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ROCK AROUND THE BLOCK

Transformers & Cable

We carry a large range of 12VAC, 24VAC & 32VAC transformers for many low voltage applications including garden pond, lighting & telemetry equipment use. The 12VAC & 24VAC models are predominantly IP67 Rated giving assured protection. IP67 Rated transformers give you the capability of burying the transformer in the garden meaning no visual impact on the landscape or mounting it on the wall in the rain. They can even cope with immersion in water to a depth of 1m.

The 240V 32VAC models are IP24 Rated, giving protection in covered outdoor areas from rain & against internal contact by fingers.

The Hozelock 24VAC range is the standard equipment supplied with Hozelock low voltage pumps and garden lighting and are lower IP rated. You will see the IP Rating alongside each transformer in the listing.

Cable choice is critical in low voltage applications - choosing cable, which is too thin, will lead to disappointing results. Thin cable causes voltage drop, reducing pump or garden light performance. This is evident in many systems available on the market. A good comparison is the use of 12.5mm tubing for in-ground water sprinklers. You will notice a huge reduction in flow at the sprinkler as you progress along the pipe. Change to 25mm tubing and there is an insignificant reduction. Comparing electricity to water, 24V AC has a lot more pressure than 12V AC so 12V needs larger cable for the desired result. Modern garden lighting systems are 12V AC.

Can I use a larger VA (Wattage) transformer than I initially require?

Yes....but, **the lower the load on the transformer, the shorter the bulb life.** If a transformer has no load the output voltage will be slightly higher than stated. The ultimate is to load the transformer so that each of the 12V bulbs gets 12V for maximum bulb life. Bulbs are so cheap these days that shorter life is no longer a financial consideration. With incandescent and halogen bulbs 50-100% transformer loading is acceptable – 80% is the best for bulb life.

You may be planning to install more lights in the future, so consider this factor. As the items are connected to the low voltage cable in parallel, the acceptable voltage at each item in the system will be maintained provided the correct cable specifications are followed.

We supply two Low Voltage cable choices:

1. [Low Voltage Cable Super Extra Heavy Duty 140/0.3 \(10 sq mm\) Fig 8 Black PVC](#)

Used as 12V Trunk Cable for up to 60m run

This our recommended main trunk cable for our range of Quality 12V AC Low Voltage Outdoor Halogen Garden and Pond Lights. It is very thick & capable of carrying 12V AC over long runs of 60m before any noticeable voltage drop. You can run multiple branches of this cable directly from the transformer. It is not commonly available through hardware stores. We suggest all 12V connections to 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.

2. [Low Voltage Cable Heavy Duty 46/0.3 \(3.3 sq mm\) Fig 8 Black PVC](#)

Used as 12V Hook-up cable, 12V Trunk cable runs to 20m or 24V & 12V LV pump extension cable

This thinner cable is perfect for use as a 12V hook-up or short connection cable up to a 20m max or for connecting 12V garden lights to the main 10mm² trunk cable running from the transformers. It is also the recommended cable for the Hozelock 24V AC garden light system. It allows the cable clips to fit correctly. It is capable of carrying the "higher pressure" 24V AC for 60m for both the Hozelock and other Low Voltage pumps and lights.

For information on the IP Ratings (weatherproof ratings) of our transformers, [click here](#).
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