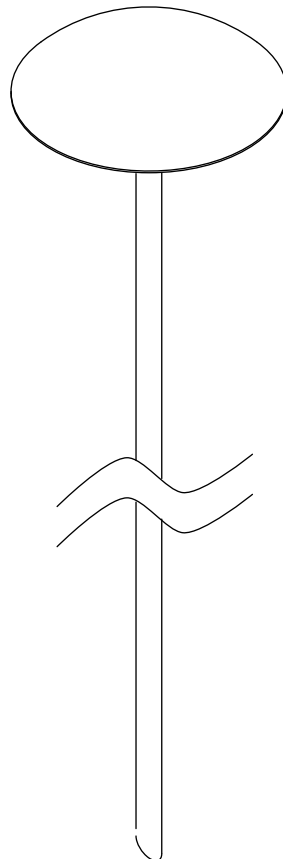



Installation and Maintenance Instructions



IMPORTANT: All wiring connections must be made before switching on mains power.

 5 x MSL Star - 14.25V_F 7.1W (Total) @ 500mA

IP20 Indoor Use Only

 Please retain these instructions for future reference

Electrical Supply

Installation must be carried out by a qualified electrician in accordance with BS 7671:2008 Wiring Regulations. 230/240V AC 50/60Hz mains supply to a suitable SELV LED Driver.

Site conditions: LED equipment is more susceptible to static damage and overvoltage than previous technology. Before handling or connecting to the mains supply ensure that all MSL products are protected from static discharge and that the mains supply is to regulation. (230V +10 -6%)

Mains cables must be double insulated, strain relieved and separated from E.L.V output cables.

This unit requires a constant current driver set at 500mA Max.

**Observe polarity:
Positive (+) is marked as RED.
Incorrect supply or reverse polarity can cause irreparable damage.**

All connections must be made before switching on mains. If the supply is energised prior to making the connections to the fitting then the resulting surge will damage the LED.

Multiple LEDs should be wired in series, refer to driver instructions for minimum/maximum load. Power per fitting is 8W, forward voltage is 15V. Observe volt drop and ensure total voltage is within drivers maximum voltage.

All lighting equipment is delicate and easily damaged through misuse or inappropriate installation (mechanical or electrical). Repairs and replacements may cause delays and will be chargeable. Contact MSL for support if required. For full warranty terms & conditions please visit our website.

The IP rating stated is applicable only when the fitting has been installed as per these instructions.

The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

Ensure supply driver and connectors are housed indoors OR in a suitably IP rated enclosure. Cable ends must be suitably waterproofed. Inspect supply cables before installation to ensure there is no damage which will allow water to enter the fitting.

Installation

Check that the ground is suitable for the installation of this fitting. For hard ground some preparation may be required for spike installation.

Step 1 Make mains connections to SELV LED driver and low voltage connections to the fitting.

Step 2 Push the spike on the fitting into the ground until it stands securely. Do not apply force to the head when placing in the ground.

Once the fitting is installed take care to ensure that the cable from the fitting is suitably positioned and protected from accidental damage.

After opening the sealed portion of the luminaire for any reason, MSL recommends running the fitting for 15 minutes with the lid open to expel moisture before closing it up. This will prevent condensation on the lens and protect the fitting from corrosion.

Care must be taken when handling any ingress protection seals, glands or "O" rings to ensure they are kept clean, unblemished and replaced exactly in their required location and suitably fastened home.

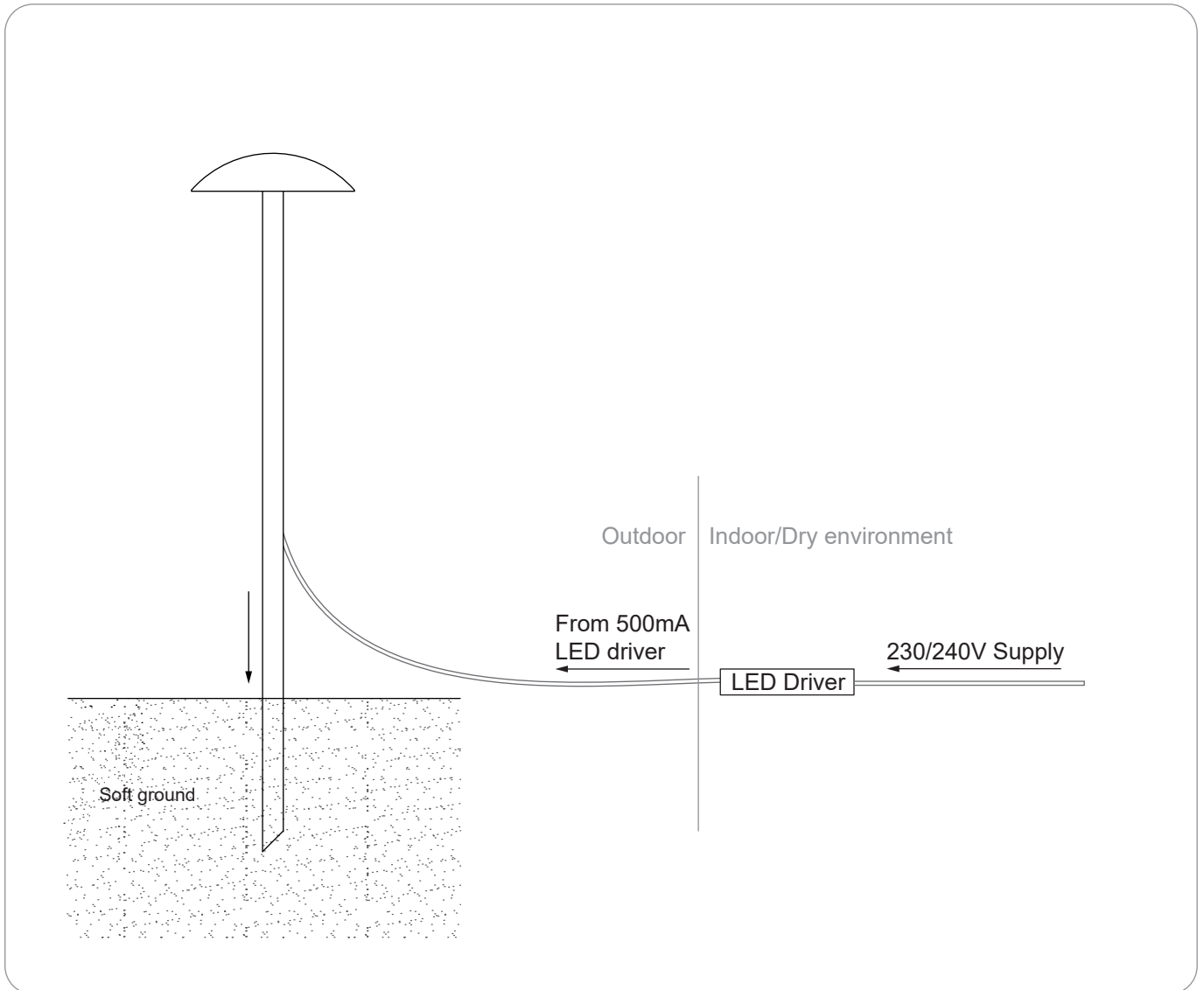
WARNING: Do not look at exposed LED lamps in operation. Eye injury can result.

Cleaning:

Fully isolate the fitting and allow to cool.

Clean the fitting with a slightly damp lint free cloth from a mild solution of soap and water. The fitting must be completely dry before reconnecting power.

Incompatible or abrasive chemicals can damage the fitting, contact MSL for advice if required.



TH391 TEETUBE Connector

WIRING IN SERIES

These connectors can also be supplied in a 4-pole version which allows for series wiring.

Observe polarity:

Positive (+) is marked as RED.

Incorrect supply or reverse polarity can cause irreparable damage.

All connections must be made before switching on mains.

Ensure supply drivers are housed indoors OR in a suitably IP rated enclosure.

