

# NH1

## LEDMOV720

## USER MANUAL

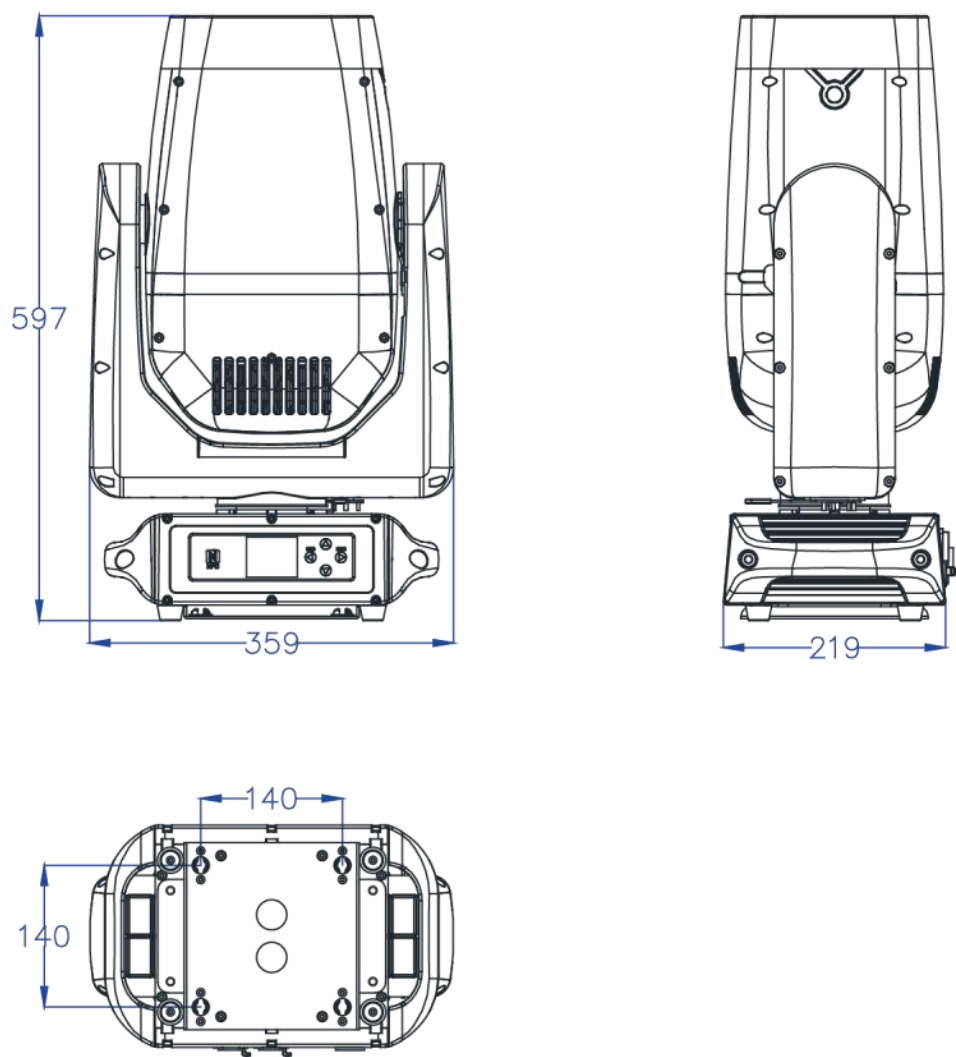


# 1 PRODUCT

## 1.1 TECHNICAL SPECIFICATIONS

Fixture Name	NH1
Light Source	350w LED
Beam Angle	3° to 52°
Power Consumption	550w
Control Protocols	DMX512, RDM, Artnet, sACN, NFC
Voltage Range	AC100~240V,50/60Hz
IP Rating	IP65
Operation Temperature	-20° to 45°
Dimensions	359 x 219 x 597mm
Weight	22kg

### DIMENSIONS



## 1.2 Safety Notes

### IMPORTANT

- Fixture must be installed by a qualified professional.
- To maintain the condition and to ensure safe operation, follow the safety instructions and warning notes outlined in this manual.
- The manufacturer is not liable for any damage caused by the operator not abiding to the manual or any modification made to this device.

### CAUTION!

- Make sure that the voltage supplied to the fixture is not higher than stated on the rear panel.
- Do not handle the power cable if your hands are wet.
- The earth wire must always be connected to ground. It is essential to connect the yellow/green conductor to earth.
- Make sure that the power cord is not damaged by sharp objects or serrated edges, beyond the minimum bend radius or crushed. Check the device and the power cord before operation. The electrical connection, repairs and servicing of this fixture must be carried out by a qualified person and to Australian/New Zealand Standards.
- Always disconnect the power input cable to completely remove power from unit when not in use or before cleaning or servicing of the fixture.
- Do not power cycle the fixture in short intervals as this could affect the fixture's life span.
- Do not touch the device's housing with bare hands during operation. The surface of the casing can reach up to 65°C during operation.
- Make sure no materials are in contact with the fixture. Ensure the product is in a location where there is no risk of accidental contact.
- Allow the fixture to cool for at least 10 minutes before handling.
- If replacing lamps and fuses, use replacements of the same type and rating only.
- To avoid damage during transportation and installation, use appropriate casing and protection. If there is any damage to the coating, the shell may become corroded.
- Before hanging the fixture verify hanging points and ensure they can support the weight. Ensure the hook clamps or couplers can bear at least 10 times the weight of the fixture.
- Ensure the fixture has a safety cable and that it is attached correctly. Please follow the illustration in this manual. Before use check that the housing is firmly closed, and all screws are fastened.
- The maximum ambient temperature for operation is 45°C. Do not operate the product if the ambient temperature ( $T_a$ ) exceeds 45° C.
- During initial start-up some smoke may appear, or a smell may be present. This is a normal process and does not necessarily mean that the device is defective.

### Electrical Warning

- The light source contained in this luminaire shall only be replaced by the manufacturer, service agent, or a similar qualified person.
- When replacing fuses, replacements must be the same type and rating.
- Lens must be replaced if damaged to ensure the fixture's function is not impaired e.g. cracks or deep scratches

### **Keep the product away from flammable materials**

- Keep all combustible materials (fabric, wood, paper etc) at least 500mm away from the fixture.
- Ensure that there is adequate and unobstructed airflow into the product. Provide a minimum clearance of 150mm around fans and air vents.
- Do not illuminate surfaces within 3m of the product.
- Do not install a fuse that has a higher rating than the original installed. Under no circumstances bypass fuses.
- Do not install filters, masks, or any other materials onto optical components.
- If the fixture seems to be abnormally hot, shows signs of melting or emits smoke, disconnect the fixture from power immediately and allow it to cool. Do not touch the fixture without appropriate PPE. Keep the fixture well away from combustible and flammable materials.

### **NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE RETINA INJURY RISK - MAY INDUCE BLINDNESS**

**Do not point the optics of the fixture towards the sun or other strong light sources. The lens focuses and concentrates light like a magnifying glass and can cause internal damage to the fixture and could melt components or start an internal fire within seconds.**

### **To avoid problems from strong light sources:**

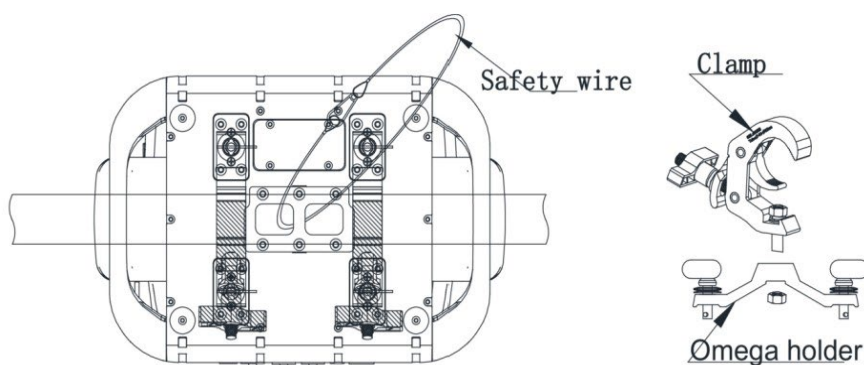
- Avoid pointing other high-powered beam lights directly at the fixture.
- Do not focus beams from one fixture directly towards another fixture.
- For outdoor applications ensure that the fixture's optics is pointed away and shielded from sunlight even when not in use.
- Do not expose the product to excess heat from other lighting fixtures.

## 2 INSTALLATION

### 2.1 Mounting

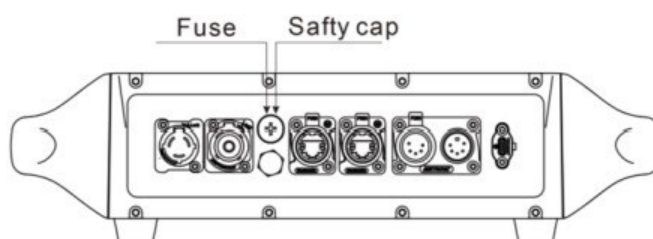
#### Truss installation

- ◆ Keep all combustible materials (fabric, wood, paper etc) at least 500mm away from the product.
- ◆ For overhead use, always install a safety cable that can hold at least 10 times the weight of the fixture.
- ◆ Secure the fixture with a safety cable through the rear safety eye and truss as illustrated.
- ◆ Ensure that the structure to which you are attaching the fixture to is secure and load bearing.



### 2.2 Fuse replacement

- ◆ Remove the safety cap using a screwdriver.
- ◆ Remove the old fuse from the safety cap.
- ◆ Install a new fuse.
- ◆ Reinstall the safety cap.



### 2.3 Power Connections

- ◆ This product has an auto-ranging power supply that can work with an input voltage range of 100–240 VAC, 50/60 Hz.

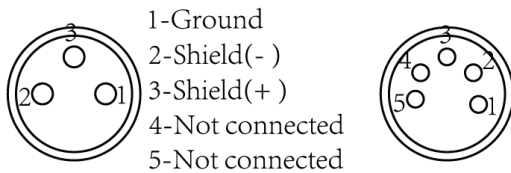
#### AC Plug

Connection	Wire Colour	Screw Colour
AC Live	Brown	Yellow/Brass
AC Neutral	Blue	Silver
AC Ground	Striped Green/Yellow	Green

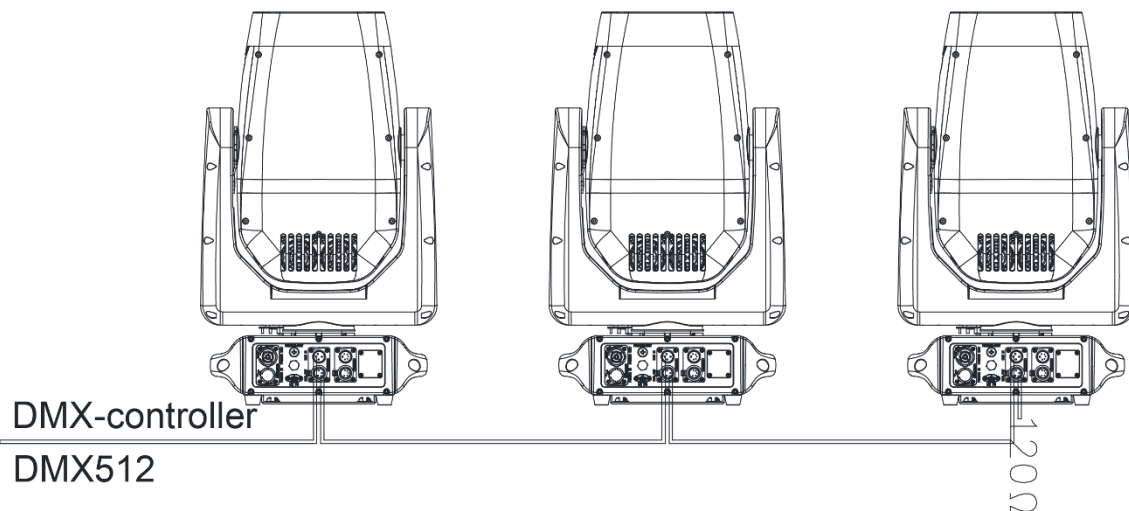
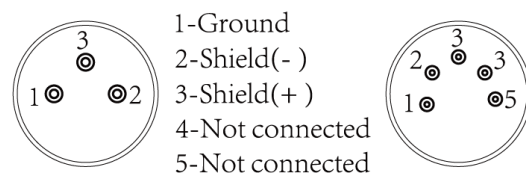
## 2.4 DMX512 Requirements

- ◆ Connect a DMX512 cable from the output of a controller or console to the first unit. The fixture has 3/5-pin XLR connectors for DMX data input and output.
- ◆ Connect the DMX-output of the first fixture in line with the DMX-input of the next fixture and repeat until all fixtures are connected.
- ◆ DMX footprint is dependant on the mode that the fixture is running. For separate control of fixtures addressing should increase by 1 after channel footprint.
- ◆ DMX addressing starts at 1 and must be contained under 512.
- ◆ It is recommended to use a DMX terminator (120Ω) in the last fixture in line. This is especially relevant for long runs or lines with a large quantity of fixtures on a single line. Please refer to USITT DMX512 loading designation.

DMX-output  
XLR mounting-sockets



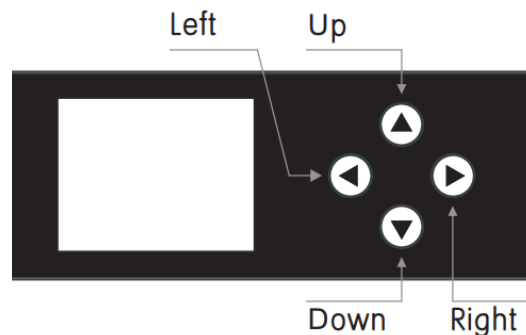
DMX-input  
XLR mounting-plugs



# 3 FUNCTIONS AND SETTINGS

## 3.1 Display Navigation

- ◆ MENU: Used to access the menu or to return to 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 upwards through the menu list and increases the numeric value when in a function;
- ◆ DOWN: Navigates downwards through the menu list and decreases the numeric value when in a function;
- ◆ Lock screen password: Long press 5s Left, Input after the screen is bright -  
UP DOWN UP DOWN



## 3.2 Menu Map

ADDRESS	001 – 512(Default 001)		DMX address setting
PERSON	BASIC		Use the menu to select desired channel mode
	STANDARD (Default)		
	EXTEND		
RUNMODE	DMX512 (Default)		Select Signal
	AUTO		Default: DMX512
	CUSTOM1		CUSTOM1-2 Set up get into EDIT MENU edit
	CUSTOM2		
OPTION	PAN INVERT	OFF (Default)	PAN invert selection
		ON	
	TILT INVERT	OFF (Default)	TILT invert selection
		ON	
	PERFORM	STUDIO	Fan mode low speed
		POWER	Higher RPM of fan, full power
		LIVE (Default)	Automatic fan speed
	BLACKOUT	OFF (Default)	OFF: Blackout without delay
		ON	ON: Blackout delays over 3s
	SUN PROTECTION	ON (Default)	Tilts the head down
		OFF	
	DIMMER MODE	Halogen (Default)	Dimming speed LED (fast) to Halogen (slow);
		LED	
	DIMMER CURVE	LINEAR	Sets the Dimmer curve
		SQUARE LAW (Default)	
		INV. SQUARE LAW	

		S-CURVE				
	LED PWM	1200Hz (Default)			Sets the PWM frequency	
		2400Hz				
		4000Hz				
		6000Hz				
		25000Hz				
	NO DMX MODE	FREEZE (Default)			Holds Data after loss of DMX signal	
		BLACKOUT			Blackout after loss of DMX signal	
	DISPLAY TIME	On			Display backlight always on	
		30s			Turns off display backlight after 30s/1min /2min of inactivity	
		1min (Default)				
		2min				
	DISPLAY LOCK	OFF			Locks display (passcode is <UP>, <DOWN>,<UP>, <DOWN>, <ENTER>)	
		ON (Default)				
	LOAD PARA	OFF			Upload data	
		NO			No upload data	
	SETTING	RECOVERY	****			Restore default factory settings.
		CLEAN EDIT1	****			Clean customer self-editing scene 1
		CLEAN EDIT2	****			Clean customer self-editing scene 2
		WDMX HIDE	YES			Hides wireless mode. WDMX resets and signal is hidden. The default is wired signal only.
			NO			
	PT ENCODER	OFF			XY Encoder switch.	
		ON			OFF is close; ON is open.	
	LANGUAGE	****	Chinese			Language
			ENGLISH			
	WDMX RESET	YES			Clears previous WDMX connection	
		NO			Doesn't clear connection	
	SIGNAL	ONLY XLRDMX			ONLY cabled input	
		XLRDMX FIRST			Chooses cabled input first	
		ONLY WDMX			ONLY WDMX input	
		WDMX FIRST			Chooses WDMX first	
		WDMX TO XLRDMX			Converts WDMX signal to cable	
EDIT	EDIT 1-2	STEP 1-30	PAN	0-255	Edit the custom programs1-30	
			TILT	0-255	Select play 【EDIT 1】 in RUNMOEDE	
			PT SPEED	0-255	CUSTOM 1; Select play 【EDIT 2】 in	
			CMY C	0-255	RUNMOEDE CUSTOM 2	
			CMY M	0-255		
			CMY Y	0-255		
			COLOR	0-255		
			ROTA.GOBO	0-255		
			GOBO.ROTA	0-255		
			FIXED GOBO	0-255		
			PRISM 1	0-255		
			PRISM 2	0-255		
			F/M COLOR	0-255		



			ZOOM	0-255	
			FOCUS	0-255	
			DIMMER	0-255	
			STROBE	0-25	
			TIME	0-255	
			USE	YES/NO	
MANUAL	Auto Test				Auto Test channel
	CHANNEL	PAN	0-255		Manual control channel
		TILT	0-255		
		PT SPEED	0-255		
		CMY C	0-255		
		CMY M	0-255		
		CMY Y	0-255		
		COLOR	0-255		
		ROTA.GOBO	0-255		
		GOBO.ROTA	0-255		
		FIXED GOBO	0-255		
		PRISM 1	0-255		
		PRISM 2	0-255		
		F/M COLOR	0-255		
		ZOOM	0-255		
		FOCUS	0-255		
		DIMMER	0-255		
		STROBE	0-25		
	DEBUG HIDE	YES			Factory testing mode. All stepper motors are not controlled by signal, It only works again after the reset.
		NO			
	RESET	ALL RESET			Select Yes/No to carry out all reset
		XY RESET			Select Yes/No to carry out P/T reset
		COLOR SYS			Color/CMYK reset
		FOCUS/ZOOM RESET			Focus/Zoom reset
		GOBO SYS			GOBO reset
INFO	FIXTURE HOURS				Hours of fixture use
	LED USE HOURS				LED use time
	TEMPERATURE				LED temperature
	VERSION				Software versions
	RDM	UID	0x388Axxxxxxx		Check fixture's ID
		LABEL			Check fixture's LABEL
	SYSTEM ERROR	MEMORY IC			Memory IC
		ANGLESENSOR			Angle Sensor
		PAN SENSOR			Pan Sensor
		PAN ENCODER			Pan Encoder
		PAN DRIVEIC			Pan Drive IC
		TILT SENSOR			Tilt Sensor
		TILT ENCODER			Tilt Encoder
TILT DRIVEIC			Tilt Drive IC		

		TEMPERATURE		Temperature
		CMY_C RESET		CMY C Reset
		CMY_M RESET		CMY M Reset
		CMY_Y RESET		CMY Y Reset
		COLOR RESET		Color Reset
		GOBO RESET		Gobo Reset
		RGOBO RESET		Rotate Gobo Reset
		FIXED GOBO		FIXED GOBO reset
		PRISM 1 RESET		PRISM 1 Reset
		PRISM 2 RESET		PRISM 2 Reset
		F/M-COLOR RESET		Prism Reset
		ZOOM RESET		ZOOM Reset
		FOCUS RESET		FOCUS Reset
		SERVICE	****	PAN
TILT	±127			Tilt position fine adjustment
CMY-C	±127			CMY-C position fine adjustment
CMY-M	±127			CMY-M position fine adjustment
CMY-Y	±127			CMY-Y position fine adjustment
COLOR	±127			CTO position fine adjustment
ROTA. GOBO	±127			Rotate Gobo position fine adjustment
GOBO.ROTA	±127			Self-rotation position fine adjustment
FIXED GOBO	±127			Fixed Gobo position fine adjustment
PRISM 1	±127			Prism 1 position fine adjustment
PRISM 2	±127			Prism 2 position fine adjustment
F/M-COLOR	±127			F/M-COLOR position fine adjustment
ZOOM	±127			Zoom position fine adjustment
FOCUS	±127			Focus position fine adjustment
UPDATE SOFTWARE				Update software
All passwords of this product are <UP>, <DOWN>,<UP>, <DOWN>, <ENTER>				

# 4 DMX CHART

## 4.1 DMX TABLE

BASIC (21CH)	STANDARD (25CH)	EXTEND (28CH)	VALUE	Functions
1	1	1	000-255	PAN 0-540°
-	2	2	000-255	PAN FINE
2	3	3	000-255	TILT 0-270°
-	4	4	000-255	TILT FINE
3	5	5	000-255	PT Speed
4	6	6	000-255	CYAN
5	7	7	000-255	MAGENTA
6	8	8	000-255	YELLOW
7	9	9	<b>COLOUR MACRO</b>	
			000-010	No Function
			11-20	L106
			21-30	L194
			31-40	L019
			41-50	R08
			51-60	L213
			61-70	R80
			71-80	L202
			81-90	L328
			91-100	R3314
			101-110	L101
			111-120	L768
			121-128	No Function
			129-147	CYAN 100% / MAGENTA UP / YELLOW 0%
			148-166	CYAN DOWN / MAGENTA 100% / YELLOW 0%
			167-185	CYAN 0% / MAGENTA 100% / YELLOW UP
			186-204	CYAN 0% / MAGENTA DOWN / YELLOW 100%
			205-223	CYAN UP / MAGENTA 0% / YELLOW 100%
			224-242	CYAN 100% / MAGENTA 0% / YELLOW DOWN
			243-255	CYAN 100% / MAGENTA UP / YELLOW 0%
8	10	10	000-255	CMY SPEED(SPEED 100%->1)
9	11	11	<b>COLOUR WHEEL 8+1</b>	
			000-007	WHITE
			008-014	COLOUR 1
			015-021	COLOUR 2
			022-028	COLOUR 3

			029-035	COLOUR 4
			036-042	COLOUR 5
			043-049	COLOUR 6
			050-056	COLOUR 7
			057-063	COLOUR 8
			064-191	COLOUR WHELL1 0-360°
			192-222	COLOUR WHEEL1 RAINBOW EFFECT(SPEED 100%→1)
			223-224	STOP
			225-255	COLOR WHEEL1 RAINBOW EFFECT(SPEED 1→100%)
-	-	12	000-255	COLOR WHEEL FINE
10	12	13	<b>ROTATING GOBO 7+1</b>	
			000-010	ROTATING WHITE
			011-018	ROTATING GOBO 1
			019-026	ROTATING GOBO 2
			027-034	ROTATING GOBO 3
			035-042	ROTATING GOBO 4
			043-050	ROTATING GOBO 5
			051-058	ROTATING GOBO 6
			059-066	ROTATING GOBO 7
			067-074	ROTATING GOBO 1 SHAKE (SPEED 1 → 100%)
			075-082	ROTATING GOBO 2 SHAKE (SPEED 1 → 100%)
			083-090	ROTATING GOBO 3 SHAKE (SPEED 1 → 100%)
			091-098	ROTATING GOBO 4 SHAKE (SPEED 1 → 100%)
			099-106	ROTATING GOBO 5 SHAKE (SPEED 1 → 100%)
			107-114	ROTATING GOBO 6 SHAKE (SPEED 1 → 100%)
			115-122	ROTATING GOBO 7 SHAKE (SPEED 1 → 100%)
			123-127	WHITE
			128-190	STATIC GOBO POSITIVE WATER EFFECT (SPEED 100 → 1%)
			191-192	STOP WATER EFFECT
			193-255	STATIC GOBO REVERSE WATER EFFECT (SPEED 1 → 100%)
			191-192	STOP WATER EFFECT
			193-255	ROTATING GOBO FLOWING WATER EFFECT (SPEED 1 → 100%)
11	13	14	<b>GOBO ROTATING</b>	
			000-120	ROTATING GOBO ANGLE ADJUSTMENT (0 → 360°)
			121-125	STOP
			126-165	ROTATING GOBO SHAKE (SPEED 1 → 100%)
			166-170	STOP
			171-210	ROTATING GOBO POSITIVE ROTATION

				(SPEED 100% → 1)
			211-215	STOP
			216-255	ROTATING GOBO REVERSE ROTATION (SPEED 1 → 100%)
-	14	15	000-255	GOBO ROTATING FINE
12	15	16	<b>FIXED GOBO WHEEL 12+1</b>	
			000-010	WHITE
			011-014	FIXED GOBO 1
			015-018	FIXED GOBO 2
			019-022	FIXED GOBO 3
			023-026	FIXED GOBO 4
			027-030	FIXED GOBO 5
			031-034	FIXED GOBO 6
			035-038	FIXED GOBO 7
			039-042	FIXED GOBO 8
			043-046	FIXED GOBO 9
			047-050	FIXED GOBO 10
			051-054	FIXED GOBO 11
			055-058	FIXED GOBO 12
			059-063	FIXED GOBO 1 SHAKE (SPEED 1 → 100%)
			064-068	FIXED GOBO 2 SHAKE (SPEED 1 → 100%)
			069-073	FIXED GOBO 3 SHAKE (SPEED 1 → 100%)
			074-078	FIXED GOBO 4 SHAKE (SPEED 1 → 100%)
			079-083	FIXED GOBO 5 SHAKE (SPEED 1 → 100%)
			084-088	FIXED GOBO 6 SHAKE (SPEED 1 → 100%)
			089-093	FIXED GOBO 7 SHAKE (SPEED 1 → 100%)
			094-098	FIXED GOBO 8 SHAKE (SPEED 1 → 100%)
			099-103	FIXED GOBO 9 SHAKE (SPEED 1 → 100%)
			104-108	FIXED GOBO 10 SHAKE (SPEED 1 → 100%)
			109-113	FIXED GOBO 11 SHAKE (SPEED 1 → 100%)
			114-118	FIXED GOBO 12 SHAKE (SPEED 1 → 100%)
			119-127	WHITE
			128-190	STATIC GOBO JUMPING WATER EFFECT (SPEED 100 → 1%)
			191-192	STOP WATER EFFECT
			193-255	STATIC GOBO FLOWING WATER EFFECT (SPEED 1 → 100%)
13	16	17	<b>PRISM LINEAR 6</b>	
			000-010	WHITE
			011-145	PRISM INSERT AND ADJUST THE ANGLE (0 → 360°)
			146-150	STOP

			151-200	PRISM INSERT AND POSITIVE ROTATION (SPEED 100% → 1)
			201-205	STOP ROTATION
			206-255	PRISM INSERT AND REVERSE ROTATION (SPEED 1 → 100%)
14	17	18	<b>PRISM ROUND 8</b>	
			000-010	WHITE
			011-145	PRISM INSERT AND ADJUST THE ANGLE (0 → 360°)
			146-150	STOP
			151-200	PRISM INSERT AND POSITIVE ROTATION (SPEED 100% → 1)
			201-205	STOP ROTATION
			206-255	PRISM INSERT AND REVERSE ROTATION (SPEED 1 → 100%)
15	18	19	<b>FROST/MULTI-COLOR</b>	
			000-063	OPEN
			064-127	FROST
			128-255	MULTI-COLOR
16	19	20	000-255	ZOOM
-	-	21	000-255	ZOOM FINE
17	20	22	000-255	FOCUS
-	-	23	000-255	FOCUS FINE
18	21	24	<b>AUTO FOCUS</b>	
			000-012	NO FUNCTION
			013-039	3 METER
			040-066	5 METER
			067-093	7 METER
			094-120	9 METER
			121-147	11 METER
			148-174	13 METER
			175-201	15 METER
			202-228	17 METER
			229-255	19 METER
19	22	25	000-255	DIMMER
-	23	26	000-255	DIMMER FINE
20	24	27	<b>STROBE</b>	
			000-009	NO FUNCTION
			010-099	STROBE ( FROM SLOW TO FAST )
			100-109	NO FUNCTION
			110-179	LIGHTNING STROBE
			180-189	NO FUNCTION

			190-255	RANDOM STROBE
21	25	28	<b>CONTROL CHANNEL</b>	
			000-010	NO FUNCTION
			011-020	PAN/TILT BLACK ACTIVATED
			021-030	PAN/TILT BLACK DEACTIVATED
			031-035	PAN INVERT
			036-040	TILT INVERT
			041-045	PAN/TILT INVERT OFF
			046-050	Sun Protection On
			051-055	Sun Protection Off
			056-060	No function
			061-070	STUDIO
			071-080	POWER
			081-90	LIVE
			091-100	DIMMER SPEED Halogen
			101-110	DIMMER SPEED LED
			111-120	DIMMER CURVE LINEAR
			121-130	DIMMER CURVE SQUARE LAW
			131-140	DIMMER CURVE INV. SQUARE LAW
			141-150	DIMMER CURVE S-CURVE
			151-160	1200Hz
			161-170	2400Hz
			171-180	4000Hz
			181-190	6000Hz
			191-200	25000Hz
			201-210	ALL RESET
			211-220	XY RESET
			221-230	COLOR SYSTEM RESET
			231-240	FOCUS/ZOOM RESET
			241-250	GOBO RESET
			251-255	NO FUNCTION