

VARYTEC

Manual



LED Mini Matrix 5x5
RGBW

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1. Safety instructions



- This device is suitable for indoor use (not outdoors) only.
- All modifications to the device will void the warranty.
- Repairs are to carry out by skilled personnel only.
- Use only fuses of the same type and original parts as spare parts.
- Protect the unit from rain and humidity to avoid fire and electric shocks.
- Make sure to unplug the power supply before opening the housing.

1.1. For safe and efficient operation

Be careful with heat and extreme temperature

Avoid exposing it to direct rays of the sun or near a heating appliance.
Not put it in a temperature bellow 32°F /0°C, or exceeding 104°F /40°C.

Keep away from humidity, water and dust

Do not place the set in a location with high humidity or lots of dust.
Containers with water should not be placed on the set.

To avoid placing on un-stable location

Select a level and stable location to avoid vibration.

Do not use chemicals or volatile liquids for cleaning

Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

If out of work, contact sales agency immediately

Any troubles arose, remove the power plug soon, and contact with an engineer for repairing, do not open the cabinet by yourself, it might result a danger of electric shock.

Take care with the power cable

Never pull the power cable to remove the plug from the receptacle, be sure to hold the plug. When not using the device for an extended period of time, be sure to disconnect the plug from the receptacle.

Important:

Damages caused by the disregard of this user manual are not subject to warranty. The dealer will not accept liability for any resulting defects or problems. Make sure the electrical connection is carried out by qualified personnel. All electrical and mechanical connections have to be carried out according to the European safety standards.

2. Designated use

This device was developed for professional use on stages, in discos, theatres etc. The device is only approved for a connection up to 230V 50/60 Hz AC voltage and only for indoor use.

Regular breaks during operation increase the lifetime of your device.

Avoid convulsions or any form of forceful impact during the installation or the start-up of the device.

Make sure that the device is not exposed excessive heat, humidity or dust at the place of installation. Take care that no cables are lying around. You would endanger your own safety and also the safety of a third party.

It is not allowed to operate or store the device in an environment in which spray water, rain, humidity or fog is expected. Humidity or very high atmospheric humidity could reduce the isolation of the device and could cause deathly electric shocks. If you use fog devices the device has not be exposed to a direct smoke jet. There has to be a safety distance of at least 0,5m between this device and the fog machine. Make sure that the saturation of the fog has to enable a visibility of at least 10m.

Operate the device not during thunderstorms. Surge voltages could destroy the device. Unplug the power supply during thunderstorms.

During the installation the use of the mounting bracket is obligatory.

Surrounding objects or surfaces should not be in contact with the device. And make sure that there is a distance of at least 0,2m between the lenses and illuminated objects.

Make sure that during the installation and removal of the device the area below the place of installation is basically cordoned off. This also applies to implementation of service.

The device has basically been protected by a suitable safety.

Make familiar yourself with the functions of the device before start-up. People without the experience should not handle with the device. The most cause of functional disorder is inappropriate handling.

Do not use chemicals or volatile liquids for cleaning. Use a clean dry cloth to wipe off the dust, or a wet soft cloth for stubborn dirt.

For transport use the original packing or designated accessory to avoid damages during the transport.

For reasons of safety unauthorized changes are forbidden.

A usage of the device which differs from usages which are described in this manual can cause damages of the device. In that case the warranty expires. Additional you should notice that every differed usage is related with dangers and can cause e.g. an electrical short, fire, electric shock or crash.

2.1. Overhead installation



Danger of life!

You have to observe the regulations of BGV C1 (formerly VBG 70) and EN60598-2-17 Installations are to carry out by skilled personnel only.

The suspension devices have to be build and measured so they can withstand for an hour the tenfold of the payload without suffering a permanent detrimental deformation.

Basically installation has to be made by using a second separate suspension. This can be e.g. a suitable net. The second suspension must be designed and attached so no part of the installation can fall down in case of failure.

During construction, reconstruction and deconstruction unnecessary stay in the range of moving areas, on lightning bridges, under elevated work stations or any other danger zones is forbidden.

The operator is obliged to following safety-related and mechanical facilities:

- Before the first start-up or after critical changes before restarting it has to be checked by an expert.
- Review in the frame of the inspection test at least all four years by an expert. .
- Review by a qualified person at least once a year.

How to carry out the overhead installation:

In tidal fall you should install the device out of the lounge area of people

IMPORTANT! Overhead installation requires a high level of experience. This includes knowledge of calculating the payload, used installation material and safety inspections of the used material and the projector whereas the required experience is not limited to this. Do not try to carry out installation yourself under any circumstances if you are not qualified. Contact a professional installer. An inappropriate installation can lead to injuries and/or damaged properties.

It is not allowed to install the device in the grip area of people.

If the device may hang from the ceiling or from high beams, the use of truss systems is mandatory. The device may not be installed so it can swing freely in the room.

Please note: Crashing down items can cause serious injuries! Do not install the projector, if you doubt the safety of a possible installation form!

Before installation make sure that the mounting surface has the ability to carry the tenfold point load of the own weight of the device.

Mount the device with the mounting-bracket to your trussing system using an appropriate clamp.

During overhead installation the device must be always secured by a safety rope which is designed to hold the twelfold weight of device. Only safety ropes with quick-release safety fastener elements may be used. Hang up the safety rope in the hole of the mounting bracket. Direct the rope over the truss or an appropriate fastening point. Hang up the end in the fastening element and tie up the locking nut. A safety rope once exposed to failing load or damaged may not be used furthermore.

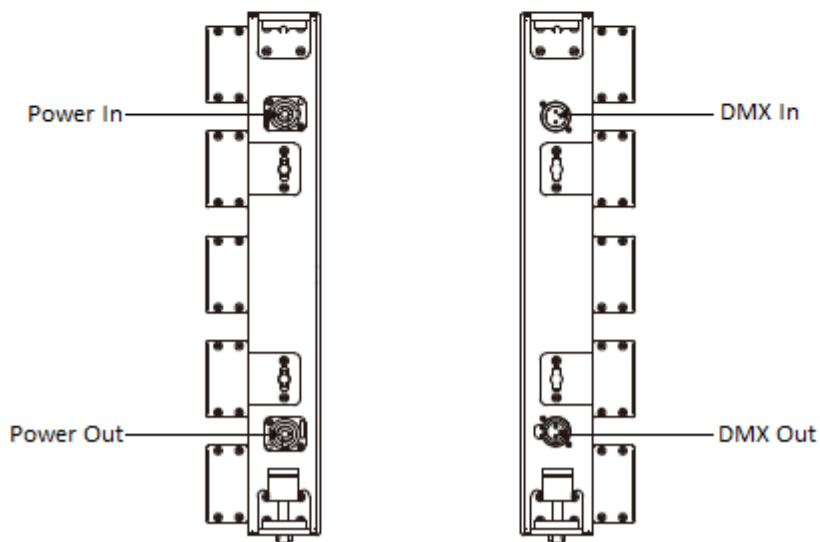
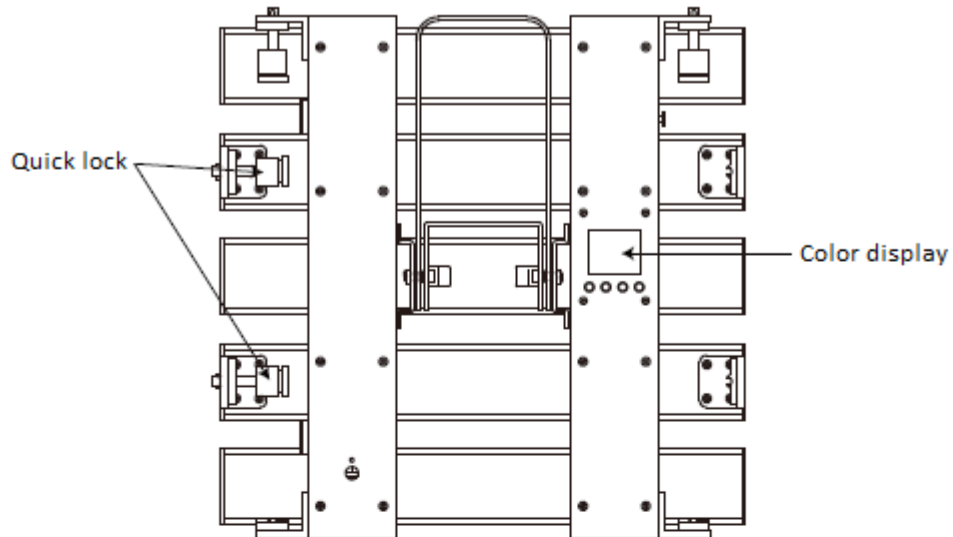
The maximum drop exceed must not exceed 20cm.

A safety rope once exposed to failing load or damaged may not be used furthermore.
Adjust the desired inclination angle via the mounting bracket and tighten the screw.

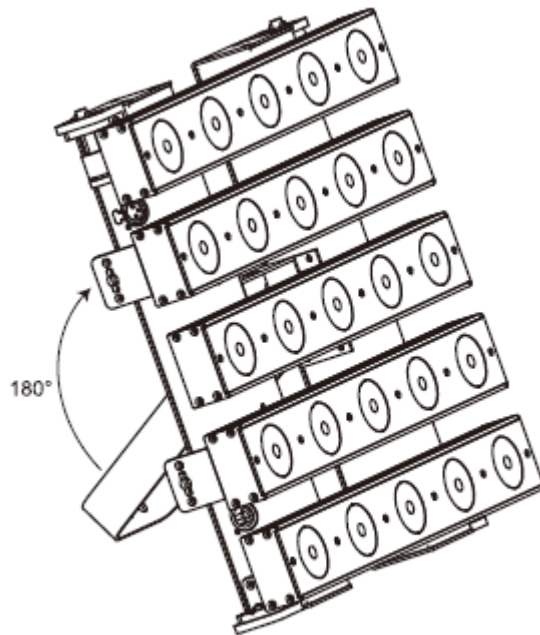
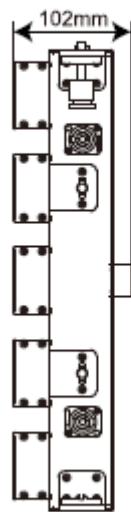
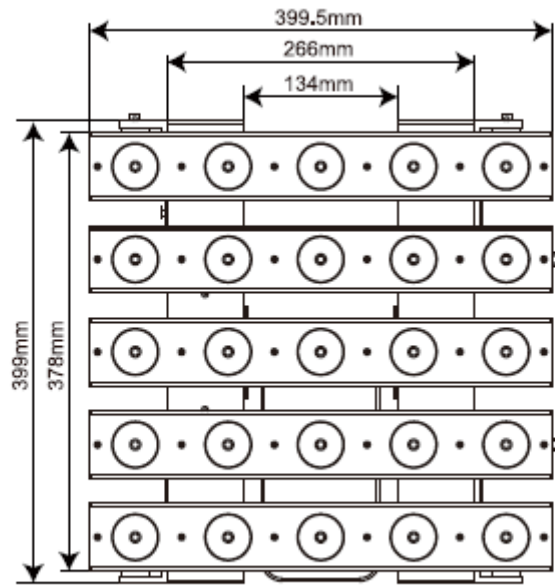
3. Introduction

Thank you for buying the **LED Mini Matrix 5x5 RGBW**. It is a powerful device. For a successful installation and operation, please read this manual carefully.

3.1. Product overview



3.2. Dimensions



4. Connections

4.1. Electrical connections

If you wish to change the power supply settings, see the chapter Appendix. Connect the fixture to the mains with the enclosed power cable and plug. The earth has to be connected.

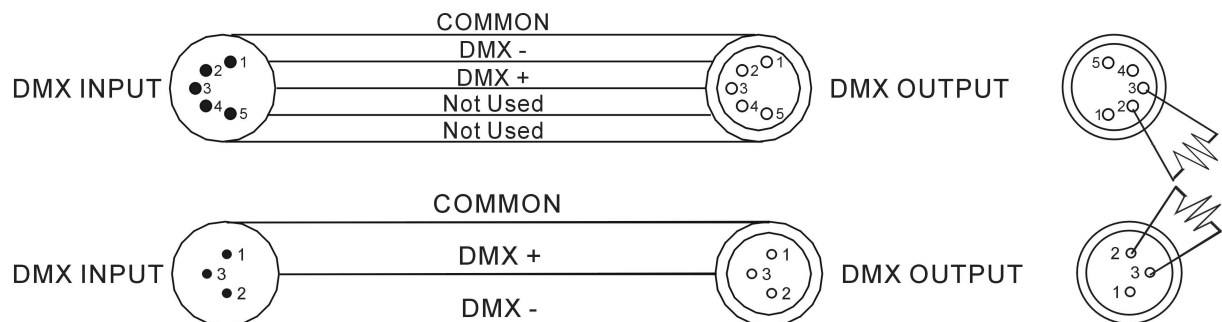
Cable (EU)	Cable (US)	Pin	International
Brown	Black	Live	L
Light blue	White	Neutral	N
Yellow/Green	Green	Earth	⊕

4.2. DMX connections

To make a DMX512 connection go ahead like it is described in the picture. Make sure that you use shielded cable. 3pole or 5pole XLR cables are suitable. If you use a controller with a 5 pin DMX output connector, you will need to use a 5pin to 3 pin adapter.

4.3. DMX connection with terminator

Where the DMX cable has to run a long distance or the equipment is operated in an electrically noisy environment like a disco for installations, we recommend using a DMX terminator. This prevents corruption of the digital control signal by electrical noise. The DMX terminator is simply an XLR connector with a 120 Ω resistor between pins 2 and 3, which is then plugged into the XLR output socket of the last device in the series. Please look to the bottom drawings.



5. Control

Press MENU, with the arrow keys you can choose the required point of menu. Confirm with ENTER. You can make your settings also with the arrow keys and conform them with ENTER.

5.1. Structure of the menu

Menu	Submenu 1	Submenu 2	Submenu 3	Function
Set	DMX Address	1 – 512		Setting the DMX address.
	Run Mode	DMX		Choosing the run mode DMX.
		SLAVE		Choosing the run mode Slave.
		ONE		Single run.
		SOUND		Sound-to-Light mode.
		M:2*2		Run as 2x2 matrix (4 devices).
		M:4*4		Run as 4x4 matrix (16 devices).
	Channel Mode	SL-01 – SL-16		Choosing in which position the device is in 2x2 or 4x4 matrix. Please read chapter 7.
		3CH		Choosing a DMX mode
		5CH		
		8CH		
		10CH		
	100CH			
	Program Mode	01 – 20		Choosing an automatic program.
		AUTO		
	Program Speed	00 – 31		Setting the program speed.
	Sound Mode	01 – 04		Choosing a sound-to-light mode.
	Sound Sens	00 – 99		Setting hat sensitivity for microphone.
	Dimmer Mode	OFF		Deactivates the dimmer mode.
		DIM 1 – DIM 3		Choosing a dimmer mode.
	DMX Signal	CLEAR		All values will be set to 0, if the DMX signal is interrupted.
		KEEP		The last received value will be hold if the DMX signal is interrupted.
	ID Number	001 – 061		Setting the ID.
		OFF		Deactivates the ID.
	Load Default	YES / NO		Reset.
	Master Signal	ON / OFF		(De-)Activates the device as master.
	Display Back	ON /OFF		(De-)Activates the backlight.
	Temperature	ON / OFF		(De-)Activates the temperature.
Red dimmer	000 – 255		Dimmer red 0 – 100%	
Green dimmer	000 – 255		Dimmer green 0 – 100%	

	Blue dimmer	000 – 255		Dimmer blue 0 – 100%	
	White dimmer	000 – 255		Dimmer white 0 – 100%	
	Master Dimmer	000 – 255		Dimmer 0 – 100%	
Men	Clear menu data			Clear the menu settings.	
	Select color	01 – 51		Choosing a preset color.	
	Test LED	Red			Test red LEDs.
		Green			Test green LEDs.
		Blue			Test blue LEDs.
		White			Test white LEDs.
		Off			Deactivates the test mode.
		All			Test all LEDs.
	Strobe Speed	00 – 20		Strobe slow – fast.	
	M:2*2 FONT	[a]			Mode in 2x2 matrix run mode.
		[A]			
		...			
		[z]			
		[Z]			
		[1]			
		...			
		[9]			
		[0]			
	M:4*4 FONT	[a]			Mode in 4x4 matrix run mode.
		[A]			
...					
[z]					
[Z]					
[1]					
...					
[9]					
[0]					
LED 1 – LED 25	Red	000 – 255		Dimmer red LED 1 – 25 0 – 100%.	
	Green	000 - 255		Dimmer green LED 1 – 25 0 – 100%.	
	Blue	000 – 255		Dimmer blue LED 1 – 25 0 – 100%.	
	White	000 – 255		Dimmer white LED 1 – 25 0 –100%.	
Sys	System error			Shows system errors.	
	DMX monitor			Shows the DMX values.	
	LED hours			Shows the working hours for LEDs.	
	Fix hours			Shows the working hours for the device.	
Adm				Service menu.	
Ver				Shows the software version.	

6. DMX chart

6.1. DMX mode 1 (3 channels)

Channels	Value from	Value to	Function
1	0	255	Hue
2	0	255	Saturation
3	0	255	Dimmer 0 – 100%

6.2. DMX mode 2 (5 channels)

Channel	Value from	Value to	Function
1	0	255	Dimmer 0 – 100%
2	0	255	Dimmer red 0 – 100%
3	0	255	Dimmer green 0 – 100%
4	0	255	Dimmer blue 0 – 100%
5	0	255	Dimmer white 0 – 100%

6.3. DMX mode 3 (8 channels)

Channel	Value from	Value to	Function
1	0	255	Dimmer 0 – 100%
2	0	255	Dimmer red 0 – 100%
3	0	255	Dimmer green 0 – 100%
4	0	255	Dimmer blue 0 – 100%
5	0	255	Dimmer white 0 – 100%
6	0	19	No function
	20	23	Red
	24	27	Green
	28	31	Blue
	32	35	Color 1
	36	39	Color 2
	40	43	Color 3
	44	47	White
	48	51	Color 4
	52	55	Color 5
	56	59	Color 6
	60	63	Color 7
	64	67	Color 8
	68	79	Color 9
	80	83	Color 10
	84	87	Color 11
88	91	Color 12	
92	95	Color 13	
96	99	Color 14	
100	103	Color 15	
104	107	Color 16	

	108	111	Color 17
	112	119	Color 18
	120	123	Color 19
	124	127	Color 20
	128	131	Color 21
	132	135	Color 22
	136	139	Color 23
	140	143	Color 24
	144	147	Color 25
	148	151	Color 26
	152	155	Color 27
	156	159	Color 28
	160	163	Color 29
	164	167	Color 30
	168	171	Color 31
	172	175	Color 32
	176	179	Color 33
	180	183	Color 34
	184	187	Color 35
	188	191	Color 36
	192	193	Color 37
	194	197	Color 38
	198	203	Color 39
	204	207	Color 40
	208	211	Color 41
	212	215	Color 42
	216	219	Color 43
	220	223	Color 44
	224	255	Color 45
7	0	6	No function
	7	27	Blue
	28	34	Green
	35	41	Color 1
	42	48	Color 2
	49	55	Color 3
	56	62	Color 4
	63	69	Color 5
	70	76	Color 6
	77	83	Color 7
	84	90	Color 8
	91	97	Color 9
	98	104	Color 10
	105	111	Color 11
	112	118	Color 12
	119	125	Color 13

	126	132	Color 14
	133	139	Color 15
	140	146	Color 16
	147	153	Color 17
	154	160	Color 18
	161	167	Color 19
	168	174	Color 20
	175	181	Color 21
	182	188	Color 22
	189	195	Color 23
	196	202	Color 24
	203	209	Color 25
	210	216	Color 26
	217	223	Color 27
	224	230	Color 28
	231	237	Color 29
	238	244	Color 30
245	255	Color 31	
8	0	8	No function
	9	255	Strobe slow - fast

6.4. DMX modus 4 (10 channels)

Channel	Value from	Value to	Function
1	0	255	Dimmer 0 – 100%
2	0	255	Dimmer red 0 – 100%
3	0	255	Dimmer green 0 – 100%
4	0	255	Dimmer blue 0 – 100%
5	0	255	Dimmer white 0 – 100%
6	0	10	No function
	11	20	Color 1
	21	30	Color 2
	31	40	Color 3
	41	50	Color 4
	51	60	Color 5
	61	70	Color 6
	71	80	Color 7
	81	90	Color 8
	91	100	Automatic program 1
	101	110	Random program
	111	120	Automatic program 2
	121	130	Automatic program 3
	131	140	Automatic program 4
	141	150	Automatic program 5
	151	160	Automatic program 6
161	170	Automatic program 7	

	171	180	Automatic program 8			
	181	190	Automatic program 9			
	191	200	Color 9			
	201	210	Color 10			
	211	220	Color 11			
	221	225	Color 12			
	226	230	Color 13			
	231	235	Color 14			
	236	240	Color 15			
	241	245	Color 16			
	246	250	Color 17			
	251	255	Color 18			
	7	0	255	Speed channel 6		
0		8	No function			
9		255	Strobe slow - fast			
8	0	8	No function			
	9	10	Automatic program 1			
	11	20	Automatic program 2			
	21	30	Automatic program 3			
	31	40	Automatic program 4			
	41	50	Automatic program 5			
	51	60	Automatic program 6			
	61	70	Automatic program 7			
	71	80	Automatic program 8			
	81	90	Automatic program 9			
	91	100	Automatic program 10			
	101	110	Automatic program 11			
	111	120	Automatic program 12			
	121	130	Automatic program 13			
	131	140	Automatic program 14			
	141	150	Automatic program 15			
	151	160	Automatic program 16			
	161	170	Automatic program 17			
	171	180	Automatic program 18			
	181	190	Automatic program 19			
	191	200	Automatic program 20			
201	255	Automatic program 21				
9	0	255	Speed channel 8			
10	0 – 9	All IDs	210	ID 21	233	ID 44
	10 – 19	ID 1	211	ID 22	234	ID 45
	20 – 29	ID 2	212	ID 23	235	ID 46
	30 – 39	ID 3	213	ID 24	236	ID 47
	40 – 49	ID 4	214	ID 25	237	ID 48
	50 – 59	ID 5	215	ID 26	238	ID 49
	60 – 69	ID 6	216	ID 27	239	ID 50
	70 – 79	ID 7	217	ID 28	240	ID 51

80 – 89	ID 8	218	ID 29	241	ID 52
90 – 99	ID 9	219	ID 30	242	ID 53
100 – 109	ID 10	220	ID 31	243	ID 54
110 – 119	ID 11	221	ID 32	244	ID 55
120 – 129	ID 12	222	ID 33	245	ID 56
130 – 139	ID 13	223	ID 34	246	ID 57
140 – 149	ID 14	224	ID 35	247	ID 58
150 – 159	ID 15	225	ID 36	248	ID 59
160 – 169	ID 16	226	ID 37	249	ID 60
170 – 179	ID 17	227	ID 38	250	ID 61
180 – 189	ID 18	228	ID 39	251	ID 62
190 – 199	ID 19	229	ID 40	252	ID 63
200 – 209	ID 20	230	ID 41	253	ID 64
		231	ID 42	254	ID 65
		232	ID 43	255	ID 66

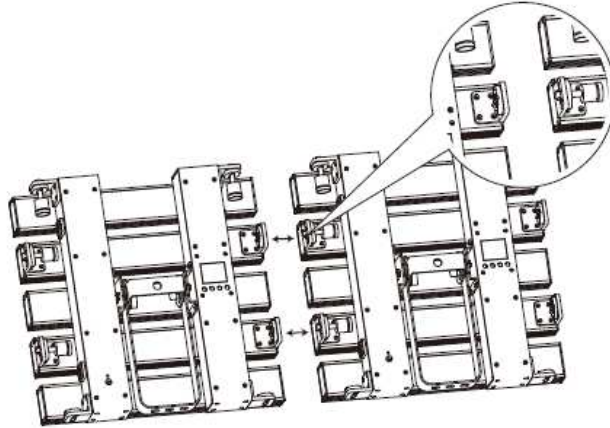
6.5. DMX mode 5 (100 channel)

Channel	Value from	Value to	Function
1	0	255	Dimmer red LED 1 0 – 100%
2	0	255	Dimmer green LED 1 0 – 100%
3	0	255	Dimmer blue LED 1 0 – 100%
4	0	255	Dimmer white LED 1 0 – 100%
...
97	0	255	Dimmer red LED 25 0 – 100%
98	0	255	Dimmer green LED 25 0 – 100%
99	0	255	Dimmer blue LED 25 0 – 100%
100	0	255	Dimmer white LED 25 0 – 100%

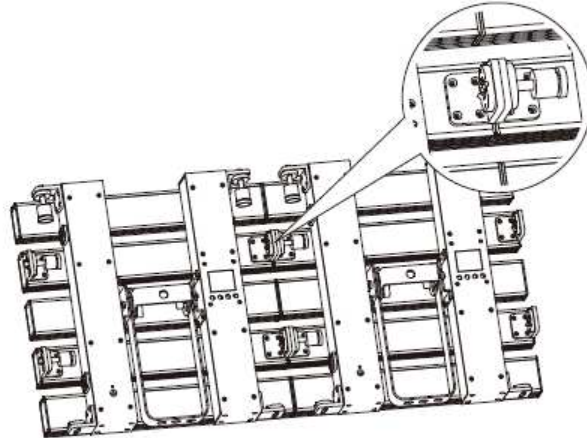
7. Matrix

7.1. Connect the devices

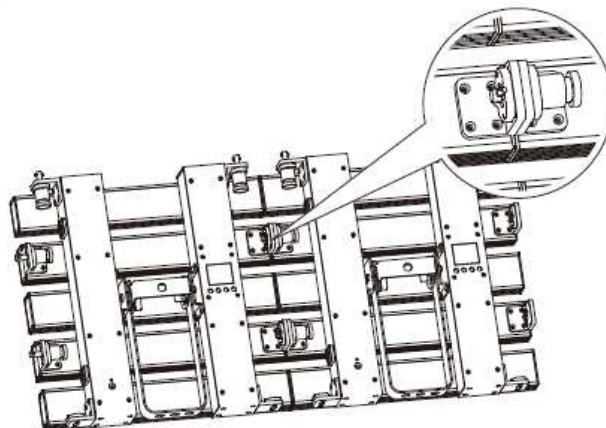
1. Put two pieces on the same plane.



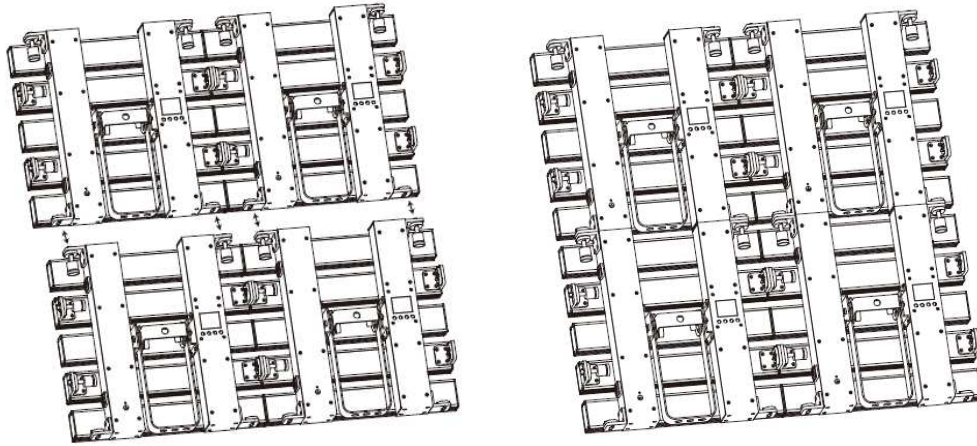
2. Connect the devices.



3. Press the quick lock, and then rotate 90°.



4. Connect the other devices in the same way.



7.2. 2x2 Matrix

1. Connect 4 devices to a 2x2 Matrix.
2. For first device set Master Signal – ON - and Run Mode – M:2*2 -.
3. For the other devices set Run Mode – SL-2 / SL-3 / SL- 4.
4. You can choose an automatic program with Program Mode or choose a static effect with M:2*2 FONT.

M: 2*2	SL-2
SL-3	SL-4

7.3. 4x4 Matrix

1. Connect 16 devices to a 4x4 Matrix.
2. For first device set Master Signal – ON- and Run Mode – M:4*4 -.
3. For the other devices set Run Mode – SL-2 / SL-3 / SL- 4 / SL-5 / SL-6 / SL-7 / SL-8 / SL -9 / SL-10 / SL-11 / SL-12 / SL-13 / SL-14 / SL-15 /SL-16.
4. You can choose an automatic program with Program Mode or choose a static effect with M:4*4 FONT.

M: 4*4	SL-2	SL-3	SL-4
SL-5	SL-6	SL-7	SL-8
SL-9	SL-10	SL-11	SL-12
SL-13	SL-14	SL-15	SL-16

8. Technical data

Power supply	
Voltage	100 – 240 V AC / 50-60 Hz
Power consumption max.	230 W
Light source	
LM type	LED 4in1
Color spectrum	RGBW
Power	230 W
Number / Power	25 x 8W
Optics	
Beam angle	15°
Connections	
Power in	P-Con
Power out	P-Con
XLR in/out	3pol
Controlling	
Sound-to-Light	Yes
Automatic	Yes
Master-Slave	Yes
DMX512	Yes
Number of channels	3 / 5 / 8 / 10 / 100 channels
Hardware	
Protection class	IP20
Suitability	Indoor
Dimension (L/B/H)	399 x 399 x 102 mm
Weight	6,84 kg

Importer:

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