ALIX 6

Quick Start Guide

Thank you for purchasing an ALIX 6 computer.

Your package should contain:

❒   ALIX 6 board

Optional Extras

❒   Case
❒   Compact Flash card
❒   miniPCI card
❒   Pigtail(s) and antenna(s)
❒   Power supply

Please read the following instructions to begin using your ALIX 6.

April 2014

Things you will need

Tools

- Anti-static wrist strap
- 2mm hex key (supplied)
- Compact Flash card reader (optional)
- Null modem cable (optional)
- Phillips head No 0 screwdriver

Materials

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

- Case
- Compact Flash Card
- miniPCI/miniPCI-e cards (optional)
- SIM card
- Power supply
- Operating system image for the ALIX 6

Instructions

Safety Note

The ALIX 6 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 anti-static wrist strap when handling the board.

Step 1   Remove the case (ALIX 6 server)

To install the Compact Flash (CF), miniPCI/miniPCI-e cards and/or SIM card(s) into the ALIX 6, 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 four screws from the end plate on the rear of the case (the end with the ethernet and serial ports).
3. Holding the board by the serial port, carefully slide the board out from the case.
   Note: You do not need to remove the end plate from the board to set up your ALIX 6 box. To remove the end plate from the board, remove the serial port screws.

Step 2   Configure and install a Compact Flash card

To use your ALIX 6, you will need to have a CF card with a suitable operating system installed in the CF socket on the ALIX 6 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 network boot the ALIX 6. The ALIX 6 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 right 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 6 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 SIM card(s) (optional)

J17 (top of board): Using a fingernail or small screwdriver, gently unlock the SIM holder tab on the top of the SIM slot by sliding it towards the front of the board (away from the ethernet ports). Lift up the rear end of the SIM card holder. Gently slide your SIM card into the holder, connector side up, with the notched corner facing the front of the board. Lower the SIM card holder and lock into place by sliding towards the rear of the board. To remove, repeat these steps in reverse.

J20 (underside of board): From the front of the board, gently slide your SIM card into the slot, connector side up, notched end first. Push firmly until you hear a small click. Release pressure and the card will spring back slightly and stop. To remove, push firmly until you hear a small click and the card will slide out so that it can be grasped between thumb and forefinger and pulled out.

Step 4   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.

Step 5   Install the miniPCI-e card (optional)

Insert your miniPCI-e card into the miniPCI-e slot (J18) at an angle of about 45° to the board. Ensure the card is firmly seated in the slot and then lay it onto the support posts at the edge of the board. Using a Phillips head No 0 screwdriver, insert the M2 screws (supplied) into the support posts, and tighten.

If you are installing a miniPCI/miniPCI-e 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/miniPCI-e 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 6   Install the pigtail(s) (optional)

Remove the rubber blanking plug from the punchout in the end plate and insert the SMA pigtail. Screw the pigtail retaining washer and nut onto the pigtail to secure it to the case. Attach the u.fl end of the pigtail to the connector on the wireless card.

Step 7 Reinstall the board into the case (ALIX 6 server)

Before you can begin using your ALIX 6, you will need to reinstall the board into the case.

1. Slide the board, with end plate attached, back into the case, ensuring that the edges of the board are inserted into the slots in the sides of the case.
2. Insert the end plate screws and tighten.

EMC Compliance

Please note that in order to comply with ACMA emissions regulations, the ALIX 6 board must be housed in a suitable metal enclosure.

Step 8 Attach the antenna(s) (optional)

Screw the antenna onto the pigtail and position as required.

Step 9 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 38400 baud, 8 bits, no parity, 1 stop bit, no flow control.

Step 10 Apply power

Plug the power supply into the DC jack on the ALIX 6. The ALIX 6 boards run on 7-18V DC, and use about 5W at 12V (excluding miniPCI cards). You'll need a power supply with a 2.1mm internal, 5.5mm external, centre positive plug.

The ALIX 6 will go through its boot up cycle, which you can watch if you are connected to the serial console. The behaviour of the three LEDs on the ALIX 6 boards is as follows:

- during memory check   all LEDs on
- during O/S start up   left-hand LED on
- after boot up   operating system dependent

Your ALIX 6 is ready to use!

More information

For more detailed instructions on using your ALIX 6, 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 6.

Yawarra Tiny Computers

Website	www.yawarra.com.au
Email	enquiries@yawarra.com.au
Phone	1300 859 799
Mail	PO Box 606, Boronia VIC 3155, Australia