ScreamerII

Ray Darrah III

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ScreamerII

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ScreamerII iv

Contents

1	Scre	amerII	1
	1.1	ScreamerII.guide	1
	1.2	ScreamerII Introduction	1
	1.3	New ScreamerII Features	2
	1.4	LightWave 4.0	2
	1.5	Rendering on a ScreamerNet	2
	1.6	ScreamerII Tips and Hints	3
	1.7	ScreamerII Features and Limitations	4
	1.8	ScreamerII Installation	5
	1.9	Using ScreamerII from the Workbench	5
	1.10	Setting up LightWave Projects for ScreamerII	5
	1.11	CLI Arguments and Workbench Tool Types	6
	1.12	Interval for Scans of the Command Directory	7
	1.13	Start CPUs Rendering Simultaneously	7
	1.14	Lowest CPU Number	7
	1.15	Highest CPU Number	8
	1.16	The Shared 'Command Directory'	8
	1.17	A Scene to be Rendered	8
	1.18	A List of Scenes to be Rendered	9
	1.19	The Root Directory for all Scene Elements	9
	1.20	Stopping Slower CPUs Early	10
	1.21	Giving Names to Rendering CPUs	10
	1.22	Rendering Only Non-Rendered Frames	10
	1.23	Restarting CPUs when ScreamerII Starts	11
	1.24	ScreamerII Registration	11
	1.25	ScreamerII Authors	11
	1.26	ScreamerII Distribution	12
	1.27	standard disclaimer	12

ScreamerII 1 / 13

Chapter 1

ScreamerII

1.1 Screamerll.guide

ScreamerII V0.82 - a ScreamerNet controller program for Amiga computers

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What is ScreamerII?

What's new with ScreamerII?

What are the features and limitations?

What is LightWave?

How do I install ScreamerII?

How should I setup my LightWave projects for ScreamerII

How can I background render on one computer?

What are the CLI options and Tool Types?

Give me some tips and hints.

How do I distribute ScreamerII?

What does ScreamerII cost?

How do I contact the Author(s)?

1.2 ScreamerII Introduction

<< ScreamerII Introduction >>

ScreamerII is an Amiga program for LightWave 4.0 users who:

· Have found LightWave's built-in ScreamerNet controller less than adequate.

AND/OR

· Wish to work in LightWave while the CPU(s) are rendering.

AND/OR

· Wish to use the superior environment of their Amiga to control non-Amiga "game machines" that happen to render faster.

ScreamerII is a stand alone program that replaces the ScreamerNet panel in LightWave 4.0.

It has many Features not found on LightWave's ScreamerNet panel.

ScreamerII 2 / 13

1.3 New Screamerll Features

<< New ScreamerII Features >>

V0.82:

- · Added this revision history
- · Put a wrapper around the locale.library function calls to enable OS 2.04 compatibility
- · Added calls to SetProgramName()
- · NOTE: Some copies of the V0.81 archive were missing icon files

1.4 LightWave 4.0

<< LightWave 4.0 >>

LightWave is a three dimensional modelling and rendering program from NewTek incorporated. It is available for many operating systems including Amiga, LoseBlows95 and various flavors of LoseBlowsNT.

The LightWave name is copyrighted by NewTek and the ScreamerII program is in no way associated with NewTek or LightWave. It was developed independently.

LightWave has the ability to render the same scene on multiple CPUs or multiple instances on the same CPU. This ability is known as ScreamerNet.

1.5 Rendering on a ScreamerNet

<< Rendering on a ScreamerNet >>

The Amiga LightWave system has something called "ScreamerNet" to render scenes on multiple CPUs at the same time. A program named LWSN.FP runs on each CPU (including one on the local machine) to perform the actual rendering. One of the machines also either uses the ScreamerNet panel built into LightWave or the ScreamerII program to control these instances of the LWSN.FP program. With ScreamerII controlling the instances of LWSN.FP, an Amiga user with a single CPU can background render while working in LightWave without noticeable system slowdown (when setup properly).

To background render on multiple CPUs with ScreamerII you will need a network capable of sharing hard drive volumes. This can be accomplished with AmiTCP, ParNet, Envoy or other such software packages and is beyond the scope of this document.

It is very important to setup your LightWave Projects properly and that each CPU have enough RAM to render the frames it is assigned.

Use the LWSN.FP program as you would normally, but instead of using the LightWave ScreamerNet panel, run the ScreamerII program with the appropriate options .

ScreamerII uses the Screamer 2 protocol. Therefore, the LWSN.FP program must be started with it's -2 parameter.

Although ScreamerII has not been tested with LightWave 5.0 (which has a new version of LWSN.FP), it is likely that ScreamerII can be used with LightWave 5.0 since NewTek probably made the new version backwards compatible - just as the LWSN.FP program that comes with LightWave 4.0 is compatible with the previous version of ScreamerNet.

If the LWSN.FP program is run with a task priority of -2, you should be able to continue to use your Amiga without a noticeable slow down. NOTE: USING A -2 PRIORITY WILL NOT SLOW THE RENDERING WHEN YOUR AMIGA IS IDLE (i.e. you are not using it).

If you are rendering on several machines, you may wish to use ASSIGNs on the other Amigas so that from their point of view, your LightWave scene and content directory are in the same place. This can greatly simplify matters where multiple LightWave users (which are potential rendering CPUs) share the same network.

Since your ScreamerNet rendering will probably use a similar environment each time, I recommend creating an AmigaDOS script file to setup your standard environment for each ScreamerNet CPU. For example, I use the following AmigaDOS script file on my local CPU:

ScreamerII 3 / 13

.key num,taskpri/k; parameter template

.bra { ; Tell AmigaDOS to use arguments enclosed in braces

.ket }

.def num 1; Default to ScreamerNet CPU number 1

.def taskpri -2; Default task priority is -2

; (content directory is always RayWave:CurrentProject)

FailAt 21; If we need to mount drives and they are already mounted, don't stop the script

; Mount network drives here

FailAt 20; Go back to default FailAt value

Assign RayWave: Work:LightWave; Make an ASSIGN for the root of the content directory

CD System:Graphic/NewTek/Programs; Change to the directory where the LWSN.FP program can be found

ChangeTaskPri {taskpri}; Use the proper task priority

LWSN.FP -2 CRAD:job{num} CRAD:ack{num}; Startup the actual LWSN program using CRAD: for the 'command' directory

And, I use the following AmigaDOS script file on one of the non-local CPU's I frequently use for ScreamerNet rendering:

.key num; optional parameters

.bra { ; Tell AmigaDOS to use arguments enclosed in braces

.ket }

.def num 2; Default to ScreamerNet CPU number 2

; content directory is always RayWave:CurrentProject

FailAt 21; If the network drives are already mounted, don't stop the script

Mount System: ; Mount a network drive called System

Mount RWork: ; Mount a network drive called RWork

Mount RCRAD: ; Mount the command directory volume of my usual machine

FailAt 20; go back to default FailAt value

Assign RayWave: RWork:LightWave; set an ASSIGN to the root of the content directory

CD System:Graphic/NewTek/Programs; Change to the directory where the LWSN.FP program can be found

ChangeTaskPri -2; don't slow down the system

LWSN.FP -2 RCRAD:job{num} RCRAD:ack{num} ; Startup the actual LWSN program using the networked T: for the 'command' directory

1.6 Screamerll Tips and Hints

<< ScreamerII Tips and Hints >>

- · Run the LWSN.FP program with a task priority of -2. This will allow you to background render on you Amiga without a noticeable system slow down. NOTE: USING A -2 PRIORITY WILL NOT SLOW THE RENDERING WHEN YOUR AMIGA IS IDLE (i.e. you are not using it).
- · Make AmigaDOS script files that set up your standard environment on each ScreamerNet CPU.
- · Use ASSIGNs on the other Amigas so that from their point of view, your LightWave scene and content directory are in the same place.
- · Make a Workbench project icon that holds your most used ScreamerII options as Tool Types and specifies ScreamerII as the Default Tool. Also make Worbench project icons connected to your LightWave scenes. These scene icons should have no Default

ScreamerII 4 / 13

Tool and should have a Tool Type that specifies the LightWave scene file that the icon represents. Icons are supplied with the ScreamerII archive.

- · Setup your LightWave scenes to reference all components (images, objects, clip maps etc.) relative to your content directory instead of actually mentioning a specific path.
- · You can stop ScreamerII by pressing <ctrl>C in it's output window.
- · A brief description of each CLI option and Workbench Tool Type can be obtained by first typing "ScreamerII?" and then typing "?" in the CLI window.
- · Put the command directory on nonvolatile media such as a hard drive. This will allow the **RESTART** option to function properly should the Amiga with the **COMMAND_DIRECTORY** on it be rebooted.

1.7 ScreamerII Features and Limitations

<< ScreamerII Features and Limitations >>

There are many advantages to using ScreamerII over LighWave's built-in ScreamerNet controller. Among them are:

- · Allows one to work in LightWave while a scene renders in the background on a single CPU
- · ScreamerNet CPUs can be added and removed dynamically during the rendering without problems
- · Does not wait for that annoying 'Screamer Init' time found on LighWave's ScreamerNet panel
- · The estimated time of completion is displayed
- · Can automatically skip frames that have previously been rendered
- · Optionally starts all rendering CPUs simultaneously instead of sequentially
- · Intelligently deactivates slower CPUs early to speed up overall rendering time
- · Adjustable rate at which the command directory is scanned
- · Rendering CPUs can be given names instead of just numbers
- · The rendering job can be RESTARTed seamlessly after rebooting the controller

Other features include:

- · Useable from the WorkBench or the CLI
- · All options are available as CLI arguments or WorkBench Tool Types
- · Supports the AmigaOS catalog system. All text can be changed even the command line arguments and Tool Types!
- · When run from the WorkBench, the content directory is determined intelligently
- · Comsumes very little CPU time
- · Pressing? a second time at the CLI prompt gives a verbose description of each CLI argument
- · Compatible with LightWave 4.0 using ScreamerNet 2 protocol
- · Likely compatibility with LightWave 5.0 (using ScreamerNet 2 protocol) and other rendering platforms such as Alpha (provided they can share network drives with your Amiga)

Some known limitations are:

- · You cannot set the first frame and last frame to be rendered in a scene. So, if you are not using the MISSING_FRAMES option, all frames of a given scene are rendered. If a partial scene render is desired, a scene file specifying the desired first frame and last frame must be created.
- · All scenes to be rendered must use the same content directory
- · The default for the content directory cannot (yet) be read from the Toaster:Programs/LightWave_Support/LW-Config file
- · Scenes cannot (yet) be dynamically added or removed from the scene list
- · There is no AREXX port (yet)

ScreamerII 5 / 13

1.8 Screamerll Installation

<< ScreamerII Installation >>

Installation of ScreamerII is simple. Just:

- · Copy the executable to somewhere in your path.
- · Put the documentation wherever you choose.

You may also wish to attach some of the included icons to your LightWave scene files and/or use them to store your frequently used ScreamerII options .

1.9 Using ScreamerII from the Workbench

<< Using ScreamerII from the Workbench >>

All of the CLI arguments in ScreamerII are also available as Workbench icon Tool Types. Using Workbench icons makes it easier to remember your most frequently used settings.

Multiple icons can be selected. The icons and their Tool Types are processed in the order they were selected with <shift>click.

Tool Types documented as having a Workbench Scope of "per icon" act special when an icon with the SCENE or SCENE_LIST is processed. For these icons, the value of a "per icon" Tool Type will be the last value encountered so far for that Tool Type.

The value used for Tool Types that are documented with a Workbench Scope of "global" will be the last selected icon which contains that Tool Type.

Of all the icons selected, there should only be one icon that is either the ScreamerII tool icon or a project icon that references ScreamerII as it's default tool.

Probably the best way to set things up would be to have a few project icons that reference ScreamerII as their default tool and have Tool Types that represent your most used settings. Then, attach an icon to each scene file which has the tool type(s) (such as SCENE=) which relate specifically to that scene.

See CLI Arguments and Tool Types for more information about how the Tool Types are processed.

1.10 Setting up LightWave Projects for ScreamerII

<< Setting up LightWave Projects for ScreamerII >>

The LWSN.FP program may not function properly if all scene elements (including where to output the image files) are not specified relative to the CONTENT_DIRECTORY.

On a default Amiga LightWave installation, all scene elements are specified relative to the Toaster: logical device. However, if your Amiga network has multiple LightWave users on it, you may run into problems because the directory that is Toaster: on one Amiga is probably not the same directory that is Toaster: on another Amiga.

You may also run into trouble if you choose to put those elements of a scene that @[b]you create on a volume other than Toaster: because all scene elements must be specified (to LightWave) relative to the content directory. This means that you must not specify a volume in any of LightWave's file requesters.

The solution I arrived at was to make an ASSIGN on each rendering CPU that points to my content directory. That way, the same logical device name can be used by all rendering CPUs even though that logical device may actually be on another CPU's hard drive. I then specify to LightWave and ScreamerII to use this ASSIGN as the content directory. (See these script files for more information.)

You cannot render to an animation when using ScreamerII. You must render to individual frames or alpha images that are assembled into an animation upon completion of the rendering.

IMPORTANT: LWSN.FP will not allow you to save frames or alpha images to an absolute path. You must specify an output path that is relative to the Content Directory .

ScreamerII 6 / 13

1.11 CLI Arguments and Workbench Tool Types

<< CLI Arguments and Workbench Tool Types >>

All ScreamerII options are available as either CLI arguments or Workbench Tool Types.

The CLI arguments are note case sensitive and many have abbreviations. For a list of CLI arguments and their abbreviations, startup ScreamerII with:

ScreamerII?

For more information on the CLI arguments, press the question mark key again and press return.

The Workbench Tool Types must be UPPER CASE. There are no abbreviations for the Tool Type options. Use the long version of the CLI arguments. For more information on using Workbench Tool Types see Workbench Usage.

For Tool Types that are documented as switches, the mere presence of the switch's name in a Tool Type will activate the switch but one of the values OFF, 0, NO and FALSE must be used to deactivate the switch. For example the following Tool Types will all turn on the MULTI_START switch:

MULTI_START=ON

MULTI_START

MULTI_START=

MULTI_START=1

MULTI_START=whatever you want

However, one of the following must be used to turn off (in this case) the MISSING_FRAMES switch:

MISSING_FRAMES=OFF

MISSING_FRAMES=0

MISSING FRAMES=FALSE

MISSING_FRAMES=NO

You can stop ScreamerII at any time by pressing <ctrl>C in it's output window.

The CLI arguments and Tool Types available in ScreamerII are:

SCAN_TIME - interval between "command directory" scans

MULTI_START - start all CPUs rendering simultaneously

LOW_CPU_NUMBER - lowest CPU number to be involved with the render

HIGH_CPU_NUMBER - highest CPU number to be involved with the render

COMMAND_DIRECTORY - shared directory used for ScreamerNet commands

SCENE - scene file to be rendered

SCENE_LIST - list of scene files to be rendered

CONTENT_DIRECTORY - root directory for scenes and objects

SMART_END - stop slower CPUs early to decrease overall rendering time

CPU_NAMES - give a name to each rendering CPU

MISSING_FRAMES - only render frames that don't yet exist

RESTART - restart certain rendering CPUs (after a reboot)

ScreamerII 7 / 13

1.12 Interval for Scans of the Command Directory

<< Interval for Scans of the Command Directory >>

CLI Argument: SCAN_TIME/K/N

CLI Shortcut: TIME/K/N

Workbench Tool Type: SCAN TIME=

Workbench Scope: global

Default Value: 3 Unit: Seconds

While rendering, the ScreamerII program must periodically check a directory shared by all rendering CPUs for the existence of new files. This directory is known as the COMMAND_DIRECTORY.

This option sets the number of seconds between each scan of the COMMAND_DIRECTORY.

If this directory is on nonvolatile media such as a hard drive (this is recommended - see Tips & Hints) you may get annoyed by the constant hard drive usage every few seconds. After all, that type of annoyance is usually only reserved for Windows users.

Higher values will cause less hard drive irritation and may decrease render times slightly on a CPU running both ScreamerII and LWSN.FP. However, higher values may also increase the render times on other CPUs. You may have to do some experimentation to get this number where you like it.

1.13 Start CPUs Rendering Simultaneously

<< Start CPUs Rendering Simultaneously >>

CLI Argument: MULTI_START/S

CLI Shortcut: MULTI/S

Workbench Tool Type: MULTI_START=

Workbench Scope: global

Default Value: OFF

Unit: switch

Normally, ScreamerII instructs only one CPU to load a scene at a time. This is similar (although a bit better) to how LightWave's ScreamerNet control panel works.

However, with this switch enabled all ScreamerNet CPUs may begin loading the scene(s) simultaneously and CPUs with faster access to a scene file (for example, on a local hard drive) may begin rendering before other CPUs have finished loading the scene file.

If you have a fast network or you don't mind all the CPUs loading the same scene file (which can cause a lot of disk activity) at the same time, you should turn on this switch.

1.14 Lowest CPU Number

<< Lowest CPU Number >>

CLI Argument: LOW_CPU_NUMBER/K/N

CLI Shortcut: LOW/K/N

Workbench Tool Type: LOW_CPU_NUMBER=

Workbench Scope: global

ScreamerII 8 / 13

Default Value: 1

Each rendering CPU must be given a unique number. (ScreamerII allows NAMES to also be assigned to each CPU).

This option specifies the lowest CPU number ScreamerII will involve in the render process. Usually, the default value of 1 can be used.

By using a combination of HIGH_CPU_NUMBER and LOW_CPU_NUMBER, you can specify that only a certain sub-set of the available CPUs be used in the rendering. This can be handy on a network where you might have multiple instances of ScreamerII running.

1.15 Highest CPU Number

<< Highest CPU Number >>

CLI Argument: HIGH_CPU_NUMBER/K/N

CLI Shortcut: HIGH/K/N

Workbench Tool Type: HIGH_CPU_NUMBER=

Workbench Scope: global

Default Value: 5

Each rendering CPU must be given a unique number. (ScreamerII allows NAMES to also be assigned to each CPU).

This option specifies the highest CPU number ScreamerII will involve in the render process. You will usually set this option to the the highest CPU number on your ScreamerNet.

By using a combination of HIGH_CPU_NUMBER and LOW_CPU_NUMBER, you can specify that only a certain sub-set of the available CPUs be used in the rendering. This can be handy on a network where you might have multiple instances of ScreamerII running.

1.16 The Shared 'Command Directory'

<< The Shared 'Command Directory' >>

CLI Argument: COMMAND_DIRECTORY/K

CLI Shortcut: CMD/K

Workbench Tool Type: COMMAND_DIRECTORY=

Workbench Scope: global Default Value: (see below)

To successfully render on a ScreamerNet, the rendering CPUs must have at least one common directory that is shared among them. This directory is used for communication between ScreamerII and the rendering CPUs.

This option specifies the name of the shared command directory as referenced by the CPU running ScreamerII.

When started from the CLI, ScreamerII uses the current working directory as the default.

When started from the Workbench, ScreamerII uses the directory of the first selected icon as the default.

1.17 A Scene to be Rendered

<< A Scene to be Rendered >>

CLI Argument: SCENE/K

ScreamerII 9 / 13

Workbench Tool Type: SCENE=

Workbench Scope: per icon Default Value: (no scene)

This option instructs ScreamerII to render the specified LightWave scene file.

From the CLI, only one scene file can be specified with this option (use the SCENE_LIST option to specify more). However, when ScreamerII is started from the Workbench, each icon selected may specify it's own scene.

IMPORTANT: All scene file names must be relative to the **CONTENT_DIRECTORY** .

1.18 A List of Scenes to be Rendered

<< A List of Scenes to be Rendered >>

CLI Argument: SCENE_LIST/K

CLI Shortcut: LIST/K

Workbench Tool Type: SCENE_LIST=

Workbench Scope: per icon Default Value: (no scene list)

This option instructs ScreamerII to render the LightWave scenes mentioned on each line of the specified ASCII file.

From the CLI, only one scene list can be specified with this option. However, when ScreamerII is started from the Workbench, each selected icon can specify another scene list.

IMPORTANT: All scene file names in a scene list must be relative to the **CONTENT_DIRECTORY** . The scene list file name itself may be relative to the content directory but is not required to be.

1.19 The Root Directory for all Scene Elements

<< The Root Directory for all Scene Elements >>

CLI Argument: CONTENT_DIRECTORY/K

CLI Shortcut: CONTENT/K

Workbench Tool Type: CONTENT_DIRECTORY=

Workbench Scope: global Default Value: (see below)

In order to successfully render on a ScreamerNet, your LightWave Project should be setup so that all scene elements (including output images) are referenced relative to the directory specified on LightWave's Options panel as the 'Content Directory'.

For best results, the 'Content Directory' you have configured in your LightWave program should be the same directory that you specify to ScreamerII.

From the CLI, the current working directory is used as the default for this option's value.

From the Workbench, ScreamerII tries to determine the default value for 'Content Directory' in an intelligent manner. It will use either the directory of the first selected icon which specifies a SCENE or SCENE_LIST OR the parent of that directory if the icon is in a drawer named "scene" or "scenes".

ScreamerII 10 / 13

1.20 Stopping Slower CPUs Early

<< Stopping Slower CPUs Early >> CLI Argument: SMART_END/S

CLI Shortcut: SMART/S

Workbench Tool Type: SMART_END=

Workbench Scope: global Default Value: OFF

Unit: switch

If certain CPUs on your ScreamerNet are much slower than other ones, the overall rendering time can be reduced by not assigning frames near the end of the rendering session to the slower CPUs because it may take them longer to render one frame than it takes the fast CPUs to render the remaining frames.

When this switch is activated, ScreamerII will not assign frames near the end of the render to CPUs which have render times so slow that they would not finish (on average) before the faster CPUs could render the remaining frames.

1.21 Giving Names to Rendering CPUs

<< Giving Names to Rendering CPUs >>

CLI Argument: CPU_NAMES/K

CLI Shortcut: NAMES/K

Workbench Tool Type: CPU_NAMES=

Workbench Scope: global

Default Value: (generated names)

Unit: file name

If this is option is supplied, ScreamerII will identify the rendering CPUs by text names fetched from the specified file.

The format of the CPU_NAMES file is as follows:

Each CPU name is specified on a line by itself.

The first line in the file will correspond to CPU number 1, the second line will correspond to CPU number 2 and so on.

When this option is not supplied, ScreamerII will identify the rendering CPUs by generated names which are based on the ScreamerNet CPU numbers. See Rendering for more information about ScreamerNet CPU numbers.

1.22 Rendering Only Non-Rendered Frames

<< Rendering Only Non-Rendered Frames >>

CLI Argument: MISSING_FRAMES/S

CLI Shortcut: MISSING/S

Workbench Tool Type: MISSING FRAMES=

Workbench Scope: per icon

Default Value: OFF

Unit: switch

When this switch is on, ScreamerII will scan the frames rendered so far and instruct the LWSN.FP programs to only render those frames which do not presently have output frame files associated with them.

Sometimes, the frames rendered at ScreamerII's startup will not be sequential. This can happen if your ScreamerNet rendering has been interrupted or for other reasons. Instead of making several SCENE files that reference each non-sequential frame that needs to be rendered, it is easier to turn on this switch.

ScreamerII 11 / 13

1.23 Restarting CPUs when Screamerll Starts

<< Restarting CPUs when ScreamerII Starts >>

CLI Argument: RESTART/M
CLI Shortcut: RESTART/M

Workbench Tool Type: RESTART=

Workbench Scope: global

Default Value: (no CPUs restarted)

Unit: CPU numbers

It is always OK to stop and restart a CPU running LWSN.FP (as long as ScreamerII continues to run) because ScreamerII will automatically re-issue the aborted frame to a rendering CPU when it re-starts.

Similarly, it is OK to stop and restart ScreamerII (with the same SCENES and SCENE_LISTS) because it will automatically detect the scene and frame that were last issued to the rendering CPUs and resume where the process was interrupted.

However, if you reboot the rendering CPU which is also running ScreamerII and then re-start ScreamerII, it may erroneously assume that the rendering CPU which was rebooted is still working on the last frame it was issued. It is for this reason that the RESTART option exists.

The RESTART option is normally used only when the COMMAND_DIRECTORY is stored on non-volatile media (which is recommended in Tips & Hints). If this is not the case, all rendering CPUs will have to be manually re-started when the CPU holding the content directory is rebooted.

The CPUs mentioned (by number) in the RESTART value will always be re-started by ScreamerII regardless of what scene and frame it thinks the CPU is working on.

As indicated by the /M above, multiple CPU numbers may be specified and this option must appear at the end of the CLI command. Separate the CPU numbers by spaces. The keyword "ALL" (without the quotes) may be used to re-start every rendering CPU.

1.24 ScreamerII Registration

<< ScreamerII V0.82 Registration >>

If you find this program helpful - and use it on a regular basis - you are encouraged, but not required, to send the author(s) some currency or a gift.

If you should decide to send the author(s) something, use your ability to pay, your conscience and the program's usefulness in determining your registration "fee".

See also: Standard Disclaimer.

1.25 Screamerll Authors

<< ScreamerII Authors >>

There is presently only one author for ScreamerII by the name of Ray Darrah III. There are future plans to bring on someone else to write a GUI for it. We won't mention names but his initials are: Dustbin.

Ray Darrah is a software engineer who's job has him coding for the world's most disgusting computer system: the IBM-PC/AT running MS-DOS/LoseBlows. Following his purchase of one of the original A1000's in 1986, Ray's one computing love has always been the true 32-bit real multitasking system known as AmigaOS.

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ScreamerII 12 / 13

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OR on the IRC (EFnet or IRCnet) as:

Exec

Special Thanks to John Lorenz for testing this program and for ripping apart it's documentation.

1.26 Screamer II Distribution

<< ScreamerII Distribution >>

Verbatim copies of this program and documentation may be distributed freely. All changes to this program and or documentation must be approved by the author(s) prior to distribution.

No guarantee of any kind is given that the program described in this document is error-free. The user assumes all risk for use or non-use of this program.

See also: Standard Disclaimer.

1.27 standard disclaimer

*** STANDARD DISCLAIMER ***

This product is meant for educational purposes only. Any resemblance to real persons, living or dead is purely coincidental. Void where prohibited. Some assembly required. List each check separately by bank number. Batteries not included. Contents may settle during shipment. Use only as directed. No other warranty expressed or implied. Do not use while operating a motor vehicle or heavy equipment. Postage will be paid by addressee. Subject to CAB approval. This is not an offer to sell securities. Apply only to affected area. May be too intense for some viewers. Do not stamp. Use other side for additional listings. For recreational use only. Do not disturb. All models over 18 years of age. Proof of age on file. If condition persists, consult your physician. No user-serviceable parts inside. Lather, rinse, repeat. Freshest if eaten before date on carton. Subject to change without notice. Times approximate. Simulated picture. No postage necessary if mailed in the United States. Breaking seal constitutes acceptance of agreement. For off-road use only. As seen on TV. One size fits all. Many suitcases look alike. For external use only. Contains a substantial amount of non-tobacco ingredients. Colors may, in time, fade. We have sent the forms which seem to be right for you. Slippery when wet. For office use only. Not affiliated with the American Red Cross. Drop in any mailbox. Edited for television. Keep cool; process promptly. Post office will not deliver without postage. List was current at time of printing. It has been modified to fit your screen. Return to sender, no forwarding order on file, unable to forward. Not responsible for direct, indirect, incidental or consequential damages resulting from any defect, error or failure to perform. At participating locations. Not the Beatles. Penalty for private use. See label for sequence. Substantial penalty for early withdrawal. Do not write below this line. Falling rock. Lost ticket pays maximum rate. Your cancelled check is your receipt. Add toner. Place stamp here. Avoid contact with skin. Sanitized for your protection. Be sure each item is properly endorsed. Sign here without admitting guilt. Slightly higher west of the Mississippi. Employees and their families are not eligible. Beware of dog. Contestants have been briefed on some questions before the show. Limited time offer, call now to insure prompt delivery. You must be present to win. It is a violation of Federal law to use this product in a manner inconsistent with its labeling. No passes accepted for this engagement. No purchase necessary. Processed at location stamped in code at top of carton. Shading within a garment may occur. Use only in well-ventilated area. Keep away from fire or flame. Replace with same type. Approved for veterans. Booths for one person only. Check here if tax deductible. Some equipment shown is optional. Price does not include taxes. No Canadian coins. Not recommended for children. Prerecorded for this time zone. Reproduction strictly prohibited.

ScreamerII 13 / 13

No solicitors. No alcohol, dogs, or horses. No anchovies unless otherwise specified. Restaurant package, not for resale. List at least two alternate dates. First pull up, then pull down. Call toll free before digging. Driver does not carry cash. Some of the trademarks mentioned in this product appear for identification purposes only. Record additional transactions on back of previous stub. Actual mileage will vary. Decision of judges is final.

This supersedes all previous notices.{ub}