



**400 SERIES**  
**400 NEW CONSTRUCTION**  
INSTALLATION INSTRUCTIONS



SCAN QR CODE FOR INSTRUCTIONS

**WARNING:** Read and understand these instructions completely before installation. Disconnect power at circuit breaker or fuse panel before installation. Always allow LED assembly to cool before servicing. To be installed by qualified electricians only. Products should be installed in accordance with these instructions, local electrical codes, and the National Electric Code (NEC). These products may represent a possible shock or fire hazard if improperly installed.

Do not install where insulation or ambient temperatures will exceed maximum values noted in product specifications. See [www.8lighting.com](http://www.8lighting.com) for current product specifications.

**NOTE:** Number Eight Lighting fixtures are designed to meet the latest NEC requirements and are listed in full compliance with UL standards. Before attempting installation check and understand your local electrical code which sets the wiring standards and installation requirements for your locality.



**Save these instructions.**

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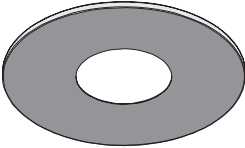
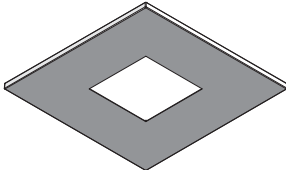
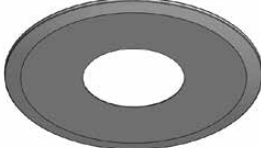
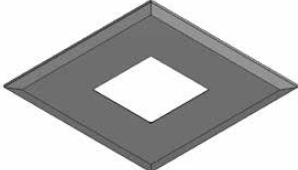
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400 SERIES COMPONENTS

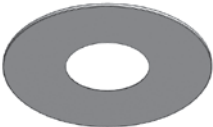


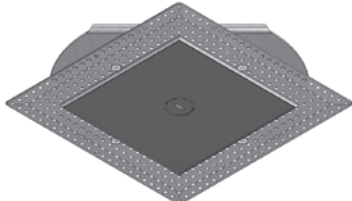
400 SERIES - AIR-TIGHT and I.C. RATED NEW CONSTRUCTION LIGHT ENGINES

	
400 NEW CONSTRUCTION LIGHT ENGINE	400-TW NEW CONSTRUCTION LIGHT ENGINE (TUNABLE WHITE)





400 SERIES – TRIMS

			
FLR-4 -FLAT ROUND TRIM PLATE	FLS-4 FLAT SQUARE TRIM PLATE	FLR-4-BV FLANGED ROUND BEVELED TRIM PLATE	FLS-4-BV FLANGED SQUARE BEVELED TRIM PLATE

400 SERIES – FLANGELESS TRIMS for SHEETROCK CEILING APPLICATIONS

			
FR-4 TRIM PLATE	FR-4 FLANGELESS TRIM	FS-4 TRIM PLATE	FS-4 FLANGELESS TRIM

400 SERIES – OPTIC OPTIONS + ACCESSORIES

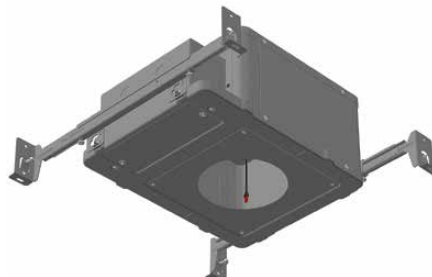
<p><b>TIR-10</b> 10° Very narrow spot*</p> <p><b>TIR-15</b> 15° Narrow spot</p> <p><b>TIR-15T</b> 15° Narrow spot**</p> <p><b>TIR-25</b> 25° Narrow flood</p> <p><b>TIR-40</b> 40° Flood</p> <p>*For use with HI-2 LED option only</p> <p>** For use with TW LED option only</p>	 TIR-10/15/25/40  TIR-15T	<p><b>NSP</b> Narrow softening lens</p> <p><b>NFL</b> Medium softening lens</p> <p><b>FL</b> Wide softening lens</p> <p><b>WFL</b> Extra wide softening lens</p> <p><b>LS</b> Linear spread lens</p> 	<p><b>CF-24</b> 2400K Color filter</p> <p><b>CF-27</b> 2700K Color filter</p> <p><b>CF-35</b> 3500K Color filter</p> 
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## 400 SERIES COMPONENTS

### NEW CONSTRUCTION HOUSINGS for FLANGED TRIM INSTALLATION



**FRM2-4** HOUSING for FLANGED INSTALLATION with **FLR-4/FLR-4-BV** ROUND or **FLS-4/FLS-4-BV** SQUARE trims in Sheetrock/Wood/Stone ceilings.



**FRM2-4-CP** HOUSING for FLANGED INSTALLATION with **FLR-4/FLR-4-BV** Round or **FLS-4/FLS-4-BV** SQUARE trims in Sheetrock/Wood/Stone ceilings. CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.



**FRM2-4T** HOUSING for FLANGED INSTALLATION WITH **FLR-4/FLR-4-BV** ROUND or **FLS-4/FLS-4-BV** SQUARE trims in Acoustic Tile/Fabric ceilings.

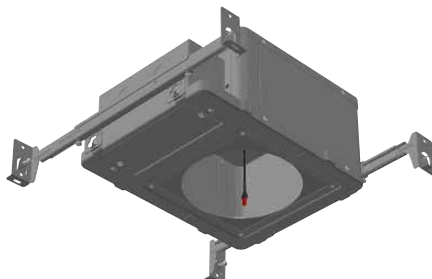


**FRM2-4T-CP** HOUSING for FLANGED INSTALLATION with **FLR-4/FLR-4-BV** Round or **FLS-4/FLS-4-BV** SQUARE trims in Acoustic Tile/Fabric ceilings. CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.

### NEW CONSTRUCTION HOUSINGS for FLANGELESS TRIMS with SHEETROCK CEILINGS



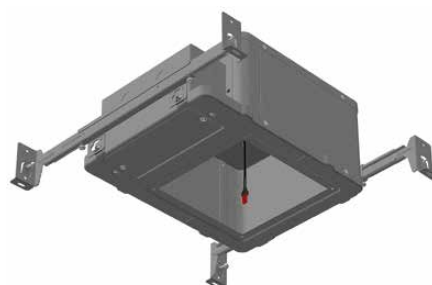
**FRM2-R6** HOUSING for FLANGELESS INSTALLATION with **FR-4** trim in Sheetrock ceilings.



**FRM2-R6-CP** HOUSING for FLANGELESS INSTALLATION with **FR-4** ROUND trim in Sheetrock ceilings. CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.



**FRM2-S6** HOUSING for FLANGELESS INSTALLATION with **FS-4** SQUARE trim in sheetrock ceilings.



**FRM2-S6-CP** HOUSING for FLANGELESS INSTALLATION with **FS-4** SQUARE trim in sheetrock ceilings. CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.

## 400 SERIES COMPONENTS

### NEW CONSTRUCTION HOUSINGS for FLANGELESS TRIM INSTALLATION with WOOD/STONE CEILINGS



**FRM2-4W-R** HOUSING for FLANGELESS INSTALLATION with **FLR-4** ROUND FLAT trim in Wood/Stone ceilings.



**FRM2-4W-R-CP** HOUSING for FLANGELESS MOUNTING ROUND FLAT trim in Wood/Stone ceilings. CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.



**FRM2-4W-S** HOUSING for FLANGELESS INSTALLATION with **FLS-4** SQUARE FLAT trim in Wood/Stone ceilings.



**FRM2-4W-S-CP** HOUSING for FLANGELESS INSTALLATION with **FLS-4** SQUARE FLAT trim in Wood/Stone ceilings. CCEA plenum rated for City of Chicago environmental air spaces and rated for direct contact with spray-foam insulation.

**Note:** Housings are Airtight and IC rated for direct contact with standard thermal insulation with a max R-value of R-42 (may also be installed in Non-IC applications). Not for use with spray-foam insulation. Housings include power supply, junction box and mounting accessories.

**CAUTION:** When installed in contact with thermal insulation, ambient temperatures in ceiling space should not exceed 25°C (77°F) during normal operation. For installations where insulation is held back a minimum of 3" from sides and top, ambient temperatures in ceiling space should not exceed 40°C (104°F) during normal operation.

**Note:** CP Housings are Airtight and IC rated for direct contact with standard or spray-foam thermal insulation with a max R-value of R-42 (may also be installed in Non-IC applications). Housings include power supply, junction box and mounting accessories.

**CAUTION:** When installed in contact with thermal insulation, ambient temperatures in ceiling space should not exceed 25°C (77°F) during normal operation. For installations where insulation is held back a minimum of 3" from sides and top, ambient temperatures in ceiling space should not exceed 40°C (104°F) during normal operation.

### FRAME MOUNTING ACCESSORIES



**BB** BUTTERFLY BRACKET  
(Set of 2)  
For commercial c-channel or bar mounting



**BH** BAR HANGER  
(Set of 2)  
For joist mounting)



**PMB** PANEL MOUNTING BRACKET  
(Set of 2)  
For direct mounting to wood panels



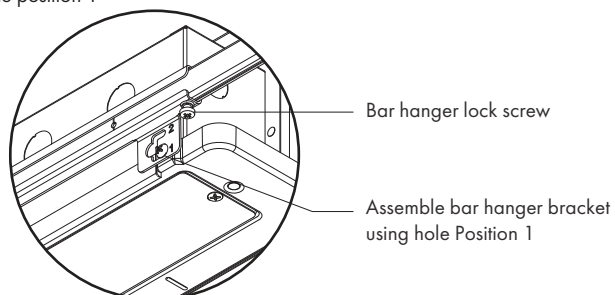
**TBC** T-BAR MOUNTING CLIPS  
(Set of 4)  
For use with BH Bar Hanger in T-GRID ceiling applications

# NEW CONSTRUCTION INSTALLATION

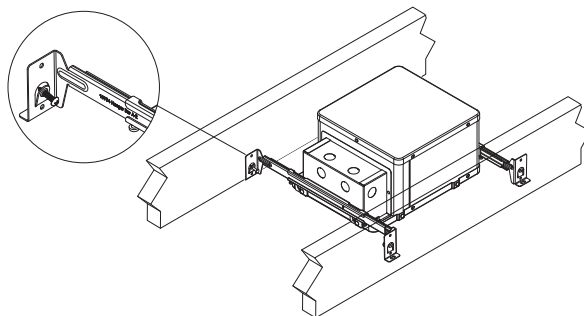
## STEP 1 - HOUSING ASSEMBLY AND INSTALLATION

### BH - BAR HANGER MOUNTING OPTION

**1a.** Attach bar hangers to either ends or sides of housing using hole position 1

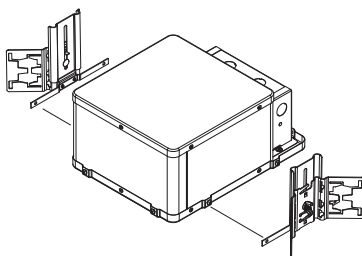


**1b.** Attach housing to joists

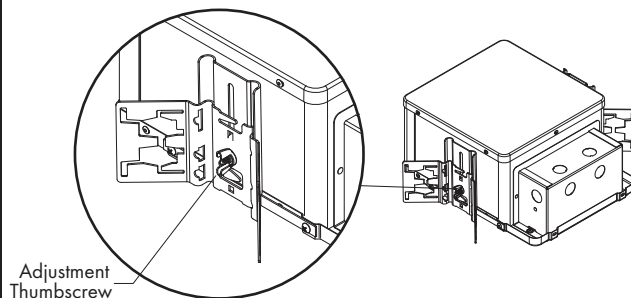


### BB - BUTTERFLY BRACKET MOUNTING OPTION

**1a.** Attach butterfly brackets to either ends or sides of housing

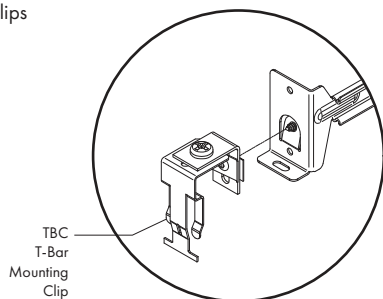


**1b.** Attach supports to bracket and adjust height with thumbscrew

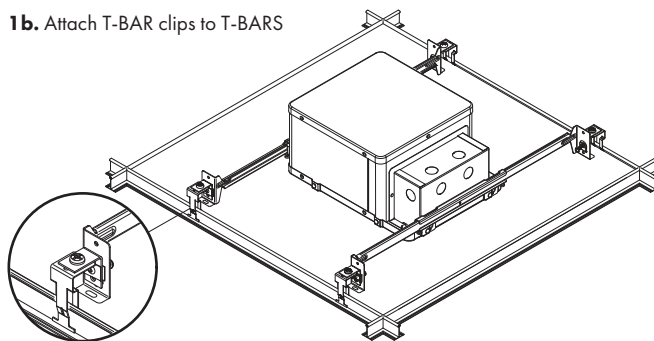


### TBC-BH - T-BAR CLIP + BAR HANGER MOUNTING OPTION

**1a.** Assemble bar hangers as shown above and attach T-BAR mounting clips

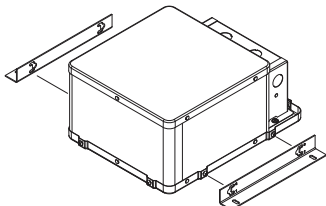


**1b.** Attach T-BAR clips to T-BARS

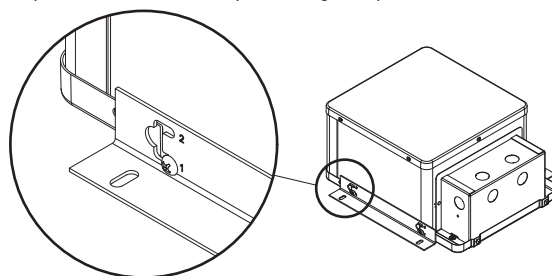


### PMB - PANEL MOUNTING BRACKET OPTION

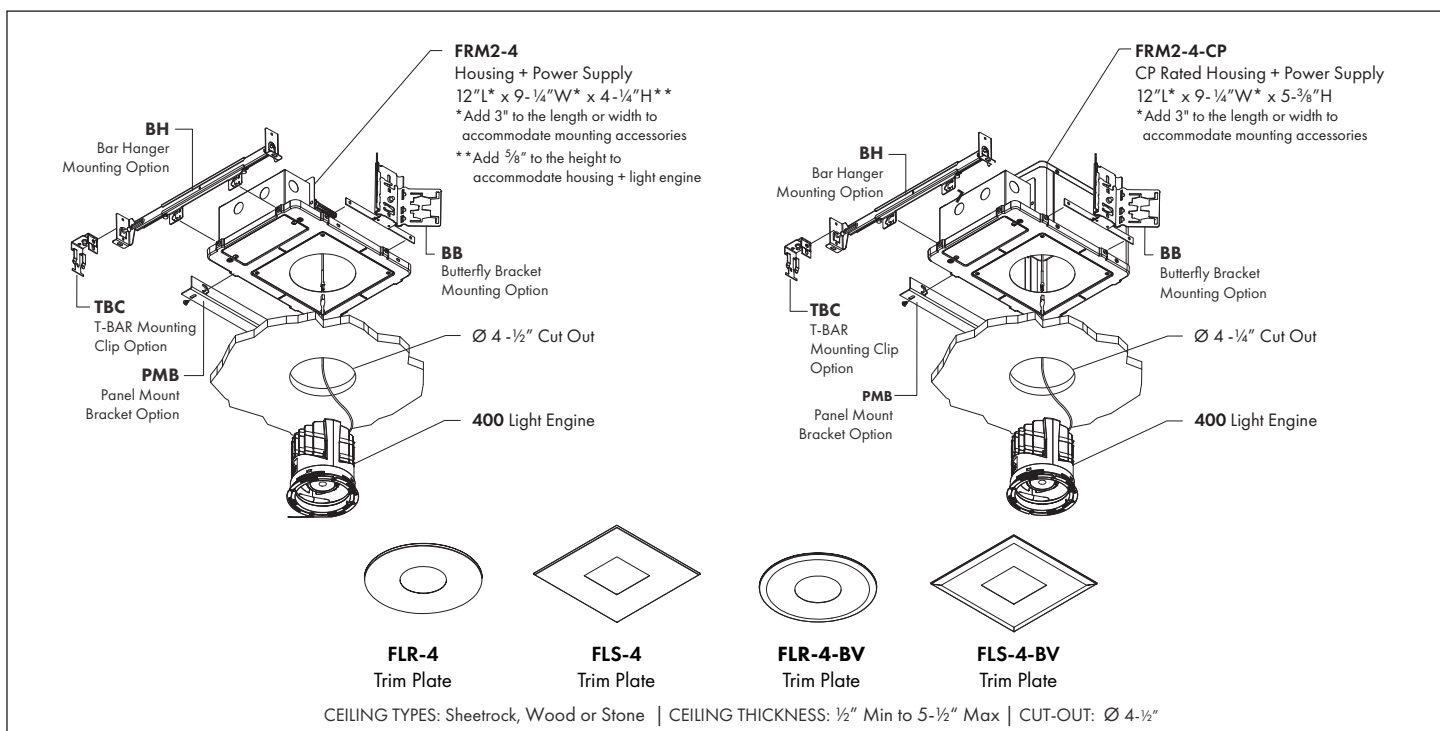
**1a.** Attach panel mount brackets to either ends or sides of housing.



**1b.** Attach panel mount brackets to panel using hole position 1.



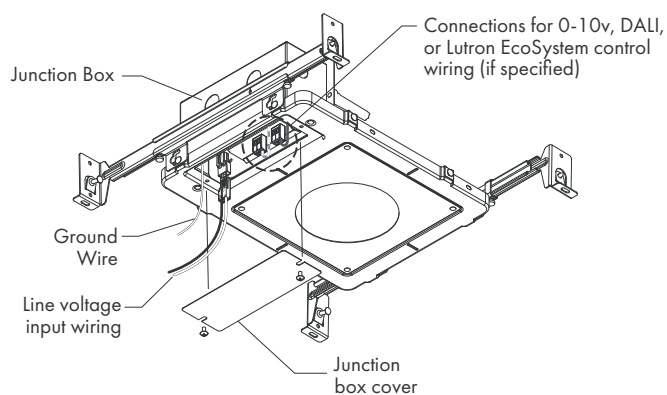
# FRM2-4 & FRM2-4-CP - FLANGED TRIM INSTALLATION with SHEETROCK/WOOD/STONE CEILINGS



## STEP 1 – FRM2-4 AND FRM2-4-CP HOUSING ASSEMBLY AND INSTALLATION (see page 4)

### STEP 2 – FIXTURE WIRING

- 2a.** Disconnect power at circuit breaker.
  - 2b.** Remove junction box cover and install appropriate conduit connector(s) using one or more of the provided junction box knock-outs.
  - 2c.** Review wiring diagrams on **Pages 20-22**, wire fixture accordingly. Place all wiring and connectors back in junction box and replace cover.
- Note:** 0-10v, DALI, or Lutron EcoSystem power supplies (if specified) require additional dimming control wiring.

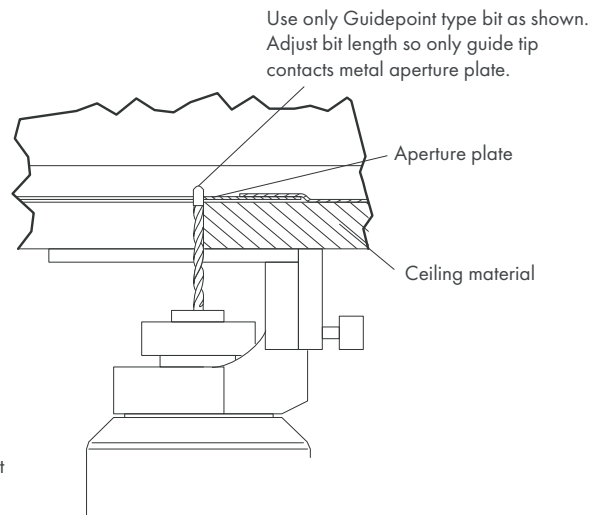
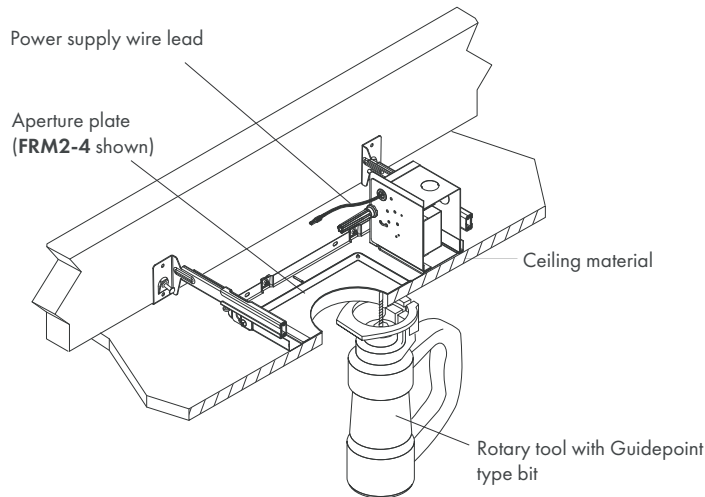




# FRM2-4 & FRM2-4-CP - FLANGED TRIM INSTALLATION with SHEETROCK/WOOD/STONE CEILINGS

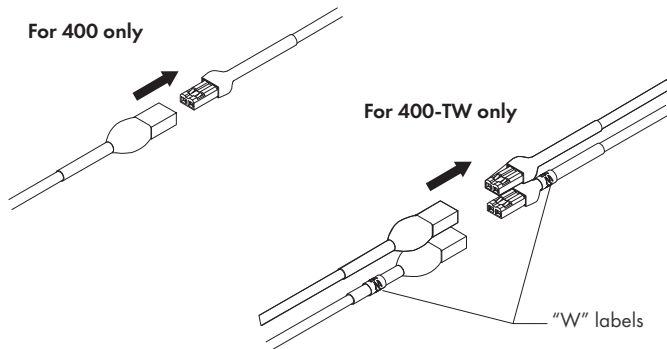
## STEP 3 – CEILING CUT-OUT

**3a.** Install ceiling material over **FRM2-4** or **FRM2-4-CP** Housng. Make  $\varnothing 4\text{-}\frac{1}{2}"$  cut-out in ceiling material using spiral saw with appropriate guide bit using aperture plate as guide.

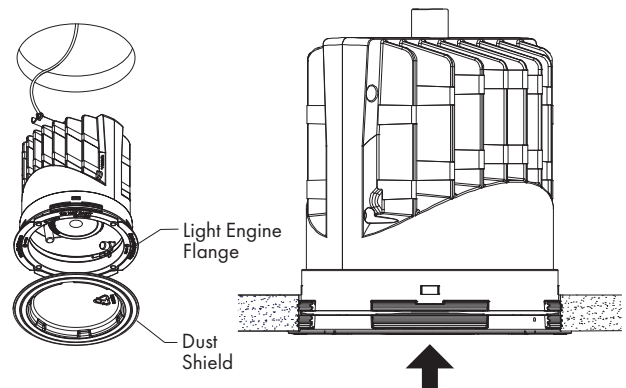


## STEP 4 – LIGHT ENGINE WIRING AND INSTALLATION

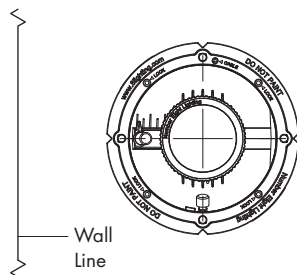
**4a.** Support light engine and connect fixture wire lead to power supply wire lead. For model 400-TW ensure connectors labeled "W" are attached together.



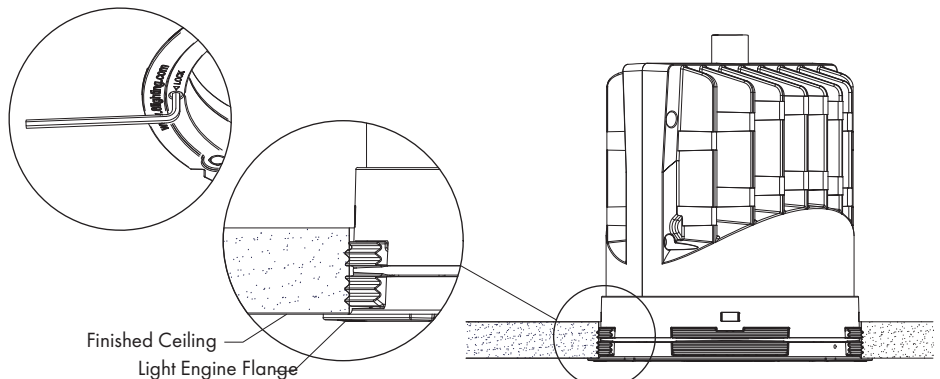
**4b.** Remove temporary dust cover and save. Install light engine into ceiling cut-out.



**4c.** Rotate light engine flange so notches are aligned with adjacent walls or fixtures.

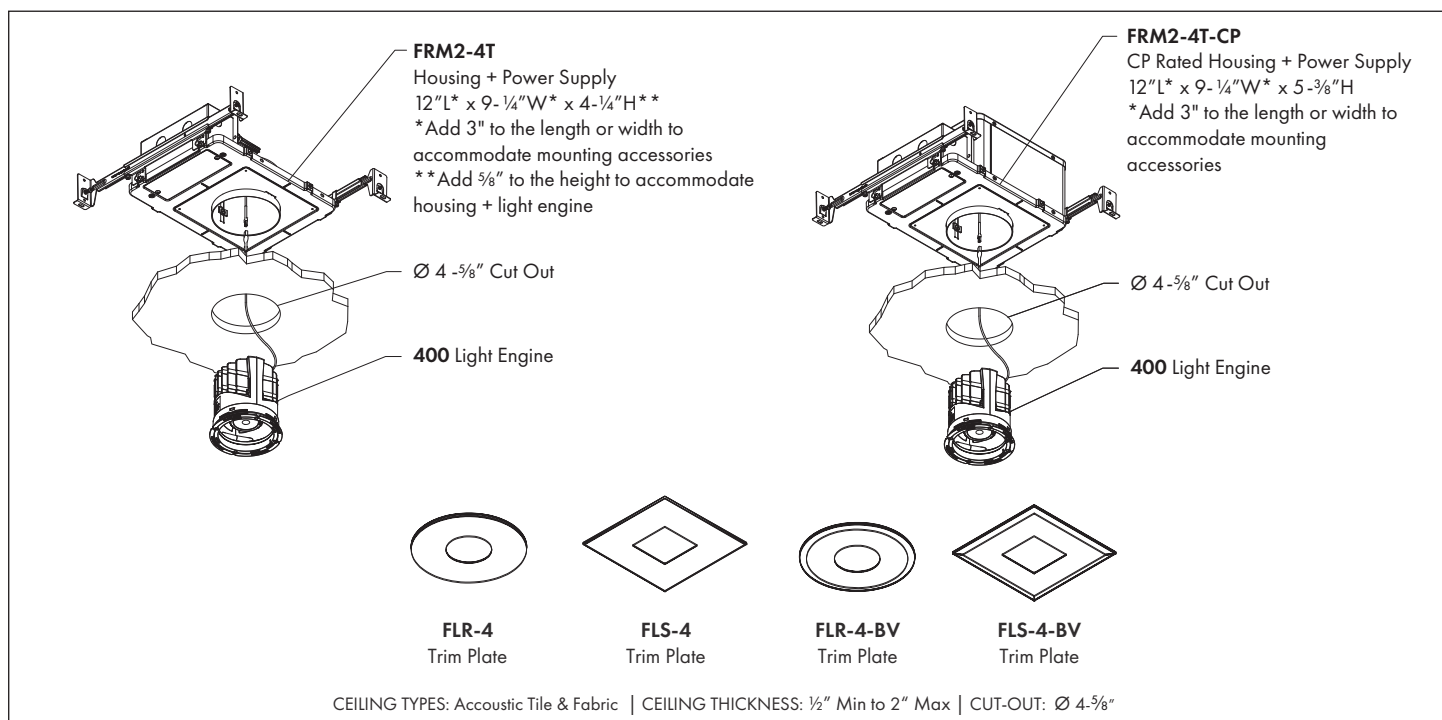


**4d.** Locate (4) four locking screws. While applying upward pressure on light engine flange, hand tighten using supplied  $\frac{3}{32}"$  hex-key. Ensure light engine flange is tight against finished ceiling. **Caution:** Ceiling finish must not extend above backside of light engine flange.



**4e.** Replace temporary dust cover before finishing ceiling.

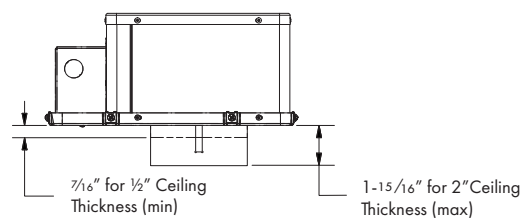
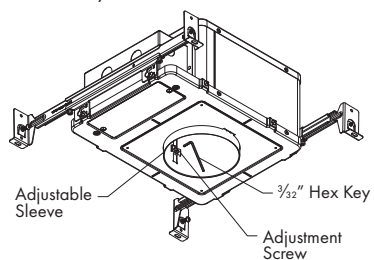
## FRM2-4T & FRM2-4T-CP - FLANGED TRIM INSTALLATION with ACOUSTIC TILE/FABRIC CEILINGS



### STEP 1 – FRM2-4T AND FRM2-4T-CP HOUSING ASSEMBLY AND INSTALLATION (see page 4)

### STEP 2 – FRM2-4T AND FRM2-4T-CP HOUSING SLEEVE ADJUSTMENT

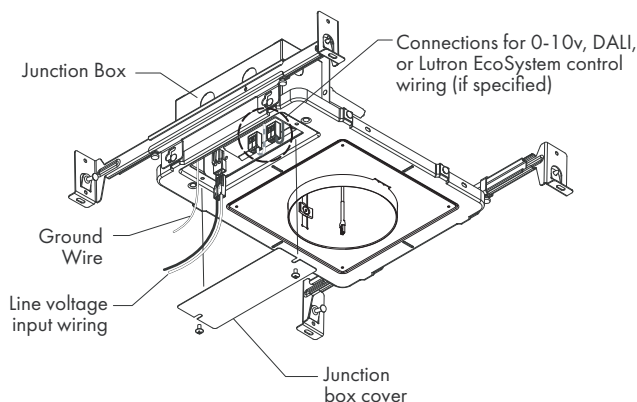
**2a.** Adjust **FRM2-4T** or **FRM2-4T-CP** sleeve to be 1/16" less than finished ceiling thickness and secure using a 3/32" hex key.



# FRM2-4T & FRM2-4T-CP - FLANGED TRIM INSTALLATION with ACOUSTIC TILE/FABRIC CEILINGS

## STEP 3 – FIXTURE WIRING

- 3a.** Disconnect power at circuit breaker.
- 3b.** Remove junction box cover and install appropriate conduit connector(s) using one or more of the provided junction box knock-outs.
- 3c.** Review wiring diagrams on **Pages 20-22**, wire fixture accordingly. Place all wiring and connectors back in junction box and replace cover.
- Note:** 0-10v, DALI, or Lutron EcoSystem power supplies (if specified) require additional dimming control wiring.



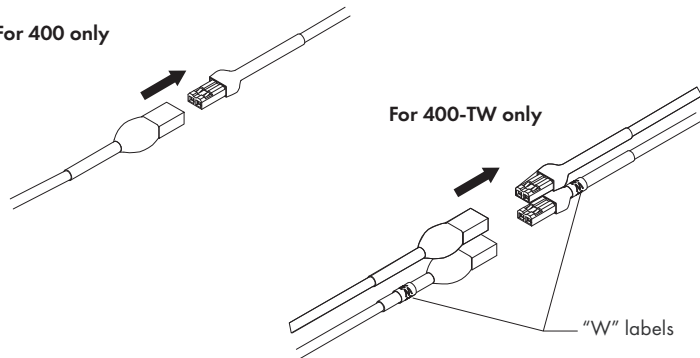
## STEP 4 – CEILING CUT-OUT

- 4a.** Make  $\varnothing 4\text{--}5/8"$  cut-out in ceiling material.
- 4b.** Install ceiling material over **FRM2-4T** or **FRM2-4T-CP** Housing ensuring sleeve is centered with  $\varnothing 4\text{--}5/8"$  cut-out in ceiling.
- 4c.** Adjust mounting sleeve (as shown in Steps 1 a) to be  $1/16"$  above finished ceiling.

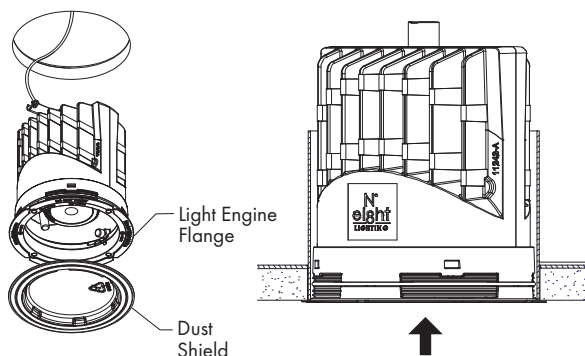
## STEP 5 – LIGHT ENGINE WIRING AND INSTALLATION

- 5a.** Support light engine and connect wire leads.  
For model 400-TW ensure connectors labeled "W" are attached together.

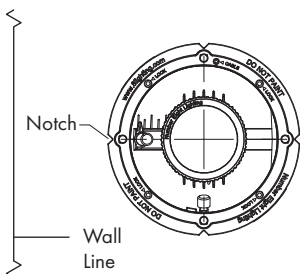
For 400 only



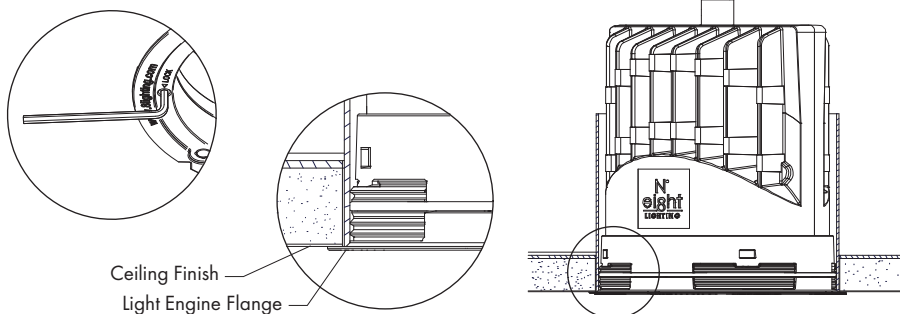
- 5b.** Remove temporary dust cover and save. Install light engine into mounting sleeve.



- 5c.** Rotate light engine flange so notches are aligned with adjacent walls or fixtures.



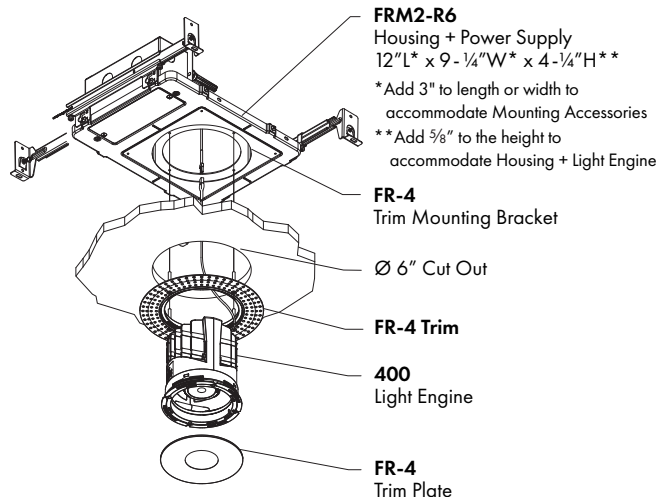
- 5d.** Locate (4) four locking screws. While applying upward pressure on light engine flange, hand tighten using supplied  $3/32"$  hex-key. Ensure light engine flange is tight against finished ceiling. **Caution:** Ceiling finish must not extend above backside of housing flange.



- 5e.** Replace temporary dust cover before finishing ceiling.

## FRM2-R/S6 & FRM2-R/S6-CP - FLANGELESS TRIM INSTALLATION with SHEETROCK CEILINGS

### FR-4 FLANGELESS TRIM & FRM2-R6 HOUSING

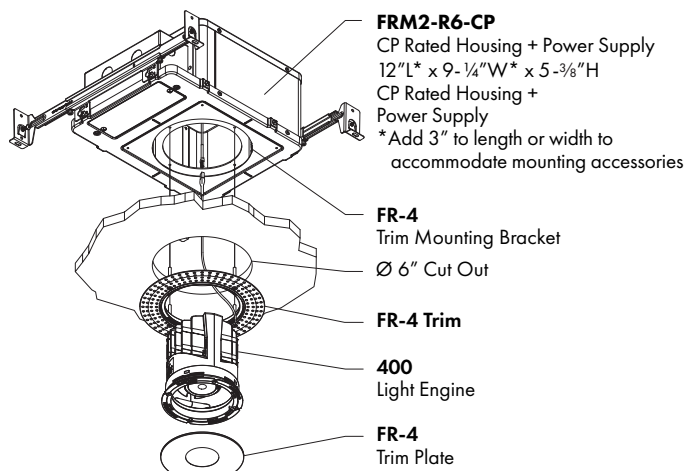


**CEILING TYPES:** Sheetrock

**CEILING THICKNESS:** 1/2" Min – 1 1/4" Max\*

**CUT-OUT:** Ø 6"

### FR-4 FLANGELESS TRIM & FRM2-R6-CP HOUSING

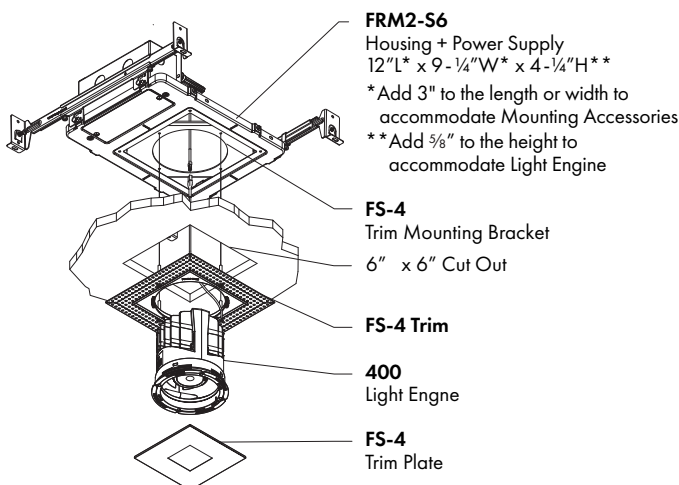


**CEILING TYPES:** Sheetrock

**CEILING THICKNESS:** 1/2" Min – 1 1/4" Max\*

**CUT-OUT:** Ø 6"

### FS-4 FLANGELESS TRIM & FRM2-S6 HOUSING

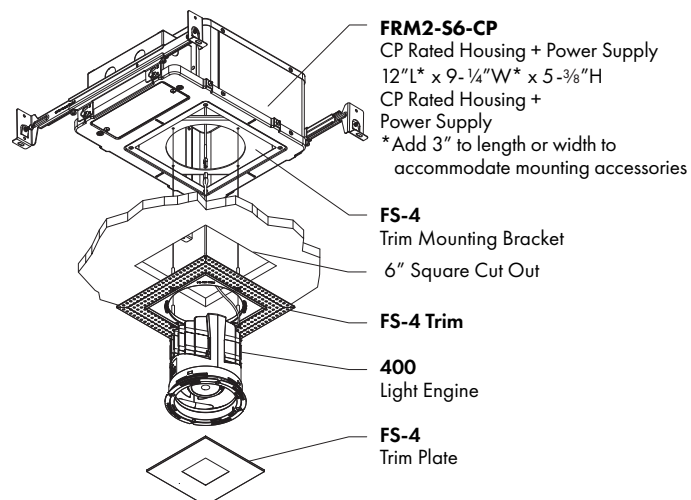


**CEILING TYPES:** Sheetrock

**CEILING THICKNESS:** 1/2" Min – 1-1/4" Max\*

**CUT-OUT:** 6" X 6"

### FS-4 FLANGELESS TRIM & FRM2-S6-CP HOUSING



**CEILING TYPES:** Sheetrock

**CEILING THICKNESS:** 1/2" Min – 1-1/4" Max\*

**CUT-OUT:** 6" X 6"

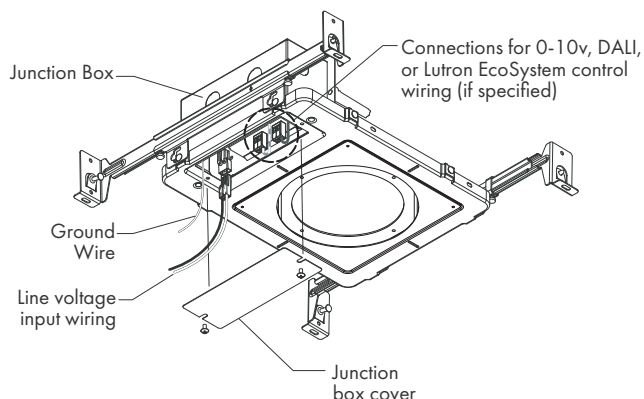
\*NOTE: For ceiling thicknesses over 1-1/4" use longer FHMS 8-32 screws (not supplied)

### STEP 1 – FRM2-R/S6 AND FRM2-R/S6-CP HOUSING ASSEMBLY AND INSTALLATION (see page 4)

# FRM2-R/S6 & FRM2-R-S6-CP - FLANGELESS TRIM INSTALLATION with SHEETROCK CEILINGS

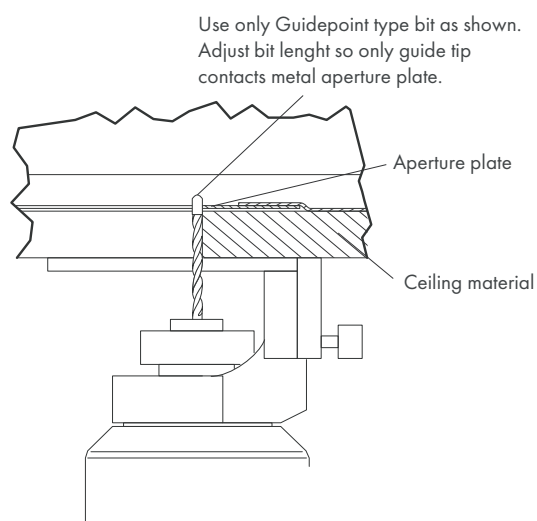
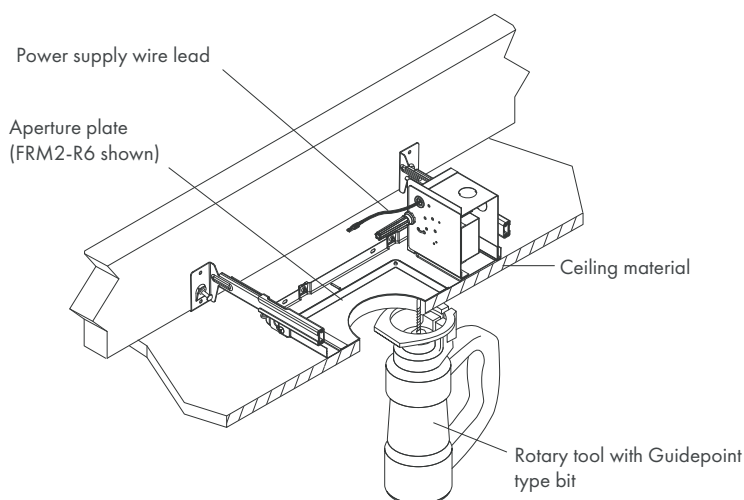
## STEP 2 – FIXTURE WIRING

- 2a.** Disconnect power at circuit breaker.
- 2b.** Remove junction box cover and install appropriate conduit connector(s).
- 2c.** Review wiring diagrams on **Pages 20-22**, wire fixture accordingly. Place all wiring and connectors back in junction box and replace cover.
- Note:** 0-10v, DALI or EcoSystem power supplies (if specified) require additional dimming control wiring.



## STEP 3 – CEILING CUT-OUT

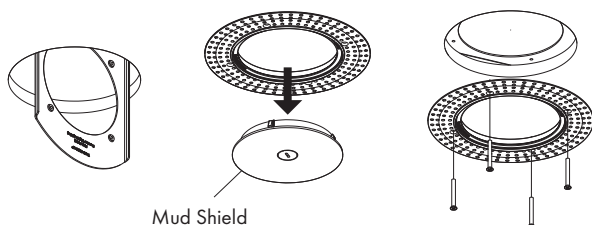
- 3a.** Install ceiling material over **FRM2-R/S6** or **FRM2-R/S6-CP** Housing. Make  $\varnothing 6"$  cut-out for **FR-4** trim with **FRM2-R6 (-CP)** or  $6" \times 6"$  cut-out for **FS-4** trim with **FRM2-S6 (-CP)** using spiral saw with appropriate guide bit using aperture plate as guide.



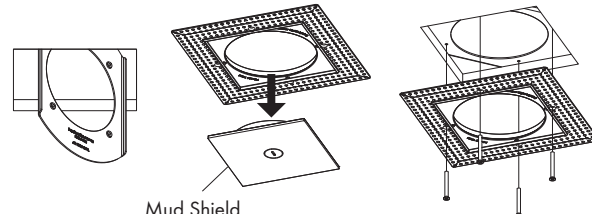
## STEP 4 – FLANGELESS TRIM INSTALLATION

- 4a.** Install ceiling bracket through cut-out. Remove mud shield and save. Install trim using four screws. Note: do not tighten screws until Step 4b.

### FR-4 FLANGELESS TRIM



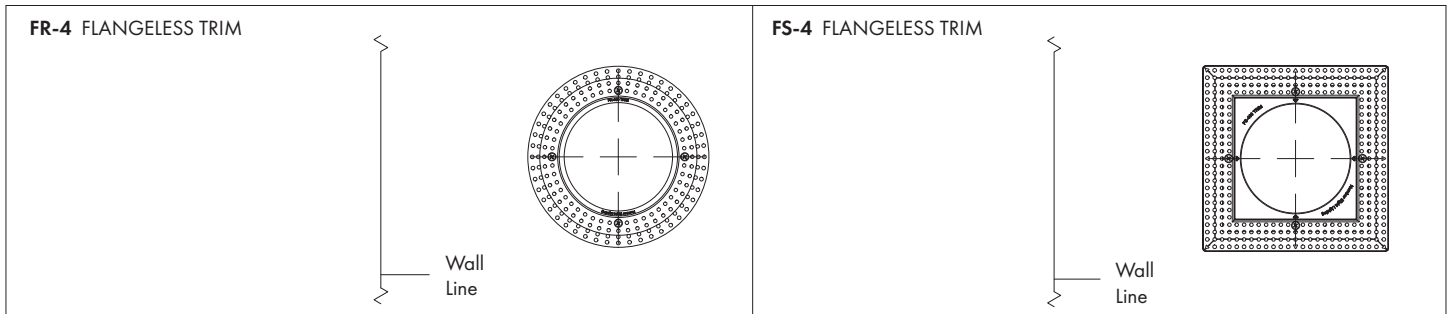
### FS-4 FLANGELESS TRIM



# FRM2-R/S6 & FRM2-R/S6-CP - FLANGELESS TRIM INSTALLATION with SHEETROCK CEILINGS

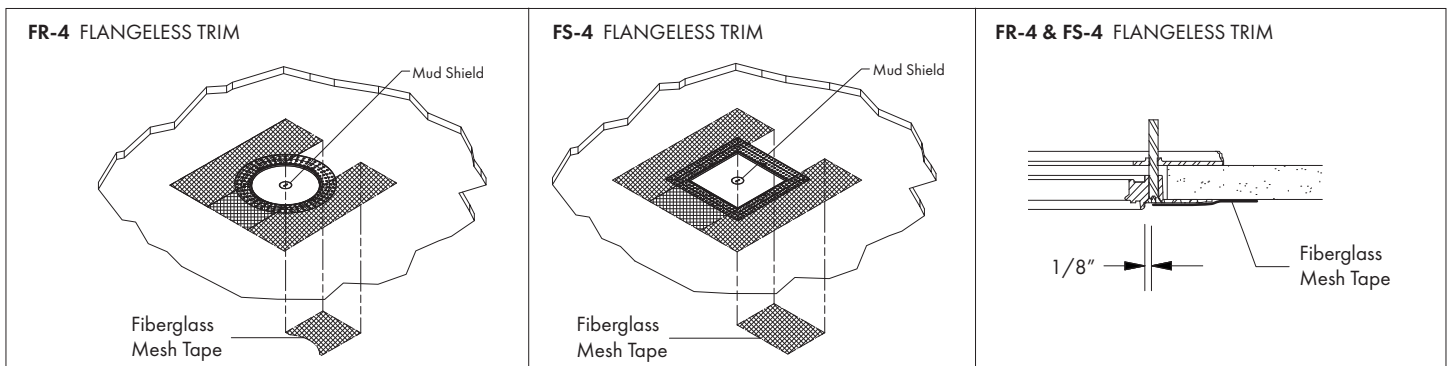
## STEP 4 – FLANGELESS TRIM INSTALLATION (CONTINUED)

**4b.** Rotate trim so screws are aligned with adjacent walls or fixtures. **Caution** - Hand tighten trim screws. Power driver is not recommended.



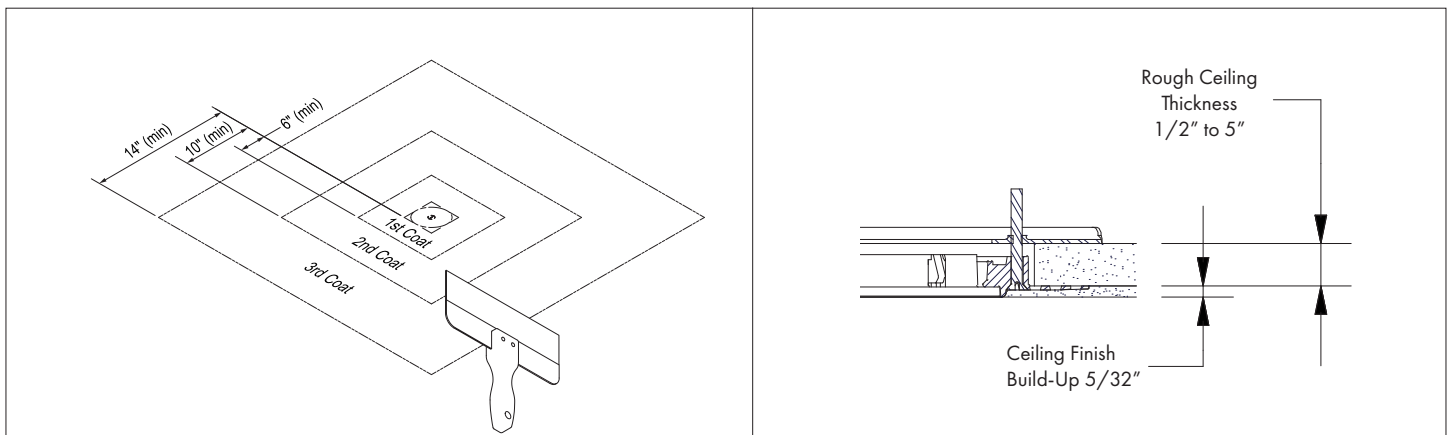
**4c.** Re-install mud shield.

**4d.** Apply 6" wide fiberglass mesh tape over perforated metal trim flange leaving 1/8" cut-out around the outside edge of the raised trim lip and extending over ceiling board.



**4e.** Apply ceiling finish **FR-4 & FS-4 FLANGELESS TRIM**.

**Note:** Minimum Level 4 or 5 finishes are recommended for optimum appearance.



**4f.** First Coat - Apply USG "Durabond" setting-type joint compound for embedding the perforated flange and fiberglass mesh tape following the manufacturer's instructions and warnings for outside corners and trim. The compound should extend a minimum of 6" from the trim edge. Allow first coat to dry completely and remove any high spots by lightly sanding before applying the second coat.

**4g.** Second Coat - Apply USG general purpose ready-mixed joint compound flush to finished edge of trim, floating outward following the manufacturer's instructions and warnings. The compound should extend a minimum of 10" from the trim edge. Allow second coat to dry completely and remove any high spots by lightly sanding before applying the third coat.

**4h.** Third Coat - Apply USG ready-mixed finishing joint compound flush to finished edge of trim, floating outward following the manufacturer's instructions and warnings. The compound should extend a minimum of 14" from the trim edge. Allow third coat to dry completely before sanding.

**4i.** Sand third coat with fine grit sandpaper until mud shield and finished metal edge of trim lip are barely exposed.

**4j.** Remove mud shield knock-out and remove mud-shield by pulling outward.

**4k.** Remove excess material from inside edges of trim.

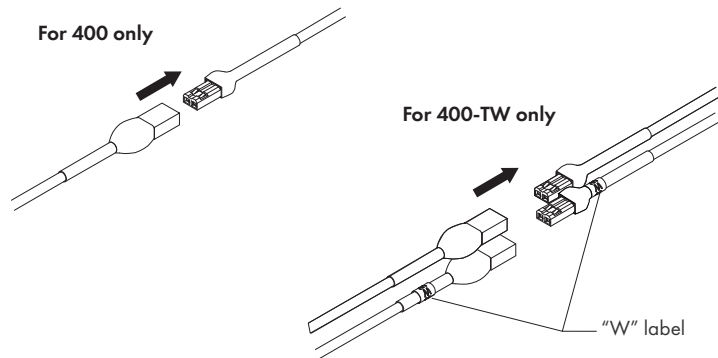
**4l.** Apply primer (USG Sheetrock or equivalent) and paint following the paint manufacturer's instructions and warnings.

**CAUTION:** Do not paint inside of **FR-4** or **FS-4** trim surface.

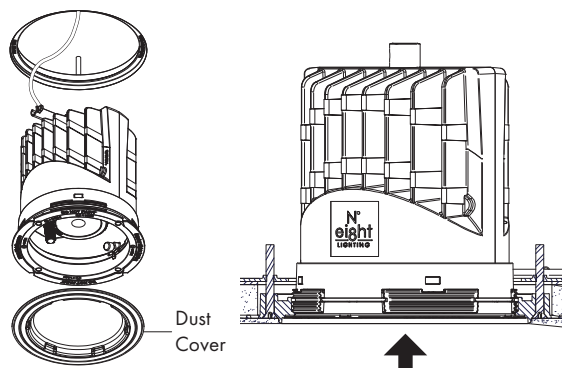
# FRM2-R/S6 & FRM2-R/S6-CP - FLANGELESS TRIM INSTALLATION with SHEETROCK CEILINGS

## STEP 5 – LIGHT ENGINE WIRING AND INSTALLATION

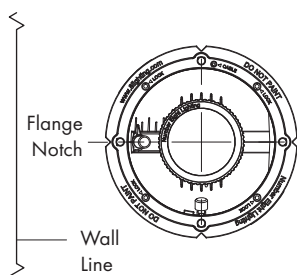
**5a.** Support light engine and connect fixture wire lead to power supply wire lead.  
For model 400-TW ensure connectors labeled "W" are attached together.



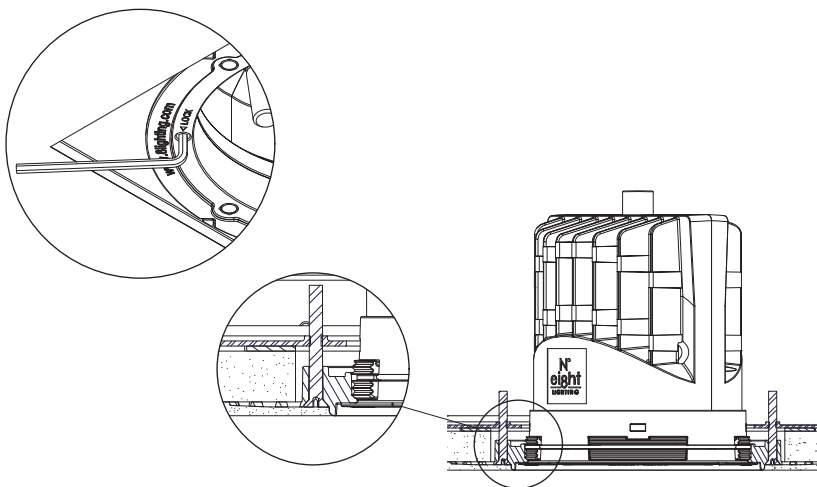
**5b.** Remove temporary dust cover and save. Install light engine into trim.



**5c.** For **FR-4** trim, rotate light engine flange so notches are aligned with adjacent walls or fixtures. For **FS-4** trim, rotate light engine flange until notches in flange mate with notches in trim.



**5d.** Locate (4) four locking screws. While applying upward pressure on lighting engine flange, hand tighten using supplied  $3/32$ " hex-key. Ensure light engine flange is tight against trim. **Caution:** Ceiling finish must not extend above backside of light engine flange.

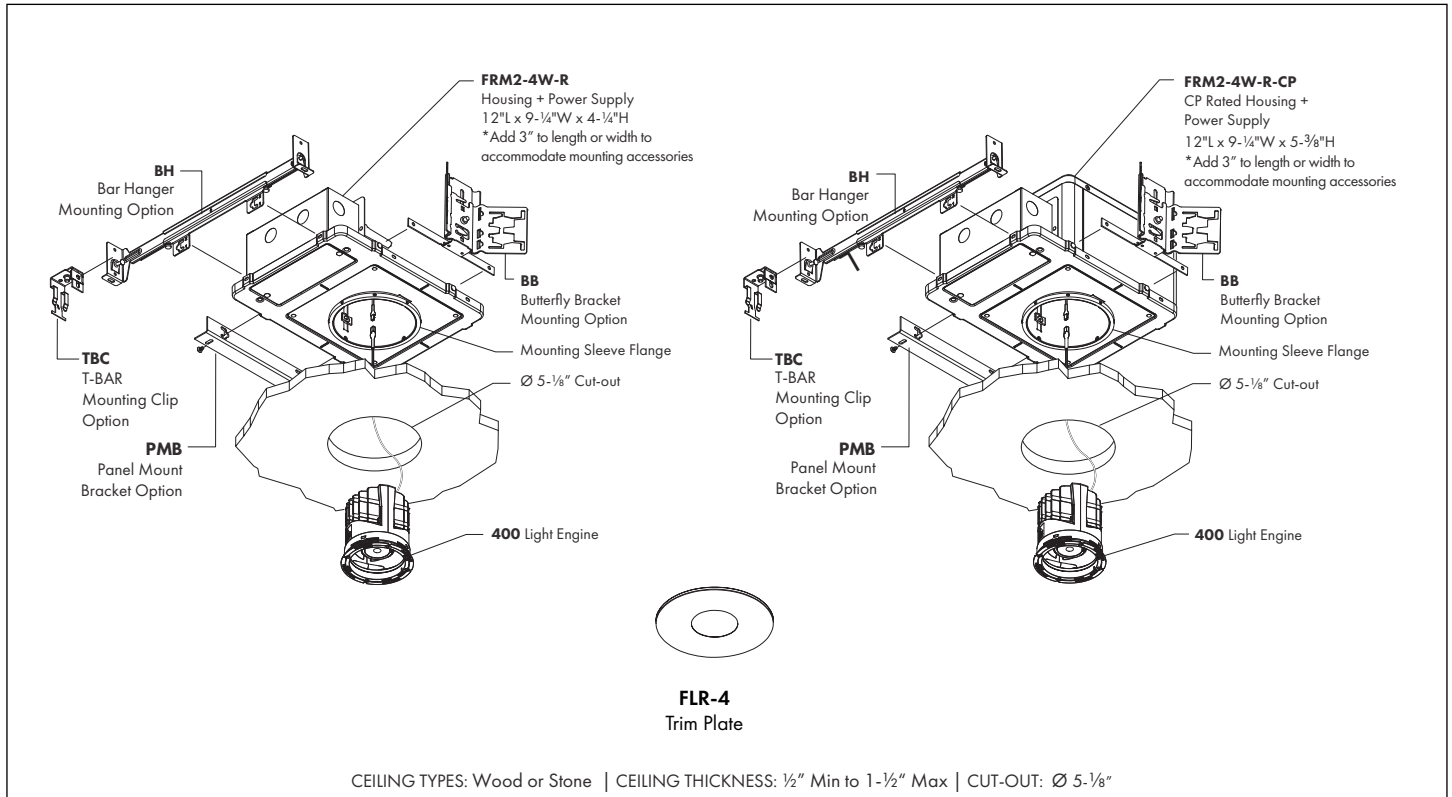


**5e.** Replace temporary dust cover before finishing ceiling.

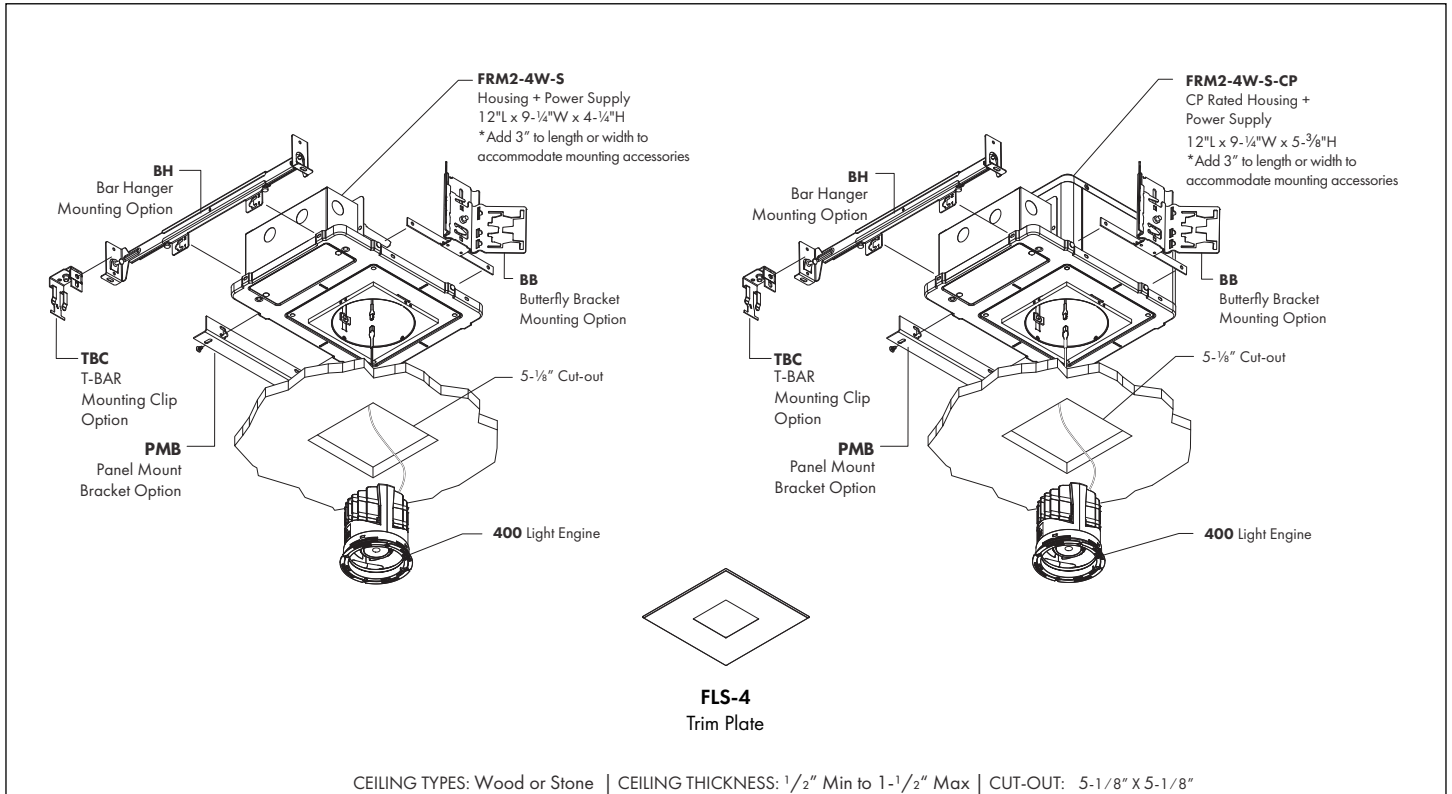


# FRM2-4W-S/R & FRM2-4W-S/R-CP - FLANGELESS TRIM INSTALLATION with WOOD/STONE CEILINGS

## FRM2-4W-R & FRM2-4W-R-CP HOUSINGS



## FRM2-4W-S and FRM2-4W-S-CP HOUSINGS



**STEP 1 – FRM2-4W-S/R and FRM2-4W-S/R-CP HOUSING ASSEMBLY and INSTALLATION** (see page 4)



## FRM2-4W-S/R & FRM2-4W-S/R-CP - FLANGELESS TRIM INSTALLATION with WOOD/STONE CEILINGS

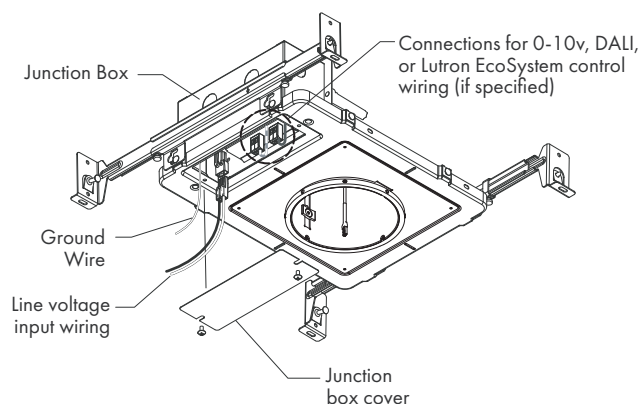
### STEP 2 – FIXTURE WIRING

**2a.** Disconnect power at circuit breaker.

**2b.** Remove junction box cover and install appropriate conduit connector(s) using one or more of the provided junction box knock-outs.

**2c.** Review wiring diagrams on **Pages 20-22**, wire fixture accordingly. Place all wiring and connectors back in junction box and replace cover.

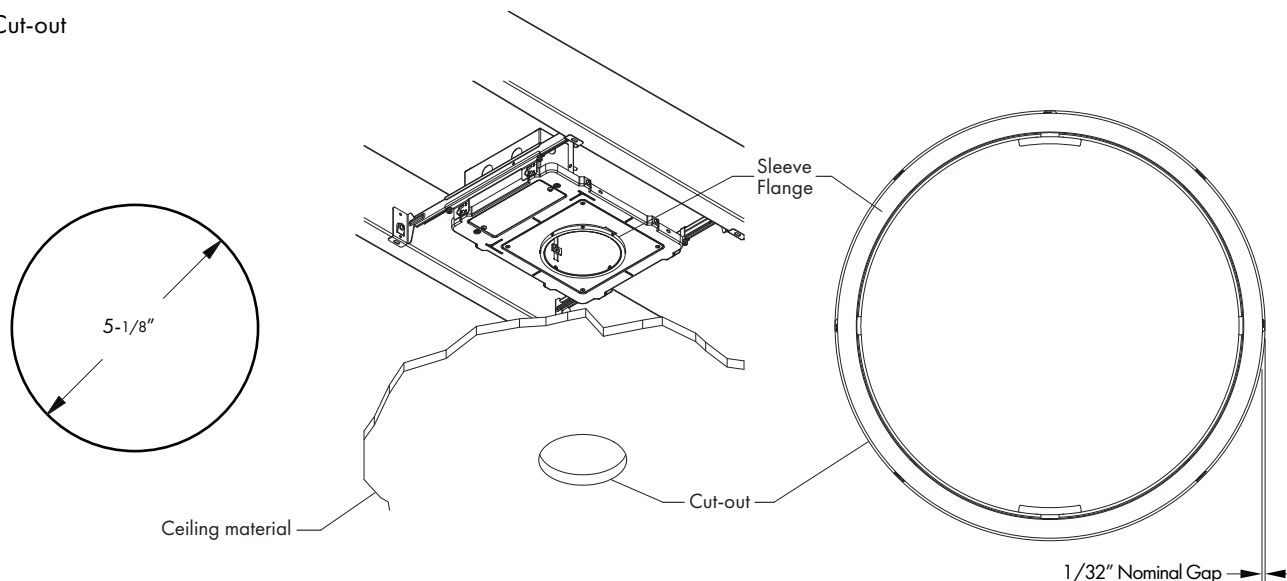
**Note:** 0-10v, DALI, or Lutron EcoSystem power supplies (if specified) require additional dimming control wiring.



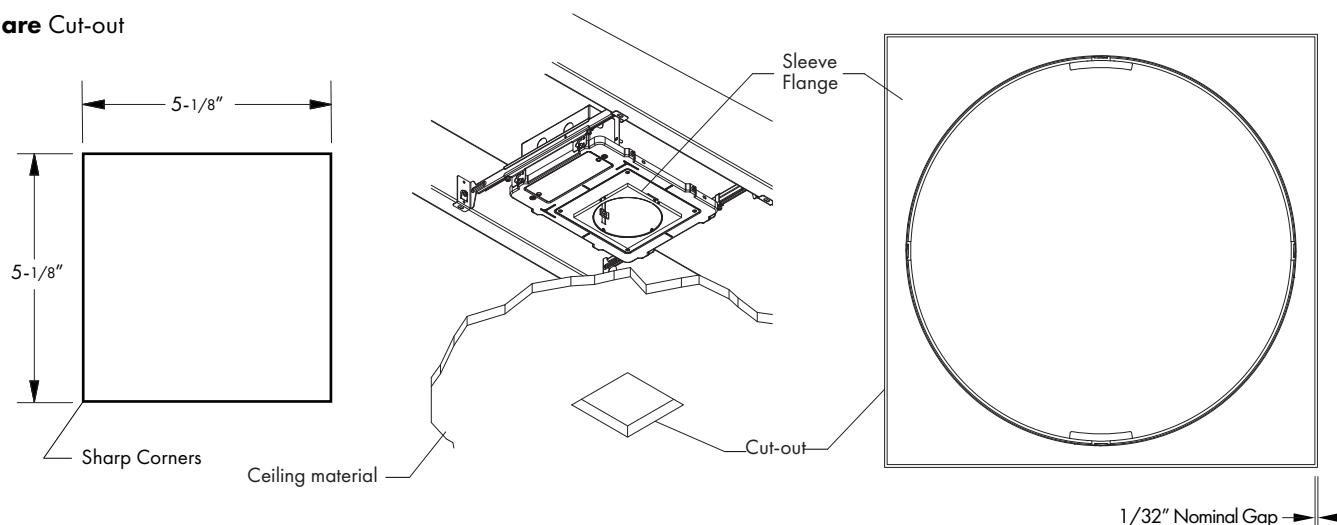
### STEP 3 – CEILING CUT-OUT

**3a.** Ceiling cut-out must be precisely located & oriented to Square or Round collar location. All dimensions are  $\pm 1/32"$ .

#### Round Cut-out



#### Square Cut-out



FRM2-4W-S/R & FRM2-4W-S/R-CP - FLANGELESS TRIM INSTALLATION with WOOD/STONE CEILINGS

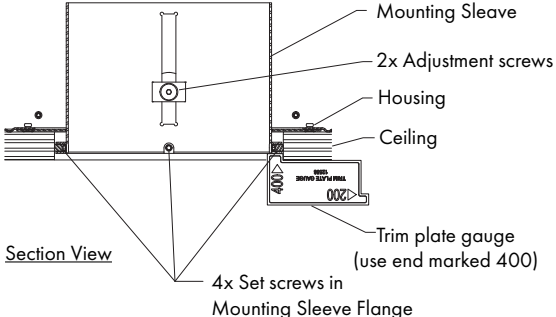
STEP 4 – FLANGELESS TRIM COLLAR ADJUSTMENT

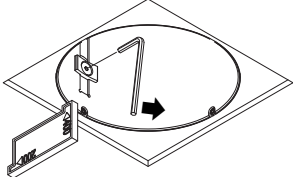
**CAUTION:** Accurate Collar depth is required to install trim plate flush to surface.  
To ensure trim plate will be flush to the mounting surface, the collar must be recessed up into the mounting surface by the depth of the supplied trim plate gauge tip. Use tip marked ◀400.

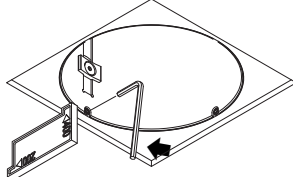
**4a.** Loosen the collar screws and check depth of mounting sleeve at each set screw location using the trim plate gauge.

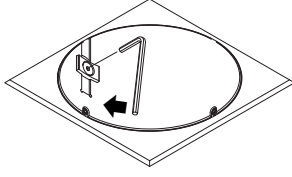
**4b.** Confirm depth using gauge. Once depth is corrected at each location, tighten the set screws to lock in the collar depth. (DO NOT OVERTIGHTEN!)

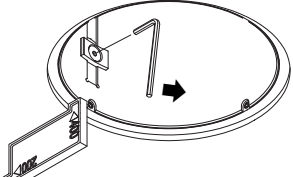
**4c.** Tighten 4x collar screws.

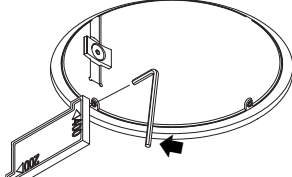


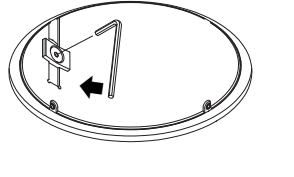












**Fig 4a.** Loosen Adjustment Screws, check & adjust Mounting Sleeve depth

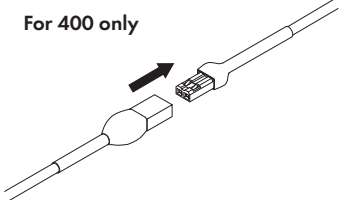
**Fig 4b.** Confirm depth and tighten Set Screws. DO NOT OVERTIGHTEN.

**Fig 4c.** Tighten Collar Screws

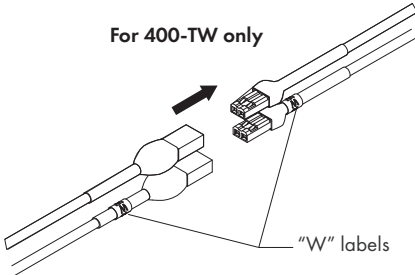
STEP 5 – LIGHT ENGINE WIRING & INSTALLATION

**5a.** Support light engine and connect fixture wire lead to power supply wire lead. Ensure connectors labeled "W" are attached together.

**For 400 only**

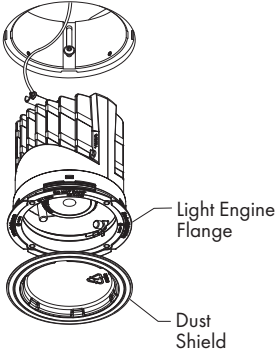


**For 400-TW only**



"W" labels

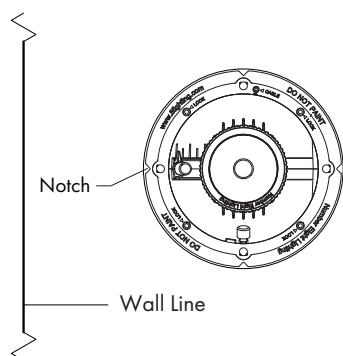
**5b.** Remove temporary dust cover and save. Install light engine into mounting sleeve.



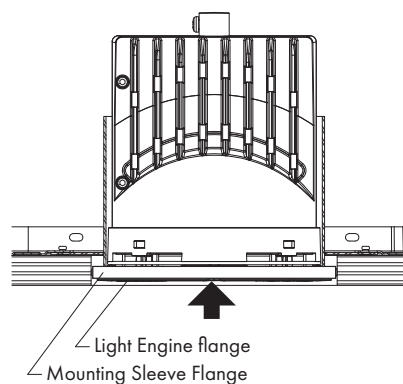
# FRM2-4W-S/R & FRM2-4W-S/R-CP - FLANGELESS TRIM INSTALLATION with WOOD/STONE CEILINGS

## STEP 5 – LIGHT ENGINE WIRING AND INSTALLATION (continued)

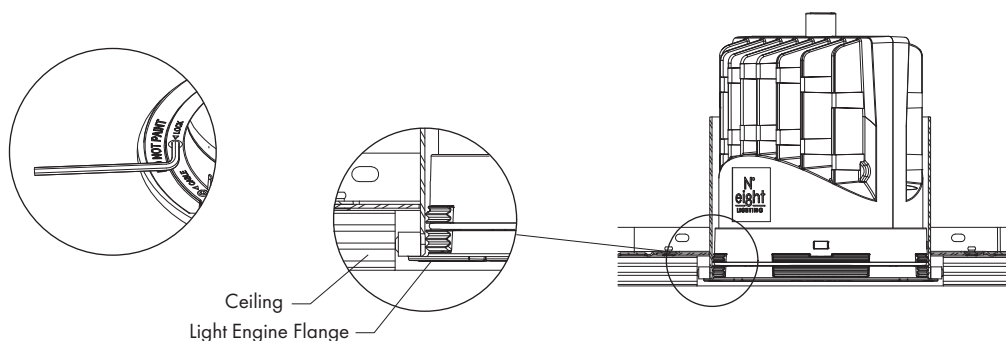
- 5c.** Orient light engine so a notch on the light engine flange will be perpendicular with adjacent wall.



- 5d.** Install light engine through cut-out and push light engine flange flush up against Mounting Sleeve Flange.



- 5e.** Locate (4) four locking screws. While applying upward pressure on light engine flange, hand tighten using supplied  $\frac{3}{32}$ " hex-key. Ensure light engine flange is tight against finished ceiling. **CAUTION:** Ceiling finish must not extend above backside of light engine flange.

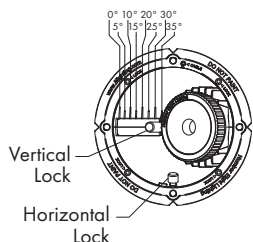
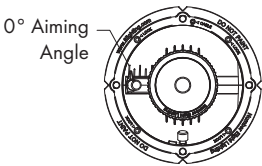
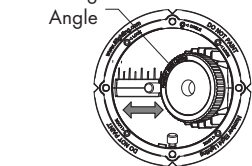
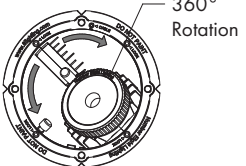


- 5f.** Replace temporary dust cover before finishing ceiling.

# AIMING & ADJUSTING

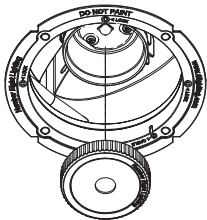
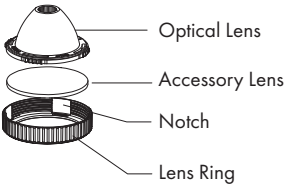
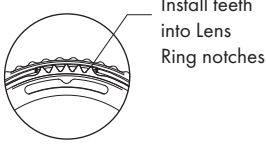

STEP 1 – VERTICAL AND HORIZONTAL AIMING AND ADJUST

- 1a. After ceiling is finished, remove temporary dust cover and discard.
- 1b. Loosen vertical and horizontal adjustment locks.
- 1c. Adjust vertical aiming by sliding the lamp holder to desired angle (0-35°).
- 1d. Adjust the horizontal aiming by rotating the lamp holder & housing assembly to desired angle (0-360°).
- 1e. Tighten vertical and horizontal adjustment screws.

Vertical aiming angle adjustment			Horizontal aiming angle adjustment
			

STEP 2 – LENS AND ACCESSORY REMOVAL AND REPLACE

- 2a. Remove lens ring from lamp holder by unscrewing counter-clockwise.
- 2b. Remove optic lens (and accessory lens if installed) by gently pressing upward on the center while holding the lens ring.
- 2c. Install desired optic (and accessory lens if used) by aligning the optic lens teeth with notches in lens ring.
- 2d. Re-install lens ring on to lamp holder by turning clockwise.

			 <div>Lens must fully seat into Lens Ring opening</div>
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## WW-4 Wall Wash Trim Adjustment and Installation

**Important:** For optimal performance use 40° optic with HI, HI-3, WD, WD-2, WD-4, or TW LED. Use 10° optic and FL lens with HI-2 LED.

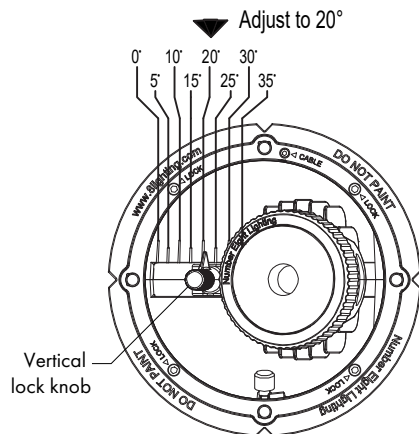
**1a.** Unlock & adjust vertical aiming angle to 20°.

**1b.** Unlock & adjust horizontal position to aim light towards wall surface to be illuminated.

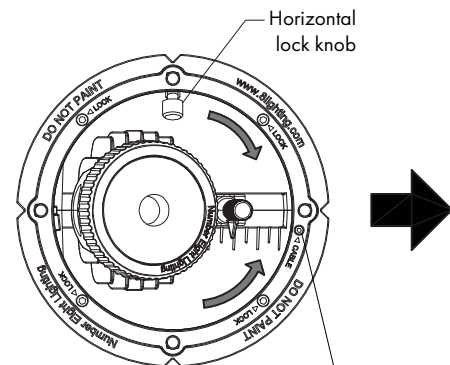
**1c.** Orient & install Wall Wash Trim Plate into Trim as shown.

**Note:** Magnets will permit Trim Plates to only be installed in 4 horizontal orientations.

### 1a. Adjust Vertical Aiming Angle



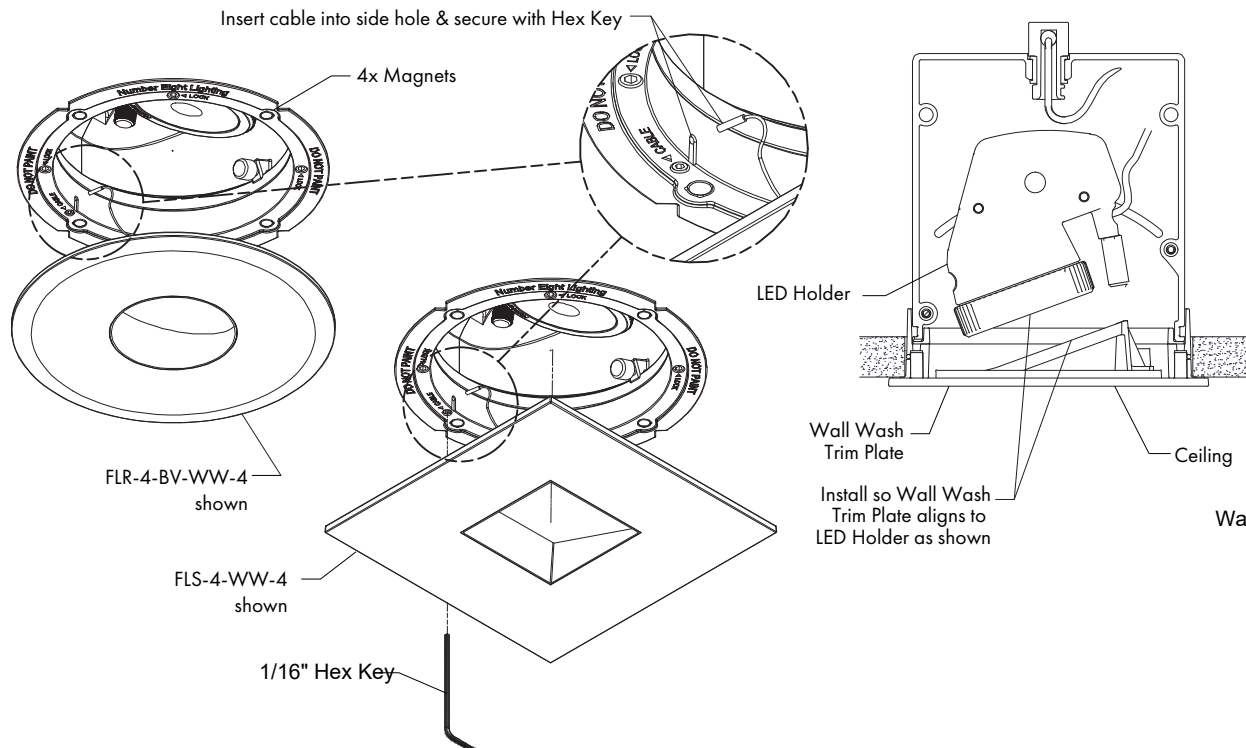
### 1b. Adjust Horizontal Aiming Angle



**Important:** Install Light Engine so Cable Screw — is oriented closest to wall as shown.

Wall –

### 1c. Install onto Light Engine Flange



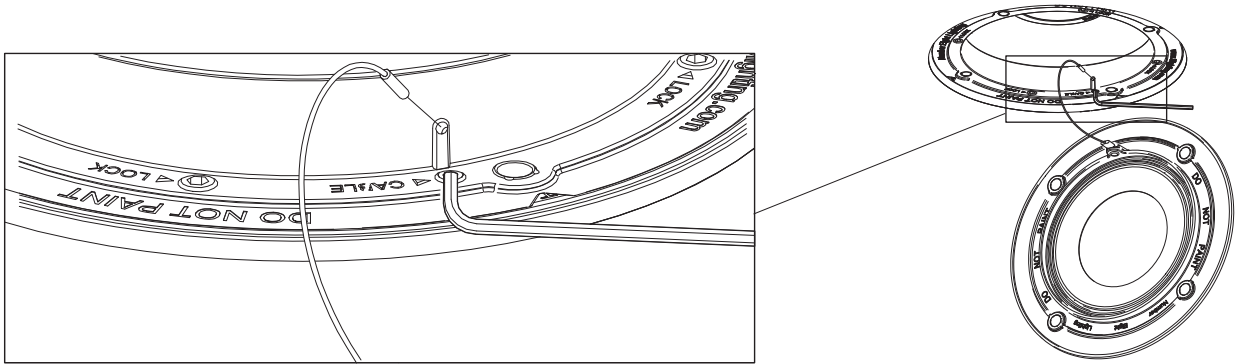
# TRIM PLATE FINISHING & INSTALLATION

## STEP 1 (OPTIONAL) – PAINT TRIM PLATE

- 1a. Remove the trim plate from packaging.
- 1b. Clean and prepare exposed surfaces for painting following the paint manufacturer's instructions and warnings.
- 1c. Paint as desired using a "dry roller" or light spray application.  
**Note:** If applying paint by spray method, mask trim plate lens (if installed).  
**Caution:** Paint must be rated for minimum 90°C (150°F). Do not paint trim plate while installed in fixture. Do not paint backside of trim plate or trim safety cable. Do not paint edges of **FR-4** or **FS-4** trim plate.
- 1d. Allow trim plate to dry completely before installing.

## STEP 2 – INSTALL TRIM PLATE

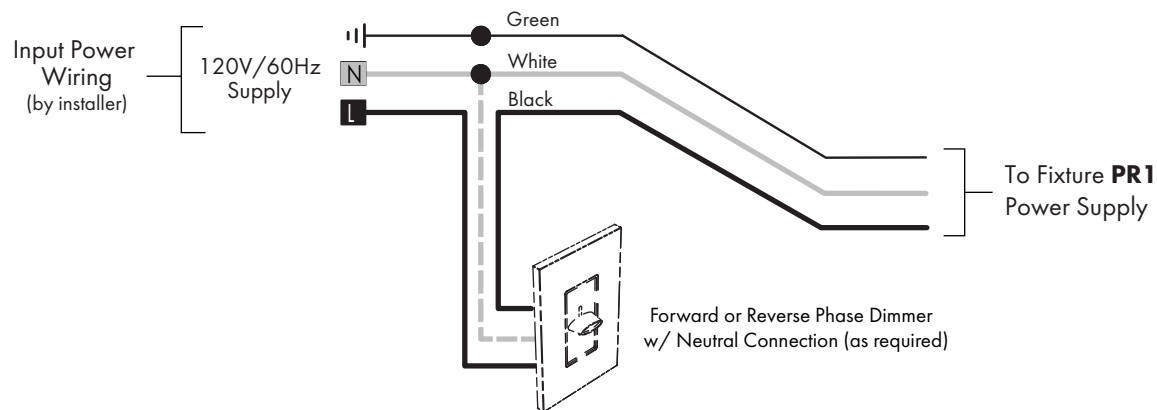
- 2a. Remove temporary dust cover and discard.
- 2b. Install trim safety cable into attachment hole on housing marked "CABLE," and secure by hand tightening set screw using supplied 1/16" hex key.



- 2c. Align trim plate with magnets and install.

## WIRING DIAGRAMS

### PR1 - PHASE CONTROL

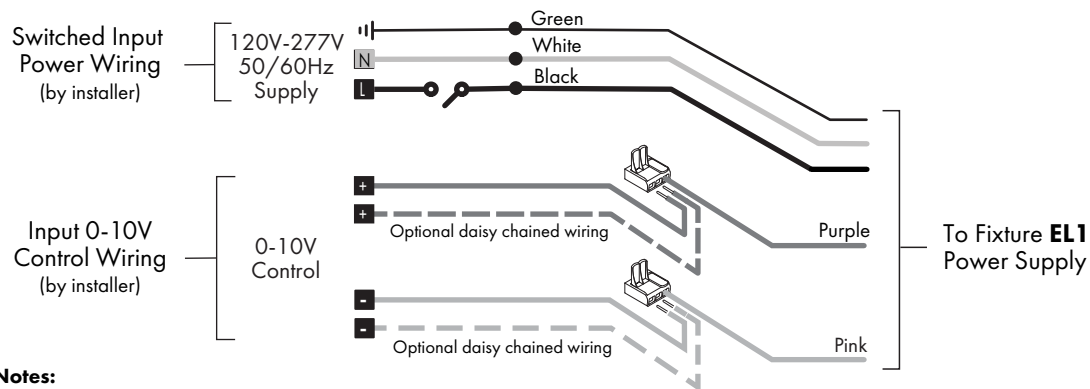


#### Phase Control Notes:

**PR1** drivers are Forward or Reverse Phase dimmable.

For compatible dimmers for use with **PR1** drivers see: [www.8lighting.com/resources-downloads](http://www.8lighting.com/resources-downloads)

### EL1 - 0-10V CONTROL



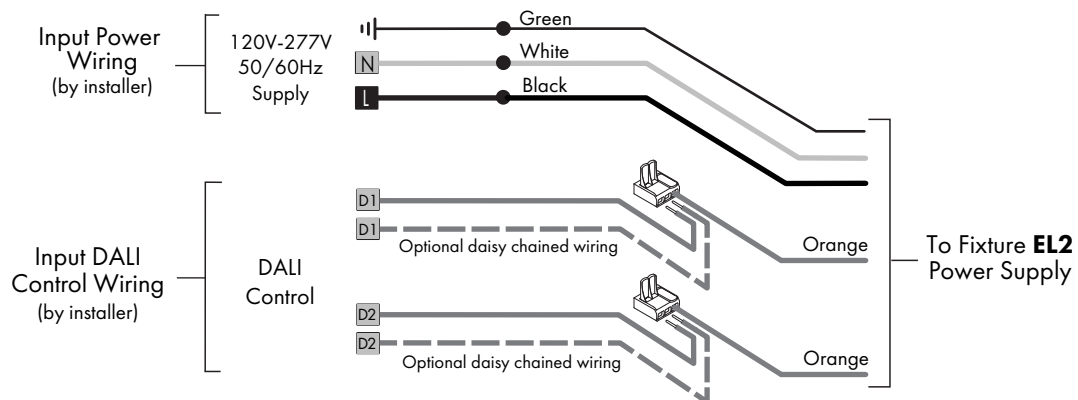
#### 0-10V Control Notes:

0-10V control wiring is polarity sensitive and should be run as Class 2.

300' is the maximum control wiring run length to reduce EMI susceptibility and voltage drop. Voltage drop should be no greater than 0.3V.

For compatible dimmers for use with **EL1** drivers see: [www.8lighting.com/resources-downloads](http://www.8lighting.com/resources-downloads).

### EL2 - DALI CONTROL



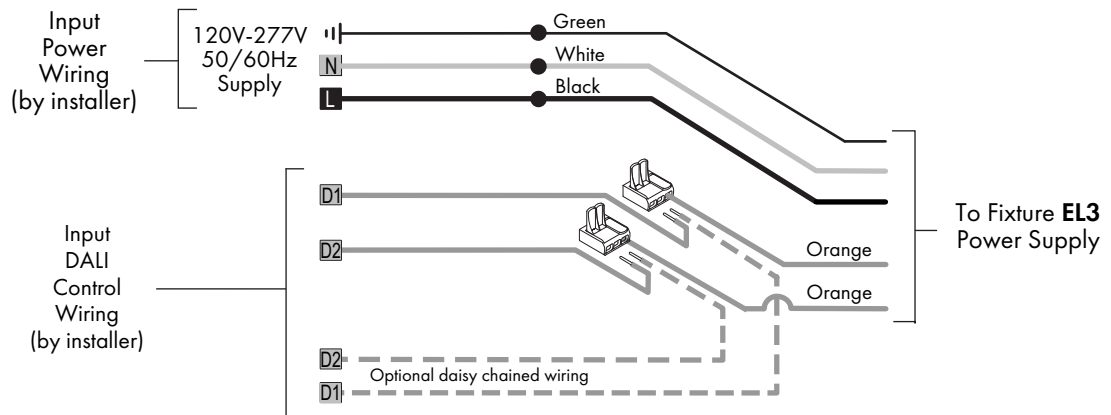
#### DALI Control Notes:

DALI control wiring is not polarity sensitive and can be run as Class 1 or 2. Up to 64 **EL2** power supplies can be daisy chained per DALI control loop. Maximum control wiring run length is 1000'.

For compatible dimmers for use with **EL2** drivers see: [www.8lighting.com/resources-downloads](http://www.8lighting.com/resources-downloads).

## WIRING DIAGRAMS continued

### EL3 - 2 CHANNEL DALI CONTROL (FOR TUNABLE WHITE)

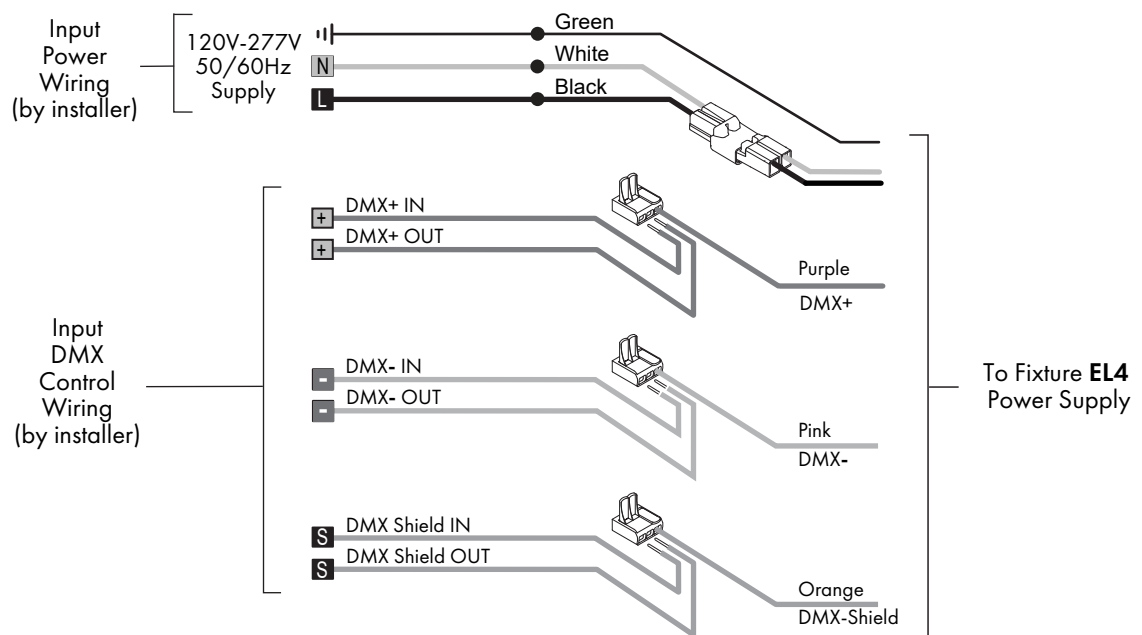


#### DALI Control Notes:

DALI control wiring is not polarity sensitive and can be run as Class 1 or 2. Each **EL3** driver will be discovered with two incremented short addresses: one for CCT and one for INTENSITY. Up to 32 **EL3** drivers can be daisy-chained per DALI control loop. Maximum control wiring run length is 1000'.

For compatible dimmers for use with **EL3** drivers see: [www.8lighting.com/resources-downloads](http://www.8lighting.com/resources-downloads).

### EL4 - 2 Channel DMX CONTROL



#### DMX Notes:

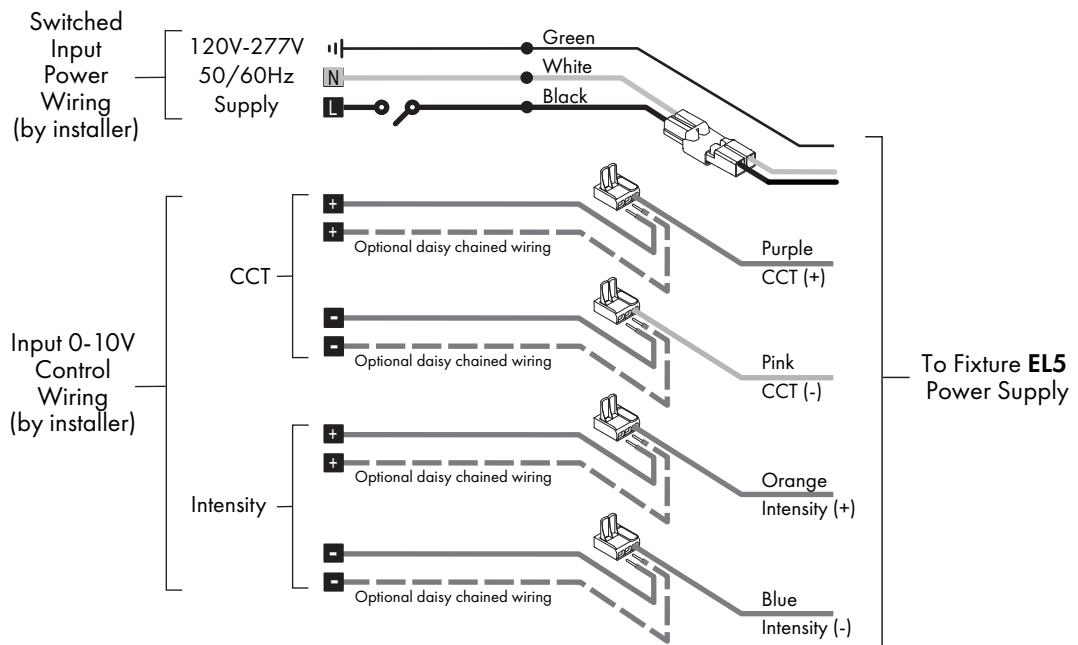
DMX control wiring is polarity sensitive and should be run as Class 2. Each **EL4** driver is one "unit load". DMX runs without a repeater/signal booster should be limited to no more than 32 fixtures including controller depending on the site conditions. **EL4** drivers are RDM compatible and addressable by others in the field. Termination of the DMX runs is to be done by others per DMX512A specification. Maximum control wiring run length is 1000'.

For compatible dimmers for use with **EL4** drivers see: [www.8lighting.com/resources-downloads](http://www.8lighting.com/resources-downloads).



## WIRING DIAGRAMS

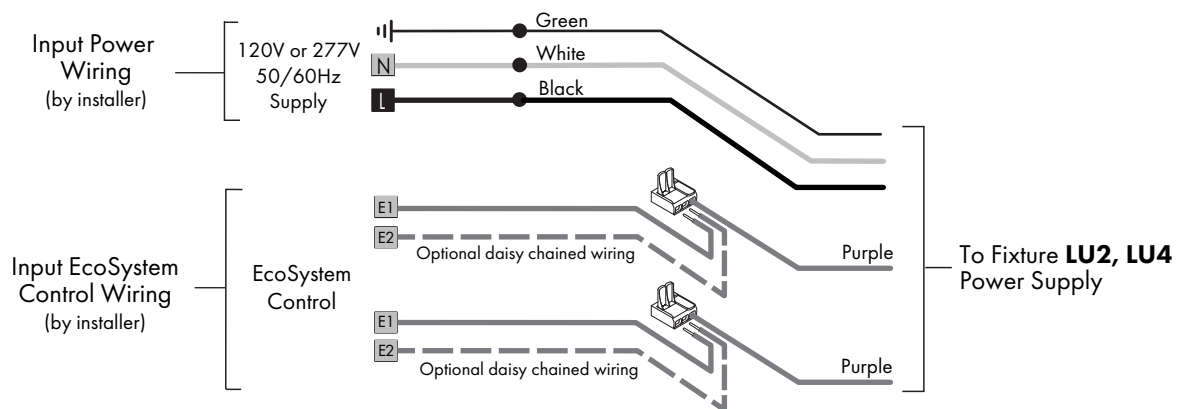
### EL5 - 2-CHANNEL 0-10V CONTROL



#### 0-10V Control Notes:

0-10V control wiring is polarity sensitive and should be run as Class 2. Each **EL5** driver requires two pairs of Class 2 control wires: one pair for CCT and one pair for INTENSITY. 300' is the maximum control wiring run length to reduce EMI susceptibility and voltage drop. Voltage drop should be no greater than 0.3V. For compatible dimmers for use with **EL5** drivers see: [www.8lighting.com/resources-downloads](http://www.8lighting.com/resources-downloads).

### LU2 / LU4 - LUTRON ECOSYSTEM CONTROL



#### Lutron EcoSystem Control Notes:

Up to 64 power supplies can be daisy chained per EcoSystem control loop. Maximum control wiring run length is 1000'. For additional information contact LED Center of Excellence at 1.877.346.5338 or [LEDs@lutron.com](mailto:LEDs@lutron.com).



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