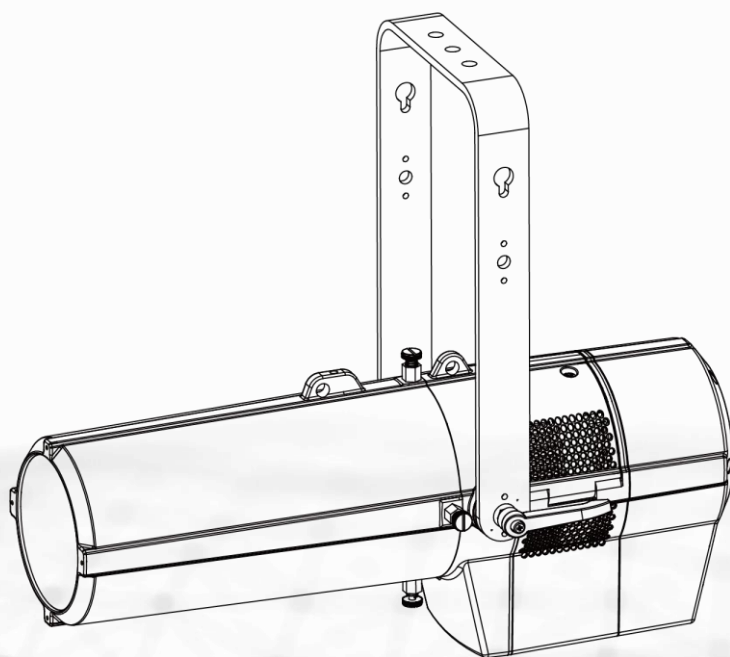


图纸编码	RD-1049-SM-001(ARC-I)				版本号	A
EP5(彩色 RGBW)英文说明书					编辑日期	2026/5/5
制作	刘丽萍	审核	韩子晓	批准	余泽松	
物料编码	1320110070					
修改内容						
备注	以 A4 样本打印					



User Manual



EP5

Please read this user manual in full before using this product

Contents

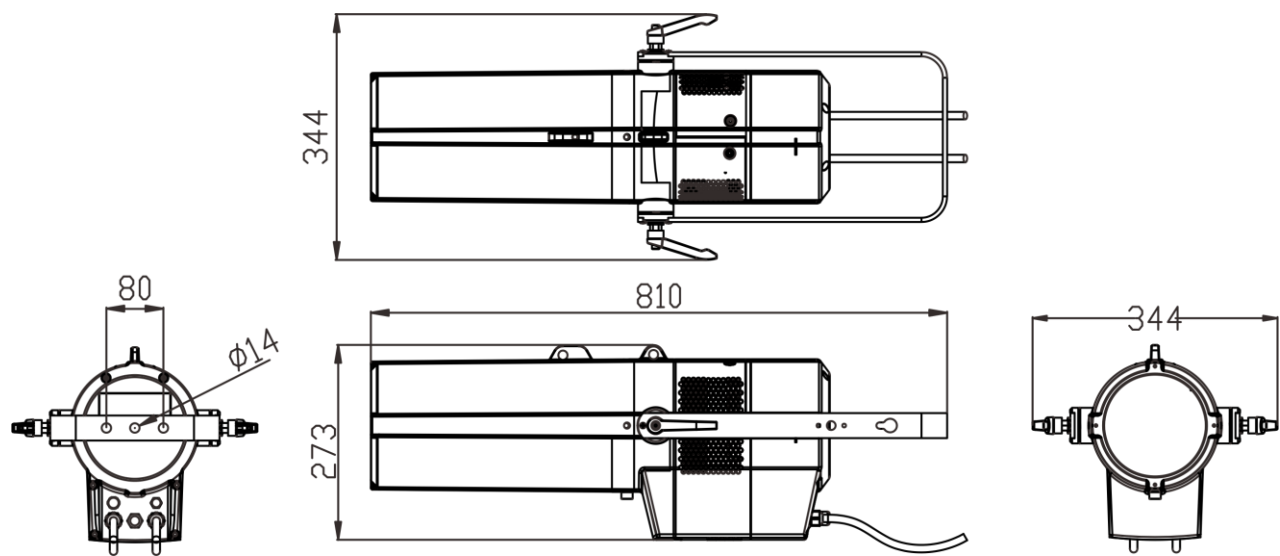
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Safety Notes.....	03/04
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1 PRODUCT

1.1 TECHNICAL SPECIFICATIONS

Type	EP5
Light source	RGBW
Power	400W
Voltage Range	100-240V~, 50/60Hz
Protection	IP66
Operation Temperature	-20℃~45℃
Dimensions	810×344×273mm
Weight	16kg

Dimension



2 Safety Notes



WARNING !

- To ensure normal and safe operation, the user must comply with all safety regulations and precautions specified in this manual.
- Installation and maintenance of this luminaire shall only be performed by qualified professional technicians.
- This luminaire has been strictly inspected and qualified before delivery. Please operate in accordance with the user manual. Functional failure or damage caused by human error is not covered under warranty.
- After receiving the luminaire, inspect the package for transportation damage first. If the outer package is intact, unpack and check the product for damage incurred during transit. Do not use the product if damaged, and contact our company's staff immediately.
- During operation, the maximum surface temperature of the luminaire housing can reach 70°C (158°F). **Do not touch the housing with bare hands!** Prevent contact with personnel and combustible materials. Do not install the luminaire in areas with risk of accidental contact. Allow the product to cool for at least 15 minutes before handling.
- For replacement, only use lamps and fuses of the same type and electrical ratings.
- When suspending the luminaire, confirm that the mounting structure and fittings can withstand at least 10 times the weight of the fixture.
- Before operation, ensure the housing is securely closed and all screws are tightly fastened. The dedicated safety cable must be correctly fixed to the luminaire prior to use.
- The maximum ambient operating temperature shall not exceed 45°C. Do not operate this product if the ambient temperature (TA) exceeds 45°C (115°F).
- Do not disassemble or repair the product without guidance from professional personnel.
- Luminaire repairs must be carried out by the manufacturer, authorized service agents, or equivalent qualified professionals, or under professional supervision.
- If the external flexible cable or cord of this luminaire is damaged, it must be replaced by the manufacturer, service agent or qualified professionals to eliminate potential hazards.
- This luminaire is prohibited from being installed near high-voltage power lines or strong electric fields.
- The luminaire must be installed in a well-ventilated area with a minimum clearance of 0.5 meters from adjacent surfaces.
- Do not mount the luminaire directly on combustible materials.

CAUTION!

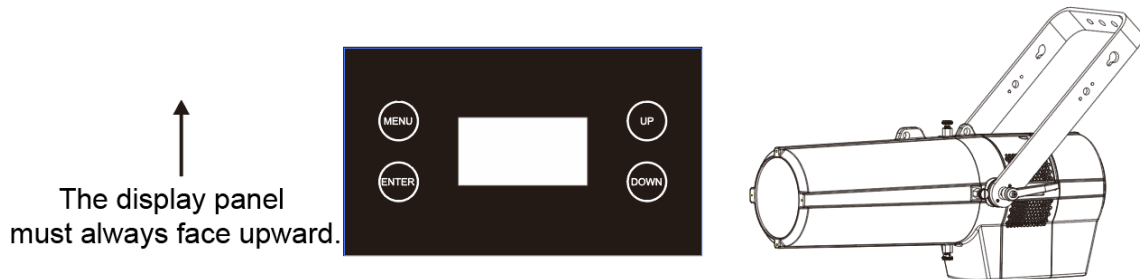
- Please check carefully whether the mains voltage is consistent with the rated voltage marked on the unit, and ensure the operating voltage is within the range specified in the technical parameters.
- Do not touch the power cable with wet hands.
- Before connecting to 110V~220V AC power, confirm that the socket is well grounded. This luminaire must be grounded with a yellow-green two-color earth wire.
- All electrical connections, repairs and maintenance must be carried out by qualified professional personnel.

- Completely cut off the power supply of the luminaire before idle use, cleaning or maintenance work.
- Prevent the power cable from being squeezed, bent or damaged by sharp edges. Inspect the fixture and power cable regularly.
- Always disconnect the power supply when the luminaire is not in use or before cleaning. Unplug the power cable only by the plug. Never pull the cable directly to disconnect the power.
- Do not frequently switch the luminaire on and off in a short time, which will shorten the service life of the product.
- After initial power-up, the luminaire will start automatic self-check with no light output. The self-test process lasts about 1 minute. The luminaire will light up and respond to control signals normally only after self-test completion.
- To guarantee stable operation, power on the control system and output control signals 2 minutes after the luminaire is powered on. 。

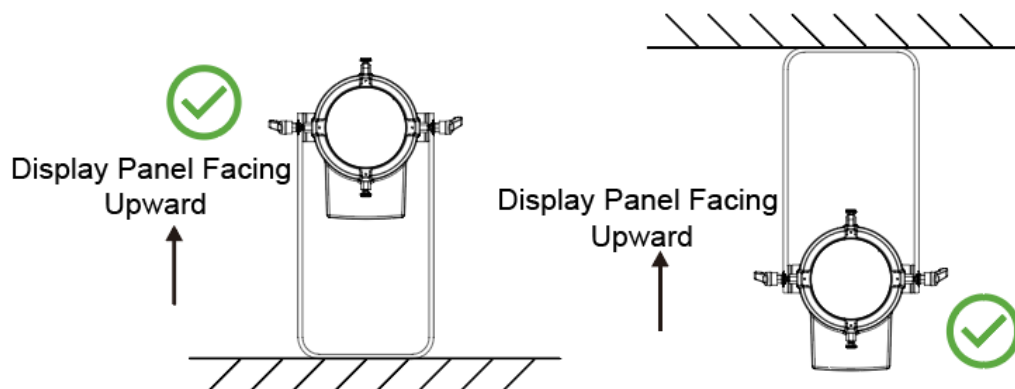
3 INSTALLATION

- ◆ Please confirm the label and mounting position of the luminaire.
- ◆ Do not pull, lift or drag the outgoing cable of the luminaire directly.
- ◆ Handle the luminaire with care during transportation and installation. Avoid collision that may damage the surface coating; do not throw or drop the fixture violently.
- ◆ Place the luminaire at the pre-installed position and adjust its orientation first.
- ◆ Fasten the luminaire to the mounting position with bolts.
- ◆ Adopt M10 bolts of Class 8.8 or above, and fasten securely with self-locking nuts.
- ◆ Each luminaire shall be fixed with no less than two bolts.
- ◆ During installation, the display panel must face upward at all times. Reverse mounting and side mounting are prohibited. Please confirm with our technical personnel for special installation methods.
- ◆ The installation method and connecting accessories shall be customized according to actual site conditions.
- ◆ Before processing mounting accessories or drilling holes, confirm the hole positions and installation details with our technical staff.
- ◆ Please contact our team to obtain the mounting dimension drawing of the luminaire.
- ◆ When installing the luminaire at height, an anti-fall safety cable must be installed.
- ◆ Ensure the safety cable is installed firmly and reliably.
- ◆ Tighten and lock all shackles equipped with nuts.
- ◆ Each luminaire model is matched with a dedicated anti-fall safety cable. Do not mix and use across different models.

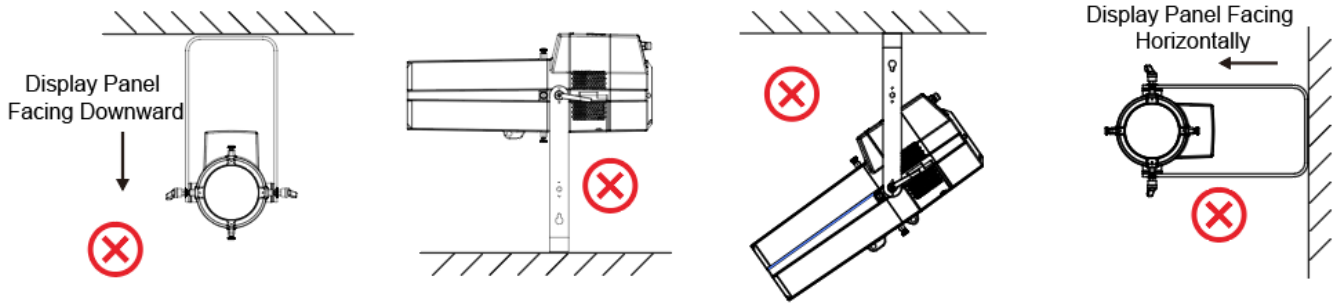
During installation, the display panel and access opening must always face upward.



Correct Installation Reference:

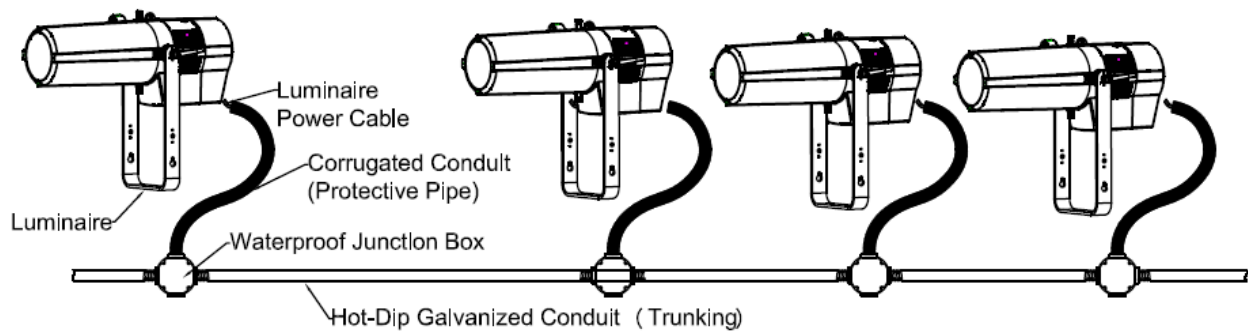


Incorrect Installation Methods:

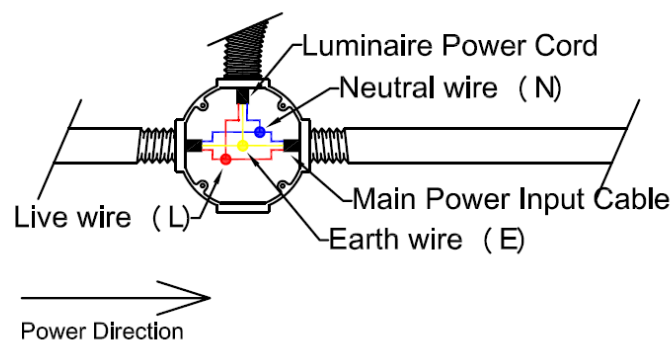


4 POWER CONNECTIONS

- ◆ The input voltage of this product is AC 100-240V, 50/60Hz. Please ensure the input voltage is within this range.
- ◆ All electrical connection work must be performed by qualified and certified installers.
- ◆ In Europe and China, the live wire (L) shall be brown, the neutral wire (N) shall be blue, and the grounding wire shall be green or yellow-green.
- ◆ In the Americas, the live wire (L) shall be black, the neutral wire (N) shall be white, and the grounding wire shall be green or yellow-green.
- ◆ A delayed start function shall be configured for each power supply circuit of the luminaire, with a start delay of 3 seconds per circuit (3s, 6s, 9s...). The quantity of luminaires connected to each circuit shall be determined according to on-site conditions and power rating. No more than 25 luminaires are allowed on each single-phase circuit.
- ◆ Phase voltage balance must be maintained in the electrical system.
- ◆ All wire connections shall ensure reliable contact. Joints must be wrapped with three-layer waterproof protection and installed inside waterproof junction boxes.
- ◆ Power cables and signal cables shall be routed in separate conduits with independent wiring; combined routing in one single conduit is prohibited.
- ◆ All luminaires must be properly grounded. For three-phase power supply, the neutral wire and grounding wire shall not be connected via switches.
- ◆ The power cable of each luminaire shall not be cut shorter than 80 cm.
- ◆ Disconnect the mains power before wiring and installation. Live-line operation is strictly prohibited.
- ◆ All cable connectors shall not be placed on the ground or in waterlogged areas to prevent short circuit caused by water accumulation.
- ◆ All wire joints shall be tinned in advance, followed by three-layer waterproof wrapping, or connected by waterproof junction boxes.
- ◆ Before powering on the luminaires, confirm correct connection of power and signal lines, and ensure no on-site construction work is in progress.
- ◆ Please refer to the electrical connection diagram for all wiring operations.



Electrical Connection Diagram I



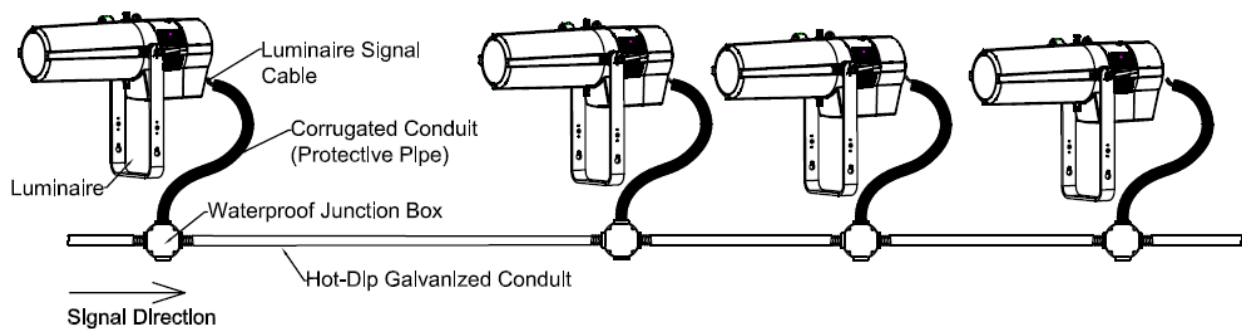
Electrical Connection Diagram II

5 Data network requirements

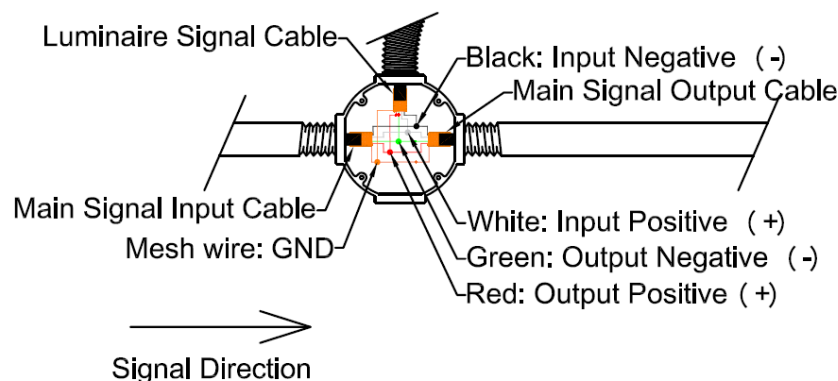
- ◆ The luminaire has two types of signal outlet cables: 4-core & 1-screened bare wire and Y-type 1-to-2 male-female cable.
- ◆ If the luminaire is fitted with a Y-type 1-to-2 male-female signal cable, the male and female connectors shall not be cut off. For signal connection of the entire control system, comply with the rule: male connector for signal input, female connector for signal output.
- ◆ All joints of signal male and female connectors must be fully tightened and wrapped with one layer of waterproof adhesive tape.
- ◆ For luminaires adopting 4-core & 1-screened bare signal wire, the cable shall not be cut to less than 80 cm in length.
- ◆ When the DMX signal cable length between the DMX console and luminaires, or between individual luminaires, exceeds 60 meters, an additional signal amplifier must be installed.
- ◆ Signal amplifiers shall be arranged with a spacing limit of 60 meters. If the distance between two adjacent amplifiers exceeds 60 meters, another amplifier shall be added, regardless of whether luminaires are connected in between.
- ◆ Signal amplifier layout shall follow the limit of maximum 20 luminaires per segment. Once 20 luminaires are connected between two amplifiers, a new amplifier is required even if the distance is within 60 meters.

- ◆ The laying and connection of all signal amplifiers in the whole control system shall strictly follow the combined principle: max. 20 luminaires or max. 60 meters.
- ◆ The installation position and quantity of amplifiers shall be determined according to on-site conditions and actual signal strength.
- ◆ Signal cables and power cables shall be routed in separate conduits and wired independently. Shared conduit routing is prohibited to avoid signal interference.
- ◆ Signal cables are forbidden to connect with high-voltage power, otherwise it will cause permanent damage to the luminaire.
- ◆ The default DMX address of the first luminaire is set to 001. The address calculation formula for subsequent luminaires: $(X-1) \times N + 1$ (X = luminaire sequence number; N = channel quantity). Example: If the first luminaire address is 001 with 4 channels, the address of the 10th luminaire is 37, i.e. DMX address 037.
- ◆ The DMX address of each luminaire must be consistent with the setting of the DMX console. Mismatched addresses will lead to loss of control or abnormal random flickering.
- ◆ DMX addresses can be reused as required.
- ◆ DMX address codes can be set to any value within the range of 001 to 512.

4-Core 1-Shielded Bare Wire Signal Connection Diagram

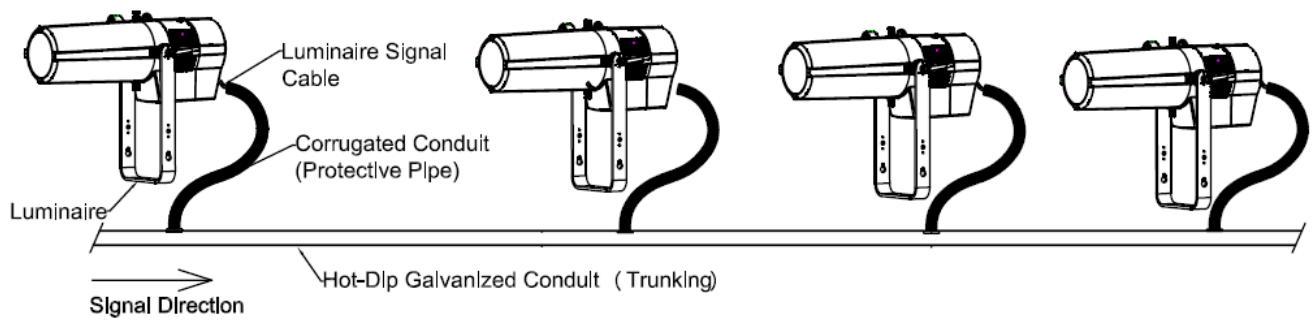


4-Core 1-Shielded Bare Wire Signal Connection Diagram I

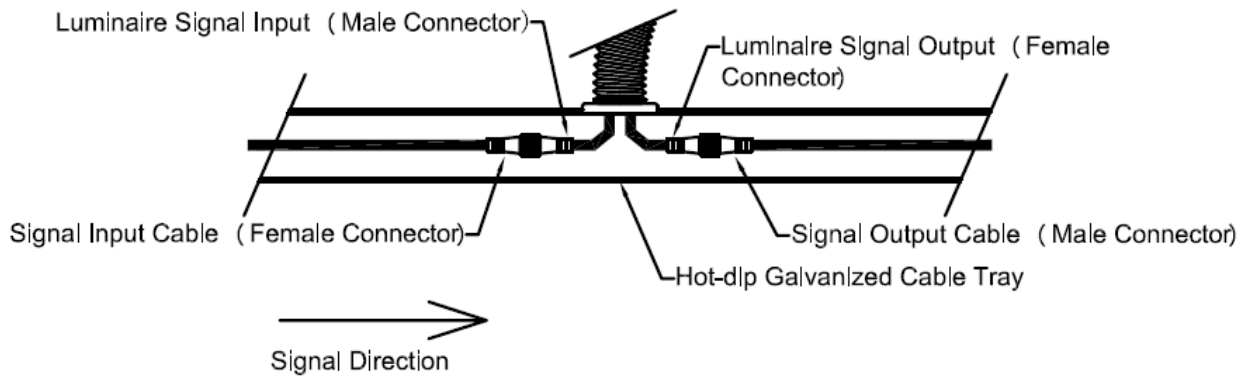


4-Core 1-Shielded Bare Wire Signal Connection Diagram II

Y-Type 1-to-2 Male-Female Cable Signal Connection Diagram



Y-Type 1-to-2 Male-Female Cable Signal Connection Diagram I



Y-Type 1-to-2 Male-Female Cable Signal Connection Diagram II

6 FUNCTIONS AND SETTINGS

6.1 DISPLAY OPERATION

- ◆ MENU: Used to access the menu or to return a previous menu option;
- ◆ ENTER: Used to select and store the current menu or confirm the current function value or option within a menu;
- ◆ UP: Navigates downwards through the menu list and increases the numeric value when in a function;
- ◆ DOWN: Navigates upwards through the menu list and decreases the numeric value when in a function;
- ◆ Standby mode: Press and hold the MENU key for 10 seconds to activate the display panel.
- ◆ Enter the password in sequence: UP → DOWN → UP → DOWN, then press the ENTER key to access the menu function settings.



6.2 Menu Map

STATIC	DIMMER	0-255			Combine [DIMMER], [RED], [GREEN], [BLUE], [WHITE], [PRESET COLOR], [GOBO] to create an infinite range of colors(0-255).Set the value of the [STROBE] (0-25Hz).
	RED	0-255			
	GREEN	0-255			
	BLUE	0-255			
	WHITE	0-255			
	PRESET COLOR	0-255			
	GOBO	0-255			
	STROBE	0-25			
ADDRESS	001-512(default 001)				Set the DMX ADDRESS
RUN MODE	DMX(default)				[DMX] Using the DMX 512 controller to control.[SLAVE] Master--Slave operation
	SLAVE				
PERSONALITY	HSIC				Use the menu to select desired channel mode
	SIMPLE				
	COLOR MODE 8BIT(default)				
	COLOR MODE 16BIT				
AUTO PROGRAM	PR.01				Programs [CUSTOM 1] to [CUSTOM 10] are fully pre-programmed and can be edited in [EDIT] mode.
	PR.02				
					
	PR.09				
	PR.10				
EDIT	PROGRA M 01-10	SCENE 01-30	DIMMER	0-255	Enter the [EDIT] mode to edit the custom programs [PROGRAM01] to [PROGRAM2]. Each custom program has 30 scenes
			RED	0-255	
			GREEN	0-255	
			BLUE	0-255	

			WHITE	0-255	that can be edited.	
			PRESET COLOR	0-255	Fade transition time, time 0-255 unit is second, fade time setting should be less than time setting.	
			GOBO	0-255	After editing the program, Play in AUTO.	
			STROBE	0-255		
			TIME	0-255		
			FADE	0-255		
	UPLOAD	****	SEND		Select [UPLOAD] to upload the custom programs	
	****	RESET ALL	****	RESET ALL		Restore factory settings
		DIMMER	OFF(default)			Dimming curves DIM1 (fast) to DIM4 (slow)
			DIM1			
			DIM2			
			DIM3			
			DIM4			
		DMX ERROR	SAVE(default)			Hold after loss of DMX signal
			BLACK			Blackout after loss of DMX signal
		PERFORM	LIVE(default)			Fan mode low speed
			POWER			Fast rotation of fan, all power
			STUDIO			Automatic rotation of fan
		DISP KEY	OFF			Locks display (passcode is <UP>, <DOWN>,<UP>, <DOWN>,<ENTER>)
			ON(default)			
		DISP TIME	ON			Display backlight always on
			10s			Turns off display backlight after 10s/30s
			30s(default)			
			2min			/2min of inactivity
		WDMX RESET	YES			Wireless DMX reset
			NO			
		SIGNAL	XLRDMX			XLRDMX and WDMX mode select
WDMX						
INFO	FIXTURE HOURS(default 00h)				Hours of fixture use	
	VERSION				Software versions	
	RDM	UID	0x388Axxxxxxxx		Check fixture's ID	
		LABEL			Check fixture's LABEL	
CCT	1800K				Preset color temperatures	
	2200K					
	2700K					
	3000K					
	3200K					
	4000K					
	4500K					
	5000K					
	5600K					
	6000K					

	6500K	
	7000K	
	8000K	
	10000K	
PRESET COLOR	COLOR 1	Preset colour（See Annex 1 for details）
	COLOR 2	
	...	
	COLOR 24	
All passwords of this product are <UP>, <DOWN>,<UP>, <DOWN>, <ENTER>		

7 USING A DMX512 CONTROLLER

7.1 DMX CONTRO

HSIC(CH8)	Value	Function
CH.1	0-255	INTENSIYT
CH.2	0-255	HUE
CH.3	0-255	HUE FINE
CH.4	0-255	SATURATION
CH.5	CCT	
	0-9	NO FUNCTION
	10	1800K
	25	2200K
	40	2700K
	55	3000K
	70	3200K
	85	4000K
	100	4500K
	115	5000K
	130	5600K
	145	6000K
	160	6500K
	175	7000K
	190	8000K
	205	10000K
	255	10000K
CH.6	STROBE	
	0-9	NO FUNCTION
	10-99	STROBE FROM SLOD TO FAST (0-25Hz)
	100-109	NO FUNCTION
	110-179	THUNDER STROBE
	180-189	NO FUNCTION
	190-255	RANDOM SROBE
CH.7	GOBO ROTATION	
	0-9	NO FUNCTION
	10-145	GOBO ADJUST THE ANGLE (0 → 360°)
	146-150	STOP ROTATION
	151-200	CLOCKWISE (SPEED 1 → 100%)
	201-205	STOP ROTATION
	206-255	COUNTERCLOCKWISE (SPEED 1 → 100%)
CH.8	CONTROL (EXECUTE AFTER 3 SECONDS)	
	0-9	NO FUNCTION
	10-34	LIVE
	35-59	STUDIO

	60-84	POWER
	85-109	OFF
	110-134	DIM1
	135-159	DIM2
	160-184	DIM3
	185-209	DIM4
	210-224	Motor Reset
	225-234	All Reset
	235-255	NO FUNCTION

SIMPLE (CH7)	COLOR MODE		Value	Function
	8BIT (CH10)	16BIT (CH15)		
CH.1	CH.1	CH.1	0-255	DIMME
--	--	CH.2	0-255	DIMMER FINE
CH.2	CH.2	CH.3	0-255	RED
--	--	CH.4	0-255	RED FINE
CH.3	CH.3	CH.5	0-255	GREEN
--	--	CH.6	0-255	GREEN FINE
CH.4	CH.4	CH.7	0-255	BLUE
--	--	CH.8	0-255	BLUE FINE
CH.5	CH.5	CH.9	0-255	WHITE
--	CH.6	CH.10	0-255	WHITE FINE
--	--	CH.11	PRESET COLOR	
			0-10	NO FUNCTION
			11-255	PRESET COLOR
--	CH.7	CH.12	CCT	
			0-9	NO FUNCTION
			10	1800K
			25	2200K
			40	2700K
			55	3000K
			70	3200K
			85	4000K
			100	4500K
			115	5000K
			130	5600K
			145	6000K
			160	6500K
			175	7000K
			190	8000K
			205	10000K
			255	10000K
CH.6	CH.8	CH.13	STROBE	

			0-9	NO FUNCTION
			10-99	STROBE FROM SLOD TO FAST (0-25Hz)
			100-109	NO FUNCTION
			110-179	THUNDER STROBE
			180-189	NO FUNCTION
			190-255	RANDOM SROBE
--	CH.9	CH.14	GOBO ROTATION	
			0-9	NO FUNCTION
			10-145	GOBO ADJUST THE ANGLE (0 —> 360°)
			146-150	STOP ROTATION
			151-200	CLOCKWISE (SPEED 1 —> 100%)
			201-205	STOP ROTATION
			206-255	COUNTERCLOCKWISE (SPEED 1 —> 100%)
CH.7	CH.10	CH.15	CONTROL (EXECUTE AFTER 3 SECONDS)	
			0-9	NO FUNCTION
			10-34	LIVE
			35-59	STUDIO
			60-84	POWER
			85-109	OFF
			110-134	DIM1
			135-159	DIM2
			160-184	DIM3
			185-209	DIM4
			210-224	Motor Reset
			225-234	All Reset
			235-255	NO FUNCTION

Annex 1

PRESET COLOR	Value	Color Names		x	y
	0-10	NO FUNCTION			
	11-15	RESERVE	Loving Amber	0.407	0.321
COLOR 1	16-20	R40	Light Salmon	0.499	0.321
COLOR 2	21-25	L24	Scarlet	0.561	0.296
COLOR 3	26-30	L164	Flame Red	0.659	0.302
	31-35	RESERVE	Easy White	0.389	0.344
	36-40	RESERVE	Warm Peach	0.448	0.353
COLOR 4	41-45	L08	Dark Salmon	0.498	0.347
COLOR 5	46-50	L25	Sunset Red	0.566	0.359
	51-55	RESERVE	Medium Bastard Amber	0.37	0.335
COLOR 6	56-60	L237	CID(To Tungsten)	0.43	0.365
COLOR 7	61-65	R321	Soft Golden Amber	0.477	0.406
COLOR 8	66-70	L652	Urban Sodium	0.535	0.399
	71-75	RESERVE	LCT Yellow(Y1)	0.34	0.363
COLOR 9	76-80	L765	LEE Yellow	0.389	0.412
COLOR 10	81-85	L513	Ice And A Slice	0.38	0.447
	86-90	RESERVE	Spring Yellow	0.41	0.502
	91-95	RESERVE	LEE Plus Green	0.324	0.388
	96-100	RESERVE	CalColor 30 Green	0.318	0.44
	101-105	RESERVE	Fern Green	0.234	0.543
COLOR 11	106-110	L90	Dark Yellow Green	0.184	0.641
	111-115	RESERVE	LEE Fluorescent3600K	0.286	0.37
COLOR 12	116-120	R92	Tuquoise	0.235	0.36
	121-125	RESERVE	Kelly Green	0.185	0.459
	126-130	RESERVE	Forest Green	0.162	0.496
	131-135	RESERVE	Cosmetic Aqua Blue	0.3	0.318
COLOR 13	136-140	L728	Steel Green	0.256	0.302
COLOR 14	141-145	L117	Steel Blue	0.223	0.278
COLOR 15	146-150	L354	Special Steel Blue	0.173	0.265
	151-155	RESERVE	Paler Lavender	0.284	0.284
COLOR 16	156-160	L501	New Colour Blue	0.246	0.249
COLOR 17	161-165	L174	Dark Steel Blue	0.204	0.205
	166-170	RESERVE	Daylight Blue	0.159	0.158
	171-175	RESERVE	Pale Lavender	0.288	0.254
	176-180	RESERVE	Surprise Pink	0.24	0.183
COLOR 18	181-185	L142	Pale Violet	0.209	0.148
	186-190	RESERVE	Perfect Lavender	0.177	0.07
	191-195	RESERVE	Light Pink	0.335	0.289
COLOR 19	196-200	L794	Pretty'n Pink	0.335	0.251
COLOR 20	201-205	L328	Follies Pink	0.335	0.18
	206-210	RESERVE	Magical Magenta	0.327	0.138
	211-215	RESERVE	Pale Rose	0.35	0.318
COLOR 21	216-220	L127	Smokey Pink	0.397	0.265
COLOR 22	221-225	L192	Flesh Pink	0.41	0.237
	226-230	RESERVE	Special Rose Pink	0.465	0.193
	231-235	RESERVE	Moroccan Pink	0.378	0.324
COLOR 23	236-240	L157	Pink	0.457	0.272
COLOR 24	241-245	R332	Cherry Rose	0.489	0.295
	246-250	RESERVE	Cool LED Bright Pink	0.57	0.263
	251-255	NO FUNCTION			



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