AmigaOS 4.1 Final Edition FAQ

Revision 3.4 November 2014

Please ensure you make a backup of all your data before attempting to install. The guide will appear on the Workbench as a left out icon when you insert the Installation CD if you prefer to read it on the computer. The latest version of this FAQ will be online. Check Hyperion's website for the latest information at:

http://www.hyperion-entertainment.biz.

Official support forums are located at http://forum.hyperion-entertainment.biz. Don't forget to register your product on the Hyperion website as listed above in order to gain access to the forums.

Special Notes for AmigaOS 4.1 Final Edition

GREX 1200 or 4000 Users with Voodoo 3 graphic cards

If you want to install AmigaOS 4.1 Final Edition and see the Installation on the output of your Voodoo 3 graphic card connected to your GREX, please use the alternate Boot Floppy named GREXBootDisk.ADF located in the root of the Installation CD. Instructions for creating this disk are in question 1.4 in this FAQ. Be sure to select that you have a GREX during the Installation.

If you use the already included Boot Floppy, and choose not to create the GREXBootDisk, installation will still work and proceed on the ECS/AGA output of your Amiga. You should still select you have a GREX during Installation. You will not see any output on your Voodoo 3 until after Installation is finished and you restart your Amiga.

Note: Users with Mediator or Prometheus PCI Bus-boards can use the included Boot Floppy. You do not need to create the GREX Boot Floppy.

BlizzardVision/CyberVision PPC Graphic Card Users

If you have a BlizzardVision or CyberVision PPC graphics card connected to your Blizzard PPC or Cyberstorm PPC AND you have the GREX firmware installed (you see a “PCI” menu entry in the setup screen of your Blizzard/Cyberstorm - hold down ESC when powering on to check), then you may use the GREXBootDisk.ADF file to create a Boot Floppy for your system. Installation will display on your BlizzardVision or CyberVision PPC output.

If you use the supplied Boot Floppy, the installation will use the ESC/AGA output of your Amiga. Please refer to question 1.4 for instructions on how to create the Boot Floppy from the ADF file.

The AmigaOS 4.1 Final Edition Boot Menu (Early Startup)

AmigaOS 4.1 Final Edition has an Early Startup Boot Menu that is loaded after kickstart loads. After you see the Boot splash screen press and hold both mouse buttons to access it. This special Boot Menu is currently only displayed on Native ECS or AGA output. It will not display on your Zorro or PCI Graphics card.

You must have a 31Khz or 15Khz monitor attached to the RGB port of your Amiga 1200/4000 or VGA port of your Amiga 3000 to see it. In the Kicklayout file in sys:kickstart for your model of Amiga there is a “BootVGA.kmod” option near the bottom. If this is enabled (and it is by default) the output will be sent at 31Khz. Comment it out to get 15Khz output.

This behavior is different from AmigaOS 4.1 Classic which displayed the AmigaOS 4.1 Boot Menu on RTG. Note that this may change in a future update.

AmigaOS 4.1 Final Edition FAQ

1.0 Installation/Booting

1.1 Q: Is it possible to boot the Installation CD directly from a SCSI CDROM attached to the optional Blizzard PPC SCSI controller?

A: No, because there is no AmigaOS 4.1 support for the optional Blizzard PPC SCSI controller.

1.2 Q: Is it possible to boot the Installation CD directly from a SCSI CDROM attached to the Cyberstorm PPC SCSI controller?

A: Yes, as long as your SCSI CDROM is properly setup on your SCSI chain and enabled in the setup menu of the Cyberstorm PPC, booting the Installation CD is possible directly from cold boot. Enter the Cyberstorm PPC Phase 5 Control Menu by holding down the “Esc” key when powering on your Amiga. Go into "SCSI", then click Unit number where you have SCSI CDROM connected. Ensure your SCSI CDROM unit is set to "8 LUNs" and change "Auto Mount" to "Mount" and "No CDRom Mount".

The AmigaOS 4.1 Final Edition Installation CD uses its own RDB (Rigid Disk Block) and CDFS, not the Phase 5 Flashrom CDFS, that is why you must keep your SCSI CDROM unit defaulted to "No CDRom Mount". If you find the Installation CD is not booting directly try to soft-reset your Amiga and trying again. If it is still not booting from the Installation CD, check the "SCSI Reset Delay" setting in the Cyberstorm PPC menu. Go into “SCSI”, then “Controller” (by default in Unit 7), and increase the SCSI Reset Delay value as much as possible as older SCSI CDROMS can take more than 20 seconds to become ready after powering on your Amiga. For newer SCSI CDROMS (for example year 2002 production) values as low as 7 seconds have been tested to work well.

If you still can’t get the Installation CD to boot directly, double check again your settings in the Cyberstorm menu, and verify you are seeing “BootCD” as a bootable device in the Amiga's early startup menu (hold down both mouse buttons at power-on).

Finally, if it still doesn’t boot, use the Boot Floppy in conjunction with the Installation CD to Install AmigaOS 4.1 Final Edition.

1.3 Q: Is it possible to boot the Installation CD from a USB CDROM drive attached to a Deneb USB Controller?

A: Yes, as long as the Poseidon USB stack is in the Deneb's flashrom and is configured as follows: Ensure "Simple SCSI" is NOT enabled in the Trident prefs for the massstorage.class binding to your USB CDROM device. Also ensure that Poseidon Popups are set to never open a pop up window. This is very important as pop ups, if they occur, can cause the installation to hang.

Remember that if you make changes to the Poseidon configuration in the Trident prefs you must re-flash your Deneb using the Luciferin software tool to ensure the changes are saved (into the Deneb Flashrom) and therefore available at cold boot. Note that Luciferin, if run under Amiga OS 4.0 or 4.1, needs to be added to the JIT Blacklist in Sys:Prefs/Compatibility otherwise you will get an error message when you try to flash your Deneb.

Consult the Deneb, Poseidon, or Luciferin documentation for further information. Please note that this is not an officially supported method for Installation. Poseidon, Luciferin, and Deneb are 3rd party products copyrighted and/or trade marked by their respective owners.

NOTE: This is not a recommended installation method as it does not always appear to be 100% reliable.

1.4 Q: Is it possible to create a new Boot Floppy?

A: Yes, there is an ADF (Amiga Disk Format) file "BootFloppy.adf" in the root of the Installation CD. You can create the Boot Floppy using ADF2Disk. Download it from Aminet at http://aminet.net/disk/misc/adf2disk11.lha. It should work under AmigaOS 3.x or 4.x or on a Catweasel using an AmigaONE, SAM, or PC with UAE.

There is also a file named GREXBootDisk.adf which will allow you to create the alternate Boot Disk if you have a GREX installed or you have a BlizzardVision PPC or CyberVision PPC graphics card AND the GREX firmware installed.

More information here: http://www.retroreview.com/iang/Catweasel/index.html

1.5 Q: My Floppy Drive is not visible after booting with the Installation CD so I can't create a new Boot Floppy?

A: In this case you need to use the already supplied Boot Floppy or create a new one using the procedure in the previous question.

1.6 Q: I booted with the Boot Floppy and Installation CD in the CDROM drive, however I am getting a requestor that says "Please insert volume AmigaOS 4.1 Final Edition in any drive".

A: There are two possibilities here:

1) Your CDROM drive has not been detected by the Boot Floppy. Refer to the "Booting the AmigaOS 4.1 Installation CD" section in the Installation Guide for troubleshooting tips.

2) Your CDROM drive needs more time to detect the Installation CD, so you can opt to "Retry". Check the Access LED on your CDROM drive to see if it's blinking. Have patience as it can take some time to access the CD.

1.7 Q: Accessing the Installation CD is very slow.

A: Please be patient, there are thousands of files that need to be copied and some CDROM drives can take quite some time to access all the files. The Amiga's IDE port is operating at PIO Mode 0 due to Classic Amiga hardware limitations.

1.8 Q: My CyberVision PPC or BlizzardVision PPC graphics card is not being detected by the Installation CD. I am not getting any signal to my CyberVision or BlizzardVision PPC graphics card. Why?"

A: You are probably running the latest version of the Blizzard PPC or Cyberstorm PPC firmware, the one that added support for OpenPCI and the GREX. If you see a “PCI” menu entry in the Cyberstorm or Blizzard PPC menu (press ESC at power-on to access the menu), then you are running the latest firmware. The Installation will default to AGA or ECS native display in this case. You will need a 15KHz monitor such as a Commodore 1084S connected to the Amiga's native RGB video output in order to complete the Installation. Amiga 3000 users can use a 31KHz display connected to the 15-pin video output of the Amiga 3000. You may proceed to install AmigaOS 4.1 Final Edition and during the install you should select that you have a CyberVision PPC or BlizzardVision PPC graphics card. After finishing the install and rebooting, your Graphics card will be available to select in Screenmode prefs. Older firmware revisions do not exhibit this problem and the Installation CD will detect the CV PPC or BV PPC card properly.

Alternatively you may create a new Boot Floppy using GREXBootDisk.adf and ADF2Disk. Use this Boot Floppy and AmigaOS 4.1 Final Edition will install using the display output from your BlizzardVision or CyberVision PPC graphics card. Please

refer to question 1.4 in this FAQ for instructions. GREXBootDisk.adf is located on the root of the Installation CD.

1.9 Q: I installed AmigaOS 4.1 Final Edition OK, powered off my Amiga, then powered it back on but it fails to boot. It is stuck at a shell prompt, or it has crashed with a software failure or ramlib error.

A: Things to check:

- Boot again with the Boot Floppy and Installation CD. Select "Continue and start Workbench directly from the CD" when the blue Welcome screen appears. After the Workbench starts, launch Media Toolbox from the AmigaOS 4.1 Final Edition CD - it is located in the "System" directory. Verify that your boot partition is inside the first 4GB of your hard disk and that the partition is set to Bootable in Media ToolBox and has the highest boot priority with respect to other bootable partitions. Verify you can see and access the partition you installed AmigaOS 4.1 Final Edition to on the Workbench.

- Double check that you placed a RDB (Rigid Disk Block) on your hard drive. To verify, start Media ToolBox, select your device, then select your hard disk and click "Edit partitions and filesystems". Click the "Add, remove, or edit filesystems" button. Ensure that you have at least SmartFileSystem and/or FastFileSystem listed in the details section. The Filesystem you have in the RDB should match the Filesystem selected for your boot partition. If it is blank (eg, there is nothing in the RDB), you can add the required Filesystem to the RDB. To add a FileSystem to the RDB, select "Add new FS", then browse to the L: directory on the Installation CD and add either FastFileSystem or SmartFileSystem (or both). Click OK to accept settings. It is important to note that when adding the FileSystem to the RDB you must edit the "DosType" so it matches the FileSystem. For FastFileSystem (FFS\07) use 444F5307. For SFS\00 use 53465300. You may need to reboot after doing this. For further information please read the section in the guide named "Hard Disk setup with Media Toolbox".
- If you have used the same hard disk from an AmigaOS 3.x or 4.0 installation and you are using FFS (FastFileSystem), ensure that you upgrade FFS by placing the latest version into the RDB. The version of FastFileSystem supplied is 52.6 and is 68k compatible. You can do this by booting with the Installation CD and going into Media Toolbox (see the above note on the instructions to add an RDB). The FastFileSystem is found in the L: directory of the Installation CD.

- Boot again with the Boot Floppy and Installation CD, Install AmigaOS 4.1 Final Edition and format your Boot partition when asked during the Instllation. **Note that this action will destroy all data on the partition**.

- Ensure you have installed to a blank formatted partition using either FFS with Long Filenames (DOS\07) or SFS file systems (SFS\00).

- Hook up a 1084S or other 15Khz compatible monitor to your Amiga's RGB port to see what is on the screen and where the booting stops.

- Disable or Remove any Zorro based FlashROM cards as their contents may not be compatible with AmigaOS 4.1.

- Refer to the Installation Guide for further Information.

TIP: you can always boot to Workbench using the Boot Floppy and Installation CD for troubleshooting purposes.

1.10 Q: My Amiga won't boot and at least one Zorro card is showing as "Defective".

A: You might have run out of address space. If you have many Zorro cards or Zorro cards in conjunction with a Mediator, you can potentially run into this issue. If you have a Mediator with a 256MB Radeon graphics card, multiple 256MB ZorRAM's, or other similar arrangements of add-on cards, you might have to make some sacrifices as there is only a finite amount of address space available. Either remove some cards or use the smaller memory configurations (eg. 128MB Radeon instead of a 256MB and reduce the Winsize on the Mediator to 256MB), etc. Some experimentation may be required to get a configuration that the Amiga likes. Note that this is not an AmigaOS 4.1 issue specifically, but rather a limitation of the Amiga itself.

1.11 *Q: What is the GREXBootDisk.adf in the root of the Installation CD?*

A: This boot floppy can be used if you have a GREX 1200 or 4000 PCI Bus-board attached to your Blizzard PPC or Cyberstorm PPC. It will enable the GREX for Installation. Please see question In this case the installer will open on a 15Khz AGA screen unless you have another graphics card.

2.0 Mediator/Prometheus PCI configuration

2.1 Q: Is the Prometheus/Firestorm PCI bus board supported?

A: Yes, it is supported.

2.2 Q: What is the recommended Jumper configuration for the Mediator?

For Mediator 1200 (all versions):

- MEMORY SIZE: 8MB WINDOW
- WAIT: CLOSED
- CONFIG: OPEN

For Mediator 4000 (all versions):

- WINSIZE: CLOSED, if Radeon 256MB, OPEN if Voodoo 3/4/5, Radeon 64MB/128MB
- MASTER: CLOSED
- SWAP CONFIG: CLOSED

If you have difficulty with some Zorro cards to be AutoConfiged (they try to configure in the address space above 0x7FFFFFFF) try to change the sequence of fitting your cards in Zorro slots and/or change the SWAP CONFIG jumper setting. SWAP CONFIG jumper changes the sequence of configuring two Mediator PICs.

2.3 Q: What is the recommended order for placing PCI cards in the PCI slots of a Mediator?

A: For the Mediator PCI A1200 boards, put your Graphics card in the top slot, labeled PCI1 on the Mediator Circuit board.

For Mediator 4000, 4000Di, or 3/4000T boards, put the Graphics Card in the second to bottom slot, the slot labeled PCI2. It is OK to place a Realtek 8029 based PCI network card in the first PCI slot closest to the Mediator Logic board, the slot labled PCI1, but do not place a SATA card or Sound Card in that slot.

For Mediator 1200 from top to bottom:

- PCI1: Graphics Card **(Top SLot)**
- PCI2: Network Card
- PCI3: Sound Card
- PCI4: SATA Card **(Bottom Slot)**

For Mediator 4000, 4000Di, 3/4000T from bottom to top:

- Mediator PCI 4000 Slot: Mediator Logic board **(Bottom Slot)**
- PCI1: Nework Card
- PCI2: Graphics Card
- PCI3: Sound Card
- PCI4: SATA Card **(Top Slot)**

3.0 PCI Graphics card/Driver Questions

3.1 Q: What Radeon PCI graphic cards are supported or recommended?

A: Radeon 9200 and 9250 are supported, providing they are electrically compatible with your Mediator PCI bus board. Please consult with Elbox at http://www.elbox.com if you are unsure if your card is compatible with your Mediator. Other Radeon cards may work as long as they are electrically compatible.

3.2 Q: Is the Radeon supported on Prometheus/Firestorm?

A: Yes, AmigaOS 4.1 Final Edition supports using a Radeon on the Prometheus (or Firestorm which is an updated Prometheus). Ensure it is electrically compatible with your Prometheus or Firestorm PCI Bus-board (eg. 5V compatible).

3.3 Q: What is the maximum size supported for Video Memory on a PCI Graphics card?

A: The Maximum AmigaOS 4.1 Final Edition can address on a Graphics card is 256MB, as long as it is in a single segment.

The recommended graphics card is the Radeon 9250 with 128MB or 256MB video memory.

3.4 Q: I installed a Radeon card in my Mediator, inserted the Installation CD and Boot Floppy, then turned on my Amiga, but my monitor isn't displaying anything.

A: Some things to try:

- Have patience - it may take several minutes for anything to be displayed on your Monitor. After several minutes you should see the Installation CD welcome screen on your Monitor.

- Make sure your Radeon card is compatible with your Mediator. All Mediators require fully 5V compatible Radeon PCI cards, except the Mediator PCI 1200 SX and TX, which can use 3.3V cards.

- It is not easy to determine if your card is fully 5V compatible. Some things to note:

- 1) If you have purchased specifically from Elbox a 5V compatible Radeon it should work.
- 2) If your card is working under AmigaOS 3.9 with Elbox's latest drivers, it should work on AmigaOS 4.1Final Edition.
- 3) If you have a SATA card ahead of the Radeon card, reverse the order of those cards. Use the recommended order as proposed above.

There is physically no other way to tell regardless of what "notches" are on your Graphic card PCI slot connector. If the card is not detected under AmigaOS 3.9 or AmigaOS 4.1 then it is likely not compatible electrically with your Mediator.

Having said this, you can verify that the Installation CD has booted ok by hooking up a 1084S or other compatible 15KHz monitor to your Amiga's RGB port prior to installation. If the AmigaOS Installation is displaying on your Amiga's native AGA/ECS output, then no graphics card has been detected. You may continue to install AmigaOS4.1 at this point and troubleshoot your Graphics card issue later.

3.5 Q: I have a 256MB Radeon PCI graphics card but only 128MB is recognized?

A: It is likely your 256MB Radeon is divided into two separate segments of memory, or two different PCI devices, each being 128MB in size. At this time AmigaOS4 can only recognize the first 128MB segment of memory. Cards that have a single 256MB segment will be able to address the entire 256MB of graphics memory.

3.6 Q: Which Graphics cards support hardware acceleration for Desktop Compositing (Window Transparency, etc...?)

A: Currently only the Radeon card supports hardware acceleration for Desktop Compositing.

3.7 Q: Which Graphic cards support Video Overlay?

A: The Voodoo 3/4/5, Picasso IV, and Radeon cards support Video Overlay.

3.8 Q: Video overlay doesn't seem to be working in DV Player on my Voodoo 3.

A: This is a known issue in DV Player. Please enable the "NOOVERLAY" Tooltype in DV Player's icon.

3.9 Q: How do I turn on Compositing to get the nice Workbench transparency effects?

A: Assuming you are using a Radeon graphics card, go into GUI Prefs, select "Effects" from the list, then in the "Compositing effects" section make sure "Enable (3D Acceleration Required)" is checked. Next, select "Controls" from the list, and select "Drag window with contents". Click USE to test, or SAVE to save.

3.10 Q: Which graphic cards support DDC for automatic monitor screen resolution detection?

A: The Voodoo 3 and Radeon drivers support DDC. DDC requires a direct VGA or DVI connection to your monitor - do not use a switch box in-between if you expect DDC to work. If you do NOT have a Radeon or Voodoo 3 graphics card do NOT select Automatic Monitor detection in screenmode prefs, otherwise you may lose all screenmodes and after a reboot you could end up with only an ECS or AGA screenmode! If this happens you will have to add the Modes back manually in Screenmode Prefs and have a 15KHz monitor such as a 1084S connected to your Amiga's 23-pin native RGB output.

3.11 Q: Is the DVI port on my Radeon supported?

A: Yes, but please ensure you directly connect the DVI cable to your monitor. It is not recommended to use a switch box.

3.12 Q: What PCI graphic cards support Warp3D hardware acceleration?

A: The Voodoo 3/4/5 and Radeon cards support Warp3D hardware acceleration. The Cybervision PPC and BlizzardVision PPC graphic cards are also supported although the driver is currently in beta form. Consult the documentation for proper configuration of this driver as there are application-specific settings.

3.13 Q: Is more than one PCI Graphics Card supported for a dual monitor setup?

A: Two PCI based Graphic Cards are not supported. However, you may use one PCI and one Zorro (or CyberVison PPC/BlizzardVision PPC) Graphics card at the same time by placing the appropriate Monitor Files in Devs:Monitors to obtain a dual monitor setup.

3.14 Q: How do I use my Picasso IV Paloma TV module with OS4.1 Classic?

A: When you have a PicassoIV gfx board and a Paloma TV card attached to it and have installed p4specials.library, you need to edit your Sys:Kickstart/KickLayout-A(model) file to be able to use the Paloma with the PalomaTV software (or other software that works with the Paloma).

Search for a line in the Kicklayout file in sys:Kickstart which contains the string "p4specials.library", remove the semicolon at the start of the line, save, do a cold reboot (Ctrl-Alt-Alt). Then p4specials.library is loaded as Kickstart module which allows PicassoIV.card to open it during early boot.

3.15 Q: Is the GREX PCI busboard supported?

A: Hyperion has added **experimental** support for GREX 1200 and GREX 4000. Tested cards are the Voodoo 3 and the RTL8029 network card. Please see the Special Notes section at the beginning of this FAQ for more information and questions 3.16 to 3.21.

3.16 Q: How to I enable my GREX?

A: During installation you were asked to enable GREX support. If you want to enable it later, or turn it off, use the Bootloader command line in your startup-sequence. Example:

Bootloader COMMANDLINE=”GREX” - this enables the experimental GREX Support.

Remove it to remove the support for GREX.

You **MUST** use only a Voodoo 3 PCI graphics card and RTL8029 PCI network card. Those are the ONLY cards supported.

To install AmigaOS 4.1 Final Edition and see the Installation on your Voodoo 3/GREX, create the GREXBootDisk.ADF using the ADF2DISK utility. Boot your Amiga with this Boot Floppy and the Installation will display on your Voodoo 3 attached to your GREX. Please refer to question 1.4.

3.17 Q: Why is it experimental?

A: There is **NO** documentation available on setting up the GREX at the hardware level. That information is **critical** to know how to fully and properly configure the GREX. There is some information from NetBSD sources but it is not complete. There have been extensive efforts to obtain assistance from the Amiga community to help with setting up the GREX. While some information was provided to us (and the beta testing team is very thankful for that) we do not have complete information on how to setup the GREX at a hardware register level. It may also be that not all cards would work, even if it was setup correctly. We have spent many months and our "Best Efforts" on GREX support, so even though it is not working with all cards, we thought it would benefit you as the user since you can at least use a Voodoo 3 and RTL8029. That is why we included it as an optional experimental feature.

3.18 Q: What is the benefit or disadvantage of using a GREX vs. a Mediator or Prometheus?

A: The benefit is that the GREX is directly connected to the Blizzard PPC or Cyberstorm PPC using a local PCI connector and is thus the fastest PCI solution available for Classic Amigas. The GREX 1200 can get up to 25MB/sec and the GREX 4000 up to 40-50MB/sec (in theory). This means, that for example you may have improved Voodoo 3 performance and improved RTL 8029 network throughput vs. a Mediator or Prometheus. Both the Mediator and Prometheus are limited by the Zorro 3 bus speeds of approximately 8-10MB in actual use.

The disadvantage is only two cards work: Voodoo 3 and RTL8029.

3.19 Q: Does it matter if I have a fixed or unfixed GREX 1200?

A: No it does not, both the Voodoo 3 and RTL 8029 cards will work in either version.

3.20 Q: Are any other cards supported by the experimental GREX support?

A: To our knowledge, no. No sound cards, SATA cards, nor Radeon cards work.

3.21 Q: Is it possible to improve the GREX support in the future?

A: Anything is possible; However it would require full information on how to setup the GREX at a hardware register level and/or at least all PCI drivers re-written to use MMIO. If you are able to help please contact Hyperion.

4.0 PCI SATA/IDE card/Driver Questions (Applies to Mediator/Prometheus)

4.1 Q: What PCI SATA cards are supported?

A: Cards based on Silicon Image 3112, 3114, or 3512 chipsets should work. Again, the card must be electrically compatible with your Mediator.

4.2 Q: What PCI IDE Controller cards are supported?

A: Cards based on the Silicon Image 0680 chipset should work, however only on Prometheus cards with the updated “FireStorm” firmware. It supports up to 4 devices on two cables. It must be electrically compatible with your Firestorm. It does not work on a normal Prometheus or Mediator.

4.3 Q: How do I setup my SATA hard disk?

A: After properly connecting your drive with SATA power and data cables, power on your Amiga and go into Media ToolBox (in the System directory). Media Toolbox will detect available devices and it should list one of the SATA device drivers (sii3512ide.device, sii3112ide.device, sii3114ide.device). Choose the appropriate device to continue and partition your SATA hard disk. Once partitioned, you will have to Save the setup in Media ToolBox and reboot. After rebooting, the partition icons will display on the Workbench. At this point you can format and name the partitions.

4.4 Q: Are external SATA Docks supported?

A: Some docks may work. Based on initial testing the Thermaltake BlacX ST0005U e-SATA Hard Drive Dock works. Note that you will need an appropriate e-SATA backplate and cable which you must purchase separately.

4.5 Q: Is cold-booting AmigaOS 4.1 Final Edition possible from a SATA hard disk?

A: No, because the AmigaOS 3.x ROM contains no 68k driver for SATA devices, so cold-booting is not possible from a SATA hard disk.

4.6 Q: What if I have a FLASH ROM card that can load resident modules? Can I boot AmigaOS 4.1 Final Edition from SATA in that case?

A: Since the SATA device drivers are in PowerPC native code and not 68K, even if you put the driver in the FLASH ROM it would not execute since the PowerPC CPU is not

available from cold-power on. The Amiga requires a 68K processor for initial startup.

4.7 On my Amiga 1200 MediaToolbox hangs when a SATA hard drive is attached, or my machine hangs when booting with a SATA hard drive attached.

A: Ensure you have the WAIT Jumper closed on your Mediator A1200. The proper jumper configuration is listed in question 2.2. Please double check it.

5.0 PCI Sound card/Driver Questions (Applies to Mediator/Prometheus)

5.1 Q: What PCI Sound cards are supported?

A: PCI sound cards based on the ESS Solo-1 Audiodrive chipset are supported. The chip itself may read "ESS 1969". Make sure you go into AHI Preferences and set your default Music Unit and Unit 0 through 3 to ESS SOLO-1 if you are using this card. Under "Options", set the Frequency to 44100 Hz. For each Music Unit, select again 44100 Hz and 10 channels. Don't forget to connect your Audio cable to the Green connector on the back of the sound card. Use the "Play a Test Sound" to verify it is working. Press "Save" when done. The card must be electrically compatible with your Mediator or Prometheus. *Note: In testing we have found that the ESS SOLO-1 card may not work in some Amiga 4000 Desktop configurations*.

5.2 Q: I am getting “click” and “pop” noises while playing back MP3’s using the Solo-1 PCI sound card. Is there a way to fix it?

A: You can reduce the frequency of the music playback in AHI prefs to 32000 Hz or lower which should make most pops or clicks go away. Start AHI Prefs in Sys:Prefs and set Frequency to 32000 Hz or lower for both the Music Unit and Unit 0-3. Save prefs and start your music playback software to test.

6.0 PCI Network card/Driver Questions

6.1 Q: What PCI network cards are supported?

A: PCI network cards based on the Realtek 8029 chipset are supported and are automatically detected in the Internet Connection Wizard (in Sys:Internet).

6.2 Q: What about Zorro 2 network cards such as the C= 2065?

A: These cards may work. You will need to supply your own device driver and copy it to DEVS:Networks and manually select it in the Internet Connection Wizard.

7.0 How Zorro based memory is handled - Amiga 3000(T) / 4000(T) only

7.1 Q: Are ZorRAM or DKB 3128 Memory boards supported with AmigaOS 4.1 Final Edition on the Amiga 1200?

A: No, these boards require a Zorro 3 bus which is only present on an Amiga 3000(T) or Amiga 4000(T).

7.2 Q: How is a ZorRAM (or other compatible Zorro memory card) card used for increasing available memory?

A: The AmigaOS 4.1 kernel will scan for and detect compatible Zorro based memory cards and automatically set them up as "paging devices". This means that the memory on your Zorro memory card will be used as "SWAP" memory. SWAP memory is used when all available physical RAM has been exhausted. It is important to recognize that SWAP memory is handled differently than physical RAM. You will not see it added to the System's "fast" memory pool because it is handled separately by the kernel.

Since Zorro-based memory is much slower than Cyberstorm memory, it makes sense to only use this memory when required, which is why the AmigaOS 4.1 kernel assigns your Zorro memory card as a paging device and not as general RAM. AmigaOS 4.1 will only use the Zorro-based memory after all physical memory has been exhausted.

7.3 Q: I have a ZorRAM, DKB 3128 card or other compatible Zorro memory card installed, how do I tell if it's being used?

A: Open a shell, type memstat then press enter. Memstat will list detected and available paging devices. Your Zorro based memory card should be listed. If it is not listed then it is not compatible with AmigaOS 4.1 Final Edition.

7.4 Q: What Zorro memory cards are supported?

A: Technically, any Zorro 3 based memory card properly conforming to the Amiga AutoConfig specs should work. Only the ZorRAM and DKB 3128 cards have been tested, though. Zorro 2 memory cards have not been tested and are generally too small to be of any effective use.

8.0 Using SWAP Partitions

8.1 Q: What is a SWAP partition or SWAP memory?

A: A SWAP partition is a partition on your hard disk that is assigned as type SWAP. That means it can be used by the AmigaOS 4.1 kernel as an extension of main memory, should all physical RAM be exhausted.

8.2 Q: How do I setup a SWAP partition?

A: Start Media ToolBox, select your hard disk device, and edit the partition layout. Partitions showing up as a dark brown colour are SWAP partitions. If one is not showing you can add a new partition and change the filesystem type to SWAP. Note that if you re-size an existing partition you will destroy all data on that partition, so please have a backup before you do this. The SWAP partition must be set to AutoMount in order for the Operating System to utilize it. SWAP partitions do not need to be formatted as they are accessed directly by the AmigaOS 4.1 kernel.

8.3 Q: What is best to use? A Zorro based memory card or SWAP partition on a hard disk?

A: Zorro based memory cards are always given priority over hard disk SWAP partitions, thus they will always be accessed first. There is really no "Best" to use, although you may find there is less latency with a Zorro based memory card. For many users a single ZorRAM card will be sufficient, while others may prefer one or more ZorRAM cards plus a hard disk SWAP partition. Others still may choose a single hard disk SWAP partition on the Cyberstorm PPC SCSI hard disk, or their SATA hard disk.

8.4 Q: What is the fastest device for SWAP partition?

A: ZorRAM and Cyberstorm PPC SCSI are the fastest, followed by SATA. You may find there is less latency using a ZorRAM or other compatible Zorro based memory card vs. a hard disk based SWAP partition. However, the Cyberstorm PPC SCSI controller uses DMA so you may find less CPU usage when using a SWAP partition on the Cyberstorm PPC. Up to you.

8.5 Q: Is it possible to use more than one SWAP Partition or Zorro memory card?

A: You can use a ZorRAM and a single hard disk based SWAP partition, but two hard disk SWAP partitions are not supported. Multiple ZorRAM cards are supported

although you may find your Amiga may not be able to AutoConfig that setup because of address space limitations. If this happens you will see a red screen listing a "Defective" card on the Amiga's native RGB output. This generally means the Amiga was not able to Autoconfig all of your devices. If you are using a Mediator PCI bus board you should verify you have set the recommended jumper settings. Adjusting the order of your Zorro cards may also help.

8.6 Q: What is the maximum recommended size for a SWAP Partition on my hard disk?

A: Use no more than 1GB in total for your hard disk based SWAP partition and any Zorro memory card(s) you may have. For example if you have a 256MB ZorRAM card installed, use a maximum of 768MB for any hard disk based SWAP partition .

8.7 Q: What hard disk based devices support SWAP partitions?

A: The Cyberstorm PPC SCSI driver (cybppc.device) and PCI SATA or IDE cards that use sii3512ide.device, sii3112ide.device, sii3114ide.device, or sii0680ide.device support adding a SWAP partition. Multiple simultaneous hard disk based SWAP partitions are not supported.

8.8 Q: What is the recommended configuration for SWAP partitions and/or Zorro based memory?

A: For Amiga 3000(T) / 4000(T) users the recommended configuration is one or more Zorro based memory cards (128MB or 256MB maximum) cards plus one hard disk based SWAP partition on a SATA hard disk drive or the Cyberstorm PPC SCSI, using the device drivers mentioned above. The total size should not be larger than 1GB. (refer to question "Q: Is it possible to use more than one SWAP Partition or Zorro memory card?" above for further information.). Amiga 1200 users with Blizzard PPC cards can install a maximum of 256MB of fast ram which lessens the need for SWAP memory, although Amiga 1200 users can use a SWAP partition on a SATA hard disk.

8.9 Q: How do I know if my System is actually paging and using the SWAP partition?

A: You may notice some system slowdown, so please be patient if this is happening. In addition, the memstat command will tell you the status of your paging devices and if they have been used.

8.10 Q: I created a JXF partition in Media Toolbox then rebooted as asked, but it is not showing up on my Workbench (so I can format it) Why?

A: Make sure you have set the block size to 512 in Media Toolbox. Setting it to other values (such as the Media Toolbox default of 1024) will not work. JXF partitions must have a blocksize of 512.

9.0 Compatible Zorro based Graphics cards

9.1 Q: What Zorro based Graphic Cards are supported?

A: The following is a list of compatible Zorro based Graphics cards:

- Graffity
- Picasso II/II+
- Piccolo
- Piccolo SD64
- GVP Spectrum
- Picasso IV
- Retina Z3
- Cybervision 64
- Cybervision 64/3D
- Domino
- Merlin
- Pixel 64

In addition, the Blizzardvision PPC and Cybervision PPC graphics cards that directly connect to the Blizzard PPC or Cyberstorm PPC CPU cards are supported. These older graphics cards do not support DDC. Do not select Automatic Monitor detection in screenmode prefs when using any of the above cards.

10.0 SCSI Support

10.1 Q: Is the Cyberstorm PPC SCSI supported?

A: Yes

10.1 Q: Is the on-board A4000T SCSI supported?

A: No.

10.2 Q: Is the optional Blizzard PPC on-board SCSI supported?

A: No.

10.3 Q: Is the Fastlane Z3 SCSI/RAM card compatible with AmigaOS 4.1 Final Edition?

A: No, it is not compatible. If you have such a card you should remove it.

11.0 Misc Zorro Cards

Q: Does the HyperCom3+ parallel port work with AmigaOS 4.1 Final Edition?

A: Yes, but you should modify the mountlist so it reads:

/* Zorro II HyperCOM3 Z port-handler example mount entry for parallel port*/

EHandler = L:port-handler

Stacksize = 1024

Priority = 5

Device = hyperPAR.device

Unit = 0

/*Baud = 0 /* set this to ZERO for parallel.devices */*/

Control = "PAR"

12.0 Miscellaneous

Q: How do I use PPC native AmigaOS FAT and NTFS filesystems with Posiedon?

A: In Posiedon's Trident prefs, go to massstorage.class and:

NOTE: *BEFORE making any changes ensure you have a backup of your data!*

For FAT: Change it to L:crossdosfilesystem Dostype 46415432 Ctrl NOACCESSDATE

For NTFS: change it to NTFS L:NTFilesystem3G DOSTYPE 4E544653 ctrl NOACCESSDATE