

# **USER'S MANUAL**

## **380W Waterproof Beam Moving Head Light With Ring version**



**CAUTION!** Keep this device away from rain and moisture!

FOR YOUR OWN SAFETY, PLEASE READ THIS USER MANUAL CAREFULLY **BEFORE YOU INITIAL START - UP!** 

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## 1-Maintenance

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.

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 fixture'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 fixtures and fuses of same type and rating only.



## **CAUTION!**

Be careful with your operations.

With a high voltage you can suffer a dangerous electric shock when touching the wires!

Attention: The powerCON is a connector without breaking capacity, i.e. the nowerCON should not be connected or disconnected under load or live!

This device is a moving head for creating decorative effects and was designed for indoor use only.

This device is for professional use only. It is not for household use.

If the device has been exposed to drastic temperature fluctuation (e.g. after transportation), do not switch it on immediately. The arising condensation water might damage your device. Leave the device switched off until it has reached room temperature.

Before switching the fixture OFF, turn the fixture OFF and allow the fixture to cool for a while.

Do not shake the device. Avoid brute force when installing or operating the device.

Never lift the fixture by holding it at the projector-head, as the mechanics may be damaged.

Always hold the fixture at the transport handles.

Never run the device without fixture!

When choosing the installation-spot, please make sure that the device is not exposed to extreme heat, moisture or dust. There should not be any cables lying around. You endanger your own and the safety of others!

The minimum distance between light output and the illuminated surface must be more than 8 meters.

Make sure that the area below the installation place is blocked when rigging, derigging or servicing the fixture.

Always fix the fixture with an appropriate safety rope. Fix the safety rope at the correct holes only.

Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.

The fixture must never be ignited if the objective-lens or any housing-cover is open, as discharge fixtures may

explode and emit a high ultraviolet radiation, which may cause burns.

The maximum ambient temperature 45°C must never be exceeded.

## 3-Attention Item

- 1.For guarantee the life of product, please do not put it on the wet place and not use it the place over 40 degree.
- 2.Please don't lay the product on the un-fixable or shakable place.
- 3.Ask for the professional to maintain the product in order to avoid the danger of get an electric shock.
- 4.Power supply should not be changed over +&-10% while the light is using, it will be decreased the life of fixture if the power is too high, but it will be influenced the luminosity if the power is too low.
- 5.After power off.if it is need used again.please cool down over 20 minuter.
- 6.Please look round the manual for ensure the product can be used normally.

#### 4-Rigging the fixture

A structure intended for installation of the fixture(s) must safely hold weight of the fixture(s) placed on it. The structure has to be certificated to the purpose.

The fixture (fixtures) must be installed in accordance with national and local electrical and construction codes and regulation.

For overhead installation, the fixture must be always secured with a safety wire that can bear at least 10 times the weight of the fixture

When rigging, derigging or servicing the fixture staying in the area below the installation place, on bridges, under high working places and other endangered areas is forbidden.

The operator has to make sure that safety-relating and machine-technical installations are approved by an expert before taking into operation for the first time and after changes before taking into operation another time.

The operator has to make sure that safety-relating and machine-technical installations are

approved by a skilled person once a year.

Allow the fixture to cool for ten minutes before handling.

The projector should be installed outside areas where persons may walk by or be seated.

#### IMPORTANTI OVERHEAD RIGGING REQUIRES EXTENSIVE EXPERIENCE

including calculating working load limits, installation material being used, and periodic safety inspection of all installation material and the projector. If you lack these qualifications, do not attempt the installation yourself, but use a help of professional companies.

CAUTION: Fixtures may cause severe injuries when crashing down! If you have doubts concerning the safety of a possible installation, do not install the fixture!

The fixture has to be installed out of the reach of public.

The fixture must never be fixed swinging freely in the room.

## **Danger of fire!**

When installing the device, make sure there is no highly inflammable material (decoration articles, etc.) in a distance of min. 1 m.

The minimum distance of 8 meters between light output from the moving head and the lit objects must be kept!

#### **CAUTION!**

Use 2 appropriate cfixtures to rig the fixture on the truss.

Follow the instructions mentioned at the bottom of the base.

Make sure that the device is fixed properly! Ensure that the structure (truss) to which you are attaching the fixtures is secure.

The fixture can be placed directly on the stage floor or rigged in any orientation on a truss without altering its operation characteristics.

For securing a fixture to the truss, install two safety wires which can hold at least 10 times the weight of the fixture. Use only the safety wires with screw-on carabines.

#### 5-DMX-512 connection

The fixture is equipped with both 3-pin sockets for DMX input and output. The sockets are wired in parallel.

Only use a shielded twisted-pair cable designed for 3-pin XLR-plugs and connectors in order to connect the controller with the fixture or one fixture with another.

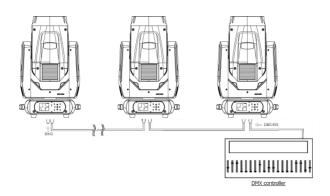
DMX - output
XLR mounting-sockets (rear view):

DMX-input XLR mounting-plugs (rear view):



# 2 • •1 2 - Silgnal (-) 3 - Signal (+)

#### **Building a serial DMX-chain:**



Connect the DMX-output of the first fixture in the DMX-chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected. Up to 32 fixtures can be connected.

Caution: At the last fixture, the DMX-cable has to be terminated with a terminator.

Solder a 120  $\,\Omega$  resistor between Signal (–) and Signal (+) into a 3-pin (5-pin) XLR-plug and plug it in the DMX-output of the last fixture.

## 6-Technical Specifications

Voltage: AC90V ~ 275V / 50 ~ 60Hz	Channel: 19 CH
Output Power: 450W	<b>Pan/Tilt:</b> 540°/270°
Light source: 310W Bulb white color	Dimmer: 0-100% 16Bit mechanic
Beam Lux: 475000 Lux / 10m	Shutter: Flash rate 0-25HZ
Frost Lux: 125500 Lux/10m	Effect: Frost wash+Rianbow
Beam angle: 1.8 degrees	IP Grade: IP65
Frost angle: 9.5 degrees	Cooling System: Box Heat Conduction
Control mode: DMX512/Master-Slave/Auto/Sound	Material: High temperture resistant plastic
Color wheel: 14 colors + open	Product Color: Black
Gobo wheel: 12 gobos + open + 5 effect gobos	Product Size: 391*306*600 mm
Rainbow wheel: 6 colors	Product weight: 20.2kg
Prism 1: 12 face prism and rotating	Package Size: 77*52*75 cm
Prism 2: 8+8+8 face prism and rotating	Package weight: 19.85 kg
Function: RDM. Intelligent temperature control,	
DMX monitor, Manual control	

## 7-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-iet.

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 cloqued!

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.

#### 8-Replacing the fuse

Before replacing the fuse, unplug mains lead.

- 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 fuse holder in the housing and fix it.

#### **Checking plastic parts of the fixture.**

The plastic parts of the fixture should be checked for damages and beginning cracks at least every two months.

In addition, the plastic part of the front lens has to be checked mechanically (by means of movement by the plastic part) if it is firmly fastened to the fixture. If hint of a crack is found on some plastic part, do not use the fixture until the damaged part will be replaced.

Cracks or another damages of the plastic parts can be caused by the fixture transportation or manipulation and also ageing process may influence plastic materials.

This checking is necessary for both fixed installations and preparing fixtures for renting. Any

free moving parts inside of the fixture head, cracked plastic or any plastic part of front lens not sitting properly in place need to be immediately replaced.

## 9-Control Menu

After the system is powered on, the graphical interface will be displayed to reset and initialize the entire system. At the same time, the functional status of the system will be checked. If there is an error or a certain function is not normal, the square in the upper right corner of the screen will turn red after the reset is completed to indicate an error. You can view error messages in the 'Information Menu/Error Messages/View' section. Normally green.



#### MenuBoard description:

DMX	DMX Signal indicator light	
ERR	Indicator light when triggered by sound mode or Auto mode	
Up	Menu Up Selection	
Down	Menu Down Selection	
Left	Menu Left Selection/Return	
Right	Menu Right Selection	
OK	confirm button	
Time on the left side of the screen	Total system usage time (display can be turned off in standard settings)	
Time on the right side of the screen	Total power on time this time (display can be turned off in standard settings)	
Vertical signal above the screen	The current DMA signal connection signal strength! Red: no signal	
	Green: normal, no errors	
Square icon in the upper right corner of the screen	Red: There is an error (you can click on the icon or "information Menu/Error Messages/View" to check for errors)	

#### **System menu description:**

Reverse	Invert the screen display	
Exit	Exit to the Home screen	
语言	Choice of Simplified Chinese or English	
Standard	Address codes and some commonly used function settings	
Advanced	Main debugging parameter settings at the factory	
Info	Display of errors, software versions, and other information	

Program	Manually control operation or edit user programs
Perform	Automatic or voice controlled running of built-in programs
Reset	System reset to initial position

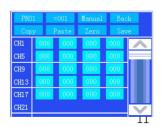
## 10-Control menu map

Menu		Function		
	Default Set	Enter	Restore factory default parameters	
	Address	001-512	Set lamp address code	
	DMX mode	Mode 1 / Mode 2	DMX channel mode	
	Effect mode	W / NI-	The effect disc automatically searches for the	
	Ellect illoue	Yes / No	shortest distance to rotate and run	
	Started lamp	On / Off	Choose whether the light bulb ' on 'or' off '	
	Starteu lamp	OII / OII	each time it is activated	
	Switch lamp	On / Off	Manually turn on and light up the bulb	
	No cianol	Hold	Keep the value of the DMA channel	
	No signal	Clear	Zero the value of the DMA channel	
Standard	UI Color	Blue		
		Golden	Choose screen menu color	
	Show time	Yes / No	Display the running time timer on the Home	
			screen	
	Brightness	000-255	Adjusting screen brightness	
	Screensaver	Off/on	Turn off screen when there is no action	
	XY encoder	No/Yes	XY automatic error correction function	
	X inversion	No/Yes	Inverte pan	
	Y inversion	No/Yes	Inverte tilt	
	Focus inversion	No/Yes	Inverte focus	
	Zoom inversion	No/Yes	Intverte zoom	
Advanced	ed This setting is the main parameter setting for the lighting fixture and requires permission			
	l			

	Error List	No error/View	View errors	
	System ver	Vxxxxxx	System version information	
	Serial NO.	XXXXXXX	Equipment factory number	
	Run timer	00000.0Н	Total system running time (hours)	
Info	Lamp timer	00:00	Operating time after this power on (hours)	
	Equip TEMP	000	Current fixture temperature	
	Head TEMP	000	Current lamp temperature	
	FAN 1 Speed	0000 RPM	Current Fan 1 Speed	
	FAN 2 Speed	0000 RPM	Current Fan 2 Speed	
	Run mode	Auto/Sound	Run auto /sound mode	
	Run speed	0-255	Set the speed for automatic program operation	
	Run cross	0-255	Set step fade speed	
	Built-in 1	Off/on	Device built-in test program 1	
	Built-in 2	Off/on	Device built-in test program 2	
	User PRO 1	Off/on	User self programmed program 1	
Perform	User PRO 2	Off/on	User self programmed program 2	
	User PRO 3	Off/on	User self programmed program 3	
	User PRO 4	Off/on	User self programmed program 4	
	Circle shape	Off/on	(No function)	
	Square shape	Off/on	(No function)	
	Shape range	000-255	(No function)	
	Sound DB	000-255	Adjusting voice sensitivity	
Program	View the following detailed instructions			
Reset	System reset to initial position			

## **Programming function description:**

1: This function can program up to 4 user programs, which can be run in series. That is to say, the programmed 4 programs can be switched on simultaneously in the "Test Run" function. When running, program



1 is run first, then program 2, then program 3, then program 4, and then loop back to program 1, and so on. Of

2: The operations that programming function buttons can achieve:

Select program, read program, select step, delete step, manually or console input, copy current step, paste to selected step, reset current step, save to selected program space

#### Manual control programming:

Select the PR01-4 that needs to be saved to, manually control and set the channel values for one step, and then click step (the number button represents step)

Press the up and down buttons to proceed to the next step. Manually control the setting of channel values again, and so on in the next step.

#### **Delete step:**

If there are too many programming steps, you can delete the following steps. Select the step button and press the 'Next' button to return to the unnecessary step. At this point, the number of steps is displayed as>0XX. Press and hold the OK button for 3 seconds to delete the subsequent steps. The display changes to=0XX.

## Copy step:

Press the copy button to copy all channel values of the current step and temporarily store them in the memory paste board.

#### **Paste steps:**

After copying, you can choose to go to any step and paste the channel values of the pasteboard into the currently selected step channel.

#### **Zeroing step:**

Press the reset button to reset the current channel value.

#### 5. Console control programming:

This device provides a more convenient console input programming function, which can also be used to step by step.



input the program of the console, achieving the function of copying the program programmed by the console.

As shown in the figure, select the manual/console input mode as the console.

At this point, all channel values are inputted by the DMA control panel, which is invalid for manual operation, pasting, and resetting. All channel values are displayed in real-time as the

At this point, programming only requires input from the control panel, or the control panel can run the programmed steps in one step, which is to enter the control panel program. Here, the device only needs to click on the next number and press the up arrow to achieve programming.

#### Save program:

After each step is programmed through manual input or console input, this programming can be saved. Please confirm the selected save location PRO1- PRO4. Please note that the save step length is equal to the step value of=OXX, rather than seeing a step value greater than OXX.

Please delete the remaining steps first, refer to 'Delete Steps', and then press' Save'.

#### Read program and re edit program:

As shown in the figure, select the PR01-PR04 that needs to be read, click the step button, and then press

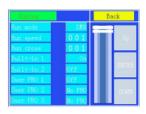


the<down>button to display "Read". At this point, press the OK key to read the selected program. The displayed value after reading is the maximum step value of the current program. If the program is empty, it will be displayed as' Empty 'or' No '

At this point, you can re edit the program that has already been read out. After editing, press Save to overwrite the current program, or select another PR01- PR04 space to save as.

#### Run program:

If you need to run a program that has been programmed and saved, please return to the "Test Run/Performance" function menu, click to select the corresponding user program, and switch to "On"



## 10-DMX Channel

DMX Channel Summary-19 Channels Mode				
Channel		Value	Features	
		0-4	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	
CH1 Color	Color	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
		90-94	Color 9
		95-99	Color 9 + Color 10
		100-104	Color 10
		105-109	Color 10 + Color 11
		110-114	Color 11
		115-119	Color 11 + Color 12
		120-124	Color 12
		125-129	Color 12 + Color 13
		130-134	Color 13
		135-139	Color 13 + Color 14
		140-144	Color 14
		145-149	Color 14 + White
		150-200	Clockwise Rotation
		201-255	Anti clockwise Rotation
		0-3	Off
		4-103	Shutter slow - fast
		104-107	Open
CH2	Strobe	108-207	Shutter slow - fast
		208-212	open
		213-251	Random shuter slow - fast
		252-255	Open
СНЗ	Dim	0-255	Dimming
		0-3	White
CH4	4 Gobo	4-6	Gobo 1
		7-9	Gobo 2
	·		

10-12	Gobo 3
13-15	Gobo 4
16-18	Gobo 5
19-21	Gobo 6
22-24	Gobo 7
25-27	Gobo 8
28-30	Gobo 9
31-33	Gobo 10
34-36	Gobo 11
37-39	Gobo 12
40-42	Gobo 13
43-45	Gobo 14
46-48	Gobo 15
49-51	Gobo 16
52-54	Gobo 17
55-59	Open
60-63	Gobo 1 shake
64-67	Gobo 2 shake
68-71	Gobo 3 shake
72-75	Gobo 4 shake
76-79	Gobo 5 shake
80-83	Gobo 6 shake
84-87	Gobo 7 shake
88-91	Gobo 8 shake
92-95	Gobo 9 shake
96-99	Gobo 10 shake
100-103	Gobo 11 shake
104-107	Gobo 12 shake

		108-111	Gobo 13 shake
		112-115	Gobo 14 shake
		116-119	Gobo 15 shake
		120-123	Gobo 16 shake
		124-127	Gobo 17 shake
		128-189	Clockwise Rotation
		190-193	Stop
		194-255	Anti clockwise Rotation
OUE.	Dulamed	0-31	No Prism
CH5	Prism1	32-255	Prism on
		0-127	0-360° rotation
one	Driem ret	128-190	Clockwise Rotation
СН6	Prism rot	191-192	Stop
		193-255	Anti clockwise Rotation
CH7	Driema	0-31	No Prism
UN/	Prism2	32-255	Prism on
		0-127	0-360° rotation
CH8	Prism rot	128-190	Clockwise Rotation
СПО	Prisiii rut	191-192	Stop
		193-255	Anti clockwise Rotation
СН9	Fucos	0-255	Fucos
CH10	Pan	0-255	Pan movement
CH11	Pan fine	0-255	Pan fine movement
CH12	Tilt	0-255	Tilt movement
CH13	Tilt fine	0-255	Tilt fine movement
CH14	Speed	0-255	Pan&Tilt speed
<b>0</b> 04€	Erroot	0-127	No function
CH15	CH15 Frost	128-191	Frost

		192-255	Rainbow effect
		0-99	No function
		100-105	Bulb Off
CU1C	Lamm	106-199	No function
CH16	Lamp	200-205	Bulb On
		206-249	No function
		250-255	Reset after 5s
CH17	Ring strobe	0-255	Ring effect strobe
		1-4	Red
		5-9	Green
		10-14	Blue
		15-19	Yello
		20-24	Pink
		25-28	Light blue
		29-33	Light green
		34-39	White
		40-48	Color change mode
		49-53	CMYW mode
		54-57	Green mode
		58-62	Red mode
		63-67	Blue mode
		68-72	Yellow mode
		73-77	Pink mode
		78-82	Light blue mode
		83-86	White mode
CH18	Ring	87-91	Green mode
		92-96	Red mode
		97-101	Blue mode
		102-106	Yellow mode
		107-111	Pink mode
		112-115	Light blue mode
		116-120	White mode
		121-125	RGB mode
		126-130	CMY mode
		131-135	White green mode
		136-140	White red mode
		141-144	White blue mode
		145-149	White yellow mode
		150-154	WHite pink mode
		155-159	White light blue mode
		160-164	White light green mode
		165-169	White red mode
		170-174	White blue mode
			·

		175-178	White yellow mode
		179-183	White pink mode
		184-188	White light blue mode
		189-193	Green mode
		194-198	Red mode
		199-202	Blue mode
		203-207	Yellow mode
		208-212	Pink mode
		213-217	Light blue mode
		218-222	Green Red mode
		223-227	Blue pink mode
		228-231	Green blue mode
		232-236	White mode
		237-241	RGBCMY mode
		242-246	RGBWCMY mode
		247-251	RGB mode
		252-255	RGB fad mode
CH19	) Ring rot	0-127	Clockwise Rotation
UIIII	ining rot	128-255	Anti clockwise Rotation

## 11-Fault handling

Corresponding solutions have been proposed for some common faults. Any unresolved issues should be handled by professionals. Before maintaining the lighting fixtures, please disconnect the power supply.

- 1.The light bulb does not light up
- Check if a voltage matching the lamp is installed;
- Check for poor contact at the power supply connection or control switch of the lighting fixture:
- Check if the power supply is insufficient;
- Check if the DMX512 controller has sent instructions.
  - 2. After the lamp is reset normally, it does not accept control from the control panel
- Check if the digital start address value and function options of the lighting fixtures are correct;
- Check if the connection of the communication control line is correct, if the communication line is too long or has been interrupted;
- Check if the control equipment is malfunctioning and if the signal amplifier connected in series is malfunctioning;

- Check if the communication line is too long or if there are other devices interfering with each other:
- Optimize wiring, shorten the length of control signal lines, and separate high-voltage and low-voltage lines for wiring:
- Add a signal amplifier:
- The signal line adopts high-quality shielded twisted pair;
- Connect the signal terminal resistor (120 ohms) at the end of the lamp.
  - 3. The lamp cannot be activated
- Check whether the power supply parameters match the lighting fixtures:
- Inspect the lighting fixtures for poor contact during long-distance transportation due to compression deformation, internal component vibration, moisture, and other reasons
- Or fall off.
- Please check if the internal wires and connectors of the lamp have fallen off or become loose.
- Check if the electronic components of the lighting fixtures (such as electronic transformers, PCB boards, motor control boards, etc.) are loose, short circuited, or hurnt out.
  - 4. During operation, the X-axis or Y-axis of the lighting fixture does not operate normally
- Check one by one according to the previous step;
- Check whether the transmission belts corresponding to the X and Y axis directions inside the lamp are detached or broken:
- Check if the data feedback receiver (optocoupler) corresponding to the X and Y directions inside the lamp is damaged:
- Restart and reset once.

## 12-Accessories list

Ouick lock x 2

Power cable x 1

Dmx512 cable x 1

Manual x 1