

PUBLISHER TRUE DTP

Requires 64k

(c)1992 by KCS

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Additional program modules by kind permission of Graham Kinns

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Loading Publisher

Before using Publisher for the first time it is very advisable to make a backup copy. Details of how to do this are in your DOS manual under BACKUP command, but for a two drive system the command required will be :

BACKUP 1 TO 2 (assuming Publisher is in drive 1 and a blank in 2).

When you have made this backup-copy put it in a safe place in case you damage the original.

To load the package place the disc in the default drive (the default drive can be changed with the DRIVE command if necessary) and type **BOOT**. When asked, press F to put the Dragon in fast-mode (doesn't work on all Dragons), or N to keep in normal mode. Whilst the title screen and your name is being shown there will be a short pause. This pause may be skipped by holding down any key whilst loading.

Introduction

Publisher, is a graphics based Desk Top Publishing system available only on disc for 64k Dragons. Unlike other Dragon DTP packages Publisher does not require you to manually hand-wind paper through the printer or only allow crude graphics shapes and few fonts. Publisher allows you to create a full page in one go, using any of the 38 fonts, graphics from the full graphics package, or some of the supplied "clip-art", and then print it quickly, and easily, to an EPSON, SEKOSHIA, or TANDY printer.

Publisher is menu driven throughout requiring only single key-presses where possible, and a self-centring type joystick for the graphics and move/copy functions, and is therefore very easy to use.

The Main Menu

The main menu consists of 14 options, each selected by a single key-press (there is no need to press **ENTER** after a selection).

These options are :

L : Load - this allows you to load fonts, pages, or screens
S : Save - this allows you to save fonts, pages, or screens
C : Choose - this shows you a menu of fonts to choose from
F : Font Editor - this allows you to make more fonts
V : View - this shows the page shrunk to quarter size
P : Print - this option dumps the page to an EPSON printer
G : Graphics - this loads in the supplied graphics package
ENTER : Edit - this is where all text is entered to the page
CLEAR : Clear - this option clears the whole page after asking
O : Options - this is where you can choose size, spacing etc.
D : Disc - this gives access to the DOS commands (eg DIR)
Q : Quit - this quits the program. Press Y or N when asked "SURE?"
X : Extras - extra add-ons to the program will be put here
M : Move/copy - this is used to move bits of page around

Starting a page

The first thing that has to be done when starting on a new page is to clear it of what was there already. This can be done simply by pressing **CLEAR** from the main menu and answering **Y** to the "SURE?" question.

Entering text

Choosing a font

Before entering text you must decide which type of lettering, called a font, which would suit what you want to do. To do this press **C** for **CHOOSE** from the main menu and select a font you like the look of by typing it's number on the keyboard. For numbers 1-9 you can either precede them with a zero (ie 01-09) or press **ENTER** after entering one digit. For two digit numbers there is no need to press **ENTER**. Pressing **@** will escape from this menu if you make a mistake. Choose a font in the range 1-30 (eg 3) for now as the others are used in special ways which will be explained later.

Adding text to the page

Press **ENTER** from the main menu to gain access to the page. You are now in the top left hand corner of a page covering almost 8 screens which will fill an A4 page on a printer. Anything typed on the keyboard will come up in the font you chose in it's smallest size (which is about the same size as the normal font on your printer). When you reach the right or bottom of the screen the screen will scroll so as to show a fresh piece of page to write on.

When entering text like this, some keys are used for special purposes such as moving around the page, deleting etc. These are listed in the following table :

Special keys

BREAK : returns you to the main menu from entering text.
ENTER : returns the cursor to the next line at the left hand margin.
SHIFT @ : deletes the character to the left of the cursor.
SHIFT CLEAR : deletes the visible part of the current line.
SHIFT 0 : used as a caps-lock as normal.
ARROW KEYS : move the cursor in character sized jumps.
SHIFT ARROW KEYS : move the cursor in single pixel sized jumps.

CLEAR key commands

23 extra functions are available by first pressing the **CLEAR** key:

ARROWS : used to move to top/bottom/left/right of page.
SPACE : Moves between four possible TAB positions.
T : sets one of four TABs at the cursor position.
M : sets the left hand margin of the column.
W : sets the point on, or to the right of which word-wrap takes place.
B : toggles **bold** text on and off.
U : toggles underline text on and off.
H : shows a help-screen with these key details on it.
Z : deletes any changes since last **ENTER**, **TAB**, or page move.

Eleven extra characters are also available by using **CLEAR** with 0-9.

These are : 1 2 3 4 5 6 7 8 9 0 -
 | ~ { } \ ^ ` [] _

Making Columns of text

When you press **ENTER** normally, the cursor returns to the left-hand side of the page. However if you press **CLEAR - M** at a point on the page then the cursor will always return to that vertical column when **ENTER** is pressed. This sets the left-hand margin of the column.

Word-wrap function

The program incorporates a simple word-wrap function where a right margin may be specified by pressing **CLEAR - W** in the required place. Typing words upto the margin will show that the program will automatically "press **ENTER**" for you when you press **SPACE**, or - on, or to the right of, the point set. This therefore ends most lines at the right point, splitting them at the next gap typed.

Changing text size & spacing

Selecting **O** from the main-menu gives a secondary menu from which may be selected several functions such as size, spacing etc. These are:

- H** : Height - changes the height of the characters from x1 to x10.
- B** : Bold - toggles **BOLD** on and off (as **CLEAR - B**).
- U** : Underline - toggles UNDERLINE on and off (as **CLEAR - U**).
- S** : Spacing - sets the horizontal spacing between characters.
- V** : Vertical spacing - sets the gap between text lines (in pixels).
- R** : Repeat - sets the repeat/delay rate of the auto-repeat function.
- D** : Descenders - toggles the descenders function on and off.
- O** : Overlay - chooses whether text overwrites what was on the screen.
- Q** : Quits to the main menu.

Descenders

Fonts are designed on an 8x8 pixel grid, but for those characters that normally hang below the line (**gpyq;** and,) a special function exists whereby those letters are moved down by 1 pixel before printing to the screen so giving an effective grid of 8x9 pixels. For some fonts such as the Double-width ones or symbols this function is not wanted and may be turned off.

Double Width Fonts (33-38)

These fonts are upper-case only fonts which are used by typing the left-hand side of a character as a lower-case letter, and the right-hand side using upper-case. The screen will then show a double-width character (16 pixels wide). To make larger characters still, these may be combined with the **HEIGHT** function to make characters upto 16x90 pixels in size.

Fonts 34 (shadow), and 37 (large) will have no gap between most letters if typed as above so to leave gaps inbetween letters, use **SHIFT RIGHT ARROW** a couple of times after each letter typed.

Symbol Fonts (31-32)

These two fonts are special fonts which contain Electronic, and general symbols. They are used in exactly the same way as normal fonts but the letters are replaced with a set of symbols.

Note

All options are correctly set up when the **CHOOSE** option is used.

Loading & Saving

When you've produced a page or so of text you can save & re-load it in one of three ways. These depend upon how much room you have used. These are:

Screen : the part of the page you can see when entering text

Page : the whole page

Letter-Head : The top quarter of the page only

Saving

A screen is saved by selecting **S** from the main menu and then **S** again for screen. Any filename may be entered, but a default extension of ".SCR" is given. Screens take up 6k of disc space, allowing about 25 to a disc.

A page is saved by selecting **S** from the main-menu and then **P** for page. No extension can be given for the name as 9 separate files are saved with the extensions ".0" to ".7" and ".PVW". Screens take up approximately 54k allowing 3 on one disc.

A letter-head is saved by selecting **X** from the main-menu and then **S**. No extension may be given for the name, but the default is ".LH". Letter-heads take up approximately 12k, and 14 may be fitted on one disc.

You can also save a small part of a screen as a "cut-out" - see the section on graphics for how to do this.

Loading

Loading is simply the same process as above except **L** is selected from the main menu, or extras menu instead. When loading pages, or screens you will first be shown a preview of it. If you don't want to load that one after all then press **N** to the question, otherwise press **Y** and it will be loaded in.

Filenames

To save, or load, from another drive than the default simply type the drive number followed by a colon (:) at the beginning of the filename, eg to load PAGE2 from DRIVE2 type 2:PAGE2 as the filename. Extensions may only be added when saving, or loading, screens.

Disc Commands

If you want to do a directory of the current disc, change the drive etc. then press **D** from the main menu. This gives access to all the main DOS commands that are likely to be needed. The options are :

K : Kill

R : Rename

F : Files (DIR)

D : Drive

I : Initialise (DSKINIT)

P : Protect - **N** : Protect on **F** : Protect off **Q** : Quit

C : Copy

Q : Quit back to main menu

To kill a whole page use the **K - KILL PAGE** function on the EXTRAS menu.

Printing the page

To print the page press **P** from the main-menu. Another menu will appear from where you can choose which sort of printer to use. The printer dumps supplied are :

- E** - Epson (+ compatibles inc. Star, Citizen, Canon, Panasonic...¹)
- S** - Sekoshia GP100A
- C** - Tandy CGP115 printer plotter
- T** - Tandy printers (DMP series and any others with 7 dot graphics)

When loaded yet another menu will appear giving various options on how the print-out will look.

Epson

- D** : Density - change between draft, and final (bold) quality
- W** : Width - change width between single, and double
- P** : Passes - the number of times each line is printed
- L** : Line Feed - set to on if your printer prints it all on one line
- I** : Invert - prints page out as a 'negative'
- Q** : Quit - quits back to printer selection menu
- 4** : A4 dump - prints page to approx A4 paper size
- 5** : A5 dump - prints page to approx A5 width paper

To print a draft page you just need to press **4**, or **5** from this menu but for a final quality dump (A4 only) the width must be set to **2** as the dots are half as wide in this mode as they are in draft.

Passes

The **PASSES** feature is useful if your ribbon is dying - try a virtually ink free ribbon with **PASSES** on **4** and the dump-quality will still be quite good!

Line Feeds

If you normally have to type "POKE 330,2" to get your printer working properly, you will probably need to press **L** to set **LINE-FEED** on as the setting of location 330 is ignored. If your printer is set to auto line-feed to print-normally then there is no need to use this option.

A5 dumps

You should note that when using the **A5** print-mode the page is printed out at it's normal length but only its width is changed to that of **A5** paper. You should therefore only use the top $\frac{2}{3}$ to $\frac{3}{4}$ of a page if you want it to fit onto **A5** paper.

Combinations of commands

You can combine all of the above commands except **BOLD** and **A5** print size. So for instance you could print in **A4** mode, **BOLD**, **WIDTH** = **1**, and the page would come out about 4" wide by 11" deep, or **NORMAL**, **WIDTH** = **2**, and the page should occupy 16" across, but as most people don't have 16" printers it will actually just be the left half of the page printed double-width.

Sekoshia GP100A

P - Print Page - starts printing page to the set length
I - Invert - prints the page as a 'negative'
M - Mark page - adds an end of page marker to the on-screen page.
Q - Quit - quits back to printer selection menu
N - Normal - selects normal length page (693 lines) = 11"
4 - True A4 - selects A4 length page (735 lines)
F - Full - selects complete page (768 lines)

The mark page option adds a pattern to the end of the page in memory beyond which will not be printed for the current page length setting, If you want to delete this pattern use the delete function under 'Move/Copy' or Clear the whole page with CLEAR.

Tandy CGP115/MCP40 plotters

I - Invert - prints the page as a 'negative'
Q - Quit - quits back to printer selection menu
F - Print full page - prints whole page (about 4"x6")

Tandy

P - Print - starts printing the page
I - Invert - prints the page as a 'negative'
W - Width - selects the width of print-out in the range 1 to 3
Q - Quit - returns to printer selection menu

The Tandy dump will require you to set the Width for your particular model of printer, eg for the DMP110 a width of two is needed for A4 width paper, but for the DMP2100 a width of one prints out at A4 size.

Note

¹ Normal printing using the EPSON dump requires the ESC K command, BOLD the ESC L command, and A5 mode the ESC ?K n command. The last command is not available on all EPSON compatible printers, and may be changed in the program EPSON.BAS line 230 to a command for your printer if necessary, for instance the Brother HR5 printer has a different graphics-mode available by sending the code for ELITE text - ESC M - before hand instead.

Some EPSON compatible printers also use different commands to set line-spacing and so you can edit or add your own codes in 'EPSON.BAS' in the same way. When you have edited this program you can resave it after killing to old one with :

```
KILL"EPSON.BAS":SAVE"EPSON"
```


Adding Graphics

Main Graphics Menu

Pressing **G** from the main menu loads in the graphics part of Publisher where graphics such as clip-art, boxes and lines may be added to the page.

The main graphics menu looks has these options :

S : Shapes - boxes, lines, circles, discs etc.
C : Cut-outs - Cut, paste, load & save clip-art.
V : View - show page. Press any key to escape.
U : Undo/OOPS - undo last drawing action.
P : Paint - brush, airbrush, paint, shaded fill etc.
M : Misc - magnify, mirror, rotate, scroll etc.
O : Options - set airbrush size & density and gridlock.
G : Get pattern - select brush/fill pattern from menu.
E : Edit pattern - draw your own pattern.
Q : Quit to main menu.

When on the hi-res screen press **BREAK** to return to the menu, and **CLEAR** to undo the last action.

Shapes

The shapes menu looks like this :

L : Line - straight line.
B : Box - outline rectangle.
F : Box - rectangle filled with pattern.
C : Circle - outline circle.
E : Ellipse - squashed circle.
A : Arc - part of circle.
P : Pen - freehand drawing.
D : Disc - circle filled with pattern.
Q : Quit to main graphics menu.

Lines are drawn by moving to one end of the line and holding **FIRE** then moving to the other and releasing **FIRE**.

Boxes and **Filled Boxes** are drawn by moving to one corner, holding **FIRE**, dragging the box out to the other corner, then releasing **FIRE**.

Circles and **Discs** are drawn by moving to the centre of the circle, holding **FIRE** then dragging the circle out to the right size.

Ellipses are drawn as for circles but the size of both axis can be changed independently by moving the joystick up/down and left/right.

Arcs are drawn as for circles except that when drawn, the computer will beep. You should then re-press **FIRE** then move the joystick again to select the part of the circle you want. Left/Right will adjust the "start-point" of the arc, and Up/Down will change the "end-point".

The **Pen** is used by moving the cursor around, inking in lines by pressing **FIRE** in the right places.

Cut-outs

The cut-outs menu allows you to cut part of a screen out, and save them to disc, or replace them on the screen.

The menu options are :

- C : Cut - cutout area.
- P : Paste - paste area back.
- L : Load - load cut-out from disc.
- S : Save - save cut-out to disc.
- Q : Quit - quit back to graphics main menu.

Cutting

Cutting an area involves forming a box around the area with the joystick as with **SHAPES - BOX** above. This area is now in memory until you cut-another, or return to the main graphics menu with **Q**. The maximum allowed area is approximately 2/3 screen so areas larger than this cannot be cut-out.

Pasting

Pasting gives you five options which effect the way the cut-out is placed on the screen, these are :

- N : Normal (PSET) - pasted as it was cut.
- I : Inverted (PRESET) - pasted back as a "negative".
- O : Overlaid (AND) - only the black bits are re-pasted.
- B : Background (OR) - only the white bits are re-pasted.
- X : Always visible (XOR) - it is always visible on black, or white.
- Q : Quit to cut-outs menu.

When you have chosen a mode, either a box (for large cut-outs), or the actual cut-out itself will be shown, and once moved to the right position, it can be fixed with **FIRE**.

Painting

The paint menu contains these items :

- A : Airbrush - random spreading of dots on the screen.
- B : Brush - for brushing a pattern onto the screen.
- P : Paint - paint the screen in black.
- S : Shaded fill - fill area in pattern.
- E : Edit pattern - to change the pattern.
- Q : Quit to main graphics menu.

The brush pattern is applied to the screen by pressing **FIRE** at the required points. Black pixels are put on the screen, but white ones are not.

Painting areas may result in an **"?OM ERROR"** because the area is too large. If this happens, just continue filling in small bits until it is finished. This restriction is due to the small amount of memory spare for the fill function.

The airbrush is activated by pressing **FIRE** as for brush, and it's size, and density, can be changed from the **OPTIONS** menu (see later).

Patterns can be imported from the **Get Patterns** menu (see later) or edited using the **Edit pattern** feature (see later).

Misc menu

The functions on the misc menu are :

M : Magnify - for fine editing of areas.
H : Horizontal mirror - mirror area left to right.
V : Vertical mirror - mirror area up and down.
R : Rotate - Turn area upside down.
I : Invert - Make a negative of an area.
D : Draw - Use the BASIC "Draw" command.
S : Scroll - choose the area of screen to work on.
Q : Quit to main graphics menu.

When in **magnify** mode, the area to be magnified should first be chosen by moving the box to the right position and then pressing **FIRE**. When in the magnified section, the fire button changes the colour of the pixel under the cursor from black to white. **BREAK** quits back to the main-menu, and **CLEAR** undoes any modifications made.

Mirror, **rotate**, and **invert** require you to make a box around the area to be changed using the same method as for **SHAPES - BOXES** above. When you release **FIRE**, the job will be done. The full-screen can be used on all of these.

Draw command allows you to use the BASIC draw command for drawing on the screen. When defined, you can move it around the screen with the joystick, and use **FIRE** to fix it.

Scroll allows you to move to a different part of the page to work on with the graphics package. A preview will be shown with a movable box showing the area of the current screen. Pressing **FIRE** will fix the position of the new screen to edit.

Options menu

This allows you to change some parameters :

S : Airbrush size - Sets the size of the airbrush in pixels.
D : Airbrush density - Sets the density of the airbrush.
G : Gridlock - Sets the jumps with which the cursor moves.
Q : Quit back to main graphics menu.

The **Airbrush density** can be chosen between Low, Medium, and High, by choosing **L**, **M**, or **H** respectively.

Gridlock can be set independently in both axis. A gridlock of one turns it OFF, and pressing **ENTER** alone returns to the menu.

Get Pattern

This shows a menu on the hi-res screen from which you can choose a pattern by moving the cursor, and pressing **FIRE** to select.

Edit Pattern

This option shows the 8x8 grid a pattern is made of and a cursor which can be moved by the arrow keys. The **SPACE-BAR** will invert individual pixels, **BREAK** will return to the main graphics menu, and **CLEAR** will clear the whole grid. Pressing **I** inverts the grid, and pressing **H** or **V** mirrors the grid horizontally, or vertically respectively.

Notes

Screens are saved as normal 6k binary files such as those from DGS, DGS+, or the NDUG's graphics library.

The Publisher disc should not be write-protected as data is written to it in some parts of the program.

Do **NOT** save any extra programs, or files on the Publisher disc as this space is required for saving to, and for future add-ons. If you want to make more room on the disc then you can remove the cut-outs to another disc.

The EPSON dump should be suitable for the following printers:

EPSON, PANASONIC, CANON, STAR, BROTHER, TAXAN KAGA, AMSTRAD DMP, MANNESMAN TALLY, CITIZEN, or any other printer that has an EPSON-FX emulation mode.

The cut-outs supplied are called : BATMAN, BOOK, CANDLE, DRAGON, DRAGON2, DRAGSYMB, DISC, DRIVE, ENVELOPE, GBUSTERS, INK1, INK2, JOYSTICK, KEYBOARD, LAMP, LT-ARROW, MOVING, PC, QUILL, RT-ARROW, RULER, TAPE, TITLE.

The screens supplied are called : BATMAN, MERRXMAS, and TITLE.

Memory Map

You don't need to know this to use the program normally but it is included for anybody wanting to customise the system etc. If you want more detailed information please contact me at the below address, enclosing an SAE and stating the details you need to know.

\$0000 System variables + direct page.
\$0400 Text Screen.
\$0600 DOS workspace.
\$0C00 Hi-res screen.
\$2000 BASIC + system stack.
\$4200 Overlays : System font, Printer Dump, Graphics, Movecopy.
\$4500 Machine code : Character routine, repeat, load, and save.
\$4800 Page font.
\$4B00 Page : 768 lines x 60 bytes.
\$FF00 SAM I/O registers.

\$47F7 - \$47FE Pattern data (fill, brush etc.)

Development policy

Publisher is subject to continual improvement as new features are being added. If you have any ideas for the system, or have added any yourself, then please contact me at the below address with details.

This package was written solely by, and is copyright (C)1989 by :

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Load/Save Screen Anywhere

This is accessed by pressing A from the eXtras menu. It allows you to load, or save, a screen to, or from any place on the page at a position chosen by moving a rectangle representing the screen over a page preview.

Press L to load, or S to save, and then enter the filename of the screen to load or save. A page preview will then be shown on the hires screen with a box cursor like the one used with the scroll feature in the graphics package. The box can be moved with the joystick and when correctly positioned, fixed with the FIRE button. The screen will then be saved, or loaded as selected earlier.

Pressing Q from the menu will return you to the eXtras menu.

This can be used to centre text and/or graphics such as headlines, text boxes etc. To do this, save the page area currently containing the area to disc, delete it off the page using Delete on the MOVE/COPY menu, then load it back using Load Anywhere, placing it exactly where you want it.

View at Half Size

Pressing V from the eXtras menu allows you to see the page at half it's normal size (but twice the normal page preview size) to check you have the layout correct before printing etc. Because it is larger small text is much more readable than on the standard page preview.

The top or bottom half of the page can be viewed by pressing the up or down arrow key respectively, the part currently being shown is represented by the box to the right of the page. When the top half of this is black the top half of the page is currently being shown, and the opposite for the bottom half. When the bar is grey the computer is still working (a preview takes a few seconds to calculate). Pressing any key other than the two arrows will return you to the eXtras menu.

Rotate by 90 degrees (turn on side)

This is now available on the Misc menu in the graphics package by pressing T (for Turn-around). The routine is used by moving the cursor to the top-left of the area to be rotated then holding FIRE whilst you move the joystick left and right to increase the size of the area to be rotated. A square will be dragged out as you move the cursor, and when the required area is outlined, release FIRE and the you will see the rotate take place in a few seconds.

Magnify Improvements

The magnify routine is now virtually instantaneous and allows you to move around the screen by moving the cursor onto the orange "scroll" bars which surround the magnified part and pressing FIRE. Doing this on the top scroll bar will move the magnified area up two pixels, the one on the right, to the right two pixels, and so on.

All work carried out since Magnify was first selected, or a new area was selected by pressing M, can be undone by pressing CLEAR. NOTE : This does **not** just undo the changes in the current magnified part. To reselect the area to magnify, and store any changes made so far, press M to move to another area.

Resize - written by Graham E Kinns

Resize allows you to resize any image up to screen size in area, from the current page, a saved screen, or Publisher/DGS Cut-out and place it on the page in any of 16 different ways - the resized image being up to page sized. This may be done by giving the fractional enlargement/reduction ratios required, or by outlining the destination area on the page, letting the program calculate the ratios. If the original image comes from the page, the new image may be placed over it without any adverse effects.

Using Resize

There must be 6400 bytes free on your master disc for Resize to work.

Resize can be accessed by pressing R-Resize from the M-Movecopy menu, and after some extensive disc activity, you will be presented with a menu to select the source area from which the image is to come.

Selecting Page, you can select the rough area of the page from which the image is to come by scrolling the page with the joystick. BREAK will return you to the source select menu, and the FIRE button confirms the initial area of page to use. Operation then continues as after loading a screen below.

Selecting Screen, prompts for the filename, no confirmation is given as it is easy enough to return and load another. You are then shown the screen surrounded by a box. The size of this box can be altered by selecting the part of the box to move and then clicking on it. You are then in control of that part of the box - indicated by a flashing circle. Selecting the central point allows you to re-position the whole box within the screen. Pressing FIRE again allows you to select another part of the box to move. Press BREAK when the box encloses the required area.

Cut-outs are treated similarly to screens. Putting a "." in the filename will add a ".CUT" extension for loading DGS cut-outs, no extension will result in a Publisher cut-out being loaded (".CO1" and ".CO2" extensions).

After the image has been selected with BREAK another menu appears. Pressing BREAK again allows you to re-position the box, Q will take you back to the source-select menu, and ENTER takes you to the next part of the program.

This next screen controls the placing of the image on the page. A small graphic display shows a diagrammatic "flag", its orientation on the screen representing how the new image will look on the page. R rotates the image by 90° clockwise, I Inverts it, and M mirrors it vertically. Using combinations of these three options you can select one of sixteen ways in which the image can be changed.

There are two modes of operation for selecting the resize factor - Auto sizing on, and Auto sizing off. With Auto sizing on, you select the area on the page you want the image to fill, and the program calculates the ratios. With auto sizing off, you have to manually enter the ratios, which the computer will check for illegal values.

Pressing **BREAK** swaps to the graphics screen where you see a box around the final area in a similar way to the image selection routine. However, since the final area may be anywhere on the whole page, you may not be able to see all of the box at once, but only the edge indicated by joystick position. With Autosizing on you may re-position any part of the box by clicking the FIRE button on the edge, or corner, to move, and then moving it.

With Autosizing off, you may only move the central point of the box, allowing you to re-position the whole box with reference to the page.

Pressing **V** at any time allows you to view the whole page with a flashing box to represent the final area. **BREAK** will take you back to the menu.

When you are on the menu with Autosizing off a cursor will flash on one of the ratios, cursor keys will move this along. Use the number keys to replace the number under the cursor, then press **ENTER**, **:** or **SPACE** to store the new ratio and move onto the next. If at any time the final image (ie original image x enlargement ratio) is bigger than the page the program will reset the ratios to the maximum allowed size.

You can force a cancelling down of the ratios by pressing **D** and you can centre the image across the page by pressing **C**.

When you have finished making adjustments, **P** places the image on the page - a short period of disc activity is followed by a wait while the M/C works, depending on the size of the area.

The placed image will "over-write" anything under it and there is no way to UNDO it. The final image may be placed over where the original came from without any adverse effects.

Compact - written by Graham E Kinns

Compact is an add-on which allows you to save Pages in a compressed form which can reduce the space taken by a page to less than 1K! This means many more pages on a disc, and its also much quicker!

To see how much you would save if you were to save a page in compressed mode, load it in then load P-Compact from the eXtras menu, and when loaded press **E** for Estimate. The figure shown is the percentage of disc space saved - a figure of over 98% can be gained for a blank page, and a saving of 50% may be gained on many pages.

To save, load, or kill, a compressed page press **S**, **L**, or **K** respectively and then follow the on-screen instructions to enter a filename. The page will then be loaded, saved, or killed. Pressing **D** will show a directory of all the pages on the drive selected - both compressed and normal ones along with the amount of free disc space.

There is an option to enter your own "token" value. This is the value that is used to tell the de-compression routine that the following bytes of data are in a compressed form. You won't normally want to change the default value (\$34) but this can be done manually, or by finding the optimum for this particular page by pressing **O**. However, on most pages the saving is only 0.01%, and isn't really worth doing.