Unipod Installation

Please ensure that you take suitable anti-static precautions while handling the Unipod and any other podules. There is a section towards the end of this document that covers basic precautions. Please consult that section if you are unsure of the steps to take.

First remove the two bolts from the back of the Unipod, place the backplate against it, easing the protruding connectors through the holes and replace the bolts to firmly hold the metal in place.

You will be opening your machine, please be careful. While this is a relatively simple operation, if you are at all unsure about it, please consult your dealer.

Ensure that your machine is switched off.

While it is not a requirement to remove the lid of your RiscPC just to fit the Unipod, it is very easy to twist and lift out the two locking pins at the rear and lift off the lid. Doing this will make the rest of the job much easier. Clearly if you are going to be making internal connections to the Unipod (eg. IDE) then this is a requirement.

Looking at the back of the machine, remove the two screws retaining either a blanking plate or an existing podule which is being removed. Remove the plate or podule. Insert the Unipod, ensuring that a firm fit is made with the backplane connector. Replace the screws which you previously removed to secure the Unipod within the machine. Replace the lid.

Start the machine.

All of the files you need to configure up the Unipod are now in Resources:Apps.UniPod (Apps on the icon bar) **copy these out to a safe place on your hard disk**.

If you have one or more of the Simtec IDE, or USB podules or the NET100 or other NIC, or an IDE podule from anyone that uses the filesystem name IDEFS, that you are keeping in the machine you should see the "Compatibility and Install Order" section before continuing.

If you are planning to make the Unipod the interface that your machine boots from, please see the "Booting from Unipod IDEFS" section before continuing.

These instructions assume a minimum base OS version of 4.02. For RISC OS 3/Uniboot differences see "Notes on earlier OS revisions".

These instructions cover installation of all three of the major functions, and the following assumes that you have purchased all of these. If this is not the case, please see the appropriate sub-sections under "I do not have some of the functions"

Follow any additional instructions found in the directory you copied. You should merge the !Boot and use the !snafu utility to program up the flash memory on the Unipod (select Unipod in the top window, press the "load defaults" button and then the "write flash" button and wait for it to complete before pressing "close"). Note that flashing the podule will remove the Unipod directory from Apps, so if you do not copy it, it will be lost.

Reboot and you're done with the initial part of the install, go to the "Other Software and Configuration" section.

Compatibility and Install Order

NET100

If you are leaving a NET100 in the machine, and you have the net functionality enabled on your Unipod, the NET100 must have EtherX version 1.39 or above on it. You can use this new version of !snafu to flash with the default module set (select NET100 in the top window, press the "load defaults" button and then the "write flash" button and wait for it to complete before pressing "close") before flashing the Unipod, as conflicting versions of the drivers may cause your machine to fail to start.

Also note that you will be unable to use the bootp configuration mode of the Unipod as this is only available for the first network interface and the NIC slot gets priority.

Also, some applications may only work correctly with the first network card (as they are only expecting one to be fitted).

Other NIC

You will be unable to use the bootp configuration mode of the Unipod as this is only available for the first network interface and the NIC slot gets priority.

Also, some applications may only work correctly with the first network card (as they are only expecting one to be fitted).

Other Network podule

If you want to use the bootp configuration mode of the Unipod it must be in a lower podule slot than the other network podule as this mode is only available for the first network interface.

Also, some applications may only work correctly with the first network card (as they are only expecting one to be fitted).

Simtec USB

If you are leaving a Simtec USB podule in the machine, it must have USB version 2.02 or higher or none of the active USB modules on it (you must program at least one module though). You can use this new version of !snafu to flash just the dummy module to the podule (select USB in the top window, press the "read from rom" button and select each module except USB1161Support (dummy) and press "remove" then "write flash" and "close") before flashing the Unipod, as conflicting versions of the drivers may cause USB to be unusable.

All IDE podules

Please be very careful that you do not loose access to the drive that contains !snafu as you will then be unable to complete the installation. If you have a drive connected to the internal ADFS interface, this is the best place to copy the Unipod directory.

Simtec IDE

Currently it is not possible to have the IDEFS modules present in more than one place. Select the IDE podule then follow the rest of the notes above for USB with the exception that the module to leave behind is vprotect. This method allows both podules to work.

Other IDE podule using IDEFS filesystem

Because of the name clash it is not possible to have both podules installed.

Other IDE podule that has to be removed in order to fit Unipod

Use the ADFS internal disk to store !snafu.

If you do not have an ADFS disk, you could use a floppy.

Booting from Unipod IDEFS

If you are adding a blank disk it is easy to initialise or format it with !IDETool. See "Other Software and Configuration"

Ensure that you have a working copy of !Boot.

Note that some programs which start from the !Boot may have static paths configured into them of a form similar to `ADFS::HardDisc4.$.file`

Pinboard is an example of this.

If you copy your !Boot from a different disk, this may show some error messages of the form "File not found" when you boot, if you press cancel for each one, the desktop will eventually start and you will be able to find and correct these.

The easiest fix for Pinboard is to remove all of the items from it before copying !Boot and add them back after booting from the new disk, of course this will use static paths again.

While it is possible to replace these static paths with updated static paths, a better solution is to work out a way of changing them to paths that are relative to the boot.

`"<Boot$Dir>.^."` is a suitable generic replacement for "`ADFS::HardDisc4.$.`"

If you are removing drives from another interface, please ensure that you comply with the configuration requirements of that interface. See “General IDE Configuration” for pointers, and for specifics of the Unipod and the internal interface.

You should make sure that the boot drive is auto-mounted, you can set the drive which is to be the boot drive by making it’s boot option Run(2) and all of the other drives as Off(0)

`*idefs` selects the filesystem
`*drive <N>` changes the current drive to N
`*opt4 <N>` changes the option on the current drive to N (0 or 2).
`*configure filesystem <name>` changes the default filesystem (where you boot from) to the named filesystem (e.g. IDEFS for Unipod, ADFS for internal interface)

Other Software and Configuration

!SNAFU

This tool lets you change the contents of the flash memory on the Unipod. Select the Unipod from the top pane, use the buttons on the bottom right to get a starting point, either “Load defaults” if using for the first time, or returning to a known good value, or “Read from ROM” if you are updating the existing set.

Removing modules

You can mark a module in the list that appears in the lower pane by clicking with select, or modify the selection by clicking with adjust, then click on “Remove” to remove from the list.

Adding modules

The easiest method is to drag and drop them from a filer window to the lower pane.

Committing Changes

Click on the “Write Flash” button. Always allow this process time to complete.

!SNAFU can be found in the Unipod directory that you copied out of Apps as part of the install of the Unipod

MassFS

MassFS is a mass storage (SCSI set) driver for the STD USB podule or Unipod with USB.

It is possible for the end user to add the details required for new devices as they determine them; see the documentation included with it for details. There are no artificial limitations on what works, but note that **absolutely no support is offered for third party devices**.

!MassInst is used to install and also to configure MassFS. If you are adding a mass storage device that will always be connected then you should configure MassFS to start at boot time otherwise “start on first insertion” is fine.

Ensure that USB core is enabled (Configure->USB->Core, tick box, “Close”, “Set”).

!MassInst is in the MassFS directory within the Unipod directory that you copied out of Apps as part of the install of the Unipod.

I do not have some of the functions

You can easily upgrade your Unipod with extra functions at any time, without having to return it to your dealer!

To do a selective install, please read each of the following sections that apply.

No USB

Ensure that you don’t tick the “enable core at startup” USB configuration option, as this will cause an error during boot.

You can optionally remove the modules with names starting USB from the list of modules that you flash into the card, leaving them in will use a small amount of memory, but has no other effect.

It is not currently possible to have a STD/Simtec USB podule fitted at the same time as a Unipod that doesn’t have USB turned on.

No Net

If you flash the driver for the network function into the Unipod and you do not have that function, then you will experience a small delay before normal boot. A message of the form "Failed to initialize unit 0. No response from controller/controller not Present." will be displayed. If you have a NET100 then the number will be 1 instead of 0.

Apart from the delay there are no ill effects from leaving this as it is. Removing the "EtherX" module from the Unipod will stop this from happening.

If you have a NET100, do not update the version of EtherX in it with a Unipod version (1.37 or higher) or you will always see this message.

No IDE

You can optionally remove the modules with names starting IDE, CDFS, and RMFS from the list of modules that you flash into the card, leaving them in will use a small amount of memory, and place an IDEFS icon on the icon bar but has no other effect.

General IDE Configuration

As with all bus interfaces, you should ensure that you do not leave any stub cables as these act as antennae and can cause odd effects.

If there is only one drive on a cable it must be set as a master (or single drive, if the drive requires this) and on an end of the cable, the host should be on the other, if there is a third connector it should be in the middle. If you are connecting two drives to a cable then one should be master and the other slave, it does not matter which goes on which connector.

If you have a "cable select" cable then you must set the drive(s) to "cable select" and use the master connector first. Some drives do not do cable select and you must use a standard cable.

Some drives do not work with some other drives being on the same cable, this is a fault with the drives, not with the interface.

If you remove a hard disk from the internal interface, you must change the value of the configure item IDEDiscs to reflect this.

If you remove a CDROM from the internal interface, you must:

```
*unplug CDFSSoftATAPI
```

If this drive isn't connected elsewhere in the system, you should update the configured value of CDDrives.

When changes have been made, ensure that the above rules are still obeyed.

Notes on earlier OS revisions

The USB configuration applet does not automatically appear in the Configure utility, you will have to find the !USB application in the !boot and run it manually. (!Boot.Resources.Configure)

RISC OS 3.6 has some networking problems that do not exist in any other version, we do not support networking on 3.6

Anti-Static Precautions

Do not remove sensitive items from their protective packaging until you are ready to use them.

If it is possible to touch an earthed item with one hand while holding the item by it's protective packaging, then this is a good precaution.

If your computer is plugged into a wall outlet that is switched, then it is best to place the wall switch in the off position, but leave the computer plugged in, it is thereby earthed and touching the metal case while you work will help. (On the RISC PC, the grey insides of the body are conductive plastic, so this would do too)

As much as is possible, handle cards by the edges.

Support

For product updates you should see http://www.stdevel.co.uk/support.html for **all** other issues you should contact the dealer who sold you the Unipod.