

# PrESS - Practical Electronics Support for Schools

We had all needed a new approach to teaching and learning in electronics for some time. The recent growth of pupil and teacher interest in robotics and animatronics in the last two years, fuelled by the success of **Robot Wars** and **Technogames**, has made Systems and Control based activities very attractive across the Key Stages. To build on this interest in schools, TEP has developed a range of electronics teaching resources, **Practical Electronics Support for Schools (PrESS)**.

Each PrESS resource is a self-assembly teaching and training board. It is ideal for teaching basic principles and circuit design and allows teachers and students to develop their understanding quickly. PrESS resources are useful for class based experiments and assignments and develop skills, knowledge and understanding through a



hands-on approach to electronics at a component and sub system level. Features of the PrESS resources include circuit layouts and schematics, component identification and a large A3 format. The boards can be used by the teacher to demonstrate electronics process and by students to develop and test their own circuit ideas.

Electronic components have dropped in price in recent years making electronic projects possible for all pupils. A number of components are available in the PrESS range that are mounted on Printed Circuit Board 'biscuits' that are easily populated with components and connectors. Circuits can be modified connected together and at low cost integrated directly into D&T projects. Trials of materials have been ongoing in a number of Midlands LEAs and with schools

and staff supported by the **DTI's Electronics in Schools** initiative.

From September 2002, TEP will also include PrESS as part of its extensive INSET programme. PrESS INSET will include back-to-school exemplars and demonstration training resources for the classroom.

PrESS resources are supported by a teacher guidance booklet of practical circuit ideas and applications to make electronics in schools really work.

**The current range of PrESS project boards includes:**

- ▶ **Infra Red Remote control**
- ▶ **The Field Effect Transistor**
- ▶ **Sequential control with the IQ programmer**
- ▶ **The Thyristor**
- ▶ **The 555 timer**
- ▶ **and the TEP Chipfactory board for PIC based projects.**

Further support materials are to be added to the TEP website. Resources are mapped to National Curriculum and allow teachers to drop project material into existing schemes of work.

**TEP are grateful for the support of Leicestershire and Lincolnshire schools that have worked extensively with the PrESS materials.**