

# Linux on the Advent 7003

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## 1 Introduction

This is a short document designed to help you set up Linux on the Advent 7003 laptop. If you don't already own this laptop and are smart enough to just be browsing the web checking out compatibility issues then I should probably tell you that this isn't the best choice for Linux. Keep looking. If on the other hand you are stuck with this machine then I hope this document helps. I sure would have appreciated such a document when I was trying to get things working.

I ended up testing out three different distributions on this machine; Mandrake 7.2, Redhat 8.0, and Debian. Out of these three I would have to say that Redhat gave me the least grief (I think my installation of Debian was done incorrectly so you might want to try that yourself). Where necessary I have made distribution specific notes.

## 2 Specs

- Pentium 4 2GHz
- 512MB RAM
- 40GB HD
- 3 USB, 1 Firewire
- 1 PCMCIA Slot
- CDRW/DVD Combi-drive

## 3 X Windows

I had some trouble getting X working as the driver that comes with XFree86 doesn't actually work. Go here to get the driver you need <http://www.probo.com/timr/savage40.html>. This nice man has written a driver for the video card (s3 86c396 - Savage 4) and provides debs and rpms. If you are doing it manually (Mandrake) you will need to overwrite `savage_drv.o` which comes with the distro with this one. Read the site, there's plenty of help.

Note to Debian users: Don't worry about that weird screen that comes up when you try and start X. It's just that X is trying to run at a higher resolution than the monitor can handle. You'll need to edit your `/etc/X11/XFree86Config` and change the available modes to range from "1024x768" to "640x480" (meaning that you should delete all the modes above that range). This is in the "Screen" section of the config file.

## 4 Sound

Oh boy was this a pain in the arse. The via82xx module that comes with your distribution will not work with your soundcards chipset. Okay this is going to be pretty distro specific;

### 4.1 Mandrake:

Via Technologies used to provide drivers for the onboard soundcard - but now - well, they don't. I went to get the link for the drivers from their site (I was going to give you a direct link to the drivers rather than just the site because I remember it being rather difficult to find them) but it appears that they are no longer available. Lucky for you have kept a local copy here [http://www.killerbees.org.uk/misc-section/advent-report-files/74audio\\_Linux\\_package1.16.tar.gz](http://www.killerbees.org.uk/misc-section/advent-report-files/74audio_Linux_package1.16.tar.gz). These drivers are relatively easy to install, just follow the README. If I'm just being blind and the drivers are actually there please e-mail me.

### 4.2 Redhat / Debian

You won't be able to use the drivers mentioned above as they are compiled with gcc 2.9x and the kernel was compiled with gcc 3.x (of course it depends on your distros version number but we're going with Redhat 8.0 and Debian 3 here).

Though it may seem that you are royally fudged, help is at at in the form of ALSA (<http://www.alsa-project.org>). I haven't managed to get even this to work properly so don't get your hopes up. Sound will work, sort of. Most sound will be distorted so much that you'd rather it didn't work at all. However there's something strange about this. I compiled xine (<http://xine.sourceforge.net>) from source and can get it to play sound from most videos without any problems. Sound from the system (alerts etc.) or sound from xmms (which I also compiled from source) still has distortion though.

This leads me to believe that this problem is fixable. However, I've been working on it for a while now and still haven't come up with a solution. I think it may have something to do with the mixer settings. If any one figures this out please mail me so I can post it up here.

## 5 Winmodem

Mandrake 7.2: Smartlink have provided drivers for Linux here <http://www.smlink.com>. The installation is pretty straightforward, just follow the README.

Redhat 8.0 / Debian: You will never get the winmodem to work. Ever. It's worth pointing out that there is no serial port on this machine (I know, it's crazy) and so you won't be able to just plug a serial modem in. Your only chance of an Internet connection is ADSL or NATing (or both:)

## 6 PCMCIA - Firewire - USB - CDWR

I haven't actually used any PCMCIA cards apart from a Buffalo WLI-PCM-L11GP WI-FI card and I can't even tell you much about that. From what I can tell PCMCIA works fine but getting that card to work is another matter (that's more of a kernel issue I believe). I've had no problems with USB. It seems fine on all distros.

I haven't tried any Firewire devices because, well, I don't have any.

The CDWR works great on Mandrake and Redhat with no configuration necessary. I haven't tried it in Debian though I presume it would work just fine.

## 7 A Word on APM

Don't. That's the word. While APM *seems* to work on all three distros, the machine actually has really bad problems when you try and use it. `apm -s` for example loses you your network connection in Redhat and freezes X in Mandrake. I never got Mandrake or Redhat to give battery readings. The Gnome2 battery monitor politely informs you that you don't actually have a battery, which is interesting. I think the monitor in Debian worked okay for some reason though. Last warning - don't try and use sleep, X will freeze, you've been warned.

## 8 Overall

Weighing in at 5Kg (including the adapter), your only option with this is a desktop replacement laptop. It's too chunky and heavy to lug around. Now if you're going to buy a desktop replacement machine then you had better buy one that works properly right? Or better still, why not *just get a desktop?*

I would recommend that you keep on looking if you're still in a position to do so. If you're stuck with this machine then I'd currently recommend Redhat 8.0.