

csa-Intro-FAQ

William Near

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| | <i>TITLE :</i> csa-Intro-FAQ | | |
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Chapter 1

csa-Intro-FAQ

1.1 The Official comp.sys.amiga.Introduction FAQ

The Official comp.sys.amiga.Introduction FAQ
(last updated on November 22, 1997)

Read the Disclaimer now!

View the Table of Contents

Changes since the last update

ASCII text version of this FAQ

Corrections and Suggestions

Read about the Author

Thanks go to...

Copyright

IMPORTANT NOTE: If reading this line forces you to scroll your ←
screen to the
right, change your System Default Text to topaz 11.

1.2 The Disclaimer

DISCLAIMER: This information is intended to be helpful.
However,

I
can't be responsible for errors, omissions,
typos, or sheer stupidity. If your computer explodes in
a fiery mass of molten metal, and your dog catches fire
and runs around the house lighting everything up, reducing
your house to a smoldering ruin, it's your fault, not mine.
You shouldn't have let him sleep by the computer in the

first place!

1.3 Table of Contents

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1.4 Changes to this FAQ

Changes since the last update:

- 8. UPGRADES
 - * What kind of hard drives work with the built-in controller in the A1200?

1.5 ASCII text version of this FAQ

You can get an ASCII text version of this FAQ by one of three ↔
methods:

(1) Go to `comp.sys.amiga.introduction` and look for the subject: Amiga Introduction FAQ (xx/xx/xx) ←- the date changes as new versions are released.

(2) Go to
 Aminet
 and download the file `c.s.a.i-FAQ.lha`
 from the

 docs/help
 directory.

(3) Email
 me
 and request a copy of it.

1.6 Corrections & Suggestions

Did you find any spelling or information errors in this FAQ?

Do you have any ideas or suggestions that you feel would improve this FAQ?

If so, please Email
 me
 and let me know -- I'm always open to new
ideas and even criticism. :-)

1.7 Read about me!

About the Author of the Official comp.sys.amiga.introduction FAQ:

William Bill Near
Email: wnear@epix.net

I live in a small town in western New York, USA. My home is about 2 miles from Lake Erie (one of the 5 Great Lakes).

I have a degree in Computer Information Systems and I have worked as a personal computer consultant for the past 7 years. I also write reviews for
Amiga Report
and

Amazing Amiga Computing
magazine.

I started out with a Mattel Intellivision video game machine back in 1982 and then I bought a C-64 a couple of years later. I progressed to the C-128 about a year later and bought my first Amiga, an
A500
, in 1987. Finally, I purchased
an A2000 in 1988 and I've been building it up ever since.

Some of my hobbies include: mountain bike riding, weight lifting, dirt bikes, music, watching old movies (especially Bogart), and satellite television.

Here's my Amiga configuration in case you're interested:

A2000
Workbench 3.1
MegACHIP 2000 (2 MBs
CHIP
)
ECS chip set
phase5 Blizzard 2060 with 16 MBs
FAST
GVP
ioExtender
with second serial port
Picasso IV
graphics board
with 4 MBs RAM
SupraFAX
Modem
33.6k

SyQuest
EZFlyer drive
ViewSonic 17GS
monitor
Hewlett Packard ScanJet 5p
Epson LQ-510 printer
Yamaha YST-M10 speakers

1.8 Thank you

THANKS: To everyone who sent suggestions, additions, and corrections, including:

Joel Juillerat <joel.juillerat@profora.ch> (French Translator)
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Last, but not least, I'd like to thank the original author of this FAQ, Jeremy Nixon.

1.9 copyright

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William Near
, wnear@epix.net

You may copy or republish this document in electronic form provided it is complete and unchanged, no money is charged for it, and proper credit is given.

Please Email me and let me know that you wish to do so.

1.10 Amazing Amiga Computing magazine

What is Amazing Amiga Computing magazine and how can I get it?

Amazing Amiga Computing is the only remaining North American print magazine dedicated solely to the Amiga.

You can subscribe to the magazine by contacting them in the following ways:

Phone: 1-800-345-3360
1-508-678-4200

Fax: 1-508-675-6002

WWW: <http://www.pimpub.com>

Subscription Rates (12 monthly issues): \$29.95 (US)
\$38.95 (Canada & Mexico)
\$49.97 (Foreign Surface)

All payments must be in US funds on a US bank. All foreign rates are one-year only.

Hey, please tell them that
Bill Near
sent you! :-)

1.11 kickstart

What is Kickstart?

Kickstart is the part of the OS (Operating System) software which is resident in the ROM chip. When you boot the computer, it kickstarts it. Many frequently used functions and commands are contained in the Kickstart ROM. This helps to speed up some system functions because the commands can be quickly retrieved from the ROM, rather than from a slower hard drive or floppy disk.

1.12 workbench

What is Workbench?

Workbench is the file manager for the Amiga. By using Workbench, you can: open windows for the directories (or drawers) on your disks, run programs, set preferences, etc., all by use of a mouse-driven graphical interface (Intuition.)

1.13 amigados

What is AmigaDOS?

AmigaDOS is the Disk Operating System portion of the OS, which is responsible for input and output to disks and devices

, the file system, and so on.

1.14 multitasking

What is this multitasking stuff all about?

Multitasking means that you can run more than one program at a time. Without getting too deep into the technical stuff, what happens is that the

operating system shares the CPU time between different programs.

On the Amiga this means that you can do more than one thing at one time. For example, you can start formatting a

floppy disk, and while it's formatting you can flip to your word processor and type away.

1.15 Windows95 invented multitasking? :-)

But I thought Windows95 invented multitasking?

Don't believe everything you read, especially if it comes from Microsoft. The Amiga was

multitasking ten years before Windows95.

1.16 Amiga models

What models of Amigas are there?

A1000 - The first Amiga, this one is now obsolete. This model uses a 68000 CPU.

A500 - A one-piece model (keyboard attached) with a numeric keypad and an expansion slot on the left side, plus a trapdoor slot in the bottom for

RAM expansion. It came with the Original Chip Set (OCS) and was surprisingly expandable. This model uses a 68000 CPU.

A500+ - An updated version of the A500, with one megabyte (MB) of RAM, able to expand to 2 MBs of

CHIP RAM, and the Enhanced Chip Set (ECS). This model uses a 68000 CPU.

A600 - Another one-piece model, without a numeric keypad, but with a

slot for PCMCIA cards. The problem with this one is that the chips are surface-mounted on the motherboard (with the exception of the OS ROM), so it's not as easy to do simple repairs or upgrade the chips as with socketed motherboards. This model uses a 68000 CPU.

A1200 - The current low-end model, a one-piece with a numeric keypad, but smaller than the A500. It has an expansion slot and a slot for PCMCIA cards, plus a trapdoor for RAM expansion. It is an Advanced Graphics Architecture (AGA) chipset machine. This model uses a 68EC020 CPU.

A2000 - A big-box Amiga with a separate keyboard. It has 5 Zorro II slots and 4 ISA slots inside for expansion, plus a Video slot and a CPU slot for processor upgrades. This model uses a 68000 CPU.

A1500 - A version of the A2000, European only. This model uses a 68000 CPU.

A2500 - A version of the A2000, I believe it was North American only. It came with a 68020 CPU and a SCSI (pronounced: scuzzy) hard drive interface.

A3000 - A smaller big-box model than the A2000. It has Zorro III slots, which are 32-bit, and ISA slots, plus the Video and CPU slots. It also has a built-in SCSI interface and a VGA monitor connector.

This model uses a 68030 CPU at 16 or 25 MHz. depending on the model.

A3000T - A tower version of the A3000. Not many of these were made. This model uses a 68030 CPU.

A4000 - A big-box AGA machine, with Zorro III, ISA, and Video slots. The processor is on a daughterboard, so it can easily be replaced with a faster-processor version. This model uses a 68030 or 68040 CPU depending on the model.

A4000T - A tower version of the A4000, this is the current high-end model. This model uses a 68040 CPU.

If you would like a complete list of all Amiga models with detailed specs, please Email me

and I'd be happy to forward it to you.

The list would make this FAQ even longer than it already is, so I think this is the best way of doing it at this time.

1.17 CHIP & FAST

What's the difference between CHIP RAM and FAST RAM?

CHIP RAM is

RAM

that can be directly accessed by the Amiga's custom chips without having to use the CPU. This RAM is where graphics and sound data must be stored in order to be used. You can think of it as similar to display RAM on a PC, but this is not entirely accurate because it is used for purposes other than graphics; in fact, it can be used to store programs and data just like any other RAM in the system. Low-end Amigas, such as an unexpanded

A1200

, have only

CHIP RAM as standard.

CHIP RAM is limited to a maximum of 2 MBs, and expanding it is not as simple as installing more RAM in most machines. The actual CHIP RAM limit on your particular machine is determined by the Agnus chip. If you have a Fatter Agnus, you can have as much as 1 MB of CHIP RAM. The Obese Agnus allows the full 2 MBs. You cannot simply replace your 1 MB Agnus chip with the 2 MB version; you must install a board such as the DKB MegACHIP. AGA Amigas (the A1200 and A4000 come with the 2 MB Agnus and 2 MBs of CHIP RAM standard. You can read my review of the MegACHIP board in

Amiga Report

magazine issue 3.06

(ar306

.lha

), which is available on the

Aminet

in the

docs/mags

directory.

CHIP RAM is slower than FAST RAM. Amigas with only CHIP RAM will therefore run slower than expanded Amigas. If FAST RAM is installed, programs will use it first, only using CHIP RAM if there is no FAST RAM available.

FAST RAM can be accessed only by the CPU, so it can't be used for graphics display (unless a 24-bit graphics board

is present) or sound

playing. However, as the name suggests, this type of RAM is faster and is thus preferred for storing programs and data.

1.18 ram

How much RAM is in my Amiga?

Open a

Shell

and type the command

avail

.

It will show you the amount of RAM currently free, the amount being used, the total amount installed on the system, and the size of the

largest contiguous block of free RAM, for
 CHIP RAM, FAST RAM
 , and
 the total for the system.

I just opened a Shell and typed avail, and it looks like this:

| Type | Available | In-Use | Maximum | Largest |
|-------|-----------|---------|----------|---------|
| chip | 1702608 | 393520 | 2096128 | 1571584 |
| fast | 5516288 | 7066624 | 12582912 | 3531440 |
| total | 7218896 | 7460144 | 14679040 | 3531440 |

The numbers are in bytes. Looking at the Maximum column, you can see that I have 2 MBs of CHIP RAM and 12 MBs of FAST RAM installed, for a total of 14 MBs of RAM.

1.19 VGA monitors

Can I use a VGA monitor with my Amiga?

The cheap VGA monitors for PC's support only the one VGA scan rate. The Amiga uses a much lower scan rate for its normal video modes (low-res, high-res, etc.), which are actually the same scan rates used for video. VGA monitors cannot display these modes.

However, if you have the ECS or AGA chipset, you can produce video modes which are compatible with VGA. You will find a VGA-Only monitor driver included with the
 OS

. The problem with this approach is that you will be limited to using only those modes. None of the standard modes will display, which will prevent you from using almost any games, lots of other software, the Early Startup Menu, or the Alert screens which appear when your computer crashes.

You can get devices called Flicker Fixers or Display Enhancers, though, which will translate your video modes to rates which can be displayed by VGA monitors. Why? Because using the higher scan rates of VGA monitors is easier on the eyes. However, these devices are rather expensive. But, by using one, you will be able to use all screen modes.

If you have an

A3000

, you can ignore everything above. The A3000 has a VGA monitor output which will allow you to use a VGA monitor for any display mode -- the equivalent of a Flicker Fixer. Just plug it in and go.

The final, and best, solution is to get a
 24-bit

display board, and a

real multisync monitor. Multisync monitors are not limited to just one or two scan rates, like VGA or Super-VGA monitors; they are capable of displaying any frequency within a certain range. Combining a multisync

monitor with a graphics board, such as a Picasso IV or a CyberVision 64/3D, will make a powerful graphics machine out of your Amiga. You can read my review of the Picasso IV board in
Amiga Report
magazine
issue 5.04 (ar504
.lha
) , which is available on the
Aminet
in the

docs/mags
directory, or you can read it in the June 1997 issue of

Amazing Amiga Computing
magazine.

If you go this route, however, you need to get a multisync monitor which can display scan rates down to 15 kHz. Few of them do any more, so make sure to check the specs before buying from a PC store where they won't know what you're talking about. You can ignore this limitation if you also have a flicker fixer installed or you buy the Picasso IV, which has one built-in. The CyberVision 64/3D has an optional flicker fixer available for the A4000 only. All you would need then is a monitor that can scan down to 30 kHz.

1.20 PAL & NTSC

What's this PAL and NTSC stuff all about?

Video signals for television in North America are different from those used in Europe. North America uses the NTSC system, and most European countries, as well as many others, use the PAL system. Since the Amiga uses video-based screen modes, they are made for the different modes according to the country.

The main differences between the two modes are resolution and frame rate. NTSC displays have 200 lines vertically, or 400 in interlaced mode, and displays 29.97 frames (59.94 fields) per second (most people round it off to 30). PAL uses 256, or 512 interlaced, with a frame rate of 25 frames per second (50 fields).

If you have the ECS chipset, you can switch your display between the two modes using the Screenmode Prefs program, in the Prefs drawer. You can also switch from the default screenmode at boot time with the Early Startup Menu, which you access by holding down both mouse buttons when booting.

Some programs, most notably games, which are not fully
OS
-compliant,
only support one of the modes. Many of the games on
Aminet
, for
example, are PAL only. If you have an NTSC machine, you will be able

to use most, but not all, of them as long as you have the ECS or AGA chipset and at least 1 MB of

CHIP
RAM.

This method of switching to NTSC or PAL modes is only used to make software work which is designed for the other standard. It's not sufficient if you want to use an Amiga with hardware video equipment from the other standard. For this purpose, you would have to rework your Amiga's motherboard to a high degree, e.g. change the main crystal.

1.21 24-bit graphics

Can I get 24-bit graphics displays on my Amiga?

Yes. There are many third-party graphics boards available for the Amiga which will allow you to run

Workbench
and most other programs in

full color.

If you do purchase a 24-bit graphics board, make sure that it either comes prepackaged with the CyberGraphX (pronounced: cyber graphics) or the Picasso96 software packages. Either of these software packages will allow you to take full advantage of your graphics card. You will also need

Workbench 3.x
in order to take advantage of one of these

wonderful cards.

Believe me, there's nothing like running your Workbench on a 1024x768 screen in 256 colors! You can also

browse
the World Wide Web (WWW)

and run most programs in 256 or more glorious colors.

An Amiga with a 24-bit graphics card makes an AGA machine look very sick in comparison. It will be much faster than any AGA machine in Workbench emulation. The only disadvantage is not being able to run the vast majority of AGA games, unless they support CyberGraphX and/or Picasso96.

1.22 Workbench 3.1

What is the newest version of the Amiga OS?

The newest release is 3.1, also known as version 40.

1.23 Operating System versions

What version of the operating system is my computer running?

There are several ways to try to discover which OS version you have installed.

Look for a pull-down menu item on the
Workbench
screen labelled

About. Selecting it should bring up a little requester with some version information in it.

Also, if you open a
Shell
window (see basic operations, and using the
Shell) and type `version`, you should get some version numbers.

Finally, the version numbers are usually printed to the screen when you boot your computer.

The version numbers may not be numbers like OS 2.1, however. The software version numbers translate into OS releases as follows:

```
40 = 3.1
39 = 3.0
38 = 2.1
37 = 2.04, 2.05
36 = 2.0
35 = ?? (Special
      Kickstart
      for A2024 monitors)
34 = 1.3
33 = 1.2
32 = 1.1 (
      PAL
      only)
31 = 1.1 (
      NTSC
      only)
30 = 1.0
```

For example, typing `version` in the Shell on my system produces:

```
Kickstart 40.63, Workbench 40.42
```

This means I'm running OS 3.1.

1.24 OS v3.1

Should I upgrade to OS 3.1?

Short answer: Yes. Do it now.

If you are running
OS

1.3, or anything older than that, upgrading to

3.1

will be like getting a whole new computer. It will look better, work better, and do more. Also, 1.3 won't run many of the newer programs, and it won't get you very far on the Internet.

If you have 2.0, 2.04, or 2.05, the answer is still a definite yes. The look won't be too much different, but the added functionality will be worth it, especially if English isn't your first language and you want Locale support.

Another option is finding a 2.1 kit somewhere and going to that instead of 3.1. However, the price of a new 2.1 kit is high enough that you would be better advised to spend a few extra dollars and go all the way to 3.1. There's no point in staying behind the latest software, and it won't be long before newer versions are out and 2.1 may not be supported much any more.

The upgrade from 2.1 to 3.1 might seem like less of an upgrade, but I would still suggest it in all cases. You can read my comparison review between OS 2.1 and 3.1 in

Amiga Report
magazine issue 2.30

(ar230

.lha
) , which is available on the
Aminet
in the
docs/mags
directory.

Going from 3.0 to 3.1 is a tougher question. (You can't upgrade to 3.0. It came standard with the

A1200

's and A4000's.) It might

not be worth it to pay the full price for a 3.1 kit for such an incremental upgrade. If you intend to develop software, I'd still say definitely upgrade. If you are one of those people who loves to have the latest stuff, then go for it. Otherwise, if it's a choice between a 3.1 kit and perhaps some more

RAM

, then you might be better off with
the RAM for now.

However, you can actually buy the 3.1 software only, and use it with your 3.0 ROM. You only lose a couple of capabilities, and it's a bit cheaper to just get the disks.

1.25 Upgrading the OS

What is involved in an Operating System upgrade?

The Amiga

OS

consists of the software, which comes on floppy disks, and a ROM chip, which you have to install inside the computer. The ROM is known as a

Kickstart

ROM, and it contains some of the system code

and

libraries

, so that it is always available to the system.

In order to upgrade your operating system, you have to replace the ROM chip inside the computer, EXCEPT if you are upgrading to 2.1 from 2.04 or 2.05. OS 2.1 was a software-only upgrade, and you can use either the 2.04 or 2.05 ROM chip with it. There is NO 2.1 ROM chip.

It is also possible to upgrade to the

OS 3.1

software using a 3.0 ROM

chip, but you will lose a few features of the 3.1 upgrade, including the built-in CD-ROM support.

Upgrading an older model

A500

's Kickstart chip may require soldering a

wire between two of the legs on the chip. The chip should, however, come with the wire in place; if it does, you will need to cut it in order to use it on a newer (revision 6+) A500 or on an A2000.

1.26 What OS versions will work?

What versions of the Operating System will work on my computer?

You can upgrade any Amiga to a newer

OS

version by

replacing the ROM chip, or by using a softkick-type program, and installing the new software.

OS 3.1 is available in versions for the A500/A2000, A1200, A600, A3000, and A4000. When you order it you must specify which computer it is for (the A500 and A2000 use the same chip).

The Commodore A1200 and A4000 came with OS 3.0 installed. There are no 3.0 ROMs for other machines.

1.27 device

What is a Device?

A device can be a Physical device, such as a hard disk or a printer, or it can be a Logical device, like a RAM disk, which exists in software. In general, the Amiga doesn't need to care whether a device is Logical or Physical. The Amiga also doesn't make a distinction

between disk Devices and other types of Devices; the difference between a disk Device and any other device is that a disk Device will have a Filesystem installed on it.

Devices are referred to by a unique name followed by a colon. Some examples of devices are:

DF0: The first floppy drive on the system.
DF1: The second floppy drive on the system.
DH0: The first hard drive on the system. (The name may be different.)
PAR: Any device connected to the parallel port.
RAM: The Ram Disk drive, a software-simulated disk drive.
CON: A console window, like the
 Shell
 window.
SYS: A Logical Device referring to the disk you booted from.

1.28 volume

What is a Volume?

A Volume is a disk, or a part of a disk which the system sees as a disk. The important distinction between a Device and a Volume is that a Device refers to the disk drive, while a Volume is the particular disk in that drive. For hard drives, the two are usually interchangeable, because you can't remove a disk from a hard drive, but for floppy disks it is important to remember. A floppy disk can end up in any floppy drive. Volume names, like Device names, end with a colon.

A Volume will have a name, and you can name it anything you want. It is a good idea, as with filenames, to avoid using spaces in the name. If a disk is referred to by its Volume name, the Amiga will look for it in all of the disk drives.

For example, if I have a floppy disk, with the volume name Stuff:, in the first floppy drive, I can get to it by asking for the volume name Stuff: or the device name DF0:. However, it is better to use the Volume name; if I move the disk to the second drive, and ask for Stuff:, the Amiga will still find it. If I ask for DF0:, however, the Amiga will use whatever disk happens to be in DF0: at that moment, if any.

If I ask for the disk Stuff:, and it is not present in any drive, the Amiga will ask me to place the disk Stuff: into any drive, and wait for me to do so. Thus, I know I'm getting the right disk.

1.29 partition

What is a Partition?

A Partition is a part of a disk, which is treated by the Amiga as a separate and distinct

Volume

. If I have a very large hard drive, I can split it up into two or more Partitions, and although they exist on the same physical drive, the Amiga will treat them as though they were separate. They might be DH0: and DH1:, and they will also have their own unique Volume names.

1.30 assign

What is an Assign?

An Assign is a user-created (or software-created) name for a directory or a device, which is treated by the Amiga as a Volume (or Device). Like

Volumes

and

Devices

, Assigns end with a colon.

For example, if I have a directory called DH0:wordprocessing/documents/personal/letters, I can give that directory its own name, such as Letters:. Now, instead of having to refer to it with the long name, I can just use Letters:.

The Amiga creates some Assigns for you when you boot it up, such as:

C: SYS:c, where the standard DOS commands are.

LIBS: SYS:Libs, the library files.

S: SYS:s, where script files are kept.

Along with a few others. Many third-party programs use assigns, so that they know where to find any data files they might need.

You can create your own assigns from the

Shell

, by typing:

Assign Name: directory/to/assign

1.31 .info

What are all these files ending in .info?

The .info files are the icons you see when you open a drawer on the Workbench screen. Every file which has an icon on the Workbench screen

will have a corresponding .info file, with the same name as the file plus the .info extension. The .info file contains the actual imagery used for the icon, positioning information telling Workbench where to place the icon, and some other information, depending upon what type of icon it is.

There are five different types of icon files: Disk, Drawer, Tool, Project, and Garbage. The Garbage type is a special type, used for the Trashcan icon.

Disk

Disk icons are used to represent disks, such as your hard drive, or a floppy disk inserted in the floppy drive. Double-clicking on these icons opens up a window, in which you will see any icons present in the top-level directory of that disk.

Drawer icons represent directories on a disk. Double-clicking on them will open a new window, with the contents of that directory. Again, you won't see anything that doesn't have an icon associated with it, unless you use the View by Names or Show All options on the Workbench menu.

Tool icons are executable programs. Double-clicking on these icons will run the program associated with the icon. These icons can contain various information which is to be passed to the program, called Tool Types. For more information about Tool Types, see the

Workbench
section of this FAQ.

Project icons are used for data files saved from other programs. For example, if you create a document in a word processor, and save it out to the hard drive, it might have a Project icon associated with it. The Project icon will contain the name of the program used to create the file, called the Default Tool. If it does, double-clicking on the icon will load up the program which created the file, and automatically load up the file into the program.

For example, if your saved document was created in a word processor, double-clicking on the icon will load up that word processor program, and then the word processor will load up that document for editing.

1.32 .library

What are all these files ending in .library?

Any file with the extension .library is a shared library file, and should be in your LIBS: directory. These files contain program code which can be shared by multiple programs, and are loaded into memory as they are needed.

The advantage of shared libraries is that programmers don't have to reinvent the wheel when writing software. Many standard functions are implemented in shared libraries, so all they need to do is use them.

The

Operating System

comes with quite a few shared libraries, allowing programmers to use system functions in their programs. Some of the libraries you should have in LIBS: are:

| | |
|-------------------------|-------------------------------------------|
| amigaguide.library | The AmigaGuide hypertext system |
| locale.library | Functions allowing multi-lingual programs |
| asl.library | Contains the standard file requesters |
| datatypes.library | Used by the Data Types system |
| mathieeedoubbas.library | Math functions |

Along with some others. There are quite a few third-party libraries available as well. The casual user shouldn't have to concern himself with these libraries except to ensure that they are installed; any software which requires non-standard libraries will either come with the libraries or provide instructions on where to find them.

1.33 Installer

When I click on an install icon, it says "Can't open your tool Installer". Why?

Installer is a program used to install software onto your hard drive. It's actually a simple programming language itself. It is used to create an installation routine using a standard interface, so that whenever you install a new program everything will look familiar.

Unfortunately, when you install the operating system onto your hard drive, the Installer program is not installed for you. So, any program using an Installer script but not including the program on its floppy disks, expecting to find it in your C: directory, won't be able to find it.

To solve this problem once and for all, find your Workbench Install floppy disk. In the C directory on that floppy you will find the Installer program. Copy it to the C directory on your hard drive.

1.34 Icon Images

How do I change the image used for an icon?

You should have a program in your Tools drawer called IconEdit. You can load an icon image into this program, alter it, and save it.

1.35 Zip/EZ drive icons

I've formatted a Zip/EZ disk, and now I have two icons. What's going on?

If you wrote a Rigid Disk Block (RDB) to the Zip/EZ disk and set the RDB to mount the Zip/EZ disk, then later you decided to use a MountList, go back Into RDPrep and change Mount to NO and save the RDB.

This will not erase the Zip/EZ disk or cause harm, but it will stop the RDB from mounting the Zip/EZ disk and allow the MountList to do so, provided that the only thing you change in RDPrep is whether you want the disk to mount or not.

1.36 shell

How do I open a Shell?

It's quite simple. Just open your boot partition's drawer and then open the System drawer and double-click on the Shell icon.

1.37 General information

General Information.

This is intended for people who don't own an official AmigaDOS manual, like owners of the A500 or early (Commodore) A1200's. This manual was not shipped due to cost savings by Commodore.

AmigaDOS commands are normally invoked from the Shell on a command line. You just type the command and any optional arguments on it. The command names may be typed in upper or lower case letters because AmigaDOS is not case-sensitive. All arguments must be separated by spaces.

The first special case occurs when one of the arguments already contains a space by itself, e.g. the volume name Ram Disk. The solution for these cases is to include the entire argument in double quotes, e.g. "Ram Disk:tempfile" for the file tempfile in the RAM disk.

1.38 Location of Commands

Where are the commands located?

The first place to look is in the C: directory, which is normally

assigned
to sys:C. In other drawers of the
Workbench

(partition)
you will find programs which can also be invoked from the
Shell

. Most
applications can also be launched from a Shell and can be followed by
any appropriate

arguments
.

1.39 Argument Template

What are argument templates?

Just because you don't know the correct arguments that a command
accepts, that doesn't mean that you can't find out. Just type the
command name and a question mark as a single argument.

Example: TYPE ? <return>

You will then get the following line returned, called a template:
FROM/A/M,TO/K,OPT/K,HEX/S,NUMBER/S:

The cursor remains on the same line, so you can enter your arguments
and then press <return> to issue the command.

In the template, all possible arguments are separated by commas.

For every possible argument, you will see a list of letters after
slashes indicating certain properties:

/A this argument must be given, otherwise the command will refuse
to work. In this case, it's the name of the file you want to have
typed out.

/M you can use this argument multiple times.

/K this is an argument consisting of a keyword which has to occur in
this form, followed by the argument. In this case, you can
redirect
the output to the printer via to prt: or to a file via
to filename; or you can get the output with line numbers via
opt n or as a hex dump via opt h.

/S this is a switch where you only enter this name as an argument to
modify the working of the command. In this case, HEX causes a
hex dump, and NUMBER adds line numbers to the output.

/N this indicates that this has to be a numerical argument.

You can see that the names of the arguments in the template are more or less self-explanatory. With a bit of experience you will easily be able to understand the workings of unknown commands just by studying their templates.

The order of arguments on the command line is normally free-form. Of course, if there is a FROM and a TO argument, as in the COPY command, you had better not mix up the order!

If there are ambiguities possible with some arguments you can always precede your argument by its name in the template. And as a further measure, but not a necessary one, you can link the argument name and its actual contents by an equal sign, type: from=s:startup-sequence

1.40 Escape Characters

Using escape characters.

There are several types of characters. Most of these characters are just printable ones, like letters and figures, but several can have very powerful meanings under certain circumstances.

Double quotes and the asterisk.

Earlier, we discussed how double quotes are used to enclose arguments containing spaces. From this you can immediately understand that the quote character itself is normally ignored. ←

So what do you do if you want it to be recognized, as in an ECHO command to print something that already contains quotes? In this situation you must escape the quote sign with an asterisk, as it's called: echo "Here is a quote sign: *"

Note that the '*' produces a '"' in the output, and the trailing quote sign is necessary to complete the argument of the ECHO command.

Other control characters which can be produced by means of the asterisk are:

*e normally a non-printable Escape character (dec. 27, hex \$1D), which can be used to include ANSI Escape sequences in the ECHO or other string-producing commands. The available Escape sequences can be found in the documentation concerning the Amiga printer drivers. (Note: Don't mix this up with Escape sequences found in printer manuals, we are talking ANSI sequences here, not Epson or HP ones!)

*N produces a newline character. This allows you to produce several lines of output with one single ECHO or other string-producing command.

** produces a single asterisk, otherwise it would be ignored

The apostrophe.

Several characters are not normally allowed to occur in filenames, e.g. the colon, as it signifies a

volume

name as part of a file path.

But there are situations where you have to access files containing such characters, or produce them. To do this you just precede the offending character with an apostrophe: TYPE b'/w

This will type the contents of the file b/w.

The backtick.

This is a powerful mechanism. When you include a whole command, with optional arguments, in backticks then you can use this as an argument for another command. The command is first executed and the result is then used as an argument. The EVAL command normally only takes two operands: eval 10 * `eval 3 + 4`

By using the backtick you can actually force the EVAL command to accept more.

1.41 I/O

I/O redirection.

The console output, what gets printed in the

Shell

window, of a

command can be redirected into a file for later use. For

AmigaDOS

before release 2.0, the redirection had to be issued before all ↵

other

arguments

. In more recent versions of AmigaDOS it can be placed later in the command line.

```
list >ram:clist C:
```

This produces a file ram:clist with a listing of all files in C: and their properties.

```
echo "Hello world!" >ram:hello
```

This produces a file ram:hello with the contents Hello world!.

The > sign is used for output redirection. With the < sign, you can force the use of the contents of an existing file as one of the arguments. This is very tricky and can better be handled through the aforementioned backtick mechanism.

Note: there must be no spaces between the redirection sign and its filename.

1.42 lformat

The powerful LFORMAT command.

LFORMAT is an option of the LIST and EVAL commands to allow a customizable output format. E.g. you can use LIST to scan the contents of some directory and use the filenames found in the output string.

Now you can choose this output string to look like another

Shell

command. By means of asterisk escapes

you can even produce multiple

lines/commands per found file (or directory). You can then

redirect

this output to a file and EXECUTE this file afterwards to achieve ↵

a

certain automatic action.

To find out all templates of the commands in C:, you can do this:

```
list c: lformat="echo *"*n%n*"*n%n ?" >ram:x
failat 21
execute ram:x
delete ram:x ; Clean up
```

For every file in C:, this generates an empty line (the first *n), then the name of the file (the first %n). All of this is accomplished by use of an ECHO command. In the next line is the filename itself followed by a question mark.

All of this is redirected to the file ram:x. Before execution, the error level is set to 21, because during execution you will be prompted to press the Return key for every command (most commands will break a script with an error when an argument is not provided.)

The %n generates the filename in the LFORMAT string. Similarly,

```
%p = relative path, %l = file length (or Dir for a directory),
%a = protection bits, %b as %l but in blocks, %d = file date,
%e = file extension (after a dot), f% = absolute path,
k% = key (header) block, %m = file name without (last) extension,
%n = file name, %s = file name, %s%s = relative path + file name,
%t = file time
```

1.43 AmigaDOS commands

What are some of the most basic AmigaDOS commands I should know?

dir (this will display the files that are in the current directory)

cd <dir or

device

name> (this will switch the

Shell

to the specified

directory name or device. Remember, a device must always be followed by a colon (:). This command is not necessary when using

Workbench

2.x+. You can just type the directory or device name at the Shell prompt.)

avail (this will display the

RAM

available in your machine)

copy from <name of file dir or device> to <destination>

(this command allows you to copy files from one place to another.)

delete <name of dir or file> (this command will delete the specified file(s) from the device.)

ed <filename> (this command will invoke the Amiga's editor program so that you can modify an existing script, or create a new one.)

info (displays information about all mounted devices on your system.)

makedir <name> (this command will create a directory of the specified name on the current device.)

why (this will print out an error message as to why the previous command failed.)

These are only the most basic

AmigaDOS

commands. See your manual for

further commands and possible options to the above commands.

1.44 Floppy drive clicking

How do I make the floppy drive stop all that clicking?

There are quite a few easy solutions to the annoying drive click. Here is a list of what I found on

Aminet

:

clicknot373.

```

        lha
        disk/misc
        3K
DOSPrefs22.lha  util/boot  25K
KillClick2.lha util/boot   3K
NoClick.lha    util/boot   4K
NonClick-106.lzh util/boot  21K
tdx.lha        util/boot   6K
NoClick10.lha  util/cdity 10K
SetNoClick.lha util/misc   6K

```

1.45 Library overwriting

How do I keep lame install scripts from overwriting my LIBS: with older versions of libraries than I already have? ←

Make a new directory called NewLibs, like this:

```

mkdir
sys:NewLibs

```

Load your S:startup-sequence into a text editor, such as C:

```

ed
, and

```

find the line:

```

Assign
>NIL: LIBS: SYS:Classes ADD

```

Change this line so it reads:

```

Assign >NIL: LIBS: SYS:NewLibs SYS:Libs SYS:Classes

```

Now (after you reboot your computer, of course) any program which installs

```

libraries
in LIBS: will put them in your NewLibs directory
instead of the main Libs directory, so your old library files won't be
overwritten. The newly installed version will be found first when
libraries are loaded. Once you determine that the library that was
installed is newer, or that you didn't already have it, you can move
it to the Libs directory like this:

```

```

copy
SYS:NewLibs/whatever.library SYS:Libs

```

```

delete
SYS:NewLibs/whatever.library

```

Nowadays, though, most install scripts will check the version first

before overwriting your files. However, there are still some naughty programmers out there that ignore this golden rule, so be careful.

1.46 version

How do I know what version a library is?

Use the

```
AmigaDOS
  Version command. Like this:
```

```
version whatever.library
```

This will give you the version number of the
library

. If you have more
than one with the same name, for example if you use the technique in
the

```
previous answer
, you will get the version of the one found first,
or if one is loaded in memory you will get the version of that one.
```

In that case, to get the version of a specific library file, use the
full path name, and the FILE switch for the version command like this:

```
version SYS:Libs/whatever.library FILE
```

That will give you the version of the library in the main Libs
directory, regardless of any other versions you may have in other
directories.

1.47 Zip/EZ drive

Can I use an Iomega Zip or SyQuest EZ drive on my Amiga?

Yes, you can use the SCSI version of either drive, if you have a SCSI
controller, and it will work just like any other SCSI drive. You can
get a software package called Zip Tools from HiSoft, which will make
life a little easier with the Zip drive, but you don't actually need
it. There are no such programs for the EZ drive. Just format the drive
with HDToolbox, or another hard disk partitioning program, and it will
work.

You can NOT use the parallel port version of either drive on the
Amiga. No, it is not due to lack of driver software. The Amiga's
parallel port is physically different from the PC's, so it is not
possible to use the parallel Zip or EZ drive.

1.48 Faster... faster... faster!

What's the most cost-effective way to make my unexpanded Amiga ←
faster?

If you don't have any

FAST
RAM, which an unexpanded Amiga
500
, 600,

1200, or 2000 won't have, adding some is the best single upgrade you
can make to your machine. Adding 4 MBs of FAST RAM to a standard
A1200 with 2 MBs of

CHIP

RAM will double the speed of the machine, at
least in interactive response.

Keep in mind, though, that if you add a RAM-only expansion to the
trapdoor of an A1200, you won't be able to install an accelerator in
there without removing the RAM board. The best plan is to do both at
the same time.

1.49 Hard drives for A1200

What kind of hard drives work with the built-in controller in the ←
A1200?

The

A1200

has an IDE controller built in. It has a 44-pin connector
which is designed for 2.5 inch IDE drives. There are also adaptors available for ←
3.5 inch
drives. The power for the larger hard drive is then taken from the floppy drive ←
power
connector. Be sure that the hard drive you want to install is slim enough to fit ←
into your
A1200.

So, it is possible to use 3.5 inch drives with an A1200; however, there have been ←
some power
supply and heat related problems reported by some users. If you want to remain on ←
the safe
side, stick to a 2.5 inch hard drive, otherwise you can opt for a, usually cheaper ←
, 3.5 inch
drive.

1.50 simms

My accelerator can take 72-pin SIMMs. What kind do I need? What about
parity & EDO?

If you have a board which can use standard 72-pin SIMM modules, you
can use any standard PC SIMMs. Check your hardware documentation to

see if a specific minimum speed is needed, but in most cases 70 ns should be fast enough.

Parity makes no difference in the Amiga, since the Amiga doesn't use it. You can use a parity or non-parity SIMM.

EDO makes no difference in the Amiga, since the Amiga doesn't use it. You can use EDO or standard SIMMs, but you won't see any advantage with EDO.

1.51 mui

What is MUI?

MUI stands for Magic User Interface. MUI is a system for creating and maintaining graphical user interfaces. It allows programmers to create a powerful GUI easily and quickly, with far less effort than it would take to code it from scratch. It also allows the user to customize the interface to personal taste.

Programs which use MUI require the MUI user system to be installed on the user's machine. The archive comes with an Installer script. It can be found on

```
Aminet
, at
dev/gui/
muixxusr
.lha
(xx = latest version
```

number.)

MUI is shareware. The registered version allows you to configure the GUI's of any MUI programs almost any way you want; the unregistered version has limited configuration options, but is completely usable. You are allowed to use the unregistered version as long as you want; you only have to pay if you want the extra options.

1.52 Arguing about MUI is silly!

Why is everyone always arguing about MUI?

Short answer: Because they don't have anything better to do.

Basically,

```
MUI
```

has its good and bad points. People on both sides like to argue about it; the pro-MUI camp seems to feel that they can convince everyone in the entire world to use MUI, while the anti-MUI people try to blot it out of existence. Neither side will succeed, and the arguments have never done any good and will never do any good.

Here are the arguments on both sides, so that you can forever ignore MUI flamewars on the newsgroups:

Pro-MUI:

- MUI looks nice.
- MUI standardizes the user interface from program to program.
- MUI offers features not present in GadTools or BOOPSI interfaces.
- MUI code is shared among multiple MUI programs running at the same time, saving on memory.
- MUI allows easy GUI development, making the software development process faster, and allowing the programmer to concentrate on the important parts of the program.

Anti-MUI:

- MUI wastes lots of hard-drive space.
- MUI is big and uses entirely too much memory.
- MUI is very slow, especially on an unaccelerated machine.
- MUI sometimes doesn't give the user instant feedback.
- You have to have the MUI software installed in order to use any MUI programs.

There. Now you know. Now you can avoid participating in useless MUI flamewars.

1.53 Directory Opus

What is Directory Opus?

Directory Opus is a file-management program, and much more. It can be used for anything from straightforward file copying and moving, to running programs, and any number of other things. In fact, the latest version, 5.x, can be installed as a replacement for

Workbench

.

Opus is highly customizable. If you want to spend the time with it, you could make it do just about anything you like. You can create banks of buttons, and attach actions to those buttons, including built-in actions, running external programs, ARexx scripts, FTP from one lister window to another, look inside of

LhA

archives and read

text files or pull single files out of the archive without actually unpacking the whole mess, etc.

It is a commercial program by Jon Potter & GPSoftware, and costs somewhere around US\$80. An older version of Directory Opus 5 can also be found on the AminetSet 4 CD. It should be owned by every Amiga user!

You can read my review of Directory Opus 5.6 in
Amiga Report
magazine

issue 5.07 (ar507.lha), which is available on the
Aminet
in the

docs/mags
directory, or you can read it in the October 1997
issue of
Amazing Amiga Computing
magazine.

1.54 executive

What is Executive?

Executive is a task-scheduler. It manages the
multitasking
of the
Amiga in a better way than the
operating system
does, giving more CPU
time to interactive programs and less to background programs, so that,
even when you are running many programs in the background, you can
still use your computer without it bogging down. It even, in my
experience, increases the interactive response time of the computer.

Executive is not a hack; it is system-friendly. It is shareware. You
can obtain the demo version from
Aminet
, at
util/misc/
Executive
.lha
.

1.55 ixemul.library

What is ixemul.library?

The ixemul
.library
is a shared library which emulates the functions of
a Unix system, so that many Unix programs can be ported to the Amiga
with few or no changes. Unix programs ported using this library will
require that you have the library installed on your system. If you're
interested in any of these programs you can just install the library
in your LIBS: directory and they will work.

ixemul also comes with another library, ixnet.library, which handles
networking with AmiTCP, Inet225, Miami, etc.

1.56 ade

What is ADE?

ADE stands for Amiga Developers Environment. It is a collection of software tools, most of which are ports of GNU Unix software. Although the ADE is mainly meant for software developers, it contains many useful programs for users as well, especially

Shell

users. If you like

Unix you will find many familiar programs in ADE.

The main ADE ftp site is [ftp.ninemoons.com](ftp://ftp.ninemoons.com), in the `pub/ade` directory. The most recent snapshot can be found in the directory `current`, which is a link to the actual location.

1.57 modems

What kind of modems will work with the Amiga?

Any standard PC modem will work. The one thing you have to keep in mind is that many newer PC's have 9-pin serial ports, and your Amiga has a 25-pin port. So, you will need a cable to plug in to a 25-pin port. Since most modems have 25-pin ports, the cable you will most likely need is a 25-pin-to-25-pin modem cable. However, if you have an

ioExtender

or

MultiFace

card in your Amiga then you probably

already have a 9-pin serial port connector. You can read my review of the ioExtender board in

Amiga Report

magazine issue 2.33 (ar233

.lha

),

which is available on the

Aminet

in the

docs/mags

directory.

1.58 Serial port speed

How fast can I make the serial port go?

The Amiga's serial port is outdated, and not as fast as a PC's port. Actually, the biggest problem is in the buffering; the Amiga's serial port has only a one-byte buffer.

However, you should be able to run the serial port at 38,400 bits per second with no problem (if you have a 68000 processor this may still

be too fast, but has been known to work fine). Use a 4-color screen, because the more colors you use, the more processor time is used to display the screen (unless you are using a graphics board).

If your machine is very fast, you can probably drive the modem even faster. Try it out, and see what speed gives you no errors. I can run 57,600 on my A2000, with an 030, most of the time before I purchased an ioExtender.

Purchasing a fast serial port card, such as the ioExtender or MultiFace card, will enable you to drive your modem's serial port connection at rates as high as 115,200. This is highly recommended if you are planning on using a 28.8k or 33.6k modem.

1.59 Serial port preferences

But the Serial Preferences editor doesn't go up that high!

Forget about the Serial Prefs. I've never even touched mine. Set the port speed with whatever communication software you are using and it will override the settings in Serial Prefs.

1.60 lha

What is LhA? How do I use all these files with .lha extensions?

LhA is a compression and archiving program. It takes a bunch of files, squashes them, and stores them all in one file. LhA archives have the extension .lha on the filenames.

To decompress them you need the LhA program. It is available on

Aminet
at
util/arc/

LhA_e138.run. This is a self-extracting archive; execute it as a program and it will decompress for you. Then take the LhA program and put it in your C: directory, or wherever else you like to keep CLI programs (but make sure it's in your DOS search path).

To decompress an LhA archive from the

Shell
, type:

```
lha x <archive-name>
```

1.61 aminet

What is Aminet?

Aminet is the central source for Amiga shareware, freeware, public domain, and demo software. Just about every non-commercial Amiga program can be found on Aminet, as well as demo versions of many commercial products.

The main ftp site for Aminet is ftp.wustl.edu, and the archive is

```
mirrored
    at other sites all over the world, so you can use whichever
is closest to you. All of the mirror sites are
    organized
    the same way,
so any files on Aminet will be referred to by their place in the
directory structure.
```

The Aminet archive is also available on CD-ROMs, which should be available from most Amiga dealers.

1.62 Aminet mirrors

Where are the Aminet mirror sites?

Here is the list of full mirrors, taken straight from Aminet

```
(pub/aminet
):
```

| Country | Address | IP Address |
|-----------|------------------------|-----------------|
| USA (MO) | ftp.wustl.edu | 128.252.135.4 |
| USA (AZ) | ftp.ninemoons.com | 165.247.33.6 |
| Australia | archie.au | 139.130.23.2 |
| Italy | ftp.unina.it | 192.132.34.17 |
| Germany | kelly.uni-paderborn.de | 131.234.128.206 |
| Germany | ftp.uni-paderborn.de | 131.234.2.42 |
| France | ftp.grolier.fr | 194.51.174.67 |
| UK | sunsite.doc.ic.ac.uk | 155.198.1.40 |

1.63 Aminet hierarchy

How is Aminet organized?

Aminet is divided into directories which contain subdirectories within

them, with the exception of the new, priv, and recent directories.

Top-level directories in

Aminet

:

| | |
|---------|------------------------------------|
| biz/ | Business software |
| comm/ | Communications |
| demo/ | Gfx and sound demos |
| dev/ | Development software |
| disk/ | Disk/Harddisk tools |
| docs/ | Text documents |
| game/ | Games |
| gfx/ | Graphics |
| hard/ | Hardware |
| info/ | General FTP information |
| misc/ | Miscellaneous |
| mods/ | Music modules |
| mus/ | Musical software |
| new/ | Upload area |
| pix/ | Pictures |
| priv/ | Private uploads |
| recent/ | Files uploaded the last seven days |
| text/ | Text related |
| util/ | Utilities |

1.64 netscape

Can I run Netscape Navigator?

No.

Why the hell not?

Netscape doesn't think it's important to make an Amiga version.

No, really, can I run Netscape Navigator?

Well, actually, you can run the Macintosh version, if you have the

Shapeshifter

Mac emulator installed on your machine.

1.65 Amiga browsers

Netscape is evil. I want an Amiga browser.

There are several good web browsers available for the Amiga. Some of the most popular are: AWeb-II, VoyagerNG, and Ibrowse.

1.66 Amiga Report magazine

What is Amiga Report magazine and how can I get it?

Amiga Report magazine is a hypertext-based electronic computer magazine. It contains current news, commentary, information, reviews, and articles pertaining specifically to the Amiga. The magazine is read on six continents, with followings in such unusual Amiga enclaves as Brazil, South Africa, and Kiev.

It is distributed via a direct Email list, the Web, Aminet, and commercial online services, as well as hundreds if not thousands of BBSes worldwide.

It has an estimated 12,000 readers, although some think it might be up to 3 times that. Amiga Report is almost always the top download on Aminet when an issue is released.

Here are the different ways you can access the magazine:

Via the Mailing List.

If you have an Internet mailing address, you can receive Amiga Report in UUencoded form each week as soon as the issue is released. To be put on the list send Email to majordomo@ninemoons.com

Your subject header will be ignored. In the body of the message enter: subscribe areport

The system will automatically pull your Email address from the message header.

Your account must be able to handle mail of any size to ensure an intact copy. For example, many systems have a 100k limit on incoming messages.

IMPORTANT NOTICE: PLEASE be certain your host can accept mail over 100k! We have had a lot of bouncebacks recently from systems with a 100k size limit for incoming mail. If we get a bounceback with your address in it, it will be removed from the list. Thanks!

Get it from Aminet.

To get Amiga Report from Aminet, simply FTP to any Aminet site, CD to

docs/mags
. All the back issues are located there as well.

Sites: ftp.netnet.net, ftp.wustl.edu, ftp.luth.se, ftp.doc.ic.ac.uk

Get it on the World Wide Web.

Amiga Report can also be read with a WWW browser

(in either AmigaGuide or HTML form). Reading Amiga Report with a browser removes the necessity to download it. It can also be read using programs found in UNIX sites, such as LYNX.

Simply tell your browser to open one of the following URLs:

```
http://www.omnipresence.com/Amiga/News/AR/
http://www.pwr.wroc.pl/AMIGA/AR/
http://mm.iit.uni-miskolc.hu/Data/AR
http://www.fhi-berlin.mpg.de/amiga/ar/
http://ramiga.rnet.cgi.com/~AR
http://www.sci.muni.cz/ar/
http://metro.turnpike.net/P/panther/main.html
http://www.lysator.liu.se/amiga/ar/
http://ArtWorks.apana.org.au/AmigaReport.html
http://www.vol.it/mirror/amiga/
http://www.cucug.org/ar/ar.html
http://www.acropolis.net/clubs/amiga/amigareport/
http://www.bengala.saccii.net.au/ar/main.html
```

The following Amiga Report sites also have a mailto form, allowing you to mail to Amiga Report from the web site. <Make sure your browser has forms capability>.

```
http://www.pwr.wroc.pl/AMIGA/AR/
http://www.sussex.ac.uk/Users/kccil
```

1.67 Reading Amiga disks with a PC

Can I read Amiga disks on a PC?

You can't make a PC read Amiga disks. The format is physically different, and anyway there is no PC software to support it.

1.68 Reading PC disks with an Amiga

Well, then, can my Amiga read PC disks?

Of course. The Amiga is much more flexible than the PC.

If you have

OS

2.1 or later, you have a program called CrossDOS, which allows you to read, write, and format MS-DOS disks. If you have a standard, double-density floppy drive (880k), you will only be able to use double-density DOS disks (720k). If you have a high-density floppy drive (1.76 MB) you can use high-density DOS disks (1.44 MB) too. If you are going to be transferring a lot of files from Amiga to DOS and back again, a high-density floppy drive would be a good investment because that is the standard on the PC, and of course because they hold almost twice as much information.

In order to use CrossDOS to read and write DOS disks, you will first need to mount the

device

. If you look in the drawer called Storage on your system hard drive, you will see another drawer called DOSDrivers. Inside there should be an icon called PC0.

Double-clicking on this icon will mount the PC0: device. Now, if you install an MS-DOS floppy disk into your first floppy drive (DF0:) it will appear as PC0: and you will be able to use it just like any other floppy disk. Of course, you have to limit your filenames to the eight-character plus three-character extension (8.3) used by MS-DOS.

If you want the PC0: device to be mounted automatically every time you boot your Amiga, all you need to do is move the PC0: icon to the other DOSDrivers drawer, located in the Devs drawer. If the icon is there, it will be mounted for you whenever you boot.

1.69 Reading Mac disks with an Amiga

Can the Amiga read Macintosh disks?

Yes, but it's a little more complex than PC disks. There are commercial packages such as CrossMac which will allow you to read Mac disks. However, the older Mac double-density disk drives used a proprietary format which is not readable using a standard floppy drive; to read these you will need a special Mac drive.

High-density Mac disks will be readable with a standard Amiga high-density floppy drive, using CrossMac or other software.

1.70 Transferring files from an Amiga to a Mac, and vice-versa

Can I transfer files from Amiga to Mac and vice-versa without getting special software like CrossMac? ↔

Yes. This is actually the easiest way to get files from Amiga to Mac and back again. The Macintosh can read MS-DOS disks, and so can the Amiga, so all you need to do is put your information on an MS-DOS disk for the transfer.

On the Amiga side, proceed according to the instructions for reading

and writing MS-DOS disks. On the Mac side, if you are using System 7.5 or later, the system should be set up to read MS-DOS disks automatically. Under System 7.0, you need to use the Apple File Exchange program to transfer the files from the MS-DOS disk to the Mac hard drive.

1.71 Transferring graphics from an Amiga to a PC or Mac

When I transfer graphics from the Amiga to the PC/Mac, they end up squashed! When I transfer them from a PC/Mac to the Amiga, they end up elongated vertically! What do I do?

The reason for this is because the Mac and the PC use square pixels, while the Amiga uses rectangular pixels the same as video images. Pictures transferred from one to the other will end up with a different aspect ratio.

Going from the PC/Mac to the Amiga, the pictures will end up looking taller than they are supposed to. Use an image processing program, on either system, to scale the image vertically to 83% of the original height.

If you're going in the other direction, scale vertically to 117% of the original height.

1.72 Transferring text from an Amiga to a PC

When I transfer a text file from the Amiga to the PC, it comes out ←
all
messed up, like it doesn't know where the lines are supposed to end. What do I do?

The Amiga uses a Linefeed character (LF) to indicate End-Of-Line, like any decent computer should. MS-DOS and Windows, however, use a Carriage Return followed by a Linefeed (CR/LF).

The

CrossDOS
program on the Amiga knows about this. Before you transfer your file to the MS-DOS disk, you need to enable Text Translation. Go to the Tools drawer, open the Commodities drawer, and double-click the CrossDOS icon. A window should pop up. Select PC0:, and check the boxes for Text Translation and Text Filtering. Now, when you save your Amiga text file to the MS-DOS disk, it will have the proper end-of-line characters.

1.73 shapeshifter

What is Shapeshifter?

Shapeshifter is a software Macintosh emulator. It is shareware, and the demo version is available on

Aminet

. It will allow you
to run Mac software on your Amiga.

To run Shapeshifter you will need: an 020 or better processor, at least 4 MBs of

RAM
(though at least 8 would be nice),
OS
2.1 or

later, and a

Macintosh ROM

image file. If you are using an 020 or 030 processor you can use a 512K Mac ROM; an 040 or 060 will need a 1 MB ROM. Of course, you will also need the Mac OS System software.

To read Macintosh floppies, which are almost all high-density these days, you'll need a high-density floppy drive. Also, the graphics will not be very fast without a graphics board installed.

These are fairly hefty hardware requirements, but bear in mind that this gives you a fully-functional Macintosh inside your Amiga.

1.74 Mac ROM

What? Where do I get a Mac ROM from?

Shapeshifter

comes with a Mac program which captures the ROM image into a file for use with the emulation. You could grab the image from a friend's Mac, or from a machine at your school, but of course that would be illegal.

Your best bet, I would think, would be to purchase a Mac ROM from an Apple dealer. Of course, you need a complete, working Mac to grab the image. So, having fulfilled your legal obligation by buying the chip, now go and grab the image from whatever Mac you can find. I think this would be legal, but I take no responsibility if Apple breaks down your door. :-)