N° ei8ht

LIGHTING

®

MPT3 SERIES
MPT3-RT MONOPOINT
REMOTE POWER SUPPLY
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.
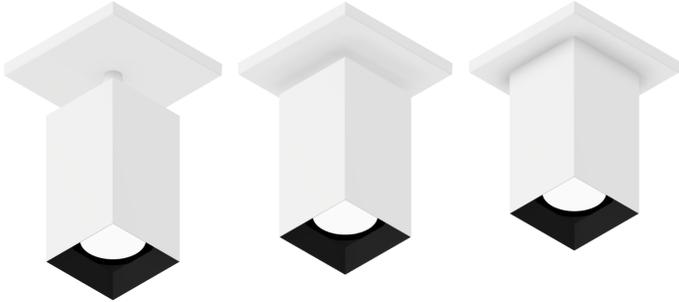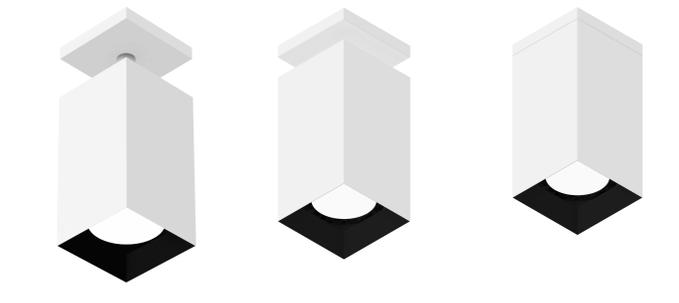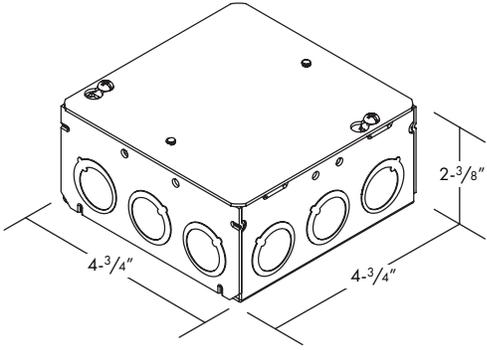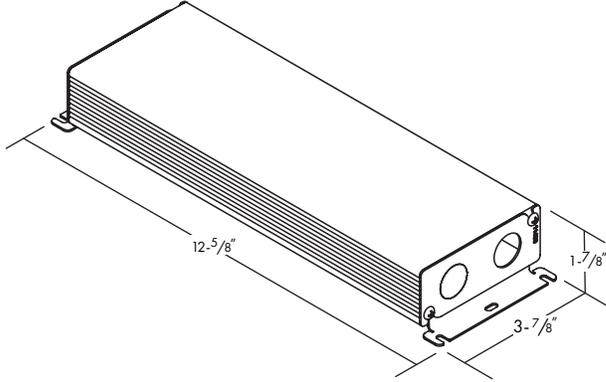
SAVE THESE INSTRUCTIONS.

TABLE OF CONTENTS

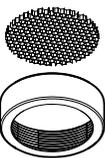**PAGE**

MPT3-RT SERIES COMPONENTS

MPT3-RT SERIES - SURFACE MOUNT SQUARE and ROUND for REMOTE DRIVER

POSITION 1
0-110° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 2
0-50° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 3
0° FIXED
(CEILING MOUNT)

MPT3-S-SM-4S-RT SQUARE with 4" CANOPY

POSITION 1
0-110° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 2
0-50° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 3
0° FIXED
(CEILING MOUNT)

MPT3-R-SM-4R-RT ROUND with 4" CANOPY

POSITION 1
0-110° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 2
0-50° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 3
0° FIXED
(CEILING MOUNT)

MPT3-S-SM-2S-RT SQUARE with 2.5" CANOPY

POSITION 1
0-110° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 2
0-50° ADJUSTABLE
(WALL or CEILING MOUNT)

POSITION 3
0° FIXED
(CEILING MOUNT)

MPT3-R-SM-2R-RT ROUND with 2.5" CANOPY

MPT3-RT SERIES - REMOTE DRIVER ENCLOSURES

2-3/8"
4-3/4"
4-3/4"

RT Enclosure

12-5/8"
1-7/8"
3-7/8"

RT-1L Enclosure

MPT3-RT SERIES - OPTIC OPTIONS + ACCESSORIES

TIR-10   10° Very narrow spot*
TIR-15   15° Narrow spot
TIR-15T 15° Narrow spot**
TIR-25   25° Narrow flood
TIR-40   40° Flood

*For use with HI-2 or HI-3 LED option only
**For use with TW LED option only

NSP   Narrow softening lens
NFL   Medium softening lens
FL   Wide softening lens
WFL   Extra wide softening lens
LS   Linear spread lens
CF-24*   2400K Color filter
CF-27** 2700K Color filter
CF-35** 3500K Color filter

*For use with 2700K LED options only
**For use with 3000K LED options only

HEX*   Hex cell louver and
deep accessory ring

*Hex cell louver requires deep lens ring
when used with lens accessories

MPT3-RT SERIES INSTALLATION INSTRUCTIONS

IMPORTANT:
- Installation must be by a qualified electrician only.
- Verify correct dimming system, LED type, power supply type and input supply requirements.
- Always allow LED assembly to cool before servicing.
- Do not install where insulation or ambient temperature will exceed maximum values noted in product specifications.
- See www.8lighting.com for current product specifications.

STEP 1 Verify suitable mounting location, junction box and blocking requirements - **FIG 2.1** & **FIG 2.2**.
STEP 2 Wire remote power supply according to wiring instructions on **Pages 4-8**.
STEP 3 For installations without a junction box, drill 7/8" hole at fixture location and pull through blocking or suitable surface, route Class 2 wiring from remote power supply to fixture location and pull through 7/8" hole - **FIG 2.1 & FIG 2.2**.
STEP 4 Install Mounting Bracket after making wire connections. Position Fixture Canopy as desired & tighten set screw in Canopy - **FIG 2.1** & **2.2**.
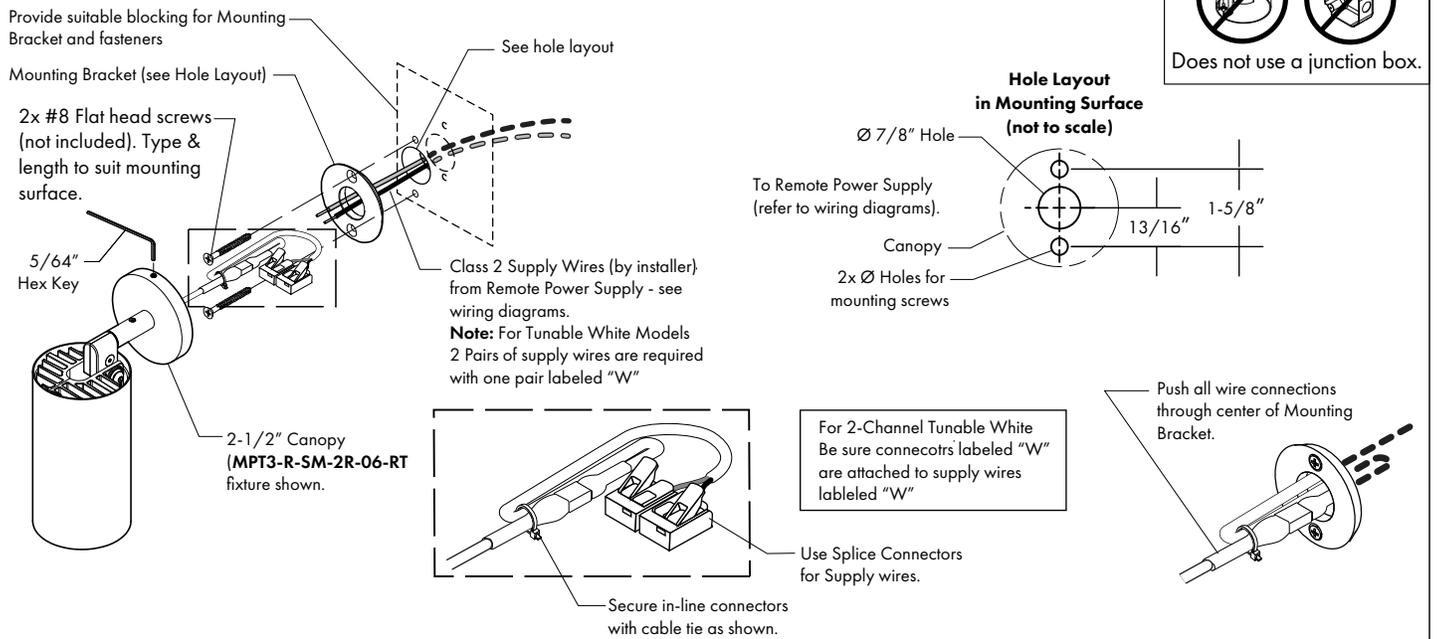
Provide suitable blocking for Mounting Bracket and fasteners

See hole layout

Mounting Bracket (see Hole Layout)

2x #8 Flat head screws (not included). Type & length to suit mounting surface.

Does not use a junction box.

Hole Layout in Mounting Surface (not to scale)

Ø 7/8" Hole

To Remote Power Supply (refer to wiring diagrams).

Canopy

2x Ø Holes for mounting screws

1-5/8"

13/16"

5/64" Hex Key

Class 2 Supply Wires (by installer) from Remote Power Supply - see wiring diagrams.
Note: For Tunable White Models 2 Pairs of supply wires are required with one pair labeled "W"

Push all wire connections through center of Mounting Bracket.

2-1/2" Canopy (**MPT3-R-SM-2R-06-RT** fixture shown.

For 2-Channel Tunable White Be sure connecotrs labeled "W" are attached to supply wires lableled "W"

Use Splice Connectors for Supply wires.

Secure in-line connectors with cable tie as shown.

FIG 2.1 MPT3-S/R-SM-2R/S-RT Wire & Install Fixture

For installations without a junction box: Provide suitable blocking for Mounting Bracket and fasteners.

Ø 7/8" Hole (No Junction Box)

2x #8 Pan/Round Head Screws (not included). Type & length to suit mounting surface.

Optional 4" x 1-1/2" deep Junction Box with 4" Round Mud Ring x 1/2" (min.) deep for **REMOTE** power supply options with 4" Canopy.

2x #8 PanHead Screws

5/64" Hex Key

Mounting Bracket for 4" Canopy

For 2-Channel Tunable White Be sure connectors labeled "W" are attached to supply wires lableled "W"

4" Canopy (**MPT3-S-SM-4S-06-RT** fixture shown)

Use Splice Connectors for supply wires

Secure in-line connectors with cable tie as shown.

FIG 2.2 MPT3-S/R-SM-4R/S-RT Wire & Install Fixture - With or Without Junction Box

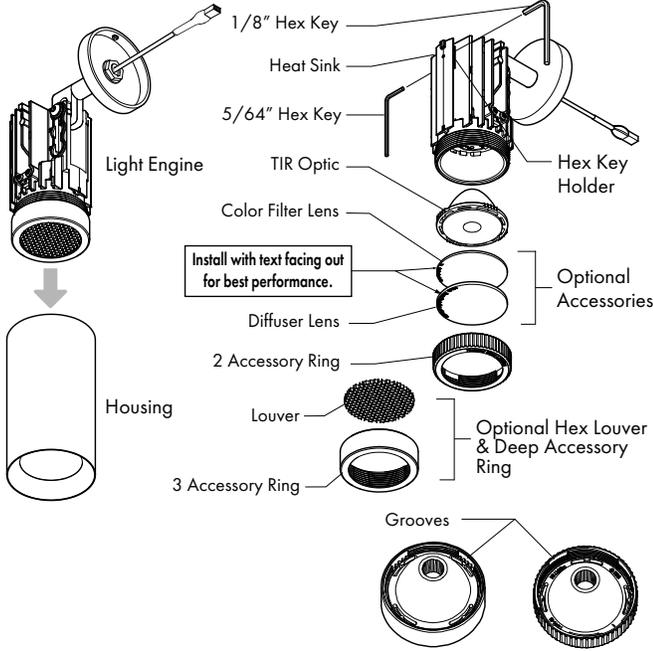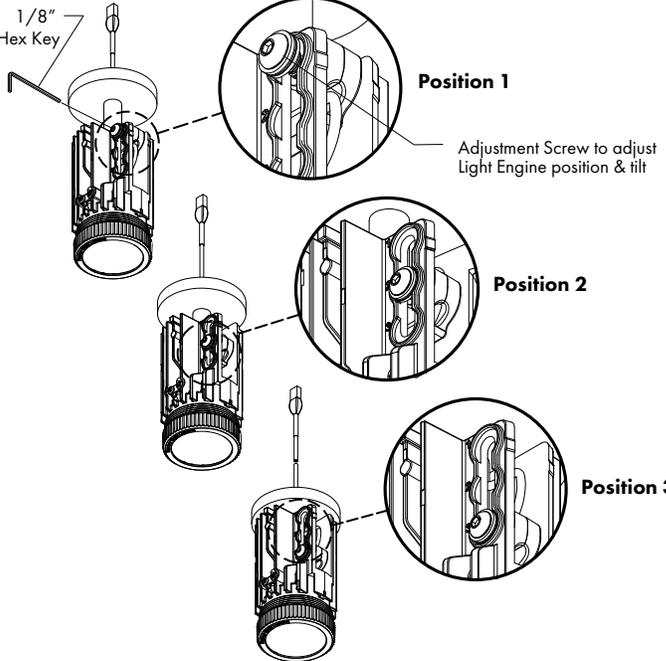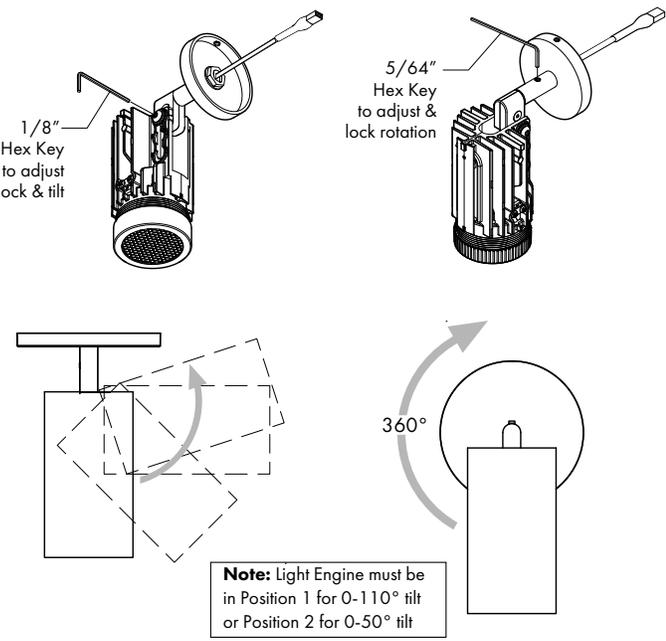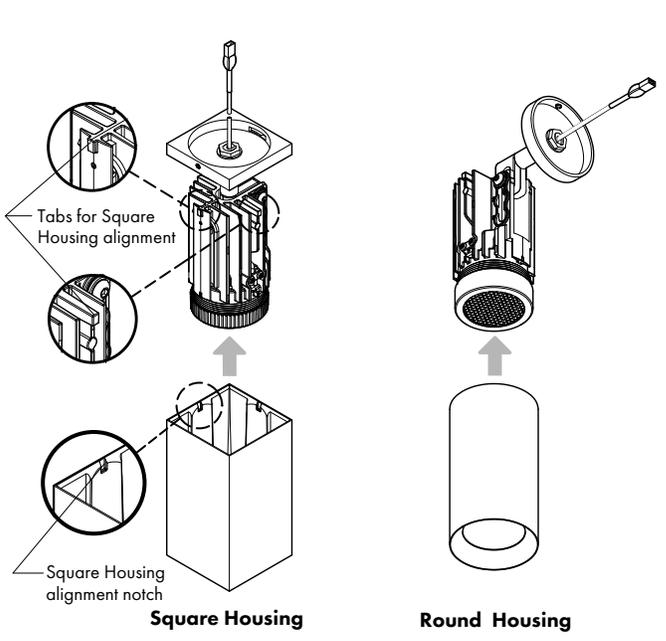# MPT3-RT SERIES ADJUSTMENT & OPTIC/ACCESSORY REPLACEMENT

MPT3-RT SERIES Install Accessories and Adjust

1/8" Hex Key

Heat Sink

5/64" Hex Key

TIR Optic

Light Engine

Hex Key Holder

Color Filter Lens

Install with text facing out for best performance.

Optional Accessories

Diffuser Lens

2 Accessory Ring

Housing

Louver

Optional Hex Louver & Deep Accessory Ring

3 Accessory Ring

Grooves

1/8" Hex Key

Position 1

Adjustment Screw to adjust Light Engine position & tilt

Position 2

Position 3

FIG 3.1 Replace Optic & Accessory Assembly

1. Slide Housing away from Light Engine to expose Accessory Ring.
2. Rotate & remove Accessory Ring from Light Engine to access Optic and accessories. Remove optic and accessories from Accessory Ring by pressing Optic upward.
3. Re-install accessories and Optic into Accessory Ring by aligning optic teeth with Accessory Ring grooves and fully pressing Optic teeth into grooves.
4. Rotate and re-install Accessory Ring onto Light Engine.
5. Re-install housing as shown in **FIG 3.4**.

FIG 3.2 Adjust Light Engine and Housing Position

1. Slide Housing away from Light Engine to expose Hex Keys as shown in - **FIG 3.1**.
2. Use 1/8" Hex Key to loosen Light Engine Adjustment Screw - do not remove.
3. Move Light Engine into the desired position.
4. Tighten Light Engine adjustment screw and replace 1/8" Hex Key into Holder.
5. Re-install Housing as shown in **FIG 3.4**.

1/8" Hex Key to adjust lock & tilt

5/64" Hex Key to adjust & lock rotation

360°

Note: Light Engine must be in Position 1 for 0-110° tilt or Position 2 for 0-50° tilt

Tabs for Square Housing alignment

Square Housing alignment notch

Square Housing

Round Housing

FIG 3.3 Tilt & Rotation Adjustment

1. Slide Housing away from Light Engine to expose Hex Keys as shown in **FIG 3.1**.
2. Use 1/8" Hex Key to adjust and lock tilt. Replace after use.
3. Use 5/64" Hex Key to adjust and lock rotation. Replace after use.
4. Re-install Housing as shown in **FIG 3.4**.

FIG 3.4 Install Housing

1. **Square Housing**: Ensure Housing alignment notches align with Light Engine alignment tabs and slide Housing onto Light Engine until Housing clicks into place.
2. **Round Housing**: Slide Housing onto Light Engine until Housing clicks into place.

WIRING INSTRUCTIONS - REMOTE POWER SUPPLY

For PR1-M-RT and EL1/EL1-01/EL2/EL2-01/EL3/EL4/EL5/LU4-M-RT -1L Remote Power Supply Options

STEP 1 Verify correct power supply model (see label on cover plate), LED type (see label on fixture), wire length and gauge (see chart below) and input requirements (see label on driver) - **FIG 4.1** & **4.2**.
Note: For compatible dimmers see: www.8lighting.com/resources-downloads.
STEP 2 Install & wire remote power supply (RT & RT-1L) - **FIG 4.1** & Wiring Diagrams on **Pages 5-8**.
STEP 3 Connect fixture supply wires to Class 2 wiring - **FIG 4.1**.
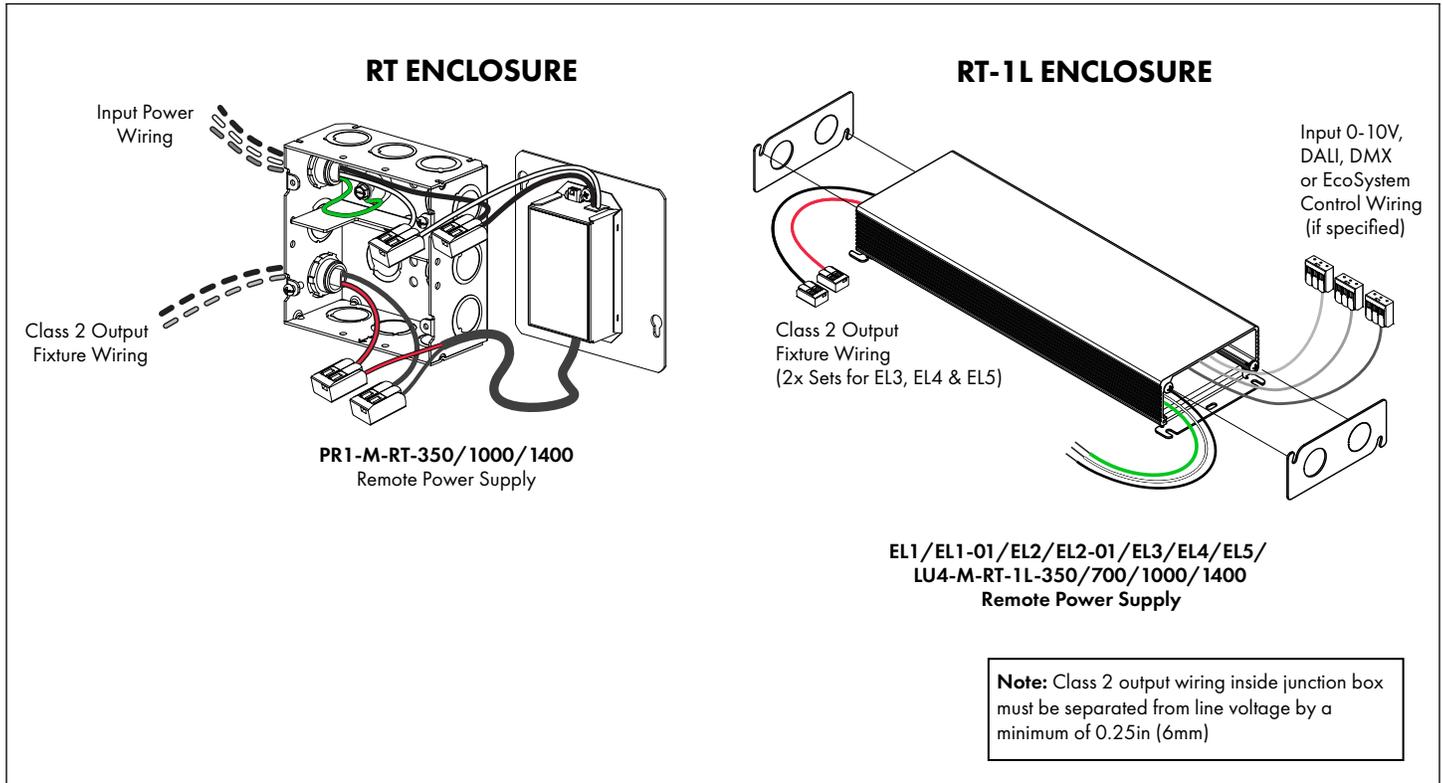**STEP 4** Push fixture supply connections completely behind Cover or End Caps - **FIG 4.1**

RT ENCLOSURE

Input Power Wiring

Class 2 Output Fixture Wiring

PR1-M-RT-350/1000/1400
Remote Power Supply

RT-1L ENCLOSURE

Input 0-10V, DALI, DMX or EcoSystem Control Wiring (if specified)

Class 2 Output Fixture Wiring (2x Sets for EL3, EL4 & EL5)

**EL1/EL1-01/EL2/EL2-01/EL3/EL4/EL5/
LU4-M-RT-1L-350/700/1000/1400**
Remote Power Supply

Note: Class 2 output wiring inside junction box must be separated from line voltage by a minimum of 0.25in (6mm)

FIG 4.1 Wire & Install Remote Power Supply

Maximum REMOTE Driver-to-LED Light Engine Wire Length					
Driver Model					
PR1-M-RT 350/1000/1400	EL1/EL1-01/EL2/ EL2-01-M-RT-1L 350/1000/1400	EL3/EL4/EL5-M-RT-1L-700	LU4-M RT-1L-350	LU4-M RT-1L-1000	**Wire Gauge**
8 ft (2.5 m)				4 ft (1.2 m)	24 AWG (0.2 mm^2)
13 ft (4 m)				6 ft (1.8 m)	22 AWG (0.34 mm^2)
20 ft (6 m)				10 ft (3 m)	20 AWG (0.5 mm^2)
30 ft (9 m)				15 ft (4.5 m)	18 AWG (.75 mm^2)
35 ft (10.5 m)				25 ft (7.5 m)	16 AWG (1.5 mm^2)
50 ft (15 m)				40 ft (12 m)	14 AWG (2.5 mm^2)
100 ft (30 m)				60 ft (18 m)	12 AWG (4.0 mm^2)
Wire Type: Stranded Class 2 wire (supplied by others)					

FIG 4.2 Remote Power Supply Class 2 Wire Length

WIRING DIAGRAMS - PHASE / 0-10 / DALI CONTROL

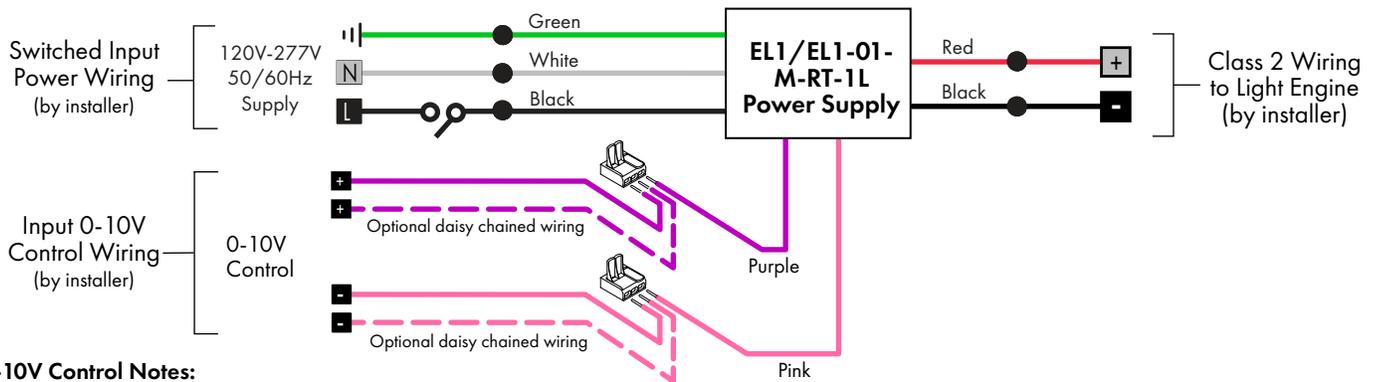## For PR1-M-RT and EL1/EL1-01/EL2/EL2-01-M-RT-1L Remote Power Supply Options

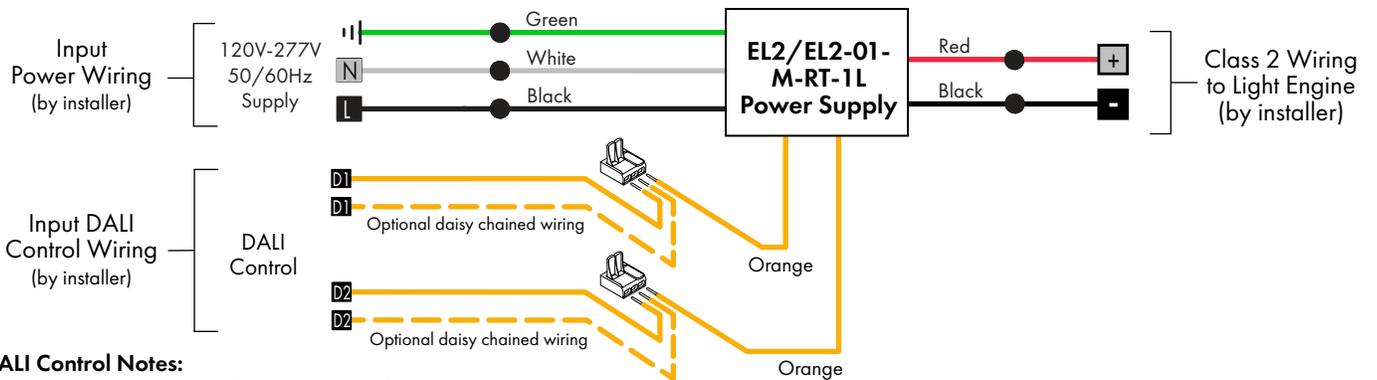### PR1-M-RT-350/1000/1400 - REMOTE PHASE CONTROL

Input Power Wiring (by installer)

120V/60Hz Supply

Green
White
Black

PR1-M-RT Power Supply

Red
Black

+
-

Class 2 Wiring to Light Engine (by installer)

Forward or Reverse Phase Dimmer w/ Neutral Connection (as required)
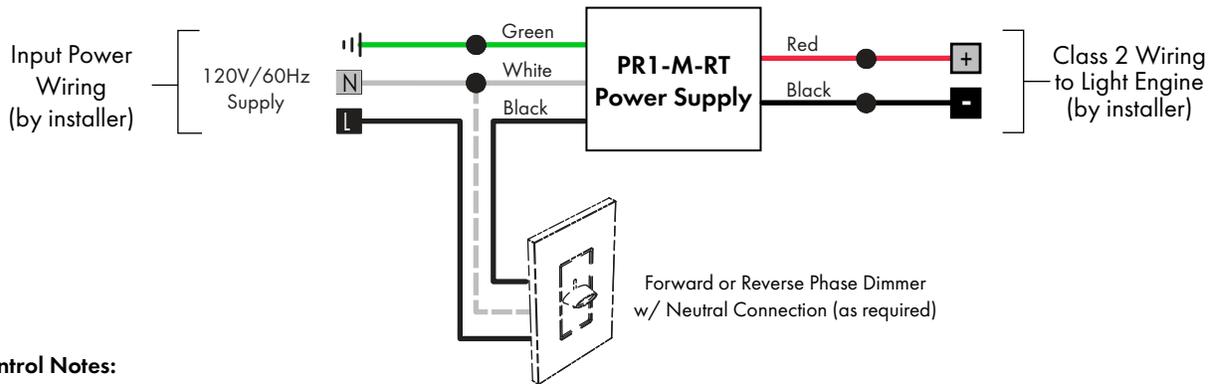
Phase Control Notes:
PR1 drivers are Forward or Reverse Phase Dimmable

EL1/EL1-01-M-RT-350/1000/1400 - REMOTE 0-10V CONTROL

Switched Input Power Wiring (by installer)

120V-277V 50/60Hz Supply

Green
White
Black

EL1/EL1-01-M-RT-1L Power Supply

Red
Black

+
-

Class 2 Wiring to Light Engine (by installer)

Input 0-10V Control Wiring (by installer)

0-10V Control

+
+
Optional daisy chained wiring

Purple

-
-
Optional daisy chained wiring

Pink

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.

EL2/EL2-01-M-RT-1L-350/1000/1400 - REMOTE DALI CONTROL

Input Power Wiring (by installer)

120V-277V 50/60Hz Supply

Green
White
Black

EL2/EL2-01-M-RT-1L Power Supply

Red
Black

+
-

Class 2 Wiring to Light Engine (by installer)

Input DALI Control Wiring (by installer)

DALI Control

D1
D1
Optional daisy chained wiring

Orange

D2
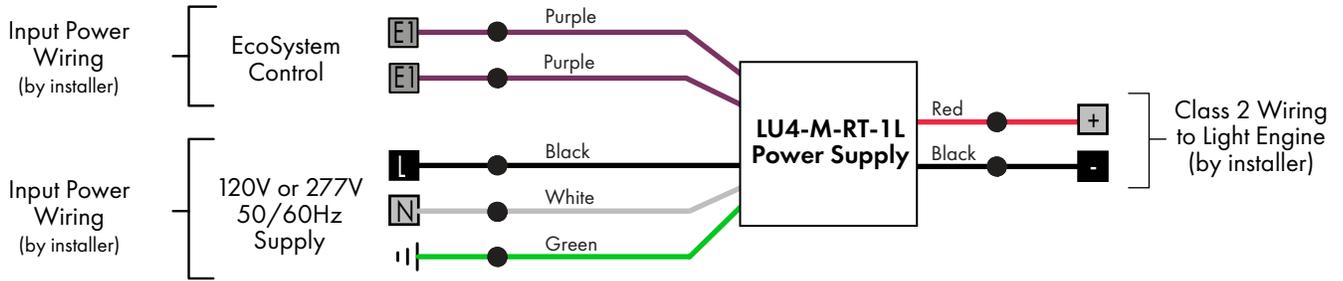D2
Optional daisy chained wiring

Orange

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

WIRING DIAGRAMS - ECOSYSTEM CONTROL

For LU4-M-RT-1L-350/1000 Remote Power Supply Options

LU4-M4-RT-1L-350/1000 - REMOTE ECOSYTEM CONTROL

Input Power Wiring (by installer) — EcoSystem Control

E1 — Purple
E1 — Purple

Input Power Wiring (by installer) — 120V or 277V 50/60Hz Supply

L — Black
N — White
— Green

LU4-M-RT-1L Power Supply

Red — +
Black — -

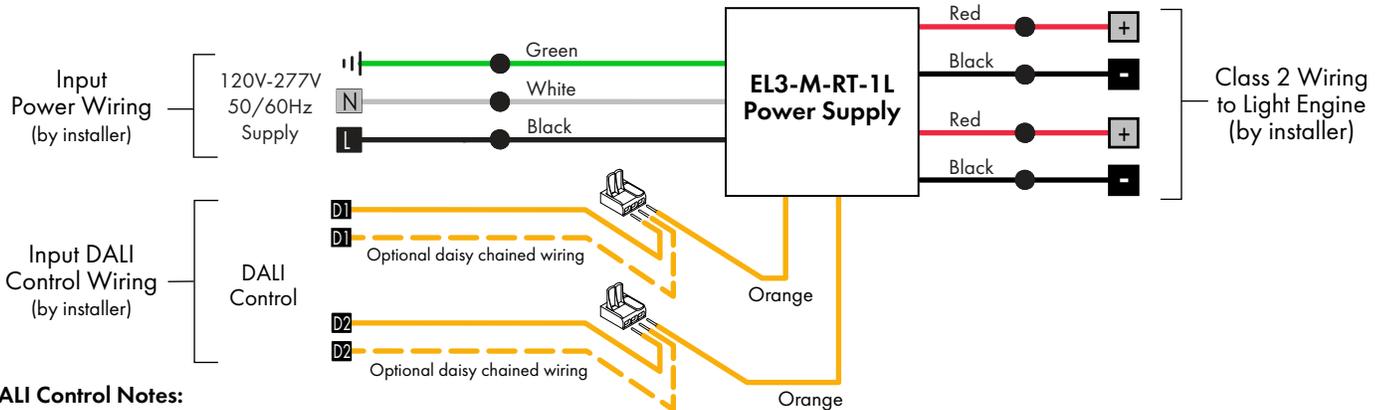Class 2 Wiring to Light Engine (by installer)

Lutron EcoSystem Control Notes:
Up to 64 **LU4** 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.

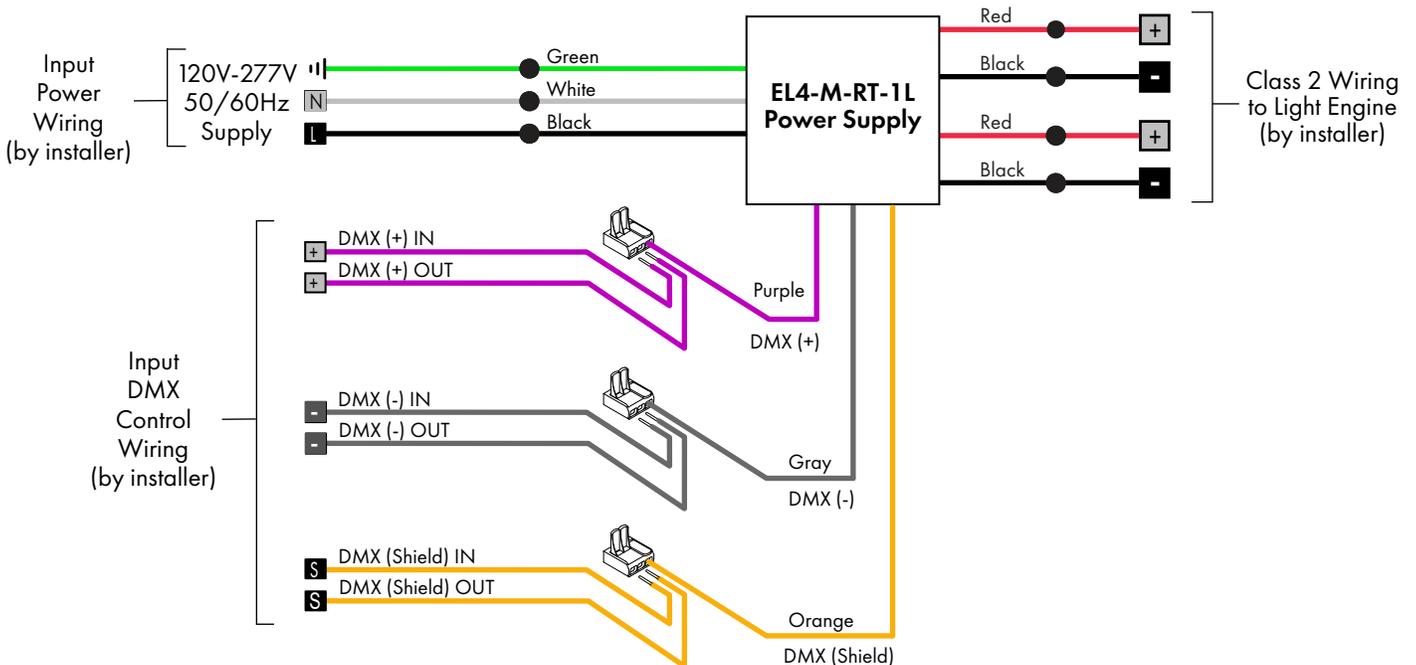# WIRING DIAGRAMS - 2-CHANNEL TUNABLE WHITE - DALI / DMX CONTROL

For EL3/EL4-M-RT-1L-700 Remote Power Supply Options

EL3-M-RT-1L-700 REMOTE DALI 2-CHANNEL CONTROL

Input Power Wiring (by installer)

120V-277V 50/60Hz Supply

Green
White
Black

EL3-M-RT-1L Power Supply

Red — +
Black — -
Red — +
Black — -

Class 2 Wiring to Light Engine (by installer)

Input DALI Control Wiring (by installer)

DALI Control

D1
D1
Optional daisy chained wiring

D2
D2
Optional daisy chained wiring

Orange

Orange

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

EL4-M-RT-1L-700 - REMOTE DMX 2-CHANNEL CONTROL

Input Power Wiring (by installer)

120V-277V 50/60Hz Supply

Green
White
Black

EL4-M-RT-1L Power Supply

Red — +
Black — -
Red — +
Black — -

Class 2 Wiring to Light Engine (by installer)

Input DMX Control Wiring (by installer)

+ DMX (+) IN
+ DMX (+) OUT

Purple
DMX (+)

- DMX (-) IN
- DMX (-) OUT

Gray
DMX (-)

S DMX (Shield) IN
S DMX (Shield) OUT

Orange
DMX (Shield)

DMX Notes:
DMX control wiring is polarity sensitive and should be run as Class 2. Each **DMX2** 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. **DMX2** 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 **DMX2** drivers see: www.8lighting.com/resources-downloads.

WIRING DIAGRAMS - 2-CHANNEL TUNABLE WHITE - 0/10V CONTROL

For EL5-M-RT-1L-700 Remote Power Supply Option

EL5-M-RT-1L-700 - REMOTE 0-10V 2-CHANNEL CONTROL
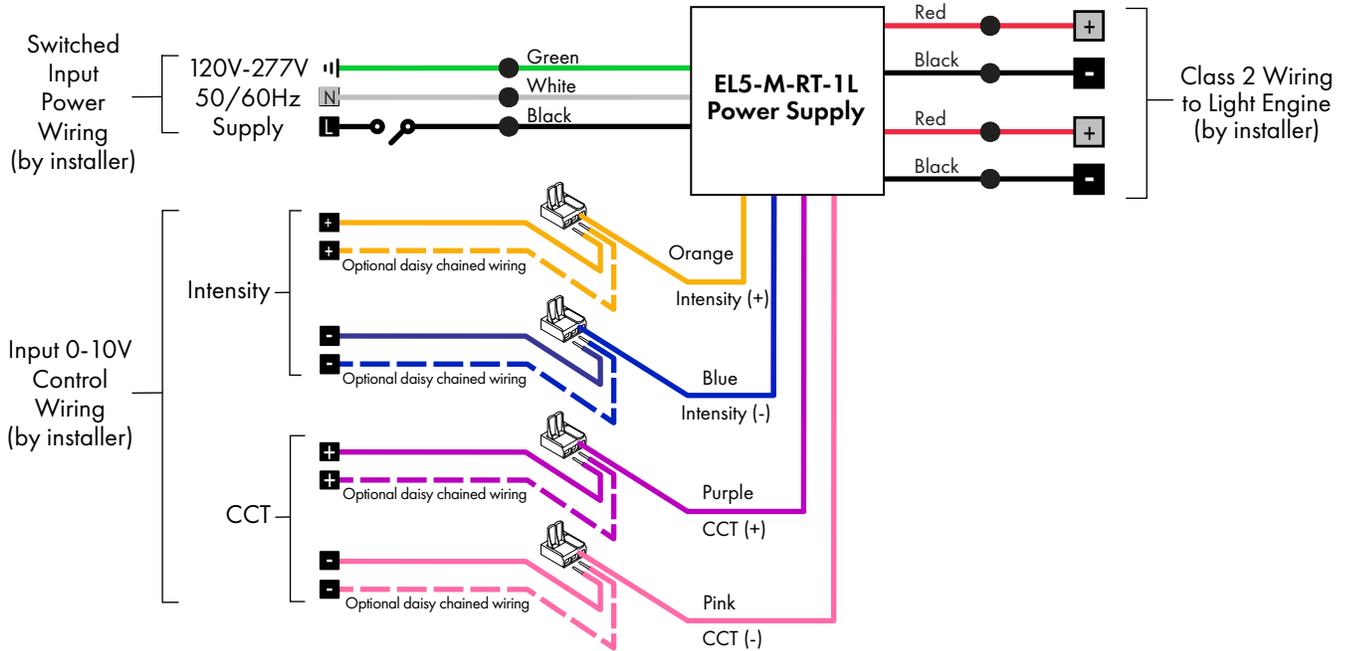
0-10V Control Notes:

0-10V control wiring is polarity sensitive and should be run as Class 2. Each **EL5** driver requires two pairs of Class 2 control wires: one pair for CCT and one pair for INTENSITY. 300' is the maximum control wiring run length to reduce EMI susceptibility and voltage drop. Voltage drop should be no greater than 0.3V.

For compatible dimmers for use with **EL5** drivers see: www.8lighting.com/resources-downloads.