Lunovas LumenTile Lighting Panel System Installation Instructions
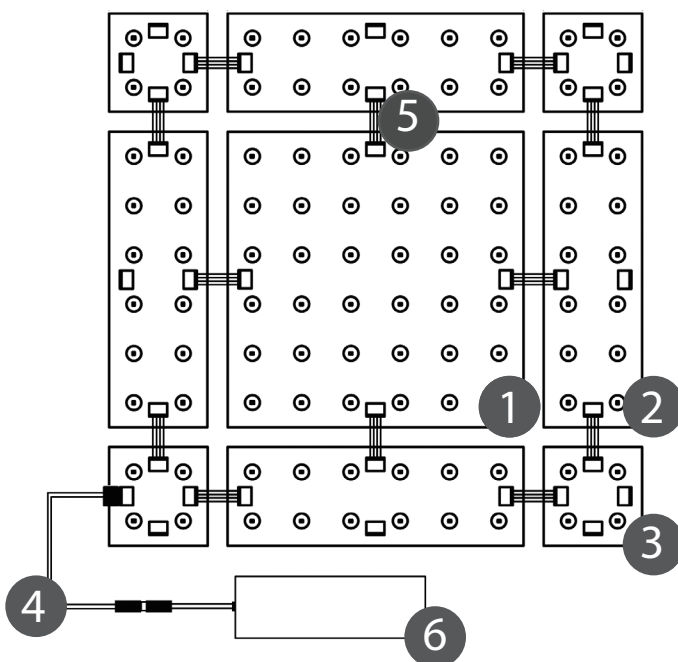
1.0 Important Installation Notes

Please read instructions prior to installation
Installation must be completed by a qualified electrician in accordance with all national and local electrical and construction codes.

- Ensure power is off prior to installation.
- LumenTile products are dry location rated only.
- LumenTile must be powered by a Lunovas approved constant voltage LED Driver.
- Using a non-approved power source could damage the system and will void the warranty.

2.0 System Overview

1	300mm x 300mm LumenTile
2	300mm x 100mm LumenTile
3	100mm x 100mm LumenTile
4	Starter Cable
5	LumenTile Connector
6	LED Driver

3.0 System Contents

A. LumenTiles	Packaged in bubble wrap, each contains 1–10 pieces.
B. Double Jumper	Packaged in bag(s), sufficient wire jumpers to connect each LumenTile to two (2) adjacent tiles.
C. LED Drivers	Packaged in box(es)
D. Starter Cables	5' length shielded cables with a 4 pin connector at one termination for connection to the LumenTile, and a DC5521 connector at the other termination for connection directly to the LED driver or to an Extension Cable.

4.0 Preparation & Handling

The surface for mounting the LumenTiles needs to be flat, clean, and strong enough to hold all LumenTiles.

Avoid handling, scraping, rubbing or wiping the front surface of the LumenTile. Although the LEDs and drive components are bonded strongly to the plastic base material, it is possible to remove them or damage the electrical connection if not handled with care.

As with all electronics, tiles are susceptible to damage from Electrostatic Discharge (ESD). Where possible avoid situations that are conducive to creating static.

5.0 System Layout

Before starting installation, carefully consider your system layout (refer to project shop drawings if available):

• No more than twelve (12) 300X300 tiles or thirty-six (36) 300x100 tiles or thirty-six (36) 100x100 tiles may be connected in series (e.g. in a single "run").

• Each 300mmx300mm LumenTile illuminates a 12"x12" (1sqft) area. Depends on the actual size of whole lighting area, you could give maximum of 5mm gap between the tiles.

- LumenTiles are joined electrically by attaching the 4 pin Double Jumper.

- See following table for the maximum number of tiles (of each size) that can be connected for different power LED driver. You can mix different sized tiles in one circuit, but always ensure that the power connected is less than 90% of the maximum load of the LED.

LED Driver Output Power	90W Driver
300x300 (7.2W)	10 Tiles
300x300 (3.9W)	18 Tiles
300x300 (2.0W)	30 Tiles
300x100 (2.4W)	30 Tiles
300x100 (1.4W)	36 Tiles
300x100 (0.8W)	36 Tiles
100x100 (1.2W)	36 Tiles
100x100 (0.7W)	36 Tiles
100x100 (0.5W)	36 Tiles

- Do not connect more than one LED Driver to one electrical circuit. An electrical circuit includes any tile that are in electrical contact with each other. Circuits must be 90W maximum.
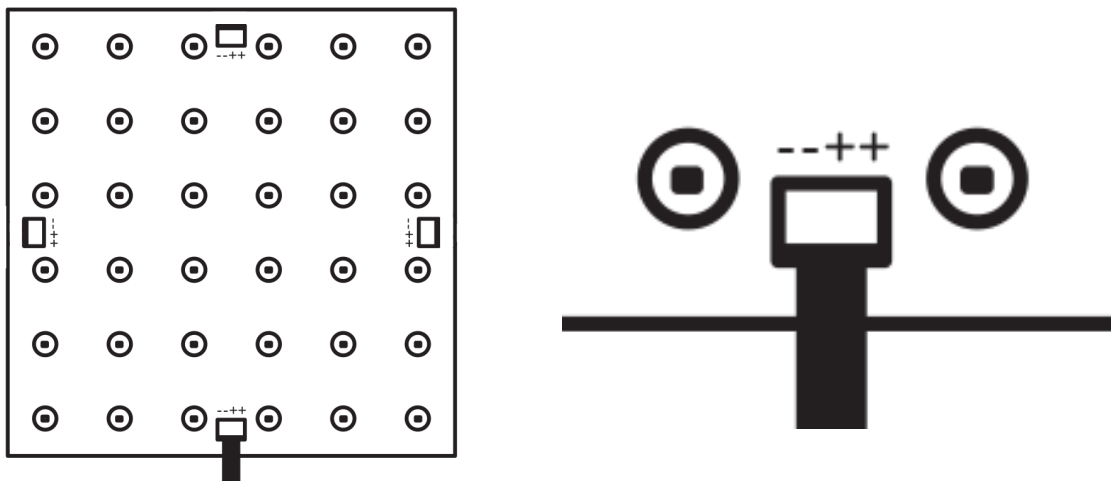
6.0 Mounting Tile

LumenTile Mounting Options:

1. Mount by screwing the 4 corners of each LumenTile, choose appropriate screw type based on mounting surface, the recommended screw size is M3 x 8mm.

2. Apply 4 strips of double-sided foam tape edge to edge, evenly separated on the back of each LumenTile. Use 3M 4032, 3/4" wide double-sided foam tape.

Mount the first LumenTile:
Begin with input end of a run (one circuit), position the first LumenTile where required. Connect Starter Cable to the tile with correct polarity, this decides the orientation of first tile (As there is one connector on each side, there are 2 orientations that work). Fasten the sheet to the mounting surface with screws or with double-sided tape.
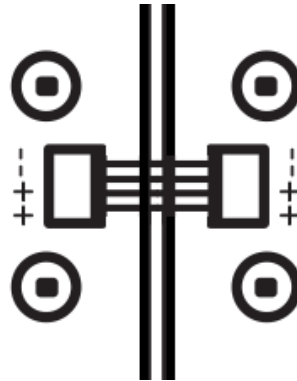

Please note that the starter cable must be connected to an orientation that shows "- - + +".

Mounting the next LumenTile:

Align the next LumenTile beside the first tile, make sure the polarity of connector is correct with all adjacent tiles and fasten the tile. Make the electrical connection between the two LumenTiles with double jumper.
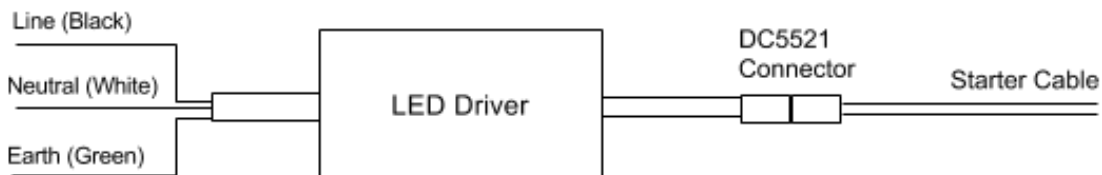
Repeat this step for all remaining tiles.

TIP - After deciding the layout, draw grids on the mounting surface for LumenTile locations, it helps with aligning the tiles.
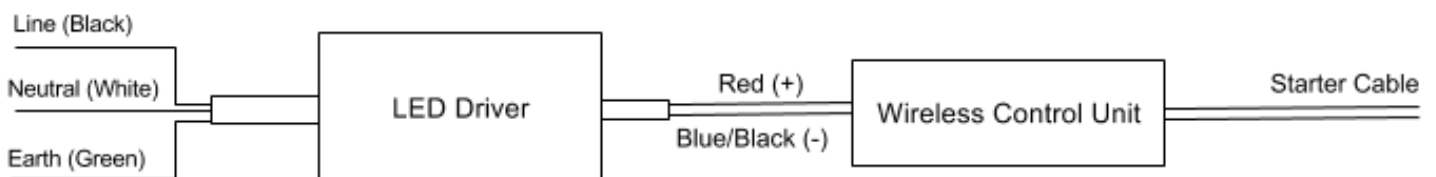
TIP - After deciding the layout, draw grids on the mounting surface for LumenTile locations, it helps with aligning the tiles.

7.0 Wiring to LED Driver

Line (Black)

Neutral (White)

Earth (Green)

LED Driver

DC5521 Connector

Starter Cable

Wiring to LED Driver with Wireless Control Unit:

Line (Black)

Neutral (White)

Earth (Green)

LED Driver

Red (+)

Blue/Black (-)

Wireless Control Unit

Starter Cable

WARNING - DO NOT CONNECT the AC power directly to the LumenTile or Starter Cable.

When wiring with Wireless Control Unit, cut the Starter Cable and LED Driver output, strip the termination, and connect to the indicated terminals on the Wireless Control Unit.

8.0 Product Support

Contact Lunovas Technical Support at:
Email: support@lunovas.com
Phone: (1)778-308-4038

9.0 Warranty

Lunovas warrants that the products manufactured, distributed or sold by it will: 1. Be free of any claim of ownership by third parties. 2. Be conforming to the specifications and free from defects in materials and workmanship under normal use, handling, warehousing and service. The warranty period specified in the Lunovas Warranty Terms and Conditions for the products will be for a period of five (5) years from the shipment date of any products sold by Lunovas.