Support Group Application Note
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Pinouts for making an Econet cable for the A3020/A4000

The A3020 and A4000 computers can accept the standard Econet interface; product code ADF10, which has been used on all previous machines since the Master 128. In the case of the A3020 and A4000 fitting the ADF10 upgrade imposes limitations upon the expansion capability of the machine.

This application note provides details on the implications of fitting the ADF10 and offers guidelines on using the interface with the above machines.

Applicable Hardware :	A3020 A4000 Econet ADF10/AEH52	Related Application Notes:	

Support Group
Acorn Computers Limited
Acorn House
Vision Park
Histon
Cambridge CB4 4AE

Introduction

Due to the positioning of the Econet upgrade in relation to the Mini-podule expansion slot on the A3020 and A4000 it is not possible to use both expansion options simultaneously unless the AEH52 Econet upgrade is used.

Users who need Econet capability and who do not require the use of the Mini-podule expansion slot until a later date, may fit the ADF10 Econet upgrade. This application note describes how to install the ADF10 Econet interface and wire up the correct cable, so that you can connect an A3020/A4000 to an Econet network.

Fitting the ADF10

The A3020 and A4000 are manufactured with a number of Molex connectors at the rear of the PCB into which the network upgrade and Mini-podules are fitted. Figure 1 shows the orientation of the Molex connectors.

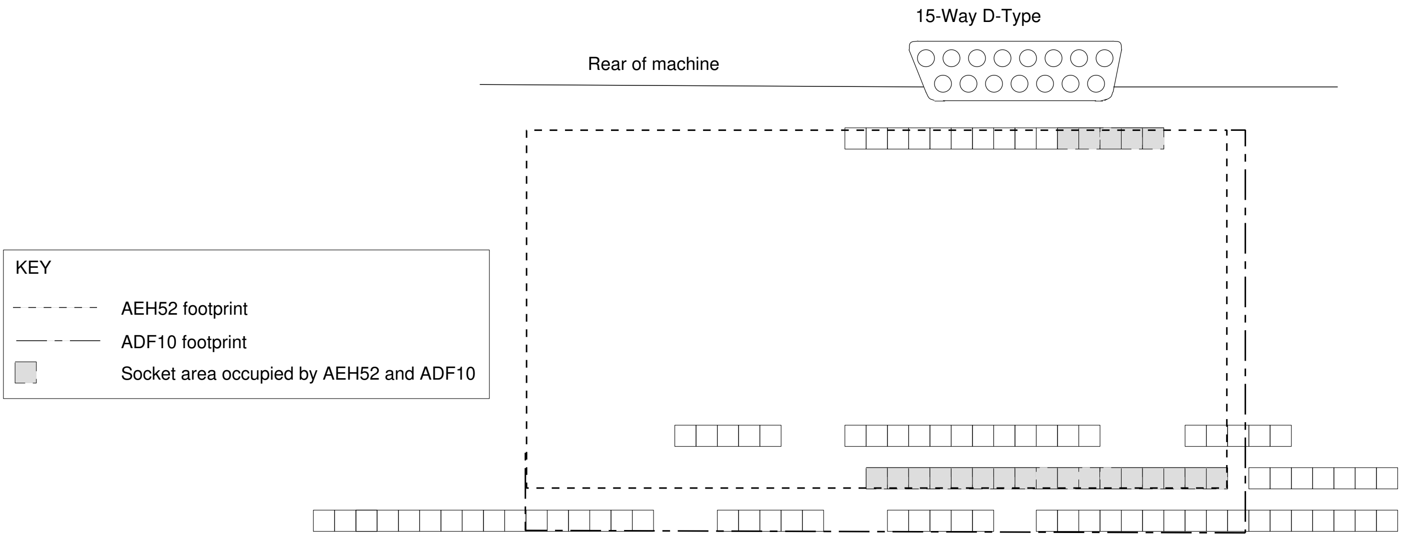


Figure 1: The orientation of the Molex connectors on the A3020 and A4000.

The bottom set of Molex connectors form the Mini-podule expansion slot, the remaining connectors are used by the various network interfaces. The greyed out areas illustrate the part of the sockets to which the pins of the Econet interface are fitted. Note: The dotted lines indicate the footprint of the ADF10 and AEH52.

When fitting this interface in these machines it is recommended that the support pillars are not used as this may make replacement of the ADF10 with an AEH52 more complex at a later date.

Making the cable

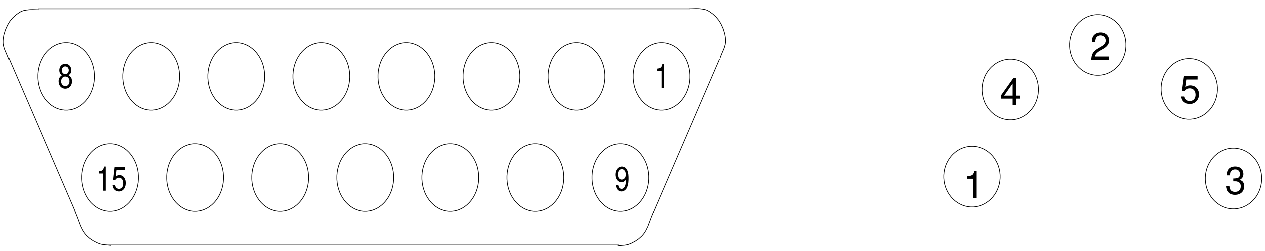
The A3020 and A4000 differ from previous machines in that the network connector on the rear of the machine is a 15-way D-type connector instead of the 5-pin DIN connector. This means that station leads supplied with the ADF10 for example, cannot be used without modification.

The simplest way to manufacture the lead is to take the Econet lead supplied with the ADF10 and cut off **one** end and solder on a 15-way D-type connector.

Examine the colour coding of the cable used and ensure that you transfer the colour codes according to Figure 2.

A3020 Econet Cable Connections

15 Way D-type plug	5 pin 180 plug - Audio DIN
6	1
7	2
8	3
14	4
15	5



NOTE: Connections as viewed from back of connector (solder side).

Figure 2: The pinouts for the Econet cable for the A3020 and A4000.