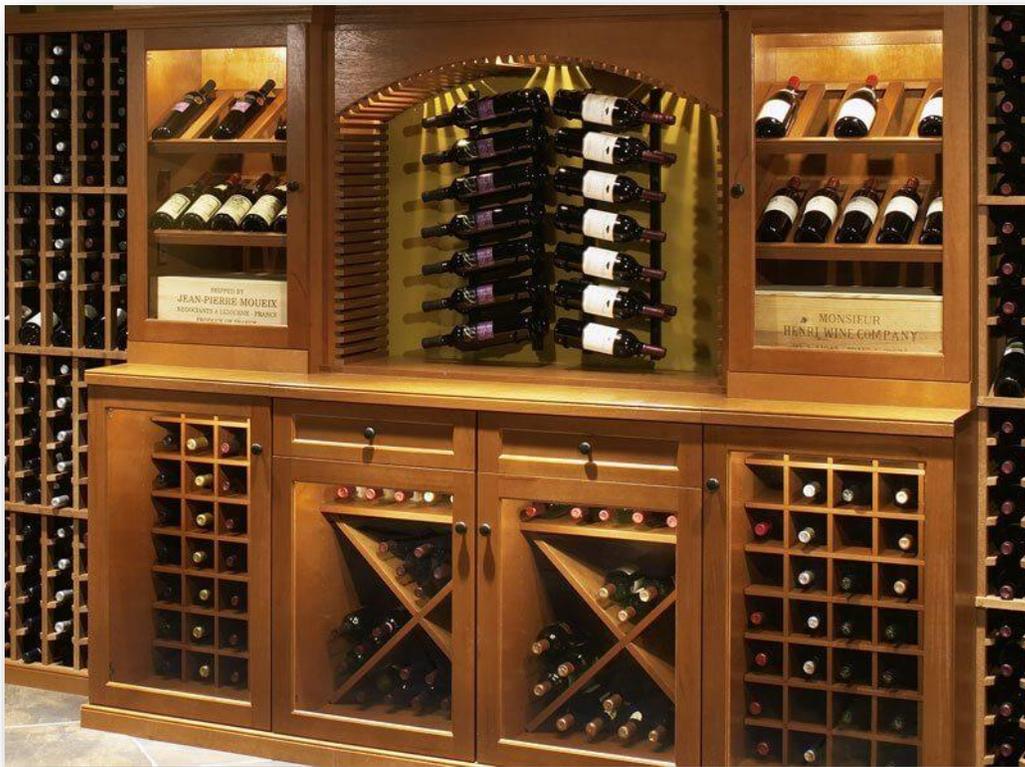




Impact LED Lighting Systems

Operating & Install Instructions



Thank you for purchasing Vigilant’s Impact LED Lighting System!

This general overview of our lighting kit components and connections is specific to a Vigilant wine cellar installation. The Impact LED Lighting System can also be used for other applications such as showcasing collectibles in other cabinets. For in-depth technical documentation, please refer to the supplied product specification sheets.

The Impact system is a premium lighting kit designed for high performance and ease of installation. The Impact system is the most comprehensive and only expandable kit in the industry, containing ample supplies to provide unmatched reach and flexibility.

Power is provided by a versatile dimmable driver designed for high-performance dimming applications.

The Vigilant Impact kit contains a continuous 16.4’ section of LED tape lighting, 25’ of standard 18-2 low-voltage cable, 25 tape-to-wire connectors, hardware kit, adaptor cables, a rocker switch, and a power cord to easily light individual sections and connect to pre-lit sections of your Vigilant wine cellar or other display cabinets.

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Specifications

- Universal input: 100-130 VAC 50/60Hz
- Output: 24 VDC 60W
- Location: indoor
- UL Listed 2108
- Color temperature: 2700K
- Watts: 1.46/ft.
- Lumens: 113/ft.
- Max continuous single run: 55' (Tape alone)
- LED chips: 36/ft.
- Dimming control: ELV/TRIAC/ 0-10V
- Manufacturers' Warranty – Tape 7-Year; Driver 5-year

Parts List

- Electronic dimmable driver
- LED tape light – 16.4 foot spool
- Tape-to-wire connectors – pack of 25 individually bagged
- PVC jacketed wire – 18-2, 25'
- 8-way hard-wire terminal block
- Mini terminal junction box
- Adapter splice cable
- NEMA 1-15P power cord
- Adhesive backed rocker switch with 72" cord
- Hardware kit

Tools & Materials Needed

- Tape measure
- Pencil
- Masking tape for marking
- #1 Phillips screwdriver
- #2 Philips screwdriver
- Scissors
- Wire stripper
- Wire cutter
- Electrical tape
- Drill and drill bits set
- Hot glue gun (optional)
- Butyl rubber adhesive (optional)

Planning

Before installing the lighting kit, please consult your wine cellar drawings if applicable. Typically lighting locations will be indicated with the icon. 

1. Identify and mark the Driver location.
2. Identify and mark the Rocker Switch location.
3. Identify and mark the 8-way splitter. This will be the connection point for your lighting runs. NOTE: A run is one 'strip' of lighting; if you do not cut your 16.4' tape lighting spool, you will have one run
4. Identify and mark each section to be illuminated with tape LED.
5. Identify and mark any factory pre-lit cellar components, such as arches or beam supports.
6. Plan single or multiple runs of lighting from the 8-way splitter to the marked areas. ***PRO TIP: A good layout only needs a few efficient runs back to the splitter. Take your time and plan a run path that will touch several areas in one run. The fewer the runs, the neater the circuit will be.**
7. Measure the marked areas to be illuminated with LED tape to ensure you will have enough. ***PRO TIP: You will need room for the wire and tape-to-wire connectors on each end of the tape. E.g., If a section requires 12" of tape, subtract 4". This will provide 2" on each end for connections.**

If while planning or installing you are short on low-voltage cable, simply contact Vigilant or purchase from a local home store where standard 18-2 low-voltage cable is readily available. If short on LED tape, contact us to purchase a 16' expansion kit.

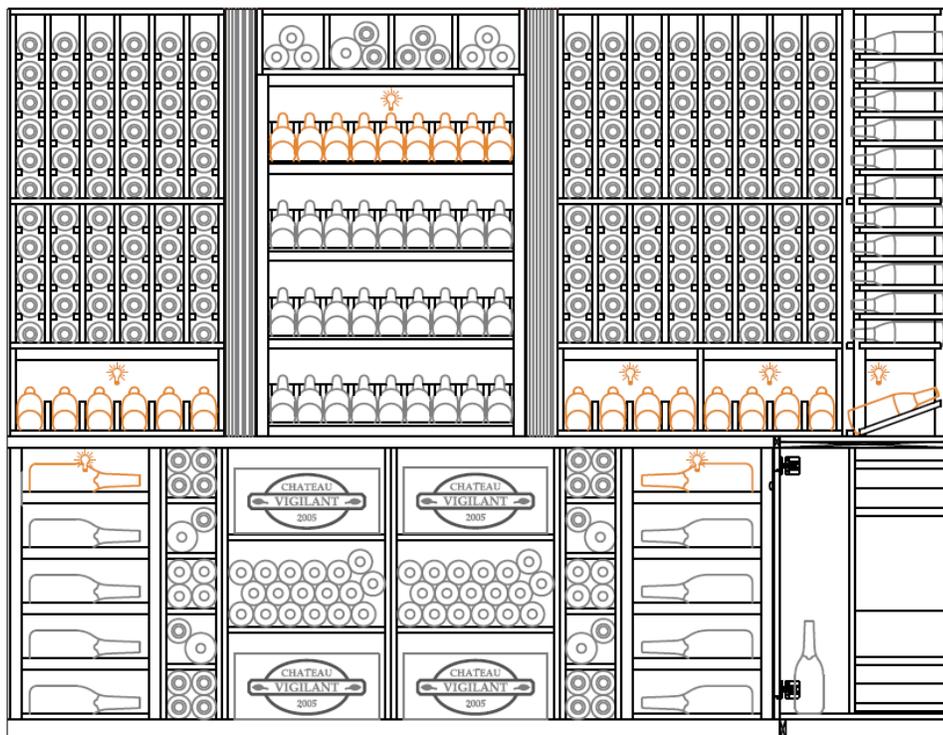


Diagram 1

 - Lighting Locations

Installation

1. Cut sections of LED tape and place them in areas marked. ***PRO TIP: DO NOT attach the LED tape at this time. It is high advisable to cut, dry-fit, and assemble all sections prior to attaching the LED tape and neatening up the wire.**
2. Route low-voltage wire runs to the LED tape in a discrete manner. Leave plenty on each end and do not cut at this time. ***PRO TIP: Route and install one run at a time to ensure low-voltage wire is not wasted.**
3. Starting at the last tape section, begin to connect the wire to the tape with the tap-to-wire connectors. ***PRO TIP: Polarity must be maintained. Always connect Red to + and Black to –. Always double-check each connection. One backwards/incorrect connection will shut the system down until it is corrected.** ***PRO TIP: Peel back a small amount of the adhesive backing prior to inserting the tape into the connector. This will make it easy to peel off during final assembly.**
4. Work your way back to the splitter bringing the slack in the low-voltage cable back as you go.
5. Once all LED Tape runs are done, make a discrete run to any factory pre-lit cellar components.
6. Using the adaptor portion of the kit, connect the pre-lit component and bring the slack in the low - voltage cable back to the splitter.

Testing

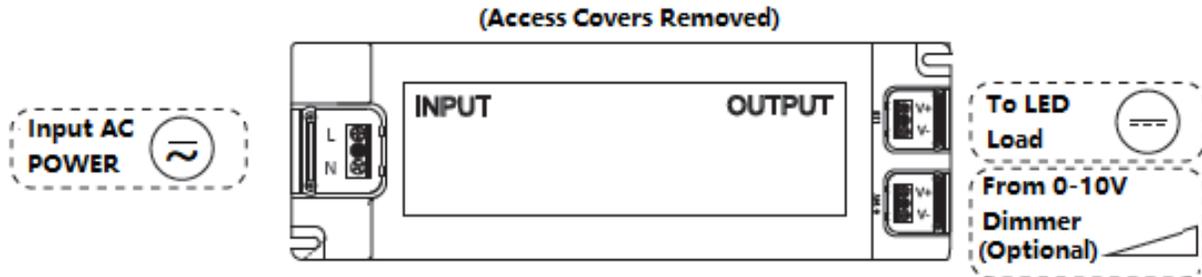
1. Using the illustrations later in this section, make the high and low-voltage connections to the driver, supplied switch, and spitter.
2. After all sections and connections are checked, power the driver up. Check that all sections are working and make corrections if not. ***PRO TIP: Polarity must be maintained. Always connect Red to + and Black to –. Always double check each connection. One backwards/incorrect connection will shut the system down until it is corrected.**
3. Test the rocker switch if used and test any dimming control (by others) if applicable.

Final installation

1. Once everything is tested and working, disconnect the driver from power.
2. Again, starting at the last section of each run, clean the tape area, peel the adhesive from the tape, and press into place firmly between each Diode.
3. Work your way back to the spitter fastening the cable as you go. ***PRO TIP: Due to the irregular pathways on most wine cellars, hot glue or butyl rubber can come in handy for attaching and holding cable in odd locations.**
4. Fasten down the driver and spitter and replace any safety covers.

Diagrams

LED Driver Overview



Connecting to AC Power with supplied cord

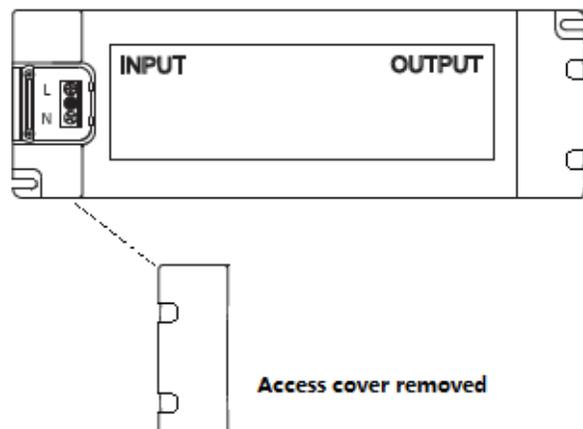
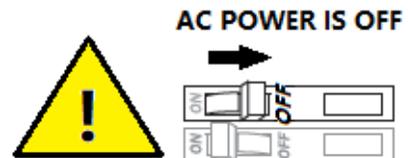
Impact LED lighting kits include a NEMA 1-15P power cord for connecting to a standard wall outlet. For hardwiring, please see next section.

Remove the access cover to expose the input terminals.

The ribbed wire connects to the position marked (N) Neutral

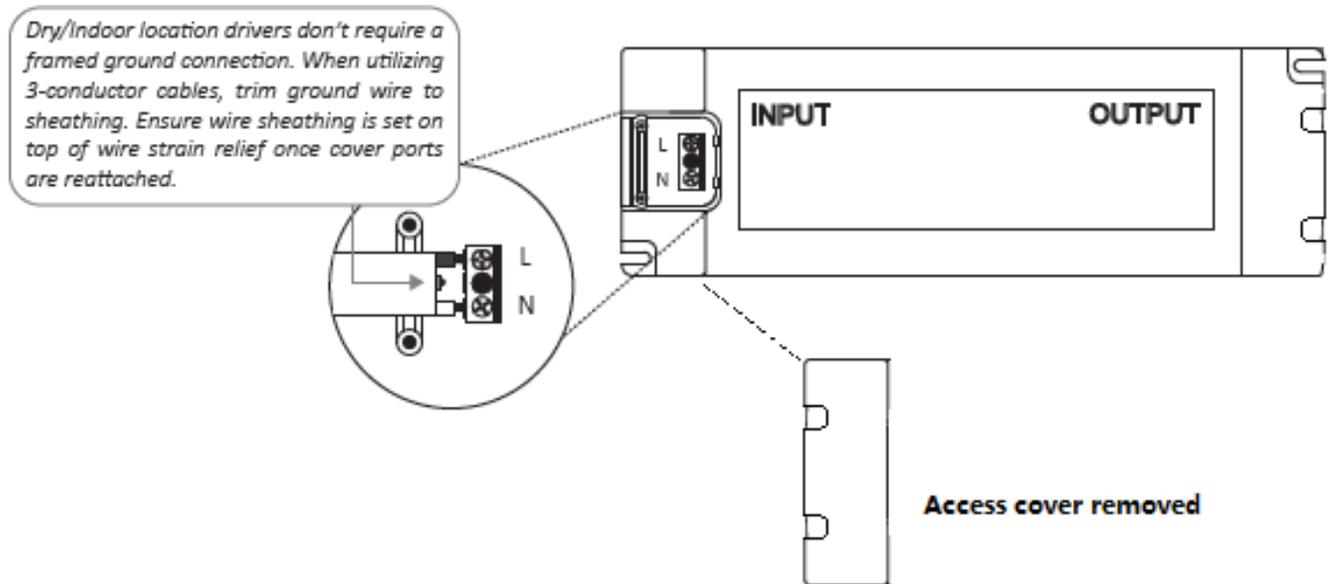


(N) Neutral Wide Blade Ribbed Wire



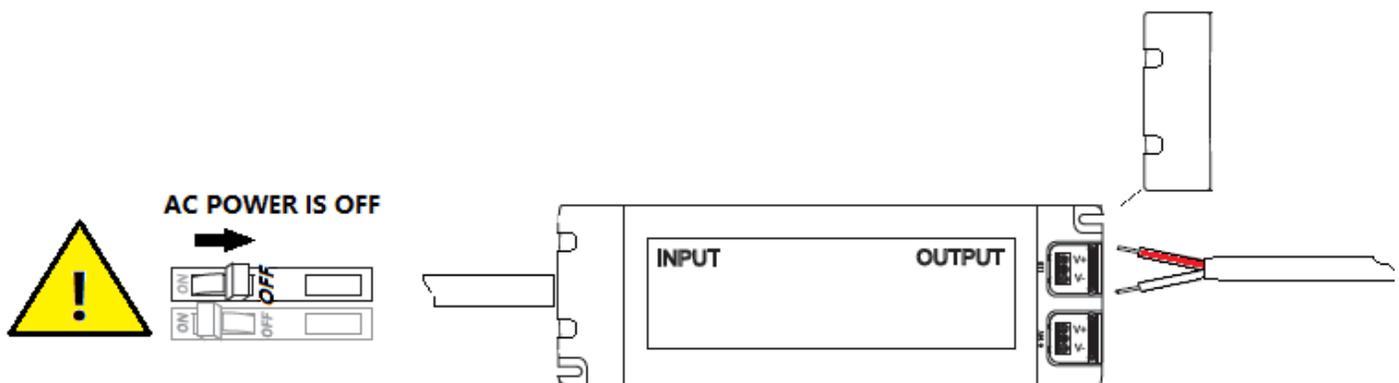
Connecting to AC power with building cable

The LED drive can be hardwired with 18-2 copper building cable.



Connecting low-voltage cable to LED Driver (NO ROCKER SWITCH)

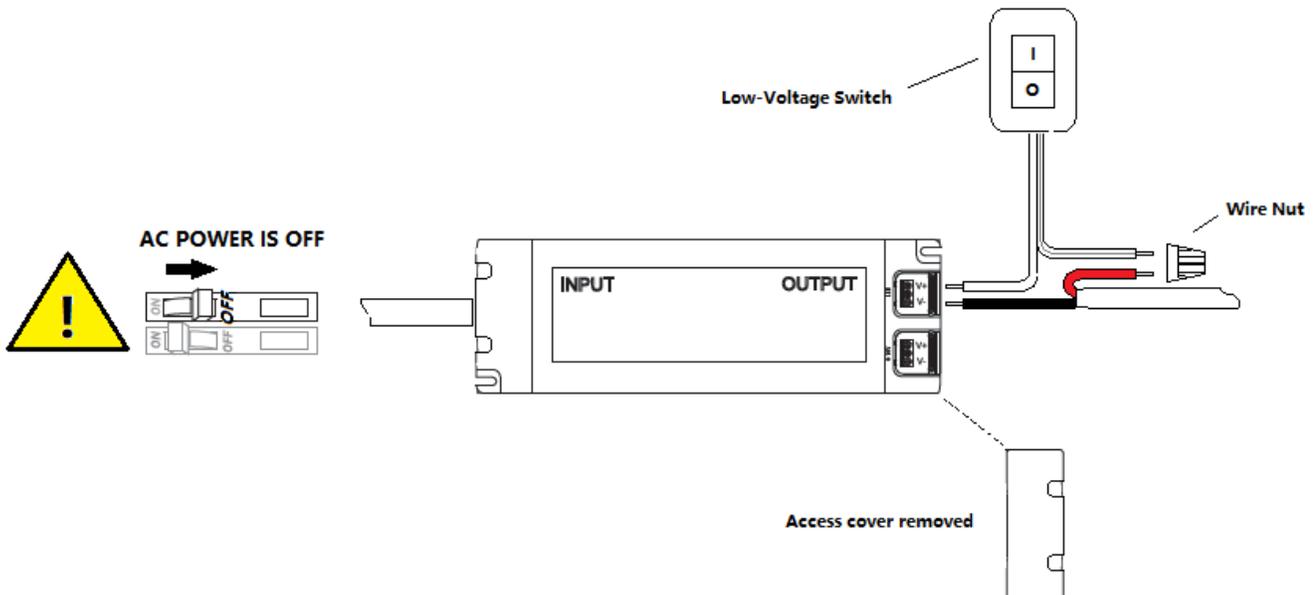
- Be sure to switch/disconnect from AC power before making connections
- The supplied low-voltage cable connects directly to the Output side of the driver



1. Carefully strip the outer jacket of the supplied low-voltage wire to expose 1-2" of the 20 AWG Red/Black conductors.
2. Strip 1/4" from each conductor and twist the copper strands tightly.
3. Insert and tighten the Red conductor to the V+ of the Output Terminal.
4. Insert and tighten the Black conductor to the V- of the Output Terminal.
5. Replace the Access cover.

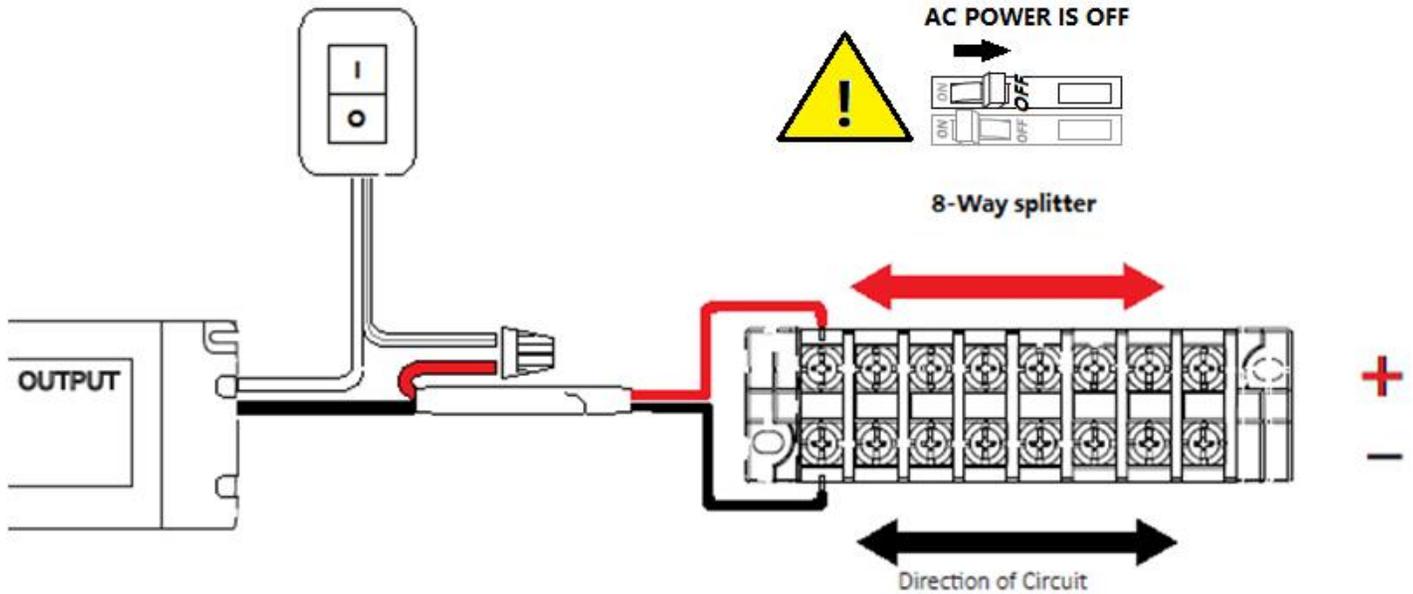
Connecting low-voltage cable to LED Driver (ROCKER SWITCH)

- Be sure to switch/disconnect from AC power before making connections
- The supplied low-voltage switch allows for simple on/off control and is simply placed between the V+ conductor on the output side of the driver
- For more advanced dimming controls such as ELV/ TRIAC/ 0-10V, please refer to the product specification sheets



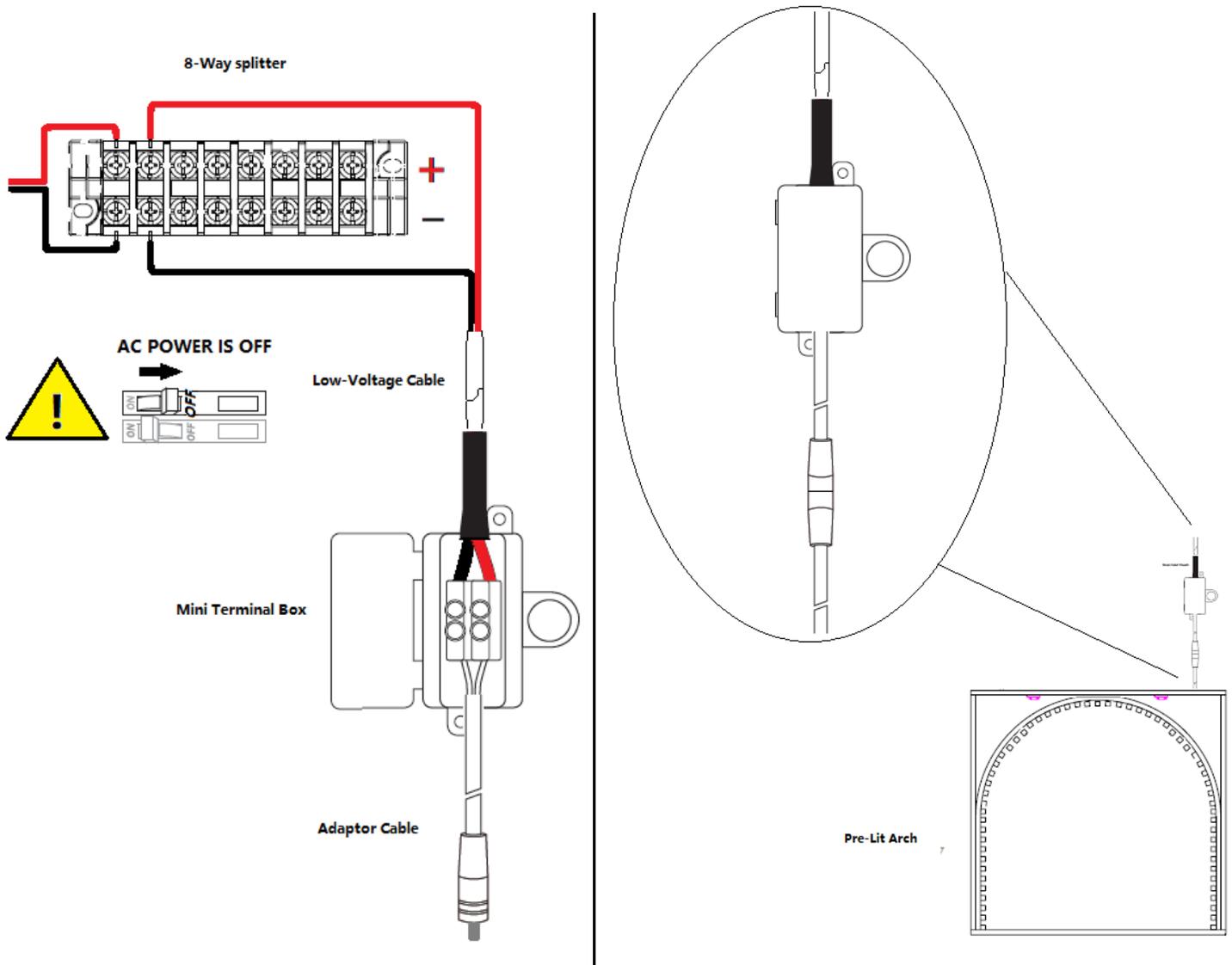
Connecting low-voltage cable to 8-way splitter

- Be sure to switch/disconnect from AC power before making connections
- The supplied 8-way splitter will allow for multiple runs from a single point
- Each row is linked so if you connect the V+ to one position, the entire row will now be live with V+



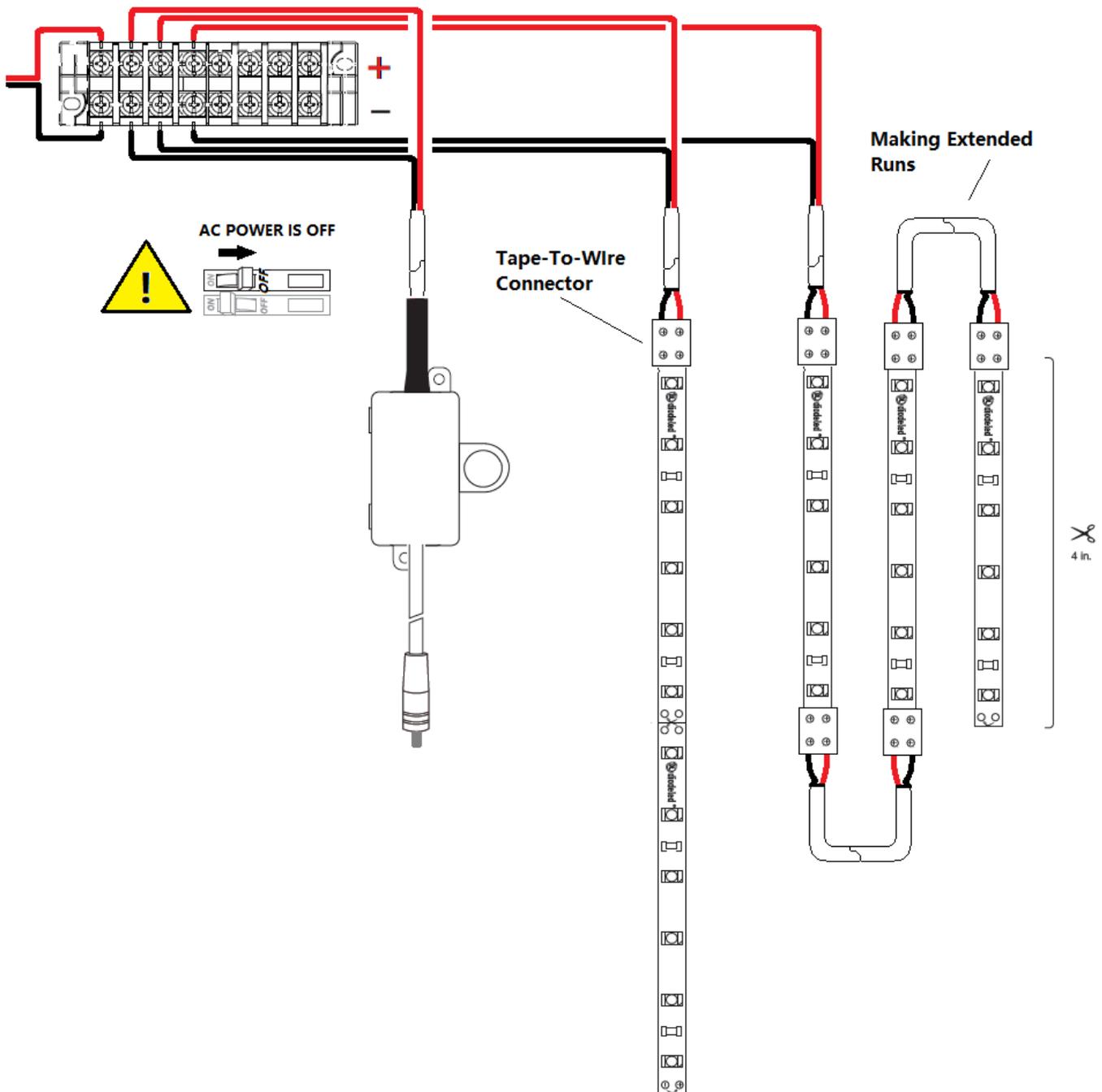
Mini Terminal Junction Box and Adaptor Cable

- Be sure to switch/disconnect from AC power before making connections
- The Mini Terminal Junction Box and Adaptor Cable allow the system to connect to pre-installed lighting fixtures
- Use the low-voltage cable to locate the terminal near the pre-lit fixture.



LED Tape and Tape-To-Wire Connectors

- Be sure to switch/disconnect from AC power before making connections.
- Use the low-voltage cable to connect to one end of the tape-to-wire connector. Connect the other end directly to the tape.
- Use low-voltage cable to connect between sections of tape and extended runs.
- LED Tape can be cut in 4" increments as needed.



Typical System Overview

