

Introduction

This adapter allows you to use an unmodified PC floppy disk drive with an Amiga computer. This adapter only supports the use of DS/DD 880K floppy disks, even if you fit a PC style High Density (HD) drive.

In addition, this adaptor provides a fix for Escom/Amiga Technologies A1200 units which have a motherboard and drive modification that prohibits the use of some NON-DOS games. A simple clip on fix is provided.

You can use this adaptor to replace aging or broken drives in any Amiga model. This guide provides details of how to fit and test the adaptor. Cosmetic changes to the drive, to fit A500/A600/A1200 faceplate are not covered by this manual.

Required tools

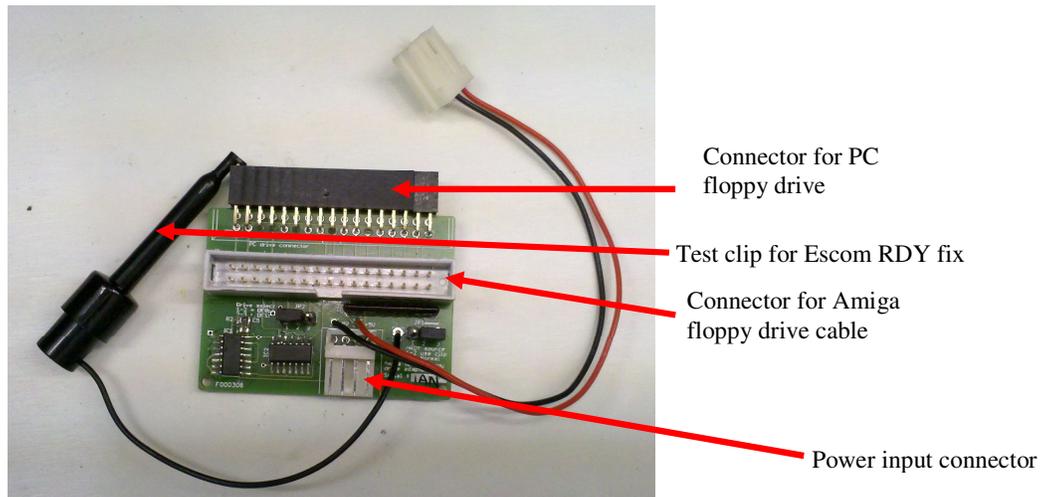
Philips or flat blade screwdrivers, as required, to disassemble your computer.

Needle nose pliers

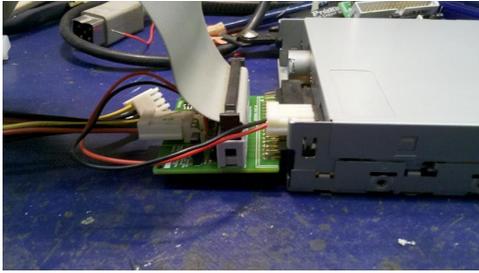
Cutters

Installation

The unit you received looks like this:



Connection to the new drive is simple, the unit plugs straight in. Connect to the PC floppy power plug using the supplied power lead. The power plug on the PCB is polarised to prevent reverse polarity connections. Using the existing 34 way IDC cable from the Amiga connect it to this adaptor. You should now have something that looks like this:



For the A500/A600/A1200, you should be able to re-use the existing fittings to secure the drive inside the case. Modify the end plate as you require.

For towered systems, fit the assembled unit into an available 3 ½ drive bay.

Escom/Amiga Technologies fix

If you have an Escom or Amiga Technologies A1200, you will need to use the supplied test clip to fix the FDD interface. Connect the test clip to pin 1 of the inside of the 23 way floppy drive connector as shown here:



Note:

You will need to remove the metal RF shielding and if necessary cut away a section to accommodate this clip. If you do not require this fix, cut the cable, 1cm above the PCB. This will make it easier to extract the wire if you need to re-solder later.

Jumper settings

This PCB has two sets of jumpers. Units are shipped with the following settings:

JP1 (Ready signal) 2-3

JP2 (Drive select) 1-2

JP1 configures the connection for the nRDY signal. The default connection is 2-3 which is for all units except Escom A1200. Connecting the jumper to positions 1-2 allow the test clip to provide the nRDY signal to the Amiga as detailed above.

JP2 configures the DF0/DF1 setting of the drive.

Setting the jumper on pins 1-2 (default) configures the drive to operate as DF0:

Setting the jumper on pins 2-3 configures the drive to operate as DF1:

Note:

The internal drive cable connections on the A500/A600 and A1200 do not have the SEL1 signal, therefore the drive can only work as DF0: with an internal 34 way IDC cable on these machines. Big box machines, A1500, A2000, A3000 & A4000 have internal support for DF0:/DF1 or DF3, check the relevant technical reference manual and schematics.

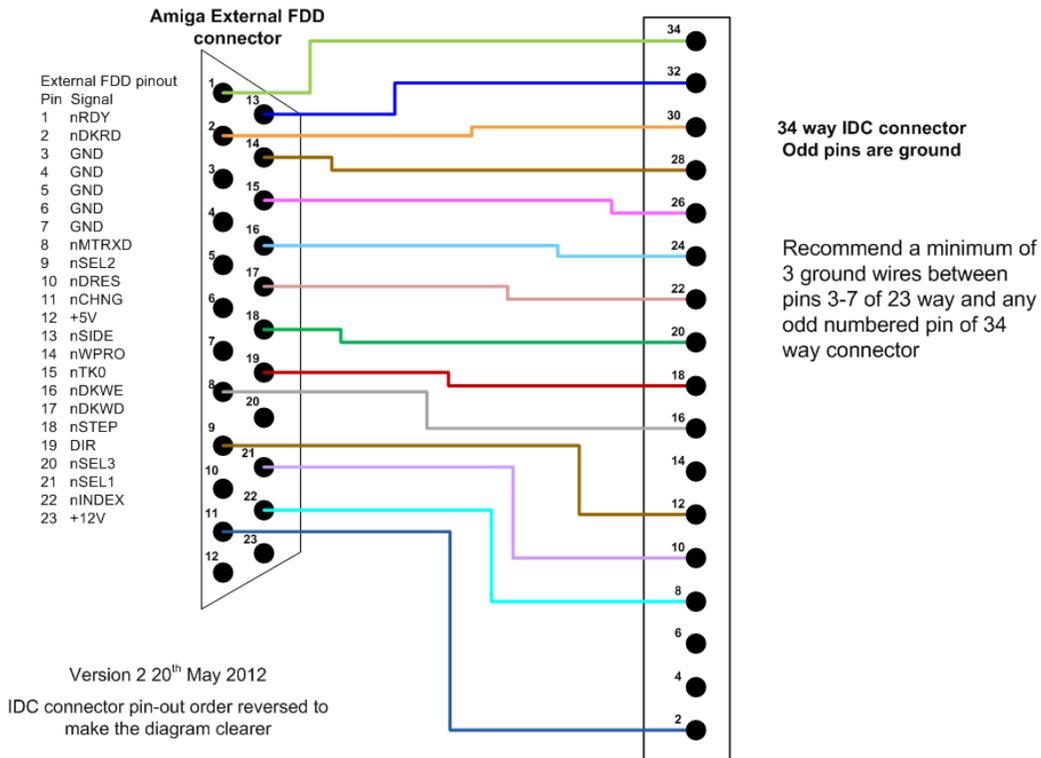
You must not use a PC floppy drive with a twist inside the A1500, A2000, A3000 & A4000 as it will crossover important drive signals.

Using the adaptor as part of an external drive

For all Amiga models it is possible to use one of these adaptors as an external drive. By default, the 23 way external drive connector has the drive select signals, nSEL1, nSEL2 and nSEL3, which are used to select DF1 to DF3: respectively.

By taking a PC floppy drive cable and removing one of the connectors (at the end with the cable twist) it is easy to make the following cable:

V2 Floppy drive adaptor external drive wiring



Note that SEL1 and SEL2 are wired to pins 10 and 12 of the 34 way cable, this corresponds to SEL0/SEL1 of the Amiga floppy drive pin-out (which differs from the PC drive pin-out).

Using this arrangement, the jumper settings for JP2 are:

1-2 configures the drive to operate as DF1:

2-3 configures the drive to operate as DF2:

The prototype cable is shown below.



Final checks

Re-check all connections, especially the 34 way IDC cable as it can easily be dislodged. If necessary check the jumper settings. Then re-assemble the unit.

Testing

The first test is to power on the Amiga and ensure that the activity LED is not on permanently. If it is, refer to the troubleshooting and support section below.

Insert your Workbench disk and boot the machine. There should be no difference to before. Insert a new blank disk and format it.

Next copy your workbench disk to this newly formatted disk using the `diskcopy DF0: df0:` command from the Shell/CLI. This tests the ability of the adaptor and the drive to read and write disks.

The final test to prove compatibility is to try a N-DOS/copy protected game or demo disk and ensure the unit boots without issue.

Troubleshooting and support

You can always send an email to the following address if there are any issues
amigasales@ianstedman.co.uk

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If the drive LED(s) are on permanently, make sure you have the 34 way IDC cable round the right way. This is especially important on leads that do not have a polarising bump.

If the unit appears dead, check that you have connected a power cable to the unit and the supplied power unit to the drive.