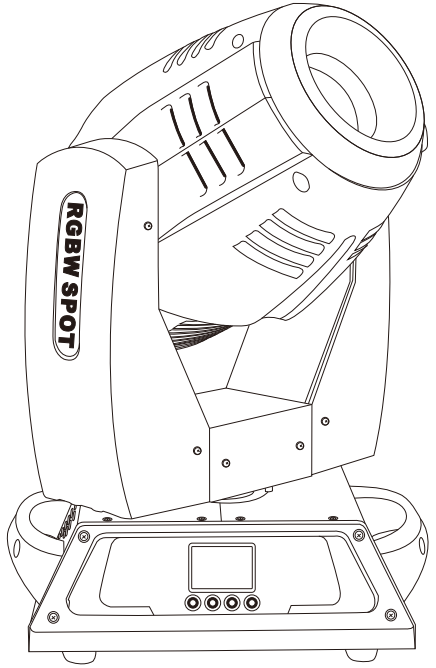
LED MOVING HEAD

Led Spot Series

LED Spot 150W RGBW Quad

Color Mixing / without color wheel



This product manual contains important information about the safe installation and use of this projector.
Please read and follow these instructions carefully and keep this manual in a safe place for future reference.

ARTFOX LIGHTING

USER MANUAL

Version 1.0 beta

TECHNICAL DATA

POWER SUPPLIES
Input Voltage: AC90 -240V 50-60Hz
Power Consumption: 230W

LAMP SOURCE
Red Butterfly 150W RGBW LED Module
80,000 Hour Average LED Engine Life

COLOR SYSTEM
RGBW Full Color (without color wheel)

EFFECTS SECTION
2 Gobo Wheels:
One Fixed Gobo Wheel:7 gobos(5 mental+2 glasses)+open
One Rotating Gobo wheel:7 gobos(5 mental+2 glasses)+open
Electronic Focus
High speed shake effect
3-facet rotating prism
Mechanical shutter and adjustable speed strobe effect (1Hz~13Hz)
Linear dimmer

CONTROL AND PROGRAMMING
Max 24 DMX 512 control channels
DMX protocol signal: USITT DMX 512
Display: LCD Display
Pan/Tilt Resolution: 16 bit
DMX signal connection: 3 pole XLR input and output

BODY
Aluminium structure with die-cast plastic cover
Two side handles for transportation
Device locking PAN and TILT mechanisms for transportation and maintenance

MOVING BODY
Travel: PAN = 540° TILT = 270°

CONTROL MODE
DMX512/Master-slave/Auto

COOLING SYSTEM
Convective Fan Inside

NET WEIGHT
14 Kg

GROSS WEIGHT
16 Kg

PACKING SIZE
72x45x43 (cm)

Zoom

12° - 15°

SAFE USAGE OF THE PROJECTO

When unpacking and before disposing of the carton check there is no transportation damage before using the projector. Should there be any damage caused by transportation, consult your dealer and do not use the apparatus.

The projector is for indoor use only, IP20. Use only in dry locations. Keep this device away from rain and moisture, excessive heat, humidity and dust. Do not allow contact with water or any other liquids.

DO NOT mount the projector directly onto inflammable surface 

The projector is only intended for installation, operation and maintenance by qualified personnel.

The projector must be installed in a location with adequate ventilation, at least 50cm from adjacent wall surfaces. Be sure that no ventilation slots are blocked.

Do not project the beam onto inflammable surfaces, minimum distance is 5m 5m

Avoid direct exposure to the light from the lamp. The light is harmful to the eye. Do not attempt to dismantle and/or modify the projector in any way.
Electrical connection must only be carried out by qualified personnel.

Before installation, ensure that the voltage and frequency of power supply match the power requirements of the projector. It is essential that each projector is correctly earthed and that electrical installation conforms to all relevant standards.
Do not connect this device to any other types of dimmer apparatus.

Make sure that the power-cord is never crimped or damaged by sharp edges. Never let the power-cord come into contact with other cables. Only handle the power-cord by the plug. Never pull out the plug by tugging the power-cord.

Keep a projector's optical system clean. Do not touch LED lens with bare hands.

The projector should always be installed with a secondary safety fixing. A safety cord is supplied for this; it should be attached as shown in "installing the projector" section.

Shields and lens shall be changed if they have become visibly damaged to such an extent than their effectiveness is impaired, for example by cracks or deep scratches.

LED lamps should be replaced if damaged or having reached life limit. 

Exterior surface temperatures of the luminaire after 5 minutes operation is 55℃, when steady state is achieved 70℃,

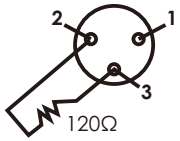
There is no user serviceable parts inside the projector, do not open the housing and never operate the projector with the covers removed.

If you have any questions, don't hesitate to consult your dealer or manufacturer.

10	12	18	Rotation Gobo Wheel	140~149	Gobo 7 Shak From Slow To Fast
				150~202	Forward Rotation Effect From Fast To Slow
				203~255	Forward Rotation Effect From Slow To Fast
11	13	19	Gobo Rotation	0~127	Gobo Index
				128~190	Gobo Forward Rotation From Fast To Slow
				191~192	Stop Rotation
				193~255	Gobo Reverse Rotation From Slow To Fast
12	14	20	Prism Insertion	0~127	Prism Excluded
				128~255	Prism Inserted
13	15	21	Prism Rotation	0~127	0 - 540 Angle Degree Indel
				128~190	Forward Rotation from Fast to Slow
				191~192	Stop
				193~255	Reverse Rotation from Slow to Fast
14	16	22	Focus	0~255	Line Focus
15	17	23	Call Program	0~50	No Function
				51~100	Preset Program 1
				101~150	Preset Program 2
				151~200	Preset Program 3
				201~255	Preset Program 4
16	18	24	Function "Stay in a certain value for more than 5 seconds"	0~24	Unused
				25~49	Reset: Effects
				50~74	Unused
				75~99	Reset: Pan Tilt
				100~124	Unused
				125~149	Reset: Complete
				150~174	Unused
				175~199	Unused
				200~224	Unused
				225~255	Unused

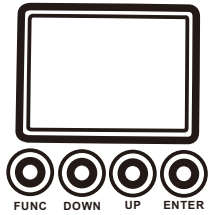
DMX TERMINATOR

In the Controller mode, at the last fixture in the chain, the DMX output has to be connected with a DMX terminator. This preventselectrical noise from disturbing and corrupting the DMX control signals.
The DMX terminator is simply an XLR connector with a 120Ω(ohm) resistor connected across pins 2 and 3, which is then plugged into the output socket on the last projector in the chain. The connections are illustrated below.



DMX TERMINATOR CONNECTION
Connect a 120Ω(OHM) resistor across pins 2 and 3 in an XLR plug and insert into the DMX out socket on the last unit in the chain.

SETUP OPTIONS-PROJECTOR CONFIGURATION



Projector configuration can be set conveniently via press button switch and LCD display.
To browse or change its setup options, Press button ENTER to unlock panel. Menu will be displayed on the screen, each menu has it own sub-menu. Each menu has specific function, Please refer to "**Operation Menu**" for details.
Press button UP or DOWN if you want to browse or change through the various Setup Options.
Press button ENTER to save your settings or enter the next menu.
Press button UP or DOWN to change values.(Add or subtract)
Press button FUNC , it will return to the upper menu one by one.

TO SET THE DMX START ADDRESS

Each projector must be given a DMX start address so that the correct projector responds to the correct control signals. This DMX start address is the channel number from which the projector starts to "listen" to the digital control information being sent out from the controller. The fixture have 3 DMX modes. There are simple mode, standard mode and extended mode. For example standard mode has 18 channels, so set the No. 1 projector's address 001, No. 2 projector's address 019, No. 3 projector's address 037, No. 4 projector's address 055 and so on.
Launch the projector. Press button ENTER more than 5 seconds to unlock panel.
Press button ENTER to display **DMX address**.
Press button UP or DOWN , you can set the address.
Press button ENTER to confirm, which means the projector has saved the Start Address automatically, when powered on next time, it will display the value saved last time.
Press button UP or DOWN to change values.(Add or subtract)
Press button FUNC , it will return to the upper menu one by one.

DMX PROTOCOL

Mode/Channel			FUNCTION	VALUE	DESCRIPTION
Short mode	Standard mode	Extended mode			
1	1	1	Pan	0~255	Pan Moving 0 - 540 Degree
		2	Pan Fine	0~255	Pan Fine Moving
2	2	3	Tilt	0~255	Tilt Moving 0 - 270 Degree
		4	Tilt Fine	0~255	Tilt Fine Moving
	3	5	Move Speed	0~255	Moving Speed From Fast To Slow
3	4	6	Dimmer	0~9	Shut Off (0%)
				10~255	Line Dimmer
4	5	7	Strobe	0~9	No Strobe
				10~255	Strobe From Slow To Fast (1Hz - 25Hz)
5	6	8	Red	0~255	8 Bit Red
		9	Red Fine	0~255	16 Bit Red
6	7	10	Green	0~255	8 Bit Green
		11	Green Fine	0~255	16 Bit Green
7	8	12	Blue	0~255	8 Bit Blue
		13	Blue Fine	0~255	16 Bit Blue
8	9	14	White	0~255	8 Bit White
		15	White Fine	0~255	16 Bit White
				0~9	No Function
				10~24	Colour Temperature 2700K
				25~39	Colour Temperature 3200K
				40~54	Colour Temperature 4200K
				55~69	Colour Temperature 5600K
				70~84	Colour Temperature 8000K
	10	16	Virtual Color	85~99	R
				100~114	R+G
				115~129	G
				130~144	G+B
				145~159	B
				160~174	B+R
				175~255	Virtual Color Rainbow

Level 1	Level 2	Level 3	Level 4
	LED Stage Light Manual Operation Fixed Gobo Wheel	LED Stage Light Manual Operation Fixed Gobo = 000	
	LED Stage Light Manual Operation Rot.Gobo Wheel	LED Stage Light Manual Operation Rot.Gobo = 000	
	LED Stage Light Manual Operation Gobo Rotation	LED Stage Light Manual Operation Gobo.Rot = 000	
	LED Stage Light Manual Operation Prism	LED Stage Light Manual Operation Prism = 000	
	LED Stage Light Manual Operation Prism Rotation	LED Stage Light Manual Operation Prism.Rot = 000	
	LED Stage Light Manual Operation Focus	LED Stage Light Manual Operation Focus = 000	
LED Stage Light Operation Mode	LED Stage Light Mode = DMX Mode	LED Stage Light DMX Mode = Short Mode	
		LED Stage Light DMX Mode = Standard Mode	
		LED Stage Light DMX Mode = Extended Mode	
	LED Stage Light Mode = Auto Mode	LED Stage Light Select Program Program = x	
	LED Stage Light Mode = Master Mode	LED Stage Light Select Program Program = x	
	LED Stage Light Mode = Slave SYNC Mode	LED Stage Light Select Program Program = x	
	LED Stage Light Mode = Slave SAME Mode		
LED Stage Light Option Settings	LED Stage Light Option Pan Tilt Swap	LED Stage Light Pan Tilt Swap =OFF	
		LED Stage Light Pan Tilt Swap =ON	
	LED Stage Light Option Pan Invert	LED Stage Light Pan Invert =OFF	
		LED Stage Light Pan Invert =ON	

Level 1	Level 2	Level 3	Level 4
	LED Stage Light Option Tilt Invert	LED Stage Light Tilt Invert =OFF	
		LED Stage Light Tilt Invert =ON	
	LED Stage Light Option Display Setup	LED Stage Light Display Setup Delay Off	LED Stage Light Delay Off = Disable
			LED Stage Light Delay Off = Enable
		LED Stage Light Display Setup Display Invert	LED Stage Light Display Invert = OFF
			LED Stage Light Display Invert = ON
		LED Stage Light Display Setup Language	LED Stage Light Language = English
			LED Stage Light Language = 简体中文
	LED Stage Light Option Lost DMX	LED Stage Light Lost DMX =Clear Value	
		LED Stage Light Lost DMX =Hold Value	
LED Stage Light Advanced	LED Stage Light Access Code	LED Stage Light Access Code Code = 000	注: Code = 008
	LED Stage Light Adjust	LED Stage Light Adjust Pan	LED Stage Light Adjust Pan = +000
		LED Stage Light Adjust Tilt	LED Stage Light Adjust Tilt = +000
		LED Stage Light Adjust Red	LED Stage Light Adjust Red = +000
		LED Stage Light Adjust Green	LED Stage Light Adjust Green = +000
		LED Stage Light Adjust Blue	LED Stage Light Adjust Blue = +000
		LED Stage Light Adjust White	LED Stage Light Adjust White = +000

Level 1	Level 2	Level 3	Level 4
		LED Stage Light Adjust Fixed Gobo Wheel	LED Stage Light Adjust Fixed Gobo = +000
		LED Stage Light Adjust Rot.Gobo Wheel	LED Stage Light Adjust Rot.Gobo = +000
		LED Stage Light Adjust Prism	LED Stage Light Adjust Prism = +000
		LED Stage Light Adjust Focus	LED Stage Light Adjust Focus = +000
LED Stage Light Information	LED Stage Light Temperature	LED Stage Light Temperature =025C	
	LED Stage Light Fixture Hours	LED Stage Light Fixture Hours =00000 H	LED Stage Light Reset Hours =NO
			LED Stage Light Reset Hours =YES
	LED Stage Light Product ID	LED Stage Light Product ID = Y**********	
	LED Stage Light View DMX Value	LED Stage Light View DMX Value Channel 001 = 000	
	LED Stage Light Version	LED Stage Light Version =1.00F	
LED Stage Light Load Defaults	LED Stage Light Load Defaults =NO		
	LED Stage Light Load Defaults =YES		

Note:

There is only one Projector to be set as a Master in a signal Cable. If Master's functions used, Please disable DMX control signal.

When multiple projectors' work together in synchronous control state, Parameters can be transmitted from the master projector to the slave projectors such as DMX channel mode, Display setting status and operation mode (User memory data is included). Before parameters transmitted, the projector which will send parameters should be set as a Master and others be as Slaves.

OPERATION MENU

Level 1	Level 2	Level 3	Level 4
LED Stage Light 150W LedSpot DMX Address = 001			
LED Stage Light 150W LedSpot Auto = P01:S01			
LED Stage Light 150W LedSpot Master = P01:S01			
LED Stage Light 150W LedSpot Slave = P01:S01			
LED Stage Light 150W LedSpot Slave same			
LED Stage Light 150W LedSpot Music = P01:S01			
LED Stage Light Address Setup	LED Stage Light Address Setup Address = 001		
LED Stage Light Reset	LED Stage Light Reset Effects		
	LED Stage Light Reset Pan & Tilt		
	LED Stage Light Reset Complete		
LED Stage Light Manual Operation	LED Stage Light Manual Operation Pan	LED Stage Light Manual Operation Pan = 000	
	LED Stage Light Manual Operation Titl	LED Stage Light Manual Operation Tilt = 000	
	LED Stage Light Manual Operation Red	LED Stage Light Manual Operation Red = 000	
	LED Stage Light Manual Operation Green	LED Stage Light Manual Operation Green = 000	
	LED Stage Light Manual Operation Blue	LED Stage Light Manual Operation Blue = 000	
	LED Stage Light Manual Operation White	LED Stage Light Manual Operation White = 000	
	LED Stage Light Manual Operation Strobe	LED Stage Light Manual Operation Strobe = 000	

Mode/Channel			FUNCTION	VALUE	DESCRIPTION
Short mode	Standard mode	Extended mode			
9	11	17	Fixed Gobo Wheel	0~9	White (No Gobo)
				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
				80~89	Gobo 1 Shak From Slow To Fast
				90~99	Gobo 2 Shak From Slow To Fast
				100~109	Gobo 3 Shak From Slow To Fast
				110~119	Gobo 4 Shak From Slow To Fast
				120~129	Gobo 5 Shak From Slow To Fast
				130~139	Gobo 6 Shak From Slow To Fast
				140~149	Gobo 7 Shak From Slow To Fast
				150~202	Forward Rotation Effect From Fast To Slow
				203~255	Forward Rotation Effect From Slow To Fast
10	12	18	Rotation Gobo Wheel	0~9	White (No Gobo)
				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
				80~89	Gobo 1 Shak From Slow To Fast
				90~99	Gobo 2 Shak From Slow To Fast
				100~109	Gobo 3 Shak From Slow To Fast
				110~119	Gobo 4 Shak From Slow To Fast
				120~129	Gobo 5 Shak From Slow To Fast
				130~139	Gobo 6 Shak From Slow To Fast

POWER SUPPLY-MAINS

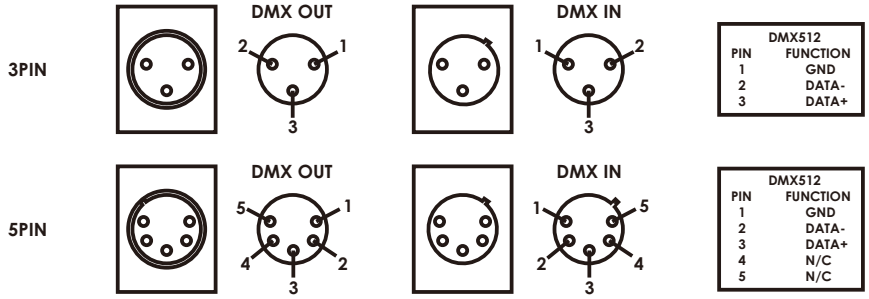
Connect the power cord as follows:

L (live) =brown
E (earth) =yellow/green
N (neutral) =blue

Use the plug provided to connect the mains power to the projector paying attention to the voltage and frequency marked on the panel of the projector. It is recommended that each projector be supplied separately so that they may be individually switched on and off.

IMPORTANT
It is essential that each projector is correctly earthed and the electrical installation conforms to all relevant standards.

CONTROL CONNECTION

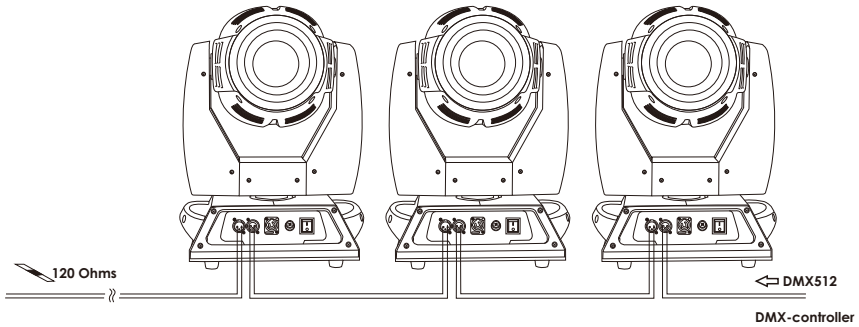


DMX512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+

DMX512	
PIN	FUNCTION
1	GND
2	DATA-
3	DATA+
4	N/C
5	N/C

Connection between controller and projector and between one projector and another must be made with a 2 core-screened cable, with each core having at least a 0.5mm diameter. Connection to and from the projector is via cannon 5 pin (which are included with the projector) or 3 pin XLR plugs and sockets. The XLR's are connected as shown in the figure above.

Note: care should be taken to ensure that none of the pins touch the metallic body of the plug or each other. The body of the plug is not connected in any way. The projector accepts digital control signals in protocol DMX512 (1990).
Connect the controller's output to the first fixture's input, and connect the first fixture's output to the second fixture's input and connect the rest fixtures in the same way. Eventually connect the last fixture's output to a DMX terminator as shown in the figure below.



MAINTENANCE

To prolong a Projector's life, Regular maintenance should be done for its LED optical System to ensure that the system be in best operational condition. If the projector does not function, check the fuses on the power socket of the projector, if burned, they should only be replaced by fuses of the same specification. Should these be damaged call a qualified technician before replacement. The projector has thermal protection device that will switch off the projector in case of overheating, should this occur, check if the fans work normally or fan and fan shield are blocked by dust. If the projector not operational, call a qualified technician. After cleaned and repaired, the projector can be restarted.

Any maintenance work should only be carried out by qualified technicians.

KEEPING THE PROJECTOR CLEAN

It definitely necessary to keep a projector clean for its reliable use. Cooling fans and their shield should be cleaned every 15days. LED lamps'lens and cover should be cleaned regularly for optimized light output.

Cleaning frequency depends on how often a projector is used and its operational environment. A soft cloth and typical glass cleaning products should be used in cleaning. It is recommended to clean the external optics at least once every 20 days.

Do not use any organic solvent, e.g. alcohol, to clean t housing of the apparatus.

TROUBLESHOOTING

PROBLEM	ACTION
The fixture can not start	> Check if the fuse on the power socket is broken or not. > Check the status of the fuse.
The lamp works normal but the fixture doesn't respond to controller	> Check if the fixture's start address is set properly. > Check if XLR signal cable is broken or not.
The fixture only functions intermittently	> Make sure the fans work normally and if dirt blocks fans and fan screens.
The beam appears dim and brightness decreases apparently	> Check if the lamps reach the end of their lives. > Check if external and internal optical systems are clean or not.

LED Spot 150W RGBW 4-in-1 moving head light

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