



## (POPOUT)

**Random Dot Stereogram generator**

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# Installation

Installation of POPOUT-TEXT is easy. Since this freeware is being distributed through a number of different channels, installation may be different for different users.

Look for a file called INSTALL.EXE or SETUP.EXE on the POPOUT-TEXT diskette. If it exists (and it should), then simply click on the "File" pulldown in the Program Manager window, then click on "Run". For "Command", type in "A:\INSTALL.EXE"

Substitute another drive letter for your floppy if yours is not drive "A:".

The POPOUT-TEXT Install utility will copy all of the necessary files to your hard drive, then create a program group and program items for POPOUT-TEXT.

# Introduction

POPOUT-TEXT generates text-based Stereogram images from text files that you create. At first glance, the images that POPOUT-TEXT generates appear to be a series of seemingly random characters. When viewed properly, however, a "hidden" three dimensional image will "POP OUT" of the stereogram!

POPOUT-TEXT was designed to be used in with any text editor that generates simple text. Notepad is a good example. POPOUT-TEXT is capable of creating text images with up to 8 levels of depth.

***Note:***

When creating Source File images, and viewing Destination File images, it is important to be using a font where all characters are the same width.

# Creating a Stereogram

The following are the main steps you will follow in creating a stereogram image:

[Create a Source File](#)

[Select a Destination File](#)

[Select a Pattern Width](#)

[Generate the Stereogram](#)

[View and Print the Stereogram](#)

[Configuration/Preferences](#)

## Source File

The Source File is the filename of the text file that contains the depth information for the stereogram POPOUT-TEXT will create. This file should be a simple text file created by a basic text editor such as Window's Notepad. The Source File should contain only the numbers 0 through 7. These numbers are the depth information, indicating a "level number" to POPOUT-TEXT. Level 0 is the level furthest from the viewer. Level 7 is the level closest to the viewer.

In the POPOUT-LITE Main Menu, click on the Source File button, and select the Source File name.

The following is a sample Source File:

[illegible]

## Destination File

The Destination File is the file which is your stereogram. POPOUT-TEXT will create this file.  
The purpose of the Destination File button in the POPOUT-TEXT Main Menu is for you to specify the filename.

The following is a sample Destination File that was created by POPOUT-TEXT:

NHPUKBQPOCNHPUKBQPOCNHPUKBQPOCNHPUKBQPOCNHP  
UYEROSEJURUYEROSEJURUYEROSEJURUYEROSEJURUYE  
GQFH0IIRWIGQFHIIRWIGQFHIIRWIGQFHIIRWIPGQFHI  
REMIJPQHZWREMIPQHZWEMUIPQZWYEMIPPQZWYTEMIPP  
VOUDPYEWSUVOUDPYEWSUVOUDPYEWSUVOUDPYEWSUWNOUDYP  
LOYKITATCYLOYKTATCYOYKTATCYJOYTAWTCYJMOYTAW  
OITXIUSRNGOITXUSRNGITPXUSNGGITXUJSNGGLITXUJ  
JYRQKYZCKLJYRQYZCKLYREQYZKLZYRQYIZKLZRYRQYI  
BSJYKQQRNUBSJYPQRNUBSJYPQRNUBSJYPQRNUBBSJYP  
FAWUSPNYYCFAWUSPNYYCFAWUSPNYYCFAWUSPNYYCFAW  
XSORYRIWEYXSORYRIWEYXSORYRIWEYXSORYRIWEYXS0

## Pattern Width

One of the first things you notice when looking at any sort of stereogram of this type seemingly repeating patterns of characters across the width of the image. We refer to this distance between repeating patterns as the Pattern Width.

When POPOUT-TEXT generates a stereogram, it reads this parameter (which we've arbitrarily defaulted to 10) to determine how many characters to generate before repeating the pattern. The Pattern Width value is specified in Characters.

This physical distance between patterns is what increases or decreases the relative "depth" of the image contained within the stereogram. The wider the pattern, the more depth in the image. Also, the wider the pattern, the more difficult it will be for some people to see the hidden image.

Depending on your own environment, you will probably want to experiment with different values for the Pattern Width. We recommend a pattern width of somewhere between three quarters of an inch to an inch and a half.

## Generate and Exit

The Generate button in the POPOUT-TEXT Main Menu is the "DO IT" button. Once you've set up all of the controls, click on the Generate button.

POPOUT-TEXT will read your Source File drawing, and create a file on your disk with the name you gave as the Destination File. This file is your stereogram.

Once POPOUT-TEXT has finished generating your stereogram Destination File, you may exit the program if you wish. The "Exit" button is used to exit POPOUT-TEXT.

### **Hint:**

Since the stereograms generated by POPOUT-TEXT are based on a randomly selected set of characters, sometimes you may get a stereogram that just doesn't "look right" - a glob of 'B's here, a glob of 'G's there, etc. Each time you press the Generate button, POPOUT-TEXT uses a different set of random numbers, so keep hitting Generate, view the stereogram via the "View" pulldown, and hit Generate again, etc., until you get a stereogram that you like.



## Hints for Viewing

Some folks will have no problems in viewing your stereogram images. Others may need a bit of help. Below is a list of "hints" that we've compiled from different people.

- n Start with your head about a foot or so from the image. Stare at it and let your eyes relax. If things start to move out of focus, let them. Keep staring.
- n With your head about a foot from the image, suddenly move toward the image, and try not to refocus.
- n Stare at something at a far wall. Then, suddenly, glance at the image. Don't try to refocus on the image.
- n Get your nose right up to the image. Gradually (or for some people, quickly) move your head back.
- n Practice by drawing two dots on a piece of paper about an inch or so apart. Stare at them and let your eyes relax. Both dots should go out of focus, and you will see a total of four fuzzy dots. Keep staring. As the two middle fuzzy dots start to move toward each other, let them. There will be a point where the two middle fuzzy dots meet, and you will see a total of three dots, where the one in the center is clear, and the two edge dots are fuzzy. This is what you need to be doing to your eyes to see the stereogram image.
- n On a printed stereogram, draw two dots like in the above hint just above the stereogram, at a distance identical to the pattern width. Once you stare and see three dots, gradually move your eyes down into the stereogram without trying to refocus.
- n Put your stereogram behind a piece of glass, then stare at your reflection in the glass.

# Preferences

The Preferences menu is accessed by clicking on the "Configuration" pulldown in the POPOUT-TEXT main menu. This menu allows you to specify your default text file viewer (some editor), and the default pathnames of your Source and Destination text files. This menu also allows you to specify to POPOUT-TEXT exactly which characters to use when generating your stereogram.

**Note:**

When you click the "Save" button in the Preferences menu, your default selections will be saved to disk, and will be used each time you start POPOUT-TEXT.

[Default Viewer](#)

[Default Directories](#)

[Use Characters](#)

## Default Viewer

The "Viewer" button in the Preferences window allows you to specify a default image viewer, which is really just a text editor. This is the "viewer" that is used when you select the "View" pulldown in the POPOUT-TEXT main menu. By default, we've selected the Viewer program to be "NOTEPAD.EXE", which is Window's Notepad. You should never need to change this setting unless you prefer using another editor.

**Note:**

The Default viewer must be located somewhere in your system PATH specified in your AUTOEXEC.BAT file.

## Default Directories

The Default Directories specified in the POPOUT-TEXT Preferences menu specify the default locations of your Source and Destination text files. This is handy if you choose to keep Source Files in one directory, Destination Files in another directory, etc.

***Note:***

This Default Directory information is saved, and will be used each time you start POPOUT-TEXT.

## Use Characters

The "Use" field in the Preferences menu is used to specify to POPOUT-TEXT exactly which set of characters to pick from when generating your stereogram. This is nice if you're looking to put some "theme" into your stereogram. By default, POPOUT-TEXT will use the upper case letters of the alphabet to generate the stereogram.

## **Problems, Suggestions, etc.**

If you've encountered some sort of problem in trying to generate a stereogram image using POPOUT-TEXT, our first recommendation is to rummage through this Help file.

If the answer to your question is not in the Help file, you can contact the authors by way of the addresses shown below:

**POPOUT**

**C/O Bob Hankinson**

**P.O. Box 50632**

**Dallas, Texas 75250**

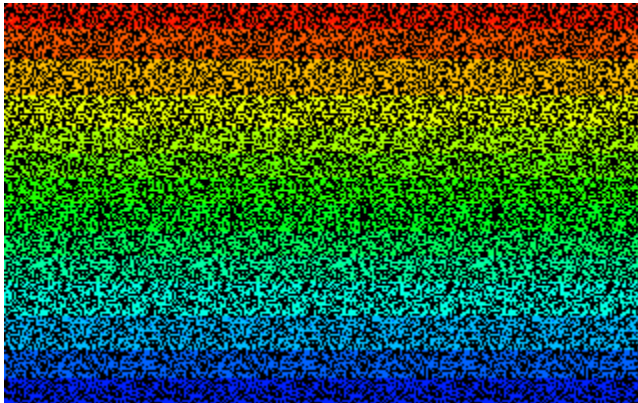
Or via the Internet, America OnLine, or CompuServe:

**Internet or AOL: [BHankinson@aol.com](mailto:BHankinson@aol.com)**

**CompuServe: 73144,1046**

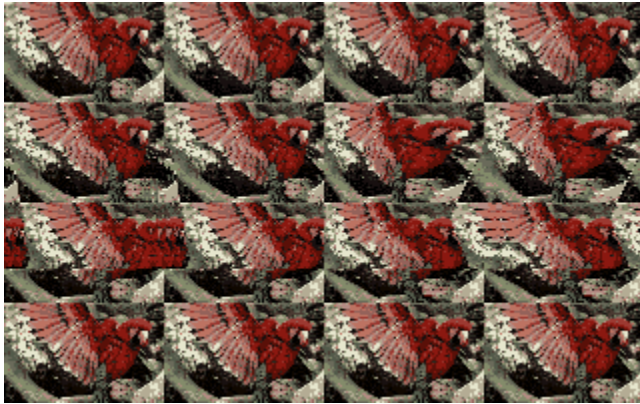
# POPOUT LITE

POPOUT-LITE is a Windows based Random Dot Stereogram generator. Unlike the character based POPOUT-TEXT, POPOUT-LITE uses BMP formatted images created by Paintbrush as the Source File images. POPOUT-LITE generates up to 16 levels, and has been quoted as "easy to use" by numerous magazines. Due to the limitations of Help files, the image below is a 16-color version of an image generated using POPOUT-LITE. Elsewhere on this disk is the original 256-color version. If the demo version of POPOUT-LITE is not on your local BBS, ask your SysOp to get it!



# POPOUT PRO

POPOUT-PRO is easily the most powerful stereogram generator in its class. Featured in numerous magazines, this award-winning software has all of the capabilities of POPOUT-LITE, plus many more. POPOUT-PRO will accept BMP or Targa format images as Source files, making it easy to interface with popular ray tracing programs. POPOUT-PRO will create up to 256 levels of depth in full 24-bit color, and is capable of generating either the common Divergent (relaxed-eyes) or Convergent (crossed-eyes) images. POPOUT-PRO will generate either Random Dot or Dual-Image stereograms. With three different stereogram-generating algorithms to choose from, the user has a great deal of flexibility in creating high-quality images. Due to the limitations of Help files, the following is 16-color version of an image created by POPOUT-PRO. The original, 256-color version, can be found elsewhere on this disk.





# Definition of Terms

The following are descriptions of some of the terms that appear in this Help file.

## ***Source File***

The Source File is the primary input to POPOUT-TEXT. This is the file that contains the depth information that will be used by POPOUT-TEXT to create the stereogram. This file must be a simple text file, containing only the characters 0, 1, 2, 3, 4, 5, 6 and 7. These characters indicate a "depth level" to POPOUT-TEXT, where level 0 is the farthest from the viewer, and level 7 is the closest.

## ***NOTE:***

Unless you're using a very very tiny character font, chances are that you won't be able to see more than 3 or 4 levels.

## ***Destination File***

The Destination File is the file that POPOUT-TEXT creates. This is the stereogram image. POPOUT-TEXT will create a simple text file that is viewable via Notepad or any other text editor. Note that POPOUT-TEXT Stereogram images are printable just like any other text file.

# UK Order Form



Oakley Data Services  
3 Oakley Close, Sandbach,  
Cheshire CW11 9RQ, England



Call +44 (0)270 759739  
Fax +44 (0)270 765272  
CIS: 100024,1763

Note: You can print this Order Form by selecting the "File" pulldown above, then clicking on "Print Topic".

To:  
Oakley Data Services, 3 Oakley Close, Sandbach,  
Cheshire CW11 9RQ, England

Please send me \_\_\_\_\_ registered copy(s) of (select one):

\_\_\_\_\_ POPOUT-LITE                      \_\_\_\_\_ POPOUT-PRO

Also, please send Shareware Versions of some of your other fine software.

## PRICES:

### **POPOUT-LITE:**

UK and EEC:

17.00 Pounds Sterling including P&P, plus VAT (17.5%) = 19.97 Pounds Sterling per copy.

Outside the EEC:

17.00 Pounds Sterling plus 2.00 Pounds Sterling P&P = 19.00 Pounds Sterling per copy.

### **POPOUT-PRO:**

UK and EEC:

29.95 Pounds Sterling including P&P, plus VAT (17.5%) = 35.19 Pounds Sterling per copy.

Outside the EEC:

29.95 Pounds Sterling plus 2.00 Pounds Sterling P&P = 31.95 Pounds Sterling per copy

Unless otherwise requested, we ship 3.5" HD disks.

Total Price: \_\_\_\_\_

Inclose a cheque / wish to pay by MasterCard / Visa (delete as applicable)

Credit Card Details:

Name as on card: \_\_\_\_\_  
Card Number: \_\_\_\_\_  
Expiry Date: \_\_\_\_\_

Please send the software to:

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
\_\_\_\_\_

Post Code: \_\_\_\_\_ Daytime Telephone: \_\_\_\_\_

You can also contact us by:

Phone: +44 (0)270 759739  
Fax: +44 (0)270 765272  
Compuserve: 100024,1763

It would help in our distribution efforts if you tell us where you found your freeware copy of  
POPOUT-TEXT. Also, please include any ideas for future enhancements:

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# USA Order Form

Note: This Order Form can be printed by clicking on the "File" pulldown above, then clicking on "Print Topic".

Please send me \_\_\_\_\_ copy(s) of (select one):

\_\_\_\_\_ POPOUT-LITE      \_\_\_\_\_ POPOUT-PRO

Send the software to:

Name: \_\_\_\_\_  
Street/Apt: \_\_\_\_\_  
City/State/Zip: \_\_\_\_\_

Unless otherwise noted, we ship 3.5" diskettes.

## PRICES:

### ***POPOUT-LITE:***

Registration Fee: \_\_\_\_\_ \$20.00

Sales Tax (TX Residents must add \$1.50): \_\_\_\_\_

Total: \_\_\_\_\_

### ***POPOUT-PRO:***

Registration Fee: \_\_\_\_\_ \$30.00

Sales Tax (TX Residents must add \$2.25): \_\_\_\_\_

Total: \_\_\_\_\_

Make checks payable to "POPOUT", and send your registration to:

POPOUT  
P.O. Box 50632  
Dallas, Texas 75250

Please note:

Orders to the above address from countries outside the United States must be paid for in US Dollars and checks must be drawn on a US Bank. Otherwise, you must include an \$8.00 collection fee.

If you have any questions, comments, or suggestions, the authors can be contacted via CompuServe, America OnLine, or the Internet. Email is typically answered within a day.

Please use one of the following addresses:

CompuServe: 73144,1046  
America OnLine: BHankinson  
Internet: BHankinson@aol.com

Also, it would help in our distribution efforts if you could tell us where you received your Freeware

copy of POPOUT-TEXT! And thanks!  
Bob Hankinson & Gary Peterson

**Background color**

The Background Color in the Create Color menu is used to specify the color of background pixels in the Custom Color Output Style, and is also used to bias the random selection of colors in the Random Color Output Style.

**Background File**

This is the file that contains the image that will be tiled and distorted to produce the Dual-Image type of stereogram.

**background pixels**

Pixels in a Custom Color stereogram that all have the same color



## **Black & White**

A stereogram Output Style consisting only of black and white pixels

**BMP**

A standard image format. Stands for "bitmap"

**Cancel**

Use this button to exit POPOUT.

**Color File**

Contains the color information for generating Custom Color stereograms

## **Create Color File**

A window that pops up when the "Create Color" button is clicked

## Create Color

Use this button to create a new color scheme.

## **Custom Color**

A stereogram where the user designs the color scheme

**Destination File**

This is the file that POPOUT creates that contains your stereogram.



## **Dual-Image**

This is a type of stereogram generated by tiling a background image, and distorting the tiled image in such a way as to hide another image within it.

## **EXAMPI.BMP**

A sample Source File drawing included with this diskette.

**foreground pixels**

The white pixels in Black & White stereograms, and the colors that are varied in Custom Color stereograms.

## **Generate**

Use this button to create the stereogram.

## **GIF**

You've probably got some images stored in GIF format. POPOUT doesn't support this format just so you won't try creating stereograms of your scanned image. It won't work. Trust us.

**Output Style**

Specifies the type of stereogram that POPOUT will generate

## **Paintbrush**

Paintbrush is a drawing tool included with Microsoft Windows. POPOUT was designed specifically to be used with Paintbrush.

**palette**

At the bottom of the Paintbrush window is the palette of colors you use in drawing. With POPOUT, only use the left-most 16 colors.



**Pattern Width**

The distance in pixels between repeating patterns in the stereogram

**Pixel Density**

For Black & White and Custom Color stereograms, the percentage of pixels that are foreground pixels.

## **POC**

Default Color File extension

## **POP16ORG.POT**

A Translate File included with this diskette

## **POPOUT**

POPOUT is a Windows based Random Dot Stereogram generator.

## **POPOUT.PAL**

This is a Paintbrush palette definition file that blackens all but the left-most 16 colors in the Paintbrush palette.

## **POPOUT.POT**

A Translate File included with this diskette

## **POPOUT16.POT**

A Translate File included with this diskette



## **Random**

A stereogram Output Style consisting of randomly chosen colors

## **RDS**

Random Dot Stereogram

**scan**

Scanned photographs are not suitable for stereograms as they contain no depth information.

**seed**

The random number generator used for the Random Color Output Style is seeded, or initialized, when POPOUT is first started, then is not touched as long as POPOUT is running.

**Source File**

This is the drawing your create which will be "hidden" within the stereogram.

## Stereogram

## **Targa**

The Targa format is the "format of choice" of popular ray tracing software. POPOUT supports Type 1, 2 and 3 Targa formats.

## **TGA**

Targa format



**Translate File**

A text file that provides the "final word" on how POPOUT will convert colors to levels.



