

LITEMAT SPECTRUM (2023)

USER GUIDE



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DANGER

- Repairs must be performed by LiteGear or an authorized service agent.
- Maintenance to be performed only when identified in this user guide.
- High voltage! Risk of electric shock and fire.
- Follow all safety information and operation instructions before operating or installing this product or system.
- Not following these instructions may result in injury, death, and equipment damage.
- For use solely and exclusively as described in the instructions.
- Confirm local AC power matches the voltage and frequency range printed on the product specifications label use.
- Never use the cables for transportation. Never hang the product from its cables.
- Do not bypass or remove any safety feature of the product.

NOTICE

- LiteGear products are to be operated by qualified personnel only.
- Not intended for household use.
- Repairs to be made by qualified LiteGear technician only.
- Follow all practical safety precautions when using this product.
- Product surface can be cleaned by lightly spraying a mild detergent onto a soft cloth and wiping the product.
- Using this fixture other than described above is not permitted and can damage the product and can lead to personal injury.
- If the external flexible cable or cord of this product is damaged, it shall be replaced by a special cord or cord exclusively available from the manufacturer or an authorized service agent.

WARNING

Risk of electric shock from high humidity.

- Do not operate or expose this product to rain or moisture.
- If the product is exposed to moisture, allow unit to dry for a period of 4 hours to prevent any electrical damage from occurring to electrical components.
- Confirm all electrical connections are securely fastened to avoid electrical shorts occurring from moisture build-up on the connectors.

WARNING

Risk of fire.

- Do not operate this product if the ambient temperature exceeds 122°F (50°C).
- Do not place the product on or near heat sources.
- Do not expose product to open flames.
- Intense heat cause damage to the product. Intense heat can damage unit.
- When using in high ambient temperatures, allow the product to cool down before storing and/or transporting.

WARNING

Heavy load fixture. Risk of injury and/or damage.

- The product and all attached accessories must be secured properly when mounted above floor level.
- Local safety regulations must be followed when operating unit.
- Fastening straps and buckle system must be used to securely mount the fixture onto appropriate truss system
- Disconnect all cables before storing and/or transporting unit.

Introduction

Welcome to the next generation of LiteMat Spectrum. The re-engineered LiteMat, powered by Spectrum technology, offers improved dimming performance, powerful companion dimmers, up to 8 pixel-mappable large-format pixels, and buttery smooth low-end dimming. And for the first time, Spectrum color technology is being brought to a LiteMat 8. This full-color light source combines high-quality color rendition and precision control in one sleek, easy-to-use package. The LiteDimmer Spectrum AC/DC 200 & 400 brings advanced electronics, Ethernet communication, and AC or DC operation in a compact unit. Designed to be rigid, lightweight, ultra-thin, and easy to rig, the versatile LiteMat Spectrum is the go-to lighting solution for stage, studio, or location lighting setups.

Included in the Box

- LiteMat Spectrum (2023)

Additional Accessories

- LiteDimmer Spectrum AC/DC 200 or LiteDimmer Spectrum AC/DC 400
- LiteMat Full Diffuser
- LiteMat Half Diffuser
- LiteMat Quarter Diffuser
- LiteMat PolySkirt
- LiteMat Parasquare Louver
- PDX Cable, 25 ft.
- kMount
- LiteMat KitBag

Features

Smoother Low-End Dimming

New electronics enable advanced, even dimming to zero while maintaining the color temperature.

Pixelization

Individual light engines, also known as large-format pixels, allow for video content to be displayed on a pixel-mapped LiteMat Spectrum, or for the creation of a subtle CCT gradient.

Robust Design

Upgraded construction increases the strength and durability of the LiteMat allowing it to withstand the harsh conditions of set life.

Precision-Calibrated Electronics

Improved calibration in LiteDimmer Spectrum electronics ensures consistent performance across the Spectrum family of products.

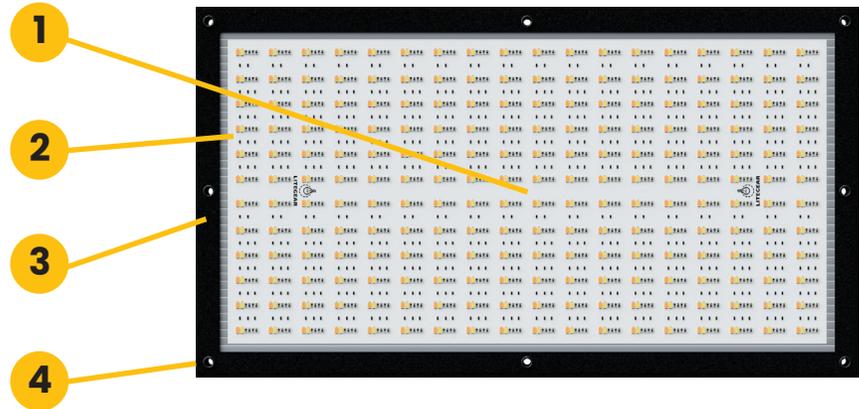
Updatable Pixel driver firmware

The ability to install the latest firmware keeps your LiteMat Spectrum running smoothly with improved functionality and performance.

LiteMat Spectrum 1 (2023) Overview

Fixture – Front View

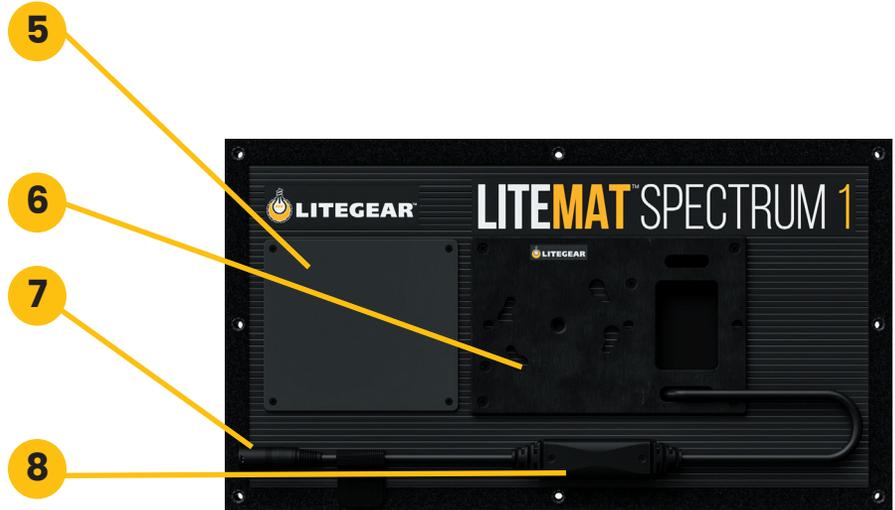
1. Spectrum Light Engine
2. Protective Clear Film
3. Velcro Border
4. Mounting Eyelets



LiteMat Spectrum 1 (2023) Overview

Fixture - Back View

- 5. Pixel Control Cover
- 6. Mount Plate
- 7. PDX Connector
- 8. Inline Fuse Block

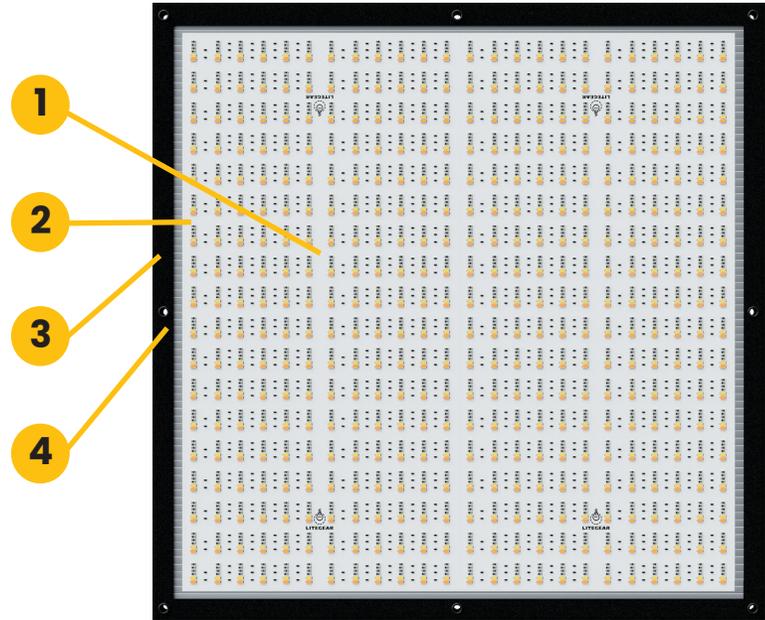


LiteMat Spectrum 2 (2023) Overview

Fixture – Front View

1. Spectrum Light Engine
2. Protective Clear Film
3. Velcro Border
4. Mounting Eyelets

□



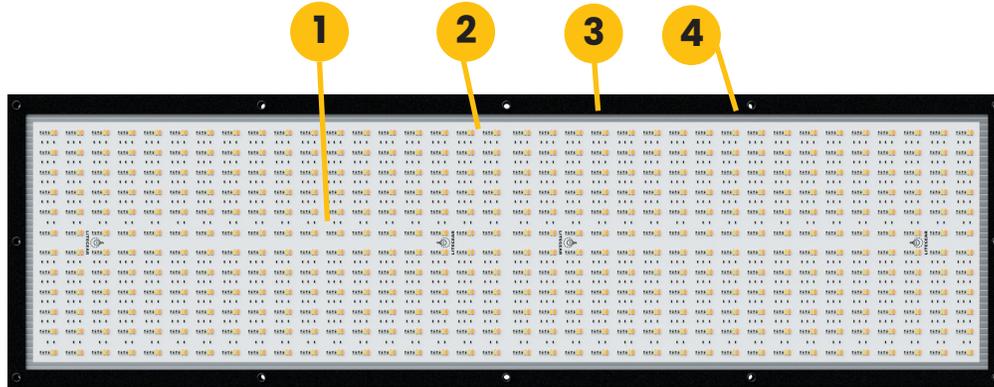
- 5. Pixel Control Cover
- 6. Mount Plate
- 7. PDX Connector
- 8. Inline Fuse Block



LiteMat Spectrum 2L (2023) Overview

Fixture – Front View

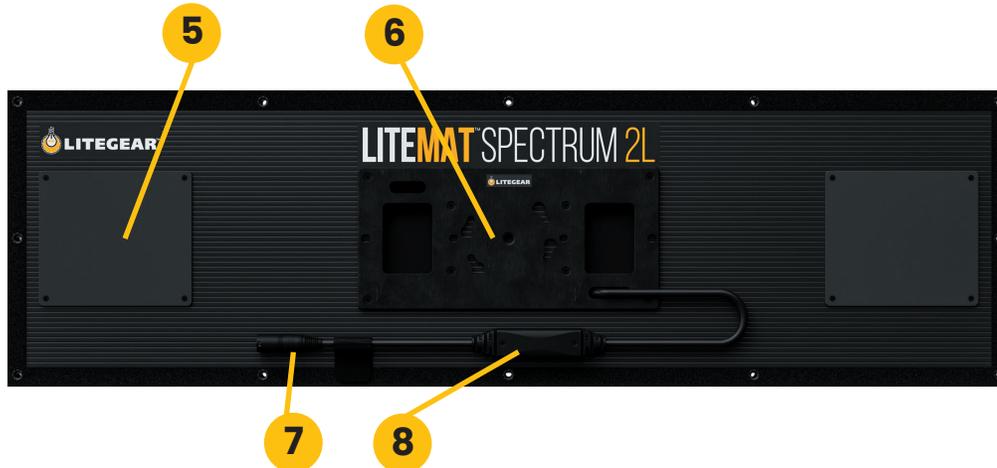
1. Spectrum Light Engine
2. Protective Clear Film
3. Velcro Border
4. Mounting Eyelets



LiteMat Spectrum 2L (2023) Overview

Fixture – Back View

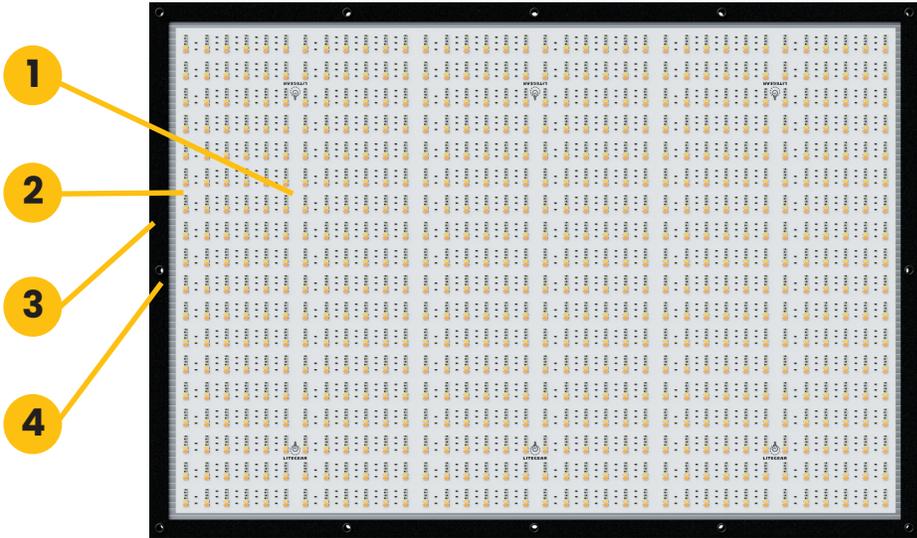
- 5. Pixel Control Cover
- 6. Mount Plate
- 7. PDX Connector
- 8. Inline Fuse Block



LiteMat Spectrum 3 (2023) Overview

Fixture – Front View

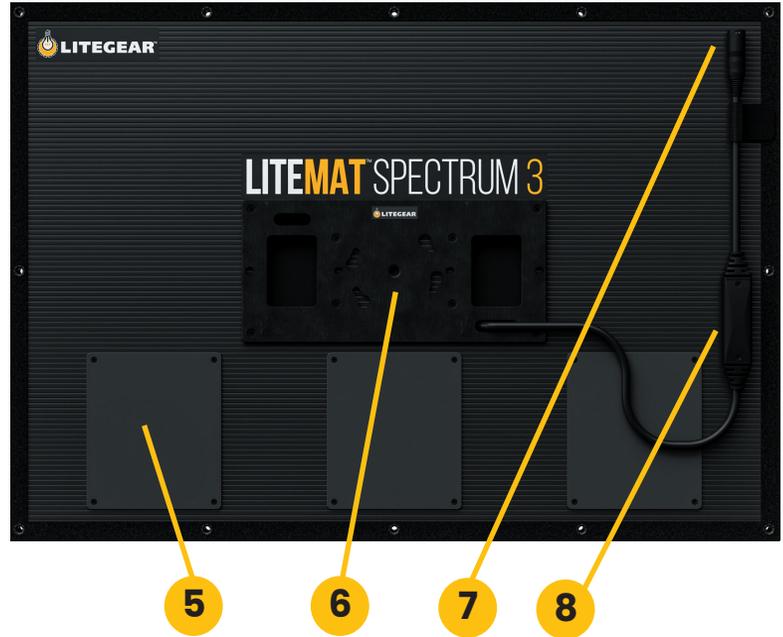
1. Spectrum Light Engine
2. Protective Clear Film
3. Velcro Border
4. Mounting Eyelets



LiteMat Spectrum 3 (2023) Overview

Fixture – Back View

- 5. Pixel Control Cover
- 6. Mount Plate
- 7. PDX Connector
- 8. Inline Fuse Block

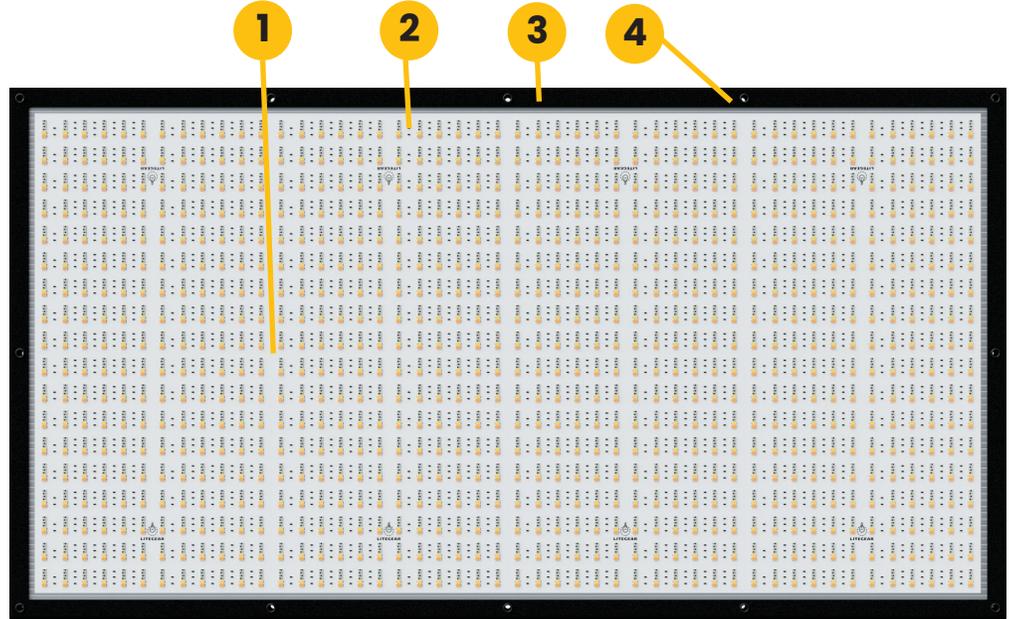


LiteMat Spectrum 4 (2023) Overview

Fixture – Front View

1. Spectrum Light Engine
2. Protective Clear Film
3. Velcro Border
4. Mounting Eyelets

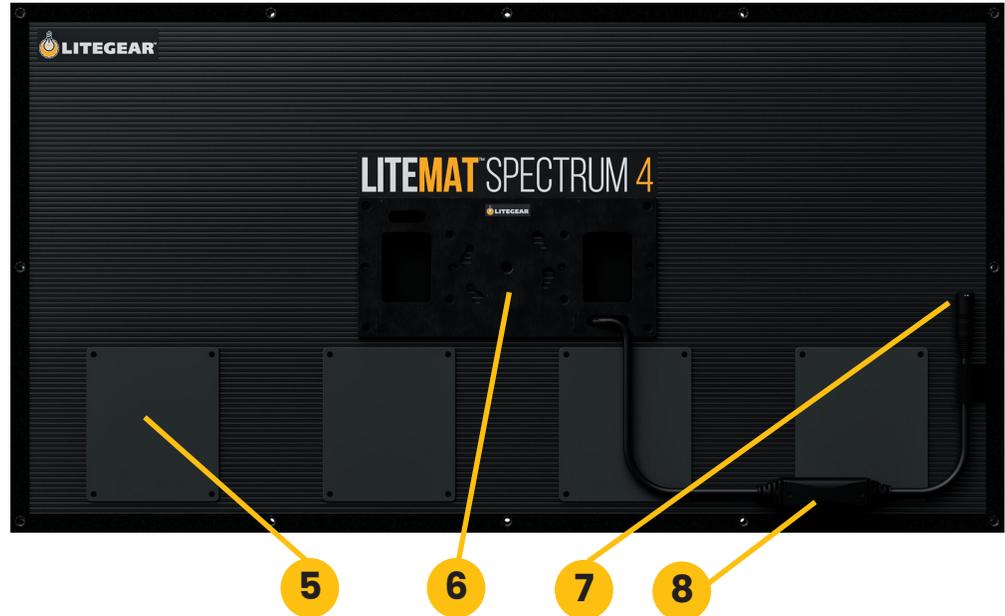
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LiteMat Spectrum 4 (2023) Overview

Fixture - Back View

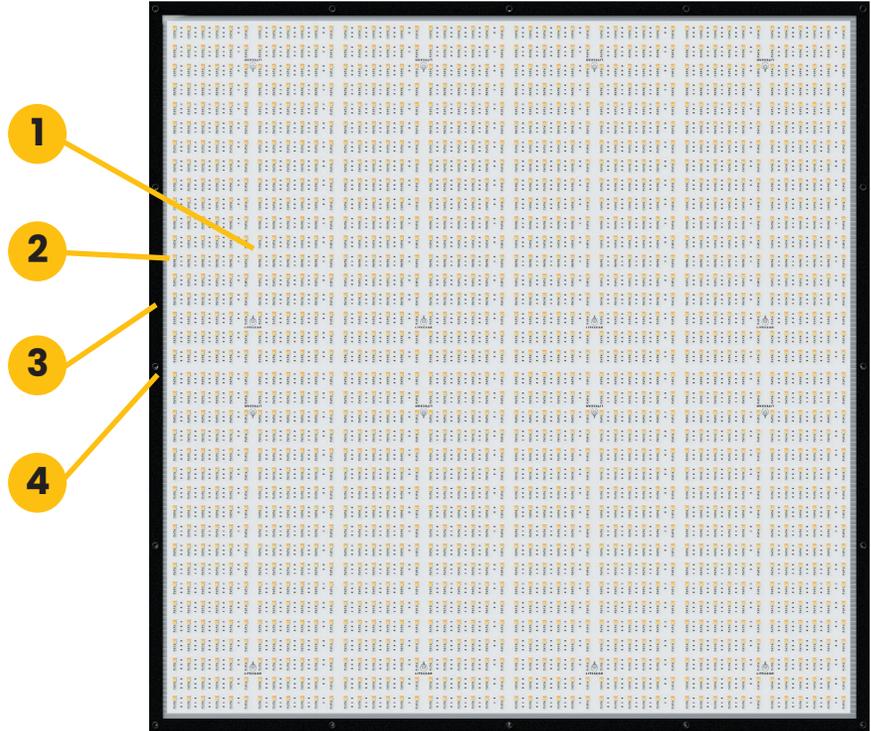
- 5. Pixel Control Cover
- 6. Mount Plate
- 7. PDX Connector
- 8. Inline Fuse Block



LiteMat Spectrum 8 (2023) Overview

Fixture – Front View

1. Spectrum Light Engine
2. Protective Clear Film
3. Velcro Border
4. Mounting Eyelets



LiteMat Spectrum 8 (2023) Overview

Fixture - Back View

- 5. Pixel Control Cover
- 6. Mount Plate
- 7. PDX Connector
- 8. Inline Fuse Block



Overview

Connections

Best practices for connecting to and disconnecting from the **PDX connector**.

1. Toggle the Power Switch to the OFF position.
2. Insert the cable connector into the PDX OUT port until the connector locks in place.
3. Toggle the Power Switch to the ON position.

Best practices for connecting to and disconnecting from the **Battery connector**.

1. Toggle the Power Switch to the OFF position.
2. Insert the cable connector into the BATTERY IN port until the connector locks in place.
3. Toggle the Power Switch to the ON position.

NOTE: The PDX and Battery connectors are not intended to be connected and disconnected when the dimmer is powered.

For more information, please see the LiteDimmer Spectrum AC/DC 200 & 400 User Guide.



Dimmer Installation

LiteDimmer Stand Mount

The LiteDimmer Stand Mount provides a secure attachment of the LiteDimmer Spectrum AC/DC 200 or the LiteDimmer Spectrum AC/DC 400 to a light stand. A k-Mount enables quick attachment to the AC600, while the Super Clamp affixes firmly to the stand stem.

1. Attach LiteDimmer Stand Mount to truss and securely tighten.
2. Align the LiteDimmer with the receiver pins in the LiteDimmer Stand mount.
3. Rotate the LiteDimmer until the locking pin clicks and locks into place into place.
4. Attach the required power and data cables.



Accessories

Light Control

LiteMat PolySkirt: A multi-wall polypropylene (coroplast) skirt that helps control the light output by limiting the amount of light exiting the fixture beyond the 120 degree primary field. The PolySkirt is assembled using shock-cord and mounts to the LiteMat head with Velcro. The PolySkirt also serves as an accessory holder as all remaining accessories require its use.

LiteMat Diffuser: Woven fabric “diffusers” are a typically used item for this type of lighting system. LiteMat Diffusers are made in industry- standard varieties and are assembled by stitching “hook” Velcro around their borders that mate with the loop on the skirt. Presently, there are 3 densities grid-cloth (full, half, and quarter).

LiteMat Parasquare Louver: An aluminized plastic molded sheet with parabolic elements within each square cell that provides desirable light output with refined edges and an even field. Velcro One-Wrap die cut strips are attached to the edges to serve as a mounting method to the required PolySkirt.

LiteMat SNAPGRID®: Mount on the front of a PolySkirt® with diffusion to control the spread of the light. Taking full advantage of DoPchoice’s patented instant set-up and self-tightening internal SNAPFRAMES, a SNAPGRID® practically snaps out of its compact pouch ready to easily attach to your LiteMat.

LiteMat Polygrid: A polycarbonate grid available in three different angles with circular cells that eliminate peripheral light and is incredibly lightweight. Velcro® strips are attached to the edges to serve as a mounting mechanism to the PolySkirt.

Accessories

Cables / Mounting / Transportation

PDX Cable: Used to connect the LiteMat Spectrum fixture to the LiteDimmer Spectrum. Available in 25 ft (7.6 m) or 50 ft (15.2 m) lengths.

LiteMount: Is based on the RAM® ball-and-socket mounting system – a trusted, durable, and reliable mounting system with many ancillary accessories.

LiteMat KitBag: Holds the LiteMat fixture as well as the accessories including the PolySkirt, Parasquare® Louver, Diffusers, LiteDimmer, power supply, Center Mount, and cables. This bag is specifically designed to protect your gear from “everyday” damage due to environmental conditions.

LiteMat Spectrum 1 (2023) Specifications

Technical Specifications

Beam Angle: 50° HPA

Input Voltage: 48V DC

Input Current: 1.04A

Total Power: 50W Nominal

Color Temperature Range: 2,000K to 11,000K

Tint Control: Full plus and minus green adjustment

Dimming Range: 0 to 100% Continuous (When paired with a compatible LiteGear Dimmer)

Colored Light: 6-color, wide gamut hue and saturation control

Estimated LED Lifetime: 50,000 hrs

Power & Data Connector: PDX

Pixels: 1 large format pixel

IP Rating: IP20

Max Operating Temp: 122°F (50°C)

Weight: 4.7 lbs (2.1 kg)

Color Rendition: CRI Average: ≥ 95

TLCI Average: ≥ 95

Total LED Quantity: 2,592

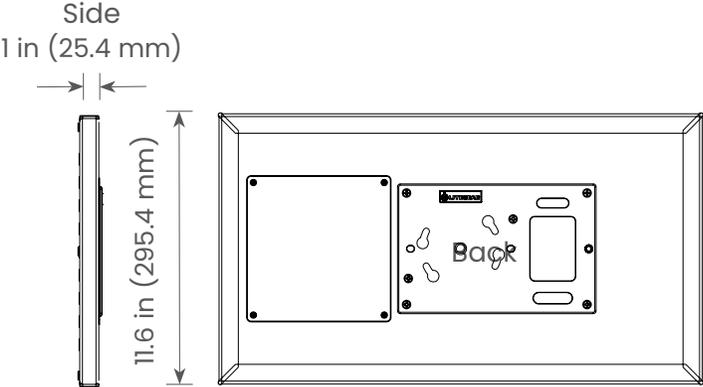
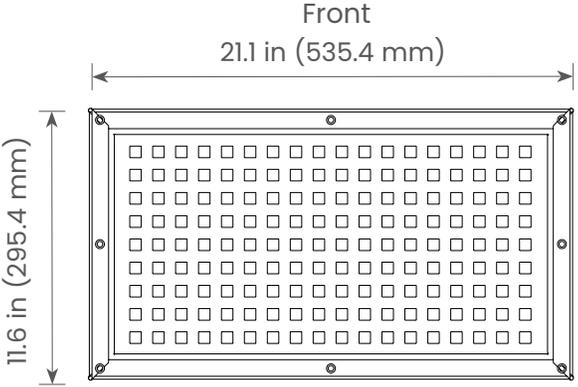
Dimensions: Height: 11.6 in. (295.4 mm), Width: 21.1 in. (535.4 mm), Depth: 1 in. (25.4 mm)

Mounting: kMount

Certifications: ETL, CE, UKCA, FCC (certification pending)

LiteMat Spectrum 1 (2023) Specifications

Dimensions



LiteMat Spectrum 2 (2023) Specifications

Technical Specifications

Beam Angle: 56° HPA

Input Voltage: 48V DC

Input Current: 2.08A

Total Power: 100W Nominal

Color Temperature Range: 2,000K to 11,000K

Tint Control: Full plus and minus green adjustment

Dimming Range: 0 to 100% Continuous (When paired with a compatible LiteGear Dimmer)

Colored Light: 6-color, wide gamut hue and saturation control

Estimated LED Lifetime: 50,000 hrs

Power & Data Connector: PDX

Pixels: 2 large format pixels

IP Rating: IP20

Max Operating Temp: 122°F (50°C)

Weight: 7.19 lbs (3.3 kg)

Color Rendition: CRI Average: ≥ 95

TLCI Average: ≥ 95

Total LED Quantity: 2,592

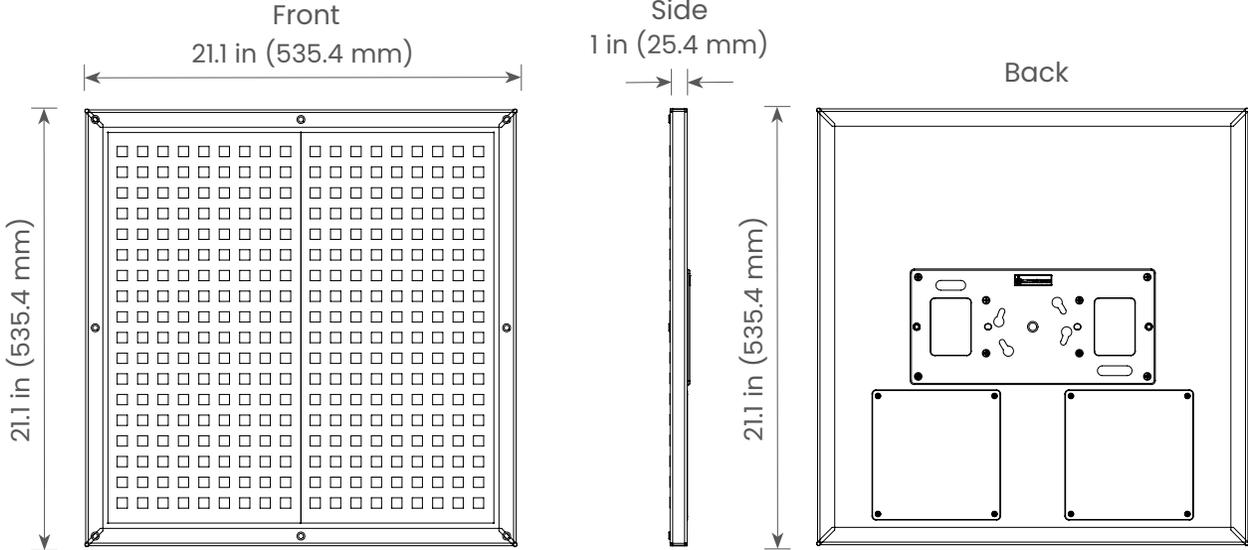
Dimensions: Height: 21.1 in. (535.4 mm), Width: 21.1 in. (535.4 mm), Depth: 1 in. (25.4 mm)

Mounting: kMount

Certifications: ETL, CE, UKCA, FCC (certification pending)

LiteMat Spectrum 2 (2023) Specifications

Dimensions



LiteMat Spectrum 2L (2023) Specifications

Technical Specifications

Beam Angle: 55° HPA

Input Voltage: 48V DC

Input Current: 2.08A

Total Power: 100W Nominal

Color Temperature Range: 2,000K to 11,000K

Tint Control: Full plus and minus green adjustment

Dimming Range: 0 to 100% Continuous (When paired with a compatible LiteGear Dimmer)

Colored Light: 6-color, wide gamut hue and saturation control

Estimated LED Lifetime: 50,000 hrs

Power & Data Connector: PDX

Pixels: 2 large format pixels

IP Rating: IP20

Max Operating Temp: 122°F (50°C)

Weight: 7.53 lbs (3.4 kg)

Color Rendition:

CRI Average: ≥ 95

TLCI Average: ≥ 95

Total LED Quantity: 2,592

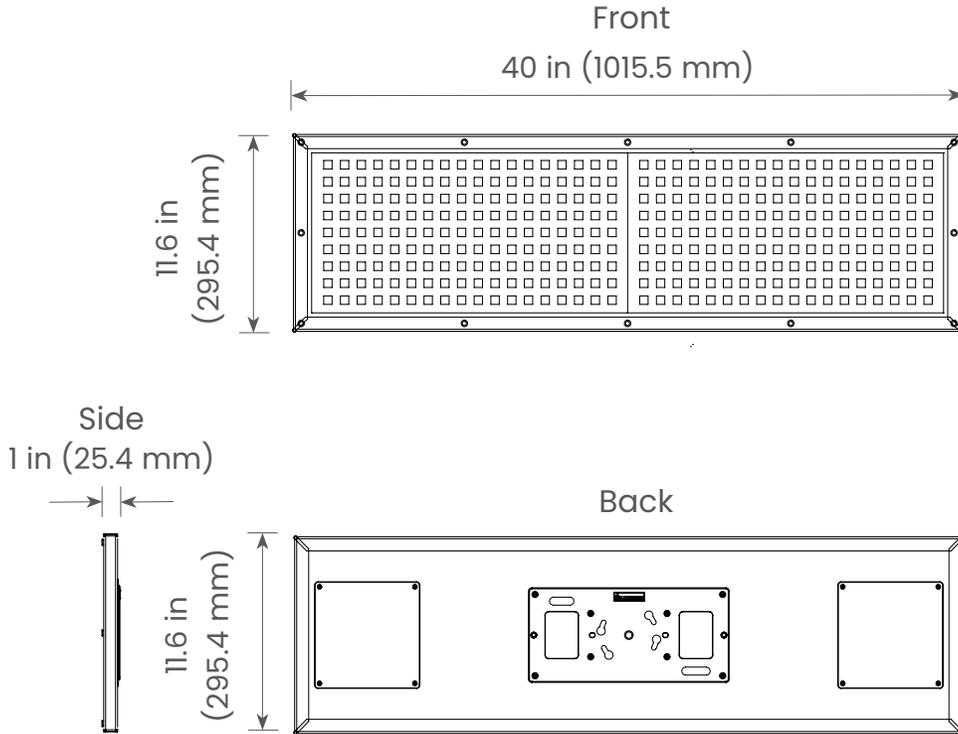
Dimensions: Height: 11.6 in. (295.4 mm), Width: 40 in. (1016 mm), Depth: 1 in. (25.4 mm)

Mounting: kMount

Certifications: ETL, CE, UKCA, FCC (certification pending)

LiteMat Spectrum 2L (2023) Specifications

Dimensions



LiteMat Spectrum 3 (2023) Specifications

Technical Specifications

Beam Angle: 55° HPA

Input Voltage: 48V DC

Input Current: 3.13A

Total Power: 150W Nominal

Color Temperature Range: 2,000K to 11,000K

Tint Control: Full plus and minus green adjustment

Dimming Range: 0 to 100% Continuous (When paired with a compatible LiteGear Dimmer)

Colored Light: 6-color, wide gamut hue and saturation control

Estimated LED Lifetime: 50,000 hrs

Power & Data Connector: PDX

Pixels: 3 large format pixels

IP Rating: IP20

Max Operating Temp: 122°F (50°C)

Weight: 9.4 lbs (4.3 kg)

Color Rendition:

CRI Average: ≥ 95

TLCI Average: ≥ 95

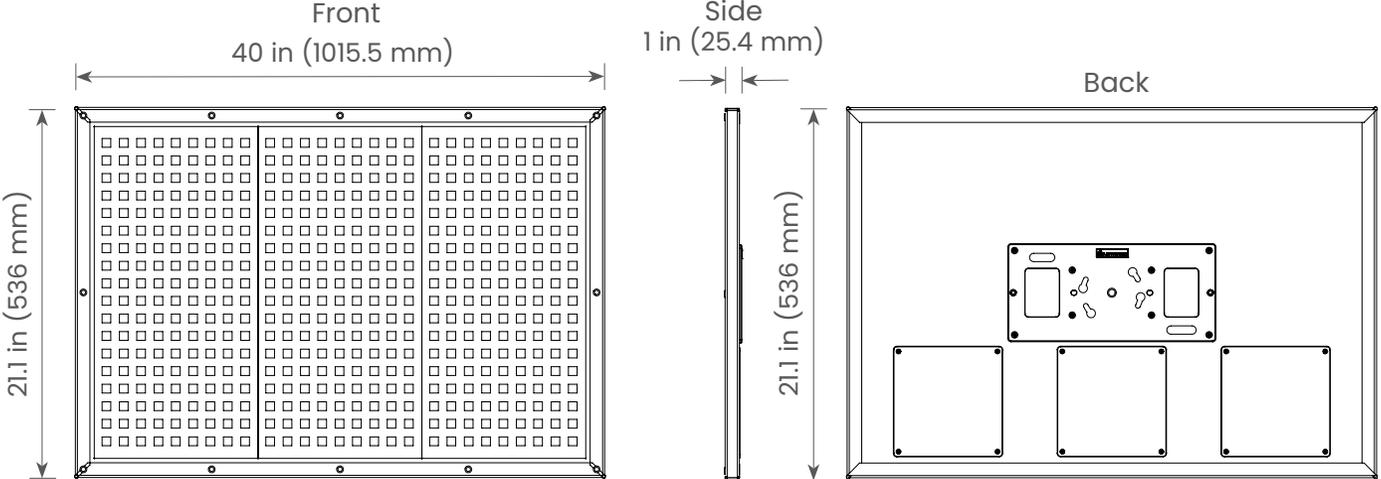
Total LED Quantity: 3888

Dimensions: Height: 21.1 in. (536 mm), Width: 30.5 in. (775.7 mm), Depth: 1 in. (25.4 mm)

Mounting: kMount

Certifications: ETL, CE, UKCA, FCC (certification pending)

LiteMat Spectrum 3 (2023) Specifications



LiteMat Spectrum 4 (2023) Specifications

Technical Specifications

Beam Angle: 53° HPA

Input Voltage: 48V DC

Input Current: 4.16A

Total Power: 200W Nominal

Color Temperature Range: 2,000K to 11,000K

Tint Control: Full plus and minus green adjustment

Dimming Range: 0 to 100% Continuous (When paired with a compatible LiteGear Dimmer)

Colored Light: 6-color, wide gamut hue and saturation control

Estimated LED Lifetime: 50,000 hrs

Power & Data Connector: PDX

Pixels: 4 large format pixels

IP Rating: IP20

Max Operating Temp: 122°F (50°C)

Weight: 11.9 lbs (5.4 kg)

Color Rendition: CRI Average: ≥ 95

TLCI Average: ≥ 95

Total LED Quantity: 5,184

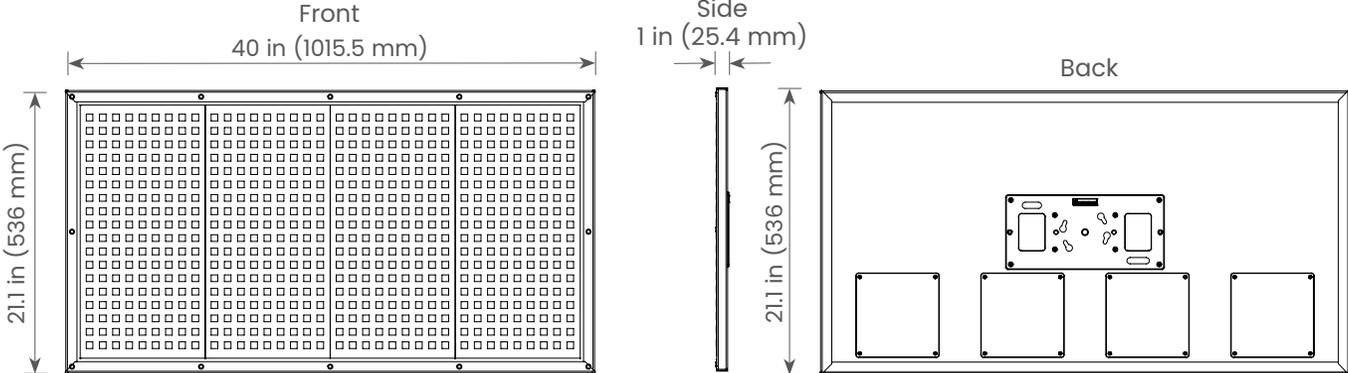
Dimensions: Height: 21.1 in. (536 mm), Width: 40 in. (1015.5 mm), Depth: 1 in. (25.4 mm)

Mounting: kMount

Certifications: ETL, CE, UKCA, FCC (certification pending)

LiteMat Spectrum 4 (2023) Specifications

Dimensions



LiteMat Spectrum 8 (2023) Specifications

Technical Specifications

Beam Angle: 53° HPA

Input Voltage: 48V DC

Input Current: 8.64A

Total Power: 400W Nominal

Color Temperature Range: 2,000K to 11,000K

Tint Control: Full plus and minus green adjustment

Dimming Range: 0 to 100% Continuous (When paired with a compatible LiteGear Dimmer)

Colored Light: 6-color, wide gamut hue and saturation control

Estimated LED Lifetime: 50,000 hrs

Power & Data Connector: PDX

Pixels: 8 large format pixels

IP Rating: IP20

Max Operating Temp: 122°F (50°C)

Weight: 21.1 lbs (9.6 kg)

Color Rendition:

CRI Average: ≥ 95

TLCI Average: ≥ 95

Total LED Quantity: 5,184

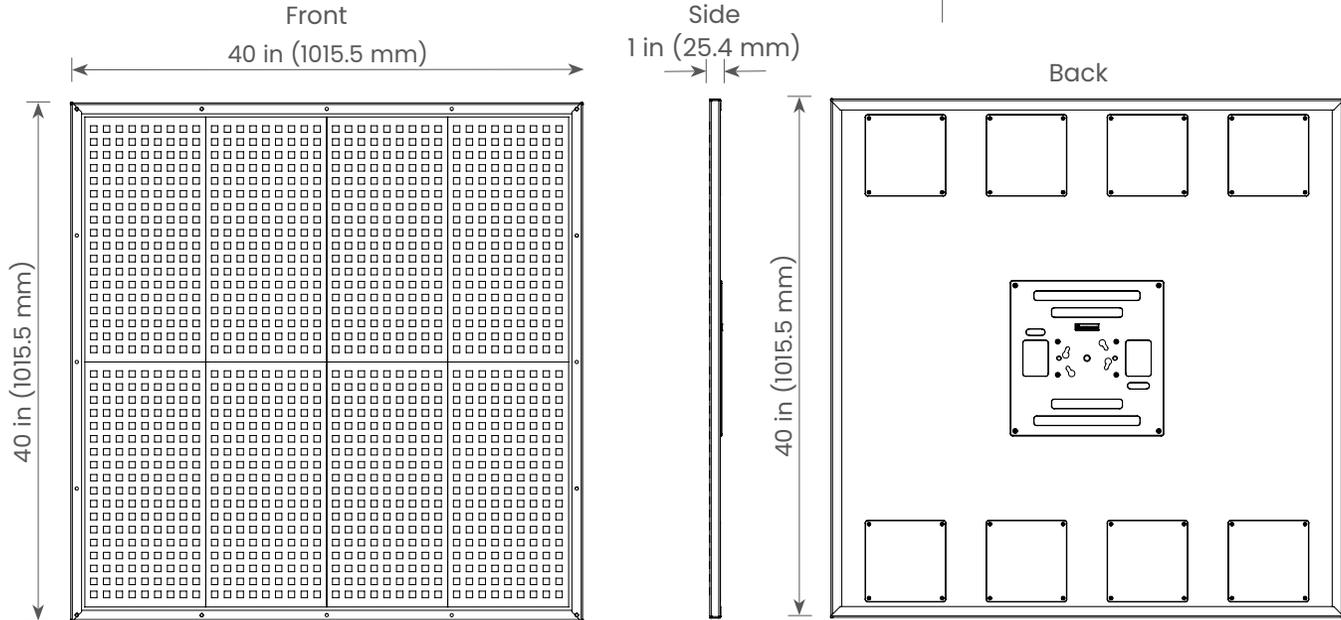
Dimensions: Height: 40 in. (1015.5 mm), Width: 40 in. (1015.5 mm), Depth: 1 in. (25.4 mm)

Mounting: LiteMount, Extra Large

Certifications: ETL, CE, UKCA, FCC (certification pending)

LiteMat Spectrum 8 (2023) Specifications

Dimensions



Certifications



Intertek
5023376

**CONFORMS TO UL STD1573
CERTIFIED TO CSA STD C22.2#166**



**CONTAINS FCC ID
XRSTIMOMWAN209
MODEL: 800-8107**

**THIS DEVICE COMPLIES WITH PART 15
OF THE FCC RULES. OPERATION IS
SUBJECT TO THE FOLLOWING
CONDITIONS: (1) THIS DEVICE MAY
NOT CAUSE HARMFUL INTERFERENCE,
AND (2) THIS DEVICE MUST ACCEPT
ANY INTERFERENCE RECEIVED,
INCLUDING INTERFERENCE THAT MAY
CAUSE UNDESIRED OPERATION.**

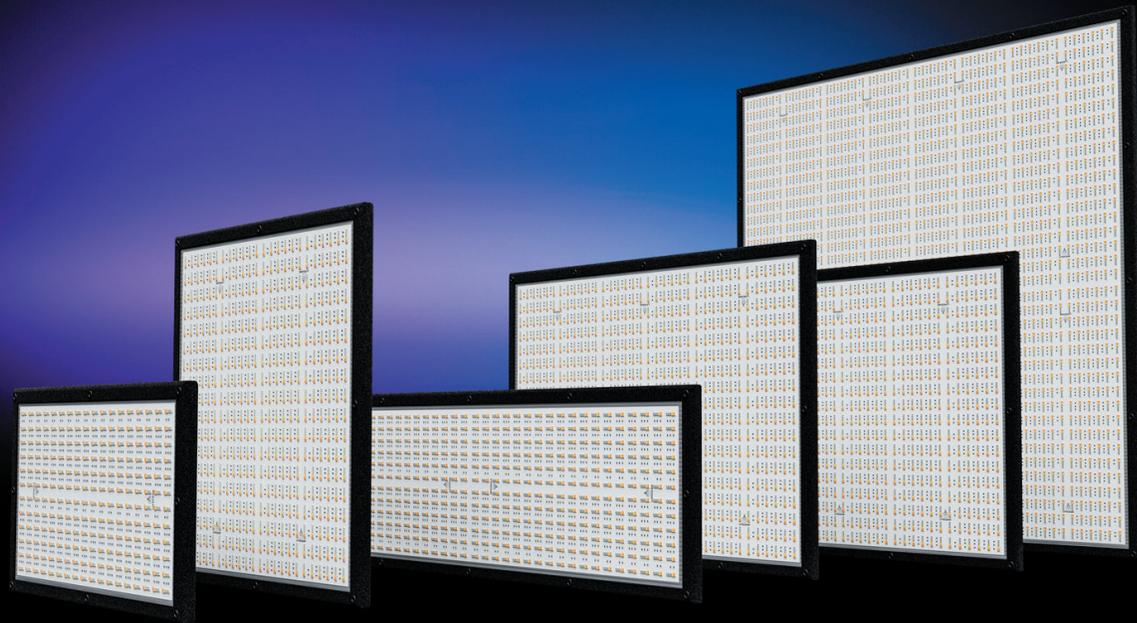
Maintenance

1. Before and after use, check for damage including but not limited to; missing or broken buckles, ripped or torn fabric, frayed or damaged straps, frayed or cut cables, or damaged LED light panels. Please contact an authorized service center for repairs.
2. Product surface can be cleaned by lightly spraying a mild detergent onto a soft cloth and wiping the product.

Help

Need Assistance

You can always email us at info@litegear.com or for immediate assistance please call LiteGear customer experience at (818) 358-8542 Monday to Friday from 8:00 am to 4:30 pm PST.



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For additional information on your LiteMat Spectrum (2023), visit us at litegear.com/litemat-spectrum