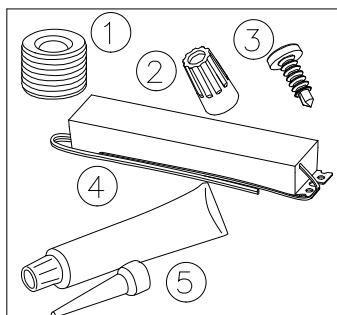# FRS Series Installation Guide

Components

1) 3x1.5mm² Power Cable
2) Wire connectors
3) #6 (M3) screws
4) 24V Power Supply
5) Electronic grade silicone

STOP

BEFORE YOU BEGIN

Read these instructions completely and carefully.

⚠ **WARNING**

RISK OF ELECTRIC SHOCK

Turn power off before inspection, installation or removal.

Properly ground power supply enclosure.

RISK OF FIRE

Use only UL certified wire for input/output connections. Minimum size 16 AWG (1.5mm²).

Follow all NEC and local codes.

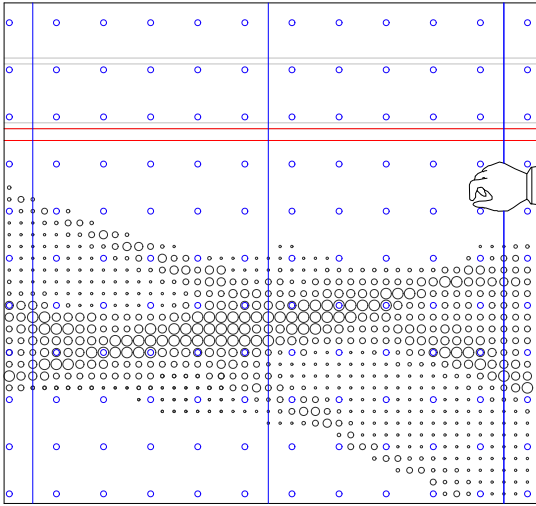### Prepare Electrical Wiring

Electrical Requirements

• Limited to use in dry and damp locations.

• The grounding and bonding of the LED Driver shall be done in accordance with National Electric Code (NEC) .

• Follow all National Electric Codes (NEC) and local codes.
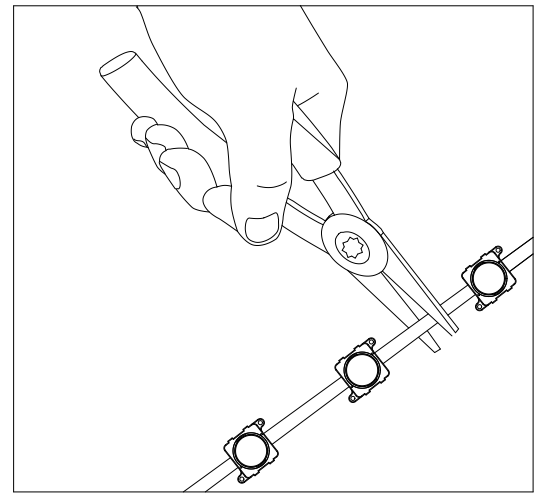
Layout Recommendations

Channel Depth (in.)	Single Row		Multiple Rows		Channel Depth (mm)	Single Row		Multiple Rows	
	Max. Stroke	Module Spacing	Row Spacing	Module Spacing		Max. Stroke	Module Spacing	Row Spacing	Module Spacing
4	11	4	10	4	100	275	100	100	100
5	14	4	10	4	125	350	100	100	100
6	14	4	10	4	150	350	100	100	100
7	14	4	10	4	175	350	100	100	100
≥7	14	4	10	4	≥200	350	100	100	100

∗Density guide designed to maintain a minimum of 600 lux for a single row or 800 lux for multiple rows at sign face .
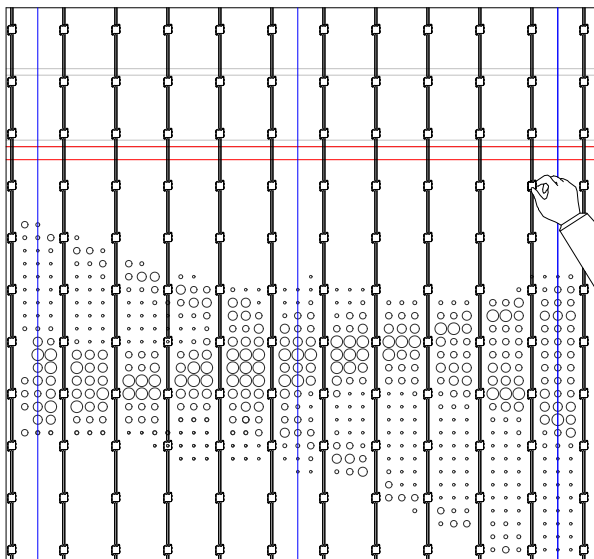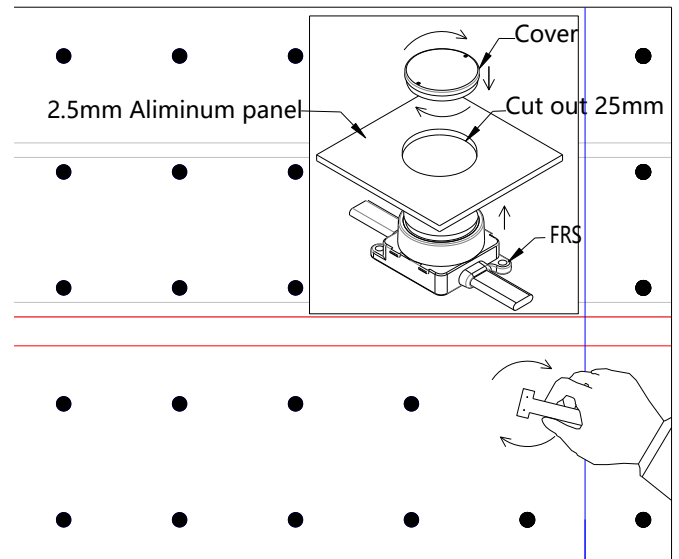
Layout Modules

❶ Pre-drill(Cut out Dia.25mm) and Clean & remove all debris from the surface of the Aliminum panel before you begin.
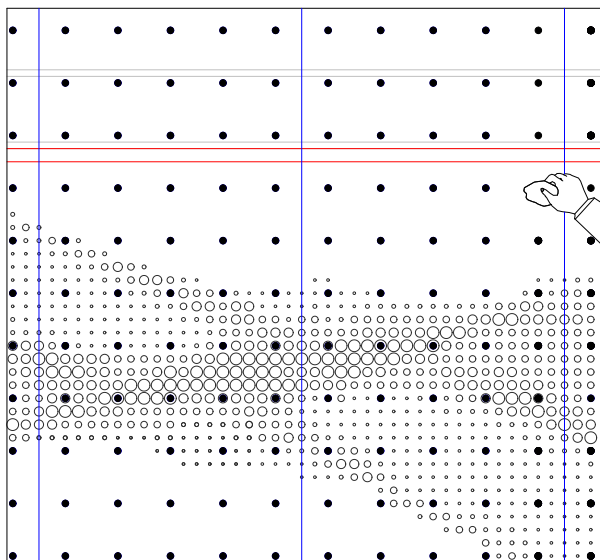
❷ Measure and cut FRS LED strip to the appropriate length for each Aliminum panel. Cuts can be made between any of the modules.

Cover

2.5mm Aliminum panel

Cut out 25mm

FRS

❸ Place the modules on the back of the aluminum plate, ensuring that each module is aligned with the aluminum plate holes.
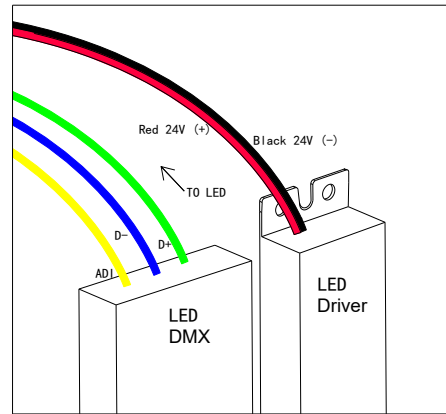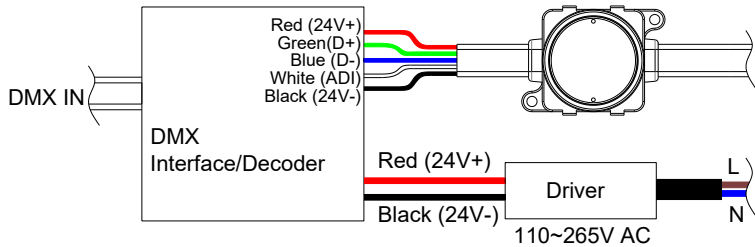
❹ Use a special tool to tighten the cover on the front of the aluminum plate to secure the module.

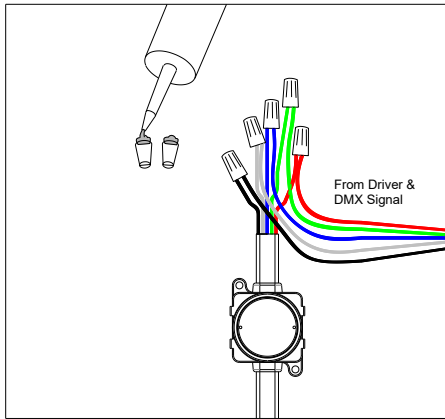❺ Clean & remove all debris from the inside of the Aliminum panel .
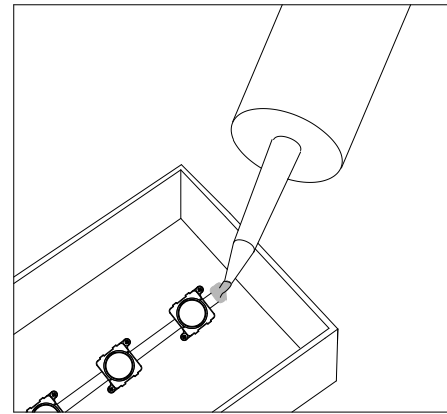
Electrical Connections

❶ Wiring Diagram

❷ Run a wire from the Power Supply and DMX Decoder to each Light box and connect to the first LED module on the strip.

Must be used with **24 Volt Power Supplies.**

From Driver & DMX Signal

❸ Connection follow wiring diagram instructions. Connect LED strips using twist-on wire connectors.

❹ Must apply electrical grade silicone to exposed wires.