

INSTALLATION INSTRUCTIONS



MODELS: LED-PHXSD-K8, LED-PHXRS-K8

WARNING

Disconnect power to the operator before beginning installation. Read and understand all instructions prior to starting and retain these instructions for future reference. Phoenix (LED-PHX) must be installed by qualified personnel to ensure compliance with all requirements. Always follow local and national electrical code specifications when wiring accessories to motor controls, and test operation upon completion.

IMPORTANT

Phoenix (LED-PHX) is sensitive to static electricity. Before handling any electronic components, discharge static by touching a grounded metal surface. Handle all power assemblies carefully, avoiding bent connectors, pulled wires, or overtightened fittings. Do not splash or submerge the charging pads. **Use only the supplied 5V power supply connected to 115V line power—damage will result if other power sources are used.**

PRODUCT OVERVIEW

Phoenix is a motion-activated LED alert strip designed to improve safety and awareness for sectional (model: LED-PHXSD-K8) and rolling steel (model: LED-PHXRS-K8) doors. Phoenix signals door movement with bright red, yellow, and green alerts—providing a clear visual status at a glance. **Responsive Activation:** Phoenix is motion-activated, allowing simplified installation with no connection to the door operator. **Charging Pad Technology:** Wireless inductive charging provides up to 60 hours of runtime or approximately 100 door cycles per charge. This eliminates coil cords and retracting reels around moving doors and tracks/guides for added safety and convenience. **Estimated installation time is approximately two-hours with one person.**

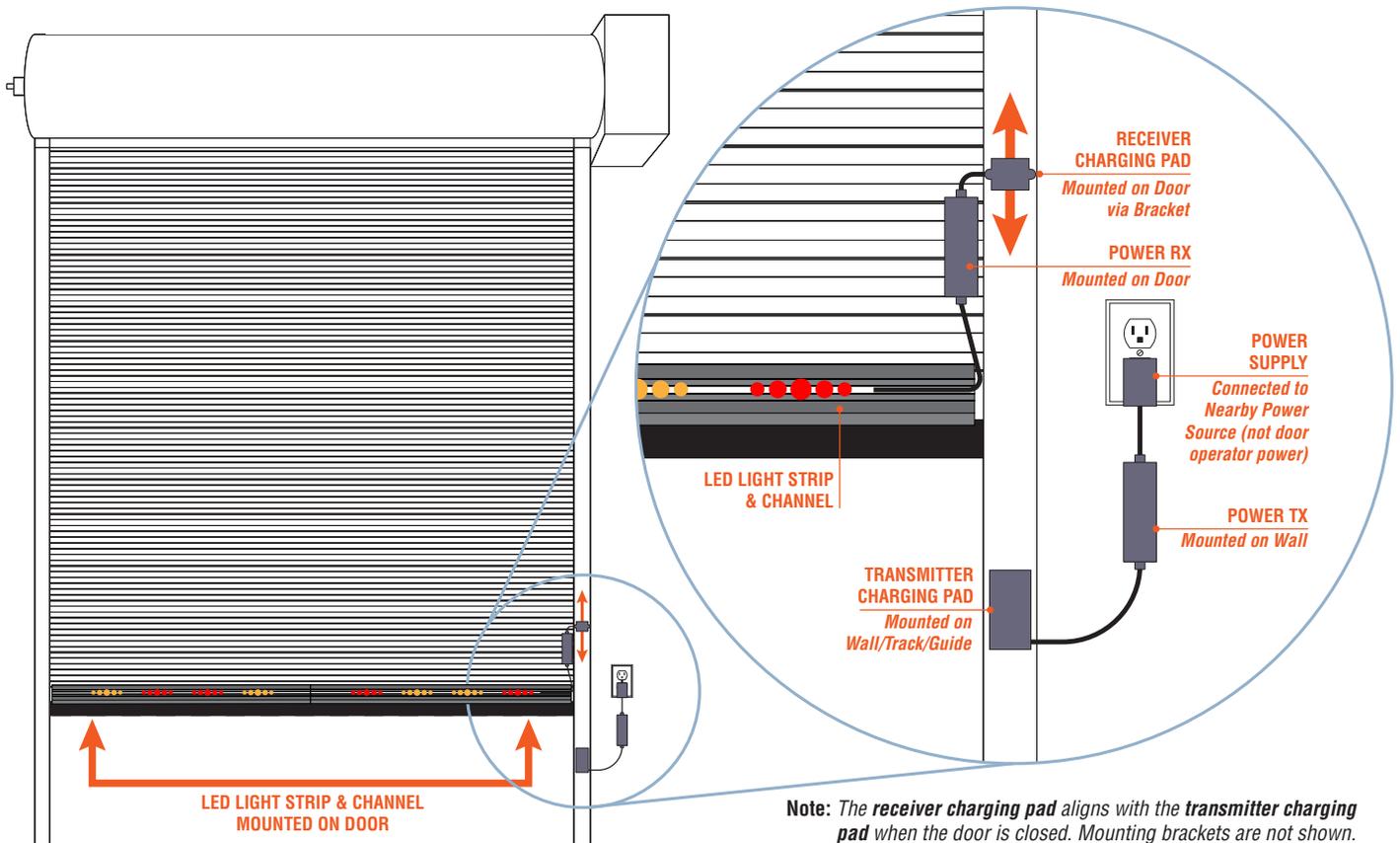
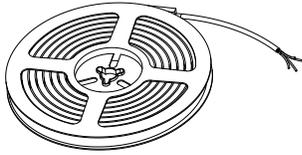


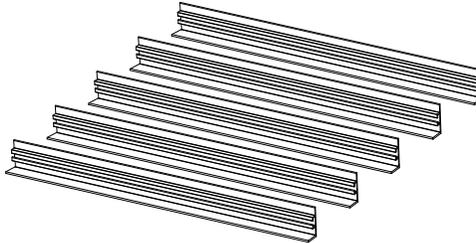
IMAGE 1: VisiLight Phoenix Installed on a Door (Rolling Steel Door Shown as an Example) LED-PHX_inst_20260129

Contents • LED & Mounting Channel

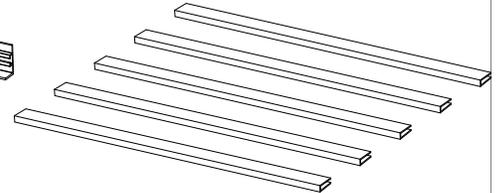
(1) 8-ft. LED Light Strip



(5) 36-in. Universal Channels

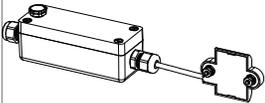


LED-PHXRS-K8 only:
(5) 36-in. Rolling Door Channel Clips



Contents • Power & Charging

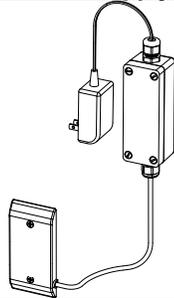
(1) Receiver Charging Pad, Power RX



(1) RX Battery



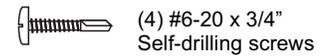
(1) Transmitter Charging Pad, Power TX, Power Supply



Power RX Hardware

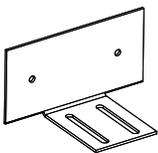


Power TX Hardware

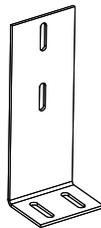


Contents • Sectional Door Brackets for LED-PHXSD-K8 only

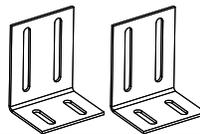
(1) Transmitter Bracket



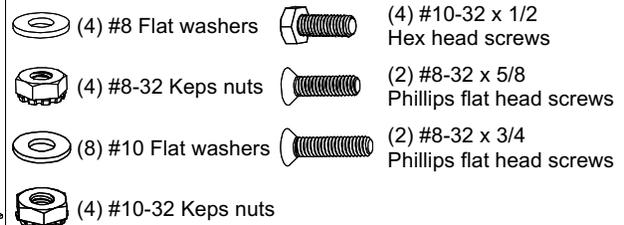
(1) Receiver Bracket



(2) Mounting Brackets

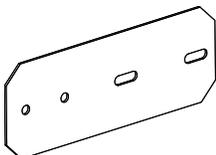


Hardware

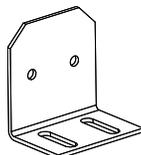


Contents • Rolling Steel Door Brackets for LED-PHXRS-K8 only

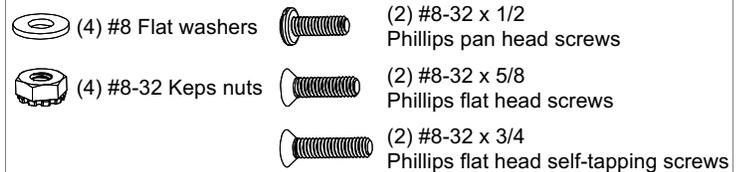
(1) Receiver Bracket



(1) Door Bracket



Hardware



Required

- Hardware for mounting brackets to door, wall, or other surface
- 5/64-in. flathead screwdriver
- 1/4-in. flathead screwdriver

Suggested

- Needle nose pliers
- Marking pencil or pen
- Measuring tape
- Level
- #6 x 1/2-in. screws

Optional

- Cable ties for dressing wires

I. Channel & LED Light Strip Installation

1. Identify these parts before beginning: PAGE 2

- (1) 8-ft. LED Light Strip
- (5) 36-in. Universal Channels
- LED-PHXRS-K8 only: (5) 36-in. Rolling Door Channel Clips

STOP: If installing a sensing edge, install it prior to installing LED-PHX. The added height of the edge may cause the charging pads to misalign if LED-PHX is installed first.

2. Prepare and mount the Universal Mounting Channel:

- a. Position the door at a comfortable working height.
- b. Mount the 36-in. channel sections horizontally across the bottom of the door. Trim the channels—as needed—to match the full width of the door: **IMAGE 1**
 - **Sectional Doors:** Remove the bottom leg of the channel before mounting. Mount using the appropriate fasteners (not provided). **IMAGE 2A**
 - **Rolling Steel Doors:** Mount the universal channels to the bottom bar using the rolling door channel clips. **IMAGE 2B**

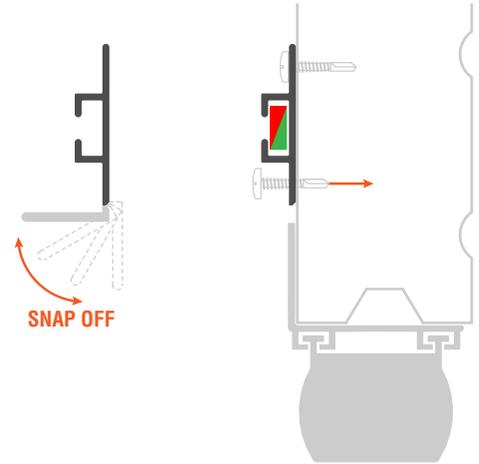


IMAGE 2A: Sectional Door Channel Installation

3. Install the LED Light Strip:

- a. Determine which side of the door (left or right) to mount the Receiver and Transmitter Charging Pads. Select the side closest to a power source for easier installation and cable management. **IMAGE 1**
- b. Starting on the side where the components will be installed, insert the non-wired end of the LED Light Strip into the channel and slide it fully into place. Example: If pads are on the right, start on the right. **IMAGE 3**
- c. Using **#6 x 1/2-in. screw(s)** (not provided), secure the cable inside any excess channel being careful not to damage the cable jacket. **IMAGE 3**
 - **Warning:** Do not pull the strip by the cable.
 - **Tips:**
 - Have a second person feed the strip while you gently pull from the non-wired end with needle-nose pliers.
 - Lubricate the channel with soapy water to ease installation.

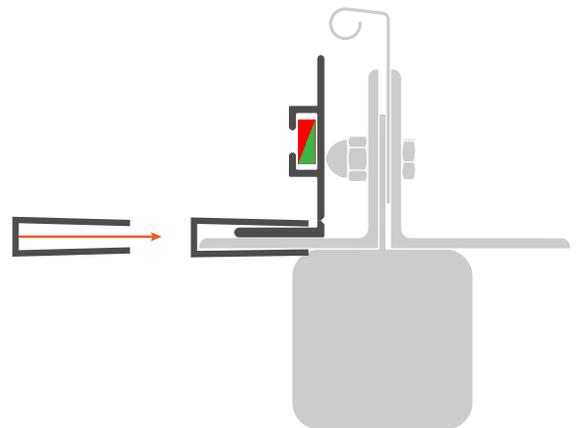


IMAGE 2B: Rolling Steel Door Channel Installation

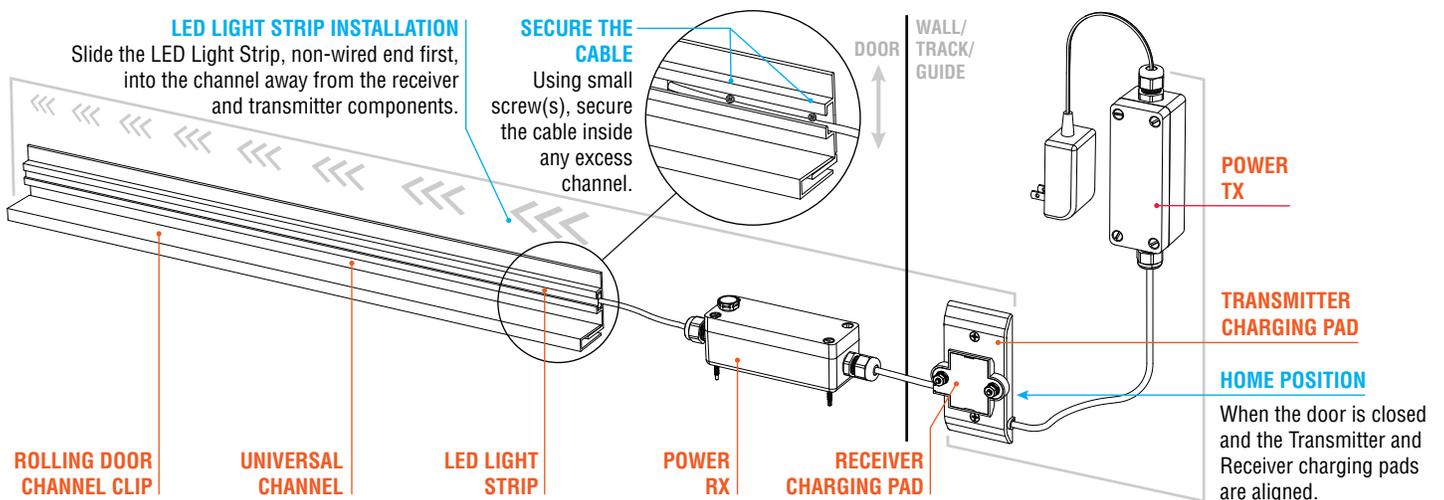


IMAGE 3: Component Detail (Door and Brackets Not Shown)

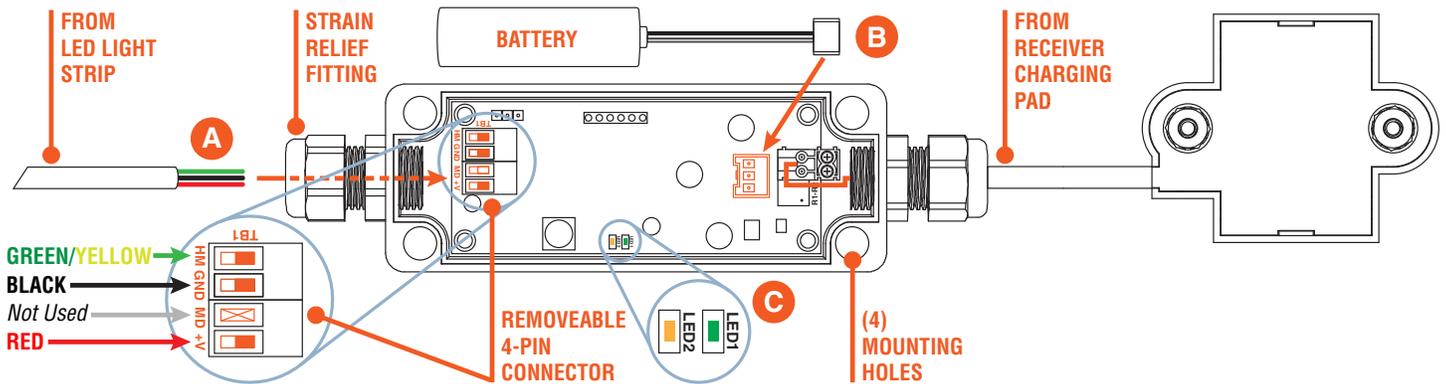


IMAGE 4: Power RX Connections

II. Power RX Installation

1. Identify these parts before beginning: IMAGE 3

- Power RX and Receiver Charging Pad (pre-connected assembly)
 - Battery
- Note:** Ensure cable routing allows all components to reach their mounting locations without strain.

2. Mount the Power RX to the Door IMAGES 5A, 5B

- Remove the lid of the Power RX box to access the four mounting holes. IMAGE 6
- Position the box on the door between the LED Light Strip and the door track/guide, leaving enough space for the Receiver Bracket assembly. IMAGES 7A, 7B
- Secure the box to the **sectional door** or **rolling steel door** bottom bar using the provided four (4) #6 x 3/4-in. self-drilling screws.

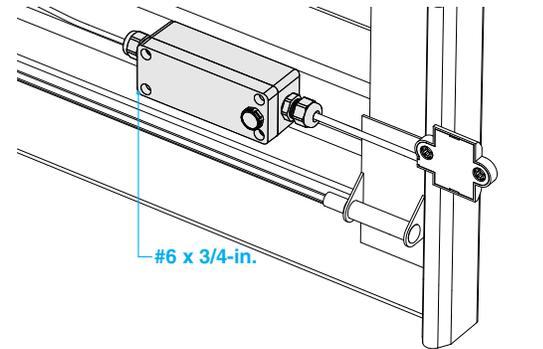


IMAGE 5A: Power RX Mounted to a Sectional Door

3. Connect the LED Light Strip

- Route the LED Light Strip wire through the Power RX strain relief fitting as shown. IMAGE 4A
- Disconnect the removable 4-pin connector using a small screwdriver or pliers, noting its orientation for reinstallation. Then, connect the wires to the terminals by matching the wire colors to the board markings.

Note: Leave the “MD” terminal unused; it should remain empty.
- Tighten the connector screws, reconnect the connector, and tighten the strain relief fitting.

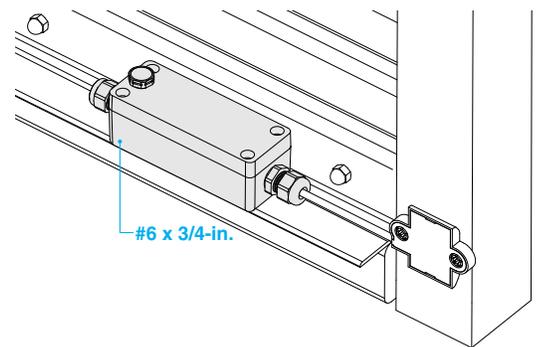


IMAGE 5B: Power RX Mounted to the Bottom Bar of a Rolling Door

4. Install the Battery

- Plug the battery connector into the white connector on the board. IMAGE 4B
- Secure the battery to the lid using the hook-and-loop fasteners. Verify that the battery does not interfere with the connector. Do not reattach the lid yet.

Note: LED indicators will not illuminate until the Receiver and Transmitter Charging Pads are aligned and powered. IMAGE 4C, TABLE 1

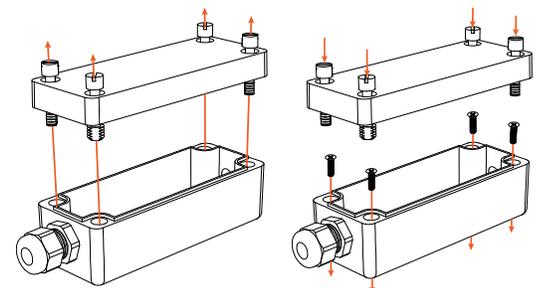


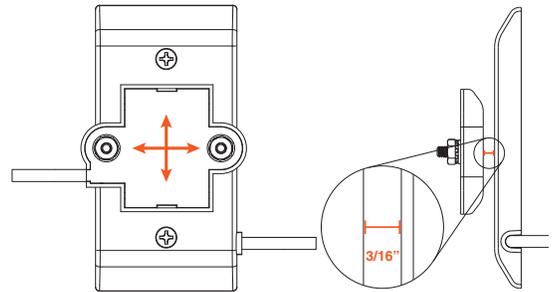
IMAGE 6: Opening, Mounting, and Closing the Power RX and Power TX

III. Preview: Charging Pad Alignment

The Receiver and Transmitter Charging Pads must align when the door is fully closed. This closed position is referred to as the **Home Position** and is required for proper battery charging.

IMAGE 3

- Pads centered horizontally and vertically
- Gap no greater than **3/16"**
- Pads must not touch
- Leave all mounting hardware **finger-tight** until final alignment with brackets is set



IV. Receiver Charging Pad Installation

1. Identify these parts before beginning:

- Brackets and bracket hardware **PAGE 2**

2. Assemble and Install the Brackets

- **Sectional Doors** **IMAGE 7A**

- a) Assemble the Receiver Bracket assembly:
 - Connect the Mounting Bracket to the Receiver Bracket using two (2) **#10-32 x 1/2-in.** Hex head screws, washers, and keps nuts.
 - Connect the Receiver Charging Pad to the Receiver Bracket using two (2) **#8-32 x 5/8-in.** screws, washers, and keps nuts.
- b) Leave all hardware finger-tight for adjustment. Hardware will be tightened in *Section V-3: Align the Charging Pads.*
- c) Mount the completed Receiver Bracket assembly to the door stile using appropriate fasteners (not included) so that the Receiver Charging Pad aligns with the Transmitter Charging Pad when the door is closed and in the Home Position. **IMAGE 3**

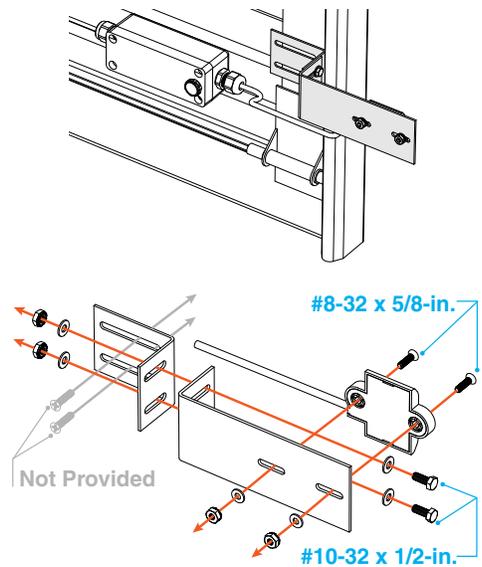


IMAGE 7A: Sectional Doors: Receiver Bracket Assembly

- **Rolling Steel Doors** **IMAGE 7B**

- a) Assemble the Receiver Bracket assembly:
 - Connect the Receiver Bracket to the Door Bracket using two (2) **#8-32 x 1/2-in.** Phillips pan head screws and star nuts.
 - Connect the Receiver Charging Pad to the Receiver Bracket using two (2) **#8-32 x 5/8-in.** Phillips flat head screws, washers, and star nuts.
- d) Leave all hardware finger-tight for adjustment. Hardware will be tightened in *Section V-3: Align the Charging Pads.*
- b) Mount the completed Receiver Bracket assembly to the bottom bar using appropriate fasteners (not included) so that the Receiver Charging Pad aligns with the Transmitter Charging Pad when the door is closed and in the Home Position. **IMAGE 3**

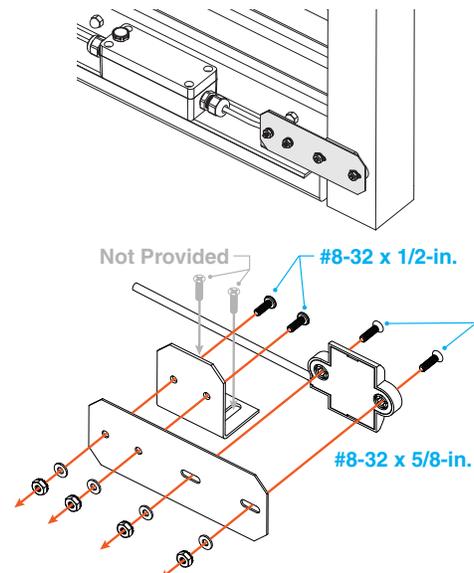


IMAGE 7B: Rolling Doors: Receiver Bracket Assembly

V. **Transmitter Charging Pad Installation**

1. **Identify these parts before beginning: PAGE 2**

- Transmitter Charging Pad, Power RX, and power cord (pre-connected assembly)
- *LED-PHXSD-K8 only*: Brackets and bracket hardware

Note: When selecting a mounting location, ensure the Receiver Charging Pad will align with the Transmitter Charging Pad when the door is fully closed (Home Position). **IMAGE 3**

2. Assemble and install the transmitter charging pad and brackets:

• **Sectional Doors IMAGE 8A**

Note: Leave all hardware finger-tight for alignment.

- Assemble the **Transmitter Bracket** assembly:
 - Connect the Transmitter Charging Pad to the Transmitter Bracket using two (2) **#8-32 x 3/4-in.** Phillips flat head screws, washers, and keps nuts.
 - Connect the Transmitter Bracket to the Mounting Bracket using two (2) **#10-32 x 1/2-in.** hex head screws, washers, and keps nuts.
- Position the bracket assembly on the wall, track, or other suitable surface so it aligns with the Receiver Charging Pad when the door is closed and in the Home Position. **IMAGE 3**
- Mark the mounting holes and secure the Mounting Bracket to the wall using appropriate fasteners (not provided).

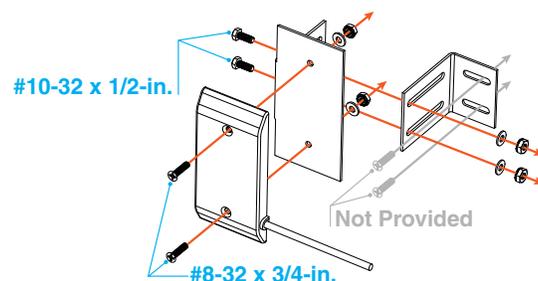
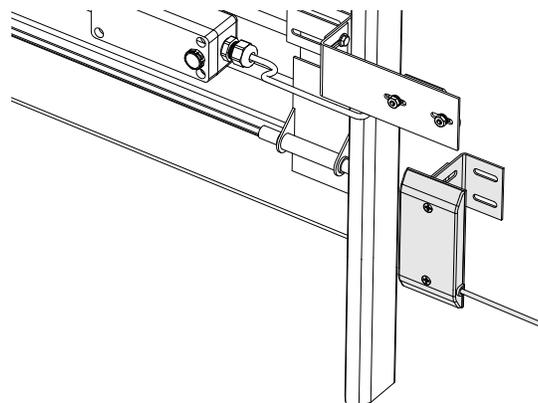


IMAGE 8A: Sectional Doors: Transmitter Bracket Assembly

• **Rolling Steel Doors IMAGE 8B**

- Position the Transmitter Charging Pad on the door guide so it aligns with the Receiver Charging Pad when the door is closed and in the Home Position. **IMAGE 3**
- Mark screw locations and drill two 0.15" holes (#25 drill bit).
- Mount the Transmitter Charging Pad to the door guide using two (2) **#8-32 x 3/4-in.** self-tapping flat head screws.

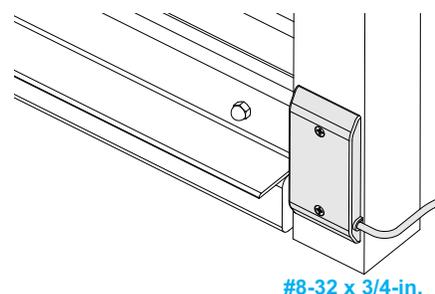


IMAGE 8B: Rolling Doors: Transmitter Charging Pad

3. **Align the Charging Pads IMAGE 9**

- Close the door to the fully Home Position.
- Adjust the Receiver and Transmitter Brackets (*LED-PHXSD-K8 only*) so the pads are centered horizontally and vertically.
- Ensure the gap between pads is $\leq 3/16"$ and that they do not touch.
 - **Note:** Too much distance reduces charging efficiency. Pads that touch or rub may become damaged.
 - **Tip:** Place a 1/8-inch thick piece of cardboard between pads before tightening.

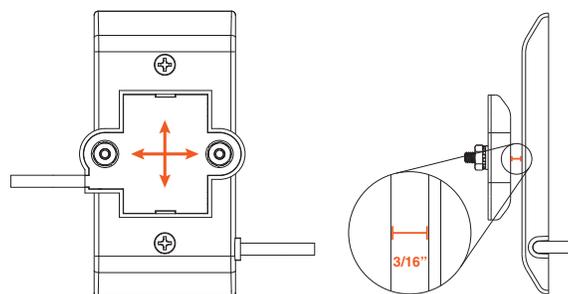


IMAGE 9: Receiver and Transmitter Charging Pad Alignment

VI. Power TX Installation

1. **Mount the Power TX**
 - a) Open the lid of the Power TX box to access the mounting holes. **IMAGES 5B, 10**
 - b) Mount the Power TX to a nearby permanent wall or other stationary surface using four (4) #6 x 3/4-in. self-drilling screws. **IMAGE 1**
2. **Connect Transmitter to Power**
 - a) With the door closed and the Receiver and Transmitter Charging Pads in the Home Position, plug the Transmitter power cord into a nearby power source. **IMAGE 1**
 - b) If the LED Light Strip and indicator sequence performs correctly, reinstall the Power RX and Power TX box lids with a large screwdriver. **TABLE 1, IMAGE 5B**
 - c) Confirm transmitter and receiver alignment by verifying:
 - (1) Receiver: Solid Green and Yellow LED
 - (2) Transmitter: Solid Green
 - d) Tighten all hardware securely.
 - e) Dress wiring with cable wraps if needed.
 - f) The battery ships from the factory pre-charged. You can now operate the door.

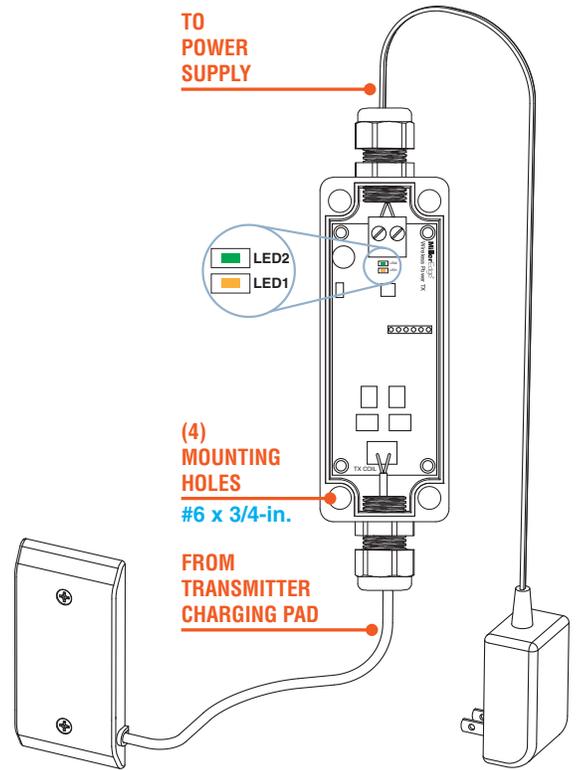


IMAGE 10: Power TX with Charging Pad

TABLE 1: LED Startup Sequence

COMPONENT	LED INDICATOR	ACTION	DESCRIPTION
LED Light Strip	● Red, ● Yellow, ● Green	Flashes 1-2 secs.	System initialization.
Power RX IMAGE 5C	1. ● Green (LED1)	On solid	Transmitter detected (door closed), battery present.
	2. ● Yellow (LED2)	On solid (after ~5 secs)	Battery charging.
	● Green (LED1)	2x per second	Troubleshooting Tip: If the door is closed and the battery is not charging, the green LED on the Power RX will flash twice per second indefinitely. Recheck pad alignment. IMAGE 9
Power TX IMAGE 10	1. ● Green (LED2)	Flashes	Indicates firmware version.
	2. ● Yellow (LED1)	Solid for 8 secs	
	3. ● Yellow (LED1) + ● Green (LED2)	Brief, single flash	Power-up startup.
	4. ● Green (LED2)	Flashes 1 per sec	Powered, not changing RX

VII. Normal Operation

The system provides visual feedback through the LED Light Strip to indicate door movement and status:



TABLE 2: LED Light Strip Signal Patterns by Door Status

STATUS	LED INDICATOR	ACTION	DESCRIPTION
Door Opening	● Red, ● Yellow	Scanner pattern	Door is opening; stay clear.
Door Open	● Green	Solid for ~6 seconds, then off	Door fully open.
Door Closing	● Red	Scanner pattern	Door is closing; stay clear.
Door Closed	● Red	Solid for ~6 seconds, then off	Door fully closed; home position.

TABLE 3: Power RX & TX LED Indicators—Normal Operation

COMPONENT	LED INDICATOR	ACTION	DESCRIPTION	
Power RX	● Green (LED1)	On solid/pulsing	Door is in home position; Transmitter is detected; the LED Light Strip is connected.	
	● Yellow (LED2)	On Solid		
	● Green (LED1)	Fast flash 1x per 5 secs.	Door is open, battery power is on, LED Light Strip is connected.	
	● Green (LED1)	Fast flash 3x per 5 secs.	Door is in home position and battery is fully charged.	
	● Yellow (LED2)	Off		
	● Yellow (LED2)	On solid		Door in the home position; high current charging.
	● Yellow (LED2)	Off		Normal condition.
Power TX	● Yellow (LED1)	Fast flash 1x	Transmitter in power-up mode.	
	● Green (LED2)	Fast flash 1x		
	● Yellow (LED1)	Off	Normal condition.	
	● Green (LED2)	On solid	Charging at full current.	
	● Green (LED2)	Fast flash 1x per sec	Plugged in, door not in home position	

VIII. **Troubleshooting**

TABLE 4: Power RX & TX LED Indicators—Troubleshooting

COMPONENT	LED INDICATOR	ACTION	DESCRIPTION
Power RX	● Yellow (LED2)	Fast Flash (1x/sec)	Battery disconnected/no charge
		Slow Flash (1x/sec)	Battery low
		Fast Flash (5x/sec)	Temperature out of range
		Off	No power or battery discharged
	● Green (LED1)	Flash (1x every 5 sec)	Door open; not “home”
		Slow Flash (1x per second)	Charging pads misaligned
		Flash (2x every 5 sec)	Battery low or charging after low-power mode
Power TX	● Yellow (LED1)	Solid On	Fault; foreign object detected
	● Green (LED2)	Flashes 2x/sec	Fault restart attempt
	● Green (LED2)	Flashes 2x per sec.	Slow or not charging while in fully closed home position.

TABLE 5: Troubleshooting by LED Light Strip Issues

SYMPTOM	COMPONENT	INDICATOR / ACTION	POSSIBLE CAUSE	RESOLUTION
<i>LED Light Strip is not lighting</i>	Power RX	● Yellow (LED2): Off ● Green (LED1): Off	Battery has no charge or is disconnected.	<ul style="list-style-type: none"> Place door in “home” position to recharge. Align transmitter and receiver charging pads. Ensure pad gap ≤ 3/16-in. Charge within 32°-113°F. Note: Full charge may take up to 6-8 hours.
	Power RX & TX	● All LEDs: Off	No power to transmitter.	<ul style="list-style-type: none"> Verify transmitter power source.
	Power RX	● Green (LED1): Flash (1x every 5 sec)	Door is open (not in “home” position).	<ul style="list-style-type: none"> Return door to “home” position.
<i>Battery is not charging</i>	Power RX	● Green (LED1) Slow Flash (1x per second)	Charging pad too far from transmitter.	<ul style="list-style-type: none"> Align pads correctly; ensure gap ≤ 3/16-in.
	Power TX	● Yellow (LED1): On solid	Metallic foreign object detected.	<ul style="list-style-type: none"> Clean faces of transmitter and receiver charging pads with a clean, dry cloth.
	Power RX	● Yellow (LED2): Fast flash (5x/sec)	Temperature out of range.	<ul style="list-style-type: none"> Charge within 32°-113°F; discharge within -4°-140°F.
	Power RX	● Green LED1: Flash (2x every 5 sec)	Battery entered low-power mode.	<ul style="list-style-type: none"> Close door and allow battery to charge (full charge may take up to 6-8 hours).
<i>No power to system</i>	Power RX & TX	● All LEDs: Off	Transmitter not powered.	<ul style="list-style-type: none"> Confirm connection of transmitter to power source.
<i>LED Light Strip does not restart after fault</i>	Power TX	● Yellow (LED1): On solid or ● Green (LED2): Flashes 2x/sec	Metallic foreign object detected.	<ul style="list-style-type: none"> Clean transmitter and receiver charging pads with a clean, dry cloth.

IX. Tech Support

For additional assistance, contact Miller Edge Tech Support: 800-220-3343

X. General Specifications

LED STRIP SPECS

Brightness	Red: 195 lumens, Green: 536 lumens	
Signaling	Red/yellow running pattern: Opening Solid green ~6 secs: Open	Red running pattern: Closing Solid red ~6 secs: Closed
Lifespan	30,000 hours	

PERFORMANCE

Runtime	Up to 60 hours of runtime or ~100 door cycles per charge	
Activation	Motion via accelerometer	
Operating Temperature	Charge: 32° to 113°F (0° to 45°C), Discharge: -4° to 140°C (-20° to 60°C)	
Agency Approvals	FCC	

ELECTRICAL

Power Source	Receiver: 3.7V 800 mAh lithium-ion battery Transmitter Power Supply: Input: 100-240VAC 50/60 Hz, Output: 5VDC 1.5A	
Charging	Inductive; full charge in 6-8 hours	
Battery Charge Current	100 mA nominal	
Power Output (TX)	5V, 1500mA	

PHYSICAL

Dimensions	LED Strip/Mounting Channel: 8-ft. (2.44 m) Power RX & TX Enclosures: 1-13/16 W x 5-3/4 H x 1-3/4 D in. (46 x 146 x 44 mm)	
Cable Lengths	LED Strip: 48-in. Power RX → Receiver: 19.5-in.	Transmitter → Power TX: 18-in. Power TX → Power Supply: 55.5-in.
Weights (door mounted components)	LED Strip: 6.56 oz. Mounting Channel: 9.21 (SD), 14.41 oz. (RS)	Power RX, Receiver with battery: 7.6 oz. Receiver Brackets: 5.01 (SD), 16.01 oz. (RS)
Materials	LED Strip: UV protected silicone sheath Mounting Channels: High density rigid PVC	Power RX & TX Enclosures: Polycarbonate Mounting Brackets: Steel
Multifunction LED Indicators	Power RX: Green, Yellow Power TX: Green, Yellow	
Mounting	LED-PHXRD-K8 (rolling steel door kit): • LED Light Strip: Universal mounting channels and rolling door channel clips • Charging Pads: Mounting brackets	LED-PHXSD-K8 (sectional door kit): • LED Light Strip: Universal mounting channels • Charging Pads: Mounting brackets
Degree of Protection	LED Light Strip: IP68	Power RX & TX Enclosures: NEMA 4

XI. Maintenance

It is strongly recommended that users check the assembly at least once per month for damage to housings and mountings. Also check for signs of damage to cables or connection points. Monthly: Inspect for physical damage and verify the LED Light Strip activates correctly during door operation. Check that charging pads remain aligned and free of debris.

XII. Warranty

VisiLight Phoenix (LED-PHX) carries a **2-year warranty** from the date of shipment from Miller Edge for credit or replacement. This warranty applies to normal use and covers defects in materials or workmanship, as determined solely by an authorized factory representative. Proof of purchase may be required. This warranty is void where evidence of misuse, abuse, unauthorized modification, or repair is present. Avoid submersion or direct spray exposure to maintain performance. Pulling on wires when installing the light strip or altering/replacing the supplied power supply will void the warranty. This warranty covers repair or replacement of the purchased product only; product installation/labor charges, shipping costs, and incidental or consequential damages are not covered. Miller Edge manufactures its products to meet stringent specifications and cannot assume responsibility for consequences arising from improper installation or misuse. Installation instructions and testing procedures provided by Miller Edge must be followed for proper operation and maintenance.

XIII. FCC

Responsible Party:

Miller Edge, Inc.
 PO Box 159, West Grove, PA, 19390
 800-220-3343
 www.milleredge.com

Compliance Information Statement (Sec. 2.1077, B3)

Product: VisiLight™ Phoenix™ LED Alert Strip
Models: LED-PHXSD-K8, LED-PHXRS-K8

FCC Part 15 Two-Condition Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

1. This device may not cause harmful interference, and
2. this device must accept any interference received, including interference that may cause undesired operation.

Modification Warning (Sec. 15.21)

Changes or modifications not expressly approved by Miller Edge could void the user's authority to operate the equipment.

Interference Statements (Sec. 15.105):

For Class A Digital Devices (Commercial Use)

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at their own expense.

For Class B Digital Devices (Residential Use)

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

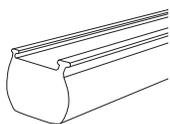
However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

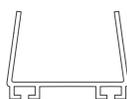
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

XIV. Accessories

Contact your sales representative about accessories for your installation:



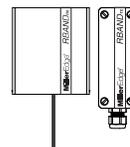
SENSING EDGES



MOUNTING CHANNELS



JUNCTION BOXES



WIRELESS EDGE SYSTEMS



COIL CORDS

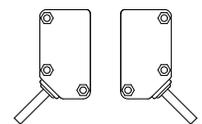


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