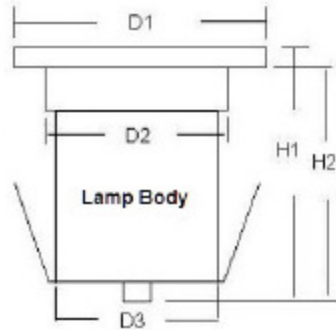


In-Ground LED Luminaire  
Integrated Constant Current Regulation



## LR-TWC12120-30F

The operating voltage for this LED luminaire is 12VDC.

**CAUTION:**  
Use drivers designed for constant current  
internally regulated luminaires only.

**Note:** Operating voltage range for LED luminaires will vary depending on model, style and total number of LEDs. To help determine the operating voltage range for each LED RAYS luminaire, always consult factory's specification sheet and/or installation instructions before installation.

Please read all the safety warnings that came with this luminaire.  
Proper installation will ensure product reliability and product performance.

**IMPORTANT: READ CAREFULLY BEFORE INSTALLING LUMINAIRE.  
RETAIN FOR FUTURE REFERENCE.**

FOR TECHNICAL ASSISTANCE PLEASE CALL LED RAYS @ 514 484-8462 or email  
info@ledrays.com



## PRECAUTIONS

- Verify the shipped contents please do not proceed with the installation if any damage is found, please contact LEDRAYS INC. in such an event.
- Verify that the correct mounts, accessories, parts & hardware are available prior to starting work.
- All work should be done by a qualified electrician in accordance with the National Electrical Code, applicable local codes and ordinances. Always check with the Authority Having Jurisdiction (AHJ) to confirm acceptable procedures.
- Confirm the operating voltage of your system with the label on the luminaire and driver/power supply.
- Do not operate in extreme heat or high humidity environments (Operating temperature range between **-30°C and +45°C/-22°F and +113°F** in wet, damp & dry applications for IP65-68 rating)
- Do not modify or operate with dimmers or other non approved control circuits unless the luminaire is equipped with that option.
- This luminaire is designed to operate in a free air environment any immediate enclosed space will reduce its lifespan and may void the warranty. Do not operate luminaire in packing carton.
- Power must be off during the installation.
- Turn off the breakers for the circuit and affix a warning label before proceeding.
- Please use supplied original packing for protection when transporting luminaire.

**TerraWALK luminaires contain no user serviceable parts inside and no field replaceable parts.**

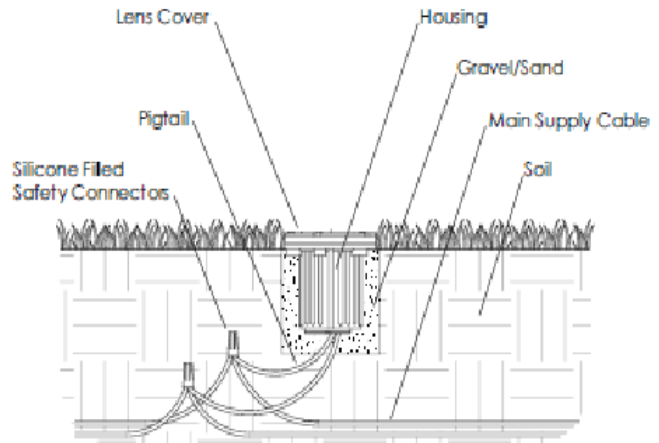
**PRECAUTION** The TerraWalk 3 luminaire is not submersible and adequate drainage must be provided for exterior installation. It is recommended the luminaire be surrounded by 3" to 4" of pea gravel or sand to assure proper drainage. Top of luminaire must be above grade so rain and irrigation water will not accumulate.

## IN-GRADE SOIL INSTALLATION

1. To prevent electrical shock, disconnect driver from electrical supply before installation or service.
2. Dig hole approximately 7" diameter by 7" deep. This allows approximately 3" of pea gravel or sand to surround luminaire housing.
3. Strip (2) leads from luminaire pigtail wire. Using two (2) silicone filled safety connectors (not provided), connect leads from luminaire to electrical supply wire leads.

**NOTE:** Luminaires are supplied with 25cm of 18-2 cable pigtail for secure connection to electrical supply cable. Wire is to be protected by routing in close proximity to luminaire. Wiring shall be buried a maximum of 6 inches (15.2 cm) in order to connect to electrical supply wire.

4. Install luminaire in hole and backfill hole after installation with pea gravel or sand.
5. Provide power to luminaire and check for proper

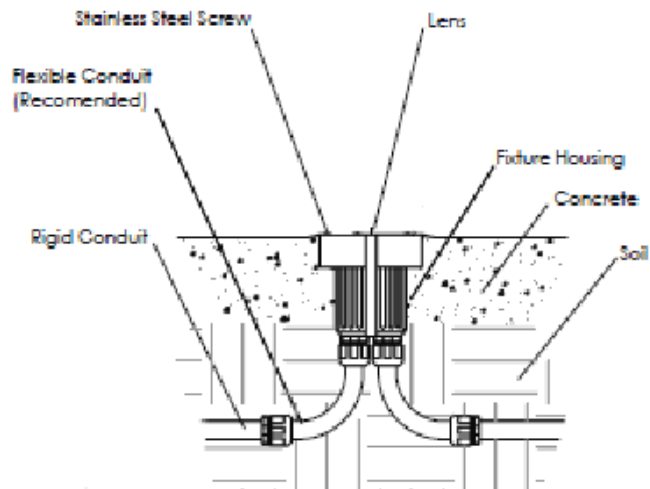


## CONCRETE POUR INSTALLATION

1. To prevent electrical shock, disconnect driver from electrical supply before installation or service.
2. Prepare hole approximately 8" diameter to a depth suitable to make top of fixture flush to 1/8" above grade. Pea gravel or sand is recommended for seating the luminaire sleeve housing to aid positioning.
3. Remove LED assembly and wiring exposing conduit entry holes in sleeve housing.
4. Install conduit through provided holes in bottom or sides of the luminaire. Plug & seal unused conduit entry if required.
5. Support luminaire in selected position using standard masonry procedures.
6. Pour concrete at least 2" thick.

**NOTE:** When installing in concrete, luminaire must be flush to 1/8" above grade to promote water run-off.

7. Pull electrical supply wires (line in) through conduit and luminaire. Pull wires long enough for manual connections with safety connectors (4" to 6" above the top rim of luminaire).
8. Make wire connections to luminaire as required using the safety connectors.
9. Coil wire leads along bottom of sleeve housing.
10. Install LED assembly and tighten screws evenly.
11. Provide power to luminaire and check for proper operation.



## SPECIFICATIONS

### Power consumption: 1W

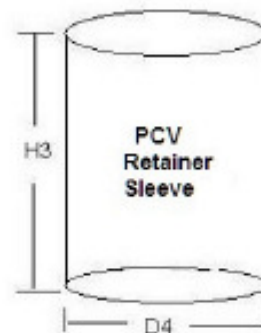
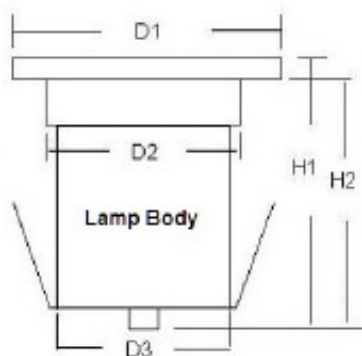
- **Input voltage:** 12VDC/ **Input current:** 90ma (0.09ADC)
- **Materials:** 304 Stainless steel body & frosted Tempered glass fascia
- **Mounting:** Retaining sleeve & spring loaded lamp body (not vandal proof)
- **Cable:** 2 wires connections 18AWG for input 12VDC
- **Cable Length:** 100cm custom length exits bottom of lamp body
- **Emitting color:** Warm white
- **Color Temperature:** 2700-3000K
- **Beam angle:** 120°
- **IP Rating:** IP68
- **L70:** 36,000Hrs

### Notes:

- If unspecified standard CCT will be 3500-4500K (Neutral white)
- For RGB units standard control is DMX512
- 25cm flying leads no connectors standard

## DIMENSIONS

**D1-52mm/2.05inch, D2=D3-33mm/1.375inch, H1-55mm/2.165inch, H2-52mm/2.05inch, D4-46mm/1.81inch, H3-80mm/3.15inch**



## ATTENTION

### Follow all applicable building & electrical codes during the installation

1. The unit is not suitable for underwater installation.
2. Do not install the unit near open flames, where high heat conditions are present or where unrated shocks, vibration and impacts are possible.
3. Do not attempt to dismantle or modify the unit.
4. Avoid looking directly into the LED light beam at close range.
5. Do not power LED fixtures while still in original packaging.
6. Do not place any objects on top of luminaire
7. Do not apply excessive weight on top of luminaire (max rating is 120kg/265lbs) per sq/inch.

## INSTALLATION

1. The TerraWALK LED fixtures should only be connected to the CV series drivers.
2. Other drivers must be approved by LEDRays prior to installation.
3. Using the recommended LEDRays driver the LED fixtures are wired in parallel across the driver output.
4. Make sure the controller and power supply operate in a ventilated & dry environment
5. Do not block fan operation or install in conditions where high particulate matter is present
6. Please pay attention to load on the driver secondary (Output)
7. Use the formula below to determine the maximum number of fixtures per driver.

$$\frac{\text{Number of fixtures (QTY)} \times \text{power rating of each fixture (W)} + 20\% = \text{Total power watts}}{\text{Total power (W) must be below rated driver power output (W)}}$$

1. Maximum number of fixtures for each driver will also be dependent on cable size and length. De-rate the cable according to length and AWG.
2. Additionally the inrush current of the driver(s) must be considered. Refer to the driver specifications for max inrush current.
3. Do not use dimmers or controllers unless provided with luminaires
4. Use correct driver/power supply input voltage as indicated on unit
5. AC Line input voltage for the driver is Blue is Neutral, Brown is Live or line
6. DC output for the driver is Black is negative & Red is positive
7. Observe proper polarity for the luminaire Blue or Black is DC negative Red or Pink is DC positive
8. Use appropriate connectors for the driver secondary as necessary to maintain the IP rating
9. Do not put excessive force on driver/power supply terminal strips
10. Do not attach more than 2 cables per terminal position. Should install require additional wiring use a secondary terminal block of distribution panel
11. Luminaire housing can be installed in any direction
12. Use only the screws, supports, attachments and accessories provided. Do not allow provided attachment screws to enter driver/power supply housing more than 1cm (10mm)

**DO NOT ATTEMPT TO ADJUST DRIVER/POWER SUPPLY OUTPUT !  
DRIVER/POWER SUPPLY OUTPUT IS PREADJUSTED PRIOR TO DELIVERY**

**WARNING:**

**FAILURE TO FOLLOW THESE AND SAFETY WARNINGS INSTRUCTIONS PROVIDED WILL VOID THE WARRANTY AND MAY RESULT IN SERIOUS INJURY AND/OR DAMAGE TO THE FIXTURE AND/OR PROPERTY.**

**WHEN USING MULTIPLE LUMINAIRES, LOAD IS NOT TO EXCEED THE TOTAL WATTS OF TRANSFORMER RATING LESS 20%.**

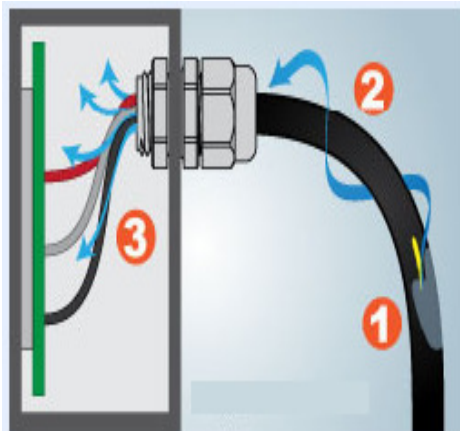
**DO NOT USE EXTENSION CORDS ON DRIVER POWER UNITS.**



**PRECAUTIONS**

**How Micro Cracks Can Cause Major Problems**

WICKING is one of the most common causes for electrical devices to fail when operating in moist environments. Often confused with just a crack in the outer casing or leakage into the housing of a machine, this simple yet complex phenomenon can mean the difference between long term reliability and short term failures and frequent servicing.



**What is Wicking?**

Wicking is caused by moisture entering a crack in the outer jacket of a cable (common with age, stress and temperature variations) or through the wire strands.

Wicking is most common when the equipment and wires cool down after operation. Any air that expanded with heat now condenses and creates a vacuum. Much like an oil lamp or pocket lighter draws fuel from a reservoir, this vacuum causes moisture to be pulled up through the strands of wire into the housing or assembly causing rapid failure.

*LED Rays Inc. has a policy of continuous advancements & development specifications may change without notice. Please contact your rep for updates.*

**FOR ASSISTANCE WITH YOUR PRODUCT PLEASE CALL LED RAYS INC. 514-484-8462  
WWW.LEDRAYS.COM**