ALIX 3 Outdoor

Installation Guide

Thank you for purchasing an ALIX 3 Outdoor computer.

Your package should contain:

- ❒ ALIX 3 board, outdoor case, pole mounting bracket, ethernet cable

Optional Extras

- ❒ Compact Flash card
- ❒ miniPCI card(s)
- ❒ Pigtail(s)
- ❒ Antenna(s)
- ❒ POE injector and regulated power supply
- ❒ Wall mounting bracket

Your ALIX 3 Outdoor is partially assembled for your convenience.

Please read the following instructions to complete the assembly of your unit.

Things you will need

Tools

- 8mm socket or spanner
- Phillips head screwdriver
- Anti-static wrist strap
- RJ45 crimping tool
- Adjustable spanner
- Compact Flash card reader (optional)
- Null modem cable (optional)

Materials

- CAT5 UTP cable
- RJ45 terminator
- Four fasteners suitable for wall mounting (optional) e.g. masonry anchors
- Cable ties (optional)

If you don't have them already, you'll also need pigtails, antennas, a Compact Flash card, an operating system image for the ALIX 3, miniPCI cards (e.g. wireless card), a suitable power supply and a POE injector.

Instructions

Safety Note

The ALIX 3 Outdoor 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 lid

Using the 8mm socket or spanner, remove the four bolts from the ALIX 3 Outdoor case. Remove the lid and gasket.

Step 2 Configure and install a Compact Flash card

To use your ALIX 3 Outdoor, you will need to install a suitable operating system onto a CF card and insert it into the CF socket on the board. This can be done by mounting a CF card in another machine (e.g. via a flash card reader) and copying a boot image onto it, or by network booting the ALIX 3 Outdoor. The ALIX 3 Outdoor supports many operating systems including BSD, Linux and a number of proprietary operating systems. Refer to www.yawarra.com.au for more information.

Disconnect the power and all cables. The CF socket on this machine is not hot-swappable. Insert the CF card into the socket on the front right hand side of the board, with the label facing up. Ensure that the CF card is fully engaged in the socket.

Step 3 Install the miniPCI card(s)

The ALIX 3 Outdoor has two miniPCI slots – one on each side of the board. In order to access the miniPCI slot on the underside of the board, you will need to remove the board from the case. To do this, remove the four corner screws from the board, carefully lift out the board and disconnect the RJ45 pigtail.

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.

We also recommend that you utilise some form of lightning protection when using wireless cards and boards in outdoor locations.

If necessary, reattach the RJ45 pigtail and reinstall the board.

Step 4 Connect to the serial console (Optional)

If you want to configure your operating system via the console, you will need to do this while the box is disassembled. To connect to the serial console, remove the two board screws nearest the serial port and loosen the two remaining board screws. Tilt the board up and connect a null modem cable to the serial port. Your terminal emulator should be set to 38400 baud, 8 bits, no parity, 1 stop bit, no flow control.

Note: With the board exposed, you can plug a power supply directly into the DC jack on the board, rather than using a POE injector.

Step 5 Install the gasket and replace the lid

1. Ensure the enclosure seal channels and silicone rubber gasket are free of dust and dirt.
   WARNING: Do not use oil or any type of solvent to clean the gasket.
2. First, place the gasket onto the base, ensuring that the outer rim of the gasket sits higher than the inner rim. Run your fingers around the gasket to ensure that it is properly seated in the channel.

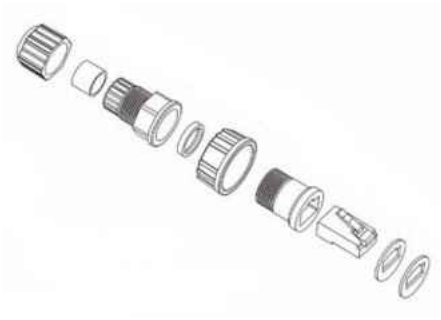
Note: If the outer rim sits lower than the inner rim, then the gasket is upside down. Correct placement of the gasket is vital to ensure a watertight seal.

3. Place the enclosure lid over the base and gasket assembly. Move the lid gently from side to side until you feel it engage with the gasket. When the lid is correctly placed, all four bolt holes will be properly aligned and the lid will sit firmly in place.
4. Using the supplied bolts and washers, secure the lid to the base. Insert all bolts loosely before tightening any of them. Tighten the bolts by hand to finger-tight, and then tighten them another half turn using the 8mm socket or spanner. Follow an X pattern when tightening the bolts (e.g. bottom-left, top-right, bottom-right, top-left).
   WARNING: Overtightening the bolts may damage the gasket.

Step 6 Attach the external fittings

Waterproof RJ45 ethernet connector

Assemble the RJ45 connector as shown. Make sure you thread the CAT5 cable through the assembly before crimping the RJ45 terminator onto the end. Plug the ethernet cable into the ethernet port and tighten the assembly, starting at the case end and working outwards. Tighten the assembly by hand to avoid damaging the threads.



Antennas

Screw the antennas onto the N-Type bulkhead connectors on the case.

Step 7 Wall or pole mount the ALIX 3 Outdoor

Using the supplied bolts, attach the appropriate mounting bracket to the rear of the case. Attach the mounting bracket to a wall or a pole as required. Ensure that the unit is position such that the ethernet cable and waterproof ethernet assembly are pointing downwards.

Step 8 Set up the POE injector and apply power

Plug the power supply and the ethernet cables into the POE injector. The cable connected to the ALIX 3 Outdoor must be connected to the port marked POE on the POE injector.

Contact us

Please feel free to contact us if you have any queries regarding your ALIX 3 Outdoor.

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