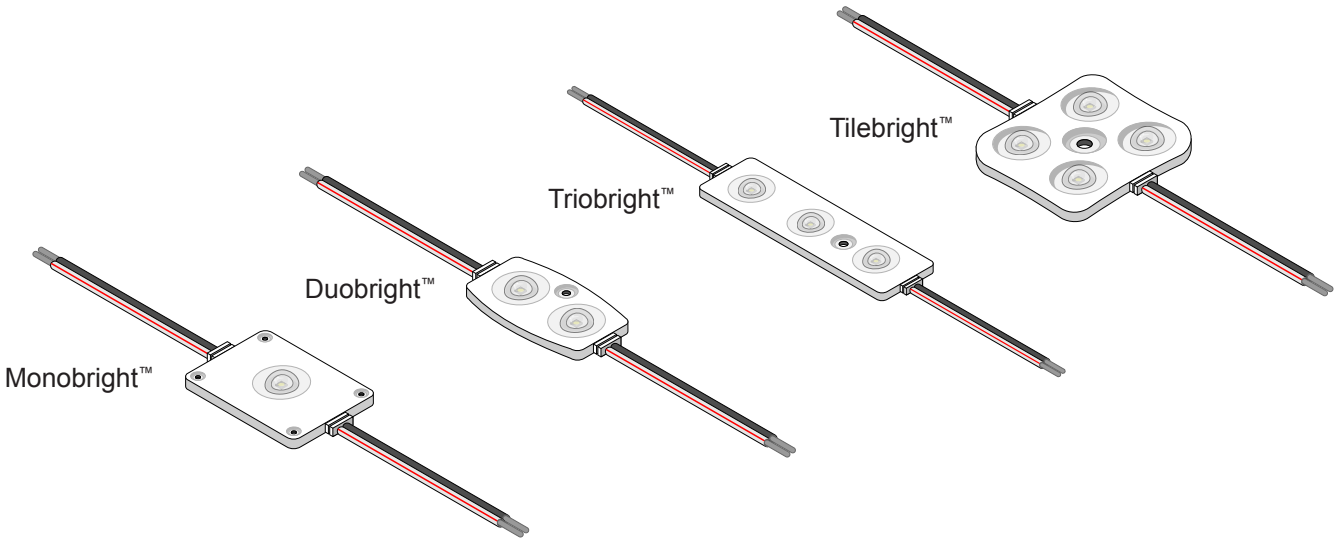
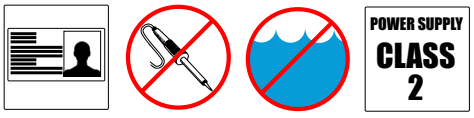
PURALIGHT® 2 LED Light Modules

INSTALLATION GUIDE



SAFETY & WARNINGS

1. Install in accordance with national and local electrical code regulations.
2. This product is intended to be installed and serviced by a qualified, licensed electrician.
3. Do not modify or disassemble this product beyond instructions or the warranty will be void.
4. Do not submerge, or install within 5 feet of a swimming pool.
5. Only install with a Listed Class 2 DC LED driver.
6. Do not exceed maximum run recommended for LED Light Module.
7. Failure to follow safety warnings, and installation instructions will void the warranty for this product.

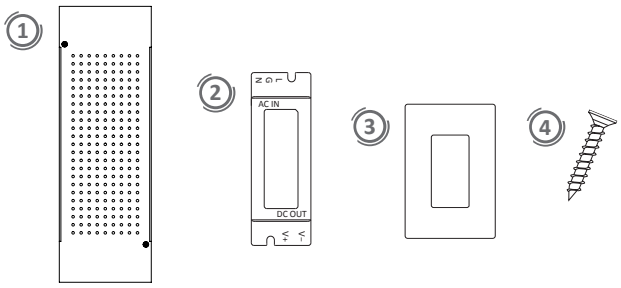


QUICK SPECS / MODELS

	Monobright™	Duobright™	Triobright™	Triobright RGB™	Tilebright™
Input	12VDC Constant Voltage				
Wattage/ Module	2.1W	.72W	1.08W	.72W	1.44W
Wattage/ Spool	42W	28.8W	43.2W	18W	57.6W
Ambient Temp*	-4° - 122°F (-20° - 50°C)				

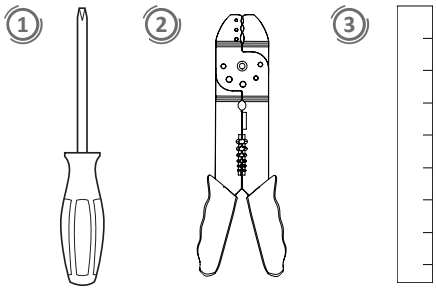
* Do not install product in environment outside listed temperature.

REQUIRED COMPONENTS



1. Appropriate Junction Box
2. Class 2 rated Driver
3. Compatible Dimmer or Switch
4. Wood Screws *(not included, 1-4 per module)*

REQUIRED TOOLS

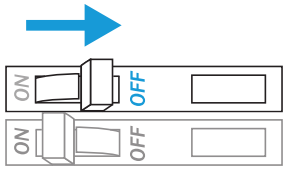


1. Phillips-head Screwdriver
2. Pliers
3. Scissors

INSTALLATION

1 TURN POWER OFF AT CIRCUIT BREAKER

SHOCK HAZARD! May result in serious injury or death.
Turn power OFF at circuit breaker prior to installation.



2 DETERMINE LOCATION TO INSTALL COMPONENTS

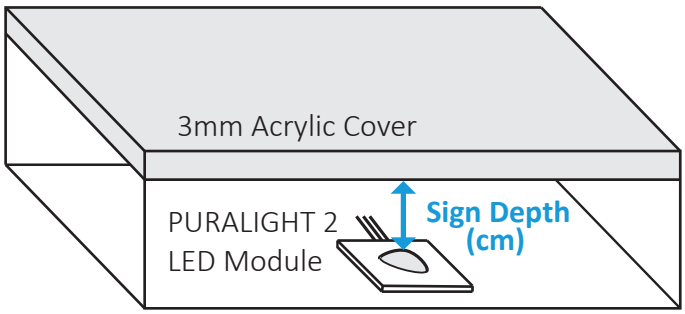
***NOT FOR USE IN SUBMERSIBLE APPLICATIONS, OR WITHIN 5 FEET OF A SWIMMING POOL.**
Refer to **SYSTEM DIAGRAMS**

WIRE GAUGE & VOLTAGE DROP
Ensure appropriate wire is installed between driver, fixture, and any controls in between. When choosing wire, factor in voltage drop, amperage rating, and type (in-wall rated, wet location rated, etc.)

For more information, refer to system diagrams and voltage drop charts at the end of this document.

SPACING CRITERIA*

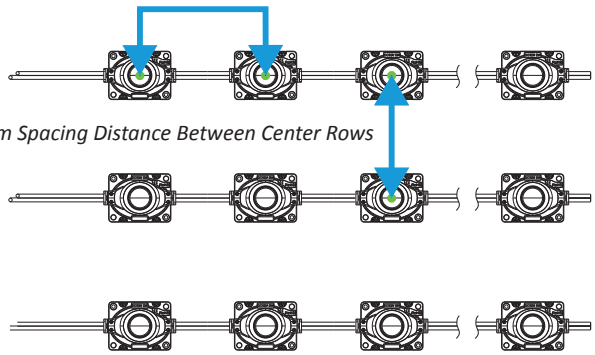
Determine interior Sign Depth from top of module to cover, round up to the nearest Sign Depth provided. We will use 10cm as an example.



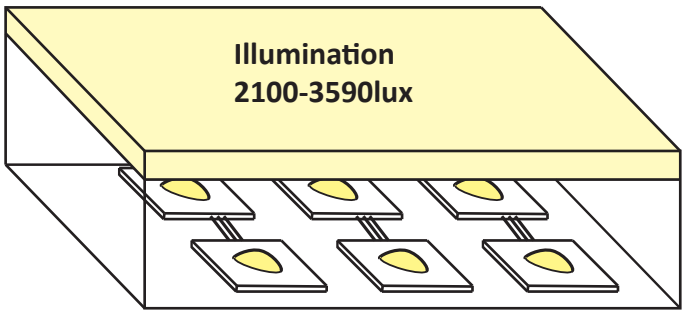
Once Sign Depth is determined, proceed across to Spacing Distance, 13*7. The first number, 13cm, gives the Spacing Distance between module centers. The second number, 7cm, gives the Spacing Distance between center rows of modules.

13cm Spacing Distance from Centers of Modules

7cm Spacing Distance Between Center Rows



At the given Sign Depth and Spacing Distance suggested, the sign Illumination will be 2100-3590lux and will help eliminate hot/dark spots in your installation.



Example:

Sign Depth (cm)	Spacing Distance (cm)	Qty/m²	Illumination (lux)
8	15*7	6*14pcs	2520-3730
10	13*7	7*14pcs	2100-3590
12	10*7	9*14pcs	2170-3660

MONOBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m²	Illumination (lux)
10	12*12	64pcs	3820-4470
15	12*12	64pcs	2380-2940
18	12*12	64pcs	2120-2630

DUOBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m²	Illumination (lux)
8	15*7	6*14pcs	2520-3730
10	13*7	7*14pcs	2100-3590
12	10*7	9*14pcs	2170-3660
15	13*5	7*20pcs	2010-3040
18	15*5	6*20pcs	1570-2410

TRIOBRIGHT SPACING CRITERIA

Sign Depth (cm)	Spacing Distance (cm)	Qty/m²	Illumination (lux)
6	11*4	8*24pcs	5840-8420
8	13*6	7*15pcs	4260-6160
10	15*6	6*16pcs	2580-4890
12	15*6	6*16pcs	2440-4630
15	15*6	6*16pcs	2310-3860
18	15*6	6*16pcs	2270-3390

TILEBRIGHT SPACING CRITERIA

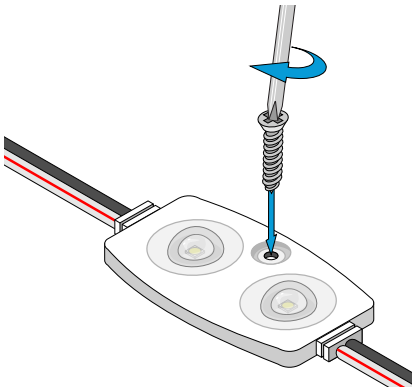
Sign Depth (cm)	Spacing Distance (cm)	Qty/m²	Illumination (lux)
5	7*7	14*14pcs	13470-16150
7	10*10	10*10pcs	6200-8010
9	16*10	7*10pcs	3990-4830
12	16*10	7*10pcs	2820-4670
15	9*9	11*11pcs	3320-5320
18	8*8	12*12pcs	3010-4830

* The Spacing Criteria above is calculated using 3mm Frosted Acrylic cover material. Results can vary for each installation, using this guide will help eliminate hot/dark spots.

INSTALLATION (CONT.)

3 MOUNT TO SURFACE

Fasten to surface using screw *(not included)* and phillips-head screwdriver.



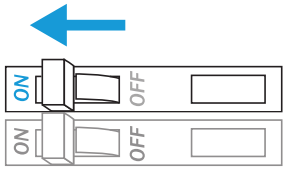
4 ATTACH CONTROL AND DRIVER

Verify compatible driver is installed. Utilize applicable wiring when installing outdoors. (Use of wet location-rated junction box recommended)

5 REVIEW SYSTEM

Ensure all polarities are correct and connections are secure.

6 TURN POWER ON AT CIRCUIT BREAKER



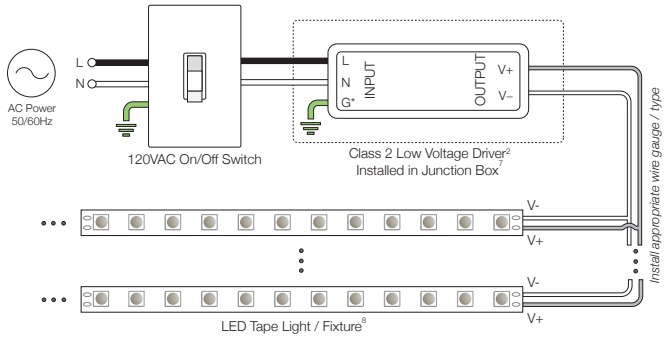
TROUBLESHOOTING

Shift in brightness and/or kelvin	• Ensure an appropriate gauge of wire is installed between strip light and LED driver. **See VOLTAGE DROP CHARTS.**
Some LEDs are not functional	• Ensure wire has not been bent excessively, which could damage circuitry. • Ensure modules have not been submerged in any liquid for any amount of time.
Lights are flickering	• Ensure a compatible driver and/or dimming control is installed. Check for loose connections.
Lights are turning on/off repeatedly	• Ensure driver is not overloaded. An overloaded driver will trip the internal auto-reset (of driver) repeatedly, turning the system on/off.

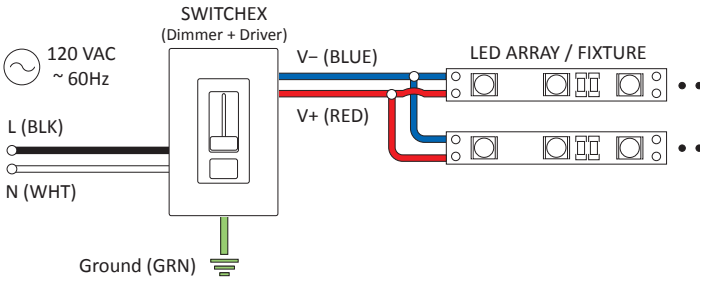
SYSTEM DIAGRAMS

The following diagrams are provided as example system designs. For information regarding larger systems or systems not pictured below, please see our web page or contact technical support. Always review each component installation guide for detailed and up-to-date wiring instructions. Install in accordance with national and local electrical codes.

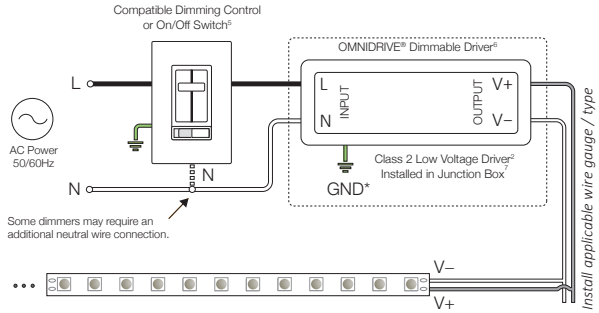
Traditional ON/OFF Switch System



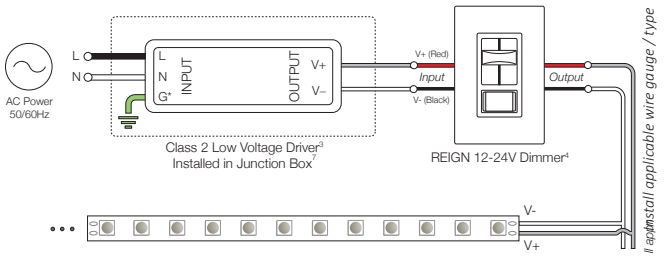
SWITCHEX® Dimmer/Driver System



OMNIDRIVE® Electronic Dimmable Driver System



REIGN® 12V Dimmer System



1. Driver may not require a fault ground connection. Refer to driver specifications for additional information.

2. Install a compatible Class 2 constant voltage driver. Refer to each driver specification sheet for full power ratings & load deratings.

3. Install a Class 2 constant voltage driver compatible with a low voltage PWM controller/dimmer switch. Refer to each driver specification sheet for full power ratings & load deratings.

4. Determine the number of low voltage outputs of the driver when installing multiple PWM controllers/dimmer switches. No more than one PWM controller/dimmer switch can be attached to a single output of the driver.

5. Install a compatible dimming control or switch. See the 'Electronic Dimmable Driver / Dimmer Compatibility List' for compatible dimming controls. See the dimming control manufacturer installation guide for complete wiring instructions.

6. Ensure to load the driver at least 60% of the labeled load for proper dimming performance (required for dimmable installations only).

7. Refer to driver or controller specifications for a compatible junction box.

8. See fixture specifications for maximum series run limits.

VOLTAGE DROP CHARTS

For best performance and lumen output, ensure proper wire gauge is installed to compensate for voltage drop of low voltage circuits.

Example: 12V Voltage Drop & Wire Length Distance Chart

Wire Gauge	10 W .83 A	20 W 1.7 A	30 W 2.5 A	40 W 3.3 A	50 W 2.1 A	60 W 4.2 A
20 AWG	18 ft.	9 ft.	6 ft.	5 ft.	4 ft.	3 ft.
18 AWG	34 ft.	17 ft.	11 ft.	8 ft.	6 ft.	5 ft.
16 AWG	54 ft.	27 ft.	18 ft.	13 ft.	10 ft.	9 ft.
14 AWG	86 ft.	43 ft.	29 ft.	21 ft.	17 ft.	14 ft.
12 AWG	134 ft.	68 ft.	45 ft.	34 ft.	27 ft.	22 ft.
10 AWG	199 ft.	99 ft.	66 ft.	49 ft.	39 ft.	33 ft.

1. Determine load size. Let's assume load is 55 W. Round up to nearest load.
2. Determine distance from driver to load. Let's assume the distance is 20 ft.
3. It's recommended to install 12 AWG to eliminate excess voltage drop.

12V Voltage Drop & Wire Length Distance Chart

Wire Gauge	10 W .83 A	20 W 1.7 A	30 W 2.5 A	40 W 3.3 A	50 W 2.1 A	60 W 4.2 A
20 AWG	18 ft.	9 ft.	6 ft.	5 ft.	4 ft.	3 ft.
18 AWG	34 ft.	17 ft.	11 ft.	8 ft.	6 ft.	5 ft.
16 AWG	54 ft.	27 ft.	18 ft.	13 ft.	10 ft.	9 ft.
14 AWG	86 ft.	43 ft.	29 ft.	21 ft.	17 ft.	14 ft.
12 AWG	134 ft.	68 ft.	45 ft.	34 ft.	27 ft.	22 ft.
10 AWG	199 ft.	99 ft.	66 ft.	49 ft.	39 ft.	33 ft.

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