How to update the fusion using the serial port.

Disclaimer:
Updating the flash is a bit risky and I won't accept any responsibility if things go wrong after following these instructions. Use them at your own risk! I do not work for Digifusion and have no idea whether this is the right thing to do or not. This is the way I did it and it worked for me. The method has been borrowed and adapted from instructions for the Inverto box. Those instructions are here:
www.invertoforum.co.uk/Firmware/IDL-7000T%20Software%20Upgrade%20via%20the%20Serial%20Port%20v0.2.zip
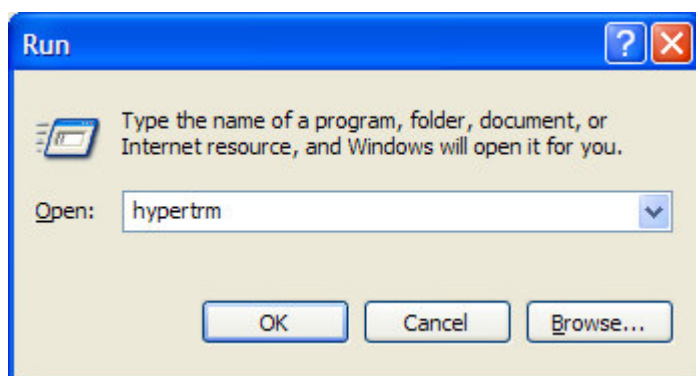
What you need:

- PC with an RS232 Serial Port
- RS232 9 Pin Null modem Cable
- Run.bin file

Before starting:

Switch off the fusion box at the mains and disconnect everything (aerial, Scart leads) from the box. Attach the null modem serial cable and the power lead and leave the mains power off.

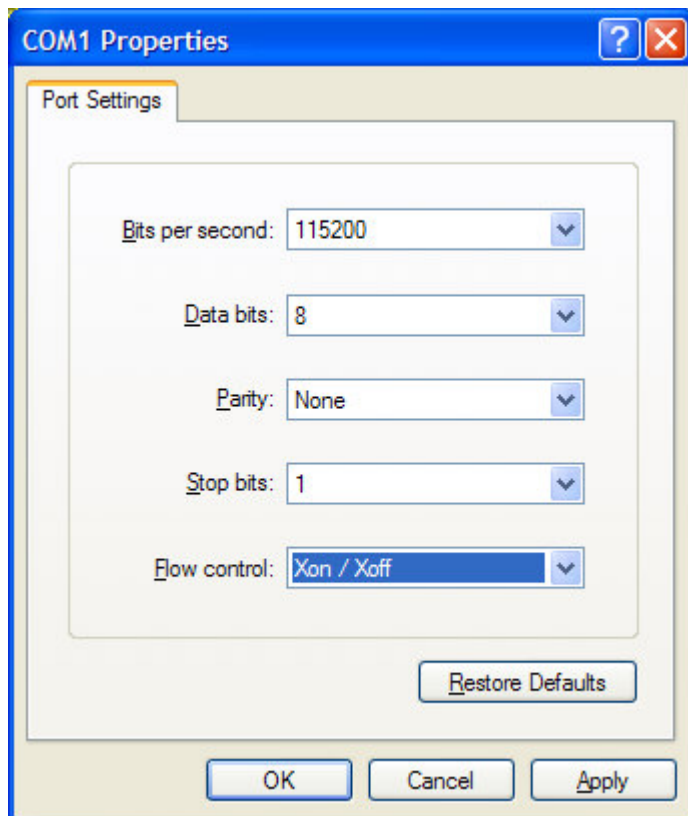1. Click start then run then type hypertrm and click OK

2. The "new connection" window will appear. Enter a name for the connection e.g. PVR and click OK
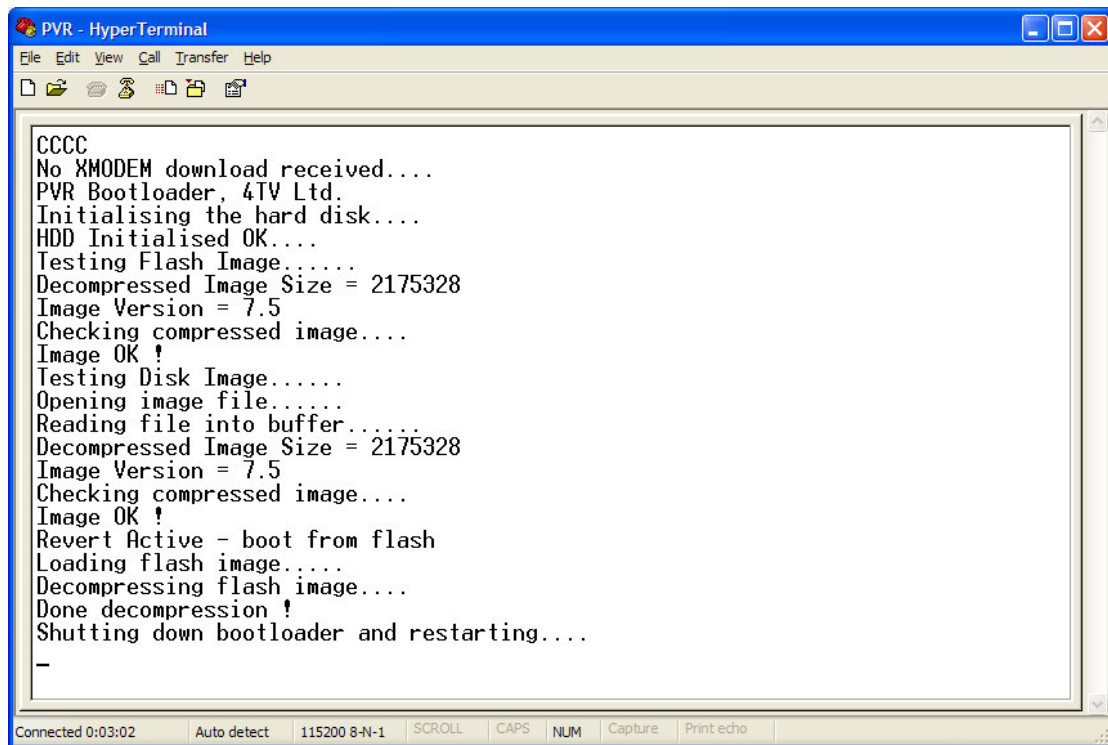
3. Change the "connect using" box to the COM port you are using. (Usually COM 1)

Connect To [?][X]

PVR

Enter details for the phone number that you want to dial:

Country/region: United Kingdom (44)

Area code: 0161

Phone number:

Connect using: COM1

[OK] [Cancel]

4. Set the properties as below:

COM1 Properties [?][X]

Port Settings

Bits per second: 115200

Data bits: 8

Parity: None

Stop bits: 1

Flow control: Xon / Xoff

[Restore Defaults]

[OK] [Cancel] [Apply]

5. Switch on the power to the fusion box at the plug. The fusion should boot and speak to the PC. It should look something like below:

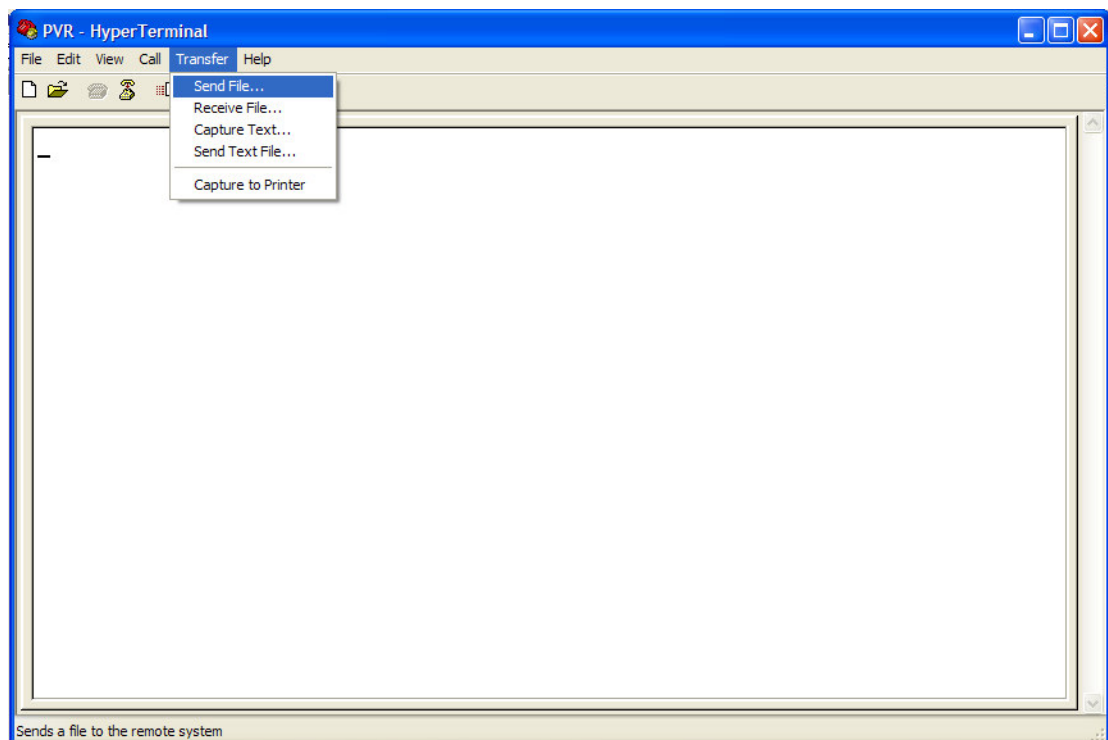If the text doesn't appear or is garbled check you entered the correct bits per second setting. If the text is OK go to the next step.

6. Click transfer then Send file…

7. Browse to the run.bin file you want to upload. Change the protocol to 1k Xmodem

Send File

Folder: C:\Documents and Settings\Ian\Desktop\Digifusion\New

Filename:
C:\Digifusion\New Folder\1.7.5 original bg\run.bin   Browse...

Protocol:
1K Xmodem

Send   Close   Cancel
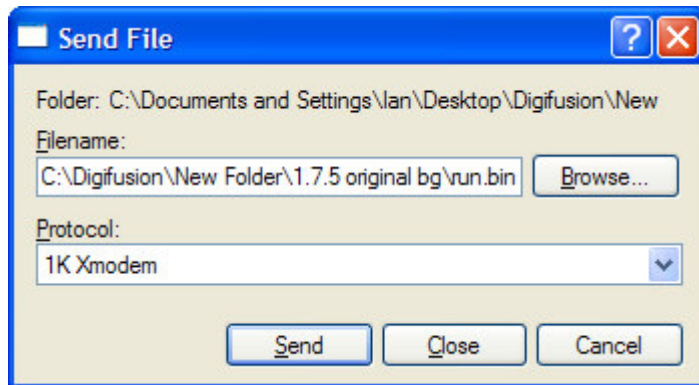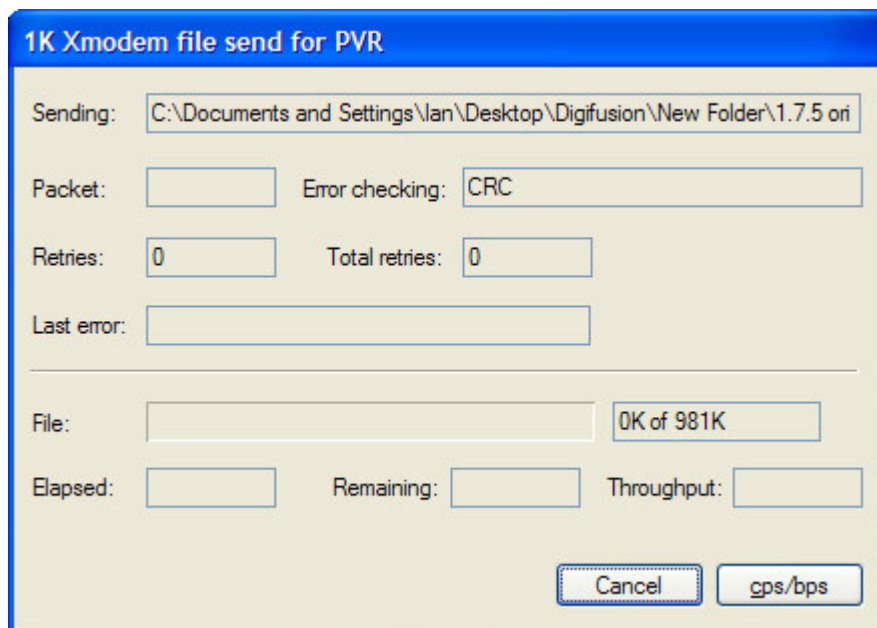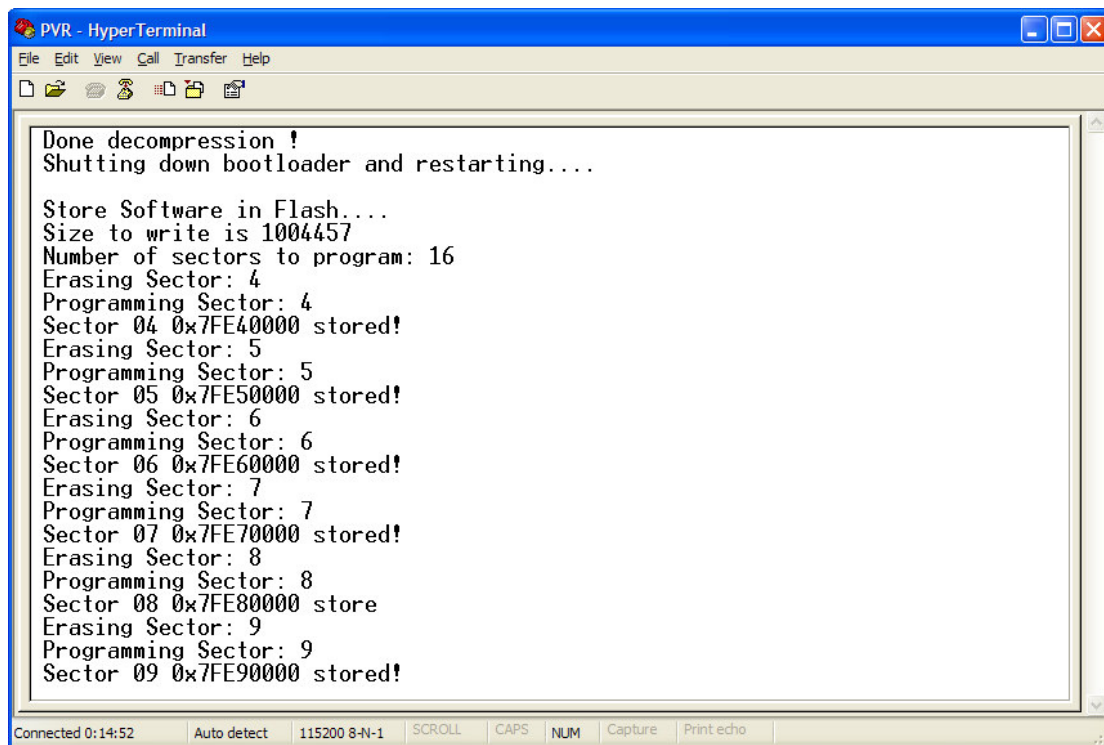
8. Click send then switch the power off and on at the wall socket for the fusion box. The file transfer window should appear.

1K Xmodem file send for PVR

Sending: C:\Documents and Settings\Ian\Desktop\Digifusion\New Folder\1.7.5 ori

Packet: [   ]   Error checking: CRC

Retries: 0   Total retries: 0

Last error:

File: [   ]   0K of 981K

Elapsed: [   ]   Remaining: [   ]   Throughput: [   ]

Cancel   cps/bps

The transfer should take around 2 minutes then the box should then store the software in the flash and output some commands in the terminal window as below.
Do not turn off the power while the box is writing to the flash memory

```
PVR - HyperTerminal
File  Edit  View  Call  Transfer  Help

Done decompression !
Shutting down bootloader and restarting....

Store Software in Flash....
Size to write is 1004457
Number of sectors to program: 16
Erasing Sector: 4
Programming Sector: 4
Sector 04 0x7FE40000 stored!
Erasing Sector: 5
Programming Sector: 5
Sector 05 0x7FE50000 stored!
Erasing Sector: 6
Programming Sector: 6
Sector 06 0x7FE60000 stored!
Erasing Sector: 7
Programming Sector: 7
Sector 07 0x7FE70000 stored!
Erasing Sector: 8
Programming Sector: 8
Sector 08 0x7FE80000 store
Erasing Sector: 9
Programming Sector: 9
Sector 09 0x7FE90000 stored!

Connected 0:14:52     Auto detect    115200 8-N-1    SCROLL    CAPS    NUM    Capture    Print echo
```

9. When the update is complete "Shutting down bootloader and restarting" will appear in the bottom of the hyperterminal window. The updating is over and Hyperterminal can then be closed down. The box should start up normally.