

powermat[®] Charging Spot 4.0

Installation
Guide

Oct-2018



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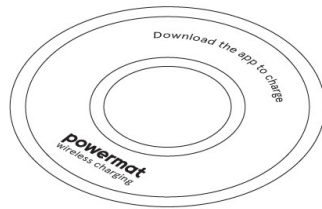
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Safety, Warnings & Disclaimers

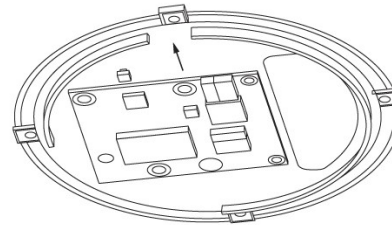
- Powermat Charging Spot 4.0 is designed to be installed by Powermat certified installers only
- Opening of, and/or repairing of the device should only be done by an authorized specialist
- Do not install the device under an electrical conductive surface
- Never use the device if it is damaged or wet
- Observe a sufficient distance from warm and/or wet elements
- Charging Spot minimal distance from table edge should be no smaller than 10cm (regulation clearance for human body exposure)
- Do not install the Charging Spot outdoors
- Make sure all electrical connections and power supply cables comply with your local electrical code and regulations
- Keep all parts out of reach of children
- Never replace damaged power supplies yourself! Disconnect the devices and contact a specialist
- ESD Safety - To avoid potential ESD damage to the Charging Spot:
 - Wiring and connections should always be done when the power is 'OFF'
 - Avoid touching the Charging Spot electronic circuit when the unit is connected to power
- Compliance with local and regional code:
 - All components provided are certified according to rules and regulations
 - Compliance with any codes, rules and regulations as far as wiring, wiring methods, and techniques lies entirely with the installer
 - Please verify these codes, rules and regulations before starting any installation

Charging Spot Installation Kit



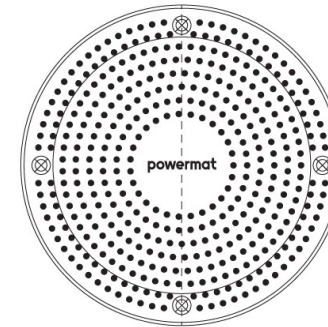
Top unit

Dimensions: $\varnothing 5.55$ " (141mm) X 0.14" (3.6mm)



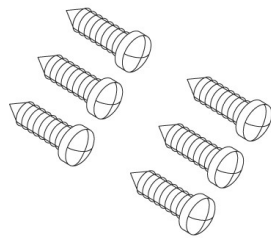
Bottom chassis

Dimensions: $\varnothing 6.26$ " (159mm) X 0.55" (14mm)

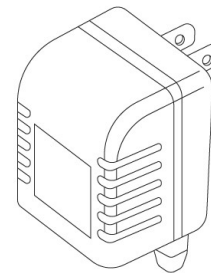


bottom cover

Dimensions: $\varnothing 6.26$ " (159mm) X 1.06" (27mm)

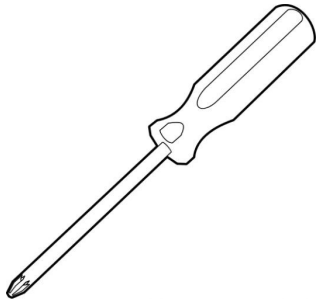


6X Wood Screws (per unit)

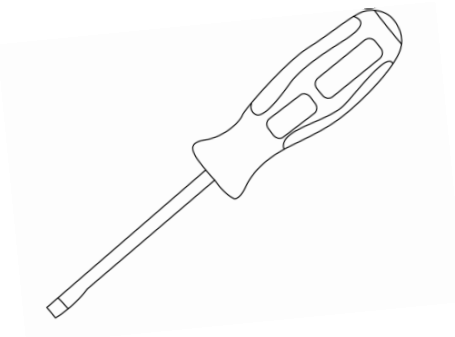


Power Supply

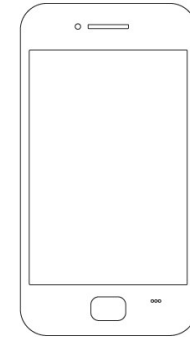
Tool List



Philips Screwdriver



Slot-head Screwdriver

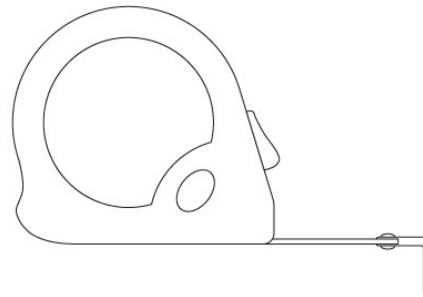


Smartphone (Android / iPhone)

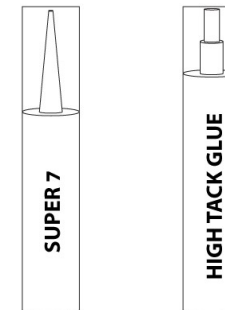


Cable tie (optional)

One per Charging Spot



Tape measure



Super 7 or High Tack Glue

(for hard surface installation only)

Pre-Installation Considerations

Surface selection

Supported Surface Materials

- Wood or wood composite
- Polymer based solid surfaces
- Stone
- Glass
- Plastic

Note: Unit can not be installed on metal based surfaces

Supported Surface thickness

- Minimum surface thickness 0.5" (12.7mm)
- Maximum surface thickness 1.5" (38.1mm)

For installing on surfaces thinner than 0.5" or greater than 1.5" please see Appendix A

Charging Spot placement

Indoor use only

- Charging Spots are not designed for outdoor installations

Distance between Charging Spots

- Min. distance between Charging Spots: 1' (~30cm)

Charging Spot to Power Supply distance

- Max. length of DC wiring between the Charging Spot and the Power Supply depends on the number of Charging Spots connected to the Power Supply and the wire AWG gauge. Appendix B - Wiring & Power supplies

Charging Spot clearance from metal fixtures

- It is recommended to keep 1" (25mm) distance between the Charging Spot and any metallic objects such as table brackets and table legs. This guarantees proper network connectivity with the Powermat Gateway and the Installer App
- Charging Spot should not be placed beneath a metallic surface

Charging Spot location on Table

- Charging Spot should be placed at least 4" (10cm) from table edge

Heat Safety

- Charging Spot should be kept away from extreme temperatures such as heating radiators and ovens

Installation Overview

Prior to installation

- Please make sure you have read the safety instructions and pre-Installation considerations.
- It is recommended to plan your installation prior starting. Take time to create an installation map of your venue; locate your AC sockets, define the locations of your Charging Spots and mark the tables.

Installation overview

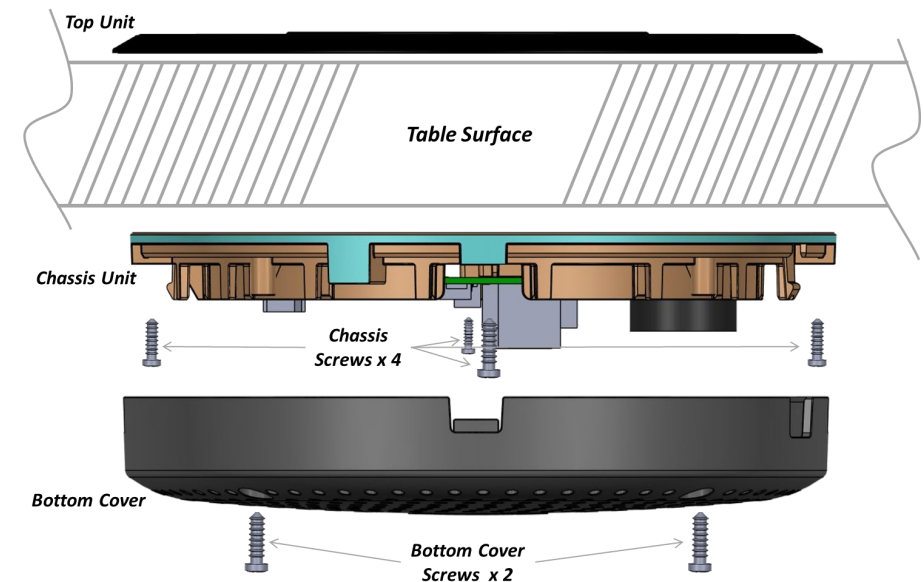
- Bottom unit installation
- Powering unit
- Top unit installation
- Charging Spot activation process

After installation

- Test your Charging Spot. Make sure unit is charging
- Set up Ring adaptors if required

Have a question?

Contact support@powermat.com



Charging Spot 4.0 Installation

1 Bottom unit installation

Locate:

Before you start: The following describes installation options where the bottom unit is fixed first. If you wish to start your installation by fixing the top unit first, go to: <https://www.powermat.com/installation/> to watch installation video.

- Measure and mark the exact position to place the bottom unit (Figure 1).
- If you are installing more than one unit on the table, make sure to use a tape measure to assure all units are positioned at the same distance from table edge.
- Assure 1" clearance from table metal objects (figure 2).

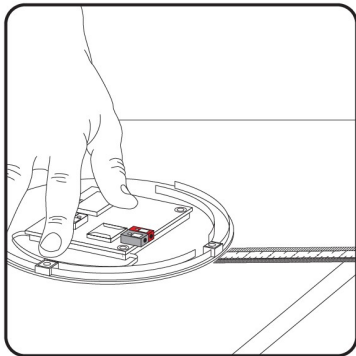


Figure 1: Measure and mark bottom unit location

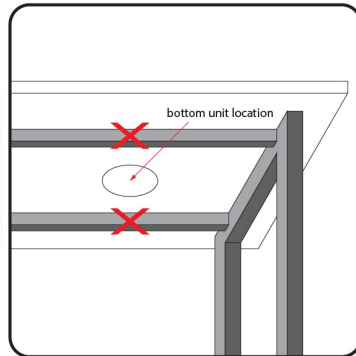


Figure 2: Assure clearance from metal objects

(!) Important note: Prior to installing bottom unit chassis, make sure power supply is disconnected from the AC power. Avoid touching the electronics unit during installation.

Connect bottom chassis:

Place and hold the bottom chassis unit on the marked location under the table. Use 4 screws to secure the chassis to the table (Figure 3).

Make sure chassis orientation fits DC wire direction (Figure 4).

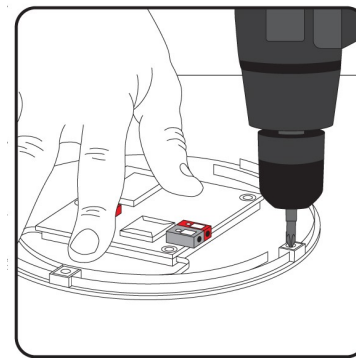


Figure 3: Connecting bottom chassis

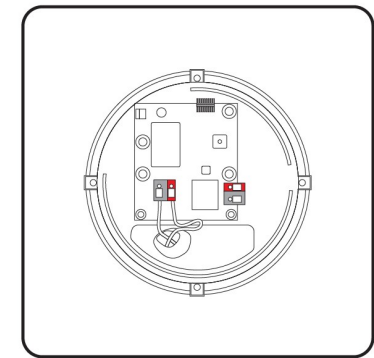


Figure 4: Bottom chassis orientation

When installing on a non-wooden surface such as Granite or glass, use glue to attach the bottom chassis to the surface (replacing the screws) (Figure 5 & 6).

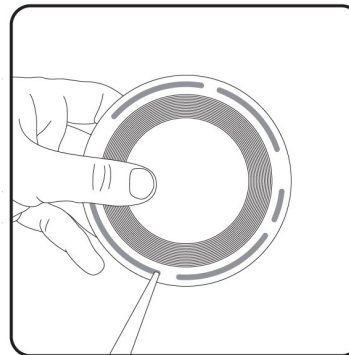


Figure 5: Glue application area

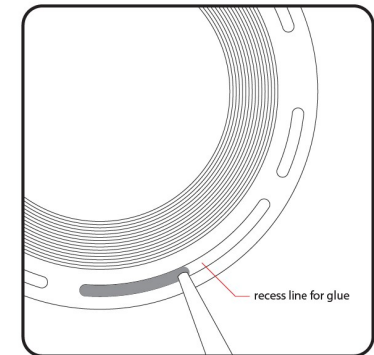


Figure 6: Apply glue in recess

Connect unit to power:

- **Connect the DC cable** from the power supply to the Charging Spot. Use a flat-head screw driver to press down the connectors and insert the wires.
- Recommended: Use a cable tie to secure the power connection, to avoid users from pulling the cable (Figure 7).
- **Once unit is wired safely, connect the power supply to the AC** wall outlet.
- A solid white LED indicator will turn on, located on the bottom chassis, indicating unit is connected and powered.

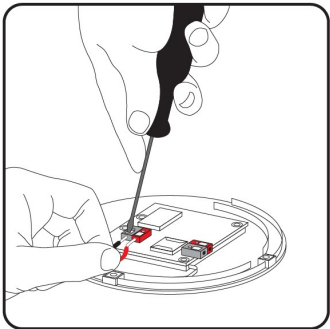


Figure 6: Power connector

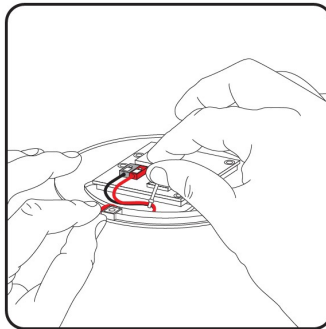


Figure 7: Securing wire with cable tie

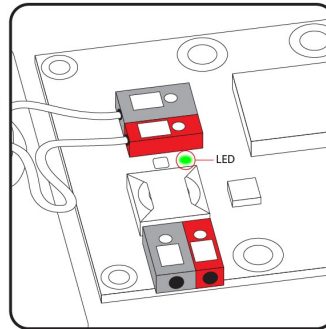


Figure 8: LED indicator

Connect bottom cover:

- **Place & secure bottom cover** to bottom chassis. Take notice to orientation.

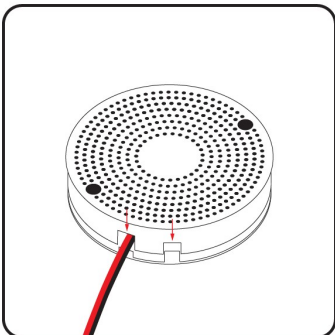


Figure 9: Place cover

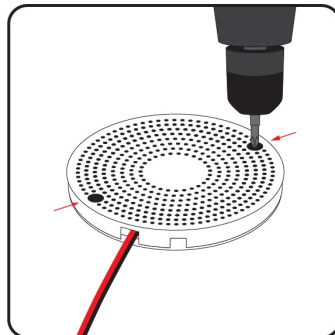


Figure 10: Secure cover

2 Top unit installation

- **Clean table** surface and make sure it is completely dry.
- Before starting, make sure the Charging Spot is connected to power.
- **Download the Charging Spot 4.0 Installer from Google Play / iTunes** to your Android / iPhone device from the link sent to your email address. The email also includes a user name and password for authentication purposes.
- **Aligning top unit with installer app:**
 - Place top unit on table
 - Open installer App
 - Set volume on your device to max.
 - Click on 'Alignment Tool'
 - App will scan for your Charging Spot ID printed on the sticker (see Figure 11)
 - Once correct ID is detected, click continue to start alignment flow. Follow the app instructions

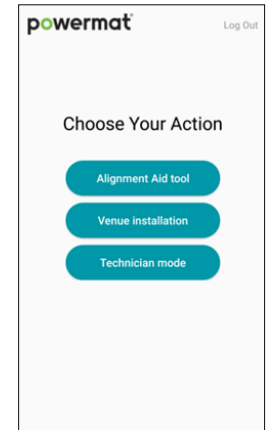


Figure 11: Installer app

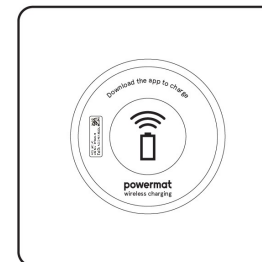


Figure 12:TxID

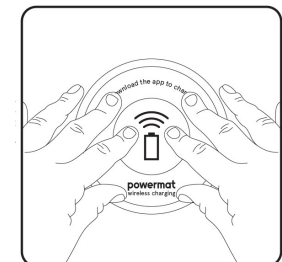
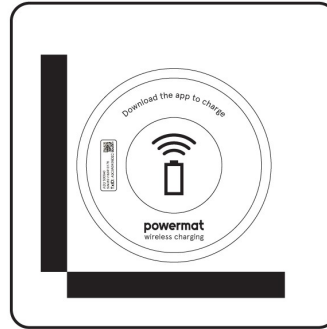


Figure 13: Move top unit according to app instructions

- **Mark Top unit location** with a pencil or using duct tape (in L shape)
- **Remove protective film** from the top unit double sided adhesive
- **Place it on the table surface**, make sure the unit is properly oriented (Powermat logo should be facing the customer)
- **Press the top unit towards the table surface** for 15 seconds to ensure top cover is properly glued to the table surface



3 Charging Spot activation process

Setting up your Charging Spots in the cloud assists us in providing you with services and/or connecting your Charging Spot to the cloud. Map your venue layout and register a specific transmitter to a surface.

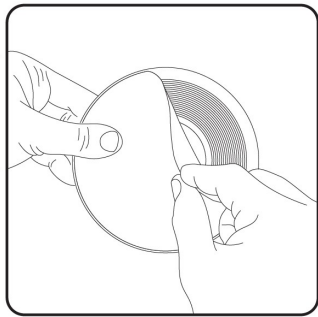


Figure 14: Remove film

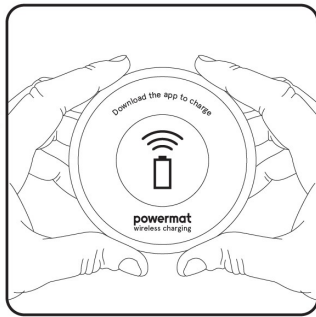


Figure 15: Orient graphics

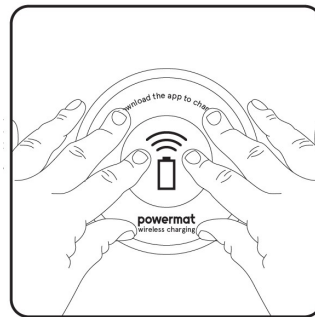


Figure 16: Pres

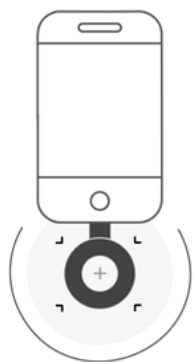
(!) Important notes:

- This step should be performed once all Charging Spots are installed
- Before starting, make sure Charging Spot is connected to the power outlet
- **Open Installer App**
- **Press Venue installation**
- **Follow the app instructions**

For more assistance please contact us at support@powermat.com

4 Test

- Place your device or device with Ring to test the unit is charging:



Use a ring if your phone does not have embedded wireless charging

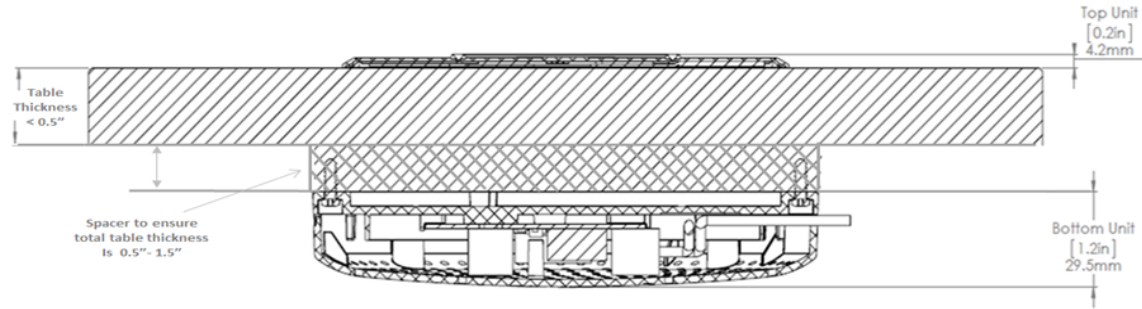


Place your phone on the Charging Spot and Tap to charge

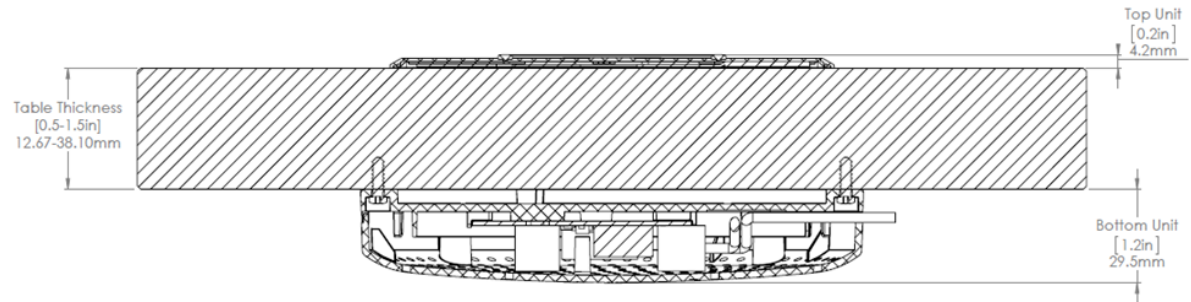
- If your venue has a Tap to Charge policy—download the Powermat app or your brand app with SDK and follow the instructions.

Appendix A - Installing in surfaces thinner than 0.5" or greater than 1.5"

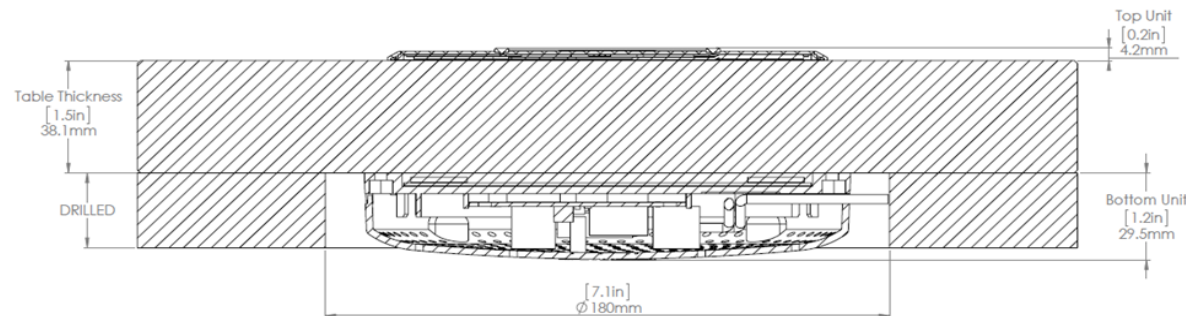
Surface thickness thinner than 0.5"



Surface thickness between 0.5"-1.5"



Surface thickness greater than 1.5"



Appendix B - Wiring & Power Supplies

1 Power Supply Selection

To minimize AC outlet usage, Powermat enables you to daisy chain multiple units to a single Power supply.

The Table below will assist you in selecting your required power supply:

Charger type	[W]
Single type	24W
Up to 2 Charging Spots	60W
Up to 4 Charging Spots	120w

If you wish to use your own purchased power supplies, please refer to our Power Supply Specification Guide at <https://www.powermat.com/Insallation/>

2 DC Wiring Guidelines

This section is relevant if you have chosen to daisy chain several Charging Spots to one power supply.

Wire length

Max. wire length from power supply to first Charging Spot (lengths presented in feet (meter)):

No. of Charging Spots connected to the same power supply	AWG 16	AWG 18
2	12.1' ((3.7m)	7.5' (2.3m)
4	5.7' (1.75m)	3.44' (1.05m)

Daisy Chaining—Connecting multiple Charging Spots to a single power supply

When installing more than one Charging Spot on the same surface, it is possible to chain the DC power from one unit to the other.

- Each Charging Spot should receive a minimum of 25W per Charging Spot.
- Make sure the connected power supply can support all the chained Charging Spots.
- **Using 18 AWG cable** – splitting the DC power can be done directly with the PCBA connector—see Figure 17: Option A.
- **Using 16 AWG cable** – may require adding an electrical connector to split the DC power —see Figure 18: Option B.
- Use the bottom chassis channels to place the DC cable wire into the direction in which you wish to exit. The Charging Spot has a total of 4 exit points.

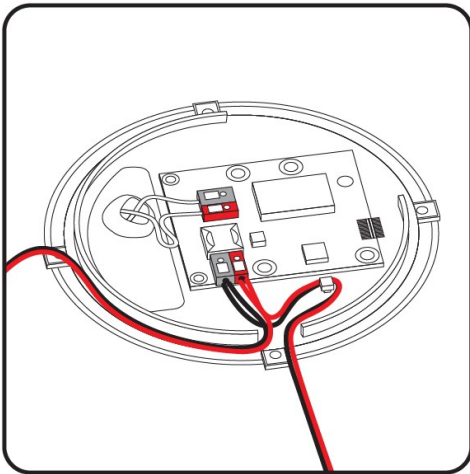


Figure 17: Option A

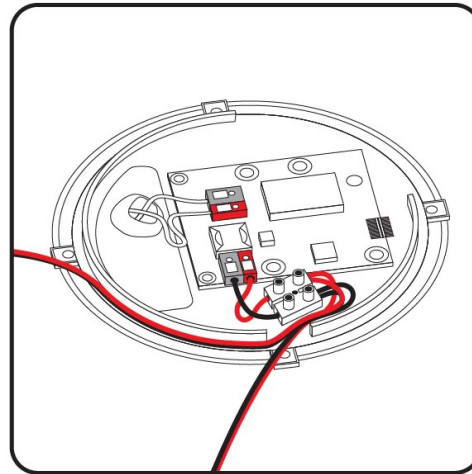


Figure 18: Option B