INSTALLATION INSTRUCTIONS
RECESSED HOUSING MODEL SERIES 804/804S

SEE PAGE 3, FIG. 3.4 FOR STICKER INSTALLATION

WARNING: Read and understand these instructions completely before installation. 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.

CAUTION: Disconnect power at circuit breaker or fuse panel before installation or servicing. Always allow LED assembly to cool before servicing. Do not connect or disconnect LED lamp module wire connector when fixture is energized as this may result in permanent damage to the LED. Do not install where insulation or ambient temperatures will exceed maximum values noted in product specifications. Do not install in steam showers.

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 your local electrical code which sets the wiring standards and installation requirements for your locality and should be understood before starting work.

SAVE THESE INSTRUCTIONS.

HOUSING INSTALLATION INSTRUCTIONS
RECESSED HOUSING MODEL 804/804S SERIES

Mounting Hanger Bars

STEP 1 Important: Before attaching Hanger Bar Bracket you must determine Trim Model to be used (refer to Trim Types on Page 2).

Select upper or lower Bracket hole position (refer to Table 1.1 **Hanger Bar Bracket Positioning Chart**).

Note: For **FS-P, FR-P, INR-P, INS-P** Trims, ceiling thickness is measured from bottom face of ceiling joist to bottom face of sheetrock.

Ceiling thickness range and hole position applies to both P-1 & P-2 Trims. Refer to plaster trim installation instructions for additional details.

STEP 2 Loosen 2 screws slightly on Housing to attach or adjust each Hanger Bar Bracket. Position Hanger Bar Bracket in hole position #1 or #2 & secure screws – **FIG 1.1** & **1.2**.

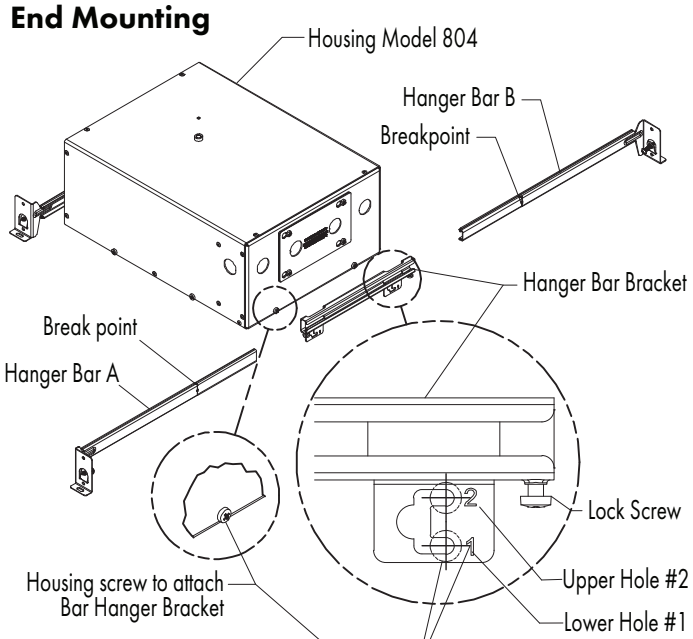
STEP 3 Assemble Hanger Bar A & B through each Hanger Bar Bracket to slide onto each other. The ends should have 1" minimum overlap.

Note: Hanger Bars can be shortened at break locations shown – **FIG 1.1**.

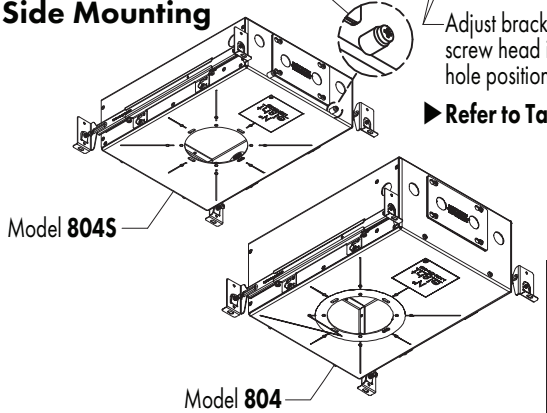
Table 1.1 Hanger Bracket Positioning Chart

Trim Models	For Ceiling Thickness Range	Hole Position #
FS-P, FR-P	½" to 1"	Lower #1
INS-P, INR-P	½" to 1"	Upper #2
	1" to 1-½"	Lower #1
FS-W, FLS-W	¼" to ¾"	Upper #2
	¾" to 1-½"	Lower #1
FR-W, FLR-W	½" to 1"	Upper #2
	1" to 1-½"	Lower #1
INR-W, FLINR-W	½" to 1"	Upper #2
	1" to 1-½"	Lower #1
INS-W, FLINS-W	½" to 1"	Upper #2
	1" to 1-½"	Lower #1

End Mounting



Side Mounting



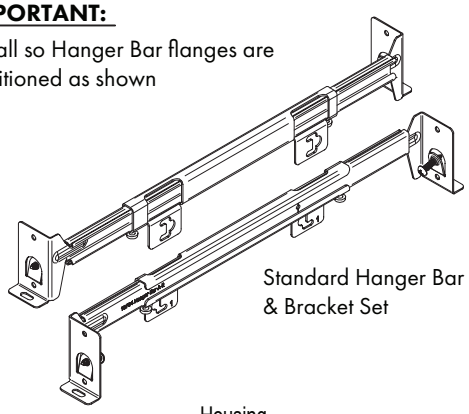
Caution: ⚠

Be sure to select correct hole position for intended Trim assembly. Changing hole position is not possible. after ceiling is installed.

FIG 1.1 Installing Hanger Bar & Hanger Bracket Set

⚠ **IMPORTANT:**

Install so Hanger Bar flanges are positioned as shown



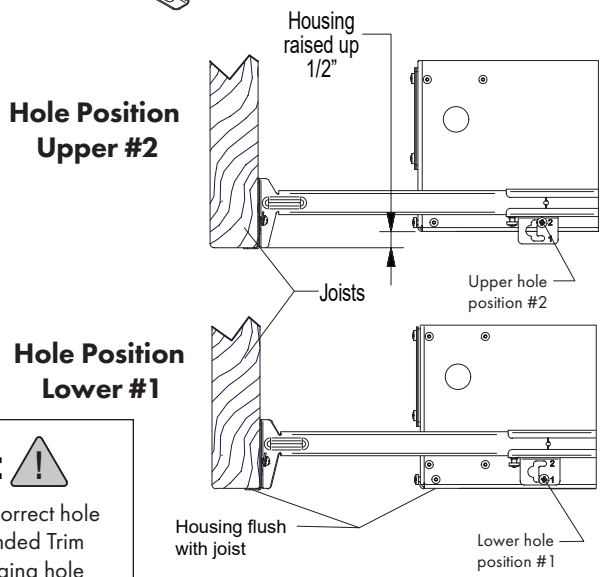


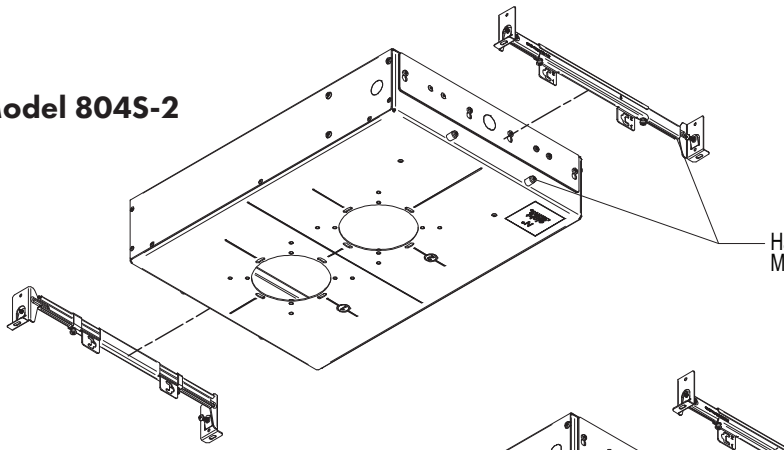
FIG 1.2 Hole Position & Housing Location

HOUSING INSTALLATION INSTRUCTIONS
RECESSED HOUSING MODEL SERIES 804/804S

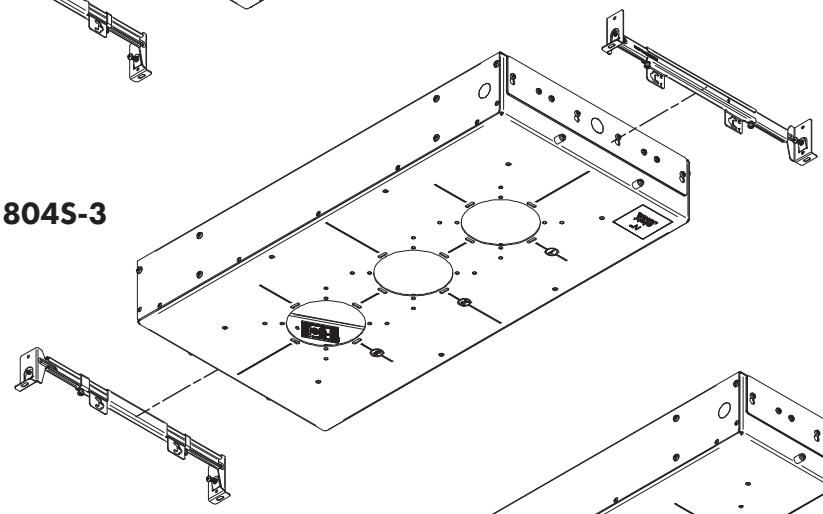
Note: Pre-install Hanger Bar & Bracket sets to housing as shown.
Refer to page 1 for assembly details.

Mounting Hanger Bar Sets to Multi-lamp Housings

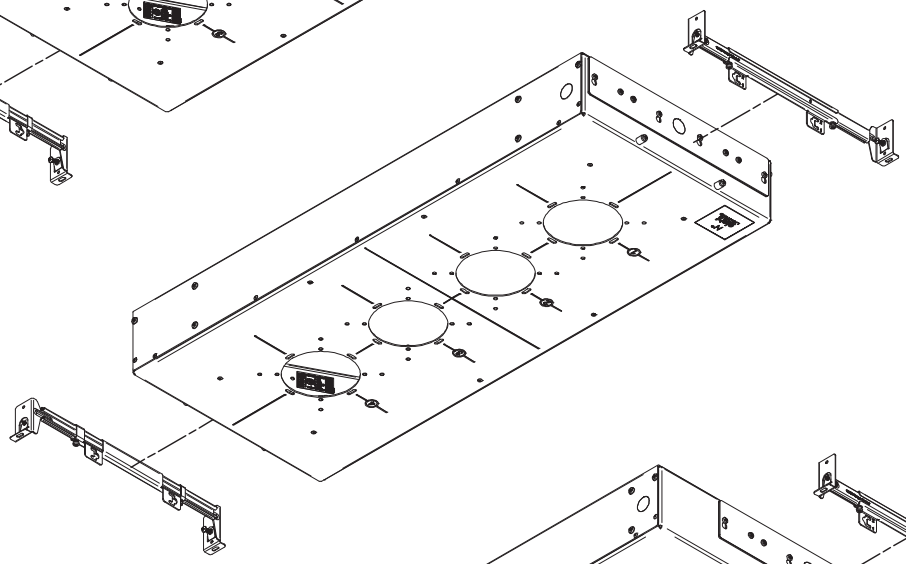
Model 804S-2



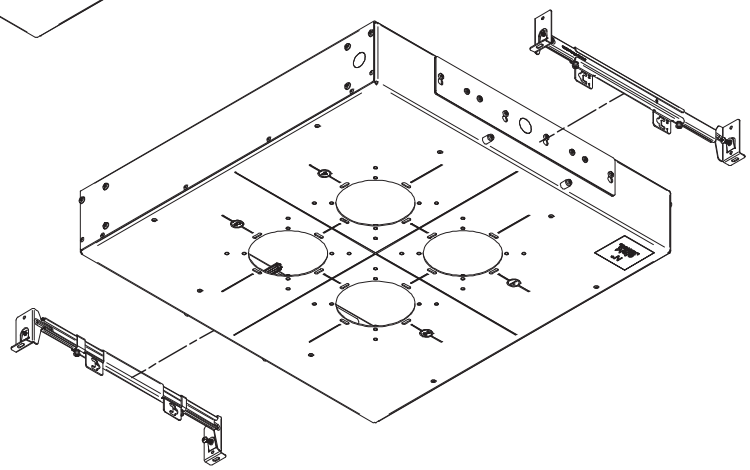
Model 804S-3



Model 804S-4



Model 804S-4Q



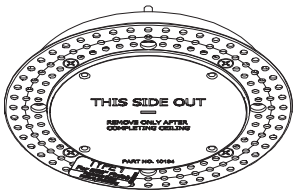
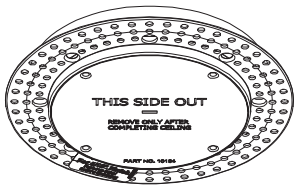
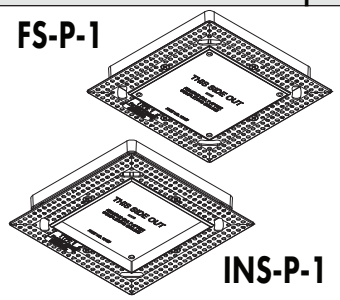
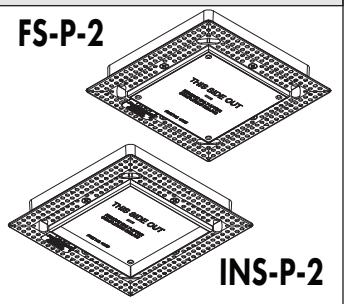
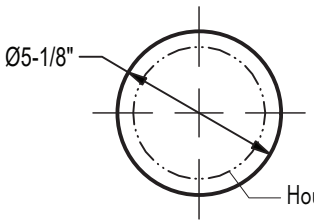
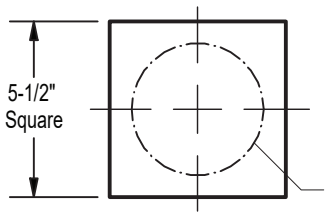
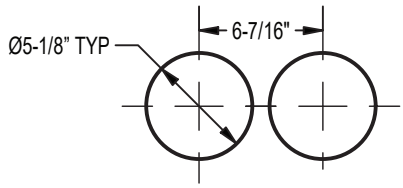
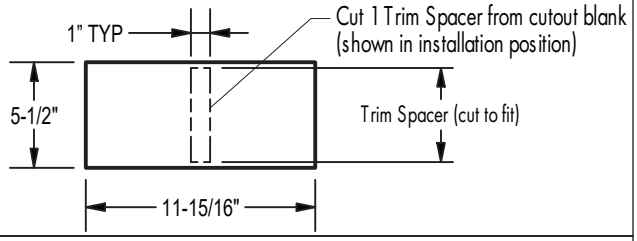
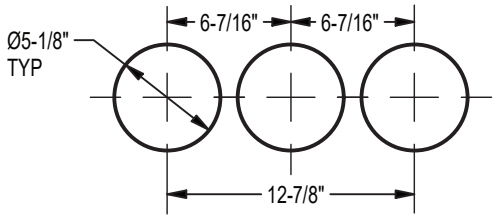
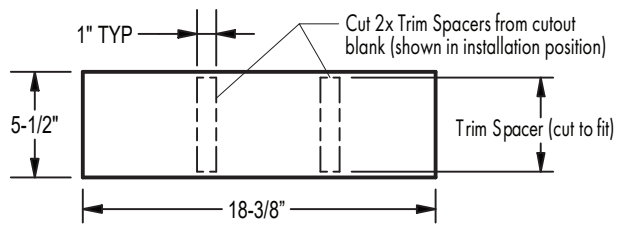
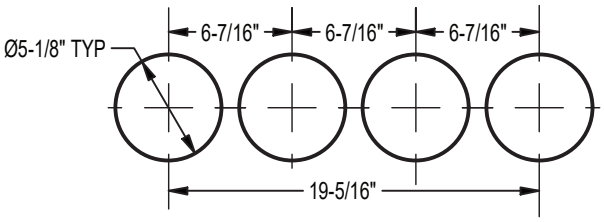
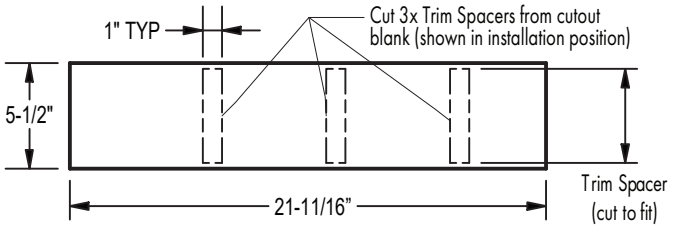
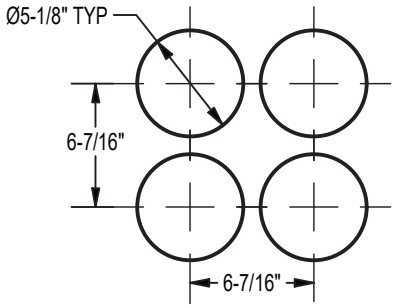
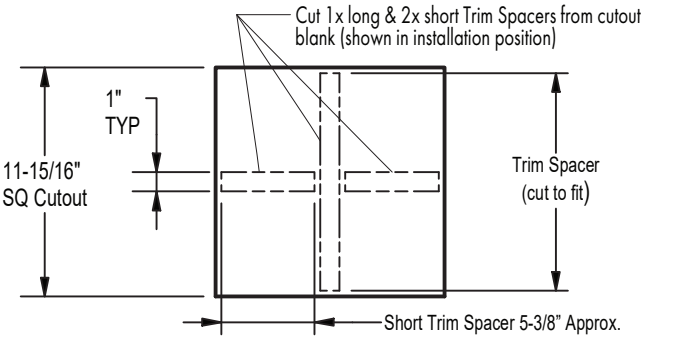
CEILING CUTOUT CHART FOR PLASTER/SHEETROCK CEILINGS

STEP 4 For Plaster/sheetrock only-Accurately measure cutout location (for housing aperture center) & mark centers in ceiling board.

⚠ **Important:** Cutout location accuracy is critical, always double check measurements before cutting.

STEP 5 Cut openings in ceiling board as dimensioned below.

Note: Trim Spacers are required with Square Trims used on Multi-Lamp Housings only. Spacers can be cut randomly from anywhere within square trim ceiling board cutout blanks shown below. Trim Spacer thickness must be identical to ceiling board used. Refer to Trim Installation Instructions 10303 for Trim Spacer installation details.

Trim Model	Round Trims		Square Trims	
	 FR-P-1	 FR-P-2	FS-P-1  INS-P-1	FS-P-2  INS-P-2
	Round Trim Cutouts		**Square Trim Cutouts & Spacers**	
1 Lamp Housing	 Tolerances: All Round Trim Cutouts ± 1/16" CTR-CTR ± 1/32" (shown at larger scale)		 Tolerances: All Square Trim Cutouts +1/8" (shown at larger scale)	
2 Lamp Housing				
3 Lamp Housing				
4 Lamp Housing				
4 Lamp Quad Housing				

CEILING CUTOUT CHART FOR WOOD/STONE CEILINGS

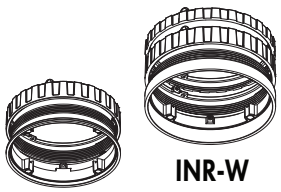
STEP 4 For Wood/Stone ceiligns only-Accurately measure cutout location for housing aperture centers & mark centers in ceiling board.

⚠ **Important:** Cutout location accuracy is critical, always double check measurements before cutting.

STEP 5 Cut openings in ceiling board as dimensioned below.

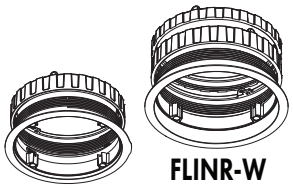
Round Trims

NON-FLANGED



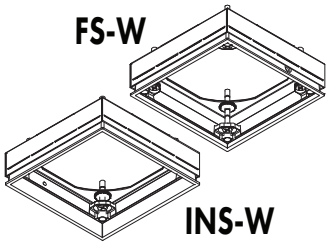
Important: All Non-flanged cutouts to have clean, sharp edges

FLANGED



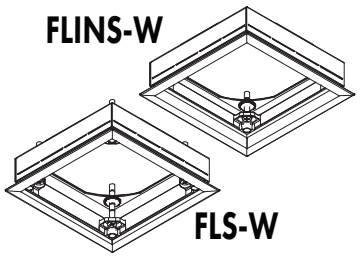
Square Trims

NON-FLANGED

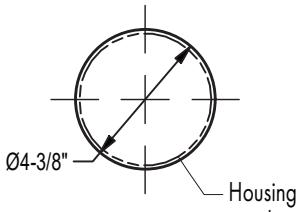


Important: All Non-flanged cutouts must have clean, sharp edges & corners

FLANGED



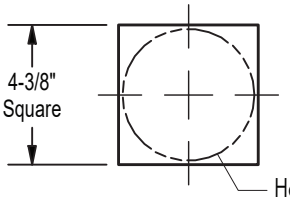
1 Lamp Housing



(shown at larger scale)

All Round Cutout Tolerances:

FR-W ± 1/32"
INR-W ± 1/32"
FLR-W +1/8" / -1/32"
FLNR-W +1/8" / -1/32"
CTR to CTR ± 1/32"

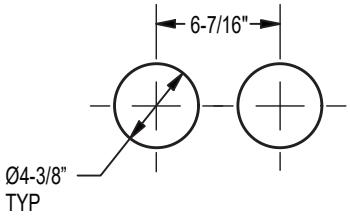


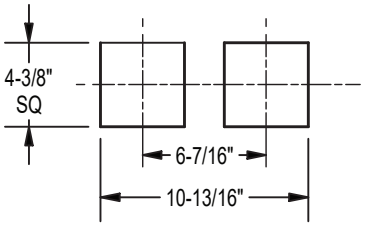
(shown at larger scale)

All Round Cutout Tolerances:

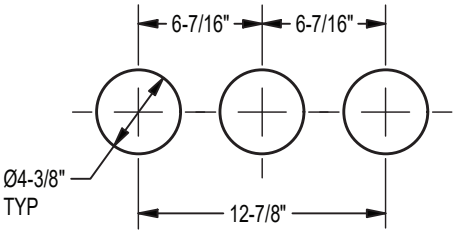
FS-W ± 1/32"
INS-W ± 1/32"
FLS-W +1/8" -1/16"
FLINS-W +1/8" -1/16"
CTR to CTR 1/32"

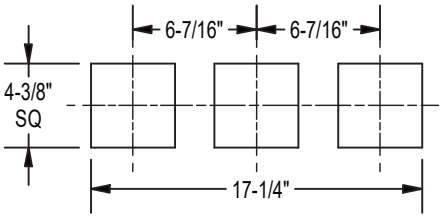
2 Lamp Housing



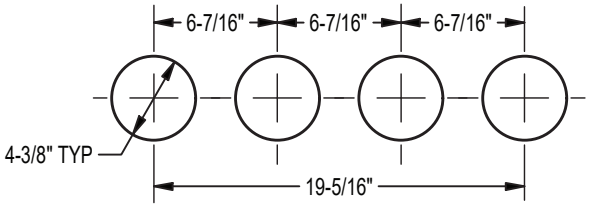


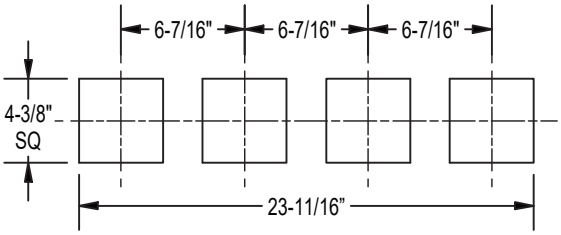
3 Lamp Housing



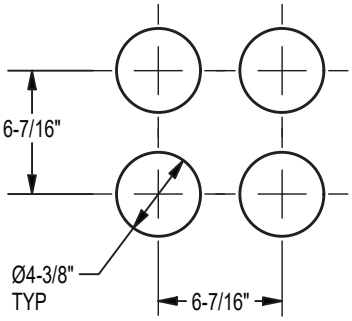


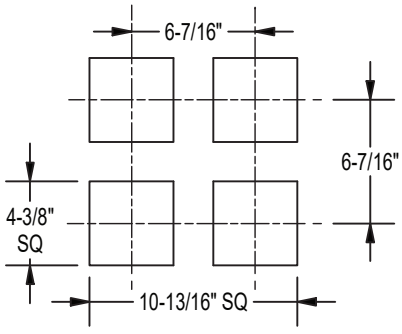
4 Lamp Housing





4 Lamp Quad Housing





HOUSING INSTALLATION INSTRUCTIONS
RECESSED HOUSING MODEL SERIES 804/804S

Mounting Housing To Joists & Sticker Application

STEP 1 Spread Hanger Bars to approximate joist spacing. Temporarily secure Lock Screws to keep Housing from sliding along Hanger Bars – **FIG 5.1 & 5.2.**
Note: For Sloped Ceilings - Installing Housing so J Box Cover faces wall is recommended for maximum adjustment on applicable Lamp Modules – **FIG. 5.3**.

STEP 2 Secure Housing & Hanger Bar assembly to Joists using either the fasteners supplied on Hanger Bars or fasteners through alternate mounting holes – **FIG 5.1**.

STEP 3 Reposition Housing along Hanger Bars as needed. Use guide lines to help locate Housing relative to nearby walls or other fixtures – **FIG 5.1 & 5.2**.

STEP 4 Apply Stickers over unused holes & slots as shown to prevent light leaks & maintain airtight standards compliance. No caulking required – **FIG 5.4**.

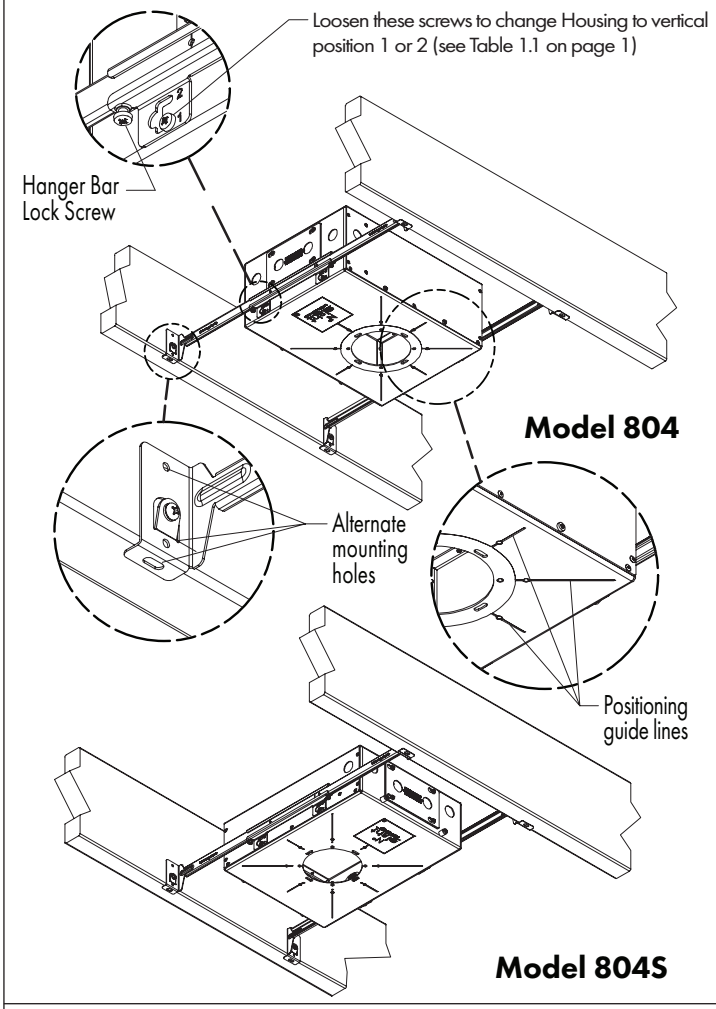


FIG 5.1 Fastening Housing to joists

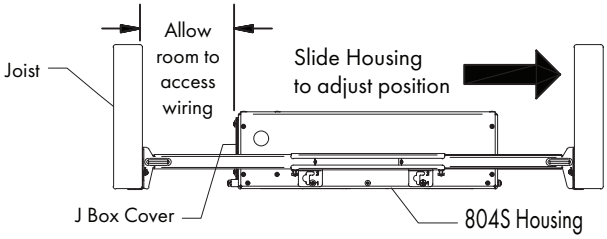


FIG 5.2 Horizontal Housing adjustment

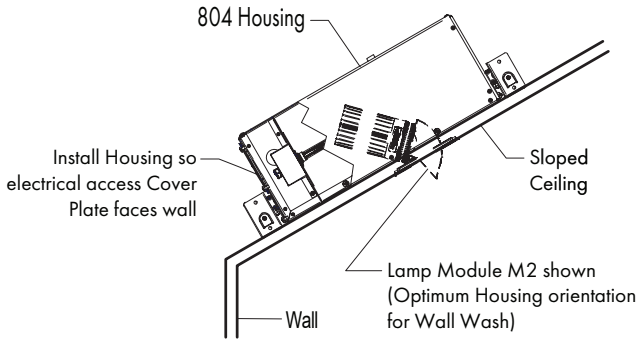
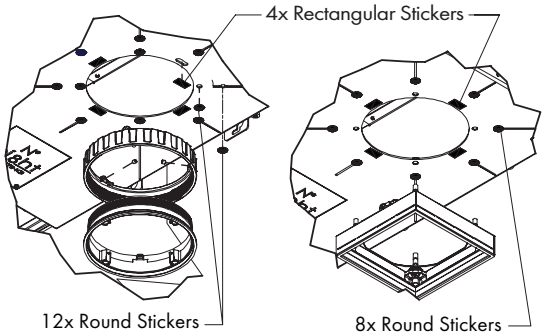


FIG 5.3 Recommended Sloped Ceiling Orientation

IMPORTANT For Airtight Compliance - Stickers are required on all 804 & 804S Housings

Wood/Stone Ceiling



Plaster/Sheetrock Ceiling

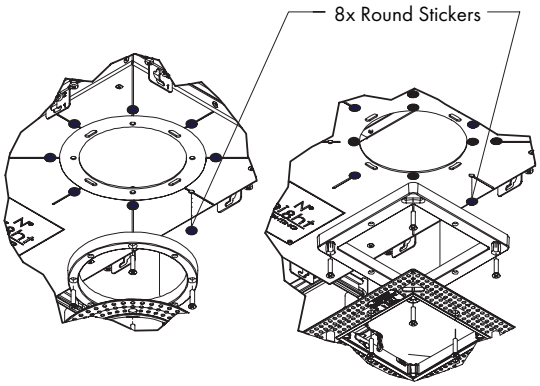


FIG 5.4 Sticker Application

WIRING INSTRUCTIONS-804 & 804S Single & Multi-Lamp

For DIM1 / DIM2 / PR1 / EL1 / EL2 / LU1 / LU2 / LU4 Dimming Options

CAUTION: TO AVOID RISK OF FIRE OR ELECTRIC SHOCK

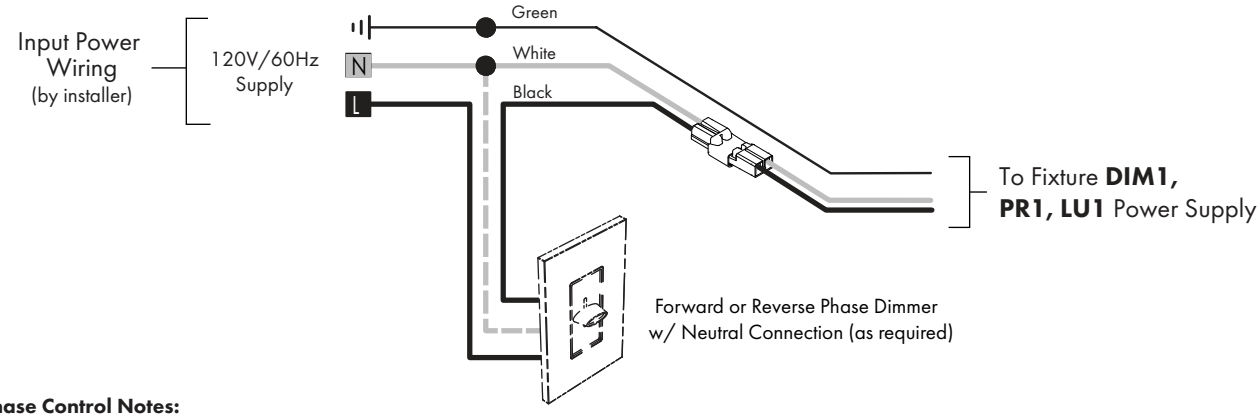
Turn off power at circuit breaker or fuse panel & read instructions completely before proceeding.
Failure to follow instructions may void warranty. Save these instructions.

- Installation must be by a qualified electrician only and must conform to National Electric code and local regulations.
- Verify correct dimming system, lamp module, power supply type, and input supply requirements.
- Always allow LED assembly to cool before servicing.
- Do not install where insulation or ambient temperatures will exceed maximum values noted in product specifications. See www.8lighting.com for current product specifications.
- For multi-lamp refer to lighting plan to determine lamp circuit control configuration.

Single Lamp Wiring

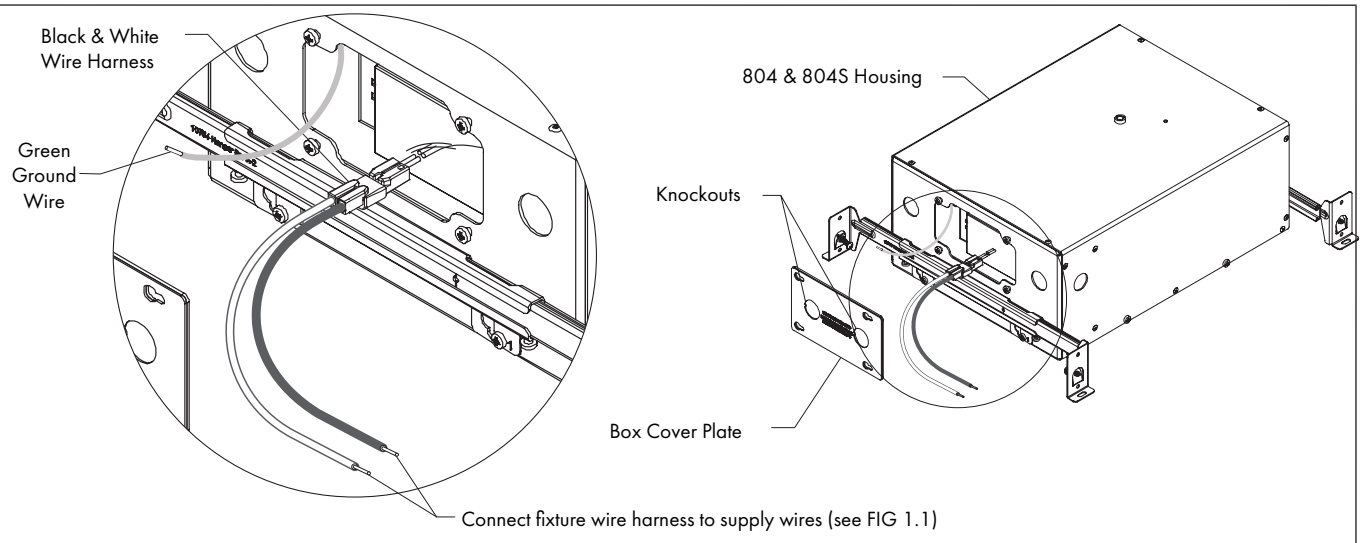
DIM1 / PR1/ LU1 - PHASE CONTROL

1. Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment – FIG 1.2.
2. Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires – FIG 1.2.
3. Make wire connections & push all wires & connections completely inside wiring compartment – FIG 1.1 & 1.2.
4. Replace & secure box cover plate using screws provided – FIG 1.2.



Phase Control Notes:
DIM1 / PR1 drivers are Forward or Reverse Phase dimmable.
For compatible dimmers for use with **DIM1 / PR1** drivers see: ww.8lighting.com/resources-downloads
LU1 drivers are Forward Phase dimmable only.
For compatible dimmers for use with **LU1** drivers, contact Lutron LED Center of Excellance at 1.877.346.5338 or LEDs@lutron.com

FIG 1.1 Wiring Diagram



NOTE: For compatible dimmers for use with **DIM1 / PR1** drivers see www.8lighting.com/resources-downloads/
For compatible dimmers for use with **LU1** drivers, contact Lutron customer assistance at 1.877.346.5338 or LEDs@lutron.com

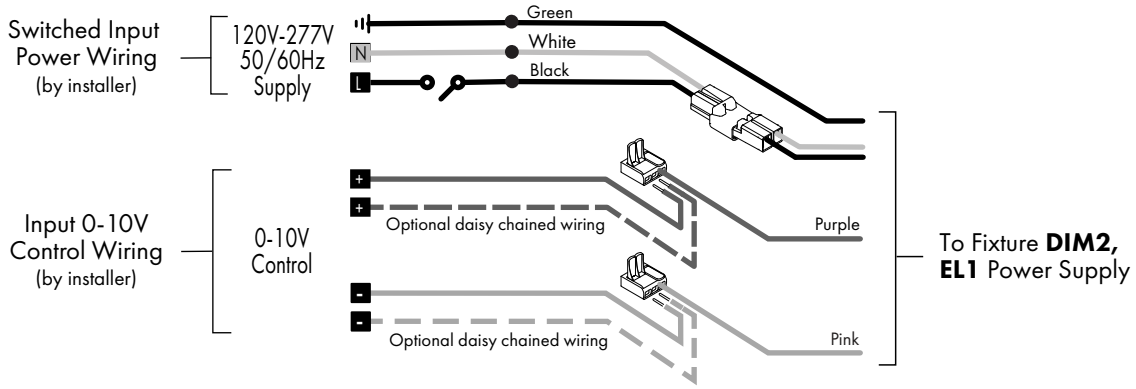
FIG 1.2 Wire Connections

WIRING INSTRUCTIONS (Continued)

804/804S Single Lamp Wiring

DIM2 / EL1 - 0-10V CONTROL

1. Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment – FIG 2.2.
2. Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires – FIG 2.2.
3. Make wire connections & push all wires & connections completely inside wiring compartment – FIG 2.1 & 2.2.
4. Replace & secure box cover plate using screws provided – FIG 2.2.



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 **DIM2 /EL1** drivers see: www.8lighting.com/resources-downloads .

FIG 2.1 Wiring Diagram

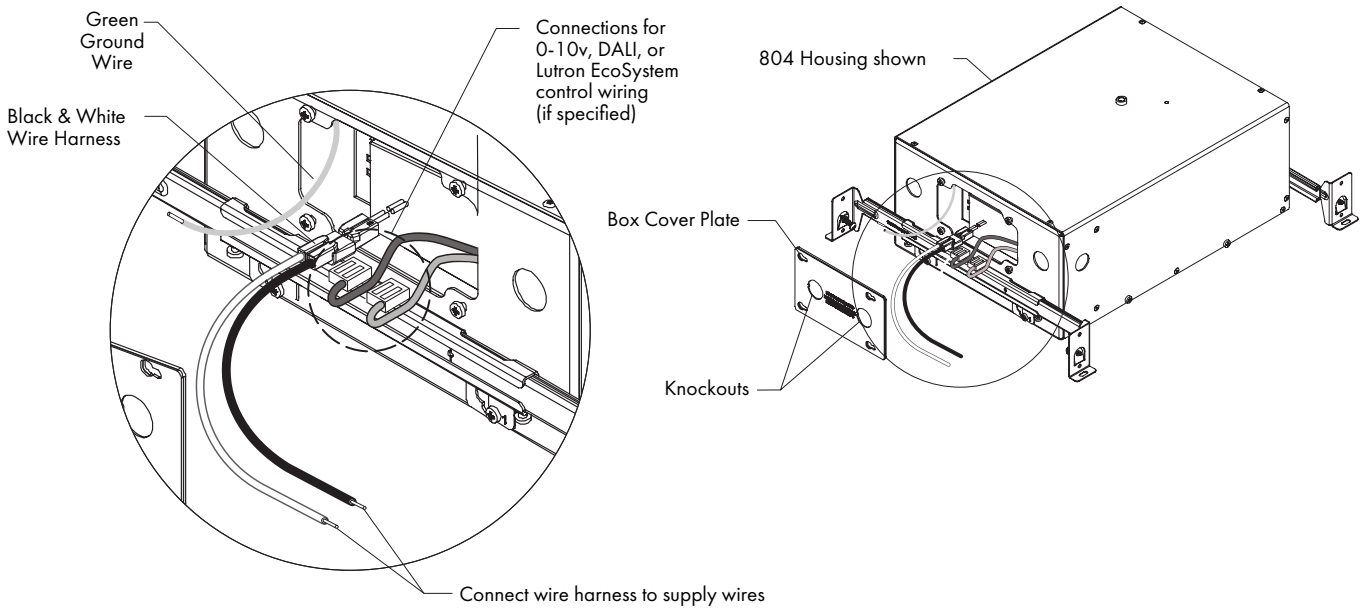


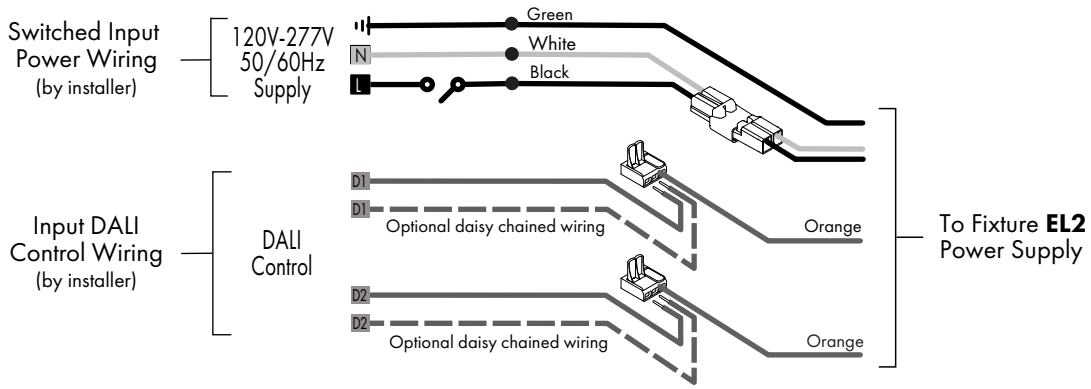
FIG 2.2 Wire Connections

WIRING INSTRUCTIONS (Continued)

804/804S Single Lamp Wiring

EL2 - DALI CONTROL

1. Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment – FIG 3.2.
2. Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires – FIG 3.2.
3. Make wire connections & push all wires & connections completely inside wiring compartment – FIG 3.1 & 3.2.
4. Replace & secure box cover plate using screws provided – FIG 3.2.



DALI Control Notes:
DALI control wiring is not polarity sensative 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.

FIG 3.1 Wiring Diagram

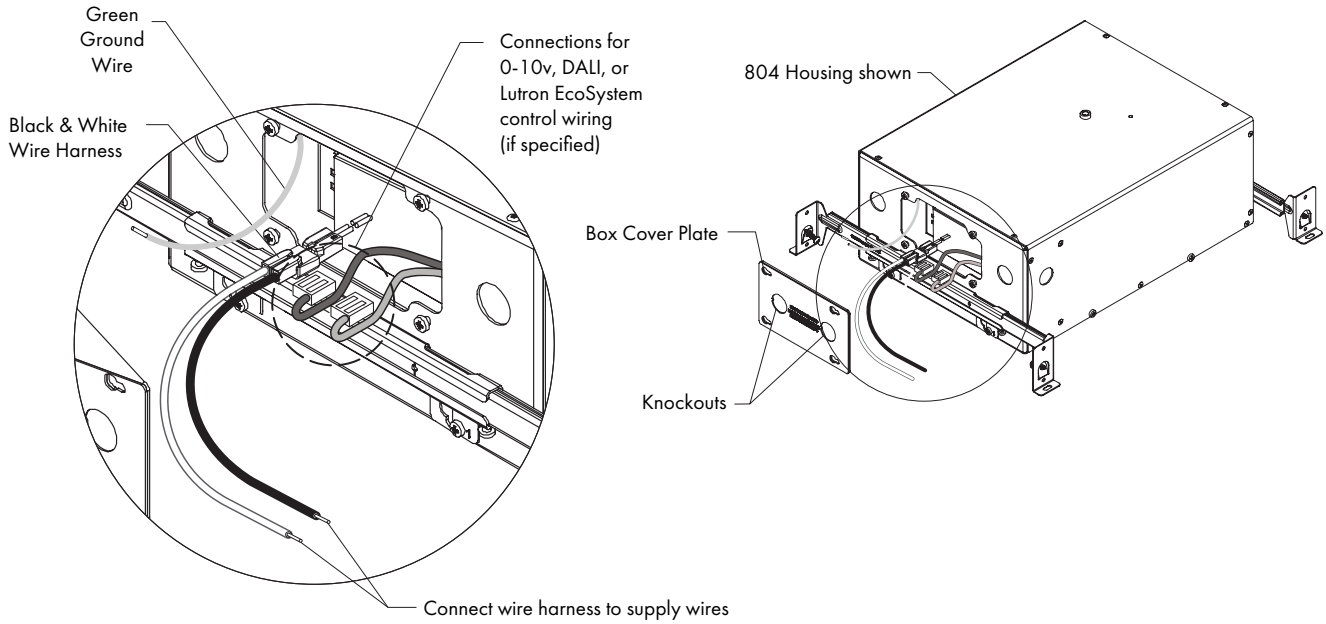


FIG 3.2 Wire Connections

WIRING INSTRUCTIONS (Continued)

804S Multi Lamp Wiring

For **DIM1 / PR1 / LU1 / DIM2 / EL1 / EL2 / LU2 / LU4** Dimming Options

1. Loosen screws to remove cover plate.
2. Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires – FIG 4.1.
3. Make wire connections shown below & push all wires & connections completely inside wiring compartment – FIG 4.1 & 4.2.
4. Check circuit continuity using holes in terminal blocks – FIG 4.2.
5. Replace & secure box cover plate using screws provided – FIG 4.1.

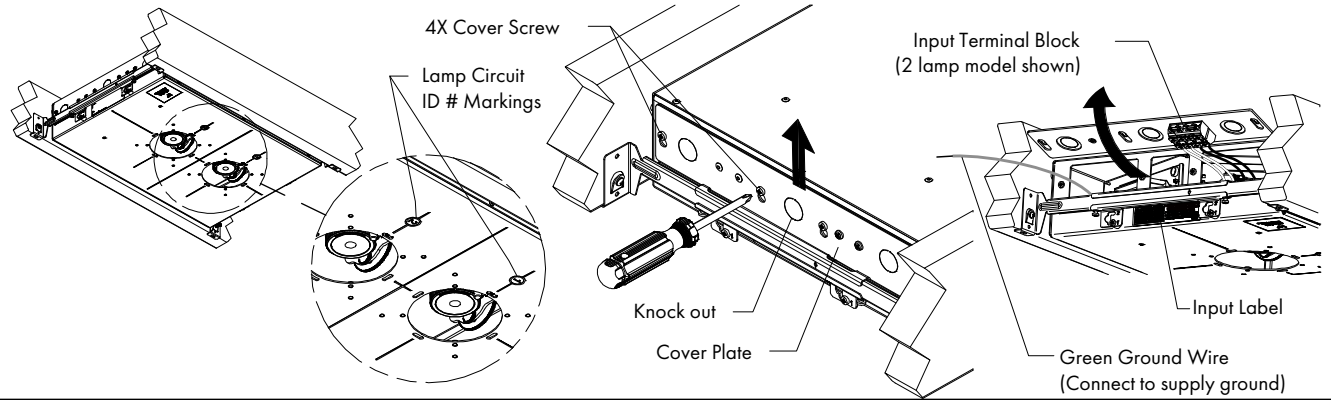
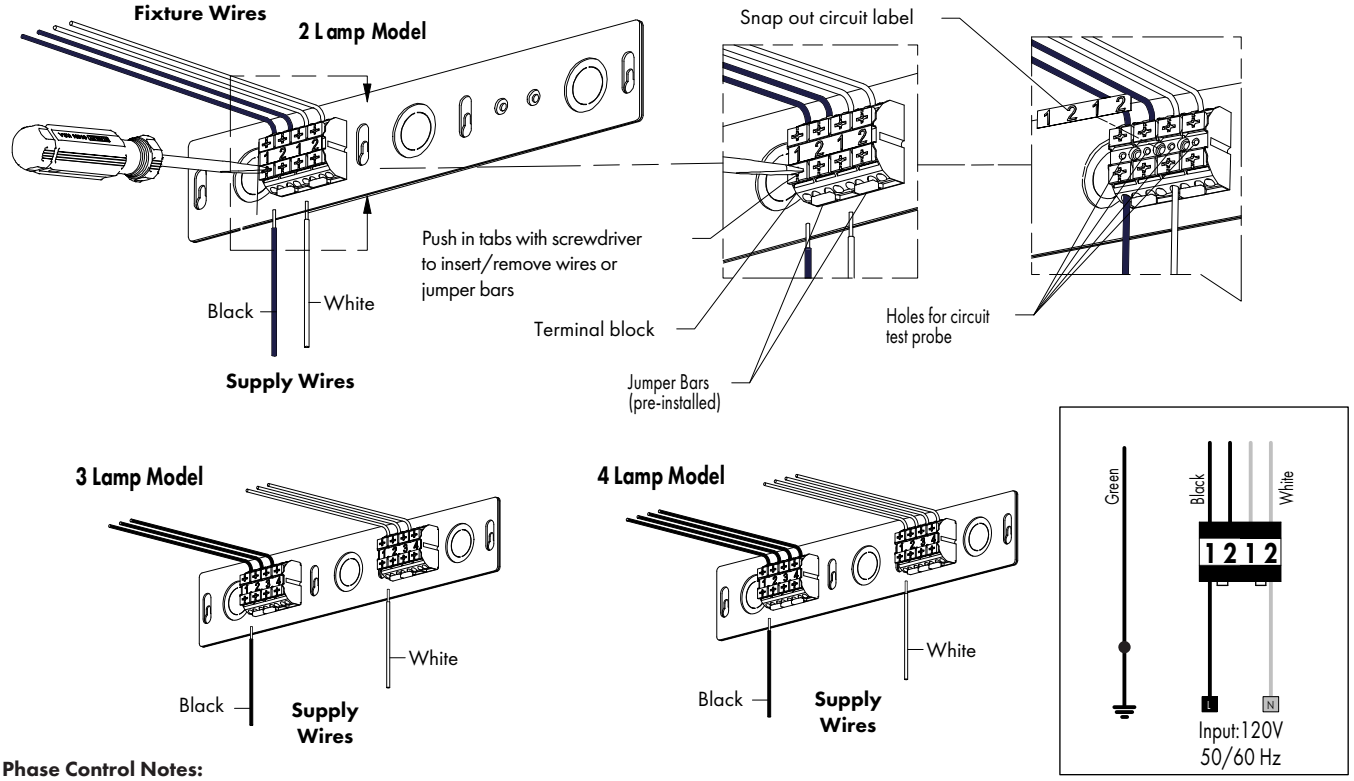


FIG 4.1 Terminal Block Access

804S Multi-Lamp Wiring - All Lamps Controlled Together

DIM1/PR1/LU1 - PHASE CONTROL



Phase Control Notes:
DIM1 / PR1 drivers are Forward or Reverse Phase dimmable.
For compatible dimmers for use with **DIM1 / PR1** drivers see: www.8lighting.com/resources-downloads
LU1 drivers are Forward Phase dimmable only.
For compatible dimmers for use with **LU1** drivers, contact Lutron LED Center of Excellance at 1.877.346.5338 or LEDs@lutron.com

FIG 4.2 Connect Wiring

WIRING INSTRUCTIONS (Continued)

804S Multi-Lamp Wiring - All Lamps Controlled Together

DIM2 / EL1 - O-10V CONTROL

1. Ensure jumper bars are installed in terminal blocks as shown - FIG 5.1.
2. Make wire connections noting individual lamp circuit numbers – FIG 5.2 & 5.3.
3. Check circuit continuity using holes in terminal blocks – FIG 5.4.
4. Push all wires completely inside wiring compartment – FIG 4.1 (page 4).
5. Replace & secure box cover plate using screws provided – FIG 4.1 (page 4).

2 Lamp Model	3 Lamp Model	4 Lamp Model

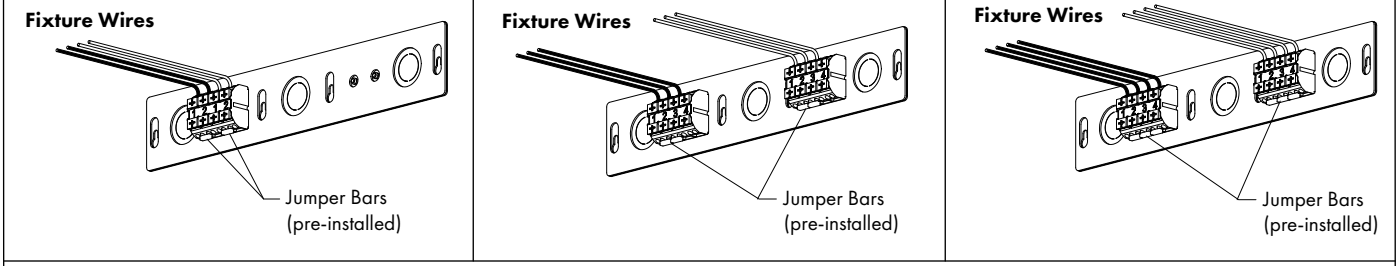


FIG 5.1 Jumper Bars

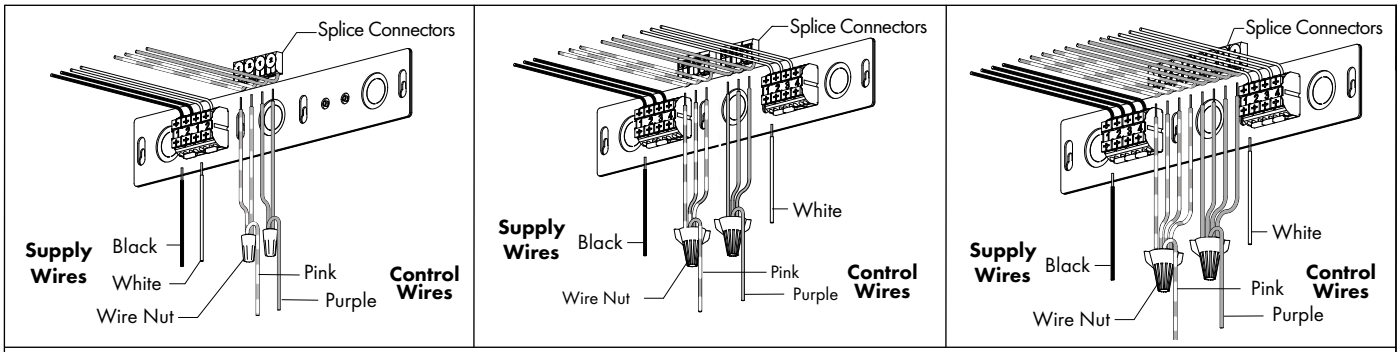


FIG 5.2 Attach Supply & Control Wires

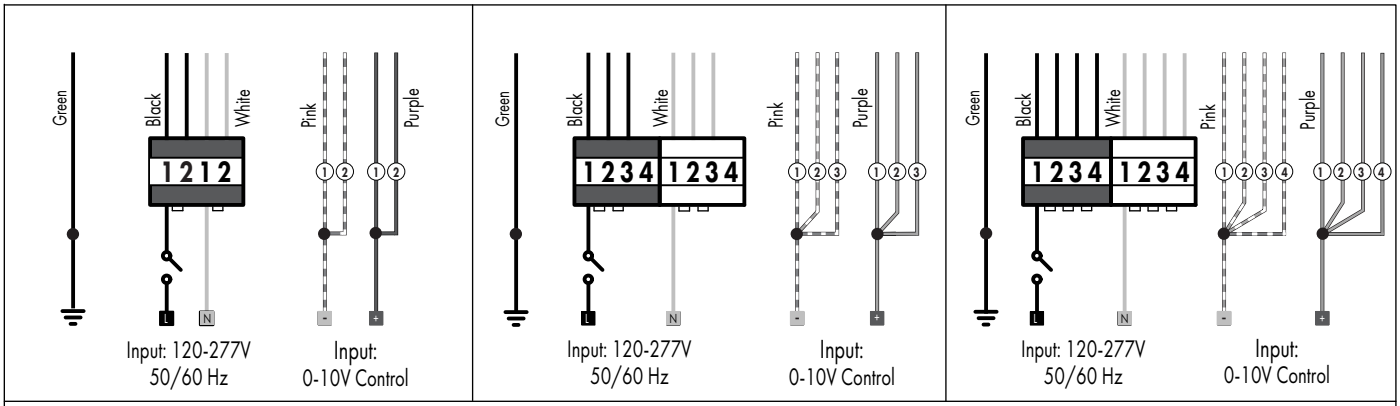
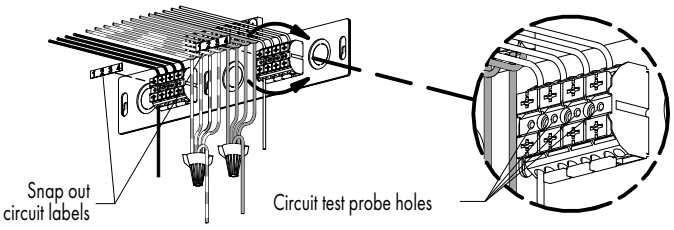


FIG 5.3 Wiring Schematics



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 **DIM2 /EL1** drivers, see: www.8lighting.com/resources-downloads.

FIG 5.4 Accessing Circuit Probe Holes

WIRING INSTRUCTIONS (Continued)

804S Multi-Lamp Wiring - Individual Lamp Control

DIM1 / PR1 / LU1 - PHASE CONTROL

1. Remove jumper bars from terminal blocks as needed for individual lamp control - FIG 6.1.
2. Make wire connections noting individual lamp circuit numbers – FIG 6.2 & 6.3.
3. Check circuit continuity using holes in terminal blocks – FIG 6.4.
4. Push all wires completely inside wiring compartment – FIG 4.1 (page 4).
5. Replace & secure box cover plate using screws provided – FIG 4.1 (page 4).

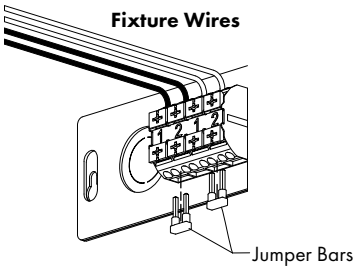
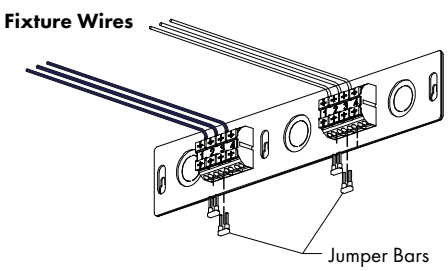
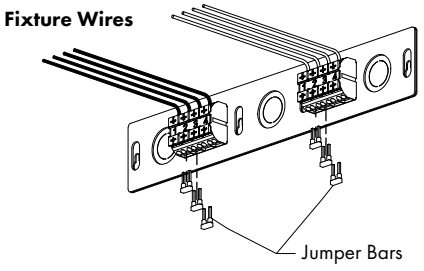
2 Lamp Model	3 Lamp Model	4 Lamp Model
		

FIG 6.1 Remove Jumper Bars

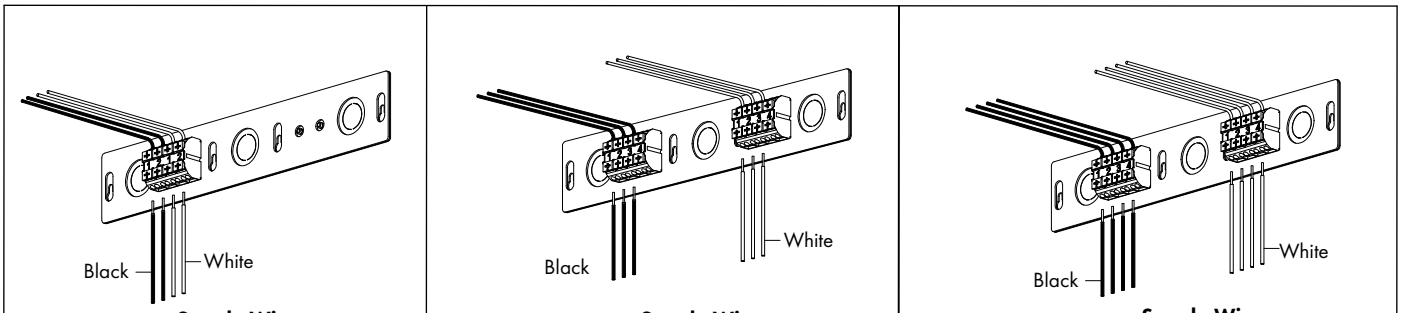


FIG 6.2 Attach Supply Wires

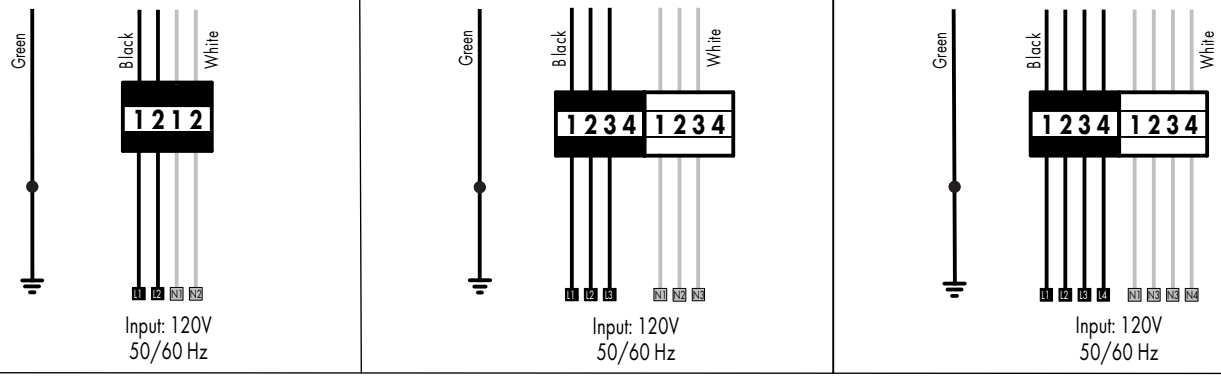
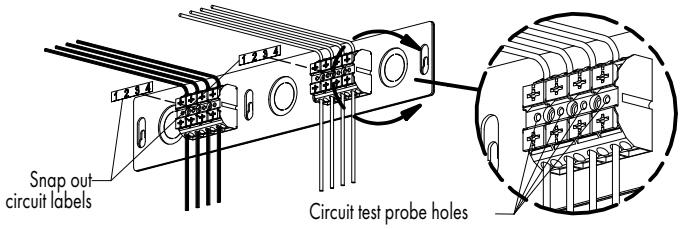


FIG 6.3 Wiring Schematics



Phase Control Notes:
DIM1 / PR1 drivers are Forward or Reverse Phase dimmable.
For compatible dimmers for use with **DIM1 / PR1** drivers see:
www.8lighting.com/resources-downloads
LU1 drivers are Forward Phase dimmable only. For compatible dimmers for use with **LU1** drivers, contact Lutron LED Center of Excellance at 1.877.346.5338 or LEDs@lutron.com

FIG 6.4 Accessing Circuit Probe Holes

WIRING INSTRUCTIONS (Continued)

804S Multi-Lamp Wiring - Individual Lamp Control

DIM2 / EL1 - 0-10V CONTROL

1. Remove jumper bars to terminal blocks as needed for individual lamp control - FIG 7.1.
2. Make wire connections noting individual lamp circuit numbers – FIG 7.2 & 7.4.
3. Check circuit continuity using holes in terminal blocks – FIG 7.4.
4. Push all wires completely inside wiring compartment – FIG 4.1 (page 4).
5. Replace & secure box cover plate using screws provided – FIG 4.1 (page 4).

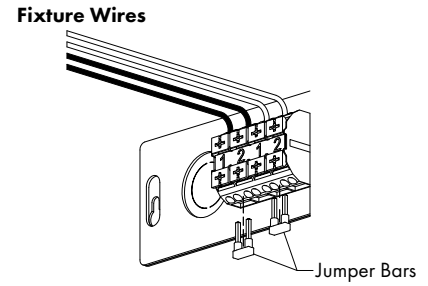
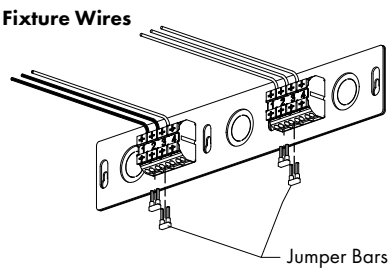
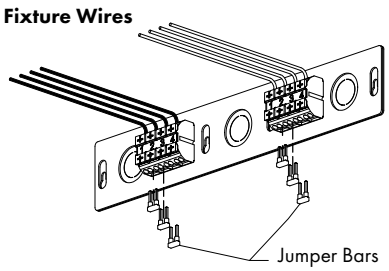
2 Lamp Model	3 Lamp Model	4 Lamp Model
		

FIG 7.1 Remove Jumper Bars

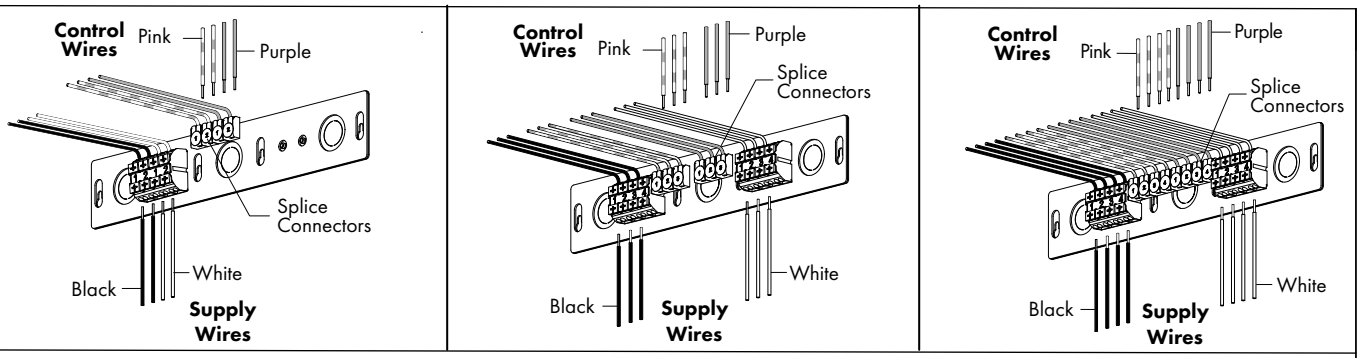


FIG 7.2 Attach Supply & Control Wires

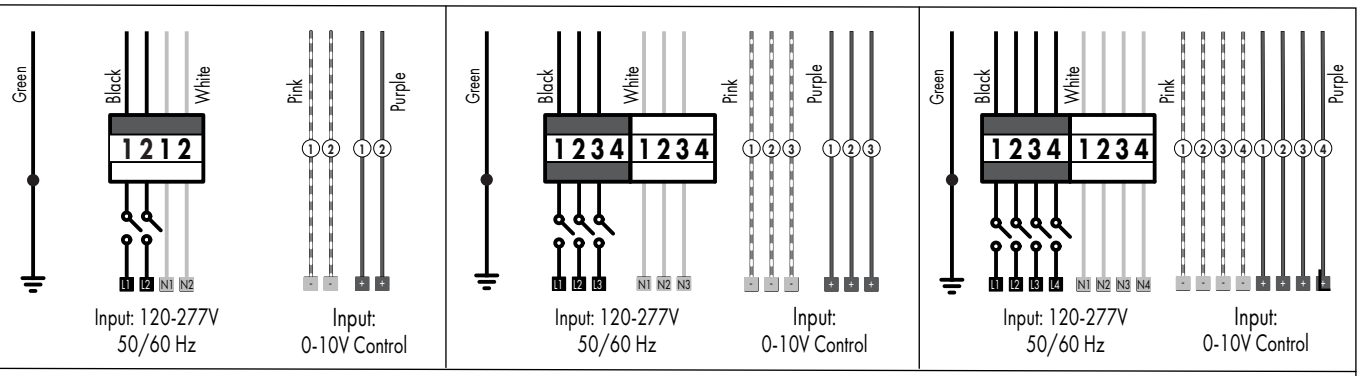
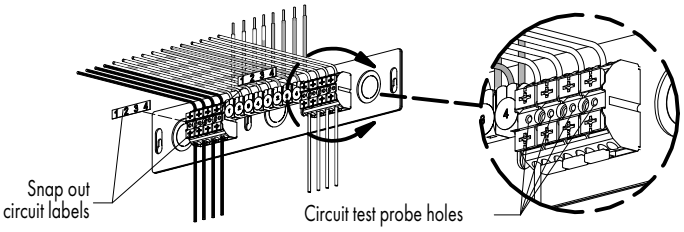


FIG 7.3 Wiring Schematics



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 **DIM2 / EL1** drivers, see: www.8lighting.com/resources-downloads.

FIG 7.4 Accessing Circuit Probe Holes

WIRING INSTRUCTIONS (Continued)

804S Multi-Lamp Wiring - All Lamps Controlled Together or Individually

EL2 - DALI CONTROL

1. Ensure jumper bars are installed in terminal blocks as shown - FIG 8.1.
2. Make wire connections noting individual lamp circuit numbers – FIG 8.2.
3. Check circuit continuity using holes in terminal blocks – FIG 8.4.
4. Push all wires completely inside wiring compartment – FIG 4.1 (page 4).
5. Replace & secure box cover plate using screws provided – FIG 4.1 (page 4).

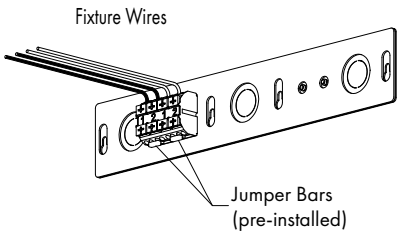
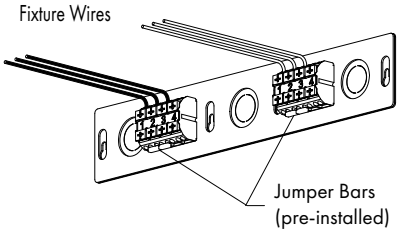
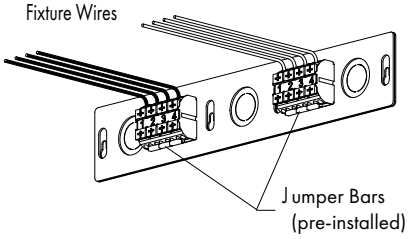
2 Lamp Model	3 Lamp Model	4 Lamp Model
		

FIG 8.1 Jumper Bars

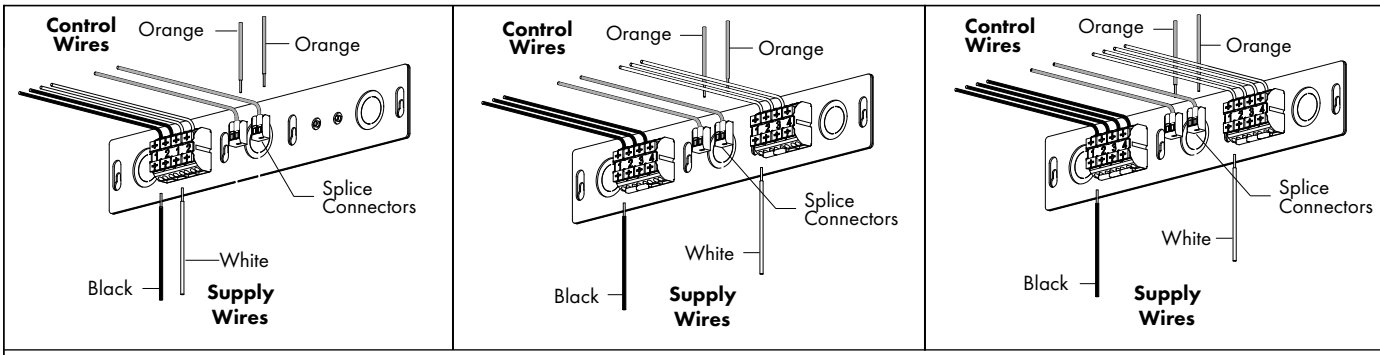


FIG 8.2 Attach Supply & Control Wires

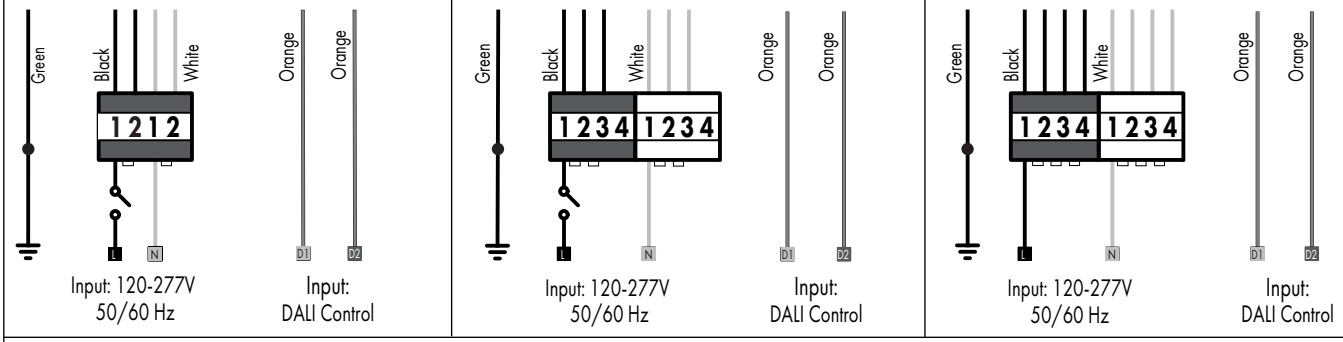
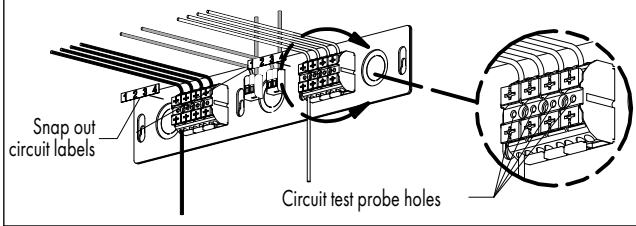


FIG 8.3 Wiring Schematics



DALI Control Notes:
DALI control wiring is not polarity sensative 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.

FIG 8.4 Accessing Circuit Probe Holes

WIRING INSTRUCTIONS (Continued)

804S Multi-Lamp Wiring - All Lamps Controlled Together or Individually

LU2 / LU4 - ECOSYSTEM CONTROL

1. Ensure jumper bars are installed in terminal blocks as shown - FIG 9.1.
2. Make wire connections noting individual lamp circuit numbers – FIG 9.2.
3. Check circuit continuity using holes in terminal blocks – FIG 9.4.
4. Push all wires completely inside wiring compartment – FIG 4.1 (page 4).
5. Replace & secure box cover plate using screws provided – FIG 4.1 (page 4).

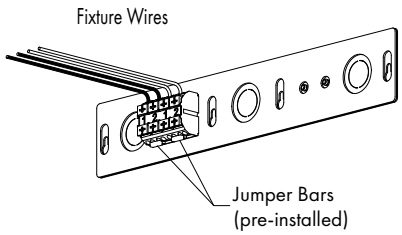
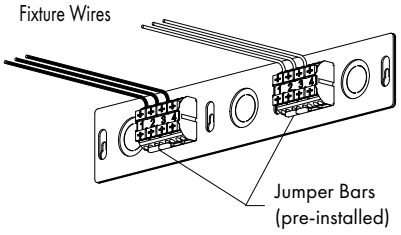
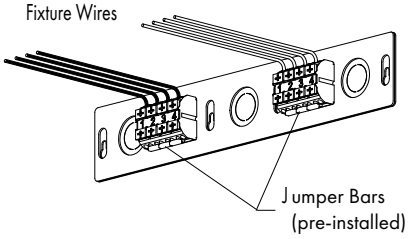
2 Lamp Model	3 Lamp Model	4 Lamp Model
		

FIG 9.1 Jumper Bars

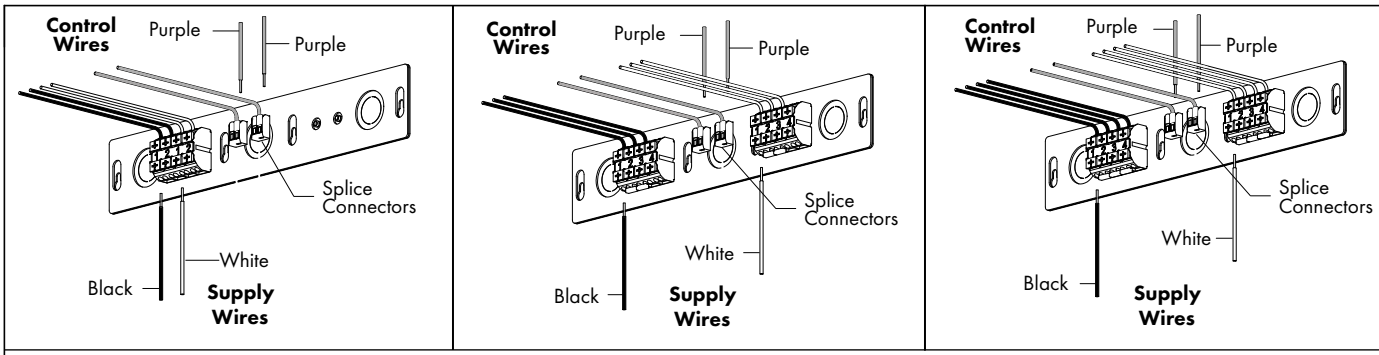


FIG 9.2 Attach Supply & Control Wires

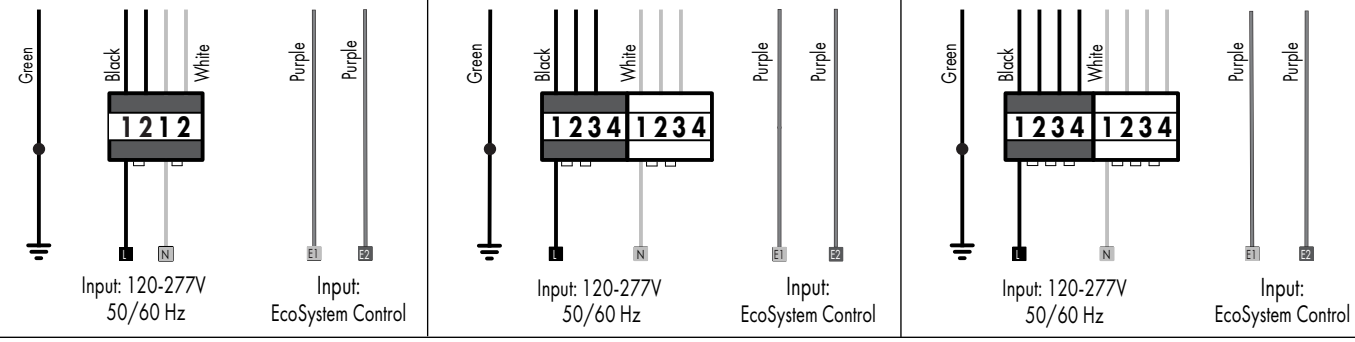
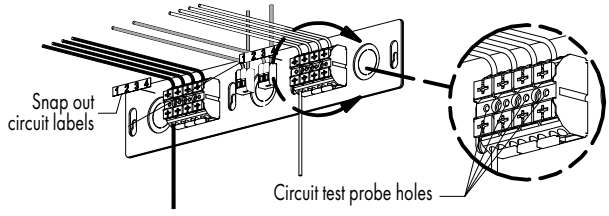


FIG 9.3 Wiring Schematics



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 Excellance at 1.877.346.5338 or LEDs@lutron.com.

FIG 9.4 Accessing Circuit Probe Holes