



FOS Hydor Wash PRO

User Manual



This manual contains important information.
Please read before operating the fixture.

1 Warnings / Precautions

WARNING!!! To reduce the risk of fire, electric shock, or injury to persons, follow these important safety instructions:

- Non-professionals do not disassemble the light arbitrarily or the accessories inside.
- Rated voltage range: AC110V-120V/60Hz or AC200V-240V / 50Hz (to be selected).
- Do not beam irradiate the flammable materials, flammable materials and the lamp should be maintained at least 1M over the distance.
- Lamps used in ambient temperature: -15 °C -40 °C, the highest temperature of the surface of the lamp: 60 °C.
- To keep away from the liquid substance and humid environment.
- Before using the fixture, you must ensure good grounding, do not install charging and remove any parts.
- The installation of lights must be fixed with screw fasteners with an additional security cable and regular inspection.
- Lamps' consecutive working hours are not recommended to be more than 10 hours.
- Must stop using the fixture if unusual conditions happen during the process.
- Lamp parts of the rotation, external accessories and paste parts should be regularly inspected such as signs of looseness and should be reinforced promptly to prevent accidents.
- The fixture uses fans for cooling; it can easily accumulate dust, so you have to clean it weekly, otherwise the dust will accumulate, leading to poor cooling and lighting output issues.

2 Technical Specifications

Input Voltage: AC90-260V 50/60Hz

Power Consumption: 880W

Light Source: 19pcs 40w 4-IN-1 LEDs (R, G, B, W)

LED Feature: Individual LED control of each colour

Life span: aprox. 50000 hours

Zoom range: 7-35degree

CTC: 10500K

CRI: 71

Control mode: DMX512, Master/Slave, Auto, RDM, Wireless DMX

Channel: 21CH / 78CH / 35CH / 111CH

Dimmer: 0-100% smoothly dimmer, 16-bit

Strobe: 1-25Hz

Effect: Beam, Wash, FX (Kaleidoscope effects)

Bi-directional rotating front lens

Display: LCD with 4 buttons

Movement: Pan 540 degrees, 16-bit; Tilt 205 degrees, 16-bit.

DMX in/out: 3-pin XLR in/out

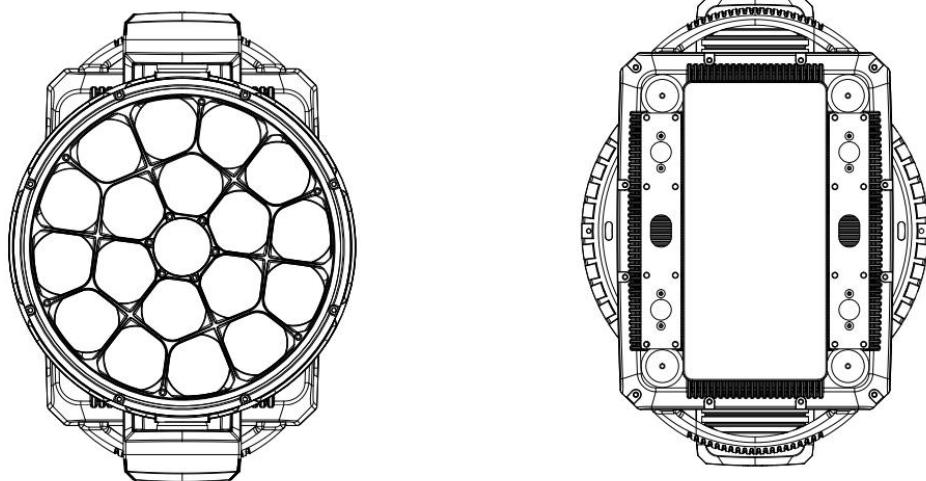
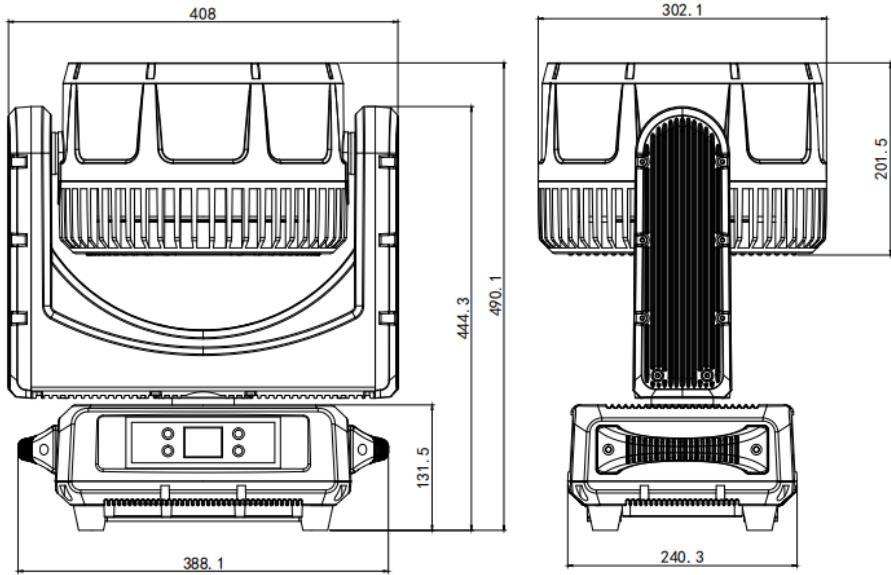
Power connection: PowerCon in/out

Working temperature: -10°C-40°C

Protection rating: IP65

Product size: 408 x 302.1 x 490.1 mm

Net weight: 24.2kg



3 Options menu layout

Address	001-512	DMX address setting
Set	Run mode	DMX/Auto1/Auto2
	Channel	21CH/78CH/35CH/111CH
	Invert Pan	On/Off
	Invert Tilt	On/Off
	Hall Crct	On/Off
	Encoder Crct	On/Off
	Signal keep	On/Off
	Screen Saver	On/Off
	Invert screen	Auto/On/Off
	Update slave	On/Off
	Screen lock	On/Off
	Speed mode	Normal/fast
	Load Default	OK/Cancel
Manual	Current channel mode channel	0-255
Calib	Enter password(0000)	Lamp calibration
Reset	Reset Effect	
	Reset Scan	
	Reset All	
Note	Reset info	Display reset error information
	DMX data	Receive the channel value of the console
	Sensor info	Hall:
		XEnc:
		YEnc:
	Hardware	04.11. 01.0
	Software	08.10. 24.0

4 DMX Channels Table

21CH	Function	Value	Description
1	Red	0-255	Red dimming from dark to light
2	Red fine	0-255	Red 16bit dimming
3	Green	0-255	Green dimming from dark to light
4	Green fine	0-255	Green 16bit dimming
5	Blue	0-255	Blue dimming from dark to light
6	Blue fine	0-255	Blue 16bit dimming
7	White	0-255	White dimming from dark to light
8	White fine	0-255	White 16bit dimming
9	CTO adjustment	0-9	No function
		10-255	Cool white-- Warm white 8000K--2500K
10	Marco Color	0-9	No function
		10-255	Macro Color Selection
11	Strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
12	Total dimmer	0-255	Total dimming from dark to light
13	Total dimmer fine	0-255	Total dimming16bit
14	Pan	0-255	Pan 0-540 degree
15	Pan Fine	0-255	Pan 16bit adjustable

16	Tilt	0-255	Tilt 0-205 degree
17	Tilt Fine	0-255	Tilt 16bit adjustable
18	Reserve		
19	Reset	0-25	No function
		26-76	Effect motors reset
		77-127	XY motors reset
		128-255	All reset
20	Zoom	0-255	Linear adjustment of angle from large to small
21	Front lens Rotation	Workable when 20CH Zoom on value201-255	
		0-127	Step Rotation
		128-188	Anticlockwise Rotation from fast to slow
		189-193	Stop
		194-255	Clockwise rotation from slow to fast

78CH	Function	Value	Description
1	Red	0-255	Red dimming from dark to light
2	Red fine	0-255	Red 16bit dimming
3	Green	0-255	Green dimming from dark to light
4	Green fine	0-255	Green 16bit dimming
5	Blue	0-255	Blue dimming from dark to light
6	Blue fine	0-255	Blue 16bit dimming
7	White	0-255	White dimming from dark to light
8	White fine	0-255	White 16bit dimming
9	CTO adjustment	0-9	No function
		10-255	Cool white-- Warm white 8000K--2500K
10	Marco Color	0-9	No function
		10-255	Macro Color Selection

11	Strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
12	Total dimmer	0-255	Total dimming from dark to light
13	Total dimmer fine	0-255	Total dimming 16bit
14	Pan	0-255	Pan 0-540 degree
15	Pan Fine	0-255	Pan 16bit adjustable
16	Tilt	0-255	Tilt 0-205 degree
17	Tilt Fine	0-255	Tilt 16bit adjustable
18	Pixel Function	0-102	No function
		103-105	RGB Pixel Enabled
		106-255	No function
19	Reset	0-25	No function
		26-76	Effect motors reset
		77-127	XY motors reset
		128-255	All reset
20	Zoom	0-255	Linear adjustment of angle from large to small
21	Front lens Rotation	Workable when 20CH Zoom on value 201-255	
		0-127	Step Rotation
		128-188	Anticlockwise Rotation from fast to slow
		189-193	Stop
		194-255	Clockwise rotation from slow to fast

CH18 set 103-105, will Enable the following Pixel functions			
22	LED1-R	0-255	LED1-red dimming
23	LED1-G	0-255	LED1-green dimming
24	LED1-B	0-255	LED1-blue dimming
25	LED2-R	0-255	LED2-red dimming
26	LED2-G	0-255	LED2-green dimming
27	LED2-B	0-255	LED2-blue dimming
.....
73	LED18-R	0-255	LED18-red dimming
74	LED18-G	0-255	LED18-green dimming
75	LED18-B	0-255	LED18-blue dimming
76	LED19-R	0-255	LED19-red dimming
77	LED19-G	0-255	LED19-green dimming
78	LED19-B	0-255	LED19-blue dimming

35CH	Function	Value	Description
1	Red	0-255	Red dimming from dark to light
2	Red fine	0-255	Red 16bit dimming
3	Green	0-255	Green dimming from dark to light
4	Green fine	0-255	Green 16bit dimming
5	Blue	0-255	Blue dimming from dark to light
6	Blue fine	0-255	Blue 16bit dimming
7	White	0-255	White dimming from dark to light
8	White fine	0-255	White 16bit dimming
9	CTO adjustment	0-9	No function
		10-255	Cool white-- Warm white 8000K--2500K
10	Marco Color	0-9	No function
		10-255	Macro Color Selection
11	Strobe	0-3	Close

		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
12	Total dimmer	0-255	Total dimming from dark to light
13	Total dimmer fine	0-255	Total dimming16bit
14	Pan	0-255	Pan 0-540 degree
15	Pan Fine	0-255	Pan 16bit adjustable
16	Tilt	0-255	Tilt 0-205 degree
17	Tilt Fine	0-255	Tilt 16bit adjustable
18	Reserve		
19	Reset	0-25	No function
		26-76	Effect motors reset
		77-127	XY motors reset
		128-255	All reset
20	Zoom	0-255	Linear adjustment of angle from large to small
21	Front lens Rotation	Workable when 20CH Zoom on value201-255	
		0-127	Step Rotation
		128-188	Anticlockwise Rotation from fast to slow
		189-193	Stop
		194-255	Clockwise rotation from slow to fast
22	Shape Selection	0-7	No function
		8-11	Shape1
		12-16	Shape2

		17-21	Shape3
		22-26	Shape4
		5values each shape
		247-251	Shape48
		252-255	Shape49
		(details check below table)	
23	Shape speed	0-63	Shape Indexing
		64-158	Backward from fast to slow
		159-160	Stop
		161-255	Forward from slow to fast
24	Shape fade	0-255	Shape movement fade off
25	Shape red	0-255	Red linear dimming from dark to light
26	Shape green	0-255	Green linear dimming from dark to light
27	Shape blue	0-255	Blue linear dimming from dark to light
28	Shape white	0-255	White linear dimming from dark to light
29	Shape dimming	0-255	Linear From dark to bright
30	Background dimming	0-255	Linear From dark to bright
31	Shape transition	0-255	Transitions between shape and shape
32	Shape Offset	0-255	Shape offset
33	Shape strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe

		239-251	Random strobe High speed strobe
		252-255	Open
34	Background strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
35	Background selection	0-7	Wash
		8	No function
		9	Ring1
		10	Ring2
		11	Ring3
		12	Ring1+3
		13	Ring1+2
		14	Ring1+2+3
		15	Ring2+3
		16-254	Ring 1+2+3
		255	Mirror effect

111CH	Function	Value	Description
1	Red	0-255	Red dimming from dark to light
2	Red fine	0-255	Red 16bit dimming
3	Green	0-255	Green dimming from dark to light
4	Green fine	0-255	Green 16bit dimming
5	Blue	0-255	Blue dimming from dark to light

6	Blue fine	0-255	Blue 16bit dimming
7	White	0-255	White dimming from dark to light
8	White fine	0-255	White 16bit dimming
9	CTO adjustment	0-9	No function
		10-255	Cool white-- Warm white 8000K--2500K
10	Marco Color	0-9	No function
		10-255	Macro Color Selection
11	Strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
12	Total dimmer	0-255	Total dimming from dark to light
13	Total dimmer fine	0-255	Total dimming16bit
14	Pan	0-255	Pan 0-540 degree
15	Pan Fine	0-255	Pan 16bit adjustable
16	Tilt	0-255	Tilt 0-205 degree
17	Tilt Fine	0-255	Tilt 16bit adjustable
18	Pixel Function	0-102	No function
		103-105	RGBW Pixel Enabled
		106-255	No function
19	Reset	0-25	No function
		26-76	Effect motors reset
		77-127	XY motors reset
		128-255	All reset

20	Zoom	0-255	Linear adjustment of angle from large to small
21	Front lens Rotation	0-255	Workable when 20CH Zoom on value201-255
		0-127	Step Rotation
		128-188	Anticlockwise Rotation from fast to slow
		189-193	Stop
		194-255	Clockwise rotation from slow to fast
22	Shape Selection	0-7	No function
		8-11	Shape1
		12-16	Shape2
		17-21	Shape3
		22-26	Shape4
		5values each shape
		247-251	Shape48
		252-255	Shape49
			(details check below table)
23	Shape speed	0-63	Shape Indexing
		64-158	Backward from fast to slow
		159-160	Stop
		161-255	Forward from slow to fast
24	Shape fade	0-255	Shape movement fade off
25	Shape red	0-255	Red linear dimming from dark to light
26	Shape green	0-255	Green linear dimming from dark to light
27	Shape blue	0-255	Blue linear dimming from dark to light
28	Shape white	0-255	White linear dimming from dark to light
29	Shape dimming	0-255	Linear From dark to bright
30	Background dimming	0-255	Linear From dark to bright

31	Shape transition	0-255	Transitions between shape and shape
32	Shape Offset	0-255	Shape offset
33	Shape strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
34	Background strobe	0-3	Close
		4-103	Strobe from slow to fast
		104-107	Open
		108-207	Pulsation Strobe from slow to fast
		208-212	Open
		213-225	Random Strobe Slow speed strobe
		226-238	Random Strobe Medium speed strobe
		239-251	Random strobe High speed strobe
		252-255	Open
35	Background selection	0-7	Wash
		8	No function
		9	Ring1
		10	Ring2
		11	Ring3
		12	Ring1+3
		13	Ring1+2
		14	Ring1+2+3
		15	Ring2+3

		16-254	Ring 1+2+3
		255	Mirror effect
CH18 set 103-105, will Enable the following Pixel functions			
36	LED1-R	0-255	LED1-red dimming
37	LED1-G	0-255	LED1-green dimming
38	LED1-B	0-255	LED1-blue dimming
39	LED1-W	0-255	LED1-white dimming
40	LED2-R	0-255	LED2-red dimming
41	LED2-G	0-255	LED2-green dimming
42	LED2-B	0-255	LED2-blue dimming
43	LED2-W	0-255	LED2-white dimming
.....
104	LED18-R	0-255	LED18-red dimming
105	LED18-G	0-255	LED18-green dimming
106	LED18-B	0-255	LED18-blue dimming
107	LED18-W	0-255	LED18-white dimming
108	LED19-R	0-255	LED19-red dimming
109	LED19-G	0-255	LED19-green dimming
110	LED19-B	0-255	LED19-blue dimming
111	LED19-W	0-255	LED19-white dimming

Shape selection and shape speed table

Value	Shape Selection	Shape Speed
0-7	No function	
8-11	Shape1	No Speed, shape static
12-16	Shape2	
17-21	Shape3	
22-26	Shape4	
27-31	Shape5	
32-36	Shape6	0-63:Shape Indexing, static
37-41	Shape7	64-158:Closing effect from fast to slow

		159-160: Stop 161-255: Opening effect from slow to fast
42-46	Shape8	0-63:Shape Indexing, static
47-51	Shape9	64-158:Open Close effect from fast to slow 159-160: Stop 161-255: Open Close effect from slow to fast
52-56	Shape10	0-63: Stop
57-61	Shape11	64-158:Instant on off from fast to slow 159-160: Stop 161-255: Instant on off from slow to fast
62-71	Shape12 Rainbow	0-63: Stop 64-158:Backward from fast to slow 159-160: Stop 161-255: Forward from slow to fast
72-236	Shape13-shape45	0-63: Shape Indexing, static 64-158:Backward from fast to slow 159-160: Stop 161-255: Forward from slow to fast
237-241	Shape46	0-63: Stop
242-246	Shape47	64-158:Backward from fast to slow 159-160: Stop 161-255: Forward from slow to fast
247-251	Shape48	0-63: Shape Indexing, static
252-255	Shape49	64-158:Backward from fast to slow 159-160: Stop 161-255: Forward from slow to fast

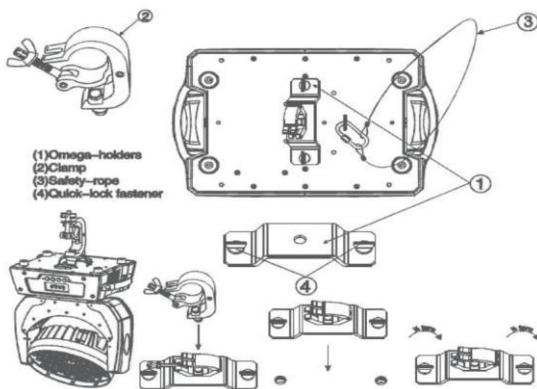
5 Installing the fixture

Please keep the equipment far away from flammable objects like finishing

material, etc. Keep at least 0.5m distance from the flammable objects.

Warning: using two lamp clamps to fix the equipment on the bottom of the lamp holder according to the instructions. to make sure the place where the lamp is safe and suitable, and the installation point that has been chosen is safe and reliable.

The place of installing the lamp must support 10 times the weight of the lamp itself. Must install the second protection when fixing the equipment, like proper protective screening. The second protection is used to prevent the drop off and loss of the lamp and injuries. Lamps can be directly installed in the lamp holder, which is shown in the figure:



6 Power connection

Please check the power equipment supported.

Please plug the power source wire connected to the main power source.

(EU)Wire	Wire(America)	Direction of wire	General marks
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	



Warranty Card

Name	Model
------	-------

Production	Purchase
------------	----------

End User
Company Name:
Add:

Sale Store	
Link man:	
Tel:	Stamp

Description: These must be truthfully fill, sealed by the end-user and point-of-sale, or else the warranty will not work (warranty period and terms, see the following)

warranty period: one year since purchase warranty terms: 1. If fail when using the product in normal state, you can made under the provisions of the warranty, show the warranty card and purchase bills(copy), and enjoy free maintenance service in a specific service center or the manufacturer.

2. The following will be the implementation of paid service:

- (1)Without the effective warranty card
- (2)There's blank, alter and no point-of-sale name
- (3)Fail caused by short circuit/overload
- (4)Fail caused by transportation or unloading, or lack of maintenance
- (5)Fail caused by not operating by manual
- (6)Fail caused by disassembling without authorization
- (7)Fail caused by using the unauthorized control system

Note:

Based on our company continuing to improve the product, the statement containing data may have changed. Company retains its right to change specifications related to when product is improved. Thanks for your understanding.