Installation Instructions
lumenfacade™ inground
Part 2
Optical Chamber
Installation Instructions

Typical Completed Installation

Easy Installation

With the Lumenfacade Inground, we believe we’ve created the first truly stress-free, installation-friendly inground luminaire. Using an innovative plug and play technique, the luminaire removes uncertainty and risk from the installation process, allowing easy, tool-free connection.

Nothing is set in stone!
A unique feature allows the luminaire to be reversed for onsite reorientation.

The luminaire can only be released by means of a unique Lumenpulse™ key tool.

Reversible IP68 optical chamber
4 Easy Steps

1. Remove Blockout Temporary Cover
2. Inspect Cables, Connectors, Blockout, Optical Chamber and Optical Chamber Power Cable
3. Connect PACBOX and Optical Chamber
4. Slide the PACBOX and Optical Chamber into position
Each step must be completed to ensure proper installation of the optical chamber

1. Associate the PACBOX with its optical chamber by referring to the information on the labels (refer to page 10).

2. Inspect the PACBOX and optical chamber components to ensure they are not damaged (fixture cord, connectors and housings).

3. Remove blockout cover (refer to page 8).

4. Clean the inside of the blockout, the mounting tracks and the clips (refer to page 9).

5. Inspect leader and jumper cables to ensure they are not damaged.

6. Connect PACBOX and optical chamber. Place PACBOX cover side up in the blockout. Ensure sealing cap is installed on every unused connector (refer to page 11).

7. Clip the optical chamber in place in the blockout. Ensure that the PACBOX is not positioned directly under the fixture’s cord entry point.

8. Ensure the optical chamber is inserted properly across the full length of the blockout and that it is level.
Installation Instructions

Bill of Materials : Exploded View

Typical installation with leader cable
Exploded view
Installation Instructions

PACBOX and Optical Chamber Overview

PACBOX20
(20 Watts)

AC Input
To Next Pacbox
AC Output
DC Output
To Fixture

Top View

2 3/32
[53mm]

Identification label

Bottom View

6 19/64
[168mm]

8 13/16
[224mm]

PACBOX40/PACBOX60/PACBOX90
(40, 60, 90 Watts)

AC Input
To Next Pacbox
AC Output
DC Output
To Fixture

Top View

2 7/32
[56mm]

Identification label

Bottom View

4 21/32
[118mm]

10 22/32
[279mm]

Optical Chamber

11°
[279mm]

5°
[41mm]

12
Front View

22°
[559mm]

25°
[67mm]

24
Front View

22°
[559mm]

14\frac{3}{8}
[371mm]

36
Front View

22°
[559mm]

24\frac{5}{8}
[676mm]

48
Front View

Lumenfacade™ inground
Optical Chamber Installation

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26/MA/2016
**Installation Instructions**

**STEP 1: Remove Blockout Temporary Cover**

**Option A. Using a Knife**

Remove Blockout Cover Using a Knife:
- Use knife to create an opening in the temporary cover.
- Pull cover out.

**Option B. Using Screws**

Remove Blockout Cover Using Screws:
- Use a drill to insert screws into the cover.
- Use the screws as a pivot and pull the cover out of the blockout.
Installation Instructions

STEP 2: Inspect Cable, Connectors and Blockout

2.1 Inspect Cables and Connectors

What to Inspect:
- Remove connectors’ sealing caps.
- Inspect connectors to ensure they are clean.
- Do not use if damaged.

2.2 Inspect Blockout

What to Inspect:
- Inspect mounting track all along the top of the blockout.
- Inspect clip slots on both sides of the blockout.
- Remove any accumulated cement or dirt to ensure proper installation and locking of the optical chamber.
**Installation Instructions**

**PACBOX and Optical Chamber Cross Reference Chart**

**Warning**

Optical chambers must be associated with their PACBOX according to the combination of output/color - control - length. Consult product labels on each component to locate this information. Mismatching the optical chamber and PACBOX might damage both components.

The PACBOX must be bound to the optical chamber for all DMX/RDM applications. Use the binding feature of the LumenID V3 software’s “Tech Mode” to complete the process. Mismatching the optical chamber and PACBOX might damage both components.

Consult factory for support 1.877.937.3003 or 1. 617.307.5700.

**Label Details**

<table>
<thead>
<tr>
<th>Optical Chamber Configuration</th>
<th>Optical Chamber Length</th>
<th>Optical Chamber Wattage Consumption</th>
<th>PACBOX Wattage</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>20W</td>
<td>40W</td>
</tr>
<tr>
<td><strong>White Light (24V)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHRAE</td>
<td>1 ft</td>
<td>4.2W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>8.4W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 ft</td>
<td>12.6W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 ft</td>
<td>16.8W</td>
<td></td>
</tr>
<tr>
<td>RO</td>
<td>1 ft</td>
<td>7.5W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>15W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 ft</td>
<td>22.5W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 ft</td>
<td>30W</td>
<td></td>
</tr>
<tr>
<td>HO</td>
<td>1 ft</td>
<td>15W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>30W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 ft</td>
<td>45W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 ft</td>
<td>60W</td>
<td></td>
</tr>
<tr>
<td><strong>Color Changing Dynamic White (15V or 12V)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGB (15V)</td>
<td>1 ft</td>
<td>15W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>30W</td>
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<td>45W</td>
<td></td>
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<tr>
<td></td>
<td>4 ft</td>
<td>60W</td>
<td></td>
</tr>
<tr>
<td>DWH (15V)</td>
<td>1 ft</td>
<td>15W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>30W</td>
<td></td>
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<tr>
<td></td>
<td>3 ft</td>
<td>45W</td>
<td></td>
</tr>
<tr>
<td>RGBW (12V)</td>
<td>1 ft</td>
<td>15W</td>
<td></td>
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<tr>
<td></td>
<td>2 ft</td>
<td>30W</td>
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<td></td>
<td>3 ft</td>
<td>45W</td>
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<tr>
<td></td>
<td>4 ft</td>
<td>60W</td>
<td></td>
</tr>
<tr>
<td><strong>Direct View (24V)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>RGB</td>
<td>1 ft</td>
<td>4.2W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>8.4W</td>
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<td>1 ft</td>
<td>5W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2 ft</td>
<td>10W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 ft</td>
<td>15W</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 ft</td>
<td>20W</td>
<td></td>
</tr>
</tbody>
</table>

* Lumentalk control option only.

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**Optical Chamber Typical Product Label**

**PACBOX Typical Product Label**

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**STEP 3 : Connect PACBOX and Optical Chamber**

### 3.1 Connect PACBOX

**Make PACBOX Connections:**
- Connect leader cable to PACBOX input. Follow indications on the PACBOX cover.
- For daisy-chain configuration, connect jumper cable to PACBOX output. Follow indications on the PACBOX cover.
- To secure connections, align the arrows on the cable connector and the PACBOX connector.
- Push in place. Clicking sound will occur when properly connected.
- Pull on the connections to ensure proper locking.
- To unlock, press on connector wingnut, turn 1/4 counterclockwise and pull.

![PACBOX diagram](image)

### 3.2 Connect Optical Chamber

### 3.3 Verify Sealing Cap

- Make sure all unused PACBOX connectors have sealing caps.

![Optical Chamber diagram](image)
**Installation Instructions**

**STEP 4 : Install Optical Chamber**

4.1 Define Optical Chamber Orientation

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**Orient Optical Chamber:**
- Identify the wall side, or the target surface to light (see diagram)
- Orient the optical chamber:
  - Key holes towards the wall side
  - Frosted section of lens towards the wall side
  - Lumenpulse logo always readable from the street side

**Did you know?**

The blockout is perfectly symmetrical: the optical chamber can be rotated 180 degrees without having to modify the blockout installation.
4.2 Finalize PACBOX and Optical Chamber Installation

Install PACBOX and Optical Chamber in Blockout:

A. Once all connections are made, insert PACBOX in blockout. Lay it flat at the bottom of the blockout with the cover facing up.
B. Ensure the PACBOX is not directly under the optical chamber power cable.
C. Insert the optical chamber flange in the blockout mounting slot.
D. Pivot the optical chamber in place to close assembly.
E. Clicking sound will occur when the locking pins are in place.

⚠️ Warning
Do not position PACBOX directly under the fixture cord.
Installation Instructions

Warnings

⚠️ Warning
This product must be installed in accordance with applicable national and local electrical and construction codes by a person familiar with the construction and operation of the product and the hazards involved. Failure to comply with the installation instructions may result in death or serious injury and will void warranty.

⚠️ Warning
Do not exceed product specified fixture voltage.

⚠️ Warning
Do not install if fixture, parts or connectors are damaged.

⚠️ Warning
To meet 1000kg walk over resistance requirements, cement must support 100% of the exterior surfaces of the blockout.

⚠️ Warning
Failure to provide adequate draining installation will void warranty.

⚠️ Warning
Storage temperature range for blockout parts is -20°C to 70°C (-10°F to 110°F). Avoid UV exposure.

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

⚠️ Warning
Lumenfacade inground is not suitable for areas with high concentrations of pesticides. Highly corrosive compounds may also affect the fixture’s integrity. Do not install in environments where petroleum-derived products may get in contact with the fixture.

⚠️ Caution
Optical chamber and PACBOX must never be opened. Unauthorized repair or modification will void warranty.

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lumenbin™, a proprietary binning method, guarantees color temperature consistency within a 3-step MacAdam ellipse.
lumentalk™ lumenear™ Combine lumentranslator with Lumentalk-enabled luminaires housing Lumenpulse’s proprietary lumenear control card to build your Lumentalk system.