

Pro Draw v1.1

User Manual

Introduction:

Pro Draw was originally designed to help me make cute little icons for the programs I make. As it grew, though, it became more like a proper drawing package, so I now use it to create pictures used by my programs as well. Because it was designed as an icon editor, it has some problems while using very large pictures. In fact, if you want to create images larger than 480x160, tough, you can't.

Setting Up Pro Draw:

Using the Psion 3-link, copy the file DRAW.APP to the /APP directory on your Psion (or Acorn Pocket Book II, if you use an Acorn Pocket Book II like me). On the Psion desktop, press Psion-I and you should see the Install dialog box appear. From the file list, select "Draw" and press Enter. Pro Draw will now be available to use on your Psion. When you run it, it'll create a directory called "PRO_DRAW", and a sub-directory "DEFORMS". If you have any deformations you want to use, copy them to this directory. Any files you create/copy should be in the /PRO_DRAW directory. I recommend that you use Pro Draw on a Psion with 512kb RAM or more.

The Basics:

People who regularly use the Psion 3a should feel at home using Pro Draw. It behaves like the built in apps, with Control-Menu bringing up the status window, hotkeys available instead of the menus and I've tried to keep the menu commands as consistent as I can with the built in apps. In this document, I'll go through each menu command, explaining how to use them.

Some basic navigational rules are:

To move the cursor one pixel at a time, just use the arrow keys.

To make the cursor "jump", hold down Control and use the arrow keys

To make the cursor move to the edges of the image, use Pg Up, Pg Dn, Home and End.

To draw using the current tool, hold Shift and use the arrow keys.

As you can see, Pro Draw treats pictures a little like Word treats a text document. When you select something, press Delete to erase it, Press Psion-c to copy it to the clipboard (please note, you cant copy things in Pro Draw and "Bring" them into a text document. Although I'd love this, The Word application is a little smaller (around 70k) than Word on the PC (around 35mb), and therefore has one or two less features). Like the other Apps on the Psion, you can only open one file at a time (well, you can open two, but it requires loading two versions of Pro Draw - virtually strangling the Psion's available memory).

The File Menu:

New File brings up the New file dialog box. In it, you can type the name of the file to create, the size of the picture and whether or not you want the picture to have a grey plane. If this is set to No, you will not be able to use any functions requiring grey, such as the shadows under text.

Open File does exactly what it says, opens a file. The file **MUST** be a valid Psion bitmap, or it'll cause a "bad file type" error.

Save as, **Save** and **Revert** behave exactly the same as in other applications. If you choose **Save** and the picture hasn't changed, it'll tell you.

Information displays general information about the current file, including its full file name, size, current colour and if it has a grey plane.

The Edit Menu:

Undo cancels the previous action. It'll display in the menu exactly what this action was. If, in the menu, it just displays **Undo** and nothing else, it means the previous action can't be undone, and selecting it will receive a "This option is not available" message. Undo functions are only available anyway if you have the "Keep undo buffer" in the preferences dialog set to "Yes"

Select allows you to select an area of the image. When selecting, you must click on the top left corner followed by the bottom right corner. When you've selected part of the image, an animated border will appear round it.

Copy copies the selected area into the clipboard. You can only use the copy command if you have selected an area of the image.

Paste pastes what's in the clipboard on the image **WITH THE TOP LEFT CORNER AT THE CURRENT CURSOR POSITION**.

Paste as New takes what's in the clipboard and turns it into a separate image that you can edit. Any selected region of the image is automatically deselected.

Clear Image brings up the a dialog allowing you to select what colour you want the image to be when cleared. "Invert" inverts the whole image, and "Patterned" fills the image with a criss-cross pattern.

Clear Clipboard is fairly self explanatory.

The Drawing Tools menu:

Pen gives a solid line, one pixel thick.

Dotted Line gives a broken line, one pixel thick

Brush acts like a paint brush. You can set the brush thickness in the preferences dialog box.

Spray, **Stripple** and **Bramble** are all tools. You can set their size and power in the preferences dialog. **Spray** acts like a spray can, **stripple** gives a tinsel effect and **bramble** looks like a bramble bush.

The Objects Menu:

Text brings up the Add Text dialog box. In it, you add the text you want to add, the font you want to use and the size of the font. If you want a shadow, choose the corner you want the shadow to appear in, and set the shadow depth (how many pixels away the shadow is from the actual text). If you want to add special effects, press the Menu key and choose the options you want (they're all Yes/No options). Press enter, and the text will be added to the picture with the bottom left corner at the current cursor position.

Line and **Box** will draw either a straight line or a plain, hollow box. Unlike the select method, you can select the corners in any order.

Circle adds a circle to the image. In the dialog that appears, you can enter the centre X/Y positions, the radius and the type. The relative height is how high the circle is compared to its width. Entering 2 means the circle will be twice as high as it is wide etc.

The Image Menu:

Flip and **Mirror** don't really need explaining, except that for some reason, mirror is much slower than flip

Rotate brings up a dialog box asking you how many degrees you want to rotate by. Because the Rotate method is so slow, the co-ordinates window turns into a progress monitor. NB. Pro Draw always rotates the picture CLOCKWISE. Believe it or not, Rotate is the single most powerful function in Pro Draw. Early versions could only rotate by 90, 180 and 270 degrees, but you should find in this one you can rotate freely by any degree. WARNING!!! Rotating an image is very, very, very slow. If you're working on a large image, I recommend you go and make a cup of tea while you wait, or maybe watch some TV.

Add Borders brings up a dialog with some simple options about the border you want to add, and then adds it to the image. If the image hasn't got a grey plane, you can't have 3D style borders.

Enlarge Canvas just enlarges the image area. IT DOES NOTHING TO THE EXISTING IMAGE, just gives you more space to draw,

Resize stretches the image to a new size. If Maintain aspect ratio is set to "Yes", the image won't be distorted in any way, although you must leave either the Width or Height set to 0.

Load Deformation loads a separate deformation to apply to the image. You MUST load a valid .DFM file, or you'll receive a "Procedure not Found Error" When this was written, I had only made one deformation, SKEW.DFM, included with this document. If you're interested in making your own deformations, see the file DEFORMS.DOC.

The Special Menu:

Set Preferences brings up the Set Preferences dialog box. In it, you can choose whether or not you want to display the box showing the co-ordinates. It's recommended that you choose "Yes" for this. Remember, it move out of your way if you want to move the cursor over it. "Keep undo buffer" doesn't need explaining, although again it's recommended that you set it to "Yes". Jump Size is how many pixels the cursor moves when you hold Control and press an arrow key. Tool size and power relate to the Spray, Stripple and Bramble drawing tools, whereas Colour changes the current drawing colour.

You can also choose to have an animated border around the selected region of the image of the screen. This is only recommended on images of 100*100 or smaller, as it uses an extreme amount of memory, and slows down Pro Draw.

Exit, **lose changes** and **Exit** behave like any other Psion 3a app

Omissions:

Probably the most obvious "missing bit" in Pro Draw is the fact that you can't print. This is because of two reasons. One, the Psion can't print pictures without extra system files, which I haven't got, and two, Pro Draw is a tool for developers, like me, who don't want to print.

Last Minute Information:

You can expect to see some more deformations/add-ins from me (including a rather nice Animator for sprite developers) in the near future.

After the Last Minute Information:

Although I've done everything I can to keep file sizes down, the application needs about 13kb of space for the file itself, and a lot more memory to run. It's a very powerful application that hogs available memory. I strongly recommend that you close all open programs before starting Pro Draw to make as much memory as possible available. Depending on the size of the image your working on, I'd say that you need about 100kb free AFTER loading Pro Draw.

Pressing the Help button does nothing. Including a help system would make the file size far too large, so I left it out of this version. Besides, this document should get you started. If anybody out there knows how to get the scrolling help dialog boxes (you know, with the arrows), please, do let me know (it can't include the gCREATE command as Pro Draw uses all 8 available windows!)

I hope you enjoy using Pro Draw, I've certainly had an ... interesting time making it!

P.S. If you discover any bugs in Pro Draw, or have any hints or programming tips (such as how to achieve a quick rotate) and want your name to appear in the Credits, please send them to at:

Graham Stoneman
33 Wellstead Gardens
Westcliff-on-Sea
Essex
SS0 0AY

Sorry E-mail users, I haven't got an Internet account anymore - no email address.

If anybody from Psion is reading this, how about having a scaleable font system for the Psion, like TrueType on the PC? Preferably one that you can display on the screen in any size. And, if you're still reading this, how about introducing three new commands for OPL, namely gFLIP, gMIRROR and gROTATE?