



ProfiLED

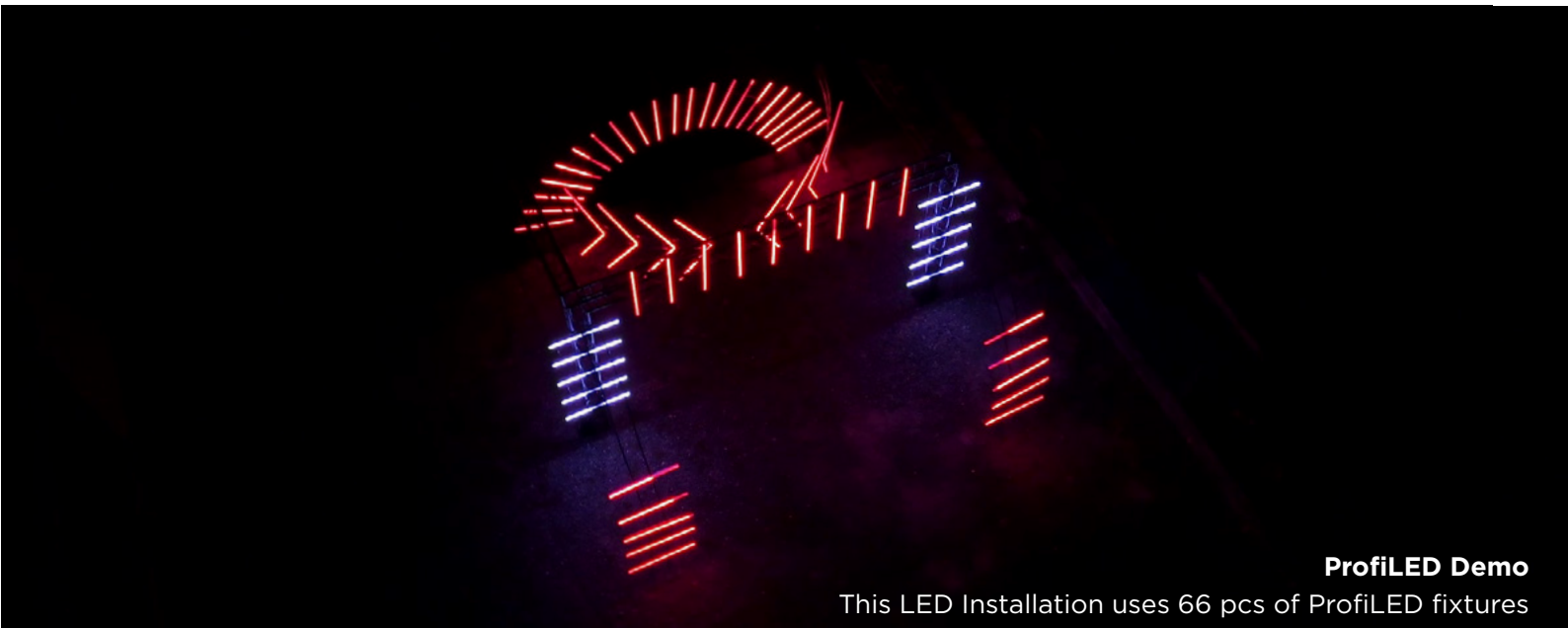
User Manual

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DEVICE INTRODUCTION



ProfiLED Demo

This LED Installation uses 66 pcs of ProfiLED fixtures

When creating installations with a large number of individually addressable LED strips or fixtures, you often face challenges with cable routing, power distribution, and controller placement. Each object typically requires its own controller output and reliable data connection, which complicates installation and increases setup time. ProfiLED was developed to simplify this process by combining LED control, power distribution, and communication into a single, compact system.

Each ProfiLED fixture connects to a powered LEC controller, which supplies both data and power through a single cable. Multiple ProfiLED bars can then be daisy-chained together, allowing you to extend the installation effortlessly while maintaining stable data transmission and consistent brightness across all units. This plug-and-play approach ensures quick setup, clean wiring, and perfect synchronization between all connected fixtures.

The durable aluminum housing ensures excellent heat dissipation and mechanical protection, while the plug-and-play interface minimizes setup time. Combined with the intuitive LED Strip Studio software, ProfiLED offers a complete, ready-made solution for creative lighting projects — from compact installations to large-scale visual environments.

DEVICE SPECIFICATION

ProfiLED

1 meter LED bar fixture

Applications

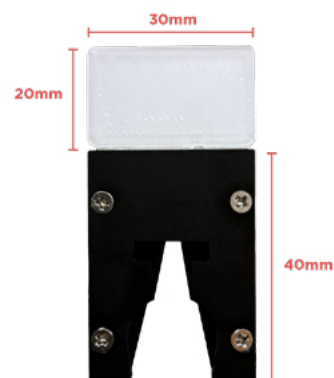
- General illumination
- Decoration illumination
- Events, lounges, clubs
- Scenography



Technical specification

Controls over	Powered LEC3 XLR
Operating voltage	24V DC
Operating current	0,5A
Rated power	12W per meter
In/Out connector	4pin M12 connector with push lock
Number of pixels	60
Color channels	3 channels: Red, Green, Blue
Typ. Dominant Wavelengths	R:620nm, G:520nm, B:465nm
Typical light output flux	400lm per meter
Grayscale	8bit
CRI	>80
View angle	150°
Operating air temperature	-20°C to 65°C
Storage air temperature	-30°C to 85°C
Relative humidity	5% to 80% non-condensing
Waterproof	YES
Ingress protection	IP68
Weight	1kg
Dimensions	60x30x1000mm
Profile material	Black Anodized aluminium

Dimensions



POWERED LEC XLR

Powered LED Ethernet Controller

Applications

- General illumination
- Decoration illumination
- Events, lounges, clubs
- Scenography



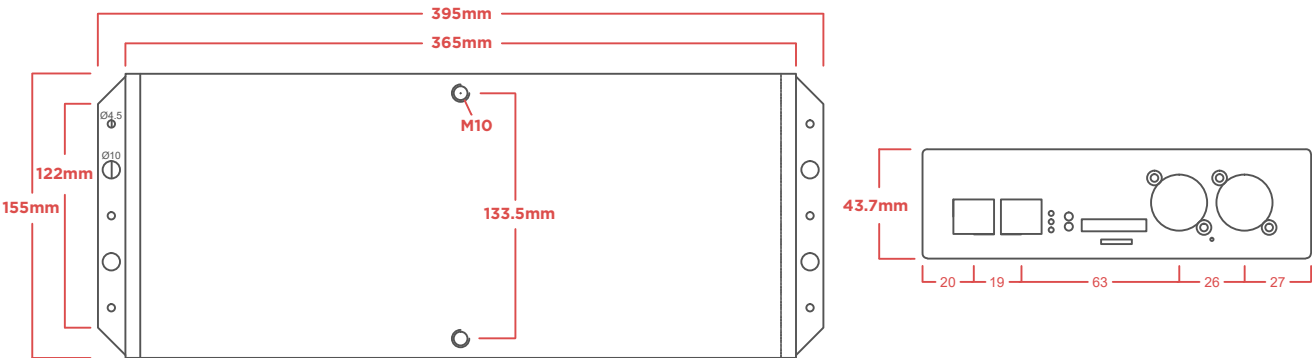
Technical specification

Controls over	LED Strip Studio software, Art-Net™, DMX, Stand-alone
Required Input	88 ~ 264 VAC/47 ~ 63Hz
Power In/Out connector	PowerCON connector 230V/20A
LED bar out connector	4x XLR 4-pin connector
DMX input connector	XLR 3-pin connector (optional 5-pin)
DMX output connector	XLR 3-pin connector (optional 5-pin)
Ethernet	2x RJ-45 connector, internal switch, 100 Mbit/sec
SD Card	Micro SD Card (FAT32, up to 32GB)
Weight	3 kg
Dimensions	395 x 155 x 44 mm

Limits

Maximum profile count	10pcs in one daisy chain string 20pcs per controller
Max. extension cable length	10m total anywhere in daisy chainstring

Dimensions



DEVICE COMPATIBILITY

The ProfiLED system is a complete modular lighting solution, consisting of:

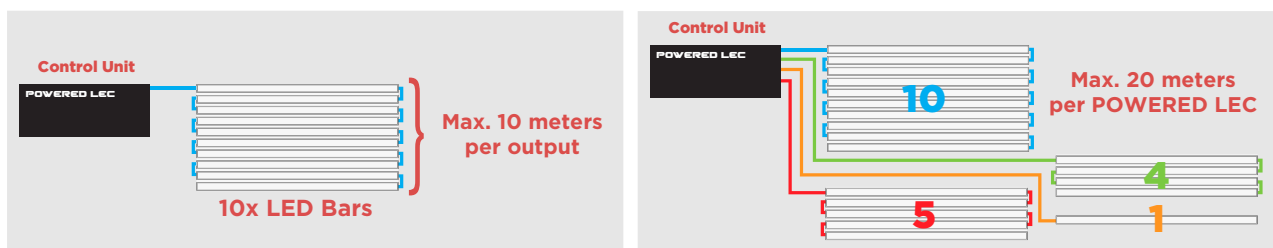
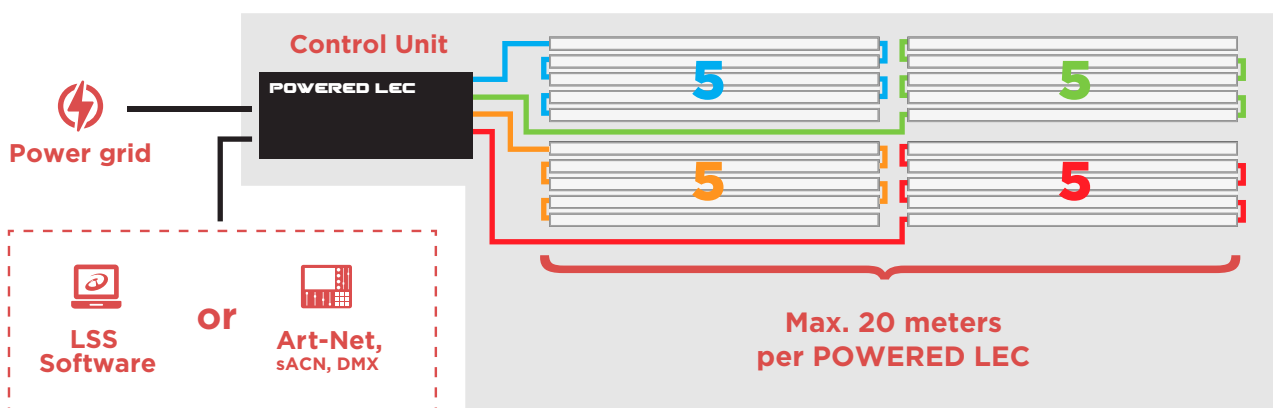
- **ProfiLED Lighting Fixtures**
- **POWERED LEC Controller**

Control and configuration are managed through the **LED Strip Studio Software**, but the POWERED LEC controller is also compatible with multiple control protocols like **Art-Net**, **sACN**, **DMX** allowing flexible system integration.

DEVICE CONNECTION

The ProfiLED system is designed to be modular and scalable, allowing users to expand installations easily without compromising performance or stability.

Each POWERED LEC controller can operate up to **20 LED Bars in total**, distributed across four XLR outputs, with a maximum of **10 bars per output line**. The total length of cabling in one daisy-chain line should **not exceed 10 meters** to ensure stable signal transmission and power delivery.



Connection scheme examples

Connecting the LED Bars is straightforward. The input cable of the first bar connects to the controller's output, and subsequent bars are linked from the output of one to the input of the next. This plug-and-play connection system allows for quick setup and rearrangement.

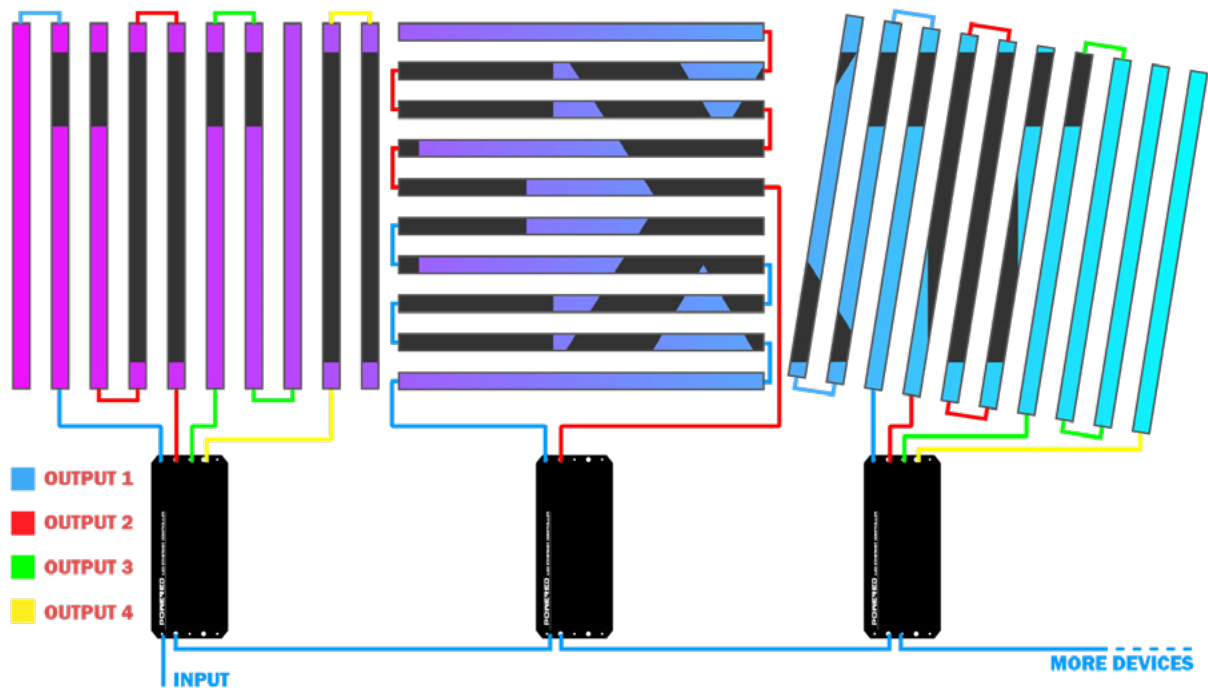
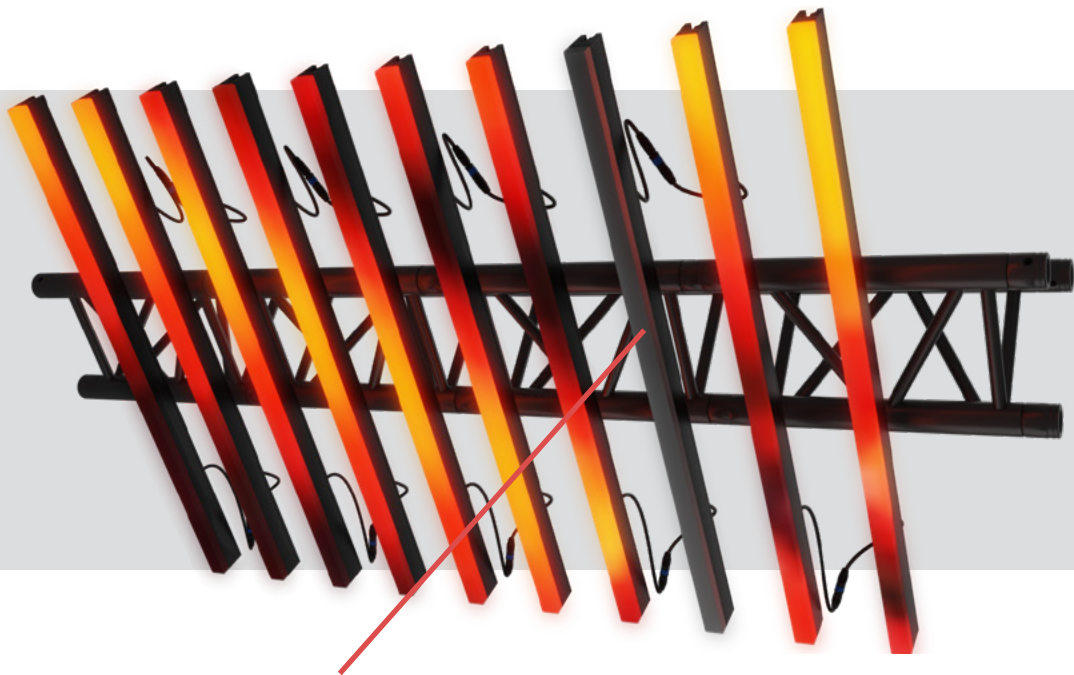


Diagram showing various possible LED output-to-fixture configurations

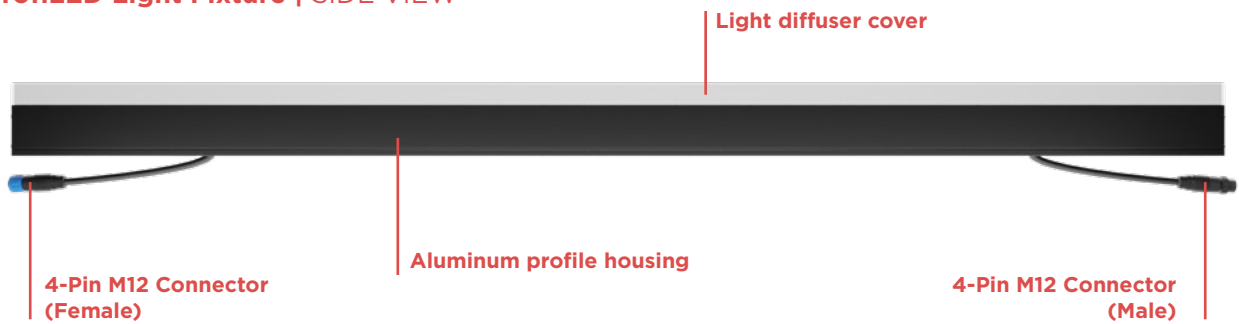


Malfunctioned LED Light Fixture

In case one LED Bar stops functioning, all bars after it will continue to operate normally, thanks to the built-in data redundancy (failsafe data caching) mechanism.

DEVICE OVERVIEW

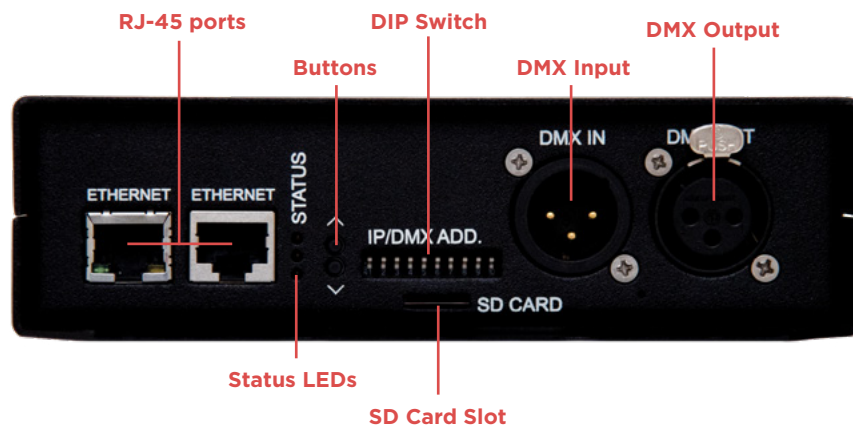
ProfiLED Light Fixture | SIDE VIEW



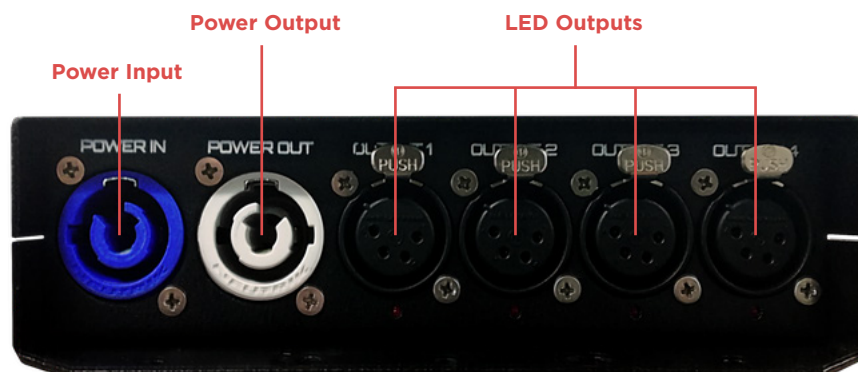
ProfiLED Light Fixture | BOTTOM VIEW



POWERED LEC | FRONT VIEW



POWERED LEC | REAR VIEW



WARRANTY

This device has been designed and made using high quality components with several quality checks and testings. Therefore we are proud to provide 5 year limited warranty for this device.

This limited warranty is valid for company or person (user) who purchased new device from us, or our authorized dealer/distributor and warranty period starts from date when user receive this device.

Limited warranty cover:

- **material defects**
- **assembly failures**
- **device malfunction**
- **this device only**

Limited warranty DO NOT cover and is void when this device:

- **has been used for different usage as specified in this manual**
- **has been opened without our permission**
- **has been modified or disassembled without our permission**
- **has been operated wrong way. E.g. over-voltage, over-current, exposed to high electromagnetic fields/discharges such as lighting strikes or ESD events with parameters way outside of HBM model**
- **has been stored or used outside of storage/operating temperature and humidity**
- **has been used in aggressive environment, corrosive environment, dusty environment or in environment with increased vibrations**
- **has been in contact with liquids**
- **has been connected wrong way. E.g. Short circuits, reverse polarity etc.**
- **has been mechanically damaged**
- **got unofficial attempts to firmware updates**

Limited warranty DO NOT cover:

- **shipping expenses to handle defective device.**
- **failures or damage of other equipments connected to this device**
- **user expenses caused by defective device**

For limited warranty claim process:

- **user must be able provide sufficient proof of purchase**
- **use email info@ledstripstudio.com with detailed description of device failure**
- **takes less than 30 days to resolve. This period starts from day we physically receive defective device (device return)**

DISPOSAL OF YOUR OLD DEVICE

This device is an electronic device, and can be categorized as hazardous waste in your country. Dispose of this device through an approved waste disposal firm or through your local waste facility. When discarding the device, comply with the rules and regulations that apply in your country. If in doubt, consult your local waste disposal facility.

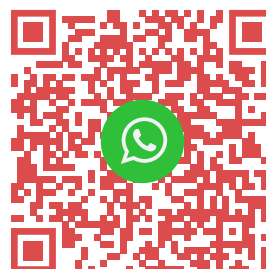
CONTACTS

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