

# net5501 "XL"



# **Quick Start Guide**

Thank you for purchasing a net5501 "XL" computer.

Your package should contain:

- □ net5501 board
- ☐ Case with flexible PCI riser

## **Optional Extras**

- □ Compact Flash card
- □ miniPCl card(s)
- □ PCI card
- □ Power supply
- □ 2.5" hard drive mounting kit

Please read the following instructions to begin using your net5501 "XL".

# Things you will need

#### **Tools**

- Anti-static wrist strap
- 2mm hex key (supplied)
- · Phillips head screwdriver
- Compact Flash card reader (optional)
- Null modem cable (optional)

#### **Materials**

If you don't have them already, you'll need:

- Compact Flash Card OR 2.5" hard drive and a net5501 hard drive mounting kit
- miniPCI card (optional) e.g. wireless adapter, VPN accelerator
- PCI card e.g. network adapter
- Power supply
- Operating system image for the net5501

#### Instructions

## **Safety Note**

The net5501 board, like all electronic equipment, is sensitive to damage from static discharge. To avoid damage caused by static discharge, we strongly recommend that you use an antistatic wrist strap when handling the board.

### Step 1 Remove the case cover

To install the Compact Flash (CF), hard drive and/or miniPCI cards into the net5501 "XL", you will need to remove the case cover.

- I. Disconnect power and all cables.
  - **Note:** The CF socket on this machine is not hot-swappable.
- 2. Using the supplied hex key, remove the four screws from the sides of the case.
- 3. Remove the top part of the case by sliding it forwards.

#### Step 2 Configure and install a Compact Flash card (optional)

To use your net5501 "XL", you will need to have either a CF card with a suitable operating system installed in the CF socket on the net5501 board or a 2.5" hard drive installed (Step 5).

If your CF card does not already have an operating system installed, you can either mount the CF card in another machine (e.g. via a flash card reader or a CF to IDE adapter) and copy a boot image onto it, or pxe boot the net5501. The net5501 supports many operating systems including BSD, Linux and a number of proprietary operating systems.

#### Installation

Insert the CF card into the socket, label up. Ensure the CF card is fully engaged in the socket. The card should not extend past the edge of the board.

#### Removal

Remove the CF card from the socket on the rear right hand side of the board. Grasp the CF card firmly between thumb and index finger and pull straight out, taking care not to lift or twist the card as this may damage the connector pins.

## Step 3 Install the miniPCI card (optional)

Insert your miniPCI card into the miniPCI slot at an angle of about 45° to the board. Ensure that the card is firmly seated in the slot and then lay it onto the board, pressing down until the locking tabs on either side of the card click into place.

If you are installing a wireless card, please note that like all electronic equipment, they are sensitive to damage from static discharge, especially the RF switch and the power amplifier. To avoid damage caused by static discharge, we strongly recommend that you do the following when installing a wireless radio card.

- Touch your hands and the bag containing the wireless card to a ground point on the board (for example one of the holes in the corner of the board). This will equalize the potential of the wireless card and board.
- Insert the radio card into the miniPCI slot on the board.
- Install the bulkhead end of the pigtail into the case. This will ground the pigtail to the case.
- Touch the u.fl end of the pigtail to a ground point on the board to discharge any static, then attach the u.fl end to the connector on the wireless card.

### Step 4 Install the PCI card (optional)

The net5501 "XL" can support a selected range of PCI cards. If you wish to install a different PCI card, it may be necessary to modify the PCI mounting bracket.

- I. Remove the PCI mounting bracket from your PCI card. Attach the net5501 PCI bracket to your PCI card using the two supplied M3x5 Phillips head screws.
- 2. Insert the flexible riser into the PCI slot on the net5501 board so the PCI connector faces towards the board.
- 3. Insert the PCI card into the riser PCI slot with the mounting bracket towards the rear of the case.
- 4. Secure the mounting bracket to the case using the two supplied M3x6 hex screws and 2mm hex key.

## Step 5 Install a 2.5" hard drive (optional)

If you want to install a hard drive in your net5501 "XL", you will need to use a net5501 hard drive mounting kit. Please note that you will need to remove the hard drive to access the miniPCI slot on the net5501 board.

- 1. Remove the board screws and replace them with the standoffs from the hard drive kit.
- 2. Attach a 2.5" hard drive to the bracket with the hard drive mounting screws.
- 3. Attach the bracket to the standoffs with the board screws.
- 4. Plug in the hard drive cable between the board and the hard drive.

#### Step 6 Replace the case cover

Before you can begin using your net5501 "XL", you will need to replace the case cover.

- 1. Reposition the case cover over the base, ensuring the lip on the bottom at the front is correctly engaged.
- 2. Replace the case screws and tighten.

### **EMC Compliance**

Please note that in order to comply with ACMA emissions regulations, the net5501 board must be housed in a suitable metal enclosure.

## Step 7 Connect to the serial console (optional)

If you want to configure your operating system via the console, you will need to connect to the serial port via a null modem cable.

Your terminal emulator should be set to 19200 baud, 8 bits, no parity, 1 stop bit, no flow control.

## Step 8 Apply power

Plug the power supply into the DC jack on the net5501 "XL". The net5501 board runs on 6-20V DC, and uses up to 18W at 12V (including a hard drive). You'll need a power supply with a 2.1mm internal, 5.5mm external, centre positive plug.

The net5501 will go through its boot up cycle, which you can watch if you are connected to the serial console. Your net5501 is ready to use!

#### More information

For more detailed instructions on using your net5501 "XL", please visit our website at www.yawarra.com.au and download the manufacturer's user guide.

# Warning

This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

### Contact us

Please feel free to contact us if you have any queries regarding your net5501 "XL".

#### **Yawarra Tiny Computers**

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