

# Inground Luminaires

Installation, Use and Maintenance Guidelines  
(Indicative for all luminaires in this series)

## Application

In-ground luminaire for recessed installation with symmetrical / asymmetrical light distribution. Designed to create and enhance architecture and landscape. Various optics, reflectors and lenses produce a wide range of distribution and lighting effects. The minimum distance to illuminate objects above the light distribution opening must be at least 0.5 metre.



Note : Technical amendments reserved

Light Source : LED. Varied wattage Options

Normal rated voltage for luminaire is 220-240V, 50Hz, single phase ac supply.

## Installation Recommendation

- This product is suitable for Indoor & Outdoor application.
- The main material of this product is aluminium, surface coatings is only suitable for natural environment, don't install this product near sea water or in the environment which is high in salt or acid content.
- Electronic equipment is sensitive to voltage surges. Hence it is recommended to install a stabilizer at source to ensure constant voltage power supply to all outdoor luminaires, for better performance and life span of the luminaire and to avoid risk of damage.
- Installation and maintenance of the luminaire should be carried out by qualified person only in accordance with good electrical practice and appropriate accessories.
- Minimum distance from the surface to be lit (0.5m) for better result.
- Use flexible cable of suitable rating and diameter with the right IP rated connectors.
- The IP rating of the connector between fixture and main cable must be equal to or greater than the IP rating of the Luminaire.
- Please use a Resin / Gel filled IP68 connector of professional standard, for connecting the incoming cable with the luminaire. Never re-use the connector
- Cable glands should be properly tightened.
- It is very important to follow these instructions to, enable the luminaire to be installed correctly. Failure to follow this will void all warranty on the product.
- Please retain installation guidelines for future reference.

## Important Note:

We recommend to drain the mounting area to ensure no water logging at all times, also considering durations of heavy downpour.

## Technical Specifications

- Recessed housing made of high strength die-cast aluminium, corrosion resistant with low copper content.
- Stainless steel 316 grade front ring and screws.
- Silicon gasket.
- Tempered glass with static load resistance.
- Optical reflector efficiency  $\geq 85\%$
- Luminaire prewired.
- Supplied with mounting sleeve for preparing recessed opening in ground.
- Integral power supply
- Earth connection
- Safety class I
- Protection class IP67
- Mechanical resistance IK06 / IK08
- CE - Conformity mark

## Light distribution

Luminaire photometric data / IES files for the light planning program DIALux can be downloaded in IES-format on the KLITE web page [www.klite.in](http://www.klite.in).

## Safety

The safety and the proper functioning of the fitting is guaranteed only respecting the electrical standards and this mounting instructions. Installation should be carried out by a suitable qualified person.

- For Safety, always ensure power supply is disconnected before regular maintenance, lamp replacement and accessory fitting.
- Installation and operation of this luminaire are subject to national safety regulations. The manufacturer is discharged from liability when damage is caused by improper use or installation.
- Any modification to this fixture without authorization will void all warranty and the persons responsible for the modification shall be considered as manufacturer.
- Observe precautions for handling LED module.
- Do not subject the product for voltage or current which is not rated for.
- Luminaire is not suitable for installation near sea water or in the environment which is high in salt or acid content.

## Installation

- Don't install the fixture in soft / loose soil.
- Make a concrete pit to suit the dimension of the plastic housing for buried light with proper drainage.
- Always prepare 20-30cm of drainage gravel and check that it works. Pour a mug of water and check that it completely disappear within 30min. If it doesn't work refine the drainage system further.
- The luminaire must not permanently get in contact with aggressive media that might corrode the housing of the luminaire
- Dismantle luminaire from the recess plastic housing.
- Position recess plastic housing into the floor and fix it using suitable fixing material.
- 0.5 m of cable must be left in the installation housing for lifting the luminaire for maintenance and refixing
- For the tightness of the luminaire it is important that the ground surface prepared later is either on the same level or slightly below top edge of the recess housing
- Use appropriate cable with respect to the rating & gland size and fully tightened to avoid ingress of water. The connection provided by the customer must be carried out in the corresponding protection class of the luminaire.
- Never cover visible parts of the luminaires. Any part not protected by the recessing box, must not be in direct contact with the ground or in contact with aggressive chemical elements
- Please ensure that the wires are connected to the right polarity [Phase, Neutral & Earth] and the luminaire must be earthed (Class I).
- Insert the luminaire housing into the recess plastic housing, align it and tighten screws firmly.
- Lock and unlock the screws following an alternative sequence, tightening all screws evenly.

### Important Note :

- LEDs are highly sensitive electronic components. Please avoid touching the light source directly, during installation.
- If fixture is supplied with integrated LED module, **Do Not Open** the front plate of luminaire during installation. Warranty void if the LED compartment is opened.

### Cleaning and care

- After installation, the luminaire should first be cleaned.
- Building dust, residues from pressure-sensitive adhesives, paint splatter and rust film must be completely removed. Never use cleaning implements made of normal steel, steel brushes or steel wool because they cause extraneous rust to form.
- Cleaning agents containing hydrochloric acid and chlorides should never be used.
- We recommend cleaning the luminaires regularly.
- Periodically clean the luminaires in order to remove possible soil heap on cages or screw heads.
- Do not use high pressure cleaners
- Never re-fill the area in such way that the fixture is partly covered with soil / water for a long time.

### Maintenance Recommendations

The LED module contained in this luminaire shall only be replaced as per the manufacturer recommendation. For further informations, please contact your supplier.

### Storage

If site is not ready for installation, store the material in proper warehouse facilities. K-Lite is not responsible for the damages caused due to the mishandling of material at site.



### Important Note

To ensure proper installation, kindly translate / communicate the installation instructions to the local qualified electrician in their respective local language.



### Please Recycle

The electronic components of this product should not be disposed via the normal waste system. To prevent possible harm to the environment and Human health please ensure that the product is recycled in an environmentally sound manner. Please contact your local collection facilities for more details

### Customer Service

If Klite agrees to receive back some fixtures for Lab Testing and further analysis please ensure that the fixtures shipped should NOT BE DISASSEMBLED. Disconnect the power line and ship the product as is unless otherwise specified. Please contact [customercare@klite.in](mailto:customercare@klite.in) for more information.

# In-Ground Luminaires

# Installation Guidelines

20-30 cm  
**DRAINAGE**

- Always prepare 20-30cm of drainage gravel and check that it works. Pour a mug of water and check that it completely disappears within 30min. If it doesn't work refine the drainage system further.

**OK**

90°  
Correct Installation

- Position recess plastic housing into the floor and fix it using suitable fixing material.
- For the tightness of the luminaire it is important that the ground surface prepared later is either on the same level or slightly below top edge of the recess housing.

**NO**

Plastic housing installed into the floor should not be above or below the floor level.

Connector IP68

- Use flexible cable of suitable rating and diameter with the right IP rated connectors.
- The IP rating of the connector between fixture and main cable must be equal to or greater than the IP rating of the Luminaire.

**NO**

Slope

**OK**

Ground Level

- Please ensure that the wires are connected to the right polarity and the luminaire must be earthed (Class I).
- Insert the luminaire housing into the recess plastic housing, align it and tighten screws firmly.

**Connectors** **IP : 68**

**NO**

- Never cover visible parts of the luminaires. Any part not protected by the recessing box, must not be in direct contact with the ground or in contact with aggressive chemical elements

**Wiring Diagram**  
High voltage single colour fitting : refer to the following recommended wiring method.

Power  
110 - 240Vac : Circuit of product

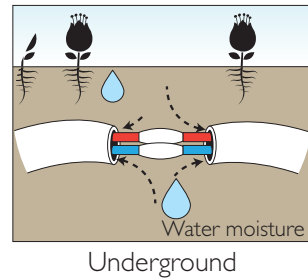
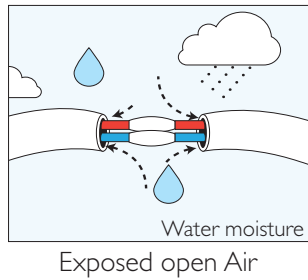
L 110 - 240V  
N  
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**Important Note :**  
If fixture is supplied with integrated LED module, **Do Not Open** the front plate of luminaire during installation. Warranty void if the LED compartment is opened.

# How to Install your outdoor luminaire correctly with connectors



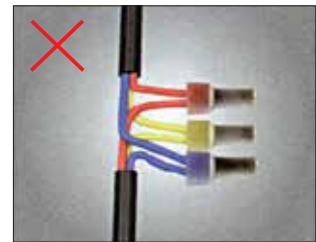
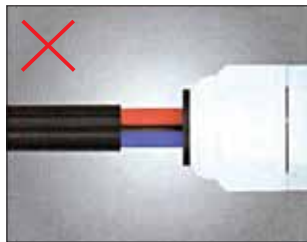
Water infiltration is one of the biggest reasons of damage to outdoors fixtures. The main reason being no proper water proof connectors being used during installation.



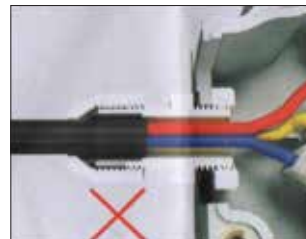
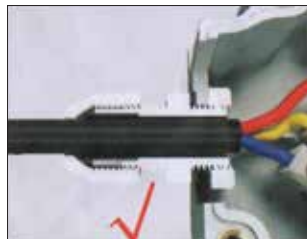
## Why use the water - proof connector ?

When the fixture is turned on, the inside temperature will increase as the operating time goes. Conversely when the lamp stops working, the temperature will drop slowly. This phenomenon will cause "The siphon effect". Thermal expansion and contraction makes the inside and outside air pressure different. The air which includes water vapour will infiltrate to the housing through the wire entry as soon as the internal air pressure is lesser than the external pressure. The infiltration is caused by several incorrect connections like the picture below. This water vapour will then become droplets of water that will be seen inside the fixture.

## Incorrect Installation

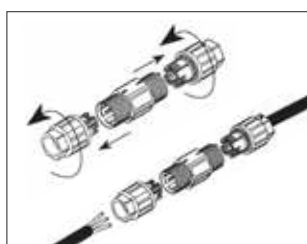


When the wire is connected into the fixture through cable gland, the cable must be more than 10mm inside. Please refer to the images below.



The best and easiest ways to prevent the water filtration are by IP rated connectors

We recommend using the water-proof connectors as shown below for all outdoor fixtures. Installers should prepare the appropriate main cables of suitable rating and diameter with the right IP rated connectors.



One input & two output

