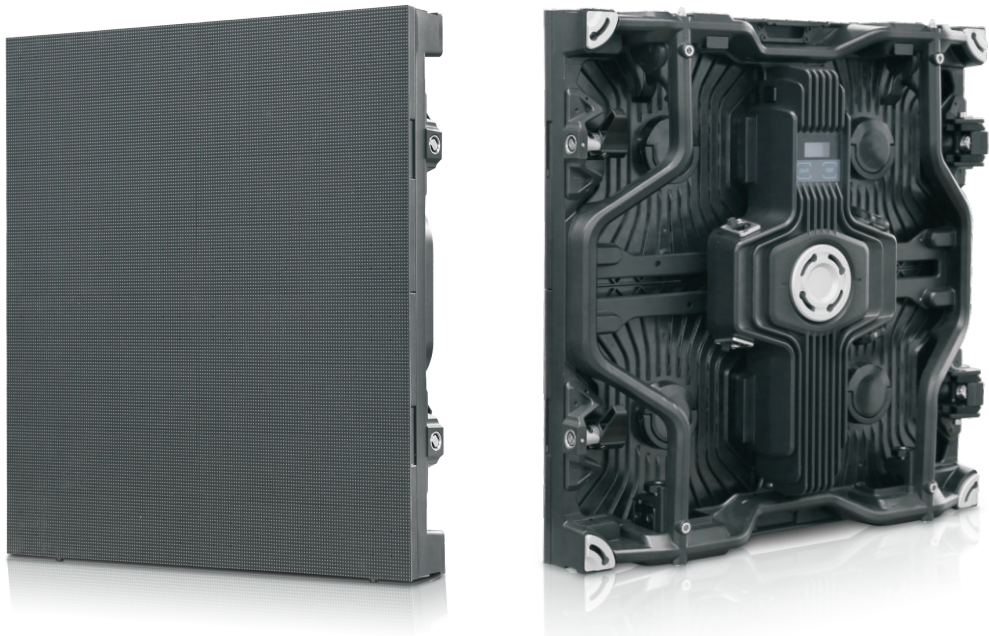


M2.3 User Manual



Patented Product



FCC



ETL



TUV-CE



Simple Operation



Panel Weight



Cooling System



Fast Assembly



High Brightness



Front Servicing




High Refresh Rate



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1 Safety Information



WARNING!

Please read the safety measures listed in this section carefully before installing, switching on, operating or performing maintenance on this product.

The following marks on the product and in this manual indicate important safety measures.

					
WARNING! Safety Risk! Might cause equipment damage Or safety risk.	WARNING! Please read the manual before operating.	WARNING! Dangerous Voltage! Might cause equipment damage or electric shock.	WARNING! Hot Surface! Do not touch.	WARNING! Flammable!	WARNING! Possible damage to eyes.



WARNING: Be sure to understand and follow all safety guidelines, safety instructions, warnings and precautions listed in this manual.
This product is for professional use only!
This product may result in serious injury or death due to fire hazard, electric shock and crushing hazard.



Please read this manual carefully before installing, powering up, operating or performing maintenance on this product.
Follow the safety instructions outlined in this manual. If you have any questions, please contact Absen.



Beware of Electric Shock!

- To prevent electric shock the device must be properly grounded during installation. Do not ignore using the grounding plug as there may be a risk of electric shock.
- During a lightning storm, please disconnect the device's power supply or provide other suitable lightning protection. If the equipment is not in use for an extended period of time, please unplug the power cord.
- When performing any installation or maintenance work (e.g. removing the fuses, etc..) make sure to turn off the master switch.
- Disconnect AC power when the product is not in use, or before disassembling, or installing the product.
- The AC power used in this product must comply with local building and electrical codes, and should be equipped with overload and ground fault protection.
- The main power switch should be installed at a location near the product and should be clearly visible and within easy reach. This way in case of any failure the power can be promptly disconnected.
- Before using this product check all electrical distribution equipment, cables and all connected devices, and make sure all meet current requirements.
- Use appropriate power cords. Please select the appropriate power cord according to the required power and current capacity, and ensure the power cord is not damaged, aged or wet. If any overheating occurs, replace power cord immediately.
- For any other questions, please consult an Absen technician.



Beware of Fire!

- Use a circuit breaker or fuse protector to avoid fire caused by power supply cables overloading.
- To avoid fire caused by power supply cables overloading, do not connect to the same power supply point for more than 16 cabinets at a voltage of 100-120V, or 24 cabinets at a voltage of 200-240V.
- Maintain good ventilation around the display screen, controller, power supply and other devices, and keep a minimum 0.1 meter gap with other objects.
- Do not stick or hang anything on the screen.
- Do not modify the product, do not add or remove parts.
- Do not use the product in environments over 55°C.



Beware of Injury!

- **WARNING:** Wear a helmet to avoid injury.
- Ensure any structures used to support, fix and connect the equipment can withstand at least 10 times the weight of all the equipment.



- When stacking products, please hold products firmly to prevent tipping or falling.
- Ensure all components and steel frames are securely installed.
- When installing, repairing, or moving the product, ensure the working area is secure, stable and free of obstacles.



- In the absence of proper eye protection, please do not look directly at the lit screen from within a 1 meter distance.
- Do not use any optical devices that have a magnifying function to look at the screen to avoid burning the eyes.



WARNING: Beware of suspended loads.



LED lamps used in the module are sensitive and can be damaged by ESD (electrostatic discharge). To prevent damage to LED lamps, do not touch when the device is running or switched off.



WARNING: The manufacturer shall not bear any responsibility for any incorrect, inappropriate, irresponsible or unsafe system installation.



Product Disposal

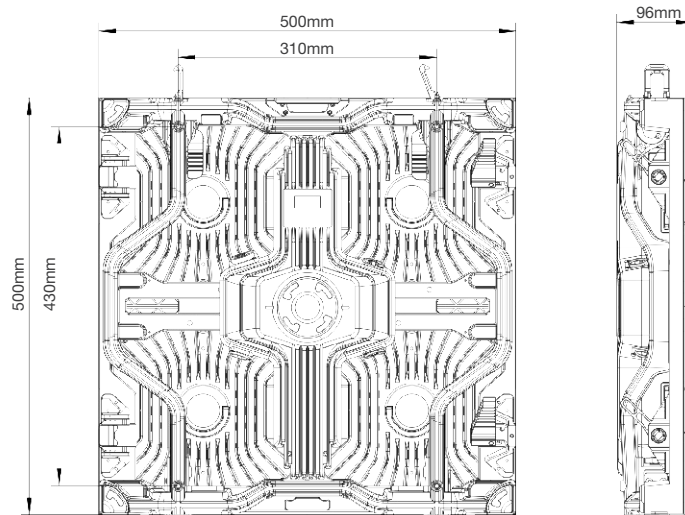
- Any component that has a recycling bin label can be recycled.
- For more information on collecting, reusing and recycling, please contact the local or regional waste management unit.
- Please contact us directly for detailed environmental performance information.

2 Product Introduction

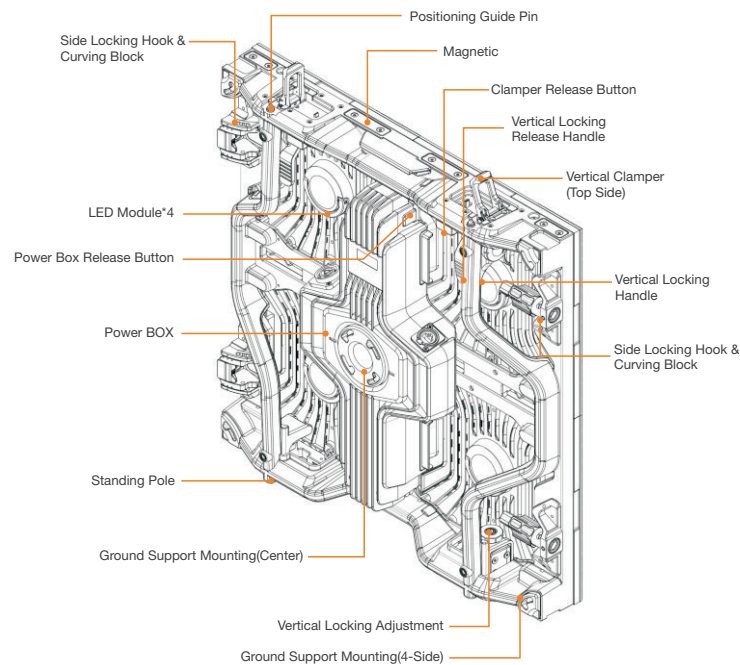
2.1 About M2.3

M2.3 is Absen's new high-performance indoor HD LED display incorporating professional industrial design. Our innovative locks facilitate fast and easy installation and dismantle. Pick up, mount and lock the panel in one seamless motion. The innovative and user-friendly design provides a fast and simple setup for both hanging and ground supported setups well-suited to the needs of large events, concerts and exhibitions. Featuring an HD pixel pitch and outstanding color processing, the product also promises high-end performance in TV studios and lecture halls.

Product Dimensions



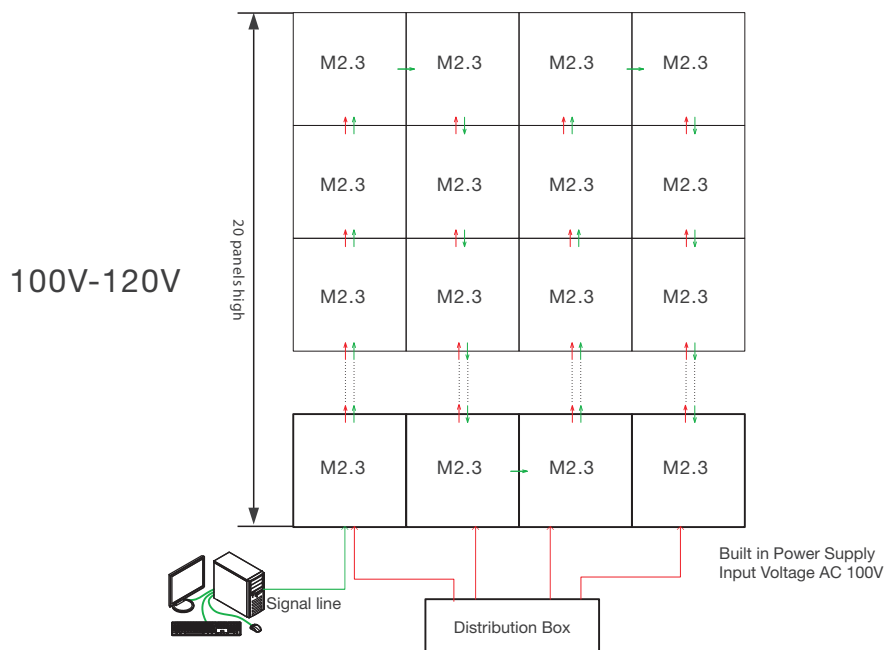
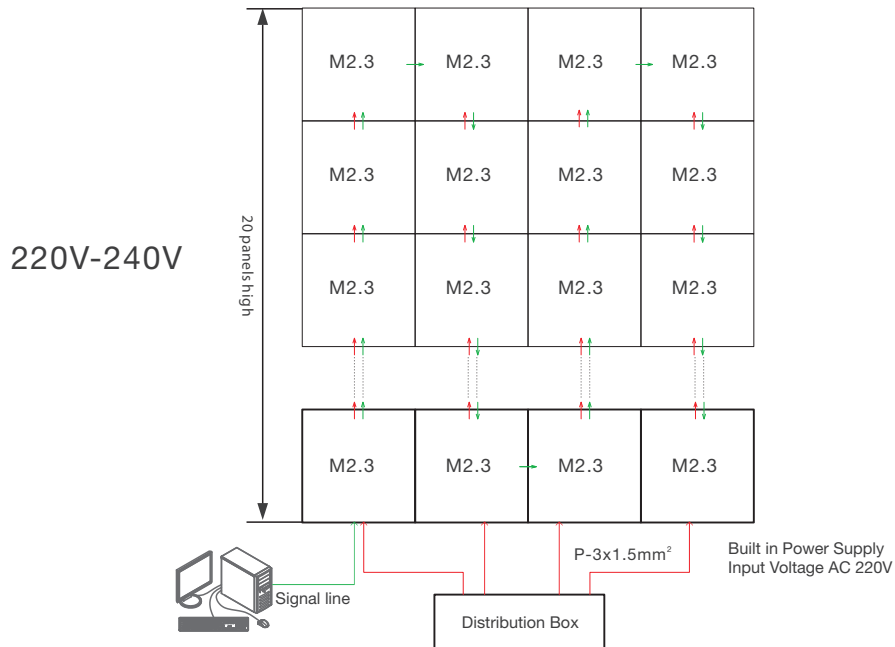
Front & Rear Components



2.2 Product Specifications

	Parameter	Value
Physical Parameter	LED Type	Black SMD1010
	Pixel Pitch (mm)	2.31
	Panel Dimensions (WxHxD)/(mm)	500x500x96
	Pixel Per Panel	216x216
	Panel Weight (kg)	8.3
	Panel Material	Die Casting Magnesium
	Module Dimensions (WxH)/(mm)	250x250
	Transparent Rate	0%
	Brightness (nit)	800
Optoelectronic Parameter	Refresh Rate (Hz)	3840
	Gray scale (bit)	14
	Contrast Ratio	6500:1
	Color Temperature (K)	7500
	Viewing Angle (H/V) (°)	140/100
	Driving Type	1/14
	AC Operating voltage (V)	100~240
	Power Consumption (Max./Avg.)(W/m ²)	650/216
	Storage Temperature (°C)	- 40~ + 60
Application Parameter	Operating Temperature (°C)	- 10~ + 40
	Storage Humidity (RH)	10%~90%
	Operating Humidity (RH)	10%~90%
	IP Rating (Front/Rear)	IP40/IP21
	LED Lifetime (H)	100000
	Module Maintenance	Front/Rear
	PSU & Others Maintenance	Front/Rear
	Panel Installation Type	Rigging/Stuck
	Maximum Number of Panels for Hanging (Vertical)(PCS)	20
	Certificate	TUV-CE / ETL +FCC

3 Basic Wiring Overview for Hanging Installation and Stacking Installation



Notes:

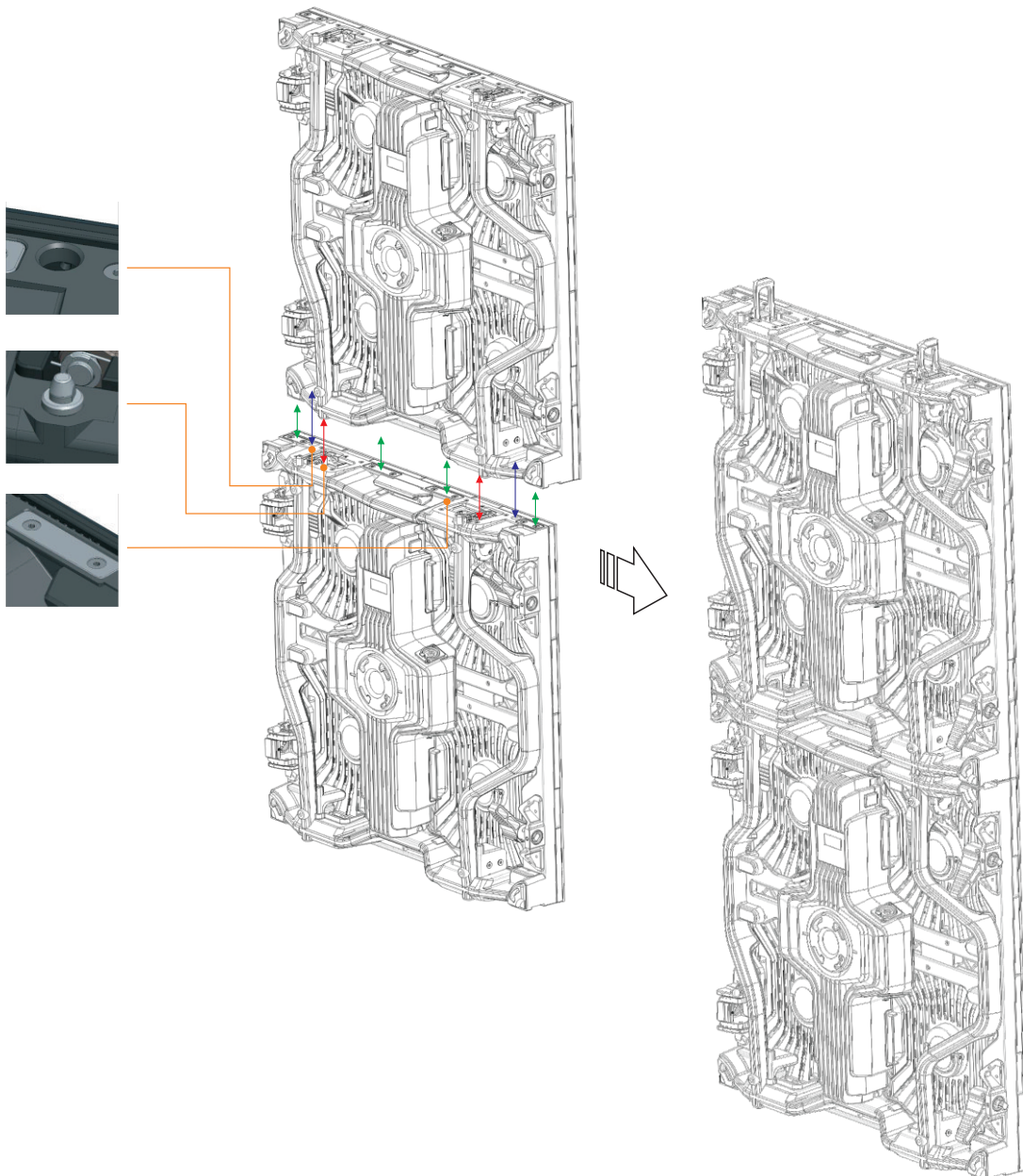
1. Hanging bars can load a max height of 20 panels, and the stacking system can load a max of 8 panels.
2. At an input voltage of 220V, one power cable can load 20 panels of M2.9; at an input voltage of 110V, one power cable can load 16 panels of M2.9.

4 Locking System

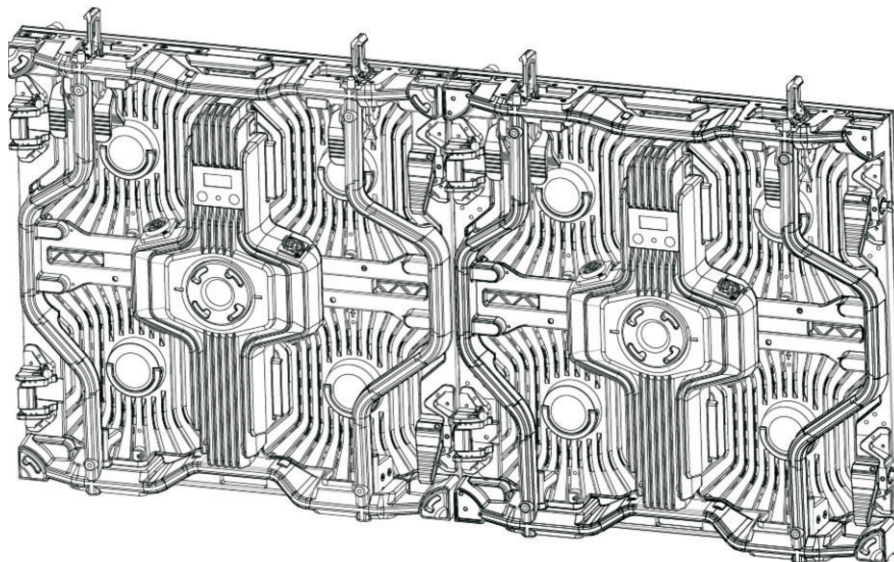
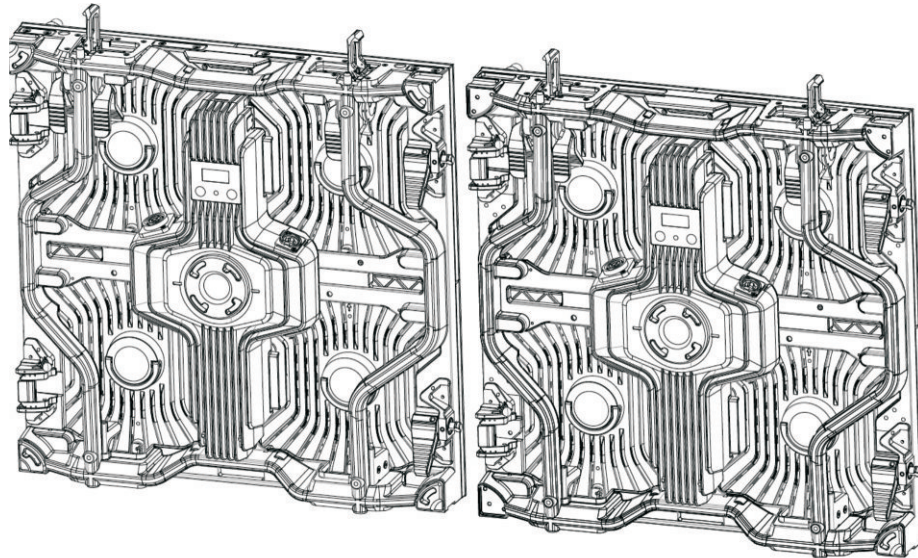
4.1 Standard Locking

Vertical locking Procedures

- ↔ 2 Point Contact Locking Pin Slots (Upper Side)
- ↔ 2 Point Contact Locking Pins (Bottom Side)
- ↔ 4 Magnetic Positioning Guides



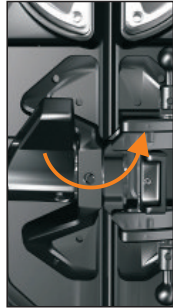
Horizontal Locking Procedures



4.2 Curve Locking



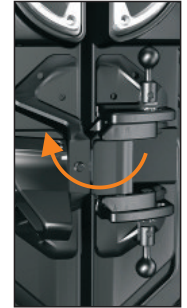
A. Tile Preparation



B. Curve Handle Release

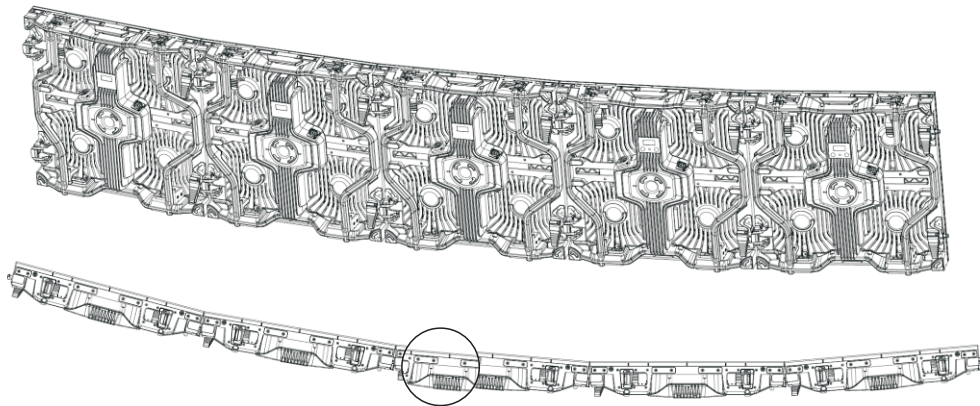


C. Curving Rotary (+5, -5°)

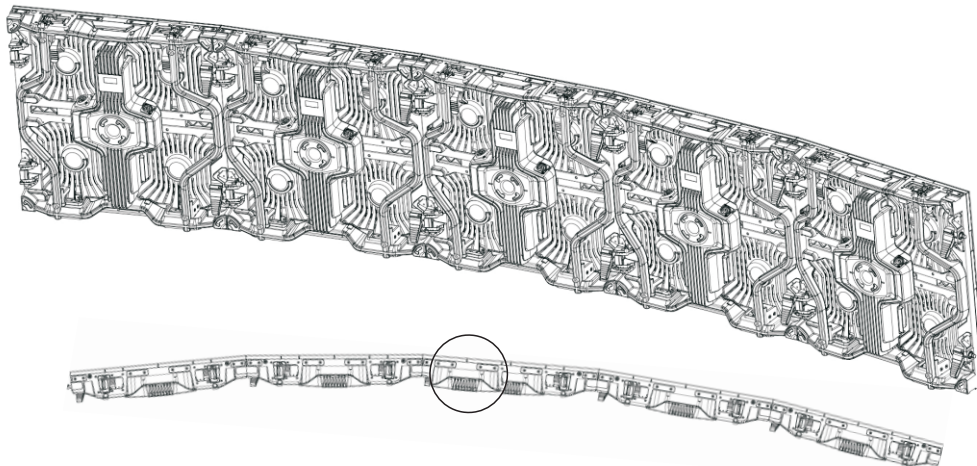


D. Curve Handle Lock

Concave(+5°)



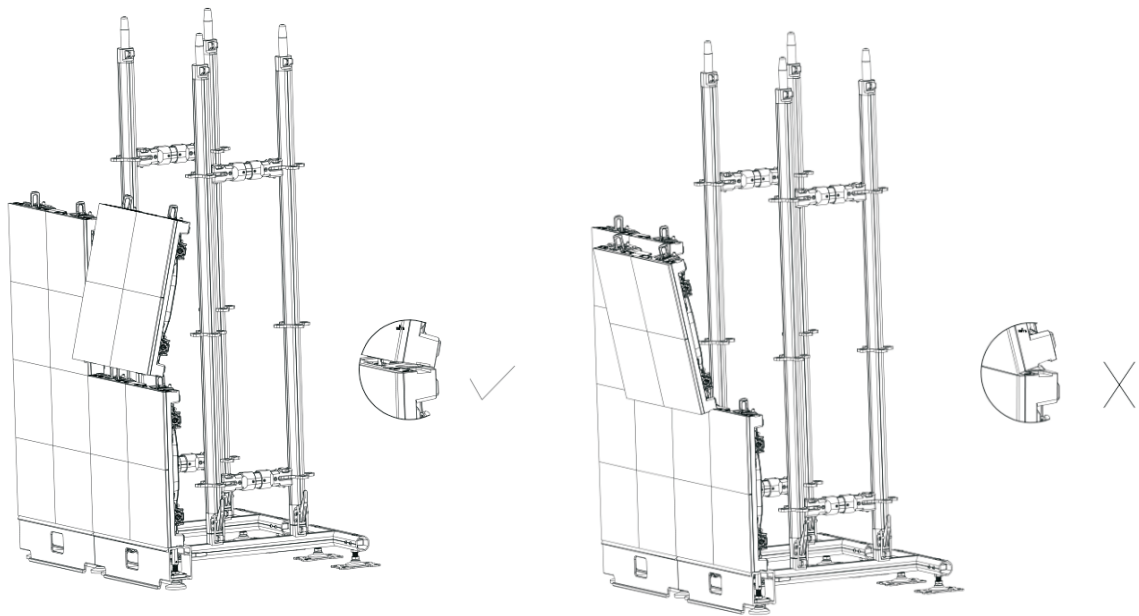
Concave(-5°)



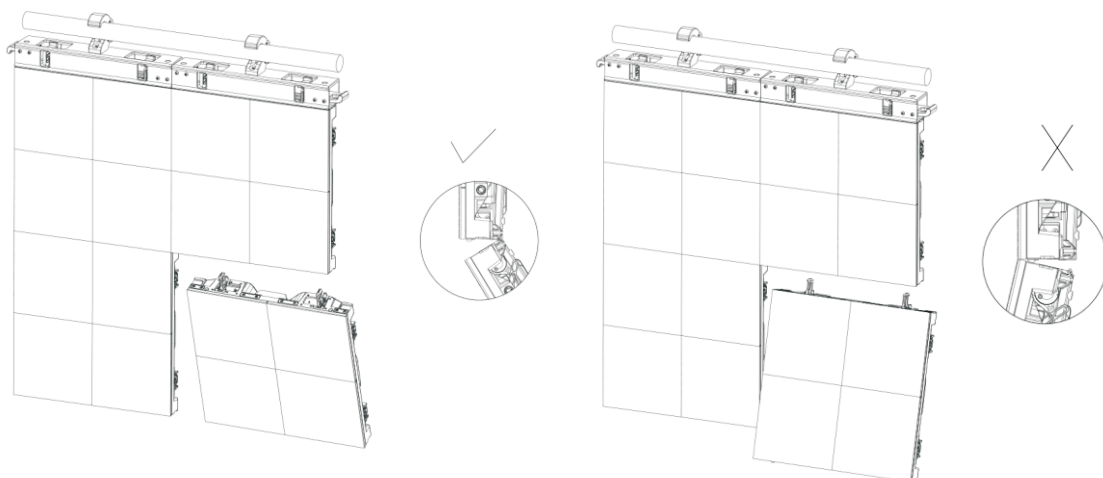
5 Product Assembly

5.1 Procedure

Stacking Installation



Hanging Installation

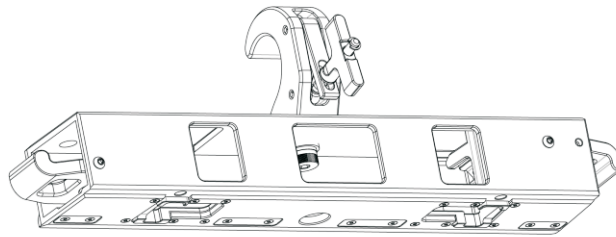


Note: To keep from damaging the LEDs on the edge of the modules, please follow the diagrams above.

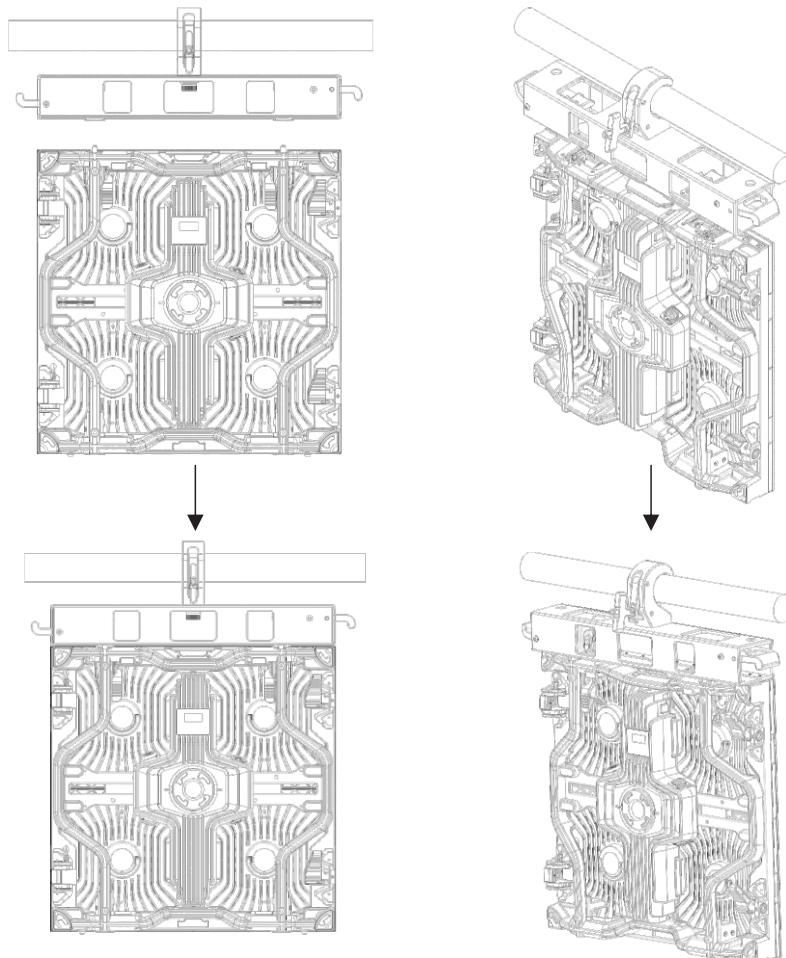
5.2 Hanging Installation

1. Fix the Hanging Bar on the Truss

Turn the adjustment screw to make the clamps close. The hanging bar should be directly affixed to the truss.



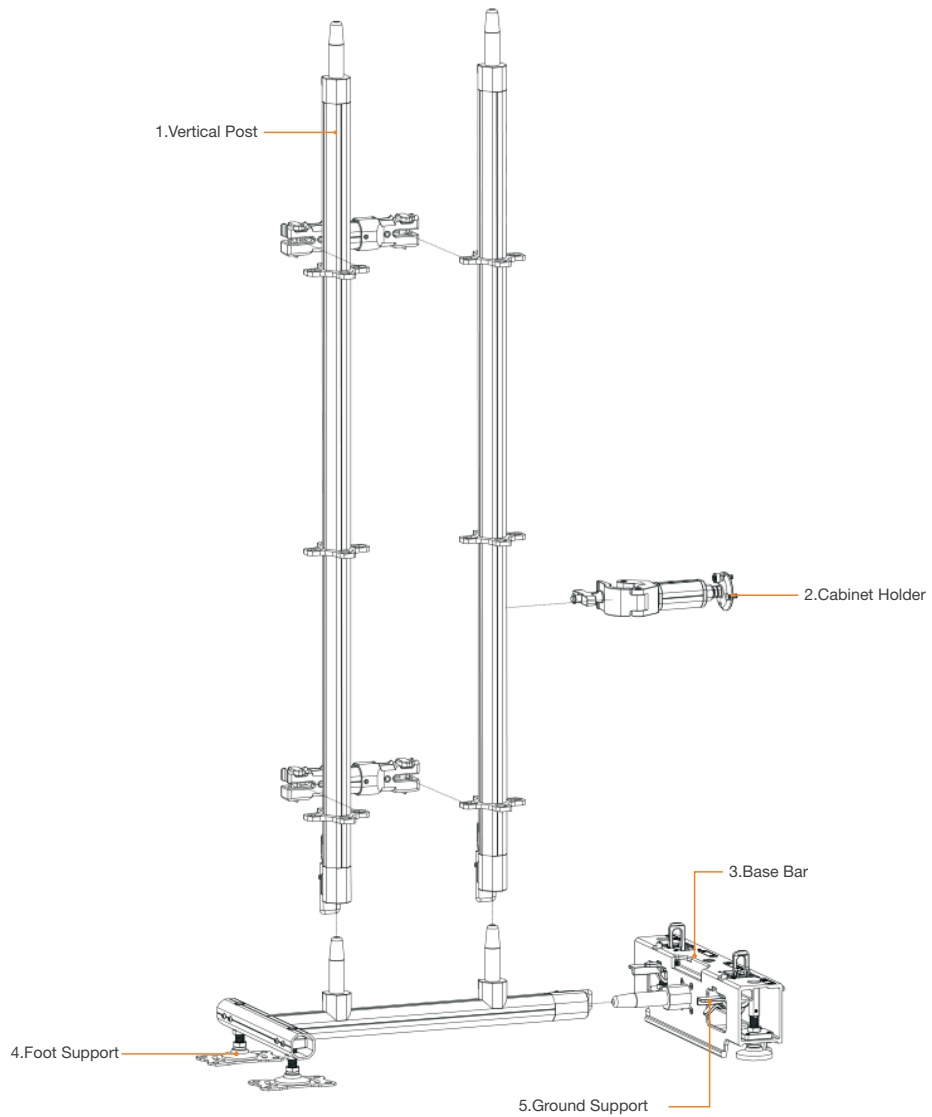
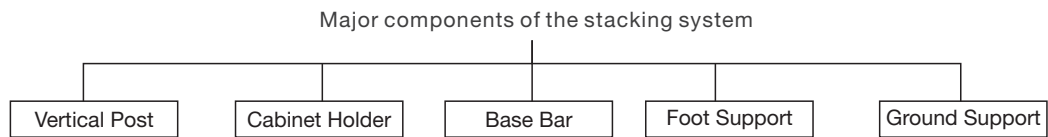
2. Connect and assemble tiles.



Note: For safety reasons, please assemble the tiles with two persons.

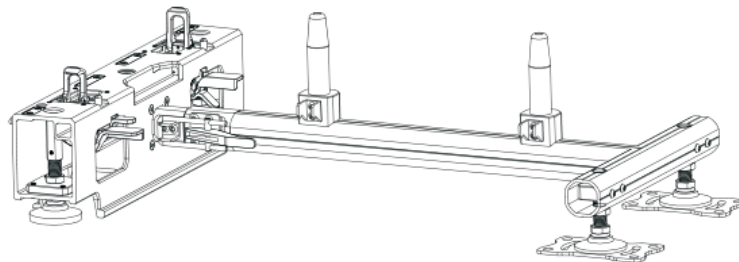
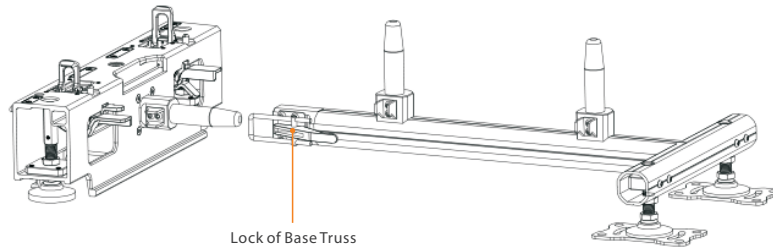
5.3 Stacking System

Stacking System Components



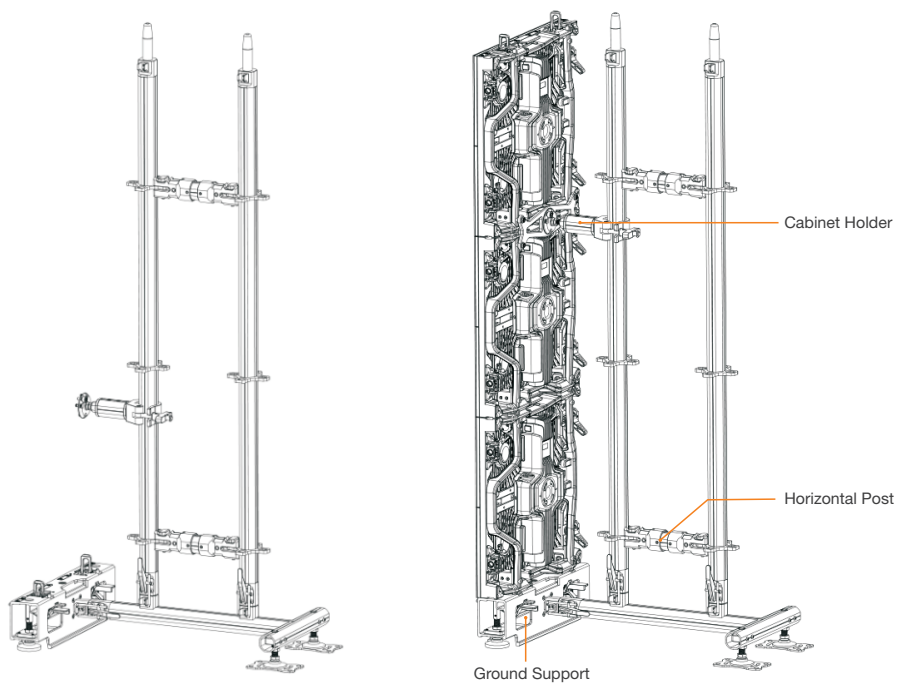
5.4 Stacking Installation

1. Connect the Base Bar to the base of the truss using the pins and safely clip in place.



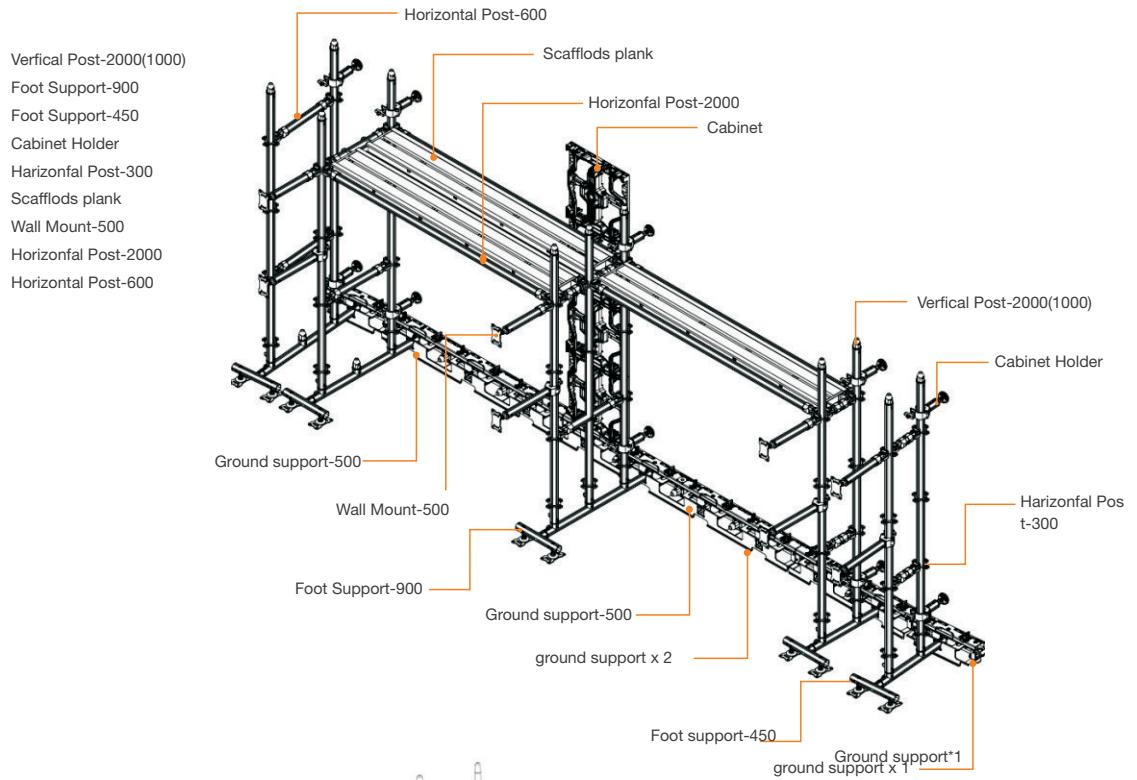
Adjust the knob until secure and the Base Bar and base of the truss are in alignment.

2. Rear truss and cabinet holder. Lock the cabinet holders into place onto the backs of the panels.



5.5 Tiling Using Stacking System

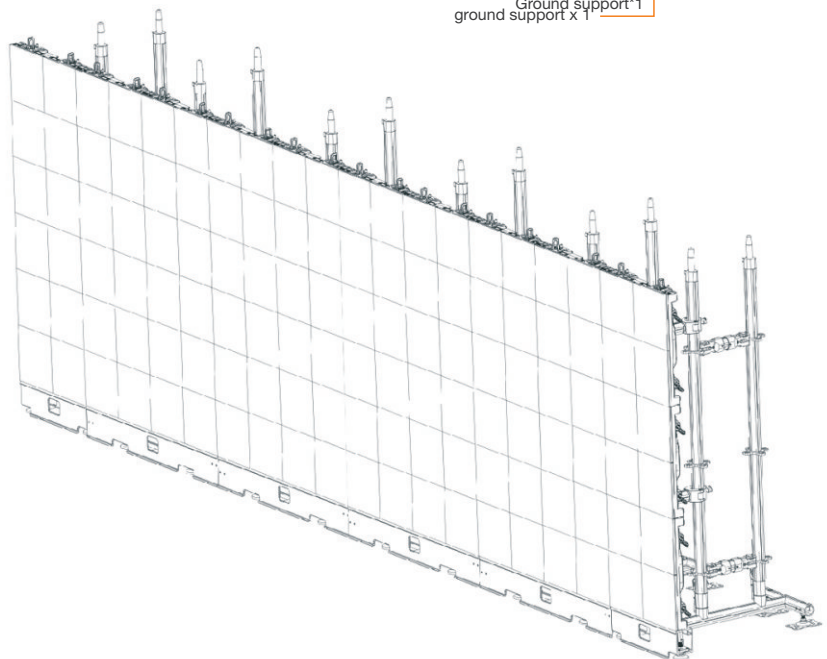
1. Connect the stacked tiles to the Base Bar using the Vertical Connectors. Use the bridge to connect the rear truss of the stacked panels to the rest of the frame.



2. Stacking Installation

W*H:10*6 Panel

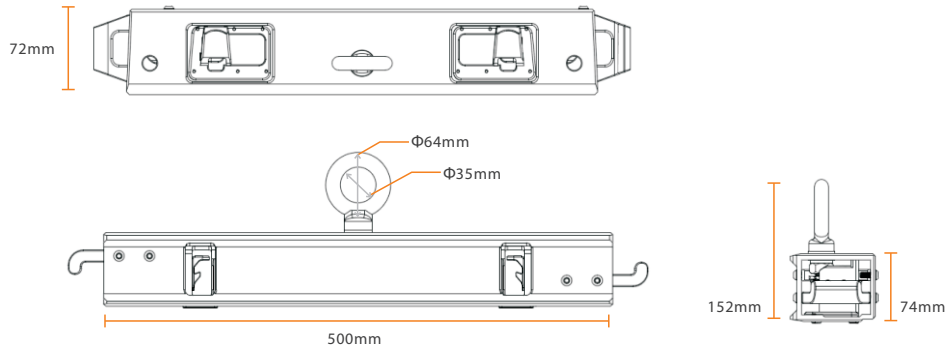
Vertical Post-2000	12 Pieces
Foot Support-900	3 Pieces
Cabinet Holder	12 Pieces
Horizontal Post-300	1 Pieces
Scaffolds plank	4 Pieces
Wall Mount-500	9 Pieces
Horizontal Post-600	9 Pieces



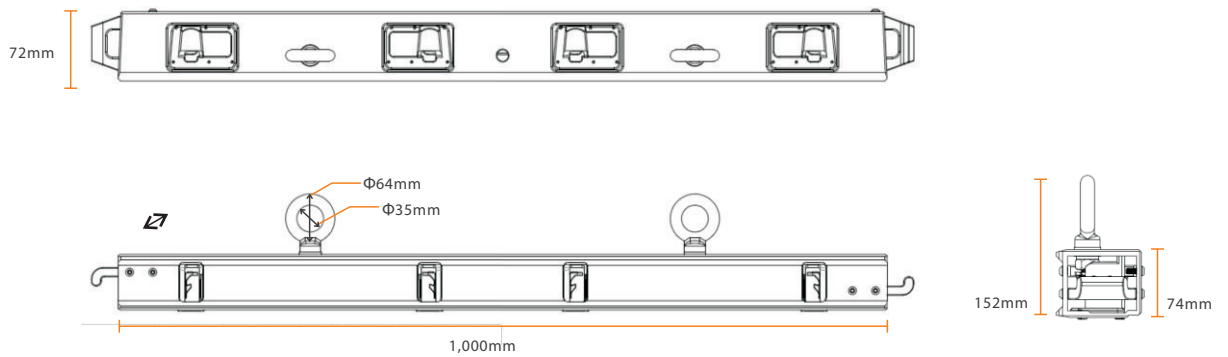
6 Hanging Bar (Rigging Bar)

6.1 Eye Bolt Type (Standard)

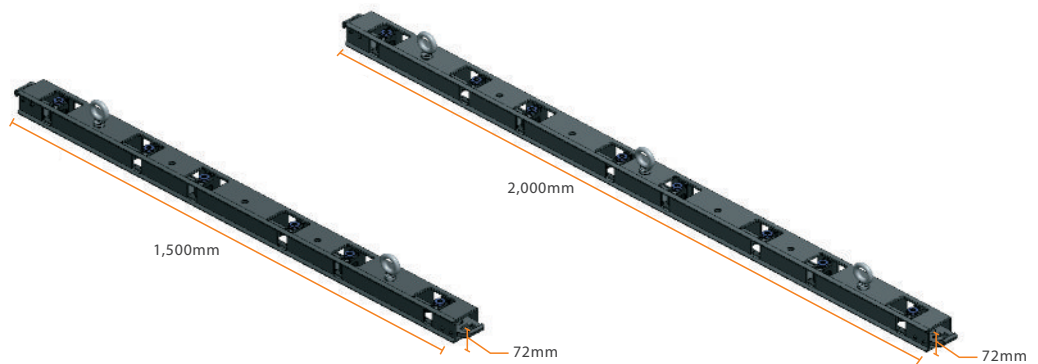
0.5m hanging bar dimensions:



1m hanging bar dimensions:

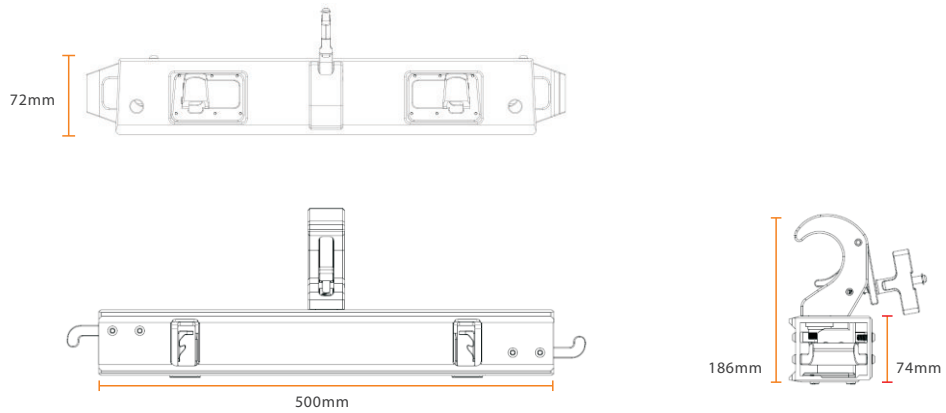


Other options:

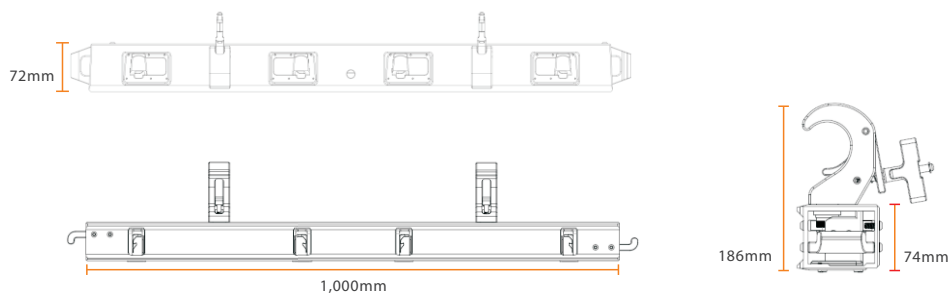


6.2 Clamp Type (Optional)

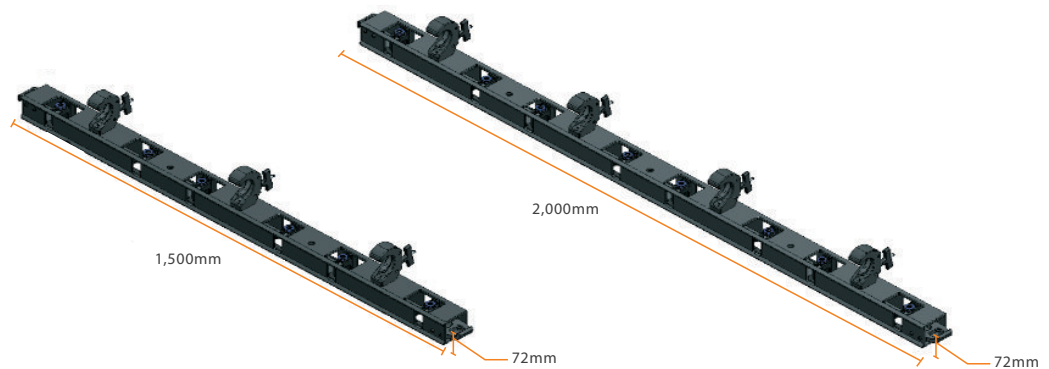
0.5m hanging bar dimensions:



1m hanging bar dimensions:

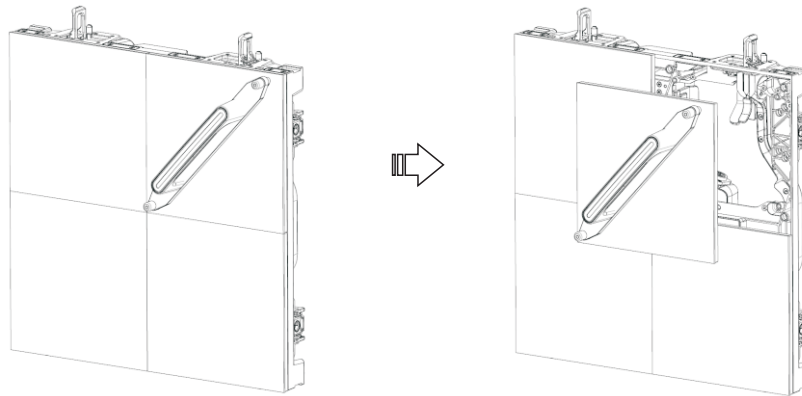


Other options:

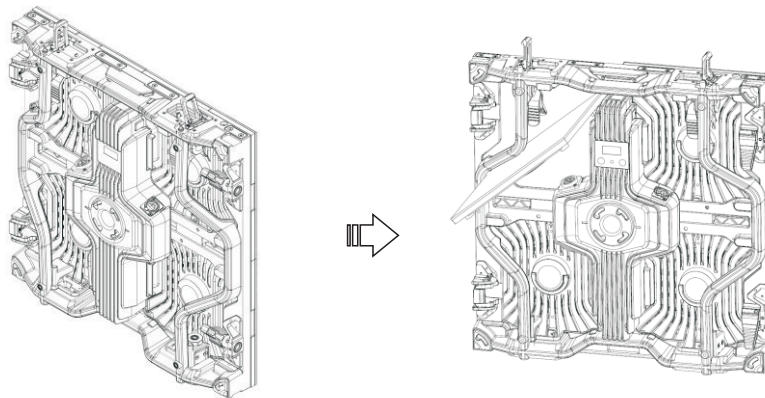


7 Service and Maintenance

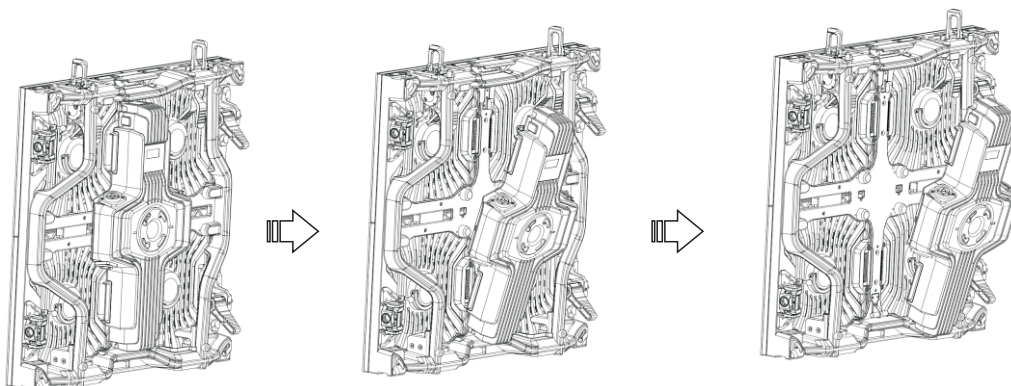
Module Front Maintenance



Module Rear Maintenance



Easy Maintenance for Power Box



1. Default

2. Push the button at the top left to unlatch the power box from the back of the panel.

3. Carefully remove the power supply, leaning the power supply away from the back of the panel, top half first then bottom.

8 Accessories

			
<p>Name Short Power Cable Dimension 0.3m Max Current 16A</p>	<p>Name Long Power Cable Dimension 10m Max Current 16A</p>	<p>Name Long Signal Cable Dimension 30m</p>	<p>Name Short Signal Cable Dimension 0.35m(R&L) 1m(T&D)</p>
			
<p>Name Rear Support Truss Dimension W1000xh290xd50mm Weight 4.35kg</p>	<p>Name Cabnet holder Dimension W182xh133xd35mm Weight 0.93kg</p>	<p>Name Ground support Dimension W494xh60xd135mm Weight 7.90kg</p>	<p>Name Stacking Bar Dimension W1090xH350xD220mm Weight 2.30Kg</p>
			
<p>Name Sending Box Dimension W480xH45xD240mm Weight 2.30kg</p>	<p>Name Flightcase Dimension W1170xH970xD475mm Max. Capacity 10 Tiles</p>	<p>Name Hanging Bar Dimension 0.5m/1m/1.5m/2m Max. Capacity 20 Tiles</p>	

9 Flight Cases

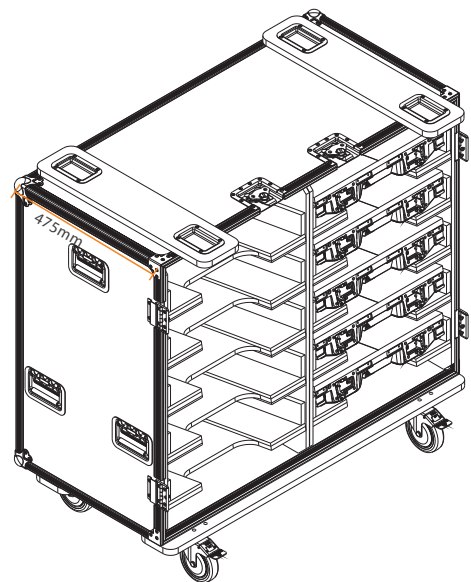
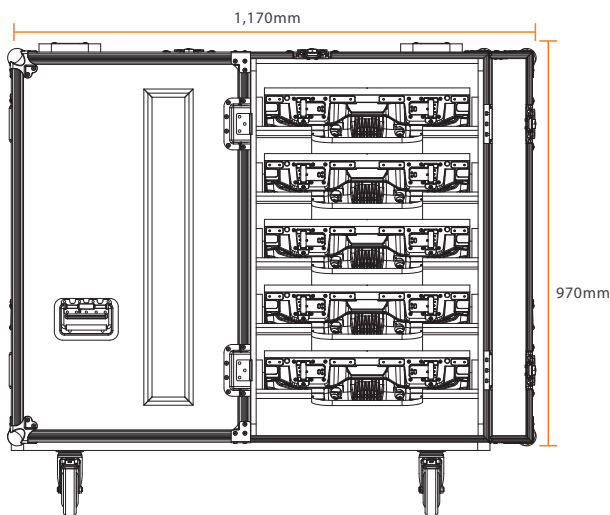
LED panels stored horizontally to prevent SMD damage.
Flight cases are optimised to fit in vehicles for low cost transport.
Fully stackable to save space.

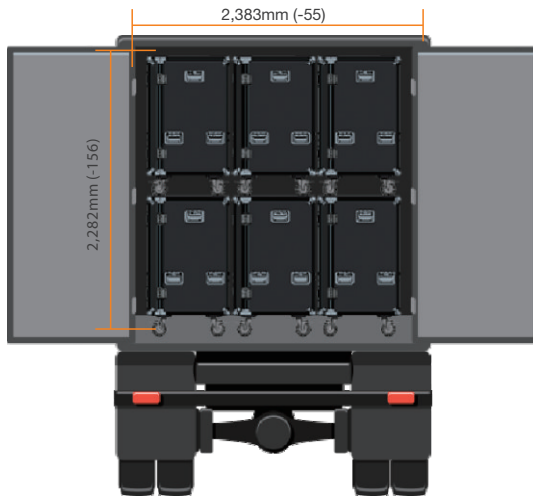


10 pcs LED tiles per Flightcase

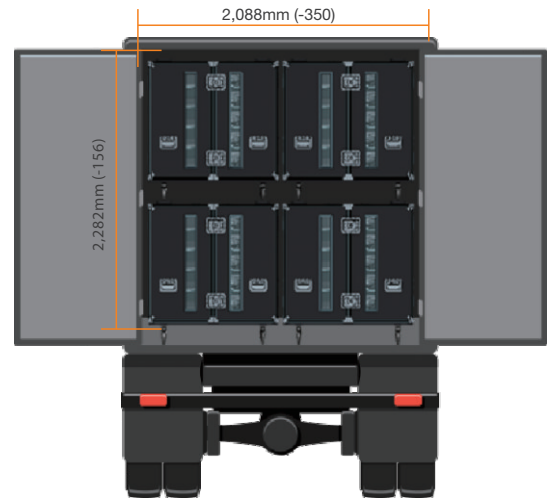


10 pcs LED tiles per Flightcase





A Type : 3*2 Flight Case



B Type : 2*2 Flight Case

96"x96"= 2,438(W)mm x 2,438(H)mm

Fits standard trucks



Window

V1.0 Otc 2016

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