## 24VDC - PLASTER-IN LED SYSTEM, DYNAMIC/TUNABLE WHITE



DESIGNED BY GREGORY KAY I MADE IN AMERICA REV 07.08.20



## **DESCRIPTION**

Reveal Wall Wash, a 24VDC linear LED system, features a shallow, plaster-in aluminum extrusion, that is no thicker than drywall. The system may be secured directly to studs without joist modification and plasters into 5/8" thick drywall or between studs with mounting clips provided. Must be mounted 24" away from the projected wall. Sold in 1' increments up to 20' (5WDC), 16' (6WDC), 12' (7WDC), or 10' (10WDC) and field cuttable to any length. Using the latest in LED Technology Dynamic/Tunable White, you have full control over the color temperature from 2000K (Sunset) to 4000K (Cool White) and the ability to regulate any level of brightness independently. Use with two dimmers (One for 2000K and One for 4000K, Ordered Separately) or our proprietary Tunable White Controller for fast and accurate adjustment with three pre-set scenes (Ordered separately). High CRI commercial-grade Tunable White (2K4K) LED Soft Strip projects a clean line of light. Coordinate installation with electrician and drywall contractors. Includes a 5 year pro-rated warranty.

#### **DESIGN NOTE**

Reveal Wall Wash is an ideal wall washing solution for contemporary spaces. Multiple runs of channel mount seamlessly together and may wrap inside corners to wash surrounding walls with uniform controlled illumination up to 95+ CRI.

#### **FINISHES**



#### **LAMP**

The average LED Life is 50,000 hours.

# REMOTE POWER SUPPLIES\*, DIMMERS & CONTROLS (SOLD SEPARATELY)

- Universal Power Supplies (UNI)
- Lutron Hi-Lume®
- Electronic Low Voltage Dimming (ELV)†
- 0-10 Volt Dimming (0-10V)

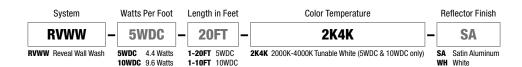
\*In-Wall Mounting Kits available for select power supplies
†With N-Lite Dimming Do Not use ELV power supply's, use only 0-10 volt or Uni drivers power supplies

#### **APPLICATIONS**

Indoor damp or dry locations only. Wall Wash, General, and Retail

# **INCLUDED COMPONENTS**

Junction Box, Adjustable Mounting Bars, Reveal Wall Wash Channel(s), Power Feed End Cap, Junction Box Cover, Dead End Cap, Take-Up Box, Drywall Screws, LED Soft Strip, and Lens(es)



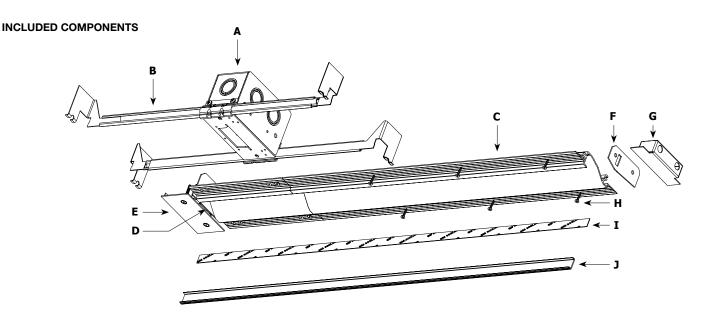
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DESCRIPTION		REVEAL WALL WASH												
WATTS PER FOOT		5W (4.4 watts) 10W (9.6 watts)												
COLOR TEMPERATURE	20K	22K	24K	27K	30K	35K	40K	20K	22K	24K	27K	30K	35K	40K
LUMENS PER FOOT (Im/ft)	202	239	246	253	274	276	241	403	478	492	506	549	552	482
LUMENS PER WATT (Im/w)	50	52	53	55	60	60	60	50	52	53	55	60	60	60
CRI	85+	85+	90+	95+	95+	85+	84	85+	85+	90+	95+	95+	85+	84



#### A. JUNCTION BOX

Mounts behind drywall with Adjustable Mounting Bars and includes a drywall template for accurate installation. Low Voltage 24VDC wires from Remote Power Supply connect to LED wires inside box. Junction Box opening is concealed with the Reveal Wall Wash Junction Box cover and is required at the beginning of each run.

#### **B. ADJUSTABLE MOUNTING BARS**

Provide flexibility for mounting in a variety of spaces.

#### C. REVEAL WALL WASH CHANNEL

5/8" deep extrusion houses a single row of commercial-grade White or Dynamic Color Changing LED Soft Strip.

# D. POWER FEED END CAP

Provides a connection area for 24VDC wires at beginning of run where LED Soft Strip enters channel.

## **E. JUNCTION BOX COVER**

Conceals Junction Box opening. Required at the beginning of each run.

#### F. DEAD END CAP PLATE

Provides a finished look and prevents light leak at feed-end of run where LED Soft Strip exits channel.

#### **G. TAKE-UP BOX**

Prevents dark spots at end of run by tucking excess LED Soft Strip safely behind wall.

## **H. DRYWALL SCREWS**

Secure channel to drywall and stud.

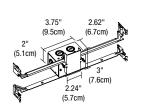
#### I. LED SOFT STRIP

(Back Side shown) commercial-grade White or Dynamic Color Changing LED Soft Strip. See lamp data on for additional details.

# J. LENS

0.74" wide diffuser lens projects a clean line of light without LED dots.





#### **JUNCTION BOX ROUGH-IN COMPONENT**

One Junction Box is included with Reveal Wall Wash. Order additional Junction Box separately to rough-in electrical wiring before drywall installation. Quick shipment available.

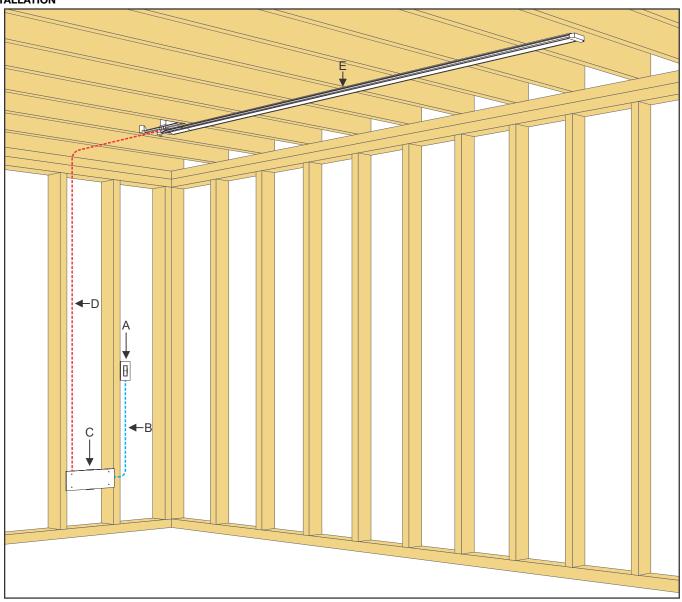
System			Size		Co	mponent
RVWW	_		1RE	_	J	BOX
RVWW Reveal Wall Wash	1	1RE	1" Rectangle		JBOX	Junction Box

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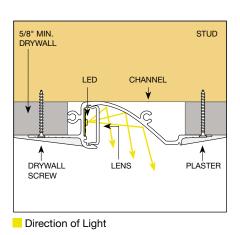


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# INSTALLATION



- A. DIMMER OR SWITCH.
- B. 120VAC WIRING TO 120V/24VDC REMOTE POWER SUPPLY, FOR IN-WALL MOUNTING KIT.
- C. IN-WALL MOUNTING KIT.
- D. 24VDC, CLASS 2 WIRING.
- E. REVEAL WALL WASH STANDARD FIXTURE.

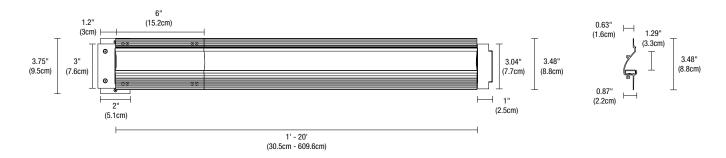


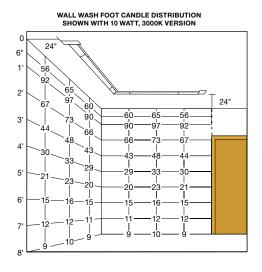
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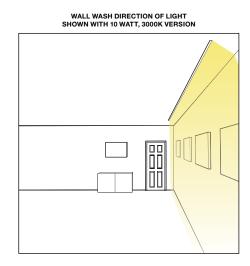


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	5 WATTS PER FOOT - 2K4K LEDS								
LENGTH IN FEET	WATTS	LENGTH IN FEET	WATTS		LENGTH IN FEET	WATTS		LENGTH IN FEET	WATTS
1	5	6	29	1	11	53	1	16	77
2	10	7	34	1	12	58	1	17	82
3	16	8	38	1	13	63	1	18	87
4	20	9	43	1	14	67	1	19	91
5	24	10	48		15	72		20	96

10 WATTS PER FOOT 2K4K LEDS										
LENGTH IN FEET	WATTS		LENGTH IN FEET	WATTS		LENGTH IN FEET	WATTS		LENGTH IN FEET	WATTS
1	10		4	40		7	70		10	100
2	20		5	50		8	80			
3	30		6	60	1	9	90			

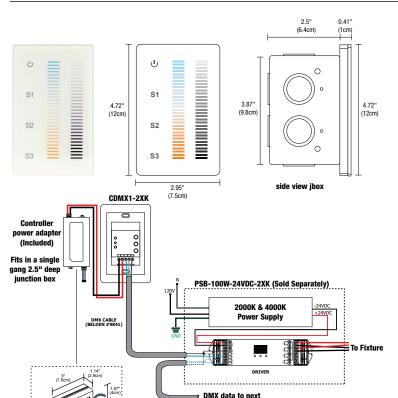
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# DYNAMIC/TUNABLE WHITE CONTROLLER AND POWER SUPPLIES

24VDC INDOOR CONSTANT VOLTAGE POWER SUPPLIES WITH DMX DRIVERS



REV 07.08.20



power/data supply

#### DESCRIPTION:

The Dynamic/Tunable White (2K4K) Touch Controller offers fast and accurate Color Temperature adjustment and the ability to regulate the Brightness Independently. The modern Glass faceplate features illuminated indicators, and a back-lit night light that softly illuminates the controller when powered off. Designed for Dynamic/Tunable White, and dual-color LED installations within a single zone. The two Vertical Touch sliders are precise and sensitive, allowing you to fine-tune your perfect Color Temperature at any point between 2000K (Sunset) to 4000K (Cool White) while selecting over 250 levels of Brightness in a smooth. uninterrupted transition. Create Thousands of Dynamic White Color Combinations while maintaining even Brightness and overall saturation. Easily save three pre-set scenes for different times of the day. Support health, performance, and general well-being using Human-Centric lighting by fine-tuning the biological effects that light has on the circadian cycle using the latest in LED technology. Includes a power adapter that fits behind the controller within a standard junction box and fits inside a standard single-gang receptacle (not for use in a multi-gang box). Use with an insulated, 24 AWG stranded, tinned copper wire (Belden #9841). Power Supplies are Sold Separately. Includes a 5 year pro-rated warranty.

#### **APPLICATIONS:**

Indoor

# **OUTPUT SIGNAL:** USITT DMX 512 (1990)

### INSTALLATION:

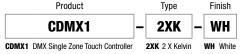
Fits in a single gang 2.5 inch deep junction box. Not compatible with multi-gang boxes.

#### LABELS:

ROHS, FCC, Damp Location, ETL/UL

#### **POWER INPUT:**

120-240VAC



			CDMX1 DMX Single 2	one louch controller 2xk 2 x keivin wh v					
	DYNAMIC COLOR CHANGING (DMX) POWER SUPPLIES & RECOMMENDED CONTROLLERS†								
	PSB-100W-24VDC-2XK	PSB-2X100W-24VDC-2XK	PSB-3X100W-24VDC-2XK	PSB-4X100W-24VDC-2XK					
ORDERING CODE	6	000	000	0 0 0					
		SPECIFIC	ATIONS						
MAXIMUM LOAD OF LED STRIP LENGTH	100W 5 WATTS - 20FT MAX. 10 WATTS - 10FT MAX.	2X100W 5 WATTS 2 X 20FT MAX. 10 WATTS - 2 X 10FT MAX.	3X100W 5 WATTS 3 X 20FT MAX. 10 WATTS - 3 X 10FT MAX.	4X100W 5 WATTS 4 X 20FT MAX. 10 WATTS - 4 X 10FT MAX.					
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC	120-277VAC					
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC					
DIMENSIONS	12.4" X 6.48" X 2.18"	14" X 10" X 3"	17" X 10" X 3"	17" X 10" X 3"					
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2					
IN-WALL MOUNTING	PSB-100W-24VDC-2XK-IW	NA	NA	NA					
		DMX DYNAMIC/TUNABLE WH	IITE DIMMING & CONTROLS						
TUNABLE WHITE TOUCH CONTROLLER (CDMX1-2XK)	•	•	•	•					

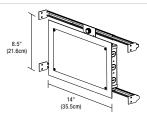
- Flicker free dimming
- Aluminum casing for optimal heat dissipation

controller power adapter

- Isolated output power per NEC and UL safety requirements
   UL & ETL recognized/ listed, meets UL 8750, 1310 requirements
- UL & ETL recognized/ listed, meets UL 8750, 1310 requirements

- Auto-reset; short circuit, overload and thermal protection
- Class 2 power supply
- Efficient, High power factor > 0.90

#### IN WALL MOUNTING OPTIONS



**8.5 x 14 inch In-Wall Mounting Kit:** Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

Ordering Codes: PSB-100W-24VDC-2XK-IW

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# **UNI INDOOR CONSTANT VOLTAGE REMOTE POWER SUPPLIES**



24VDC UNIVERSAL DIMMING WITH ELV, 0-10V, TRIAC | DYNAMIC TUNABLE WHITE TECHNOLOGY

REV 07.08.20

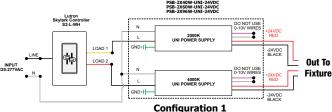
	UNIVERSAL P	OWER SUPPLIES & RECOMMENDE	D DIMMERS†	
ORDERING CODE	PSB-2X40W-UNI-24VDC	PSB-2X60W-UNI-24VDC	PSB-2X96W-UNI-24VDC	PSB-4X96W-UNI-24VDC
	5 0:0:0	5 0:0:0	5	5 5 5 person
SPECIFICATIONS				
MAXIMUM LOAD	2X40W	2X60W	2X96W	4X96W
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC	120-277VAC
OUTPUT VOLTAGE	24VDC	24VDC	24VDC	24VDC
DIMENSIONS	12.15" X 6.48" X 2.18"	12.15" X 6.48" X 2.18"	12.15" X 6.48" X 2.18"	17" X 13" X 3"
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2	CLASS 2
IN-WALL MOUNTING	PSB-2X40W-UNI-24VDC-IW	PSB-2X60W-UNI-24VDC-IW	PSB-2X96W-UNI-24VDC-IW	NA
ELV DIMMING & CONTROLS				
LUTRON DIVA: DVELV-300P	•	•	•	•
LUTRON SKYLARK: SELV-300P	•	•	•	•
LUTRON RADIO RA2: RRD-6NA	•	•	•	•
LUTRON MAESTRO: MAELV-600	•	•	•	•
LEGRAND ADORNE: ADTP-703TUM4	•	•	•	•
0-10 DIMMING & CONTROLS				
PHILIPS SUNRISE: SR1200ZTUNV	•	•	•	•
LUTRON DIVA: DVTV-WH, DVSTV-WH	•	•	•	•
LUTRON NOVA T: NTSTV-DV-XX	•	•	•	•
LUTRON GRAFIK EYE QS: QSGRJ-XP	•	•	•	•
LUTRON RADIO RA2: RRD-10ND	•	•	•	•
LEVITON: LEV40050	•	•	•	•
LEVITON IP710-LFZ	•	•	•	•
LEGRAND: ADPD4FBL3P2W4	•	•	•	•
TRIAC DIMMING & CONTROLS				
LUTRON SKYLARK: S2-L-WH	•	•	•	•
LUTRON DVLV-600P-WH	•	•	•	•
LUTRON DVLV-603P-WH	•	•	•	•
LUTRON MALV-600-WH	•	•	•	•
LUTRON MALV-1000-WH	•	•	•	•
LUTRON MA-R-XX	•	•	•	•

- · Flicker free dimmina
- Aluminum casing for optimal heat dissipation
- Isolated output power per NEC and UL safety requirements
   UL & ETL recognized/ listed, meets UL 8750, 1310 requirements
- · Auto-reset; short circuit, overload and thermal protection
- Class 2 power supply
  Efficient, High power factor > 0.90

- The Solid State Constant Voltage Uni-Power Supply is compatible with most commercially available Dimmers:
- Triac Dimmer: (Forward Phase) Typically used for the dimming of Incandescent and Low Voltage Magnetic Transformers
- ELV Dimmer: (Reverse Phase) Dimming of Electronic Low Voltage Transformers and Power Supply's used for LED lighting
- 0-10 Dimmer: Dims the Low Voltage side of a 0-10 volt power supply commonly used in large scale lighting or commercial applications.
- . The Uni-Power Supply is recommended with any Siemens/Murray brand of arc fault breaker to overcome the issues with tripping the breakers with an ELV LED Low Voltage Drivers.

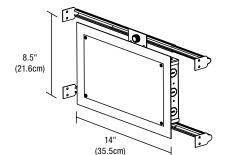
#### **MAXIMUM LENGTH**

POWER SUPPLY	5 WATTS	10 WATTS
PSB-2X40W-UNI-24VDC	8 FEET	4 FEET
PSB-2X60W-UNI-24VDC	12 FEET	6 FEET
PSB-2X96-UNI-24VDC	20 FEET	10 FEET





# IN WALL MOUNTING OPTIONS



In-Wall Mounting Kit: Includes power supply, box cover and stud hangers for installing Junction Box in wall. Select "IW" in the options section of compatible power supply ordering codes if an In-Wall Mounting Kit is needed.

S2-L-WH (TRIAC) Single Pole Dimming with

**Dual Universal Power Supplies** 

Ordering Codes 8.5 x 14.25 inch: PSB-2X40W-UNI-24VDC-IW, PSB-2X60W-UNI-24VDC-IW,

PSB-2X96W-UNI-24VDC-IW

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# INDOOR CONSTANT VOLTAGE REMOTE POWER SUPPLIES



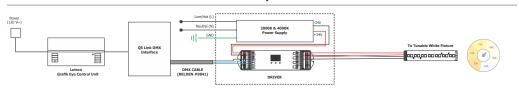


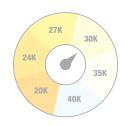
REV 07.08.20

LUTRON HI-LUME® PREMIER .1% ECOSYSTEM®†							
	L3D0-96W24V-U	2-WIRE ECOSYSTEM LTEA4U1UKL-CV240	3-WIRE ECOSYSTEM L3DA4U1UKL-CV240				
ORDERING CODES		1 I I I I I I I I I I I I I I I I I I I	THE PROPERTY OF THE PROPERTY O				
	SPECIFICATIONS						
MAXIMUM LOAD	96W	5W-40W	5W-40W				
INPUT VOLTAGE	120-277VAC	120-277VAC	120-277VAC				
OUTPUT VOLTAGE	24VDC	24VDC	24VDC				
DIMENSIONS	10.5" X 5.5" X 2"	4" X 4.89" X 2.62"	4" X 4.89" X 2.62"				
CLASSIFICATION	CLASS 2	CLASS 2	CLASS 2				
	DIM	MING AND CONTROLS					
RADIO RA2	•	•	•				
HOMEWORKS QS	•	•	•				
PHPM-3F-120	•	•	•				
PHPM-3F-DV	•	•	•				
BCI-0-10	•	•	•				

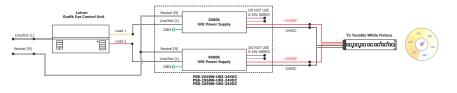
<sup>124</sup>K - 57K color temperatures are compatible with 0-10V, ELV, and Lutron Hi-Lume® Power Supplies. Warm Dim (27D, 30D) color temperatures are only compatible with ELV power supplies.

# WIRING DIAGRAM: DMX Control with Lutron Grafik Eye Control Unit

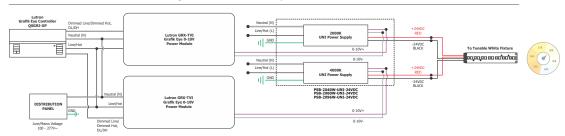




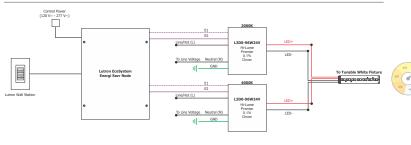
## WIRING DIAGRAM: Line Voltage Dimming with Lutron Grafik Eye Control Unit



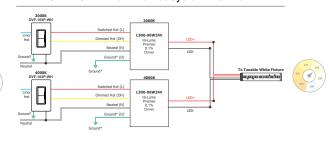
# WIRING DIAGRAM: 0-10V Dimming with Lutron Grafik Eye Control Unit or Wall box controller



# WIRING DIAGRAM: 2-Wire EcoSystem Panel



#### WIRING DIAGRAM: 3-Wire EcoSystem Wall Box



PROJECT FIXTURE TYPE DATE
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<sup>\*</sup>Tunable White (2K4K) Color Temperature is compatible with 0-10V, ELV, DMX, and Lutron Hi-Lume® Power Supplies. Dynamic Color (RGB, RGB+W) and Static Color (Amber, Blue, Green, or Red) are compatible with DMX Power Supplies.

<sup>\*\*</sup>Tunable White (2K4K) uses one or two power supplies, dependent on the controller or dimmer(s) used.

Lutron Hi-Lume® can be used in both single or dual power formats, dependent on the controller or dimmer(s). Specify amount of Power Supplies based on this.

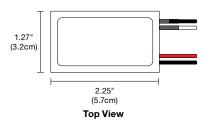
# **INDOOR CONSTANT VOLTAGE REMOTE POWER SUPPLIES**

24VDC, PS-60L-ELV



REV 07.08.20







#### **DESCRIPTION**

Compact, lightweight remote electronic 60W/24V LED Power Supply\* converts standard 120VAC voltage to 24VDC and features built-in short-circuit protection. The low voltage output may be dimmed using an electronic low voltage dimmer. The Power Supply is certified to be used inside a standard Junction Box enclosure. Power Supply features short circuit and overload protection. Indoor applications only.

\*Electrical Panels using Seimens/Murray AFCI breakers are not compatible with this ELV transformer. Use 0-10 Volt power supplies with this breaker.

#### **APPLICATIONS**

Indoor\*

To avoid overheating the power supply, install it in a ventilated remote location where air flows. Maintain proper spacing among power supplies when multiple power supplies are installed in the same remote location. POWER INPUT 120 volts AC, 60Hz

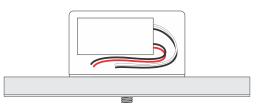
POWER OUTPUT Class 2; 24 volts DC 2.5A 60 watt maximum

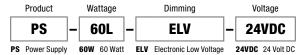
**DIMENSIONS** 2.25" x 1.25" x 0.83"

**DIMMER TYPE** Electronic Low Voltage Dimmer Lutron: Diva

#DVELV-300P; Skylark #SELV-300P; Maestro

#MAELV-600



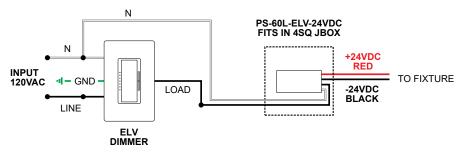


#### **SAMPLE WIRING DIAGRAMS 24VDC ELV**

**Application:** ELV dimming for Static White

**Dimming:** Dimmable with ELV dimmer: Legrand, Adorne ADTP703TU; Lutron: Diva DVELV-300P, Skylark SELV-300P, Maestro MAELV-600 and

Radio Ra 2

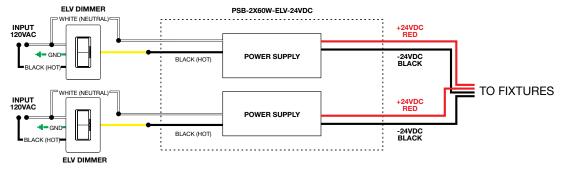


Application:

Dual ELV dimming for Dynamic/Tunable White 2000K-4000K

Dimming:

Dimmable with ELV dimmer: Legrand, Adorne ADTP703TU; Lutron: Diva DVELV-300P, Skylark SELV-300P, Maestro MAELV-600 and Radio Ra 2



PROJECT	FIXTURE TYPE	DATE	

# 24VDC - PLASTER-IN LED SYSTEM, DYNAMIC/TUNABLE WHITE

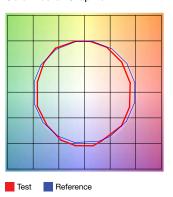


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**TM-30-15 DATA:** The data below is for SS5C and SS10C bare LED Soft Strips. Consistent color temperatures throughout a single strip and among multiple strips is possible through a 3 phase binning process in which each order is inspected with a color meter to ensure uniformity.

# 2000K ONLY (2K4K) | Rf: 84.3 | Rg: 96.9

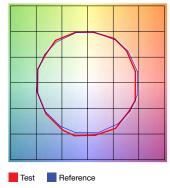
Color Vector Graphic



		GRAPHIC SHIFTS %		
HUE BIN	Rf	CHROMA	HUE	
1	80.3	-8.9%	1.7%	
2	79.7	-7.0%	7.8%	
3	78.9	-2.9%	10.0%	
4	89.5	-0.5%	5.1%	
5	94.4	0.7%	1.7%	
6	92.1	2.4%	-0.3%	
7	89.4	-2.4%	-5.9%	
8	89.7	-6.4%	-0.2%	
9	86.0	-4.9%	4.6%	
10	81.8	-3.4%	9.3%	
11	83.1	3.3%	9.7%	
12	85.8	5.6%	3.3%	
13	85.6	6.2%	-12.8%	
14	61.7	-1.9%	-19.0%	
15	79.7	-3.3%	-12.9%	
16	78.1	-7.9%	-10.6%	

# 3000K (2K4K) | Rf: 90.2 | Rg: 101.4

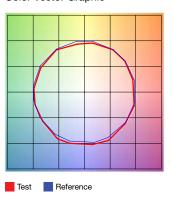
Color Vector Graphic



		<b>GRAPHIC SHIFTS</b> %		
<b>HUE BIN</b>	Rf	CHROMA	HUE	
1	90.9	-3.8%	1.3%	
2	91.7	-1.9%	3.3%	
3	88.7	0.7%	5.1%	
4	92.4	-1.0%	0.7%	
5	92.9	0.9%	1.7%	
6	93.1	3.3%	-0.6%	
7	91.0	-1.8%	-0.4%	
8	97.0	0.2%	-1.1%	
9	92.8	-0.5%	3.6%	
10	88.3	1.0%	7.0%	
11	87.1	3.8%	7.8%	
12	87.6	6.5%	-0.3%	
13	89.3	3.6%	-6.3%	
14	86.1	4.5%	-9.1%	
15	91.6	-1.9%	-3.1%	
16	83.8	-1.5%	-11.2%	

# 4000K ONLY (2K4K) | Rf: 89.6 | Rg: 99.1

Color Vector Graphic



		CDADUIC	CLUETC 0/	
		GRAPHIC SHIFTS %		
HUE BIN	Rf	CHROMA	HUE	
1	91.3	-2.5%	1.0%	
2	95.3	-0.5%	0.5%	
3	94.3	-0.7%	1.1%	
4	91.1	-3.4%	-1.1%	
5	89.5	-5.6%	0.0%	
6	94.6	-1.4%	1.3%	
7	93.2	-3.0%	2.6%	
8	91.3	-1.8%	4.6%	
9	86.5	-0.9%	9.1%	
10	83.3	-0.5%	9.5%	
11	83.3	4.9%	9.0%	
12	89.7	4.1%	1.7%	
13	90.1	3.6%	-4.3%	
14	93.4	5.2%	-2.1%	
15	87.4	0.4%	-4.3%	
16	86.6	0.4%	-6.1%	

PROJECT FIXTURE TYPE DATE