

**Before Getting Started**

Installation may vary based on the circumstances at the installation site. Retrofitting an existing deck or patio will require a different method than installing lighted caps in an area where posts and railing have yet to be installed. Please contact your local Sales representative or reach out to INTEX Millwork Solutions for assistance in planning your installation. It is generally recommended to estimate about 10-20' of wiring per cap required depending on the installation scenario. It is also recommended to purchase a few extra gel connectors (INTEX Part # LED-SPLICE) for field adjustments and corrections during installation.

**Warranty Disclosure**

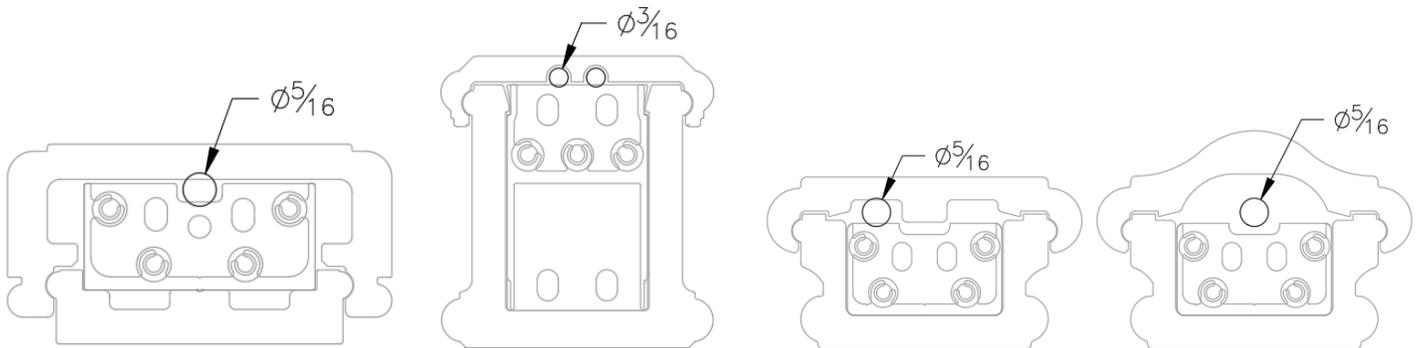
INTEX Millwork Lighted Cap Warranty will not be honored if 3<sup>rd</sup> party parts and accessories are substituted during installation. INTEX Millwork supplied Lighted Caps, wires, connectors, and transformers must be installed in accordance with INTEX Millwork Lighted Cap Installation Instructions in order maintain warranty coverage. Using any accessories or electrical equipment not specified by INTEX Millwork in this instruction will void all warranties associated with the product. Please see full warranty information at [www.intexmillwork.com](http://www.intexmillwork.com)

**1. Planning your Installation**

Determine the number of lights required and plan your layout. The 150W Transformer supports up to 40 lights in total, but it is recommended that these are split over several output terminals. For best results, limit installation to no more than 12 caps per output terminal, and evenly distribute the number of caps per output terminal. See Figure 1 at the end of this instruction for reference.

Plan the location of the transformer. Bear in mind that if a Timer/Photocell combo is being used, the power supply will need to be located in a position where there is sufficient ambient light to trigger the sensor (i.e. not under a deck or inside an enclosure.)

Determine the method required to run the wiring from post to post. It is generally advised to run wiring underneath the deck or structure and up through the newel posts to make a connection. If posts are already installed or there is no access underneath the structure, wiring can be run through top railing sections. This will require drilling holes in the newel posts faces to run the wiring, which will then be covered once the top rail is installed. Refer to the images below for hole locations and sizes if running cabling through INTEX railing.



**RS35 Dartmouth**  
 Drill 5/16" hole in newel and pass wire through notch at bracket.

**RS60 Liberty**  
 Drill two 3/16" holes to split wire and pass leads over bracket. Requires making small notches in the rail cap for clearance.

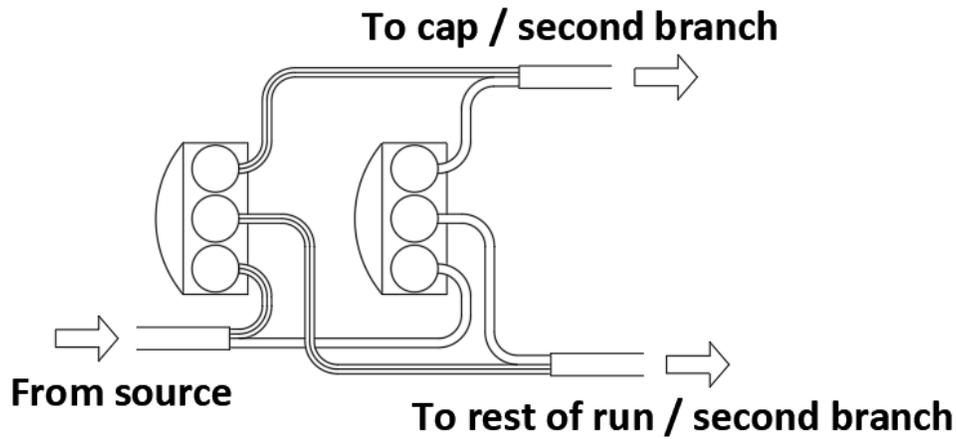
**RS40 Hampton**  
 Drill 5/16" hole in newel just above bracket, centered or offset depending on which rail cap is being used.

## 2. Run Cabling to Planned Layout

Lay all cabling according to planned layout. You may wish to leave extra length at each intersection to allow for minor field adjustments. If running wiring through railing, ensure that rail caps are not installed until all connections are made and verified.

## 3. Connect all Caps

Set caps in place and make all connections. Locate the packs of gel connectors provided with each cap. Note that each cap connected will require 2 connectors. For a typical connection - split the two-conductor wire and include a lead from the source, cap, and continued run on each connector as shown below. *Note: To use the gel connectors, wires do not need to be stripped. Simply insert all 3 leads fully into the connector and use a pair of pliers to clamp the blue cap down onto the leads until it clicks into place.*



## 4. Install and Connect Transformer

Follow the transformer's included instructions to install it in a suitable location. Ensure it is unplugged before connecting the wiring to the terminals. Using a pair of wiring strippers, strip the source leads about ½" back before inserting them into the terminals and snapping them in place. *Note: INTEX Millwork Solutions recommends using the 15V terminals only on the power supply. If you are unable to evenly balance the number of lights per terminal, you may wish to connect the smaller run of lights to the 12V terminal to more evenly balance the brightness.*

## 5. Verify Installation and Finalize

Once all connections are made, plug the power supply in and turn it on to ensure all lights are properly connected and are functional. Once verified, tuck cap wiring into newels and secure caps to newels using latex caulk. **DO NOT USE PVC GLUE TO ATTACH CAPS TO NEWEL.**

If necessary, finish rail installation by applying all rail caps in accordance with their provided installation instructions.

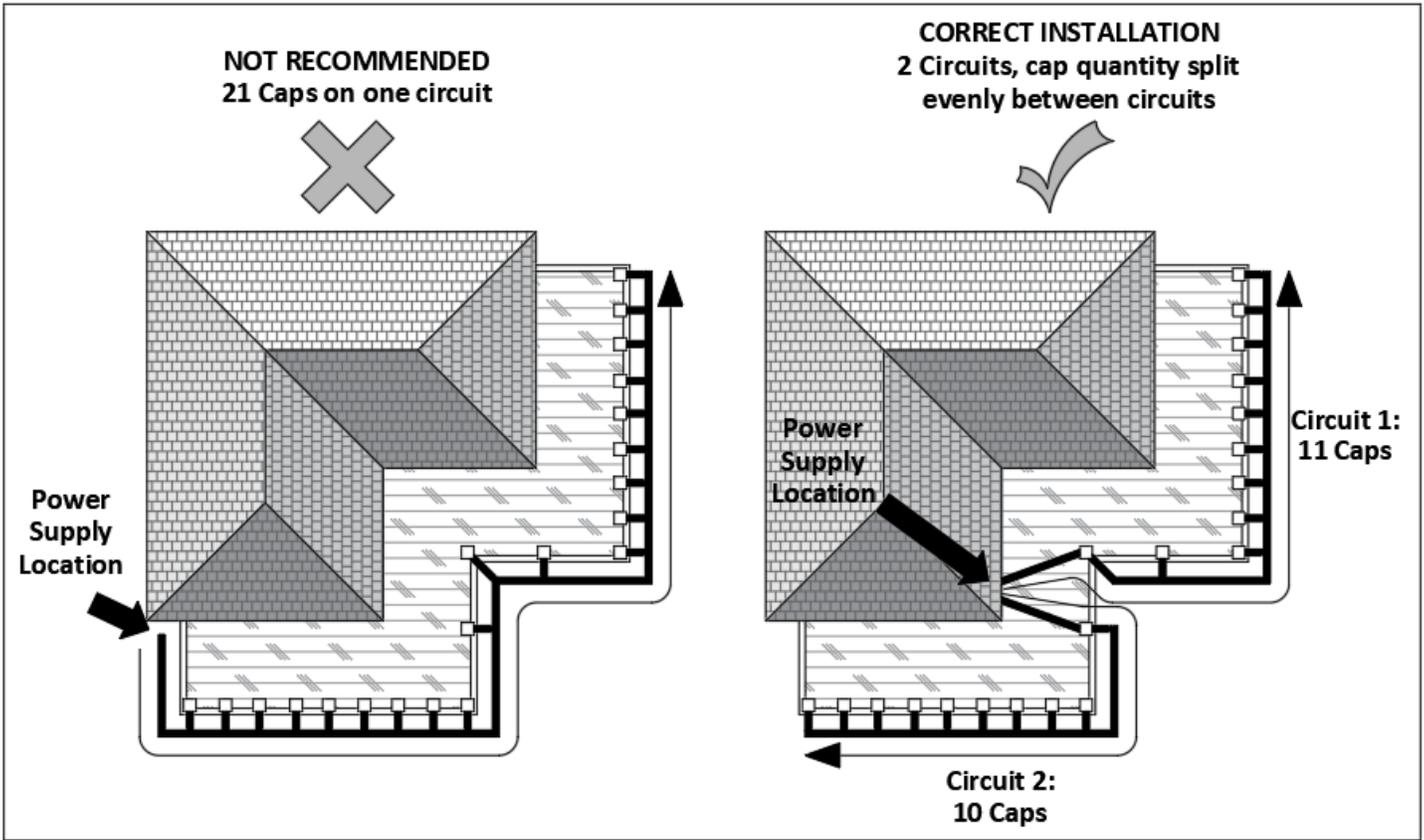


Figure 1 – Planned Layout

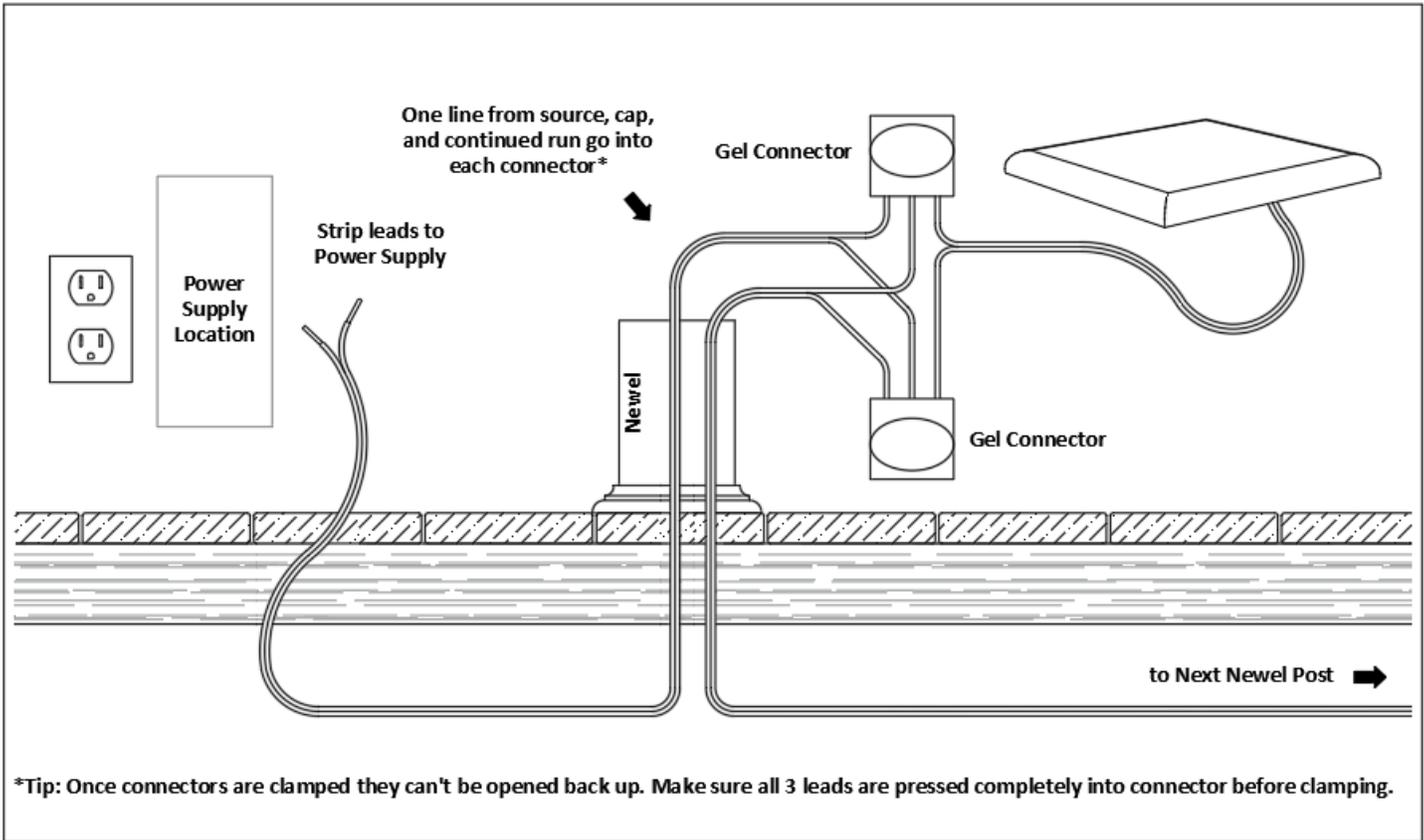
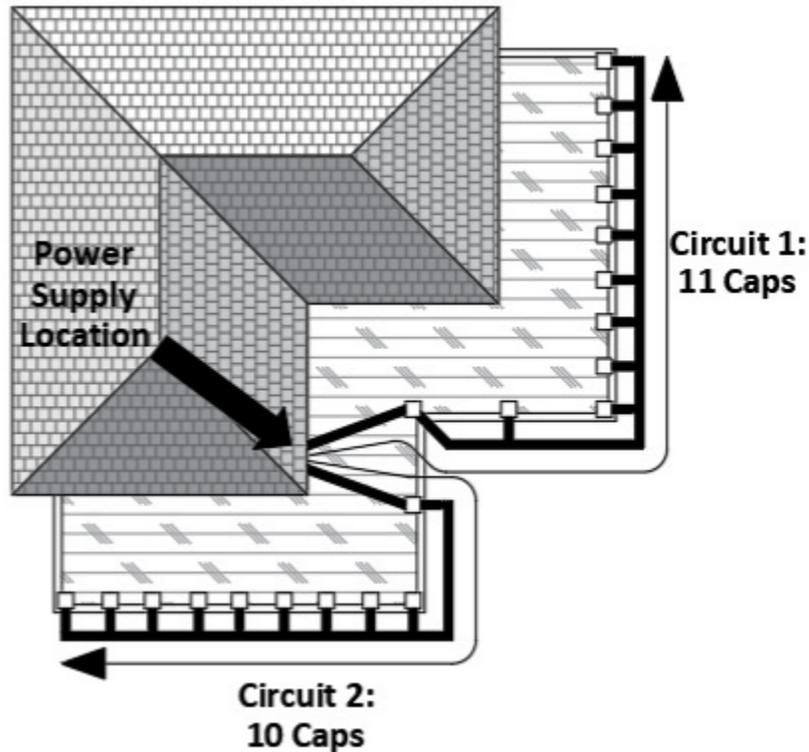


Figure 2 – Wire Under Deck Example



### Typical Lighted Cap Material Take-Off for Deck Example Above

Suggested Quantity	Item with INTEX SKU	Description
1	Transformer (LEDPOWER-150)	150W unit can support 40 total Lighted Caps across 4 separate circuits
1	Timer & PhotoCell (LEDPOWER-TP)	This item is optional but recommended
21	Lighted Flat Caps (LED-NCFLAT5)	Also available in Pyramid; includes 9" Connection Wire and 2 Gel Connectors
3	100' Spool of Conductor Wire (LEDWIRE100)	16 Gauge 2 Conductor Wire (Assuming "Through Rail" Installation) <ul style="list-style-type: none"> <li>For "Through Rail" Installation, assume 10' of wire required for every 8' section</li> <li>For "Under Deck / "Through Post" Installation, assume 20' of wire required for every 8' section</li> </ul>
4	2-Pack Self-Stripping Sealing Gel Connectors (LEDSPLICE)	This item is optional but recommended <ul style="list-style-type: none"> <li>Although 2 Gel Connectors are supplied with purchase of each Lighted Cap, it is recommended to purchase a few extra, as the connector is a "1-time use" item. Once the connector has been used and attached, it cannot then be removed and reused.</li> </ul>

