

Installing Red Hat Linux/Fedora Core 1:

Once your partitioning is sorted out, you are ready for the install. Most of this is straight forward enough, but there are one or two pieces of information you might need before you begin.

Bootloader: If you are running Windows NT/2000/XP you can opt to use the existing bootloader. Otherwise you can use either the **Grub** bootloader (installed with linux) or another third party one. The bootloader you choose will have an effect on some of the settings you use during the installation. If you are using the windows bootloader or another third party one, you will need to make sure that Grub is installed on the first sector of your linux installation and NOT the **MBR** (master boot record). If you are going to use Grub as your bootloader, then install it on the MBR.

Network Settings: If you have a network card installed, you will be asked to enter your network details during installation. This does not apply to modems etc. which will get set up after the installation process is finished.

Display settings: At the end of the installation process you may be asked to enter your display settings, depending on which distribution you are installing. On older machines (or machines with obscure graphics cards) this is quite often where installation goes wrong. More often than not, linux will be able to automatically detect your display settings. If not, then make sure you have the following information close to hand:

Video RAM - this is the amount of graphics memory installed on your graphics card or chip. It is normally the first thing displayed whenever you turn your machine on. If not, check out the manual for your particular card.

Monitor settings - if it can't find your monitor settings, you will be asked to enter the v-sync, h-sync and refresh rates. These should be in the manual for your particular monitor.

If you have any other non-standard devices (SCSI drives etc.) then make sure you have the relevant manuals close by. It would also do no harm to see if there are any specific issues with your device before you start installation by doing a quick google.

Installation:

If you plan to install the planet ccrma package from CD, then it is recommended that you use apt-enabled installation cd's. You can download the full images from the planet ccrma site, or if you already have the red hat cd's you can adapt them by following the instructions at <http://ccrma-www.stanford.edu/planetccrma/software/createredhatcdroms.html#createredhatcdroms>. This will only work if your red hat cd's are from the official distribution – some magazines/books etc. give out modified versions which

will not work in this case. If you are modifying your existing cdroms, then you will need to use **cygwin** (with the usual developer packages installed – **make**, **gcc** etc.) and the **cdrtools** package (download the source and compile it in cygwin) to carry out the instructions on the planet ccrma site, as well as an application which can burn ISO images. Check out the following links:

Cygwin: www.cygwin.com

Cdrtools: <http://freshmeat.net/projects/cdrecord/>

ISO Recorder:

<http://isorecorder.alexfeinman.com/isorecorder.htm>

Insert the 1st Red Hat/Fedora Core CD and reboot your computer. If your computer supports it, set your cdrom drive as the first boot device in your BIOS. If it doesn't, then you can create a boot disk from windows - see the bottom of this document for instructions.

The installer will begin - it is very user friendly and will take you through everything step by step, offering detailed help if you need it. The main thing to watch out for is your Grub setup (see above). If you choose a custom install (highly recommended by me!) then you can choose exactly which packages you would like installed. If you have lots of disk space, try them all out!

During the installation you will be asked about partitioning. If you choose auto-partition it generally sorts everything out for you.

Towards the end of the installation, **MAKE SURE YOU CREATE A BOOT DISK!!!** It's always better to be safe than sorry.....

When you are finished, reboot your computer and you should now have a working linux installation. Hooray!

Post-installation:

If you are using the windows bootloader, then you have a couple of final steps. After booting into linux (using your boot floppy....) we need to create a copy of the boot partition and write it to a file which windows can then use. First of all, find out which partition is being used as your boot partition using the **mount** command. This will list all current mounted partitions. The boot partition is the one with the mountpoint “/boot” listed next to it.

Once you have figured out which partition is which, we can copy it using the following command (as **su**)

```
dd if=/dev/hd<bootpartition> of=/bootsect.lnx bs=512 count=1
```

e.g. `dd if=/dev/hda2 of=/bootsect.lnx bs=512 count=1`

We should now copy this **bootsect.lnx** file and store it somewhere so we can access it from windows - the easiest option is to copy it to a floppy:

```
mount -t auto /dev/fd0 /mnt/floppy
cp /bootsect.lnx /mnt/floppy
umount /mnt/floppy
```

Remove the floppy and reboot into windows. Copy the **bootsect.lnx** file to the root level of your **C:** drive and edit your **boot.ini** file. Add the following to the bottom of it:

C:\BOOTSECT.LNX="Red Hat Linux 9.0"

OR

C:\BOOTSECT.LNX="Fedora Core 1"

MAKE SURE IT IS TYPED EXACTLY LIKE THIS OR IT WON'T WORK

Now reboot your computer again and you should be presented with a choice between windows and linux. Select linux and it should then take you into Grub and then continue loading linux. Yippee!

We can now go ahead and start preparing for the Planet CCRMA software installation.

Making a boot disk for the installation:

You can use a program called **rawritewin** to create a linux bootdisk to start the installation process. This program will be on the 1st installation cd – normally **/dosutils/rawritewin/rawritewin.exe**. Run this program and select your floppy drive. Then browse to the image you need to copy – again, this will be on the 1st cd as **/images/bootdisk.img**. Make sure you have a floppy in the drive and click “write”. When it finishes, you can use this floppy to boot your computer and run the installer.