

**AMOSAGA**

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# Chapter 1

# AMOSAGA

## 1.1 AmosAGA Release Information

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AmosAGA V0.02  
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AGA Screen Mode examples for Amos & AmosPRO

Written By Kevin Picone

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Released: 1-Sep-1997  
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Copyright Notice

Software Disclaimer

Introduction

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## 1.2 Copyright Notice

\* Copyright:

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These are my wishes please respect them, Thank You.

The included texture image remains the (c) copyright or "Bowie J. Poag"  
and was taken from his GREAT GFX collection titled "ArcTexture-3.lha"

Although, I should apologise as I did resized it... ;)

### 1.3 Software Disclaimer

\* Disclaimer:  
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### 1.4 Quick Introduction

\* What is AmosAGA ?  
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At this point 'AmosAGA' is just a simple source code that allows Amos & AmosPro users to open either a 256 colour lowres (320x\*256y) or a 256 colour Hires (640x,256y) screen.

The source code create's the AGA screen via the use of Amos's own custom copper creation commands, and with a few simple 'hacks' mixed in for good measure. ;)

You should be aware that this source, at this point, is provided purely as a learning, but 'working' example. To take this idea further you will need at least a basic understanding of the Amiga's display hardware, or to be correct, the programming of the Amiga's AGA display hardware.

I would recommend that you lay your hands on the AGA hardware documentation Also (obviously ;) , which can be found in most PD collections, like Aminet, etc. etc..

### 1.5 AmosAGA System Requirements

\* System Requirements:  
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To make use of this source, you'll need at least a copy of either Amos or Amospro and obviously an AGA machine.

## 1.6 The Method - How does it actually work ?

\* The Method:

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Basically, all I've done is use the custom copper creation commands that Amos offers, to build up my own personal 640\*256 256 colour hires screen.

- \* The included source firstly open's TWO screens, screen 0 and screen 1, both are same size and depth. i.e 640,256,16,hires, this is needed so that we can both use these screens with our regular Amos commands and since Amos rejects open screen requests for 256 colours directly.... ;)
- \* Next the source loads a simple iff picture into screen 2, which is used as our 256 colour backdrop, although the picture it's self is only 16 colours.
- \* Next we need to find the actual locations of each bitplane in the two screens and store them in an array for later use..
- \* Now we read the palette information into the array creatively called PALCOLOUR... ;)
- \* Next we init an array that I use in the actual demo part...
- \* Next we create our custom copper. Firstly we switch the Amos copper system off, then we init our custom copper routine.
- \* The custom copper routine builds a fairly basic copper list. Although it doesn't init sprites, thus there may be some ugly crappy sprite data, on your nice new AGA screen. ;)

NOTE: I'm not going to explain how to construct a copper, I'll assume you already understand how to do this... ;)

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- \* After the copper list is defined, it's time to init our new copper lists pointers, to our previously opened screens (0 & 1). The init bitplane routine actually uses the actual pointers to each of the combined 8 bitplanes and moves those into our copper list. With screen 0 becoming the lower 4 planes (planes 0,1,2,3) and screen 2 becoming the high ones, planes 4,5,6,7
- \* Next, here comes the only real 'hack' in this example, which simply replaces one of the copper commands (which I've defined as a dummy or a padding command) with a different one, via poking directly into our nice new copper list, just as our bitplane init routine did.

The reason this is needed, is that Amos didn't want to allow me to do a 'cop move \$lfc,\$l001' since it believe's that \$lfc (burst mode (FMODE) register) isn't used in OCS,ECS chips, which it isn't, but it is by AGA... ;)

- \* we turn our AGA copper / display on via the 'cop swap' command

I suggest you read your manual in regards to custom copper creation. ;)

- \* To close our screen, all we need to do is firstly turn the Amos copper system on, then call a simple procedure which restores the FMODE register to normal, other wise your display will be offset when you return to the Amos editor.

PLEASE NOTE: if you break (CTRL-C) out of program, and then return to the Amos editor, you can normally reset the FMODE register via, just switching back to workbench, then back to Amos.. i.e. 'left Amiga - A'

## 1.7 The Author

If you have problems with this package or any ideas for possible improvements, well then feel free to contact me.

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## 1.8 AmosAGA has BUGS ?

\* BUGS:  
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For some unknown reason, there are two annoying things that seem to occur, why I have no idea. Perhaps somebody with more Amos street smarts can point them out.

Anyway, firstly from some reason, when the Amos copper system is switched off and your meant to get a nice `_blank_` screen, you don't, obviously because there's still crap in the Hardware registers.. grrr... A simple but nasty solution could be to set all the colours to the same colour, so if it occurs, you simply dont see it..... ;)

Secondly, some times my custom AGA copper fails to appear ?, and I've absolutely no idea why, but I've no doubt the two bugs are indeed related.

So can anybody point out what the problem is ?

## 1.9 The future ?

\* The Future:  
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Well, at this point I really don't have any plans to do great deal with

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this. I guess it's possible that I may attempt, or at least think about setting up a simple AGA extension (somebody would have to show how to do that first ;) or perhaps coding a little AGA GFX library, which people could use. To be honest the second is more likely.. ;)

Anyway, I hope that this software has been of some use to you...

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