

# 800 SERIES 804S LOW PROFILE SINGLE and MULTI-LAMP

**804** (Legacy Model)
INSTALLATION INSTRUCTIONS



SCAN QR CODE FOR INSTRUCTIONS

**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. See 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 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.

Number Eight Lighting 92001

# **TABLE OF CONTENTS**

	PAGE
OUSING INSTALLATION - BAR HANGER MOUNTING	1-3
OUSING INSTALLATION - PANEL MOUNTING BRACKETS	4
OUSING INSTALLATION - T-BAR MOUNTING	5
OUSING INSTALLATION - BUTTERFLY BRACKET MOUNTING	6
EILING CUT-OUTS - PLASTER/SHEETROCK CEILINGS	7
EILING CUT-OUTS - WOOD/STONE ACOUSTIC TILE CEILINGS	8
MP MODULE INSTALLATION, ADJUSTMENT, REMOVAL	9-13
DWER SUPPLY REMOVAL AND REPLACEMENT	14
/IRING INSTRUCTIONS - SINGLE LAMP	15-18
/IRING INSTRUCTIONS - SINGLE LAMP TUNABLE WHITE	19-21
/IRING INSTRUCTIONS - MULTI-LAMP	22-27
/IRING INSTRUCTIONS - MULTI-LAMP TUNABLE WHITE	28-30

Number Eight Lighting 92001-05

#### **Bar Hanger Mounting**

STEP 1 IMPORTANT: Before attaching Bar Hanger Bracket you must determine Trim Model to be used (refer to Trim Types on Pages 7-8). Select upper or lower Bracket hole position (refer to Table 1.1 Hanger Bar **Bracket Positioning** ).

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 Bar Hanger Bracket. Position Bar Hanger Bracket in hole position #1 or #2 & secure screws - FIG 1.1 & 1.2.

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

**Note**: Bar Hangers can be shortened at break locations shown – **FIG 1.1**.

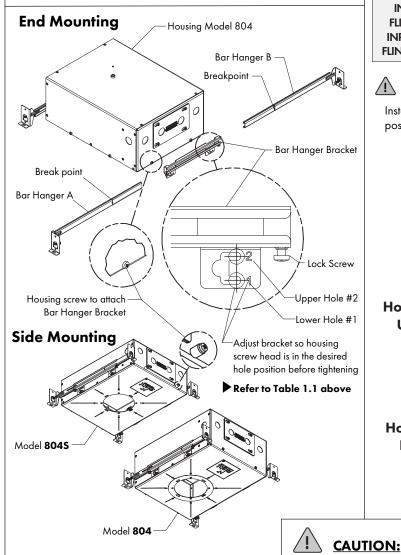
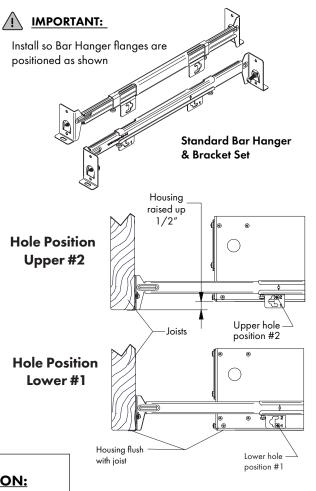


FIG 1.1 Installing Bar Hanger & Bar Hanger **Bracket Set** 

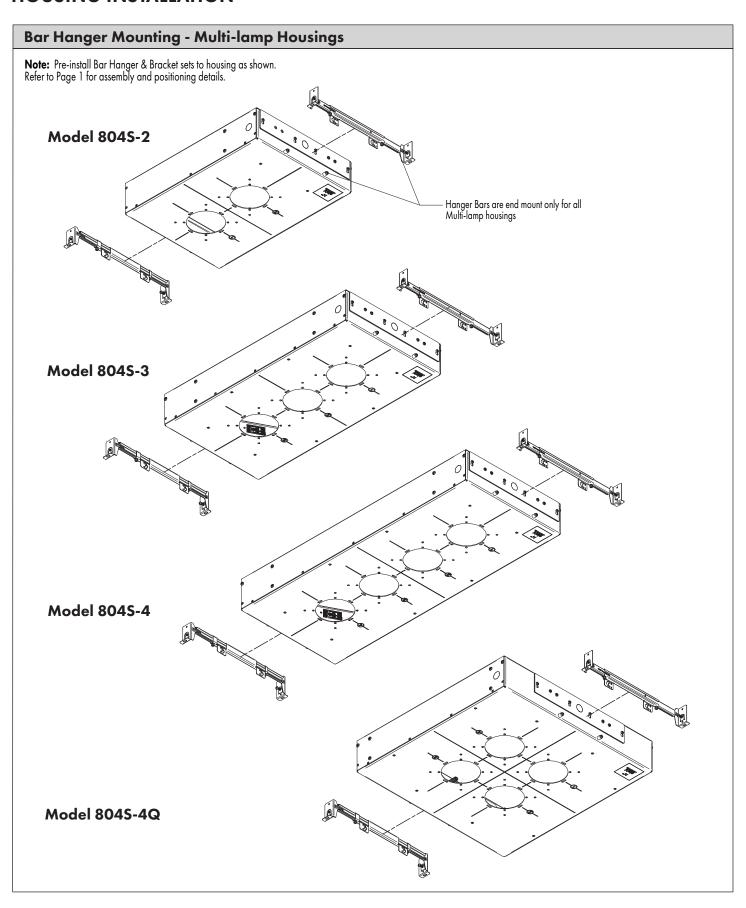
Table 1.1 Bar Hanger Bracket Position						
800 Series Trim Models		For Ceiling Thickness Range	Hole Position #			
FR-P, FS-P		1/2" to 1"	Lower #1			
INR-P, INS-P,		1/2" to 1"	Upper #2			
INR-BV-P, INS-BV-P		1" to 1-1/2"	Lower #1			
FS-W, FS-W-M, FLS-W		1/4" to 3/4"	Upper #2			
		3/4" to 1-1/2"	Lower #1			
INS-W, FLINS-W, INS-BV-W, FLINS-BV-W		1/2" to 1"	Upper #2			
		1" to 1-1/2"	Lower #1			
FR-W, FR-W-M, FLR-W	Standard	1/2" to 1"	Upper #2			
	Mounting Ring	1" to 1-1/2"	Lower #1			
INR-W, FLINR-W, INR-BV-W FLINR-BV-W	Standard Mounting Ring	1/2" to 3/4"	Upper #2			
		1" to 1-1/4"	Lower #1			
	Tall Mounting Ring	3/4" to 1"	Upper #2			
		1-1/4" to 1-1/2"	Lower #1			



assembly. Changing hole FIG 1.2 Hole Position & Housing Location position is not possible. after ceiling is installed.

Be sure to select correct hole position for intended Trim

92001-05 • Page 1 Number Eight Lighting



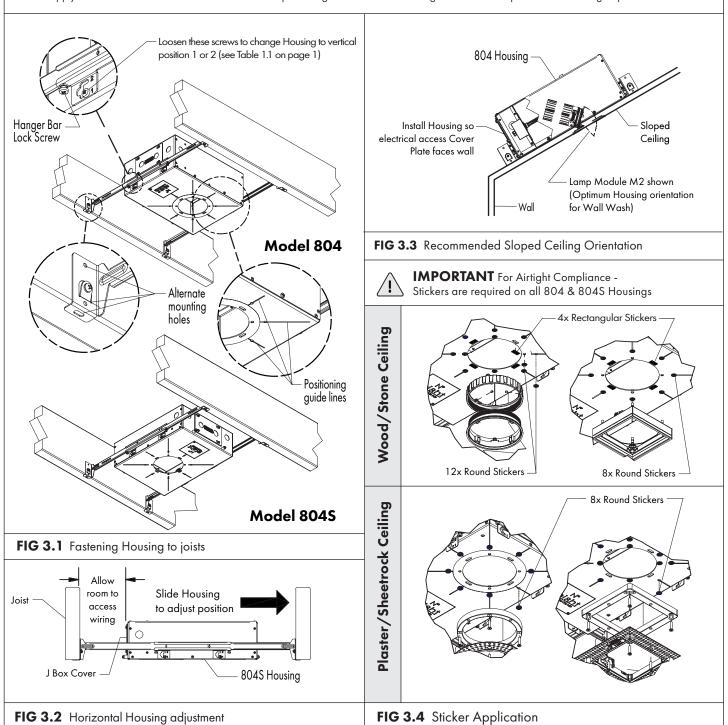
# **Mounting Housing To Joists & Sticker Application**

STEP 1 Spread Hanger Bars to approximate joist spacing. Temporarily secure Lock Screws to keep Housing from sliding along Hanger Bars – FIG 3.1 & 3.2. Note: For Sloped Ceilings - Installing Housing so J Box Cover faces wall is recommended – FIG. 3.3.

STEP 2 Secure Housing & Hanger Bar assembly to Joists using either the fasteners supplied on Hanger Bars or fasteners through alternate mounting holes - FIG 3.1.

STEP 3 Reposition Housing along Hanger Bars as needed. Use guide lines to help locate Housing relative to nearby walls or other fixtures - FIG 3.1 & 3.2.

STEP4 Apply Stickers over unused holes & slots as shown to prevent light leaks & maintain airtight standards compliance. No caulking required - FIG 3.4.



# **PMB - Panel Mounting Brackets**

#### CAUTION: Read all instructions completely before proceeding.

Important: Before attaching Panel Mounting Brackets you must determine Trim Model to be used (refer to Trim Types on Pages 7-8).

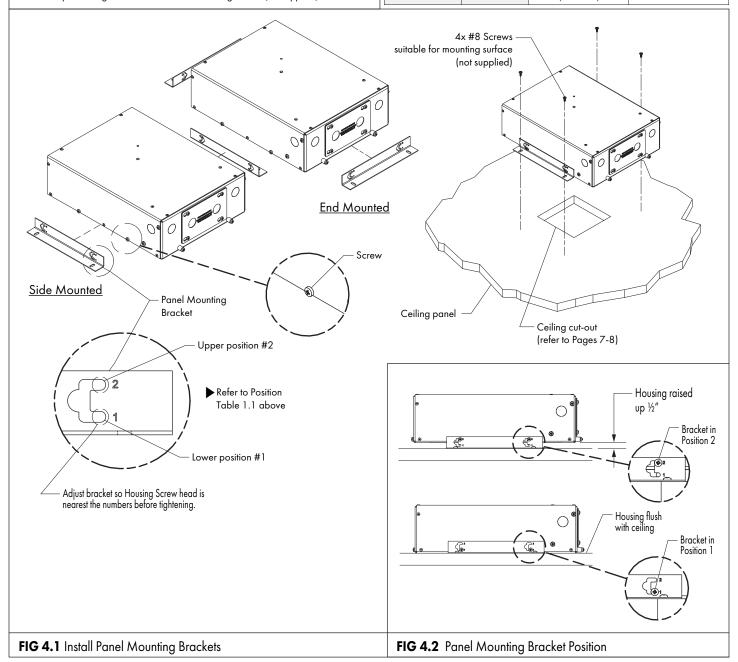
**Note:** Panel may consist of wood, stone or other structural material. Sheetrock could also be used attached below panel & must be considered part of the overall ceiling thickness.

STEP 1 Select upper or lower Bracket postion (refer to **Table 4.1** Panel Mounting Bracket Position) & attach 2x Panel Mounting Brackets to Housing as shown using screws supplied with Housing (use side or end mounting locations as needed) - **FIG 4.1 & FIG 4.2**.

STEP 2 Locate & cut hole in ceiling panel (refer to Trim types and hole sizes specified on (Pages 7-8) - FIG 4.1.

**STEP 3** Align Housing so aperture is centered in ceiling cut-out & secure Panel Mounting Brackets to panel using 4x Screws suitable for mounting surface (not supplied) - **FIG 4.1**.

Table 4.1 Panel Mounting Bracket Position Chart					
800 Series Trim Models		For Ceiling Thickness Range	Hole Position #		
FR-P, FS-P		1/2" to 1"	Lower #1		
INR-P, INS-P,		1/2" to 1"	Upper #2		
INR-BV-P, INS-BV-P		1" to 1-1/2"	Lower #1		
FS-W, FS-W-M, FLS-W		1/4" to 3/4"	Upper #2		
		3/4" to 1-1/2"	Lower #1		
INS-W, FLINS-W, INS-BV-W, FLINS-BV-W		1/2" to 1"	Upper #2		
		1" to 1-1/2"	Lower #1		
FR-W, FR-W-M, FLR-W	Standard	1/2" to 1"	Upper #2		
	Mounting Ring	1" to 1-1/2"	Lower #1		
INR-W,	INR-W, Standard FLINR-W, Mounting Ring	1/2" to 3/4"	Upper #2		
•		1" to 1-1/4"	Lower #1		
	Tall	3/4" to 1"	Upper #2		
	Mounting Ring	1-1/4" to 1-1/2"	Lower #1		



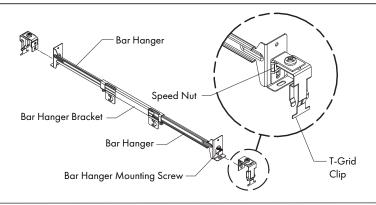
#### TBC - T-BAR Clips for T-GRID Mounting with Bar Hangers

Important: Before attaching Bar Hangers you must detemine Trim Model to be used (refer to Trim Types on Page 7-8).

STEP 1 Pre-assemble T-Grid Clips to Bar Hangers & tighten Bar Hanger Mounting Screws just enough to allow for vertical adjustment of Hanger Bracket - FIG 5.1.

STEP 2 Attach Bar Hanger Brackets to Housing in hole position 1 or 2 to accommodate Trim Model & ceiling tile thickness (refer to Page 1 - Table 1.1) - FIG. 5.2.

**CAUTION:** Hanger Bar hole position cannot be changed after ceiling is installed.



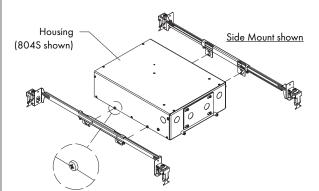


FIG 5.1 Attach T-Grid Clip assemblies to Hanger Bracket Assemblies

FIG 5.2 Attach Hanger Bracket Assemblies to Housing

STEP 3 Extend Hanger bars to position T-Grid Clip assemblies fixture onto T-Grid bars - FIG 5.4.

**STEP 4** Determine cut-out location in Ceiling Tile and ensure sufficient clearance for housing installation. Locate & cut hole in Ceiling Tile (refer to Trim Types and hole sizes specified on Pages 7-8). Install Ceiling Tile into T-Grid - **FIG 5.5**.

STEP 5 Attach fixture to T-Grid and adjust horizontal fixture position so Housing aperture is centered with Ceiling Tile opening. Lock fixture into place by tightening the Bar Hanger Lock Screws - FIG 5.5.

STEP 6 Adjust vertical height of Housing by sliding speed nuts so Housing is level with Ceiling Tile. Lock position by tightening Mounting Screws - FIG 5.6.

Note: Trim will permit a vertical adjustment range to help accommodate Ceiling Tile thickness.

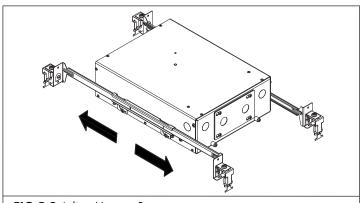


FIG 5.3 Adjust Hanger Bars

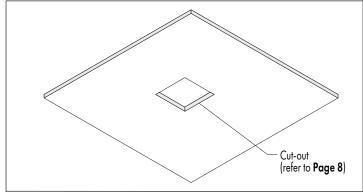


FIG. 5.4 Cut opening in Ceiling Tile

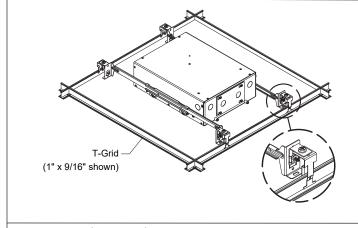


FIG 5.5 Attach to T-Grid

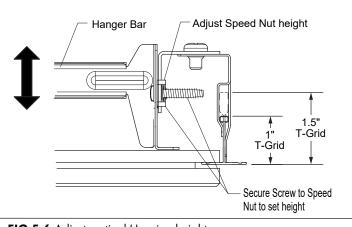


FIG 5.6 Adjust vertical Housing height

# **INSTALLATION INSTRUCTIONS**

# BB - Butterfly Bracket - For Commercial C-CHANNEL or T-GRID Mounting

**STEP 1** Attach Butterfly Brackets to either ends or sides of mounting frame using existing screws - **FIG 6.2**.

STEP 2 Slide c-channel or bar through bracket and adjust height with thumb screw - FIG 6.3.

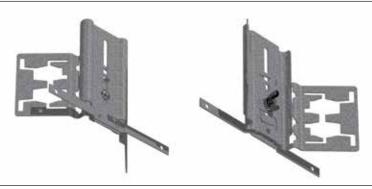


FIG 6.1 Butterfly Brackets (1 Set)

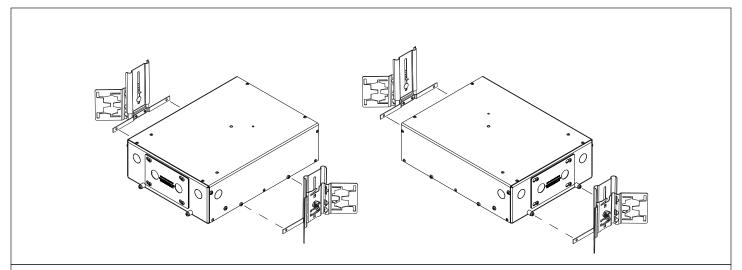


FIG 6.2 Butterfly Bracket/Housing Position

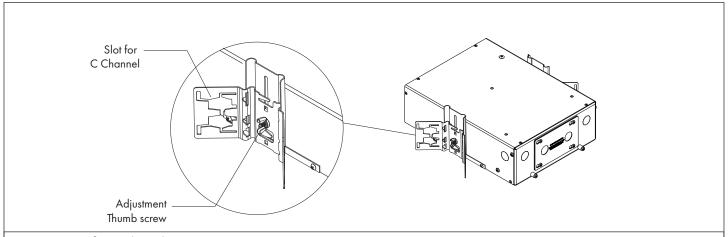
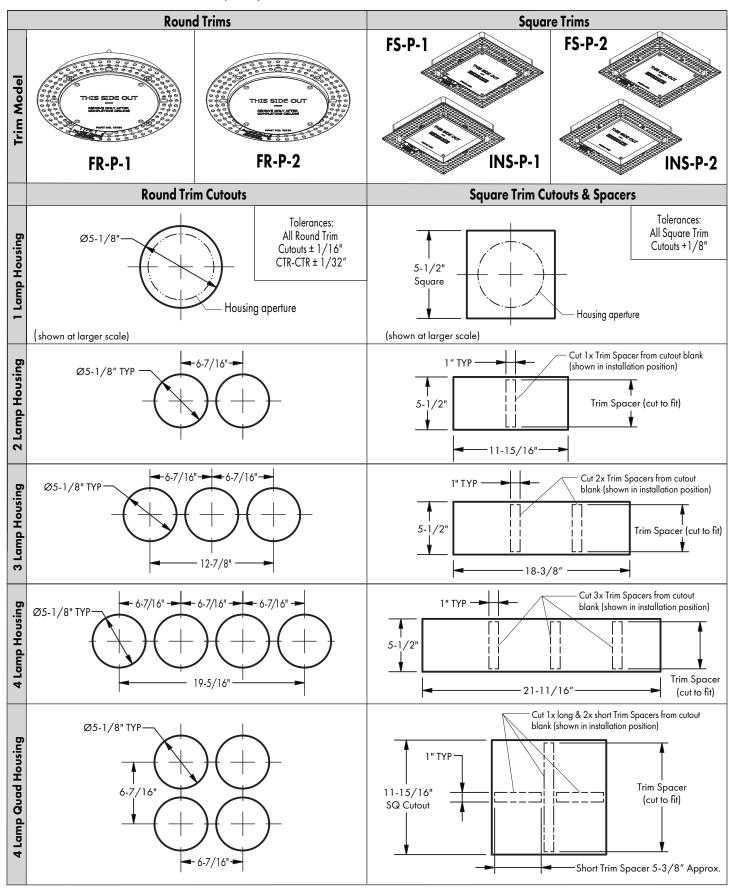


FIG 6.3 Butterfly Bracket Adjustment

# **CEILING CUTOUTS FOR PLASTER/SHEETROCK CEILINGS**Refer to 800 Series Trim Installation Instructions (92005) for Additional Details



# CEILING CUTOUTS FOR WOOD/STONE/ACOUSTIC TILE CEILINGS Refer to 800 Series Trim Installation Instructions (92005) for Additional Details

Refer to 800 Series Trim Installation Instructions (92005) for Additional Details  Round Trims  Squal				Trims
	Non-Flanged	Flanged	Non-Flanged	Flanged
Trim Model	FR-W INR-W FR-W-M Important: All Non-flanged cutouts to have clean, sharp edges	FLR-W FLINR-W	FS-W-M Important: All Non-flanged cutouts to have clean, sharp edges	FLS-W FLINS-W
1 Lamp Housing	Ø4-3/8"  Housing aperture	All Round Cutout Tolerances: FR-W, FR-W-M ± 1/32" INR-W ± 1/32" FLR-W + 1/8" / - 1/32" FLNR-W + 1/8" / - 1/32" CTR to CTR ± 1/32"		All Square Cutout Tolerances:  FS-W, FS-W-M ± 1/32" INS-W ± 1/32" FLS-W + 1/8" / - 1/16" FLNS-W + 1/8" / - 1/16" CTR to CTR ± 1/32"
2 Lamp Housing	Ø4-3/8" TYP	7/16" -	4-3/8" SQ 	
3 Lamp Housing	Ø4-3/8" TYP	2-7/8"	4-3/8"	4"
4 Lamp Housing	4-3/8" TYP	7/16"	4-3/8" SQ 23-11,	
4 Lamp Quad Housing	6-7/16" Ø4-3/8" TYP	7/16" -	4-3/8" SQ 10-13/1	6-7/16"

92001-05 • Page 8 Number Eight Lighting

# LAMP MODULE J2 & J2S INSTALLATION / ADJUSTMENT / REMOVAL

CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding.

Always allow lamp module to cool before servicing.

**Installation** (not required if pre-installed into housing):

Step 1 Before installing Lamp Module, make sure correct LED Power Supply Module is installed & Lock Shaft is in unlocked position - FIG 9.1 & 9.3.

Step 2 Insert Lamp Module into housing as shown then adjust to 45° position to expose Fastener. Secure to Housing Center Stud - FIG 9.2 & 9.3.

Step 4 Plug Wire Connector from Lamp Module into Power Supply Module connector. Push wire up inside housing to avoid interference during adjustment - FIG 9.2.

Adjustment: Adjust desired horizontal position & vertical aiming angle as shown in FIG 9.4.

Removal: To remove lamp module follow steps above in reverse order.

Replacement: Contact Number Eight Lighting for replacement Lamp Module.

Optional Accessories: Unscrew Lamp Ring to add/remove accessories - FIG 9.2.

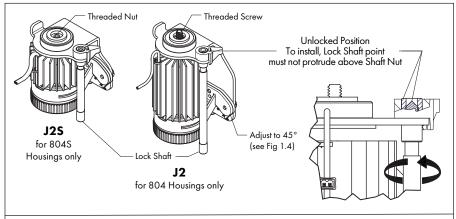
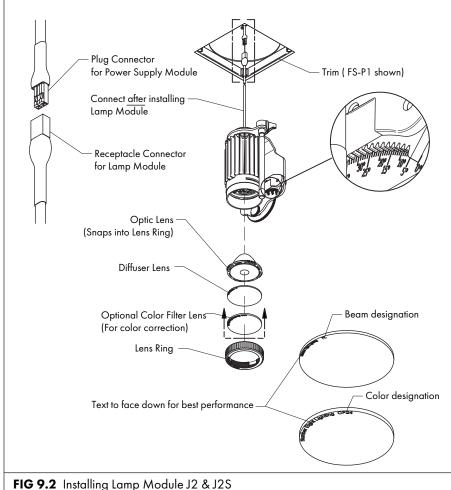


FIG 9.1 Preparing Lamp Module J2 & J2S for installation



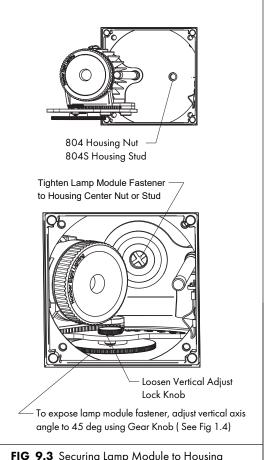
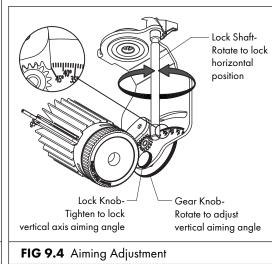


FIG 9.3 Securing Lamp Module to Housing



92001-05 • Page 9 Number Eight Lighting

# LAMP MODULE J2S-TW INSTALLATION/ADJUSTMENT/REMOVAL



CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding.

Always allow lamp module to cool before servicing.

**Installation** (not required if pre-installed into housing ):

Step 1 Before installing Lamp Module, make sure accessories & correct LED Power Supply Module are installed & Lock Shaft is in unlocked position - FIG 10.1 & 10.2.

Step 2 Insert Lamp Module into housing as shown then adjust to 45° position to expose fastener. Secure to Housing Center Stud - FIG 10.2 & 10.3.

Step 3 Plug Wire Connectors from Lamp Module into Power Supply Module connectors. Push wires up inside housing to avoid interference during adjustment - FIG 10.2.

Adjustment: Adjust desired horizontal position & vertical aiming angle as shown in FIG 10.4.

Removal: To remove lamp module follow steps above in reverse order.

Replacement: Contact Number Eight Lighting for replacement Lamp Module.

Optional Accessories: Unscrew Lamp Ring to add/remove accessories - FIG 10.2.

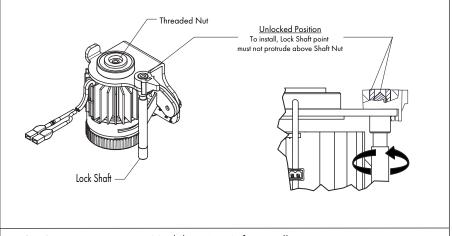


FIG 10.1 Preparing Lamp Module J2S -TW for installation

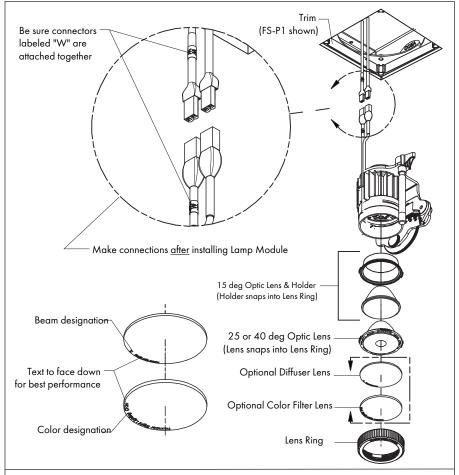
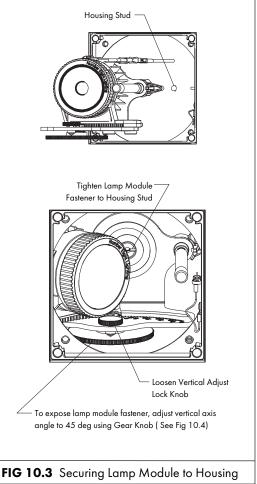


FIG 10.2 Installing Lamp Module J2S-TW



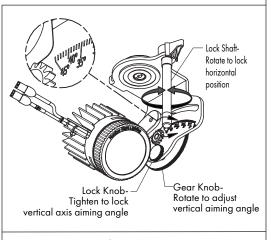


FIG 10.4 Aiming Adjustment

Number Eight Lightin Company 92001-05 • Page 10

# WW-8 WALL WASH TRIM PLATE - INSTALLATION INSTRUCTIONS

#### WW-8 Trim Plate Models for 800 Series Housings

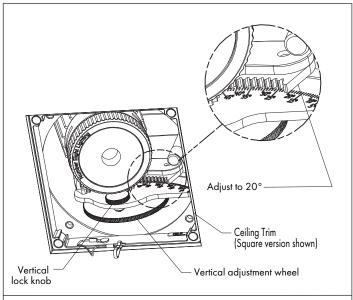
Important: WW-8 Trim Plates can only be used with J2 & J2S Lamp Modules. For optimal performance use 40° optic with HI, HI-3, WD, WD-2, WD-4 or TW LED. Use 10° optic and FL lens with HI-2 LED.

STEP 1 Unlock & adjust J2 or J2S Lamp Module to 20° vertical aiming angle for optimal wall wash performance - FIG 11.1.

STEP 2 Unlock & adjust horizontal position to aim light towards wall surface to be illuminated - FIG 11.2.

STEP 3 Orient & install Wall Wash Trim Plate into Trim as shown - FIG 11.3.

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



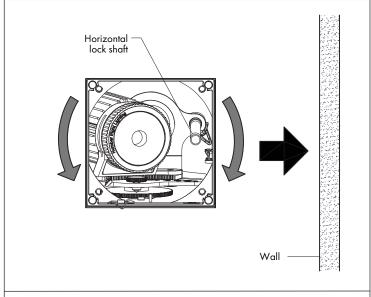


FIG 11.1 Adjust Vertical Aiming Angle

FIG 11.2 Adjust Horizontal position

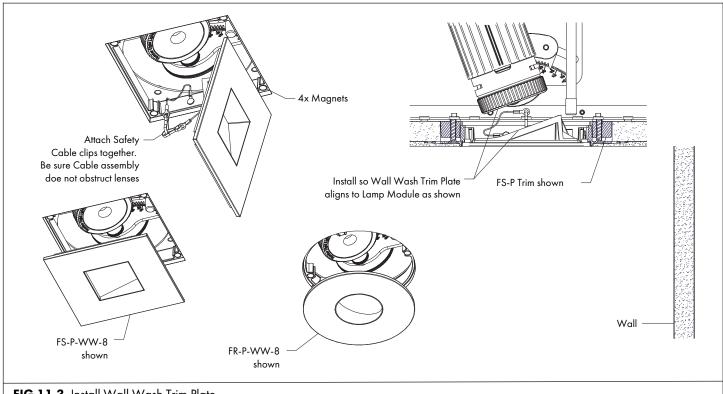


FIG 11.3 Install Wall Wash Trim Plate

# LAMP MODULE K2 & K2S INSTALLATION/ADJUSTMENT/REMOVAL



CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding.

Always allow lamp module to cool before servicing.

**Installation** (not required if pre-installed into housing):

STEP 1 Before installing Lamp Module, make sure the LED Power Supply Module is installed (shown on page 15).

STEP 2 Pull Power Module Connector through opening & insert Lamp Module into housing as shown. Secure Lamp Module to Housing Nut or Stud & hand tighten - FIG 12.1 & 12.2.

STEP 3 Plug Wire Connector from Lamp Module into Power Supply Module connector. Push wire up inside housing to avoid interference with LED - FIG 12.2.

 $\textbf{Removal:} \ \text{To remove lamp module follow steps above in reverse order}.$ 

Replacement: Contact Number Eight Lighting for replacement Lamp Module.

Optional Accessories: Unscrew Lamp Ring to add/remove accessories- FIG 12.1.

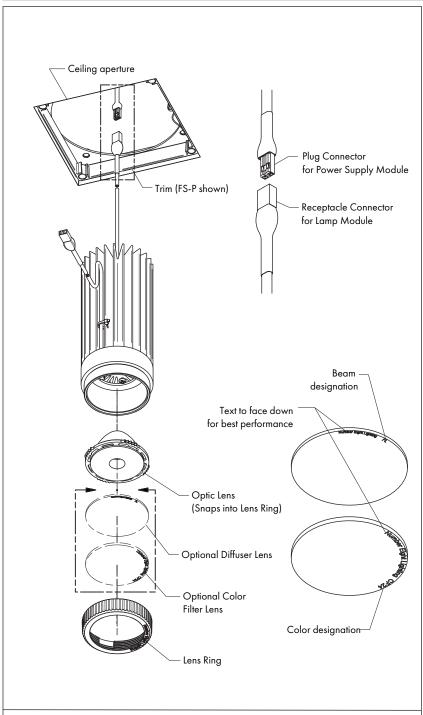
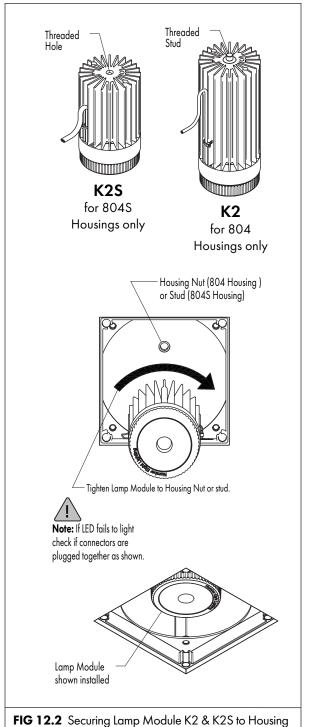


FIG 12.1 Installing Lamp Module K2 / K2S & Accessories



92001-05 • Page 12 Number Eight Lighting

# LAMP MODULE M2 & M2S INSTALLATION / ADJUSTMENT / REMOVAL



CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding.

Always allow lamp module to cool before servicing.

#### Installation:

STEP 1 Before installing Lamp Module M2 or M2S, make sure LED Power Supply Module is installed (shown on page 14).

Note: For use of M2 & M2S with Sloped Ceilings Only-See recommended Housing installation orientation - FIG 13.1.

STEP 2 Adjust vertical to 90° position as shown in FIG 13.3. Note: angle adjustment is limited on ceilings over 5/8" thick & when Mirror Reflector is aligned facing narrow sides of Housing.

STEP 3 Plug Wire Connector from Lamp Module into Power Supply Module Connector. Push wire up inside Housing to avoid interference during installation - FIG 13.4.

STEP 4 Choose general aiming position desired. Attach Safety Cable from Trim Cable Clip to Lamp Module before inserting Lamp Module into Housing aperature. Seat Trim Plate into Trim.

Note: Horizontal & vertical aiming position adjustment is lockable using Lock Knobs. General aiming position is easily changed by pulling Lamp Module out slightly & rotating into one of 4 positions - FIG 13.2 & 13.3. **Removal:** To remove Lamp Module follow steps above in reverse order.

Replacement: Contact Number Eight Lighting for replacement LED Engine Subasy. Remove Lamp Module & unscrew LED Engine Subasy for replacement.

Optional Accessories: Unscrew LED Engine Subasy to add/remove Lens accessories - FIG 13.2.

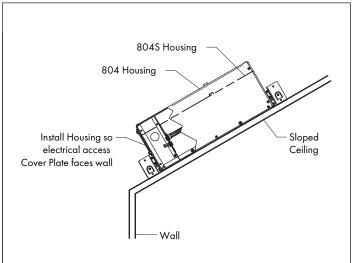


FIG 13.1 Recommended Housing Orientation for Sloped Ceiling

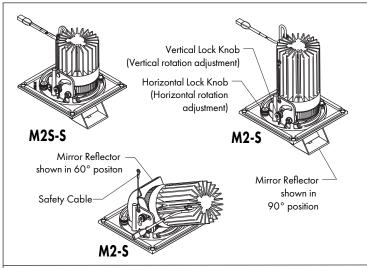


FIG 13.3 Lamp Module Adjustment

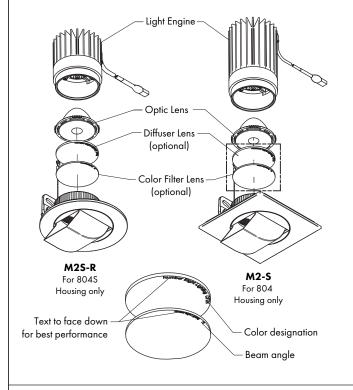
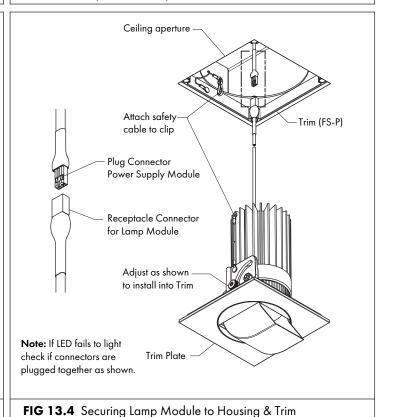


FIG 13.2 Installing Lamp Module Accessories



92001-05 • Page 13 Number Eight Lighting

# LED POWER SUPPLY MODULE REMOVAL / REPLACEMENT



CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding.

Always allow lamp module to cool before servicing.

#### To remove LED Power Supply Modules

- STEP 1 Remove Lamp Module (refer to Pages 9-13).
- STEP 2 Unscrew & remove Thumb Knob inside Housing as shown. Tilt Power Supply Module to disengage offset tab from housing as shown FIG 14.1.
- STEP 3 Pull Power Supply Module away from threaded stud and pull wires & Power Connectors out of the Junction Box FIG 14.2.
- STEP 4 Disconnect Power Supply Connectors. For models with 0-10 drivers, also disconnect purple & gray wires FIG 14.2.
- STEP 5 Pull Power Supply Module through aperture FIG 14.3.

For Replacement: Replace all parts in steps above in reverse order. Push all wires into wiring compartment & replace Power Supply Module as shown in FIG 14.4.

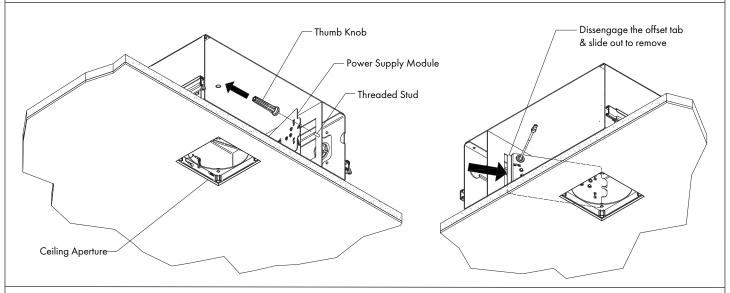
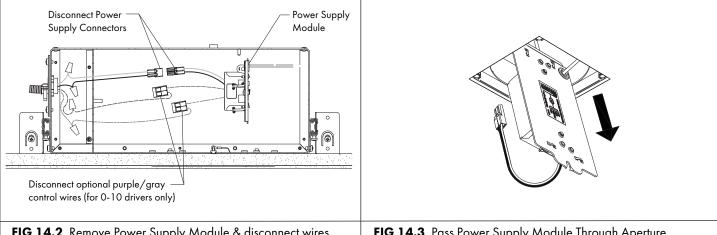


FIG 14.1 Remove Thumb Knob & Disengage Power Supply Module (Model 804 shown)





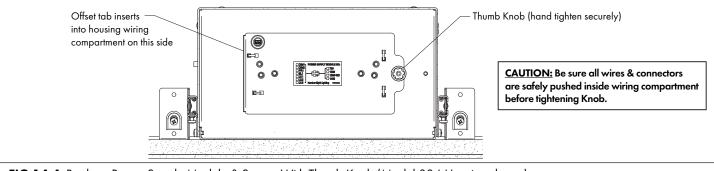


FIG 14.4 Replace Power Supply Module & Secure With Thumb Knob (Model 804 Housing shown)

92001-05 • Page 14 Number Eight Lighting

# For PR1 / EL1 / EL2 / LU2 / LU4 Driver Options

#### **CAUTION: TO AVOID RISK OF FIRE OR ELECTRIC SHOCK**

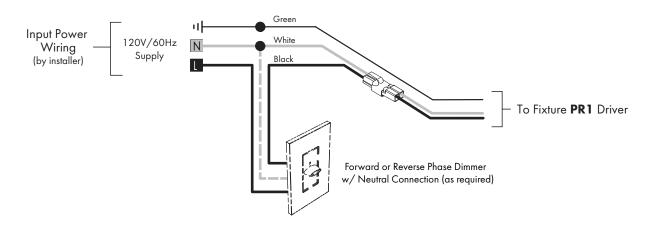
Turn off power at circuit breaker or fuse panel & read instructions completely before proceeding.

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 <a href="https://www.8lighting.com">www.8lighting.com</a> for current product specifications.

#### PR1 - PHASE CONTROL

- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 15.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 15.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 15.1 & 15.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 15.2

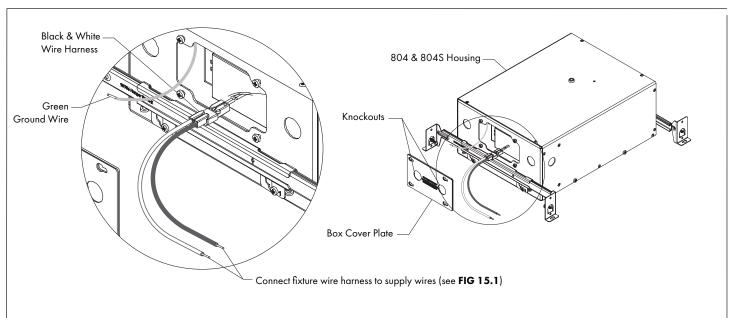


#### **Phase Control Notes:**

PR1 drivers are Forward or Reverse Phase dimmable.

For compatible dimmers for use with  $\begin{cal}PR1\end{cal}$  drivers see: ww.8lighting.com/resources-downloads

#### FIG 15.1 Wiring Diagram

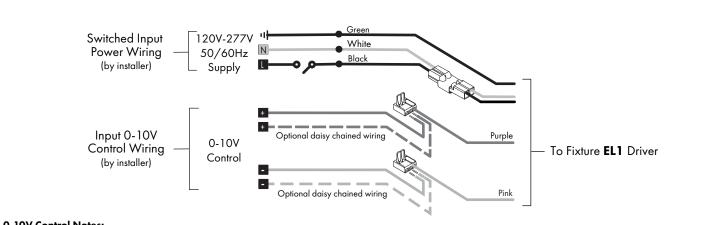


NOTE: For compatible dimmers for use with PR1 drivers see www.8lighting.com/resources-downloads/

FIG 15.2 Wire Connections

#### EL1 - 0-10V CONTROL

- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 16.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 16.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 16.1 & 16.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 16.2



#### 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  ${\bf EL1}$  drivers see: www.8lighting.com/resources-downloads .

#### FIG 16.1 Wiring Diagram

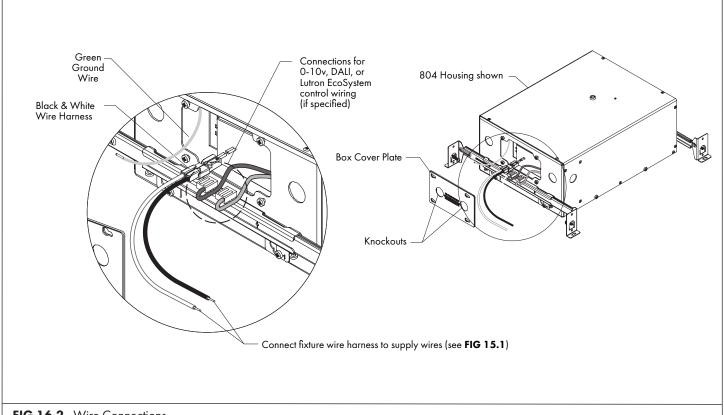
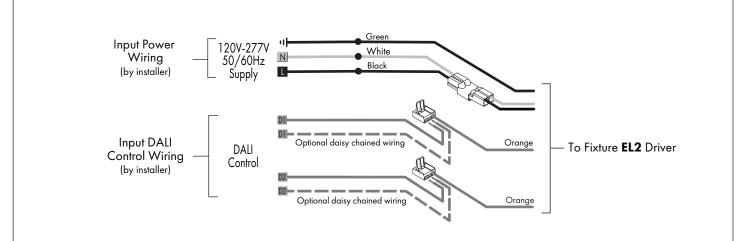


FIG 16.2 Wire Connections

92001-05 • Page 16 Number Eight Lighting

#### **EL2** - DALI CONTROL

- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 17.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 17.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 17.1 & 17.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 17.2

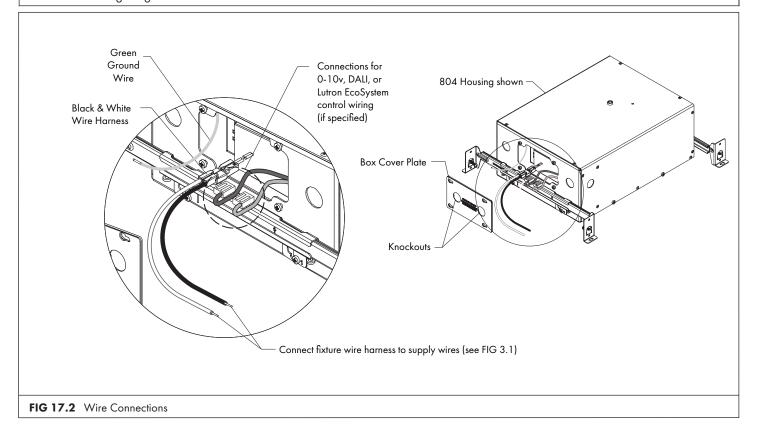


#### **DALI Control Notes:**

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

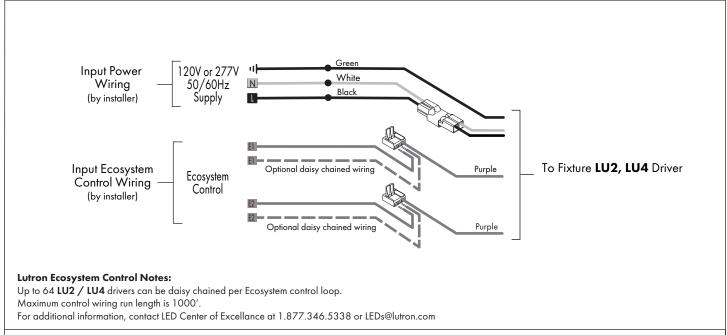
For compatible dimmers for use with EL2 drivers see: www.8lighting.com/resources-downloads.

#### FIG 17.1 Wiring Diagram

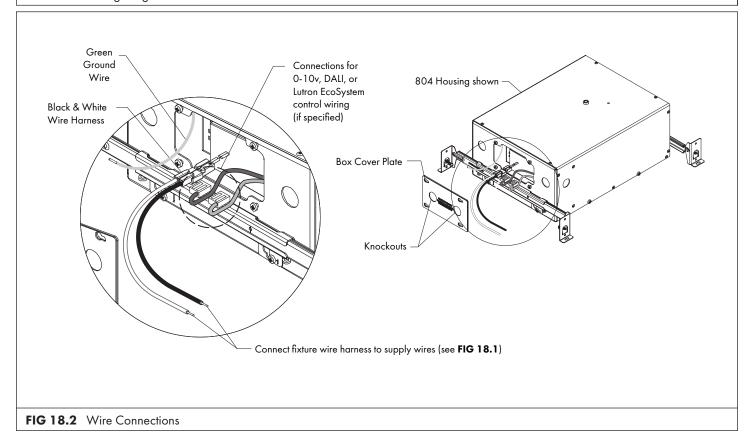


# LU2 / LU4 - LUTRON ECOSYSTEM CONTROL

- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 18.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 18.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 18.1 & 18.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 18.2



#### FIG 18.1 Wiring Diagram



#### SINGLE LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE

#### For **EL3 / EL4 / EL5** 2-Channel Driver Options



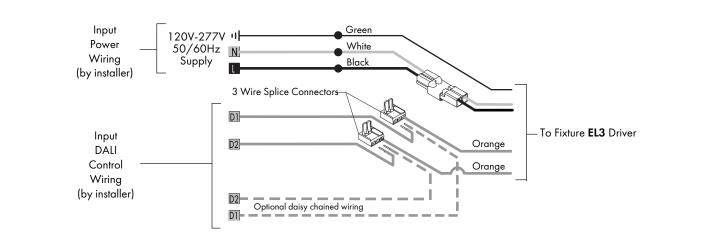
#### A CAUTION: TO AVOID RISK OF FIRE OR ELECTRIC SHOCK

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.

#### **EL3 - 2 CHANNEL DALI CONTROL**

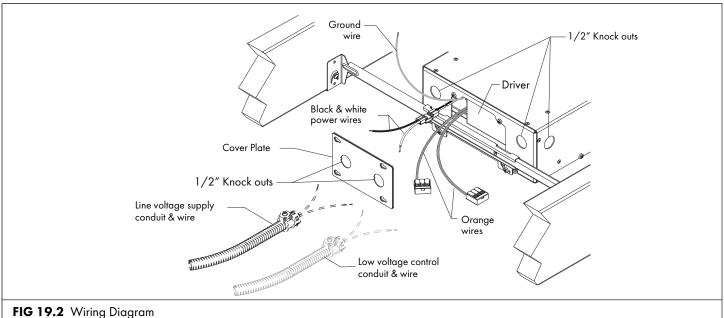
- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 19.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 19.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 19.1 & 19.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 19.2



#### **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.

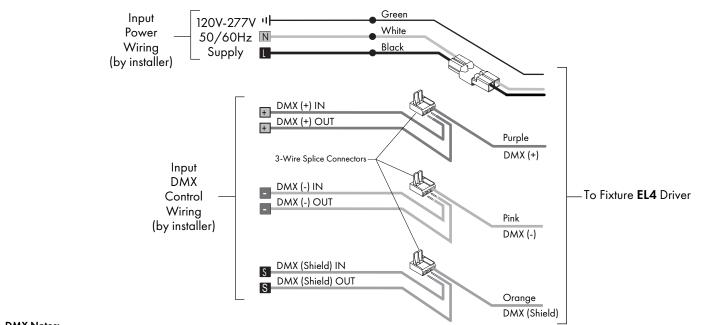
#### FIG 19.1 Wiring Diagram



#### SINGLE LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE

#### **EL4** - 2 CHANNEL DMX CONTROL

- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 20.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 20.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 20.1 & 20.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 20.2



#### **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 drivers 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.

#### FIG 20.1 Wiring Diagram

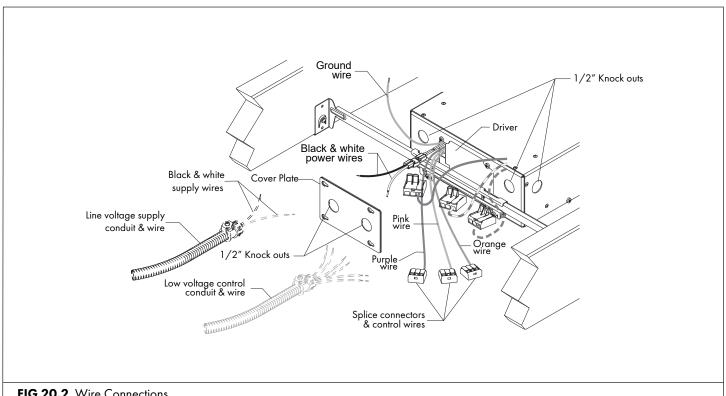
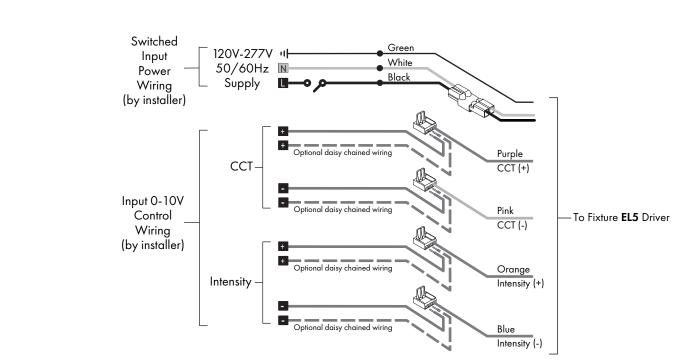


FIG 20.2 Wire Connections

#### SINGLE LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE

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

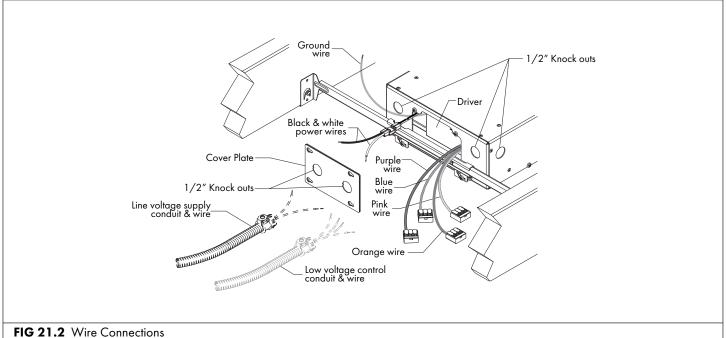
- STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment FIG 21.2.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 21.2.
- STEP 3 Make wire connections & push all wires & connections completely inside wiring compartment FIG 21.1 & 21.2.
- STEP 4 Replace & secure box cover plate using screws provided FIG 21.2



#### 0-10V Control Notes:

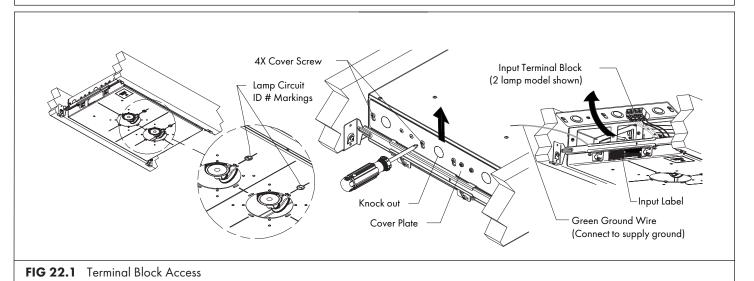
0-10V control wiring is polarity sensitive and should be run as Class 2. Each EL5 driver requires two pairs of Class 2 control wires: one pair for CCT and one pair for INTENSITY. 300' is the maximum control wiring run length to reduce EMI susceptibility and voltage drop. Voltage drop should be no greater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

#### FIG 21.1 Wiring Diagram

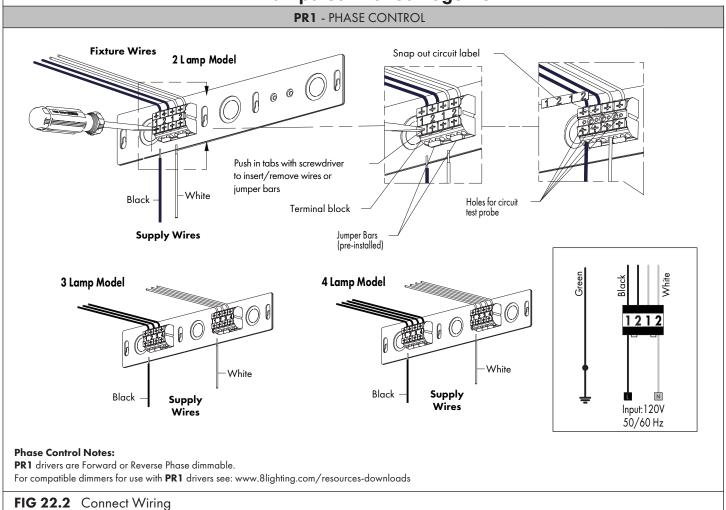


# For EL1 / EL2 / LU2 / LU4 Driver Options

- STEP 1 Loosen screws to remove cover plate.
- STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires FIG 22.1.
- STEP 3 Make wire connections shown below & push all wires & connections completely inside wiring compartment FIG 22.1 & 22.2.4.
- STEP 4 Check circuit continuity using holes in terminal blocks FIG 22.2.
- STEP 5 Replace & secure box cover plate using screws provided FIG 22.1.



# All Lamps Controlled Together



# **All Lamps Controlled Together**

EL1 - O-10V CONTROL

- STEP 1 Ensure jumper bars are installed in terminal blocks as shown FIG 23.1.
- STEP 2 Make wire connections noting individual lamp circuit numbers FIG 23.2 & 23.3.
- STEP 3 Check circuit continuity using holes in terminal blocks FIG 23.4
- STEP 4 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 5 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).

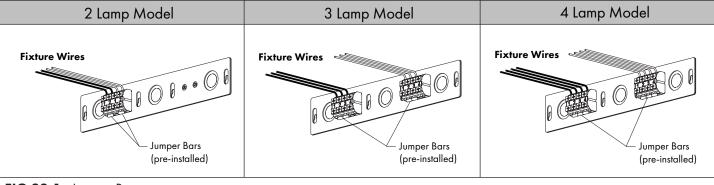
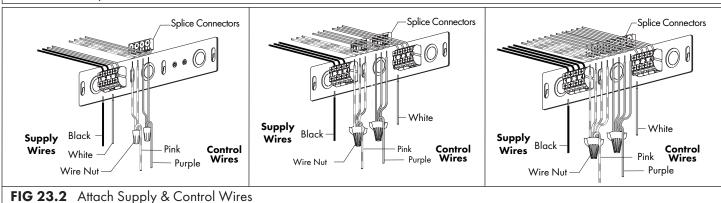


FIG 23.1 Jumper Bars



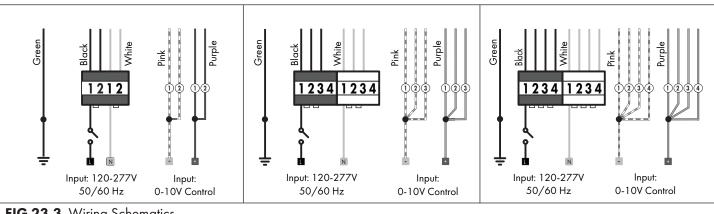


FIG 23.3 Wiring Schematics

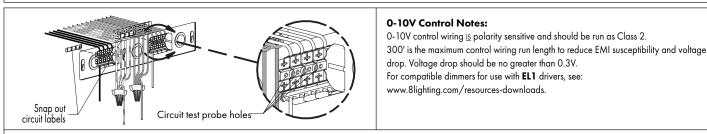


FIG 23.4 Accessing Circuit Probe Holes

# **Individual Lamp Control**

#### PR1 - PHASE CONTROL

- STEP 1 Remove jumper bars from terminal blocks as needed for individual lamp control FIG 24.1.
- STEP 2 Make wire connections noting individual lamp circuit numbers FIG 24.2 & 24.3.
- STEP 3 Check circuit continuity using holes in terminal blocks FIG 24.4.
- STEP 4 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 5 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).

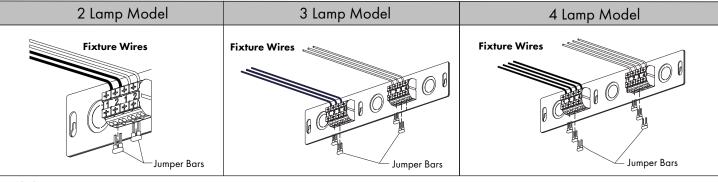


FIG 24.1 Remove Jumper Bars

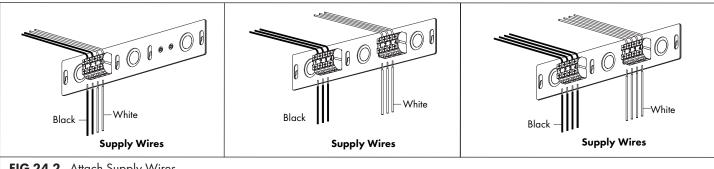


FIG 24.2 Attach Supply Wires

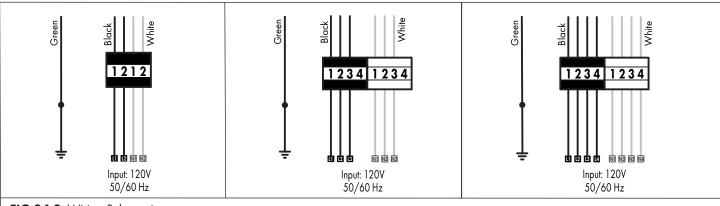
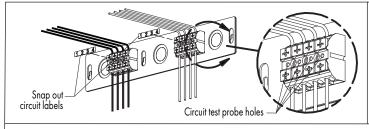


FIG 24.3 Wiring Schematics



#### **Phase Control Notes:**

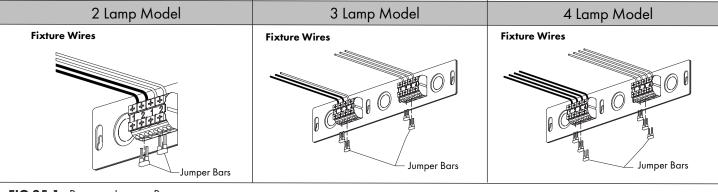
PR1 drivers are Forward or Reverse Phase dimmable. For compatible dimmers for use with PR1 drivers see: www.8lighting.com/resources-downloads

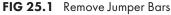
FIG 24.4 Accessing Circuit Probe Holes

# **Individual Lamp Control**

#### EL1 - 0-10V CONTROL

- STEP 1 Remove jumper bars from terminal blocks as needed for individual lamp control FIG 24.1.
- STEP 2 Make wire connections noting individual lamp circuit numbers FIG 24.2 & 24.3.
- STEP 3 Check circuit continuity using holes in terminal blocks FIG 24.4.
- STEP 4 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 5 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).





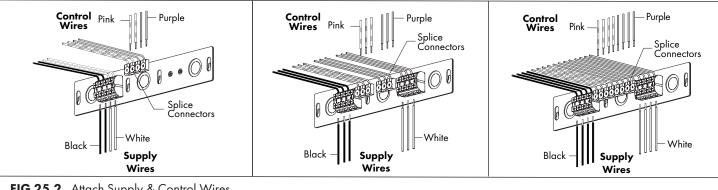


FIG 25.2 Attach Supply & Control Wires

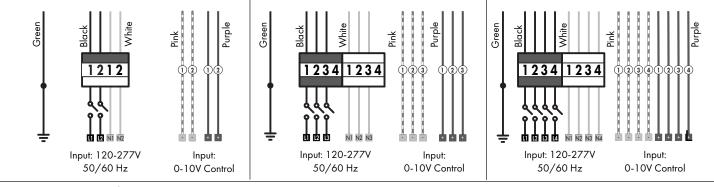
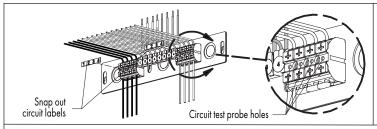


FIG 25.3 Wiring Schematics



#### 0-10V Control Notes:

0-10V control wiring 15 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

FIG 25.4 Accessing Circuit Probe Holes

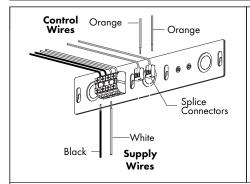
## All Lamps Controlled Together or Individually

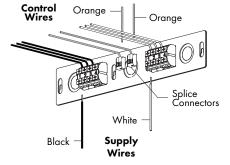
#### **EL2** - DALI CONTROL

- STEP 1 Remove jumper bars from terminal blocks as needed for individual lamp control FIG 26.1.
- STEP 2 Make wire connections noting individual lamp circuit numbers FIG 26.2 & 26.3.
- STEP 3 Check circuit continuity using holes in terminal blocks FIG 26.4.
- STEP 4 Push all wires completely inside wiring compartment FIG 22.1 (page 22).
- STEP 5 Replace & secure box cover plate using screws provided FIG 22.1 (page 22).

# 2 Lamp Model Fixture Wires Fixture Wires Jumper Bars (pre-installed) Jumper Bars (pre-installed)

FIG 26.1 Jumper Bars





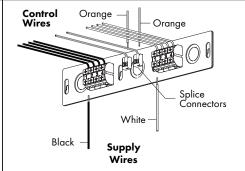


FIG 26.2 Attach Supply & Control Wires

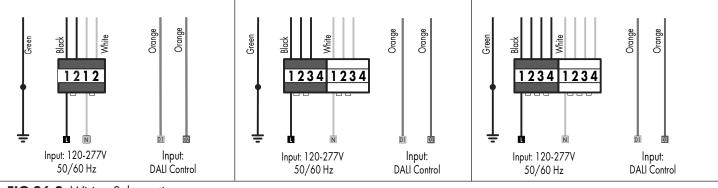
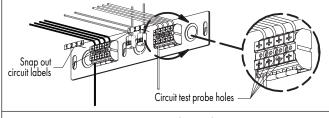


FIG 26.3 Wiring Schematics



#### DALI Control Notes:

DALI control wiring <u>is not</u> polarity sensative and can be run as Class 1 or 2. Up to 64 **EL2** drivers can be daisy chained per DALI control loop. Maximum control wiring run length is 1000'. For compatible dimmers for use with **EL2** drivers see:

For compatible dimmers for use with **EL2** drivers see www.8lighting.com/resources-downloads

FIG 26.4 Accessing Circuit Probe Holes

# **All Lamps Controlled Together or Individually**

#### LU2 / LU4 - ECOSYSTEM CONTROL

- STEP 1 Remove jumper bars from terminal blocks as needed for individual lamp control FIG 27.1.
- STEP 2 Make wire connections noting individual lamp circuit numbers FIG 27.2 & 27.3.
- STEP 3 Check circuit continuity using holes in terminal blocks FIG 27.4.
- STEP 4 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 5 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).

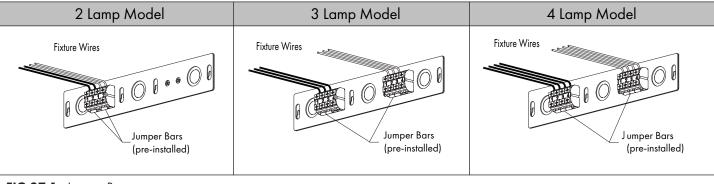
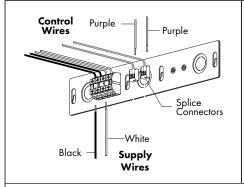
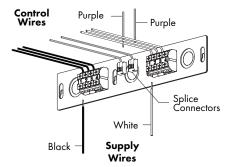


FIG 27.1 Jumper Bars





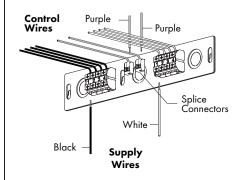
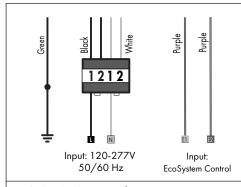
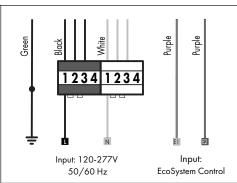


FIG 27.2 Attach Supply & Control Wires





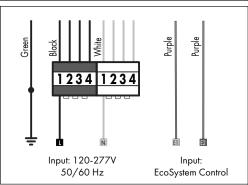
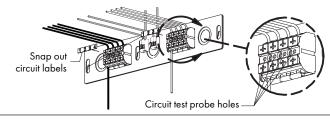


FIG 27.3 Wiring Schematics



#### **Lutron EcoSystem Control Notes:**

Up to 64 LU2/LU4 drivers 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 27.4 Accessing Circuit Probe Holes

# **MULTI-LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE**

# **All Lamps Controlled Together**

#### **EL3** - 2 CHANNEL DALI CONTROL

- STEP 1 Make wire connections noting individual lamp circuit numbers FIG 28.1, 28.2 & 28.3.
- STEP 2 Check circuit continuity using holes in terminal blocks FIG 28.4.
- STEP 3 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 4 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).

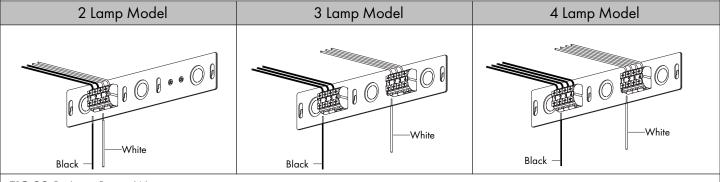


FIG 28.1 Input Power Wiring

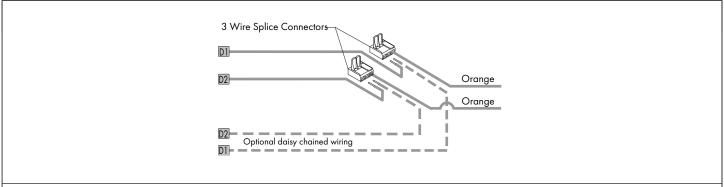


FIG 28.2 Input Control Wiring

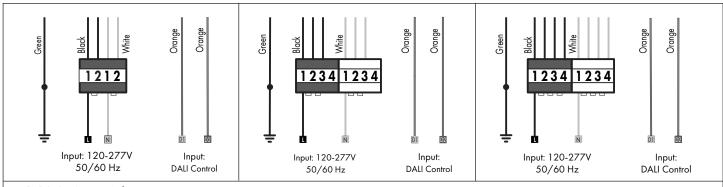
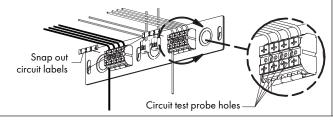


FIG 28.3 Wiring Schematics



#### **DALI Control Notes:**

DALI control wiring <u>is not</u> polarity sensitive and can be run as Class 1 or 2. 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

FIG 28.4 Accessing Circuit Probe Holes

# **MULTI-LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE**

# **All Lamps Controlled Together**

#### **EL4** - 2 CHANNEL DMX CONTROL

- STEP 1 Make wire connections noting individual lamp circuit numbers FIG 29.1, 29.2 & 29.3.
- STEP 2 Check circuit continuity using holes in terminal blocks FIG 29.4.
- STEP 3 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 4 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).

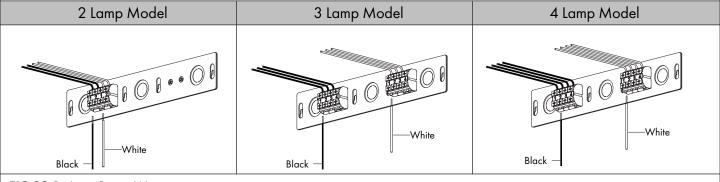


FIG 29.1 Input Power Wiring

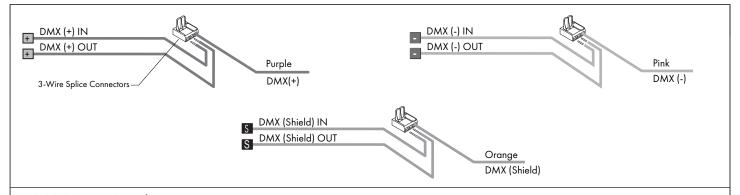


FIG 29.2 Input Control Wiring

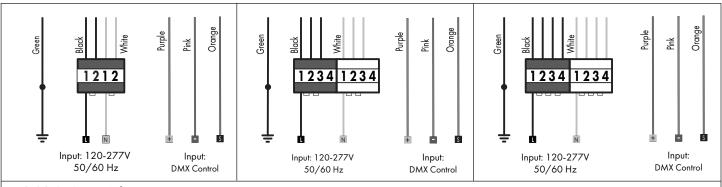
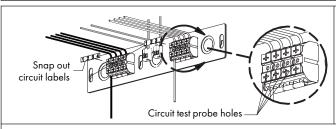


FIG 29.3 Wiring Schematics



#### **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 drivers 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  ${\bf EL4}$  drivers see: www.8lighting.com/resources-downloads.

FIG 29.4 Accessing Circuit Probe Holes

# **MULTI-LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE**

# **All Lamps Controlled Together**

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

- STEP 1 Make wire connections noting individual lamp circuit numbers FIG 30.1, 30.2 & 30.3.
- STEP 2 Check circuit continuity using holes in terminal blocks FIG 30.4.
- STEP 3 Push all wires completely inside wiring compartment FIG 22.1 (Page 22).
- STEP 4 Replace & secure box cover plate using screws provided FIG 22.1 (Page 22).

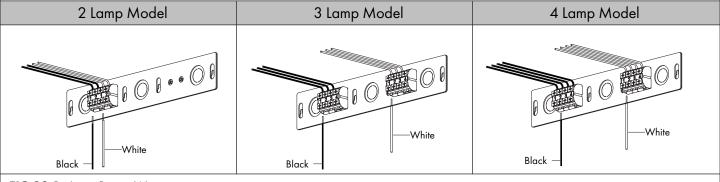


FIG 30.1 Input Power Wiring

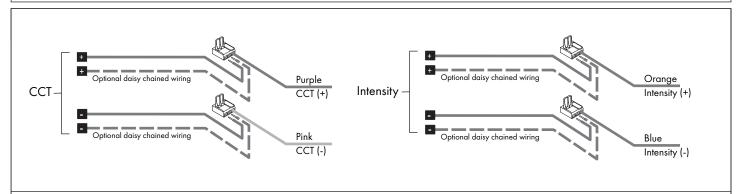


FIG 30.2 Input Control Wiring

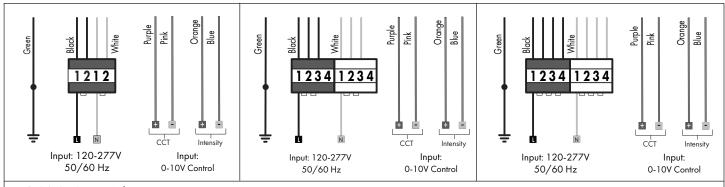
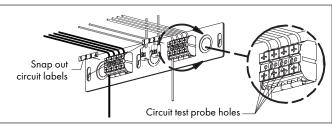


FIG 30.3 Wiring Schematics



#### 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.

FIG 30.4 Accessing Circuit Probe Holes



www.8lighting.com

**Number Eight Lighting Company** 

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