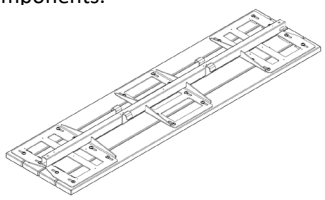
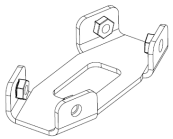
Included Components:



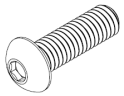
Rail Top (1)

Metal Support (2)

Footrest (1)



Connection Bracket (1)

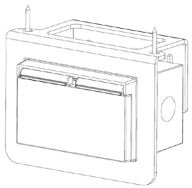


3/8-16 x 1-1/4" Socket Button Head Cap Screw (4)

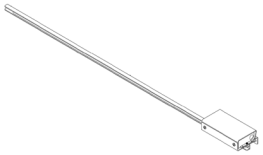
¼-20 x ¾"Flanged Button Head Cap Screw (4)

3/8 Washer (4)

Rail Options:



Power Kit



Lighting Kit

Tools Required

- Safety Glasses
- 7/32" Hex Key
- 5/32" Hex Key

Required surface mount components

- (4) Ø3/8" non-corrosive anchors (or 2 anchors per metal support).
- Non-corrosive washers for leveling. Up to (2) per metal support.
- Compressed air for clearing holes of debris

PROCEDURE FOR INSTALLATION:

Note: DO NOT DRAG rail across concrete or other rough surfaces. This could damage the powder coat finish.

Note: All rails will include connecting brackets, and any rail style is capable of connecting to one another. Consult plans and set rails in approximate locations before beginning assembly.

PROCEDURE FOR SINGLE SEGMENT RAIL:

1. Set bench top upside down on protective padding.
2. Install one metal support and footrest with 2 screws and washers. Tighten fully. *See Fig. 1.*
3. Install second metal support with 2 screws and washers. Tighten fully. *See Fig. 2.*
4. Set rail in position.
5. Mark anchor hole locations using the feet at the bottom of the metal supports. Move rail and drill holes. *See Fig. 5.*
6. Clear holes of debris and move rail back in position.
7. Install anchors according to anchor manufacturer's instructions.

PROCEDURE FOR MULTI-SEGMENT RAIL:

1. Refer to site plans for rail layout (provided by customer).
2. Set rail tops and supports in correct orientation and approximate position on site.
3. Starting with first segment, Mark anchor hole locations. Move rail and drill holes.
4. Clear holes of debris and move rail back in position.
5. Install anchors according to anchor manufacturer's instructions.
6. Install connecting bracket to metal support with 2 screws. *See Fig 3.*
7. Repeat steps 3 - 5 for the next segment.
8. Install 2 screws and washers to opposite side of first bracket. Fully tighten. *See Fig 4.*
9. Repeat process for remaining segments.

PROCEDURE FOR LEVELING

Note: Customer to provide washers needed for leveling**.** Utilize corrosion resistant washers up to 1/4" thick.

1. Once anchors are installed, place (1) washer on the necessary anchor locations. Washer should be between grade and the foot of the metal support.
2. Fasten rail to anchors.

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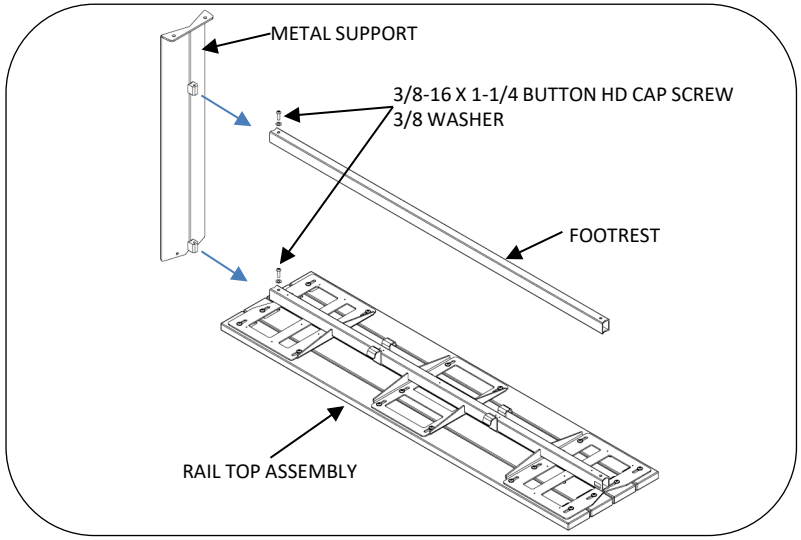

Fig. 1 – Install metal support to rail top and footrest with two (2) 3/8-16 X 1-1/4 BUTTON HD CAP SCREWS and two (2) 3/8 WASHERS.

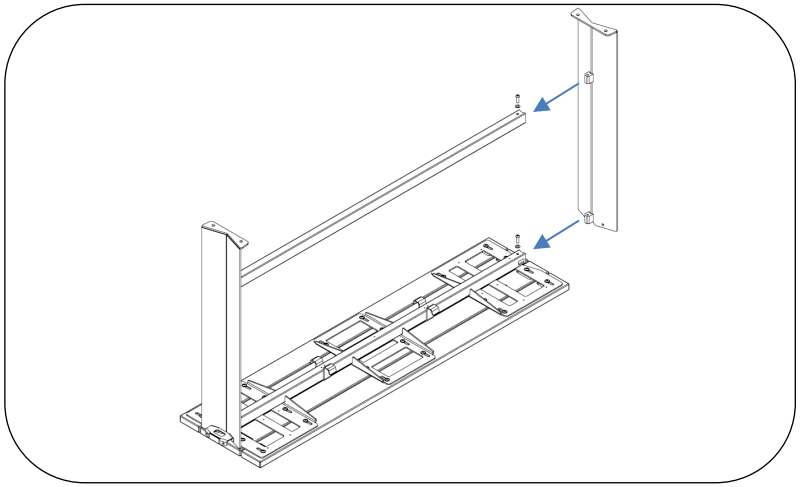

Fig. 2 – Install second metal support to rail top and footrest with two (2) 3/8-16 X 1-1/4 BUTTON HD CAP SCREWS and two (2) 3/8 WASHERS.

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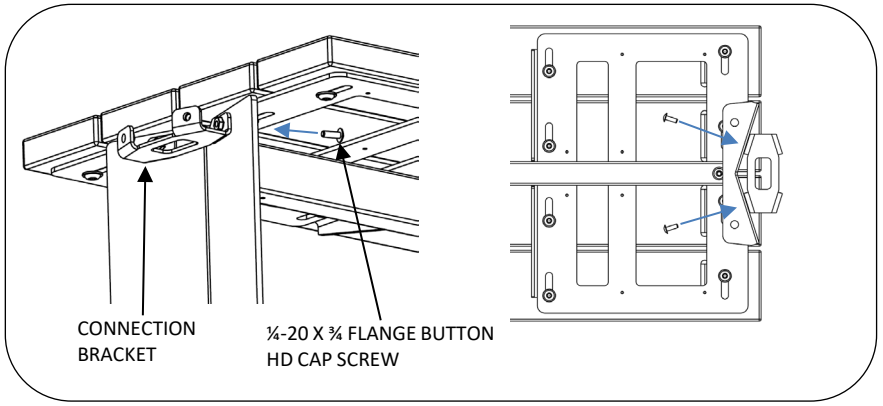

Fig. 3 – Install optional Connection Bracket at the top of the metal support with two (2) ¼-20 X ¾ FLANGE BUTTON HD CAP SCREWS.

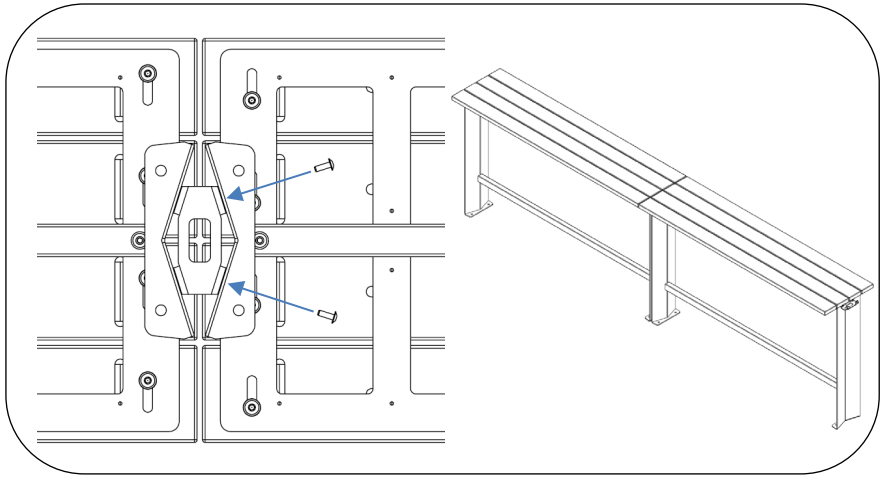

Fig. 4 – Connect next rail segment with two (2) ¼-20 X ¾ FLANGE BUTTON HD CAP SCREWS to Connection Bracket.

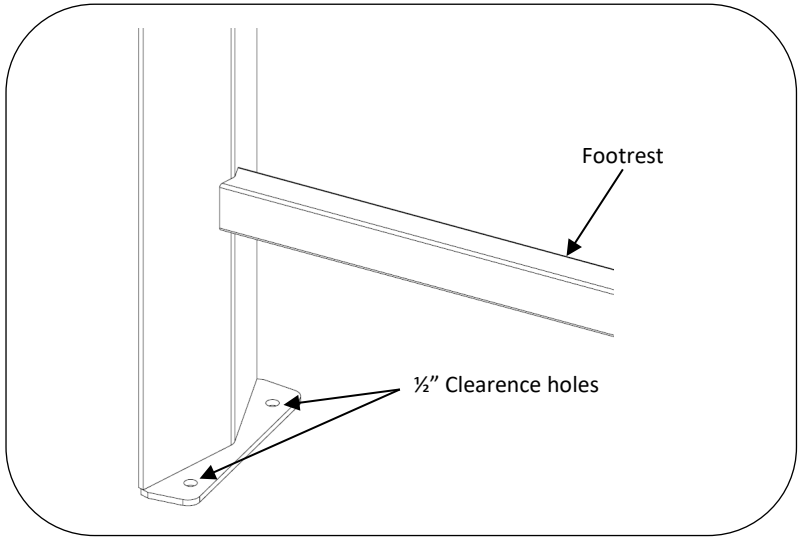

Fig. 5 – Surface mount location

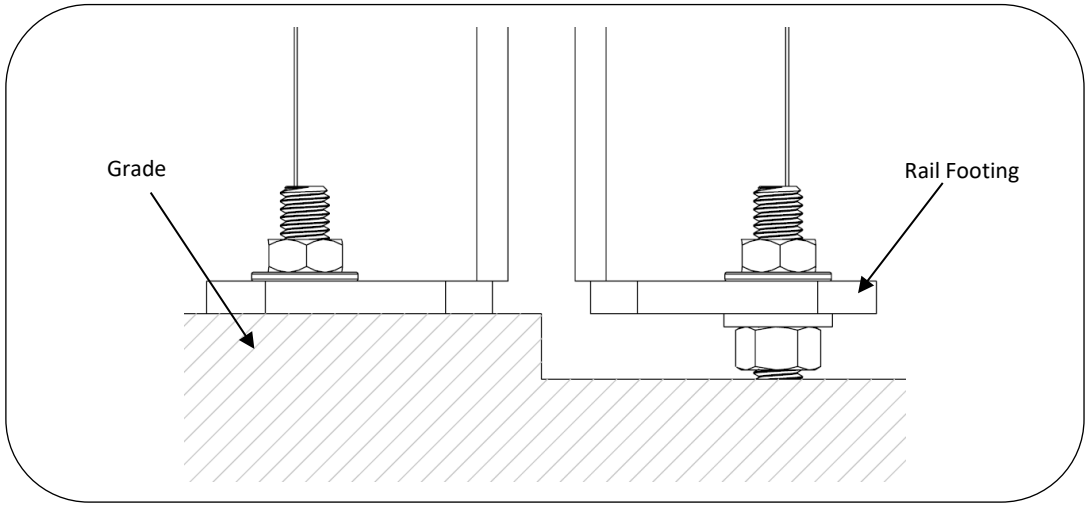

Fig. 6 – Link Rail Footing install example.

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OPTIONS FOR LEVELING BETWEEN RAIL SEGMENTS:

1. FOR GRADE VARIATION OF .125" OR LESS
    1. Mount rail in place utilizing a concrete anchor of choice.
    2. Utilize a 3/8" washer of desired thickness to raise the height of the foot. MUST USE WASHER WITH HIGH CORROSION RESISTANCE.
    3. Fasten rail to anchors.

2. FOR GRADE VARIATION GREATER THAN .125". *See Fig 6.*
    1. Mount rail in place utilizing an anchor or threaded rod that is embedded or epoxied in place.
    2. Install a washer and nut on the anchors.
    3. Place rail onto anchors and adjust nuts to set the desired height of the Rail.
    4. Install washer and nut onto anchor over the foot to fasten into place.

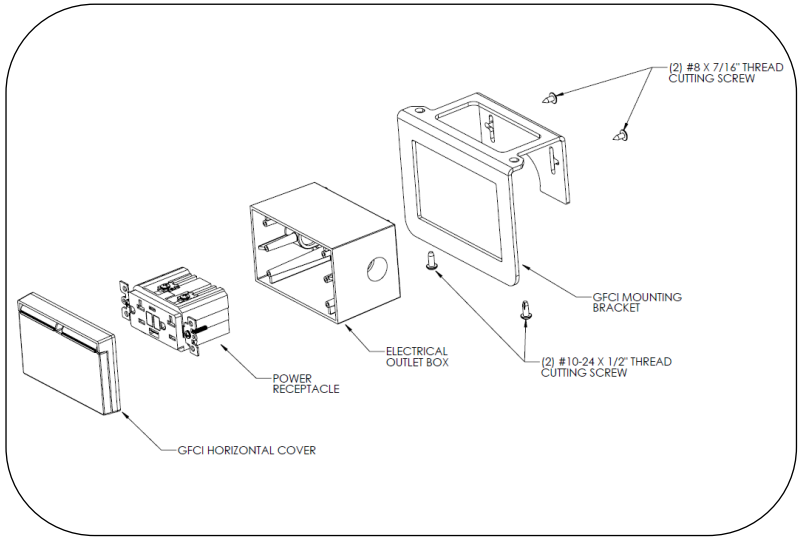

Fig. 7 – Power Kit exploded view

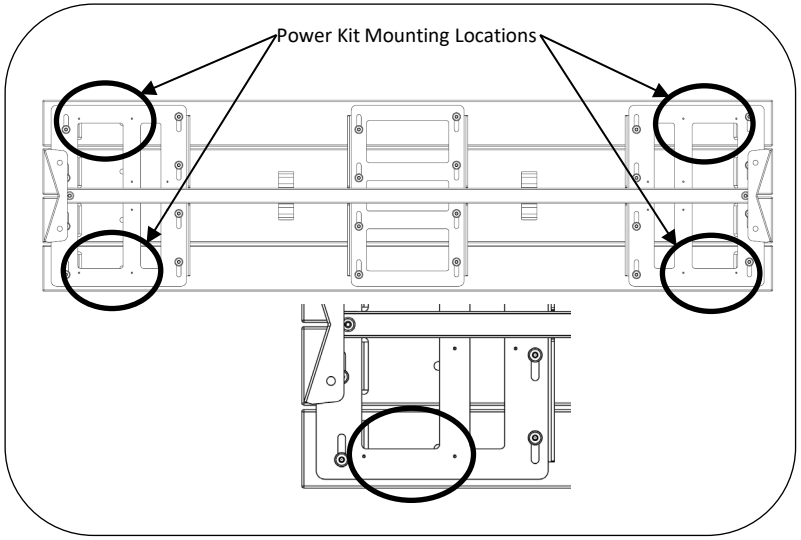

Fig. 8 – Possible Power Kit mounting locations at each corner of the rail.

PROCEDURE FOR INSTALLATION:

Note: The Link Rail has up to four possible mounting locations for the Power Kit.

PROCEDURE FOR POWER KIT:

1. Determine the appropriate conduit hole where incoming power will run through and install the 1/2 NPT liquid-tight fitting (provided by others) according to the manufacturer's instructions. Install 1/2 NPT liquid-tight plugs (provided by others) for the other two unused holes.
2. Run incoming power through the liquid-tight fitting and connect to the power receptacle according to the markings on the power receptacle.
3. Tighten the liquid-tight fitting according to the manufacturer's instructions.
4. Install the power receptacle to the electrical box with include #8 X 7/16" THREAD CUTTING SCREWS. *See Fig. 9.*
5. Install the cover to the receptacle and the electrical box to the power bracket.
6. Mount the Power Kit to the one of the desired locations on the underside of the rail with two (2) #10-24 X 1/2" THREAD CUTTING SCREWS (included). *See Fig. 10 and 11.*

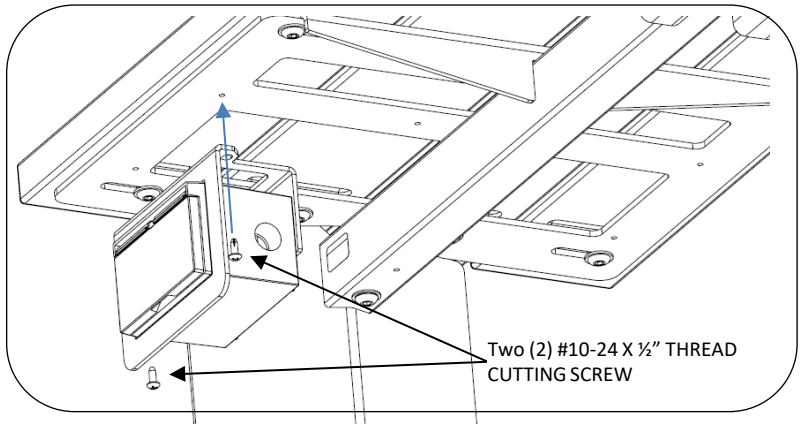

Fig. 9 – Mount the Power Kit to the desired location with two (2) #10-24 X ½" THREAD CUTTING SCREWS.

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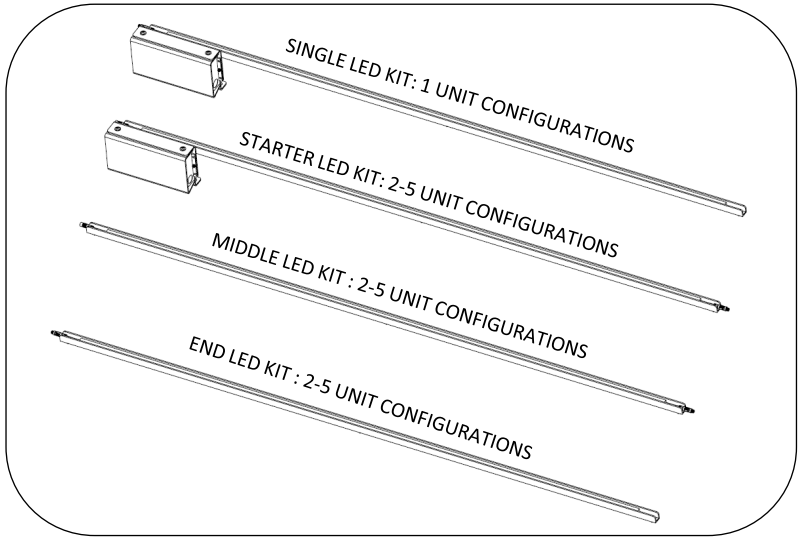

Fig. 10 – Four (4) possible LED KITS utilized depending on layout of Link Rails.

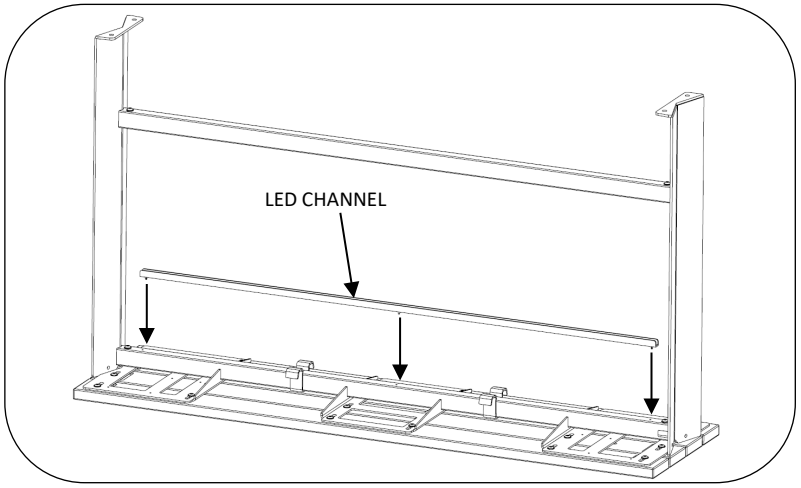

Fig. 11 – Mount LED CHANNEL with three (3) #10-24 x ½" THREAD CUTTING SCREWS.

PROCEDURE FOR INSTALLATION:

Note: The Link Rail has up to four (4) possible mounting locations for the driver. One driver can power up to five (5) LED light segments. LED lights include 24" input and/or output leads.

PROCEDURE FOR LIGHTING KIT INSTALL:

1. Mount the LED channel to the underside of the rail with three (3) provided #10-24 x ½" THREAD CUTTING SCREWS. *See Fig. 11.*
2. Mount the Driver Mounting Bracket in the desired location underneath the rail with two (2) provided #10-24 x ½" THREAD CUTTING SCREWS. Up to four (4) possible mounting locations are available. *See Fig. 12.*
3. Mount the LED Driver to the Driver Mounting Plate using the provided #6 screws, nuts, and washers. The orientation of the driver should have the AC Input closest to the leg. *See Fig. 13.*
4. Remove the backing from the two (2) pieces of VHB inside the LED Channel. Adhere the LED strip to the VHB with the input nearest the driver OR nearest output of prior LED strip.
5. Connect LED strip input to the driver output or LED output with barrel connector. Utilize cable ties to secure any excess cable. *See Fig. 16.*
6. Wiring LED driver:
    a. Locate the LED driver and uninstall the LED driver wiring compartment cover with a Phillips screwdriver. *See Fig 17.*
    b. Use a screwdriver and rubber hammer to knock out the appropriate conduit hole where incoming power will run through and the cord grip hole for wiring to the light.
    c. Install the liquid-tight conduit fitting (provided by others) according to the manufacturer's instructions.
    d. The installed LED driver supports either 0-10VDC external signal control or phase dimming. Run incoming power and signal (optional) wiring through the liquid-tight bulkhead fitting and connect to the LED driver according to the wiring diagram (Incoming power to LED Driver). If using the phase dimming control option, connect the output of the phase dimmer (not included) to the input of the LED driver. If neither option is used the lights will operate at maximum brightness. *See Fig 18.*
    e. Tighten the liquid-tight bulkhead fitting according to the manufacturer's instructions.
    f. Secure the appropriately sized cord grip to the housing of the driver for water light installation.
    g. Reinstall the LED driver wiring compartment cover.
7. Install Driver Mount Cover with two (2) provided #10-24 x ½" THREAD CUTTING SCREWS and #10 WASHERS. *See Fig. 14.*

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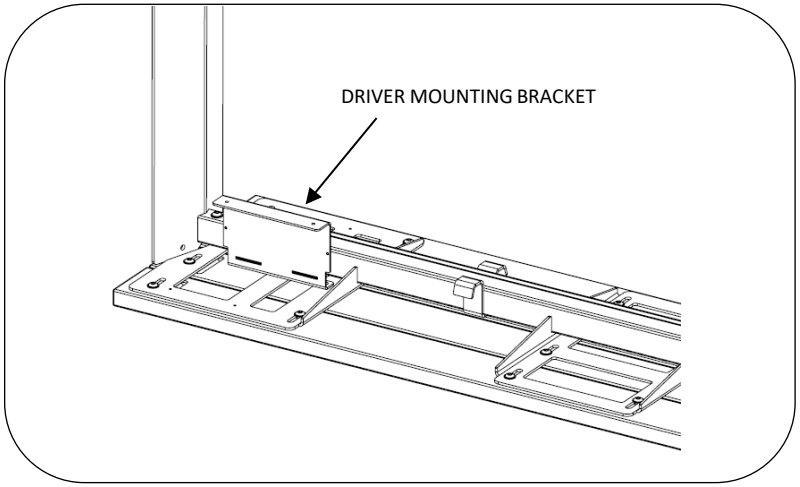

Fig. 12 – Install DRIVER MOUNT BRACKET with two (2) #10-24 x ½" THREAD CUTTING SCREWS.

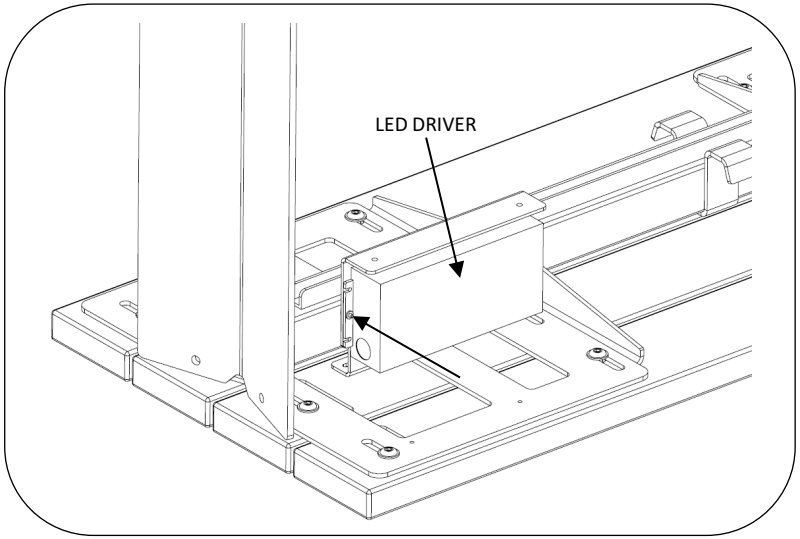

Fig. 13 – Mount LED DRIVER to the Driver Mounting Plate using the provided #6 screws, nuts, and washers.

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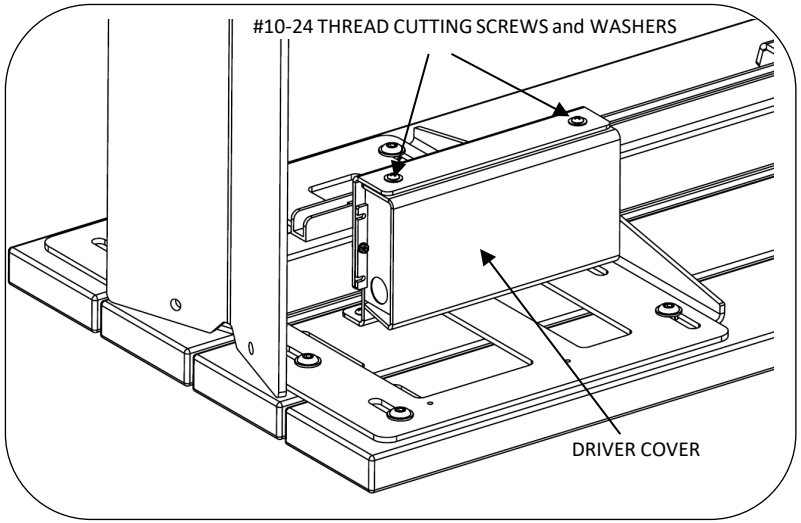

Fig. 14 – Install DRIVER MOUNT BRACKET with two (2) #10-24 x ½" THREAD CUTTING SCREWS and WASHERS.

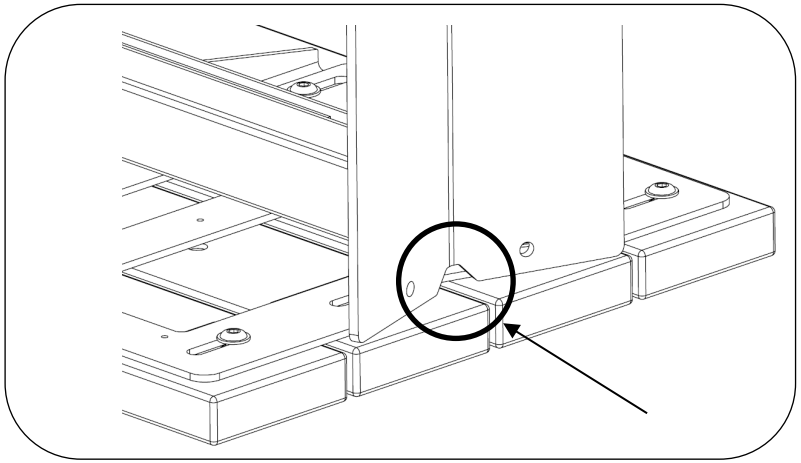

Fig. 15 – Notch in leg for routing LED inputs and outputs when connecting multiple Link Rail segments.

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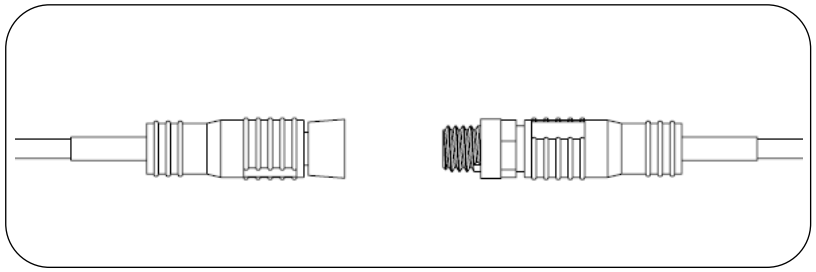

Fig. 16 – IP67 Rated Wire Connector

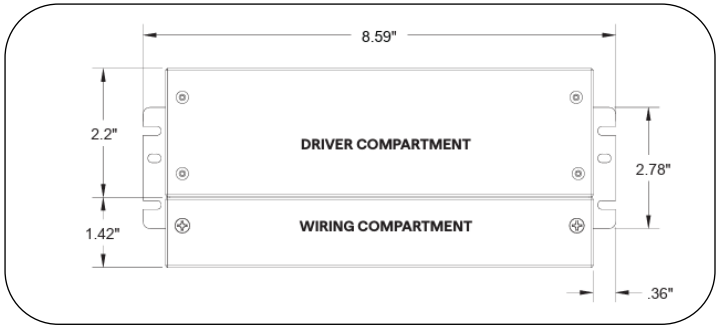

Fig. 17 – QTL 96W PH/0-10V Dimming Driver

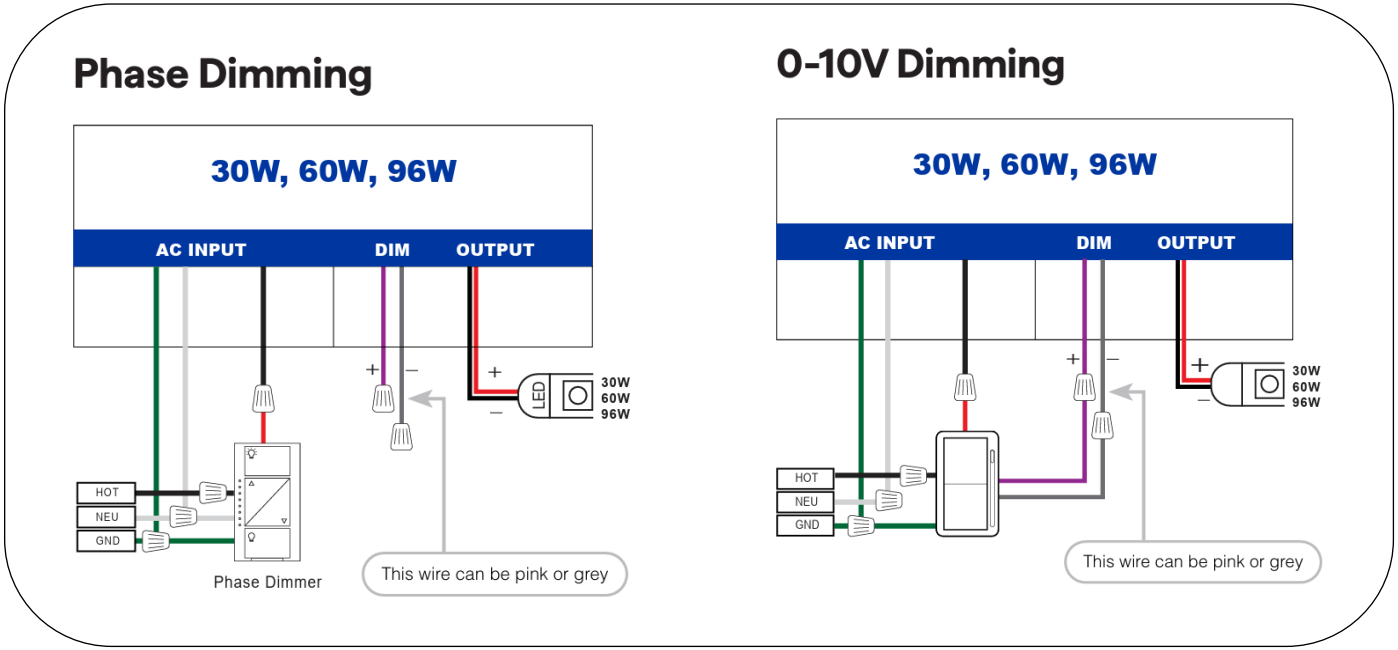

Fig. 18 – Wire diagrams for Phase Dimming and 0-10V Dimming.

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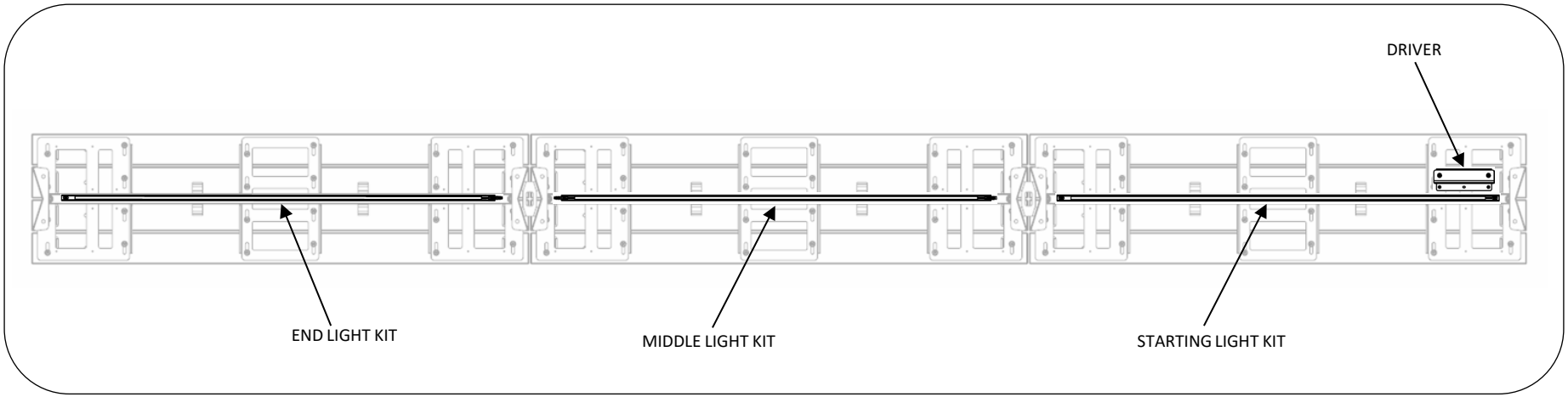

Fig. 19 – Configuration of three (3) Link Inline Bar Rails with a STARTING LIGHT KIT, MIDDLE LIGHT KIT, and END LIGHT KIT