

PowerTrack System Guide

Part number: ELPT-DG-1m, ELPT-DG-2m, accessories



The Environmental Lights PowerTrack System is a cost effective, adaptable and universal UL recognized solution for distributing low-voltage power for LED lighting. The system is made up of two key components: PowerTrack and matching twist-lock connector cables. The PowerTrack is a low-profile bar containing two large power conductors. It can be installed in any orientation using the pre-installed adhesive tape on the back or optional mounting clips. Multiple sections can be linked together for larger installations. Twist-lock cables are available in several configurations with male barrel connectors, female barrel connectors and linking cables for multiple sections of PowerTrack. These cables can be connected anywhere along the length of the track system and can be reconfigured as-needed.

The PowerTrack System is intended for use in Class 2 electrical systems with 5 amps of current or less using the standard barrel plug connectors. Outside of Class 2 applications, the PowerTrack can handle 15 amps of current. Barrel plugs should not be used for any connection over 5 amps. A normal voltage drop calculator can be used for the system. The PowerTrack is the equivalent of 12AWG solid copper wire and the cables use 18AWG stranded copper.

The EL Power Track System can be cut in the field or by our in-house customization team. Instructions for cutting the PowerTrack in the field can be found at the end of this document. The PowerTrack System can also be custom ordered for larger commercial applications. This includes custom lengths, alternate connectors and additional mounting options. Please contact us with any specific inquiries.

Features

- UL Recognized Power Distribution System E345129
- Configurable and customizable for a wide range of applications
- Can be reconfigured in the field if lighting needs change

Features cont.

- Minimal voltage drop: PowerTrack is equivalent to 12AWG solid copper wire
- PowerTrack can handle 15 amps of current
- Barrel plug connections are rated for 5 amps

Installation

Caution: It is always recommended that power be disconnected during installation or when re-configuring any parts of the PowerTrack System.

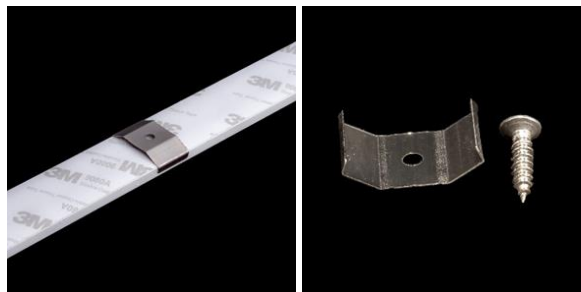
Adhesive Backing

1. The adhesive backing should only be used on flat, non-porous surfaces. The area should be clean and have sufficient space for the entire bar to make contact Normal
2. Remove the protective layer from the adhesive tape on the back side of the PowerTrack.
3. Press the PowerTrack into the installation position, applying pressure along its entire length to ensure proper adhesion.



Mounting Clips

1. Plan out your installation by measuring out and marking the locations for the mounting clips. It is recommended that you use at least 3 mounting clips per meter of PowerTrack.
2. Drill pilot holes for each screw, if required by the material that you are mounting to.
3. Insert a screw through the mounting hole on each clip and drive the screw into the pilot hole or marked location.
4. With all clips secured, snap the PowerTrack into place. It may help to spread the clips as the PowerTrack is being pressed into place.



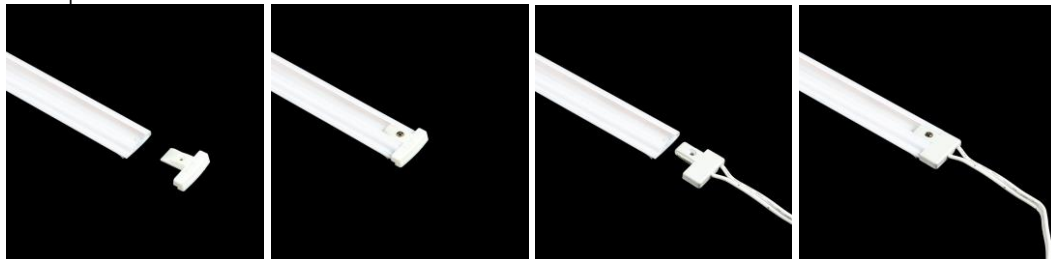
Twist Lock Cables

1. Place the twist-lock connector into the groove in the PowerTrack. The wire exit should be perpendicular to the PowerTrack and facing away from the guard rail.
2. Rotate the twist-lock plug so that the wire exit is running parallel to the PowerTrack. The guide on the connector should be on the opposite side of the guard rail.



End Caps

1. All PowerTrack sections are sold with end caps installed, but may be swapped out to add or remove barrel plugs. End caps will also need to be installed after cutting sections of the power track. Both powered (with barrel plugs) and standard end caps are available.
2. The first step in installation is to confirm that the end cap version matches the side of the PowerTrack you will be installing it on. If the end cap protrudes out past the width of the PowerTrack, it is on the wrong side.
3. Slide the end cap into place and secure with the screw.



Extending the PowerTrack System

The EL PowerTrack system utilizes the equivalent of 12AWG solid copper conductors for carrying current throughout the rigid sections. This permits the use of multiple power track sections together for longer runs without significant voltage drop. The three methods of connecting PowerTrack sections are outlined below.

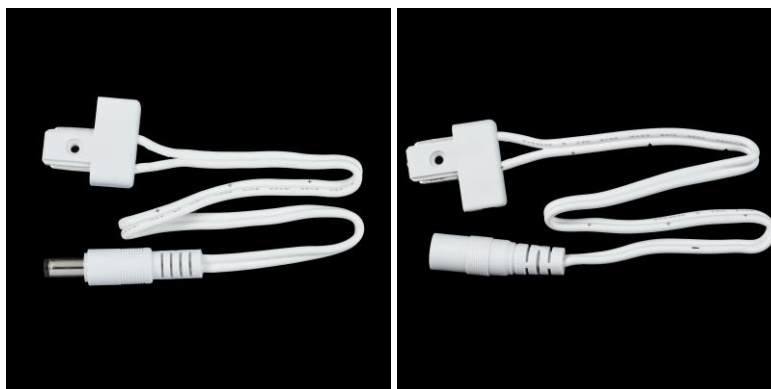
Two-sided Twist Lock Cable (ELPT-TL-C250mm-TL)



Twist Lock to Barrel Connector Cables (ELPT-TL-1m-FBC and ELPT-TL-1m-MBC)



Powered End Caps (ELPT-PEC-fbc-A and ELPT-PEC-mbc-B)



Cutting Instructions

The Environmental Lights PowerTrack System can be cut in the field to any length for a truly custom fit. The system retains the UL recognition even when cut. The process requires some common tools, but is otherwise very easy. We recommend using power tools for the most accurate cut. Only qualified people should operate power tools and only with the proper safety gear. Note that all installed sections of PowerTrack should have the "RU" logo if it is being inspected by a UL inspector

Steps

1. Double check all measurements of the installation location to ensure that the PowerTrack will be cut to the correct length.
2. Use a Philips screwdriver to remove the screw and end cap from the side that will be cut.



3. Measure and mark the cutting location on the power track. Then use a chop saw to make a clean, straight cut. Other cutting methods such as a jigsaw may be used if a chop saw is not accessible. Cut slowly to avoid splintering the plastic.



4. Screw the end cap back into the PowerTrack.

Note: The copper traces inside the PowerTrack may move around after cutting. This is normal and will not affect performance. The movement will stop as soon as a twist-lock connector is installed in the PowerTrack. Optionally, the copper traces can be removed after step #2 and cut separately a few millimeters longer than the power track. This will prevent the traces from sliding around once you reinstall them into the cut PowerTrack.