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## ROCK AROUND THE BLOCK

### DIY 12V AC Lighting Installation Guide

In this website there is extensive information to guide you through a do-it-yourself low voltage light installation, from the transformer, the cable, the lights and correct bulb choice & even remote control switching that you can use to control the lights from the inside of your home.

DIY and save possibly thousands of dollars. **This is safe low voltage 12V electricity.** The only time you will be near 240V is when you plug the transformer into the powerpoint.

This installation requires no conduits. The cable is simply buried in the ground, along the path edge, tacked to the fence or hidden behind the bushes, placing it where you will not chop through it accidentally meaning a soldered reconnection repair. Sealing of the connections is NOT necessary. We only ask you to isolate the opposite conductor connections from each other to avoid short circuits. Low voltage 12V AC and 24V AC cables can be safely joined underwater. If is not sealed at the joint, water may seep along within the cable to the "sealed" light fitting, causing possible corrosion within the light housing.

You will notice that the lighting equipment is IP Rated for assured electrical protection in the weather. [Click here for our IP Rating Table.](#)

Aquatran & Aqualux Garden, Pond & Architectural Lights use 10W or [20W Halogen Bi-Pin bulbs](#) and all Spotlights use either [20W](#), [35W](#) or [50W MR16 dichroic bulbs](#) or the accent or mood-lighting 1W MR16 15 LED bulbs (yes!-only 1W) which are available in [cool white](#) or colours - we let you choose which bulb you want us to supply when you order your pond and garden lights.

The range of [12VAC Ferguson Aquatran Transformers](#) are all IP67 rated. This means that they can actually be buried in the ground, meaning no visual impact on the landscape or can be mounted on a wall in the weather.

For long trunk cable runs of up to 60m without the problem of voltage drop you should use [Low Voltage Cable Super Extra Heavy Duty 140/0.3 \(10 sq mm\) Fig 8 Black PVC](#). It is considerably heavier than normally available from hardware stores. For shorter trunk cable lengths of up to 20m you can use lighter [Low Voltage Cable Heavy Duty 46/0.3 \(3.3 sq mm\) Fig 8 Black PVC Flex](#).

Connection of the individual outdoor low voltage garden and pond lights to the Super Extra Heavy Duty Cable should preferably be soldered at the connection points to avoid any long-term connection problems. If you need to connect a light that is a short distance away from the passing trunk cable you can use the lighter Low Voltage Cable Heavy Duty 46/0.3 (3.3 sq mm) Fig 8 Black PVC as hook-up wire.

We suggest that all 12V connections should be soldered using the [Nicholson 80W Soldering Iron](#) or similar for superior performance. [Click here for our "How To Solder" brochure](#) for an easy to follow guide for a perfect job.

As 12V is "low pressure voltage" you need permanent connection that **NO clip-on** connector (sealed or not) can ever achieve. Poor connections along with wrong cable choice will give unreliable and disappointing garden lighting.

If you wish to use an electrician or choose to wire the transformer into your household light circuit rather than a powerpoint, [click here for a recommended electrician.](#)

BEST OF ALL... Because we sell so much, look at the very competitive prices for such high quality product.

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