# **WARNING AND CAUTIONS**

WARNING! To reduce the risk of fire, electrical shock, or injury to persons:.

 LED Disc Light is intended for use strictly with class 2 power supplies. Use only approved class 2 12V power supplies when powering LED Disc Light.

### Non Dimmable

LEDDR-12-60W: Outdoor driver, Max. 18 LEDDL, 60W hardwire

Input: 100 - 240V AC Output: 12V DC

## Dimmable

TRE12L20DC: min 3 LEDDL, max 6 LEDDL TRE12L60DC: min 3 LEDDL, max 18 LEDDL

Input: 120VAC Output: 12V DC

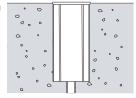
- 2. Parallel wire LED Disc Lights to LED Driver.
- 3. Use only 18G wire of the following specifications:
- For all applications with wire interior to a wall, use only UL approved or equivalent 18G wire labeled "CL2". NSL part number LW-18G-CL2.
- For all exterior to a wall or burial applications, use only UL approved or equivalent 18G wire labeled "Sprinkler Wire" or "Direct Burial", NSL part number LW-18G-BUR.
- First, disconnect power from LED Driver. Wire LED Disc Lights per these instructions, assure proper tightness on all terminal blocks, strain reliefs, and Disc Light covers, and then apply 120VAC power to LED Driver.
- Do not try to adjust, fix, rewire, LED module. In the unlikely event LED module does not illuminate, check wiring and terminal block first. If this does not work, send LED module back for warranty replacement, if applicable.

NOTE: THESE PRODUCTS MAY REPRESENT A POSSIBLE SHOCK OR FIRE HAZARD IF IMPROPERLY INSTALLED OR ATTACHED IN ANY WAY. THIS PRODUCT MUST BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE INSTALLATION CODE BY A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE PRODUCT AND THE HAZARDS INVOLVED.

# WARNING: LACK OF DRAINAGE WILL VOID THE WARRANTY

To maintain the warranty, a proper drainage system MUST be installed (drainage material or drainage pipe), when the product is installed in soil or concrete.

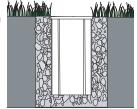
Concrete installation



Paving stones



Soil installation



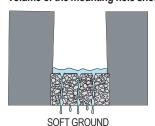


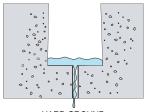






Test drainage prior to installation. A quantity of water equal to the volume of the mounting hole should drain in 15 minutes or less.





HARD GROUND



# LED Disc Lights

**INSTALLATION AND** 

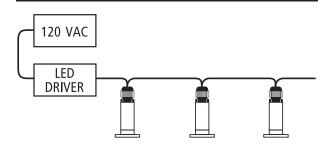


- ▶ Steps
- ▶ Aisles
- ▶ Paths
- ▶ Driveways
- ▶ Direction Lighting
- ▶ Information Lighting
- ▶ Decorative Lighting
- ▶ Merchandising
- ▶ Landscape Accents





# GENERAL GUIDELINES FOR FIXTURE INSTALLATION

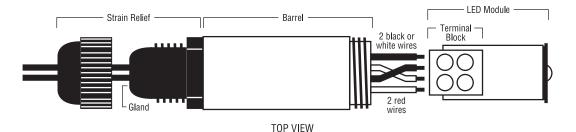


Determine where you wish the LED Disc Light to be placed.

Drill a 1.5" (3.81cm) diameter hole into mounting surface. LED Disc Lights will require a hole of at least 4" (10.2cm) long x 1.5" (3.81cm) in diameter. If you wish to recess the cover of the LED Disc Light for a totally flush mount, you will need to center drill an additional 2.36" (5.99cm) diameter hole, 5/32" (0.40cm) deep. Note that an 18 gauge wire will also have to pass from LED Driver to all LED Disc Lights.

Note: For concrete pour applications, we recommend the use of our concrete form, NSL Part # LEDD-CF

- 2. Place LED Disc Lights loosely into holes, do not mount at this time
- Locate Driver adjacent to 120VAC power supply. Remember to adhere to max and min number of fixtures per driver being used as per #1 under Warnings in these instructions. Leave LED Driver unattached to 120V power at this time.
- 4. Use only 18G wire of the following specifications:
  - For all applications with wire interior to a wall, use only UL approved or equivalent 18G wire labeled "CL2", NSL part number LW-18G-CL2.
  - For all exterior to a wall or burial applications, use only UL approved or equivalent 18G wire labeled "Sprinkler Wire" or "Direct Burial". NSL part number LW-18G-BUR.
- Disassemble LED Disc Light per diagram below. Bring power wire from LED Driver to LED Disc Lights and strip insulation off of the wire leaving 3/8" (0.95cm) of bare copper wire.



- 6. Bring both the incoming power wire, and the outgoing power wire, into the LED Disc Light strain relief by pushing each through the respective hole in strain relief rubber gland. If you encounter difficulty inserting wire into the gland, apply a small amount of Vaseline on the outside of the wire. Once through the strain relief gland separate the incoming and outgoing power wires into two sets of black or white and two sets of red wires. See diagram above.
- There is no polarity for terminal block. Attach both black or white wires to either one of the two vacant terminals, and attach both red wires to the other vacant terminal. Tighten terminal block screws. See diagram above.
- 8. Pull wires and LED module into LED Disc Light barrel until LED module is flush with top of barrel. Screw on cover firmly. Tighten strain relief nut firmly.
- On the last LED Disc Light in the run, you will only have one incoming power wire, no outgoing power wire. On this LED Disc Light place the incoming power wire through one hole in the strain relief, and in the other hole place acrylic rod included with this instruction sheet.
- 10. Bring power wire from first LED Disc Light through a proper strain relief, and into the LED Driver. Place black or white power wire into either "+" side or "-" side, and red wire into vacant side of LED Driver output.
- Assure all connections and strain reliefs are firmly tightened, cover is tight on LED Driver, and then hardwire LED Driver to 120VAC.

**VERY IMPORTANT!** To properly tighten the black plastic strain relief nut, first tighten firmly with your hand, then tighten an additional one-half turn with a 7/8" open end wrench.

- 12. LED Disc Light will illuminate in about 3 seconds. If all do not illuminate, check connections at the LED Driver. If one does not illuminate, check connections at the unlit LED Disc Light. If several do not illuminate, check connections at the first unlit LED Disc Light, then the next, and so on.
- 13. With system working properly, attach LED Disc Lights to mounting surface by securing mounting screws provided through LED Disc Light cover and into mounting surface.

# **SPECIFICATIONS**

Approvals: cETLus listed for indoor, outdoor wet

and outdoor burial applications

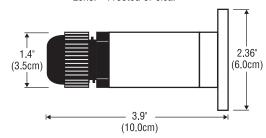
Electrical Rating

Per Disc Light: 3.0 watts, .25A, 12VDC Average LED Life: 50,000 hours, 70% initial

lumen output

Finish Options: Stainless Steel

Lens: Frosted or clear



Suitable for damp locations SUITABLE FOR WET LOCATIONS Access behind wall/ceiling required

