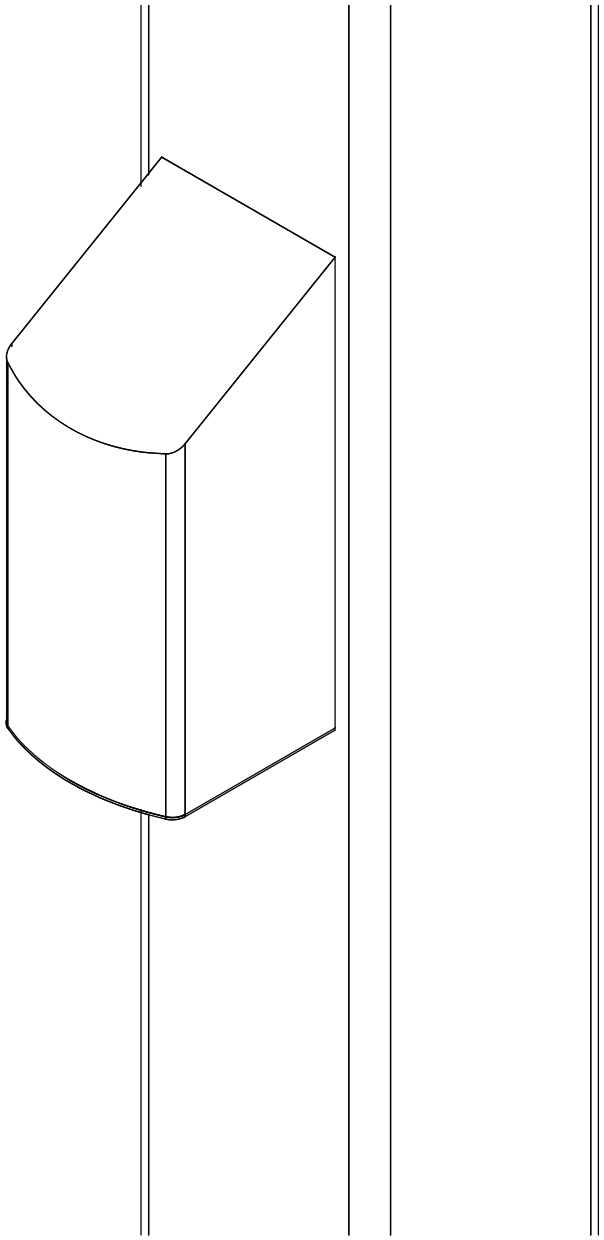
DesignRail® 24V LED Post Accent Light

Installation Instructions

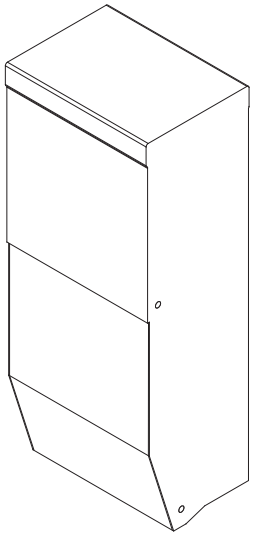


Drivers are available in a variety of wattages. In general a driver should not exceed more than 80% of its rated wattage. (Example: 60W Driver = 60 x 0.8 = 48W Max).

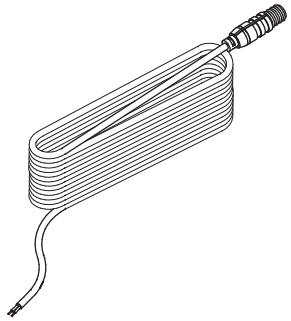
Building codes vary by location and jurisdiction. Consult all applicable codes before installing DesignRail® LED Lighting. DesignRail® LED Lighting may not be suitable for every application and it is the sole responsibility of the installer to ensure that DesignRail® LED Lighting is used for its intended purpose.

WARNING: ELECTRIC SHOCK IS ALWAYS POSSIBLE WHEN WORKING WITH ELECTRICITY. THIS CAN CAUSE SERIOUS PERSONAL INJURIES OR DEATH. ELECTRICAL SHORTS CAN ALSO CAUSE FIRES AND PROPERTY DAMAGE. ALWAYS MAKE SURE THE ELECTRICAL OUTLET YOU ARE PLUGGING INTO IS GROUNDED.

LED Lighting - Driver Kits



24V MAGNETIC DIMMABLE DRIVER
(SKU #LED : 40W, LED : 60W, LED : 96W)



LED STARTER CABLE (20')
(SKU #LED : STC)

ISOLATION BUSHING
(SKU #1114)

WIRE NUTS
(PAIR)
(SKU #7670)

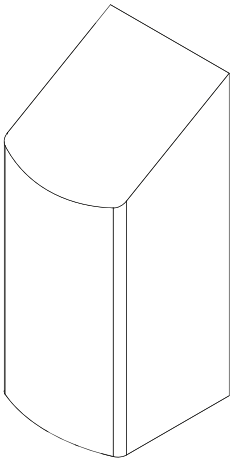
KIT CONTENTS

40W Driver Kit
(SKU #LED : 40W-DK)
1x 40 Watt Dimmable Driver
1x Starter Cable (20')
1x Wire Nuts (Pair)
1x Isolation Bushing

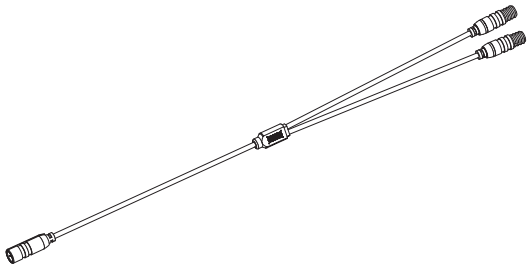
60W Driver Kit
(SKU #LED : 60W-DK)
1x 60 Watt Dimmable Driver
1x Starter Cable (20')
1x Wire Nuts (Pair)
1x Isolation Bushing

96W Driver Kit
(SKU #LED : 96W-DK)
1x 96 Watt Dimmable Driver
1x Starter Cable (20')
1x Wire Nuts (Pair)
1x Isolation Bushing

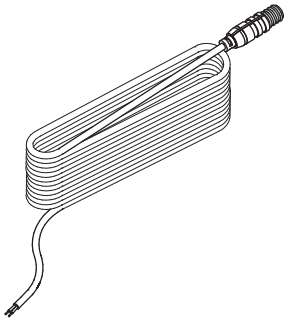
Post Accent Light - Components



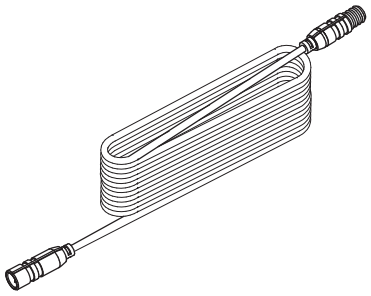
POST ACCENT LIGHT
(SKU #LED : PAL)



LED 2-WAY SPLITTER
(SKU #LED : 2WAY)



LED STARTER CABLE (20')
(SKU #LED : STC)



LED EXTENSION CABLE (132")
(SKU #LED : EXT132)

Step 1 - Install Drivers

Step 1A – Connect Source Power to Driver

IMPORTANT SAFETY NOTE: TO REDUCE RISK OF ELECTRICAL SHOCK, TURN OFF AC CIRCUIT BREAKER PRIOR TO COMMENCING ANY ELECTRICAL WORK AND CONNECTING DRIVER(S) TO AC POWER SOURCE. VERIFY THAT LIVE POWER IS NOT PRESENT AT JUNCTION BOX WHEN MAKING CONNECTIONS.

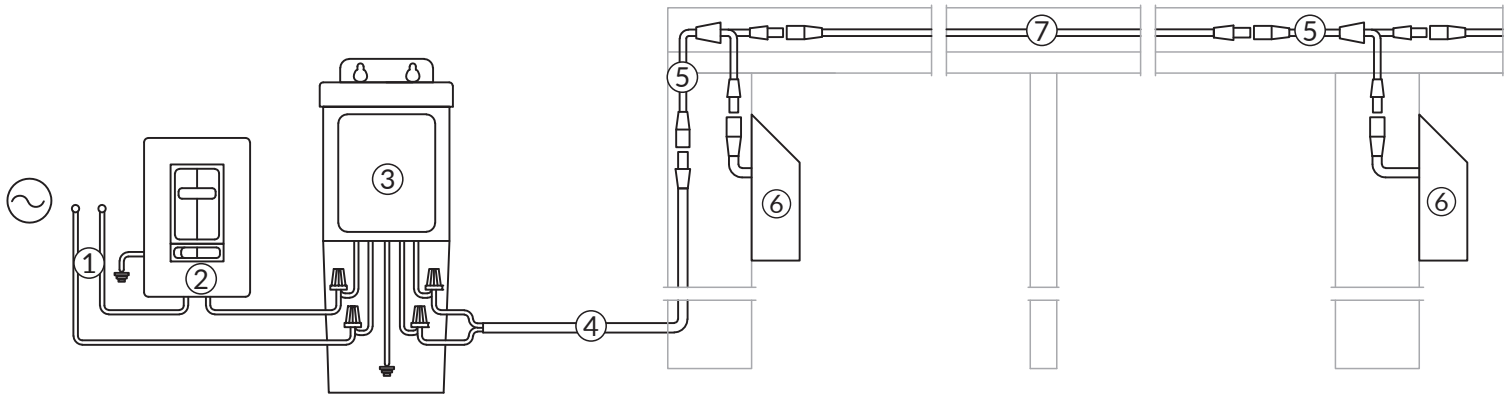
Determine location of driver.

Note: It is best to locate the drivers as close as possible to the lighting to reduce the possibility of voltage drop occuring. If possible, the driver should be within 15 feet of the post that will accept the 20' starter cable.

Route exterior rated wiring from compatible dimmer switch/AC power source to location of driver.

Connect drivers to dimmer switch/AC power source.

Connect 20' starter cable and route from driver to post using supplied wire nuts.



POST ACCENT LIGHT - WIRING DIAGRAM

LIGHTING COMPONENTS:

① Power (by customer)
② Light Switch (by customer) [1]
③ 24v Dimmable Driver [2]
④ LED Starter Cable (20')
⑤ LED 2-Way Splitter
⑥ LED Post Accent Light
⑦ LED Extension Cable (132")

1. Mount vertically only. See Switch Compatabilty Spec Sheet at www.feeneyinc.com
2. See Driver Spec Sheet at www.feeneyinc.com

Step 1B - Drill Posts and Route Starter Cable

Determine the post that will act as the starting post, this will likely be designated on the lighting layout schematic received with the order. Installing the starter cable through the post is easiest when done prior to mounting the post.

Determine the location that the starter cable will enter the starting post.

Note: Depending on the post mounting method, and driver location relative to the post, the starter cable entrance point may vary. (See Figure 1.2 for typical recommendations)

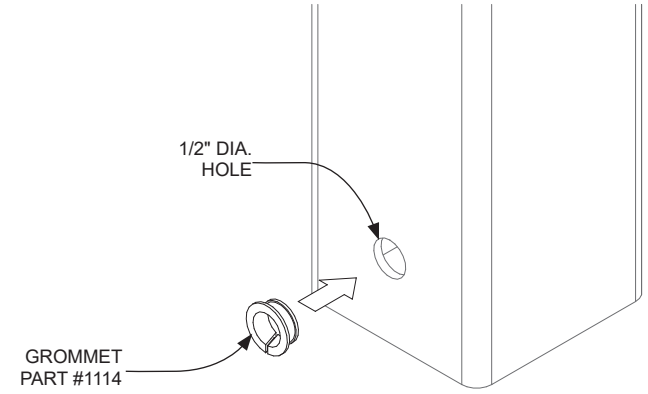


Figure 1.1

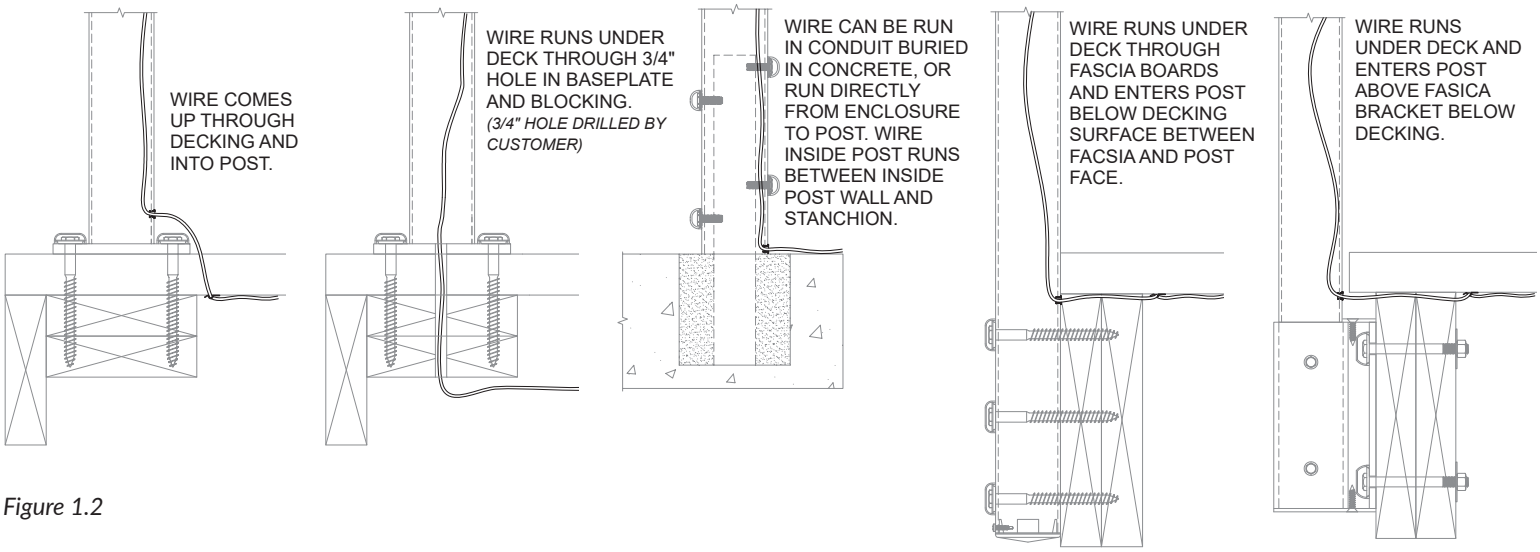


Figure 1.2

For systems with Series 200, 300, 350, or 450 top rail:

Fish the connector for the starter cable through the post and out of the top, and attach LED 2-Way Splitter to Starter Cable *(See Figure 1.3).*

IMPORTANT NOTE: Maintaining the polarity at all connection points is critical. Constant alignment verification of the of the positive and negative signs will guarantee less problems and rework.

Use masking tape to temporarily secure starter cable to outside of post to prevent retracting back into post.

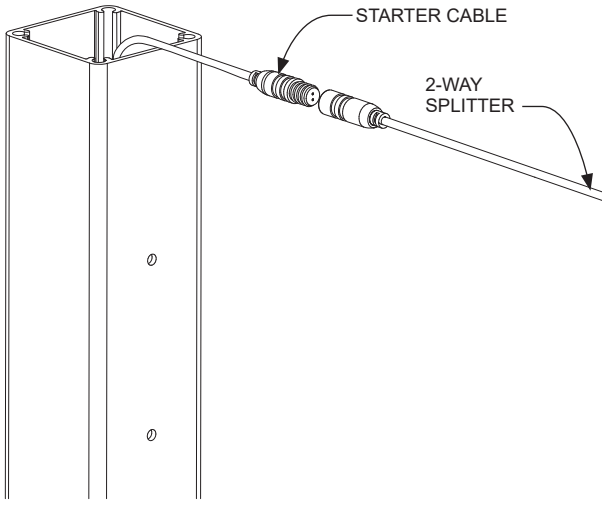
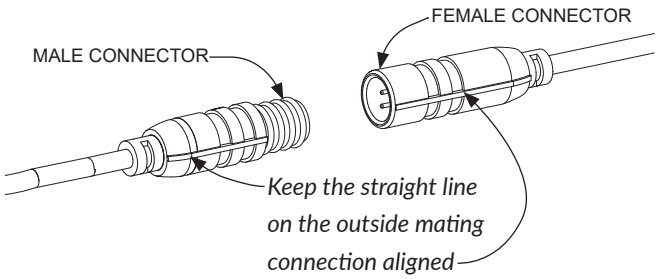


Figure 1.3



Step 1B – Continued

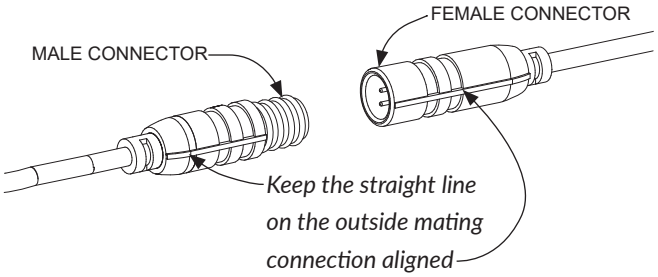
For systems with Series 150 top rail:

Drill a 1/2” diameter hole vertically centered between the factory pre-drilled top rail RCB holes. This will allow the LED 2-way splitter and LED extension cable to pass through the RCB hollow *(See Figure 1.4).* Repeat this step for each post which will have post accent lights installed. For stair posts, pre-drill top rail RCB holes as needed, and then pre-drill 1/2" diameter hole.

Pull one branch of the LED 2-way splitter out through drilled hole between RCB holes, and attach LED Extension Cable to the other branch *(See Figure 1.5).*

> *IMPORTANT NOTE:* Maintaining the polarity at all connection points is critical. Constant alignment verification of the of the positive and negative signs will guarantee less problems and rework.

Use masking tape to temporarily secure starter cable to outside of post to prevent retracting back into post.



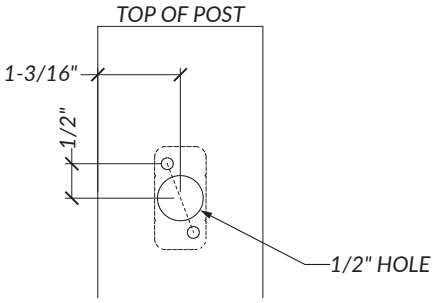


Figure 1.4

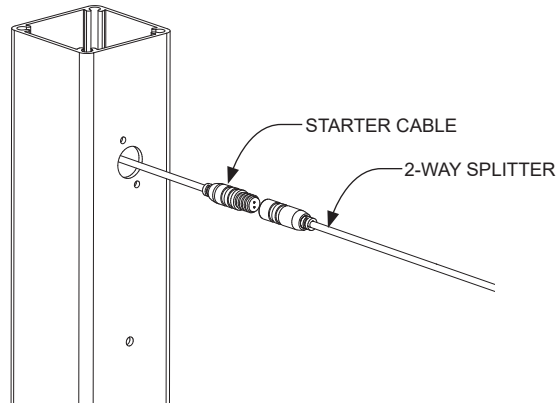


Figure 1.5

Step 2 - Prepare Posts and Run Wiring

Step 2A – Prepare Post for Mounting Plate

Locate the mounting plate in the desired location on the post. Place the top of the plate at least 4-1/2” down from the top of the post. Using the mounting plate as a guide, mark the locations of the four mounting holes, and the lead wire hole *(See Figure 2.1).*

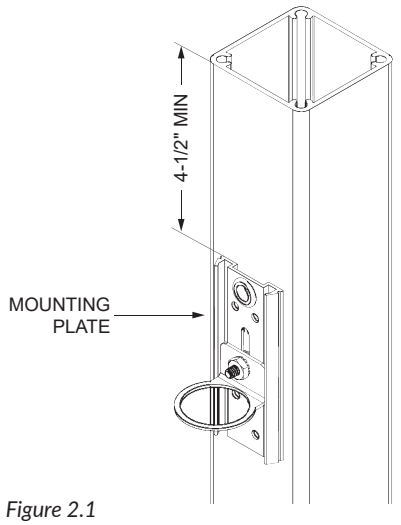


Figure 2.1

Set the mounting plate aside. Pre-drill the four mounting pilot holes using a 1/8” diameter drill bit. Pre-drill the lead wire pilot hole using a 1/2” diameter drill bit *(See Figure 2.2).*

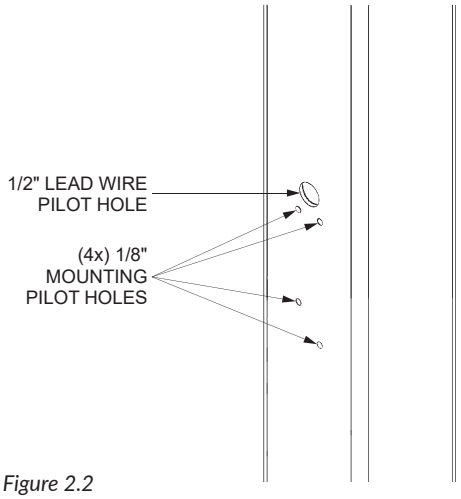


Figure 2.2

Step 2B – Run Wiring

For systems with Series 200, 300, 350, or 450 top rail:

String an extension cable between each post, and connect a 2-way splitter. Feed one branch of the splitter out through the 1/2" lead wire pilot hole drilled in the previous step, this becomes the lead wire for the light at this post. Feed the other branch of the 2-way splitter over the top of the post and connect an extension cable *(See Figure 2.3).*

Note: A 2-way splitter does not need to be used at the final post, as the extension cable will connect to the final light to complete the circuit.

Use masking tape to temporarily secure lead wire to outside of post to prevent retracting back into post.

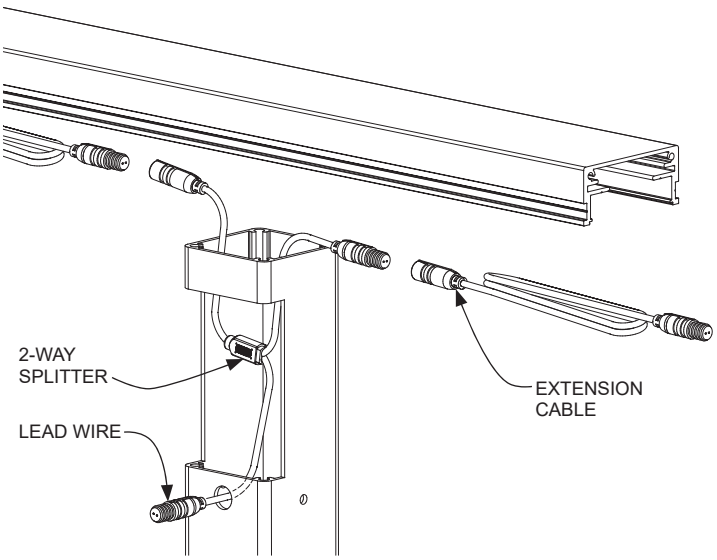


Figure 2.3

Step 2B – Continued

For systems with Series 150 top rail:

String an extension cable between each post, feeding it through the RCB and 1/2" hole, then connect a 2-way splitter. Feed one branch of the splitter out through the 1/2" lead wire pilot hole drilled in the previous step, this becomes the lead wire for the light at this post. Feed the other branch of the 2-way splitter through the 1/2" hole and the hollow of the RCB and connect an extension cable *(See Figure 2.4).*

Note: A 2-way splitter does not need to be used at the final post, as the extension cable will connect to the final light to complete the circuit.

Use masking tape to temporarily secure lead wire to outside of post to prevent retracting back into post.

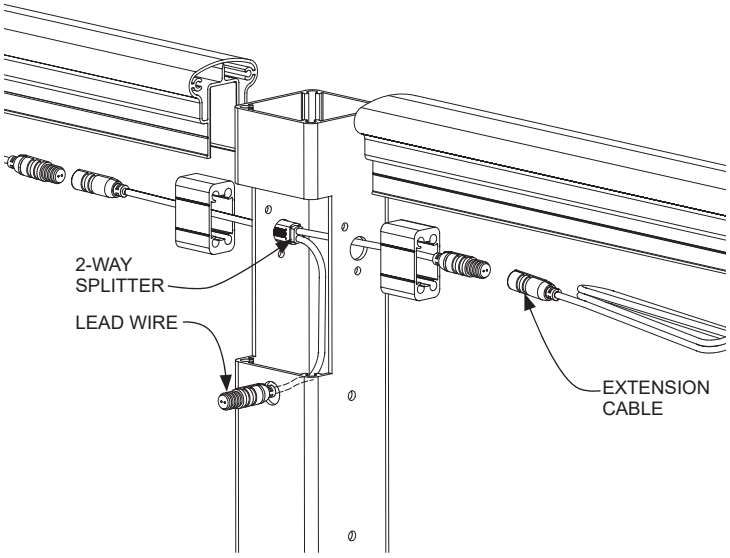


Figure 2.4

Step 3 - Install Post Accent Lights

Step 3A – Attach Mounting Plate

Attach the mounting plate to the post using two of the provided #8 x 3/4” self-tapping screws *(See Figure 3.1).*

Important: Use only the top two mounting holes at this time.

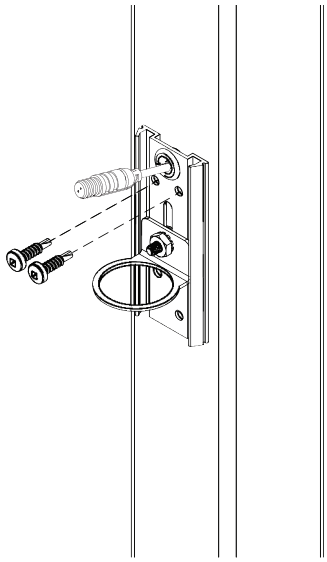


Figure 3.1

Step 3B – Attach LED Array

Feed LED array lead wire through array bracket and attach to splitter branch or . Push excess wiring and connectors back into post through the power source lead wire hole. Insert LED array into bracket and snap into place to secure *(See Figure 3.2).*

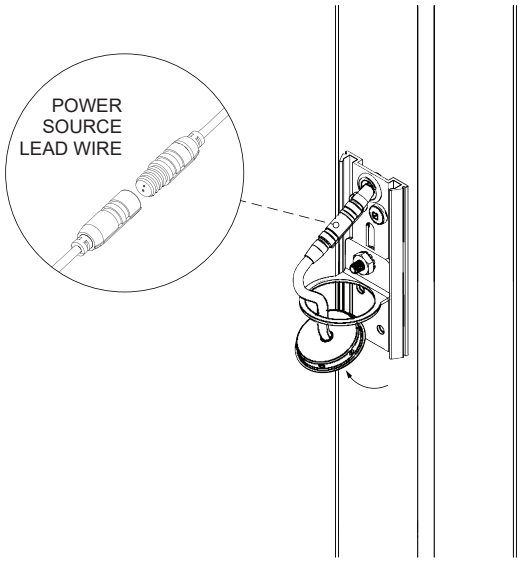


Figure 3.2

Step 3C – Insert Lens

Slide the lens onto the mounting plate, by inserting back plate into angled receiver flanges on mounting plate *(See Figure 3.4).*

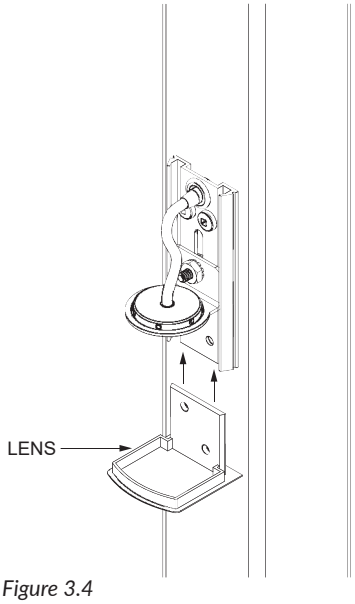


Figure 3.4

Step 3D – Secure Lens

Secure the lens and the mounting plate to the post using two of the provided #8 x 3/4" self-tapping screws *(See Figure 3.5).*

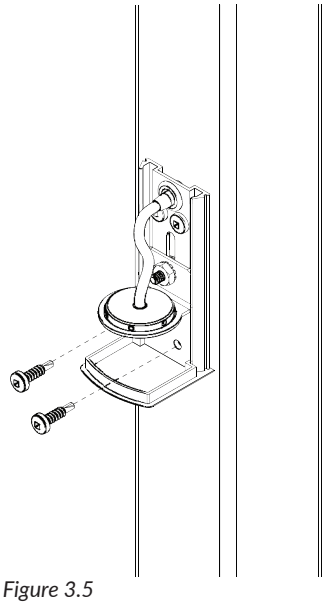


Figure 3.5

Step 3E – Attach Cover

Attach the cover onto the mounting plate by aligning the tabs on the cover with the slot on the sides of the mounting plate and sliding the cover down until it comes into contact with the lens *(See Figure 3.6).*

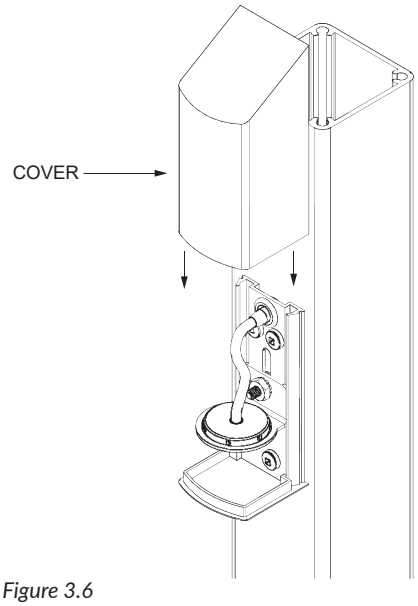


Figure 3.6

Step 4 - Aperature Adjustments (optional)

Step 4A – Loosen LED Array Bracket

Slide the cover upwards on mounting plate, enough to expose the nut on the LED array bracket. Loosen the nut *(See Figure 4.1)*.

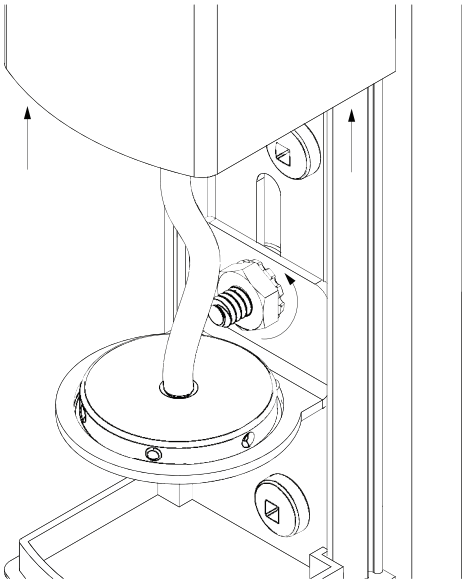


Figure 4.1

Step 4B – Adjust LED Array Bracket

Slide the LED array bracket up or down to acheive desired light aperture *(See Figure 4.2)*.

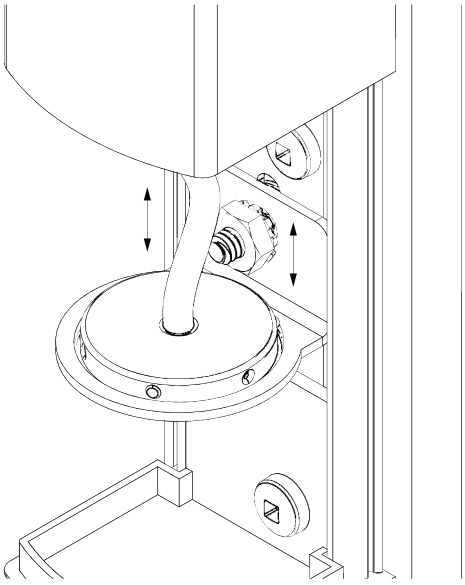


Figure 4.2

Step 4C– Tighten LED Array Bracket

Once the LED array bracket is in the desired location, tighten the nut on the LED array bracket *(See Figure 4.3)*.

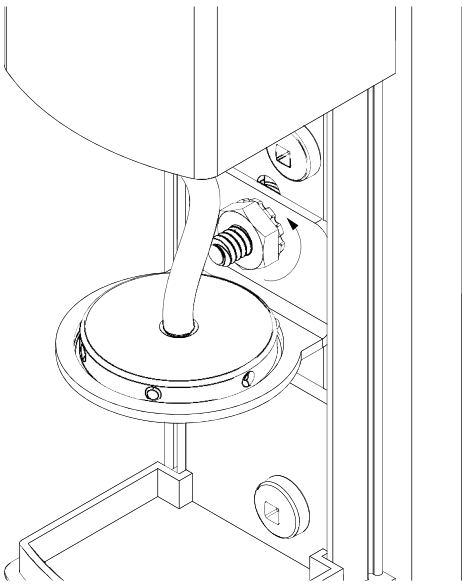


Figure 4.3

Step 4D – Re-attach Cover

Slide the cover down until it comes in contact with the lens *(See Figure 4.4)*.

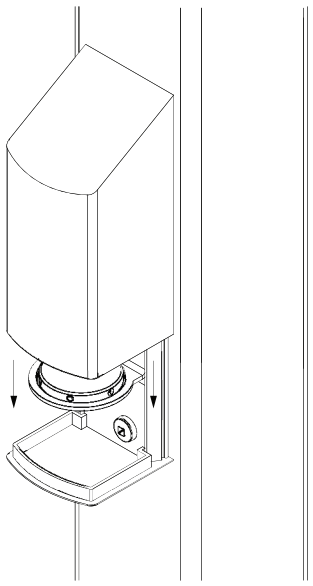


Figure 4.4

LED Post Accent Light - Troubleshooting

Scenario #1 - If all locations do not illuminate, there could be a polarity issue

1. Turn off AC circuit breaker prior to continuing the next procedure.
2. Swap the wires at the driver terminals
3. Replace cover on driver unit
4. Turn on AC circuit breaker
5. Power up the driver and check all LED locations for illumination

Scenario #2 - Some LED locations are illuminated but others are not

1. Note which locations are not illuminating
2. Turn off AC circuit breaker prior to continuing to next procedure
3. Rotate the connector 180 degrees at each noted location where the array is not illuminating
4. Repeat at all noted locations that did not illuminate
5. Turn on AC circuit breaker
6. Power up the driver and check all locations for illumination

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