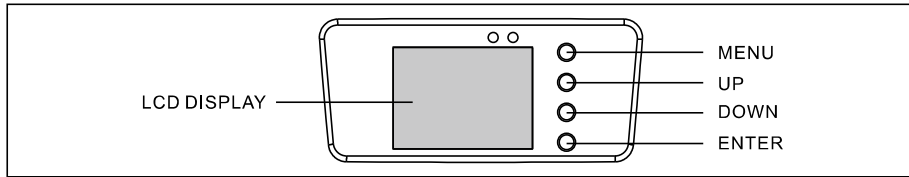
Gobo Wheel&Color Wheel:



9. DMX PROTOCOL

Mode/Channel			Value	Function
17CH	15CH	19CH		
1	1	1	0..255	Pan PAN Movement
2		2	0..255	Pan-fine Fine control of Pan movement
3	2	3	0..255	Tilt Tilt Movement
4		4	0..255	Tilt-fine Fine control of Tilt movement
5	3	5	0.9	Color wheel Open / white
			10..19	Color 1
			20..29	Color 2
			30..39	Color 3
			40..49	Color 4
			50..59	Color 5
			60..69	Color 6
			70..79	Color 7
			80..89	Color 8
			90..99	Color 9
			100..109	Color 10
			110..127	Color 11
			128..189	Forwards rainbow effect from fast to slow
190-193	Color rotation stop			
194..255	Backwards rainbow effect from slow to fast			
5	3	5		Color wheel (Mode 2)
			0.4	Open / white
			5..9	White + Color 1
			10..14	Color 1
			15..19	Color 1 + Color 2
			20..24	Color 2
			25..29	Color 2 + Color 3
			30..34	Color 3
			35..39	Color 3 + Color 4
			40..44	Color 4
			45..49	Color 4 + Color 5
			50..54	Color 5
			55..59	Color 5 + Color 6
			60..64	Color 6
			65..69	Color 6 + Color 7
			70..74	Color 7
			75..79	Color 7 + Color 8
80..84	Color 8			
85..89	Color 8 + Color 9			

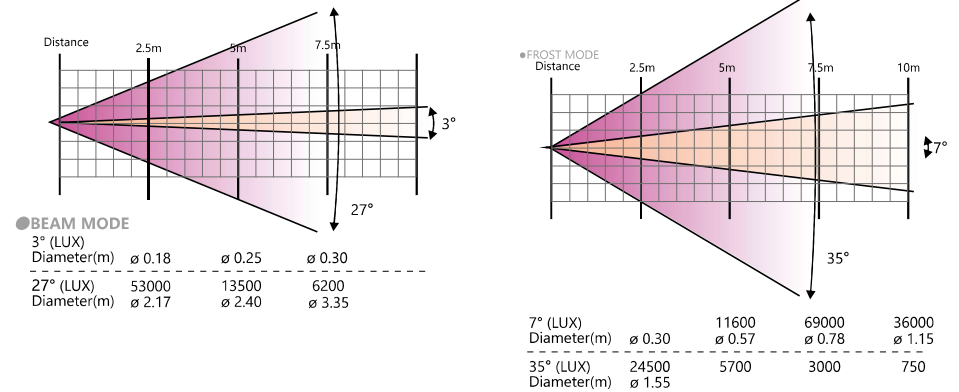
8.MENU OPERATIONS



MENU	Description			
Function Mode	Dmx Address	A001~AXXX		
	Channel Mode	CH17		
		CH15		
		CH19		
	Auto Run	Internal Program1~9	Master/Alone	
Music Control	Internal Program1~9	Master/Alone		
Option	Reset Default	Yes/No		
	Signal Set	Wire DMX		
		Wireless DMX		
	Pan / Tilt	Reverse Pan (On/Off)		
		Reverse Tilt (On/Off)	Select Pan 630/540/360	Select Tilt 270/180/90
UI SET	Mic sensitivity 0~99%	OFF Signal Mode (On/Off)		
Information	Lamp Hours	xxxx H		
	Temperature	XXX°C/°F		
	Software Version	V1.0~V9.9		
	Fan Parameter	xxx MV xxx MA		
Manual Control	Lamp	(On/Off)		
	Reset	Total Reset		
		Pan/Tilt Reset		
Color Reset				
Gobo Reset				
Strobe Reset				
The Others Reset				
Channel	PAN=XXX.....			
ADVANCED (Access Code 088)	Calibration	PAN=XXX.....		
	Clear Lamp Time	Clear Lamp Time		

Special button instruction: press "UP" and "DOWN" for 3 seconds, display menu turns upside down

4.PHOTOMETRICS DIAGRAM



5.OPERATION INSTRUCTIONS

- FOS Nitro BSW is for spot effect for on-site 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 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 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.

6. INSTALLATIONS

Cautions:

For added protection mount the fixtures 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 servicing 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 (1.5 f t) away from any flammable materials (decoration etc.).

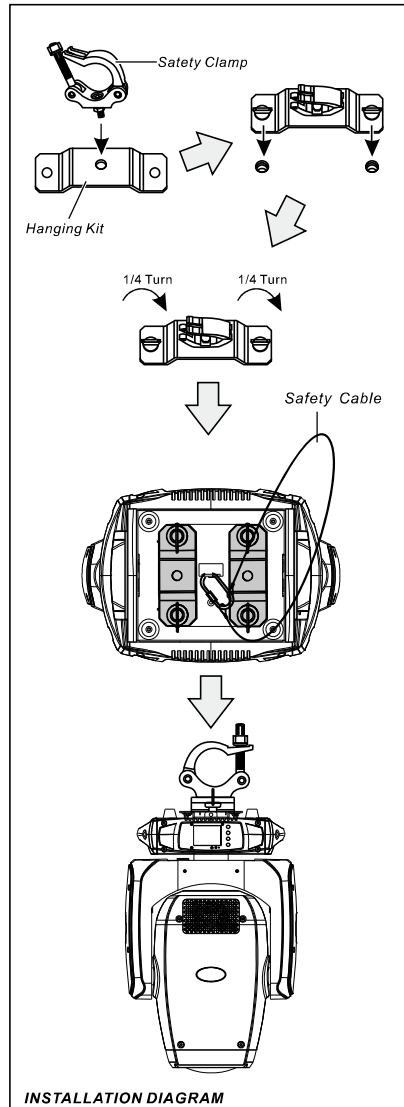
Always use and install the supplied safety cable as a safety measure to prevent accidental damage and/or injury in the event the clamp fails.

Mounting points:

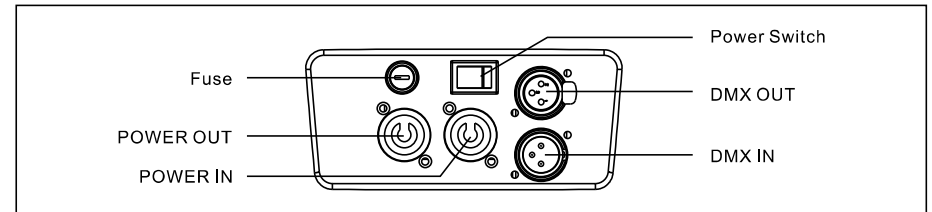
Overhead mounting requires extensive experience, including amongst others calculating working load limits, a fine knowledge of the installation material being used, and periodic safety inspection of all installation material and the fixture. If you lack these qualifications, do not attempt the installation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

FOS Nitro BSW provides a unique mounting bracket assembly that integrates the bottom of the base, 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 "Hanging Kit". As an added safety measure be sure to attached at least one properly rated safety cable to the fixture using one of the safety cable rigging point integrated in the base assembly.



7. CONTROL CONNECTION



Connect the provided XLR cable to the female 3-pin XLR output of your controller 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 cable with XLR input and output connectors. Please refer 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 environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 3 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 below.

