Stylus
Whenever the stylus is placed in contact with the pad, its position is reported to the computer

Grid
A matrix of wires 1.2mm apart is used to determine the pen's position on the pad

Trigger Switch
The Grafpad stylus has a tiny trip switch built into its nib that triggers off a search for the position of the stylus on the pad

Designer Software
Grafpad comes with PROG2, a freehand drawing package that was used to create these images. The ability to draw and fill circles greatly speeds up the process

Command Bar
A special area of the top surface has a set of letters and numeric commands that could be used by particular programs

Perspex Cover
A perspex sheet protects the top of the pad. Overlay sheets can be taped to this

(computer-aided design) package. The simple read-the-pad routine can be incorporated in your own programs (it's supplied in machine code and a BASIC version).

The drawing program is an electronic etch-a-sketch program comparable to most artist packages available, even those that don't use a pad. It offers all the basic features: lines, boxes, circles, triangles and 'freehand', and will fill an enclosed area with a particular colour. However, it lacks more sophisticated facilities, such as being able to copy and move sections of the drawing.

Certainly, there is nothing here that a keyboard-only piece of software couldn't do although the Grafpad does allow designs to be traced. The BBC version will display only four colours at once and suffers from slow response times.

The CAD program is simply a demonstration of some of the principles involved. First, you create a set of characters to be used in the construction of your designs. For electronics, these shapes might be components such as transistors, resistors and so on. You could also create logic gates, pieces of furniture, or even tile patterns. Once these are created, you move on to the actual drawing board where you can freely repeat and arrange the shapes and join them with straight lines.

This is very similar to how a real CAD package works. But the Grafpad software isn't up to serious use. Among the facilities you would need are the ability to label the diagrams, rotate and scale drawings, magnify a particular portion of the screen, position small shapes very accurately and so on. More flexibility in correcting mistakes is essential and in general the CAD program misses the point of using the Grafpad as an input device. Despite the small command bar on the tablet, many commands need keyboard input and overall operation is rather cumbersome.

The Grafpad itself is a versatile peripheral that offers very good value for money. In terms of area, resolution and reliability, it is restricted in order to be economically priced. However, the software that comes with the system is disappointing and the unit will appeal most to those who want to write their own programs. Even so, with suitable effort, tablets like these will enable people to explore new possibilities and should prove a considerable boost for more advanced graphics on home micros.