

AmigaOS4.0 Pre-Release Installation Guide

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Section 1. Updating your Firmware

In order to install this Developer pre-release of OS4 on your AmigaOne you must update its firmware (U-Boot) to V1.0.0, dated 12-Apr-2004 (or later).

If you know that your firmware ROM is write protected, then please contact your Amiga dealer to arrange for it to be replaced with an unprotected ROM before proceeding.

The update process should be able to detect if your firmware ROM is write protected and should halt if it cannot be updated.

Located on the AmigaOS4.0 Developer pre-release CD, in the Firmware directory, are the required images to update your U-Boot firmware.

Click here for instructions on how to create these images.

There are two versions available. One is for updating from U-Boot version 0.0.1 (September 10th, 2003), the other is for updating from version 1.0.0 (December 2003 or later).

Please ensure you use the correct version.

For example:-

For updating from "10th September 2003" U-Boot, use the "From 0.1" image.

For updating from "22nd December 2003" or later U-Boot, use the "From 1.0" image.

If you are unsure what version of U-Boot you have then perform the following:-

Press any key when the "Press any key to interrupt autoboot:" message appears on screen.

It should look like this:-

```
Device 0: Model: Maxtor 90650U2 Firm: MA540RR0 Ser#: C203166C
          Type: Hard Disk
          Capacity: 6199.1 MB = 6.0 GB (12695760 x 512)
Device 1: not available
Device 2: Vendor: E-IDE Prod.: PCCD048 Rev: U22P
          Type: Removable CD ROM
          Capacity: not available
Device 3: not available
Detected PS/2 Mouse Port.
AT Keyboard initialized!
USB: scanning bus for devices... 1 USB Devices found
No Catweasel controller (0xe1594, 0x0001) attached
Press any key to interrupt autoboot: 5
```

The U-Boot preferences count down will then start - allow this to complete without interrupting.

It should look like this:-

```
Booting. Press ENTER for boot select, any other for Preferences
```

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You should now see the U-Boot command prompt "]"
Type **ver** and press Enter.
It should look like this:-

```
USB: scanning bus for devices... 1 USB Devices found
No Catweasel controller (0xe1594, 0x0001) attached
Press any key to interrupt autoboot: 5

] ver

U-Boot 1.0.0 (Feb 11 2004 - 21:01:00)
]
```

You should now have identified which firmware update to use. If you are ready to proceed then use the procedure outlined above to interrupt the U-Boot sequence. Insert the Firmware update CD into your CD-ROM drive and then at the U-Boot "]" prompt type:-

```
ide reset
diskboot 500000 X:0 ; bootm *
```

* Where X is either 0, 1, 2 or 3 depending on your CDROM config.

```
CDROM as Primary Master Type: diskboot 500000 0:0 ; bootm
CDROM as Primary Slave Type: diskboot 500000 1:0 ; bootm
CDROM as Secondary Master Type: diskboot 500000 2:0 ; bootm
CDROM as Secondary Slave Type: diskboot 500000 3: ; bootm
```

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If you are unsure about what diskboot command to use then take a look at the --Disk Summary-- output, which is displayed when you first power on your AmigaOne. This will show you which Device number your CD-ROM is attached to. The Device number is the same number you should use in the diskboot command. From the example below you can see that the CD-ROM is on Device 2, so you would use the "diskboot 500000 2:0 ; bootm" command.

It should look like this:-

```
---- Disk summary ----
Device 0: Model: Maxtor 90650U2 Firm: MA540RR0 Ser#: C203166C
        Type: Hard Disk
        Capacity: 6199.1 MB = 6.0 GB (12695760 x 512)
Device 1: not available
Device 2: Vendor: E-IDE Prod.: PCCD048 Rev: U22P
        Type: Removable CD ROM
        Capacity: 9.0 MB = 0.0 GB (4657 x 2048)
Device 3: not available
]
```

If you have created a Floppy Disk updater under linux then at the U-Boot prompt "]" insert the disk into the Floppy Disk drive and type:-

```
fdcboot ; bootm
```

It is also possible to update your Firmware via a TFTP Session.

Firstly make sure that the "serverip" U-Boot environment variable is set to the IP address of the server you want to get the image from, for example: 192.168.0.5

See the Next Section for instructions on updating U-Boot variables before proceeding.

At the U-Boot "]" Prompt type:

```
setenv serverip 192.168.0.5 *
```

* Replace this IP address with the IP address of your TFTP Server.

Make sure the server is running a TFTP Server.

Copy the Floppy Firmware install file "updater.image" from the AmigaOS4.0 Developer pre-release CD into a directory on the TFTP Server that the TFTP program has access to. This will be the file that you are going to run over TFTP.

At the U-Boot "]" Prompt type:

```
tftpboot 500000 updater.image
```

This should then run the updater program and give you the same output for the standard floppy version.

The Firmware update will then load from CD, Floppy or TFTP server and after a few seconds you will be presented with the following message

It should look like this:-

```
*****
*  ATTENTION!! PLEASE READ THIS NOTICE CAREFULLY!  *
*****

This program will update your computer's firmware.
This process has certain risks and might fail,
Which renders your machine unusable until you
Return the ROM to your dealer for replacement or
Reflashing. Some ROM's might have partial protection
against overwriting; in this case, the ROM will also
be unusable afterwards.

(more: press any key)
```

Press any key to continue.
You must type the letters "o" & "k" in that order to confirm you wish to proceed.

```
(more: press any key)
This program will try to find out if your machine can
be reflashed or not, but this test might yield a
positive result and still fail to do so.

If you want to do the upgrade anyway, you are required
to enter the letters 'o' and 'k' now. If you do so, you
accept the responsibilities. If you don't want to do that
remove any floppies now and reset the machine.
```

The update will go through an erasing process and then through an update process. Once completed there will be a count down of 5 seconds, after which your AmigaOne will be rebooted.
Please ****DO NOT**** turn off your AmigaOne during this update as it could render your firmware unusable and your AmigaOne *unbootable*.

If you are not completely confident about doing a U-Boot flash update then contact your Amiga dealer, who will advise you.

Section 2. Configuring U-Boot Parameters

Your AmigaOne firmware will now be at the correct version for booting the AmigaOS4.0 Developer pre-release CD.

But first you need to make a few environment and preference changes.

Please ensure that you have interrupts set to "level" and have set your disk boot device order in the U-Boot Menu.

Interrupt the boot sequence, as described in Section 1. or if you are already at the U-Boot "]" prompt type **menu** and press Enter.

Again the U-Boot preferences countdown will start, please interrupt it by pressing any key, except Enter.

It should look like this:-

A screenshot of the U-Boot boot screen. The text "Booting. Press ENTER for boot select, any other for Preferences" is displayed in a monospaced font. Below the text is a large, dark, textured rectangular area, likely representing a progress bar or a placeholder for a logo. The entire screenshot is enclosed in a black rectangular border.

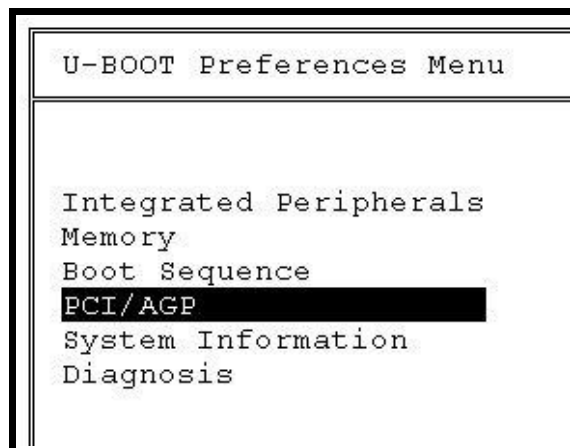
```
Booting. Press ENTER for boot select, any other for Preferences
```

The U-Boot menu should then appear.

The menu is navigated by the use of cursor keys and the Enter key to select.

Use the Esc key to return one level and to quit when at the main menu.

It should look like this:-

A screenshot of the U-Boot Preferences Menu. The title "U-BOOT Preferences Menu" is at the top. Below it is a list of menu items: "Integrated Peripherals", "Memory", "Boot Sequence", "PCI/AGP", "System Information", and "Diagnosis". The "PCI/AGP" item is highlighted with a black background. The screenshot is enclosed in a black rectangular border.

```
U-BOOT Preferences Menu

Integrated Peripherals
Memory
Boot Sequence
PCI/AGP
System Information
Diagnosis
```

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Use the cursor keys to navigate to PCI/AGP and then press Enter.
The PCI/AGP submenu will then appear. Use the cursor and Enter keys to change the "Trigger By" settings to "Level".
It should look like this:-

```
PCI/AGP

- PCI Interrupt A -----
IRQ Level      :IRQ 9
Trigger by     :Level
- PCI Interrupt B -----
IRQ Level      :IRQ 10
Trigger by     :Level
- PCI Interrupt C -----
IRQ Level      :IRQ 11
Trigger by     :Level
- PCI Interrupt D -----
IRQ Level      :IRQ 7
Trigger by     :Level

- AGP Bridge -----
AGP Bus        :on
Sideband enable :off
AGP Speed      :2x
```

Press the Esc key to return to the main menu.
It should look like this:-

```
U-BOOT Preferences Menu

Integrated Peripherals
Memory
Boot Sequence
PCI/AGP
System Information
Diagnosis
```

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Use the cursor keys to navigate to "Boot Sequence" and press Enter. The Boot Sequence submenu will appear. Use the cursor and Enter keys to change the "Boot Devices" to the following. It should look like this:-

```
Boot Sequence

Boot Device 1      :IDE Disk
Boot Device 2      :IDE CDROM
Boot Device 3      :Floppy
Configuration      :Default

Initial Boot delay :3 seconds

Boot arguments for AmigaOS:debuglevel=0
Boot arguments for Linux :root=/dev/ram rw

Network Boot Options
```

Press the Esc key to return to the main menu. It should look like this:-

```
U-BOOT Preferences Menu

Integrated Peripherals
Memory
Boot Sequence
PCI/AGP
System Information
Diagnosis
```

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Use the cursor keys to navigate to "Integrated Peripherals" and press Enter. The "Integrated Peripherals" submenu will appear. Use the cursor and Enter keys to change the "PAR Port Mode" to "ECP". It should look like this:-

```
Integrated Peripherals

Serial 1 Address      : 0x3F8
Serial 2 Address      : 0x2F8

PAR Port Mode         : ECP
PAR Port Address      : 0x378

USB Port 0/1          : on
USB Port 2/3          : off

Internal IDE Controller:Both
```

Press the Esc key to return to the main menu. It should look like this:-

```
U-BOOT Preferences Menu

Integrated Peripherals
Memory
Boot Sequence
PCI/AGP
System Information
Diagnosis
```

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Press the Esc key to exit the main menu.

Use the cursor keys to navigate to "Save Settings and Exit" and press Enter.

It should look like this:-

```
Intergrated Peripherals
Me
Bo Save settings and exit
PC Use settings for this session only
Sy Leave without saving
Di Return to menu
  Abort boot and enter U-Boot shell
```

Once you have saved the changes you need to change some U-Boot env parameters.

You will be returned to the U-Boot "]" Prompt.

At the "]" U-Boot prompt type (in lower case only):-

```
setenv stdout vga
setenv autostart yes
setenv preboot
setenv bootcmd "menu; run menuboot_cmd"
saveenv
```

****DO NOT**** reset your AmigaOne at this point.

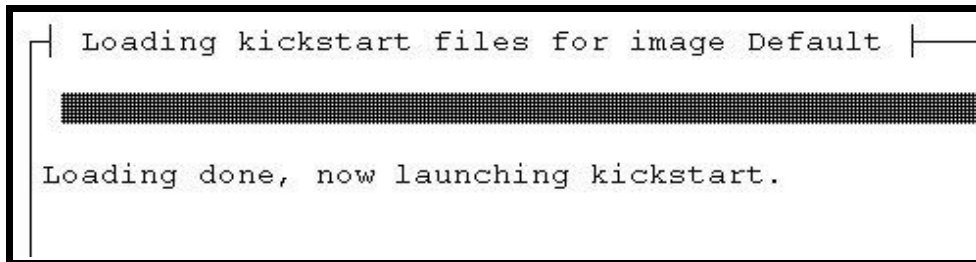
Section 3. Installation CD

Insert the AmigaOS4.0 Developer pre-release CD in your CDROM drive. At the UBoot "]" prompt type:

```
ide reset  
setenv boot1 cdrom  
boota
```

You will notice the AmigaOS4.0 kernel modules will begin loading from the Developer pre-release CD.

It should look like this:-



```
| Loading kickstart files for image Default |  
|-----|  
Loading done, now launching kickstart.
```

Once the kernel (kickstart) has loaded, your screen will go blank and your monitor may go onto standby.

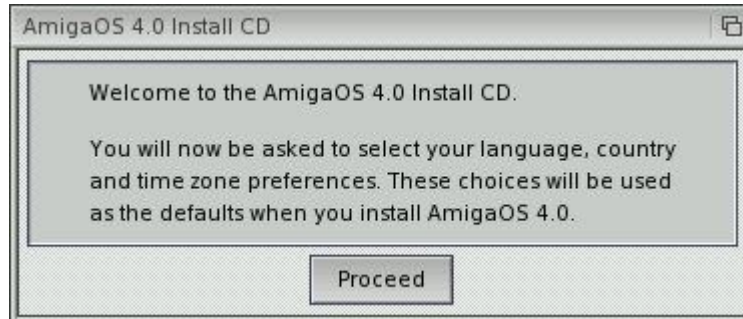
The CD drive is still being accessed at this point, after about one minute you will be presented with a welcome message on a White background.

Section 4. Locale Preferences / Input Preferences

Firstly you will be presented with a "Welcome to AmigaOS4.0 Install CD" greeting. Follow the simple instructions in the requester.

Click "Proceed".

It should look like this:-



To change the language first click "Clear languages".

Select your language, from the list.

It should look like this:-

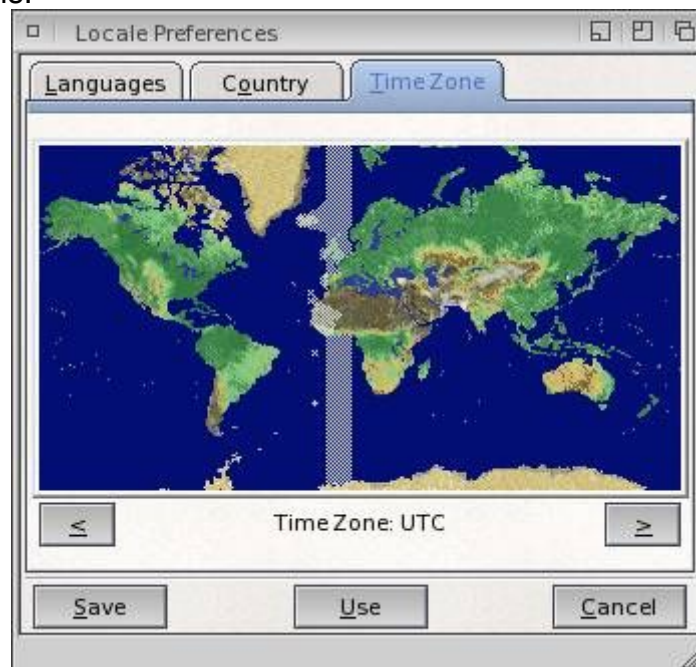


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Click on the Country tab.
Select your country from the list.
It should look like this:-

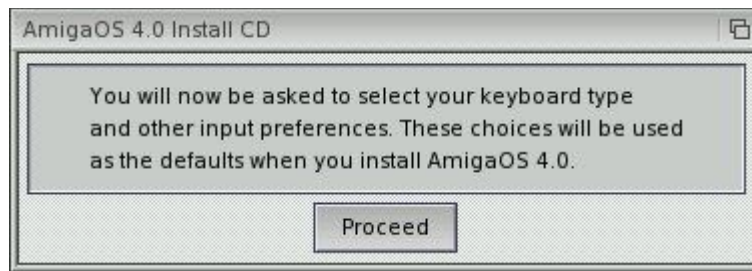


Click on the "Time Zone" tab.
Select your time zone.
Click "Use" to continue.
It should look like this:-

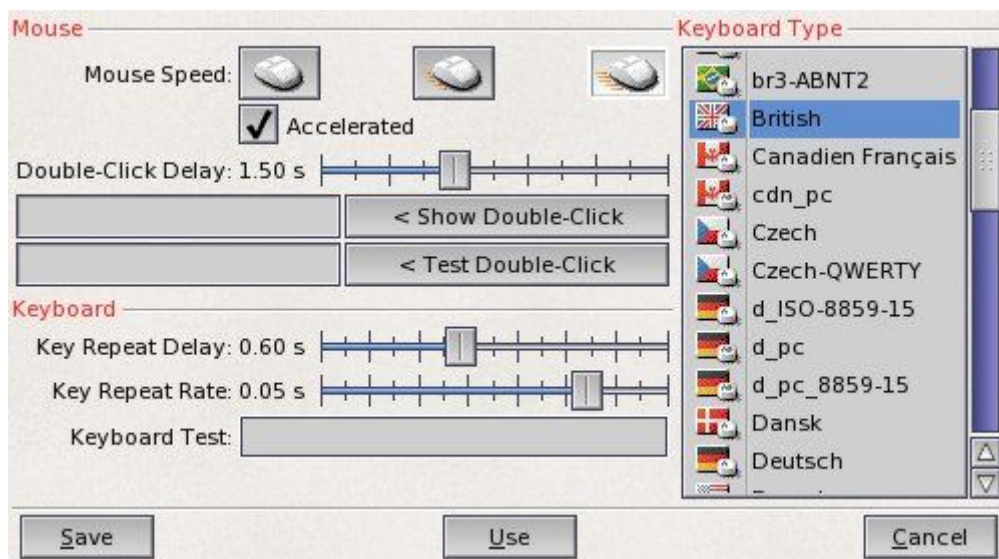


Follow the simple instructions on the second requester.
Click Proceed.
It should look like this:-

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"Input preferences" will then load.
Select the keyboard layout that matches your keyboard.
Select a mouse speed / acceleration that you are happy with.
Click "Use" to continue
It should look like this:-



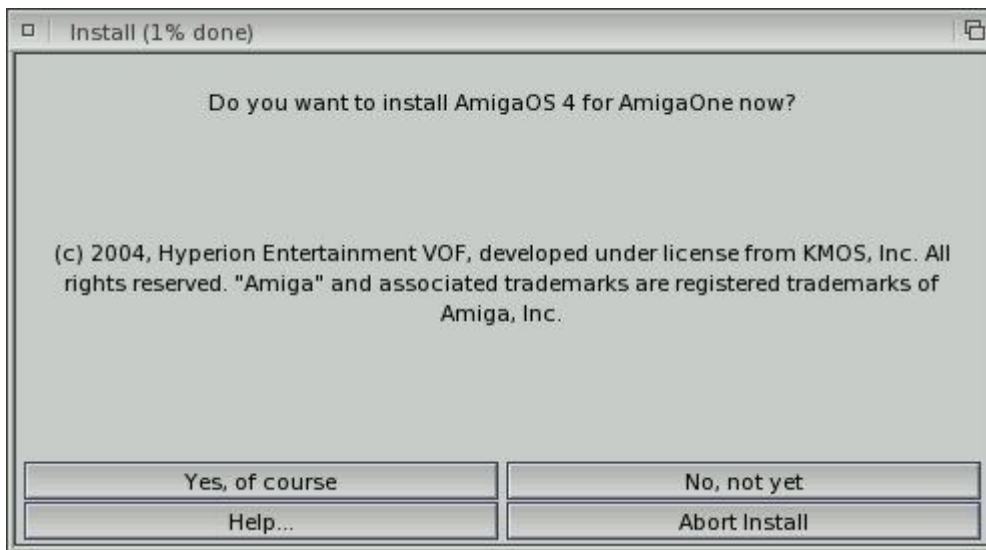
Section 5. OS4 Installer

At this time you will be presented with the AmigaOS4.0 Workbench Screen for the first time.

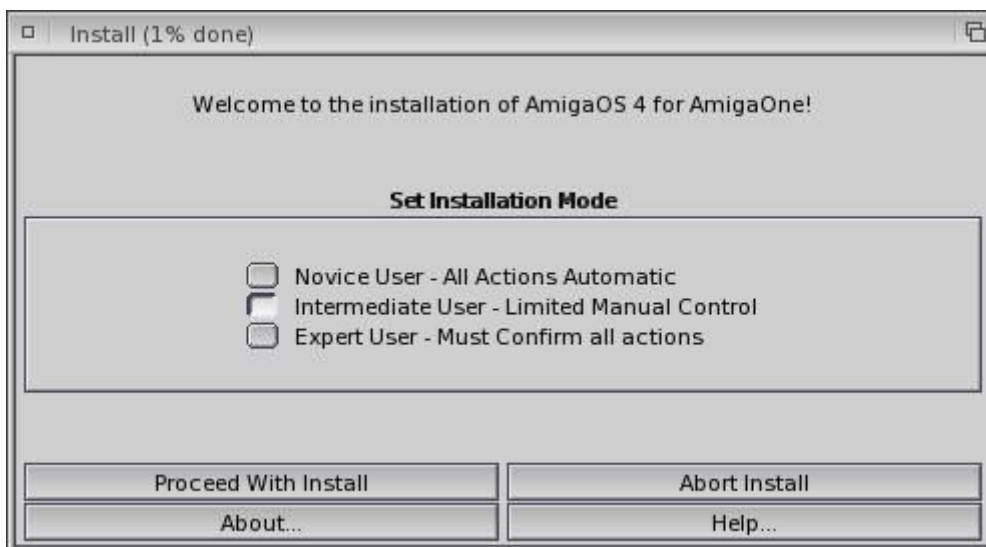


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The AmigaOS4.0 Installer will automatically open on the above Workbench Screen. Click "Yes of course".

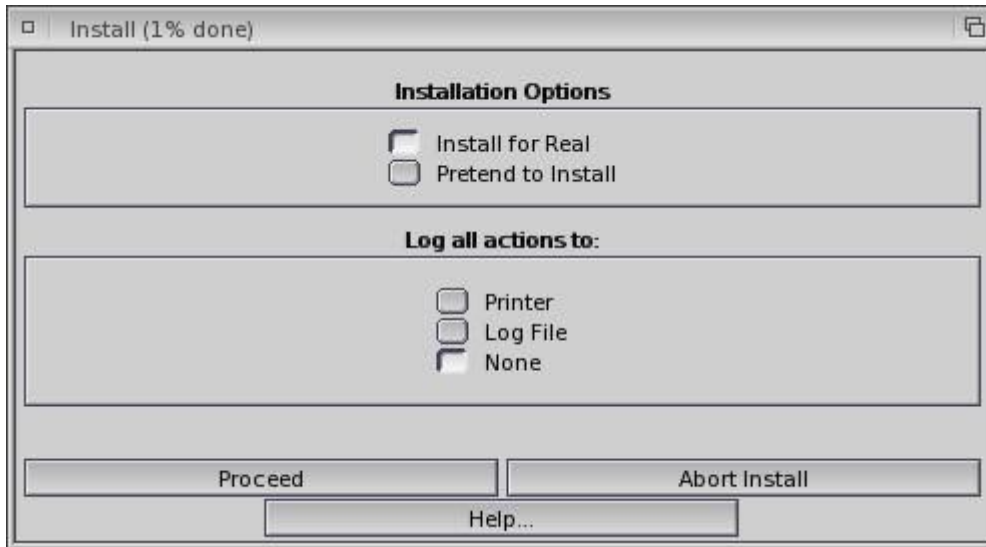


Click "Proceed with install".



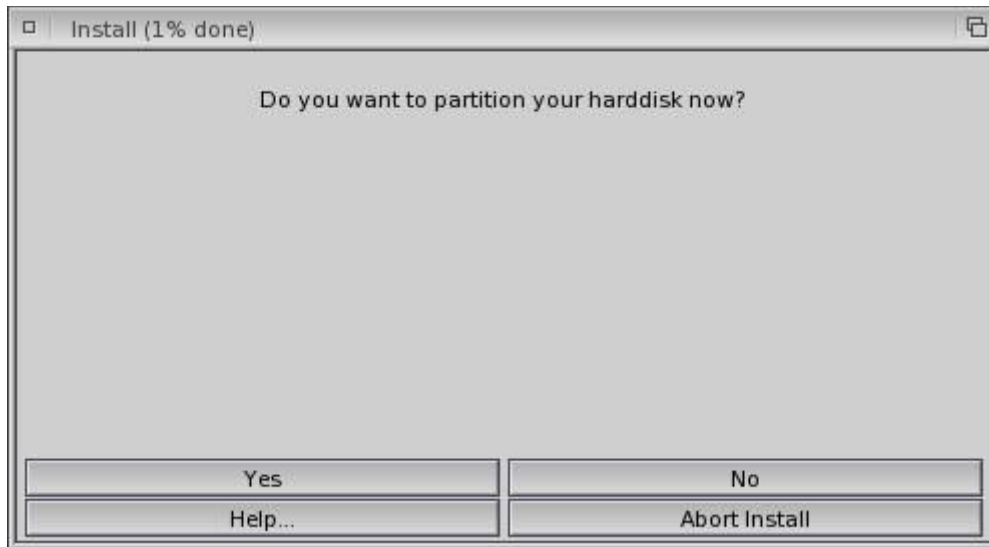
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Click "Proceed".



Section 6. Configuring Your Hard Drive

Click "Yes" when asked if you want to partition your hard disk now.

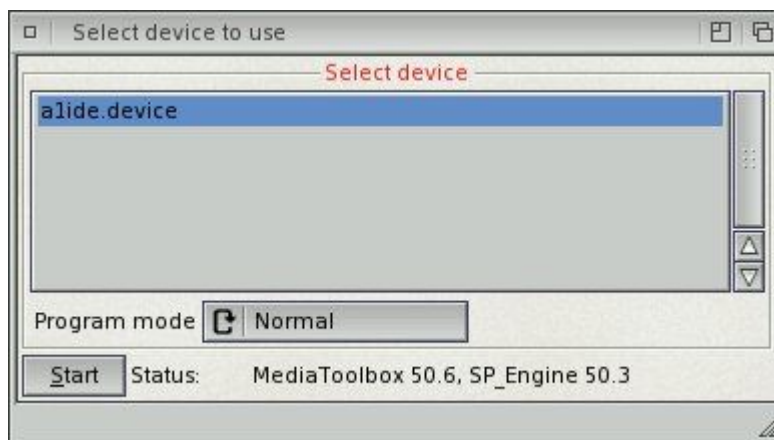


Media Toolbox will then open, defaulting to Normal Mode.

"a1ide.device" is also selected by default.

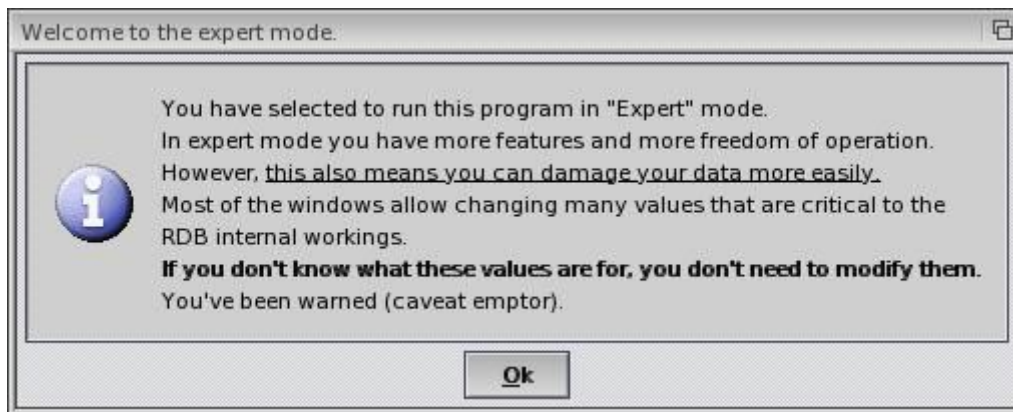
Both Normal and Expert modes are available. Select "Normal".

Click "Start".

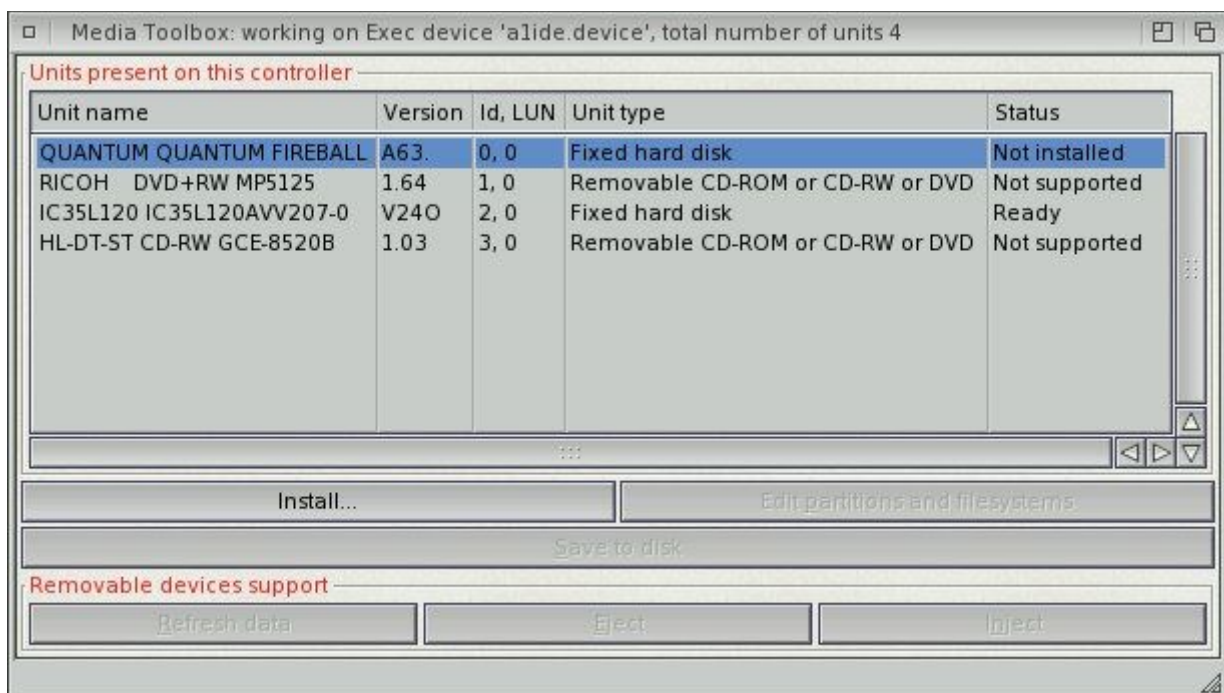


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The following warning will appear, if you choose "Expert" Mode.
Click "OK".

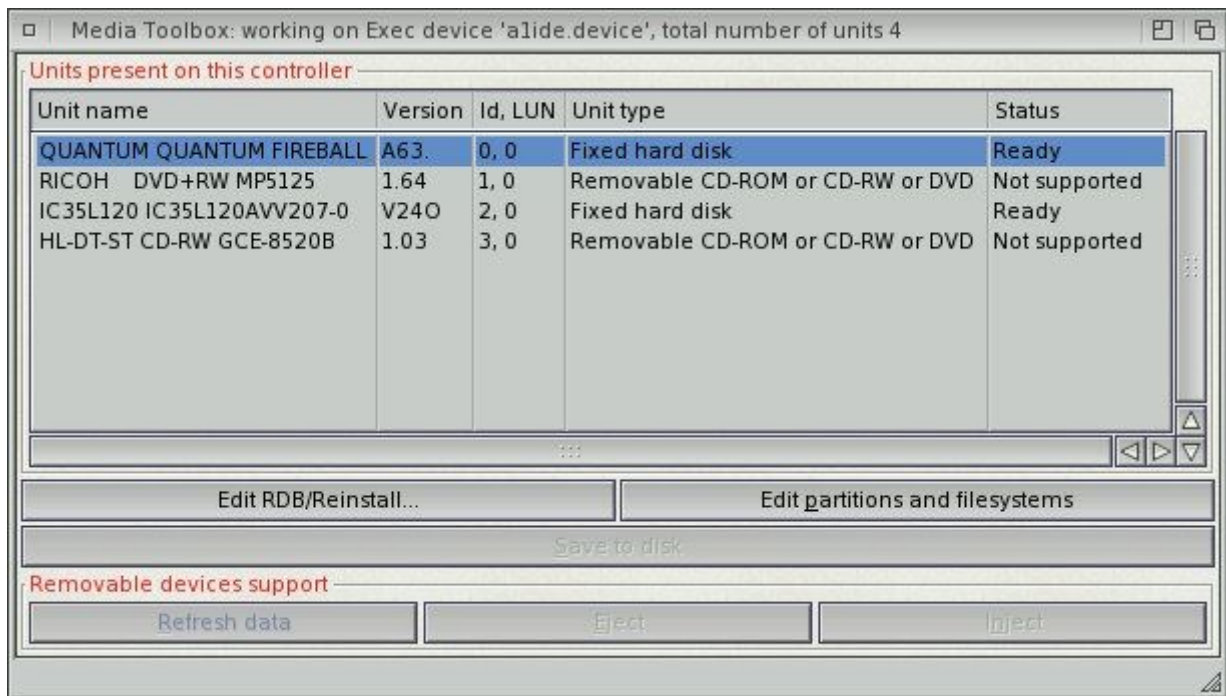


Media ToolBox will show devices on "a1ide.device".
Select your hard disk from the list of devices on "a1ide.device", in most cases this will be a1ide.device unit 0 or (ID 0, LUN 0).
For a previously unused / unpartitioned ("Not Installed") Harddisk, Click "Install".



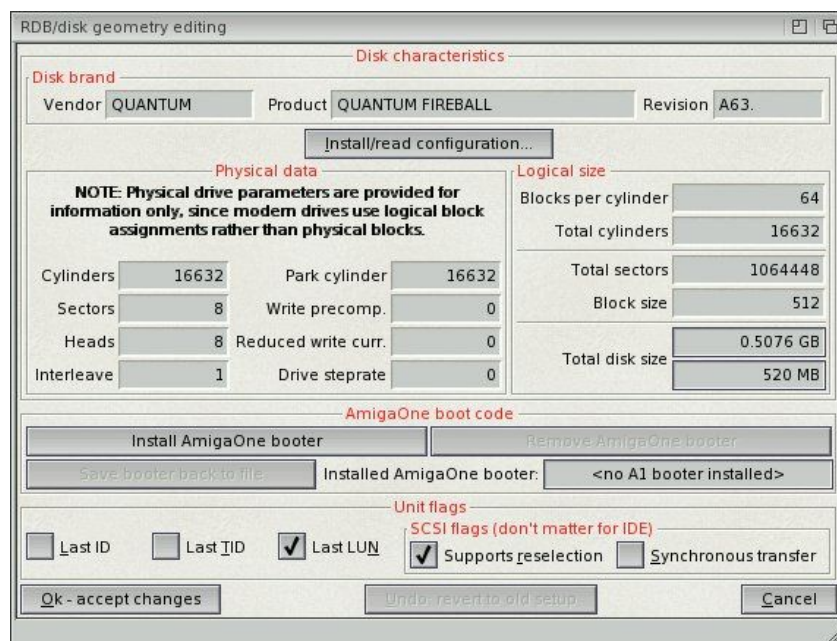
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For a previously used / RDB partitioned ("Ready / Modified") Harddisk, Click "Edit RDB / Reinstall".

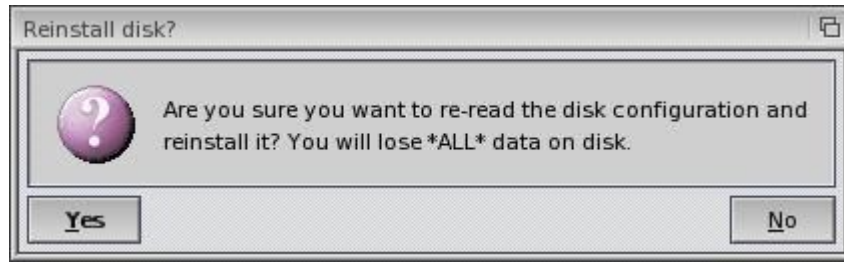


For Installing on an previously unused / unpartitioned Harddisk. Click "Install / Read Config".

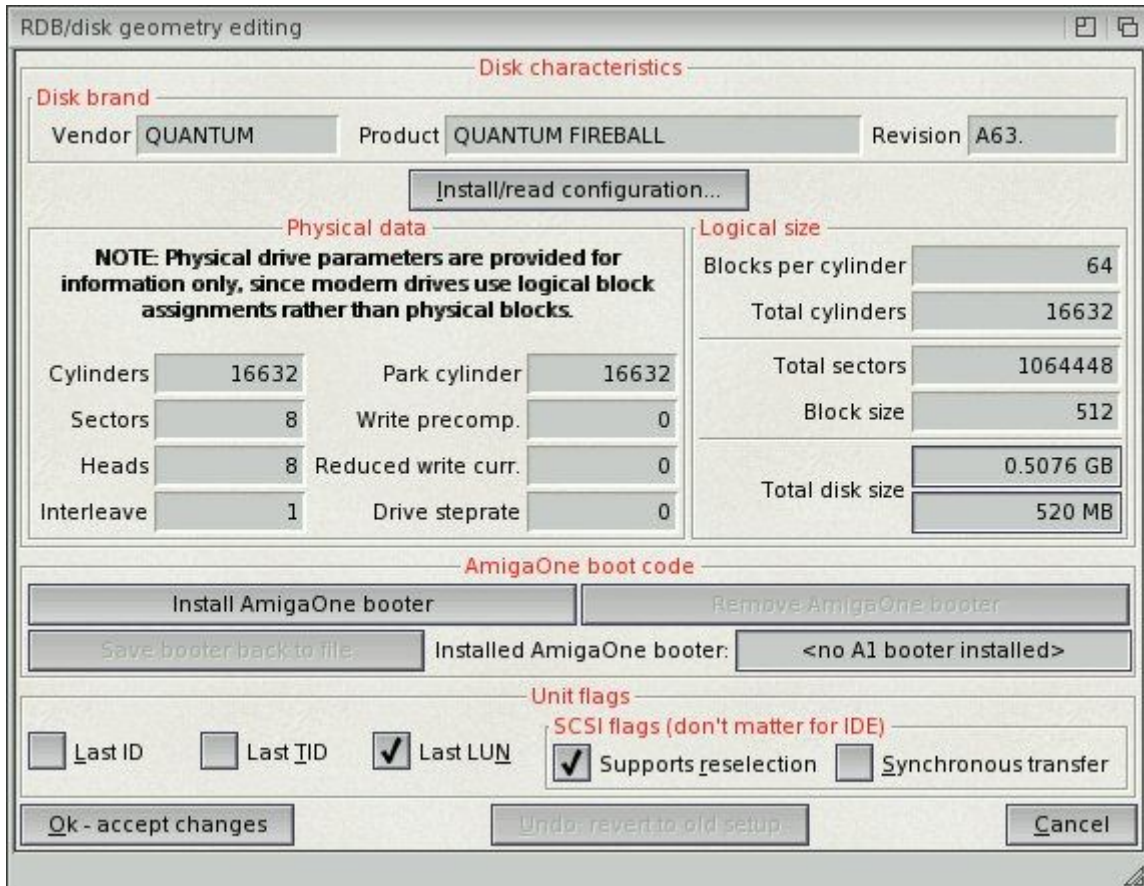
However, if you previously created an RDB partitioned hard disk, with some free space available for AmigaOS4.0, then please proceed to the "Add AmigaOne booter" steps below and then on to "Partition" steps to add your AmigaOS4.0 partition in the available space.



If you are installing on a previously unused / unpartitioned Harddisk. Click "Yes" to lose *ALL* data.

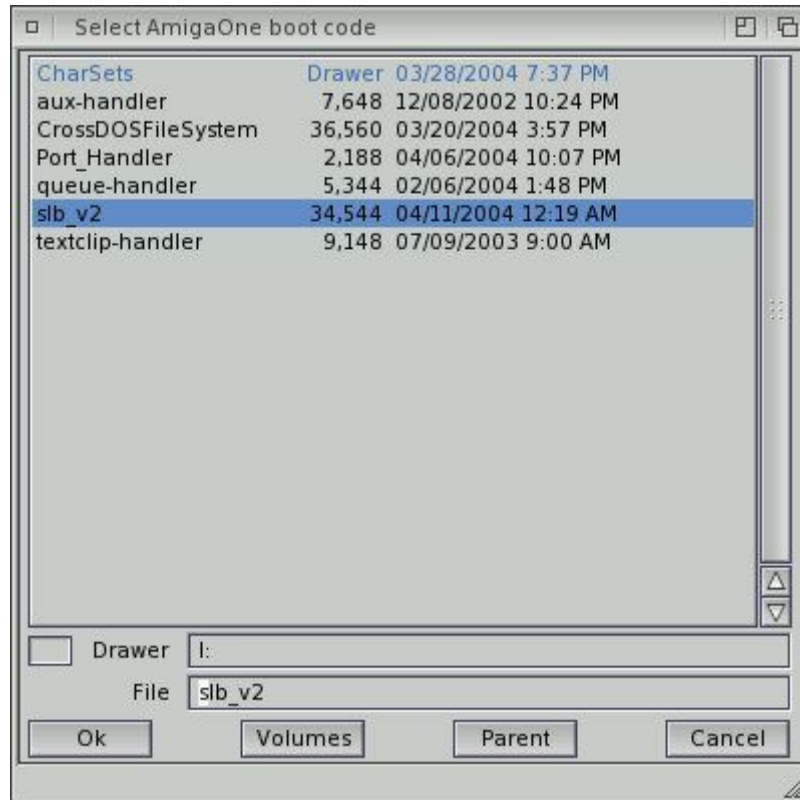


Click "Install AmigaOne booter".

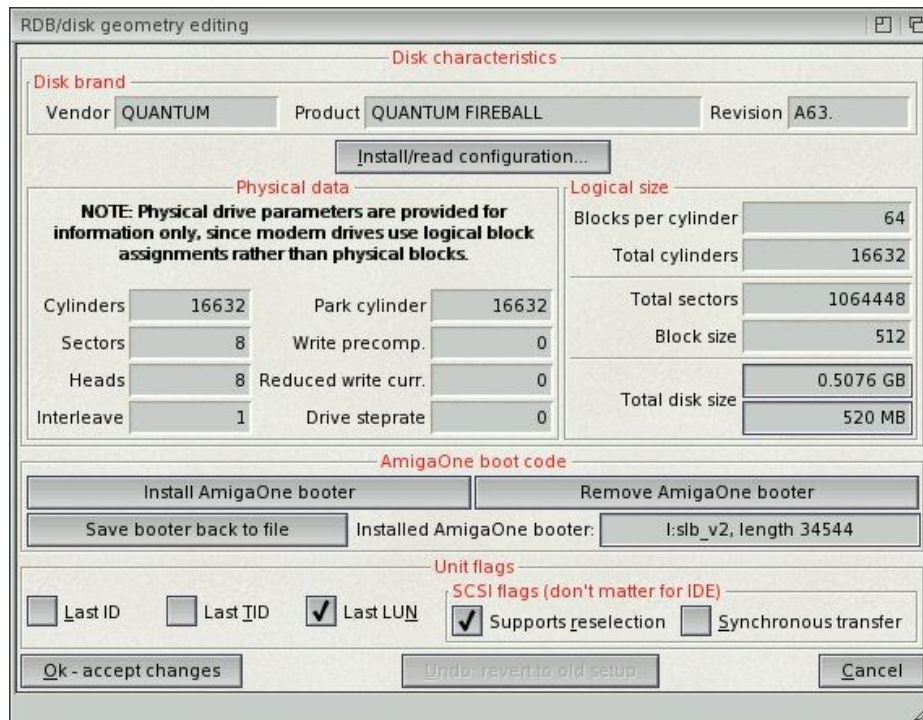


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Select the file `I:slb_v2` (alternatively, `AmigaOS4-CD:slb_v2`).

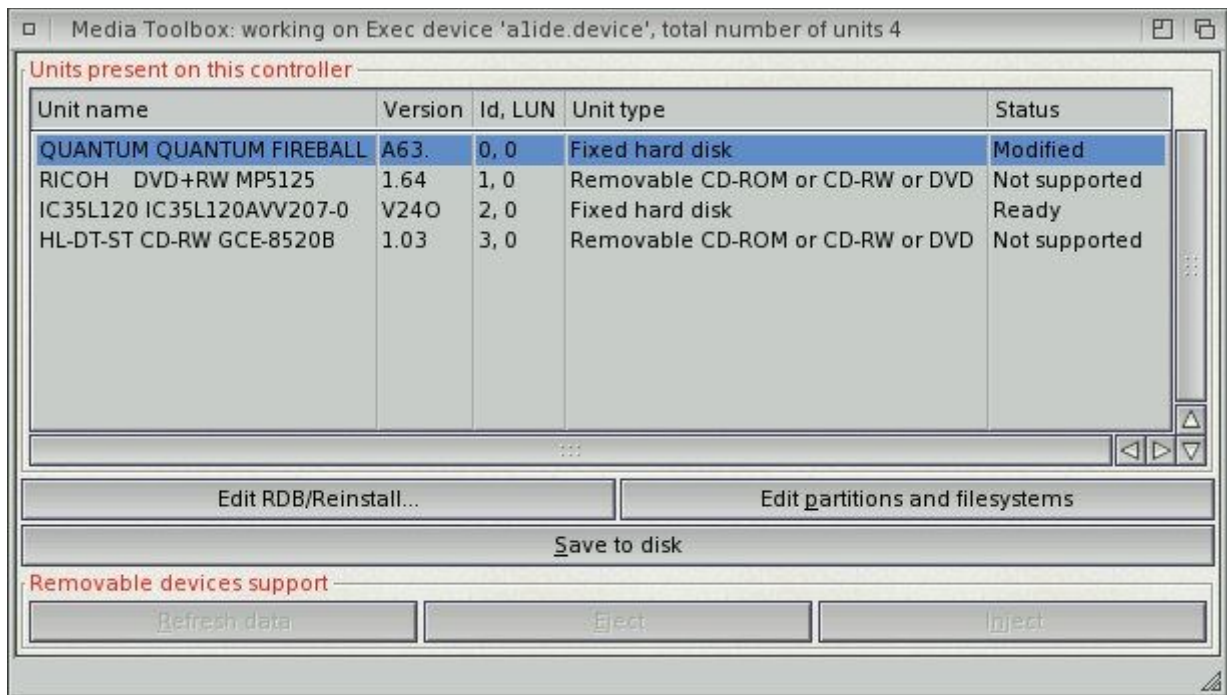


Click "OK-accept changes".

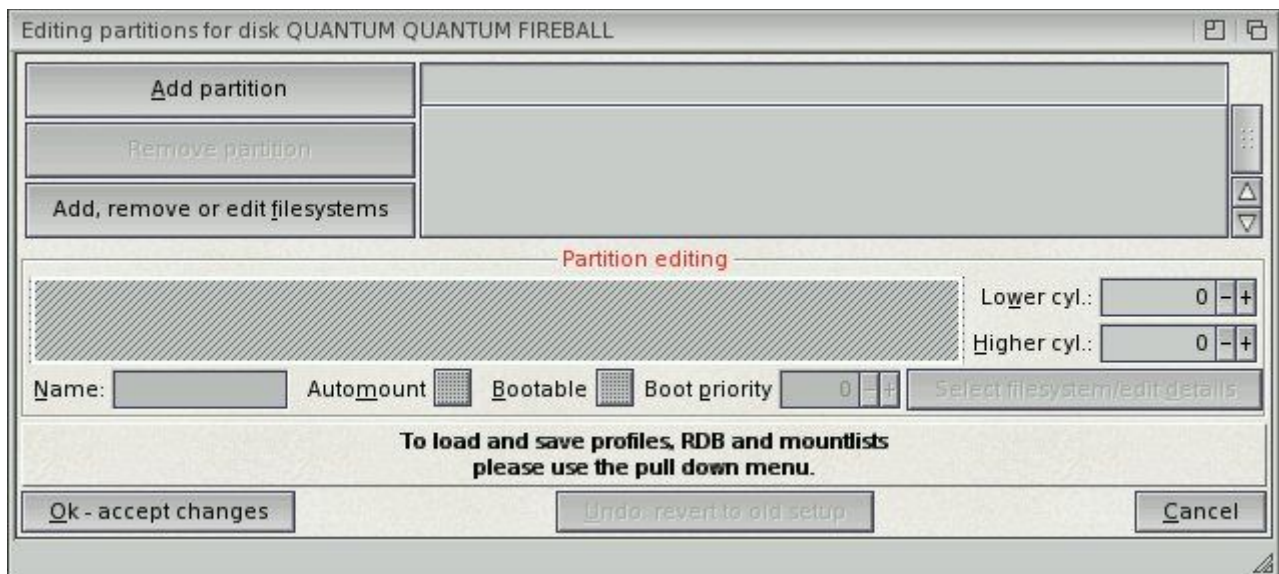


This will take you back to the Media Toolbox main menu.
Click "Edit partitions and filesystems".

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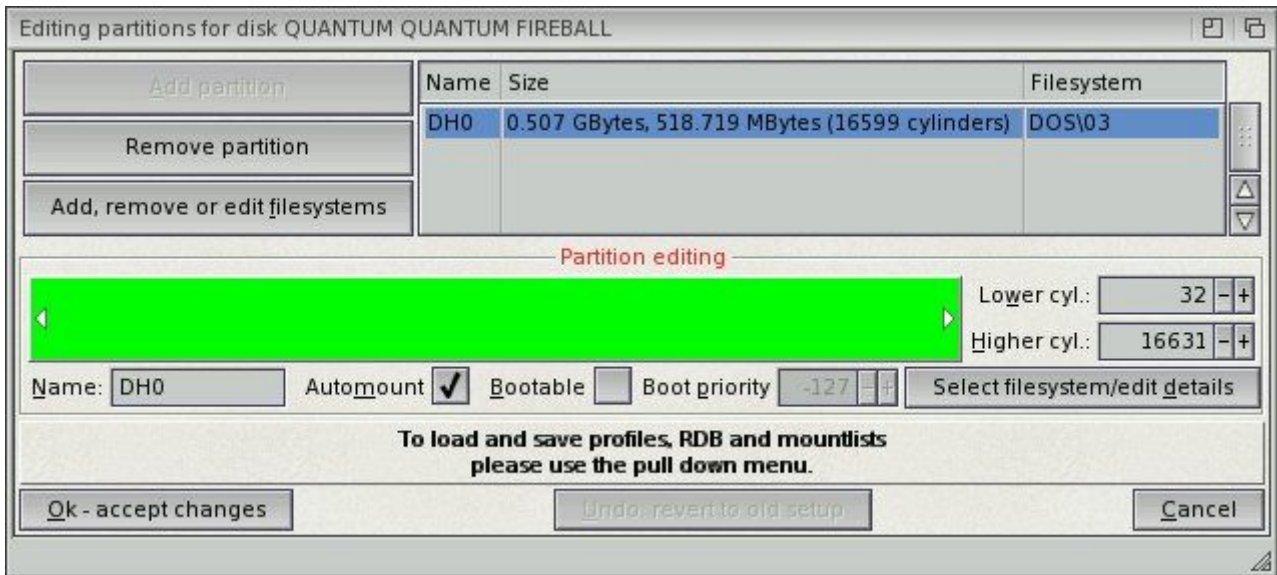
Click "Add partition".



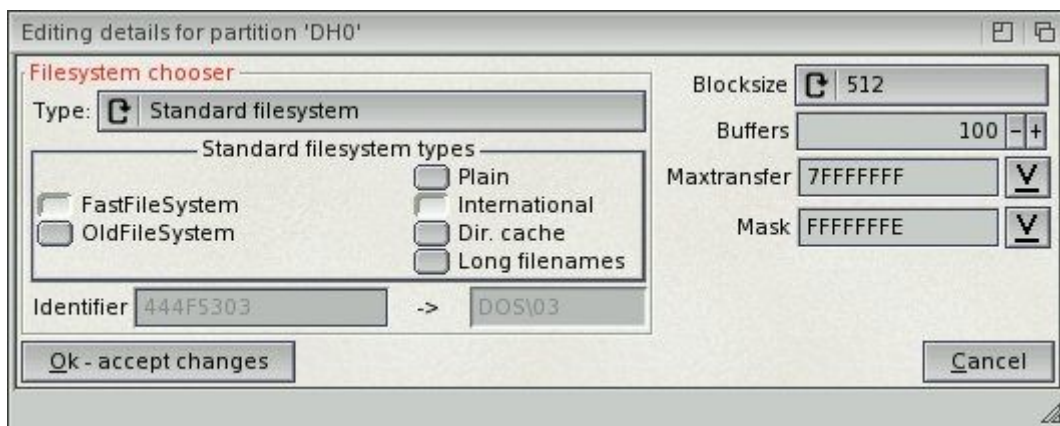
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The partition name should show a default (e.g. DH0:) and will default to the full available drive space.

Click "Select file system / edit details".



The "Editing partition details" window will then open.
The window shows you the filesystem partition defaults.
"Fast Filesystem / International (DOS\03)".

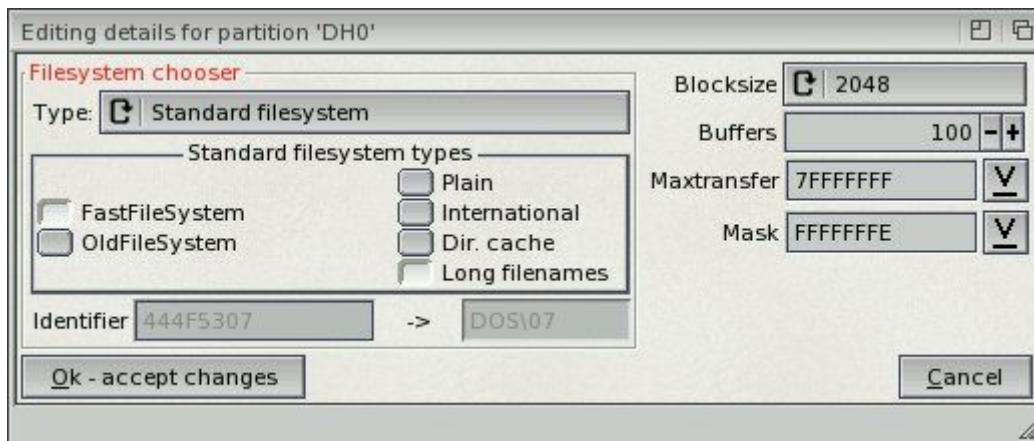


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Change the setting to "Fast Filesystem / Long Filenames (DOS\07)".

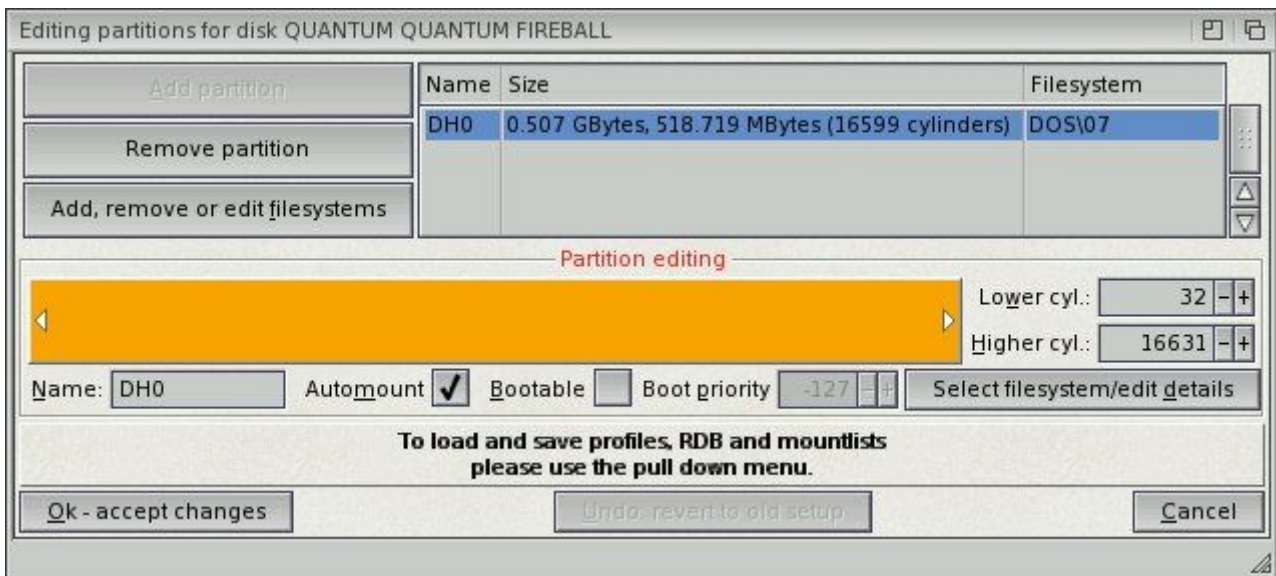
Change "Blocksize" to 2048.

Click "OK - accept changes".



You will then be returned to the partition editing window.

Please note that the partition sizing bar will have changed colour from Green to Orange. This is a visual indication that you have successfully changed the partition to (DOS\07).



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To change partition sizes move the arrow at the right of the sizing bar, towards the left of the screen.

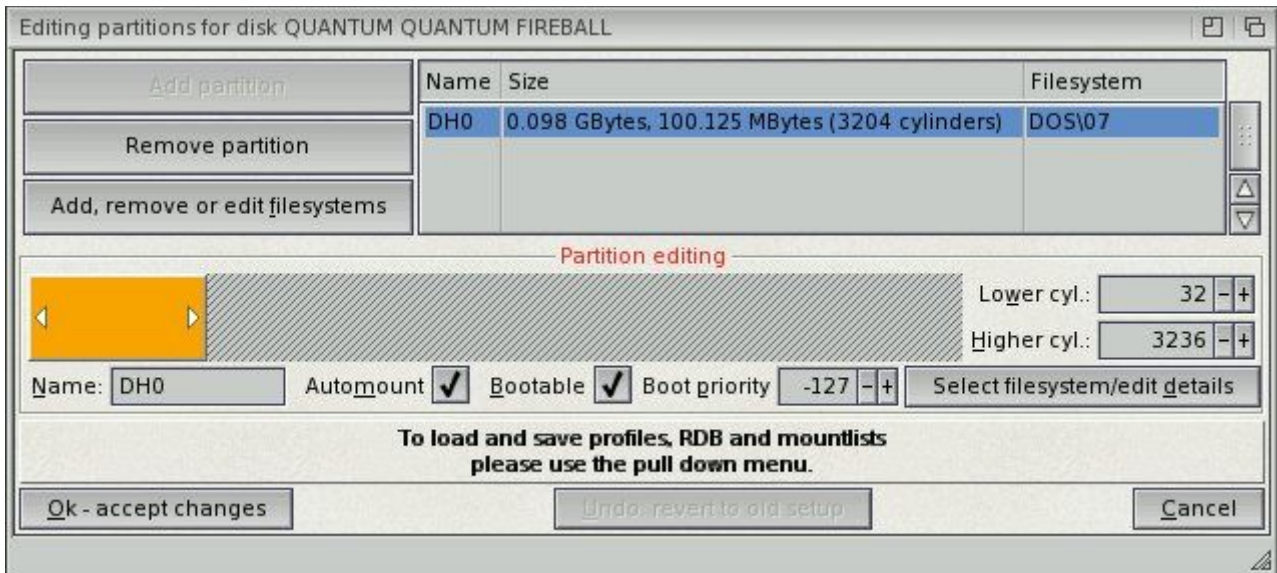
A minimum of 100MB is recommended, to be on the safe side.

Use 400MB if you require the SDK on the same partition.

The Image shows 100MB being used.

Make sure you have selected "automount" and "bootable" for your DH0: partition, this is done by clicking the tick boxes underneath the partition editing bar.

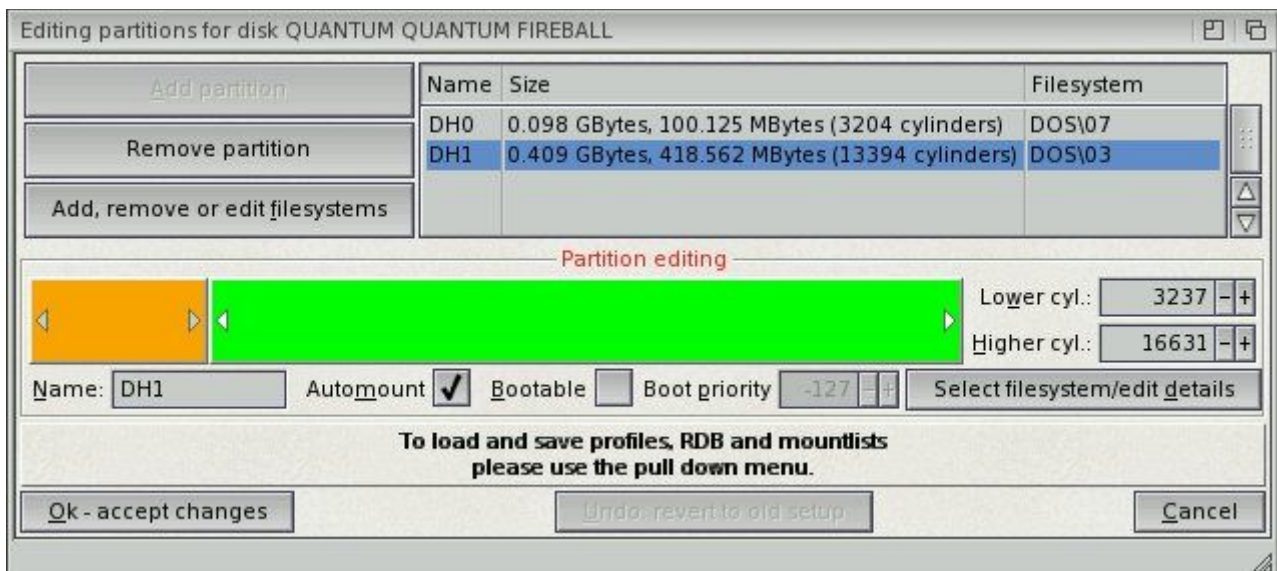
DO NOT alter the boot priority.



You can add extra partitions now or later.

This shows adding a DH1: partition to the remaining free unused drive space.

However, If you have a Harddisk with ample storage space, please leave about 512MB or 1GB unpartitioned. This space can be used later for virtual memory.



Again change the newly added partition to Fast Filesystem / Long Filenames (DOS\07) as described above.

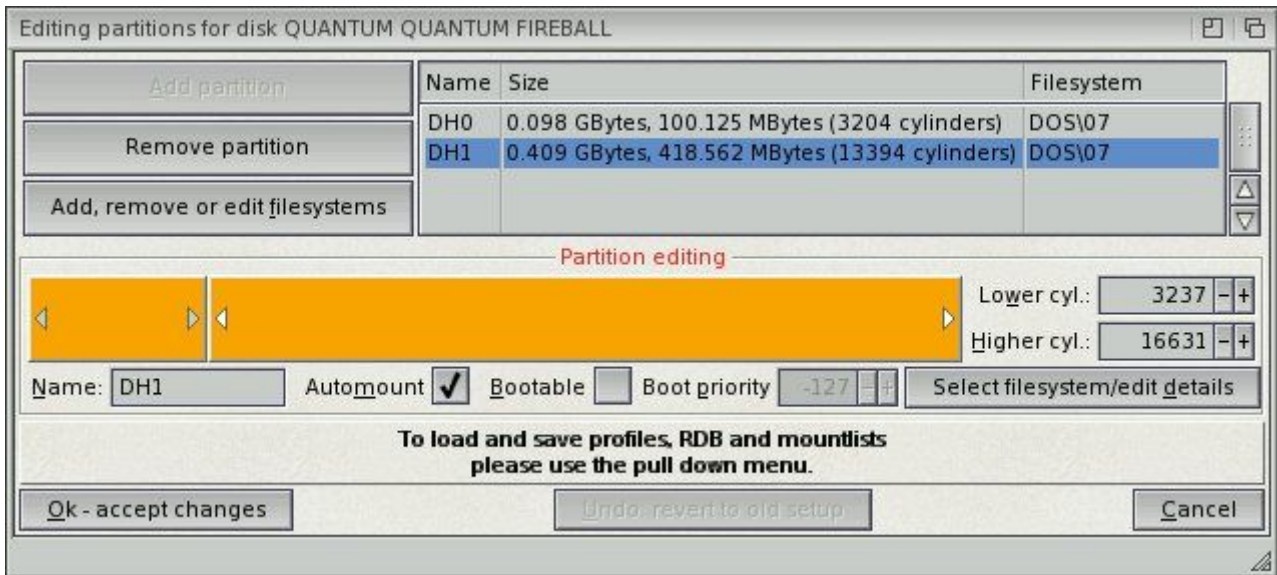
The colour will again change from Green to Orange as visual indication that you have

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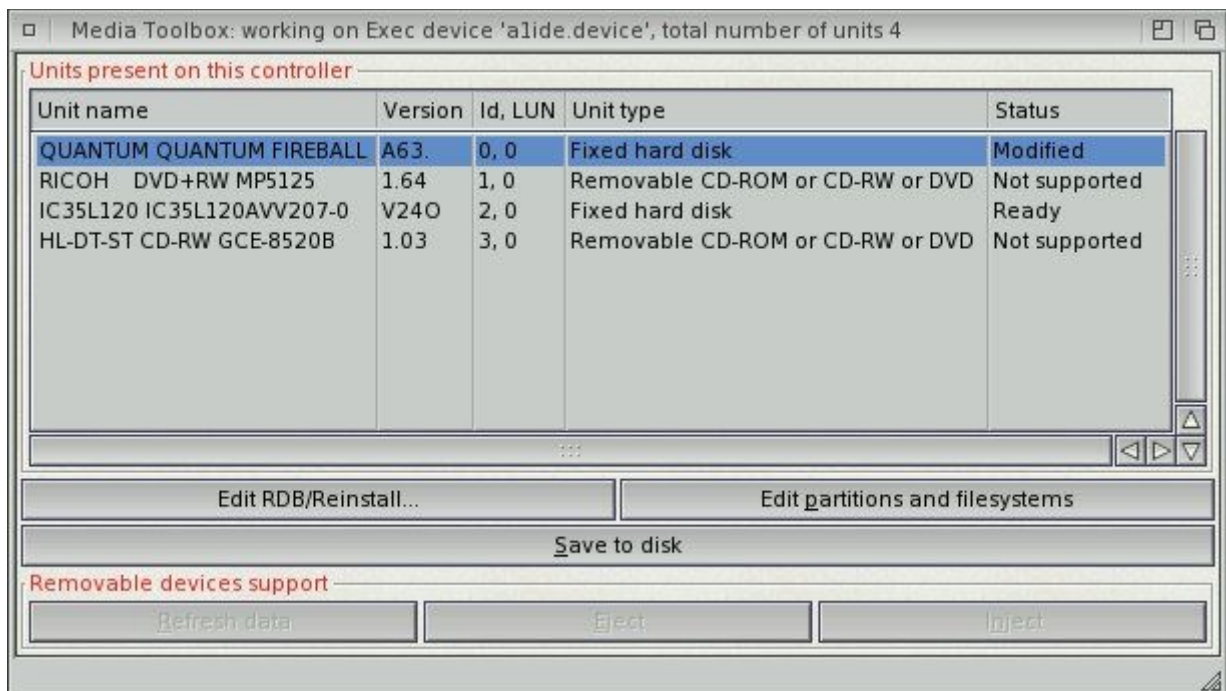
successfully changed the partition to (DOS\07).

Make sure that any extra partitions only have "automount" selected. Do not make extra partitions "bootable".

When you have finished adding partitions, click "OK - accept changes".

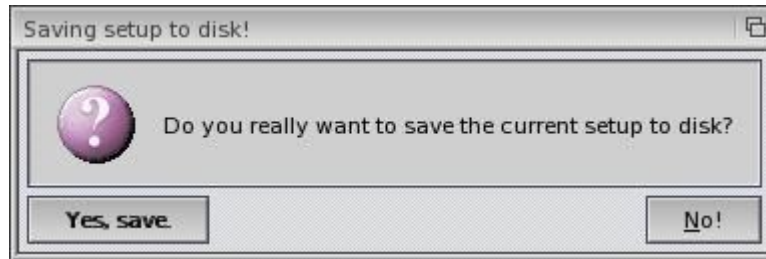


Click "Save to disk".

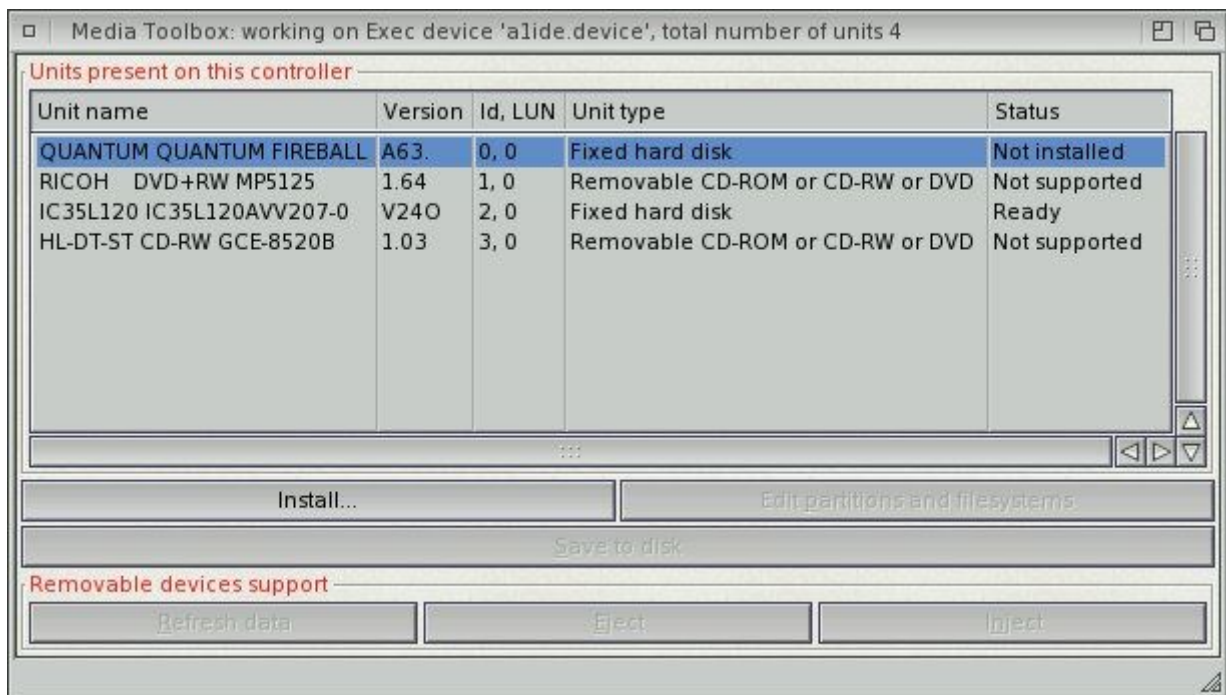


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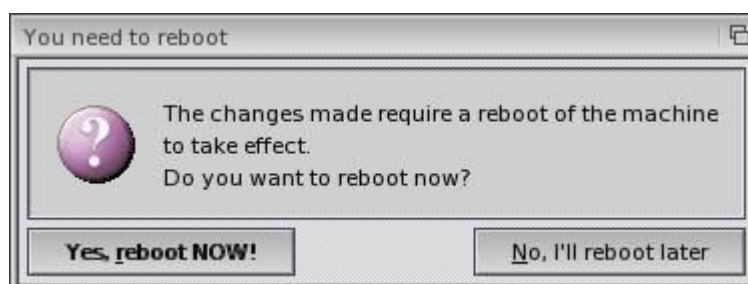
Click "Yes, save".



Exit Media ToolBox by clicking on the close gadget in the top left corner of the window.



Click "Yes, reboot NOW!".



Section 7. OS4 Installation

Your AmigaOne will now reset and again boot from the AmigaOS4.0 Developer pre-release CD.

Select your Locale / Input preferences as described in section 4.

Workbench and the Installer will then reappear.

Do not return to the installer just yet.



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Before returning to the Installer you need to "Quick Format" your DH0: partition.

There should be a "ghosted" DH0: disk icon on the Workbench.

Click the left mouse button once on the ghosted DH0: icon, a yellow glow should appear around it.

Move the mouse pointer over the grey titlebar at the top of the screen and press and hold down the right mouse button.

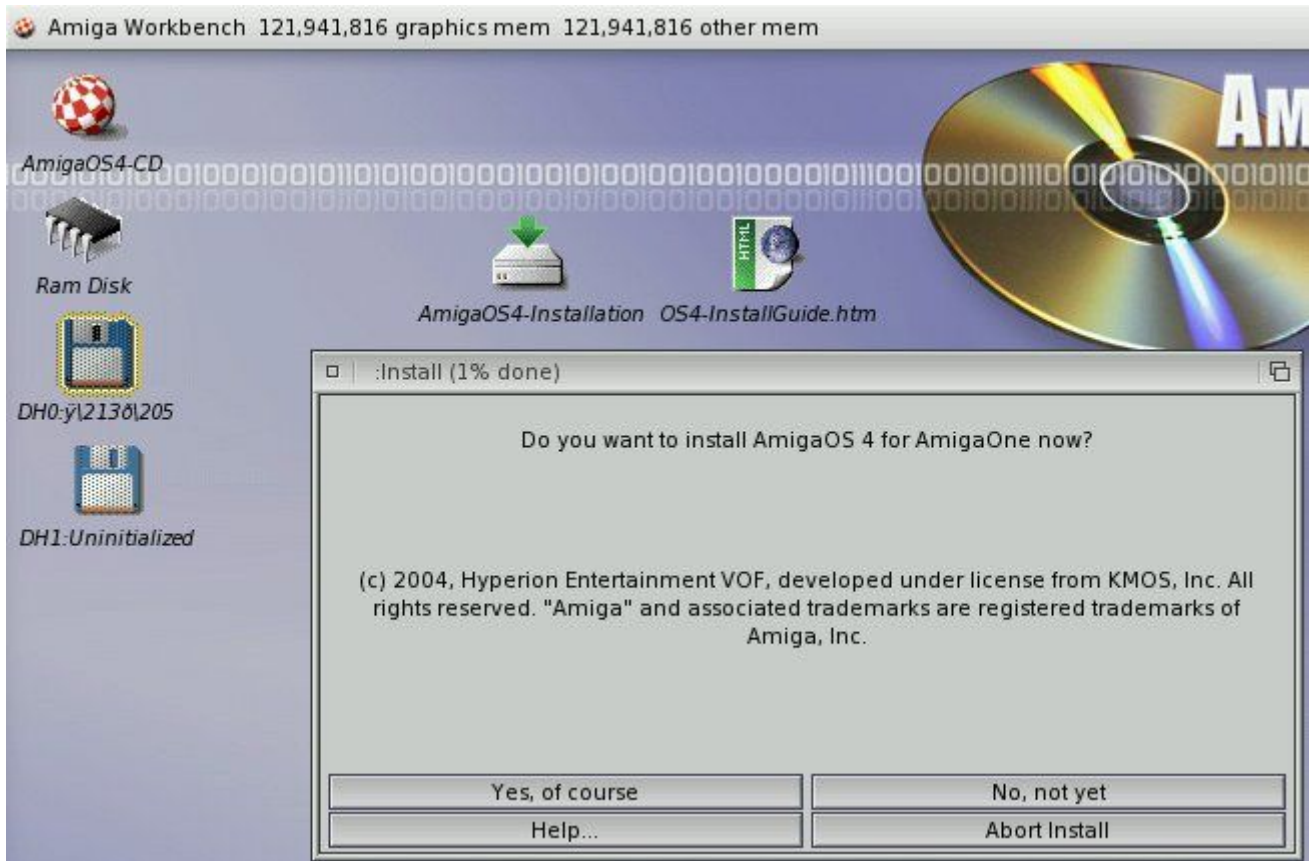
A menu should appear in the grey titlebar.

While holding the right mouse button, move the mouse pointer toward the word "ICON".

As you pass over the word "ICON" a submenu will appear.

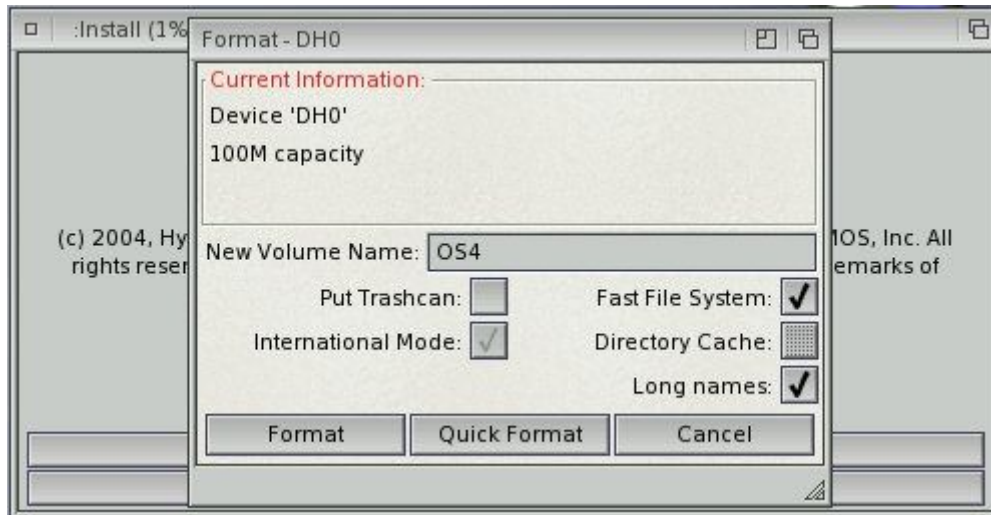
Still holding the right mouse button, move down the sub menu to the "Format Disk" option.

Release the right mouse button whilst remaining over the "Format Disk" option.



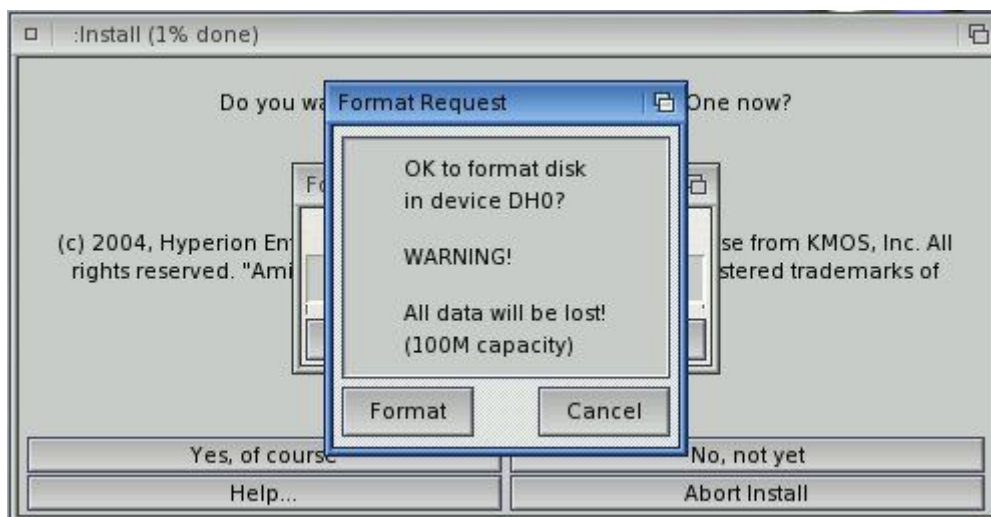
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This requester should appear:-



Give the volume a name eg. OS4
Check that "Fast File System" is selected.
Check that "Long File Names" is selected.
Selecting TrashCan is optional.
Click "Quick Format". Do not click "Format", it is not necessary.

A confirmation requester will appear.
Click "Format".

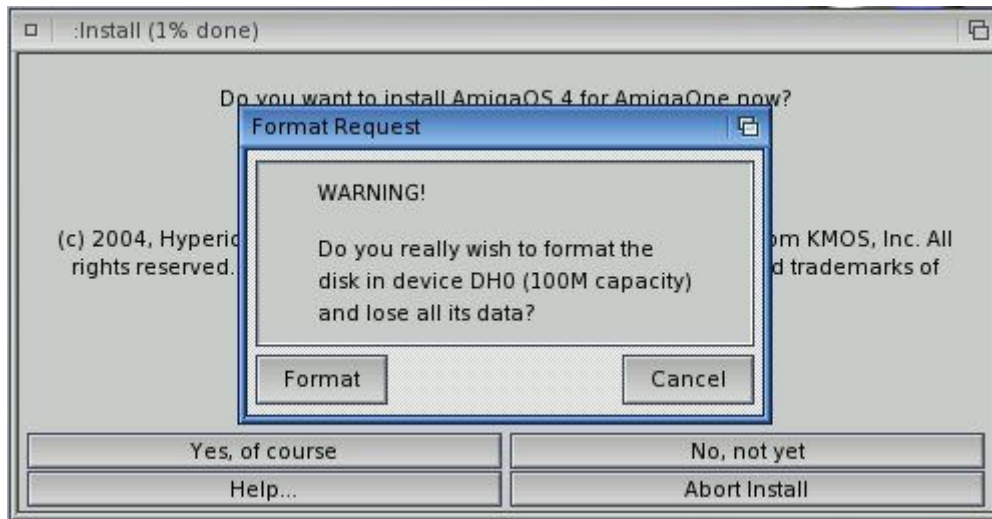


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A final confirmation requester will appear.

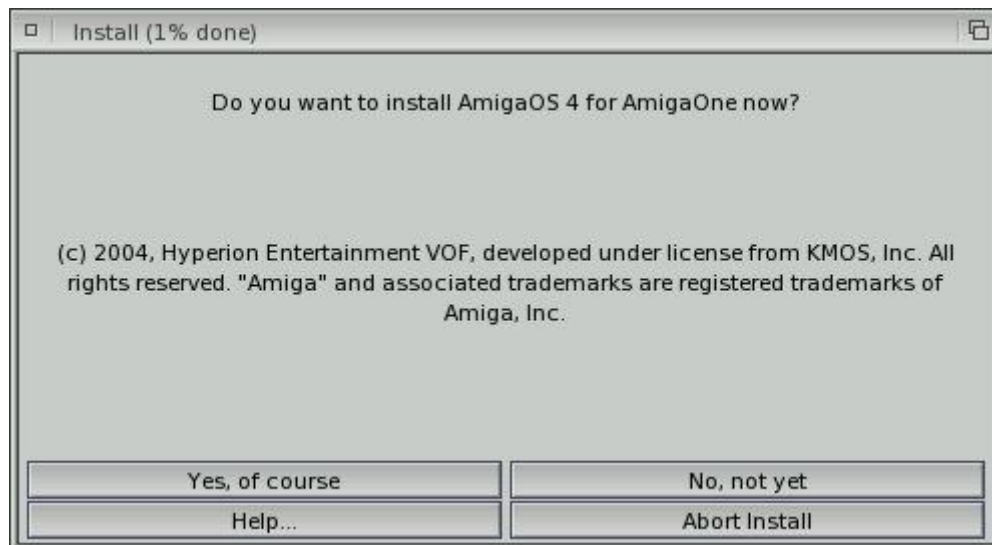
Click "Format".

This should take only a few moments.



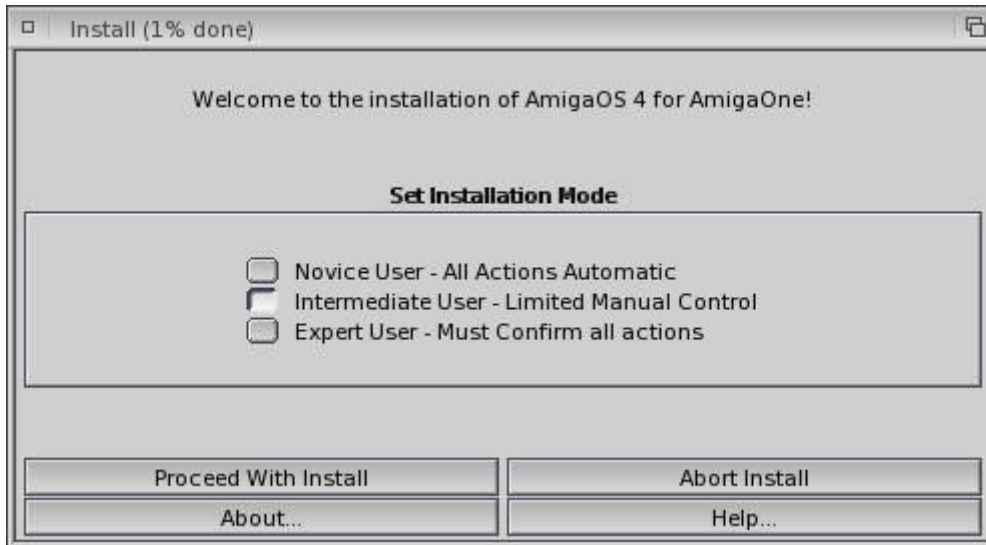
If you want to format any additional partitions, that can be done now. If not, please return to the Installer window, it should still be open on Workbench.

Click "Yes of course".

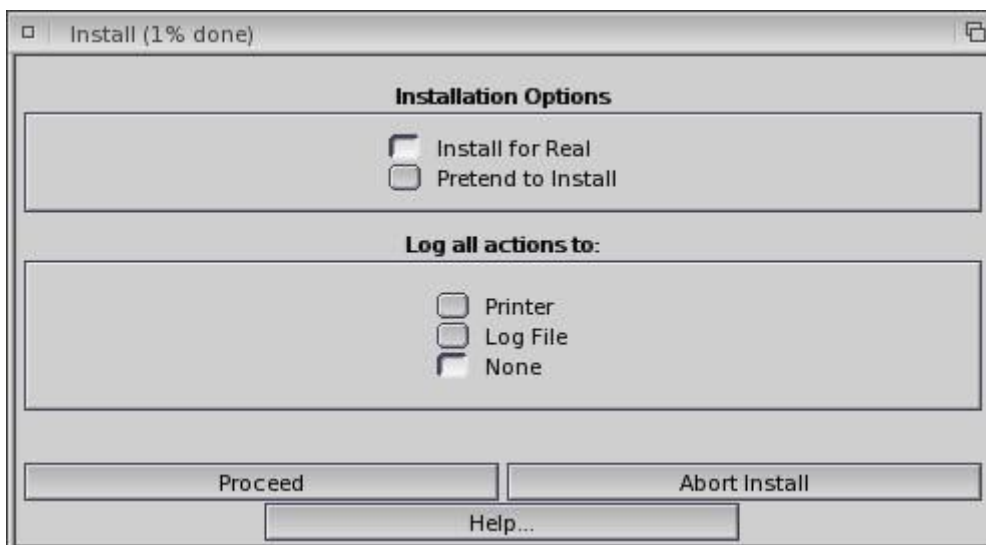


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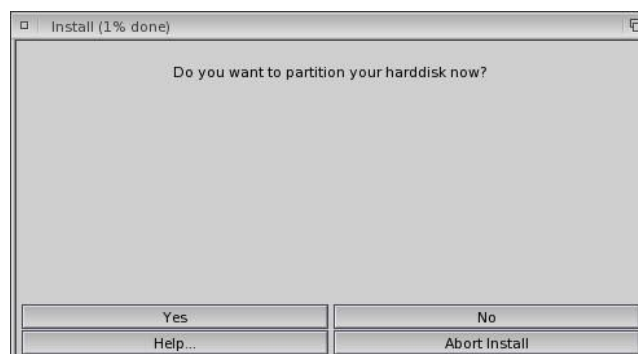
Click "Proceed with install".



Click "Proceed".

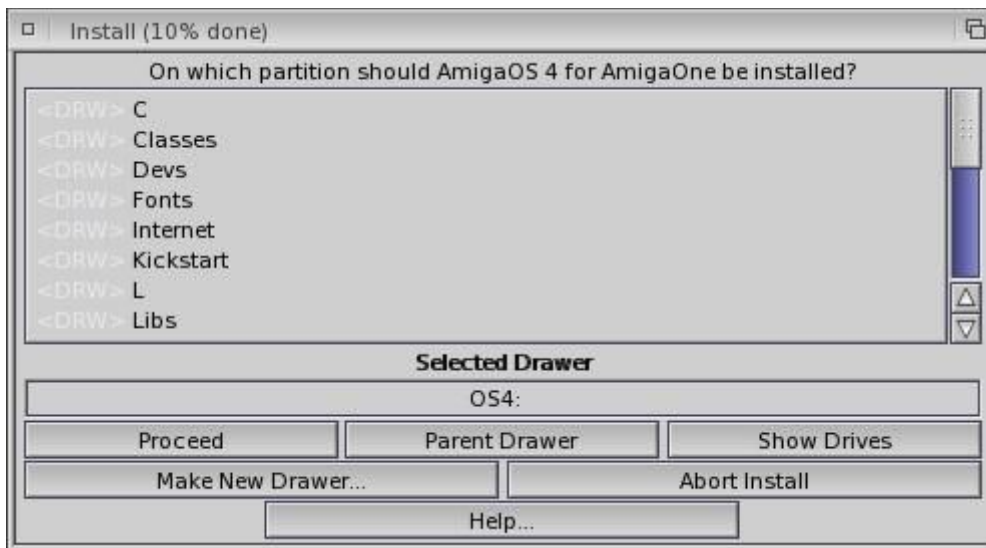


When asked "Do you want to partition your hard disk now?", select "No".

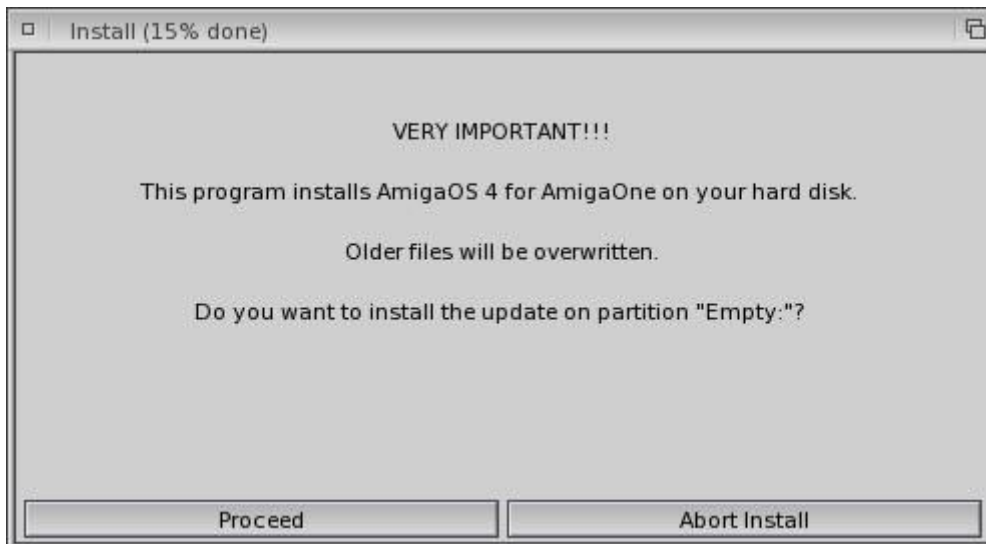


Choose the partition name (eg DH0:) in the file requester and click "Proceed".

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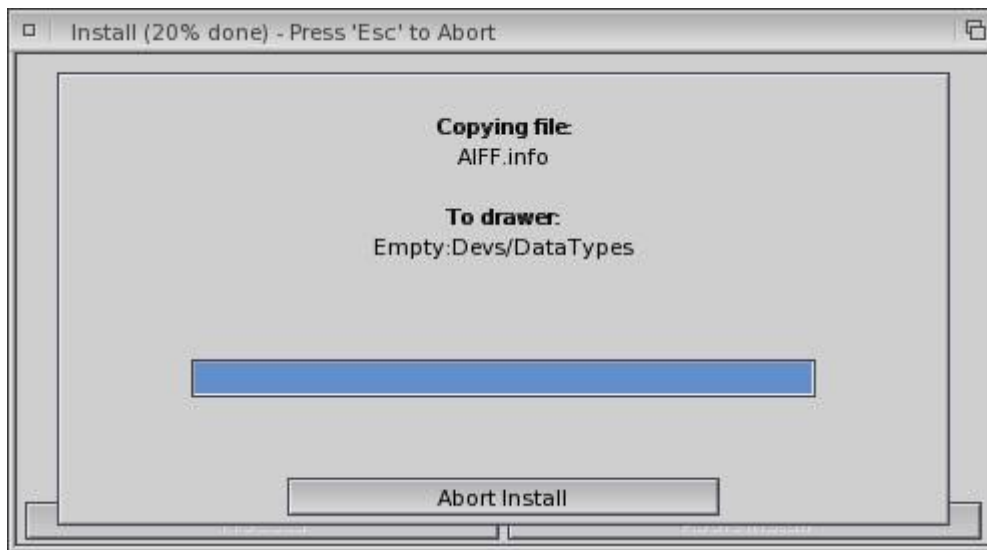


Click "Proceed".



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The Installer will now install the AmigaOS4.0 Developer pre-release onto volume DH0:. This may take a few minutes.



Installer will then prompt you to choose the best screenmode that your monitor can display.

If you have your Monitor documentation to hand please refer to that.

If you are unsure leave it set to the default setting.

Click "Proceed".



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The Installer will automatically detect your sound card and install the appropriate drivers. FM801, SB 128 (Esoniq), SB Live / Audigy 1&2 (Emu10kx) based cards are supported in this Developer pre-release.

The "Installation complete" message will then be displayed.

Click "Proceed".

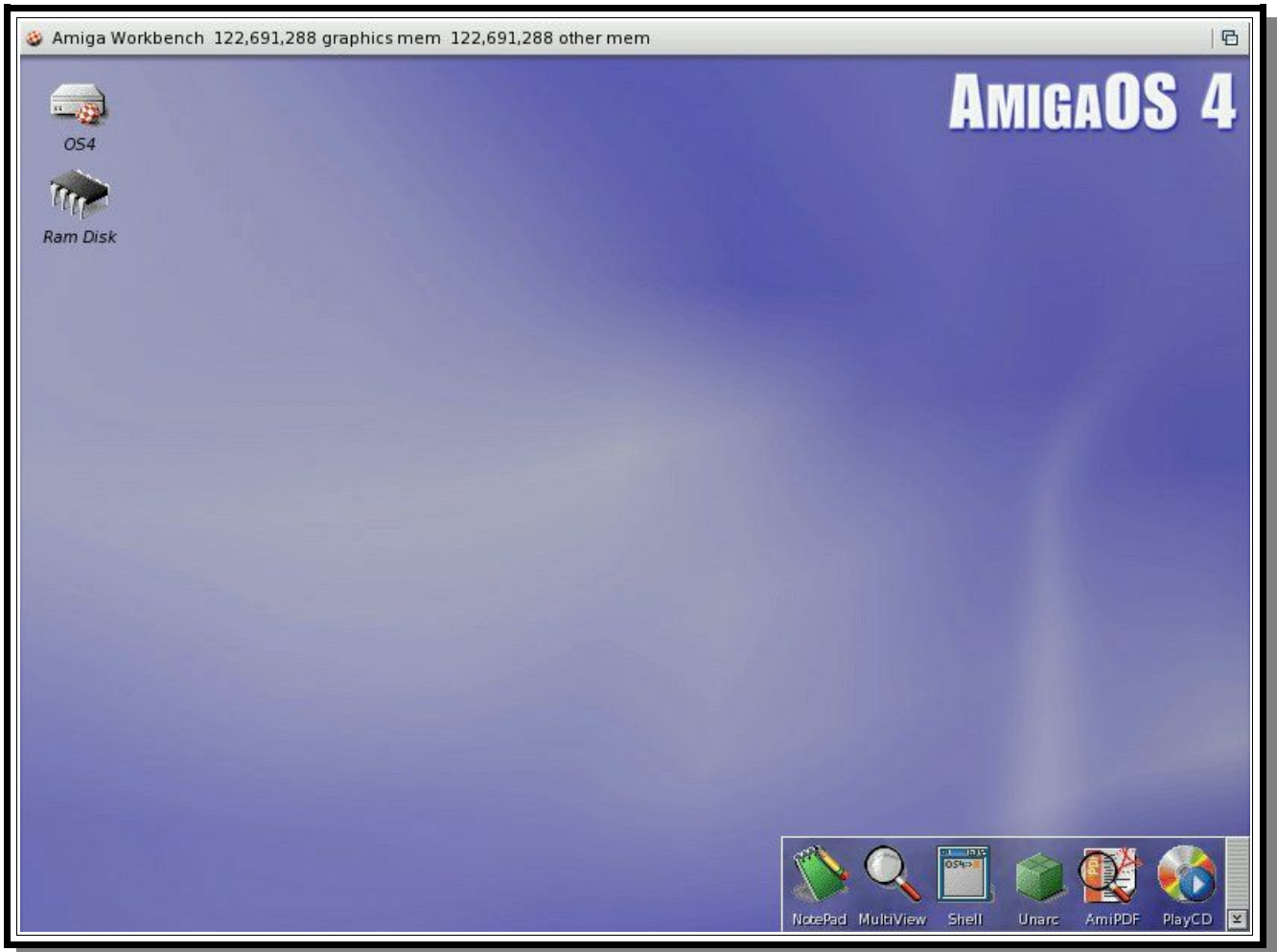


Section 8. Booting to OS4

Remove the AmigaOS4.0 Developer pre-release CD from your CD-ROM drive.

Press the Reset button on your AmigaOne.

Your AmigaOne will boot from your hard disk into AmigaOS4.0 for the first time.



The SDK is located in the "SDK" directory on the Developer pre-release CD-ROM. Contributions are located in the "Contrib" directory on the Developer pre-release CD-ROM.

GO DEVELOP!!

Original guide by Carl Moppett (aka JurassicC)
PDF by Kelvin Shirley (aka Gemini)

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