

ROE Strip User Manual

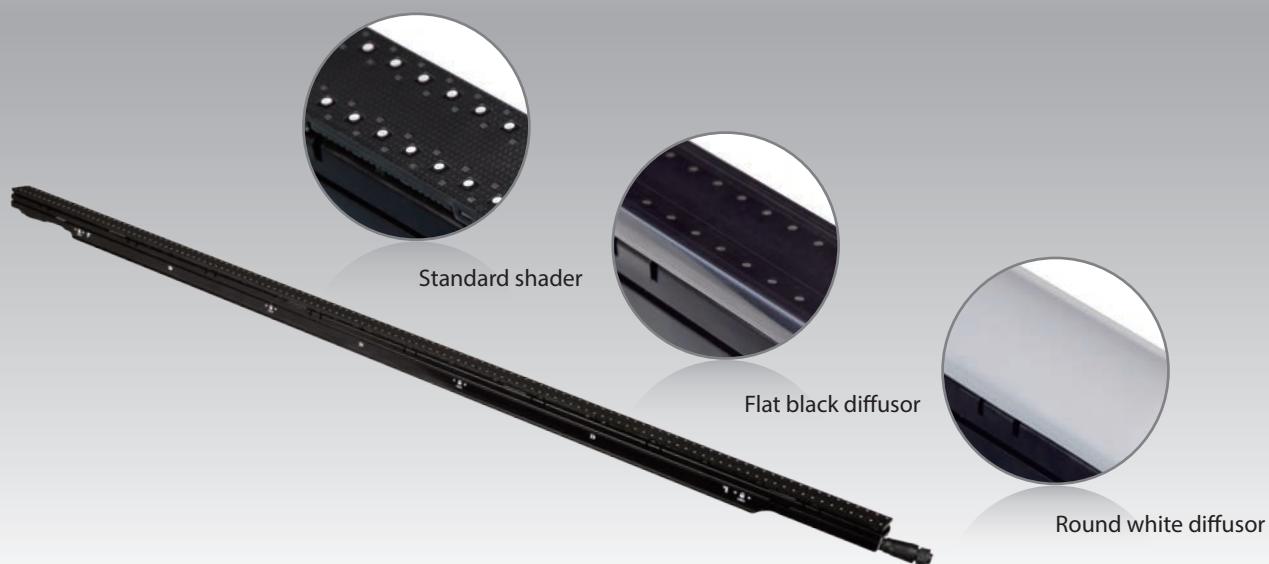


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Safety Information:



WARNING!

Read the safety precautions in this section before installing, powering, operating or servicing this product.

The following symbols are used to identify important safety information on the product and in this manual:



WARNING!

Safety hazard.
Risk of severe injury or death.



WARNING!

Refer to manual before installing, powering or servicing.



WARNING!

Hazardous voltage.
Risk of lethal or severe electric shock.



WARNING!

Hot surface.
Do not touch.



WARNING!

Fire hazard.



WARNING!

Emission hazardous to eyesight.



- This product is for professional use only. It is not for household use.
- This product presents risks of severe injury or death due to fire hazards, electric shock and falls.



- Read this manual before installing, powering or servicing this product, follow the safety precautions listed below and observe all warnings in this manual and printed on the product.
- If you have questions about how to operate the tile safely, please contact your ROE supplier.



PROTECTION FROM ELECTRIC SHOCK

- Connect the product to AC mains power within the range 100-240V nominal at 50 or 60 Hz only.
- Disconnect the product from power when not in use.
- Always ground (earth) the product electrically.
- Before using the product, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
 - Do not use the product if the power cable or a power plug is in any way damaged, defective or showing signs of overheating.
- Do not attempt to open any cover.
- Refer any service operation not described in this manual to a qualified technician.



PROTECTION FROM FIRE

- Do not stick filters, masks or other materials directly onto LED modules.
- Do not modify the product in any way not described in this manual.
- Install only genuine ROE parts in or on the product unless an alternative is described in this manual.
- Do not operate the product full load if the ambient temperature of power units (Ta) exceeds 50°C (122° F) or less than -20°C(-4° F).



PROTECTION FROM INJURY

- Create an installation by installing tiles at the top and working downwards. Disassemble an installation by removing tiles at the bottom and working upwards.
- Check that all external covers and rigging hardware are securely fastened.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the product.

Important warnings

Maximum and minimum ambient temperature:

The maximum ambient temperature for the LED wall is 50 °C; the minimum temperature is (-20°C.)

High leakage current:

The combination of power boxes in an installation results in increased levels of Leakage current. In order to avoid risk of electric shock due to high leakage current, proper grounding of the installation is required.

This equipment **MUST** be earthed:

In order to protect against risk of electric shock, the installation should be properly grounded. Defeating the purpose of the grounding type plug will expose you to the risk of electric shock.

Power system

Mains cords:

The power cords delivered with this system have special properties for safety. They are not user Serviceable. If the power cords are damaged, replace them only with new ones. Never try to repair a power cord.

Data cables:

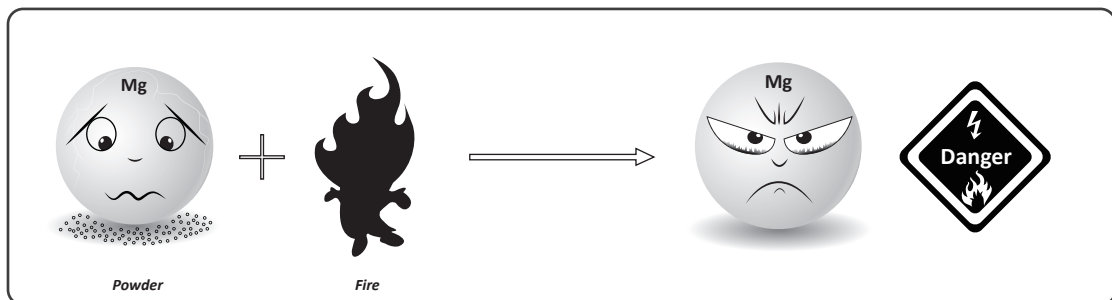
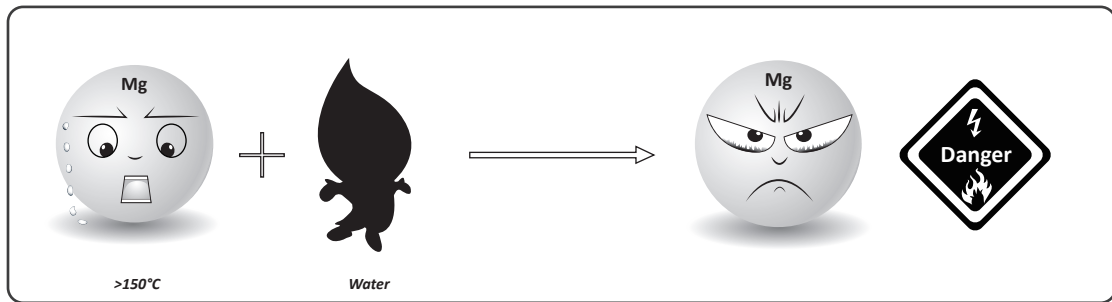
The data cables provided with this system have special properties for safety. They are not user serviceable. If the data cables are damaged, replace them only with new ones. Never try to repair a data cable. Per requirements of the National Electrical Code® in the USA, the length of a data cable must not exceed 100 m (332 feet). Avoid exposure of data cables to accidental contact with lightning or power conductors.

ROE Strip tiles cannot be hot swapped:

Always disconnect the power cord from the control box before connecting or disconnecting the cable string or one of ROE Strip tiles.



FRAME PROTECTION



Note: At normal temperature environment, Magnesium alloy is absolutely stable and safe.
It's dangerous only in:

1. Temperature higher than 150°C with water;
2. Powder with fire.

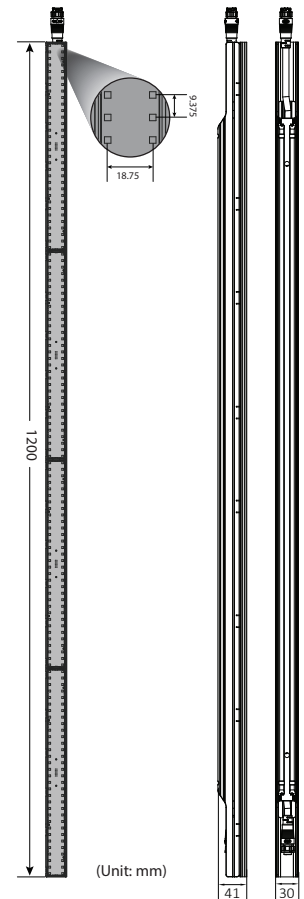
02 Specification:

ROE Strip is an outdoor/indoor creative linear LED element for stage design. The multiple options of cover, installation and length make it ideal to meet designer's creative thinking when the standard LED screen can not conform.

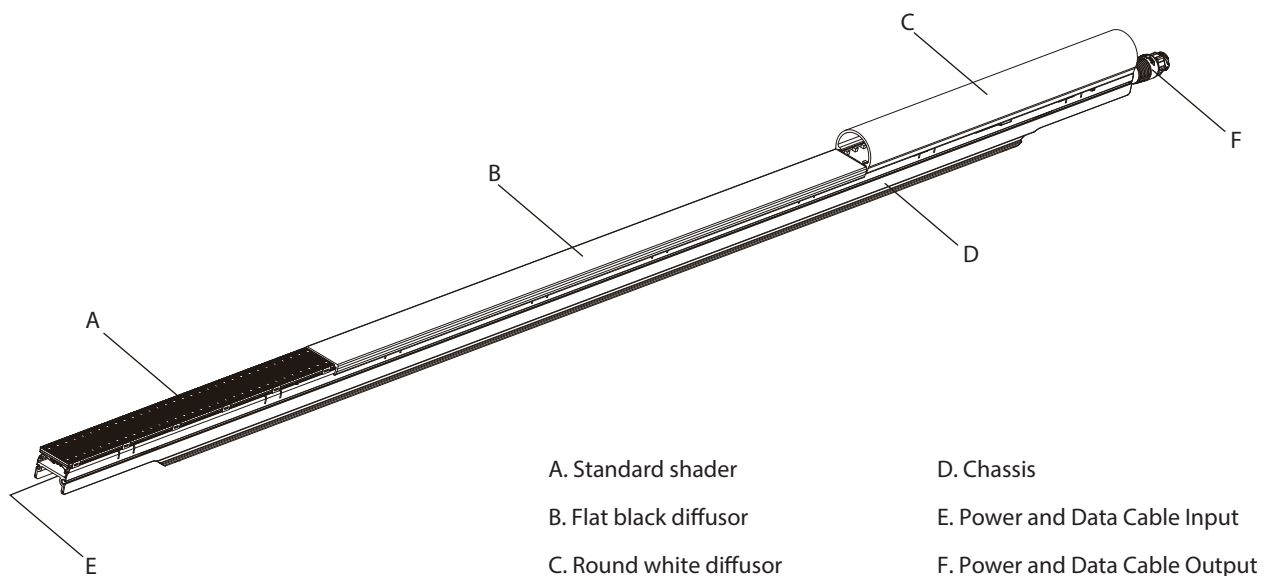
Specification:

ROE Strip	Standard shader	Flat black diffusor	Round white diffusor
Pixel Pitch/Horizontal	18.75mm	18.75mm	18.75mm
Pixel Pitch/Vertical	9.375mm	9.375mm	9.375mm
Pixel Density	5690/sqm	5690/sqm	5690/sqm
Pixel / Tile	128×2	128×2	128×2
LED Configuration	White SMD 3-in-1	White SMD 3-in-1	White SMD 3-in-1
Max. Brightness(CD/m ²)	7000(Multicolor 2727)	2100(Multicolor 2727)	2800(Multicolor 2727)
Viewing Angle(Hor/Vert)	140°/140°	140°/140°	140°/140°
Transparency	Solid	Solid	Solid
Tile Dimension (W×H×D)	1200×30×39(mm) 47.2"×1.2"×1.5"	1200×30×41(mm) 47.2"×1.2"×1.6"	1200×30×55(mm) 47.2"×1.2"×2.2"
Weight/Tile	935g/2.1lbs	1058g/2.3bs	1143g/2.5lbs
Max. Hanging	10tiles	10tiles	10tiles
Frame Material	Magnesium Alloy	Magnesium Alloy	Magnesium Alloy
Gray Scale	10bit	10bit	10bit
Refresh Rate	6000Hz	6000Hz	6000Hz
IP(Front/Reverse)	IP65	IP65	IP65
Scan	Static	Static	Static
Max Power/Tile	40W	40W	40W
Lifetime	≥50000h	≥50000h	≥50000h
Operating Temp/Humidity	-20°C to 45°C, 10~90%RH	-20°C to 45°C, 10~90%RH	-20°C to 45°C, 10~90%RH
Storage Temp/Humidity	-40°C to 60°C, 10~90%RH	-40°C to 60°C, 10~90%RH	-40°C to 60°C, 10~90%RH

Dimensions:



Rear components



03 Connection:

Loading Capability

1. Loading Capability of Processor:

Quantity of Control boxes	50Hz	8 bit	10 bit	12 bit
	60Hz	Max.17 × 4 port	Max.15 × 4 port	Max.11 × 4 port
		Max.15 × 4 port	Max.12 × 4 port	Max.9 × 4 port

The screenshot shows a software interface with a table of control boxes and a configuration window for 'Strip Control Box 12'.

Port	Address	Type	Serial Number	Firmware	Port 1 Status	Port 2 Status	Temperature	Orientation	Status	Authentic
1	00:13:b2:14:3cd1	Strip Control Box	S18PD1000446	1.2.1	1000MB upstream	1000MB downstream	44.9°C		Online	Authentic
1	00:13:b2:14:3cec	Strip Control Box	S18PD1000442	1.2.1	1000MB upstream	1000MB downstream	45.0°C		Online	Pending
1	00:13:b2:14:3cf2	Strip Control Box	S18PD1000439	1.2.1	1000MB upstream	1000MB downstream	44.5°C		Online	Pending
1	00:13:b2:14:3cfc	Strip Control Box	S18PD1000443	1.2.1	1000MB upstream	1000MB downstream	44.1°C		Online	Pending
1	00:13:b2:14:3d01	Strip Control Box	S18PD1000465	1.2.1	1000MB upstream	1000MB downstream	45.3°C		Online	Authentic
1	00:13:b2:14:3d1b	Strip Control Box	S18PD1000441	1.2.1						
1	00:13:b2:14:3df5	Strip Control Box	S18PD1000466	1.2.1						
1	00:13:b2:14:4ac6	Strip Control Box	S18PD1000454	1.2.1						
1	00:13:b2:14:4fe9	Strip Control Box	S18PD1000610	1.2.1						
1	00:13:b2:14:4feb	Strip Control Box	S18PD1000618	1.2.1						
1	00:13:b2:14:6ae1e	Strip Control Box	S18PD1000617	1.2.1						
1	00:13:b2:14:6ae1f	Strip Control Box	S18PD1000575	1.2.1						
1	00:13:b2:14:6ae25	Strip Control Box	S18PD1000578	1.2.1						
1	00:13:b2:14:6aabb	Strip Control Box	S18PD1000613	1.2.1						
1	00:13:b2:14:6aadc	Strip Control Box	S18PD1000606	1.2.1						
1	00:13:b2:14:6ae2	Strip Control Box	S18PD1000616	1.2.1						
1	00:13:b2:14:6ae9	Strip Control Box	S18PD1000603	1.2.1						
1	00:13:b2:14:6aee	Strip Control Box	S18PD1000615	1.2.1						

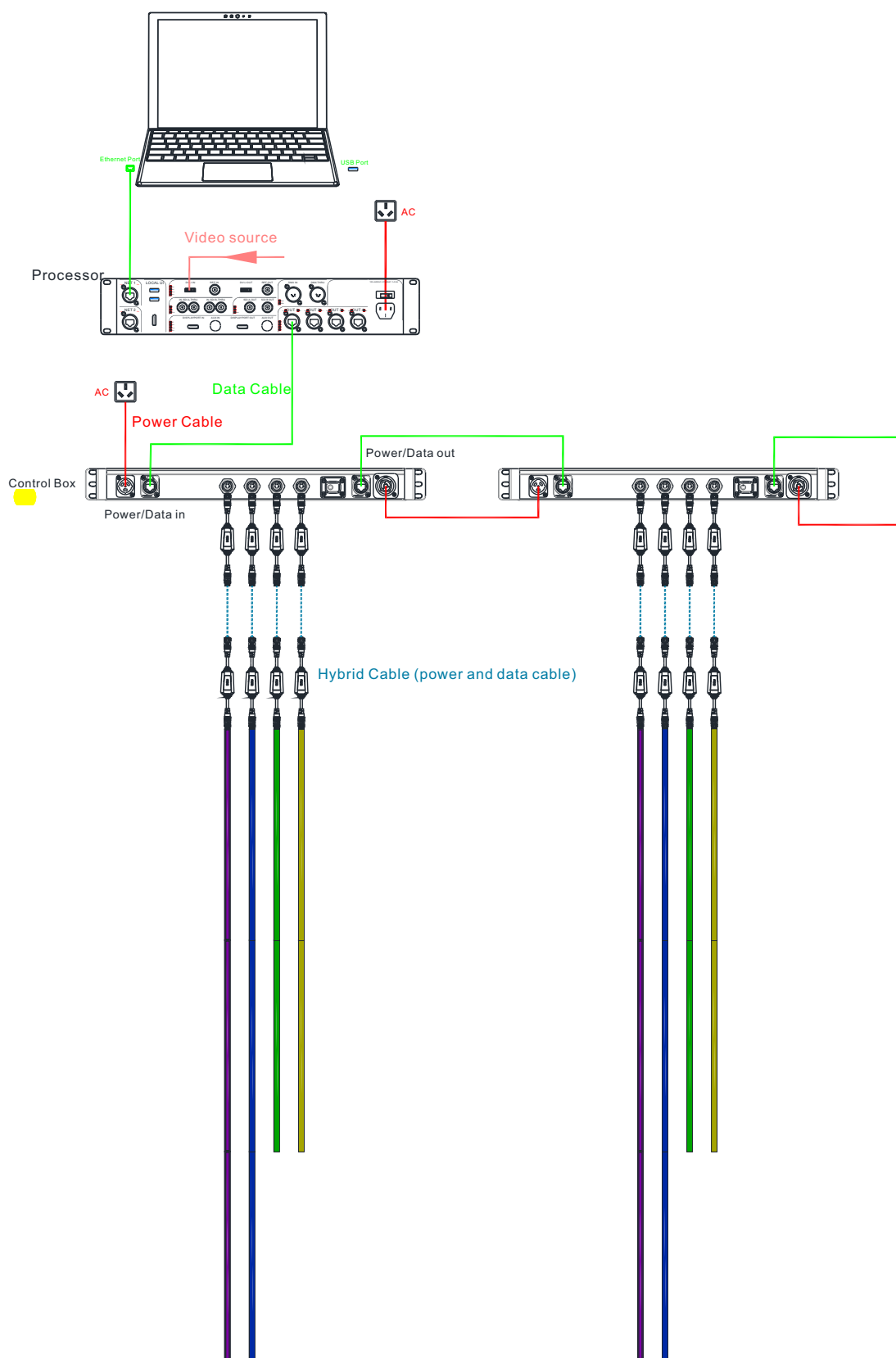
The configuration window for 'Strip Control Box 12' shows the following settings:

- Name: Strip Control Box 12
- Subdevice: Strip S18
- Count: 1
- Buttons: Add devices, Delete, Clear all ports
- Port 1: 25: Strip S18, 26: Strip S18, 27: Strip S18, 28: Strip S18, 29: Strip S18, 30: Strip S18, 31: Strip S18, 32: Strip S18, 33: Strip S18, 34: Strip S18, 35: Strip S18, 36: Strip S18, 37: Strip S18, 38: Strip S18, 39: Strip S18, 40: Strip S18
- Buttons: Reset to defaults, OK, Cancel

Select the control box and click "Configure" to make sure the correct count of fixtures is configured on the correct port. If too many strips loaded on the port, remove the not used strips. If you do not remove, it will create extra processor loading.

2. Loading Capability of Control Box: Max. 10 × 1.2m Strips(13 × 0.9m / 20 × 0.6m / 40 × 0.3m)

3. Cabling



Notes:

The hybrid cable should not be more than 2 meters.

The hybrid cable can be replaced by the AMP cable, which should not be more than 30 meters.

04 Accessories

①



Name : Power Cable
SAP No. : 208001S0754
Dimension : 10m
Weight : 1.6kg
Max Current : 16A

②



Name : Data Cable
SAP No. : 208004S0242
Dimension : 30m
Weight : 1.4kg
Max Length : 100m

③



Name : Control Box
SAP No. : 206002S0345
Dimension : W429×H45×D170mm
Weight : 2.5kg

④



Name : Data Cable
SAP No. : 208001S0709
Dimension : 2m
Weight : 0.1kg

⑤



Name : Power Cable
SAP No. : 208004S0062
Dimension : 2m
Weight : 0.4kg

⑥



Name : Power / Data Cable
SAP No. : 208003S019/9/8/7
Dimension : 2m/1m/0.6m
Weight : 0.2kg

⑦



Name : Power and Data Cable
SAP No. : 208003S0161
Dimension : 10m
Weight : 1.1kg

⑧



Name : Connector
SAP No. : 304012-00885
Dimension : W300×H38.5×D33mm
Weight : 0.3kg

⑨



Name : Bracket
Dimension : W30×H20×D20mm
Weight : 0.1kg

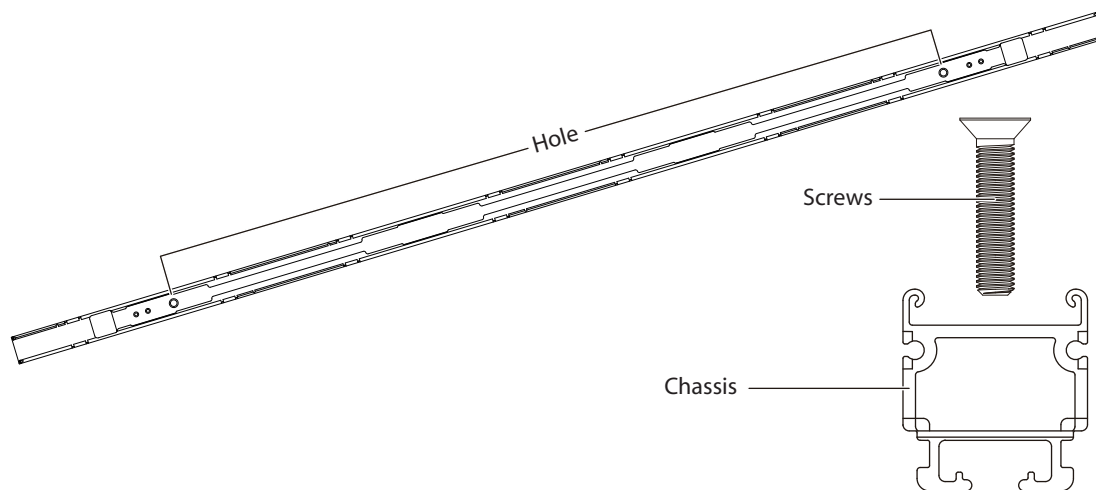
05

Installation:

ROE Strips are designed to be versatile and install easily to virtually any structure. There are three approaches to install ROE Strips, Fixed installation by screw, Bracket on the wall , Hanging on truss.

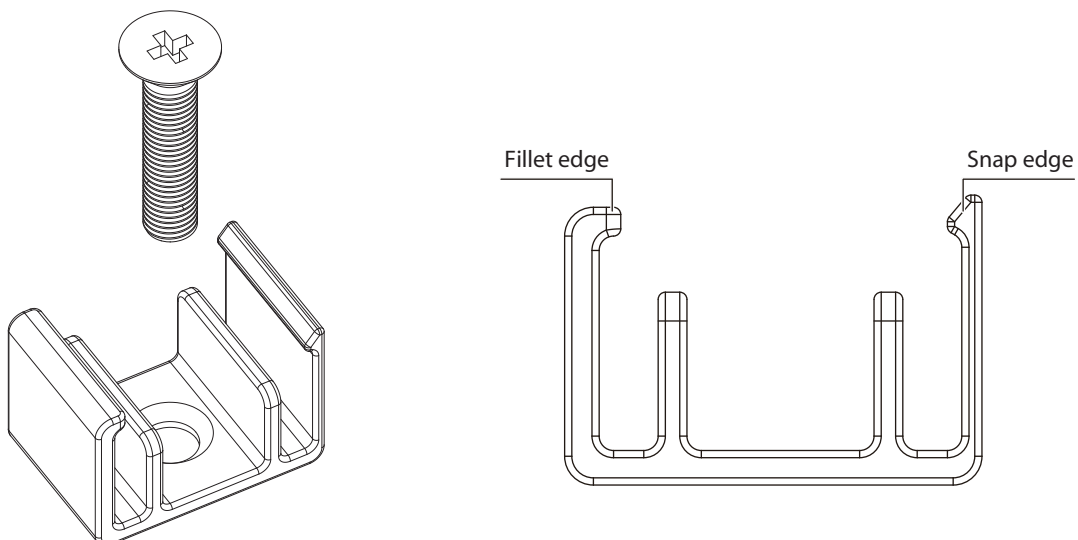
Fixed installation by screws

The Chassis have a two 7mm hole at each end of it for use with standard M6 screws. Then screw the Chassis to stage scenery or some other support structure.

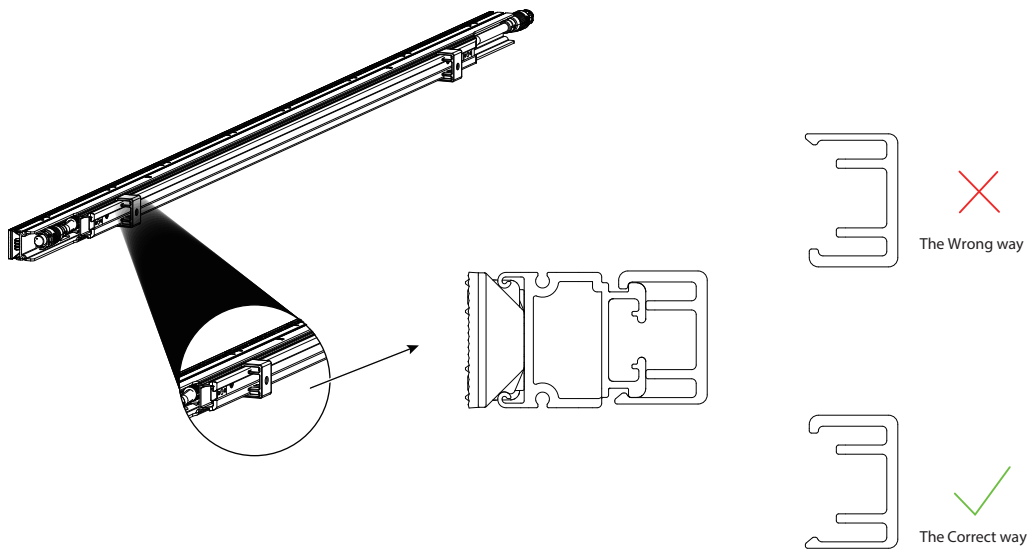


Bracket on the wall

The Bracket install system is used when a rapid deploy or expendable solution is needed. It is a small piece of Aluminium alloy designed exclusively for ROE Strip to snap into. These brackets have a 7mm hole in the center for use with standard M6 screws. Screw the brackets to stage scenery or some other support structure. Then, snap ROE Strip into the brackets.

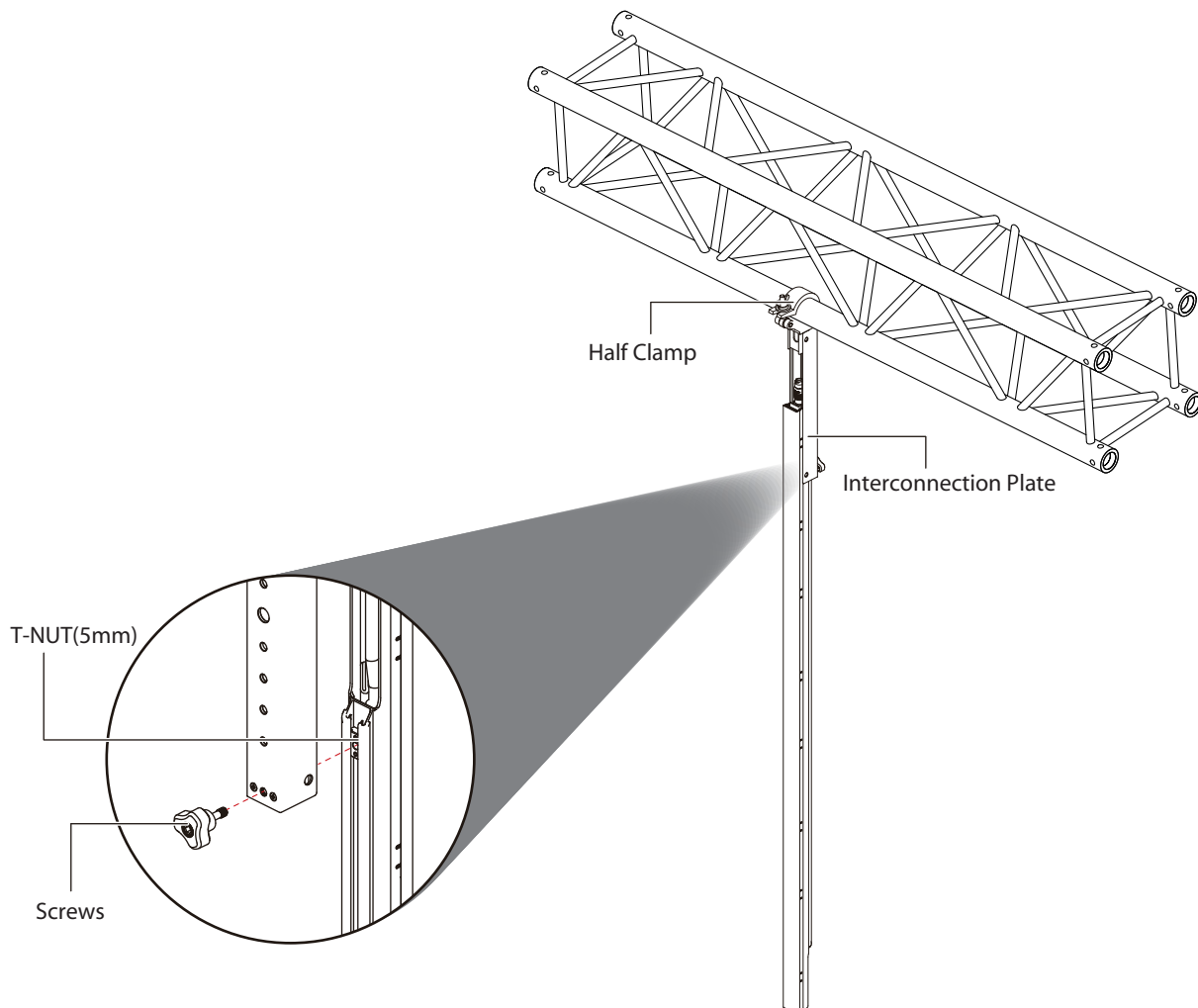


2. For safety, clips must be fixed in the right way when making horizontal assembly.



Hanging on truss

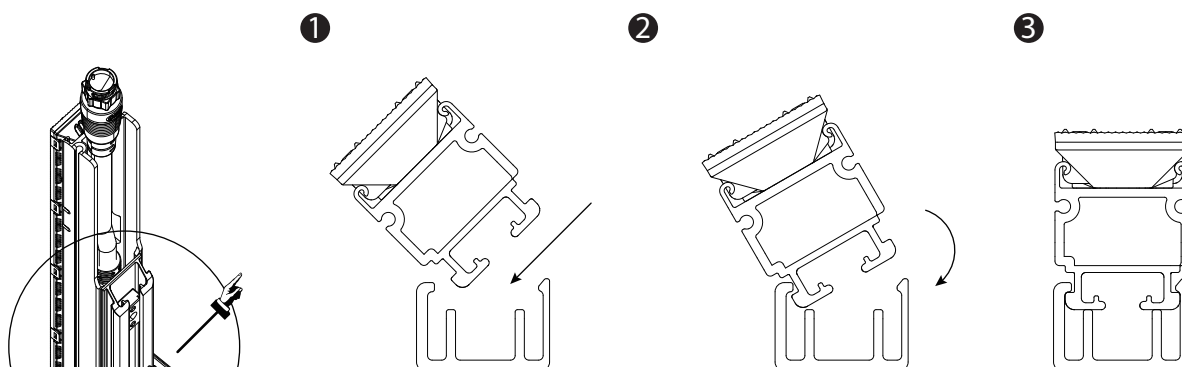
The ROE Strips can be hung on the truss with Connector and the Half Clamp. Align the hole of connect and AUX Pedestal, just Screw the Screws of the Connector. (the same with ROE Strips connection).



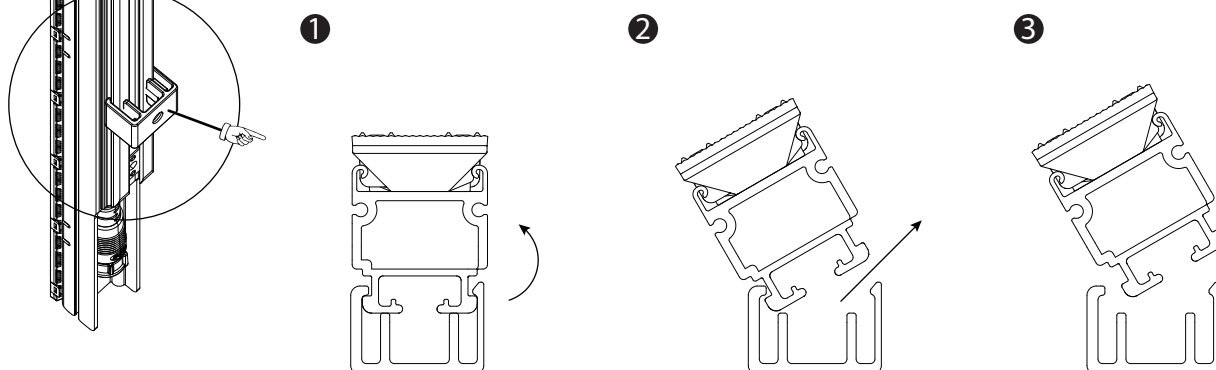
Note: ROE Strips base is inserted under the fillet edge before attempting to press the fixture into the snap edge.

1. Make sure to disassemble the Strips from the fixed clips in the right way.

Assemble:

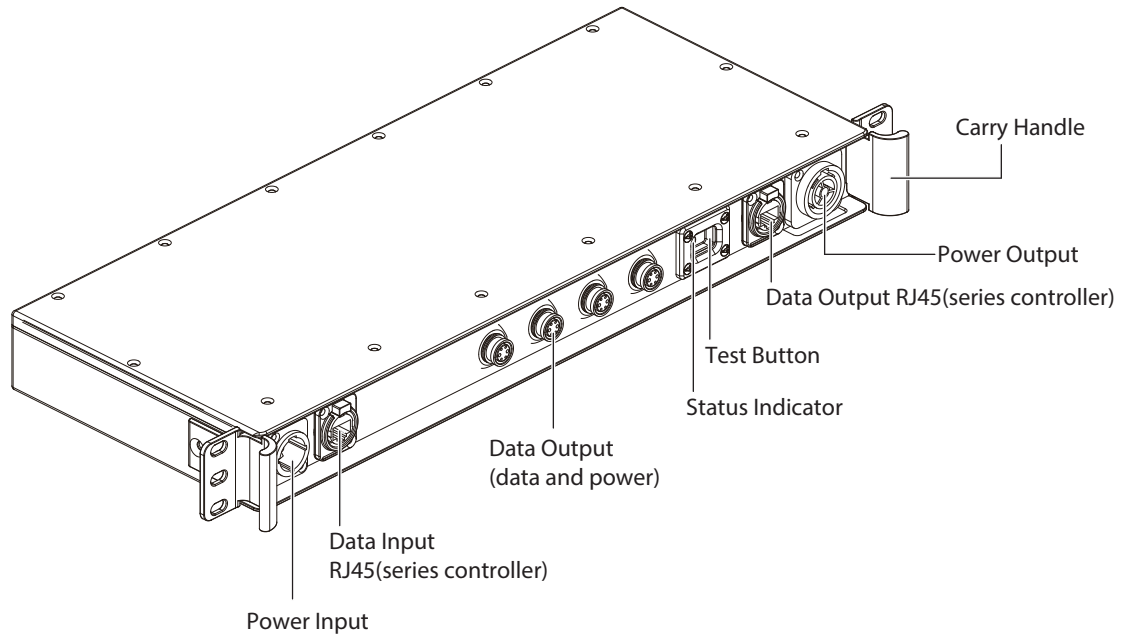


Disassemble:



The Control Box is a power and data distribution unit includes receiving card, power supply and aluminium frame.

Diagram



Specification

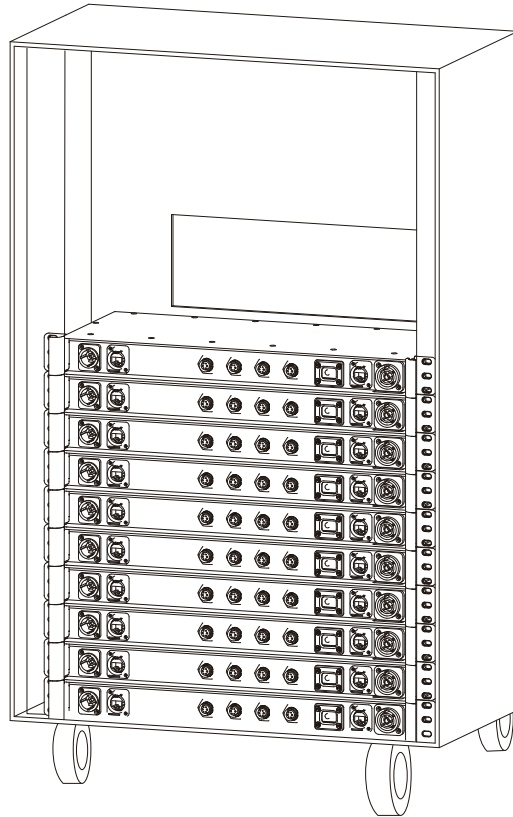
Working voltage	220V AC	50/60Hz
Power Output	450W/36V	
Data Output port number	4 port	
Mounting	Fixed on the beam/Case/Settle on the ground	
Max. Capacity	10 tiles	
Material	Al6061	
Dimensions	W429×H45×D170mm	
Weight	2.5kg	
IP	IP65	
Operating Temperature/Humidity	-20°C to 45°C, 10% to 90%RH	
Storage Temperature/Humidity	-40°C to 60°C, 10% to 90%RH	

Software:

Please read software manual firstly, (download link as below): [Http://www.roevisual.com/how-to-make-led-display](http://www.roevisual.com/how-to-make-led-display).

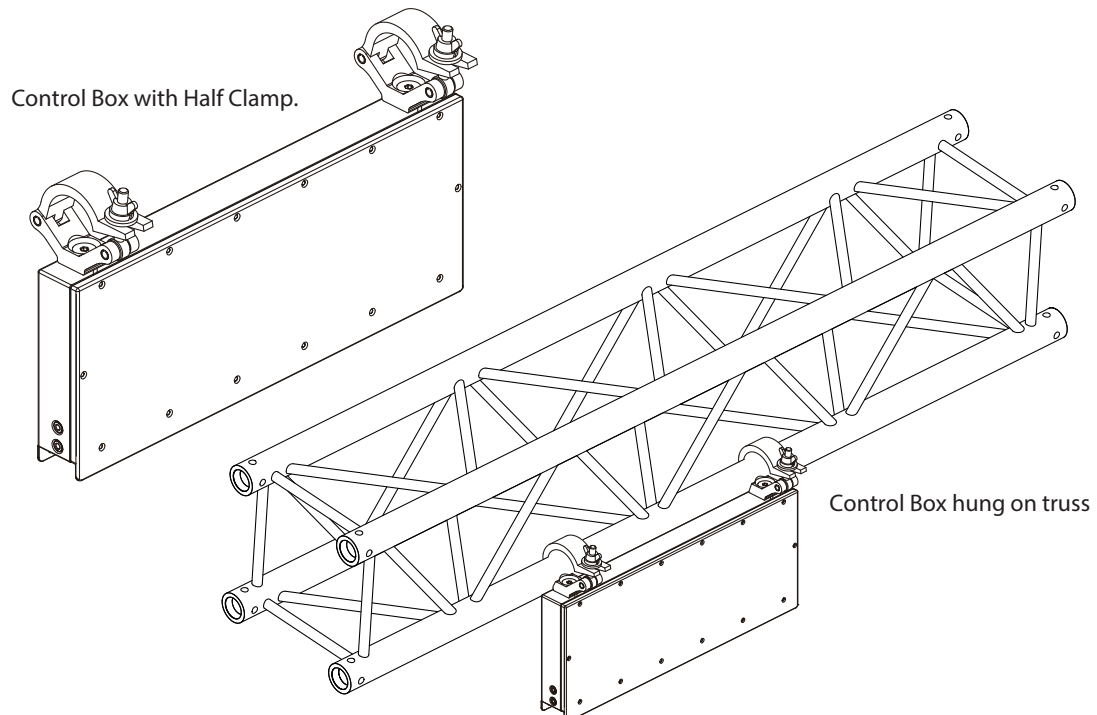
Control Box Installation

1. Put the Control Box of ROE Strip together in distribution box, its very convenient and efficiency to work.



2. Hanging on truss

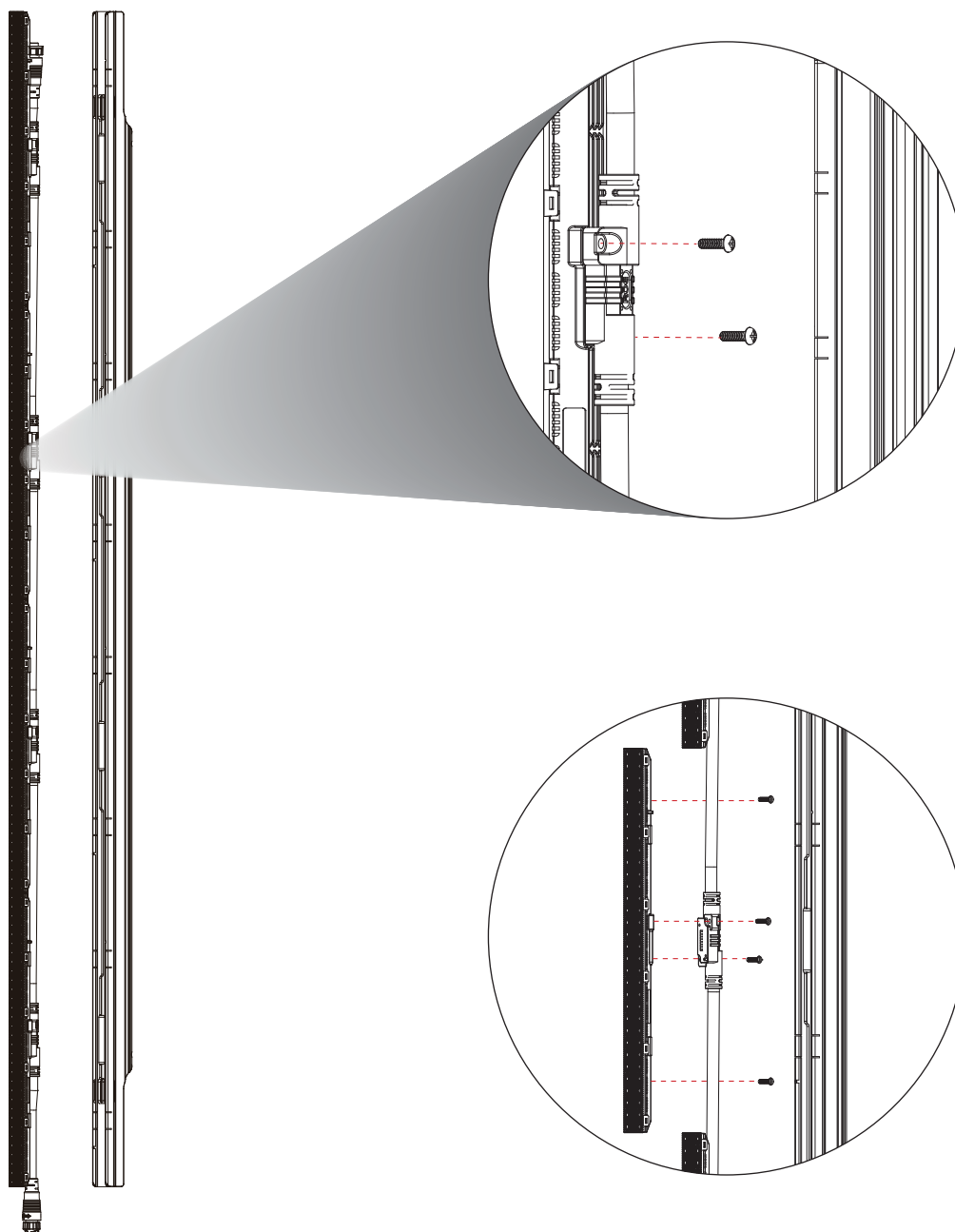
The top of the Control Box has an 19mm nut which is used for attaching a trigger Clamp.



09 Maintenance

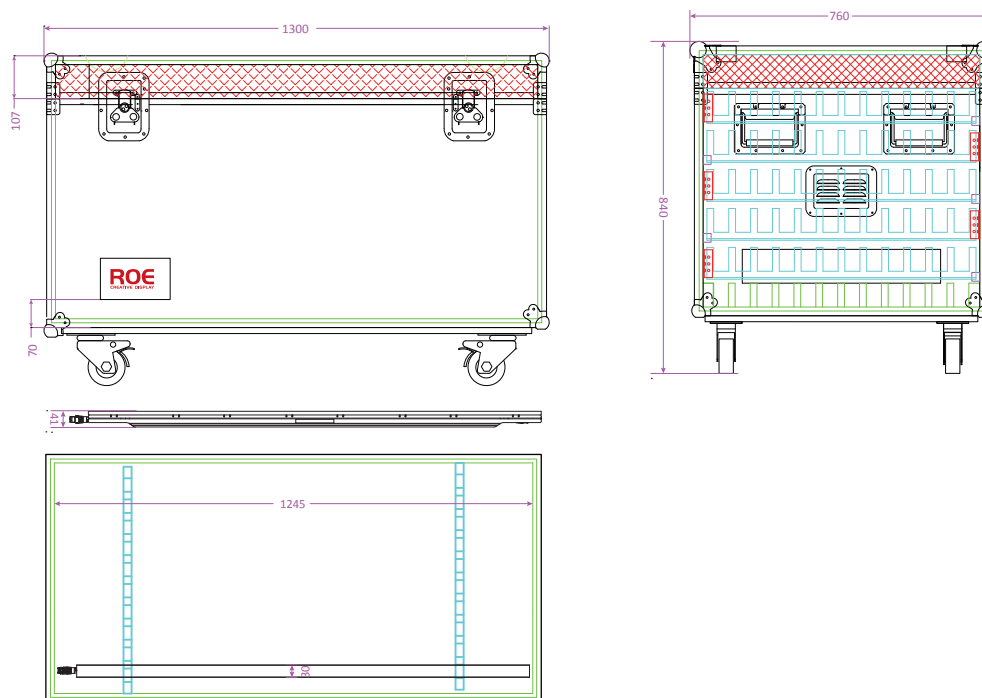
When a led fail to work, we need to replace the LED module.

1. Firstly, take all the module of ROE Strip down from Fixed housing.
2. Separate the module from Power/Data Cable by loosen the Screw.
3. Then replace the LED module.



09 Package

72pcs ROE Strips per Flightcase



Picture



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