

Products Update

Once again, the new products featured in this issue are largely answers to problems and needs suggested by TEP schools. Many colleagues ask for materials not normally available in 'raw' form (e.g., soft PVC sticker sheet), and others are anxious to find safer options for work in progress (e.g., lighting projects). We try as hard as possible to find ready-made answers, but in many cases we have to go into production (e.g., steam chest, four legged robot). It is only with your continued support that we can do this.



Low Voltage Lighting

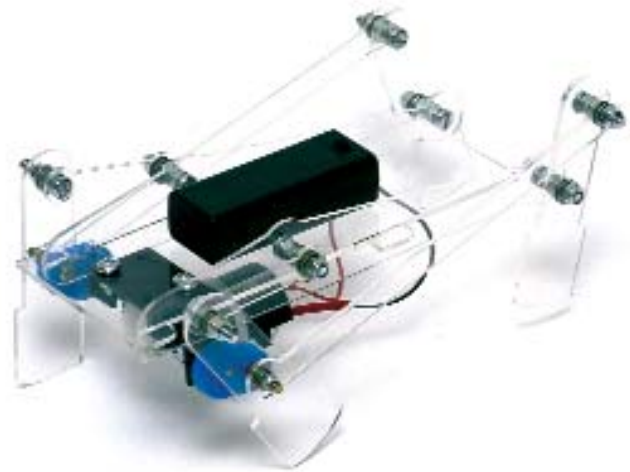
This low-voltage lighting kit was developed by a colleague in school frustrated by attempts to obtain a suitable safe system for advanced project work. The transformer has been specially designed to run a 20 watt halogen bulb and comes complete with a plug-in 2 metre lead. The transformer itself is moulded into the 13amp plug. A thermal fuse protects the system against damage.

- 📦 **Low voltage transformer with 2M lead** – stock code PSI 005
- 📦 **Ceramic bulb holder** – stock code E02 032
- 📦 **12v/20 watt halogen bulb** – stock code E02 032

Magnetic Leads

These offer a remarkably simple way of making electrical connections. Powerful magnets on the ends of the leads simply stick to each other or to components. (Many electronic component legs are actually plated steel and not copper as many think.) The connectors are ideal for prototyping and demonstrations.

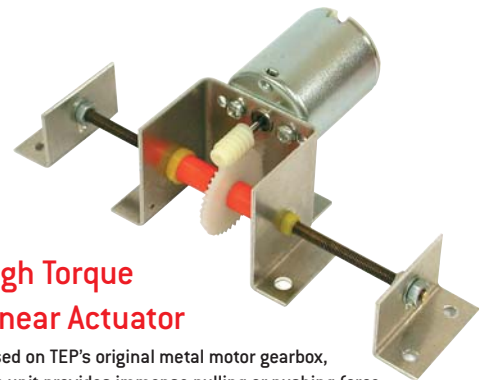
Colour	stock code
Red	LEA 003
Black	LEA 004
Yellow	LEA 005
White	LEA 006



Four Legged Robot

This kit provides the precision-cut parts, gearbox and switched battery box for a complete walking robot. It can be used for demonstrations, as a guide for self-designed robots, or - for example - as a test bed for developing control systems. It takes about 20 minutes to assemble and can be adjusted to give different walking characteristics.

- 📦 **Four Legged Robot** – stock code BCE 004



High Torque Linear Actuator

Based on TEP's original metal motor gearbox, this unit provides immense pulling or pushing force delivered via the movement of a threaded shaft passing through the central pinion gear. The actuator is supplied complete with two mounting brackets that are fastened to the components being moved. Ordinary 3mm studding can be substituted for the 150mm length supplied as standard.

- 📦 **Four Legged Robot** – stock code BLC 017

Self-adhesive PVC Sheetting

This is the material used for car tax disk pockets. It has the unusual property of sticking to glass and other smooth surfaces without adhesive. It is now available in large sheets that can be used generally for putting up posters and notices - or for graphics projects. The material is crystal clear and can be cut with scissors or a craft knife.

- 📦 **Sheet size = 1000mm x 700mm** – stock code PL1 080

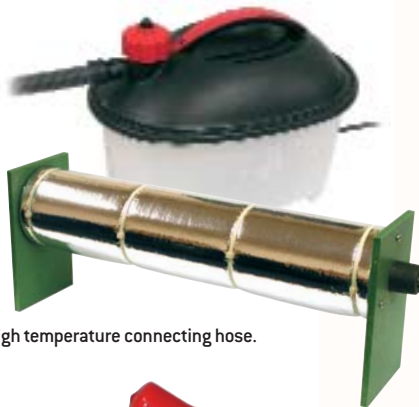


TEP Steam Chest

In response to the renaissance of commercial interest in wood forming, TEP has produced the first small scale steam chest capable of taking lengths of timber up to 550mm in length. Supplied by an electric boiler, steam is continuously fed into one end of the unit at low pressure. Any timber inside softens and becomes pliable enough to bend into tight curvatures either free-form or in moulds.

The steam chest comes complete with boiler and high temperature connecting hose.

TEP Steam Chest – stock code ST1 001



Bottle Rocket Launcher

This unique moulding turns a fizzy drinks bottle into a 'stomp rocket' launcher - enabling pupils and students to design and make paper rockets intended for retail sale etc. It has already been used successfully in graphics and packaging projects. The rocket joiners are sold in sets of 10 complete with 10 rocket rolling mandrel/launch tubes and 10 nose cones. Bottles NOT included.

Bottle Rocket Launcher – stock code ROC 020



NEW Multiple Discounts!

With generous support from one of the sponsors of the recent science gift, we can now make available several popular items at much lower cost.

20 Second Voice Recorder

A fantastic resource for building added value into projects. Examples include: talking pads for partially sighted people, memo recorders, money boxes, talking alarms, talking posters for museums etc. The playback button can be swapped for a piezo disk, so you just tap a surface momentarily to play back the message.

Voice recorder – stock code VCR 001

Piezo disk – stock code EW2 003A

Digital Wrist Watches

These watches are typically used as a focus for packaging/graphics projects or as merchandise for special school events such as fund raising fairs. They are now offered in a mixed pack of 20 watches at just 40p each - including the batteries! (Note: the batteries are more expensive sold individually on the high street)

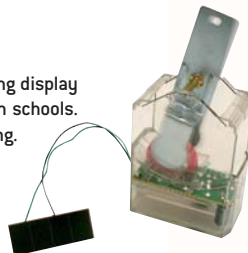
Digital Watches – stock code SH0 400



Solar Powered Shaker

This gadget is widely used on shop counters to power an eye-catching display and has proved to be a great motivator for designing and making in schools. Powered by a tiny solar cell, the device works in average room lighting.

Solar powered shaker – stock code SHA 001



Precision Motor and Heavy Duty Gear Box

This unit is powered by a large solar motor that will start running at just 0.5 volts! But due to the large precision gearbox, the output torque is remarkable at even this low voltage. (Also, because of the motor's ultra-low electrical noise, it can be wired directly to electronic control circuits.)

The unit has been used for large scale robots, door opening mechanisms and even a low-profile 'personal transporter' platform capable of moving a person.

It is also a highly efficient generator and will provide useful power if the shaft is turned at relatively low speeds (e.g., 100rpm). This means it can be used for projects involving wind turbine blades up to 1M across – fitted directly to the gearbox shaft.

Precision motor and heavy duty gear box – stock code EW2 ECK9

Please note: this item is now offered at roughly 25% of the normal retail cost.



<http://www.mutr.co.uk>



The Middlesex University Teaching Resources website has a vast selection of products for all types of projects and classroom experiments. Categorized into different product sections, items can easily be found, or you can perform a simple site search. Secure online ordering and special low prices for schools.

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