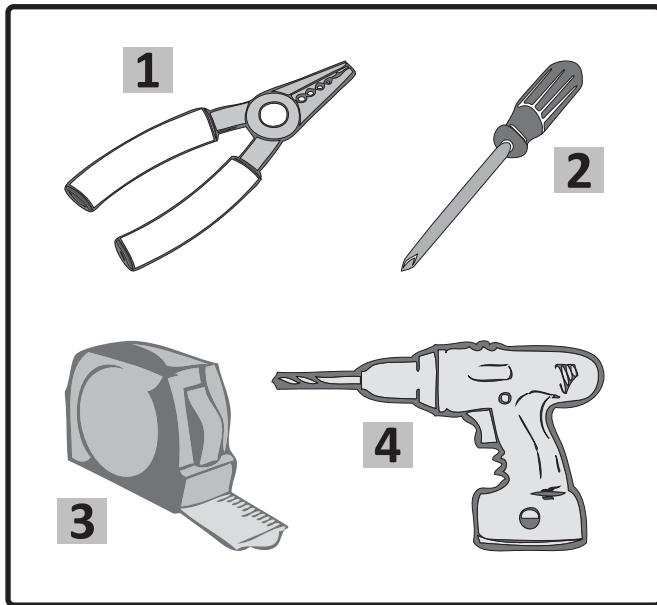# Installation Guide
SignRayz® Series
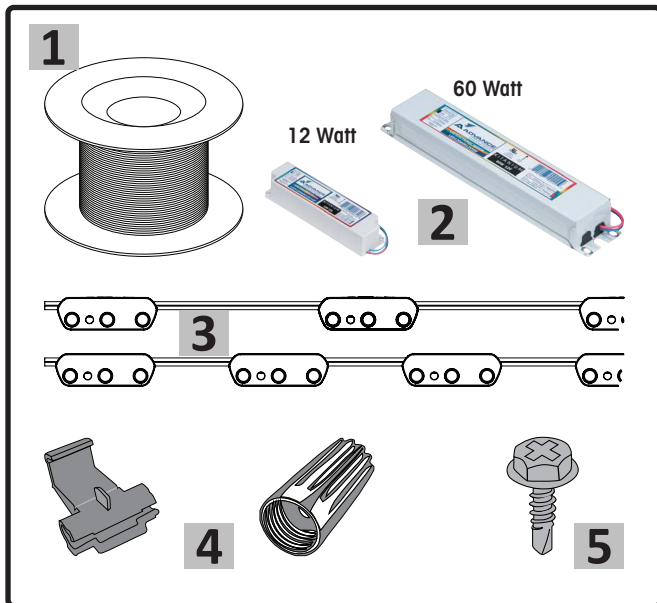
AgiLight

Installation guide for SignRayz BASE, CORE and APEX Series

Tools:
1. Wire Strippers
2. Screw Driver or Rivet Gun
3. Tape Measure
4. Drill

Components:
1. 18 AWG (0.82mm) Wire-UL Approved
   *Under certain conditions, a heavier gauge wire may be necessary.
2. Power Supply (Advance 60W or 12W)
3. AgiLight SignRayz Series LED Modules
4. 22-14 AWG (0.33-2.08 mm) wire connectors or 22-18 AWG (0.33-0.82mm) in-line connectors-UL Approved
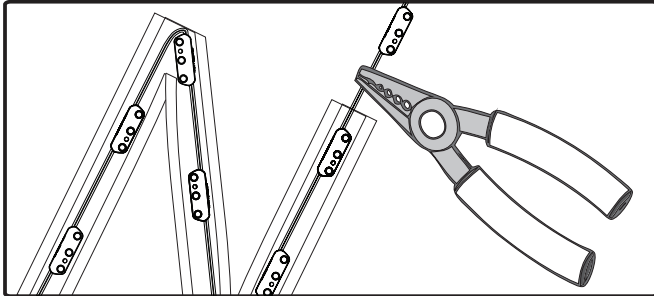5. #6 or #8 (M3 or M4) screws or 1/8 inch (3.2mm) rivets

12 Watt

60 Watt

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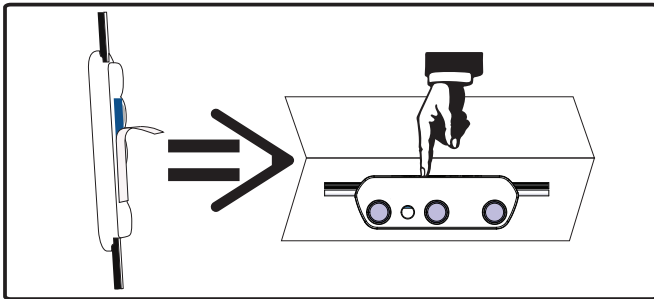Turn OFF power before before perfoming any any maintenance.

Module Installation
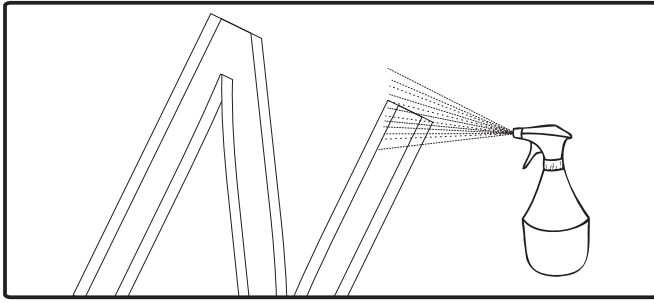
1. Remove all debris from the inside of the channel and clean inside of channel with denatured alcohol. Allow alcohol to dry before proceeding.

2. Place modules in sign according to layout. Cut product accordingly.
   *Product may be cut in between modules

3. To adhere the product to letter back, remove liner from tape and firmly press LED modules in place. Repeat process for the rest of layout.
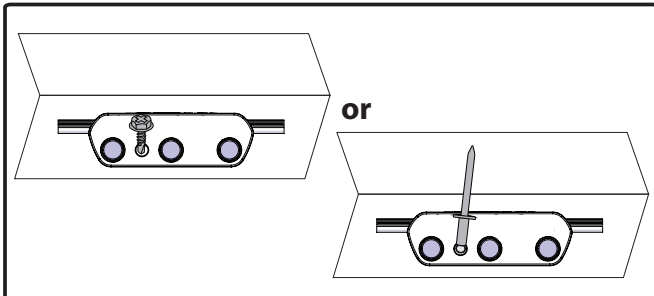
4. Screws or rivets may also be used to attach LED modules to letter back if mechanical fasteners are required or desired.
   *Use #6(M3) or #8(M4) hexagonal or pan head metal screws or 1/8 inch (3.2mm) rivets.
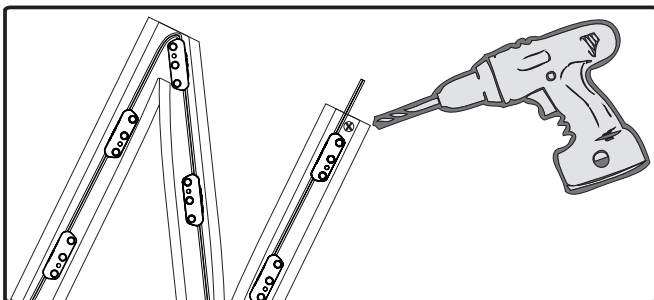
5. Drill an access hole near the beginning of teh LED module and fit with an insulating for feeding supply wire to the product.
   *Access hole should be approximately ¼ inch (6.4mm) in diameter, minimum.

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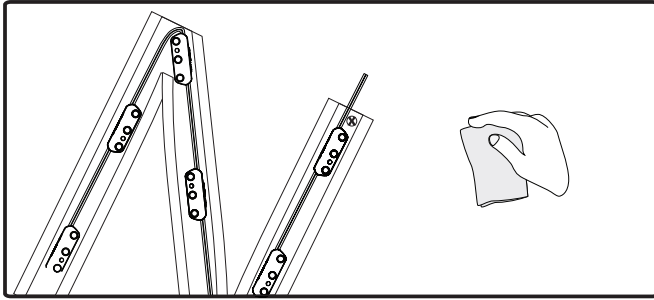
6. Remove debris from inside of channel and clean inside of channel.

Wiring Instructions

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

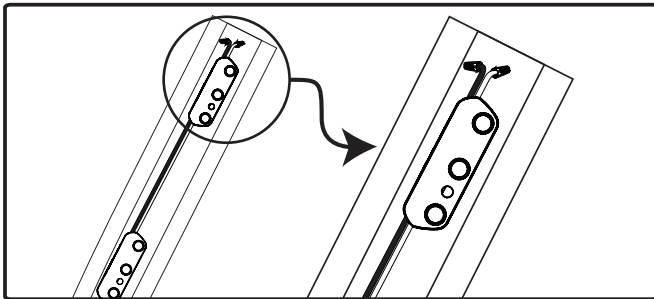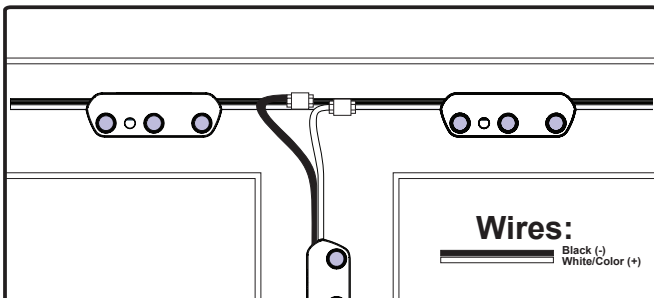2. To connect (splice) wires, use an in-line (IDC) connector or a twist-on wire connector.

Wires:
Black (-)
White/Color (+)

Power Supply 60W or 12W

DC output:
6-inch 18AWG leads
Positive (red)
Negative (blue)
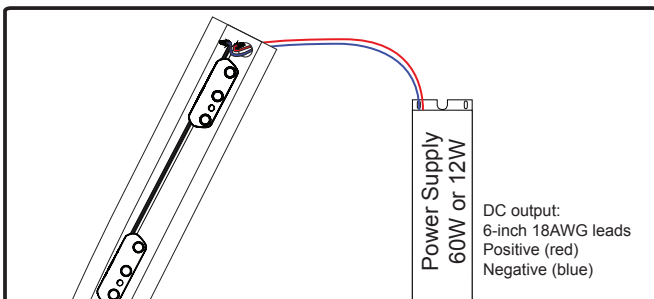
3. Connect the power supply to the product via the access hole in the letter back.

*Use the proper gauge wire for connecting power supply to product

*Must use approved power supply (Advance 60W or 12W, 12-Volt power supplies).

*All electrical connections should be made within the channel letter.

*Do not overload the power supply. See power loading chart on back page.

*The grounding and bonding of the LED Driver must be done in accordance with ordnance National Electric Code (NEC) Article 600.

*Follow all National Electric Codes (NEC) and local codes.

Troubleshooting

All letters are OFF or some of the letters are not illuminated

• Check AC input to power supply for proper connection, input voltage and/or check circuit breaker.
• Ensure proper power supply is used for input voltage at site.
• Check wire connection(s) at the primary and secondary sides of the power supply for improper termination(s) or short circuits. Properly terminate or replace the wire connection(s) if needed.
• Check that the white or colored wire (+) of the LED strip is connected to the positive red wire (+) of the power supply and the black wire (-) of the LED strip is connected to the negative blue wire (-) of the power supply.

Hot spots and/or shadows

• Check that the power supply is not obscuring the modules. Adjust the wires or wire connectors to ensure they do not obscure any of the LEDs.
• Adjust the position of the LEDs to ensure uniform illumination to the face of the letter.

Entire section does not light or lights intermittently

• Check the wire connection on the secondary side of the power supply. A bad connection or reversed polarity connection will cause the modules to not light.
• Ensure proper spacing demands of Phillips Advance power supply.

  *Only 2 power supplies approved for installation in a standard neon transformer box.

One module does not light, but all others in the sign light

• SignRayz are wired in parallel so that if one module fails, it will not cause the entire sign or leg to fail. If one module does not light, it may be replaced with a new one.

LEDs flicker or appear dim

• Sign may be under loaded or overloaded. Adjust loads on power supply so the load is appropriate for the power supply. Refer to the load chart for proper loading of the power supply.
• Possible malfunction of the power supply. May need to replace power supply, please contact an AgiLight Customer Service Representative 866-482-0203.

Power Supply Load Chart

Power Supply	LS-APEX-83K-G1	LS-APEX-75K-G1	LS-APEX-65K-G1	LS-APEX-30K-G1	LS-APEX-27K-G1	Power Supply	LS-BASE-75K-G1	LS-BASE-65K-G1
12 W	3.5 ft (7 Modules)	3.5 ft (7 Modules)	3.5 ft (7 Modules)	3.5 ft (7 Modules)	3.5 ft (7 Modules)	12 W	12 ft (24 Modules)	12 ft (24 Modules)
60 W	17 ft (34 Modules)	17 ft (34 Modules)	17 ft (34 Modules)	17 ft (34 Modules)	17 ft (34 Modules)	60 W	60 ft (120 Modules)	60 ft (120 Modules)

Power Supply	LS-CORE-75K-G1	LS-CORE-65K-G1	LS-CORE-57K-G1	LS-CORE-45K-G1	LS-CORE-30K-G1	LS-CORE-27K-G1
12 W	8 ft (24 Modules)	8 ft (24 Modules)	8 ft (24 Modules)	8 ft (24 Modules)	8 ft (24 Modules)	8 ft (24 Modules)
60 W	40 ft (120 Modules)	40 ft (120 Modules)	40 ft (120 Modules)	40 ft (120 Modules)	40 ft (120 Modules)	40 ft (120 Modules)

Power Supply	LS-COLOR-RR-G1	LS-COLOR-TR-G1	LS-COLOR-CR-G1	LS-COLOR-OR-G1	LS-COLOR-YE-G1	LS-COLOR-GR-G1	LS-COLOR-BL-G1	LS-CLR3-RR-G1	LS-CLR3-YE-G1
12 W	12 ft (24 Modules)	12 ft (24 Modules)	12 ft (24 Modules)	9 ft (18Modules)	9 ft (18Modules)	12 ft (24 Modules)	12 ft (24 Modules)	8 ft (24 Modules)	6 ft (18 Modules)
60 W	60 ft (120 Modules)	60 ft (120 Modules)	60 ft (120 Modules)	45 ft (90 Modules)	45 ft (90 Modules)	60 ft (120 Modules)	60 ft (120 Modules)	40 ft (120 Modules)	30 ft (90 Modules)

c**UL**us

RoHS compliant
This light source meets restrictions on hazardous substances.

LM-79   LM-80

• **SignRayz are only suitable for connection to a circuit from a class 2 power source.**
• **SignRayz have not been evaluated for use when connected to a power source that does not comply with Class 2 voltage and energy limited supplies.**
• **SignRayz are suitable for wet, damp or dry locations. SignRayz are not required to be enclosed or protected from weather.**
• **SignRayz is a 12volt system with a 5amp max load when connected to a UL Recognized (UYMR2) Class 2 supply.**