

# LUMENGEAR™ REMOTE ENCLOSURE ASSEMBLIES

## Installation Instructions

Another Lumenrail® System for Life Safety and Light

WARNING: TO REDUCE RISK OF ELECTRIC SHOCK, TURN OFF THE ELECTRICAL SUPPLY BEFORE INSTALLING OR SERVICING THE SYSTEM. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY AND/OR DAMAGE TO THE COMPONENTS.

### LIGHTING SAFETY INSTRUCTIONS

READ THE INSTALLATION INSTRUCTIONS IN THEIR ENTIRETY BEFORE INSTALLING. IT IS IMPORTANT TO LEAVE THESE INSTRUCTIONS WITH THE OWNER OR FACILITY MANAGER OF THE BUILDING FOR FUTURE REFERENCE.

- **Caution:** Installation must be performed by a licensed electrician and all wiring must conform to local, state and national electrical codes
- All electrical components must be grounded and Wagner Architectural recommends connection to a GFCI circuit per local codes and/or the NEC
- This product must be installed in a manner consistent with its intended use
- For trouble-shooting, installation questions and replacement component orders, contact Wagner at 888-243-6914



SCAN QR CODE  
for technical information,  
downloads and instructions.

All of the Lumenrail® Architectural System supplied enclosures are approved to hold:

- One or two standard 100W drivers OR
- One standard 100W and one Dali or DMX controller OR
- One Made in the USA 100W driver

AND these optional safety components

- One 20,000 amp SSP3 surge protector OR
- One or two fuse holders (1 per each driver).

Page 3 provides a location diagram for the alternatives. Pages 4 & 5 provide exploded assembly views.

### ASSEMBLY INSTRUCTIONS

1. Drill holes in the enclosure for conduit connections (by others) as necessary.
2. Using proper mounting techniques, attach driver enclosure to a suitable structural member (hardware by others).
3. Install the required mounting plate to the proper standoffs using the supplied hardware. Safety labels must face up and remain visible.
4. Attach conduit using water tight fittings (by others).
5. Pull necessary wires into the enclosure. These 120V or 277V line voltage leads, secondary leads for powering the luminaires, and potentially 0-10V dimming, DMX, or DALI control leads depending on what was specified.
6. Follow mounting diagram for locating the driver(s), controller, surge protector or fuse holders. Use star washers to ground each of the components to the mounting plate.
7. When including a surge protector, it connects to the primary side of the driver(s) to the line, neutral, and ground (see the SSP3 wiring diagram).
8. When including fusing, each driver will get its own fuse and fuse holder. Fuse holders are wired in series on the secondary side of the driver(s). Independently connect each line lead to each driver's positive output. Connect the fuse holders load lead to the positive wires going to the LED luminaire.
9. When dimming is required, connect the 0-10V, DMX, or DALI control wires per the controller/driver instructions. If 0-10V dimming is not required, cap purple and gray wires separately.
10. Make the remaining electrical connections between the low voltage driver wires and the LED luminaire wires. Ensure that the correct polarity is maintained: positive to positive, negative to negative.
11. Attach the all ground leads to the ground screw.
12. Make the remaining wire connections on the primary side. Connect the incoming line to the black driver(s) line lead, the incoming neutral leads to the white neutral leads on driver(s).
13. Check all connections prior to powering up the driver(s).



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### LUMENRAIL - GROUNDING REQUIREMENTS

- All of our equipment is designed around Class 2 circuits.
- The NEC defines a Class 2 circuit as:
  - That portion of the wiring system between the load side of a Class 2 power source and the connected equipment.
  - Due to its power limitations, a Class 2 circuit is considered safe from a fire initiation standpoint and provides acceptable protection from electrical shock.
- Any conductors intended to be routed through our system do not carry more than 24VDC and are isolated from line voltage through properly specified and installed Class 2 equipment .
- There is no grounding requirement for Class 2 systems in the NEC, however, Wagner recommends that systems be grounded and connected on the primary side to a GFCI if local, state or national codes require it.

### LUMENRAIL - CLASS 2 DRIVER REQUIREMENTS

Class 2 is a classification referring to the NEC – National Electric Code.

- To avoid potential cable overheating due to excessive currents and electric shock, the output of the power supply is limited to 60VDC or 100VA, (100W when used with an AC-DC power supply).
- You will often see 24V output DIN rail power supplies or LED drivers rated at -98W rather than 100W because if the power supply is overloaded, any tolerance in the over current protection has to be accounted for.
- This is the same reason a driver should not be loaded to capacity. A good rule of thumb is not to exceed 80% of capacity.

### RAILING SAFETY INSTRUCTIONS

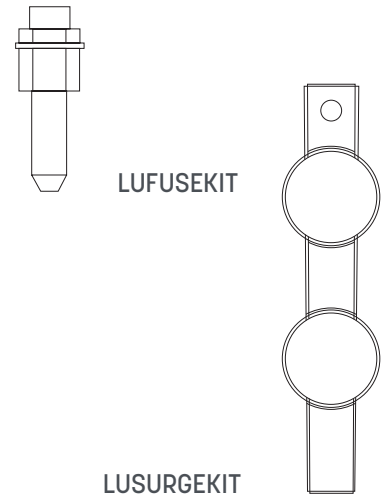
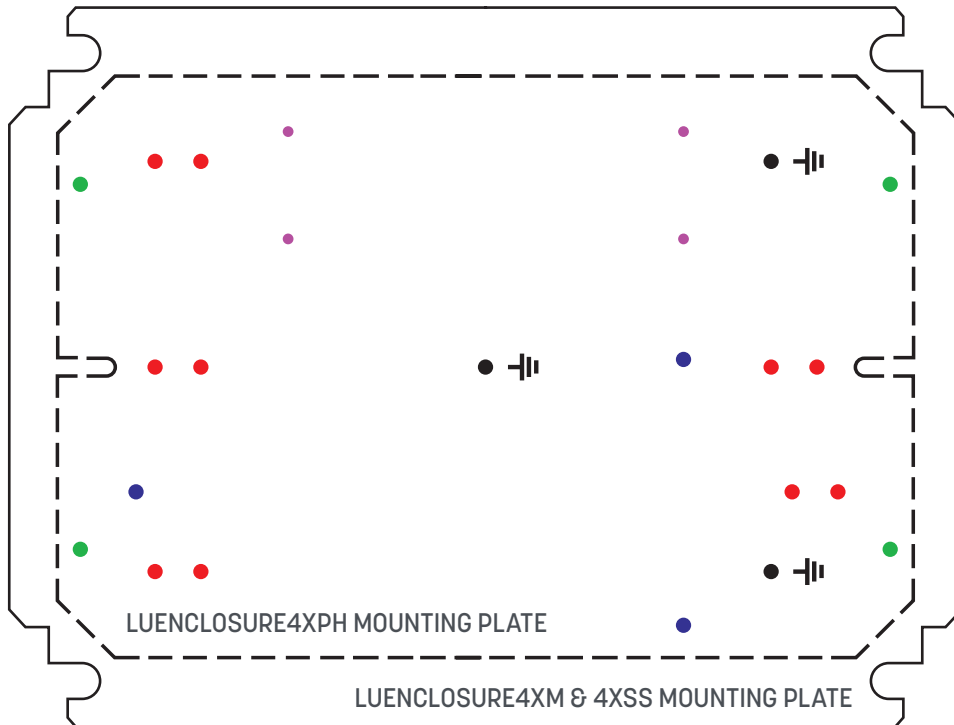
Wagner Architectural Systems are engineered to meet IBC, ADA and NFPA when properly installed

- Check and confirm all local railing code requirements
- A structural analysis may be required per local codes and is the responsibility of the customer
- **Note:** It is recommended that a professional railing installer be used for ANY rail system, illuminated or not.



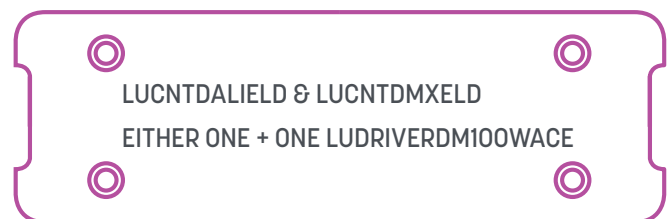
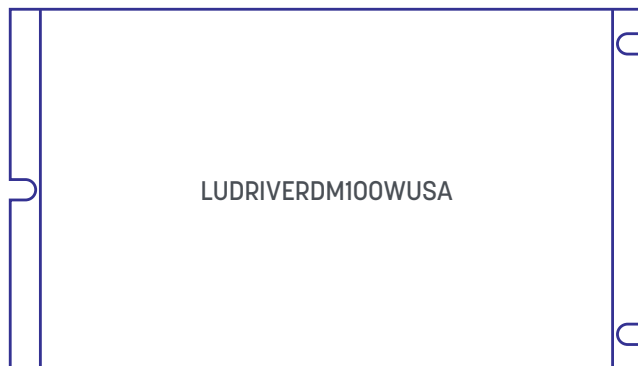
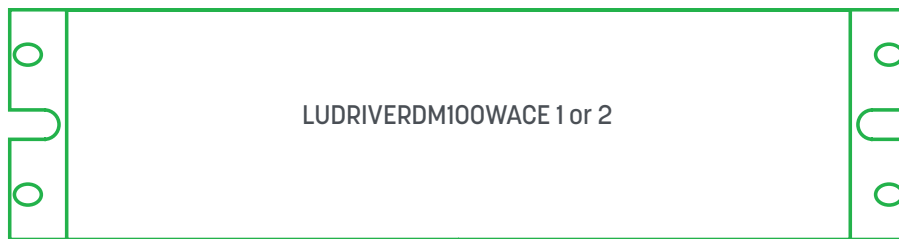
# LUMENGear™ Remote Enclosure Assemblies

Installation Instructions  
Component Mounting Locations



All kits include: components, mounting hardware and a separate or integrated mounting bracket/strap. Hole colors in above plates correspond with component mounting locations.

One LUFUSEKIT per driver if this option is selected.  
One LUSURGEKIT per enclosure if this option is selected.



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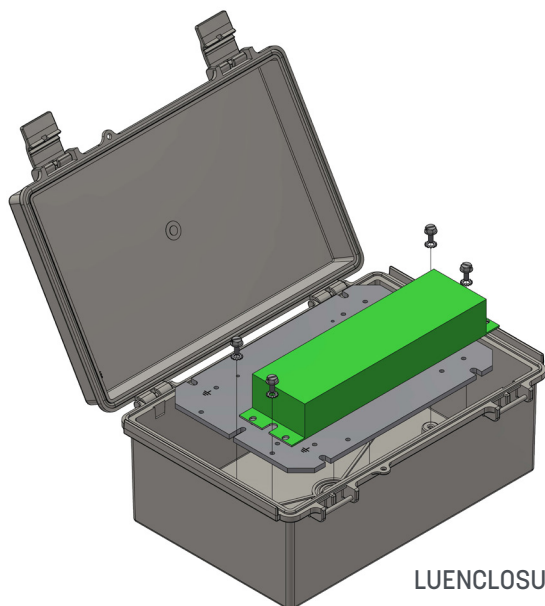
# LUMENGEAR™ REMOTE ENCLOSURE ASSEMBLIES

## Installation Instructions

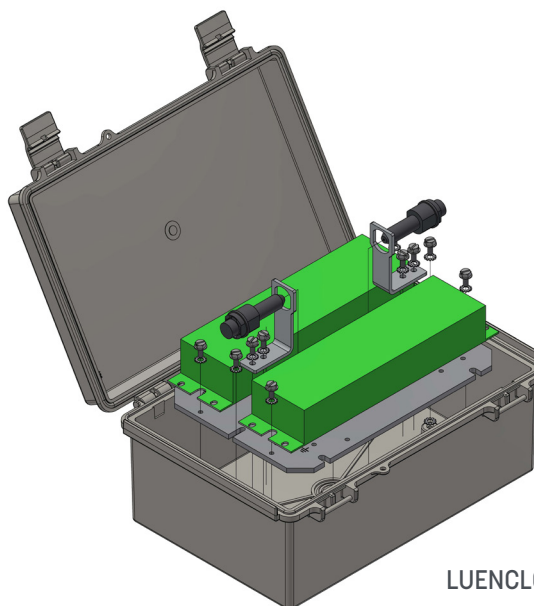
Standard LUENCLOSURE4XPH Configurations

LUENCLOSURE4XPH

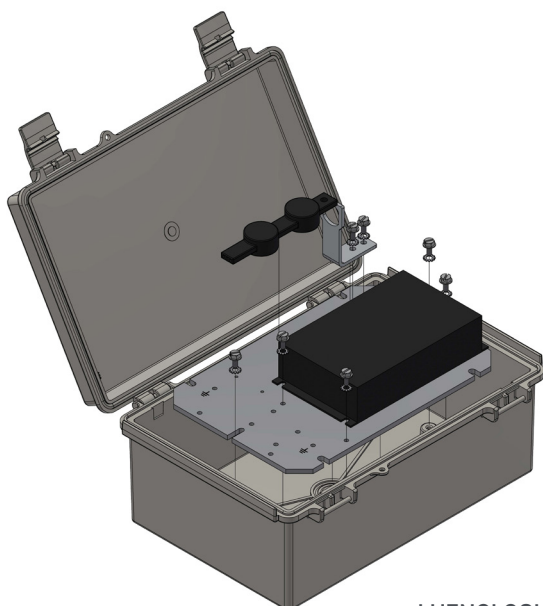
\$ Standard: NEMA 4X, IP67,  
Molded Polycarbonate  
10.03 x 7.08 x 4.92



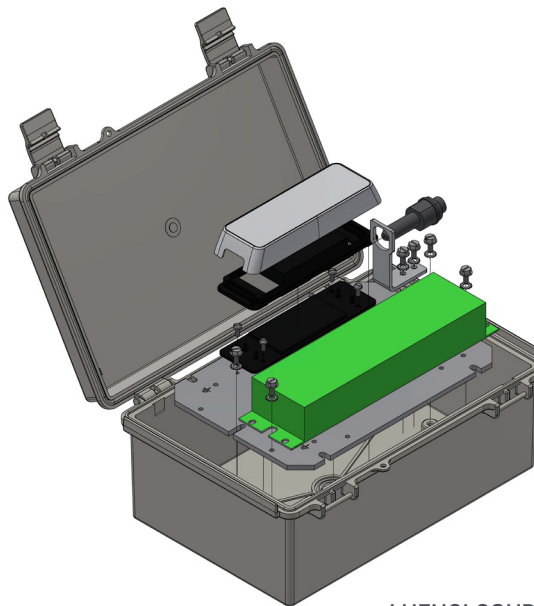
LUENCLOSURE4XPH  
LUDRIVERDM100WACE



LUENCLOSURE4XPH  
LUDRIVERDM100WACE



LUENCLOSURE4XPH  
LUDRIVERDM100WUSA  
LUSURGEKIT



LUENCLOSURE4XPH  
LUDRIVERDM100WACE +  
LUCNTDALIELD  
LUFUSEKIT



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## Installation Instructions

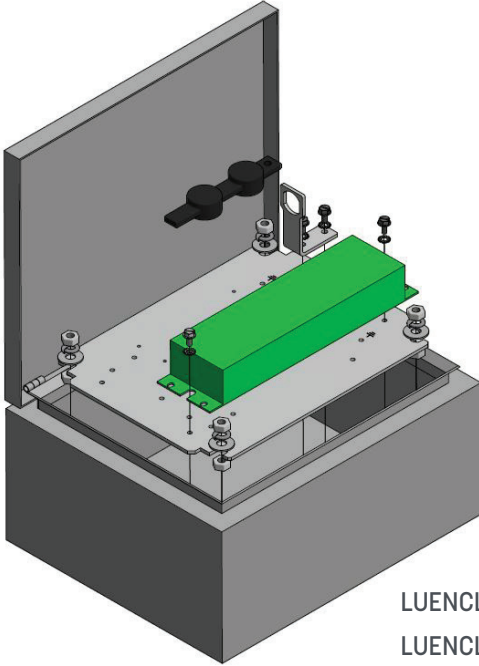
Upgrade LUENCLOSURE4XM or LUENCLOSURE4XSS Configurations

### LUENCLOSURE4XM

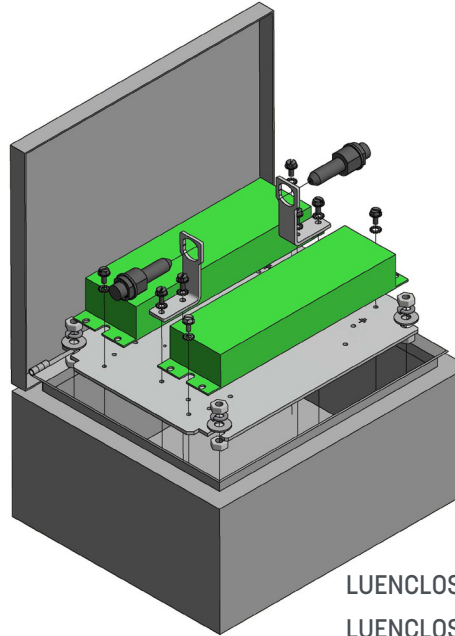
\$\$ Option: NEMA 4X, IP65  
Painted Steel  
11.81 x 9.84 x 5.91

### LUENCLOSURE4XSS

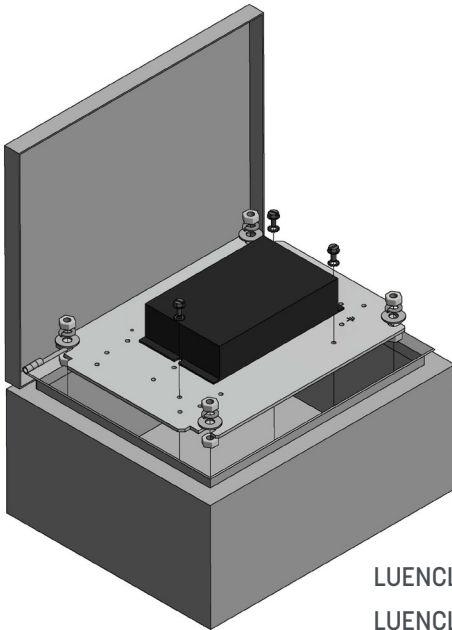
\$\$\$ Option: NEMA 4X IP65,  
Stainless Steel  
11.81 x 9.84 x 5.91



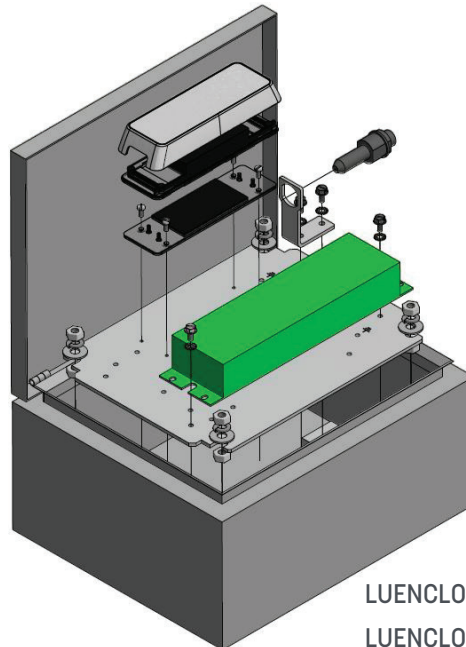
LUENCLOSURE4XM or  
LUENCLOSURE4XSS  
LUDRIVERDM100WACE  
LUSURGEKIT



LUENCLOSURE4XM or  
LUENCLOSURE4XSS  
LUDRIVERDM100WACE  
LUFUSEKIT



LUENCLOSURE4XM or  
LUENCLOSURE4XSS  
LUDRIVERDM100WUSA



LUENCLOSURE4XM or  
LUENCLOSURE4XSS  
LUDRIVERDM100WACE  
+ LUCNTDMXELD  
LUFUSEKIT



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