

800 SERIES 8045 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 <u>www.8lighting.com</u> 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.

TABLE OF CONTENTS

PAGE

HOUSING INSTALLATION - BAR HANGER MOUNTING	1-3
HOUSING INSTALLATION - PANEL MOUNTING BRACKETS	4
HOUSING INSTALLATION - T-BAR MOUNTING	5
HOUSING INSTALLATION - BUTTERFLY BRACKET MOUNTING	6
CEILING CUT-OUTS - PLASTER/SHEETROCK CEILINGS	7
CEILING CUT-OUTS - WOOD/STONE ACOUSTIC TILE CEILINGS	8
LAMP MODULE INSTALLATION, ADJUSTMENT, REMOVAL	9-13
POWER SUPPLY REMOVAL AND REPLACEMENT	14
WIRING INSTRUCTIONS - SINGLE LAMP	15-18
WIRING INSTRUCTIONS - SINGLE LAMP TUNABLE WHITE	
WIRING INSTRUCTIONS - MULTI-LAMP	22-27

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.

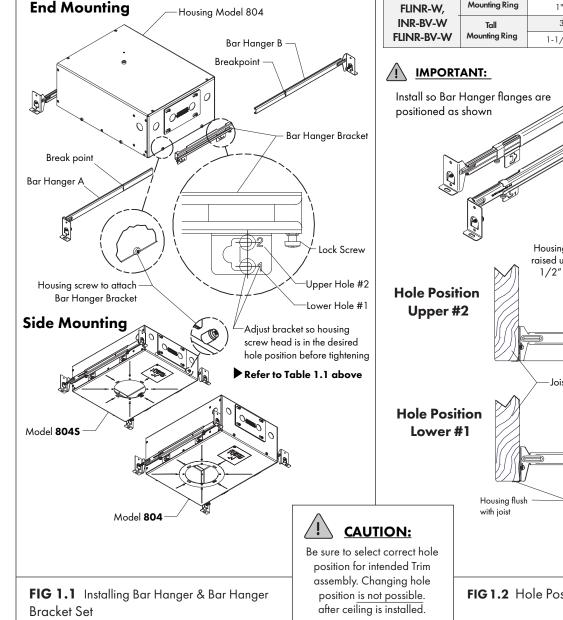
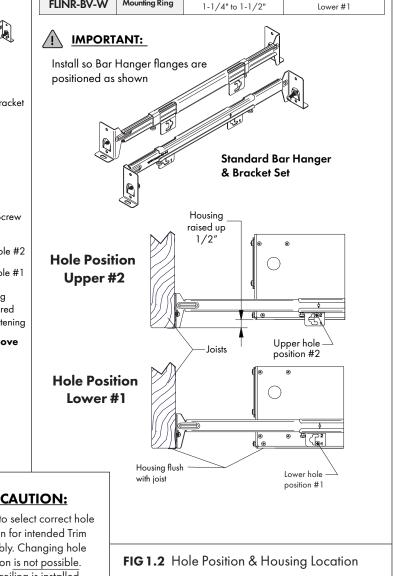
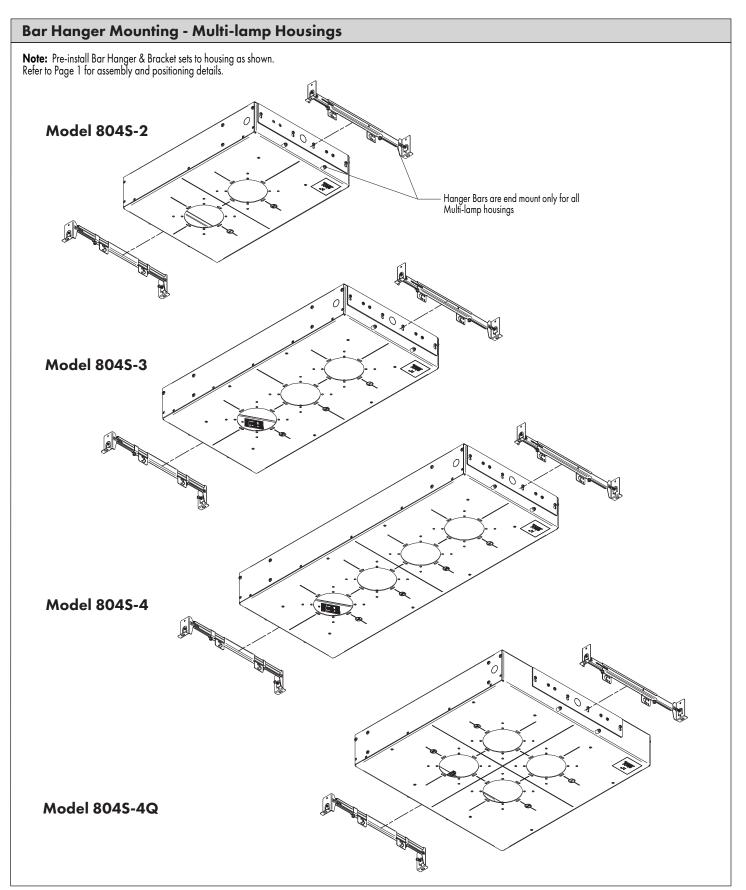


Table 1.1 Bar Hanger Bracket Position			
800 Series Trim Models		For Ceiling Thickness Range	Hole Position #
FR-P, FS-P		1/2" to 1"	Lower #1
INR-P, INS-P,		1/2" to 1"	Upper #2
INR-BV-P, INS-BV-P		1" to 1-1/2"	Lower #1
FS-W, FS-W-M, FLS-W		1/4" to 3/4"	Upper #2
		3/4" to 1-1/2"	Lower #1
INS-W, FLINS-W,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





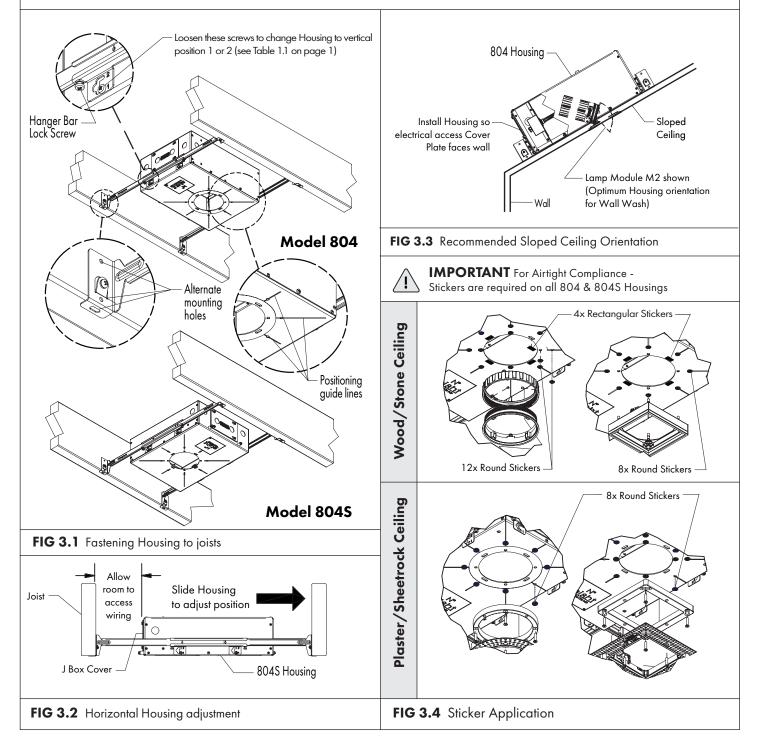
Mounting Housing To Joists & Sticker Application

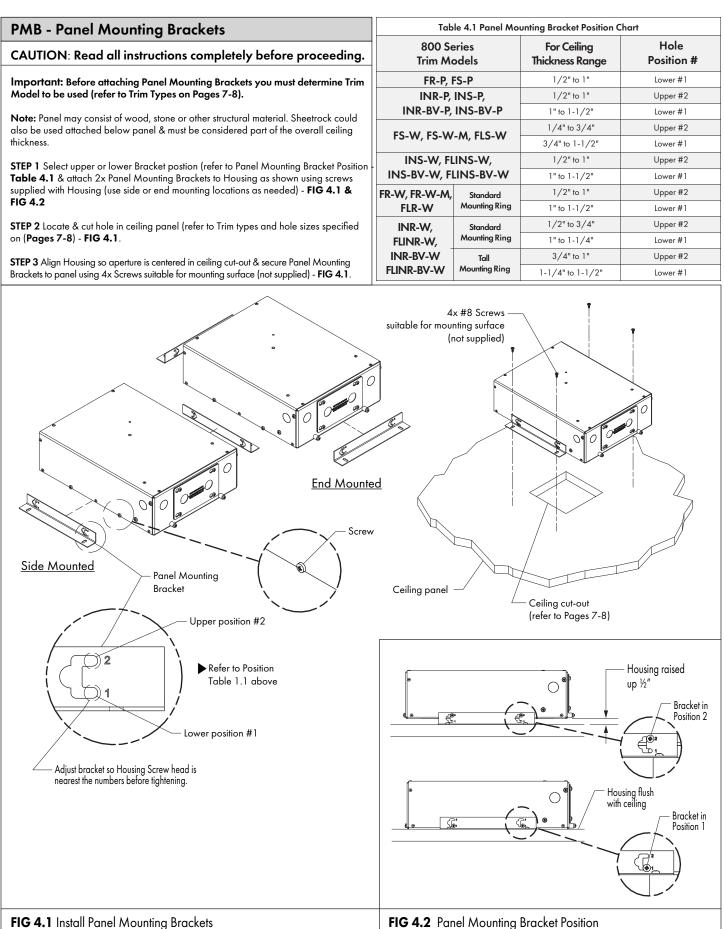
STEP 1 Spread Hanger Bars to approximate joist spacing. Temporarily secure Lock Screws to keep Housing from sliding along Hanger Bars – **FIG 3.1** & **3.2**. **Note:** For Sloped Ceilings - Installing Housing so J Box Cover faces wall is recommended – **FIG. 3.3**.

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.

STEP 4 Apply Stickers over unused holes & slots as shown to prevent light leaks & maintain airtight standards compliance. No caulking required - FIG 3.4.

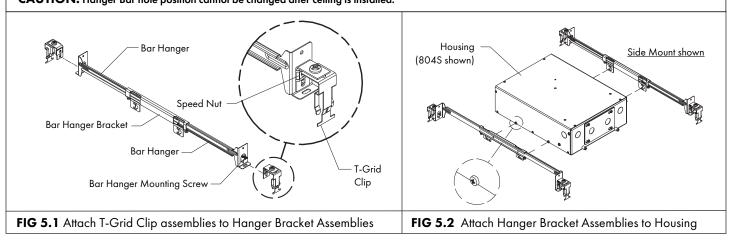




TBC - T-BAR Clips for T-GRID Mounting with Bar Hangers

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 accomodate 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.

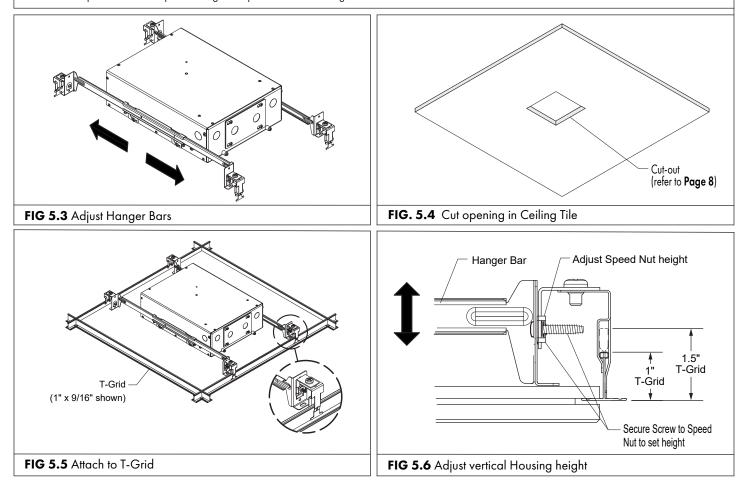


STEP 3 Extend Hanger bars to position T-Grid Clip assemblies fixture onto T-Grid bars - FIG 5.4.

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.



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.

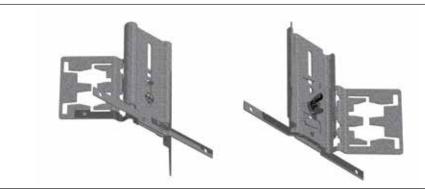
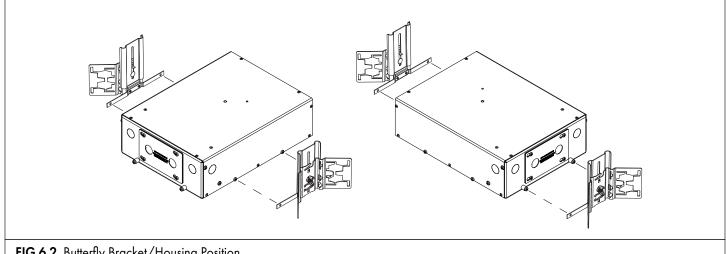
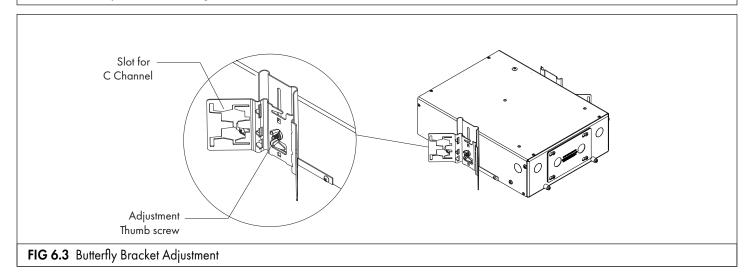


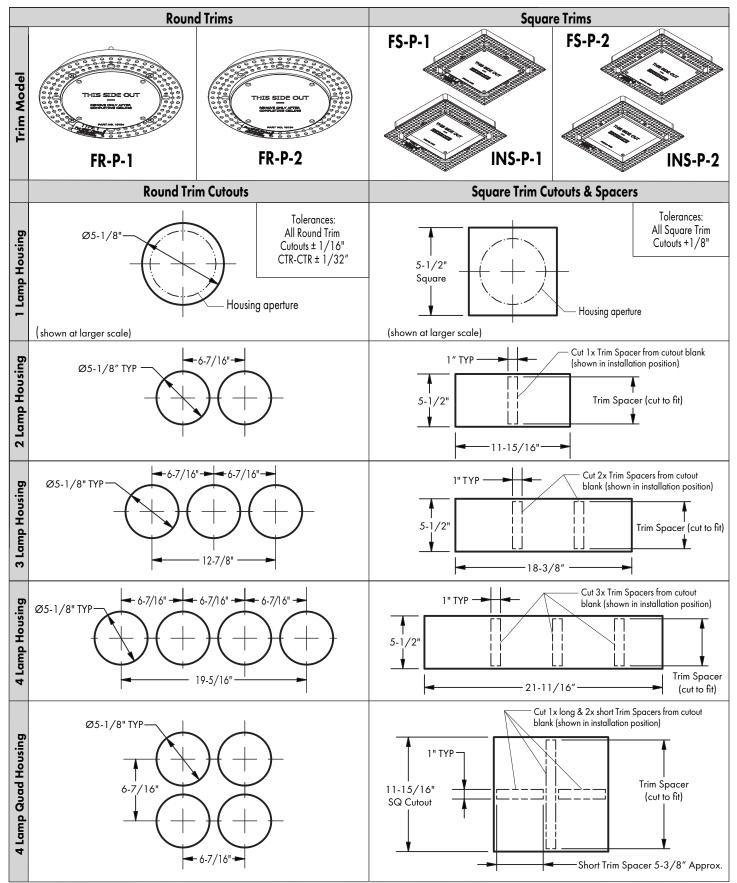
FIG 6.1 Butterfly Brackets (1 Set)





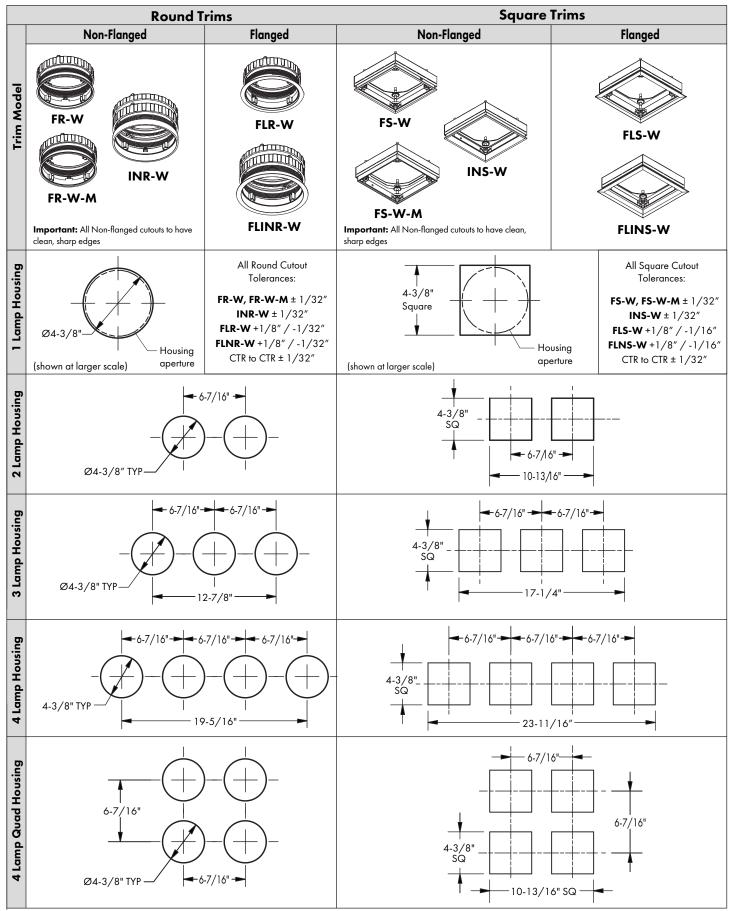


CEILING CUTOUTS FOR PLASTER/SHEETROCK CEILINGS Refer to 800 Series Trim Installation Instructions (92005) for Additional Details



CEILING CUTOUTS FOR WOOD/STONE/ACOUSTIC TILE CEILINGS

Refer to 800 Series Trim Installation Instructions (92005) for Additional Details



LAMP MODULE J2 & J2S INSTALLATION / ADJUSTMENT / REMOVAL

CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding. 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. Threaded Nut Threaded Screw **Unlocked** Position To install, Lock Shaft point must not protrude above Shaft Nut J2S Adjust to 45° for 804S (see Fig 1.4) 804 Housing Nut Housings only Lock Shaft 804S Housing Stud J2 for 804 Housings only Tighten Lamp Module Fastener to Housing Center Nut or Stud FIG 9.1 Preparing Lamp Module J2 & J2S for installation Plug Connector for Power Supply Module Trim (FS-P1 shown) Connect after installing Lamp Module Loosen Vertical Adjust Receptacle Connector Lock Knob for Lamp Module To expose lamp module fastener, adjust vertical axis angle to 45 deg using Gear Knob (See Fig 1.4) FIG 9.3 Securing Lamp Module to Housing **Optic Lens** (Snaps into Lens Ring) Diffuser Lens Lock Shaft-Œ Rotate to lock horizontal արող position **Optional Color Filter Lens** Beam designation (For color correction) Lens Ring Color designation Text to face down for best performance Lock Knob Gear Knob-Tighten to lock Rotate to adjust vertical axis aiming angle vertical aiming angle

FIG 9.4 Aiming Adjustment

FIG 9.2 Installing Lamp Module J2 & J2S

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):

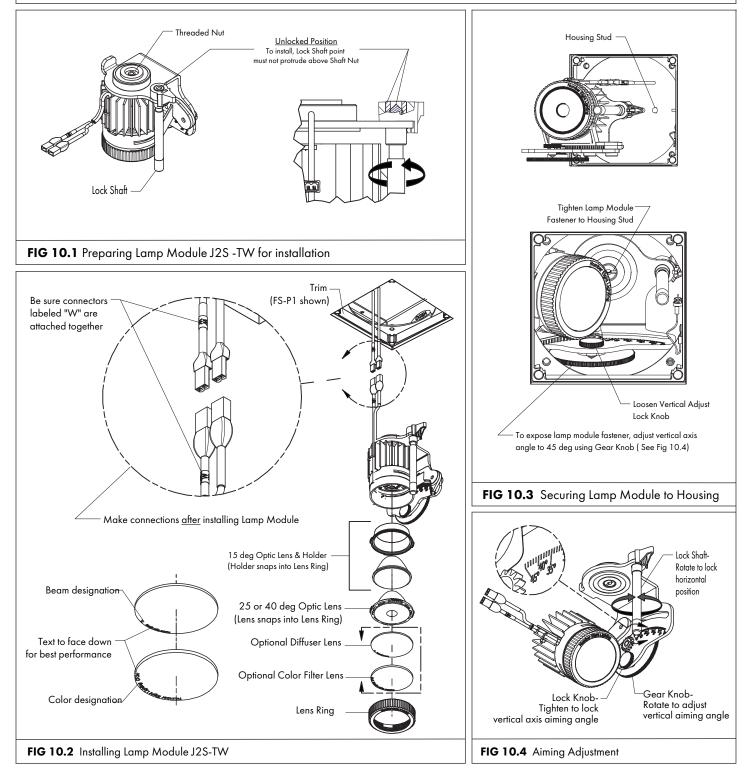
Step 1 Before installing Lamp Module, make sure accessories & correct LED Power Supply Module are installed & Lock Shaft is in unlocked position - **FIG 10.1 & 10.2**. **Step 2** Insert Lamp Module into housing as shown then adjust to 45° position to expose fastener. Secure to Housing Center Stud - **FIG 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.



WW-8 WALL WASH TRIM PLATE - INSTALLATION INSTRUCTIONS

WW-8 Trim Plate Models for 800 Series Housings

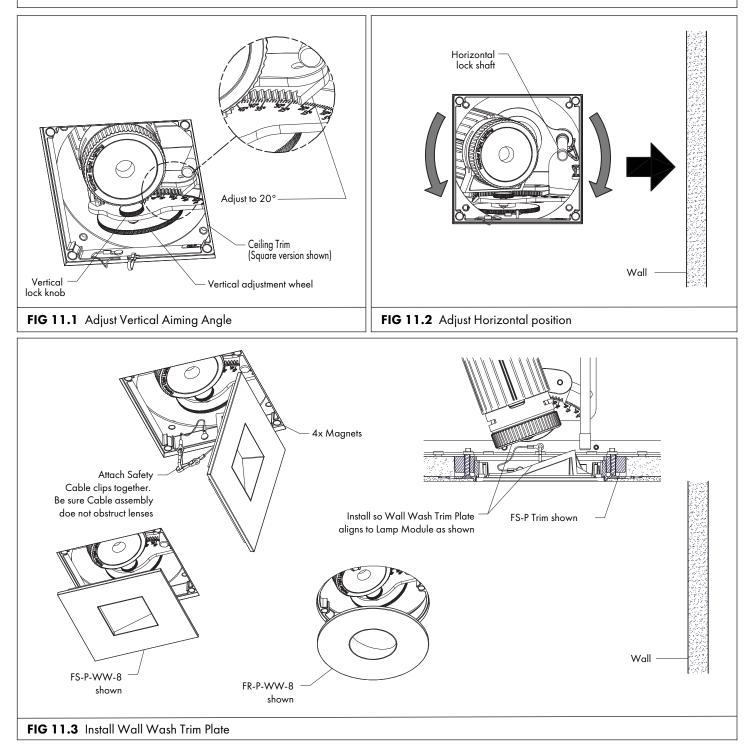
Important: WW-8 Trim Plates can only be used with J2 & J2S Lamp Modules. For optimal performance use 40° optic with HI, HI-3, WD, WD-2, WD-4 or TW LED. Use 10° optic and FL lens with HI-2 LED.

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.



LAMP MODULE K2 & K2S INSTALLATION/ADJUSTMENT/REMOVAL

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

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

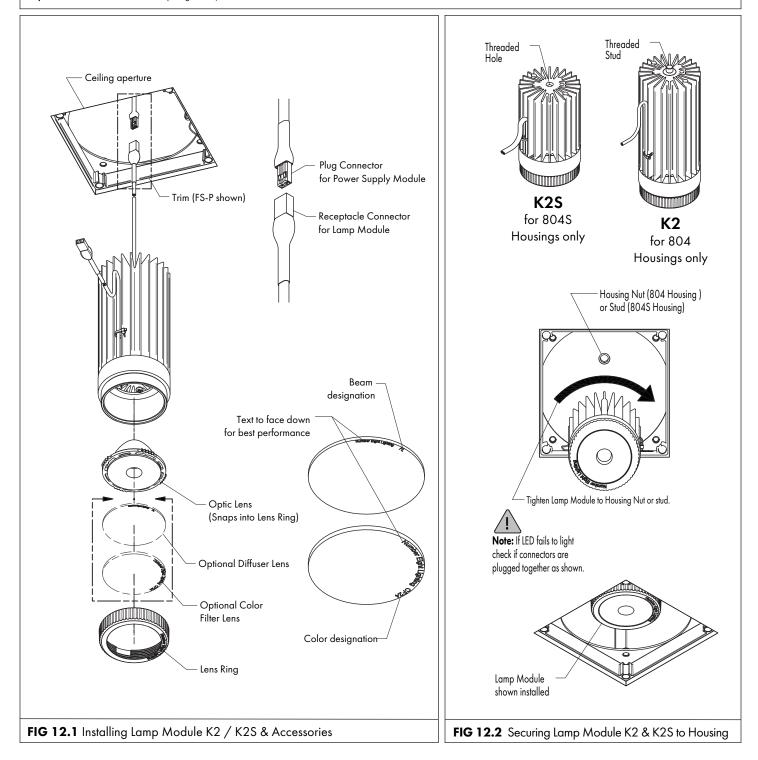
STEP 1 Before installing Lamp Module, make sure the LED Power Supply Module is installed (shown on page 15).

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.

SIEP 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

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 12.1.



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.

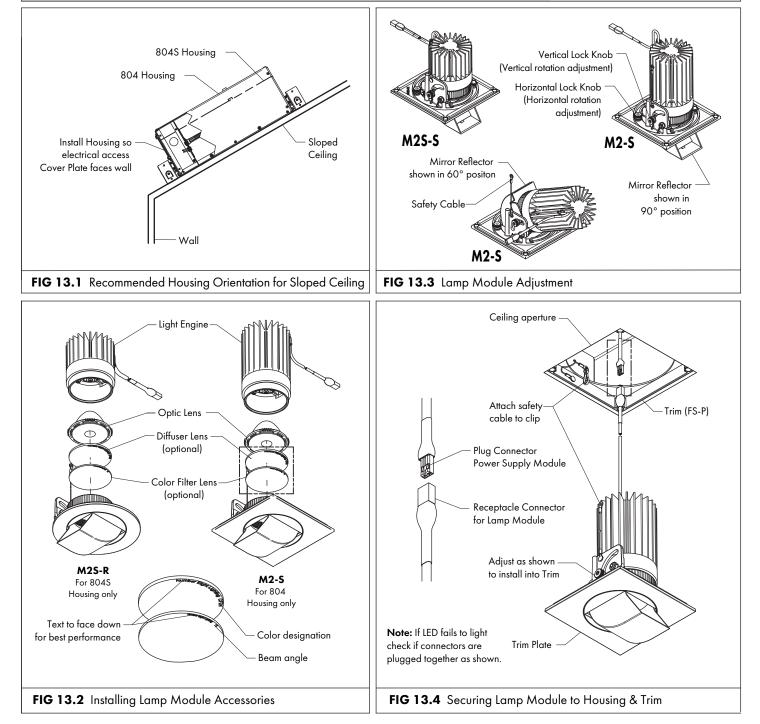
STEP 2 Adjust vertical to 90° position as shown in FIG 13.3. Note: angle adjustment is limited on ceilings over 5/8" thick & when Mirror Reflector is aligned facing narrow sides of Housing.

- 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.



LED POWER SUPPLY MODULE REMOVAL / REPLACEMENT

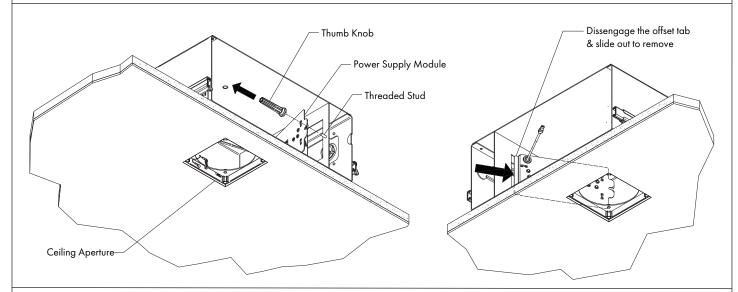
CAUTION: Turn off power at wall switch & review all instructions on this page before proceeding.

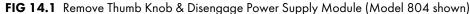
To remove LED Power Supply Modules

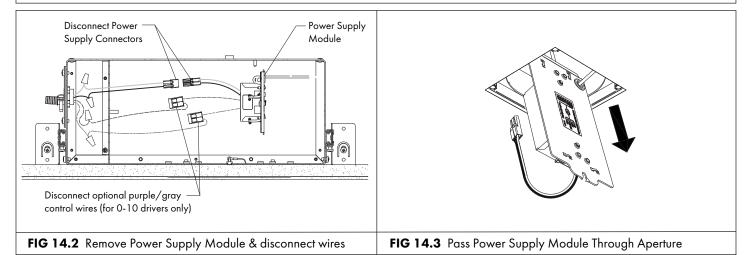
STEP 1 Remove Lamp Module (refer to Pages 9-13).

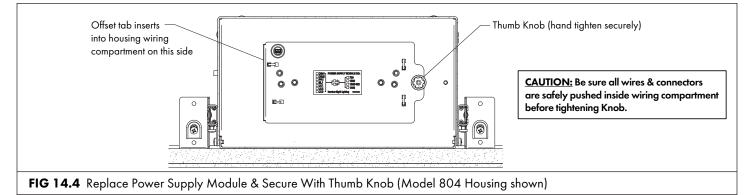
- STEP 2 Unscrew & remove Thumb Knob inside Housing as shown. Tilt Power Supply Module to disengage offset tab from housing as shown FIG 14.1.
- STEP 3 Pull Power Supply Module away from threaded stud and pull wires & Power Connectors out of the Junction Box FIG 14.2.
- STEP 4 Disconnect Power Supply 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.









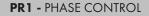
For PR1 / EL1 / EL2 / LU2 / LU4 Dimming Options

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 <u>www.8lighting.com</u> for current product specifications.



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

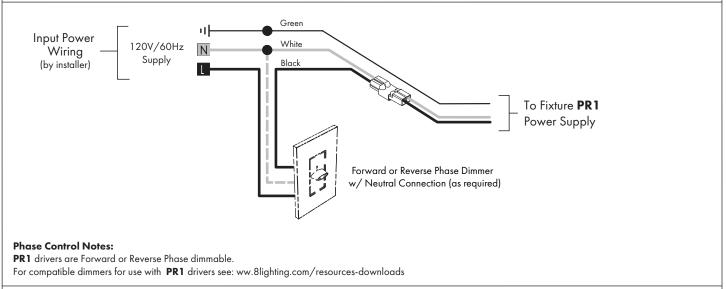
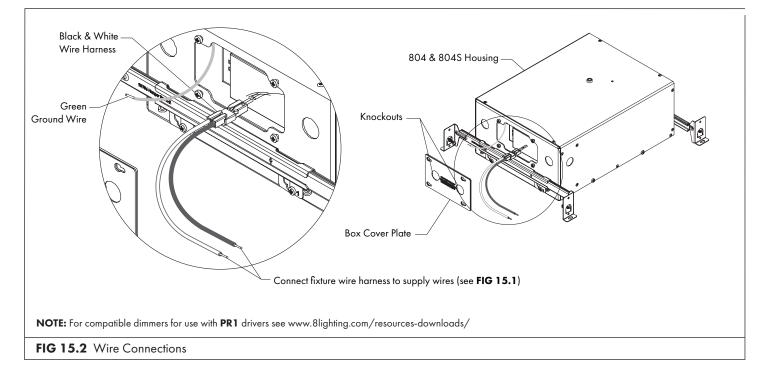
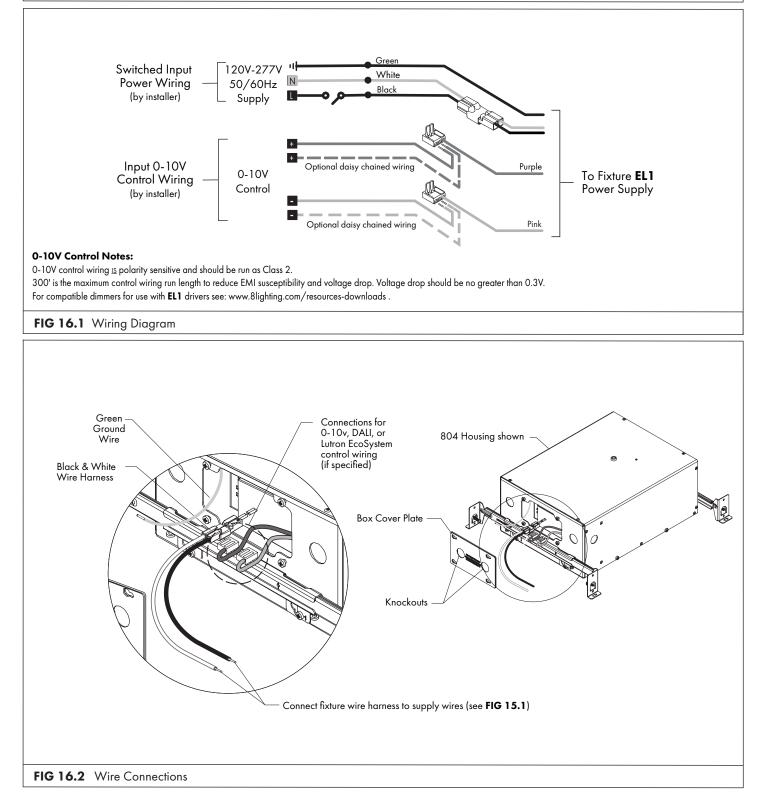


FIG 15.1 Wiring Diagram



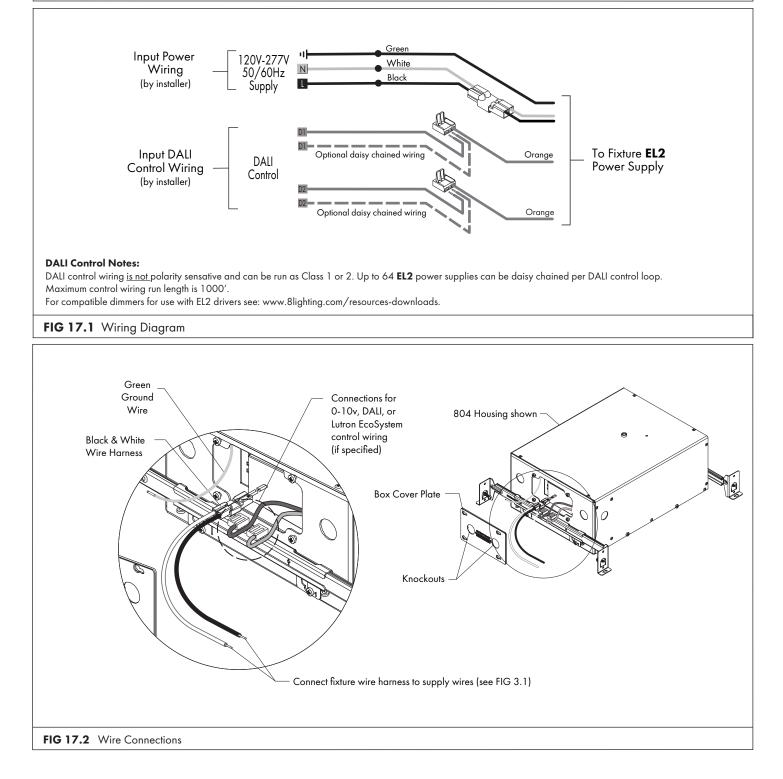
EL1 - 0-10V CONTROL

- 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



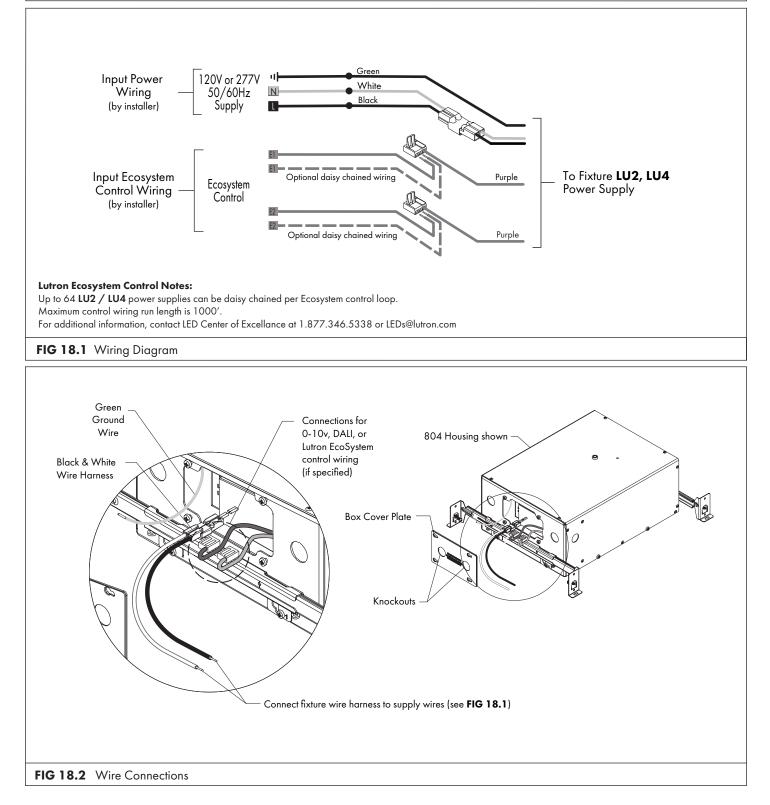
EL2 - DALI CONTROL

- 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



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



SINGLE LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE

For EL3 / EL4 / EL5 2-Channel Dimming Options

AUTION: 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.

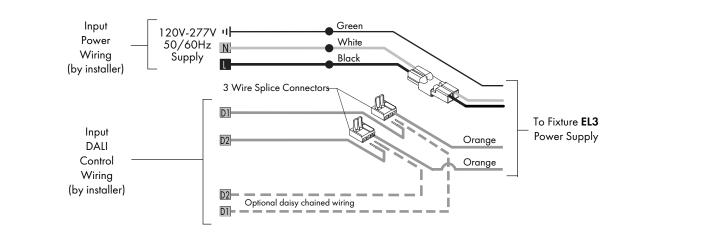
- Installation must be by a qualified electrician only and must conform to National Electric code and local regulations.
- Verify correct dimming system, lamp module, power supply type, and input supply requirements.
- Always allow LED assembly to cool before servicing.
- Do not install where insulation 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.

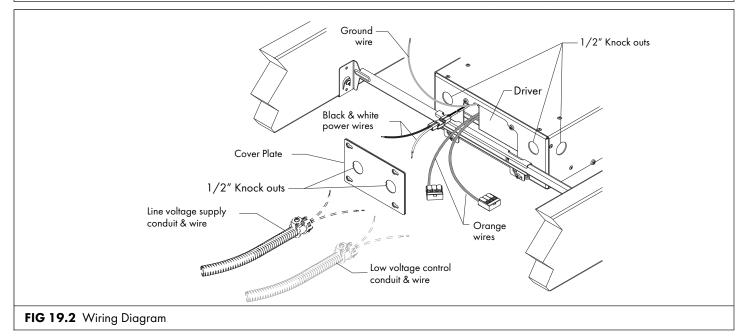
STEP 4 Replace & secure box cover plate using screws provided - FIG 19.2



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

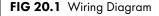


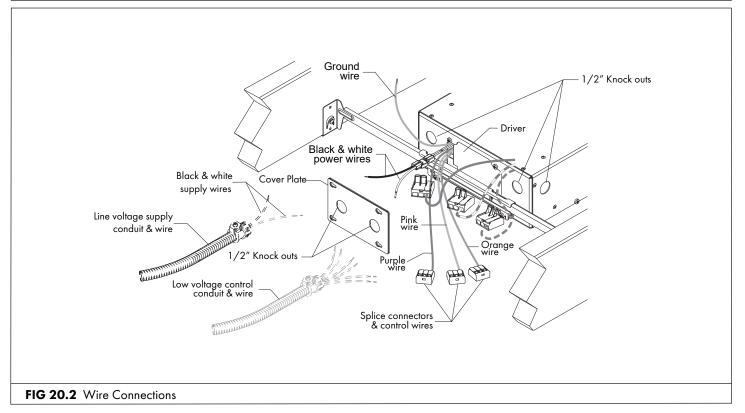
SINGLE LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE

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 Greer Input 120V-277V 마 White Power 50/60Hz N Wiring Black Supply (by installer) DMX+IN + DMX+ OUT + Purple DMX+ 3-Wire Splice Connectors Input DMX DMX-IN To Fixture EL4 Control DMX-OUT **Power Supply** ٠ Wiring Pink (by installer) DMX-DMX Shield IN S DMX Shield OUT S Orange DMX-Shield 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.



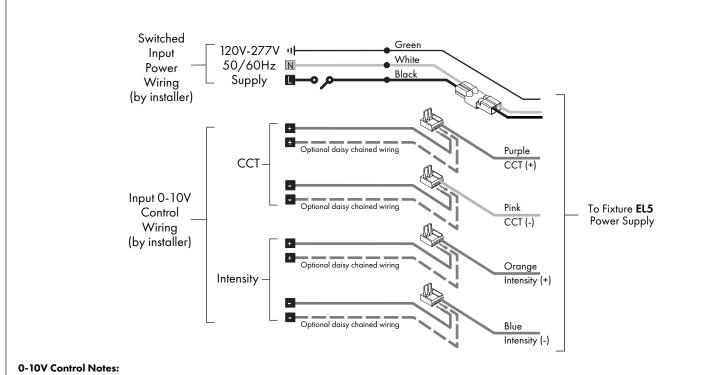


SINGLE LAMP WIRING INSTRUCTIONS - 2 CHANNEL TUNABLE WHITE

EL5 2-CHANNEL 0-10V CONTROL

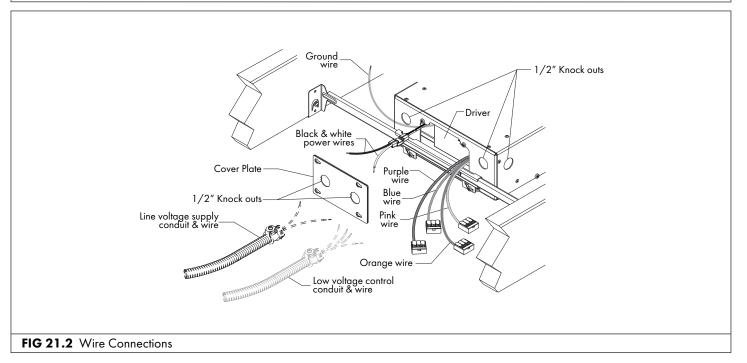
STEP 1 Loosen screws to remove cover plate & connect driver output wires using electrical connectors at wiring compartment – FIG 21.2.
STEP 2 Remove required knockouts in cover plate or housing & secure suitable electrical connectors into knock outs for supply wires – FIG 21.2.
STEP 3 Make wire connections & 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 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.

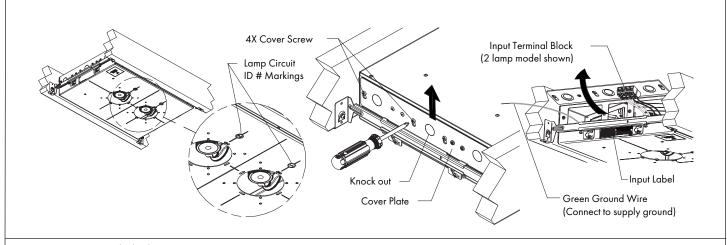
FIG 21.1 Wiring Diagram



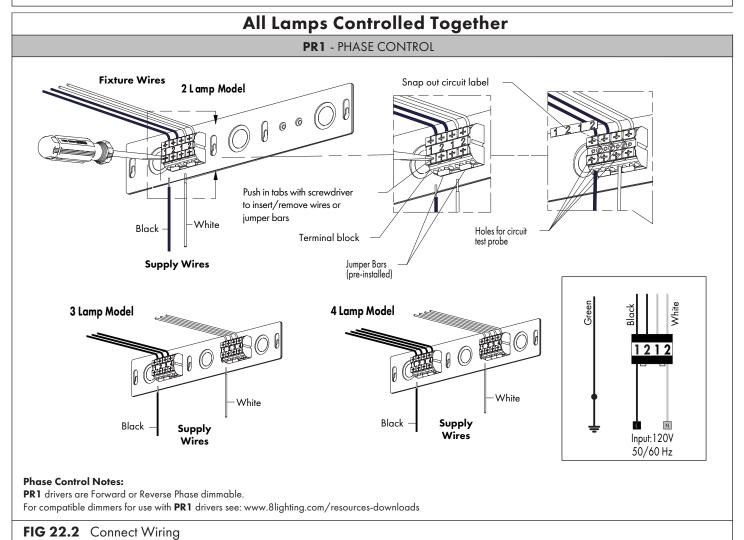
For EL1 / EL2 / LU2 / LU4 Dimming Options

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.







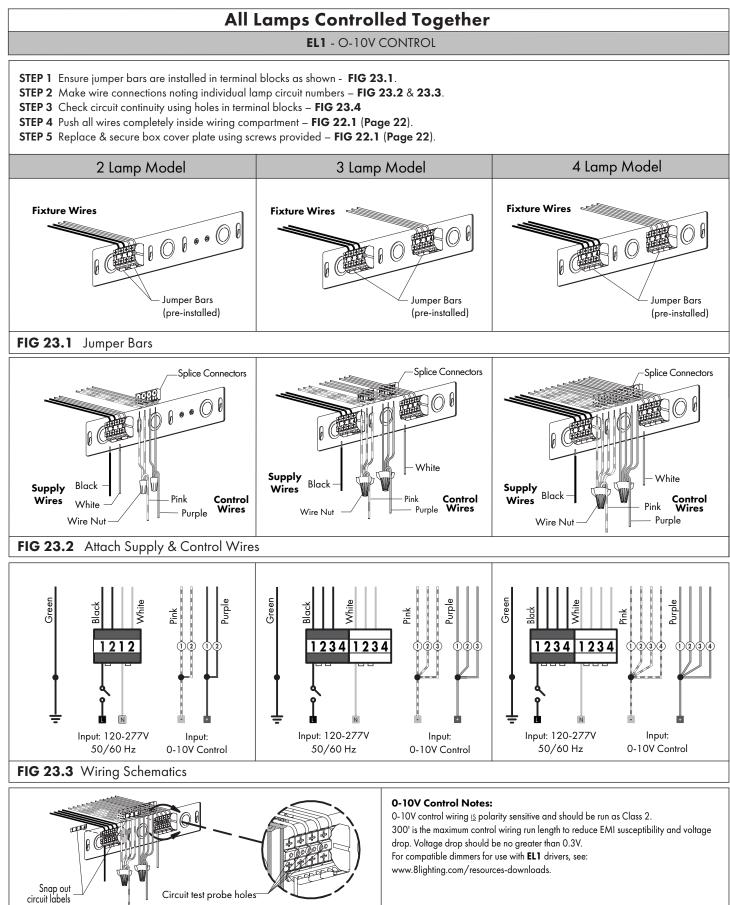
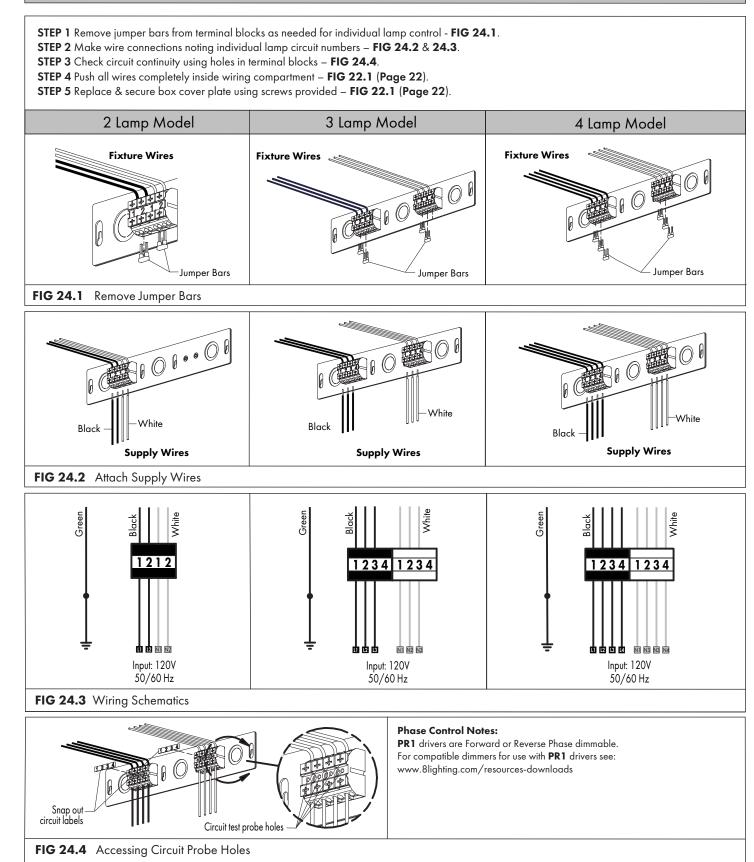
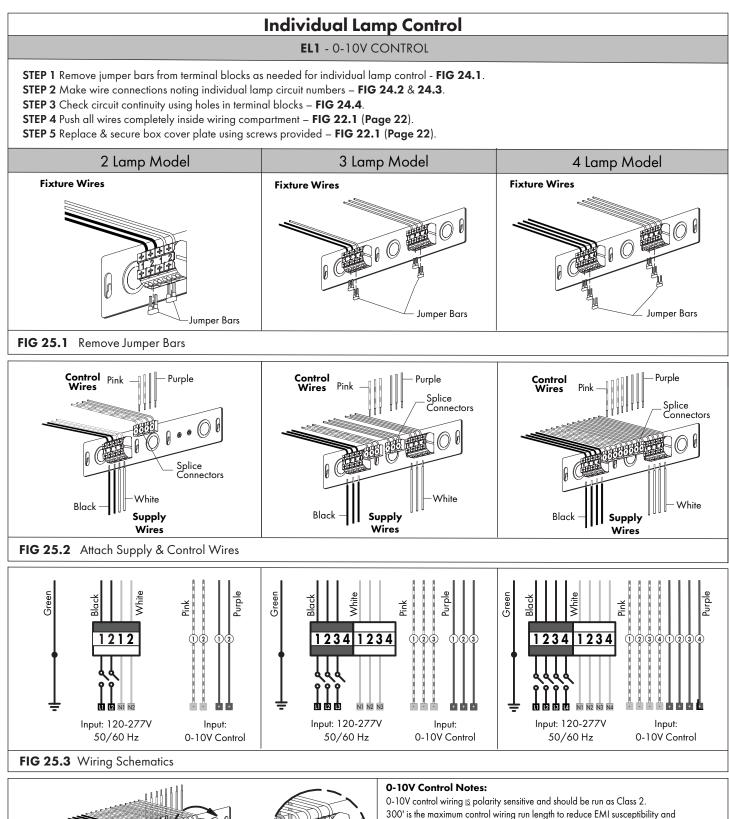


FIG 23.4 Accessing Circuit Probe Holes

Individual Lamp Control

PR1 - PHASE CONTROL





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

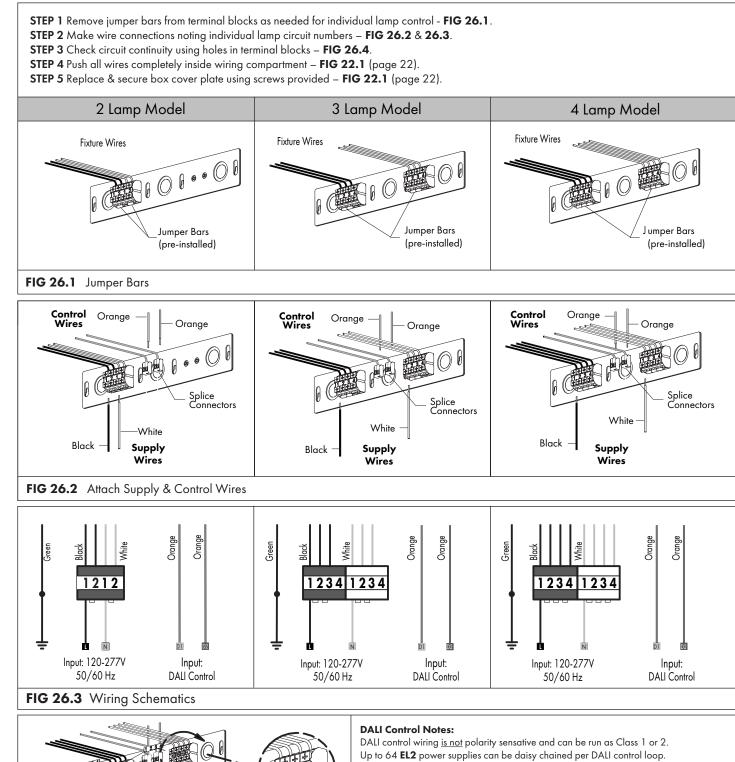
FIG 25.4 Accessing Circuit Probe Holes

Circuit test probe holes

Snap out circuit labels

All Lamps Controlled Together or Individually

EL2 - DALI CONTROL



Maximum control wiring run length is 1000'.

For compatible dimmers for use with **EL2** drivers see:

www.8lighting.com/resources-downloads

FIG 26.4 Accessing Circuit Probe Holes

Circuit test probe holes

Snap out circuit labels

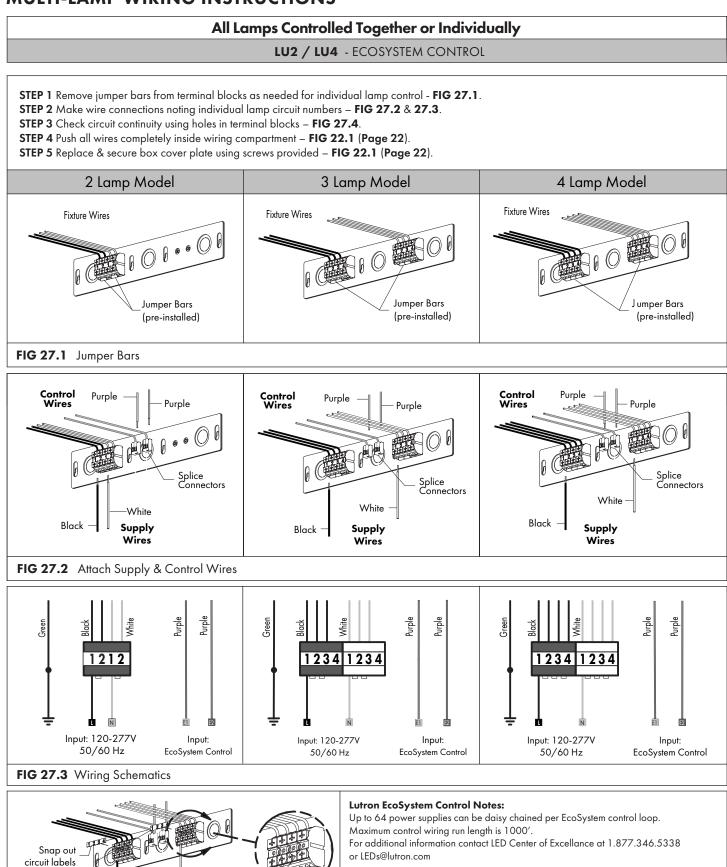


FIG 27.4 Accessing Circuit Probe Holes

Circuit test probe holes



www.8lighting.com

Number Eight Lighting Company 526 Portal Street, Cotati, CA 94931 Phone (707) 794-0888 • Email customerservice@8lighting.com