SignRayz® Pro Premium LED Modules

GEN LED AgiLight®
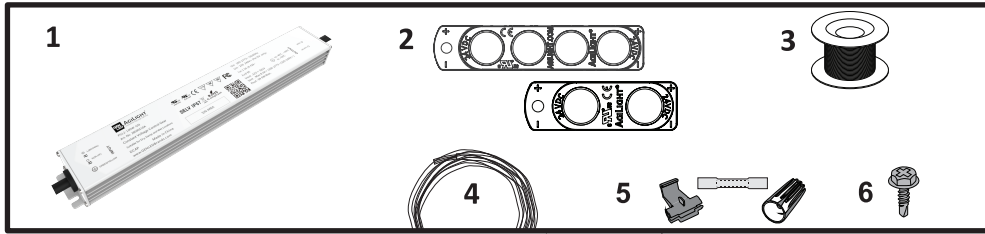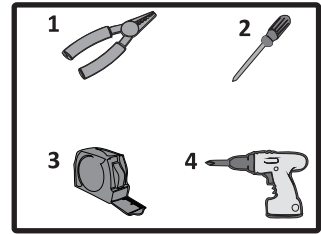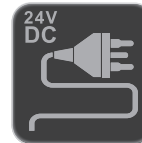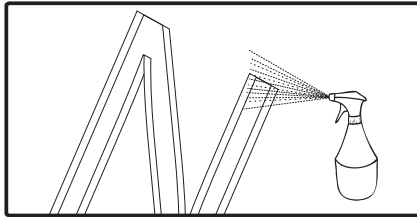Innovative Signage Lighting

STOP Read instructions completely before installation. Altering the product in any way VOIDS the warranty. **STOP**
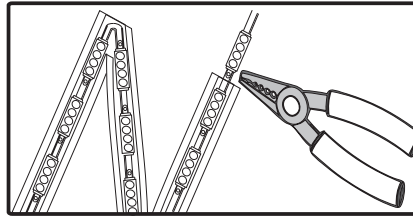
Components:
1. **GEN**LED AgiLight® PS24-100W-GN power supply
2. **GEN**LED AgiLight® SignRayz® Pro Premium LED Modules
3. Minimum 18 AWG (0.82 mm) wire (UL Listed)
   *Under certain conditions, a heavier gauge wire may be necessary.
4. PLTC Cable (UL Listed)
5. 22-14 AWG (0.33-2.08 mm) wire connectors or
   22-18 AWG (0.33-0.82 mm) wire nuts, IDC, or butt splice connectors (UL Listed)
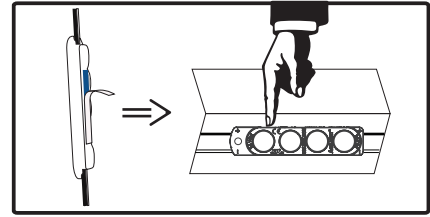6. #6 or #8 (M3 or M4) screws

Tools:
1. Wire Strippers
2. Screw Driver
3. Tape Measurer
4. Drill with ¼ inch bit
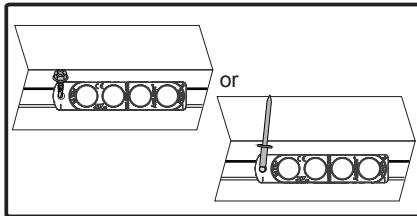
LED Module Installation

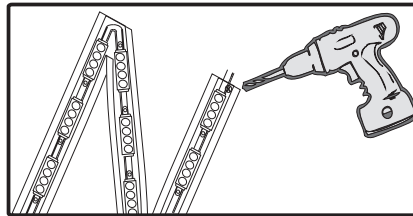**1.** Clean inside of the sign with denatured alcohol. Allow alcohol to dry before proceeding.

2. Place LED modules in the sign according to **GEN**LED AgiLight® layout or Population Density Guide. Cut product accordingly. (Product may be cut in between modules.)

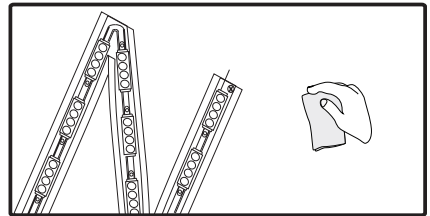**DO NOT EXCEED** Maximum Single String in Modules = n

3. To adhere the LED module to the sign's back panel, remove liner from tape and firmly press the module in place. Repeat process for the rest of the layout.

4. (Optional) Mechanically fasten the LED modules to the sign's back panel with screws or rivets. Use #6 (M3) or #8 (M4) metal screws or 1/8 inch (3.2 mm) rivets.

5. Drill a hole near the beginning of the string of LED modules and fit with an insulator for feeding power supply wire to the modules. Access hole should be approx. ¼ inch (6.4 mm) in diameter, minimum.

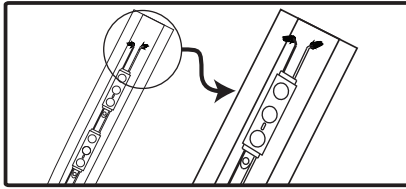**6.** Remove debris and clean the inside of channel.
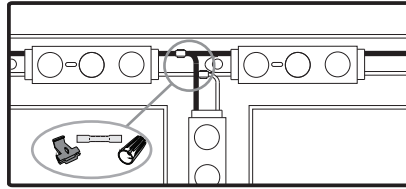

WARNING READ BEFORE WIRING
1. Must use **GEN**LED AgiLight® Class 2 power supply rated for 24 Volts DC or less; proper wire gauge to connect to LED modules.
2. Check polarity for DC standard, BLACK (-) to BLACK (-) and RED (+) to RED, BLUE or WHITE (+).
3. UL 48 Standard requires spacing between power supplies to be at least 1 inch (25.4 mm) from end to end AND 4 inches (101.6 mm) from side to side.
4. Do not overload power supply and do not use products in submersed applications. 8% buffer for power supply is recommended.
5. Grounding and bonding of the LED power supply must be done in accordance with National Electric Code (NEC) Article 600.
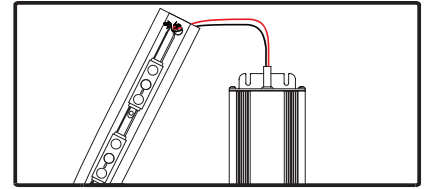6. Follow all National Electric Codes (NEC) and local codes.

SIGNRAYZ® Pro Premium LED Modules

GEN LED **AgiLight**®
Innovative Signage Lighting

Wiring Instructions

1. Use appropriate wire connectors to cover the ends of exposed wires not being used as a connection point.

2. To connect (splice) wires, use an in-line (IDC) connector, butt splice connector or a twist-on wire connector.

3. Connect the power supply to the product via the access hole in the sign's back.

Power Supply Wiring Instructions

AC INPUT (3*AWG #18) DC OUTPUT (2*AWG #18)

Brown=Ground
Blue=Neutral
Yellow/green=Line

Red=Positive (+)
Black=Negative(-)

Note:
*Have a licensed electrician make connections to primary (AC) input.
*Per NEC 2008 Articles 725.121 through 725.130, secondary class 2 cables do not require conduit when installing.
*Seal all wall penetrations with silicone to avoid intrusion of water.

WARNING
RISK OF ELECTRICAL SHOCK
Turn OFF power before perfoming any maintenance.

Maximum Remote Mounting Distance From Power Supply Output

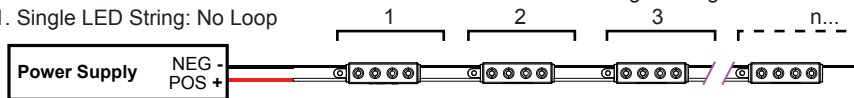| Power Supply \ Wire Gauge	18 AWG 0.82 mm²	16 AWG 1.32 mm²	14 AWG 2.08 mm²	12 AWG 3.31 mm²
30W	120 ft / 36.6 m			
60W	20 ft / 6.1 m	25 ft / 7.6 m	35 ft / 10.6 m	40 ft / 12.1 m
100W	20 ft / 6.1 m	25 ft / 7.6 m	35 ft / 10.6 m	40 ft / 12.1 m
300W	20 ft / 6.1 m	25 ft / 7.6 m	35 ft / 10.6 m	40 ft / 12.1 m

Notes:
- Power supply always has 8% buffer
- Long run string, center connection to the LED module is recommend to reduce voltage drop.
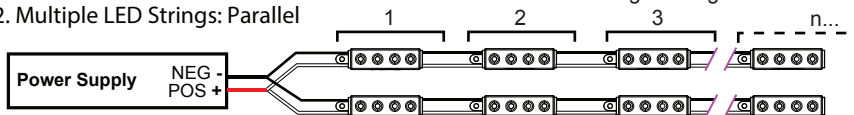- It' good only with AgiLight power supply

Wiring Diagrams

1. Single LED String: No Loop

DO NOT EXCEED Maximum Single String in Modules = n

2. Multiple LED Strings: Parallel

DO NOT EXCEED Maximum Single String in Modules = n

Troubleshooting

PROBLEM	POSSIBLE CAUSE
All LED modules are OFF or some of the LED modules are not illuminated.	1. Power supply may not be loaded properly with LED modules. 2. Wrong power supply. Must be 24VDC constant voltage. 3. Bad or loose connections.
Entire section does not light or lights intermittently.	1. Bad, loose, or improper connections. 2. Power supplies are spaced too close together; overheating. Note: Spacing between power supplies must be at least 1 inch (25.4 mm) from end to end AND 4 inches (101.6 mm) from side to side.
LED modules flicker or appear dim.	1. Power supply may not be properly loaded with LED modules. 2. Power supply may be damaged or defective. 3. Power supply may not be wired correctly. Check AC input wiring (Green to Ground, Black to Black, and White to White).