

Galaga

COLLABORATORS

	<i>TITLE :</i> Galaga		
<i>ACTION</i>	<i>NAME</i>	<i>DATE</i>	<i>SIGNATURE</i>
WRITTEN BY		February 7, 2023	

REVISION HISTORY

NUMBER	DATE	DESCRIPTION	NAME

Contents

1 Galaga	1
1.1 Galaga v2.4	1
1.2 What is Shareware ?	2
1.3 If you like this piece of software !	2
1.4 My address and bank/giro account	3
1.5 Methods of payment	4
1.6 Important notes	4
1.7 To Magazines!	5
1.8 About Deluxe Galaga	5
1.9 Your Mission	6
1.10 The Game Screen ..	7
1.11 Installing the game	7
1.12 Game options and Preferences	8
1.13 How to control the game	11
1.14 Extra functions	12
1.15 The next Deluxe game	16
1.16 History of Deluxe Galaga	17
1.17 Technical info	19

Chapter 1

Galaga

1.1 Galaga v2.4

```

«-----»
»

D E L U X E

*****      ***** ***          ***** *****          *****
***          ***** ***          ***** ***          *****
***          **  ***  ***          **  ***  ***          **  ***
***   ***   ***** ***          ***** ***   ***   *****
***    **  **   ***  ***          **   ***  ***   **  **   ***
***** **   *** ***** **   *** ***** **   *** ***** **   ***

v2.4   Made by Edgar M. Vigdal          ©EMW94

«-----»

```

Table of Contents:

What is Shareware ?

If you like this piece of software !

About Deluxe Galaga

Your Mission

The Game Screen ..

Installing the game

Game options and Preferences

How to control the game

Extra functions

The next Deluxe game

History of Deluxe Galaga

Technical info

1.2 What is Shareware ?

Shareware is a way of getting good software in a cheap way. You get hold of the software for almost nothing, and can test it for a while before deciding if you want to pay the programmer for his/her hard work. And remember that if you don't pay and nobody else do pay than it's pretty sure that the programmer will NOT make any more shareware software. And that will in the end lead to no software for your machine!!!! So, please pay the author of the software.

NOTE! This program is in fact shareware!

1.3 If you like this piece of software !

If you use this software and you like it, than I (Edgar M. Vigdal) would be eternal grateful to you, if you send me 10 US Dollar, £5, 15DM, 50 NOK or any amount you like, as payment for the game. If you would like 1 year of free update (at least 2 update (If I get any bug rapport, or suggestions for improvement)), than send me \$20, £15, 35DM or 150 NOK or more if like to.... ;-)

If you also want the latest version of Deluxe PacMan, than add \$5, £5 or 50 NOK.

If you become a registered user and send me a disk, I will send you a super version with more levels, more sound effects, speech and other improvements. (maybe an AGA version?!)

* PLEASE *

Send me a disk for the reply, as I can not afford the disks!
Please add an extra disk for Deluxe PacMan, if you want that
one too, or if you want the next game. The game has now
grown too big and I can no longer fit both games on one disk!

* NOTE *

If you only pay the shareware fee (\$10,£5) AND you get a
later version from a PD-dealer/BBS or some where else, you
should think of that version as an update from me! (If you
send a disk then you should get a new version from me! (When
I have made a new version!!))

My address and bank/giro account

Methods of payment

Important notes

To Magazines!

1.4 My address and bank/giro account

This is my address...

Edgar M. Vigdal
5830 LUSTER
NORWAY

(I do NOT like whale hunting!)
(But than again, I don't like
bull fights either!)

Yes! this is really my address, it's very short for people in
the U.K. Canada and Australia, but it's long enough for me. ;)

EMAIL: edgarv@powertech.no

Or you may use my bank account....

3785.10.05774 Luster SpareBank
5830 Luster
NORWAY

Or you may use my PostGiro account...

0826.0658124

1.5 Methods of payment

- Cash: Preferably by registered mail. Please do NOT use any strange currencies, Fuji dollars, AUS\$, NEZ\$....

- EuroCheques: Send a EuroCheque written out in Norwegian kroner. (other currencies are not accepted). Make the cheque payable to Edgar M. Vigdal. This is without doubt the best method of payment to use!!!

- PostGiro: Transfer NOK to the PostGiro account 0826.0658124. Please send me a message either via E-Mail or snail-mail and give me your address and your setup. My receipt is very small and difficult to keep track off... ;-/

Please do NOT use any strange postal order notes, if you want to use any form of postal order, then use an International Postal Order. Check with your local post office!!!! Some postal orders are totally rubbish here in Norway. Eg. British Postal Order's. DO NOT USE THIS TO PAY ME!!!!

Please do not use cheques if you can, because I have to pay SO MUCH in exchange fee!!! (30-50%)(It's sick!!) :(((

Please make sure that your full name, address, postal code, city and country is included. If you have an Internet email address, please include that one too, so I can notify you that I have got your fee!. Please include a description of your hardware and OS versions too!

To those that support my hard work, I send my warmest regards to!!

1.6 Important notes

Please check that the address listed above is the same as the one in the game !

If you send a disk you may put some stuff on it. Demos, games, utilities or music modules.

To all of those that send me the fee for Deluxe PacMan, I WILL send you the update!!! As soon as I have a version of PacMan that works on all Amigas I will send it to all who

have paid for it!!!

If you have bought this game from any public-domain firms you have NOT paid me anything, you have only supported some 'thieves' who are earning lots of money on other peoples hard work!! If you want to support the programmers, then subscribe for the Fred Fish disks and send the shareware fee to the peoples that should have had it in the first place (The programmers!!).

It is illegal to copy this piece of software onto games collections and sell it for profit!! Permission to copy and distribute this program is only granted to Fred Fish and if the charge for the disk/copying don't exceed 1 US dollar!!!!

All the files MUST be included!!!! (If you need some extra space on a coverdisk, then you may delete the music files and the 'GALAGA.SFX' file. All text/doc files MUST be included !!

* NOTE *

If there are any registration sites that want to distribute the game, please contact me! E-Mail or Snail-Mail.

1.7 To Magazines!

If you want to use this game on your coverdisk or you are reviewing the game, then please send me a copy of the magazine/review. If you want to pay me, I will not say no to that.

If you want to use this game on a CD32 coverdisk, I would really like a copy of the disk! And make use of the GALAGA.MUSIC file! This file could be filled with names of modules on the CD and the player could then select/switch music with the green shuffle button on the joypad!

1.8 About Deluxe Galaga

Deluxe Galaga is based on the game StarBattle on the old VIC20. That was one excellent game, that I had a lot of fun with. It's also some features from the games Galaga and Galaxions. I played Galaga on an arcade machine, but it was so long ago that I have forgotten how it looked like. My version of Galaga (or StarBattle) is a simple (?) shoot'em up game with good game play, but not so much fancy graphics. Many of todays game have lots and lots of graphics, but when it comes to game play they really sucks. They have manuals

covering hundreds of pages, and you need hours and days to get into the game. What I want from a game is some relaxation for a couple of minutes, and then be able to quit the game and do some more work. And not to mark the calendar for when I want to play the 60MB hi-tech game!

1.9 Your Mission

You are in control of a small starfighter, and your mission is to protect the earth from alien attackers. When you start, your ship has limited supply of bullets and is moving a bit too slow, but by shooting the aliens you can collect the falling bonuses and get all sorts of weapons, extra speed and a lot of other goodies!

When you are hit, some of the weapon power is lost and also speed and any bonus time you have collected. This loss is bigger on the hard level.

There are double shoot, triple shoot, super weapon, extra life, smart bombs, money, warps, secret bonus level and much more to be collected and added to the starfighter.

Look out for mother ships, rockets, warp malfunctions, super guardians and Super Cash Ship!

There is also a lot of secrets in the game, you can find these secrets yourself, or you can buy them in space-shop. The space-shop will appear every fourth level, but you must have more than 50 credits to enter the shop. There are more than 10 secrets hidden in the game and some that are not listed in the game!!

The Sub Games:

Meteor Storm: You must navigate your ship through a field of big rocks floating in space. Some of the rocks have bonus points on surface and can be collected. There are also some money containers floating around. Collect these and get some extra shopping money. You will get a super bonus if you complete the meteor storm.

The Memory Station: Try and find a pair (Two blocks that look the same) in a matrix of blocks. If you find a pair you will get the bonus that is one of the blocks. You only have limited time to find as many pairs as possible. If you find all the pairs you will get a bonus.

The Warp Malfunction: Shoot and try to survive the attack of the warped beast from outer hyperspace.

1.10 The Game Screen ..

```

                Player1 Cash   Hiscore   Player2 Cash
                .----- .
Music/sfx |m 00000 00   00000000   00000 00 c| Game credits
|
Multiply Score |x5                                x2| This side is
Lives left |Ships                                Ships| for player 2
|
When EXTRA is |E                                E|
spelled, you |X                                X|
will get an |T                                T|
extra ship! |R                                R|
|           |A                                A|
|
If you have |Rank                                Rank|
six marks,you |marks                                marks|
will be pro- |                                |
moted to a |                                |
new rank. |                                |
|           |-----|
|           |-----| «-----| Alien Scope: Use it
|           |----| |-----| to catch aliens!
|           |--| |-----|
|           |/\| |-----| Your ship!
|           |===| |-----| If it's flashing
|           |-----| you have the shield.
|-----|

```

Player 1 has a grey ship and player 2 has a green ship!

1.11 Installing the game

o DISK

Start your machine with workbench, than insert the Deluxe Galaga game disk in one of the diskdrives, and open up the disk by double clicking on the disk icon. Than open up the Deluxe Galaga directory by double clicking on the directory icon. You than start the game by double clicking the Galaga game icon.

If you want to make a bootable game disk than format and install a disk. Than make a 's' directory on the disk...

```
Makedir DF0:s [RETURN]
```

Copy all of the Deluxe Galaga files on to the disk. Or just copy the Deluxe_Galaga directory over to the empty disk.

Copy the following commands on to the disk...

```

CD
SetPatch21           ;If you are using OS2.1
SetPatch30           ;If you are using OS3.0 and AGA
LoadWB

```

Make a startup-sequence in the 's' directory like this...

```

-8<-----
  SetPatch21          ;If you are using OS2.1
  SetPatch30          ;If you are using OS3.0 and AGA
  CD Deluxe_Galaga    ;If Deluxe_Galaga is the games directory!.
                    ;If you don't use a Deluxe_Galaga directory
                    ;you must use a 'CD DF0:' to get the game
                    ;to start!!.)
  LoadWb              ;To get interrupts correctly....
  Galaga              ;Load and start the game
-8<-----

```

Reboot with the disk and test if it works!!

If you want to use packed data files you should also create a directory call 'libs' on the disk and copy the xpkmaster.library file and all the files in the compressors directory.

If you want to use a joystick to control the game you must also copy the file 'lowlevel.library' to the 'libs' directory on your game disk.

o HARDDISK

Copy the Deluxe Galaga directory to the desired directory on your harddisk, by dragging the directory icon from the Deluxe Galaga game disk to the selected harddisk directory.

To start the game just double click on the Galaga game icon.

You should select the 'SAVE ON EXIT' option, if you are playing the game from a harddisk, and end the game by pressing the 'ESC' key. Read more about the options below.

If you want to use packed data files you should also copy the xpkmaster.library file and all the files in the compressors directory to your 'sys:libs' directory.

If you want to use a joystick to control the game you must also copy the file 'lowlevel.library' to the 'sys:libs' directory on your boot disk.

1.12 Game options and Preferences

When you start the game for the first time, a preferences screen will appear. On this screen you can select what chips your Amiga have, the video system and how to save the hiscore list.

	68000	
PAL (50Hz)	68020	O K
SAVE ON EXIT	68030/40	

This are the gadgets that will appear on the preferences window.

PAL (50Hz)	This gadget will switch between PAL and NTSC mode of the game.
SAVE ON EXIT	This gadget will switch between 'SAVE ON EXIT' and 'SAVE IN GAME' for the hiscore saving option.
68000	This gadget will select the MC68000 processor mode. Used in A500/A600.
68020	This gadget will select the MC68020 processor mode. Used in the A1200.
68030/40	This gadget will select the MC68030/MC68040 processor mode. Used in A3000, A4000/030 and A4000/40

The 'OK' button will save the preferences and start the game.

CD\$^3\$\$^2\$ Use the left and right buttons to select a button and use the red button to switch/select the gadget. The preferences you select will be saved in the nonvolatile ram on the CD32.

If you are living in a country that uses the NTSC video system then select the NTSC mode. This will adjust the game to use a smaller screen and the players ship should appear on the screen.

If you want a bit more arcade feeling added to the game AND you have a fat Agnus installed in your machine, then try the NTSC mode and hit the TAB key when on the menu screen in the game. This will speed up the game even more... (Not for those who must use the NTSC mode! (USA & JAPAN (I think!?!)))

PAL Video System:

Game in normal mode: Select PAL and switch off the Hz mode inside the game (TAB).

Game in Arcade feeling mode: Select NTSC and switch on the Hz mode inside the game (TAB). This is the mode that I personally like the best!!

NTSC Video System:

Game in normal mode: Select NTSC and switch off the Hz mode inside the game (TAB). This is actually the arcade mode and the game will be a bit faster then for PAL players!

Game in PAL mode: Select PAL and switch the Hz mode off inside the game (TAB). The game will now be a bit slower.

If you are playing the game from harddisk, you may select the 'SAVE ON EXIT' option, this will save the hiscore list when you quit the game with the 'ESC' key. You can also use this option if you have any problems with the 'SAVE IN GAME' option. If you use the 'SAVE ON EXIT' option you must use the 'ESC' key to save the hiscore, if you reset the machine (CTRL,AMIGA,AMIGA) the hiscore will be lost! The 'SAVE IN GAME' will save the hiscore each time the hiscore list is updated with a new hiscore entry.

You may also select the kind of main processor your Amiga is using.

68000 If you got a standard Amiga (A500,A600,A1000 or A2000)
68020 If you got a A1200 or any 68020 accelerator.
68030/40 If you got a A3000, A4000/30, A4000/40 or any 68030/
68040 accelerator.

If you don't select any of the processor options, the program will automatically select the right kind of processor.

If you have a faster processor, the game will have more objects on the screen, bigger explosions, more bullets, more bonuses, more background stars and.....

You may also force the program into using more objects, by choosing a faster processor than the one you have. This may slow down the game when a lot of objects is on the screen at once, and the graphics may begin to flicker.

The preferences that you have selected will be saved for

later use. If you want to change the preferences you must hold down the fire button on the joystick (Port 2) (NO auto fire) when the game is loading. Or you can delete the GALAGA.PREFERENCES file in the game directory.

CD\$^3\$\$^2\$ Use the left and right on the joypad to move a cursor from gadget to gadget. Press the red button on the joypad to change the preferences. Use no repeat/autofire on the red button!! Move the cursor to the 'OK' gadget and press on the red button to exit the preferences menu and to enter the game. The selected options will only be saved when the game is exited (Move the in game cursor to the 'ESC....' line and press the red button.

NOTE!

This game will NOT work on any 24bit graphics card. If Commodore had made a machine with a fast enough processor to use system functions in games, it would have worked, but didn't and they never will! Sorry !!!

Amiga is the best home computer in the world, it's just too bad that Commodore got hold of it !!!! And that Medhi Ali was ever born!!

1.13 How to control the game

ESC Stops the game in play, and quits the game if you are on any of the menu pages.

CD\$^3\$\$^2\$ To quit a game in progress: pause the game and press the blue button.

F1 Selects 1 player mode.

F2 Selects 2 players mode.

1 Selects beginner mode. (5 bullets)

2 Selects normal mode. (4 bullets)

3 Selects hard mode. (3 bullets)

P Pauses the game, and starts the game again. You may also start the game again by using the fire button.

CD\$^3\$\$^2\$ Use the pause/play button on the joypad.

E Selects sound effects or music.

CD\$^3\$\$^2\$ Use the yellow button to switch between music and sfx's.

- TAB Toggle between NTSC/PAL (50/60Hz) mode. You must have the fat Agnus chip for this to work!
- F5 Print out the hiscore-list. The boot-disk must contain the printer driver, parallel.device and the port-handler.
- ** This is disabled if the nonvolatile library is present. (CD\$^3\$\$^2\$)
- F6-F9 Toggle the 4 sound channels between music and SFX.
- F10 Selects the next music module.
- *CD\$^3\$\$^2\$* Use the shuffle (green) button to switch to the next module. (If there are any modules!)
- * Mute. Toggles volume between max(64) and min (0).
- +, - Adjusts the music volume.
- *CD\$^3\$\$^2\$* Use the rewind and forward buttons to adjust the music volume.
- J Joins two hiscore lists together. If a friend of you have the game you can use this function to make a new hiscore list with the best hiscores on. The new hiscore lists will contain only the best hiscores.
- ** This is disabled if the nonvolatile library is present. (CD\$^3\$\$^2\$)
- *CD\$^3\$\$^2\$* Use the up and down buttons to move a cursor (checkmark) up and down on the menu screen. Use the red button to select/toggle an option.

You control the game with a joystick in port #2. If you are playing in the two-player-at-once mode, player 2 must use a joystick in port #1.

- BUTTON = Shoots at the aliens.
- LEFT = Moves the ship to the left.
- RIGHT = moves the ship to the right.

1.14 Extra functions

- o MUSIC & SFX

If you get sick and tired of the music you can change it to one of your own favorite protracker modules. You do this by changing the name of the original music or delete it.

Example:

```
rename GALAGA.MUSIC as GALAGA.MUSIC.reserve
```

And then you copy your module over to the Deluxe Galaga directory and rename it as 'GALAGA.MUSIC'

Example:

```
rename MOD.MYSUPERTUNE as GALAGA.MUSIC
```

You may also change the jingles (this are small tunes that are played at special occasions), as they are also protracker modules.

NOTE! The modules that you want to use must be compatible with ProTracker 1.1b. If you test your selected module and it's not played back correctly, then it's most probably not compatible.

NOTE Some noisetracker (and maybe other module types too) uses some strange commands and my module player may crash if you use this kind of modules. If the game crashes/guru's for no apparent reason it may be one of the loaded modules that causes the failure!

NEW FOR VERSION 1.3

~~~~~

You may now have many different music modules, and have one random module selected and loaded.

First copy all of your favorite ProTracker modules to the Deluxe Galaga directory. Then you must rename them to...

```
GALAGA.MUSIC0 (The number at the end of the name -
GALAGA.MUSIC1 starts on 0 and goes up to as -
GALAGA.MUSIC2 many modules you have copied.)
. (Max is 9!! (0..9))
.
.
GALAGA.MUSICN (n is the number of modules)
```

NEW FOR VERSION 1.7B

~~~~~

You may now have a file containing a list of your favorite ProTracker modules. The file must be named 'GALAGA.MODULES'!

Example file.....


```

Music:PT/Modules/mod.HideawayBlues
Music:PT/Modules/mod.DontYouWantMe
Music:PT/Modules/mod.FeelTheBase2
Music:PT/Modules/mod.Guitarslinger
*Add a dummy line with the EOF mark here>#

```

Please look at the GALAGA.MODULES_res that should be included in the Deluxe Galaga package/directory.

NEW FOR VERSION 2.4

~~~~~

When the game starts it will load as many of modules as the memory allows. It will select any of the modules in the list randomly. (Max 50 modules!) If you have a MC68020 or better (faster) modules will also be loaded into any available fast memory. When switching to a new module inside the game the game action may pause for a very small period while the new module is copied from fast memory to chip memory. On a fast MC680x0 this will barely be noticeable.

#### o SFX

If you have more than 512K of memory and you get sick of the sound effects, then you may try the small sound effects.

Example

```
rename GALAGA.SFX as GALAGA.SFX_reserve
```

The game will now use the 'GALAGA.SFX\_SMALL' as sound effects.

#### o 512K MEMORY

Sorry, but the game has now grown out of the 512K memory of a standard A500!!! But as extra memory are now very cheap this a very good excuse for investing in a bit more memory!!

#### o HISCORE PRINTING (New for version 1.9)

When you press F5 on the menu screen, you will enter the print hiscore function. For this function to work, the boot-disk (DH? or diskette) must contain the following files...

```

DEVS: Parallel.device
      printers/<printer driver for your printer>
L:    port-handler

```

The printed hiscore-list will list the following info...

```
#, Name, Score, Rank, Shoots, Hits, %, Game Time
```

..and will print for easy, normal, hard and meteor-storm.

This option is disabled if the nonvolatile library is loaded or available.

o CD\$^3\$\$^2\$ CONTROL

The game can now be controlled completely by a joypad. Move the joypad up/down to make a cursor appear on the 'control screen'. Use the firebutton to make a selection or switch an option. Move the cursor down to the line 'PRESS FIRE TO PLAY' to play the game. Press left on the joypad to show the different menu/info screens in the game.

The game preferences and hiscore will be saved on the nonvolatile RAM disk on the CD\$^3\$\$^2\$. Only 10 names will be saved and only 3 characters for each name. So use your initials...

NEW FOR VERSION 2.4

~~~~~

o XPK LIBRARY SUPPORT

The game will now use the xpk (A data compressor/decompressor library) to load compressed data files or modules.

- o Use of the lowlevel library. You can now control the game with a joypad in both port 1 and 2. Only the joypad in port 2 (player 1) can control the music selection, volume control, etc.

Buttons	Action
RED	Start the game and fire bullets.
GREEN	Shuffle between music modules.
YELLOW	Switch between sound effects and music.
PLAY	Pauses the game.
BLUE	Quits the current game when game is paused.
REWIND	Less volume on the music.
FORWARD	More volume on the music.

- o Use of the nonvolatile library. If found the game will now save preferences and hiscores in the NV device (RAM on the CD\$^3\$\$^2\$ and floppydisk or harddisks on other Amiga's. If you have a disk based amiga you can add a NV device by doing this:

- o Format a disk in drive n with the name 'NV', n being DF0: or any other drive.

Format DRIVE n NAME NV FFS NOICON (RETURN)

- o Then make a directory named 'nonvolatile' and one called

'prefs' on the disk.

```
Mkdir NV:nonvolatile (RETURN)
```

```
Mkdir NV:prefs (RETURN)
```

- o Then make a directory named 'env-archive' in the 'prefs' directory.

```
Mkdir NV:prefs/env-archive (RETURN)
```

- o Then make a directory named 'sys' in the 'env-archive' directory.

```
Mkdir NV:prefs/env-archive/sys (RETURN)
```

Then create a file in the 'NV:prefs/env-archive/sys' directory that contains the following:

```
NV:nonvolatile
```

Name the file 'nv_location'. Use Ed or another text editor to make this file.

1.15 The next Deluxe game

The next game in the Deluxe series, will probably be Deluxe Donkey Kong. I actually started on this game after I had finished Deluxe PacMan. But then I got another public-domain version of Donkey Kong, that looked almost like the version that I had on my old C64, and that look almost like the one I had in mind. After I released Deluxe PacMan many have written to me and asked my to make a version of Donkey Kong, so now I am going do that. A super duper version of Donkey Kong. If you have any tips for Deluxe Donkey Kong then send them to me. (Video recordings, graphics, maps, sounds or ideas) But when I am finished with Donkey Kong I would really want to make a version of JumpMan, one of my all time favorites!

A version of Radar Rat Race is also coming !!!!

If you have any suggestions for improvements or if you have found any bugs then please let my know.

Good luck and have a lot of fun !!!! PEACE !!!!

Life sucks !! - Al Bundy

Where's that damn hamburger - Kelly Bundy

Remember: Man is the dream of the dolphins....

Sorry for all the spelling errors and bad syntax!!

Have fun!!!!

1.16 History of Deluxe Galaga

VERSION	SPECIFICATIONS	DATE
v1.0	First version of Deluxe Galaga	20/10/93
v1.2	Added 'Hurry Up!!', and fixed a possible trouble spot. Fixed some routines in 2-player mode. Added exploding rubbish to small aliens	27/12/93
v1.3	Speeded up some routines. Added the Warp Malfunction routine. Changed the music routine with the prorrinner routine (very fast!) Fixed the ProRunner routine, so it would not GURU on machines with the interrupt vectors moved to fast RAM. Added the volume adjust routine. Added the random music loader routine.	14/01/94
v1.4	Speeded up even more routines. Channel shearing between music and sfx. Faster vector, Random and BOB routines. Test for HIRES SPRITE and DBLPAL screen.	17/02/94
v1.5	Fixed the BOOM when the rocket dies. Set the interrupt handler priority a bit higher. Same random in the meteor-storm mode. Fixed a bug in the 'save hiscore in game' routine. Shows the rank mark, when new rank.	25/02/94
v1.6	Removed the AGA/ECS gadget as it had no function any more.	27/02/94
v1.7B	Switched from AsmOne to DevPac 3.04. (The DevPac is a bit slower, but the sources gets a bit cleaner?!) Speeded up the movements of the players ship. Now uses TCPA (Time Coded Pointer Array) to check for alien hits (No big loops, and no clearing of a hash array each frame!) Speeded up the program even more, using a global variable pointer. The switching of HiRes sprites to LoRes is tested and it is now working	20/03/94
v1.8	Found one nasty bug. After the bug was removed my machine has not guru'ed once!! (It's stayed on for almost a month) Added a credit meter and some other info. Fixed some other small 'faults'.	04/04/94
v1.9	Fixed a bug in the show-secret function.	

Added two new weapons and the Cash-Ship.
 Added the print hiscore function.
 Made the game work on only 512Kb memory.
 Changed the PAL-NTSC switch to bit 5 in
 \$DFF1DC.w 25/04/94

v2.0 Added the 'Quit game? Yes or No' function.
 Toggle NTSC/PAL with TAB key. 24/05/94

v2.1 ????? ??/??/??

v2.2 Added the two player at once mode. puh!!
 Added a real NTSC mode for american users.
 The game can now be completely controlled
 with joystick/joypad (CD\$^3\$\$^2\$).
 Added some secrets.... 8^)
 Fixed some minor flaws. 15/07/94

v2.3 Argggg.. There was one nasty bug in v2.2,
 killed that bug and improved some other
 stuff. 21/07/94

v2.4 -Argggg.. (Again..) There was still some bugs
 in v2.3... :(Killed the bugs I found!!
 -The game now has 75 levels. puh..!!!
 -Added a new sub game. The memory station.
 -Moved the PREFERENCES file from S: to the
 game's directory.
 -Added functions that uses the
 nonvolatile.library and the lowlevel.library.
 Control the whole game with an joypad.
 -Added money, money bonuses and progress
 indicator in the meteor-storm.
 -Added support for the XPK libraries.
 -Can now load music modules into fast RAM.
 -Color of the bonus text is now the same
 as the player who got the bonus. Two player at
 once mode only.
 -Made the game a bit easier.
 -More alien types on one level. Easy 1 alien.
 Normal mode 2 aliens. Hard 3 aliens.
 -Added joypad control on the preferences screen.
 -Added some extra game secrets!
 -Improved and added some other stuff. 13/11/94

I have tested the game on a A2000B/68000 with 3MB memory and 1MB
 chip memory with and with out harddisk. And on a A1200 with both
 a 68020 and a 33MHz 68030/MMU and 6MB RAM. And I have not
 discovered any ugly bugs on my setup.

Thanks to everyone that sent me bug reports, messages and have
 helped me with this game!!!! Special thanks to the very kind
 person that converted the doc file into this Amiga Guide file!!
 (Sorry, but I've lost your name... :~(()

Please do NOT hack this game and PLEASE do NOT make any trainers
 for the game!!!!!!!!!!!!!! This will kill both the game and any
 future projects that I had in mind!!!!!!!!!!

1.17 Technical info

GenAm Macro Assembler Copyright © HiSoft 1985-93
All Rights Reserved - version 3.04

Assembling galaga2.4.S
Pass 1
Pass 2

0 errors found
34107 lines assembled into 234124 bytes, Amiga executable relocatable code
262 optimisations saving 642 bytes
954414 bytes used

34107 lines of Devpac v3.04 assembler code. A great assembler package!!!! Assembling time : 27.69 seconds on a 33 MHZ 68030 A1200 with 6MB RAM.

371KB+ bytes of raw graphics.
Over 1050 frames of animations.
Over 90 sprites on screen at once (68030)
Over 185 BOB'S on screen at once (68030)
78 sound effects, 4 jingles, 30 max music pieces.

If you are interested in making your own games or assembler programming then you can buy the whole source code and development tools for only \$75, £50 or 500 NOK

You will then receive the following...

Source code	(assembler, with comments)
Data files	(graphics, animations, sound effects)
Level Creator	(make new levels for Deluxe Galaga)
SFX Creator	(Synthetic and sample sound effects creator)
Converter 5.0	(Graphics converter and cruncher)

You will also receive all the source code for all the tools1
