

## BOLLARD HALOGEN 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.

**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 transformer (if the transformer is to be buried - installation of the transformer must be carried out by a licenced electrician to meet local Electrical Authority Regulations) 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 transformer (if the transformer is to be buried - installation of the transformer must be carried out by a licenced electrician to meet local Electrical Authority Regulations) 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 lamp holder section and pull the low voltage cable through it, push it into the concrete, 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 lamp holder section to the low voltage cable protruding from the bollard pole. Assemble the lamp holder section on 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 heatshrink, 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.

**WARNING:** Take care to place luminaire in a suitably safe position due to operating temperature of luminaire. Do not water blast/jet wash this fixture under any circumstances.

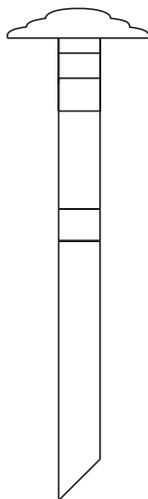
**Stainless Steel Maintenance:** To maintain the finish of 316 stainless steel it is recommended to wash the luminaire with water from time to time to stop salt and corrosive elements building up. If tea staining appears, a commercially available stainless steel cleaner is recommended to remove this.

## LAMP CHANGING

**CAUTION:** Make sure that the power to the luminaire is switched off before attempting to change the lamp. Beware of hot luminaire and lamp. Make absolutely sure when changing lamps that the correct wattage lamp is installed. Incorrect wattage lamps may cause HUNZA™ IG series transformers to overload causing them to heat up and turn the luminaires off and on.

### **Lamp Changing Sequence (MR16)**

Only use MR16 lamps where glass cover sits below lip of lamp. Unscrew lens ring, remove gasket and lens. Pull lamp forward until the ceramic lamp holder appears. Hold lamp holder in one hand and remove lamp with other hand very carefully. Do not touch the glass capsule in the middle of the reflector when pushing the lamp back into the ceramic lamp holder.



## BOLLARD RETRO™ HALOGEN LUMINAIRES INSTALLATION INSTRUCTIONS

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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. Connect the phase (active) wire to the RED wire of the luminaire and neutral wire to BLACK wire of the luminaire. Fit the lamp holder section onto the tube using the stainless steel grub screws provided.

### **BOLLARD 700 RETRO FLANGE MOUNT**

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 RED 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** push the luminaire more than 150mm into concrete slurry.

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

**DO NOT** connect to a circuit that has an electronic soft start motor starter on it.

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

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

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

**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)

## LAMP CHANGING

**CAUTION:** Make sure that the power to the luminaire is switched off before attempting to change the lamp. Beware of hot luminaire and lamp.

### **Lamp Changing Sequence (MR16)**

Only use MR16 lamps where glass cover sits below lip of lamp. Unscrew lens ring, remove gasket and lens. Pull lamp forward until the ceramic lamp holder appears. Hold lamp holder in one hand and remove lamp with other hand very carefully. Do not touch the glass capsule in the middle of the reflector when pushing the lamp back into the ceramic lamp holder.

