MOVING WASH 420 PLUS

User manual

Please read the instructions carefully before use

TABLE OF CONTENTS

- Safety Instructions 2
- Technical Specifications 4
- How To Control The Unit..... 6
- Channel 8
- Trouble shooting 13
- Fixture Cleaning..... 14

Statement

The product has well capability and intact packing when leave factory. All of the user should comply with warning item and manual, any misuse cause of the damages are not included in our guarantee, and also can not be responsible for any malfunction & problem owing to ignore the manual.

1 Safety Instructions

Please keep this User Guide for future consultation. If you sell the unit to another user, be sure that they also receive this instruction booklet.

- **Unpack and check carefully there is no transportation damage before using the unit.**
- **Before operating, ensure that the voltage and frequency of power supply match the power requirements of the unit.**
- **It's important to ground the yellow/green conductor to earth in order to avoid electric shock.**
- **The unit is for indoor use only. Use only in a dry location.**
- **The unit must be installed in a location with adequate ventilation, at least 50cm from adjacent surfaces. Be sure that no ventilation slots are blocked.**
- **Disconnect main power before replacement or servicing.**

- **Make sure there are no flammable materials close to the unit while operating as it is fire hazard.**
- **Use safety cable when fixes this unit. DO NOT handle the unit by taking its head only, but always by taking its base.**

- **Maximum ambient temperature is Ta: 40℃. DO NOT operate it where the temperature is higher than this Unit surface temperature may reach up to 85℃. DO NOT touch the housing bare-hand during its operation. Turn off the power and allow about 15 minutes for the unit to cool down before replacing or serving.**

- **In the event of serious operating problem, stop using the unit immediately.Never try to repair the unit by yourself. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized technical assistance center. Always use the same type spare parts.**

- **DO NOT touch any wire during operation as high voltage might be causing electric shock.**

Warning:

- **To prevent or reduce the risk of electrical shock or fire, do not expose the unit to rain or moisture.**
- **DO NOT open the unit within five minutes after switching off.**

- **The housing, the lenses, or the ultraviolet filter must be replaced if they are visibly damaged.**

Caution:

There are no user serviceable parts inside the unit. DO NOT open the housing or attempt any repairs yourself. In the unlikely event your unit may require service, please contact your nearest dealer.

Installation:

The unit should be mounted via its screw holes on the bracket. Always ensure that the unit is firmly fixed to avoid vibration and slipping while operating.

And make sure that the structure to which you are attaching the unit is secure and is able to support a weight of 10 times of the unit's weight. Also always use a safety cable that can hold 12 times of the weight of the unit when installing the fixture.

The equipment must be fixed by professionals. And it must be fixed at a place where is out of the touch of people and has no one pass by or under it.

2 Technical Specifications

Light Sources: 7x40W RGBW Original LED

Power Voltage: AC 100-240V, 50/60Hz, 500w

Single LED power: 40W

Color: RGBW automatic correction 16.7 million pixels

Electronic dimmer:0～100% linear

Control

DMX Channel: 23/35/51 Channel

Control Modes: DMX512

Software Upgrade: Firmware update via DMX link

Pan/Tilt

Pan/Tilt: 540°

Construction

Display: LCD Display

Data In/Out socket: 3-pin XLR sockets

Power Socket: Powercon in/out

Protection Rating: IP20

Features

Motorized liner zoom system,

zoom range: 4.5°~45° Outstanding color

macro effect,CTO,Kaleido effects,led

single controlled

Dimmer: 0~100% smooth dimming

Variable strobe effects

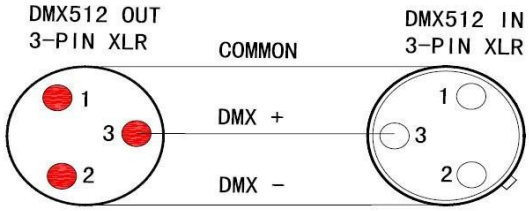
Fast, quiet operation and flicker free

/ 270° Pan/Tilt

Resolution: 16 bit

3 How To Control The Unit

The DMX512 is widely used in intelligent lighting control,with a DMX 512 controller.connect several lights together,dmx in and dmx out, 3 pin XLR connectors: Pin 1: GND, Pin 2: Negative signal (-), Pin 3: Positive signal (+)



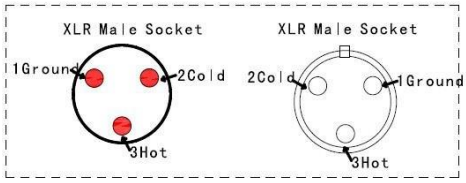


Figure2

XLR Pin Configuration
pin1=Ground
pin2=Data Compliment(negative)
pin3=Data true(positive)

Display:

MENU To select the programming functions DOWN To go backward in the selected functions uP To go forward in the selected functions ENTER To confirm the selected functions

Set DMX Address Code

Press "Menu" to "Set DMX Address",and press"ENTER" keys to enter into Show "Set DMX Address DMX Address:001",Press the "UP and DOWN" keys to amended

Press "ENTER"keys to save and Exit,Press the"MENU"Keys does not save and Exit

Menu			
DmxAddr	001 - 512		
Fix Set	Ch Mode	STD/HIS	
	Run Mode	DMX/Host	
	Pan Inv	Close/Open	
	Tilt Inv	Close/Open	
Manual	Pan	0 - 255	
	Pan Fine	0 - 255	
	Tilt	0 - 255	
	Tilt Fine	0 - 255	
	.	0 - 255	
	.	0 - 255	
	.	0 - 255	
Fix Info	TimeInfo	Cur Time	xxxh
		Show Time	xxxh
		PowerCnt	xxx
	SenSor	Pan	OK/NG
		Tilt	OK/NG
		Zoom	OK/NG
		Temp	OK/NG
		Fan	OK/NG

	TempInfo	Temprat	xxx C
		FanSpeed	xxxx RPM
	Soft Ver	Panel	Vx.xxx
		Motor	Vx.xxx
Home Set	Password	0 - 255	
	Pan	0 - 255	
	Tilt	0 - 255	
	Zoom	0 - 255	
	Red	0 - 255	
	Green	0 - 255	
	Blue	0 - 255	
	White	0 - 255	
FixReset	Reset	Cance/Run	
	Factory	Cance/Run	
Display	Language	EN/CH	
	DispFlip	Open/Close	
	DispMode	Show/60s	

Channel list(23 channels)			
chs	function	DMX value	description
1	X	0-255	0-540 degree
2	X fine	0-255	16 bit
3	Y	0-255	0-205 degree
4	Y fine	0-255	16 bit
5	XY speed	0-255	Fast-slow
6	Zoom	0-255	Angle from small-big
7	rotating	0-127	0~60 degree
		128-191	Antiwise fast-slow

		200-255	Forward slow-fast
8	Dimmer	0-255	From dark-bright
9	Strobe	0-3	on
		4-200	Synchronous strobe from slow-fast
		201-215	Random strobe in low speed
		216-234	Random strobe in middle speed
		235-255	Random strobe in high speed
10	R dimmer	0-255	From dark-bright
11	G dimmer	0-255	From dark-bright
12	B dimmer	0-255	From dark-bright
13	W dimmer	0-255	From dark-bright
14	CT	0-255	Linear CT control
15	Wash	0-255	Inner color gradual change
16	Static effect	0-255	5 no. One effect
17	Dynamic effect	0-255	5 no. One effect
18	Dynamic effect speed	0-127	Forward from fast-slow
		128-255	Reverse from slow-fast
19	Background R	0-255	Dark-bright
20	Background G	0-255	Dark-bright
21	Background B	0-255	Dark-bright
22	Background W	0-255	Dark-bright
23	Reset	0-199	invalid
		200-205	Reset after 5 seconds
		206-255	invalid

DMX channel´s functions and values (23/35/51 DMX channels):

Channel list(35 channels)			
chs	function	DMX value	description
1	red	0-255	Red dimmer
2	Red fine	0-255	Red dimmer fine
3	green	0-255	Green dimmer
4	Green fine	0-255	Green dimmer fine
5	blue	0-255	Blue dimmer
6	Blue fine	0-255	Blue dimmer fine
7	white	0-255	White dimmer
8	White fine	0-255	White dimmer fine

9	CT	0-255	Linear CT control
10	Color Macro	0-255	Color Macro function
11	strobe	0-3	off
		4-103	Synchronous strobe slow-fast（1HZ-25HZ）
		104-107	on
		108-207	Divide strobe from slow-fast（1HZ-25HZ）
		208-212	on
		213-225	Random strobe in low speed
		226-238	Random strobe in middle speed
		239-251	Random strobe in high speed
		252-255	on
12	dimmer	0-255	Linear dimmer from dark-bright
13	Dimmer fine	0-255	Dimmer fine
14	pan	0-255	pan
15	Pan fine	0-255	Pan fine
16	tilt	0-255	tilt
17	Tilt fine	0-255	Tilt fine
18	function	0-255	
19	reset	0-199	1 invalid
		200-205	Reset after 5 seconds
		206-255	invalid
20	zoom	0-255	zoom
21	Lens rotating	0-127	0~60 degree
		128-191	Forward limitless rotate
		192-255	Reverse limitless rotate
22	pattern	0-255	Pattern rotate
23	P attern speed	0-255	Pattern speed

24	Pattern effect fade	0-255	
25	Pattern effect R	0-255	
26	Pattern effect G	0-255	
27	Pattern effect B	0-255	
28	Pattern effect W	0-255	
29	Pattern dimmer	0-255	Pattern 0-100% dimmer
30	Background dimmer	0-255	Background 0-100% dimmer
31	Pattern transition	0-255	
32	Pattern angle	0-255	Pattern design
33	Prospect strobe	0-255	Prospect strobe（with 11 chs）
34	Background strobe	0-255	Background strobe（with 11 chs）
35	Background selection	0-255	

Channel list(51 channels)

chs	function	DMX value	description
1	X	0-255	0-540 degree
2	X fine	0-255	16 bit
3	Y	0-255	0-205 degree
4	Y fine	0-255	16 bit

5	XY speed	0-255	Fast-slow
6	zoom	0-255	Small-big
7	rotating	0-127	0~60 degree
		128-191	Forward fast-slow
		200-255	Reverse slow-fast
8	dimmer	0-255	Dark-bright
9	strobe	0-3	on
		4-200	Synchronous strobe slow-fast
		201-215	Random strobe in low speed
		216-234	Random strobe in midlle speed
		235-255	Random strobe in high speed
10	R dimmer	0-255	
11	G dimmer	0-255	
12	B dimmer	0-255	
13	W dimmer	0-255	
14	CT	0-255	Linear CT control
15	Wash	0-255	
16	Static effect	0-255	5 no. One effect
17	Dynamic effect	0-255	5 no. One effect
18	Dynamic effect speed	0-127	Forward fast-slow
		128-255	Reverse slow-fast
19	Background R	0-255	Dark-bright
20	Background G	0-255	Dark-bright
21	Background B	0-255	Dark-bright
22	Background W	0-255	Dark-bright
23	reset	0-199	invalid
		200-205	Reset after 5s
		206-255	invalid
24	R1 LED	0-255	R1 LED dimmer

	dimmer		
25	G1 LED dimmer	0-255	G1 LED dimmer
26	B1 LED dimmer	0-255	B1 LED dimmer
27	W1 LED dimmer	0-255	W1 LED dimmer
...	...	.....	.....
...	...	.....	.....
48	R7 LED dimmer	0-255	R7 LED dimmer
49	G7 LED dimmer	0-255	G7 LED dimmer
50	B7 LED dimmer	0-255	B7 LED dimmer
51	W7 LED dimmer	0-255	W7 LED dimmer

4 Trouble shooting

Following are a few common problems that may occur during operation. Here are some suggestions for easy troubleshooting:

- **The unit does not work, no light and the fan does not work**
- **Check the connection of power and main fuse.**
- **Measure the mains voltage on the main connector.**
- **Check the power on LED.**

- **Not responding to DMX controller**
- **DMX LED should be on. If not, check DMX connectors, cables to see if link properly.**
- **If the DMX LED is on and no response to the channel, check the address settings and DMX polarity.**
- **If you have intermittent DMX signal problems, check the pins on connectors or on PCB of the unit or the previous one.**
- **Try to use another DMX controller.**
- **Check if the DMX cables run near or run alongside to high voltage cables that may cause damage or interference to DMX interface circuit.**

- **One of the channels is not working well**
- **The stepper motor might be damaged or the cable connected to the PCB is broken.**

6. Fixture Cleaning

The cleaning of internal and external optical lenses and/or mirrors must be carried out periodically to optimize light output. Cleaning frequency depends on the environment in which the fixture operates: damp, smoky or particularly dirty surrounding can cause greater accumulationofdirtontheunit'soptics.

1. **Clean with soft cloth using normal glass cleaning fluid.**
2. **Always dry the parts carefully.**

3. **Clean the external optics at least every 20 days. Clean the internal optics at least every 30/60 days.**