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            Linksys LNE100TX Fast Ethernet Adapter(LNE100TX v4)
                    Linux Driver Installation
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I. Installation Guide using TurboLinux 6.0.X (It will also work for all other linux but some directories will be different)

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*Note: Before starting make sure the diskette is not write protected! (won't matter much)

Step 1: Mount the Linksys driver diskette with the following command;

```
mount -t msdos /dev/fd0 /mnt/floppy
```

Change directories into the Linux directory on the diskette;

```
cd /mnt/floppy/Linux
```

Step 2: Create a temp directory called netdrivers in /root;

```
mkdir netdrivers
```

Step 3: Copy netdrivers.tgz on the floppy diskette to the new directory you have just created;

```
cp /mnt/floppy/netdrivers.tgz /root/netdrivers
```

Step 4: Decompress netdrivers.tgz to extract the source files;

```
tar xzvf netdrivers.tgz
```

The extracted files should now be located within the netdrivers directory

Step 5: Compile the modules;

```
make
```

You now have compiled the modules successfully

Step 6: Install the modules;

```
insmod pci-scan.o
insmod tulip.o
```

Step 7: Issue the depmod command;

```
depmod -a
```

Step 8: Initialize the eth0 adapter

```
ifup eth0
```

Step 9: Run ifconfig to make sure that the eth0 interface is loaded;

ifconfig

You should see the loopback adapter (lo), and the Ethernet adapter (eth0)

Step 10: To have the eth0 load everytime you boot into Linux you must copy tulip.o, and pci-scan.o into the following directories;

/lib/modules/2.2.14-3/net

/lib/modules/2.2.14-3BOOT/net

/lib/modules/2.2.14smp/net

If you are prompted to replace the current files, say YES

Step 11: You will have to add two lines of code to the following file;

/etc/rc.modules

Add the following;

pci-scan.o
tulip.o

To write the changes to the file type the following;

Shift+: wq (this is only true if they use vi, you not telling them to use vi).

Step 12: Edit etc/modules.conf (if needed).

vi etc/modules.conf

Add the following to the begining of the file;

alias eth0 tulip

To write the changes to the file type the following;

Shift+: wq

A. Get source Code and produce a binary code
==========
Step 1 : Get the source code from the following site;

FTP://cesdis.gsfc.nasa.gov/pub/linux/drivers/kern-2.3/tulip.c
FTP://cesdis.gsfc.nasa.gov/pub/linux/drivers/kern-2.3/kern_compat.h

Step 2 : Compile the source code by using

"gcc -DMODULE -D__KERNEL__ -I/usr/src/linux/net/inet
-Wall -Wstrict -prototypes -O6 -c tulip.c
'[-f /usr/include/linux/modversions.h] && echo
-DMODVERSIONS`"

B. Installation guide using Slackware 3.XX
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Step 1 : Copy tulip.o into the latest kernel's modules:
cp tulip.o /lib/modules/2.0.XX/net/tulip.o
Where the XX is the version number of the latest kernel.

Step 2 : Modify /etc/rc.d/rc.modules:
Unmark the line /sbin/modprobe tulip

Step 3 : Reboot system:
reboot

Step 4 : when system boots, the driver will be load.

Step 5 : run netconfig to setup TCP/IP
(run 'ifconfig' or 'netstat -i' to see if there is a
interface 'eth0')

C. Installation guide using Redhat 5.XX
==========

Step 1 : Copy tulip.o into the latest kernel's modules:
cp tulip.o /lib/modules/2.0.XX/net/tulip.o
Where the XX is the version number of the latest kernel.

Step 2 : Update kernel's module dependencies:
/sbin/depmod -a

Step 3 : Check /etc/conf.modules:
alias eth0 tulip
options tulip options=X debug=X

Step 4 : Valid media types selections for options=X are:
0 Auto-select (default to the 10baseT link)
1 10base2
2 AUI
3 100baseTx
4 10baseT-FD
5 100baseTx-FD
6 100baseT4
7 100baseFx
8 100baseFx-FD
9 MII 10baseT
10 MII 10baseT-FD
11 MII (autoselect)
12 10baseT (no autoselect), v0.69 and later only
13 MII 100baseTx
14 MII 100baseTx-FD
15 MII 100baseT4

Step 5 : Valid debug levels for debug=X are:
1 normal output

```
          2 more verbose
          3 even more verbose
          4 even more verbose
          6 insanely verbose

Step 6 : Reboot system:
          /sbin/shutdown -r now

Step 7 : when system boots, the driver will be load.

Step 8 : run netconfig to setup TCP/IP
          (run 'ifconfig' or 'netstat -i' to see if there is a interface
          'eth0')
```