

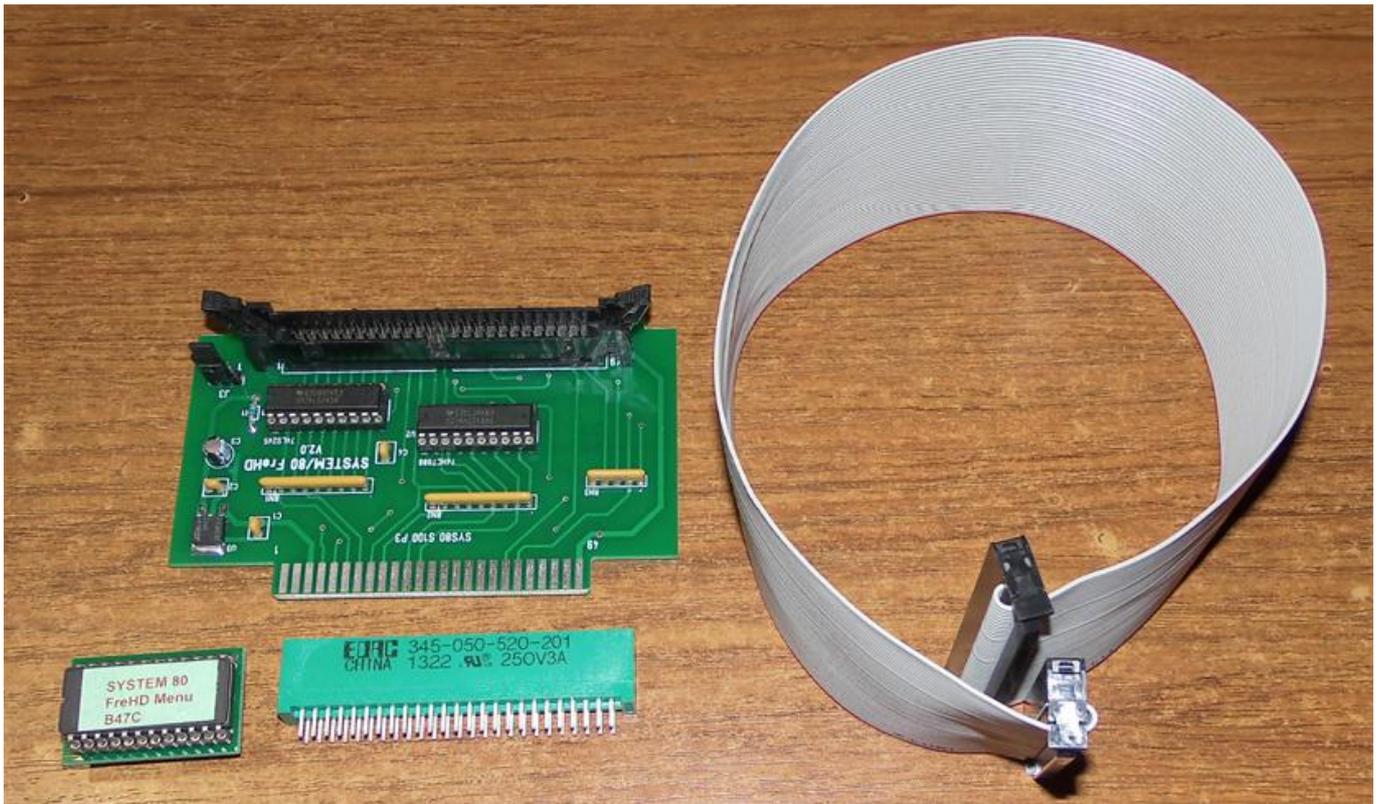
FreHDaptor

System 80/Video Genie Installation

For X-4020/EG3014 Expanders only.

The FreHDaptor comes with all the parts required to allow the System 80/Video Genie to connect to the FreHD Hard Drive Emulator.

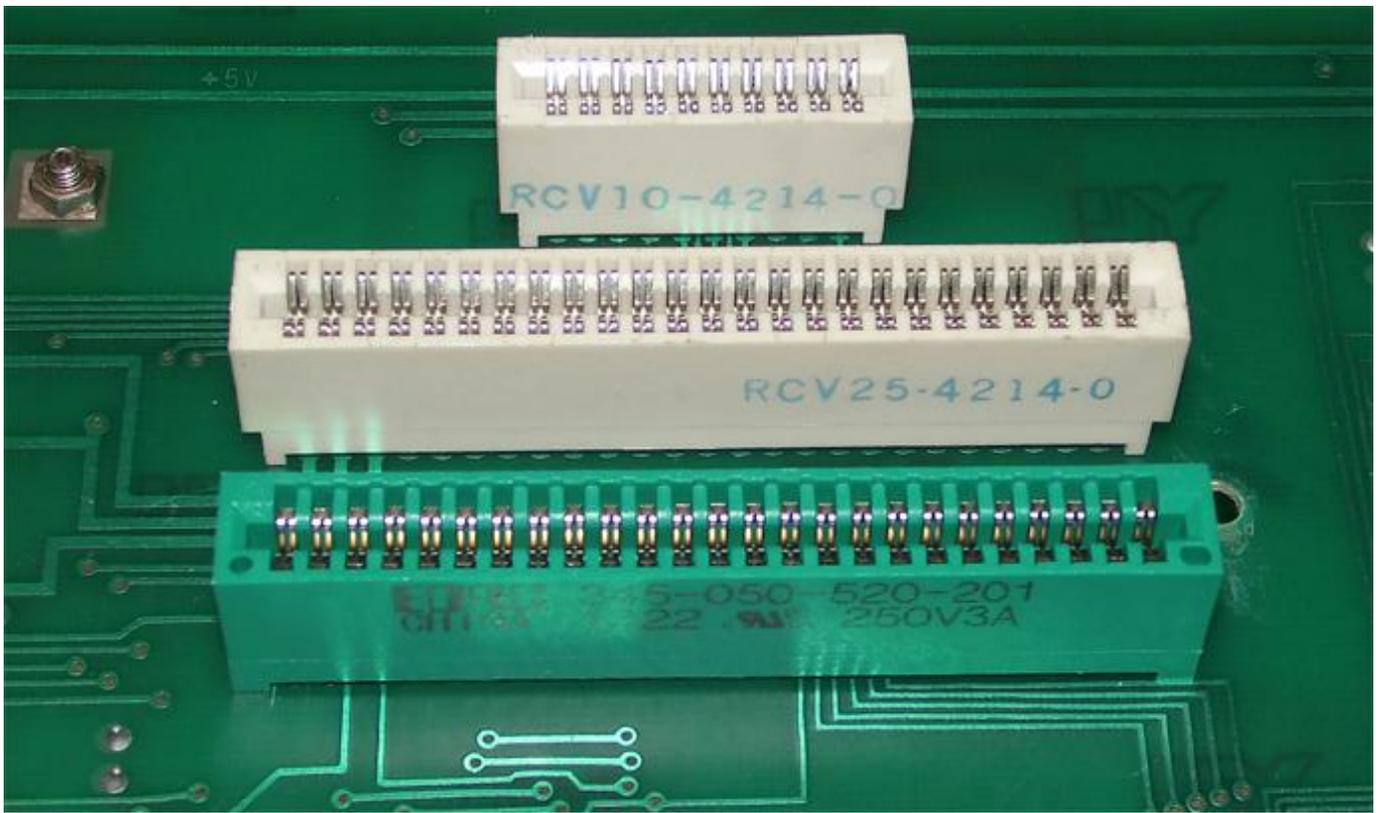
- 1 each FreHDaptor
- 50 way card edge connector
- 50 way IDC cable
- A 2732 eeprom programmed with the FreHD Menu and an adaptor for the eeprom.



Installation of the FreHDaptor requires modifications to the computer and the expansion unit and should only be attempted by someone with experience in electronic service.

The FreHDaptor requires the installation of a 50 way card edge connector to the normally unused connection P3 on the motherboard of the expansion unit.





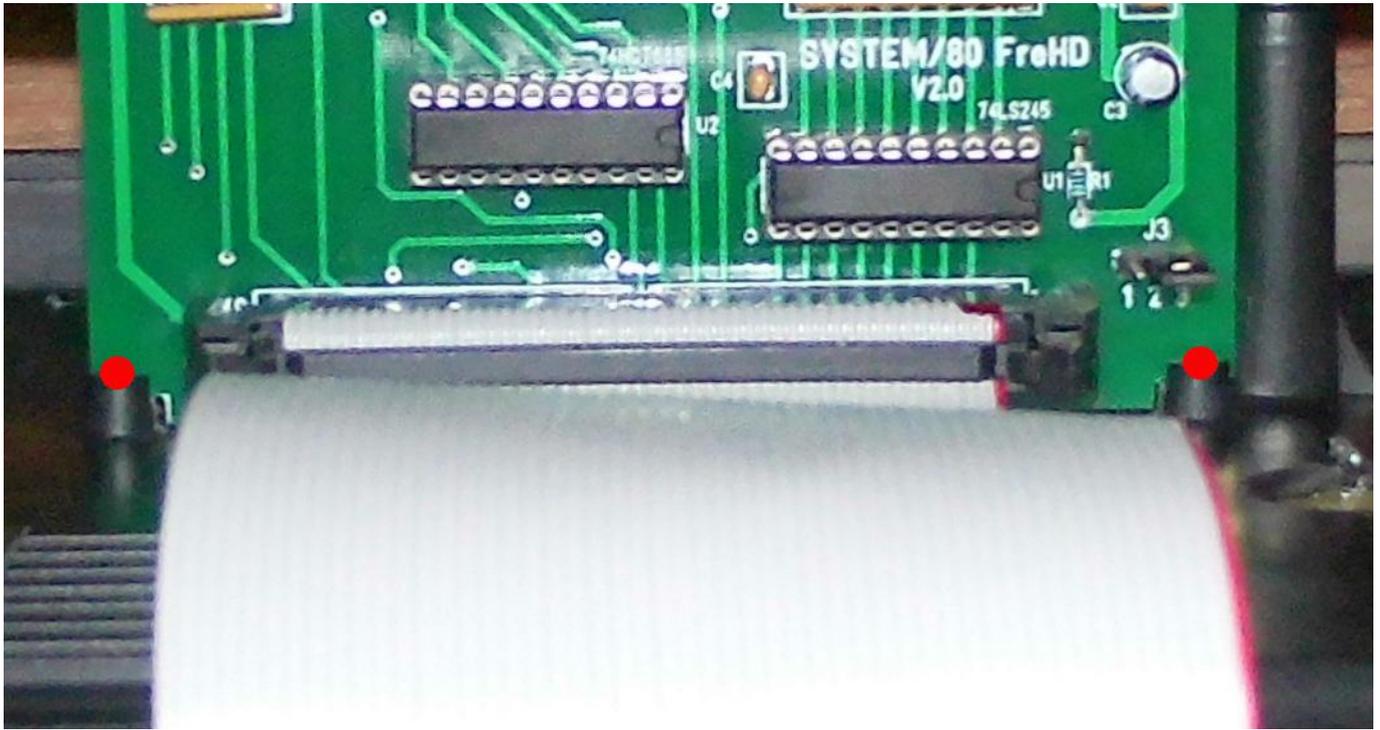
To avoid damage to the motherboard it is recommended that the installer use a good quality low voltage temperature controlled soldering iron and to ensure that the FreHDaptor fits securely into the supports on the base of the expander, the card edge connector **MUST** be fitted flush and straight on the motherboard.

When the card edge connector has been installed insert the 50 way IDC cable with the cable pointing down and the red stripe at pin 1. The board can now be installed in the motherboard as in the image below.



Testing has shown that incorrect power-up sequence may corrupt the FreHD's internal RTC. If you experience any corruption of the RTC change the jumper at J3 to 1-2 else it can be left in the default 2-3 position.

Guide the FreHDaptor into place so that the board fits into the supports on the base, secure the motherboard and reassemble the Expansion Unit.

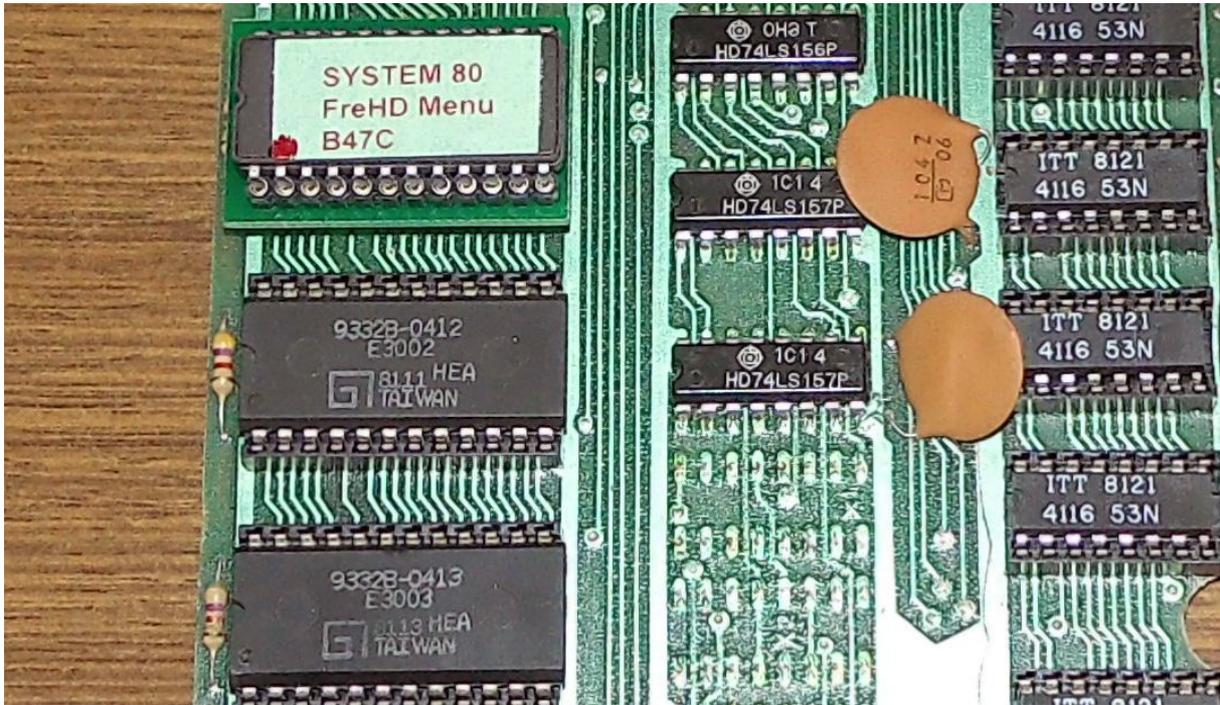


The left hand side of the cover has a slot wide enough to allow the cable to exit the front of the Expansion box.

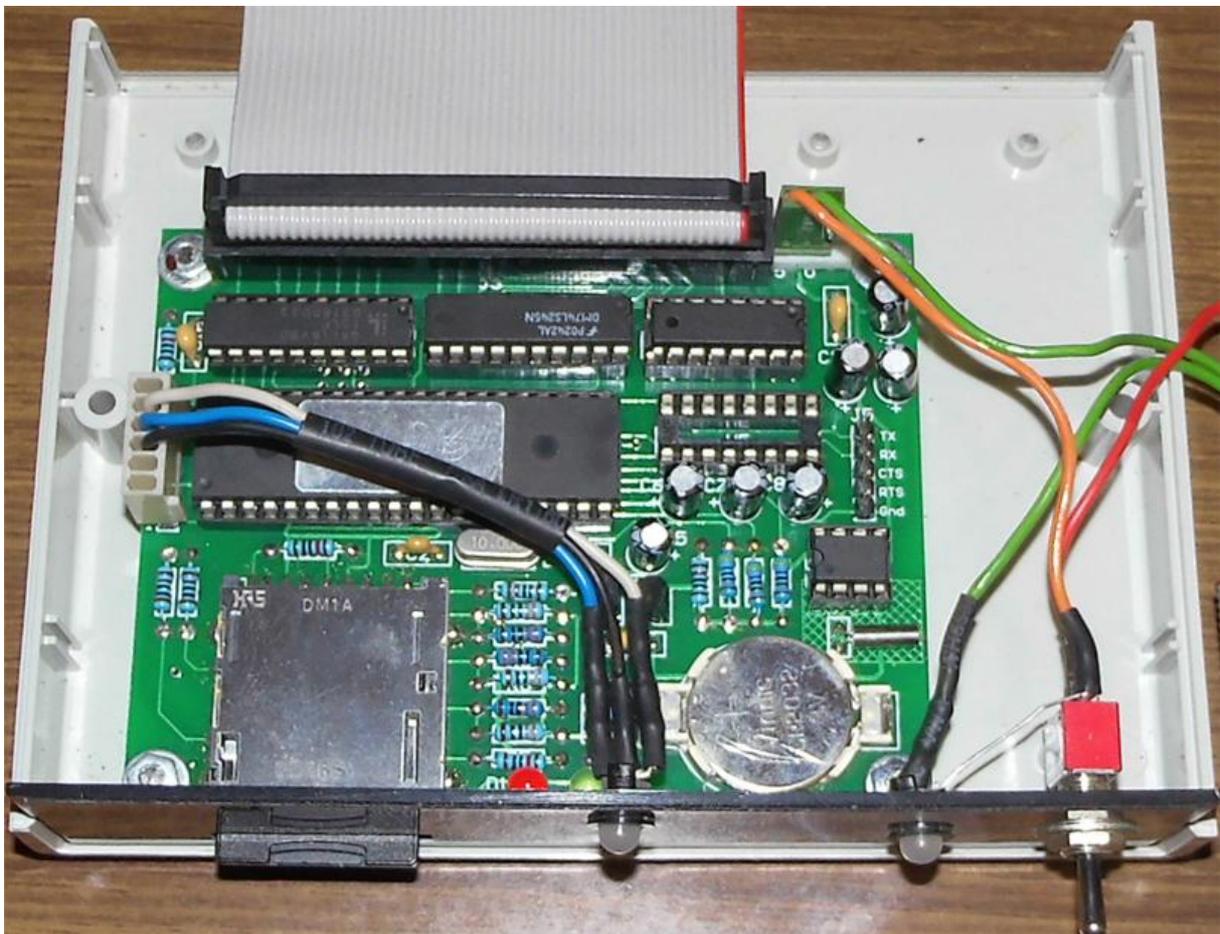


The FreHDaptor comes with a 2732 eeprom programmed with the FreHD Menu and an adaptor board. After removing the computer's cover carefully unplug the keyboard connector and remove the keyboard. The single wire connectors are extremely fragile so take care not to bend or break the wires.

Carefully remove the first rom Z10, 'E3001' and insert the new rom as in the image below. Store the old rom in a ESD tube for safe keeping.



Assemble the computer and connect it to the expansion unit. Connect the cable from the FreHDaptor to the FreHD as in the image below



To reduce the risk of RTC corruption make sure to power-up the FreHD first then the Expansion Unit and finally the computer and on power-up you should be greeted with this screen



Various notes in no particular order

If the rom cannot detect the FreHD it will attempt to boot from floppy.
A copy of FreHD.ROM must be in the root directory of the SD card.

RESET SPACE forces a boot from floppy.

RESET BREAK to enter Level II Basic

Level II Basic now displays

MEMORY SIZE

READY

When the FreHD Menu is displayed use the **UP/DOWN** arrows or **A/Z** keys to select the desired Operating System and **ENTER** to load. Only DOSPLUS 3.5, LDOS and NEWDOS 80 2.5 are supported.

R – will reload the Hard Drive images from the SD card.

FreHD.ROM will automatically update the DOS time and date on power-up.

Copies of the various FreHD utilities are included on the Hard Drive images including a copy of VHDUTL/CMD modified for the System/80 and renamed to VS/CMD

The FreHDaptor has been tested extensively at CPU*2 and both LDOS and DOSPLUS have been found to work reliably at this speed..

Hard Drive access with NEWDOS 80 2.5 is temperamental at double CPU speed but works reliably at the standard CPU speed.

A program such as DriveSort can be used to sort the files on the SD card so that the menu displays the Operating Systems alphabetically.

<http://www.anerty.net/software/file/DriveSort/>