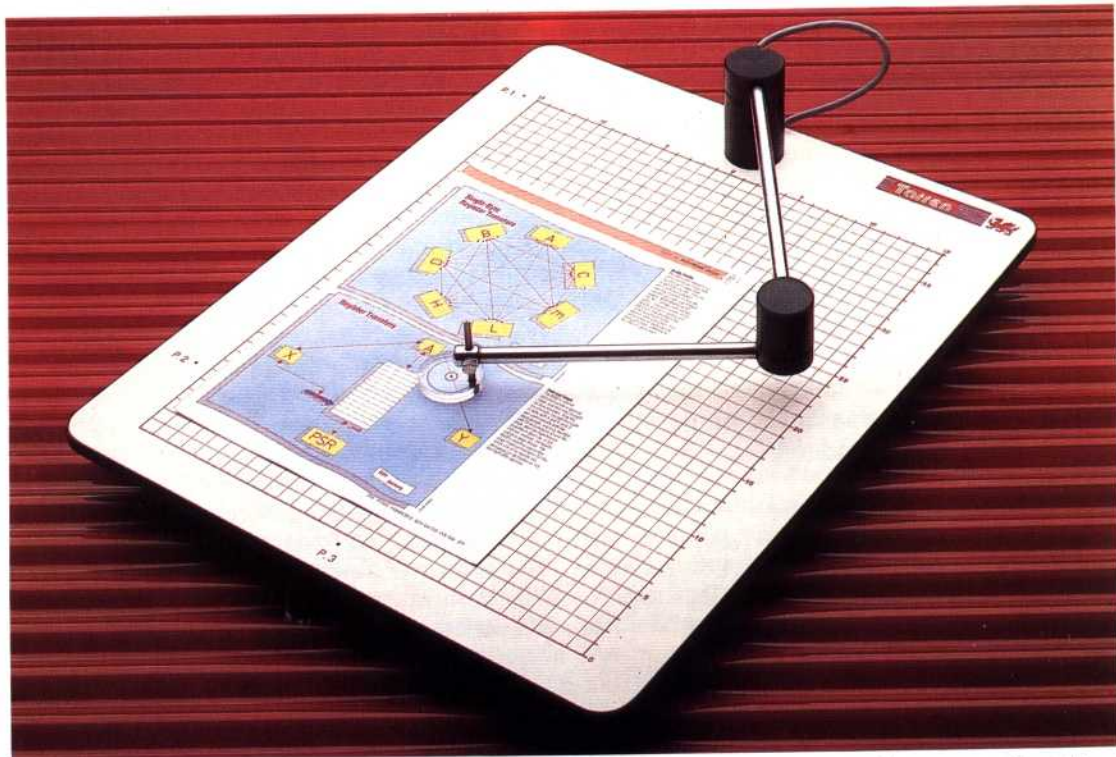




**Digigraph**

Solidly built from metal and plastic with a wooden tracing table, the Digigraph package includes several practice worksheets



the tracer to other programs.

The Digigraph tracer is also solidly built. The base plate consists of a large wooden board with a red grid painted on the surface. The arm is made up of aluminium tubing, with a perspex disc at the pointer end. The picture to be traced is placed on the board. This system is the easiest to use of the four tested here; the arm moves smoothly and the picture is clearly visible through the perspex disc. The supplied software is less sophisticated than that sold with the Robot Plotter, but has similar facilities. The tracer movements are not stored as separate commands by the computer, but pictures are drawn straight onto the screen and saving and loading pictures is achieved by saving and loading the screen memory. This means that a picture cannot be easily edited, but it has the advantage of

using no more memory to draw a complex picture than to draw a simple one — which is extremely useful on the memory-starved BBC Micro. The Digigraph system also includes several 'worksheets', which the user is invited to use to practise copying. Together with the excellent manuals, these allow you to master the system with the minimum of effort. The Digigraph costs £100 with cassette software or £105 with the software on disk.

The RD Labs tracer is marketed in two forms — one for the BBC and the other for the Spectrum. Both versions are virtually 'do-it-yourself' kits: the tracer arm only is supplied, along with a peel-off sticky pad that allows you to glue the arm to a suitable base. The arm is made of plastic and is very flexible, but operates reasonably accurately. The pointer is a plastic cross-hair arrangement that is somewhat cumbersome in use.

The BBC version is priced at £70. For this, you get the arm itself, a manual and a software cassette. The pictures are stored in a similar way to those produced on the Robot Plotter, with the result that memory shortage is again a problem. The software is fairly complex, containing routines for drawing circles, rectangles and lines and an animation facility. This uses the BBC's ability to redefine the colour palette to animate short simple sequences. A demonstration cassette shows off all the features of this tracer.

The Spectrum version is the least expensive of the four at £56. The package includes an add-on analogue-to-digital converter (the BBC Micro already has this built in). In most other respects, the Spectrum model is very similar to the BBC version. Continuous drawing is possible, but is difficult to do satisfactorily because of the slow response of the software, and a smooth curve

**Different Angles**

