

## HUNZA PURE LED BOLLARD LUMINAIRES

### INSTALLATION INSTRUCTIONS

**BOLLARD 300** - Is simple and easy to install as it has a spike on the bottom which can be pushed into the ground wherever you desire light. Place the Bollard on the ground where you wish to install it and then run the low voltage cable from the 240v driver to the Bollard(s), each cable connection must be waterproof using heavy walled, adhesive lined heat shrink to prevent water leaking into the cable joint. Once this is completed stand the Bollard(s) up and push into the ground.

**BOLLARD 700** - Run the low voltage cable from the 240v driver to the bollard(s). Make a slurry of concrete, make sure there is at least 500mm of low voltage cable protruding out from the concrete slurry. Unscrew the grub screws and remove the bottom section of Bollard below the LED section and pull the low voltage cable through it, push it into the concrete so that the drain hole is not covered, making sure that it is in a vertical position before the concrete sets. Make a waterproof connection using heavy walled adhesive lined heat shrink, between the LED section to the low voltage cable protruding from the bollard pole. Assemble the LED section onto the bottom section, secure with stainless steel grub screws.

#### **BOLLARD 300 and 700 FLANGE MOUNT & BOLLARD MINI:**

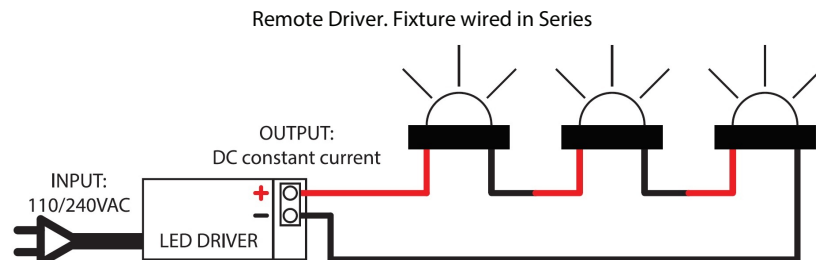
Remove stainless steel grub screws and detach end cap. Apply silicon around the 25mm hole in the bottom of the end cap and mount end cap to deck/tiles etc, using stainless steel screws provided. Connect luminaire making a waterproof connection using heavy walled adhesive lined heat shrink, to the low voltage cable. Secure the luminaire to the end cap using the stainless steel grub screws provided.

#### **Recommendation:**

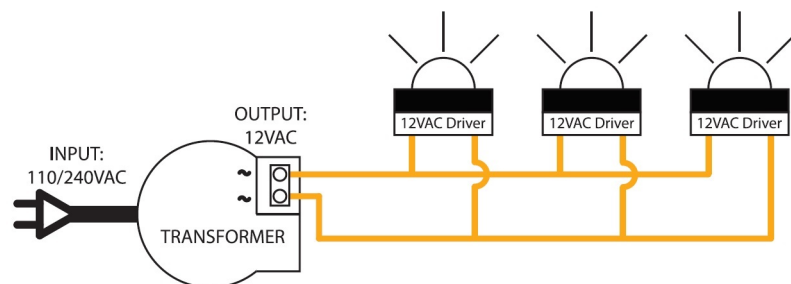
Run all low voltage cables in flexible conduit for extra protection. Use Hunza Cable Joint Kit CJK#150. It is recommended that high quality lamps are used when replacing lamps.

**Note :** If not using a HUNZA™ driver - you must select a suitable constant-current driver. Decide what output is required in mA (350, 700, 1050), the LED requires a forward voltage of 6 vdc.

**Warning:** Do not disconnect the LED luminaire from secondary side of the the driver connected to the mains. Switch off mains **FIRST** then disconnect luminaire from the output side of the driver.



Remote Transformer. Fixture with Internal Driver Wired in Parallel



## BOLLARD RETRO™ LED LUMINAIRES

### INSTALLATION INSTRUCTIONS

**NOTE:** THESE INSTRUCTIONS MUST NOT CONTRAVENE YOUR LOCAL ELECTRICAL AUTHORITY REGULATIONS, WITH WHICH ALL INSTALLATIONS HERE IN MUST COMPLY. PLEASE KEEP INSTRUCTIONS FOR FUTURE REFERENCE MUST BE INSTALLED BY A LICENCED ELECTRICIAN

Make a slurry of concrete, make sure the conduit is protruding out of the concrete slurry and there is at least 500mm of cable protruding out of the conduit. Unscrew the grub screws and remove the bottom section of tube below the lamp holder section and push it into the concrete slurry no more than 150mm, over the conduit and pull the cable through the tube. Make sure that there is concrete in the bottom of the pole and that the pole is vertical before the concrete sets. There must be concrete in the bottom of the tube to stop moisture build up. Unscrew the orange PVC connection on the bottom of the lamp holder section and slide it over the 230/240 volt supply cable. Connect the phase (active) wire to the WHITE wire of the luminaire and neutral wire to BLACK wire of the luminaire. Screw the orange PVC connection back onto the orange nipple of the luminaire and fit the lamp holder section onto the tube using the stainless steel grub screws provided.

**Hunza recommends the use of Loctite during installation when specifying a Hunza Bollard with hood to secure the top nut.**

#### **BOLLARD 700 RETRO DIMMING**

Remove stainless steel grub screws and detach end cap. Apply silicon around the 25mm hole in the bottom of the end cap and mount end cap to deck/tiles etc, using stainless steel screws provided. Unscrew the orange PVC connection on the bottom of the lamp holder section and slide it over the 230/240 volt supply cable. Connect the phase (active) wire to the WHITE wire of the luminaire and neutral wire to BLACK wire of the luminaire. Secure the luminaire to the end cap using the stainless steel grub screws provided. **Stainless Steel Maintenance:** To maintain the finish of 316 stainless steel it is recommended to wash the luminaire with water from time to time to stop salt and corrosive elements building up. If tea staining appears, a commercially available stainless steel cleaner is recommended to remove this.

**Warning:** We recommend when connecting to photocells and timers that the outputs of these devices be a relay output and not an electronic output. This is due to the high frequency output of these devices which can lead to failure of the internal driver.

**DO NOT** connect in close proximity to inductive loads eg. air conditioning systems, water pumps, etc. without appropriate mains filtering. Use a suppression interface module for every six luminaires connected to the circuit.

**DO NOT** carry out a Megger or insulation test on a circuit with a luminaire connected to it.

**DO NOT** connect to a Clipsal C-Bus2, or any other home automation System type without using a suppression interface module.

**DO NOT** water blast/jet wash this fixture under any circumstances.

**NOTE:** Due to the nature of electronics, the ambient temperature of the installation location must be considered carefully as the luminaire may not operate reliably at temperatures below -8°C (18°F)

### LED CHANGING

**CAUTION:** Make sure that the power to the luminaire is switched off before attempting to change the lamp. Unscrew bollard lens. Unscrew the two allen head screws using a 2.5mm allen key. Replace board with new HUNZA LED board and re-fit the allen head screws to hold the LED board in place, taking care not to touch or alter the LED diode. Replace bollard lens.

**WARNING:** Take care to place luminaire in a suitably safe position due to operating temperature of luminaire.

**Stainless Steel Maintenance:** To maintain the finish of 316 stainless steel it is recommended to wash the luminaire with fresh water from time to time to stop salt and corrosive elements building up. If tea staining appears, a commercially available stainless steel cleaner is recommended to remove this. Electro polishing is recommended in this situation but the fitting will still require regular maintenance. Even an electro polished stainless steel fixture under an eave or roof will suffer from the build up of salt deposits as it will not be washed away by rain.