Raspberry Pi Wireless Dongle Configuration Guide

The Debian Squeeze OS supplied on the SD card provided with this kit needs to be upgraded to get the drivers required to use the supplied Wifi dongle. Please follow the instructions below carefully to install the required drivers:

1. Insert an Ethernet cable from a DHCP enabled router to the Raspberry Pi
2. Insert Pre-loaded SD card with Debian Squeeze OS v6
3. Plug in the USB hub and USB enabled keyboard and mouse
4. Insert the supplied USB Wifi adaptor

The Wifi adaptor must be inserted to a USB port before the Raspberry Pi is powered on.

5. Plug in power adaptor to the Raspberry Pi and wait for it to boot up
6. When prompted type in default username – Pi & password – Raspberry, Press enter on the keyboard
7. Once in command line type "sudo apt-get update" (sudo runs the command with admin privileges, apt-get is a tool which installs and uninstalls programs. In this case it updates the raspberry pi's firmware to the latest version.)
8. Once firmware has installed the raspberry pi requires a reboot to load new settings
9. Type "sudo reboot" – This restarts the Raspberry Pi with latest firmware installed
10. Login to the Raspberry Pi again as previously
11. Type "ifconfig" (This will list all the network devices attached to the Raspberry Pi and all the network parameters for that device.)
12. Here we should see 'eth0' and 'Wlan0' which are Ethernet port and wireless local area network port. This confirms that the raspberry has detected the wireless adaptor and is ready to be configured.
13. Type "sudo iwlist wlan0 Scan" This will then tell that wifi adaptor to scan the area for wifi signals and display a list of wireless devices and parameters.
14. Find your wireless network in the list and take note of the ESSID name, we will need this later.
15. Now we need to tell the wifi adaptor when it is plugged in to connect to your wireless router. To do this we need to add these settings to a network configuration file.
16. Type "CD /etc/network" CD is use to simply change directory
17. If we type in "ls" this lists all the files in that directory and in there should be a file called 'interfaces'.
18. To edit this file we type command "sudo nano interfaces" (nano is a text editor program in linux just like using notepad in windows)
19. We should see something very similar to whats listed below
    auto lo
    iface lo inet loopback
    iface eth0 inet dhcp

20. Now we need to add the following lines :-
    Auto wlan0
    Iface wlan0 inet dhcp
    Wpa-ssid (enter the ESSID noted earlier, please note that the ESSID is case sensitive)
    Wpa-psk (enter that password for your wifi, this can be plain text or a Hex key)

21. Now that we have finished we need to save the file by using keyboard command CTRL+O and press enter to save under filename interfaces. Now we can exit Nano by CTRL-X
22. Now unplug the Ethernet cable from the Raspberry Pi and type "sudo reboot" to reboot the Raspberry Pi
23. Login on reboot when prompted and type"Start X" to boot up the Debian OS
24. Open up a web browser to confirm that the wifi adaptor has connected to your router.

If you do not have access to an Ethernet network connection point then you can reprogramme the SD card with the latest image from www.raspberrypi.org/downloads and then start from step 10 in the instructions above.