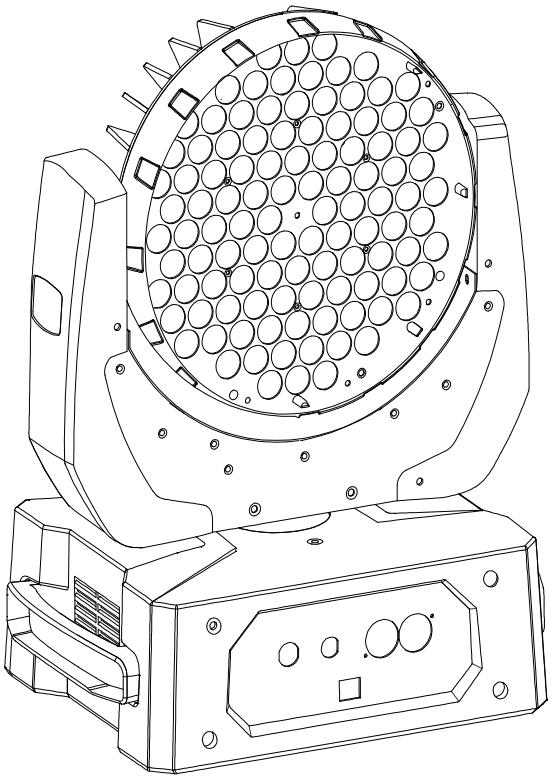
USER MANUAL

LED WASH PRO

RGB



INSTRUCTION

Thank you for purchasing our product. LED WASH PRO is designed for professional stage and nightclub lighting applications. With its unlimited colors and the fast movement, it is perfect for disco, bars, stage, shopping center, and TV shows, etc, owing to its quality in the color production and its versatility in use.

INDEX

I. Function and Features.....01
II. Technical Data.....01
III.Operation Guide.....02
IV. Connection of Fixtures.....06
V. Notice.....06
VI. Packing Contents.....07

I. Function and Features

1. With light source of LED, this fixture has following advantages:
   - long service life, good at resistance to shock; service life is 50,000 hours under nominal working conditions, and only 5% decrease in the first 1,000 working hours;
   - bright-colored, color saturation can be reached at more than 90% to produce more brilliant light effect;
   - high efficiency, and low power consumption. There is no color filter loss, being efficient at electro-optic transfer;
   - RGB color mixing with or without DMX control;
   - Environmental protected, since there is no ultraviolet radiation and infrared ray in the spectrum, it is low at heat emission and radiation. It is a typical environmental protected lighting fixture with cool light source;
2. Pan and Tilt Scan
   - Pan 540°, Tilt: 265°
   - With 8 or 16 resolution
   - Scan speed adjustable
   - Automatic repositioning by photoelectric repositioning system
3. Four-digit LED display for function set and corresponding parameters adjustment;
4. With DMX512 signal, this fixture is compatible with various kind of digital dimmer;
5. With parameters such as ID addressing, function set, strobe speed, strobe pulse, and power-off
   memory adjustable;
6. 10 / 12 / 16 control channels selectable;
7. With engineering plastics housing of high strength, this fixture is of durability and attractive shape, which is widely used at entertainment places, such as dancing hall, discos, pubs, clubs, etc.

II. Technical Data

Model: LED WASH PRO 3W
Power Supply: AC220V±10%, 50Hz
Power Consumption: 324W max
Light Source: 108 high power LEDs (Red: 36×3W, Green: 36×3W, Blue: 36×3W)
Beam Angle: 25°
Illumination Intensity: 74100 Lx @1m

Control Signal: DMX512, Auto Mode, Master/Slave Mode
Input Signal: XLR 3-Pin (In & Out)
Control Channels: 10/12/16
Pan 540°, Tilt: 265°
Working Temperature: -20□~40□
Protection grade: IP20
Dimension: 338mm×235mm×433mm
Net Weight: 9.8Kg

Illuminance Spectrum

	1m	2m	3m	4m	5m	
R	12200	4260	2140	1170	898	LUX
G	24200	7810	3740	2160	1540	LUX
B	39000	12610	5960	3460	2400	LUX
W	34500	18820	8960	5100	3400	LUX
Full color	74100	24500	11620	6800	4600	LUX

III.Operation Guide

1. DMX Code Addressing

In DMX mode, all fixtures must be set a preliminary ID address (default value: 001). It is used to receive signal from the controller and make the right response. With 10 channel, When the preliminary value of the first fixture is 001, the second one should be 011; the third one should be 21, with M channel. the N should be (N-1)*M+1 and so on and so forth.

2. DMX Channel Assignments

This fixture occupies 10/12/16 channels. For the corresponding value, please refer to **TABLE 1** as follows

Channel			Function	DMX VALUE		priority
10	12	16		0	1～255	
1	1	1	Master Dimmer	Linear Dimmer 0～100%		2

2	2	2	Red	Linear Dimmer 0～100%		5
3	3	3	Green	Linear Dimmer 0～100%		5
4	4	4	Blue	Linear Dimmer 0～100%		5
	5	5	Rainbow effects	off	Mixed color control on preset turn.	4
	6	6	Rotating Rainbow Effects	off	Mixed color in cycle with speed adjustable from slow to fast	3
5	7	7	Strobe	off	Strobe speed adjustable from slow to fast	2
		8	Pulse strobe	50%	Strobe VS Dark, duty cycle 90%～10%	2
		9	Build-in programs	off	Refer to Table 2: ***Build-in Programs Instruction***	1
		10	ID Addressing	off	ID Address: 0(0-3),1(4-7)…62 (248-251), 63(252-255)	1
		11	White balance	off	1-254 (White balance), 255 custom white balance	2
6	8	12	Pan scan	8 bit adjustment		2
7	9	13	Tilt scan	8 bit adjustment		2
8	10	14	Pan fine	16 bit fine		2
9	11	15	Tilt fine	16 bit fine		2
10	12	16	Speed adjust			2

3. ID Addressing

- Under the same ID Address, there are 64 sub-ID; fixtures make the right response according to DMX address and corresponding Sub-ID of its tenth channel.
- When DMX value of the tenth channel ≤3, fixtures will not be influenced by Sub-ID address, and all fixtures will be controlled by DMX address only;
- When DMX value of the tenth channel >3, fixtures will be controlled by both DMX address and Sub-ID address.

- The corresponding Sub-ID value of the tenth channel is DMX Value of the tenth channel ÷4 .

  For instance, if DMX value=13, 13÷4=3…1, the corresponding sub-ID value =3.

  Fixture 1: DMX Address=36, ID Address=5;

  Fixture 2: DMX Address=36, ID Address=8;

- To use a controller to control these two fixtures with same DMX address, but different ID address:

  If corresponding controlled ID=0, both fixtures will not work;

  If ID Address =5, only fixture 1 work;

  If ID Address=8, only fixture 2 work;

  If ID Address ≠0, 5, or 8, both fixtures will not work.

4. Build-in Programs Instruction

Built-in Programs		Program 1	Program 2	Program 3	Program 4	Program 5
		Dimmer: lower→higher→lower, Mixed color in cycle	Dimmer: lower→higher (in a slow speed), higher→lower (in a fast speed)	Dimmer: lower→higher (in a fast speed), higher→lower (in a slow speed)	A blackout in each color change.	Dimmer controlled by sound beat, mixed clor in cycle
		DMX Value	DMX Value	DMX Value	DMX Value	DMX Value
1	Slow ↓ Fast	1-8	33-40	65-72	97-104	129-136
2		9-16	41-48	73-80	105-112	137-144
3		17-24	49-56	81-88	113-120	145-152
4		25-32	57-64	89-96	121-128	153-160

Built-in programs		Program 6	Program 7	Program 8	Program 9	Program 10	Program 11	Program 12	Program 13
		Red	Green	Blue	Red & Green	Green & Blue	Red & Blue	Full color	White
		DMX Value	DMX Value	DMX Value	DMX Value	DMX Value	DMX Value	DMX Value	DMX Value
1	Off	161-163	173-175	185-187	197-199	209-211	221-223	233-235	245-247

2	Slow	164-166	176-178	188-190	200-202	212-214	224-226	236-238	248-250
3	Medium	167-169	179-181	191-193	203-205	215-217	227-229	239-241	251-253
4	Fast	170-172	182-184	194-196	206-208	218-220	230-232	242-244	254-255

Table 2

5. LCD Display Menu Instruction

【MODE】 switch the working mode

【UP】 is used to increase the selected parameter value, hold the button to increase rapidly.

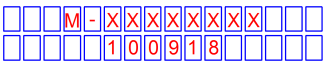
【DOWN】 is used to decrease the selected parameter value; hold the button to decrease rapidly.

Button **【ENTER】** is used to select parameters. The selected parameter value can be adjusted when it is flashing. Press continually to install self-defining white balance(refer to self-defining white balance)

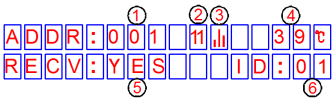
Press Button **【MODE】** to switch the following modes in cycle. In the corresponding mode, press Button **【ENTER】** to select parameters in cycle and the selected parameter will start flashing. Then press Button **【UP】** or **【DOWN】** to adjust the parameter value. All the change will be saved automatically.

Booting Interface:

Display the model and its version of the fixture

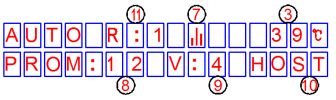


Mode 1: DMX512 Control Mode



① DMX address code range: 001～512
② Control channels: 10 / 12 / 16
③ Signal status: display if there is DMX signal in
④ Temperature of PCB panel: display temperature of PCB panel. (Range: 39～99)
⑤ Signal source: display the source of signal. WIRE: DMX512 Signal
⑥ ID addressing: 00～63

Mode 2: Auto Mode (In this mode, neither DMX line nor wireless signal is acceptable)



⑦ Signal mark: display if there is DMX signal out.
⑧ Build-in program: 01～13
⑨ Build-in program parameter: 1～4
⑩ Master / Slave setting: "HOST": Master; "SELF": Slave

6. Build-in Programs Setting

- In build-in programs 1-4, Mode 4 is to adjust the cycle speed. The cycle of build-in program 1-4 is about 10s～2s.
- In build-in program 5, build-in program 1-4 is to set the cycle speed to 120s～5s

- In build-in programs 6-13, build-in program 1-4 is to set Strobe. 1 refers to non-strobe; Strobe speed of 2, 3, 4 is 0.3s/sec, 1s/sec, 5s/sec respectively.

7. Custom-defined White Balance

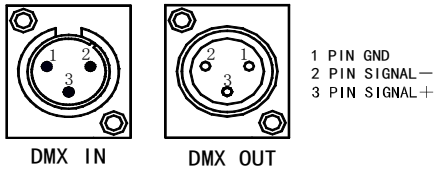
- In Mode 1, set the first channel to 255, through controller to adjust 2, 3,4 channel value, the other channels is 0, When it achieves the expected value, press Button **【ENTER】**. When there appears "W" before the temperature value on the LCD display interface, the white balance is set successfully.
- If all the user-defined white balance RGB values are set to 0, the white balance will resume to default value.

8. Master-slave setting

Under master-slave mode, only need to set 1 "HOST", the other lights will be DMX mode(no need to adjust ID code), only 1"HOST" in entire communication system. prohibited to connect controller.

IV. Connection of Fixture

1. 3-Pin XLR Socket connection line: 1 pin: signal GND, 2 pin Signal－, 3 pin signal ＋, as listed in the graph below.



2. DMX line should use STP (Shielded Twisted Pair). The transfer distance should be within the range of 300m. If out of this range, it should be equipped with a DMX distributor. Each distributor can connect up to 32 fixtures.
3. The DMX line should be connected in series one by one. That is each output of former fixture connects to the input of its follower, and each output DMX line can not be divided into more than one outputs;
4. There should be a terminator on the last unit of DMX line. A terminator is a 120 ohm 1 watt resistor which is a connection between Pin 2 and Pin 3 of a Male XLR connector. Using a cable terminator will decrease the possibility of erratic behavior.

V. Notice

1. before install or use of this fixture, please read and follow these instructions carefully and keep this manual in a safe place for future reference;
2. before install or use of this fixture, please check the address code and operating modes are set right;
3. before install or maintain this fixture, make sure the power is off;
4. When the fixture is running, don't unplug live DMX connection line;

5. before use this fixture safely, make sure the fixture is appropriately earthed;
6. in DMX control mode, any fixture in DMX chain set as Master Mode will lead fixture work inappropriately;
7. in Master/Slave mode, there can only be one Master, and signal input of controller prohibited.

VI. Packing Contents

Items included in the packing:

- ✓ An unit of LED WASH PRO 3W
- ✓ A 3-Pin DMX control line
- ✓ 1 power cord
- ✓ An user manual

Please Note: **Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.**