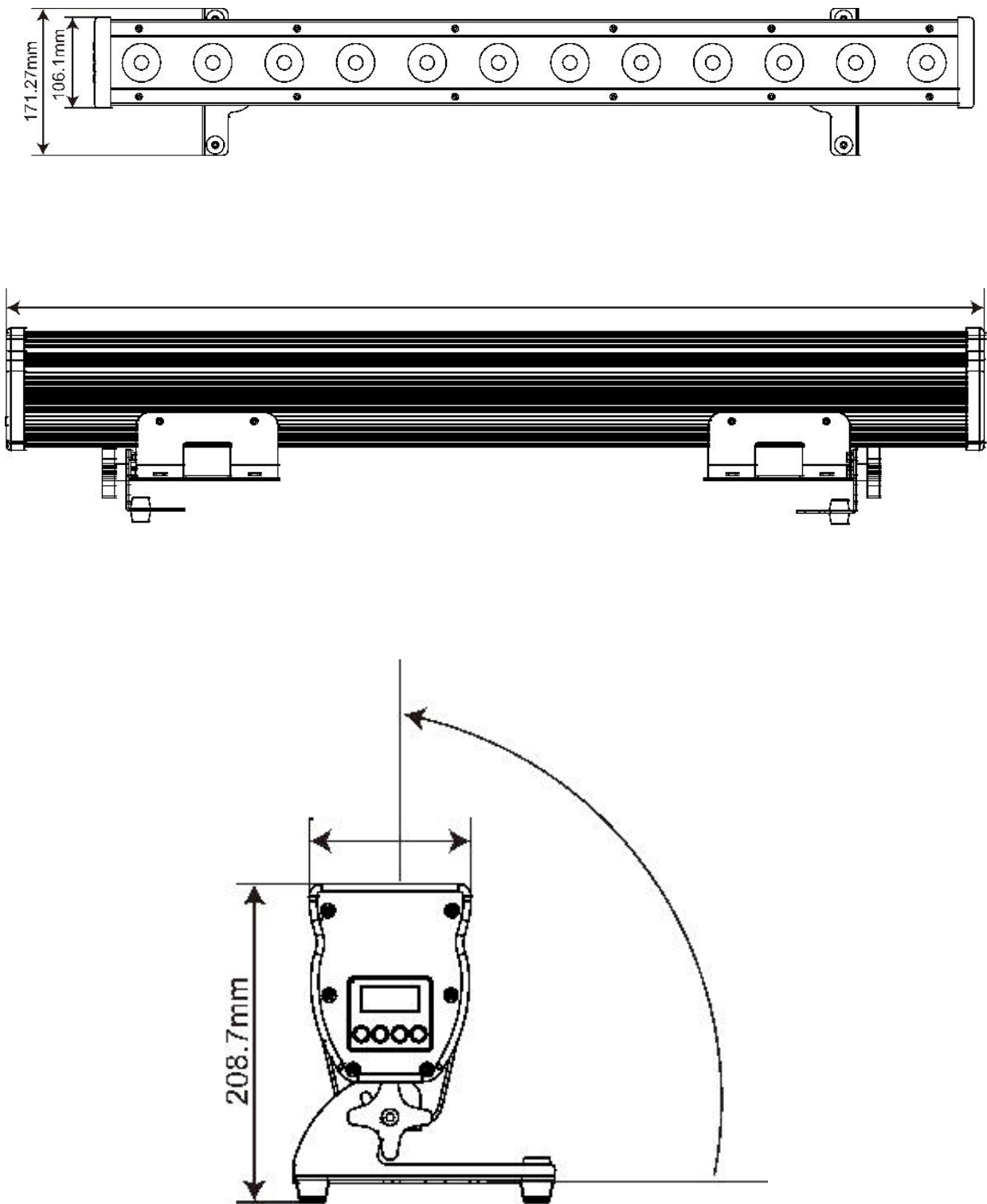




SquareLED - MRX 12x15W RGBW 4in1 Matrix Bar PRO-Version

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

1.Mechanical Specification



Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

2. Introduction

Unpacking:

Thank you for purchasing the MRX 12x15W RGBW 4in1 Matrix Bar PRO. Every MRX 12x15W RGBW 4in1 Matrix Bar PRO has been tested and shipped in perfect operating condition.

Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact.

Introduction:

The MRX 12x15W RGBW 4in1 Matrix Bar PRO is a DMX intelligent LED color wash. This wash can be used in a stand alone mode or connected in a Master/Slave configuration.

The unit can also be controlled via DMX controller. This unit has seven operating modes: Manual Color mode, Color Change mode, Color Fade mode, Auto mode, RGBW Manual Control mode and DMX control mode.

Warning!

To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture

Caution!

There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, doing so will void your manufactures warranty. In the unlikely event your unit may require service please contact us.

PLEASE recycle the carton when ever possible.

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

3. Safety Information

Installation

Make sure all parts for fixing the projector are in a good state of repair. Make sure the point of anchorage is stable before positioning the projector.

The safety chain must be properly hooked onto the fitting and secured to the framework, so that, if the primary support system fails, the fitting falls as little as possible. If the safety chain gets used, it needs to be replaced with a genuine spare.

Minimum distance of illuminated objects

The projector needs to be positioned so that the objects hit by the beam of light are at least 0.2 metres (8") from the lens of the projector.

Minimum distance from flammable materials

The projector must be positioned so that any flammable materials are at least 0.20 metres (8") from every point on the surface of the fitting.



Mounting surfaces

It is permissible to mount the fitting on normally flammable surfaces.

t_a 40°C

Maximum ambient temperature

Do not use the project if ambient temperature (T_a) exceeds 40°C.

IP65

IP65 protection rating

The equipment is fully protected against dust (first digit 6) and against jets of water (second digit 5).



Protection against electrical shock

Connection must be made to a power supply system fitted with efficient earthing (Class I appliance according to standard EN 60598-1).

It is moreover, recommended to protect the supply lines of the projectors from indirect contact and/or shorting to earth by using appropriately sized residual current devices.

Connection to the power mains

A qualified electrician must perform connection to the power mains. Check that the mains frequency and voltage correspond to the frequency and voltage for which the projector was designed and indicated on the electrical data label. This label also gives the input power. Refer to the latter to evaluate the maximum number of devices to be connected to the mains to avoid overloads.



Maintenance

Before starting any maintenance work or cleaning the projector, cut off power from the supply mains. After switching off, do not remove any parts of the fitting for at least 10 minutes. The lenses must be mounted and, if visibly damaged, they have to be replaced with genuine spares.

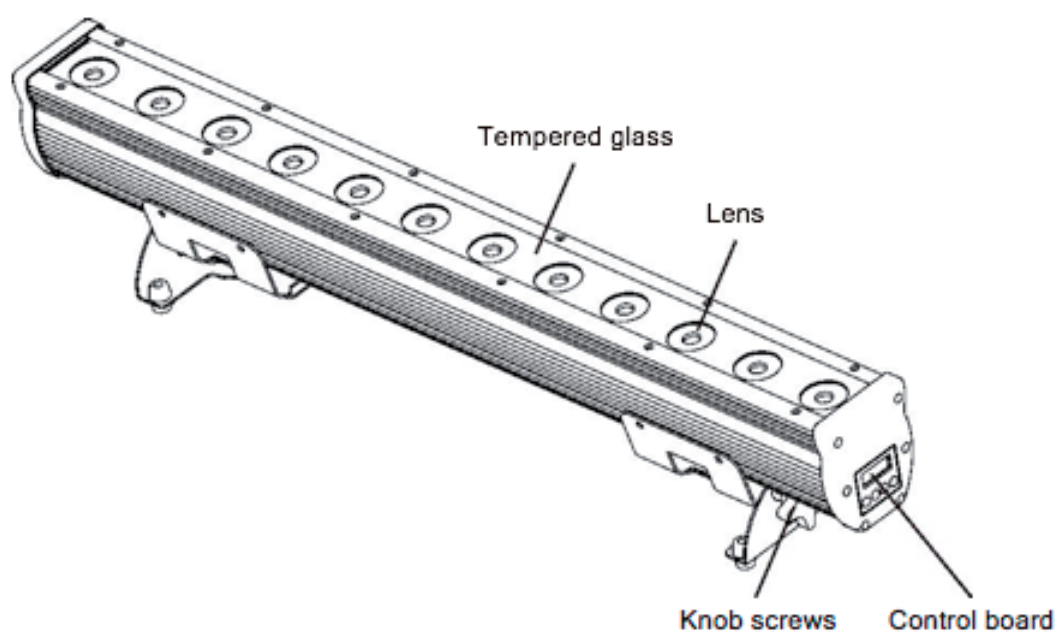
Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO



The products referred to in this manual conform to the European Community Directives to which they are subject:

- Low Voltage Directive 2006/95/EC
- Electromagnetic Compatibility Directive 2004/108/EC

4. Product Overview



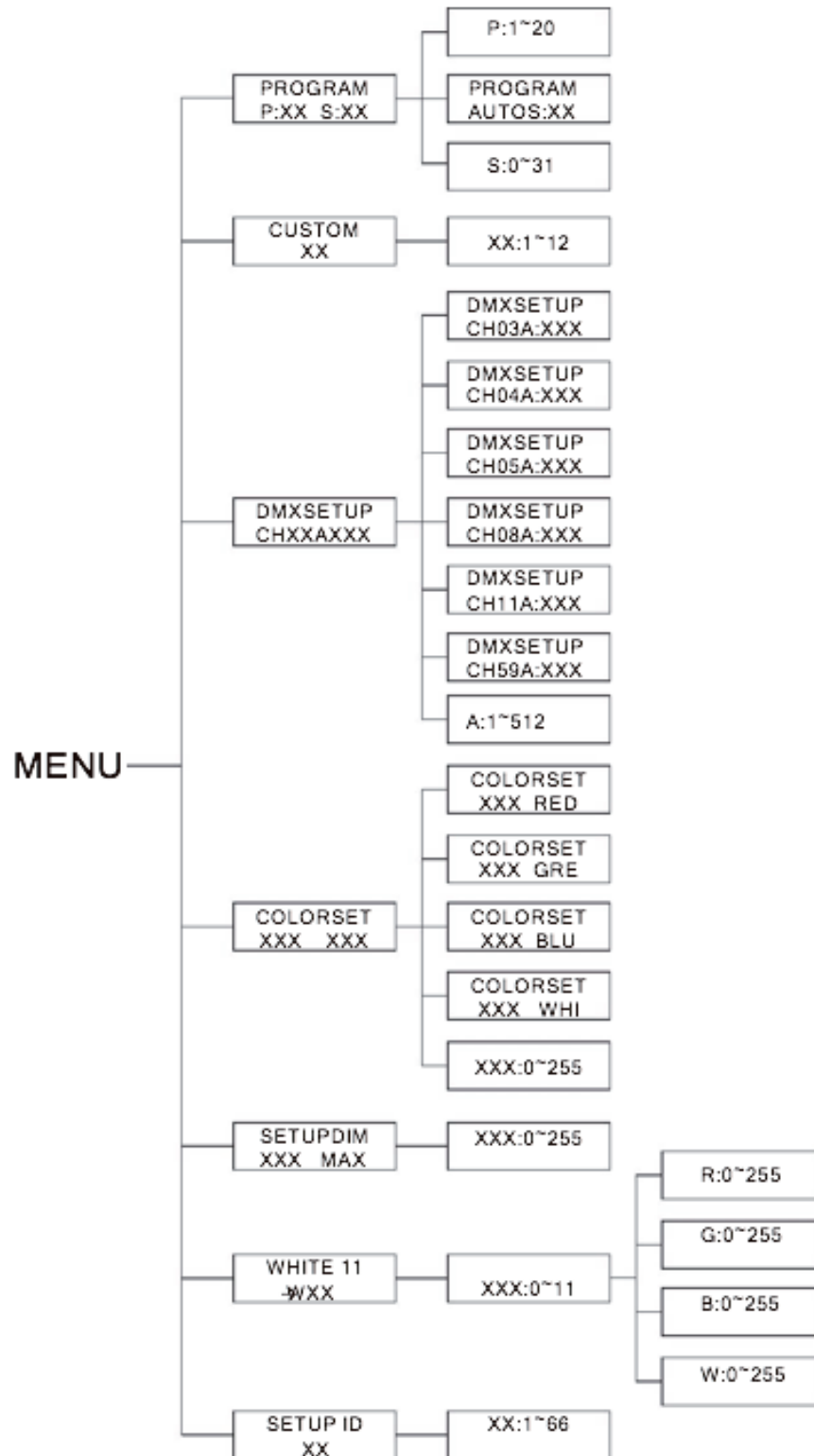
Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

5. Technical Data

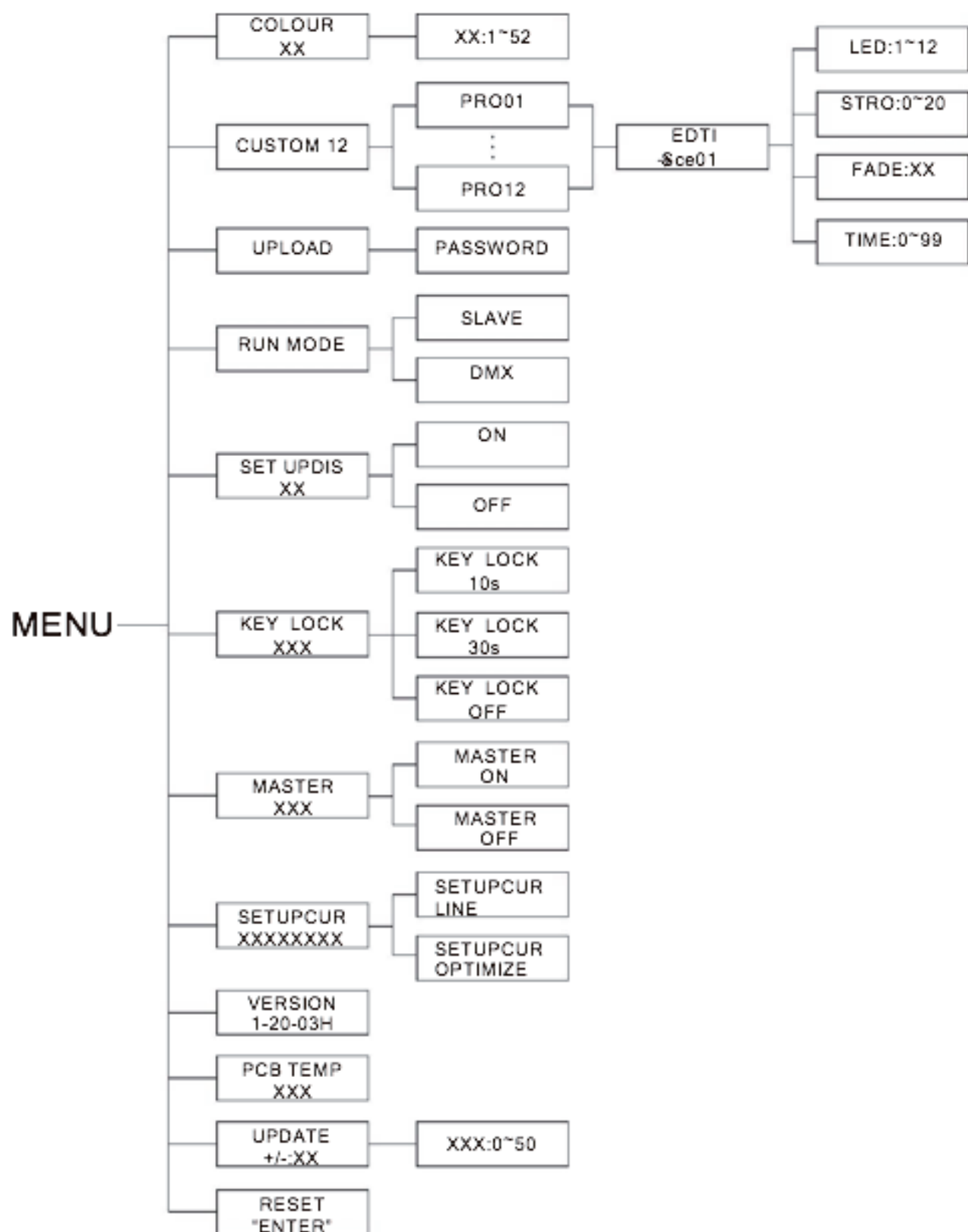
- Source: 12 high performance OSRAM LED
- Light output: 3000 Lumen
- 0 – 100% dimmer curve
- Cooling: Natural cooling by body
- Standard beam angle: 40°*10°
- 10 customer programs
- Lens: high quality lens from France
- IP65 rated for outdoor applications
- Color strobe: 1-25s
- 6 DMX Modes (RGBW separate control, Strobe, Macro Dimmer)
- 50,000 hour life light source (Average)
- DMX channel: 3, 4, 5, 8, 11 or 59
- 20 internal programs included
- Set-up via DMX standard controller
- Cooling by the body
- Automatic thermal protection system
- Each LED can be controlled separately
- Power consumption: 200W
- Die-cast and extruded aluminium construction
- Waterproof: IP65
- Dimensions: 1034 x 171.27 x 208.7 mm
- N.W: 10.0 kg
- G.W: 11.1 kg

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

6. Operating Instructions



Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO



Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

PROGRAM

1. P: Internal program mode select 1 - 20
2. AUTO : 20 mode loop run
3. S: Adjust internal program speed 0- 31

CUSTOM

1. Run customized program 12

COLORSET

1. Setup red dimmer 0 - 255
2. Setup green dimmer 0 - 255
3. Setup blue dimmer 0 - 255
4. Setup white dimmer 0 - 255

WHITE 11

1. Set the internal 11 white and set of 4 color parameters

SETUP ID

1. Off :Close dmx id function. 1 – 66 Setup dmx id number

COLOUR

1. Choose Internal 52 color

UPLOAD

1. Upload customized program when press (Down+Up+Down+Up)

DMX SIGN

1. FREEZE: When dmx cable break keep buffer data.
2. BLACKOUT: When dmx cable break clear buffer data.

SETUPDIS

1. OFF: Close lcd backlight. On: Open lcd backlight.

RUN MODE

1. Run SLAVE/DMX

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KEY LOCK

1. 10s :Key lock 10s after open
2. 30s: Key lock 30s after open
3. OFF: Key lock close.Password is UP/DOWN

MASTER

1. ON: Open master signal
2. OFF: Close master signal

SETUPCUR

1. Setup dimmer mode

VERSION

1. Display software version(1-20-03H)

PCB TEMP

1. Display system led pcb temperature,when exceed 65 down dimmer

UPDATE

1. +/-:xxx: Press“+/-” Display data up to 51 into software update

RESET

1. “ENTER” :Press Enter reset all value

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

7. DMX control mode

Mode 1: 3CH

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

Mode 2: 4CH

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

Mode 3: 5CH

DMX Channel	Value	Function
1	0 -255	0 = Off 1 - 255 = Master dimmer
2	0 -255	Adjust red LEDs Dimmer low to high
3	0 -255	Adjust green LEDs Dimmer low to high
4	0 -255	Adjust blue LEDs Dimmer low to high
5	0 -255	Adjust white LEDs Dimmer low to high

Mode 4: 8CH

DMX Channel	Value	Function
1	0 -255	0 = Off 1 - 255 = Master dimmer
2	0 -255	Adjust red LEDs Dimmer low to high
3	0 -255	Adjust green LEDs Dimmer low to high
4	0 -255	Adjust blue LEDs Dimmer low to high
5	0 -255	Adjust white LEDs Dimmer low to high
6	0 - 19	none
	20 - 23	red

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6	24 - 27	green
	28 - 31	blue
	32 - 35	yellow
	36 - 39	cyan
	40 - 43	magenta
	40 - 43	white
	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
	84 - 87	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
	120 - 123	bright pink
	128 - 131	medium blue
	132 - 135	golden amber
	136 - 139	deep golden amber
	136 - 139	pale lavender
	144 - 147	apricot
	148 - 151	dark lavender
	152 - 155	chocolate

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

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 = Off 1 - 255 = Different colourmacros 36
8	0 -255	strobe (0Hz—20Hz)

Mode 5: 11CH

DMX Channel	Value	Function
1	0 -255	0 = Off 1 - 255 = Master dimmer
2	0 -255	Adjust red LEDs Dimmer low to high
3	0 -255	Adjust green LEDs Dimmer low to high
4	0 -255	Adjust blue LEDs Dimmer low to high
5	0 -255	Adjust white LEDs Dimmer low to high
6	0 - 10	No function
	11 - 20	R100%/Gup/B0%/W0%
	21 - 30	Rdown/G100%/B0%/W0%
	31 - 40	R0%/G100%/Bup/W0%
	41 - 50	Rup/Gdown/B100%W0%

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

6	51 - 60	Rup/G0%/B100%/W0%
	61 - 70	R100%G0%Bdown/W0%
	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↑/G0%/B↓/W0%→R↓/G↑/B0%/W0%→R0%/G↓/B↑/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%→ 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	White 9
	246 - 250	White 10
	251 - 255	White 11
7	0 -255	Speed when channel 6 is enable
	0 -8	Default
	9 -255	strobe (0Hz - 20Hz)
8	0 - 8	Default
	9 - 10	program 1
	11 - 20	program 2

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

8	21 - 30	program 3									
	31 - 40	program 4									
	41 - 50	program 5									
	51 - 60	program 6									
	61 - 70	program 7									
	71 - 80	program 8									
	81 - 90	program 9									
	91 - 100	Custom 1									
	101 - 110	Custom 2									
	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										
191 - 200	Custom 11										
201 - 255	Custom 12										
9	0 - 255	Speed when channel 8 is enable									
10	0 - 127	Off dimmer speed									
	128 - 255	Dimmer speed									
11	0 - 9	all Ids	140 - 149	ld14	217	ld28	231	ld42	245	ld56	
	10 - 19	ld1	150 - 159	ld15	218	ld29	232	ld43	246	ld57	
	20 - 29	ld2	160 - 169	ld16	219	ld30	233	ld44	247	ld58	
	30 - 39	ld3	170 - 179	ld17	220	ld31	234	ld45	248	ld59	
	40 - 49	ld4	180 - 189	ld18	221	ld32	235	ld46	249	ld60	
	50 - 59	ld5	190 - 199	ld19	222	ld33	236	ld47	250	ld61	
	60 - 69	ld6	200 - 209	ld20	223	ld34	237	ld48	251	ld62	
	70 - 79	ld7	210	ld21	224	ld35	238	ld49	252	ld63	
	80 - 89	ld8	211	ld22	225	ld36	239	ld50	253	ld64	
	90 - 99	ld9	212	ld23	226	ld37	240	ld51	254	ld65	
	100 - 109	ld10	213	ld24	227	ld38	241	ld52	255	ld66	
	110 - 119	ld11	214	ld25	228	ld39	242	ld53			
	120 - 129	ld12	215	ld26	229	ld40	243	ld54			
	130 - 139	ld13	216	ld27	230	ld41	244	ld55			

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

Mode 6: 59CH

DMX Channel	Value	Function
1	0 -255	0 = Off 1 - 255 = Master dimmer
2	0 -255	Adjust red LEDs Dimmer low to high
3	0 -255	Adjust green LEDs Dimmer low to high
4	0 -255	Adjust blue LEDs Dimmer low to high
5	0 -255	Adjust white LEDs Dimmer low to high
6	0 - 127	Off dimmer speed
	128 - 255	Dimmer speed
7	0 - 10	No function
	11 - 20	R100%/Gup/B0%/W0%
	21 - 30	Rdown/G100%/B0%/W0%
	31 - 40	R0%/G100%/Bup/W0%
	41 - 50	Rup/Gdown/B100%W0%
	51 - 60	Rup/G0%/B100%/W0%
	61 - 70	R100%G0%Bdown/W0%
	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↑/G0%/B↓/W0%→R↓/G↑/B0%/W0%→R0%/G↓/B↑/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%→
		R↓/G0%/B100%/W0%→R0%/G↑/B100%/W0%
	191 - 200	RGBW
	201 - 205	White 1

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

7	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	White 9
	246 - 250	White 10
	251 - 255	White 11
8	0 - 7	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	program 7
	71 - 80	program 8
	81 - 90	program 9
	91 - 100	Custom 1
	101 - 110	Custom 2
	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
	191 - 200	Custom 11
	201 - 255	Custom 12

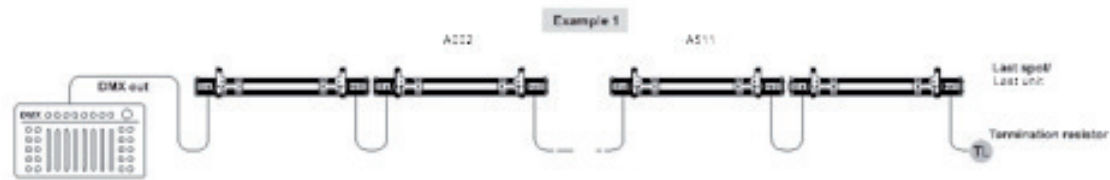
Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

9	0 - 255	Speed when 7 or 8 Channel is enable									
	16 -255	strobe (0Hz—20Hz)									
10	0 - 10	Default									
	11 - 63	Led unique control									
	64 - 95	Module control 1									
	96 - 127	Module control 2									
	128 - 159	Module control 3									
	160 - 191	Module control 4									
	192 - 255	Module control 5									
11	0 - 255	Red 1 LEDs Dimmer low to high(unique/module1/2/3/4)									
12	0 - 255	Green 1 LEDs Dimmer low to high(unique/module1/2/3/4)									
13	0 - 255	Blue 1 LEDs Dimmer low to high(unique/module1/2/3/4)									
14	0 - 255	White 1 LEDs Dimmer low to high(unique/module1/2/3/4)									
---	---	---									
39	0 - 255	Red 12 LEDs Dimmer low to high(unique / module1/2/3/4)									
40	0 - 255	Green 12 LEDs Dimmer low to high(unique/module1/2/3/4)									
41	0 - 255	Blue 12 LEDs Dimmer low to high(unique/module1/2/3/4)									
42	0 - 255	White 12 LEDs Dimmer low to high(unique/module1/2/3/4)									
43	0 - 9	all Ids	140 - 149	ld14	217	ld28	231	ld42	245	ld56	
	10 - 19	ld1	150 - 159	ld15	218	ld29	232	ld43	246	ld57	
	20 - 29	ld2	160 - 169	ld16	219	ld30	233	ld44	247	ld58	
	30 - 39	ld3	170 - 179	ld17	220	ld31	234	ld45	248	ld59	
	40 - 49	ld4	180 - 189	ld18	221	ld32	235	ld46	249	ld60	
	50 - 59	ld5	190 - 199	ld19	222	ld33	236	ld47	250	ld61	
	60 - 69	ld6	200 - 209	ld20	223	ld34	237	ld48	251	ld62	
	70 - 79	ld7	210	ld21	224	ld35	238	ld49	252	ld63	
	80 - 89	ld8	211	ld22	225	ld36	239	ld50	253	ld64	
	90 - 99	ld9	212	ld23	226	ld37	240	ld51	254	ld65	
	100 - 109	ld10	213	ld24	227	ld38	241	ld52	255	ld66	
	110 - 119	ld11	214	ld25	228	ld39	242	ld53			
	120 - 129	ld12	215	ld26	229	ld40	243	ld54			
	130 - 139	ld13	216	ld27	230	ld41	244	ld55			

Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

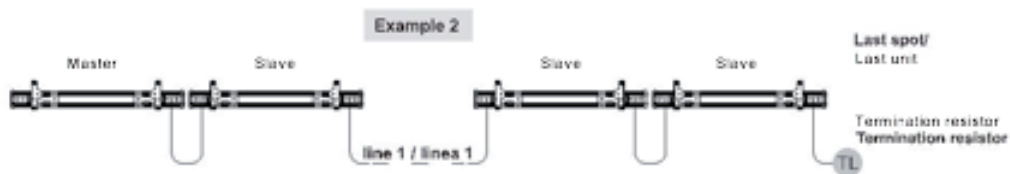
8. Connection

8.1 DMX connection



Connect all lights with controller, set all channels are same.

8.2 Master slave connection

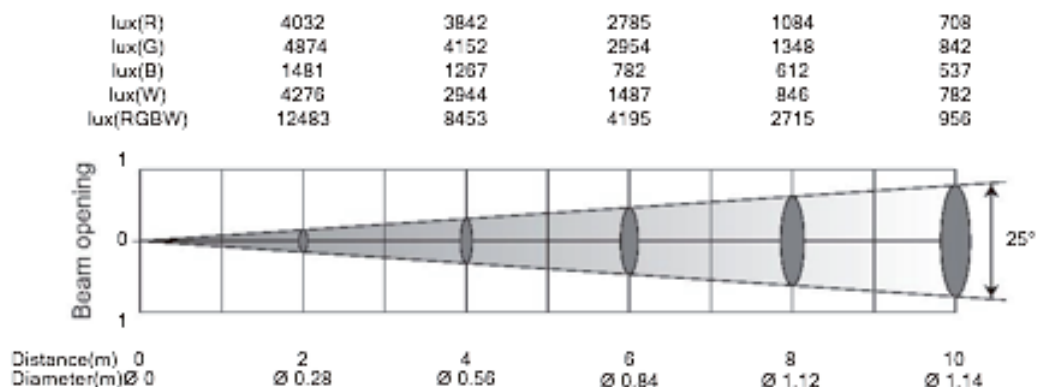


Connect all lights with controller, set one light on **PROGRAM** or **COLOUR**, other all lights set it **RUN MODE** **SLAVE**.

Voltage	the largest number of connection
230V AC	8 MAX.
110V AC	4 MAX.

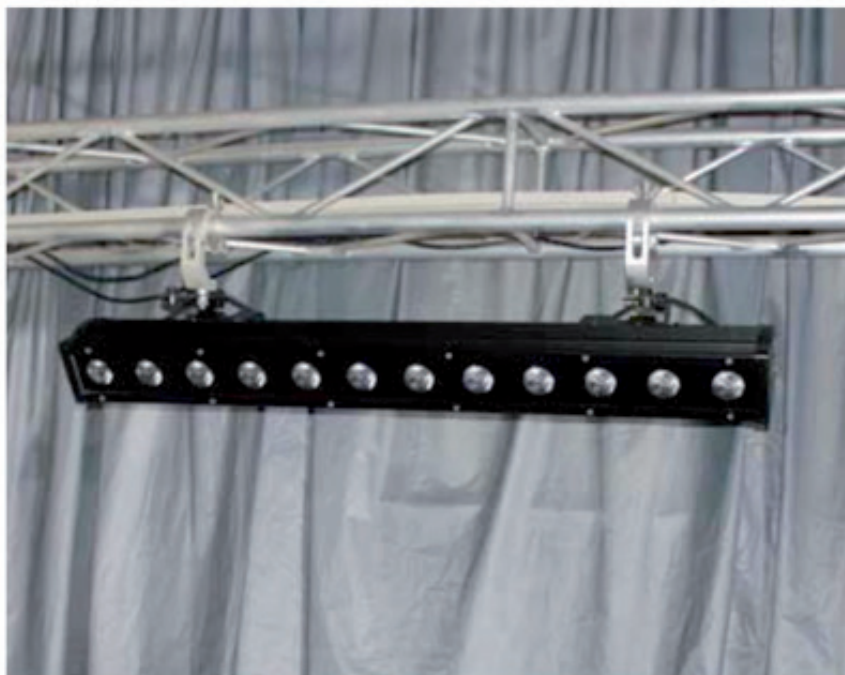
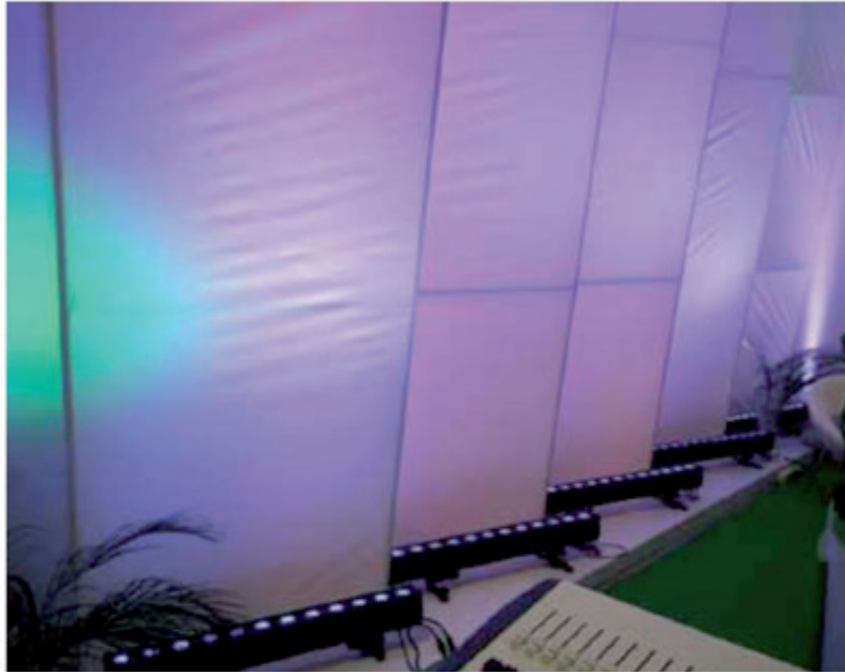
Please strictly in accordance with the requirements of the above peration, if beyond the above quantity, will cause a fire or burn out products.

9. Photometric data



Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

10. Installation

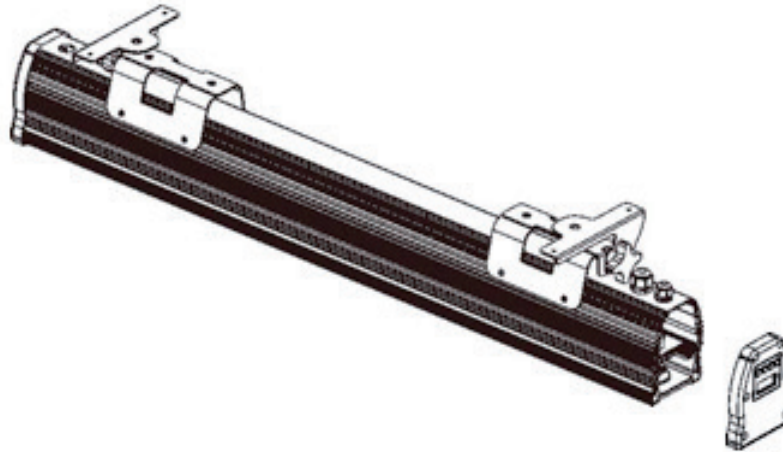


Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

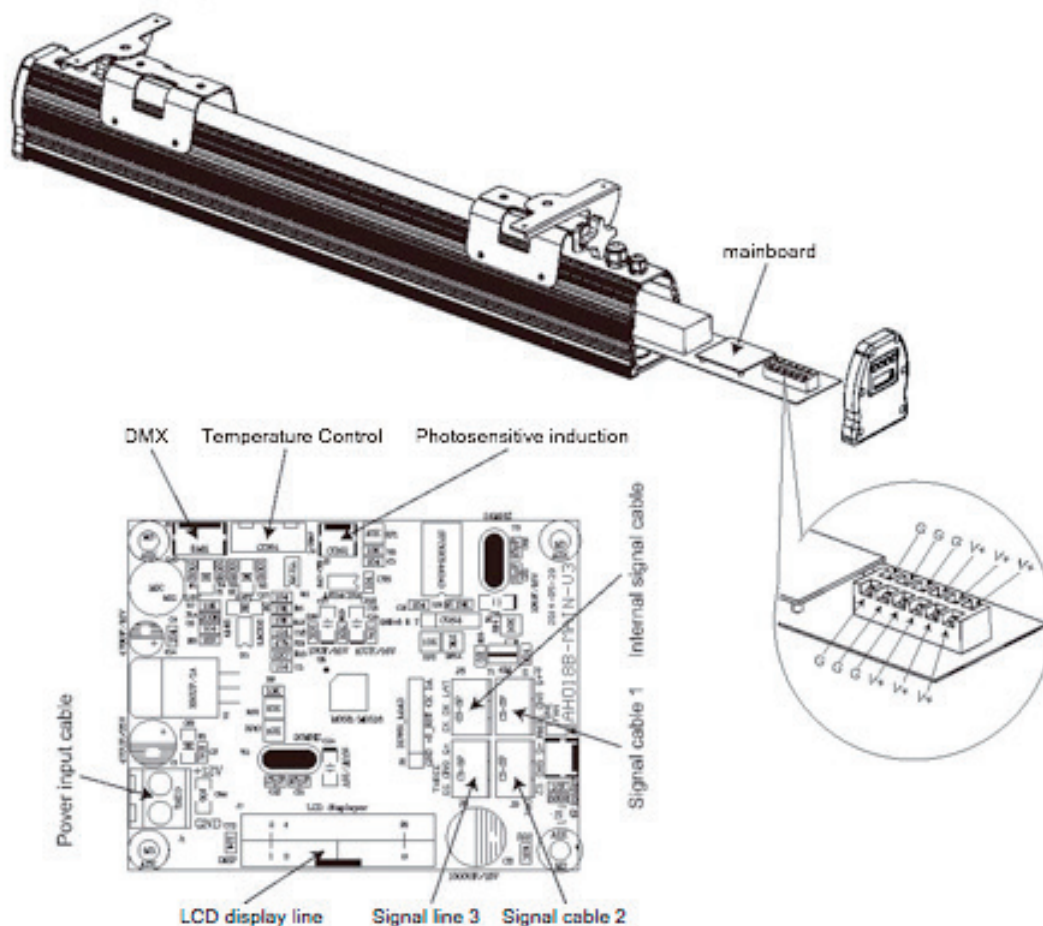
11. Service

11.1 Replace the mainboard

Use the screw open the cover of display board



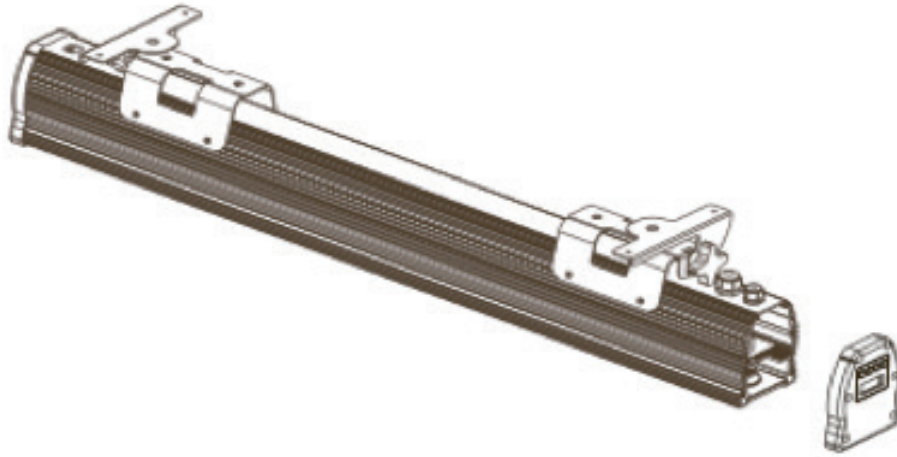
Pull out the mainboard, remove the old mainboard then follow the mainboard schematic, put the wire connected to the new mainboard.



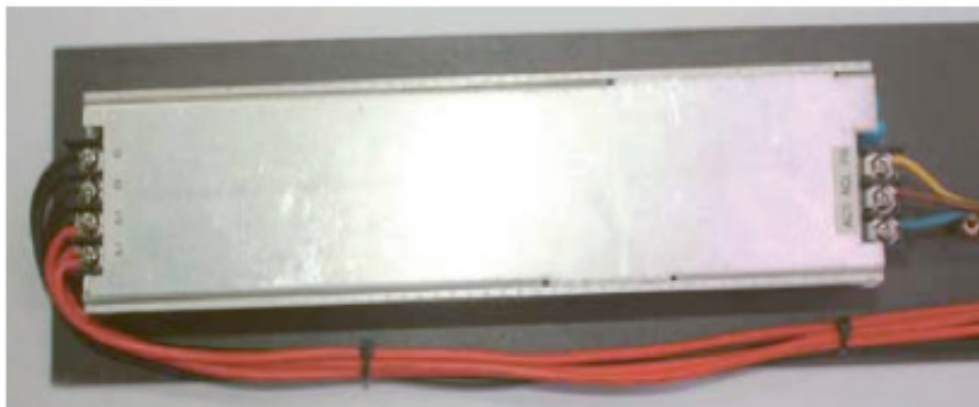
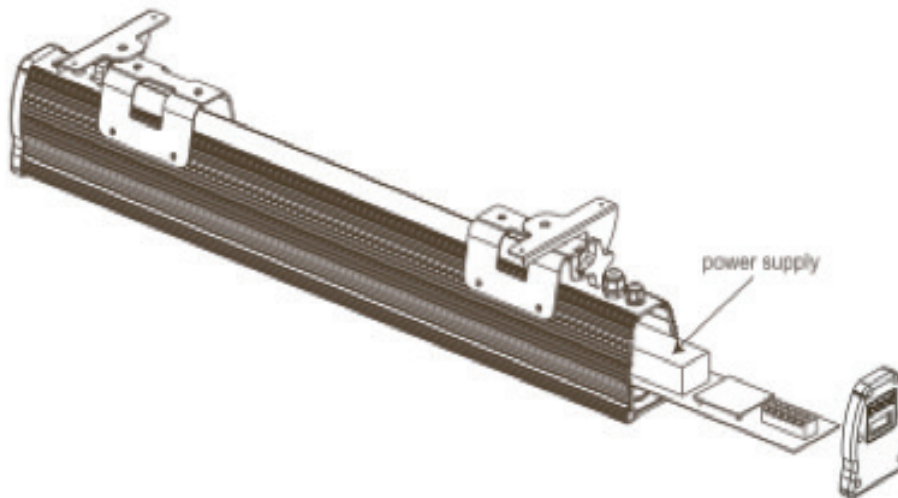
Manual | MRX 12x15W RGBW 4in1 Matrix Bar PRO

11.2 Replace the power supply

Use the screw open the cover of Power In.



Pull out the power supply, remove the old power supply then follow the power supply schematic, put the wire connected to the new power supply.





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