

# **Electronics Kit**

Systems Trainer



## EM1767-001 Inputs, Outputs & Logic

## **Description:**

The 'IEC' **SYSTEMS KIT** is a self contained set of electronic circuits that can be interlinked by students to create working circuits. Component parts cannot be removed or lost in the classroom and interlinking is performed by short coloured cables fitted with small insulated alligator clips.

Machines in our everyday life are controlled by inputs (many types of switches, press buttons, microphones, light beams ....and similar). These inputs are arranged in a logical way so that, if the correct conditions are met, certain outputs activate (motors start, bells ring, lights come on, loud speaker makes noise.... and similar).

This kit allows students to choose from 6 inputs or combinations of inputs and allows the logic between then to be programmed so that the desired output occurs. The students find this interesting, challenging and exciting. In very short time they are making up their own working 'SYSTEMS'.

Length: 315mm   Width: 170mm   Height: 65mm   Weight: 460g
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#### **Kit Contains:**

- 1 pce Main circuit board with legend and pins for connecting the sections together.
- 1 pce Transparent cover which can be used as a storage tray during experiments.
- 1 pce Experiment manual with many projects for the instructor and students to perform.
- 2 sets of 10x cables, with alligator clips for connection of circuits.

### Features of the 'IEC' Digital Trainer:

- It is made in Australia by IEC and is low in cost.
- It is very compact and easy to store.
- Parts cannot be removed by students.
- Students can see and feel the circuit board and can touch the component to become familiar with electronic components.
- Can be powered from any 12V.AC or DC power source by banana sockets or by 240/12V.AC. mains plug pak.
- Circuits are easy to make and the 'Systems' are exciting to create. After some brief explanation, most students become enthralled without the need for any intervention by the instructor.
- The instruction and experiment book is written by IEC and is complete with Glossary of terms, many experiments and much information valuable to a student involved in electronics options.
- Using this trainer, the student is exposed to analogue and digital devices, digital counter, binary numbers, operational amplifiers, logic gates and relays and must also perform some basic mental logic to create the circuits. It is a very exciting and rewarding training kit and explains and handles the "input & output" scenario of machines in the world around us.

### **Repairs:**

It is impossible to make electronic equipment 100% safe from damage by students, but care has been taken to protect the circuits from damage. Should this equipment ever need repair, IEC is in Melbourne and can repair all equipment that it manufactures.

Designed and manufactured in Australia

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