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## 1. Resistance Substitution Box

This resistance substitution box has 12 different values: 100 $\Omega$ , 220 $\Omega$ , 470 $\Omega$ , 1K $\Omega$ , 2.2K $\Omega$ , 4.7K $\Omega$ , 10K $\Omega$ , 22K $\Omega$ , 47K $\Omega$ , 100K $\Omega$ , 220K $\Omega$ , 470K $\Omega$ . All values are in  $\pm 1\%$  tolerance & all the resistance are of 1 watt rating.

Code	Pack	Price
EDU086N	Each	£28.99

## 2. Lascells Bridge Rectifier System

A must for the effective demonstration of this important circuit. This unit contains a bridge rectifier circuit with LEDs showing which diodes are conducting during each half cycle of the A.C. supply. The clear front panel label shows the current path at each stage through the on-board load resistor. In addition there is a smoothing capacitor which may be switched on as required. The unit may be powered from a 6V D.C. supply (mains or battery) with the connections reversed for each half cycle. A better approach is to use a slow signal generator (about 1Hz) or our special A.C. waveform generator which allows the signal to be paused at any point in the cycle.

Code	Pack	Price
PY3112	Each	£47.76

## 3. National Grid Kit

As this experiment is now featured in the science curriculum as the 'AC power line at high voltage' we have developed a new, safe form of the experiment that can easily be set up within minutes and clearly shows students the relevant principles of the national grid high voltage transmission system.

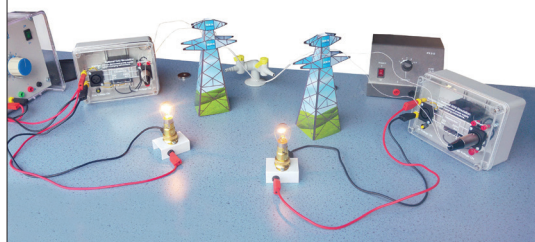
Each kit contains:

- 2 x transmission/receiver boxes (clear lid to enable students to investigate wiring)
- 2 x lamp holders
- 2 x 12V 21 watt lamps
- 1 x set of "HT" leads with touch-proof connectors
- 2 x self-assembly fold-away pylons (display purposes only)
- Experiment instructions included
- Manufactured in the UK

An additional power supply is required to carry out this experiment capable of supplying 12V AC at 5A and 6 connection wires.

Code	Pack	Price
★ SEM1000	Each	£137.80

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## 4. Electrical Circuit Tube

Great fun science toy, ideal for teaching children about the movement of energy and circuits. This energy tube lights up when both ends are touched as long as it makes a circuit, and makes a noise.

A group of children can stand in a circle all holding hands, with two children holding either end of the energy tube. As long as all the children remain holding hands and the circuit is not broken the tube will remain lit up. If a child lets go and the circuit is broken the light will go out. Dimensions: 17.5cm length x 3cm  $\varnothing$ .

Code	Pack	Price
EL10360	Each	£16.33