# LED PIXEL STROBE IP 65

EK 10000 STROBE

USER MANUAL

- **Safety Warning**

- The products are packaged in good condition when leaving the factory. Please operate according to the user manual. Machine failures caused by human factors are not covered by thewarranty.

- The light source in this lamp should be replaced by the manufacturer or its service agent or a similarly qualified person. If the external flexible cable or cord of this lamp is damaged, the cableshould be replaced by a qualified person from the manufacturer or its service agent to avoid danger

- After receiving the light, please unpack it and check whether there is any damage caused by transportation. If there is any damage, do not use this lamp, and promptly contact the supplier or manufacturer.

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- This product is suitable for indoor and outdoor use, and its protection level is IP65. Lamps should be kept clean to avoid using in humid or dusty environments. It should be maintained everythree months.

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- Only qualified professionals can carry out the installation, operation, and maintenance of lamps and ensure that they operate in strict accordance with the procedures described in this instruction.

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- Light should be installed in a well ventilated place with a distance of at least 50cm from the wall, and the ventilation holes should be checked for smoothness. Do not look directly at the light source to avoid damage to the eyes.

- Please do not turn on the light for self maintenance.
- The parts for electrical connection must be operated by qualified installation personnel.
- If the rear cover of the lamp is equipped with a safety buckle or connection hole, for safety reasons,please use a safety rope to penetrate the connection hole for auxiliary lifting.

- After 10 minutes of full power operation, the surface temperature of the lamp should be approximately 40 degrees Celsius, and after stable operation, the surface temperature of the lampshould be approximately 70 degrees Celsius.

- There are no user serviceable components inside this lamp. Before starting to operate the lamp,please check whether all parts are properly connected and whether the screws are reliable andsecure.

- If you have any questions or concerns, please contact the supplier or manufacturer in a timelymanner and return the product with the original packaging stating the reason for the defect

Dimensional drawings
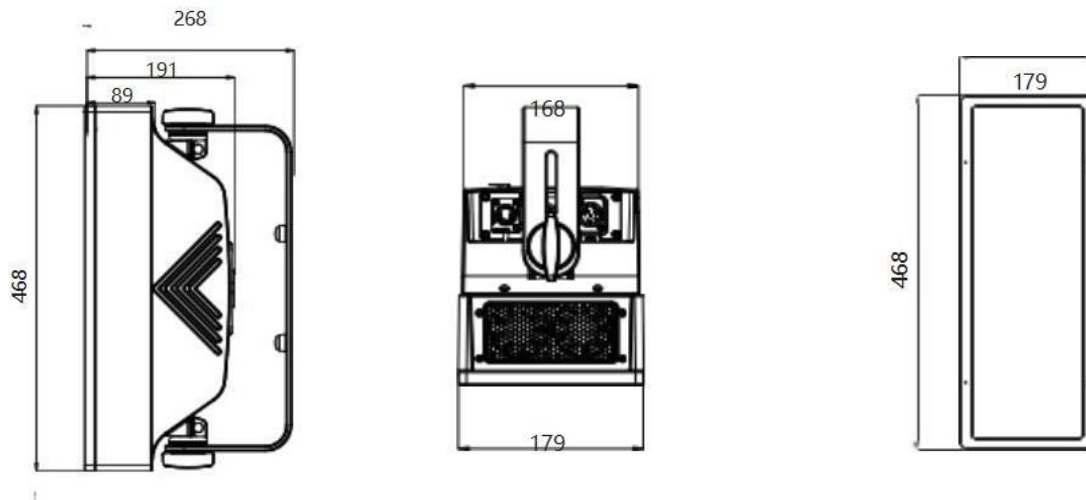
Product Introduction
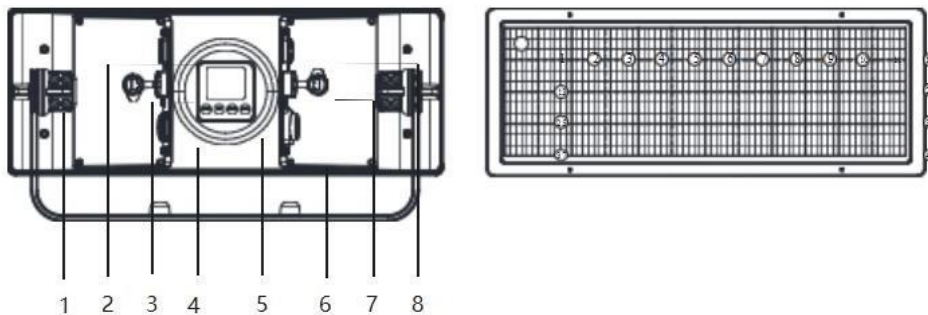
- The 4-color LED is divided into 6 large blocks, each of which is further divided into small blocks,**1.Handle screw: used when adjusting or fixing the angle of the light**
- **DMX input: 3-core DMX waterproof signal line input**
- **ART-NET input: Connect network input**
- **Power input: waterproof POWER CON power cord Input voltage: 100-240V 50/60HZ**
- **Panel operation keys: mode, UP, Down, Enter; TFT 220 X 176 touch display**
- **Power output: waterproof POWER CON power connection line Output voltage: 100-240V 50/60HZ**
- **ART-NET output: Connect network output**
- **DMX output: 3-core DMX waterproof signal line output**

Description of display panel key

Function	Description	Function Description	function
MODE KEY	Menu selection	Enter menu selection function	Menu Actions
UP KEY	UP	Go to previous option	Change parameter increase
DOWNKEY	DOWN	Go to the next option	Change parameter reduction
ENTERKEY	ENTER	Confirm the selectedfunction	Save Last Parameters

DMX Connection

Next

DMX Connection Instructions

COMMON

DMX INPUT — DMX+ — DMX− — DMX OUTPUT
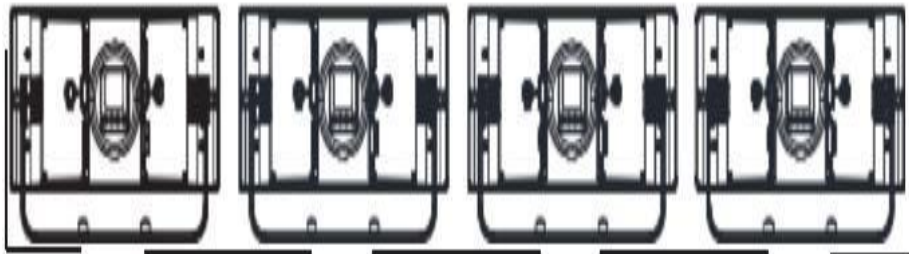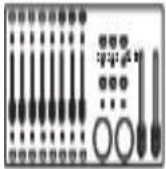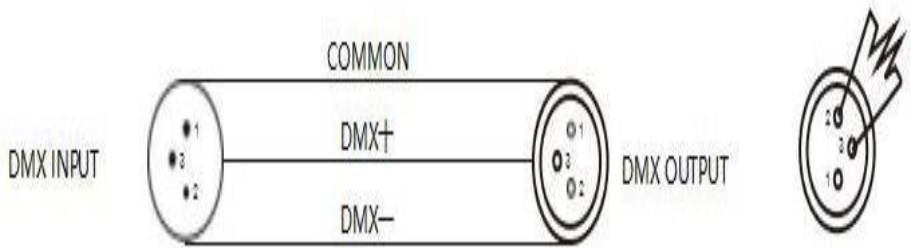
- To reduce signal errors and avoid signal attenuation and interference during transmission, a 120 ohm 1/4W resistor can be added between the 2 and 3 cores of the DMX output terminal of the last machine.
- Connect the lamp with an XLR signal line, with one end connected to the output port of the light and the other end connected to the input port of the next lamp. The signal line Can only be used in series, not in parallel. Because the DMX512 signal transmission speed is very fast, when the signal line is damaged, the welding joint is not secure Poor contact, etc. can affect signal transmission and cause the system to shut down.
- When a unit's machine power supply is disconnected, the DMX output and input connections are bypassed to maintain the DMX line connection
- Each lamp must have an address code that can receive messages from the console.
- The terminals of the DMX512 system need to be equipped with a terminator to reduce signal transmission errors.

Relationship between address codes and channels in DMX 512

Channel	Address	Address of thefirst light	Address of thesecond light	Address of the third light
ADVANCED 1	001 -015	001	016	031

(Refer to the above figure) The number of lights added after the fourth set; The address code isdeduced sequentially based on the channel .

Power connection instructions
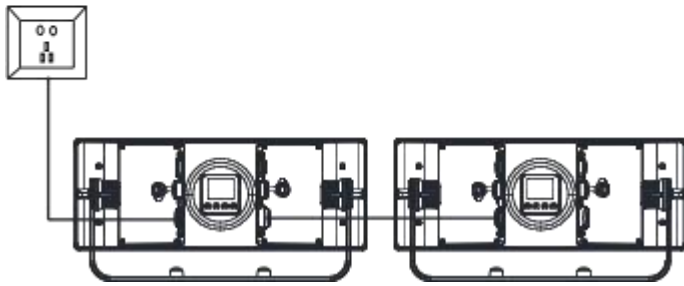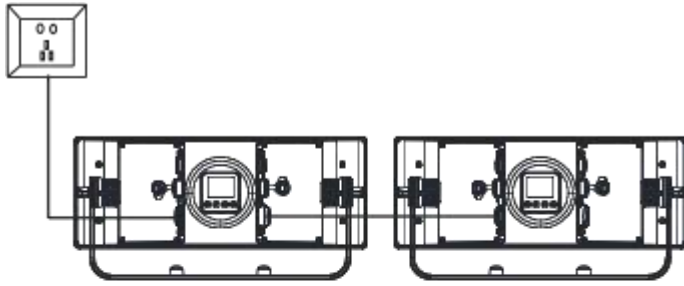
Power In   Power Out

⚠ **This product uses Powercon in/out**

Connect the power cord hand in

hand

Note: Due to power reasons, a 1.5 square meter power cord can carry up to 2 sets (230V)

Do not connect too many lights to a single power cord, or overload it.
Do not use a power cord with damaged insulation and do not lap the power cord over other wires.
Pleaseunplug the power cord when the lamp is not in use or clean.
Do not vigorously plug or drag the power cord directly.

Network Connection
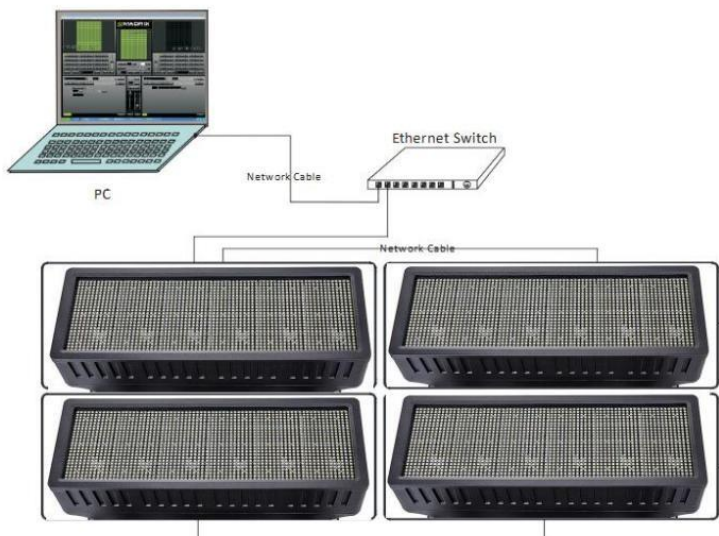
Technical parameter table

Optics	
light source	1728 RGBW LED
Beam angle	98°
wash angle	156°
Luminance	5-meter distance 1282 Lux (full on)
	180000 lm (Strobe instantaneous peak)
Effect	
colour mixture	RGBW
Pixel matrix	4 x 12
Strobe	0-30 Hz
Dimming	4 dimming curves
Power and data connections	
Power connection	IP65 power cord input/output
data connection	IP65 signal line input/output
Maximum number of connections	2 pcs /230V
Control	
Protocols	DMX, Artnet and RDM

DMX CH	STATIC 1PX ADVANCED 1
	 STROBE 2PX ADVANCED 2
	 PIXELS 3PX ADVANCED 3
	 RGBW STROBE 12PX
	           ADVANCED 4
	           48PX

Built-in program	Yes
Display	TFT 220 x 176
Input voltage and power	
Input voltage and frequency	100 - 240 VAC, 50/60 Hz
Power	590W (full on)
	1500W (Strobe instantaneous peak)
Housing construction	
Housing	Die cast aluminum
surface treatment	Black Matte
IP protection level	IP65
temperature	
heat radiation	Variable speed heat dissipation motor
ambient temperature	-20°C ~ 40°C

Technical parameter table

physical characteristics	
Protection level	IP65
measurement	468 x 179 x 268 mm
Weight	15 KG
Spare parts	
power cord	Included (IP65 PowerKon)
Floor stander	Optional
Flight case	Optional

IL luminance chart
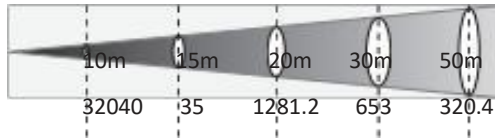
Beam Angle::
98°FULL on

Project

Distance(m)

luminance(lux)

Beam angle：45°	Spot diameter	ø229.37cm	ø688.1cm	ø1146.84cm	ø1605.57cm	ø2293.67cm
(Lux)	Test distance	1m	3m	5m	7m	10m
Full on large angletest luminance (C700)	R	3339	371	113.6	68	33.4
	G	22590	2510	903.6	461	226
	B	1620	180	64.8	33	16.2
	W	17784	1976	711.4	363	177.8
	ALL	32040	3560	1281.6	653	320.4

Menu Table

Menu(-)						
Main Menu		Menu level 2	Menu level 3	Menu level ...		Remark
1	CONNECT	DMX Address	1-512			Default: 1
		DMX Mode	BASIC	STATIC		Default: BASIC RGBW STROBE
				STROBE	R =0~255	TO CHOOSE THE COLOROF THE STROBE, NOT SELECTABLEWITH DMX
					G =0~255	
					B =0~255	
					W =0~255	
				PIXELS		
				RGBW STROBE		
			PIXELS	1PX		Default: 48PX
				2PX		
				3PX		
				12PX		
				48PX		
			ADVANCED	ADVANCED 1		Default: ADVANCED 3
				ADVANCED 2		

			ADVANCE D 3		
			ADVANCE D 4		
		Ethernet	Protocol	Only Art-Net (two different sets of device Artnet signals, default LTP)	Default:Only Art-net
				ArtNet+DMX (PIXELS(1/2/4/8/16/64PX) / ADVANCE(2/4)) Normal control is only possible when both sets of signals are valid simultaneously	
			Subnet	0-15	Default: 0
			Universe	0-15	Default: 0
			Start Channel	1-512	Default:1

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			IP Address	2/10.***.***.***		
			Ethernet To DMX	NO Yes		Default: No
		RDM ID	030F********			
2	SETUP	Temperature Unit	°C			Default: °C
			°F			
		Screen	Back Light	On		Default: 10S
				10S		
				20S		
				30S		
			Flip Display	No		Default: No
				Yes		Exit Menu,UP+DOWN press 3S ，Screen inversion
			Key Lock	No		Default: No
				Yes		
		Fixture	White Balance	Off			Default: Off, RGB W unclear value ；
				Manual	Red	<125-255>	
					Green	<125-255>	
					Blue	<125-255>	
					White	<125-255>	
			Dimmer Mode	Off		Default: Off
				Dimmer 1		
				Dimmer 2		
				Dimmer 3		
			Fan mode	Auto		Default: Yes
				High		
3	ADVANCED	Factory Reload	No			
			Yes			
			No			Default: No
			Yes			
		Fixture Time	0-9999			Default: 0
		Temperatu	58 °C			

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#	Menu					Default
4	INFORMATION	re				
		Fans Speed	**%			
		Software Version	DISP-V1.0 CTR1-NET-V1.0 CTR2-LED-V1.0			
	Master/Slave	Master	Master/Slave			Default: Slave
		Slave				
5		Master/Slave	Master			Default: Show 23 Speed:100 Foreground = R Background = Black
			Slave			
		Sequence	Show 1 Show 2 Show 3 ... ... Show 16 Show 17 Show 18 Show 19 Show 20 Show 21 Show 22 Show 23	Speed	1-100	
				Foreground	Black	
					R	
					G	
					B	
					W	
					GB	
					RB	
					RG	
					RGB	
					RW	
					GW	
					BW	
					RGW	
					RBW	
					GBW	
					RGBW	
					Black	
					R	

STAND ALONE	Static		Background	G	
		Fixed Color	R		Default RGBW
			G		
			B		
			W		
			GB		
			RB		
			RG		
			RGB		
			RW		
			GW		
			BW		
			RGW		
			RBW		
			GBW		
			RGBW		
		Manual Color	Red	<000-255>	Default RGBW=255
			Green	<000-255>	
			Blue	<000-255>	
			White	<000-255>	

LED direction: facing the machine, from left to right,from top to bottom, with the top left corner as the firstpiece .

Menu Description
- **CONNECT connection**
- **DMX Address (setting of address code)**
- **DMX mode: basic channel mode, pixel channel mode, extended channel mode**
- **Ethernet (network protocol setting):**
- **Protocol: Two network protocol control modes can be selected: (DMX and Ant net)**
- **Subnet**
- **Universe: 000-015 space settings can be set**
- **Start Channel: Setting the start address 001-512 .**
- **IP address: IP address: 2/10. * *. *. * * ******
- **Ethernet To DMX Network Connection DMX**

SETUP settings

(1) **Temperature unit** ：   **F:Fahrenheit degree**   **C:Celsius degree**(2)**Screen**：(**Setting**

(2) **of screen parameters**)

- **Back Light**：Setting of screen backlight (can be set to stay on, or to turn off the screen in10/20/30 seconds without operating the menu)
- **Flip Display**：Forward and reverse direction of screen menu subtitles
- **Key Lock**：Screen lock: When the screen appears and needs to be unlocked, please press: UPDOWN to repeat twice, and then press Enter to unlock
  (**Fixture** (**Light p function setting**)

1.white balance：White balance adjustment for uneven color mixing.

This menu allows you to adjust the desired

effect

1. **dimmer mode**   ：**This menu allows you to adjust the dimming modes (off,block, medium, and slow dimming speeds) that do not work in the four modes**

2. **Fan Mode: Fan speed setting: can be set to automatically accelerate or decelerate according to LED temperature, or can be set to operate at high speed**

ADVANCED advanced setting

Factory Reload
Mapping Rotation
INFORMATION
1.Fixture Time(0-9999)

2.Temperature

3.Fan speed

4.Software Version

5.STAN ALONG

1. **Master/slave**

2. **sequence: total 18 colors can be manually edited and played for the performance background**

3. **Static :Built-in fixed selection of 15 colors, and user-defined color selection**

＋．**Basic Channel Mode Table**

BASIC – STATIC				
Channel	**Function**	**Value**	**Percent/Setting**	**Remark**
1	Red	000-255	Red intensity	
2	Green	000-255	Green intensity	
3	Blue	000-255	Blue intensity	
4	White	000-255	White intensity	

BASIC - STROBE (color could be choosed by menu)				
Channel	**Function**	**Value**	**Percent/Setting**	**Remark**
1	DIMMER	000-005	Blackout	
		006-255	Minimum to maximum	
2	FLASH DURATION	000-255	15ms-990ms	
3	FLASH RATE	000-010	No Flash	
		011-255	Strobe slow to fast	
4	FLASH FX	000-002	No Effect	
		003-005	Static	If selected, the fixture willworks as wash, only dimmer control.
		006-042	Ramp up	
		043-085	Ramp down	
		086-128	Ramp up-down	
		129-171	Random	
		172-214	Lightning	
		215-255	Spikes	

BASIC – PIXEL				
Chann el	Function	Value	Percent/Setting	Remark
1	PIXEL 1 RED	000-255	Red intensity	
2	PIXEL 1 GREEN	000-255	Green intensity	
3	PIXEL 1 BLUE	000-255	Blue intensity	
4	PIXEL 1 WHITE	000-255	White intensity	
	...			
189	PIXEL 48 RED	000-255	Red intensity	
190	PIXEL 48 GREEN	000-255	Green intensity	
191	PIXEL 48 BLUE	000-255	Blue intensity	
192	PIXEL 48 WHITE	000-255	White intensity	

Channel	Function	Value	Percent/Setting	Remark
1	RED	000-255	Red intensity	
2	GREEN	000-255	Green intensity	
3	BLUE	000-255	Blue intensity	
4	WHITE	000-255	White intensity	
5	DIMMER	000-005	Blackout	
		006-255	Minimum to maximum	
6	FLASH DURATION	000-255	15ms-990ms	
7	FLASH RATE	000-010	No Flash	
		011-255	Strobe slow to fast	
8	FLASH FX	000-002	No Effect	
		003-005	Static	If selected, works as wash, only dimmer andcolor control.
		006-042	Ramp up	
		043-085	Ramp down	
		086-128	Ramp up-down	
		129-171	Random	
		172-214	Lightning	
		215-255	Spikes	

Pixel Channel Mode Table

PIXEL MODE	DMX	Art-net+DMX		Function	Value	Percent/Setting	Remark
	Artnet	Artnet	DMX				
						PIXELS - PIXELS	
1	1	/	1	DIMMER	000-005	Blackout	
					006-255	Minimun to maximum	
	2	/	2	FLASH DURATION	000-255	15ms-990ms	
	3	/	3	FLASH RATE	000-010	No Flash	Single flash with ch 1
					011-255	Strobe slow to fast	
					000-002	No Effect	

4	/	4	FLASH FX		003-005	Static	If selected, the fixture will works as wash, only dimmer control.
					006-042		
					043-085		
					086-128	Ramp up	
					129-171	Ramp down	
					172-214	Ramp up-down	
					215-255	Random	
						Lightning	
						Spikes	
5	1	/	PIXEL 1	RED	000-255	Red intensity	
6	2	/		GREEN	000-255	Green intensity	
7	3	/		BLUE	000-255	Blue intensity	
8	4	/		WHITE	000-255	White intensity	

2	9	5	/	PIXEL 2	RED	000-255	Red intensity
	10	6	/		GREEN	000-255	Green intensity
	11	7	/		BLUE	000-255	Blue intensity
	12	8	/		WHITE	000-255	White intensity
3	13	9	/	PIXEL 3	RED	000-255	Red intensity
	14	10	/		GREEN	000-255	Green intensity
	15	11			BLUE	000-255	Blue intensity
	16	12	/		WHITE	000-255	White intensity
12	17	13	/	PIXEL 4	RED	000-255	Red intensity
	18	14			GREEN	000-255	Green intensity
	19	15	/		BLUE	000-255	Blue intensity
	20	16	/		WHITE	000-255	White intensity
	...	...		...	...	...	...
	49	45	/	PIXEL12	RED	000-255	Red intensity
	50	46	/		GREEN	000-255	Green intensity
	51	47	/		BLUE	000-255	Blue intensity
	52	48	/		WHITE	000-255	White intensity
48	53	49	/	PIXEL13	RED	000-255	Red intensity
	54	50	/		GREEN	000-255	Green intensity
	55	51	/		BLUE	000-255	Blue intensity
	56	52	/		WHITE	000-255	White intensity
	...			...	...	...	...
	193	189	/	PIXEL48	RED	000-255	Red intensity
	194	190	/		GREEN	000-255	Green intensity
	195	191	/		BLUE	000-255	Blue intensity
	196	192	/		WHITE	000-255	White intensity

Extended Channel Mode Table 1

ADVANCED - ADVANCED 1				
Channel	**Function**	**Value**	**Percent/Setting**	**Remark**
1	FLASH DIMMER	000-255	Strobe dimmer	
2	FLASH STROBE	000-030	No flash/Closed	
		031-100	Strobe slow to fast	
		101-130	Open	
		131-200	Random strobe slow to fast	
		201-255	Open	
3	FLASH RED	000-255	Red intensity	
4	FLASH GREEN	000-255	Green intensity	
5	FLASH BLUE	000-255	Blue intensity	
6	FLASH WHITE	000-255	White intensity	
7	BG DIMMER	000-255	Strobe Dimmer	The background can only be lit when the foreground is strobe or running
8	BG STROBE	000-030	No flash/Closed	
		031-100	Strobe slow to fast	
		101-130	Open	
		131-200	Random strobe slow to fast	
		201-255	Open	
9	BG RED	000-255	Red intensity	
10	BG GREEN	000-255	Green intensity	
11	BG BLUE	000-255	Blue intensity	
12	BG WHITE	000-255	White intensity	
		000-010	No Function	
		011-015	FX 1	
		016-020	FX 2	
		021-025	FX 3	
13	AUTO FX	026-	FX 4	

			030			
			031-035	FX 5		
			036-040	FX 6		
			041-045	FX 7		
			046-050	FX 8		
			051-055	FX 9		
			056-060	FX 10		
			061-065	FX 11		
			066-070	FX 12		
			071-075	FX 13		
			076-080	FX 14		
			081-085	FX 15		
			086-090	FX 16		
			091-095	FX 17		
			096-100	FX 18		
			101-105	FX 19		
			106-110	FX 20		
			111-115	FX 21		
			116-120	FX 22		
			121-125	FX 23		
			126-205	RESERVED(TBD)		
			206-255	Random pixel(with density)	From 1 to 10 pixel, 1 more pixel every 5 steps
14	FX SPEED		000-050	Static indexing		
			051-255	From slow to fast		
15	DIMMER MODE		000-051	From MENU		
			052-101	Mode OFF		
			102-152	Mode 1		
			153-203	Mode 2		
			204-255	Mode 3		

ADVANCED - ADVANCED 2							
DMX	**Art-net+DMX**		**Function**	**Value**	**Percent/ Setting**	**Remark**	
Artnet	**Artnet**	**DMX**					
1	/	**1**	**FLASH DIMMER**	000-255	0-100%		
2	/	**2**	**FLASH STROBE**	000-030	No flash/Closed		Extended Channel Mode Table 2
				031-100	Strobe slow tofast		
				101-130	Open		
				131-200	Random strobe slow tofast		
				201-255	Open		
3	/	**3**	**BG DIMMER**	000-255	Strobe Dimmer		
4	/	**4**	**BG STROBE**	000-030	No flash/Closed		
				031-100	Strobe slow tofast		
				101-130	Open		
				131-200	Random strobe slow to fast		
				201-255	Open		
5	/	**5**	**BG RED**	000-255	Red intensity		
6	/	**6**	**BG GREEN**	000-255	Green intensity		
7	/	**7**	**BG BLUE**	000-255	Blue intensity		
8	/	**8**	**BG WHITE**	000-255	White intensity		
				000-010	No Function		
				011-015	FX 1		
				016-020	FX 2		
				021-025	FX 3		
				026-030	FX 4		

				031-035	FX 5	
				036-040	FX 6	
				041-045	FX 7	
				046-050	FX 8	
9	/	9	AUTO FX	051-055	FX 9	
				056-060	FX 10	
				061-065	FX 11	
				066-070	FX 12	
				071-075	FX 13	
				076-080	FX 14	
				081-085	FX 15	
				086-090	FX 16	
				091-095	FX 17	
				096-100	FX 18	
				101-105	FX 19	
				106-110	FX 20	
				111-115	FX 21	
				116-120	FX 22	
				121-125	FX 23	
				126-205	RESERVED(TBD)	
				206-255	Random pixel(with density)	From 1 to 10 pixel, 1 more pixel every 5 steps
10	/	10	FX SPEED	000-050	Static indexing	
				051-255	From slow tofast	
11	/	11	DIMMERMODE	000-051	From MENU	
				052-101	Mode OFF	
				102-152	Mode 1	
				153-203	Mode 2	
				204-255	Mode 3	
12	1	/	PIXEL 1 RED	000-255	Red intensity	
13	2	/	PIXEL 1 GREEN	000-255	Green intensity	13
14	3	/	PIXEL 1 BLUE	000-255	Blue intensity	14
15	4	/	PIXEL 1 WHITE	000-255	White intensity	15
...	...	/	...	...	...	....
200	189	/	PIXEL 48 RED	000-255	Red intensity	200
201	190	/	PIXEL 48 GREEN	000-255	Green intensity	201
202	191	/	PIXEL 48 BLUE	000-255	Blue intensity	202
203	192	/	PIXEL 48 WHITE	000-255	White intensity	203