MAKING PLANS

Despite many basic similarities of design, financial modelling packages each have their own individual characteristics and idiosyncrasies. This is certainly true of Graph Plan, a combined spreadsheet and graphics package, which is available for the BBC Model B equipped with the Z80 second processor.

Unlike the other packages that we have looked at in this series, Graph Plan is a disk-based program. Acorn gives the package away, as part of a bundle of free software, to purchasers of the Z80 second processor. Like all the programs in that bundle, Graph Plan is a very useful and reliable package.

The program doesn't have quite as much 'style' as Psion's Abacus, the spreadsheet/graphics package that Sinclair QL users receive free of charge (see page 724). But it does have the enormous advantage over Abacus of the fast access and storage speeds that proper disk-based software enjoys (the QL Microdrives are adequate if you are used to cassette-based software, but frustratingly slow if you have ever used a proper disk drive). Since Graph Plan is a 'giveaway' package, it is sure to enjoy great popularity — although not as much as Abacus, perhaps, since the combined price of the Z80 processor plus Acorn disk drives is a lot higher than that of the Sinclair QL.

In this article, we will concentrate our attention on the graphics side of financial modelling. Graph Plan, as the name suggests, has a very extensive graphics capability, as well as a formidable array of built-in commercial and mathematical formulae.

What gives Graph Plan its unusual style is its idiosyncratic way of communicating by numbers; all user interaction with the program is via 144 numbered commands. Upon loading, the program has a standard spreadsheet display — divided into rows and columns — filling most of the screen. Down the right-hand side of the screen the 20 basic commands with their corresponding numbers are displayed. The user selects a command and keys in the number at the ENTER COMMAND prompt on the third status line above the display.

Although it is simple enough to select a command — either from the menu on the screen or from the complete list of commands in the excellent 124–page Graph Plan manual — there are obvious disadvantages to this way of doing things. Most modelling packages, particularly the highly successful ones like the Lotus 1-2-3 (see page 644), require you to input the initial letter of a command only (or to select it from a display with the cursor control arrows).

Sophisticated modelling packages, like Lotus 1-2-3, display explanations of what each command's function is. Graph Plan, on the other hand, expects you to understand the function of all of its commands. However, the program does provide the facility for the command list on the right of the screen to be altered to display corresponding lists of commands. If, for example, you select command number 2 data, the command menu changes to display commands 29 to 48 (the data entry and data manipulation commands). There is also a HELP facility (command number 7) that can give an explanation of a given command's function.

In addition to the system of numbered commands, Graph Plan has other unique features. Most spreadsheets, for example, are based around the concept of the 'cell' — an intersection between a row and a column. Graph Plan treats rows and columns as separate entities, and the 'data pointer' (the second status line on the display) is a cursor indicator that, in addition to displaying the identity of the current cursor square, shows whether you are in row or column mode.

This distinction would be meaningless in a system where the unique cell address is the central reference point but it is extremely important in Graph Plan, because graphs have to be drawn up with reference to either rows or columns, but not both. In order to tell the package whether you want to generate a row-based graph or a column-based graph, you have to set the appropriate mode by changing the data pointer. This is done using the arrow keys to move the cursor onto the heading of either a row or a column, which automatically specifies the mode.

A SIMPLE MODEL

As an illustration of the package's graph drawing technique, let's consider a simple model. This has five columns, headed 'January' to 'May' respectively, and five rows, headed 'Sales', 'Cost of Sales', 'Gross Profit' 'Overheads' and 'Net Profit'. In a model like this, a row-based graph will have a different meaning from a column-based graph. For example, we could generate a very simple row-based bar graph for the sales turnover figures for January through to May.

The graph would display the column titles ('January' to 'May') along the x-axis, and the bars would represent the values given in row one of the model. Alternatively, by adjusting the data pointer to column mode, we could generate a very different bar graph. This would display the row