

# Sarge Installation

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## 1 Basic Install

1. Boot install CD with: “`linux26 vga=771`”
2. Install the system and don't select any package category

### 1.1 Post install

1. Install vim and mc: “`apt-get install vim mc`”
2. Add ftp or http alternate sources to sources.list (`apt-setup`)
3. Add the Debian Backports to sources.list

## 1.2 Debian Backports

For Backports, add this line

```
deb http://www.backports.org/debian/ sarge-backports main
```

to your `/etc/apt/sources.list`, and these lines

```
Package: *
Pin: release a=sarge-backports
Pin-Priority: 200
```

to your `/etc/apt/preferences`. That will deactivate all packages from backports.org. To activate a package (e.g. mutt), add these lines

```
Package: mutt
Pin: release a=sarge-backports
Pin-Priority: 999
```

to `/etc/apt/preferences`. Then run:

```
apt-get update
and
apt-get install mutt
```

Another way is to skip the second entry in `/etc/apt/preferences` and to use “`apt-get -t sarge-backports install mutt`” which is easier when the package requires additional backports.

## 2 Kernel

You can now install new kernel if you want:

```
apt-get install -t sarge-backports linux-image-2.6.15-1-686
```

Don't forget “`dpkg --purge hotplug`” after kernel upgrade.

Note: I had to add “`ide_generic`” and “`ide_disk`” modules to `/etc/mkinitramfs/modules`. Some Intel chipsets do also need “`piix`” to enable DMA. After that, you have to run:

```
update-initramfs -u -k 2.6.16-2-686
```

to make it boot ;-)

*REBOOT*

### 2.1 ACPI

Install ACPI with

```
apt-get install acpi apt-get install acpid
```

## 2.2 Centrino

If you have Centrino, add these lines

```
freq_table
cpufreq_powersave
cpufreq_userspace
speedstep-centrino
```

to `/etc/modules` then install `cpudyn`.

```
apt-get install cpudyn
```

## 2.3 Hard disk

Install `hdparm` and put a section like this in `hdparm.conf` (to activate dma).

```
/dev/hda {
quiet
dma = on
io32_support = 1
}
```

You can also do the same with dvd/cd-rom drives (e.g. `/dev/hdc`)

## 2.4 Alsa sound

You can now setup sound (use backports if you installed new kernel)

```
apt-get install alsa-base alsa-utils
```

then run `alsacnf`. Add the following line to `/etc/modprobe.d/alsa-base` if you don't want your usb headset to be taken as the first device.

```
options snd-usb-audio index=-2
```

## 2.5 Wireless

If you have wireless (use backports if you installed new kernel):

```
"apt-get install wireless-tools"
```

You can rename whether necessary you interface in `"wlan*"` with `ifrename`.

```
apt-get install ifrename
```

Example for `ipw2200` WiFi driver, add these lines

```
wlan* driver ipw2200
```

in `/etc/iftab` and this line in `/etc/modprobe.d/ipw2200`.

```
install ipw2200 /sbin/modprobe --ignore-install ipw2200; /sbin/ifrename
```

## 3 X Window

Install X Window with

```
apt-get install x-window-system
```

or with

```
apt-get install -t sarge-backports x-window-system
```

if you want to install Xorg from backports (better with recent hardware, notebooks...). Don't forget to put "DisplaySize X Y" (mm) in the "Monitor" section of your `/etc/X11/xorg.conf`.

Example: "DisplaySize 335 207"

### 3.1 Touchpad

If you have a touchpad (e.g. Synaptics) install the following packages (use backports if you installed X Window from it):

```
apt-get install -t sarge-backports xfree86-driver-synaptics tpconfig
```

In the future, there will also be an `xorg-driver-synaptics` package to use with Xorg. You can now add the following line

```
InputDevice "TouchPad"
```

to the 'ServerLayout' section of your `/etc/X11/xorg.conf`. Don't forget to load the `synaptics` module in the "Module section.

```
Section "Module"
```

```
...
```

```
Load "synaptics"
```

You can now add the following "InputDevice" section :

```
Section "InputDevice"
  Identifier "TouchPad"
  Driver     "synaptics"
  Option     "AlwaysCore"
  Option     "Device" "/dev/input/mouse0"
  Option     "Protocol" "auto-dev"
  Option     "HorizScrollDelta" "0"
  Option     "LeftEdge" "1700"
  Option     "RightEdge" "5300"
  Option     "TopEdge" "1700"
  Option     "BottomEdge" "4200"
  Option     "FingerLow" "25"
  Option     "FingerHigh" "30"
  Option     "MaxTapTime" "180"
  Option     "MaxTapMove" "220"
  Option     "VertScrollDelta" "100"
  Option     "MinSpeed" "0.09"
  Option     "MaxSpeed" "0.18"
  Option     "AccelFactor" "0.0015"
  Option     "SHMConfig" "on"
EndSection
```

## 3.2 Fonts

Install more fonts:

```
apt-get install -t sarge-backports xfonts-base-transcoded \  
xfonts-75dpi-transcoded xfonts-100dpi-transcoded xfonts-konsole  
apt-get install -t sarge-backports msttcorefonts x-ttcidfont-conf
```

Make sure bitmap fonts are activated in fontconfig “dpkg-reconfigure fontconfig”

## 3.3 Kde

Install Kde with

```
apt-get install kde  
or  
apt-get install kde-core
```

if you only want basic kde. If you want Gnome apps look like kde:

```
apt-get install gtk2-engines-gtk-qt
```

and configure it via Kde control panel. Install kde locales (e.g. “apt-get install kde-i18n-fr” for french).

## 3.4 Gnome

If you prefer Gnome, you can install it with

```
apt-get install gnome  
or  
apt-get install gnome-core
```

if you only want basic Gnome.

## 3.5 Session manager

Install gdm:

```
apt-get install gdm  
and gdm-themes  
apt-get install gdm-themes
```

You can configure it with gdmconfig” (there is a beautiful Debian theme...).

If you suffer from graphical logout problem (crash...) you can set in gdm.conf:

```
AlwaysRestartServer=true
```

## 3.6 Printing System and Samba client

You can install CUPS printing system:

```
apt-get install cupsys cupsys-client cupsys-bsd cupsys-driver-gimpprint  
and footmatic (drivers) with  
apt-get install foomatic-db-engine
```

You will probably also need Samba client to print on Windows shared printers:

```
apt-get install samba-client
```

Don't forget to restart CUPS after packages installation:

```
/etc/init.d/cupsys restart
```

## 4 Misc

Install rcconf

```
apt-get install rcconf
```

to manage daemons auto start.

Install numlockx to enable Numlock in X11 sessions

```
apt-get install numlockx
```

and linux-logos for beautiful ASCII logos !

```
apt-get install linux-logos
```