

CYLINDER-CY4 SURFACE MOUNT

CYLINDER LED LUMINAIRE CY4 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 driver or LED assemblies when electrical power is applied, DO NOT ATTEMPT TO CONNECT the following on branch circuit serving cylinder 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 of 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 integral or remote driver. Cylinders feature lockable 365° rotation and precision friction lock 90° tilt.

D. MOUNTING

CY4 may be ceiling mounted for Dry / Damp (IP30) and Wet locations (IP54 & IP55), or wall mounted for Dry / Damp (IP30) locations.

CY4-CMJB:

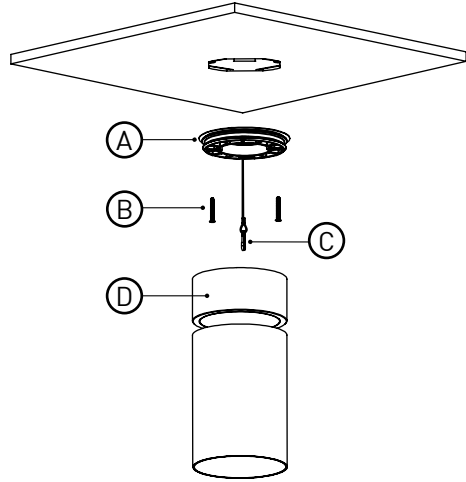
Lucifer designed ceiling mount j-box for 1/2" and 3/4" direct conduit feed and matches CY4 profile for continuous, integrated look (section D.3, page 4).

D.1 DOMESTIC MOUNTING ADAPTOR INSTALLATION

PARTS IDENTIFICATION

Part ID	Description	Qty.
A	Mounting Adaptor	1
B	Mounting Screws	2
C	Safety Lanyard	1
D	Cylinder Assembly	1

NOTE: Mounting adaptor ships with Cylinder assembly.

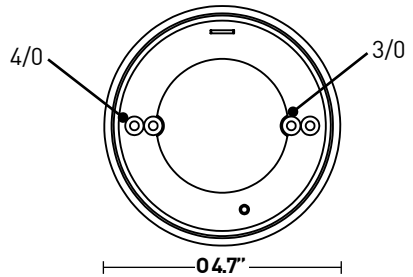
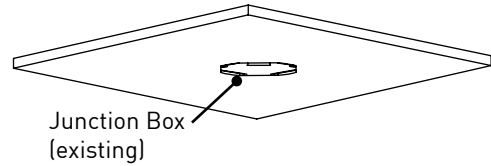


STEP 1

Mounting adaptor accommodates standard 3" and standard 4" octagon junction boxes and features 4.7" diameter.

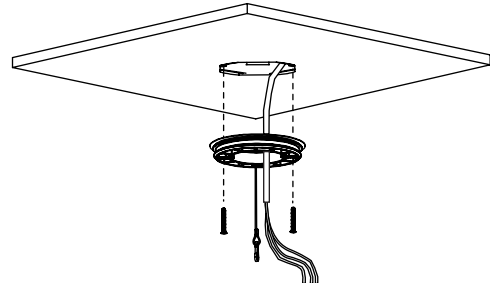
For new construction ensure ceiling cutout does not exceed 4.25" diameter.

For remodel applications remove existing fixture and mounting hardware, ensuring the ceiling area is level and free from debris.



STEP 2

Guide line voltage and control wiring (if applicable) through mounting adaptor and attach mounting adaptor to junction box with supplied mounting screws. Use outer holes for 4/0 and inner holes for 3/0 junction boxes.



D.2 INTERNATIONAL MOUNTING ADAPTOR INSTALLATION

PARTS IDENTIFICATION

Part ID	Description	Qty.
A	Mounting Plate	1
B	Mounting Adaptor	1
C	Mounting Screws	2
D	Safety Lanyard	1
E	Cylinder Assembly	1

NOTE: Mounting plate and adaptor ships with Cylinder assembly.

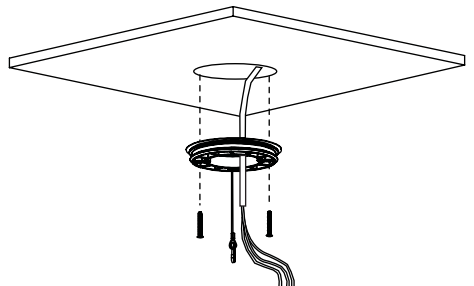
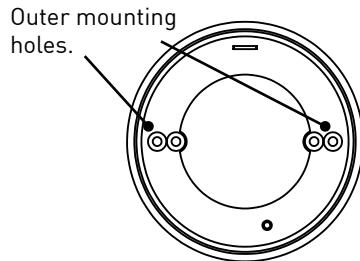
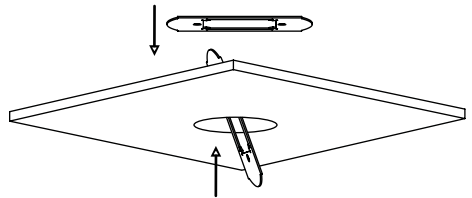
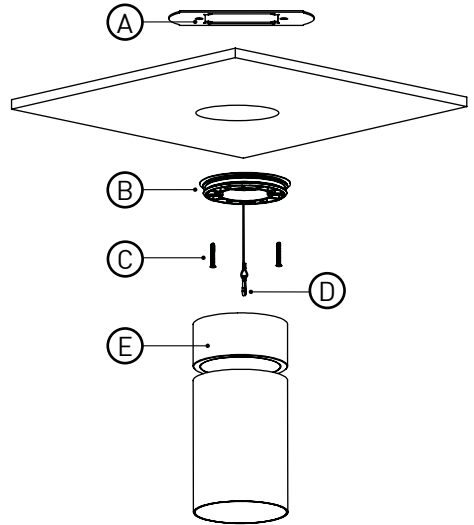
STEP 1

Make ceiling cutout. For new construction ensure ceiling cutout does not exceed 102mm diameter.

For remodel applications remove existing fixture and mounting hardware, ensuring the ceiling area is level and free from debris.

STEP 2

Place mounting plate atop ceiling over cutout and guide line voltage and control wiring (if applicable) through mounting plate and plate and adaptor. Attach mounting adaptor to mounting plate using supplied mounting screws, utilize outer mounting holes.

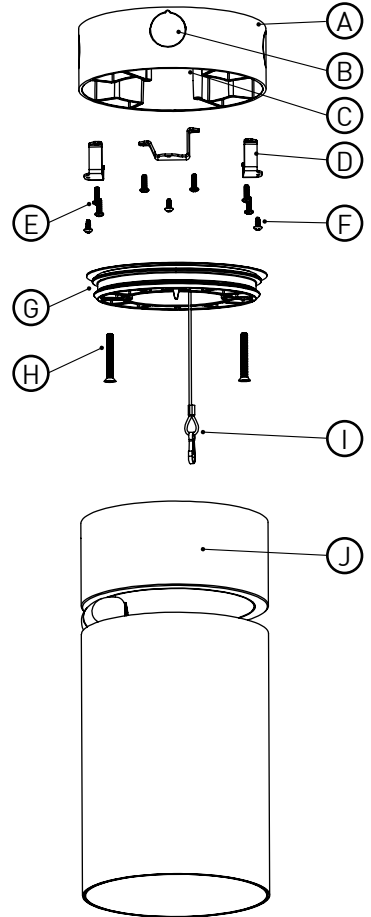


D.3 CEILING MOUNT JUNCTION BOX INSTALLATION

PARTS IDENTIFICATION

Part ID	Description	Qty.
A	CY4-CMJB	1
B	Blank-off Plug	3
C	Ground Lug (Hidden)	1
D	Conduit Clamp	3
E	Clamp Screws	6
F	Conduit Locking Screw	3
G	Mounting Adaptor	1
H	Mounting Screws	2
I	Safety Lanyard	1
J	Cylinder Assembly	1

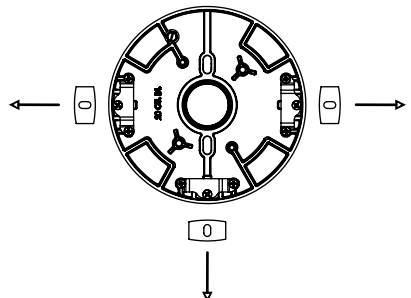
NOTE: Mounting adaptor plate ships with Cylinder assembly.



STEP 1A - 3/4" CONDUIT

For 3/4" conduit, loosen conduit 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.

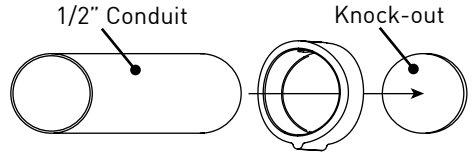
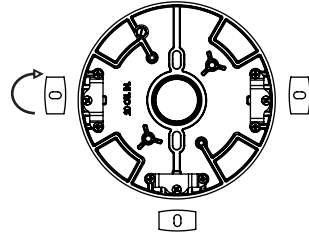


STEP 1B - 1/2" CONDUIT

Scan QR code and reference knock-out removal video. Loosen clamp and locking screw to remove plug(s). On a protected concrete surface, remove knock-out from plug using 1/2" conduit and reinstall in reverse orientation.

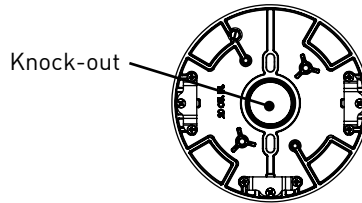
NOTE: Maximum 1/2" conduit throat diameter is 0.622" (15.8 mm), per UL code.

Knock-out Removal



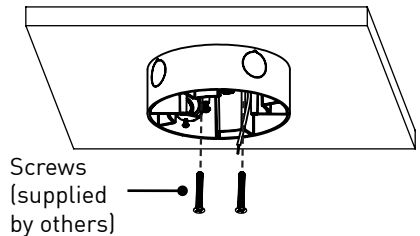
STEP 1C - TOP FEED

Place CMJB on a soft surface, top facing up, and remove top knock out.



STEP 2

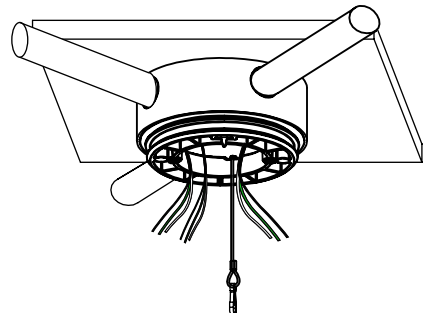
Ensure the ceiling plane is level and free from debris, firmly secure j-box to ceiling with suitable anchors / screws.



STEP 3

Run conduit and / or wiring to the CMJB, as required. On applications using 1/2" conduit, tighten clamp screws and conduit locking screw. Install mounting adaptor (Ref. D.1).

Please refer to section K, page 12 of this install guide for Cylinder wiring and mounting instructions.



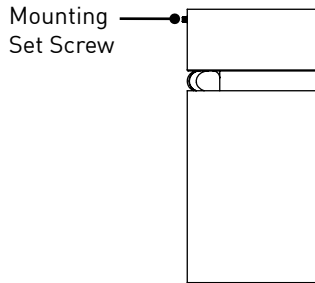
E. WIRING & MOUNTING

If using remote power supply, see Section G for Domestic or H for International installations.

STEP 1

Back out 3/32" hex set screw on canopy six full turns, ensuring it is not removed completely.

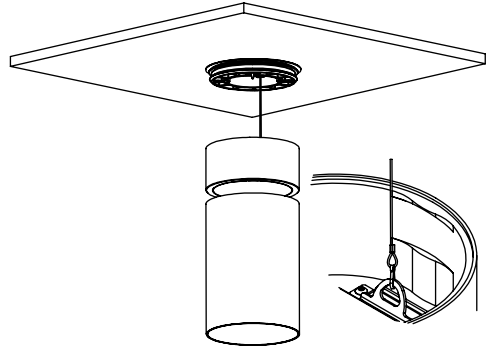
Installers Note: Using a Ball End Hex Key tool is recommended.



STEP 2

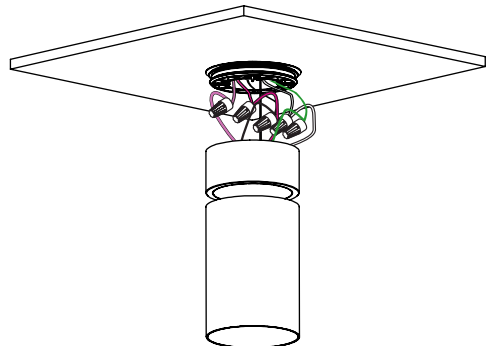
Connect Cylinder to mounting plate safety lanyard.

WARNING: Failure to attach safety lanyard may result in an unsafe condition.



STEP 3A - UL1598 / CE INSTALLATIONS

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



DOMESTIC

Black - Line
White - Neutral
Green - Ground
Purple - Dim +
Pink - Dim -

INTERNATIONAL

Brown - Mains
Blue - Neutral
Green - Ground
Purple - Dim +
Pink - Dim -

STEP 3B - UL2108 INSTALLATIONS

Attach wiring from low voltage source as indicated with suitable wire-nuts or similar connectors.

Reference Section Q for drive current and node compatibility information.

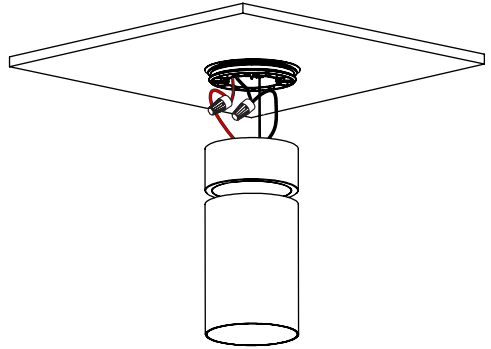
CY4 AD/FB/WW

- (+) - Red (+)
- (-) - Black (-)

CP4

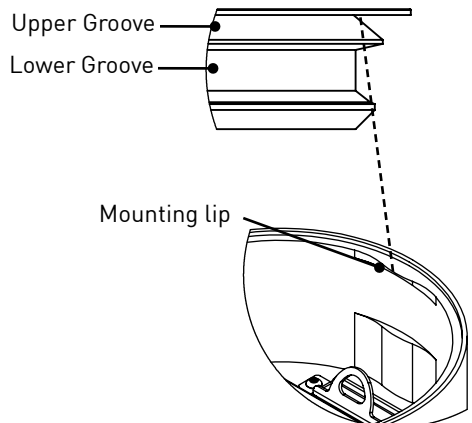
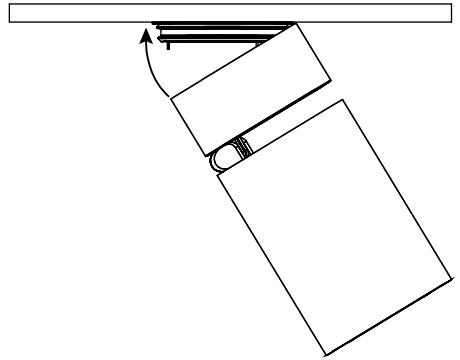
DOWNLIGHT **UPLIGHT**

- (+) - Red (+) (+) - White (+)
- (-) - Blue (-) (-) - Black (-)



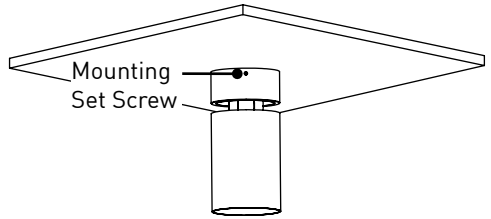
STEP 4

With fixture at slight angle, key mounting lip into the upper groove of the adaptor, being careful to not mar the ceiling. With lip engaged, tilt the cylinder canopy up and flush with ceiling or CMJB.



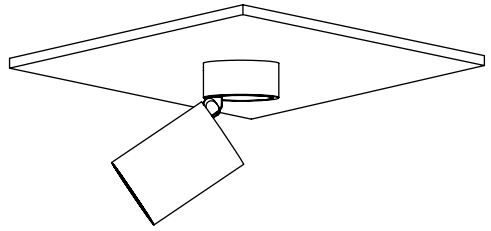
STEP 5

Tighten the mounting set screw until secured onto the lower groove of the mounting adaptor. For aiming, loosen mounting set screw slightly to facilitate rotation.



STEP 6

Rotate and aim adjustable fixtures to achieve desired effect. Lock mounting set screw when aiming is complete.

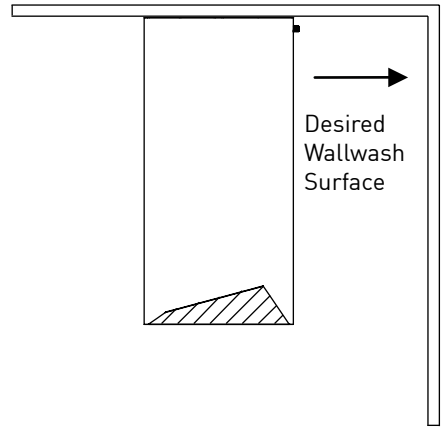


F. WALLWASH INSTALLATIONS

Factory recommends 48" x 48" setback and spacing

STEP 1

Install fixture with set screw facing desired wallwash surface.



G. WET LOCATION INSTALLATIONS (IP54 & IP55)

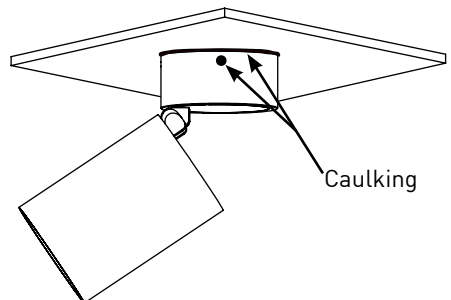
Do not apply caulking to fixture until aiming is completed.

STEP 1

With fixture aiming completed, apply a fillet seal around the fixture canopy mounting surface.

STEP 2

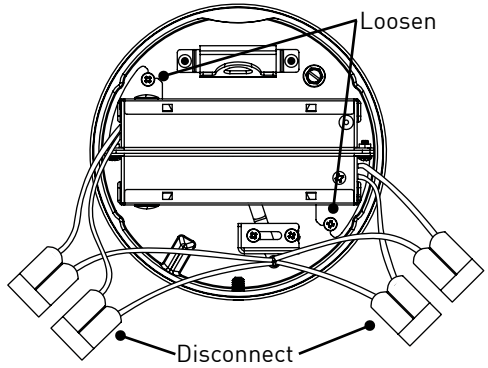
Apply caulk to the set screw.



H. PENDANT CABLE ADJUSTMENT

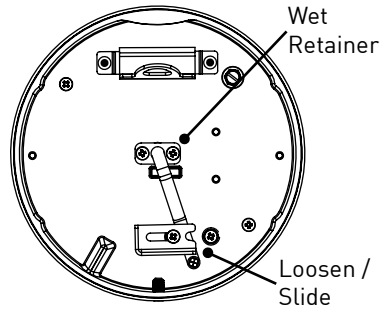
STEP 1

Disconnect quick connectors from pendant side. If applicable, loosen driver assembly screws and rotate assembly counter clockwise to remove.



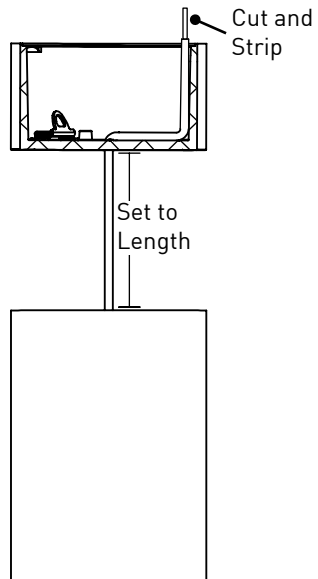
STEP 2

Loosen cable retainer screws and slide retainer off of cable. Remove wet location retainer if applicable leaving it on the cable.



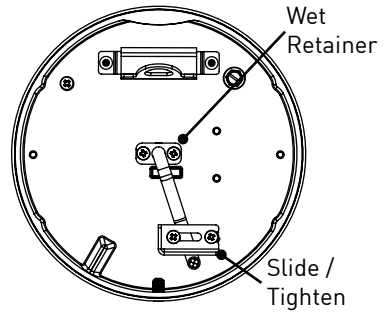
STEP 3

Set cable to desired length, positioning cable in canopy as shown. Cut and strip cable above top of canopy leaving excess wiring to make wiring connections.



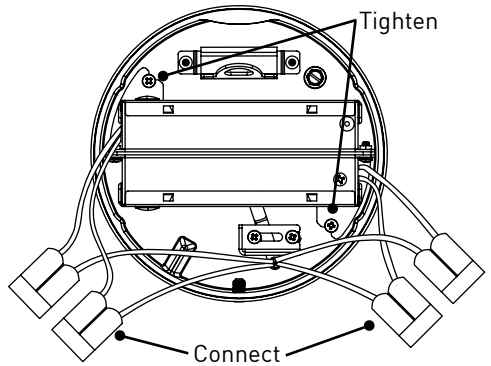
STEP 5

Reinstall wet location retainer as applies and slide cable retainer over cable, tighten screws to secure.



STEP 6

Reinstall driver assembly if applicable, by turning clockwise onto screws and tightening. Reattach low voltage conductors, referring to the chart below:



DOMESTIC DOWNLIGHT

Red (+) - Red (+)
Blue (-) - Blue (-)

UPLIGHT

Red (+) - White (+)
Blue (-) - Black (-)

INTERNATIONAL DOWNLIGHT

Red (+) - Red (+)
Black (-) - Blue (-)

UPLIGHT

Red (+) - White (+)
Black (-) - Black (-)

LOW VOLTAGE SYSTEM

DOWNLIGHT

{+} - Red (+)
{-} - Blue (-)

UPLIGHT

{+} - White (+)
{-} - Black (-)

I. REMOTE POWER SUPPLY - UL 1598 INSTALLATIONS ONLY

NOT SUITABLE FOR RECESSED APPLICATIONS

Do not install in environments where ambient temperatures exceed 35°C (95°F).

Determine preferred mounting location, verifying Cylinder falls within allowable wire capacity distance from selected power supply (Ref. Page 15).

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.

WARNING: 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 power supply back plate assembly to suitable substrate using customer supplied screws (Fig.2).

Insert line / mains and control 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 beginning on page 17, 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. Install retaining screws (fig. 3).

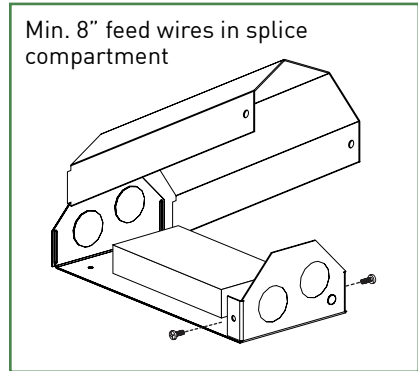


Fig.1

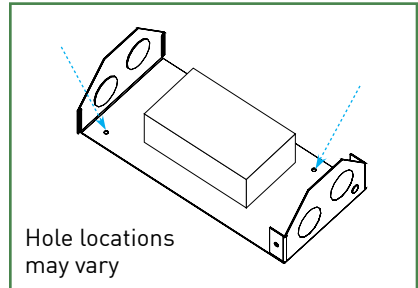


Fig.2

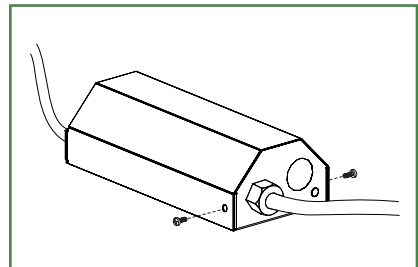


Fig.3

J. REMOTE POWER SUPPLY - CE INSTALLATIONS ONLY

Driver assembly provides integral wiring terminal (*Fig.4*) and typically accepts 3 wires for connecting to the mains voltage: black, white and green (*Fig.5*) plus any control wiring required.

Place power supply atop ceiling and prior to the installation of the mounting plate and make line/mains and any control wiring connections on integral wiring terminal.

Driver and cylinder feature 2-pin quick connector for making secondary wiring connection, make connection and reference section E to mount cylinder.

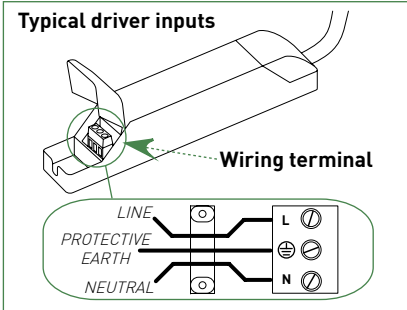


Fig.4

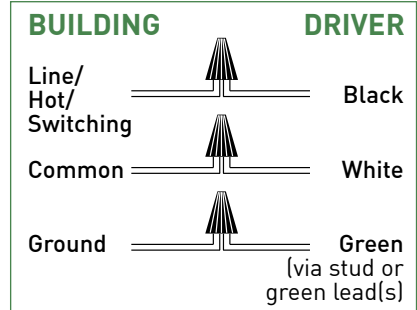
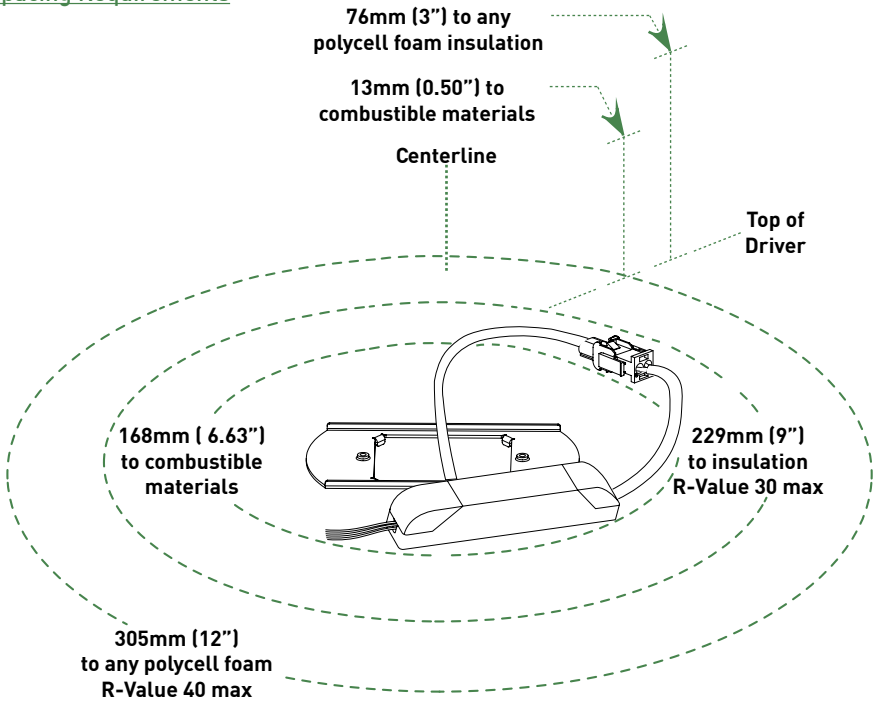


Fig.5

Spacing Requirements



K. EFFECTS DEVICE REPLACEMENT

STEP 1

Grasp inner lip of baffle assembly and carefully pull down to remove.

STEP 2

To access effects device, turn lens retainer counter clockwise and remove from baffle base.

Note: Fixture can accommodate up to two effects devices.

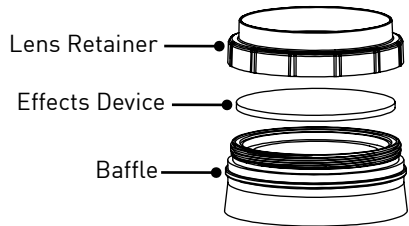
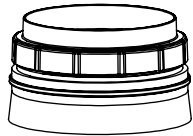
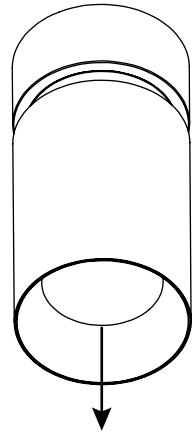
STEP 3

With effects device(s) installed, reinstall lens retainer to baffle base, turning clockwise until secure.

STEP 4

Carefully reinstall baffle assembly by pushing up into fixture.

Note: For wet location fixtures (IP54 or IP55), fully seat lens to ensure dust and water ingress protection.



L. OPTIC REPLACEMENT

STEP 1

Grasp inner lip of baffle and carefully pull down to remove.

STEP 2

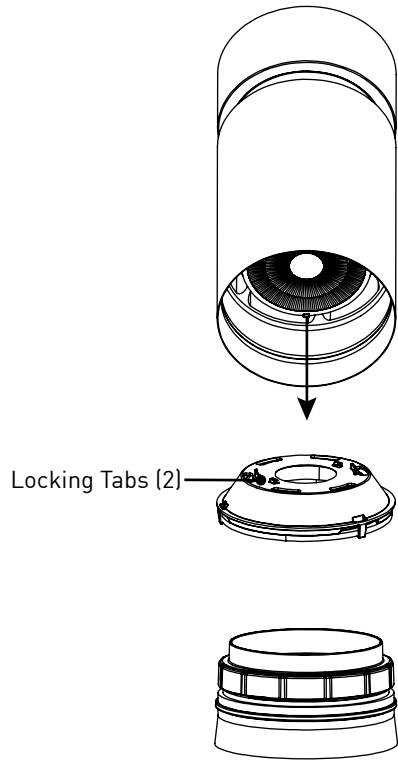
Turn optic assembly counter clockwise and pull down to remove from fixture.

STEP 3

Install optic assembly by aligning locking tabs of assembly with LED base, turning clockwise.

STEP 4

Carefully reinstall baffle assembly by pushing up into fixture.



M. CY4-AD/FB/WW INTEGRAL DRIVER REPLACEMENT

STEP 1

Remove 2 screws located on either end of the driver and the 2 screws securing the strain relief using 3/32" Allen wrench.

STEP 2

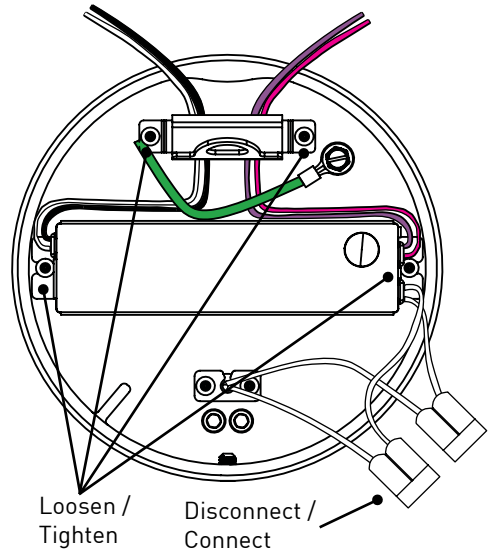
Disconnect secondary voltage wiring to LED from driver, plus remove line / mains and control voltage jumpers.

STEP 3

Remove driver from fixture canopy and install replacement driver securing with two screws.

STEP 4

Reconnect secondary voltage wiring to LED from driver, ensuring polarity to LED is correct, plus reattach line / mains and control voltage jumpers. See diagram below.



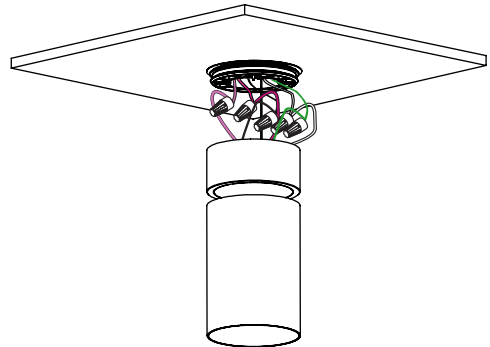
Line / Mains and Control Voltage:

DOMESTIC

Black - Line
White - Neutral
Green - Ground
Purple - Dim +
Pink - Dim -

INTERNATIONAL

Brown - Mains
Blue - Neutral
Green - Ground
Purple - Dim +
Pink - Dim -



Secondary LED Voltage:

DOMESTIC

Red (+) - Red (+)
Blue (-) - Black (-)

INTERNATIONAL

Red (+) - Red (+)
Black (-) - Black (-)

STEP 5

Reference section E for fixture installation.

N. CP4 INTEGRAL DRIVER REPLACEMENT

STEP 1

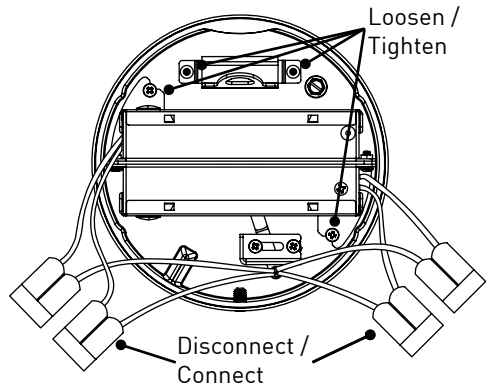
Loosen 2 screws located on either end of the driver and the 2 screws securing the strain relief using PH1 screwdriver.

STEP 2

Disconnect secondary voltage quick connectors to LED from driver, plus remove line / mains and control voltage jumpers.

STEP 3

Remove driver from fixture canopy and install replacement driver sled securing with two screws.



STEP 4

Reattach line / mains and control voltage jumpers. Reattach secondary voltage quick connectors to LED from driver. See diagram below.

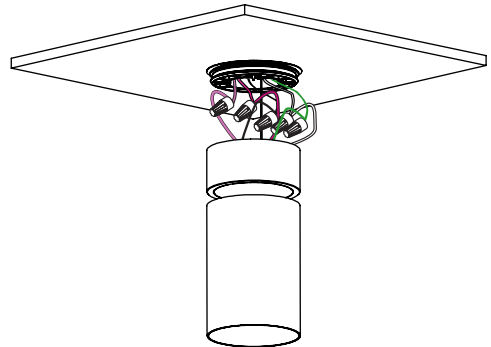
Line / Mains and Control Voltage:

DOMESTIC

Black - Line
White - Neutral
Green - Ground
Purple - Dim +
Pink - Dim -

INTERNATIONAL

Brown - Mains
Blue - Neutral
Green - Ground
Purple - Dim +
Pink - Dim -



Secondary LED Voltage:

DOMESTIC DOWNLIGHT

Red (+) - Red (+)
Blue (-) - Blue (-)

INTERNATIONAL DOWNLIGHT

Red (+) - Red (+)
Black (-) - Blue (-)

UPLIGHT

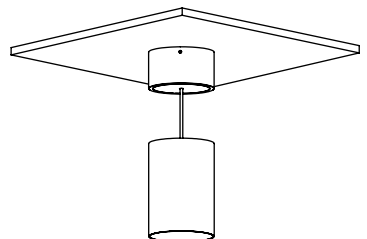
Red (+) - White (+)
Blue (-) - Black (-)

UPLIGHT

Red (+) - White (+)
Black (-) - Black (-)

STEP 5

Reference section E for fixture installation.

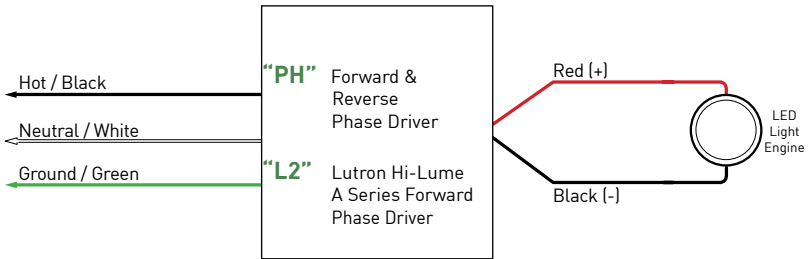


0. CY4-AD/FB/WW DRIVER WIRING DETAIL

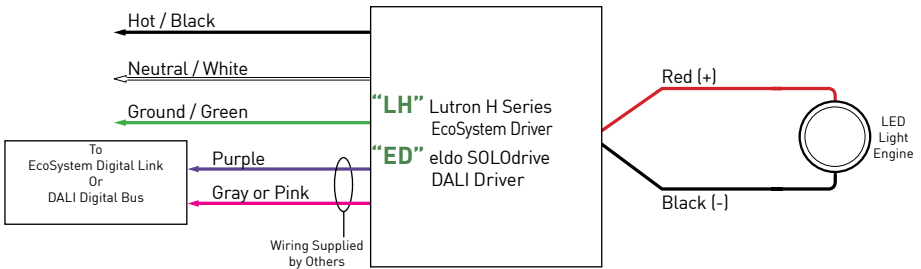
GENERAL WIRING NOTES

1. Consult approved dimmer list to ensure compatibility.
2. Install in accordance with manufacturer's dimmer installation guidelines.
3. Secondary and 0-10V connections are polarity sensitive.

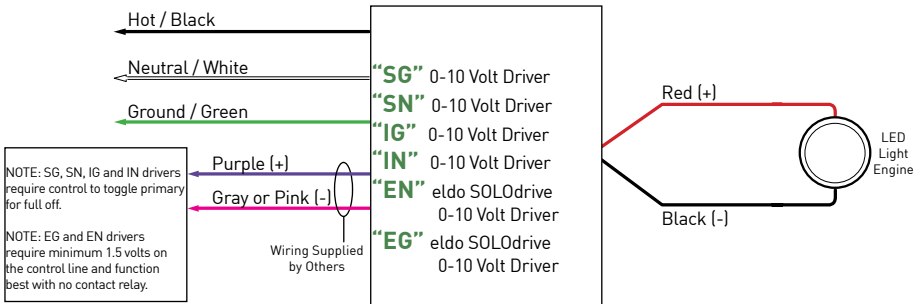
WIRING DIAGRAM FOR PHASE DIMMING



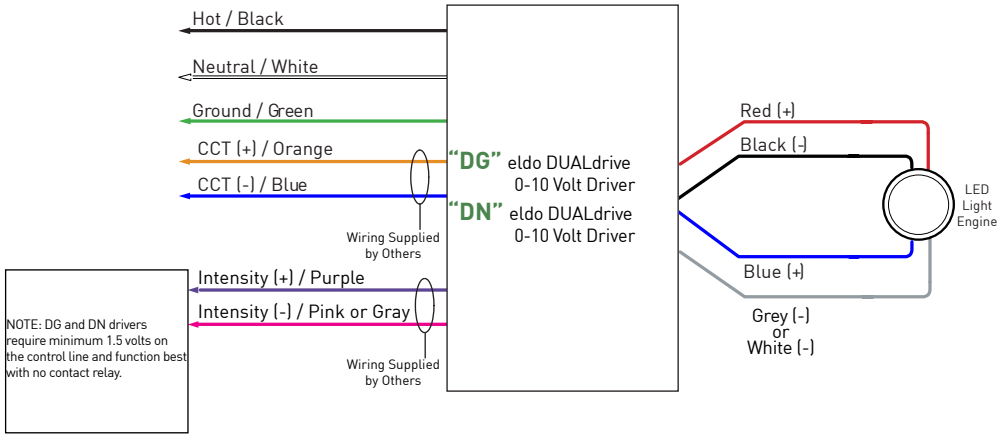
WIRING DIAGRAM FOR ECOSYSTEM AND DIGITAL CONTROL



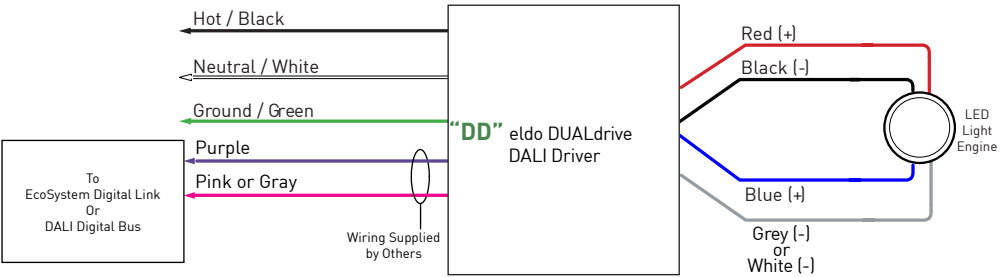
WIRING DIAGRAM FOR ANALOG CONTROL



WIRING DIAGRAM FOR TUNABLE WHITE ANALOG CONTROL



WIRING DIAGRAM FOR TUNABLE WHITE DALI CONTROL



MAXIMUM ALLOWABLE WIRING DISTANCES

Lutron Drivers: “L2” & “LH”

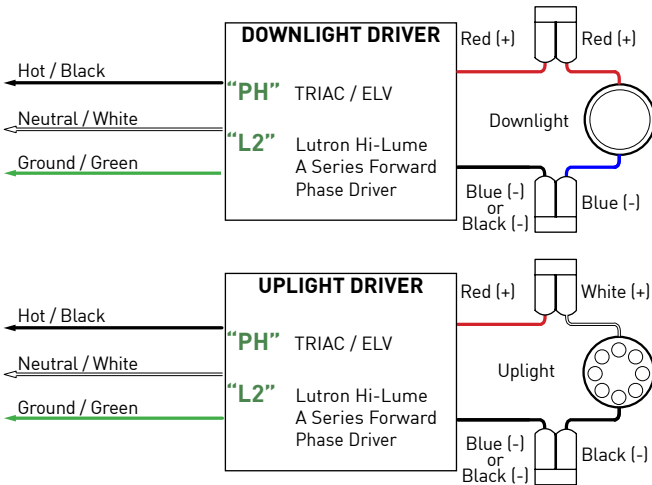
AWG Value	18	16	14	12
Distance (m)	4.5	7.5	12	18
Distance (ft)	15	25	40	60

eldoLED Drivers: “ED”, “EG”, “EN”, “DD”, “DG”, “DN”

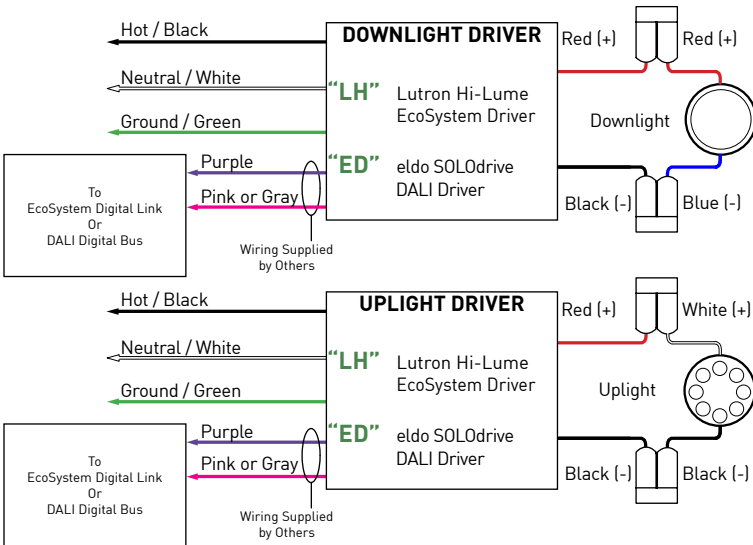
AWG Value	20	19	18	17	16
Distance (m)	14	18	22	28	36
Distance (ft)	46	59	72	92	118

P. CP4 DRIVER WIRING DETAIL

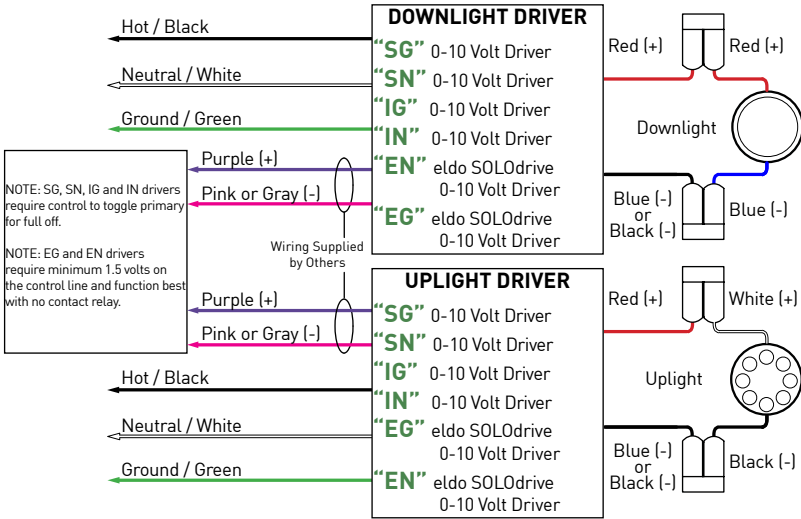
WIRING DIAGRAM FOR PHASE DIMMING



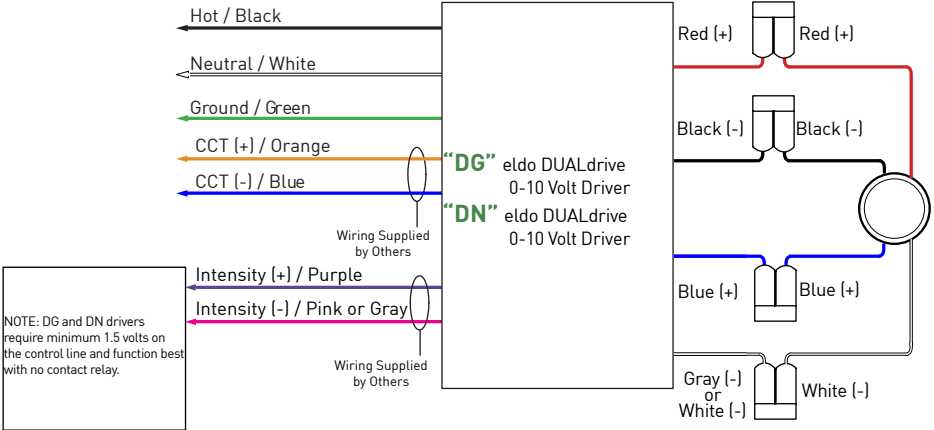
WIRING DIAGRAM FOR ECOSYSTEM AND DIGITAL CONTROL



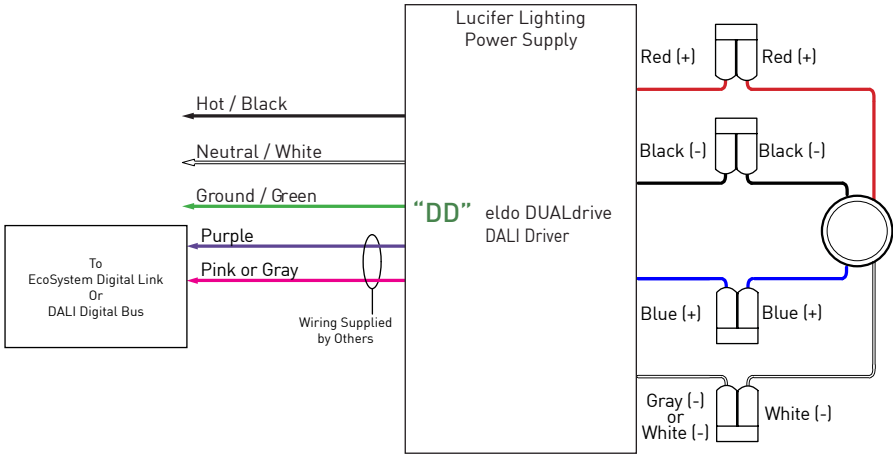
WIRING DIAGRAM FOR ANALOG CONTROL



WIRING DIAGRAM FOR TUNABLE WHITE ANALOG CONTROL



WIRING DIAGRAM FOR TUNABLE WHITE DALI CONTROL



MAXIMUM ALLOWABLE WIRING DISTANCES

Lutron Drivers: "L2" & "LH"

AWG Value	18	16	14	12
Distance (m)	4.5	7.5	12	18
Distance (ft)	15	25	40	60

eldoLED Drivers: "ED", "EG", "EN", "DG", "DG", "DN"

AWG Value	20	19	18	17	16
Distance (m)	14	18	22	28	36
Distance (ft)	46	59	72	92	118

Q. UL2108 INSTALLATION INFORMATION




CY4 AD/FB/WW Drive Current Information:

	80C			90C			90T	
	34B	45B	55B	29B	39B	47B	20B	30B
Minimum Vf	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Maximum Vf	39	39	39	39	39	39	39	39
Current mA	700	960	1200	700	960	1200	700	1200
Wattage W	23.1	33.9	41.6	23.1	33.9	41.6	23.1	41.6

CP4 Drive Current Information:

	80C			90C			90T	
	18B	34B	UPLIGHT	15B	29B	UPLIGHT	20B	30B
Minimum Vf	30.5	30.5	30.5	30.5	30.5	30.5	30.5	30.5
Maximum Vf	39	39	39	39	39	39	39	39
Current mA	350	700	350	350	700	350	700	1200
Wattage W	11.1	23.1	11.1	11.1	23.1	11.1	23.1	41.6

Node Compatibility:

Manufacturer	Model Number
 Igor® Enabling Smart Buildings™	NP50-60-C-F-5
 molex	180996-1001 180996-1002 180996-2001 180996-2002
 PLATFORMATICS	1 Channel Node, POE-LN2-1U-E 2 Channel Node, POE-LN2-2U-E 4 Channel Node, POE-LN2-4U-E

Please consult website for full warranty terms and conditions:
www.luciferlighting.com/warranty

[02142022]
3750 North PanAm Expressway
San Antonio, TX 78219 USA
[PH] +1 210 227 7329
[FAX] +1 210 227 4967
www.luciferlighting.com

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