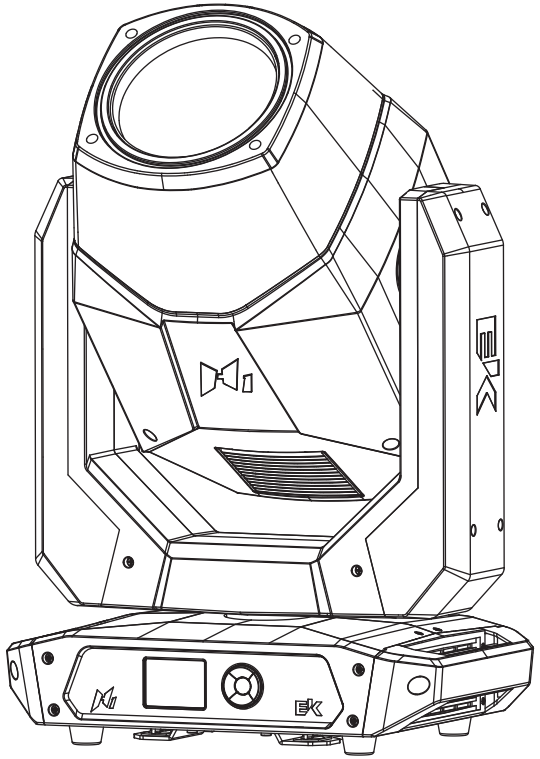


M1

USER MANUAL

CONTENTS

MAINTENANCE

MAINTENANCE AND CLEANING THE UNIT

- Make sure the area below the installation place is free from unwanted person during setup.
- Switch off the unit,unplug the main cable and wait until the unit has cooled down.
- All screws used for installing the device and any of its parts should be tightly fastened and should not be corroded.
- Housings,fixations and installation spots (celling,trusses,suspensions) should be totally free from any deformation.
- The main cables must be in impeccable condition and should be replaced immediately even when a small problem is detected.
- It is recommended to clean the front at regular intervals,from impurities caused by dust,smoke,or other particles to ensure that the ligh is radiated at maximum brightness.For cleaning,disconnect the main plug from the socket.Use a soft,clean cloth moistened with a mild detergent.Then carefully wipe the party dry. For cleaning other housing parts use only a soft,clean cloth.Never use a liquid,it might pernetrate the unit and cause damage to it.

FUSE REPLACEMENT

1.Disconnect this product from the power outlet.
2.Using a screwdriver,unscrew the fuse holder cap from the housing.
3.Remove the blown fuse and replace with a good fuse of the same type and rat -ing (250V/T10A).
4.Screw the fuse holder cap back in place and reconnect power.

TROUBLESHOOTING

Problems	Possible causes	Checks and remedies
Fixture does not light up	• No mains supply • Dimmer fader set to 0 • Faulty LED • Faulty LED board	• Check the power supply voltage • Increase the value of the dimmer channels • Replace the LED board • Replace the LED board
General low light intensity	• Dirty lens assembly • Misaligned lens assembly	• Clean the fixture regularly • Install lens assembly properly
Fixture does not power up	• No power • Loose or damaged power cord • Faulty internal power supply	• Check for power on power outlet • Check power cord • Replace internal power supply

Contact an authorized service center in case of technical problems or not reported in th table can not be resolved by the procedure given in the table.

DMX CHANNELS

29	Function	000-110 111-120 121-130 131-140 141-255	No Function Pan/Tilt Slow Speed (Hold 3S) Pan/Tilt Medium Speed (Hold 3S) Pan/Tilt Fast Speed (Hold 3S) (Default) No Function	
30	Reset	000-025 026-076 077-127 128-255	Unused Range Effects Reset (Hold 5S) Pan/Tilt Reset (Hold 5S) Complete Reset (Hold 5S)	
31	Lamp Control	000-025 026-100 101-255	No Function Lamp Off (Hold 3S) Lamp On (Hold 3S)	

SAFETY

WARNING!Before carrying out any operations with the unit,carefully read this instruction manual and keep it with cure for future reference,It contains important information about the installation,usahe and maintenance of the unit.

General instruction

-The products referred to in this manual conform to the European Community Directives and are therefore marked wihth CE.
-The unit is supplied with hazardous network voltage (230V~) .Leave serving to skilled personnel only. Never make any modifications on the unit not described in this instruction manual,otherwise you will risk an electric shock.
-Connection must be made to power supply system fitted with efficient earthing (Class I appliance according to standard EN60598-1) .It is moreover,recommended to protect the supply lines of the units from indirect contact and/or shorting to earth by using appropriately sized residual current devices.
-The connection to the main network of electric distribution must be carried out by a qualified electrical installer.Check that the main frequecy and voltage correspond to those for which the unit is designed as given on the electrival data lable.
-This unit is not for home use,only professional applications.
-Never use the fixture under the following conditions:
• in places subject to vibrations or bumps;
• in places with a temperature of over 40 ℃.
-Make certain that no inflammable liquids,water ot metal objects enter the fixture,
-Do not dismantle or modify the fixture.
-All work must always be carried out by qualified technical personnel.Contact the nearest sales point for an inspection or contact the manufacturer directly.
-If the unit is to be put out of operation definitively,take it to a local recyling plant for a dosposal which is not harmful to the environment.

Warnings and installation precautions

-If this device will be operated in any way different to the one described in this manual,it may suffer damage and the guarantee becomes void.Furthermore,any operation may lead to dangers like short circuit,burns,electric shock,etc.
-Before starting any maintenance work or cleaning the projector,cut off power from the main supply.
-Always additionally secure the projector with the safety rope.When carrying out any work,always comply scrupulously with all the regulations (particularly regarding safety) currently in force in the country in which the fixture's being used.
-Install the fixture in a well ventilated place.
-Keep any inflammable materials at a safe distance from the fixture.
-Shields,lenses or ultraviolet screens shall be changed if they have become damaged to such an extent that their effectiveness is impaired.
-The lamp (LED) shall be changed if it has become damaged or thermally deformed.
-Never look directly at the light beam.Please note that fast changes in lighting,e.g. flashing light,may trigger epileptic seizuresin photosensitive persons or persons with epilepsy.
-Do not touch the product's housing when operating because it may be very hot.

INTRODUCTION

FEATURES

- A perfect combination of beam/spot/wash with HID light source
- 480w 6500K PHILIPS lamp
- Ultra-bright output of 130K lux @ 20m
- Crisp beam from lens to end at every beam angle
- Consistent brightness from center to edge
- 2.1°~41.5° wide zoom angle
- CMY color mixing (CMY+15filters)
- 19 fixed gobos + 8 rotating gobos
- 1 animation wheel
- Bi-directional 4-f and 8-f prisms with variable speed
- DMX、RDM control

SPECIFICATIONS

Light Source :	480W PHILIPS Lamp
Output:	16300lm
Illuminance:	130K @ 20m
Color Temperature:	6500K±400K
Beam Angle:	2.1°~29°(Beam Mode)，2.3°~41.5°(Spot Mode)
Pan:	540°(16 bit)
Titl:	270°(16 bit)
Color:	CMY + 15filters
Gobo:	1 static gobo wheel(19+open) 1 rotating gobo wheel(8+open)
Animation:	1 animation wheel
Focus:	Motorized focus
Frost:	10°
Strobe:	0~12Hz
Dimming:	0~100%
Prism:	Bi-directional, indexable 4-facet and 8-facet
Protocol:	DMX512、RDM
DMX Channels:	31CH
Data Connections:	XLR DMX In/Out
Display:	TFT display
Mains:	100 - 240 VAC, 50/60 Hz
Power Connections:	TureCon In
Consumption:	650W/230V
Ambient:	-10℃~45℃
Dimension:	400.1 x 277.4 x 626.3 mm
Weight:	25KG

DMX CHANNELS

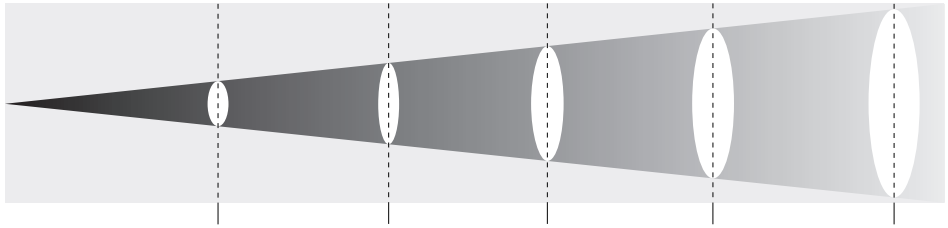
13	Rotating Gobo Change	000-007	White	
		008-015	Gobo1	
		016-023	Gobo2	
		024-031	Gobo3	
		032-039	Gobo4	
		040-047	Gobo5	
		048-055	Gobo6	
		056-063	Gobo7	
		064-071	Gobo8	
		072-113	Fast to Slow(Revers Spin)	
		114-117	Stop (Stop Rotation)	
		118-159	Slow to Fast(Forward Spin)	
		160-171	Gobo1 Shaking Slow to Fast	
		172-183	Gobo2 Shaking Slow to Fast	
		184-195	Gobo3 Shaking Slow to Fast	
		196-207	Gobo4 Shaking Slow to Fast	
		208-219	Gobo5 Shaking Slow to Fast	
		220-231	Gobo6 Shaking Slow to Fast	
		232-243	Gobo7 Shaking Slow to Fast	
		244-255	Gobo8 Shaking Slow to Fast	
14	Gobo Rotation	000-127	0 - 540 Position	
		128-190	Fast to Slow(Forward Spin)	
		191-192	Stop (Stop Rotation)	
		193-255	Slow to Fast(Revers Spin)	
15	Gobo Fine	000-255		
16	4 Prism Insertion	000-127	4 Prism Out	
		128-255	4 Prism into the light beam	
17	4 Prism Rotation	000-127	0 - 540 Position	
		128-190	Fast to Slow(Forward Spin)	
		191-192	Stop (Stop Rotation)	
		193-255	Slow to Fast(Revers Spin)	
18	8 Prism Insertion	000-127	8 Prism Out	
		128-255	8 Prism into the light beam	
19	8 Prism Rotation	000-127	0 - 540 Position	
		128-190	Fast to Slow(Forward Spin)	
		191-192	Stop (Stop Rotation)	
		193-255	Slow to Fast(Revers Spin)	
20	Frost	000-255	Frost moves linearly into the light beam	
21	Zoom	000-255	Wide Beam-Narrow Beam	
22	Focus	000-255	Distant-Near	
23	Focus Fine	000-255	Focus Fine	
24	Beam Mode	000-127	Spot mode	
		128-255	Beam Mode	
25	Pan	000-255		
26	Pan Fine	000-255		
27	Tilt	000-255		
28	Tilt Fine	000-255		

DMX CHANNELS

10	Fixed Gobo Change	000-003	White	
		004-007	Gobo1	
		008-010	Gobo2	
		011-014	Gobo3	
		015-017	Gobo4	
		018-021	Gobo5	
		022-024	Gobo6	
		025-028	Gobo7	
		029-031	Gobo8	
		032-035	Gobo9	
		036-039	Gobo10	
		040-042	Gobo11	
		043-046	Gobo12	
		047-049	Gobo13	
		050-053	Gobo14	
		054-056	Gobo15	
		057-060	Gobo16	
		061-063	Gobo17	
		064-067	Gobo18	
		068-071	Gobo19	
		072-113	Fast to Slow(Revers Spin)	
		114-117	Slow(Slow Rotation)	
		118-159	Slow to Fast(Forward Spin)	
		160-165	Gobo1 Shaking Slow to Fast	
		166-170	Gobo2 Shaking Slow to Fast	
		171-175	Gobo3 Shaking Slow to Fast	
		176-180	Gobo4 Shaking Slow to Fast	
		181-185	Gobo5 Shaking Slow to Fast	
		186-190	Gobo6 Shaking Slow to Fast	
		191-195	Gobo7 Shaking Slow to Fast	
		196-200	Gobo8 Shaking Slow to Fast	
		201-205	Gobo9 Shaking Slow to Fast	
		206-210	Gobo10 Shaking Slow to Fast	
		211-215	Gobo11 Shaking Slow to Fast	
		216-220	Gobo12 Shaking Slow to Fast	
		221-225	Gobo13 Shaking Slow to Fast	
		226-230	Gobo14 Shaking Slow to Fast	
		231-235	Gobo15 Shaking Slow to Fast	
		236-240	Gobo16 Shaking Slow to Fast	
		241-245	Gobo17 Shaking Slow to Fast	
		246-250	Gobo18 Shaking Slow to Fast	
		249-255	Gobo19 Shaking Slow to Fast	
11	Effect	000-255	Effect moves linearly into the light beam	
12	REffect	000-003	Stop (Stop Rotation)	
		004-127	Slow to Fast(Forward Spin)	
		128-132	Stop (Stop Rotation)	
		133-255	Slow to Fast(Revers Spin)	

PHOTOMETRICS

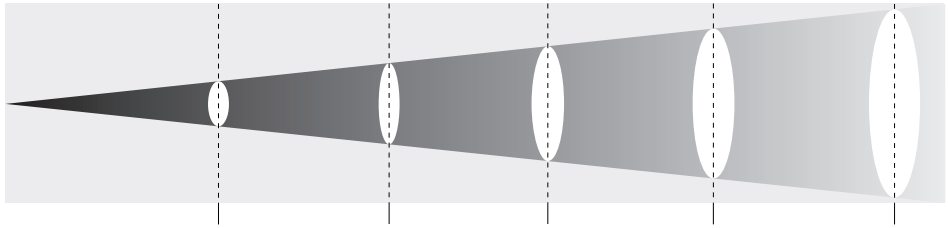
Beam Mode 2.1°/ 29°



Distance(M)	20	50	70	100	150
Illuminance(lux)	130000	20800	10612	5200	2311
Diameter(M)	0.72	1.8	2.52	3.6	5.4

Distance(M)	3	5	7	10	15
Illuminance(lux)	46900	16884	8614	4221	1876
Diameter(M)	1.58	2.63	3.68	5.26	7.9

Spot Mode 2.3°/ 42°

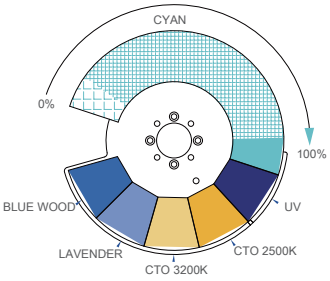


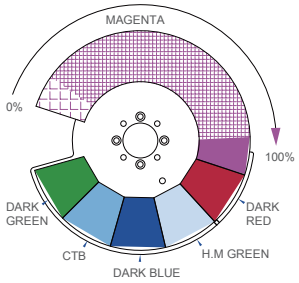
Distance(M)	20	50	70	100	150
Illuminance(lux)	31600	5056	2579	1264	562
Diameter(M)	0.77	1.92	2.69	3.85	5.77

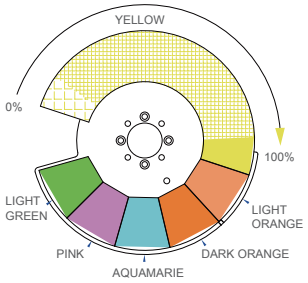
Distance(M)	3	5	7	10	15
Illuminance(lux)	5800	2088	1065	522	232
Diameter(M)	2.29	3.81	5.34	7.63	11.45

COLOR & GOBO

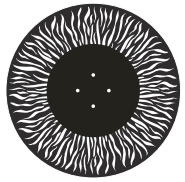
Color





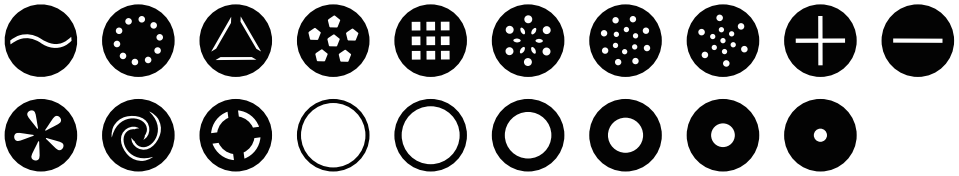


Animation



Rotating Gobos

Static Gobos



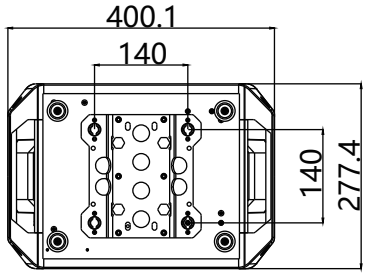
DMX CHANNELS

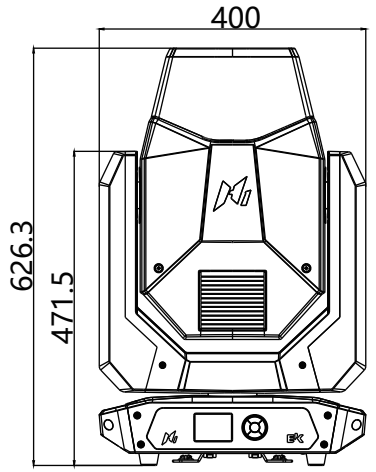
31CH	Function	Value	Percent/Setting	Remark
1	Cyan	000-255		Valid when Color1 = 0
2	Magenta	000-255		Valid when Color2 = 0
3	Yellow	000-255		Valid when Color3 = 0
4	Color 1	000-023	Open	
		024-046	Open + Color1	
		047-069	Color 1	
		070-092	Color 1 + Color 2	
		093-115	Color 2	
		116-139	Color 2 + Color 3	
		140-162	Color 3	
		163-185	Color 3 + Color 4	
		186-208	Color 4	
		209-231	Color 4 + Color 5	
		232-255	Color 5	
5	Color 2	000-023	Open	
		024-046	Open + Color1	
		047-069	Color 1	
		070-092	Color 1 + Color 2	
		093-115	Color 2	
		116-139	Color 2 + Color 3	
		140-162	Color 3	
		163-185	Color 3 + Color 4	
		186-208	Color 4	
		209-231	Color 4 + Color 5	
		232-255	Color 5	
6	Color 3	000-023	Open	
		024-046	Open + Color1	
		047-069	Color 1	
		070-092	Color 1 + Color 2	
		093-115	Color 2	
		116-139	Color 2 + Color 3	
		140-162	Color 3	
		163-185	Color 3 + Color 4	
		186-208	Color 4	
		209-231	Color 4 + Color 5	
		232-255	Color 5	
7	Strobe	000-003	Closed	
		004-103	Slow to Fast Strobe	
		104-107	Open	
		108-207	Open and close by arrive slow to fast	
		208-212	Open	
		213-251	Random Strobe	
		252-255	Open	
8	Dimmer	000-255	Dimmer 0%-100%	
9	Dimmer Fine	000-255	Dimmer Fine	

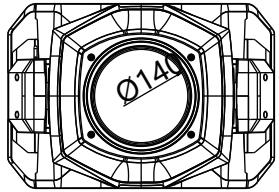
MENU

5	TEST	Pan/Tilt				
		Colour				
		Beam				
		Gobo				
		All				
6	ADVANCED	Access Code xxxx	Calibration	Pan Offset	000-255	
				Tilt Offset	000-255	
				Dimmer Offset	000-255	
				Cyan Offset	000-255	
				Magenta Offset	000-255	
				Yellow Offset	000-255	
				Gobo1 Offset	000-255	
				RGobo1 Offset	000-255	
				Gobo2 Offset	000-255	
				4 Prism Offset	000-255	
				4 RPrism Offset	000-255	
				8 Prism Offset	000-255	
				8 RPrism Offset	000-255	
				Effect Offset	000-255	
				Focus Offset	000-255	
				Zoom Offset	000-255	
				Frost Offset	000-255	
				Blance Offset	000-255	
			Menu Locking	Unlock Code XXXX		Default: 1234

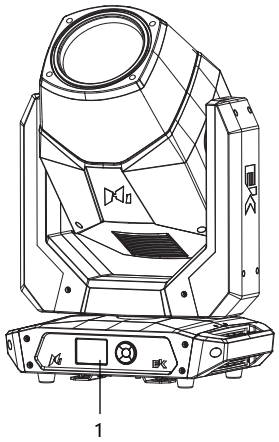
DIMENSION

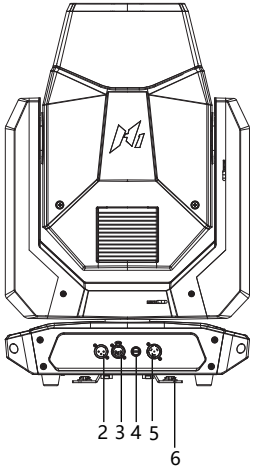




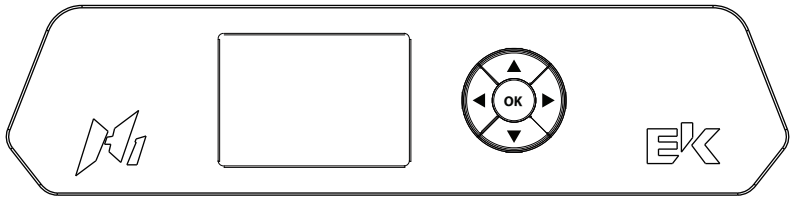


OVERVIEW





1. Control Panel
2. 3Pin XLR DMX IN
3. 3Pin XLR DMX OUT
4. FUSE
5. POWER IN
6. Omega Bracket Plate



UP	DOWN	LEFT	RIGHT	ENTER
Increases the value display or passes to the previous item in a menu	Decreases the value displayed or passes to the next item in the menu	Return to the top level	Commute from unites,tens,hundred in the menu	Confirms the displayed value, or activates the displayed function, or enters the successive menu

MENU

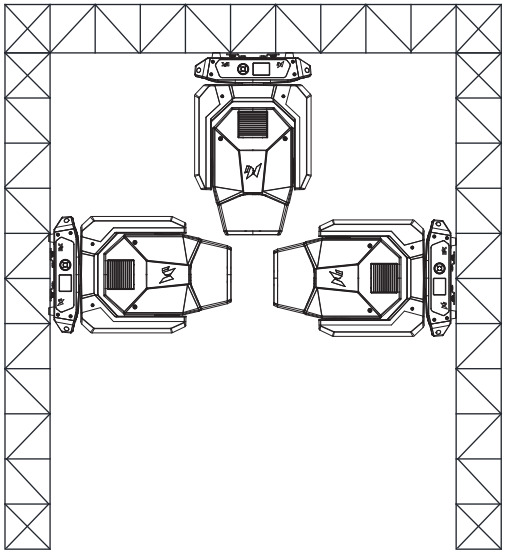
3	INFORMATION	Lamp Strikes	Total Strikes			
			Partial Strikes	Reset		
				Go Back		
		System Version	DISP NET CTR1-XY CTR2-MOTOR CTR3-MOTOR CTR4-MOTOR CTR5-MOTOR			
		DMX Monitor				
		Network parameters	IP Address	2.198.159.207		
			IP Mask	255.0.0.0		
			MAC Address	54-10-EC-5B-B2-32		
		UID	030F046*****			
4	MANUAL CONTROL	Lamp	On			Default: Off
			Off			
		Reset	NO			
			Yes			
		Channel	1.Cyan	000-255		
			2.Magenta	000-255		
			3.Yellow	000-255		
			4.Color1	000-255		
			5.Color2	000-255		
			6.Color3	000-255		
			7.Strobe	000-255		
			8.Dimmer	000-255		
			9.Dimmer Fine	000-255		
			10.Fixed Gobo	000-255		
			11.Effect	000-255		
			12.REffect	000-255		
			13.Rotating Gobo	000-255		
			14.Gobo Rotation	000-255		
			15.Gobo Fine	000-255		
			16.4Prism Insertion	000-255		
			17.4Prism Rotation	000-255		
			18.8Prism Insertion	000-255		
			19.8Prism Rotation	000-255		
			20.Frost	000-255		
			21.Zoom	000-255		
			22.Focus	000-255		
			23.Focus Fine	000-255		
			24.Beam Mode	000-255		
			25.Pan	000-255		
			26.Pan Fine	000-255		
			27.Tilt	000-255		
			28.Tilt Fine	000-255		
			29.Reset	000-255		
			30.Function	000-255		
			31.Lamp Control	000-255		

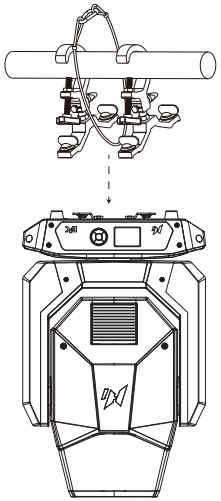
MENU

Menu(-)					
	Main Menu	Menu level 2	Menu level 3	Menu level4	Remark
1	SETUP	DMX Address	1-512		Default: 1
		Ethernet Interface	Custom IP Address	2.198.159.207	
			Custom IP Mask	255.0.0.0	
			Universe	000-255	Default: 0
			Start Channel	1-512	Default: 1
			Ethernet to DMX	No	Default: No
				Yes	
2	OPTION	Lamp DMX	On		Default: On
			Off		
		Safety Black Out	On		Default: On
			Off		)
		Pan / Tilt	Invert Pan	Off	Default: Off
				On	
			Invert Tilt	Off	Default: Off
				On	
			Swap Pan-Tilt	Off	Default: Off
				On	
			Encoder Pan-Tilt	Off	Default: On
				On	
			P/T Homing mode	Standard	Default: Standard
				Sequenced	
			Pan Home Def Pos	0 degree	Default: 270 degree
				90 degrees	
				180 degrees	
				270 degrees	
			Tilt Home Def Pos	0 %	Default: 50%
				12.5 %	
				25 %	
				50 %	
				75 %	
				87.5 %	
				100 %	
		Shutter	Shutter On Error	On	Default: Off
				Off	
		Display	Off		Default: Off
			On		
		Setting	Default Preset	Reset To Default / Go Back	Are you sure ? Yes / No
			User Preset 1	Load preset 1 / Save to preset 1	Are you sure ? Yes / No
			User Preset 2	Load preset 2 / Save to preset 2	Are you sure ? Yes / No
			User Preset 3	Load preset 3 / Save to preset 3	Are you sure ? Yes / No
3	INFORMATION	System Errors			
		Fixture Hours	Total Hours		
			Partial Hours	Reset / Go Back	
		Lamp Hours	Total Hours		
			Partial Hours	Reset / Go Back	

INSTALLATION

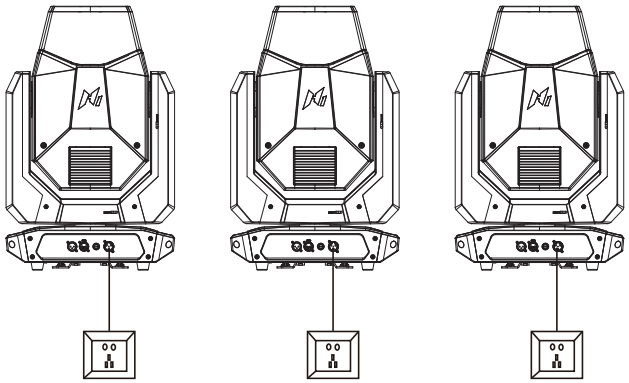
The H1 may be set up on a solid and even surface. By means of the fixing facilities of the baseplate, the unit can also be mounted upside down to a cross arm. For fixing, stablemounting clips are required. The bolts of the brackets are placed into the openings provided in the base plate and turned clockwise until they lock (to the stop). Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating. The mounting place must be of sufficient stability and be able to support a weight of 10 times of the unit's weight. When carrying out any installation, always comply scrupulously with all the regulations(particularly regarding safety) currently in force in the country in which the fixture's being used. Always additionally secure the projector with the safety rope from falling down. For this purpose, fasten the safety rope at a suitable position so that the maximum fall of the projector will be 20 cm.





CONNECTIONS

POWER CONNECTION



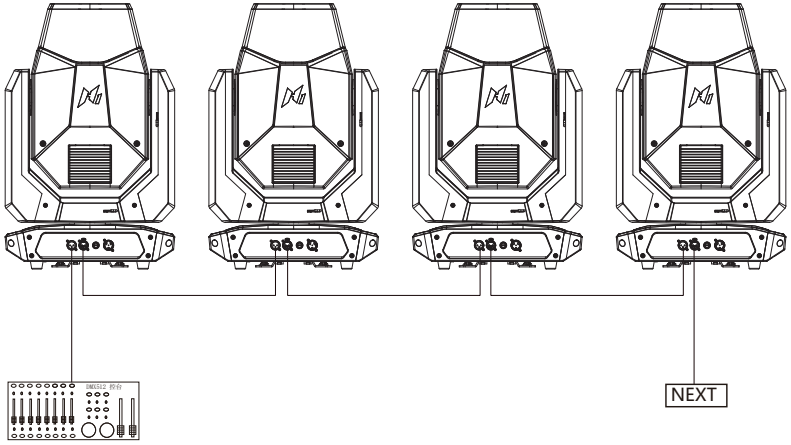
Power In

Using POWER CON In/Out
Power cable connected in series
Attention:due to the power rating,
one 1.5mm^2 power cable can connect 1 unit maximum

WARNING

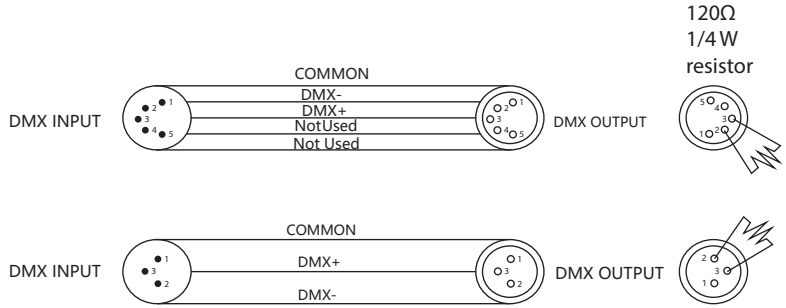
Do not connect more than 1 unit in series with one power cable.
Do not use damaged power cables
Turn off the power when the unites are not in use.

DMX CONNECTION



CONNECTIONS

Depending on the length of the DMX cable run, or other factors, it may be advisable to install a terminator at the last fixture in the run.
The illustration below shows the correct placement of a 120Ω 0.25W resistor in a terminator, as well as the standard DMX signal pin-outs.



DMX STARTING ADDRESS

To set the starting address of each fixture:

- Press the ENTER button and use the UP/DOWN buttons to scroll the menu
- Select the CONNECT menu and press ENTER
- Use the UP/DOWN buttons to scroll to the ADDRESS menu
- Press ENTER and use the UP/DOWN buttons to select the DMX address
- Press ENTER to confirm the chosen DMX address
- Press the MENU button to save changes and exit

EXAMPLE OF DMX ADDRESSING

The below table shows an example of starting addresses for four fixtures assuming a first fixture with starting address of 001.

The actual starting addresses will be determined by the operator as needed to match external controller settings.

Relation between DMX and Address

MODE	ALLOCATION	STARTING ADDRESS 1ST FIXTURE	STARTING ADDRESS 2ND FIXTURE	STARTING ADDRESS 3RD FIXTURE	STARTING ADDRESS 4TH FIXTURE
31CH	001-031	001	032	063	094

Follow above method for subsequent fixtures, calculating starting addressed as indicated.