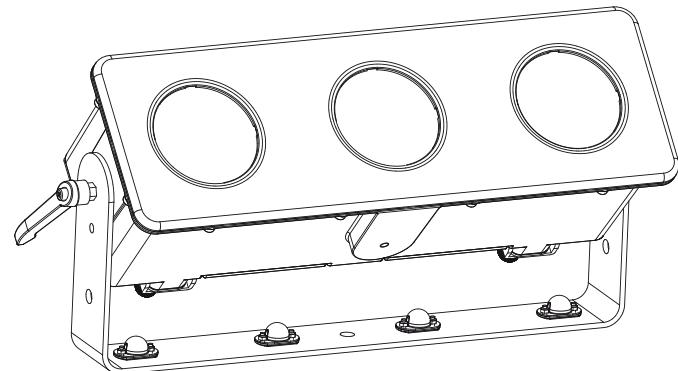


# Z3 LED

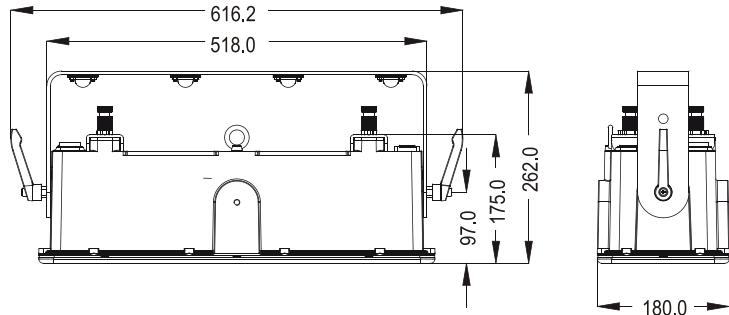
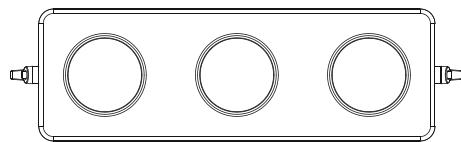
USER MANUAL



# 1 PRODUCT SPECIFICATIONS

## 1.1 PRODUCT SPECIFICATIONS

- ◆ Voltage:AC100~240V, 50/60Hz
- ◆ Max Power:230W
- ◆ Operation Temperature: -20°C~45°C
- ◆ Size:616×180×262mm
- ◆ Weight:10.5kg



## 1.2 SAFETY WARNING

### IMPORTANT:

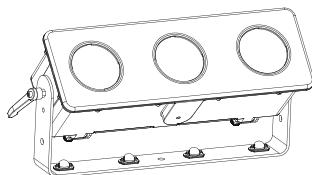
- This product must be installed by a qualified professional.
- All maintenance must be carried out by a qualified electrician.
- A minimum distance of 0.5m must be maintained between the equipment and a combustible surface.
- The product must always be operated in a well ventilated area.
- DO NOT stare directly into the LED light source.
- Always disconnect the power before carrying out any maintenance.
- The earth must always be connected to the ground.
- Ensure that all parts of the equipment are kept clean and free of dust.

## 2 INSTALLATION

### 2.1 MOUNTING

#### HANGING

The fixture can be mounted in a hanging position using the supporting bracket. The bracket should be secured to the mounting truss or structure using a standard mounting clamp. Please note that when hanging the unit a safety cable should also be used.



#### UPRIGHT

The fixture can be mounted in an upright or sitting position using the supporting brackets.



**NOTE:** The LED MODULE can be mounted at any angle and in any position. It is possible to further adjust the angle of the LED MODULE using the two adjustment knobs located on the side of the fixture.

### 2.2 POWER CONNECTIONS

@ 220V: 8 units may be connected in series

@110V: 4 units may be connected in series

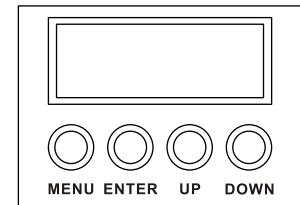
**Note:**

If the signal cable is over 60m between the DMX512 controller and fixture or between two fixtures, then a DMX signal amplifier is needed as well.

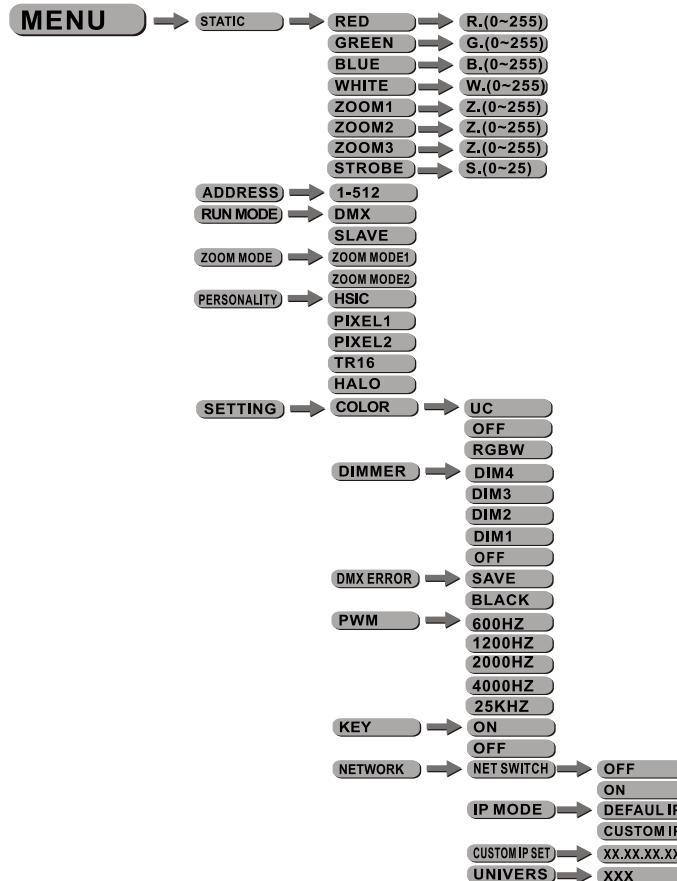
## 3 DISPLAY PANEL OPERATION

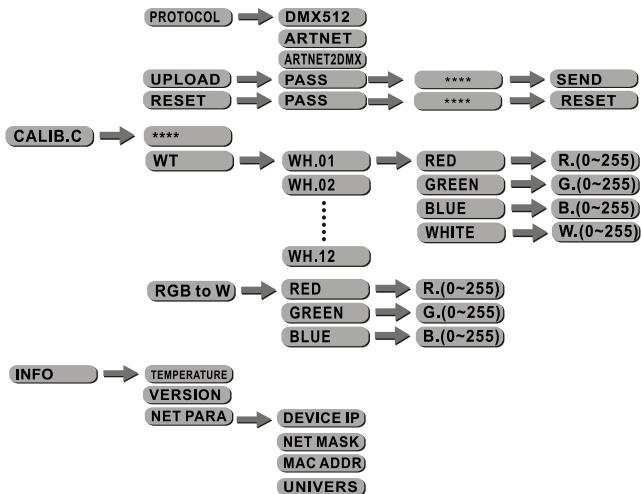
### 3.1 DISPLAY OPERATION

- ◆ MENU: BACK;
- ◆ ENTER: ENTER OR SAVE;
- ◆ DOWN: DOWN;
- ◆ UP: UP;

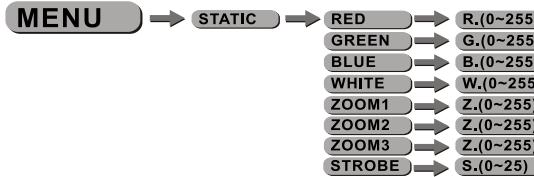


### 3.2 MENU MAP





### 3.3 EDIT STATIC COLOUR



- Combine 【RED】 , 【GREEN】 , 【BLUE】 , 【WHITE】 , 【ZOOM1】 , 【ZOOM2】 AND 【ZOOM3】 to reate an infinite range of colors (0-255)
- Set the value of the 【STROBE】 (0-25Hz)

### 3.4 DMX512 SETTINGS



- Enter the 【 ADDRESS】 mode to set the DMX ADDRESS.

### 3.5 RUN MODE



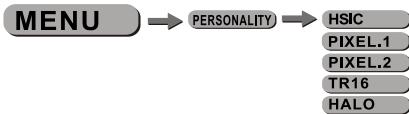
- Enter the 【 RUN MODE】 mode to set working mode.
- 【DMX】 mode is for using the DMX512 controller to control the fixtures.
- 【SLAVE】 mode is for Master -- Slave operation.

### 3.6 ZOOM MODE



- 【ZOOM MODE 1】 is the default fast zoom speed, work in Ambient Temp. > 0°C
- 【ZOOM MODE 2】 is slow zoom speed, works in Ambient Temp. < 0°C

### 3.7 PERSONALITY

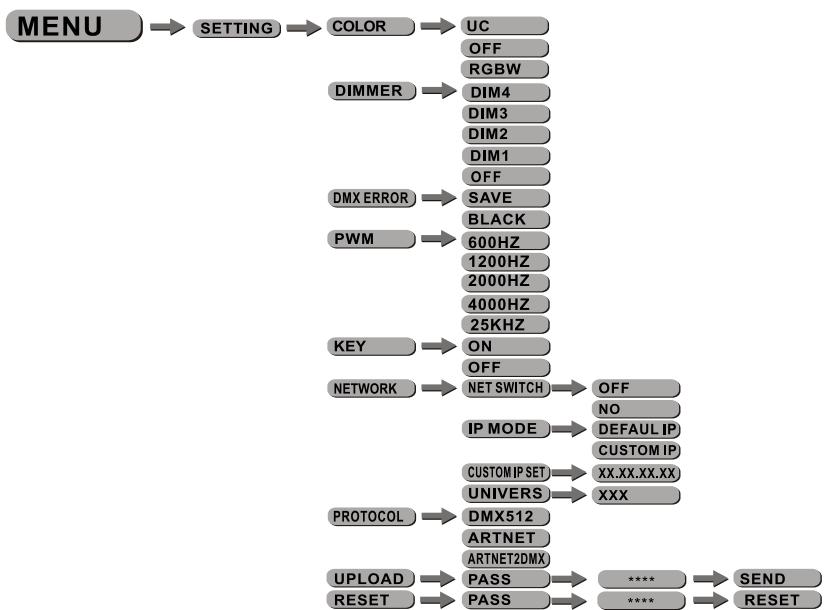


- Enter the 【PERSONALITY】 mode to select DMX mode: 【HSIC】 \ 【SSP】 \ 【TOUR】 \ 【TR16】 \ 【HALO】 .

#### Introduction for HSIC

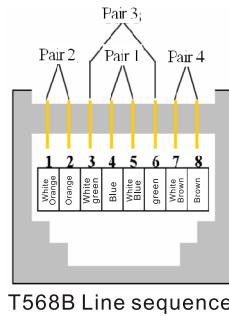
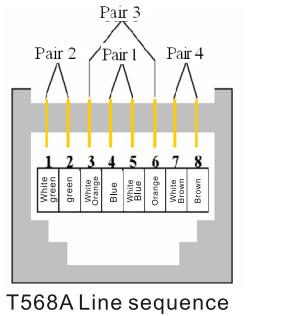
- HUE: colorful present(red, orange,yellow, green,cyan, blue, magentacolor changeable)
- HUE FINE: fine dimming when choose a color
- SATURATION: adjust saturation when choose a color
- INTENSITY: adjust intensity for chosen color
- CCT: choose needed color temperature(2700k, 3000k, 3200k, 3500k, 4000k, 4200k, 4500k, 5600k, 6000k, 6500k, 7200k, 8000k)

### 3.10 SPECIAL SETTINGS



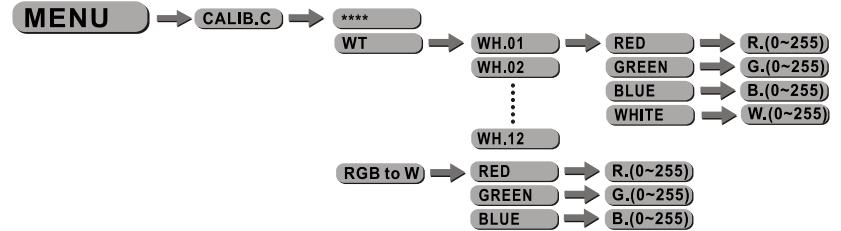
- [SETTING]...this menu allows the user to adjust key operation settings for this fixture.
- [COLOR] is for activate/unactivate the color calibration functions. When [RGBW] is selected, on RGB = 255,255,255, the color is displayed as calibrated in CALIB.C -- RGBW. When [COLOR] is set [OFF], on RGB = 255,255,255, the RGBvalues are not adjusted and the output is most powerful. When [UC] is selected, the RGB output are adjusted to a standard preset universal color which balances fixtures from different generations.

- Note: [COLOR]work only when choose [NORMAL]at [FULL POWER CCT]
- Select [DIM1], [DIM2], [DIM3] or [DIM4] for different dimming speeds. ([DIM4]is the slowest dimming speed)
  - [DMX ERROR] Choose[SAVE] in order to save the last DMX data incase of DMX signal error. Choose[BLACK] in order to blackout in case of DMX signal error.
  - <PWM\_RATE> is PWM refresh rate bottom, press UP/DOWN to choose <600Hz>, <1200Hz>, <2000Hz>, <4000Hz>, <25000Hz>  
Note: with refresh rate increased, gray rate of dimmer will be reduced, (that's means high refresh rate, low gray rate), when it's <4000Hz>, CV3 is invalid, when it's <25000Hz>, CV1 CV2 CV3 are invalid, so please lower PWM rate to increase gray rate in necessary.
  - [KEY]...select [ON] for automatic lock-out. Password to re-enter the display is <UP> + <DOWN> + <UP> + <DOWN>.



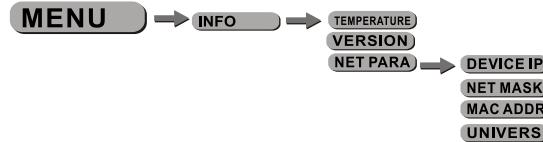
### 3.9 BALANCE PARAMETERS AND CORRECTION MENU DISPLAY

Press **【MENU】** button to enter the password confirmation, to enter the correct password < UP + DOWN + UP + DOWN >  
Key, press the **【MENU】** in, the correct password will enter show submenu



- 【NET SWITCH】 is net switch, OFF adhere to 2.XX.XX.XX , ON adhere to 2.XX.XX.XX, 【IP MODE】 is IP mode setting, "DEFAULT IP" is default IP, CUSTOM IP is user IP, 【CUSTOM IP SET】 is customer IP setting, 【UNIVERS】 is data bulk setting, output series 0-255
- 【PROTOCOL】 is the control protocol setting, press 【UP】 / 【DOWN】 to choose, choose 【UP】 / 【DOWN】 means use DMX protocol, choose 【ARTNET】 means use artnet protocol, choose 【ARTNET2DMX】 means use artnet protocol and send DMX signal from DMX XLR at the same time.
- Net wire: Straight-through cable is recommended between T568B wire order, the computer connected to the switch with a straight-through cable, the connection between the switch and the lamp used T568A line order with a straight-through cable crossover cable at one end and the other end with T568B wire order. Lamps directly connected computer should use a crossover cable
- IP setting: When set IP, it can't be duplicated. Internet port IP and fixture IP should be provided on the same subnet. Computer subnet mask is fixed: 255.0.0.0
- Select【UPLOAD】 to upload the custom programs from the current MASTER unit to the SLAVE units.
- In order to reset custom modes to default values select [RESET]. Note:

### 3.10 INFO



- Press **【ENTER】** enter into **【INFO】** and check information, press **【DOWN】** / **【UP】** to choose **【TEMPERATURE】** to check temperature information, choose **【VERSION】** to check version information, choose **【NET PARA】** to check net date

# 4 USING A DMX512 CONTROLLER

## 4.1 CHANNEL ASSIGNMENT

- Note: This product have four DMX512 channel configuration:  
【HSIC】，【PIXEL.1】，【PIXEL.2】，【TR16】，【HALO】.

HSIC		
CHANNEL	VALUE	FUNCTION
1	0 ⇐⇒ 255	INTENSITY
2	0 ⇐⇒ 255	HUE
3	0 ⇐⇒ 255	HUE FINE
4	0 ⇐⇒ 255	SATURATION
5		CCT
	0 ⇐⇒ 15	NO FUNCTION
	16 ⇐⇒ 35	2700K
	36 ⇐⇒ 55	3000K
	56 ⇐⇒ 75	3200K
	76 ⇐⇒ 95	3500K
	96 ⇐⇒ 115	4000K
	116 ⇐⇒ 135	4200K
	136 ⇐⇒ 155	4500K
	156 ⇐⇒ 175	5600K
	176 ⇐⇒ 195	6000K
	196 ⇐⇒ 215	6500K
	216 ⇐⇒ 235	7200K
	236 ⇐⇒ 255	8000K
		STROBE
	0 ⇐⇒ 9	STROBE CLOSED
	10 ⇐⇒ 59	STROBE FROM SLOW TO FAST (1-25Hz)
6	60 ⇐⇒ 109	NO FUNCTION
	110 ⇐⇒ 159	THUNDER STROBE FROM SLOW TO FAST
	160 ⇐⇒ 209	NO FUNCTION
	210 ⇐⇒ 255	RANDOM STROBE
		ZOOM1
7	0 ⇐⇒ 255	ZOOM2
8	0 ⇐⇒ 255	ZOOM3
9	0 ⇐⇒ 255	ALL ZOOM
11		ZOOM CONTROL
	0 ⇐⇒ 9	NO FUNCTION
	10 ⇐⇒ 59	ZOOM SEPARATE ON (Effect when stay 3 seconds, CH7-CH9 has effect when start)
	60 ⇐⇒ 109	ZOOM SEPARATE OFF (Effect when stay 3 seconds, CH7-CH9 no effect when off)
	110 ⇐⇒ 159	ZOOM SPEED (Control all zoom speed)
	160 ⇐⇒ 209	ZOOM REST (Effect when stay 3 seconds)
	210 ⇐⇒ 255	NO FUNCTION

CHANNEL	VALUE	FUNCTION
		DIMMER SPEED
	0 ⇐⇒ 9	NO FUNCTION
	10 ⇐⇒ 49	DIM4 (Effect when stay 3 seconds)
	50 ⇐⇒ 89	DIM3 (Effect when stay 3 seconds)
	90 ⇐⇒ 129	DIM2 (Effect when stay 3 seconds)
	130 ⇐⇒ 169	DIM1 (Effect when stay 3 seconds)
	170 ⇐⇒ 209	DIM0 (Effect when stay 3 seconds)
12	210 ⇐⇒ 255	NO FUNCTION

## PIXEL.1

CHANNEL	VALUE	FUNCTION
1	0 ⇌ 255	MASTER DIMMER
2	0 ⇌ 255	RED1
3	0 ⇌ 255	GREEN1
4	0 ⇌ 255	BLUE1
5	0 ⇌ 255	RED2
6	0 ⇌ 255	GREEN2
7	0 ⇌ 255	BLUE2
8	0 ⇌ 255	RED3
9	0 ⇌ 255	GREEN3
10	0 ⇌ 255	BLUE3
		STROBE
	0 ⇌ 9	STROBE CLOSED
	10 ⇌ 59	STROBE FROM SLOW TO FAST (1-25Hz)
	60 ⇌ 109	NO FUNCTION
11	110 ⇌ 159	THUNDER STROBE FROM SLOW TO FAST
	160 ⇌ 209	NO FUNCTION
	210 ⇌ 255	RANDOM STROBE
12	0 ⇌ 255	ZOOM1
13	0 ⇌ 255	ZOOM2
14	0 ⇌ 255	ZOOM3
15	0 ⇌ 255	ALL ZOOM
		ZOOM CONTROL
	0 ⇌ 9	NO FUNCTION
	10 ⇌ 59	ZOOM SEPARATE ON (Effect when stay 3 seconds, CH7-CH9 has effect when start)
16	60 ⇌ 109	ZOOM SEPARATE OFF (Effect when stay 3 seconds, CH7-CH9 no effect when off)
	110 ⇌ 159	ZOOM SPEED (Control all zoom speed)
	160 ⇌ 209	ZOOM REST (Effect when stay 3 seconds)
	210 ⇌ 255	NO FUNCTION
		DIMMER SPEED
	0 ⇌ 9	NO FUNCTION
	10 ⇌ 49	DIM4 (Effect when stay 3 seconds)
	50 ⇌ 89	DIM3 (Effect when stay 3 seconds)
17	90 ⇌ 129	DIM2 (Effect when stay 3 seconds)
	130 ⇌ 169	DIM1 (Effect when stay 3 seconds)
	170 ⇌ 209	DIM0 (Effect when stay 3 seconds)
	210 ⇌ 255	NO FUNCTION

## PIXEL.2

CHANNEL	VALUE	FUNCTION
1	0 ⇌ 255	MASTER DIMMER
2	0 ⇌ 255	RED1
3	0 ⇌ 255	GREEN1
4	0 ⇌ 255	BLUE1
5	0 ⇌ 255	WHITE1
6	0 ⇌ 255	RED2
7	0 ⇌ 255	GREEN2
8	0 ⇌ 255	BLUE2
9	0 ⇌ 255	WHITE2
10	0 ⇌ 255	RED3
11	0 ⇌ 255	GREEN3
12	0 ⇌ 255	BLUE3
13	0 ⇌ 255	WHITE3
		STROBE
	0 ⇌ 9	STROBE CLOSED
	10 ⇌ 59	STROBE FROM SLOW TO FAST (1-25Hz)
	60 ⇌ 109	NO FUNCTION
14	110 ⇌ 159	THUNDER STROBE FROM SLOW TO FAST
	160 ⇌ 209	NO FUNCTION
	210 ⇌ 255	RANDOM STROBE
15	0 ⇌ 255	ZOOM1
16	0 ⇌ 255	ZOOM2
17	0 ⇌ 255	ZOOM3
18	0 ⇌ 255	ALL ZOOM
		ZOOM CONTROL
	0 ⇌ 9	NO FUNCTION
	10 ⇌ 59	ZOOM SEPARATE ON (Effect when stay 3 seconds, CH7-CH9 has effect when start)
19	60 ⇌ 109	ZOOM SEPARATE OFF (Effect when stay 3 seconds, CH7-CH9 no effect when off)
	110 ⇌ 159	ZOOM SPEED (Control all zoom speed)
	160 ⇌ 209	ZOOM REST (Effect when stay 3 seconds)
	210 ⇌ 255	NO FUNCTION
		DIMMER SPEED
	0 ⇌ 9	NO FUNCTION
	10 ⇌ 49	DIM4 (Effect when stay 3 seconds)
	50 ⇌ 89	DIM3 (Effect when stay 3 seconds)
	90 ⇌ 129	DIM2 (Effect when stay 3 seconds)
20	130 ⇌ 169	DIM1 (Effect when stay 3 seconds)
	170 ⇌ 209	DIM0 (Effect when stay 3 seconds)
	210 ⇌ 255	NO FUNCTION

TR16		
CHANNEL	VALUE	FUNCTION
1	0 ⇔ 255	MASTER DIMMER
2	0 ⇔ 255	MASTER DIMMER FINE
3	0 ⇔ 255	RED
4	0 ⇔ 255	RED FINE
5	0 ⇔ 255	GREEN
6	0 ⇔ 255	GREEN FINE
7	0 ⇔ 255	BLUE
8	0 ⇔ 255	BLUE FINE
9	0 ⇔ 255	WHITE
10	0 ⇔ 255	WHITE FINE
11		COLOR MARCOS
	0 ⇔ 10	NO FUNCTION
	11 ⇔ 30	RED 100% / GREEN UP / BLUE 0%
	31 ⇔ 50	RED DOWN / GREEN 100% / BLUE 0%
	51 ⇔ 70	RED 0% / GREEN 100% / BLUE UP
	71 ⇔ 90	RED 0% / GREEN DOWN / BLUE 100%
	91 ⇔ 110	RED UP / GREEN 0% / BLUE 100%
	111 ⇔ 130	RED 100% /GREEN 0%/BLUE DOWN
	131 ⇔ 150	RED 100%/GREEN UP/BLUE UP
	151 ⇔ 170	RED DOWN/GREEN DOWN/BLUE 100%
	171 ⇔ 195	ALL LEDS AT FULL OUTPUT
	196 ⇔ 200	2700K
12	201 ⇔ 205	3000K
	206 ⇔ 210	3200K
	211 ⇔ 215	3500K
	216 ⇔ 220	4000K
	221 ⇔ 225	4200K
	226 ⇔ 230	4500K
	231 ⇔ 235	5600K
	236 ⇔ 240	6000K
	241 ⇔ 245	6500K
	246 ⇔ 250	7200K
	251 ⇔ 255	8000K
		STROBE
13	0 ⇔ 9	STROBE CLOSED
	10 ⇔ 59	STROBE FROM SLOW TO FAST (1-25Hz)
	60 ⇔ 109	NO FUNCTION
	110 ⇔ 159	THUNDER STROBE FROM SLOW TO FAST
	160 ⇔ 209	NO FUNCTION
	210 ⇔ 255	RANDOM STROBE
13	0 ⇔ 255	ZOOM1

CHANNEL	VALUE	FUNCTION
14	0 ⇔ 255	ZOOM2
15	0 ⇔ 255	ZOOM3
16	0 ⇔ 255	ALL ZOOM
17		ZOOM CONTROL
	0 ⇔ 9	NO FUNCTION
	10 ⇔ 59	ZOOM SEPEARATE ON (Effect when stay 3 seconds, CH7-CH9 has effect when start)
	60 ⇔ 109	ZOOM SEPEARATE OFF(Effect when stay 3 seconds, CH7-CH9 no effect when off)
	110 ⇔ 159	ZOOM SPEED(Control all zoom speed)
	160 ⇔ 209	ZOOM REST (Effect when stay 3 seconds)
	210 ⇔ 255	NO FUNCTION
18		COLOR PIXEL SELECTION
	0 ⇔ 9	NO FUNCTION
	10 ⇔ 29	PIX1,2,3 (Static)
	30 ⇔ 49	PIX1(Static)
	50 ⇔ 69	PIX2(Static)
	70 ⇔ 89	PIX3(Static)
	90 ⇔ 109	PIX1,2(Static)
	110 ⇔ 129	PIX1,3(Static)
	130 ⇔ 149	PIX2,3(Static)
	150 ⇔ 169	Chase Left to right (Slow to fast)
	170 ⇔ 189	Chase Left to right(Fast to slow)
	190 ⇔ 209	Chase left-right-left(Slow to fast)
19	210 ⇔ 229	Random(Slow to fast)
	230 ⇔ 255	PIX1,2,3 (Static)
		ZOOM PIXEL SELECTION
	0 ⇔ 9	NO FUNCTION
	10 ⇔ 19	PIX1(Small to large)
	20 ⇔ 29	PIX1(Big to small)
	30 ⇔ 39	PIX2(Small to large)
	40 ⇔ 49	PIX2(Big to small)
	50 ⇔ 59	PIX3(Small to large)
	60 ⇔ 69	PIX3(Big to small)
	70 ⇔ 79	PIX1,2(Small to large)
	80 ⇔ 89	PIX1,2(Big to small)
20	90 ⇔ 99	PIX1,3(Small to large)
	100 ⇔ 109	PIX1,3(Big to small)
	110 ⇔ 119	PIX2,3(Small to large)
	120 ⇔ 129	PIX2,3(Big to small)
	130 ⇔ 139	PIX1,2,3(All zoom)
	140 ⇔ 149	Chase Left to right (Slow to fast)
	150 ⇔ 159	Chase Left to right(Fast to slow)
	160 ⇔ 169	Chase left-right-left(Slow to fast)
	170 ⇔ 179	Random(Slow to fast)
	180 ⇔ 255	PIX1,2,3(All zoom static)

CHANNEL	VALUE	FUNCTION
20	0 ⇐⇒ 9	DIMMER CONTROL
	NO FUNCTION	
	10 ⇐⇒ 49	DIM4 (Effect when stay 3 seconds)
	50 ⇐⇒ 89	DIM3 (Effect when stay 3 seconds)
	90 ⇐⇒ 129	DIM2 (Effect when stay 3 seconds)
	130 ⇐⇒ 169	DIM1 (Effect when stay 3 seconds)
	170 ⇐⇒ 209	DIM0 (Effect when stay 3 seconds)
	210 ⇐⇒ 255	NO FUNCTION

## HALO

CHANNEL	VALUE	FUNCTION
1	0 ⇐⇒ 255	MASTER DIMMER
2	0 ⇐⇒ 255	PIXEL1 DIMMER 2700K
3	0 ⇐⇒ 255	PIXEL2 DIMMER 2700K
4	0 ⇐⇒ 255	PIXEL3 DIMMER 2700K
5	0 ⇐⇒ 255	ZOOM1
6	0 ⇐⇒ 255	ZOOM2
7	0 ⇐⇒ 255	ZOOM3
8	0 ⇐⇒ 255	ALL ZOOM
9		ZOOM CONTROL
	0 ⇐⇒ 9	NO FUNCTION
	10 ⇐⇒ 59	ZOOM SEPEARATE ON (Effect when stay 3 seconds, CH7–CH9 has effect when start)
	60 ⇐⇒ 109	ZOOM SEPEARATE OFF (Effect when stay 3 seconds, CH7–CH9 no effect when off)
	110 ⇐⇒ 159	ZOOM SPEED (Control all zoom speed)
	160 ⇐⇒ 209	ZOOM REST (Effect when stay 3 seconds)
	210 ⇐⇒ 255	NO FUNCTION
10		DIMMER CONTROL
	0 ⇐⇒ 9	NO FUNCTION
	10 ⇐⇒ 49	DIM4 (Effect when stay 3 seconds)
	50 ⇐⇒ 89	DIM3 (Effect when stay 3 seconds)
	90 ⇐⇒ 129	DIM2 (Effect when stay 3 seconds)
	130 ⇐⇒ 169	DIM1 (Effect when stay 3 seconds)
	170 ⇐⇒ 209	DIM0 (Effect when stay 3 seconds)
	210 ⇐⇒ 255	NO FUNCTION