General Information
» ALWAYS consult local codes before beginning a project.
» A maximum of 60 lights can be powered by one 60W transformer. If your project requires more than 60 lights, contact 1-800-BUY-TREX for transformer sizing.
» Straight runs over 100’ (30.5 m) may require larger wire such as 16 or 14 gauge.
» Use Trex Transformer only. Use of any other transformer voids warranty.

Planning
NOTE: When designing your deck, plan locations of lights, power supply, timer, and dimmer. These should be accessible for service.
1. The dimmer remote will work in a 30’ (9 m) radius of the unit.
2. The dimmer must be installed in a dry location. Keep dimmer remote ID # in a safe place in case a replacement remote is needed.
3. The timer must be installed vertically with the receptacle facing downwards and not reaching ground level. The timer must be in view of the sun to use the dusk/dawn feature.

Lighting and Wiring Overview

NOTE: Avoid railing brackets and locations for deck rail lights when running wires up posts.

NOTE: It is recommended to install wiring before decking and railing have been installed.
DO NOT run wires between joists and deck boards.
**Installing Wiring**

**NOTE:** It is recommended to install wiring before decking and railing have been installed.

- Use 18 gauge stranded outdoor wire (available from Trex) to connect wires from each light.

1. Wiring must be run under the decking structure and behind stringers. **DO NOT** run wires between deck boards and joists. Staple to frame with cable staples at least 1/4” (0.6 cm) wide. **DO NOT** crush wire insulation with staple.

2. Wiring can be run under the deck and behind risers. Staple to frame with cable staples at least 1/4” (0.6 cm) wide. **DO NOT** crush wire insulation with staple.

3. Run wire up the outside of each post that will have either a post cap light or a deck rail light. Avoid running wire on the side of post where railing brackets or deck rail lights will be installed. Leave a 6” (15.2 cm) loop at top to make connections. Staple to frame and posts with cable staples at least 1/4” (0.6 cm) wide. **DO NOT** crush wire insulation with staple.

**NOTE:** After installing wiring, finish installing your Trex decking and railing by following the Trek Installation Guide.

**Making Connections**

- Polarity must be maintained through wiring system. Always attach the same side of the 18 gauge wire to the red wires on the lights. The red wires are positive.
- The wire nuts supplied by Trex are gel-filled and waterproof. These wire nuts can safely attach four wires.

1. Strip wires to 5/8” (1.6 cm). Align any frayed strands of the conductors. Pre-twisting is unnecessary.
2. Place stripped wires together with insulation even. Twist connector onto wires pushing firmly until hand-tight. **DO NOT** over torque. Wipe sealant in and around conductors and connector opening while tightening. **DO NOT** reuse.

**Timer Operation Instructions**

1. Select the mode of operation:
   - Dusk to Dawn
   - 1-8 hours
   - Always On
   - Off

Program repeats daily. When power is flowing to lights, green light above POWER is on.

**Installing Post Cap Lights**

**NOTE:** Install post cap lights after the railing system, post sleeve skirt, and post sleeve have been installed.

1. Cut the wire loop at the top of the post. Strip the wire ends. Make connections with the provided wire nuts. **See Making Connections above.**
2. After verifying wiring is correct by turning lights on, attach the cap to the top of the post with silicone caulk.
Installing Deck Rail Lights

**NOTE:** Install deck rail lights after the railing system, post sleeve skirt, and post sleeve have been installed.

1. Mark desired height, centered on post sleeve for deck rail light location.
2. Drill a 1” (2.5 cm) hole through post sleeve. Use care to stop drill before cutting into post.
3. Fish wire from deck rail light through hole and up to top of post. Cut wire loop at the top of the post. Strip the two wire ends. Make connections with the provided wire nuts. See *Making Connections on page 2*.
4. Push back housing and wires into hole. Align holes for screws vertically and attach fixture base to post with provided screws as indicated above.
5. Line up polycarbonate lens with fixture housing. Twist onto fixture base.

Installing Riser Lights

**NOTE:** Install riser lights after stair and risers have been installed.

1. Mark the locations for each light, generally 4” (10.2 cm) above the tread. Consult local codes for lighting requirements.

**NOTE:** If possible, avoid locations over stringers as holes will be more difficult to create.

2. Drill a 1” (2.5 cm) diameter hole at least 1” (2.5 cm) deep into riser. If the riser material is thicker than 1” (2.5 cm), use a 1/4” (0.6 cm) drill bit to create a passage for the wires.
3. Thread wires through hole.
4. Press light into hole, ensuring lens is horizontal. Make connections behind the stairs with the provided wire nuts. See *Making Connections on page 2*.

**NOTE:** DO NOT install Riser Light or Deck Rail Light into top or bottom rails or balusters.
Installing Recessed Deck Lights

**NOTE:** Install recessed deck lights after installing decking.

1. Mark locations for lights in deck boards.

   **NOTE:** If possible, avoid locations over joists as holes will be more difficult to create.

2. Drill a 1" (2.5 cm) diameter hole 3/4" (1.9 cm) deep into deck board. Hole cannot go all the way through deckboard or light will fall through. Ensure drill bit is perpendicular to board. Drill a 1/4" (0.6 cm) diameter hole in base of the first hole through deck board.

3. Thread wires through hole. **DO NOT pull LED into hole by pulling on wires. This may damage wires or LED.**

4. Press light into hole until flush with surface. Make connections under deck with the provided wire nuts. See **Making Connections on page 2**.