

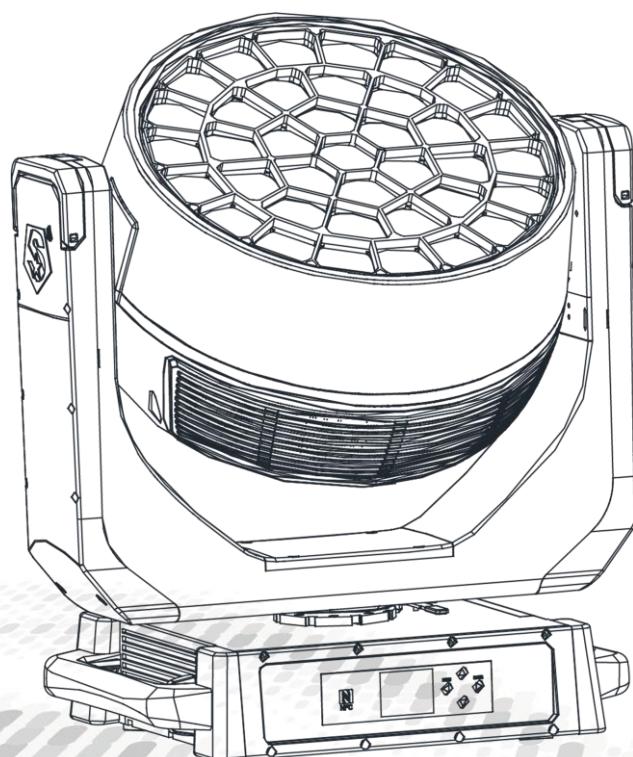


创意源于追求  
Own Idea Of Lighting

# NW10

## USER MANUAL

 NW10  
SS9691



MODEL: SS9691XLEM



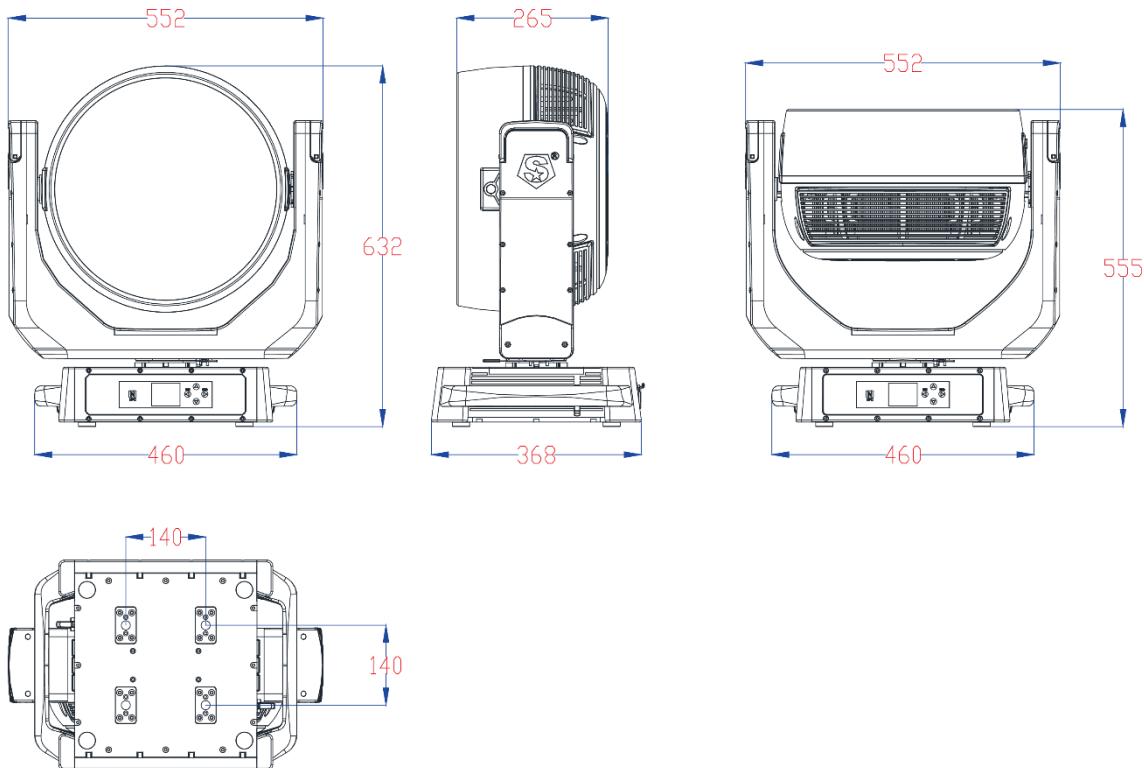
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# 1 PRODUCT

## 1.1 TECHNICAL SPECIFICATIONS

Type	SS9691XLEM
LED colors	37PCS*50W RGB LED
Angle	Beam Angle: 3.5°~35°, Field Angle: 6°~ 60°
Power	1800W
Control Protocol	DMX512,RDM,ARTNET,SACN, NFC,CRMX(optional)
Voltage Range	100-240V~
Frequency Range	50/60Hz
Input Current	110V/16.4A,220V/8.2A
Protection	IP66
Operation Temperature	-20°C~45°C
Dimensions	552x368x632mm
Weight	36kg

## DIMENSIONS



## 1.2 Safety Notes

### **IMPORTANT**

- This product must be installed by a qualified professional.
- 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
- The manufacturer will not accept liability for any resulting damages caused by the non-observance of this manual or any unauthorized modification to the device.

### **CAUTION!**

- Make sure that the available voltage is not higher than stated on the rear panel.
- Do not touch the power cables if your hands are wet.
- The earth wire must always be connected to the ground. Therefore it is essential to connect the yellow/green conductor to earth.
- Make sure that the power-cord is never crimped or damaged by sharp edges. Check the device and the power-cord from time to time. The electric connection, repairs and servicing must be carried out by a qualified employee.
- Always disconnect power input cable to completely remove power from unit when not in use or before cleaning or servicing the fixture.
- Do not switch the fixture on and off in short intervals as this would reduce the LED's life.
- Do not touch the device's housing bare hands during its operation (housing becomes hot)! The surface of the product's casing can reach up to 65° C (149° F) during operation. Avoid contact by persons and materials. Do not install the product in a location where there is a risk of accidental contact. Allow the product to cool for at least 10 minutes before handling.
- For replacement use lamps and fuses of same type and rating only.
- Please protect the fixture and avoid destroy during transport and installation. If there is any damage to the coating, the shell may be corroded.
- When hanging LEDs and lanterns, it is necessary to verify that facilities and hooks can bear at least 10 times the weight of lamps and lanterns.
- Fix the safety rope at the correct holes only. Only operate the fixture after having checked that the housing is firmly closed and all screws are tightly fastened.
- The maximum ambient temperature 45°C must never be exceeded. Do not operate the product if the ambient temperature (Ta) exceeds 45° C (115° F).
- During the initial start-up some smoke or smell may arise. 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 or his service agent or a similar qualified person
- For replacement use lamps and fuses of same type and rating only.
- The lens has to be replaced when it is obviously damaged, so that its function is impaired, e.g. due to cracks or deep scratches!

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

- Keep all combustible materials (e.g. fabric, wood, paper) at least 500 mm (20 in.) away from the product.
- Ensure that there is free and unobstructed airflow around the product. Provide a minimum clearance of 150 mm (6 in.) around fans and air vents.
- Do not illuminate surfaces within 1m (3.2ft.) of the product.
- Do not install a fuse that has a higher rating than the one originally installed in the product. Do not bypass fuses.
- Do not stick filters, masks or 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 heatproof safety gloves. 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 front of the fixture towards the sun or other strong light sources. The front lens focuses and concentrates light just like a magnifying glass. Strong light can cause internal damage to the fixture, melting components or starting an internal fire within seconds.**

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

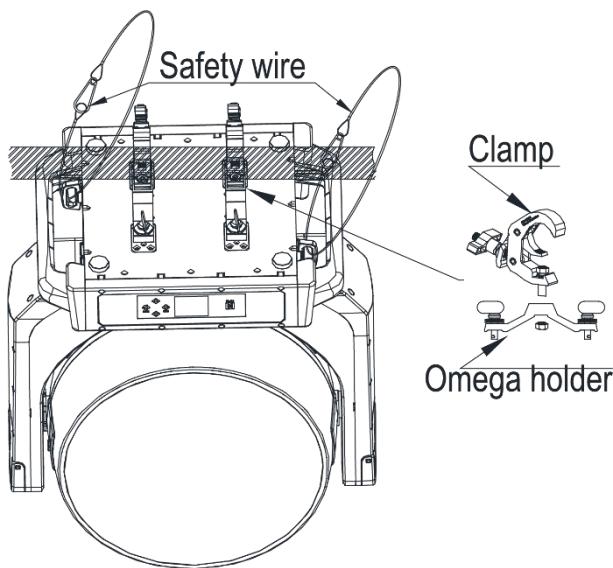
- Do not expose the front of a fixture to sunlight or any other strong light source. Avoid pointing other high-powered beam lights directly at the fixture.
- Do not focus a light beam from one lighting fixture directly towards another.
- For outdoor applications during daylight, make sure that the front face of any fixture is shielded or points away from the sun, even when not in use.
- Do not expose the product to heat (from other lighting fixtures for example).

# 2 INSTALLATION

## 2.1 MOUNTING

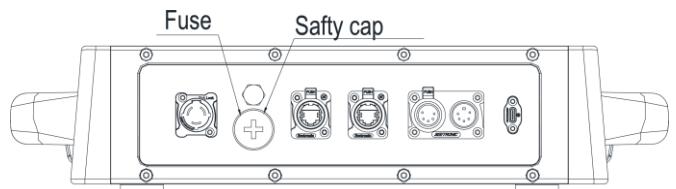
### Truss installation

- ◆ Keep all combustible materials (e.g. fabric, wood, paper) at least 500 mm (20 in.) away from the product.
- ◆ For overhead use, always install a safety cable that can hold at least 10 times the weight of the fixture.
- ◆ For overhead installation, the fixture must be always secured with a safety wire that can bear at least 10 times the weight of the fixture;
- ◆ Secure the fixture with a safety cable through the rear safety eye and truss as shown..
- ◆ Ensure that the structure (truss) to which you are attaching the fixture is secure



## 2.2 Fuse replacement

- ◆ Remove the safety cap by a screwdriver.
- ◆ Fetch the old fuse from safety cap.
- ◆ Install a new fuse.
- ◆ Install the safety cap.



## 2.3 POWER CONNECTIONS

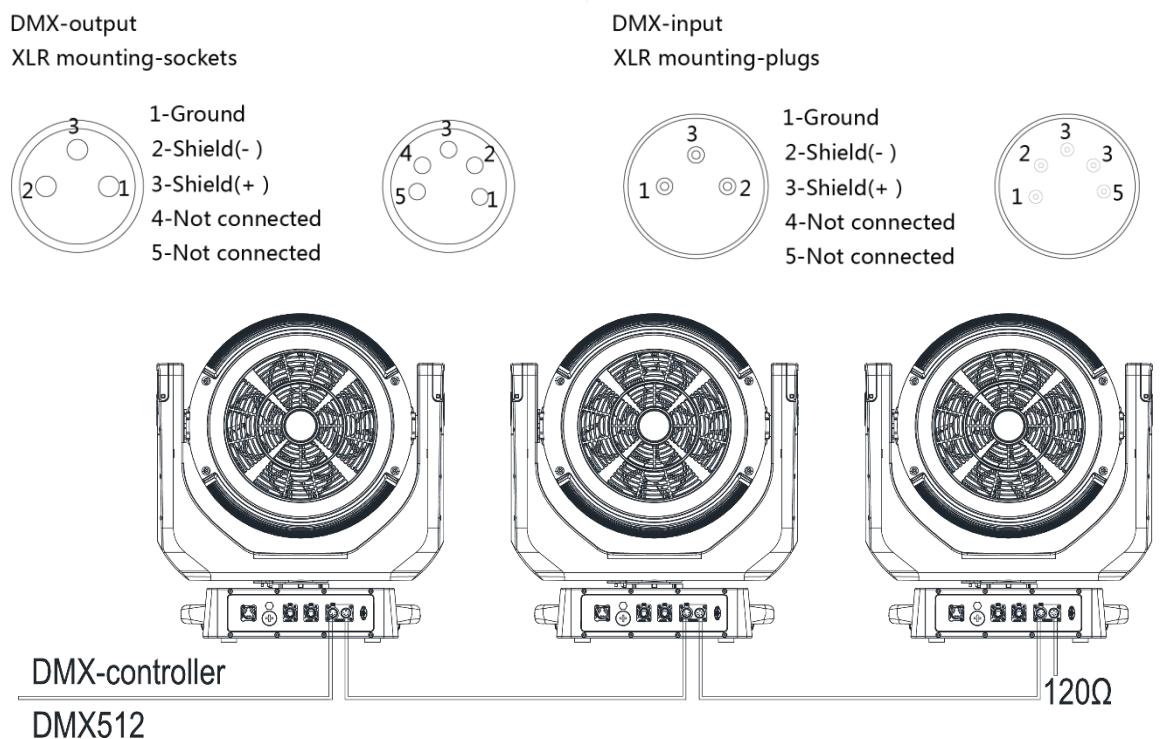
- ◆ This product has an auto-ranging power supply that can work with an input voltage range of 100–240 VAC, 50/60 Hz.

AC Plug

Connection	Wire (U.S.)	Wire(Europe)	Screw Color
AC Live	Black	Brown	Yellow/Brass
AC Neutral	White	Blue	Silver
AC Ground	Green/Yellow	Green/Yellow	Green

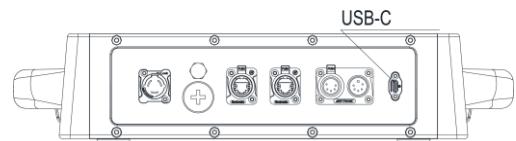
## 2.4 Data network requirements

- ◆ Connect the DMX512 controller to the units in series. A DMX 512 data link is required in order to control the fixture via DMX. The fixture has 3/5-pin XLR connectors for DMX data input and output.
- ◆ Each unit has N DMX channels so the DMX Addresses should increase by increments of 1, (Nx1)+1, (Nx2)+1, (Nx3)+1...
- ◆ Any DMX address in the range from 001 to 512 may be used.
- ◆ Connect the DMX-output of the first fixture in the DMX chain with the DMX-input of the next fixture. Always connect one output with the input of the next fixture until all fixtures are connected.
- ◆ Caution: At the last fixture, the DMX-cable has to be terminated with a terminator. Solder a  $120\ \Omega$  resistor between Signal (-) and Signal (+) into a 3/5-pin XLR-plug and plug it in the DMX-output of the last fixture.



## 2.5 Update software

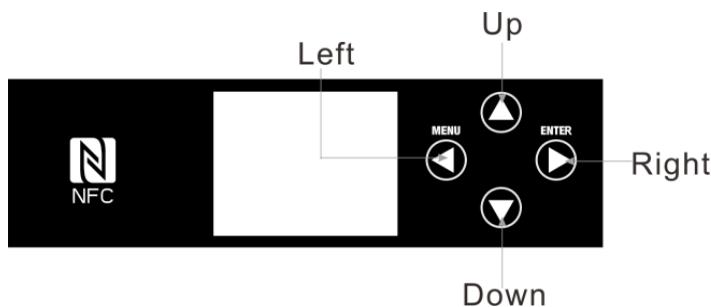
- ◆ Steps of updating software with USB-C interface:
  1. Insert USB-C U dish into USB-C interface
  2. After finding "Upgrade Software" in the menu, Find the corresponding software and click OK



# 3 FUNCTIONS AND SETTINGS

## 3.1 DISPLAY OPERATION

- ◆ LEFT: Used to access the menu or to return a previous menu option;
- ◆ RIGHT: 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;
- ◆ When the display locked, please unlock the display as below:
  1. Keep pressing BACK around 5sec, until the display shows inset password.
  2. Press "up down up down, enter" to unlock.



## 3.2 Menu Map

ADDRESS	001 – 512(Default 001)		DMX address setting
PERSON	HSIC		Use the menu to select desired channel mode
	SSP		
	TOUR(Default)		
	TR16		
	CMY		
	PIXEL		
RUNMODE	DMX512 (Default)		Select Signal Default: DMX512 CUSTOM 1-2 Set up get into EDIT MENU edit
	ARTNET		
	ARTNET2DMX		
	sACN		
	AUTO		
	CUSTOM1		
	CUSTOM2		
OPTION	PAN	OFF(Default)	PAN moving direction selection
	INVERT	ON	
	TILT	OFF(Default)	TILT moving direction selection
	INVERT	ON	
	PAN	630	PAN moving degree selection
	DEGREE	540	
	PERFORM	STUDIO	Fan mode low speed
		POWER	Fast rotation of fan, all power

	LIVE (Default)	Automatic rotation of fan		
BLACKOUT	OFF (Default)	Select OFF blackout without delay		
	ON	Select ON Blackout delay 3s		
PT ENCODER	OFF(Default)	XY Encoder switch. OFF is close; ON is open.		
	ON			
DIMMER	DIM4 (Default)	Dimming speed OFF (fast) to DIM4 (slow);		
	OFF			
DIMMER CURVE	LINEAR	Dimmer curves selection		
	SQUARE LAW(Default)			
	INV. SQUARE LAW			
	S-CURVE			
LED PWM	1200Hz (Default)	Sets the PWM frequency		
	2400Hz			
	4000Hz			
	6000Hz			
	25000Hz			
COLOR MODE	RGBL (Default)	DMX channl output RGBL colour		
	RGBW	DMX channl output RGBW colour		
DMX ERROR	SAVE (Default)	Hold after loss of DMX signal		
	BLACK	Blackout after loss of DMX signal		
DISP 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(Default)	Upload data		
	ON	Not 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	Hide wireless mode WDMX reset and signal hide and the default is wired mode only	
		NO		
Color Cali	OFF (Default)			Full power mode
	User Calibration	RED	0-255	Manual calibration mode
		GREEN	0-255	
		BLUE	0-255	
		LIME	0-255	
	Factory Calibration			Factory calibration mode
NETWORK	NET	2.xxx.xxx.xxx		Net switch off IP mode
	SWITCH	10.xxx.xxx.xxx		Packet group Settings
	UNIVERS	0-255		Default IP
	IP MODE	DEFAUL IP		Customer's IP
		CUSTOM IP		Customer's IP setting

		CUSTOM IP	XX.XX.XX.XX	Net switch off IP mode	
LANGUAGE	****	Chinese	LANGUAGE		
		English(Default)			
WDMX RESET	YES		Do not clear the receiver's message.		
	NO		Clear the receiver's message		
SIGNAL	ONLY XLRDMX(Default)		ONLY XLR is wire only		
	XLRDMX FIRST		XLR FIRST is wire first		
	ONLY WDMX		ONLY WDMX is wireless only		
	WDMX FIRST		WDMX FIRS is wireless first		
	WDMX TO XLRDMX		WDMX TO DMX is wireless to wired		
EDIT	EDIT 1-2	STEP 1-30	PAN	0-255	Edit the custom programs1-30 Select play 【EDIT 1】 in RUNMOEDE CUSTOM 1; Select play 【EDIT 2】 in RUNMOEDE CUSTOM 2
			TITL	0-255	
			ZOOM	0-255	
			RED	0-255	
			GREEN	0-255	
			BLUE	0-255	
			LIME	0-255	
			STROBE	0-255	
			PRESET COLOR	0-255	
			CCT	0-255	
			STATIC PIXEL	0-255	
			PIXEL EFFECT	0-255	
			FX RED	0-255	
			FX GREEN	0-255	
			FX BLUE	0-255	
			RING RED	0-255	
			RING GREEN	0-255	
			RING BLUE	0-255	
			TIME	0-255	
			USE	YES/NO	Select YES to run the steps user need.
MANUAL	Auto Test				Auto Test channel
	CHANNEL		PAN	0-255	Manual control channel
			TITL	0-255	
			ZOOM	0-255	
			RED	0-255	
			GREEN	0-255	
			BLUE	0-255	
			LIME	0-255	
			STROBE	0-255	
			PRESET COLOR	0-255	
			CCT	0-255	
			STATIC PIXEL	0-255	
			PIXEL EFFECT	0-255	
			FX RED	0-255	
			FX GREEN	0-255	

		FX BLUE	0-255		
		RING RED	0-255		
		RING GREEN	0-255		
		RING BLUE	0-255		
	CCT	1800K		Preset color temperatures	
		2200K			
		2700K			
		3000K			
		3200K			
		4000K			
		4500K			
		5000K			
		5600K			
		6000K			
		6500K			
		7000K			
	PRESET COLOR	8000K		Preset color (See Annex I for details)	
		10000K			
		COLOR 1			
		COLOR 2			
	CMY	...		Cyan、Magenta、Yellow color	
		COLOR 24			
		CYAN			
		MAGENTA			
		YELLOW			
		C+M			
	DEBUG HIDE	C+Y		Factory testing mode. All stepper motors are not controlled by signal, It only works again after the reset.	
		M+Y			
	RESET	NO		Select Yes/No to carry out all reset	
		YES			
		ALL RESET			
		XY RESET		Select Yes/No to carry out P/T reset	
		ZOOM		Zoom/ Focus/ Prism reset	
SERVICE	****	PAN	±127	Pan position fine adjustment	
		TILT	±127	Tilt position fine adjustment	
		ZOOM	±127	Zoom position fine adjustment	
INFO	FIXTURE HOURS			Hours of fixture use	
	LED USE HOURS			LED use time	
	TEMPERATURE			LED temperature	
	VERSION			Software versions	
	NETWORK			Check network parameter	
	RDM	UID	0x388Axxxxxxx	Check fixture's ID	
		LABEL		Check fixture's LABEL	
		MEMORY IC		Memory IC	

SYSTEM ERROR	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
	NetworkIc	NetworkIc
UPDATE SOFTWARE		USB-C Update software

All passwords of this product are: <UP>, <DOWN>, <UP>, <DOWN>, <ENTER>

# 4 USING A DMX512 CONTROLLER

## 4.1 DMX CONTROL

<b>HSIC (28CH)</b>	<b>Value</b>	<b>Function</b>
1	0-255	PAN
2	0-255	PAN FINE
3	0-255	TITL
4	0-255	TITL FINE
5	0-255	PT SPEED
6	<b>PAN Motor continuous rotation</b>	
	0-63	stop rotation by spinout
	64-127	stop rotation by shortcut
	128-189	Forwards Pan rotation from fast to slow
	190-193	No rotation
7	194-255	Backwards Pan rotation from slow to fast
	0-255	INTENSIYT
	0-255	HUE
	0-255	HUE FINE
	0-255	SATURATION
11	<b>CCT</b>	
	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
12	205	10000K
	255	10000K
	<b>STROBE</b>	
	0-9	NO FUNCTION
	10-99	STROBE FROM (SLOW TO FAST , 0-25Hz)
13	100-109	NO FUNCTION
	110-179	LIGHTNING STROBE
	180-189	NO FUNCTION
	190-255	RANDOM STROBE
	0-255	ZOOM
14	0-255	RED (Facial mask light strip)

15	0-255	GREEN (Facial mask light strip)
16	0-255	BULE (Facial mask light strip)
<b>Facial mask light strip Color Presets</b>		
17	000-009	Open
	010-014	RED
	015-019	GREEN
	020-024	BLUE
	025-029	Yellow
	030-034	Magenta
	035-039	Cyan
	040-044	WHITE
	045-049	Violet blue
	050-054	Light blue
	055-059	Wine red
	060-064	May green
	065-069	Reseda green
	070-074	Blue lilac
	075-079	Moss green
	080-084	Signal violet
	085-089	Red lilac
	090-094	Purple red
	095-099	Green brown
	100-104	Pale green
	105-109	Ruby red
	110-114	Flame red
	115-119	Red orange
	120-124	Rose
	125-129	Honey yellow
	130-134	Light Pin
	135-139	Deep orange
	140-144	Lemmon
	145-149	Golden yellow
	150-154	Pastel orange
	155-159	Cream
	160-164	Melon yellow
	165-169	Luminous orange
	170-174	Luminous ellow
	175-179	Open
	180-248	Stop
	249-255	Open
<b>Color FX (Facial mask light strip)</b>		
18	0-10	Open
	11-20	FX1 (Associated with CH13-CH15)
	21-30	FX2 (Associated with CH13-CH15)
	31-40	FX3 (Associated with CH13-CH15)
	41-50	FX4 (Associated with CH13-CH15)

	51-60	FX5 (Associated with CH13-CH15)
	61-70	FX6 (Associated with CH13-CH15)
	71-80	FX7 (Associated with CH13-CH15)
	81-90	FX8 (Associated with CH13-CH15)
	91-100	FX9 (Associated with CH13-CH15)
	101-110	FX10 (Associated with CH13-CH15)
	111-120	FX11 (Associated with CH13-CH15)
	121-130	FX12
	131-140	FX13
	141-150	FX14
	151-160	FX15
	161-170	FX16
	171-180	FX17
	181-190	FX18
	191-200	FX19
	201-210	FX20
	211-255	Open
19	0-255	Facial mask light strip speed(SPEED 1 → 100%)
20	0-255	Facial mask light strip Dimmer
21	0-255	RED RING (RGB ring)
22	0-255	GREEN RING (RGB ring)
23	0-255	BULE RING (RGB ring)
24	<b>Ring Color Presets (RGB ring)</b>	
	000-009	Open
	010-014	RED
	015-019	GREEN
	020-024	BLUE
	025-029	Yellow
	030-034	Magenta
	035-039	Cyan
	040-044	WHITE
	045-049	Violet blue
	050-054	Light blue
	055-059	Wine red
	060-064	May green
	065-069	Reseda green
	070-074	Blue lilac
	075-079	Moss green
	080-084	Signal violet
	085-089	Red lilac
	090-094	Purple red
	095-099	Green brown
	100-104	Pale green
	105-109	Ruby red
	110-114	Flame red
	115-119	Red orange

	120-124	Rose
	125-129	Honey yellow
	130-134	Light Pin
	135-139	Deep orange
	140-144	Lemmon
	145-149	Golden yellow
	150-154	Pastel orange
	155-159	Cream
	160-164	Melon yellow
	165-169	Luminous orange
	170-174	Luminous yellow
	175-179	Open
	180-248	Stop
	249-255	Open
25	<b>Color FX (RGB ring)</b>	
	0-10	Open
	11-20	FX1 (Associated with CH20-CH22)
	21-30	FX2 (Associated with CH20-CH22)
	31-40	FX3 (Associated with CH20-CH22)
	41-50	FX4 (Associated with CH20-CH22)
	51-60	FX5 (Associated with CH20-CH22)
	61-70	FX6 (Associated with CH20-CH22)
	71-80	FX7 (Associated with CH20-CH22)
	81-90	FX8 (Associated with CH20-CH22)
	91-100	FX9 (Associated with CH20-CH22)
	101-110	FX10 (Associated with CH20-CH22)
	111-120	FX11 (Associated with CH20-CH22)
	121-130	FX12
	131-140	FX13
	141-150	FX14
	151-160	FX15
	161-170	FX16
	171-180	FX17
	181-190	FX18
	191-200	FX19
	201-210	FX20
	211-255	Open
26	0-255	Ring Speed(SPEED 1 → 100%)
27	0-255	Ring Dimmer (RGB ring)
28	<b>CONTROL (EXECUTE AFTER 3 SECONDS)</b>	
	0-10	NO FUNCTION
	11-15	PAN/TILT BLACK ACTIVATED
	16-20	PAN/TILT BLACK DEACTIVATED
	21-25	PAN INVERT
	26-30	TILT INVERT
	31-35	PAN/TILT INVERT OFF

	36-40	PAN DEGREE 630
	41-45	PAN DEGREE 540
	46-50	Sun Protection On
	51-55	Sun Protection Off
	56-100	RESERVED
	101-105	STUDIO
	106-110	POWER
	111-115	LIVE
	116-120	RESERVED
	121-125	Tungsten Fade ON
	126-130	Tungsten Fade OFF
	131-135	DIMMER SPEED Halogen
	136-140	DIMMER SPEED LED
	141-145	DIMMER CURVE LINEAR
	146-150	DIMMER CURVE SQUARE LAW
	151-155	DIMMER CURVE INV. SQUARE LAW
	156-160	DIMMER CURVE S-CURVE
	161-165	1200Hz
	166-170	2400Hz
	171-175	4000Hz
	176-180	6000Hz
	181-185	25000Hz
	186-190	RESERVED
	191-195	COLOR MODE RGBL
	196-200	COLOR MODE RGBW
	201-205	ALL RESET
	206-210	XY RESET
	211-215	ZOOM RESET
	216-250	RESERVED
	251-255	NO FUNCTION

SSP (26CH)	TOUR (33CH)	TR16 (38CH)	Value	Function
1	1	1	0-255	PAN
	2	2	0-255	PAN FINE
2	3	3	0-255	TITL
	4	4	0-255	TITL FINE
3	5	5	0-255	PT SPEED
4	6	6	<b>PAN Motor continuous rotation</b>	
			0-63	stop rotation by spinout
			64-127	stop rotation by shortcut
			128-189	Forwards Pan rotation from fast to slow
			190-193	No rotation
			194-255	Backwards Pan rotation from slow to fast
5	7	7	0-255	RED
		8	0-255	RED FINE

6	8	9	0-255	GREEN
		10	0-255	GREEN FINE
7	9	11	0-255	BLUE
		12	0-255	BLUE FINE
8	10	13	0-255	LIME
		14	0-255	LIME FINE
9	11	15	0-255	DIMMER
		16	0-255	DIMMER FINE
10	12	17	<b>STROBE</b>	
			0-9	NO FUNCTION
			10-99	STROBE FROM (SLOW TO FAST , 0-25Hz)
			100-109	NO FUNCTION
			110-179	LIGHTNING STROBE
			180-189	NO FUNCTION
			190-255	RANDOM STROBE
	13	18	<b>PRESET COLOR</b>	
			0-10	NO FUNCTION
			11-255	PRESET COLOR (See Annex I for details)
14	19	19	<b>CCT</b>	
			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
	15	20	<b>STATIC PIXEL</b>	
			0-10	NO FUNCTION
			11-255	STATIC PIXEL (See Annex 2 for details)
	16	21	<b>PIXEL EFFECT</b>	
			0-10	NO FUNCTION
			11-255	PIXEL EFFECT (See Annex 3 for details)
	17	22	0-255	AUTO SPEED ADJUSTMENT(SLOW TO FAST)
11	18	23	0-255	ZOOM
12	19	24	0-255	RED (Facial mask light strip)
13	20	25	0-255	GREEN (Facial mask light strip)
14	21	26	0-255	BULE (Facial mask light strip)

			<b>Facial mask light strip Color Presets</b>
15	22	27	0-9 Open
			10-14 RED
			15-19 GREEN
			20-24 BLUE
			25-29 Yellow
			30-34 Magenta
			35-39 Cyan
			40-44 WHITE
			45-49 Violet blue
			50-54 Light blue
			55-59 Wine red
			60-64 May green
			65-69 Reseda green
			70-75 Blue lilac
			75-79 Moss green
			80-84 Signal violet
			85-89 Red lilac
			90-94 Purple red
			95-99 Green brown
			100-104 Pale green
			105-109 Ruby red
			110-114 Flame red
			115-119 Red orange
			120-124 Rose
			125-129 Honey yellow
			130-134 Light Pin
			135-139 Deep orange
			140-144 Lemmon
			145-149 Golden yellow
			150-154 Pastel orange
			155-159 Cream
			160-164 Melon yellow
			165-169 Luminous orange
			170-174 Luminous yellow
			175-179 Open
			180-248 Stop
			249-255 Open
16	23	28	<b>Color FX (Facial mask light strip)</b>
			0-10 Open
			11-20 FX1 (Associated with RGB)
			21-30 FX2 (Associated with RGB)
			31-40 FX3 (Associated with RGB)
			41-50 FX4 (Associated with RGB)
			51-60 FX5 (Associated with RGB)
			61-70 FX6 (Associated with RGB)

			71-80	FX7 (Associated with RGB)
			81-90	FX8 (Associated with RGB)
			91-100	FX9 (Associated with RGB)
			101-110	FX10 (Associated with RGB)
			111-120	FX11 (Associated with RGB)
			121-130	FX12
			131-140	FX13
			141-150	FX14
			151-160	FX15
			161-170	FX16
			171-180	FX17
			181-190	FX18
			191-200	FX19
			201-210	FX20
			211-255	Open
17	24	29	0-255	Facial mask light strip speed(SPEED 1 → 100%)
18	25	30	0-255	Facial mask light strip Dimmer
19	26	31	0-255	RED RING (RGB ring)
20	27	32	0-255	GREEN RING (RGB ring)
21	28	33	0-255	BULE RING (RGB ring)
22	29	34	<b>Ring Color Presets (RGB ring)</b>	
			0-9	Open
			10-14	RED
			15-19	GREEN
			20-24	BLUE
			25-29	Yellow
			30-34	Magenta
			35-39	Cyan
			40-44	WHITE
			45-49	Violet blue
			50-54	Light blue
			55-59	Wine red
			60-64	May green
			65-69	Reseda green
			70-75	Blue lilac
			75-79	Moss green
			80-84	Signal violet
			85-89	Red lilac
			90-94	Purple red
			95-99	Green brown
			100-104	Pale green
			105-109	Ruby red
			110-114	Flame red
			115-119	Red orange
			120-124	Rose
			125-129	Honey yellow

			130-134	Light Pin
			135-139	Deep orange
			140-144	Lemmon
			145-149	Golden yellow
			150-154	Pastel orange
			155-159	Cream
			160-164	Melon yellow
			165-169	Luminous orange
			170-174	Luminous yellow
			175-179	Open
			180-248	Stop
			249-255	Open
			<b>Color FX (RGB ring)</b>	
			0-10	Open
			11-20	FX1 (Associated with RGB)
			21-30	FX2 (Associated with RGB)
			31-40	FX3 (Associated with RGB)
			41-50	FX4 (Associated with RGB)
			51-60	FX5 (Associated with RGB)
			61-70	FX6 (Associated with RGB)
			71-80	FX7 (Associated with RGB)
			81-90	FX8 (Associated with RGB)
			91-100	FX9 (Associated with RGB)
			101-110	FX10 (Associated with RGB)
			111-120	FX11 (Associated with RGB)
			121-130	FX12
			131-140	FX13
			141-150	FX14
			151-160	FX15
			161-170	FX16
			171-180	FX17
			181-190	FX18
			191-200	FX19
			201-210	FX20
			211-255	Open
24	31	36	0-255	Ring speed (SPEED 1 → 100%)
25	32	37	0-255	Ring Dimmer (RGB ring)
			<b>CONTROL (EXECUTE AFTER 3 SECONDS)</b>	
			0-10	NO FUNCTION
			11-15	PAN/TILT BLACK ACTIVATED
			16-20	PAN/TILT BLACK DEACTIVATED
			21-25	PAN INVERT
			26-30	TILT INVERT
			31-35	PAN/TILT INVERT OFF
			36-40	PAN DEGREE 630
			41-45	PAN DEGREE 540

		46-50	Sun Protection On
		51-55	Sun Protection Off
		56-100	RESERVED
		101-105	STUDIO
		106-110	POWER
		111-115	LIVE
		116-120	RESERVED
		121-125	Tungsten Fade ON
		126-130	Tungsten Fade OFF
		131-135	DIMMER SPEED Halogen
		136-140	DIMMER SPEED LED
		141-145	DIMMER CURVE LINEAR
		146-150	DIMMER CURVE SQUARE LAW
		151-155	DIMMER CURVE INV. SQUARE LAW
		156-160	DIMMER CURVE S-CURVE
		161-165	1200Hz
		166-170	2400Hz
		171-175	4000Hz
		176-180	6000Hz
		181-185	25000Hz
		186-190	RESERVED
		191-195	COLOR MODE RGBL
		196-200	COLOR MODE RGBW
		201-205	ALL RESET
		206-210	XY RESET
		211-215	ZOOM RESET
		216-250	RESERVED
		251-255	NO FUNCTION

CMY(31CH)	Value	Function
1	0-255	PAN
2	0-255	PAN FINE
3	0-255	TITL
4	0-255	TITL FINE
5	0-255	PT SPEED
6	<b>PAN Motor continuous rotation</b>	
	0-63	stop rotation by spinout
	64-127	stop rotation by shortcut
	128-189	Forwards Pan rotation from fast to slow
	190-193	No rotation
7	194-255	Backwards Pan rotation from slow to fast
	0-255	CYAN
	0-255	MAGENT
	0-255	YELLOW
	0-255	DIMMER
11	<b>STROBE</b>	

	0-9	NO FUNCTION
	10-99	STROBE FROM (SLOW TO FAST , 0-25Hz)
	100-109	NO FUNCTION
	110-179	LIGHTNING STROBE
	180-189	NO FUNCTION
	190-255	RANDOM STROBE
12	<b>PRESET COLOR</b>	
	0-10	NO FUNCTION
	11-255	PRESET COLOR (See Annex I for details)
13	<b>CCT</b>	
	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
14	<b>STATIC PIXEL</b>	
	0-10	NO FUNCTION
	11-255	STATIC PIXEL (See Annex 2 for details)
15	<b>PIXEL EFFECT</b>	
	0-10	NO FUNCTION
	11-255	PIXEL EFFECT (See Annex 3 for details)
16	0-255	AUTO SPEED ADJUSTMENT(SLOW TO FAST)
17	0-255	ZOOM
18	0-255	RED (Facial mask light strip)
19	0-255	GREEN (Facial mask light strip)
20	0-255	BULE (Facial mask light strip)
21	<b>Facial mask light strip Color Presets</b>	
	000-009	Open
	010-014	RED
	015-019	GREEN
	020-024	BLUE
	025-029	Yellow
	030-034	Magenta
	035-039	Cyan
	040-044	WHITE

	045-049	Violet blue
	050-054	Light blue
	055-059	Wine red
	060-064	May green
	065-069	Reseda green
	070-074	Blue lilac
	075-079	Moss green
	080-084	Signal violet
	085-089	Red lilac
	090-094	Purple red
	095-099	Green brown
	100-104	Pale green
	105-109	Ruby red
	110-114	Flame red
	115-119	Red orange
	120-124	Rose
	125-129	Honey yellow
	130-134	Light Pin
	135-139	Deep orange
	140-144	Lemmon
	145-149	Golden yellow
	150-154	Pastel orange
	155-159	Cream
	160-164	Melon yellow
	165-169	Luminous orange
	170-174	Luminous yellow
	175-179	Open
	180-248	Stop
	249-255	Open
22	<b>Color FX (Facial mask light strip)</b>	
	0-10	Open
	11-20	FX1 (Associated with RGB)
	21-30	FX2 (Associated with RGB)
	31-40	FX3 (Associated with RGB)
	41-50	FX4 (Associated with RGB)
	51-60	FX5 (Associated with RGB)
	61-70	FX6 (Associated with RGB)
	71-80	FX7 (Associated with RGB)
	81-90	FX8 (Associated with RGB)
	91-100	FX9 (Associated with RGB)
	101-110	FX10 (Associated with RGB)
	111-120	FX11 (Associated with RGB)
	121-130	FX12
	131-140	FX13
	141-150	FX14
	151-160	FX15

	161-170	FX16
	171-180	FX17
	181-190	FX18
	191-200	FX19
	201-210	FX20
	211-255	Open
23	0-255	Facial mask light strip speed(SPEED 1 → 100%)
24	0-255	Facial mask light strip Dimmer
25	0-255	RED RING (RGB ring)
26	0-255	GREEN RING (RGB ring)
27	0-255	BULE RING (RGB ring)
28	<b>Ring Color Presets (RGB ring)</b>	
	000-009	Open
	010-014	RED
	015-019	GREEN
	020-024	BLUE
	025-029	Yellow
	030-034	Magenta
	035-039	Cyan
	040-044	WHITE
	045-049	Violet blue
	050-054	Light blue
	055-059	Wine red
	060-064	May green
	065-069	Reseda green
	070-074	Blue lilac
	075-079	Moss green
	080-084	Signal violet
	085-089	Red lilac
	090-094	Purple red
	095-099	Green brown
	100-104	Pale green
	105-109	Ruby red
	110-114	Flame red
	115-119	Red orange
	120-124	Rose
	125-129	Honey yellow
	130-134	Light Pin
	135-139	Deep orange
	140-144	Lemmon
	145-149	Golden yellow
	150-154	Pastel orange
	155-159	Cream
	160-164	Melon yellow
	165-169	Luminous orange
	170-174	Luminous yellow

	175-179	Open
	180-248	Stop
	249-255	Open
<b>Color FX (RGB ring)</b>		
	0-10	Open
	11-20	FX1 (Associated with RGB)
	21-30	FX2 (Associated with RGB)
	31-40	FX3 (Associated with RGB)
	41-50	FX4 (Associated with RGB)
	51-60	FX5 (Associated with RGB)
	61-70	FX6 (Associated with RGB)
	71-80	FX7 (Associated with RGB)
	81-90	FX8 (Associated with RGB)
	91-100	FX9 (Associated with RGB)
29	101-110	FX10 (Associated with RGB)
	111-120	FX11 (Associated with RGB)
	121-130	FX12
	131-140	FX13
	141-150	FX14
	151-160	FX15
	161-170	FX16
	171-180	FX17
	181-190	FX18
	191-200	FX19
	201-210	FX20
	211-255	Open
30	0-255	Ring speed(SPEED 1 → 100%)
31	0-255	Ring Dimmer (RGB ring)
<b>CONTROL (EXECUTE AFTER 3 SECONDS)</b>		
	0-10	NO FUNCTION
	11-15	PAN/TILT BLACK ACTIVATED
	16-20	PAN/TILT BLACK DEACTIVATED
	21-25	PAN INVERT
	26-30	TILT INVERT
	31-35	PAN/TILT INVERT OFF
	36-40	PAN DEGREE 630
32	41-45	PAN DEGREE 540
	46-50	Sun Protection On
	51-55	Sun Protection Off
	56-100	RESERVED
	101-105	STUDIO
	106-110	POWER
	111-115	LIVE
	116-120	RESERVED
	121-125	Tungsten Fade ON
	126-130	Tungsten Fade OFF

	131-135	DIMMER SPEED Halogen
	136-140	DIMMER SPEED LED
	141-145	DIMMER CURVE LINEAR
	146-150	DIMMER CURVE SQUARE LAW
	151-155	DIMMER CURVE INV. SQUARE LAW
	156-160	DIMMER CURVE S-CURVE
	161-165	1200Hz
	166-170	2400Hz
	171-175	4000Hz
	176-180	6000Hz
	181-185	25000Hz
	186-190	RESERVED
	191-195	COLOR MODE RGBL
	196-200	COLOR MODE RGBW
	201-205	ALL RESET
	206-210	XY RESET
	211-215	ZOOM RESET
	216-250	RESERVED
	251-255	NO FUNCTION

PIXEL (174CH)	Value	Function
1	0-255	PAN
2	0-255	PAN FINE
3	0-255	TITL
4	0-255	TITL FINE
5	0-255	PT SPEED
6	<b>PAN Motor continuous rotation</b>	
	0-63	stop rotation by spinout
	64-127	stop rotation by shortcut
	128-189	Forwards Pan rotation from fast to slow
	190-193	No rotation
	194-255	Backwards Pan rotation from slow to fast
7	0-255	ZOOM
8	0-255	RED (Facial mask light strip)
9	0-255	GREEN (Facial mask light strip)
10	0-255	BULE (Facial mask light strip)
11	<b>Facial mask light strip Color Presets</b>	
	000-009	Open
	010-014	RED
	015-019	GREEN
	020-024	BLUE
	025-029	Yellow
	030-034	Magenta
	035-039	Cyan
	040-044	WHITE

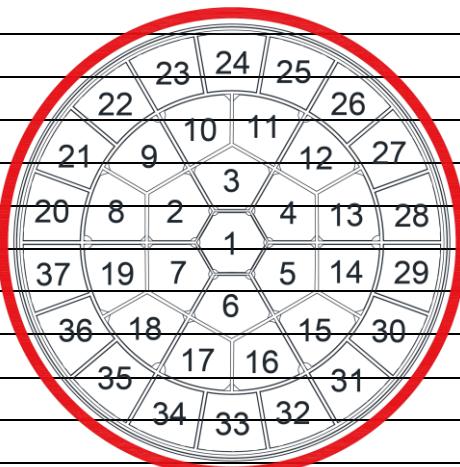
	045-049	Violet blue
	050-054	Light blue
	055-059	Wine red
	060-064	May green
	065-069	Reseda green
	070-074	Blue lilac
	075-079	Moss green
	080-084	Signal violet
	085-089	Red lilac
	090-094	Purple red
	095-099	Green brown
	100-104	Pale green
	105-109	Ruby red
	110-114	Flame red
	115-119	Red orange
	120-124	Rose
	125-129	Honey yellow
	130-134	Light Pin
	135-139	Deep orange
	140-144	Lemmon
	145-149	Golden yellow
	150-154	Pastel orange
	155-159	Cream
	160-164	Melon yellow
	165-169	Luminous orange
	170-174	Luminous yellow
	175-179	Open
	180-248	Stop
	249-255	Open
12	<b>Color FX (Facial mask light strip)</b>	
	0-10	Open
	11-20	FX1 (Associated with RGB)
	21-30	FX2 (Associated with RGB)
	31-40	FX3 (Associated with RGB)
	41-50	FX4 (Associated with RGB)
	51-60	FX5 (Associated with RGB)
	61-70	FX6 (Associated with RGB)
	71-80	FX7 (Associated with RGB)
	81-90	FX8 (Associated with RGB)
	91-100	FX9 (Associated with RGB)
	101-110	FX10 (Associated with RGB)
	111-120	FX11 (Associated with RGB)
	121-130	FX12
	131-140	FX13
	141-150	FX14
	151-160	FX15

	161-170	FX16
	171-180	FX17
	181-190	FX18
	191-200	FX19
	201-210	FX20
	211-255	Open
13	0-255	Facial mask light strip speed(SPEED 1 —> 100%)
14	0-255	Facial mask light strip Dimmer
15	0-255	RED RING (RGB ring)
16	0-255	GREEN RING (RGB ring)
17	0-255	BULE RING (RGB ring)
18	<b>Ring Color Presets (RGB ring)</b>	
	000-009	Open
	010-014	RED
	015-019	GREEN
	020-024	BLUE
	025-029	Yellow
	030-034	Magenta
	035-039	Cyan
	040-044	WHITE
	045-049	Violet blue
	050-054	Light blue
	055-059	Wine red
	060-064	May green
	065-069	Reseda green
	070-074	Blue lilac
	075-079	Moss green
	080-084	Signal violet
	085-089	Red lilac
	090-094	Purple red
	095-099	Green brown
	100-104	Pale green
	105-109	Ruby red
	110-114	Flame red
	115-119	Red orange
	120-124	Rose
	125-129	Honey yellow
	130-134	Light Pin
	135-139	Deep orange
	140-144	Lemmon
	145-149	Golden yellow
	150-154	Pastel orange
	155-159	Cream
	160-164	Melon yellow
	165-169	Luminous orange
	170-174	Luminous yellow

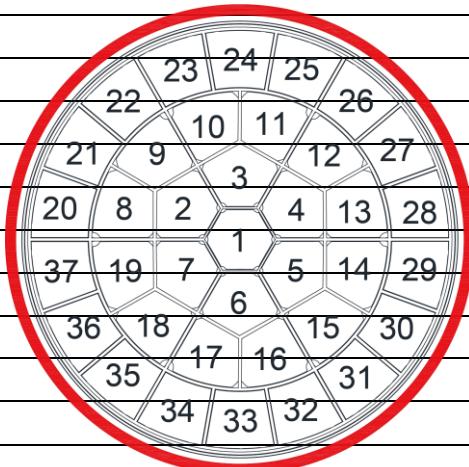
	175-179	Open
	180-248	Stop
	249-255	Open
<b>Color FX (RGB ring)</b>		
	0-10	Open
	11-20	FX1 (Associated with RGB)
	21-30	FX2 (Associated with RGB)
	31-40	FX3 (Associated with RGB)
	41-50	FX4 (Associated with RGB)
	51-60	FX5 (Associated with RGB)
	61-70	FX6 (Associated with RGB)
	71-80	FX7 (Associated with RGB)
	81-90	FX8 (Associated with RGB)
	91-100	FX9 (Associated with RGB)
19	101-110	FX10 (Associated with RGB)
	111-120	FX11 (Associated with RGB)
	121-130	FX12
	131-140	FX13
	141-150	FX14
	151-160	FX15
	161-170	FX16
	171-180	FX17
	181-190	FX18
	191-200	FX19
	201-210	FX20
	211-255	Open
20	0-255	Ring Speed (SPEED 1 → 100%)
21	0-255	Ring Dimmer (RGB ring)
<b>CONTROL (EXECUTE AFTER 3 SECONDS)</b>		
	11-15	NO FUNCTION
	16-20	PAN/TILT BLACK ACTIVATED
	21-25	PAN/TILT BLACK DEACTIVATED
	26-30	PAN INVERT
	31-35	TILT INVERT
	36-40	PAN/TILT INVERT OFF
	41-45	PAN DEGREE 630
	46-50	PAN DEGREE 540
22	51-55	Sun Protection On
	56-100	Sun Protection Off
	101-105	RESERVED
	106-110	STUDIO
	111-115	POWER
	116-120	LIVE
	121-125	RESERVED
	126-130	Tungsten Fade ON
	131-135	Tungsten Fade OFF

	136-140	DIMMER SPEED Halogen
	141-145	DIMMER SPEED LED
	146-150	DIMMER CURVE LINEAR
	151-155	DIMMER CURVE SQUARE LAW
	156-160	DIMMER CURVE INV. SQUARE LAW
	161-165	DIMMER CURVE S-CURVE
	166-170	1200Hz
	171-175	2400Hz
	176-180	4000Hz
	181-185	6000Hz
	186-190	25000Hz
	191-195	RESERVED
	196-200	COLOR MODE RGBL
	201-205	COLOR MODE RGBW
	206-210	ALL RESET
	211-215	XY RESET
	216-250	ZOOM RESET
	251-255	RESERVED
	201-205	NO FUNCTION
23	0-255	DIMMER
24	<b>STROBE</b>	
	0-9	NO FUNCTION
	10-99	STROBE FROM (SLOW TO FAST , 0-25Hz)
	100-109	NO FUNCTION
	110-179	LIGHTNING STROBE
	180-189	NO FUNCTION
25	<b>PRESET COLOR</b>	
	0-10	NO FUNCTION
	11-255	PRESET COLOR (See Annex I for details)
26	<b>CCT</b>	
	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

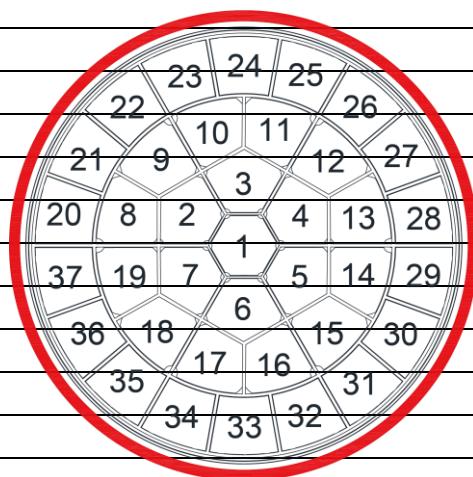
	255	10000K
27	0-255	RED 1
28	0-255	GREEN 1
29	0-255	BLUE 1
30	0-255	LIME 1
31	0-255	RED 2
32	0-255	GREEN 2
33	0-255	BLUE 2
34	0-255	LIME 2
35	0-255	RED 3
36	0-255	GREEN 3
37	0-255	BLUE 3
38	0-255	LIME 3
39	0-255	RED 4
40	0-255	GREEN 4
41	0-255	BLUE 4
42	0-255	LIME 4
43	0-255	RED 5
44	0-255	GREEN 5
45	0-255	BLUE 5
46	0-255	LIME 5
47	0-255	RED 6
48	0-255	GREEN 6
49	0-255	BLUE 6
50	0-255	LIME 6
51	0-255	RED 7
52	0-255	GREEN 7
53	0-255	BLUE 7
54	0-255	LIME 7
55	0-255	RED 8
56	0-255	GREEN 8
57	0-255	BLUE 8
58	0-255	LIME 8
59	0-255	RED 9
60	0-255	GREEN 9
61	0-255	BLUE 9
62	0-255	LIME 9
63	0-255	RED 10
64	0-255	GREEN 10
65	0-255	BLUE 10
66	0-255	LIME 10
67	0-255	RED 11
68	0-255	GREEN 11
69	0-255	BLUE 11
70	0-255	LIME 11
71	0-255	RED 12



72	0-255	GREEN 12
73	0-255	BLUE 12
74	0-255	LIME 12
75	0-255	RED 13
76	0-255	GREEN 13
77	0-255	BLUE 13
78	0-255	LIME 13
79	0-255	RED 14
80	0-255	GREEN 14
81	0-255	BLUE 14
82	0-255	LIME 14
83	0-255	RED 15
84	0-255	GREEN 15
85	0-255	BLUE 15
86	0-255	LIME 15
87	0-255	RED 16
88	0-255	GREEN 16
89	0-255	BLUE 16
90	0-255	LIME 16
91	0-255	RED 17
92	0-255	GREEN 17
93	0-255	BLUE 17
94	0-255	LIME 17
95	0-255	RED 18
96	0-255	GREEN 18
97	0-255	BLUE 18
98	0-255	LIME 18
99	0-255	RED 19
100	0-255	GREEN 19
101	0-255	BLUE 19
102	0-255	LIME 19
103	0-255	RED 20
104	0-255	GREEN 20
105	0-255	BLUE 20
106	0-255	LIME 20
107	0-255	RED 21
108	0-255	GREEN 21
109	0-255	BLUE 21
110	0-255	LIME 21
111	0-255	RED 22
112	0-255	GREEN 22
113	0-255	BLUE 22
114	0-255	LIME 22
115	0-255	RED 23
116	0-255	GREEN 23
117	0-255	BLUE 23



118	0-255	LIME 23
119	0-255	RED 24
120	0-255	GREEN 24
121	0-255	BLUE 24
122	0-255	LIME 24
123	0-255	RED 25
124	0-255	GREEN 25
125	0-255	BLUE 25
126	0-255	LIME 25
127	0-255	RED 26
128	0-255	GREEN 26
129	0-255	BLUE 26
130	0-255	LIME 26
131	0-255	RED 27
132	0-255	GREEN 27
133	0-255	BLUE 27
134	0-255	LIME 27
135	0-255	RED 28
136	0-255	GREEN 28
137	0-255	BLUE 28
138	0-255	LIME 28
139	0-255	RED 29
140	0-255	GREEN 29
141	0-255	BLUE 29
142	0-255	LIME 29
143	0-255	RED 30
144	0-255	GREEN 30
145	0-255	BLUE 30
146	0-255	LIME 30
147	0-255	RED 31
148	0-255	GREEN 31
149	0-255	BLUE 31
150	0-255	LIME 31
151	0-255	RED 32
152	0-255	GREEN 32
153	0-255	BLUE 32
154	0-255	LIME 32
155	0-255	RED 33
156	0-255	GREEN 33
157	0-255	BLUE 33
158	0-255	LIME 33
159	0-255	RED 34
160	0-255	GREEN 34
161	0-255	BLUE 34
162	0-255	LIME 34
163	0-255	RED 35



164	0-255	GREEN 35
165	0-255	BLUE 35
166	0-255	LIME 35
167	0-255	RED 36
168	0-255	GREEN 36
169	0-255	BLUE 36
170	0-255	LIME 36
171	0-255	RED 37
172	0-255	GREEN 37
173	0-255	BLUE 37
174	0-255	LIME 37

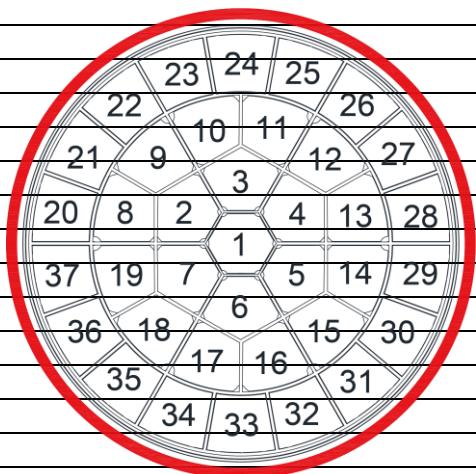
## Annex 1

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	Tuiquoise	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			

## Annex 2

STATIC PIXEL	
0-10	NO FUNCTION
11-12	1
13-14	2
15-16	3
17-18	4
19-20	5
21-22	6
23-24	7
25-26	8
27-28	9
29-30	10
31-32	11
33-34	12
35-36	13
37-38	14
39-40	15
41-42	16
43-44	17
45-46	18
47-48	19
49-50	20
51-52	21
53-54	22
55-56	23
57-58	24
59-60	25
61-62	26
63-64	27
65-66	28
67-68	29
69-70	30
71-72	31
73-74	32
75-76	33
77-78	34
79-80	35
81-82	36
83-84	37
85-86	1
87-88	2,3
89-90	4,5
91-92	6,7
93-94	8,9
95-96	10,11
97-98	12,13
99-100	14,15
101-102	16,17
103-104	18,19
105-106	20,21
107-108	22,23
109-110	24,25
111-112	26,27
113-114	28,29
115-116	30,31
117-118	32,33

119-120	34,35
121-122	36,37
123-124	1
125-126	2,3,4
127-128	5,6,7
129-130	8,9,10
131-132	11,12,13
133-134	14,15,16
135-136	17,18,19
137-138	20,21,22
139-140	23,24,25
141-142	26,27,28
143-144	29,30,31,
145-146	32,33,34
147-148	35,36,37
149-150	1
151-152	2,3,4,5,6,7
153-154	8,9,10,11
155-156	12,13,14,15
157-158	16,17,18,19
159-160	20,21,22,23
161-162	24,25,26,27
163-164	28,29,30,31
165-166	32,33,34,35
167-168	36,37,20,21
169-170	22,23,24,25
171-172	26,27,28,29
173-174	30,31,32,33
175-176	34,35,36,37
177-178	1
179-180	2,8,9
181-182	3,10,11
183-184	4,12,13
185-186	5,14,15
187-188	6,16,17
189-190	7,18,19
191-192	20,21,22
193-194	23,24,25
195-196	26,27,28
197-198	29,30,31,
199-200	32,33,34
201-202	35,36,37
149-150	1
151-152	2,3,4,5,6,7
153-154	8,9,10,11
155-156	12,13,14,15
157-158	16,17,18,19
159-160	20,21,22,23
161-162	24,25,26,27
163-164	28,29,30,31
165-166	32,33,34,35
167-168	36,37,20,21
169-170	22,23,24,25
171-172	26,27,28,29
173-174	30,31,32,33
175-176	34,35,36,37
177-178	1
179-180	2,8,9
181-182	3,10,11



183-184	4,12,13
185-186	5,14,15
187-188	6,16,17
189-190	7,18,19
191-192	20,21,22
193-194	23,24,25
195-196	26,27,28
197-198	29,30,31.
199-200	32,33,34
201-202	35,36,37
203-204	1,2
205-206	1,3
207-208	1,4
209-210	1,5
211-212	1,6
213-214	1,7
215-216	1,2,8,9
217-218	1,3,10,11
219-220	1,4,12,13
221-222	1,5,14,15
223-224	1,6,16,17
225-226	1,7,18,19
227-228	1,2,8,9,20,21,22
229-230	1,3,10,11,23,24,25
231-232	1,4,12,13,26,27,28
233-234	1,5,14,15,29,30,31
235-236	1,6,16,17,32,33,34
237-238	1,7,18,19,35,36,37
239-240	1
241-242	2,4,6
243-244	3,5,7
245-246	8,10,12,14,16,18
247-248	9,11,13,15,17,19
249-250	20,22,24,26,28,30,32,34,36
251-252	21,23,25,27,29,31,33,35,37
253-255	NO FUNCTION

## Annex 3

PIXEL EFFECT	
0-10	NO FUNCTION
11-15	1-37(Single light cycling operation,associated with CH6-CH18)
16-20	37-1(Single light cycling operation,associated with CH6-CH18)
21-25	1-37-1(Single light cycling operation,associated with CH6-CH18)
26-30	1 and 2-7, as well as 8-19 and 20-37, light up simultaneously for diffusion cycle operation
31-35	1 and 2-7, as well as 19-8 and 20-37, light up simultaneously for diffusion cycle operation
36-40	1 and 7-2, as well as 8-19 and 37-20, light up simultaneously for diffusion cycle operation
41-45	1 (30%)-2 (60%)-3 (100%) , (associated with CH6-CH18)
	2 (30%)-3 (60%)-4 (100%) , (associated with CH6-CH18)
	3 (30%)-4 (60%)-5 (100%) , (associated with CH6-CH18)
	4 (30%)-5 (60%)-6 (100%) , (associated with CH6-CH18)
	5 (30%)-6 (60%)-7 (100%) , (associated with CH6-CH18).....
	36 (30%)-37 (60%)-1 (100%) , (associated with CH6-CH18)
	37 (30%)-1 (60%)-2 (100%) , (associated with CH6-CH18)
46-50	37(30%)-36 (60%)-35 (100%) , (associated with CH6-CH18)
	36 (30%)-35 (60%)-34 (100%) , (associated with CH6-CH18)
	35 (30%) - 34 (60%)- 33 (100%) , (associated with CH6-CH18)...
	4 (30%) - 3 (60%) -2 (100%) , (associated with CH6-CH18)
	3 (30%) - 2 (60%) -1 (100%) , (associated with CH6-CH18)
	2 (30%) - 1 (60%) -37 (100%) , (associated with CH6-CH18)
	1 (30%) - 37 (60%)- 36 (100%) , (associated with CH6-CH18)
51-55	1-37 2700K cycle run (CH6-CH11 background)
56-60	37-1 2700K cycle run (CH6-CH11 background)
61-65	1-37-1 2700K cycle run (CH6-CH11 background)
66-70	1 and 2-7, as well as 8-19 and 20-37, light up simultaneously. 2700K diffusion cycle operation
71-75	1 and 2-7, as well as 19-8 and 20-37, light up simultaneously. 2700K diffusion cycle operation
76-80	1 and 7-2, as well as 8-19 and 37-20, light up simultaneously. 2700K diffusion cycle operation
81-85	1-37 6000K cycle run (CH6-CH11 background)
86-90	37-1 6000K cycle run (CH6-CH11 background)
91-95	1-37-1 6000K cycle run (CH6-CH11 background)
96-100	1 and 2-7, as well as 8-19 and 20-37, light up simultaneously. 6000K diffusion cycle operation
101-105	1 and 2-7, as well as 19-8 and 20-37, light up simultaneously. 6000K diffusion cycle operation
106-110	1 and 7-2, as well as 8-19 and 37-20, light up simultaneously. 6000K diffusion cycle operation
111-115	Red background, adjustable illumination. 100% green cycle operation(1-37)
116-120	Red background, adjustable illumination. 100% green cycle operation(37-1)
121-125	Red background, adjustable illumination. 100% green cycle operation(1-37-1)
126-130	Red background, adjustable illumination. 100% green cycle operation(1 and 2-7, as well as 8-
131-135	Red background, adjustable illumination. 100% green cycle operation(1 and 2-7, as well as 19-
136-140	Red background, adjustable illumination. 100% green cycle operation(1 and 7-2, as well as 8-
141-145	Green background, adjustable illumination. 100% blue cycle operation(1-37)
146-150	Green background, adjustable illumination. 100% blue cycle operation(37-1)
151-155	Green background, adjustable illumination. 100% blue cycle operation(1-37-1)
156-160	Green background, adjustable illumination. 100% blue cycle operation(1 and 2-7, as well as 8-
161-165	Green background, adjustable illumination. 100% blue cycle operation(1 and 2-7, as well as
166-170	Green background, adjustable illumination. 100% blue cycle operation(1 and 7-2, as well as 8-
171-175	Blue background, adjustable illumination. 100% red cycle operation(1-37)
176-180	Blue background, adjustable illumination. 100% red cycle operation(37-1)
181-185	Blue background, adjustable illumination. 100% red cycle operation(1-37-1)
186-190	Blue background, adjustable illumination. 100% red cycle operation(1 and 2-7, as well as 8-
191-195	Blue background, adjustable illumination. 100% red cycle operation(1 and 2-7, as well as 19-8

196-200	Blue background, adjustable illumination. 100% red cycle operation(1 and 7-2, as well as 8-19)
201-205	Red background, adjustable illumination. 100% lime cycle operation(1-37)
206-210	Red background, adjustable illumination. 100% lime cycle operation(37-1)
211-215	Red background, adjustable illumination. 100% lime cycle operation(1-37-1)
216-220	Red background, adjustable illumination. 100% lime cycle operation(1 and 2-7, as well as 8-
221-225	Red background, adjustable illumination. 100% lime cycle operation(1 and 2-7, as well as 19-
226-230	Red background, adjustable illumination. 100% lime cycle operation(1 and 7-2, as well as 8-
231-235	Spread outwards from the middle (1-2,3,...6,7-8,9,...19-20,21,...36,37)
236-240	Spread from the outside to the middle (20,21,...36,37-8,9,...19-1-2,3,...6,7)
241-245	Rotate clockwise in a fan shape, with the middle 1 constantly on
246-250	Rotate counterclockwise in a fan shape, with the middle 1 constantly on
251-255	NO FUNCTION