

# IP Connection Kit

IP68

Resin Kit for IP68 Rated Connections

Data sheet - Page 1

IP connections are very important when wiring fittings in wet or damp environments. When fittings are not wired with an IP68 connection, water that pools around exposed cables can corrode wires or be drawn through the cable sheath and into the fitting, which can lead to irreparable damage. The IP connection kit is designed for use in all exterior applications.

## Key Features

- Up to 10 connections (11 LED fittings) per IP Kit
- Designed for single colour constant current LED fittings and 24V linear
- Quick and simple method of creating IP68 connections on site
- Resin-filled cartridge for easy handling on site
- Once fully cured it provides a reliable and robust protection
- Potted connections ready to install within 2 hours (light handling)
- Minimal size, can fit in cut-outs as small as 26mm in diameter
- Works with both in series and parallel wiring

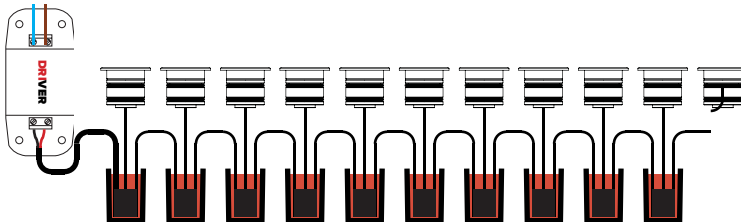
We would always recommend in exterior applications that connections are done in a dry location if possible. LightGraphix products can be specified with longer leads if needed. Connections should never be made under water.



## Wiring

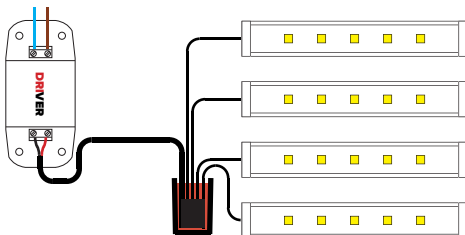
### Constant Current (In-series wiring)

Up to 10 connections for 11 LED fittings per Resin Kit

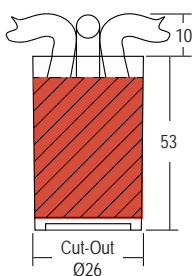


### 24V Constant Voltage (Parallel wiring)

Up to 4 Linear LED fittings per connection



## Dimensions



## Installation



Please see attached instruction leaflet for more detailed instructions

## Order Code

Description	Order Code
IP68 resin kit for 10 connections	/IPKit10

# WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDs.

All LED fittings are tested before dispatch. It is not necessary to check them on site. Do not power up until fittings are wired correctly.

## INSTRUCTION LEAFLET



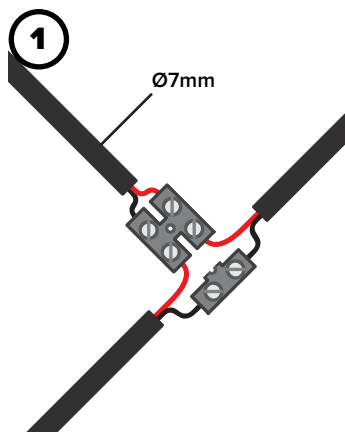
# IPKit10

## IP68 Connection Resin Kit for Wet/Exterior Environments

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

**Included in this kit:** Terminal blocks x 30, containers x 10, cable ties x 10, 250ml resin cartridge, resin nozzle & a pair of protective gloves.

### INSTALLATION

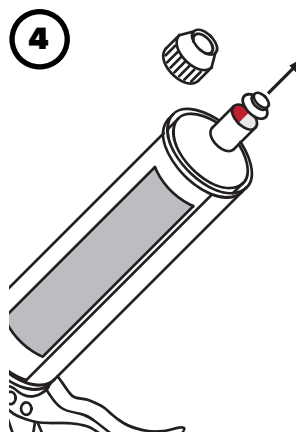


1 Connect wires to the terminals.\* For 'Constant Current' fittings, wire in-series. For 'Constant Voltage' fittings, wire in parallel. **POLARITY IS CRITICAL!**

When wiring in-series, cut terminal blocks as shown.

**NOTE: The maximum cable diameter is 7mm.**

\* In-series wiring has been used in this example.

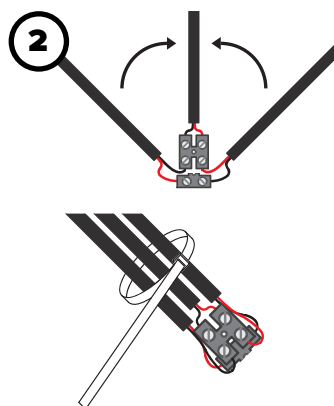


4 Fit the resin cartridge into a standard sealant gun.

Unscrew the top retaining collar/ring.

Lift the top cap off of the resin tube to expose the 2 part mixture.

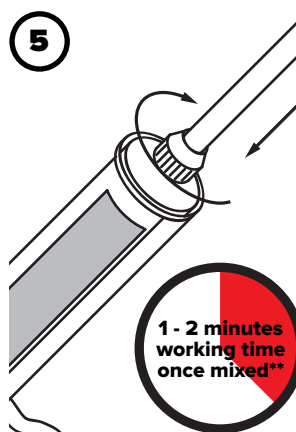
**NOTE: So long as the 2 parts of the resin do not mix within the tube itself, the resin can be resealed and reused at a later date.**



2 At this point check the connections made, to ensure that all the fittings are wired correctly.

Bunch the cables into an upright position to fit into the container. Keep as small as possible.

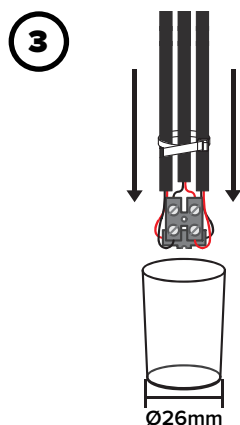
Use cable tie to bind all the cables together. Position cable tie above the end of the cable sheath as shown.



5 Before attaching the included nozzle, gently extrude some of the mixture until both parts are visible.

Wipe clean then attach the nozzle to the cartridge. Make sure that both parts mix equally when exiting the nozzle.

**NOTE: Once the 2 parts of the resin start to mix within the nozzle, the user will have a maximum of 2 minutes\*\* to extrude the mixture out. After 2 minutes the mixture will start to set within the nozzle and will need to be replaced.**

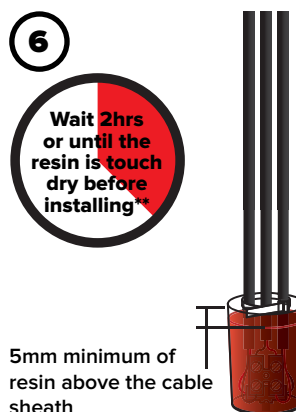


3 Place wiring assembly into container, putting it as far down as possible. Do not use excessive force, as this may crack the container.

Before any resin extruding can begin, fix containers and wires into position so they can't fall over. For example, tape both container and wires vertically against a wall.

Keep cables and terminal blocks centralised within the container.

The container will fit into a cut-out diameter of 26mm.



6 **Wait 2hrs or until the resin is touch dry before installing\*\***

5mm minimum of resin above the cable sheath

As soon as the resin begins to mix within the nozzle the user must start to fill the containers, the user will have 2 minutes\*\* to extrude the mixture. Pot a minimum of 5mm above the end of the cable sheath to ensure IP68 rating.

The potted containers will be safe to install after 2hrs\*\*, do not exert excessive force on the connection as the resin is not fully cured. The resin will be fully cured within 48hrs\*\*.

**NOTE: Connections must be kept dry until touch dry.**

\*\*Times given are base on ambient room temperatures of 20°C to 25°C. Curing times will be longer if the ambient temperature is below 20°C.

For example, in cold weather conditions the potted connections will take longer to cure before being ready to install.

While in hot weather conditions (above 25°C) the resin mixture will fully cure quicker. When extruding the resin, users must pot the containers quickly as the working life of the resin mixture will be shorter than the stated 1-2 minutes.

**IPKit10 must be stored between 15°C to 25°C in order for both parts of the mixture to perform correctly and give full IP68 protection.**

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# WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDs.

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## INSTRUCTION LEAFLET



# IPKit10

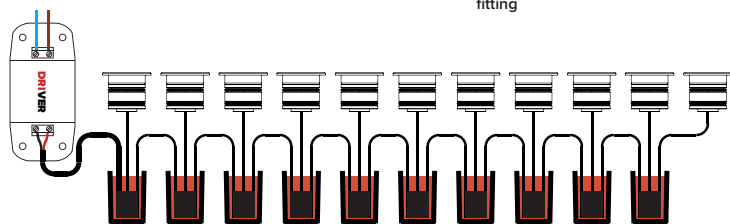
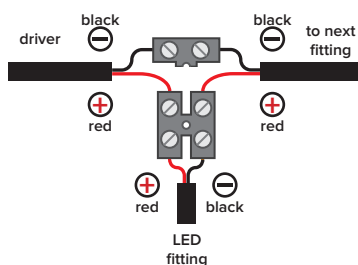
## IP68 Connection Resin Kit for Wet/Exterior Environments

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

### WIRING

#### IN-SERIES CONNECTION FOR CONSTANT CURRENT WIRING

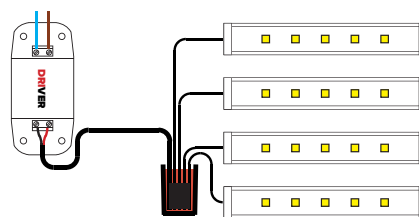
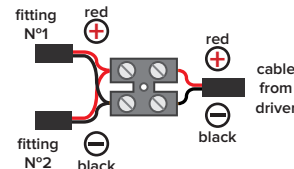
10 connections for 11 LED fittings.



A maximum no. of 10 connections can be achieved with one IP68 connection kit

#### PARALLEL CONNECTION FOR CONSTANT VOLTAGE WIRING

4 LED fittings per IP connection.



### IN-SERIES EXAMPLE



Take time to prepare all connections, use tape to hold cables and containers in an upright position.

Keep cables and terminal blocks centralised within the container.

Connections will not be able to bear weight until fully cured (a minimum of 48hrs).



### WARNING

Refer to specified driver sheet for correct wiring instructions.

Do not switch on power source prior to making these connections as this will result in the LEDs being overvoltage and can lead to LED failure.  
Do not switch on power until resin has had enough time to cure as stated in the instructions above.  
Do not pour resin on live connections.

Connect pairs of cables (e.g. red + / black -) from LED fittings to specified driver. Multiple fittings of constant current LEDs are wired in series.  
**POLARITY IS CRITICAL!**

If LEDs don't work, turn power off immediately, then check polarity. Failure to do so will excessively heat up the LED, causing them to fail.