

## TECHLIGHT - Flagpole Lighting Kit Instructions

**Transformer Installation:** Low voltage lighting systems require transformers to reduce standard house current (115/120 volts) to 12 volts.

Mount the "rain tight" transformer in a well ventilated area at least 12" above the ground. After connecting your supply wire from your transformer to your fixtures, (see below) plug your transformer into a covered GFI receptacle (marked suitable for wet locations). The transformer is equipped with manual circuit breaker. If a short or current overload occurs, unplug the transformer, repair the short or overload, reset the breaker and plug the transformer back in. Your transformer may also be equipped with a dusk till dawn photocell. For daylight testing it will be necessary to cover the photo eye with a piece of black tape, when testing is complete, remove the tape. The lights will automatically turn on at dusk and off at dawn.

Transformer load is calculated by adding the total number of watts from desired lamps.

Example - 4 fixtures at 20 watts = 80 watts. As a general rule of thumb, load your transformer no more than 80% of it's rated load, as the low voltage wire adds to the amp load of the transformer.

If your load is to great, it will be necessary ti use a larger transformer.

**Low Voltage Cable Installation:** Landscape lighting cable is UV stablized and is intended for shallow burial at a 6" depth. Typically, 12-2 wire can be used for runs of 100ft. The shorter you keep the run, the better for lamp life and brightness.

Split the two sides of the wire and remove 1/2" of insulation from one end of the wire. It is important not to remove any of the copper strands of the cable.

Using the two red wire nuts provided in your kit, twist one of the stripped ends to your supply cable to the red wire, and the other one to the blue wire of your transformer. Make sure that the wires are tight, and tighten the screws in the strain relief to prevent the cable from being accidentally pulled out.

Connect your fixture wire to the 12-2 supply cable using the low voltage connectors supplied with your kit (see supplied instruction sheet for low voltage connector).

### INSTALLATION

1. Dig hole the diameter of plastic pipe and about six inches deeper - fill bottom of hole with gravel for drainage.
2. Attach lead connectors to lamp terminals using terminal screws.
3. Press lamp inot groove in housing and insert housing into plastic pipe (if lamp is adjusted to any angle, make sure weep holes are in lowest position).

### OUT OF GROUND

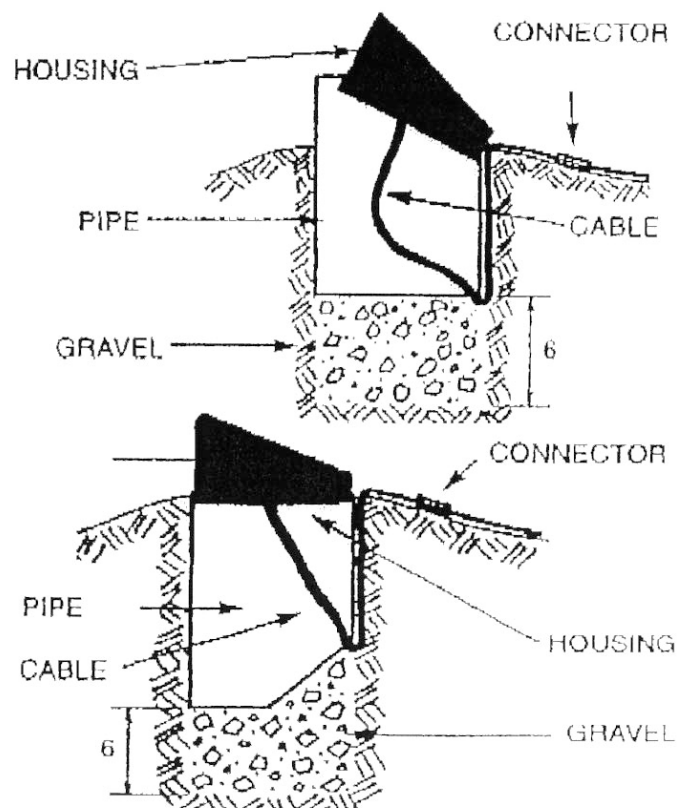
Install pipe out of ground with angle face up for vertical to horizontal illumination (adjustable up to 45 degrees).

### FLUSH WITH GROUND

Install pipe flush with ground for vertical illumination (adjustable up to 15 degrees).

### FINAL INSTALLATION

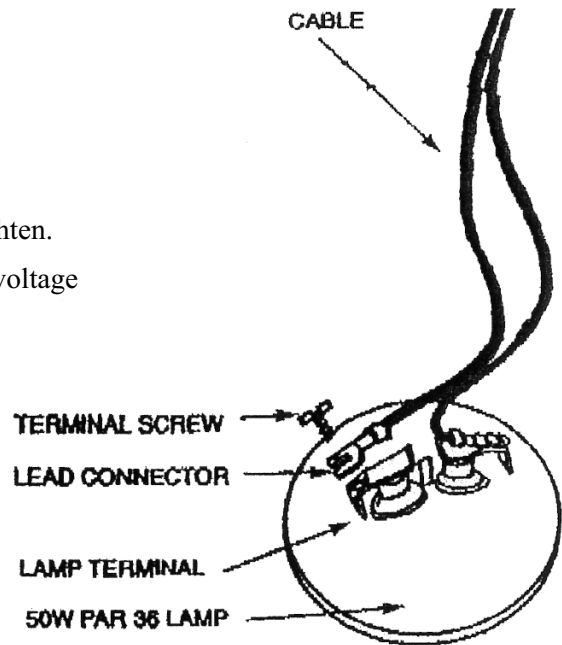
4. Insert pipe and lamp housing assembly into hole allowing cable to run along surface of ground. Tamp ground to secure in place.
5. Attach fixture cable to main supply cable with connector



Instructions Cont.

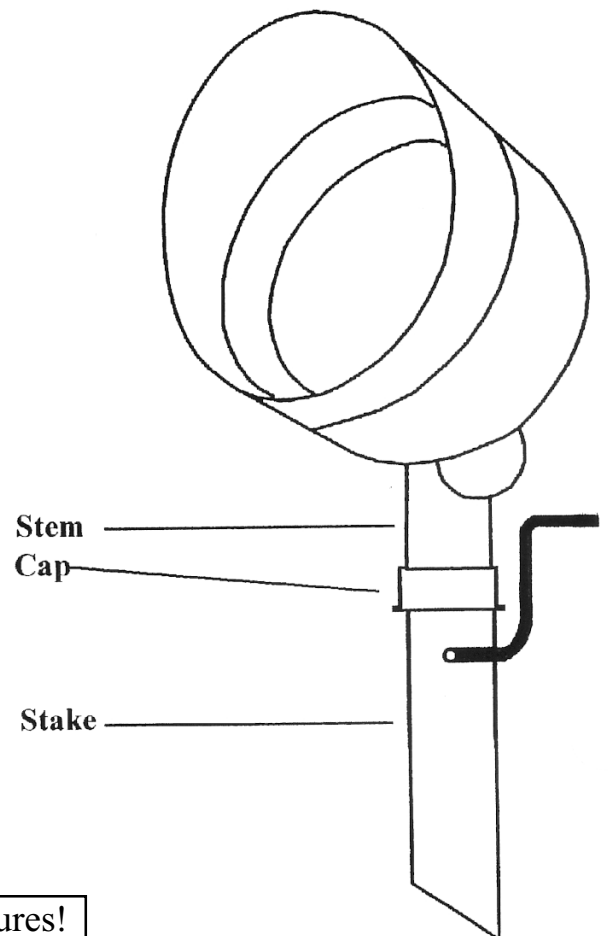
## Connecting The Lamp

1. Loosen the terminal screws on the lamp.
2. Slide the forked connector under the screw on the lamp and tighten.
3. Install the lamp in the fixture and connect the cable to the low voltage supply wire using the connector supplied with the kit.



## Installation Of Bullet Fixture

1. Determine the location of the fixture and drive the mounting stake into the ground using a block of wood and hammer. Remove the cap from the top of the stake.
2. Loosen the screw that holds the shield on the fixture and connect the lamp to the terminals (see above). Install the lamp into the shield by pulling back the spring loaded retainer and placing the face of the lamp against the two retaining tabs. Release the spring loaded retainer and re-install the shield.
3. Screw the cap from the stake onto the stem of the fixture and pull the fixture cable through the small hole at the top of the stake. Place the fixture on the stake, aim, and tighten the cap screw.
4. Connect the fixture cable to the low voltage supply wire using the connector supplied with the kit.  
( see the low voltage connector instruction sheet )



Always Make Sure Power Is Off When Connecting Fixtures!