

## **ALIX 1**



# **Quick Start Guide**

Thank you for purchasing an ALIX I computer.

Your package should contain:

- □ ALIX I board
- ☐ Power and hard drive LEDs

## **Optional Extras**

- □ Case
- □ Compact Flash card
- □ miniPCl card
- □ Power supply
- ☐ PS2 cable, keyboard and mouse splitter

Please read the following instructions to begin using your ALIX I.

## Things you will need

#### **Tools**

- Anti-static wrist strap
- 2mm hex key (ALIX I box)
- Phillips head screwdriver (ALIX I box)
- 5mm nut driver or small adjustable spanner
- Compact Flash card reader (optional)
- Null modem cable (optional)

#### **Materials**

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

- Case
- Compact Flash Card
- miniPCI card (optional) e.g. wireless adapter, VPN accelerator
- Hard drive bracket (optional)
- Power supply
- Operating system image for the ALIX I

## Instructions

## Safety Note

The ALIX I 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 (ALIX 1 server)

To install the Compact Flash (CF) and/or miniPCl cards into the ALIX I, you will need to remove the board from the case.

- 1. Disconnect power and all cables.
  - **Note:** The CF socket on this machine is not hot-swappable.
- 2. Remove the screws from serial port and VGA port on the rear of case.
- 3. Remove the four outer case screws.
- 4. Remove the top part of the case The top of the case is symmetrical, so it doesn't matter which way round it goes.
- 5. Using a Phillips head screwdriver, remove the four screws from the corners of the board.
- 6. Carefully unclip the LEDs and remove them from the case. Squeeze the the plastic LED clips, pushing them towards the outside of the case, and remove them.
- 7. Carefully lift the board out by placing your fingers under the board at the front on both sides.

## Step 2 Configure and install a Compact Flash card

To use your ALIX I, you will need to have a CF card with a suitable operating system installed in the CF socket on the ALIX I board.

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 ALIX I. The ALIX I supports many operating systems including BSD, Linux and a number of proprietary operating systems.

#### Installation

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

#### Removal

To remove the CF card from the ALIX I 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(s) (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 a 2.5" IDE hard drive (optional)

If you want to install a hard drive in your ALIX I, you will need to use an ALXI I hard drive mounting bracket. Please note that you will need to remove the hard drive to access the miniPCI slot on the ALIX I board.

- 1. Attach a 2.5" IDE hard drive to the hard drive bracket, using 2 M3 x 5 screws, and the two holes at the end of the hard drive furthest from the 44-pin connector.
- 2. Press the hard drive bracket onto the 44-pin connector and USB header on the board.

You may need to adjust the jumpers on the corner of the board adjacent to the Compact Flash slot, to determine which devices act as master and slave.

## Step 5 Reinstall the board into the case (ALIX 1 server)

Before you can begin using your ALIX I, you will need to reinstall the board into the case.

- 1. Place the board back into the case feeding the ethernet and serial ports in first, then lowering the front of the board. Press down firmly on the corners of the board.
- 2. Using a Phillips head screwdriver, insert and tighten the four board screws.
- 3. Insert the serial port screws and tighten using a small spanner.
- 4. Push LED clips through the holes in the front of the case and re-insert LEDs from the rear. Attach the other end of the LED cables to the board.
- 5. Replace the case cover and align with screw holes.
- 6. Insert the case screws, to finger tight, plus a quarter turn only.

## **EMC Compliance**

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

## Step 6 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 settings will depend on the operating system you have installed.

**Note:** Depending on the operating system you have installed, you can also connect to the ALIX I via a keyboard and monitor.

## Step 7 Apply power

Plug the power supply into the DC jack on the ALIX I. The ALIX I boards run on 12V DC, and use about 5W at 12V (excluding miniPCI cards). You'll need a power supply with a 2.5mm internal, 5.5mm external, centre positive plug.

The ALIX I will go through its boot up cycle, which you can watch if you are connected to the serial console or via a monitor/keyboard. The behaviour of the two LEDs on the ALIX I boards is as follows:

• green - power ON whenever power is switched on

yellow - hard drive
ON whenever the system is accessing the hard drive or

Compact Flash card

Your ALIX I is ready to use!

## More information

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

## Contact us

Please feel free to contact us if you have any queries regarding your ALIX 1.

## **Yawarra Tiny Computers**

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