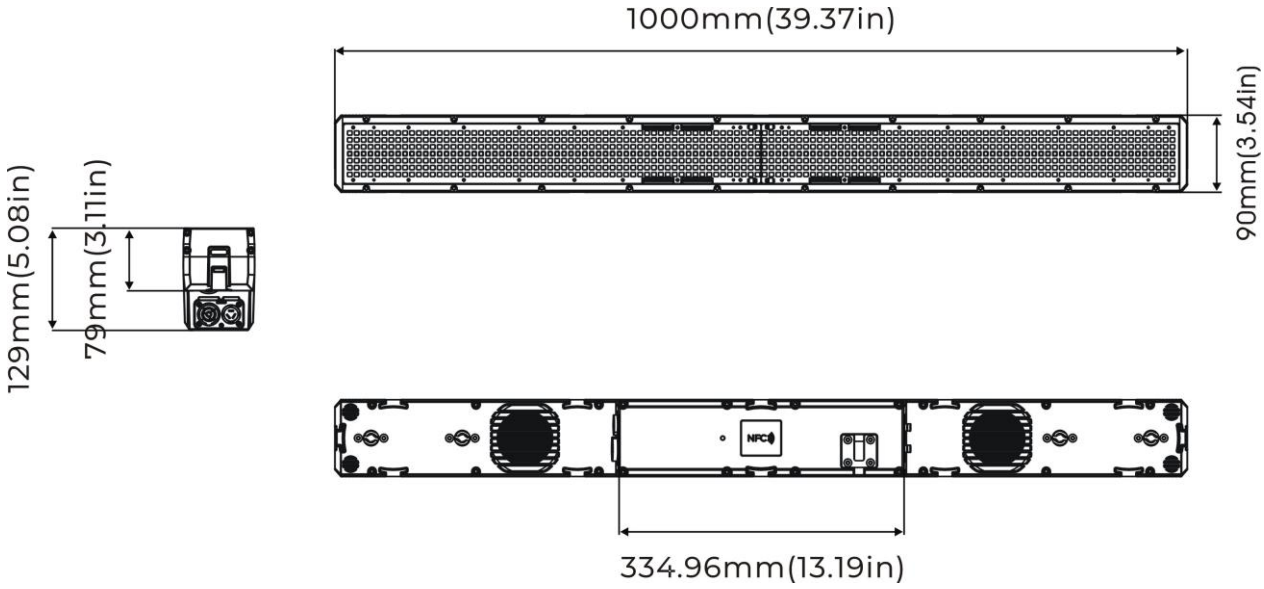
USERMANUAL

GENIO PixelBar



Document Revision B | Released 2026-9-22

DIMENSIONS



All dimensions in millimetres and inches. Drawing not to scale

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English edition © 2024 SGM Lighting ApS®.

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WARNING! READ THE FOLLOWING SAFETY PRECAUTIONS CAREFULLY BEFORE UNPACKING, INSTALLING, POWERING OR OPERATING THE DEVICE.

SGM fixtures are intended for professional use only. They are not suitable for residential use.
Les fixtures SGM sont impropre à l'usage domestique. Uniquement à usage professionnel.
This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.
Ce produit doit être installé selon le code d'installation pertinent, par une personne qui connaît bien le produit et son fonctionnement ainsi que les risques inhérent.

DANGER! RISK OF ELECTRIC SHOCK DO NOT OPEN THE DEVICE!

- The SGM fixture shall be serviced only by the manufacturer or an authorized service agent.
- Disconnect power before installing or servicing to avoid electrical shock.
- Ensure that the device is electrically connected to earth (ground).
- Do not apply power if the device or mains cable is in any way damaged.
- Do not immerse the fixture in water or liquid.

WARNING! TAKE MEASURES TO PREVENT BURNS AND FIRE!

- Install in a location that prevents accidental contact with the device.
- Install only in a well-ventilated space.
- Install only in accordance with applicable building codes.
- Do not paint, cover, or modify the device, and do not filter or mask the light.
- Keep all flammable materials well away from the device.

ALLOW THE DEVICE TO COOL FOR 15 MINUTES AFTER OPERATION BEFORE TOUCHING IT. THE EXTERIOR SURFACE TEMPERATURE MAY REACH UP TO 80°C (176°F) AT STEADY STATE.

- Take precautions when working at height to prevent injury due to falls.
- For Permanent Outdoor Installations (POI), ensure that the fixture is securely fastened to a load-bearing surface with suitable corrosion-resistant hardware.
- For elevated installations, secure the fixture with suitable safety cables, and always comply with relevant load dimensioning, safety standards, and requirements.

Please visit www.sgmlighting.com for the latest version of this user manual/ safety information leaflet. Due to continuous improvements, the instructions may change without notice. SGM always recommends the latest available firmware version from www.sgmlighting.com.

VISUAL INSPECTION



All users of the SGM fixtures should regularly clean those parts of the fixture directly exposed to the elements, such as the external housing and front glass. Additionally, all owners of the SGM fixtures must periodically check the external housing of the fixture for structural breaks, deterioration, cracked lenses, or loose screws. To ensure proper operation, but also to prevent the risk of potential accidents, do not use the fixture if the lens, housing, or power cables are damaged. If parts of the fixture appear to be missing, cease use immediately and contact SGM support.

WIRING



When installing fixtures in a permanent installation, ensure power and data cable leads are installed as a service loop to an appropriately rated junction box using suitable cable strain reliefs/glands. All installed fixtures must be securely mounted, and service loop appropriately protected for installation location. All electrical wiring and connections should be completed by a qualified electrician.

Separation of field installed power limited circuit (dimming/control) wiring from the branch circuit wiring in the outlet box are to be made in accordance with local and/or national electrical installation codes.

SAFETY PRECAUTIONS



When using electrical equipment, basic safety precautions should always be followed including the following:

- Do not mount near gas or electric heaters.
- Permanently installed equipment should be mounted in locations and at heights where it will not be readily subjected to tampering by unauthorized personnel.
- The use of accessory equipment not recommended by the manufacturer may cause an unsafe condition.
- Do not use this equipment for other than intended use.
- Refer service to qualified personnel or authorized service centers.
- Do not look directly into the beam for long periods of time, when the fixture is on.
- The fixture shall, under no circumstance, be covered with insulating material of any kind.

READ AND FOLLOW ALL SAFETY INSTRUCTIONS.

IDENTIFICATION AND TERMINOLOGY OF GENIO PixelBar

A. Optical lens

B. Power Out

C. Power In

D. RJ45

E. RJ45

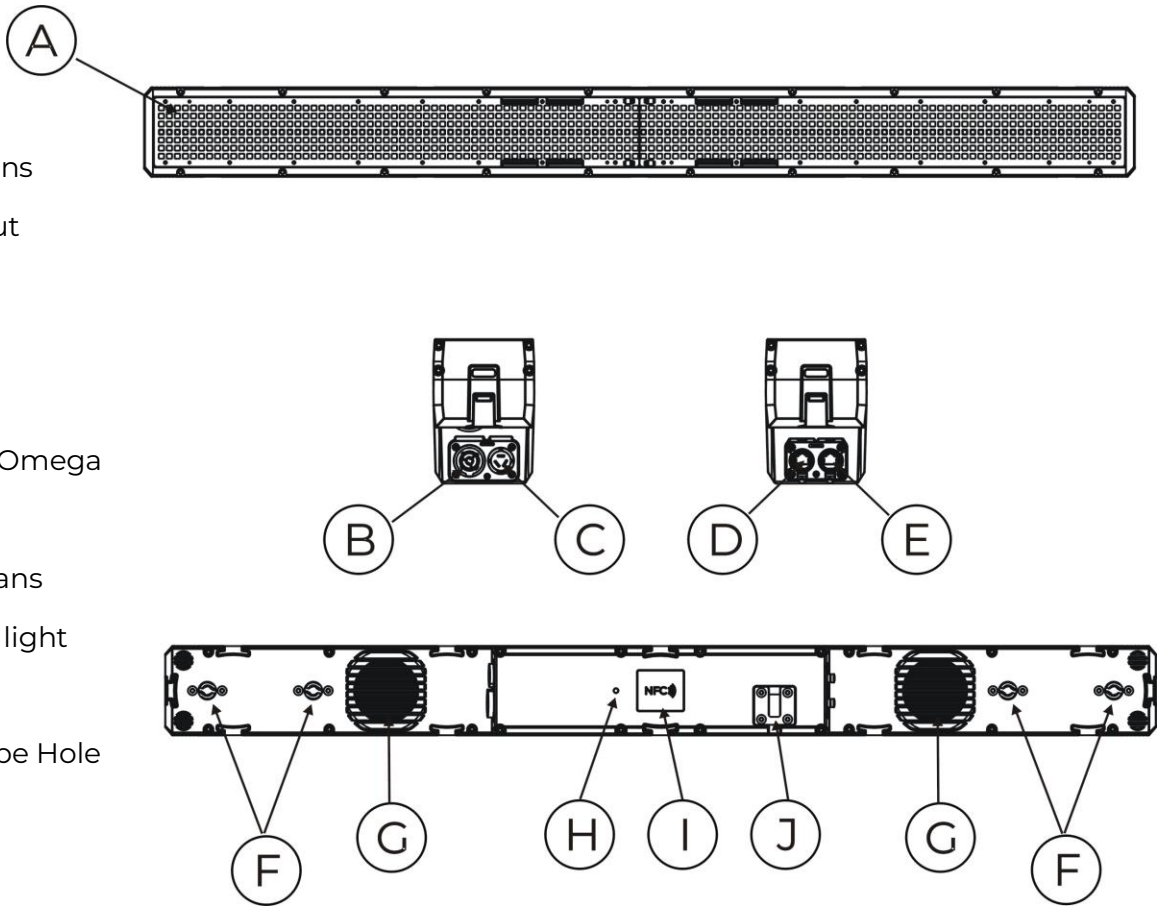
F. Holes for Omega bracket

G. Cooling fans

H. Indicator light

I. NFC Tag

J. Safety Rope Hole



Illustrations might vary from received products.
This is subject to change without notice.

UNPACKING

Unpack the device and inspect it to ensure that it has not been damaged during transport. The fixture is shipped with：

- 2 x GENIO Connector M + 4 x GENIO Rigging Connector

APPLICATION CONSIDERATIONS

The standard fixture is IP65-rated and is designed for both indoor and outdoor events. This means that it is protected from：

- Dust to the degree that dust cannot enter the fixture in sufficient quantities as to interfere with its operation.
- Lower pressure water jets from any direction.

When using standard fixtures outdoors or in wet locations，ensure that：

- The DMX connection out of the last fixture in a chain is properly sealed，in accordance with the ingress protec- tion (IP) requirements.
- The DMX out of the last fixture is terminated with a 120 Ohm resistor between pin 2 and 3 (as per RS485 stand- ards).

When selecting a location for the device, ensure that：

- It is situated away from public thoroughfares and protected from contact with people.
- It has adequate ventilation.
- It is not immersed or submerged in water.

TRANSPORT HANDLING

Always use the supplied packaging or suitable flight case for transportation and storage. Never carry the fixture by connected cables or wires.

The fixture may be installed in any orientation, in the ceiling or on a wall surface.

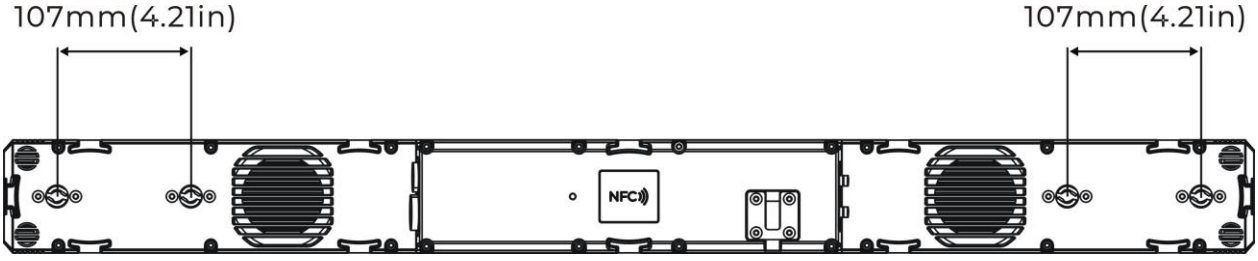
When installed horizontally with a downward beam-angle, water or dirt can potentially pool in the fan wells. Under normal operation the moisture will evaporate.

In locations with high rainfall, consider locating the fixture under cover or an overhang, or modify the position and orientation of the fixture to minimize pooling.

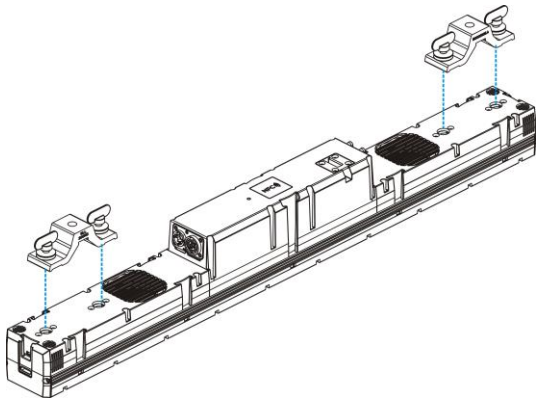
All SGM fixtures have locking points in the base for installation and rigging.

Always use the supplied omega bracket to rig a standard fixture. Lock the bracket with the 1/4-turn fasteners.

PLEASE NOTE! 1/4-TURN FASTENERS ARE ONLY LOCKED WHEN TURNED FULLY CLOCKWISE. DEPENDING ON THE STRUCTURE, PLEASE USE APPROPRIATE AND SECURE METHODS FOR MOUNTING THE OMEGA BRACKETS.

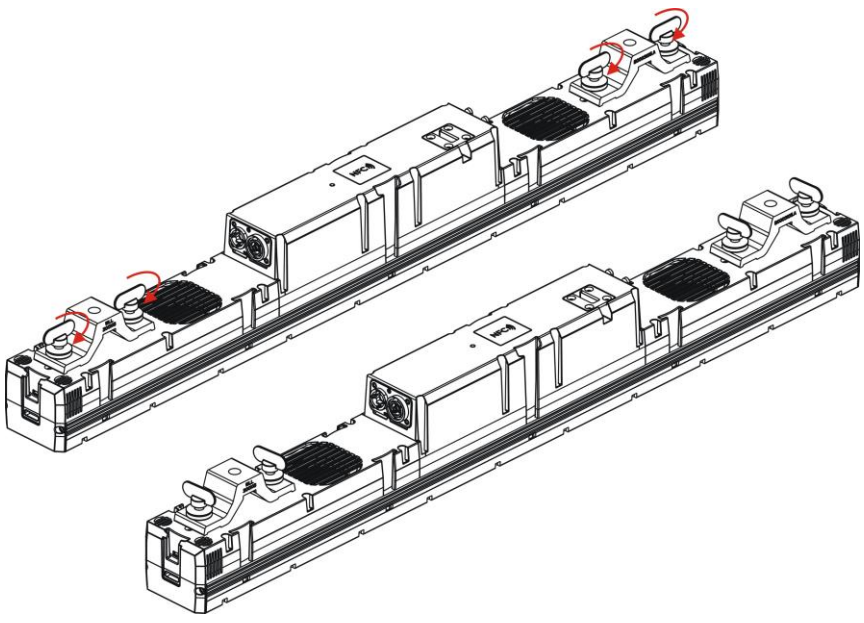


OMEGA BRACKET (not included)

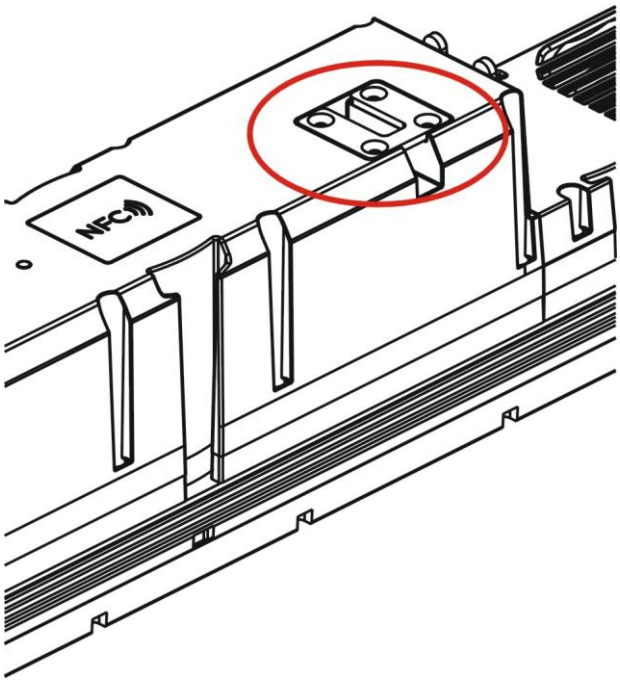


Start the standard rigging process by blocking the lower working area, and make sure the work is performed from a stable plat- form.

- Check that the clamp/bracket is undamaged. Supporting structure should be capable of bearing at least 10 times the weight of all installed fixtures, lamps, cables etc.
- Bolt a clamp or bracket securely to the omega bracket with a M12 bolt (min. grade 8.8) and a lock nut. For longer term installations, choose outdoor rated hardware.
- Align the omega bracket with the fixture base. For stand- ard Omega Bracket, insert the fasteners into the fixture base bracket, and turn both levers a full 1/4 turn clockwise to lock.
- Hang the fixture on a truss or other structure. Tighten the clamp/bracket.
- Verify that there are no combustible materials, cables, or surfaces to be illuminated within 0.3 m (12 in.) of the fix- ture.
- Check that there is no risk of the head/yoke colliding with other fixtures or structures.



SAFETY WIRE



Fasten a safety wire (not shown) between the load-bearing support structure and the safety wire attachment point on the device.

The safety cable (not included in the package) must:

- Bear at least 10 times the weight of the device (SWL)
- Have a minimum gauge of 6 mm.
- Have a maximum length (free fall) = 30 cm (12 in.).

WARNING! ALWAYS SECURE AN ELEVATED FIXTURE WITH A SAFETY WIRE. ALWAYS USE A SAFETY WIRE OF A GRADE AISI 316 STEEL. MAKE SURE THE SLACK OF THE SAFETY WIRE IS AT A MINIMUM. NEVER USE THE YOKE/ HANDLE FOR SECONDARY ATTACHMENT.

POWER

The power input required is 100–240 VAC, 50/ 60 Hz AC mains power supply, and draws a maximum of 600 Watts. Power is connected via a “Powercon” type connector. Power plug is as per local code.

The power cable must be fitted with a grounded connector intended for exterior use.

Please note： to ensure maximal stability, when the voltage is over AC100-120V~, only four devices may be connected together in this manner! From the fifth device, please connect to power supply to get power for the second link. when the voltage is over AC200-240V~, only ten devices may be connected together in this manner! From the eleventh device, please connect to power supply to get power for the second link.

PLEASE NOTE! PROTECTIVE CAPS MUST BE SECURELY MOUNTED ON ANY UNUSED CONNECTORS, IN ORDER TO MAINTAIN INGRESS PROTECTION (IP RATING).

DATA

The fixture is controllable using a sACN or Art-Net control device, and can be connected using Ethercon style cable receiver system.

ETHERCON

Using sACN or Art-Net is done through the ethernet connectors. These are compatible with all Ethercon or RJ45 style connectors. The 2 ethernet ports can serve in either a daisy chain topology or can be fed directly with the ethernet lines, providing a double input for ethernet protocols. For outdoor installations, use only IP65-rated XLR connectors suitable for outdoor use. In a setup where the ethernet ports are in a daisy chain, the fixture will still pass through the ethernet signal in the event the fixture loses power.

NFC

The fixture includes a built-in Near Field Communication (NFC) interface, providing compatibility with both Android and iPhone devices for basic configuration and information access. The SGM NFC app can be downloaded from the App Store or Google Play Store.

The NFC tag is positioned on the side of the fixture. To access the configuration, open the SGM NFC app and hold your smartphone as close to the tag as possible. Note that the fixture does not need to be powered for the NFC functionality to operate, and the NFC tag remains accessible even when the fixture is stored in the packing box.

INDIVIDUAL FIXTURE SETTINGS

Setting the fan mode

For operating environments where low-noise is a requirement, or where the fixture will be operating at high temperatures, it is possible to adjust the default fan speed by NFC or RDM.

FACTORY DEFAULT

DMX ADDRESS	1
UNIVERSE	0
FAN MODE	Auto
SOURCE PRIORITY	Art-Net
IP ADDRESS	Default address

SUPPORTED RDM FUNCTIONS

RDM (Remote Device Management) is a protocol enhancement to USITT DMX512 that allows bi-directional communication between the fixtures and the controller over a standard DMX line. This protocol will allow configuration, status monitoring, and management. A RDM controller is needed to get control over the supported parameters. See the tables below for supported RDM functions.

PLEASE NOTE! THE RDM CONTROLLER COMMUNICATES WITH THE FIXTURES TO SHOW ONLY THE AVAILABLE OPTIONS FOR EACH RDM FUNCTION. TABLES ARE SUBJECT TO CHANGE WITHOUT NOTICE.

SENSORS

RDM enables various sensor readouts for remote device monitoring. See the table below for sensors and sensor types.

PLEASE NOTE! THE RDM CONTROLLER COMMUNICATES WITH THE FIXTURES TO SHOW ONLY THE AVAILABLE SENSORS FOR THIS FIXTURE. THE TABLE IS SUBJECT TO CHANGE WITHOUT NOTICE.

NAME	SENSOR TYPE
PSU TEMP	Temperature
LED TEMP ID1	Temperature
LED TEMP ID2	Temperature
LED TEMP ID3	Temperature
LED TEMP ID4	Temperature
LED TEMP ID5	Temperature
LED TEMP ID6	Temperature
DRIVER TEMP ID7	Temperature
DRIVER TEMP ID8	Temperature

NAME	SENSOR TYPE
FAN1 RPM	Other
FAN2 RPM	Other
FAN3 RPM	Other
FAN4 RPM	Other

PID COMMANDS

PID	ACTIONS ALLOWED	NAME
0x0060	Get	Device Info
0x00F0	Get/Set	DMX Start Address
0x0081	Get	Manufacturer Label
0x00C0	Get	Software Version Label
0x1000	Get/Set	Identify Device
0x00E0	Get/Set	DMX Personality
0x00E1	Get	DMX Personality Description
0x0080	Get	Device Model Description
0x0082	Get/Set	Device Label
0x0656	Get/Set	Device Unit Number
0x0050	Get	Supported Parameters

PID	ACTIONS ALLOWED	NAME
0x0051	Get	Parameter Description
0x0200	Get	Sensor Definition
0x0201	Get	Sensor Value
0x0120	Get	Slot Info
0x0121	Get	Slot Description
0x0122	Get	Default Slot Value
0x0400	Get/Set	Device Hours
0x0401	Get/Set	Lamp Hours
0x0405	Get/Set	Device Power Cycles
0x1001	Set	Reset Device
0x0090	Get/Set	Factory Defaults
0x0030	Get	Status Messages
0x0120	Get	Slot Info
0x0121	Get	Slot Description

GENIO Rigging Connector (EXCLUDING THE CLAMP)

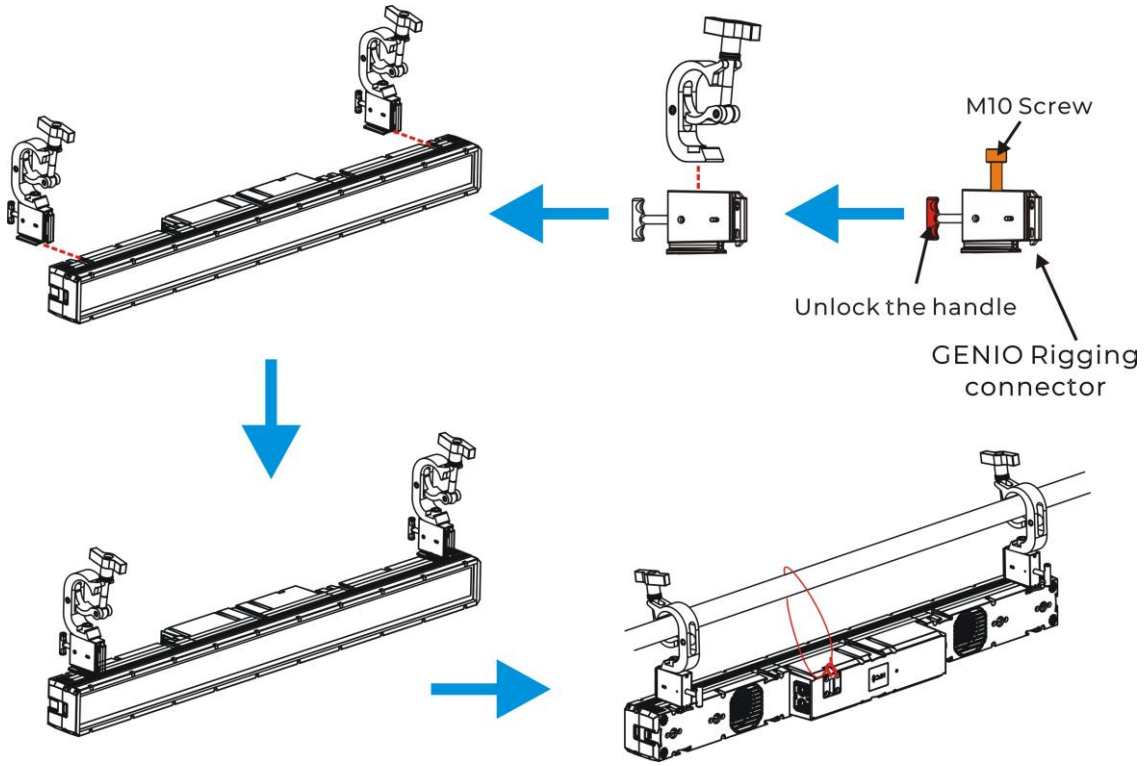
The GENIO Rigging connector enables the light fixture to be hung in various ways, including using M10 hexagon screws, quick-lock handles, or direct bolt connections to other devices. The specific steps for installation and disassembly are as follows:

Installation:

- Place the fixture in an appropriate position.
- Loosen the M10 screw on the GENIO Rigging connector and screw the clamp firmly into the M10 threaded hole located in the center of the assembly.
- Insert the GENIO Rigging connector into the designated " mating slot" on the fixture; you will hear a "click" once it is securely in place.

Removal:

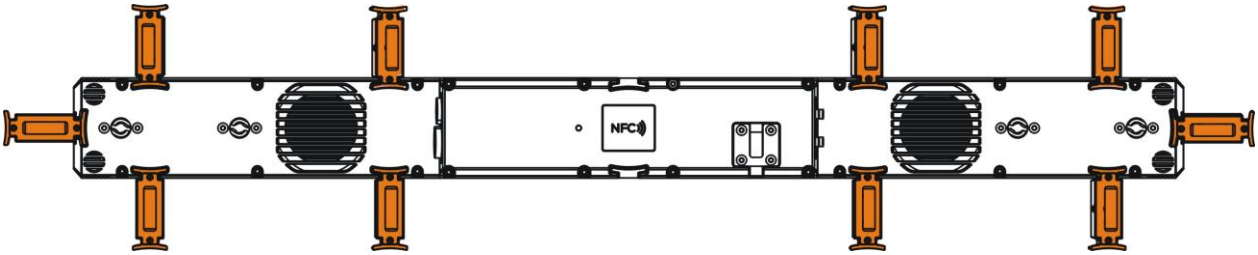
- Place the fixture in an appropriate position.
- Gently pull on the unlocking handle, and you can remove the GENIO Rigging connector in the direction of the groove.



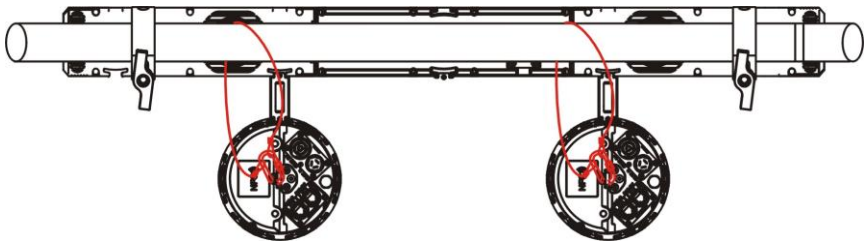
Note: The final step is extremely important. As a secondary safety hanging mechanism, it ensures that the light fixture will not fall if there are any issues with the clamp.

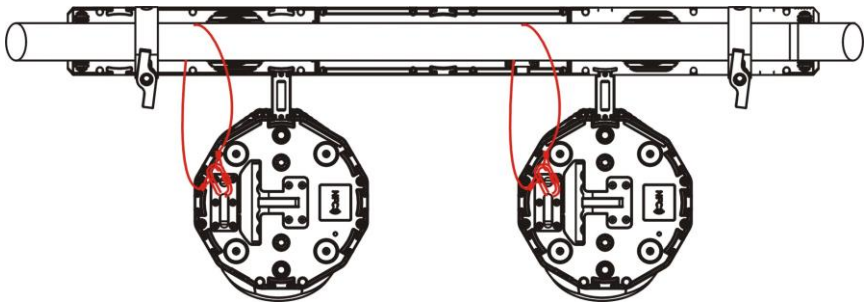
GENIO Connector M

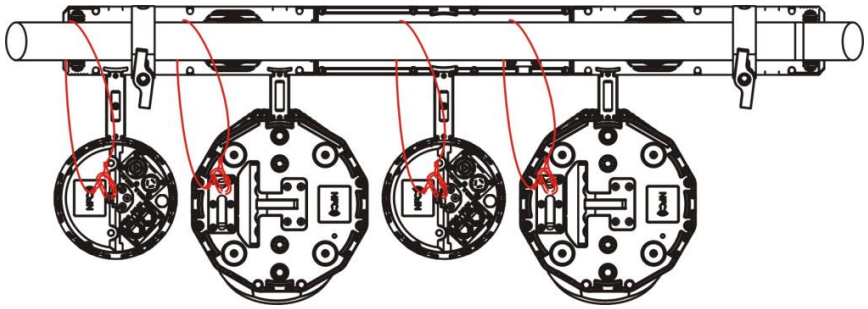
The connection slots on the fixture are allowing for a variety of creative layouts and display designs.



To the GENIO Connector M, the GENIO PixelBar can be combined with either the GENIO BlinderDot or the GENIO Beam. It is also possible to connect all three fixtures together (GENIO PixelBar, GENIO BlinderDot and GENIO Beam), as illustrated in the following picture:

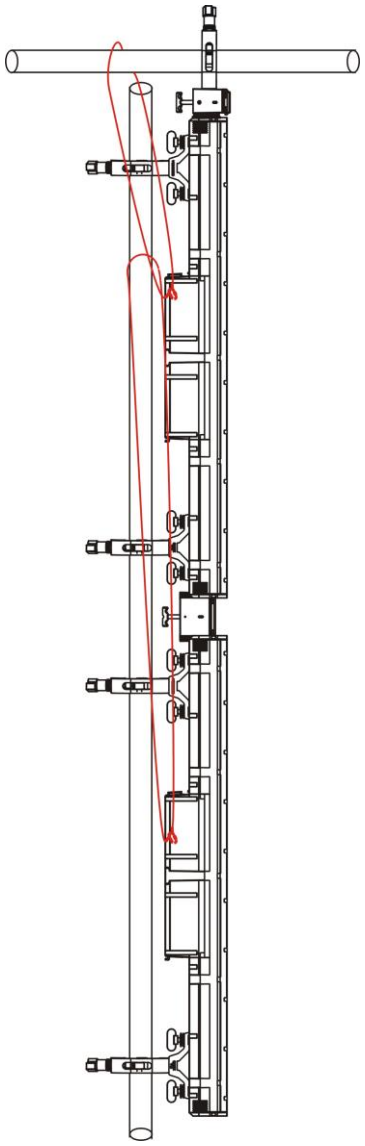






VERTICAL INSTALLATION:

When hung in the vertical direction, the maximum load that can be sustained when the lighting fixtures are connected vertically using the splice locks and hooks is 17 kg. This figure includes all additional accessories, cables, and mounting hardware. If no additional components are used, a maximum of 2 lighting fixtures can be hung vertically in this manner. The specific connection method is as follows:

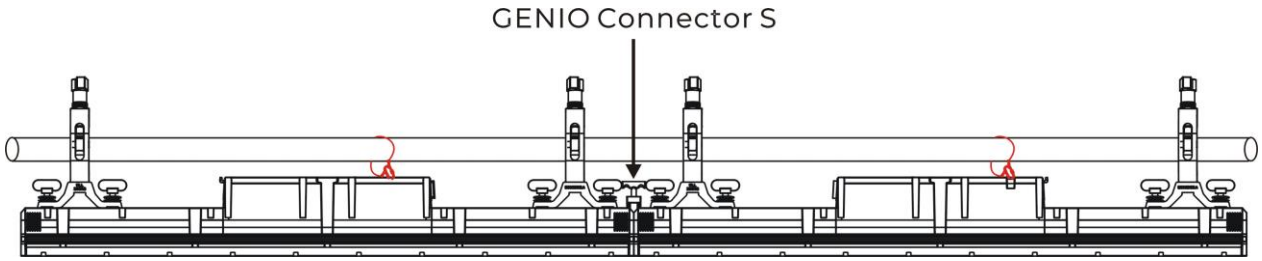


Note: 1、A safety rope is connected to the safety rope connection point at the back of each fixture. For ease of hoisting, the topmost safety rope should be fixed to a secure point. Subsequent safety ropes should all pass around the safety point of the fixture above them, thereby ensuring a step-by-step connection.

2、This type of fixture cannot be transported in a stacked manner, as this would require a truss structure for transportation.

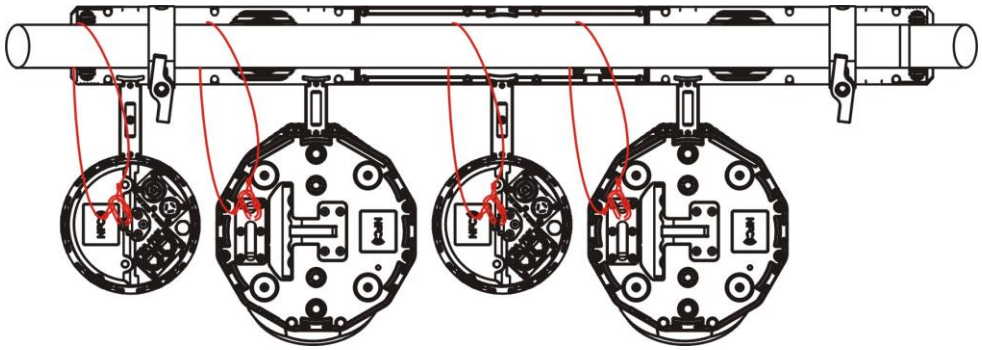
GENIO Connector S

The installation method for this accessory is the same as that for the GENIO Connector M. However, this accessory should only be used when two GENIO PixelBars are spliced together seamlessly, as shown in the following diagram:



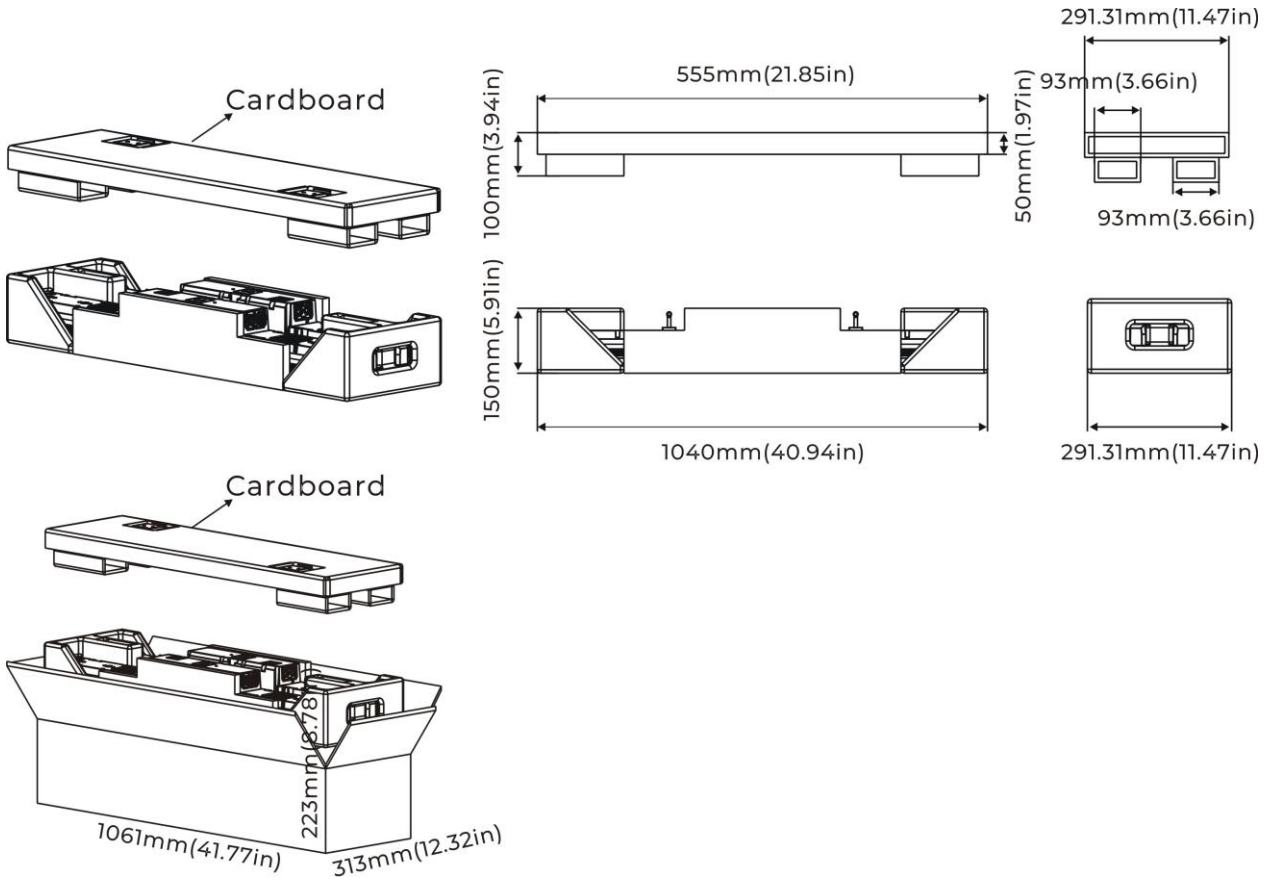
GENIO Connector L

The installation method for this accessory is the same as that for the GENIO Connector M. However, this accessory is required only when the GENIO PixelBar is used in combination with the GENIO BlinderDot and GENIO Beam lights, as shown in the following diagram:



Note: A safety rope is connected to the safety rope connection point at the back of each fixture. For ease of hoisting, the topmost safety rope should be fixed to a secure point. Subsequent safety ropes should all pass around the safety point of the fixture above them, thereby ensuring a step-by-step connection.

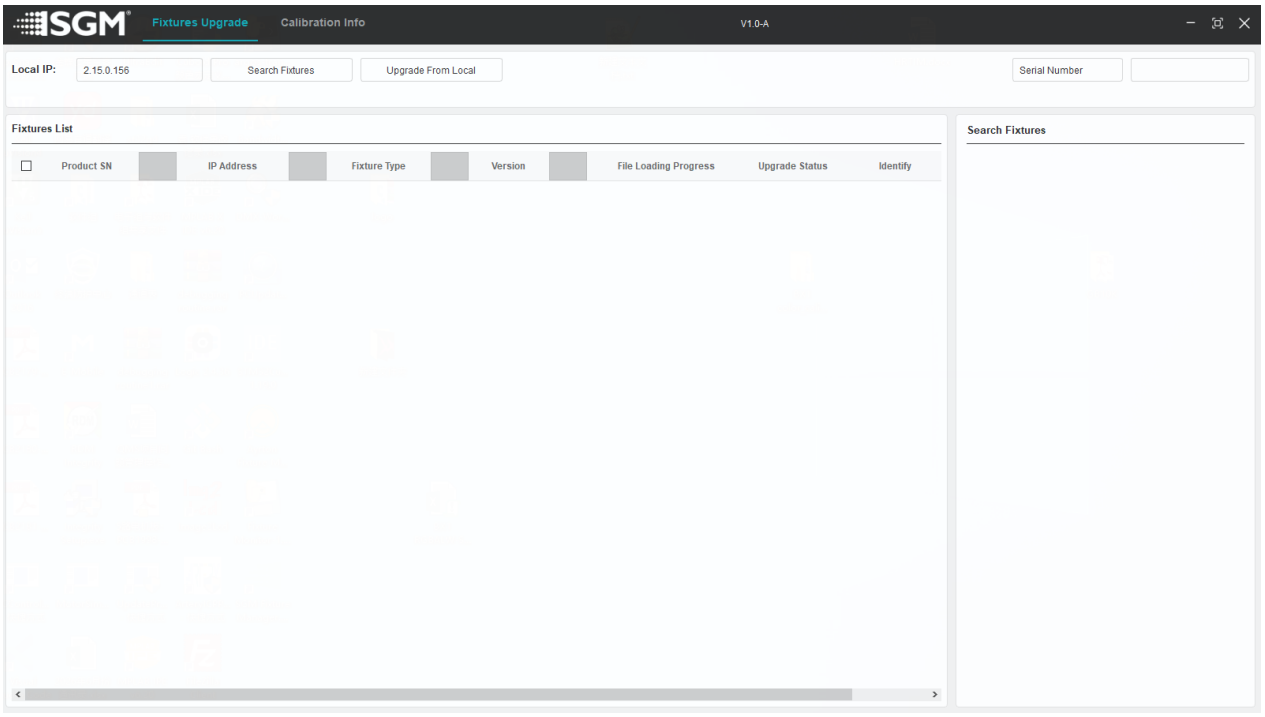
1040x291.31x150 / 1061x313x223 (2 in 1 PU + Carton packaging, contains 2 x GENIO Connector M + 4 x GENIO Rigging Connector)



FIRMWARE UPDATES

The latest firmware，manuals and tools are all available for free download a www.sgmlighting.com. The SGM Firmware Tool is used to update firmware：

Fixture firmware can be identified in this ways：



After the fixture is powered on and is working properly, click on SGM Fixture Manager.exe to open the APP upgrade interface “Fixtures Upgrade”. Select the Ethernet IP range of the respective fixture by clicking “Local IP”, and then click “Search Fixtures” to locate the fixtures connected to that IP range. After the search is completed, all relevant information about the connected fixtures will appear in the “Fixtures List”, and on the right side, you will see the progress of the search (ranging from 0% to 100%).

The “Fixtures List” is displayed as follows:

Product SN: The serial number of the fixture;
IP Address: The IP address of the fixture;
Fixture Type: The model name of the fixture;
Version: The software version number of the fixture;
File Loading Progress: The progress of loading the upgrade program onto the external storage chip;
Upgrade Status: The upgrade status of the fixture;
Identify: The command used to identify the fixture device.

CLEANING

SGM fixtures with IP54 do not need any cleaning procedures inside the fixture. However, cleaning the front lens may be needed to achieve the maximum light output after exposure to dust, sand, or dirt. The exterior housing can also be cleaned to get a better look. To maintain adequate cooling, fans must be cleaned periodically.

Whenever necessary, clean the fixture using a soft cloth dampened with a solution of water and a mild detergent. Do not use products that contain solvents, abrasives, or caustic agents for cleaning, as they can cause damage to hardware, cables, and connectors.

The level of cleaning required will vary greatly depending on the operating environment and installation. Therefore, it is recommended to do frequent check-ups the first few weeks of operation to see how often cleaning is necessary.

Note: The flexible cable connecting the light board must not be folded, as this could cause wrinkles. If the flexible cable is accidentally folded during maintenance or disassembly, it may damage the circuit, and the cable will need to be replaced. The location is shown in the diagram below:



PROBLEM		POTENTIAL CAUSE(S)	REMEDIES
Fixture does not respond or appears to be completely dead.		No power to the fixture	Confirm that the power is switched on, confirm that the cables are plugged in.
Fixture suddenly turned off.		Power was turned off.	Check the power supply, switches and breakers
Color is uneven.		The minimum values are out of calibration.	Contact your local SGM dealer or support@ sgmlighting.com.
		The SGM Calibration Data set has been lost.	Contact your local SGM dealer or support@ sgmlighting.com.
Indicator light	Doesn't light up	The fixtures is not functioning properly	Check the power supply, switches and breakers
	Turns green gradually	The network is not connected	Connect to the network
	Turns red on	There is an error with the fixture	It is necessary to obtain the error information via NFC or SGM Fixture Manager.

The fixture can be used with a variety of accessories.

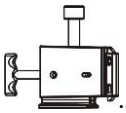
Contact your local SGM dealer to get the latest pricing and news about available accessories.

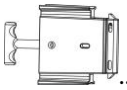
PLEASE NOTE! THE LIST BELOW IS SUBJECT TO CHANGE WITHOUT NOTICE.

ORDERING INFORMATION

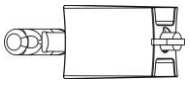
The ordering information of the GENIO Beam and it's variants can be found on the GENIO Beam product page

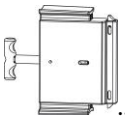
ACCESSORIES (STANDARD)

GENIO Rigging Connector  P/N:83063252

GENIO Connector M  P/N:83063254

ACCESSORIES (OPTIONAL)

GENIO Connector XS  P/N:83063256

GENIO Connector L  P/N:83063255

APPROVALS AND CERTIFICATIONS

Conforms to.....2014/35/EU：Low Voltage Directive

Conforms to.....2014/30/EU：EMC Directive

Conforms to.....2011/65/EU：RoHS2 Directive

Conforms to.....UK SI 2016 No. 1101：The Electric Equipment (Safety) Regulations 2016

Conforms to.....UK SI 2016 No. 1091：Electromagnetic Compatibility Regulations 2016

Conforms to.....UK SI 2012 No. 3032：Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012 (RoHS2)

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