

# Low Voltage Lights *by*



## Before You Start

- o Read and Understand the instructions completely.
- o Be sure electrical current is turned off.
- o If you have any doubts about how to install fixture, please contact an electrical contractor.

## Installation

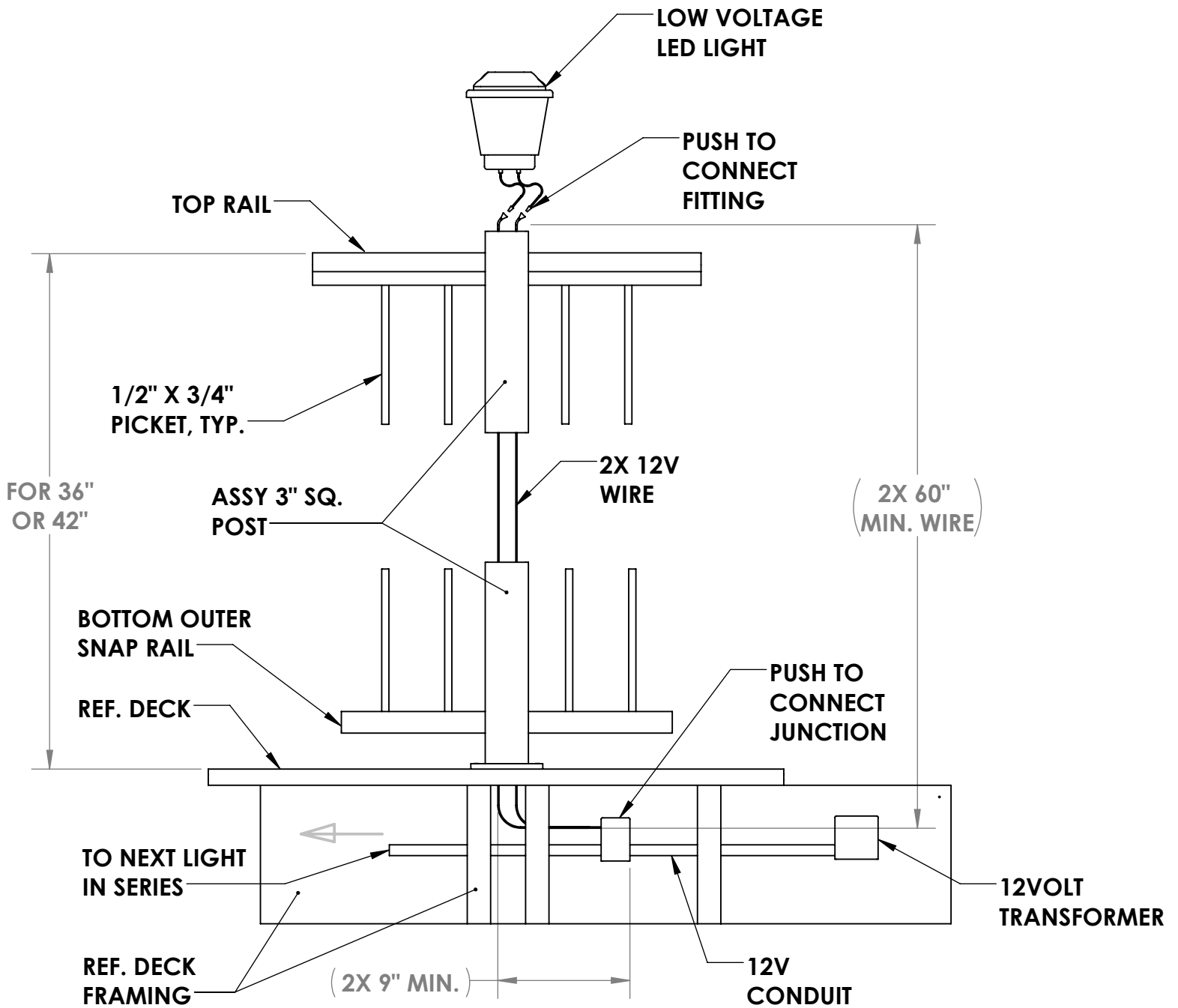
1. Connect Deck light only to a 12 volt power source
2. Connect wires from "12 volt supply line" to the Deck light (Push connectors together, if using the DLE4410) or if using standard wire attach with wire nut.
3. Attach Deck light to post using screws provided.
4. The Deck light includes (1) 18 watt, 12 volt bulb
5. Turn on power to confirm light is on

**Main low voltage wire:** Be sure to use a minimum of 12-gauge, UV protected, exterior grade wire. To determine the amount of wire required, measure the distance from the furthest light, in series, back to where the transformer will be mounted (interior or exterior, wherever an outlet is available). Each light is wired "daisy chain" style to the main low voltage wire, using the DLE4410 pigtail. The wire is typically sold in 100', and 500' coils. The wire can be run above ground, under the joist or under the handrail, through the vinyl, or under ground. It is low voltage, so it need only be buried 3" or so underground. Wiring should not exceed 200' runs. If 200+ feet is required, please refer to transformer instruction sheet for additional wiring options.

**Transformer:** Transformers are specified per the installation. Always size the transformer as close as possible to the required wattage draw, without going over. The wattage output of the transformer is important; you do not want too much or too little output on the transformer. To **determine the size of the transformer**, add up the total number of light-watts. This is the wattage of the fixture times the number of fixtures. Example: 6 each DLA6040 = 6 lights x 18 watts = 108 watts. Then select the next larger size transformer, in this example 121 watt transformer. Transformers usually have built in timers to set on/off times, as well as a manual override, or have a built in photo-eye for automatic on/off applications. With a switched exterior outlet your transformer can be controlled from indoors.

## FREQUENTLY ASKED QUESTIONS:

1. **How many lights can I install on a transformer?** Up to 50 lights. See transformer section. For further detail, read the transformer instruction sheet included with the transformer
2. **How do I install wire in a wood post?** Simply cut or route a channel vertically on the face of the post. Once wire is installed, cover with a batten strip or cut a filler piece to match the slot size. Additionally, the wire can run under the handrail. In this application, drill a hole from the top of the 4x4, on an angle, to meet the underside of the handrail. Run wire from post to post, under the handrail.
3. **Can I put the lights on an inside switch?** Yes. To do so, the outlet that the transformer plugs into must be wired to the desired switch. The transformer is then placed in "manual mode", operated by the light switch.
4. **What type of bulb is used, and where do I get replacements?** The bulb is a standard automotive brake light bulb, and can be purchased at any auto parts store.
5. **Can the light output be reduced on the low voltage light?** A 13 watt bulb is available to reduce the light output if desired.
6. **Can a dimmer switch be used?** Dimmer switches are not effective on low voltage lighting.
7. **Some lights appear dimmer than others, what do I do?** This is a result of wiring issues. Primary due to longer distances from the transformer (200 or more feet). There are several different wiring schemes to address and/or correct this. Please refer to the transformer instruction manual to correct.



**ELEV. VIEW - LOW VOLTAGE DECK LIGHT**