

# 'Short-Podule' Expansion Card Fitting Instructions

## WARNING!



Your computer contains hazardous voltages so before removing any cover, switch off and disconnect from the mains supply as failure to do so may cause injury.

## CAUTION!



OBSERVE PRECAUTIONS FOR HANDLING ELECTROSTATIC SENSITIVE DEVICES. Your computer and upgrade can be damaged by careless static discharge. Earth yourself and try to avoid touching any of the electronic circuitry.

**Note:** The computer motherboard and expansion card are static sensitive and excessive handling can damage them. It is recommended that the upgrade is left in its protective packaging and only removed immediately prior to plugging it into the machine. Precautions should be taken to reduce static by wearing an earthed anti-static strap or by occasionally touching an earthed surface. As the fitting of this upgrade is outside our control, no responsibility can be accepted for any consequential loss or damage caused by its incorrect installation. If you are unsure about fitting this upgrade yourself then ask your local Acorn dealer to fit it for you. It is highly recommended that the machine is tested for electrical safety after the upgrade is fitted.

## Tools Required

A small cross-head screwdriver for removing the case lid and for securing the expansion card.

## Purpose

The short podule supplied can be fitted to any of the following machines: 305/310, 440, A400/1, A540, A5000, A7000 and Risc-PC. A special link option allows the card to be fitted directly to the motherboard of the 305/310 eliminating the need for a backplane. The two !DE ports on the card allow the connection of up to four internal or external devices. The backplate assembly accepts a standard SCSI! 50 way Male Centronics cable so that external devices can be mounted in standard SCSI style housings.

## A7000 and Risc-PC

If you are unfamiliar with the disassembly of your Risc-PC then follow the instructions in the chapter 'How to add expansion cards' starting on page 98 of the Welcome Guide to gain access to the podule expansion area. If you find that your machine has no podule backplane present then one must be fitted before any expansion cards can be used.

## 310,440,A400/1,A540 Fitting

Disconnect the power cord and all other connecting cables from the computer and move the monitor and keyboard to a safe place. The cover can now be removed using the cross-head screwdriver to unscrew the two side screws and the three rear screws. Carefully slide the cover to the rear until it clears the rest of the machine. Place the cover in a safe place. (This operation is explained in more detail in appendix B of the Archimedes User Guide : Maintaining the Archimedes computer under *Changing the Batteries.*)

## A5000 Only

Disconnect the power cord and all other connecting cables from the computer and move the monitor and keyboard to a safe place. The cover can now be removed by turning the computer upside-down and using the cross-head screwdriver, unscrew the cover screws. When all six screws are removed (three from each side) carefully turn the machine back over and slide the cover off towards the rear.

## Fitting the expansion card

Observing static precautions, remove the card from its protective packaging and line up its connector with one of the empty backplane sockets. Press the expansion card home firmly so that the expansion card connector fits firmly into the socket of the backplane. If you intend to fit the external connector plate to your system then one of the metal blanking plates must be removed, (usually the one that corresponds to the slot occupied by the expansion card). If a double width plate is removed then the gap should be filled using the extra plates supplied. When fitted, the free end of the cable is plugged into the secondary !DE socket of the card leaving the primary socket for internal drives. If external connection is not required, both sockets may be used. Retain the old blanking plate so that it can be replaced if the expansion card is to be removed at a later date.

## 305/310 Motherboard Fitting

In the absence of a backplane, the card is directly plugged in the motherboard backplane socket which is located between the ARM processor and the ROMs. First, unteather the backplane supply cables from the side of the PSU and plug the RED 5V connector onto the spade terminal (PL3) found in the lower left corner of the card. Now remove the jumper cap from the pins of LK I (adjacent to PL3). The two unused connectors (yellow and black) should be secured with tape to prevent them touching anything.

With the upgrade fitted, any internal drives and cables can be installed. Once done, the case can now be reassembled by following the instructions in reverse. Make sure that the case screws are firm but not over-tight. With the lid properly secured, reconnect the machine and switch on. Follow the additional software instructions to make the necessary configurations for your drives.