Cylindrical Surface Mount

CYLINDER LED LUMINAIRE CY / CP / CS SERIES

**INSTALLATION**

Before beginning any CYLINDER installation, disconnect electrical power at main switch or circuit breaker.

**A. CAUTION**

To reduce the risk of fire, electric shock, and potential damage to recessed housing assembly when electrical power is re-connected, DO NOT ATTEMPT TO CONNECT the following on branch circuit serving recessed downlight assembly:
- Motors
- Power tools
- Extension cords
- Appliances or similar electronics

Fixtures to be mounted in conditions where ambient temperatures do not exceed 40°C.

Ensure AC input voltage is protected against surges & load shifts prior to power supply input.

**B. SAFETY INSTRUCTIONS**

1. Read installation instructions completely before attempting installation.
2. Failure to follow instructions may result in improper installation and void warranty.
3. Contact Lucifer Lighting Company with any questions or concerns before beginning any installation.
4. Ensure qualified electrician will perform all electrical procedures.
5. Disconnect electrical power circuit before attempting to install Cylinder, or if adding to or changing configuration Cylinder assembly.
6. **CAUTION:** When fixture is on for long periods the Cylinder surface will be hot. Take care when making adjustments.

This product must be installed in accordance with applicable electrical and installation codes by a person familiar with the construction and operation of the product and the hazards involved. ”CAUTION– RISK OF FIRE”

**C. DESCRIPTION**

Surface mounted Cylinder with dimmable LED module and optional integral driver. CY1 has standard 42° tilt; CY2 has standard 70° tilt; CY3 has standard 60° tilt. CY1, CY2 & CY3 adjustable Cylinders have tooless 357° rotation and optional 90° tilt with precision friction lock. Fixed Unibody and Stem Cylinders also available. Pendant Cylinders feature field-cuttable cable (section E, page 5).

**D. MOUNTING**

CY1, CY2 & CY3 adjustable Cylinders may be wall mounted in Dry / Damp locations only. Pendant and Stem / Drop Kit Cylinders accommodate flat or sloped ceiling conditions.

**Wallwash:** recommended spacing is 36” (914mm) on center with 36” (914mm) setback from wall plane with 30° tilt.

**CY1/2/3-JBMP:**
Specified to mount flush with minimalist transition to standard j-box installed behind substrate (section D.1, page 2).

**CY1/2/3-SMK:**
Includes concealer plate to conceal mounting hardware between fixture and j-box for existing installations (section D.2, page 3).

**CY1/2/3-CMJB:**
Lucifer designed ceiling mount j-box for 1/2” and 3/4” direct conduit feed and provides minimalist transition from Cylinder to j-box (section D.3, page 4).
**D.1 CY1/2/3-JBMP**

NOTE: The CY1/2/3-JBMP (A) must be installed prior to substrate.

### PARTS IDENTIFICATION

<table>
<thead>
<tr>
<th>Part ID</th>
<th>Description</th>
<th>Qty.</th>
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<tbody>
<tr>
<td>A</td>
<td>J box mounting plate</td>
<td>1</td>
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<tr>
<td>B</td>
<td>Mounting adaptor plate</td>
<td>1</td>
</tr>
<tr>
<td>C</td>
<td>Cylinder assembly</td>
<td>1</td>
</tr>
</tbody>
</table>

NOTE: Mounting adaptor plate ships with cylinder assembly.

### STEP 1

Universal junction box mounting plate attaches to standard 4” octagon or 4” square junction box before ceiling substrate is installed.

### STEP 2

Attach mounting adaptor plate with screws provided; ensuring the plate is seated firmly to the finished ceiling plane by tightening screws provided.

Please refer to section G, page 11 of this install guide for Cylinder wiring and mounting instructions.
The SMK kit is specified for mounting to either standard 3” or standard 4” junction box. Remove existing fixture and mounting hardware, ensuring the ceiling area is level and free from debris.

STEP 1
Attach mounting plate to junction box with screws supplied, routing safety lanyard, and line/ mains supply and control wires through opening.

NOTE: The mounting plate must not extend below the finished ceiling plane.

NOTE: Thicker ceiling substrates may require longer screws. Use 8-32 machine screws with an 82° countersink angle

STEP 2

NOTE: Mounting adaptor plate ships with Cylinder assembly.
**STEP 3**
Attach concealer plate and mounting adaptor plate with screws provided, ensuring the plates seat firmly to the finished ceiling plane by tightening screws as required.

Please refer to section G, page 11 of this install guide for Cylinder wiring and mounting instructions.

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**D.3 CY1/2/3-CMJB**

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<table>
<thead>
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<th>Part ID</th>
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<tbody>
<tr>
<td>A</td>
<td>CY1/2/3-CMJB</td>
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<tr>
<td>B</td>
<td>Blank-off plug</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Ground screw</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>Clamp</td>
<td>2</td>
</tr>
<tr>
<td>E</td>
<td>Clamp screws</td>
<td>4</td>
</tr>
<tr>
<td>F</td>
<td>Conduit locking screw</td>
<td>2</td>
</tr>
<tr>
<td>G</td>
<td>Mounting plate</td>
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</tr>
<tr>
<td>H</td>
<td>Mounting plate screws</td>
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<tr>
<td>I</td>
<td>Safety lanyard</td>
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<tr>
<td>J</td>
<td>Cylinder assembly</td>
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</tbody>
</table>

NOTE: Discard mounting adaptor plate supplied with Cylinder assembly, use mounting plate “F” shown above.

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**STEP 1A - 3/4” CONDUIT**

For 3/4” conduit, remove mounting plate, loosen clamps and conduit locking screw, discard applicable blank-off plug(s).

NOTE: Maximum 3/4” conduit throat diameter is 0.819” (20.8 mm), per UL code.
**STEP 1B - 1/2” CONDUIT**
For 1/2” conduit remove mounting plate and and loosen clamps, remove blank-off plug(s). Remove the knock-out from blank-off plug(s). Reinstall blank-off plug(s) in reverse orientation, secure with clamps.

NOTE: Maximum 1/2” conduit throat diameter is 0.622” (15.8 mm), per UL code.

**STEP 1C - TOP FEED**
Remove the mounting plate, place CMJB on a soft surface and remove top knock out.

**STEP 2**
Ensure the ceiling area is level and free from debris, secure j-box to ceiling.

**STEP 3**
Run conduit and / or wiring to the CMJB. On applications using conduit tighten clamp screws and conduit locking screw. Install mounting plate.

Please refer to section G, page 11 of this install guide for Cylinder wiring and mounting instructions.
E. CY1/2/3-DK (DROP KIT)
For suspending cylinder at varying heights and on sloped ceilings up to 45°. Must be installed in conjunction with the JBMP (Section D.1), SMK (Section D.2) or CMJB (Section D.3).
NOTE: The CY2/3-JBMP must be installed prior to substrate.

PARTS IDENTIFICATION

<table>
<thead>
<tr>
<th>Part ID</th>
<th>Description</th>
<th>Qty.</th>
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<tr>
<td>A</td>
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<tr>
<td>B</td>
<td>Mounting plate screws</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Pressure plate</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>Ball swivel</td>
<td>1</td>
</tr>
<tr>
<td>E</td>
<td>Magnetic concealer plate</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Stem</td>
<td>1-3</td>
</tr>
<tr>
<td>G</td>
<td>Lower canopy</td>
<td>1</td>
</tr>
<tr>
<td>H</td>
<td>Safety lanyard</td>
<td>1</td>
</tr>
<tr>
<td>I</td>
<td>Retaining collar</td>
<td>1</td>
</tr>
<tr>
<td>J</td>
<td>Set Screws</td>
<td>3</td>
</tr>
<tr>
<td>K</td>
<td>Threaded Nipple</td>
<td>1-2</td>
</tr>
<tr>
<td>L</td>
<td>Clamping bracket</td>
<td>1</td>
</tr>
<tr>
<td>M</td>
<td>Clamping bracket screw</td>
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</tr>
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</table>

STEP 1
Cut stem to length as required at 90° angle from end where the lower canopy will be connected.

Installer Tip: Stem is recessed into lower canopy 3/8”, add 3/8” to total length prior to cutting stem.

STEP 2
Connect stems as required by threading stems together.
STEP 3
Feed line and control wiring (if required) through stem(s) from the mounting plate to the lower canopy; wiring supplied by others.

Installer Tip: Recommend using solid 12 AWG THHN and 18/2 for line voltage and control wiring. Wrap wiring tight with electrical tape and push through stems.

STEP 4
Ensure magnetic concealer plate is in place and feed lower canopy onto stem, install retaining collar on end of stem and secure with three factory supplied set screws. Ensure bushing is secured to stem.

WARNING: Failure to ensure set screws are adequately tightened may result in failure of bushing.

STEP 5
Install clamping bracket to lower canopy by starting supplied screw, rotate bracket over retaining collar and tighten screw.
**STEP 6**
Loosen pressure plate screws slightly prior to installation.

**STEP 7**
Attach safety lanyard and wiring from line / mains source as indicated with suitable wire-nuts or similar connectors. For 0-10V dimming option, use gray and purple wires as shown. Push connections, excess wiring, and lanyard into junction box.

NOTE: CMJB application not shown.

- Black Wire - Line
- White - Neutral
- Green - Ground
- Purple - Dim +
- Gray - Dim -

**STEP 8**
Attach drop kit mounting plate to applicable mounting option using supplied screws.

**8.1 CY2/3-JBMP**
Reference section D.1 for complete JBMP installation instructions. Position drop kit mounting plate below ceiling cutout and attach to J box mounting plate with supplied screws.
8.2 CY2/3-SMK
Reference section D.2 for complete SMK installation instructions. With SMK mounting plate installed, feed supplied screws through drop kit mounting plate and concealer plate and attach to SMK mounting plate.

8.3 CY2/3-CMJB
Reference section D.3 for complete CMJB installation instructions. Remove factory supplied mounting plate from CMJB and attach drop kit mounting plate with original screws.

STEP 9
With drop kit installed and stem positioned vertically, UNIFORMLY tighten pressure plate screws and raise magnetic concealer plate.
F. PENDANT CABLE ADJUSTMENT
For Pendant Cylinder installations where field adjustment of cable length is required, refer to following instructions.

STEP 1
Remove 3 screws located on top of Cylinder body using 1/16” Allen key.

STEP 2
Remove lid from top of Cylinder body exposing wire nuts and cable strain relief.

STEP 3
Remove 2 Phillips screws, cable strain relief and the 2 wire nuts connecting the cable wires and the LED wires. Make desired cut on pendant cable. Strip orange and white wires located inside pendant cable and re-connect to LED wires using wire nuts. Orange to black and white to red as shown in diagram. Note: leave white and orange wires 1” longer than cable to allow for connection to LED wires. Replace wire strain relief.

STEP 4
Reverse steps 1-2 to secure Cylinder body lid.
**G. WIRING & MOUNTING**
If using remote power supply, see page 7.

**STEP 1**
Connect Cylinder and mounting plate safety lanyards together.
WARNING: Failure to attach safety lanyard may result in an unsafe condition.

**STEP 2**
Attach wiring from line / mains source as indicated with suitable wire-nuts or similar connectors. For 0-10V dimming option, use gray and purple wires as shown. Push connections, excess wiring, and lanyard into junction box.

- Black Wire - Line
- White - Neutral
- Green - Ground
- Purple - Dim +
- Gray - Dim -

**STEP 3**
With safety lanyard and wiring completed, fasten Cylinder to mounting adaptor plate. Align three keyholes of Cylinder with standoffs of mounting adaptor plate, turning clockwise to fully secure.
To remove, gently turn counter clockwise.
H. REMOTE POWER SUPPLY
Determine preferred mounting location, verifying Cylinder falls within allowable wire capacity distance from selected power supply.

Run suitably sized two-pair wire between remote driver and Cylinder location, following installation guidelines for terminating, as applies.

**Note:** Secondary wiring is polarized (+ / -) and must be terminated correctly at both ends for proper operation. It is recommended to use Red (+) and Black (-) wires to avoid confusion. Additionally, a ground wire should not accompany secondary run wires.

*Failure to use the appropriate gauge wire for the run length required and to ensure proper polarity is observed will cause damage to the unit and void the warranty.*

Access splice compartment by removing retaining screws, then tilting cover slightly back and away from base (fig.1).

Mount transformer back plate assembly to suitable substrate using customer supplied screws (fig.2).

Insert line voltage wiring / conduit into line side of splice compartment and secondary voltage wiring / conduit into secondary side of splice compartment utilizing appropriate strain relief or connector (fig.3).

**Note:** Consult wiring diagrams on page 11, in accordance with the applicable driver.

Join structured building wires to corresponding driver wires with suitable customer supplied wire connecting device, ensuring proper polarity is observed with secondary wires.

Push all wires and wire connections into splice compartment and reinstall splice compartment cover by aligning tab and slot, ensuring no wires are pinched by cover, installing retaining screws (fig.3).
I. LENS REPLACEMENT
For Unibody Cylinders proceed to step B1.

**STEP A1**
Remove threaded cowl by twisting counter-clockwise.

**STEP A2**
Remove and replace lens. Wet location requires replacement cowl with sealed lens.

Twist clockwise to secure cowl to Cylinder body.

**STEP B1**
Unibody Cylinders feature baffle assembly with sealed lens. To release baffle assembly, secure provided suction tool to lens and gently pull down to release.

Replace with new OEM baffle assembly. Apply even pressure to baffle assembly to secure into Cylinder body.

J. OPTIC REPLACEMENT
Remove threaded cowl or baffle assembly by following the instructions in Section H.

**STEP 1**
Carefully grab optic and twist counter-clockwise to remove and clockwise to secure. Ensure that both locking tabs of optic engage LED base.

Replace cowl or baffle assembly.
K. DRIVER REPLACEMENT
The following instructions describe how to remove and replace the integral driver.

STEP 1
Remove 3 screws located on mounting plate of Cylinder canopy using 1/16” Allen key (Fig 4.).

STEP 2
Remove K-nut, green ground wire, and locking washer at center of mounting plate using standard wrench (Fig 5.).

STEP 3
Remove mounting plate to expose integral driver.

STEP 4
Lift driver out of Cylinder canopy and disconnect plastic socket by pressing on locking tab and pulling apart.

STEP 5
Connect plastic socket of replacement driver and lower into Cylinder enclosure with red and white wires facing downward.

STEP 6
Replace mounting plate, feeding driver’s black and white wires through larger mounting plate holes, and gray and purple wires through smaller mounting plate holes.

STEP 7
Reverse STEPS 1-2 to secure mounting plate and complete driver replacement.
L. REMOTE DRIVER WIRING DETAIL

WIRING DIAGRAM FOR LINE DIMMING

- Lucifer Lighting Power Supply
- “TR2” Forward & Reverse Phase Driver
- “L21” Lutron Hi-Lume A Series Forward Phase Driver
- “L23” Lutron Hi-Lume A Series Forward Phase Driver

- LED Light Engine

WIRING DIAGRAM FOR ECOSYSTEM AND DIGITAL CONTROL

- Lucifer Lighting Power Supply
- “LH1” Lutron H Series EcoSystem Driver
- “ED1” eldo SOLOdrive DALI Driver

- LED Light Engine

WIRING DIAGRAM FOR ANALOG CONTROL

- Lucifer Lighting Power Supply
- “AN4” 0-10 Volt Driver
- “EA1” eldo SOLOdrive 0-10 Volt Driver
- “EA2” eldo SOLOdrive 0-10 Volt Driver

- LED Light Engine

Consult Approved Dimmer List to Ensure Compatibility. Install in accordance with dimmer manufacturer’s installation guidelines. NOTE: Control must switch primary for full off.
L U C I F E R  L I G H T I N G  C O M P A N Y (Seller) warrants that for a period of one (1) year from date of sale to the first non-retail purchaser, Seller will repair or replace, at the Seller’s sole option, free of charge, any defective products purchased from Seller provided that prior authorization is obtained from the Seller and the products are sent prepaid to the Seller’s manufacturing facility. Lamps are not warranted or guaranteed in any manner for any length of time, except LED lamp modules and power supplies used in Seller’s recessed, surface mount and exterior lighting fixtures, are warranted to operate with 70% lumen maintenance from the date of sale by Seller for five (5) years. LED MR-16 style lamps supplied by Seller are only warranted as provided by their original maker. Please refer to the following limiting conditions.

1. The Citizen, Bridgelux, Xicato, Sharp and Lumenetix LED lamp modules supplied by Seller are only suitable for use in ceiling or plenum conditions where the maximum operating temperature of the module does not exceed 90°C (194°F) and/or the ambient temperature does not exceed 40°C (104°F) or lower threshold as featured on Seller’s product specification literature.
2. These terms only cover the power supply (if purchased from Seller) and Citizen, Bridgelux, Xicato, Sharp, and Lumenetix LED modules.
3. If installed outdoors, the power supply must always be shielded from direct sunlight. The power supply cannot be installed in areas where liquids may pool.
4. The end user must ensure that the AC input voltage has measures in place to prevent lightning strike surges and that large load shift surges are reduced or eliminated prior to the input of the power supply. Power supplies returned with this type of damage are not covered under Seller’s Limited Warranty.
5. Seller reserves the right to physically evaluate the LED module and driver supplied by Seller for compliance with these conditions. An end user’s refusal to return such fixture articles shall void Seller’s Limited Warranty.
6. The LED module will be considered in working condition and therefore not warrantable if it meets or exceeds 70% of its original flux and remains within a range of 3 duv.
7. The color temperature of the Citizen, Bridgelux, Xicato, Sharp and Lumenetix LED module is guaranteed to remain within a range of 3 duv from the date of sale by Seller.
8. Any tampering or disassembly of the LED module or LED heat-sink assembly without Seller’s prior written consent will immediately void the warranty.

Where Seller’s fixtures are used in conjunction with drivers/power supplies sourced by others and/or where POE (power over ethernet) systems are present, Seller’s warranty will only apply to the Seller supplied lighting fixtures. In all instances where drivers/power supplies and/or POE are by others, the responsibility to confirm the selected power supply(s) conforms to operating parameters of Seller’s fixtures shall be the responsibility of others. Approved parameters (including voltage, current, and power quality for the selected fixtures and outputs) will be provided by Seller upon request, however the parameters can not be considered exhaustive for the purpose of the warranty and represents a good faith effort by Seller to support its customers. All warranty claims are subject to Seller’s review and if Seller determines the root cause of the issue involves supplied power supply[s] by others, Seller’s warranty shall not be applicable. Further, in such events of supplied power supply[s] by others, Seller makes no guarantee as to fixture operating performance (startup time, flicker, shimmmer, pop-on/pop-off, dimming, etc.). In no event shall Seller’s obligations under this warranty extend beyond the initial cost of the products and, accordingly, consequential damages arising out of any claimed product defect are expressly excluded. This Warranty does not cover the costs, if any, in re-installation of products serviced under this warranty. This Warranty does not cover damage or failure caused by abnormal spikes in power, dirty power, and light fixtures used with power supplies or other products not supplied by Seller, nor shall it apply to defects for which written notice thereof is not received by Seller.

In the event that any of the terms of this Warranty are in conflict with any rule of law or statutory provision or otherwise unenforceable under the laws or regulations of any government or subdivision thereof, such terms shall be deemed stricken from this Warranty, but such invalidity or unenforceability shall not invalidate any of the other terms of this Warranty and this Warranty shall continue in force.

EXCEPT AS TO SELLER’S WARRANTY OF REPAIR OR REPLACEMENT SET FORTH ABOVE, THERE ARE NO UNDERSTANDINGS, AGREEMENTS, REPRESENTATIONS, OR WARRANTIES, EXPRESS OR IMPLIED (INCLUDING ANY REGARDING THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND NON-INFRINGEMENT, AND ANY WARRANTIES ARISING FROM A COURSE OF DEALING, USAGE, OR TRADE PRACTICE), RESPECTING LUCIFER LIGHTING COMPANY PRODUCTS. THIS WARRANTY IS THE PURCHASER’S SOLE AND EXCLUSIVE REMEDY AGAINST THE SELLER FOR THE REPAIR OR REPLACEMENT AT SELLER’S OPTION OF DEFECTIVE LUCIFER LIGHTING PRODUCTS. UNDER NO CIRCUMSTANCES SHALL SELLER BE LIABLE FOR ANY LOSS OR DAMAGE, DIRECT OR CONSEQUENTIAL, ARISING OUT OF THE USE OF, OR INABILITY TO USE, THE PRODUCTS SOLD HEREUNDER.

For service under this warranty, please provide the original date of sale and nature of difficulty being experienced. All service matters should be directed to:

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