

# MH1910 SMARTWASH 1910



CE F IP20  $t_a 40^{\circ}\text{C}$   $t_c 100^{\circ}\text{C}$

## User Manual

KEEP THIS MANUAL FOR FUTURE NEEDS



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## 1 SAFETY INSTRUCTIONS



### CAUTION

Becareful with your operations. With a dangerous voltage you can suffer a dangerous electric shock when touching wires!

This device has left the factory in perfect condition. In order to maintain this condition and to ensure a safe operation, it is absolutely necessary for the user to follow the safety instructions and warning notes written in this user manual.



### IMPORTANT

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems.

If the device has been exposed to temperature changes due to environmental changes, do not switch it on immediately. The arising condensation could damage the device. Leave the device switched off until it has reached room temperature.

This device falls under protection-class I. Therefore it is essential that the device be earthed.

The electric connection must carry out by qualified person.

The device shall only be used with rated voltage and frequency.

Make sure that the available voltage is not higher than stated at the end of this manual.

Make sure the power cord is never crimped or damaged by sharp edges. If this would be the case, replacement of the cable must be done by an authorized dealer.

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.

During initial start-up some smoke or smell may arise. This is a normal process and does not necessarily mean that the device is defective, it should decrease gradually.

Please don't project the beam onto combustible substances.

Fixtures cannot be installed on combustible substances, keep more than 50cm distance with wall for smooth air flow, so there should be no shelter for fans and ventilation for heat radiation.

If the external flexible cable or cord of this luminaire is damaged, it shall be exclusively replaced by the manufacturer or his service agent or a similar qualified person in order to avoid a hazard.

## 8 MAINTENANCE AND CLEANING

The following points have to be considered during the inspection:

- 1) All screws for installing the devices or parts of the device have to be tightly connected and must not be corroded.
- 2) There must not be any deformations on the housing, color lenses, fixations and installation spots (ceiling, suspension, trussing).
- 3) Mechanically moved parts must not show any traces of wearing and must not rotate with unbalances.
- 4) The electric power supply cables must not show any damage, material fatigue or sediments.

Further instructions depending on the installation spot and usage have to be adhered by a skilled installer and any safety problems have to be removed.



### CAUTION

Disconnect from mains before starting maintenance operation.



In order to make the lights in good condition and extend the life time, we suggest a regular cleaning to the lights.

- 1) Clean the inside and outside lens each week to avoid the weakness of the lights due to accumulation of dust.
- 2) Clean the fan each week.
- 3) A detailed electric check by approved electrical engineer each three month, make sure that the circuit contacts are in good condition, prevent the poor contact of circuit from overheating.

We recommend a frequent cleaning of the device. Please use a moist, lint-free cloth. Never use alcohol or solvents.

There are no serviceable parts inside the device. Please refer to the instructions under "Installation instructions".

Should you need any spare parts, please order genuine parts from your local dealer.

20	Tilt	0-255	TILT
21	Tilt fine	0-255	TILT FINE
22	Color crossfade	0-255	COLOR CROSSFADE
23	Reset	0-25	Unused range
		26-255	Wait 5 seconds for automatic restart
24	Pan Rotation	0-255	Pan Rotation
25	Tilt Rotation	0-255	Tilt Rotation

## 2 UNPACKING

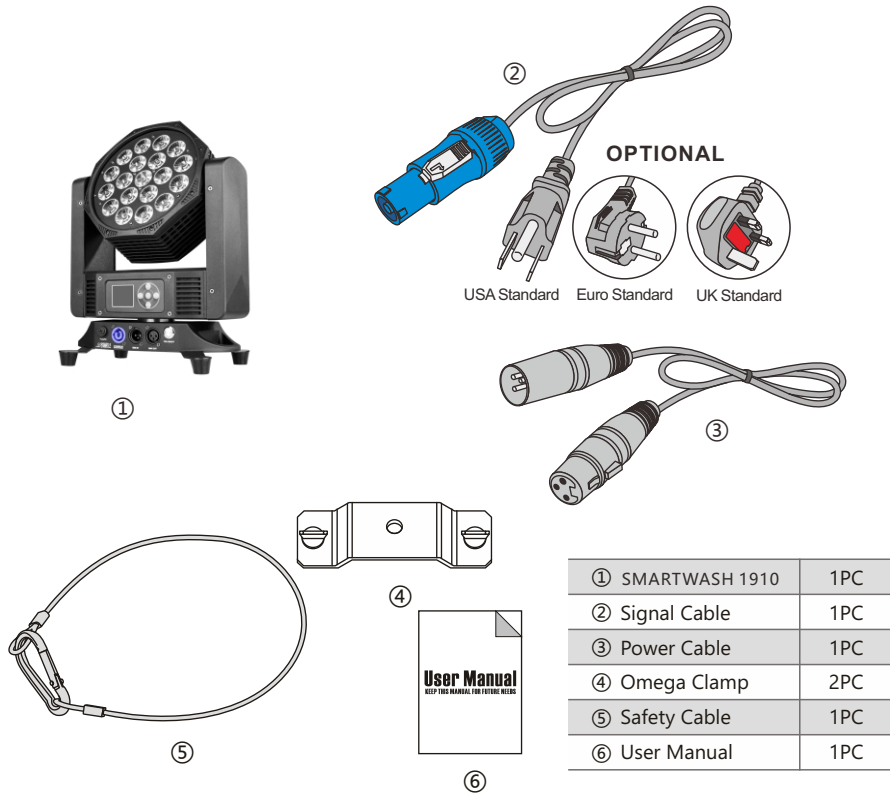
The NO-FAN designed SMARTWASH 1910 is an ultra compact and light weight stylish moving head wash light featuring 19\*10W 4-IN-1 RGBW LEDs which is designed with 3 individual rings. It's available for 2800K-5600K color temperature adjustment.

It provides 360° continuous fast and smooth PAN/TILT movement with variable speed which delivers even more vivid visual effect to the show. The fixture supports DMX, RDM (Remote Device Management).

It features excellent color mixing, quiet running and flicker free control. The fixture is built in with different internal dynamic effect with variable speed. The moving head also features optimum optic design integrated with extremely effective aluminum heat sink system.

The fixture's exterior housing is beautifully balanced basing on a modern design philosophy with supremely harmonious interior structure for remarkable control. The sculpted body of the SMARTWASH 1910 achieves more than just a striking look. The 2\*1/4 turn fastening omega clamps, available for vertical and horizontal plug-in, make installations fast and easy.

The SMARTWASH 1910 is designed for applications as concerts, TV studios, banquet halls, bars, pubs, DJ entertainment, ballrooms, etc.



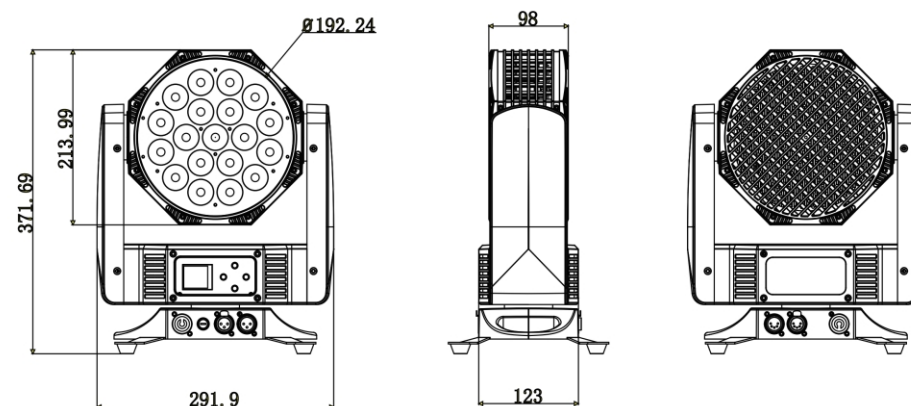
### 3 FEATURES & SPECIFICATIONS

Source: 19\*10W 4-IN-1 LEDs (RGBW)  
 3 Individual control rings  
 Flicker free operation for broadcast TV and FILM  
 Life Span: 50000H  
 High efficiency optic system  
 25° Beam angle (other angles optional)  
 35° Field angle  
 High output  
 PAN: 2 modes  
 1. 360° Continuous movement  
 2. 540° (8/16 bit)  
 TILT: 2 modes  
 1. 360° Continuous movement  
 2. 270° (8/16 bit)  
 Fast, quiet, smooth and precise 2-Phase motors  
 Smooth, fast and precise resolution for PAN/TILT movement with low noise operation  
 Scan position memory, auto reposition after unexpected movement  
 PAN/TILT reversible  
 RGBW  
 Smooth and pure color mixing capability  
 CTO, 2800K-5600K color temperature adjustment  
 Different built-in dynamic effect with variable speed  
 Different preset colors  
 0-25Hz LED shutter/strobe effect with variable speed  
 0-100% Smooth linear LED dimming  
 17/25 DMX channels USITT DMX-512  
 DMX512, master-slave, sound or auto operation  
 DMX recorder and edit function integrated  
 RDM available (Remote Device Management)  
 Art-NET (Optional)  
 Wireless receiver system built-in (Optional)  
 Shielded input signal protection for stable signal without interference  
 RJ45 etherCON IN/OUT (Optional with Art-Net)  
 3-Pin and 5-pin XLR DMX connectors IN/OUT  
 Software up-datable through DMX connectors  
 Mult units up-datable in daisy chain  
 1.44" TFT LCD display  
 5 Control buttons  
 180° Reversible for LCD display  
 Display auto OFF  
 DMX signal and error monitoring indicators  
 Advanced noise-free cooling system integrated aluminum (NO-FAN)  
 Constant temperature readout and management function  
 Over temperature protection management  
 Electronic supply with active PFC  
 AC100-240V 50/60Hz  
 PowerCON connectors IN&OUT  
 210W Power consumption  
 -25°C to 45°C ambient temperature  
 IP20 protection rating

CH	Function	Value	Function Detailed Description
1	Red ring 1	0-255	Red Ring 1 linear 0 - 100%
2	Green ring 1	0-255	GREEN Ring 1 linear 0 -100%
3	Blue ring 1	0-255	BLUE Ring 1 linear 0 -100%
4	White ring 1	0-255	WHITE Ring 1 linear 0 - 100%
5	Red ring 2	0-255	Red Ring 2 linear 0 - 100%
6	Green ring 2	0-255	GREEN Ring 2 linear 0 -100%
7	Blue ring 2	0-255	BLUE Ring 2 linear 0 -100%
8	White ring 2	0-255	WHITE Ring 2 linear 0 - 100%
9	Red central led	0-255	Red central led linear 0 - 100%
10	Green central led	0-255	Green central led linear 0 - 100%
11	Blue central led	0-255	Blue central led linear 0 - 100%
12	White central led	0-255	White central led linear 0 - 100%
13	CTO	0-255	CTO
14	Macro color	0-255	MACRO COLOR
15	Strobe	0 - 3	Light OFF
		4 - 103	Strobe effect linearly variable frequency from low (1Hz) to fast (25Hz)
		104 - 107	Light ON
		108 - 207	Pulsation at linearly variable speed from slow (0.5 Hz) to fast (25 Hz)
		208 - 212	Light ON
		213 - 225	Random Slow Strobe effect
		226 - 238	Random Medium Strobe effect
		239 - 251	Random Fast Strobe effect
		252 - 255	Light ON
16	Dimmer	0-255	DIMMER
17	Dimmer fine	0-255	DIMMER FINE (16 bit)
18	Pan	0-255	PAN
19	Pan fine	0-255	PAN FINE

## 7 DMX CHANNELS

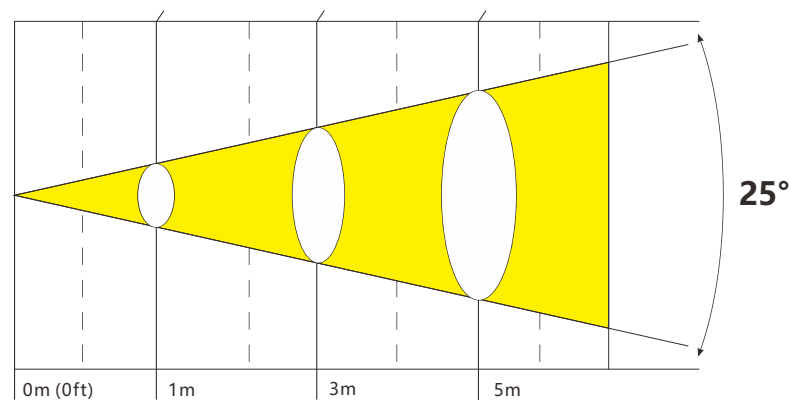
CH	Function	Value	Function Detailed Description
1	Red	0-255	RED linear 0 - 100%
2	Green	0-255	GREEN linear 0 -100%
3	Blue	0-255	BLUE linear 0 -100%
4	White	0-255	WHITE linear 0 -100%
5	CTO	0-255	CTO
6	Macro color	0-255	MACRO COLOR
7	Strobe	0 - 3	Light OFF
		4 - 103	Strobe effect linearly variable frequency from low (1Hz) to fast (25Hz)
		104 - 107	Light ON
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		213 - 225	Random Slow Strobe effect
		226 - 238	Random Medium Strobe effect
		239 - 251	Random Fast Strobe effect
		252 - 255	Light ON
8	Dimmer	0-255	DIMMER
9	Dimmer fine	0-255	DIMMER FINE (16 bit)
10	Pan	0-255	PAN
11	Pan fine	0-255	PAN FINE
12	Tilt	0-255	TILT
13	Tilt fine	0-255	TILT FINE
14	Color crossfade	0-255	COLOR CROSSFADE
15	Reset	0-25	Unused range
		26-255	Wait 5 seconds for automatic restart
16	Pan Rotation	0-255	Pan Rotation
17	Tilt Rotation	0-255	Tilt Rotation



## 4 PHOTOMETRIC DATA

**Photometric Beam Angle Data**  $25^\circ$  Beam Angle  $LUX \times 0.0929 = FC$

<b>R</b>	5400/501	609/56	173/16
<b>G</b>	12100/1124	1540/143	514/47
<b>B</b>	671/62	91/8	36/3
<b>W</b>	12170/1130	1505/139	507/47
<b>RGBW</b>	30300/2815	3565/331	1150/107 (LUX)

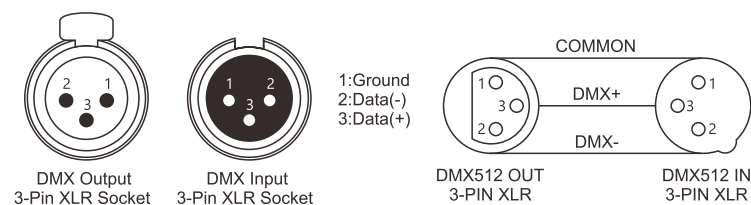


## 5 DMX-512 CONTROL CONNECTIONS

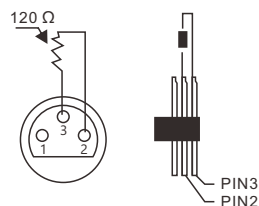
Connect the provided XLR cable to the female 3-pin XLR output of your controller and the other side to the male 3-pin XLR input of the architectural. You can chain multiple

Architectural together through serial linking. The cable needed should be two core, screened cable with XLR input and output connectors. Please refer to the diagram below.

DMX-512 connection with DMX terminator.



For installations where the DMX cable has to run a long distance or is in an electrically noisy environment, such as in a discotheque, it is recommended to use a DMX terminator. This helps in preventing corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR plug with a 120  $\Omega$  resistor connected between pins 2 and 3, which is then plugged into the output XLR socket of the last fixture in the chain. Please see illustrations below.



## 6 MENU OPERATIONS

Main Menu	Second	Third	Fourth
Dmx Address	000 - 512		
Fixture	Dmx Mode	BAS17CH / EXT25CH	
	Run Mode	DMX / Host / Sound	
	Pan Invert	Close / Open	
	Tilt Invert	Close / Open	
	No Dmx Signal	Clear / Hold	
	Sound Sensitivity	0 - 99	
Manual	Pan	000 - 255	
	Pan Fine	000 - 255	
	Tilt	000 - 255	
	Tilt Fine	000 - 255	
	?	?	
Info	Time	Current Time	xxxH
		Total Time	xxxH
		Power Count	xxx
	Sensor	All Sensors are ok! / Pan, Tilt	
	Temperature	Head Temp	xxxC
	Software Version	Panel	Vx.xx
Factory	Password	000 - 255	
	Pan	000 - 255	
	Tilt	000 - 255	
Fixture Reset	Motor Reset	Cance / Run	
	Factory	Cance / Run	
Display	Language	CH / EN	
	Display Flip	Normal / Reverse	
	Display Mode	60s / Show	