

# **FracBlank**

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<b>COLLABORATORS</b>
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<b>REVISION HISTORY</b>
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## Chapter 1

# FracBlank

### 1.1 FracBlank

A non-modular screen blanker utility for  
operating system release v3.0 or higher  
Written by Olaf 'Olsen' Barthel  
Freeware, All Rights Reserved

Cosmic flame fractal code derived from original xlock  
program source code, Copyright © 1988-1991 by  
Patrick J. Naughton

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### 1.2 introduction

FracBlank is a veteran among all the screen blanker utilities available for the Amiga. I created the first version way back in 1991 when I finally came upon the real plane fractal algorithm employed by the X-Windows xlock program. In the years after its initial release the program was subsequently expanded until I really lost interest in it. To my surprise the fractal creation code was 'recycled' over and over again in the ever growing legion of modular screen blanker packages available for the Amiga. Usually the blanker code was falsely attributed to Olaf Seibert, sometimes the author was reported as 'unknown'.

Now, about three years after the last revision, I decided to upgrade the program to 'modern' standards; in fact I needed a good screen blanker, but none of the packages currently available could satisfy my needs. Neither was as system friendly as it really should be and added more useless bells, whistles and gongs than I would admit 'term'~sports.

FracBlank is yet another custom screen blanker created to live in symbiosis with Kickstart v3.0 (or higher) and the Commodities Exchange toolkit, similar to the Blanker utility, just more wonderful.

Apart from the usual job (turning the screen to black after a given period of time in order to prevent the phosphorus of your monitor from burning in) it will draw some neat patterns while mouse and keyboard are inactive.

The real plane fractal pattern algorithm comes from the September 1986 issue of Scientific American, some of you who are familiar with X11 will know it from the popular xlock program. The patterns created may remind you of spiders' webs, lace or even Chladni's patterns formed by grains of sand strewn across a vibrating surface.

When I received a copy of the original xlock program source code I decided to add another fractal type known as cosmic flames. The patterns created by this algorithm resemble cosmic nebuli, ferns, the traces left by subatomic particles in the cloudchamber or the fruitless attempts of a lecturer in particly physics at action-painting.

## 1.3 installation

Here is how you install the program manually:

- There are two different program versions supplied, called "FracBlank\_ieee", which will run on any Amiga model, and "FracBlank\_fpu", which requires an Amiga equipped with an 68020/68030/68040/68060 CPU and/or an 68881/882 FPU. Pick the version you need and copy it into your SYS:WBStartup drawer.

Take care, the wrong version will crash your machine.

- If the supplied "gtlayout.library" is not yet installed on your system, copy it to your "Libs:" drawer.

That's all, it's as simple as that.

## 1.4 configuration

FracBlank can be started both from Shell and from Workbench. It sports a number of configurable parameters as follows:

```
CX_PRIORITY=<Pri>
```

The commodities priority to assign this tool to. You may want to change this value if there is more than one commodities tool running that uses the same key sequences as FracBlank. The tool which has the higher priority assigned will receive the keystrokes first.

```
CX_POPKEY=<Keywords>
```

The keys to press to open the FracBlank control panel. The control panel allows you to set the hotkeys, adjust the timeous, etc.

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CX\_POPUP=YES or NO

This is a boolean switch which determines whether FracBlank is to open the control panel on startup or to remain quiet. Place YES here to open it.

BLANKSCREEN=<Keywords>

The keys to depress to force the screen blanker to become active. If the blanker is already running, pressing the keys will cause the pattern to change.

Note: When in «Random» mode, a pattern change only concerns the currently active fractal type. The screen will be cleared, but the fractal type will not change

SAVESCREEN=<Keywords>

In order to save the fractal pattern that is currently being displayed in the clipboard, press this key combination. The image will be stored in IFF-ILBM format in clipboard unit 0.

DISPLAYMODE=<Name>

If you omit this keyword, FracBlank will use the default public screen displaymode to open the fractal blanker screen. If you choose to provide it, it must match one of the names displayed in the list of the preferences program "ScreenMode", such as "PAL:HighRes".

DEPTH=<Number>

If you omit this keyword the fractal blanker screen will open in the maximum depth the display mode supports. Otherwise, it selects a specific screen depth to use.

COLOUR=STATIC or CYCLE

Two colour modes are supported; when in STATIC mode, the rendering colour map will not change. CYCLE causes the colour palette to slowly cycle backwards.

FRACTAL=REALPLANE, COSMICFLAME or RANDOM

FracBlank supports two different fractal types and a random mode which selects either of these. To select real plane fractals, place REALPLANE here, to select cosmic flames, use COSMICFLAME; any other name will select the random mode.

SCREENTIMEOUT=<MM:SS>

Here you enter the number of minutes that must pass before the screen blanker is activated. For example, 1:00 will activate the blanker after one minute has elapsed with no mouse or keyboard input. Enter 0:00 to disable the screen blanker altogether.

PATTERN TIMEOUT=<MM:SS>

After a certain timeout has elapsed while the blanker is active, the screen will be cleared and the pattern will change. This is where you enter the time that has to elapse. Enter 0:00 if you do not want the pattern to change.

MAXRECURSION=<Number>

The maximum recursion level the cosmic flame blanker is to use. Greater values may yield better images.

MAXDOTS=<Number>

The maximum number of dots the cosmic flame blanker is to draw before the screen is cleared.

## 1.5 gui

The user interface will open when you press the key combination specified using the CX\_POPKEY keyword, by default this is [Shift]-[F1].

Please note that the interface requires "gtlayout.library" v9 or higher to be installed.

The controls found in the configuration window correspond directly to the tooltypes and command parameters described under Configuration:

Screen timeout	See SCREEN TIMEOUT
Pattern timeout	See PATTERN TIMEOUT
Hot key	See CX_POPKEY
Blank screen	See BLANKSCREEN
Save screen to clipboard	See SAVESCREEN

These text entry fields are special, in that they automatically translate the key combinations you press into proper key codes, suitable for use with the Commodities Exchange toolkit.

If you wish to enter text in 'the usual fashion', press the [Caps Lock] key.

Display mode	This is where you select the screen display mode and depth to use when blanking the screen. Just pick the mode you need from the list and move the depth slider as needed.
Colour mode	See COLOUR
Fractal type	See FRACTAL
Maximum recursion level	See MAXRECURSION
Maximum dots	See MAXDOTS
Save	Store the current configuration in the FracBlank icon.
Hide	Keep the current settings, close the configuration window.
Quit	Close the configuration window and terminate the program.

## 1.6 troubleshooting

There are few problems with FracBlank I know of, here is a list:

- ~The fractals appear to be off-centre.

Sorry, there is nothing you can do about it, in fact I cannot do anything about it either. This is how the fractals work, they are not necessarily centered around the origin which with FracBlank is placed in the centre of the screen.

- ~The colours don't appear to cycle.

They do, but the colours shift very smoothly in 256 colour mode.

- Pressing the alt/amiga/shift/control keys does not stop the blanker.

Check your hotkeys, if they make use of the qualifiers the qualifier keys won't stop the blanker.

- Keys don't always show up in the text editing fields.

If you want to enter a specific key combination, press the [Caps Lock] key. Otherwise, you need to hold down a bunch of qualifier keys in addition to the key you want to use. Put another way, simply pressing [Help] won't do anything, [Shift]-[Help] however does.

## 1.7 credits

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FracBlank and gtlayout.library were hand-crafted by Olaf 'Olsen' Barthel.  
It uses the cosmic flame code from Patrick J. Naughton's xlock program.  
The icon was designed by Martin Huttenloher

If you wish send me comments on the program, here is my address:

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