

# **USER MANUAL**

# RGBW LED FLOODLIGHT WITH DMX CONTROLLING SPX22090



Please, read carefully before operating the floodlight!



# PRODUCT INFORMATION

RGBW FLOODLIGHT SPX22048 has three operating modes: AUTO, DMX and MASTER/SLAVE. The DMX mode has 5 channels: channel 3, channel 4, channel 6, channel 8 µ channel 11. The floodlight has 21 built-in programs and an editing option in the AUTO mode. Several floodlights in DMX mode can be connected and those in SLAVE mode will follow the program of the floodlight in AUTO mode. Using stage smoke would increase the effect of the floodlight's lighting.

### WARNING:

- 1. Do not expose the luminaire directly to running water or rain for the sake of preventing the risk of electrical shock or fire!
- 2. Do not look directly at the working floodlight, because it could damage your eyes!

# **TECHNICAL INFORMATION**

### **Basic parameters**

- Beam angle: 8°
- Light source: 4 in 1 LED RGBW
- Protection rate: IP65
- TFT display
- Casing: Aluminum alloy
- Breathing valve for preventing moisture penetration
- Working temperature: -30 °C ÷ +40 °C
- Size: 288/142/280 mm
- Weight: 5 kgWarranty: 2 years

# Electro-technical information

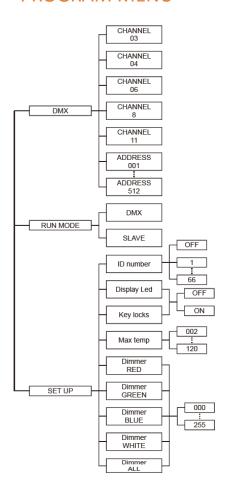
- Voltage: 100-240 V AC
  Frequency: 50/60 Hz
  Power consumption: 90 W
- Built-in driver

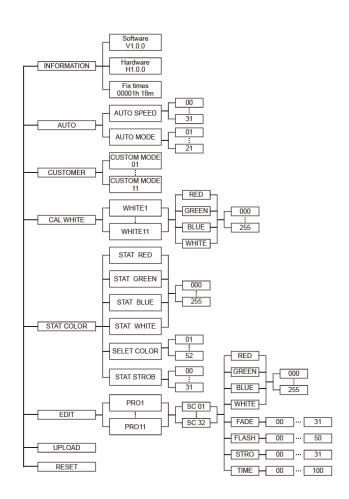
## **Control** information

- DMX channels: 3, 4, 6, 8 and 11
- Modes: DMX512/MASTER SLAVE/AUTO RUN
- Built-in effects: color shifting, color chasing, strobing, and fading
- 512 separate IP addresses in DMX mode
- Regulating the color temperature

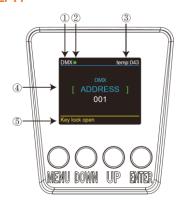


# **PROGRAM MENU**





# **DISPLAY**



- 1. DMX means, that the floodlight is in DMX mode; respectively SLAVE means, that the floodlight is in SLAVE mode;
- 2. The color of the dot represents the condition of signal transmission. Green indicates that the signal is good, while red means that the signal is interrupted;
- 3. Shows the floodlight's working temperature. If the temperature reaches its maximum level the inscription would turn yellow;
  - 4. Shows the current menu and operational mode;
  - 5. Indicates if the KEY LOCK function is enabled (KEY LOCK ON) or disabled (KEY LOCK OFF).



### DMX

In this menu, you can connect several floodlights with a DMX cable and control them with a single DMX console / controller.

- 1. Press the ENTER button, after that UP or DOWN until DMX is displayed;
- 2. Press ENTER again. You can select either CHANNEL or ADDRESS with pressing ENTER again.
- 2.1. In CHANNEL mode, [xx] represents the number of the DMX channel, that can be changed by pressing the UP or DOWN buttons;
- 2.2. In ADDRESS mode, [xxx] represents the number of the ID address, that can be changed by pressing the UP or DOWN buttons.

### **RUN MODE**

In this menu, you determine how the floodlight will operate – you can select DMX mode or SLAVE mode. In SLAVE mode, you can select one of the floodlights as a leading (MASTER), and the rest in SLAVE mode to operate in accordance to its program.

- 1. Press the ENTER button, after that UP or DOWN until RUN MODE is displayed;
- 2. Press ENTER to select between the DMX or SLAVE modes and then press ENTER again to save the selected mode.

### SFT UP

In this menu, you can adjust the values of the selected functions.

- 1 Press the ENTER button, after that UP or DOWN until SET UP is displayed;
- 2. Press ENTER to select one of the 9 available functions and then press ENTER again to adjust the values of the selected function.
  - 2.1. ID number from 1 to 66:
- 2.2. LED DISPLAY by selecting ON the display would stay permanently operating; selecting OFF would cause the floodlight's display to stop working in 10 seconds;
- 2.3. KEY LOCK selecting this function would block the floodlight's buttons. To activate them again you must consequently press DOWN + UP + DOWN + UP;
- 2.4. MAX TEMP allows you to select maximum working temperature for the floodlight. If the temperature is exceeded, the inscription TEMP [xx] would turn yellow;
  - 2.5. DIMMER RED allows you to regulate the brightness of the red color;
  - 2.6. DIMMER GREEN allows you to regulate the brightness of the green color;
  - 2.7. DIMMER BLUE allows you to regulate the brightness of the blue color;
  - 2.8. DIMMER WHITE allows you to regulate the brightness of the white color;
  - 2.9. DIMMER ALL allows you to regulate the brightness of the colors altogether.

## **INFORMATION**

In this menu, you would find out information about the software, hardware, and the operated time of the floodlight.

- 1 Press the ENTER button, after that UP or DOWN until INFORMATION is displayed;
- 2. Press ENTER and choose between SOFTWARE, HARDWARE, or FIX TIMES and then press ENTER again.
- 2.1. SOFTWARE provides information for the software;
- 2.2. HARDWARE provides information for the hardware;
- 2.3. FIX TIMES shows you how many hours (in total) the floodlight has worked for.

### **AUTO**

In this menu, you can select the AUTO mode and adjust the operating speed of the floodlight.

- 1. Press the ENTER button, after that UP or DOWN until AUTO is displayed;
- 2. Press ENTER and choose between SPEED and PROGRAM MODE and then press ENTER again.
- 2.1. SPEED adjusts the speed of program changing;
- 2.2. AUTO MODE provides a choice between 28 auto modes.



### **CUSTOMER**

In this menu, you can program the floodlight to a personally adjusted mode.

- 1. Press the ENTER button, after that UP or DOWN until CUSTOMER is displayed;
- 2. Press ENTER again to choose one of the 11 pre-programmed modes that can be adjusted from the EDIT menu.

### **CAL WHITE**

In this menu, you can adjust the value of one of the 11 types of white color that this floodlight has.

- 1. Press the ENTER button, after that UP or DOWN until CAL WHITE is displayed;
- 2. Press ENTER again to choose one of the 11 types of white color that can be adjusted manually by changing the values of RED, GREEN, BLUE and WHITE colors.

### **STAT COLOR**

In this menu, you could adjust the values of the static colors and the speed of strobing.

- 1. Press the ENTER button, after that UP or DOWN until STAT COLOR is displayed;
- 2. Press ENTER again and choose one of the 5 static colors that can be manually adjusted by pressing the buttons UP and DOWN.
  - 2.1. STATE RED allows you to adjust the brightness of the red color;
  - 2.2. STAT GREEN allows you to adjust the brightness of the green color;
  - 2.3. STAT BLUE allows you to adjust the brightness of the blue color;
  - 2.4. STAT WHITE allows you to adjust the brightness of the white color;
  - 2.5. SELCET COLOR allows you to choose one of the 52 available colors;
  - 2.6. SELECT STROB allows you to choose the strobing speed.

### EDIT

In this menu, you can edit your choice of an AUTO program.

- 1. Press the ENTER button, after that UP or DOWN until EDIT is displayed;
- 2. Press ENTER again to modify one of the 11 possible programs (from PR.01 to PR.11). Each one has 32 variants that can be manually adjusted.
- 3. Each variant (SCENE) has an option for changing the values of the red, green, blue, and white colors (0-255), as well as the effects FADE (0-31), FLASH (0-50), STROBE (0-31) and TIME (0-100). The settings can be saved with holding the button ENTER for about 5 seconds.

### **UPLOAD**

In this menu, you can connect several floodlights with DMX cables and set a leading one (MASTER) that the rest of the floodlights (SLAVE) will follow.

- 1. Press the ENTER button, after that UP or DOWN until UPLOAD is displayed;
- 2. Press ENTER again to upload the desired program from the MASTER floodlight to the SLAVE floodlights.

### RESET

In this menu, you can recover the default settings of the floodlight.

- 1. Press the ENTER button, after that UP or DOWN until RESET is displayed;
- 2. Press ENTER again to recover the default settings.





# **DMX MODE**

## DMX channel 3

Channel	Value	Function
1	0-255	Hue
2	0-255	Saturation
3	0-255	Value(brightness)

# DMX channel 4

Channel	Value	Function			
1	0-255	djust red LEDs Dimmer from low to high			
2	0-255	djust green LEDs Dimmer from low to high			
3	0-255	djust blue LEDs Dimmer from low to high			
4	0-255	djust white LEDs Dimmer from low to high			

# DMX channel 6

Channel	Value	Function			
1	0-255	0 = Off 1 - 255 = Master dimmer			
2	0-255	Adjust red LEDs Dimmer from low to high			
3	0-255	Adjust green LEDs Dimmer from low to high			
4	0-255	Adjust blue LEDs Dimmer from low to high			
5	0-255	Adjust white LEDs Dimmer from low to high			
0-49 default dimmer		default dimmer			
	50-99	Dimmer mode 1			
6	100-149	Dimmer mode 2			
	150-199	Dimmer mode 3			
	200-255	Dimmer mode 4			

DMX channel 8						
Channel	Value	Function				
1	0-255	0 = Off 1 - 255 = Master dimmer				
2	0-255	Adjust red LEDs Dimmer from low to high				
3	0-255	Adjust green LEDs Dimmer from low to high				
4	0-255	Adjust blue LEDs Dimmer from low to high				
5	0-255	Adjust white LEDs Dimmer from low to high				
	0 - 19	none				
	20 - 23	red				
	24 - 27	green				
	28 - 31	blue				
	32 - 35	yellow				
	36 - 39	cyan				
	40 - 43	magenta				
	44 - 47	white				
6	48 - 51	orange				
	52 - 55	pink				
	56 - 59	violet				
	60 - 63	aquamarine				
	64 - 67	sky blue				
	68 - 71	full white				
	72 - 75	cool white				
	76 - 79	warm white				
	80 - 83	white 3200				
	84 - 87	white 2500				





	88 - 91	yellow 2		
	92 - 95	straw		
	96 - 99	orange 2		
	100 - 103	light rose		
	104 - 107	dark pink		
	108 - 111	magenta 2		
	112 - 115	blue 2		
	116 - 119	med blue green		
	120 - 123	dark blue		
	124 - 127	bright pink		
	128 - 131	medium blue		
	132 - 135	golden amber		
	136 - 139	deep golden amber		
	140 - 143	pale lavender		
	144 - 147	apricot		
	148 - 151	dark lavender		
	152 - 155	chocolate		
6	156 - 159	just blue		
	160 - 163	surprise pink		
	164 - 167	scarlet		
	168 - 171	surprise peach		
	172 - 175	fire		
	176 - 179	english rose		
	180 - 183	mauve		
	184 - 187	bright blue		
	188 - 191	alice blue		
	192 - 195	rose indigo		
	196 - 199	urban blue		
	200 - 203	cool blue		
	204 - 207	Light salmon		
	208 - 211	mayan sun		
	212 - 215	cherry rose		
	216 - 219	flesh pink		
	220 - 223	skelton exotic sangria		
	224 - 255	amber		
7	0-255	0~6 = Off 7 - 255 = Different colour auto 36		
8	0-255	strobe (0Hz - 20Hz)		
	0~8 no function			
		9~255 strobe from slow to fast		

## DMX channel 11

Channel	Value	Function			
1	0-255	0 = Off 1 - 255 = Master dimmer			
2	0-255	Red LED adjustment, from low to high			
3	0-255	Green LED adjustment, from low to high			
4	0-255	Blue LED adjustment, from low to high			
5	0-255	White LED adjustment, from low to high			
	0 - 10	No function			
	11 - 20	R100%/Gup/B0%/W0%			
	21 - 30	Rdown/G100%/B0%/W0%			
6	31 - 40	R0%/G100%/Bup/W0%			
	41 - 50	Rup/Gdown/B100%W0%			
	51 - 60	Rup/G0%/B100%/W0%			
	61 - 70	R100%G0%Bdown/W0%			



	74 00	PACCOL/COOL/POOL/NA					
	71 - 80	R100%/G0%/B0%/Wup					
	81 - 90	R100%/G0%/B0%Wdown					
	91 - 100	R↑/G↓/B0%/W0%→R↓G↑/B0%/W0%					
	101 - 110	R↑/G0%/B↓/W0%→R↓/G0%B↑/W0%					
	111 - 120	R0%/G↑/B↓/W0%→R0%/G↓/B↑/W0%					
	121 - 130	R↑/G↑/B↓/W0%→R↓/G↓/B↑/W0%					
	131 - 140	R↑/G↓/B↓/W0%→R↓/G↑/B↑/W0%					
	141 - 150	R↑/G↓/B↑/W0%→R↓/G↑/B↓/W0%					
	151 - 160	$R \uparrow /G0\%/B \downarrow /W0\% \rightarrow R \downarrow /G \uparrow /B0\%/W0\% \rightarrow R0\%/G \downarrow /B \uparrow /W0\%$					
	161 - 170	R↑/G100%/B↓/W0%→R100%/G↓/B↑/W0%→R↓/G↑/B100%/W0%					
		R↓/G↑/B0%/W0%→R0%/G↓/B↑/W0%→R0%G0%/B↓/W↑					
	171 - 180	R↑/G0%/B0%/W↓ R0%/G100%/B↓/W0%→R↑/G100%B0%/W0%					
	181 - 190	R100%/G↓/B0%/W0%→R100%/G0%/B↑/W0%→					
6		R↓/G0%/B100%/W0%→R0%/G↑/B100%/W0%					
	191 - 200	RGBW					
	201 - 205	White 1					
	206 - 210	White 2					
	211 - 215	White 3					
	216 - 220	White 4					
	221 - 225	White 5					
	226 - 230	White 6					
	231 - 235	White 7					
	236 - 240	White 8					
	241 - 245						
	241 - 243	White 9 White 10					
	251 - 255	White 10 White 11					
	0 - 255	Speed when channel 6 is enabled					
7	0 - 255	Default					
,	16-255	Flicker OHz - 20Hz)					
	0	Default					
	8 - 10	Program 1					
	11 - 20	Program 2					
	21 - 30	Program 3					
	31 - 40	Program 4					
	41 - 50	Program 5					
	51 - 60	Program 6					
	61 - 70 71 - 80	Program 7					
	81 - 90	Program 8 Program 9					
	91 - 100	Custom 1					
	101 - 110	Custom 2					
8	111 - 120	Custom 3					
	121 - 130	Custom 4					
	131 - 140	Custom 5					
	141 - 150	Custom 6					
	151 - 160	Custom 7					
	161 - 170	Custom 8					
	171 - 180	Custom 9					
	181 - 190	Custom 10					
9	200 - 255	Custom 11					
9	0 - 255 0 - 49	Auto mode speed OFF dimming speed					
	50 - 99	Dimming speed 1					
10	100 - 149	Dimming speed 2					
10	150 - 199	Dimming speed 3					
	200 - 255	Dimming speed 4					
11	0-255	ID address set					

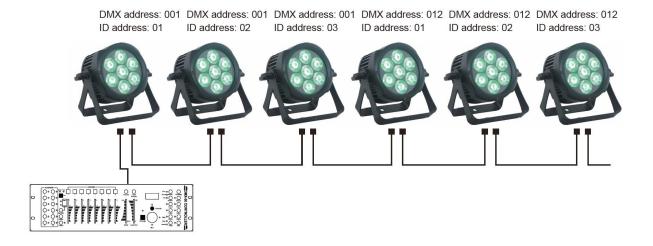


## channel 11 (ID address set)

charmer 11 (15 dadress see)							
09	ID address	170179	ld17	223	Id34	240	ld51
1019	ld1	180189	ld18	224	Id35	241	ld52
2029	ld2	190199	ld19	225	Id36	242	Id53
3039	Id3	200209	Id20	226	Id37	243	Id54
4049	ld4	210	ld21	227	Id38	244	ld55
5059	ld5	211	ld22	228	Id39	245	Id56
6069	Id6	212	ld23	229	Id40	246	Id57
7079	Id7	213	ld24	230	Id41	247	Id58
8089	Id8	214	ld25	231	Id42	248	ld59
9099	Id9	215	ld26	232	Id43	249	Id60
100109	ld10	216	ld27	233	Id44	250	Id61
110119	ld11	217	ld28	234	Id45	251	Id62
120129	ld12	218	Id29	235	Id46	252	Id63
130139	ld13	219	Id30	236	Id47	253	Id64
140149	ld14	220	ld31	237	Id48	254	Id65
150159	ld15	221	ld32	238	Id49	255	Id66
160169	ld16	222	ld33	239	ld50		

# **ACTIVATING AN ID ADDRESS IN DMX-512 MODE**

Activate (ON) the ID function from the settings panel. Each floodlight in DMX mode could use 66 separate ID addresses.



The scheme above shows a connection of DMX floodlights – three per each DMX address. Each of the three floodlights uses a separate ID address, allowing you to control the whole group with choosing a channel (3, 4, 6 or 8) or controlling each floodlight separately (when channel 11 is selected).



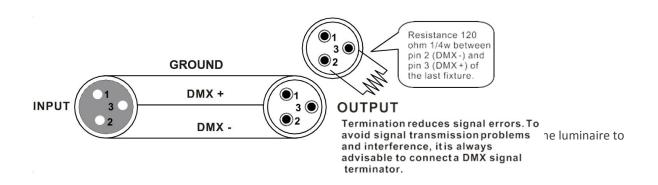
# **UPLOADING A PROGRAM**



First, select the floodlight that is going to be leading (MASTER) and have its program prepared in the EDIT menu beforehand. After that, connect all the floodlights with DMX cables, choose UPLOAD from the menu of the MASTER floodlight and press ENTER. Its program would be transferred to all the floodlights in SLAVE mode.

# CONNECTING

The connection must be executed with XLR connectors on both ends (male and female).



# 3-pin to 5-pin conversion

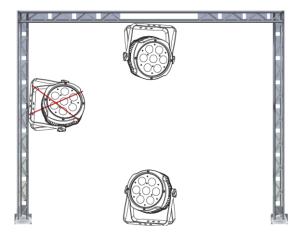
When using a 5-pin connector you must also use an adapter. The chart below shows the correct way of connecting the cables:

Conductor	3 Pin Female	5 Pin Male	
Ground/Shiel	Pin 1	Pin 1	
Data ( - )	Pin 2	Pin 2	
Data (+)	Pin 3	Pin 3	
Do not use		Do not use	
Do not use		Do not use	



# **MOUNTING**

The area where the floodlight would be mounted must be able to hold 10 times its weight without being deformed. When mounting, the floodlight must be additionally reinforced with a special mounting cable, in case the mounting bracket breaks. Never stand directly under the floodlight when it is being mounted, dismounted, or serviced. The proper mounting of the floodlight requires certain qualification and experience. Do not attempt to mount the floodlight if you are not sure you can do it properly. The installation must be checked from a competent person at least once a year.



The INNO POCKET SPOT technology allows a vertical mounting. To avoid damaging the luminaire or an eventual accident DO NOT mount it sideways (see the illustration) or less than half a meter from flammable materials (e.g. drapes)!

# **MECHANICAL PARAMETERS**







