

## How to upgrade Piper to the latest software release.

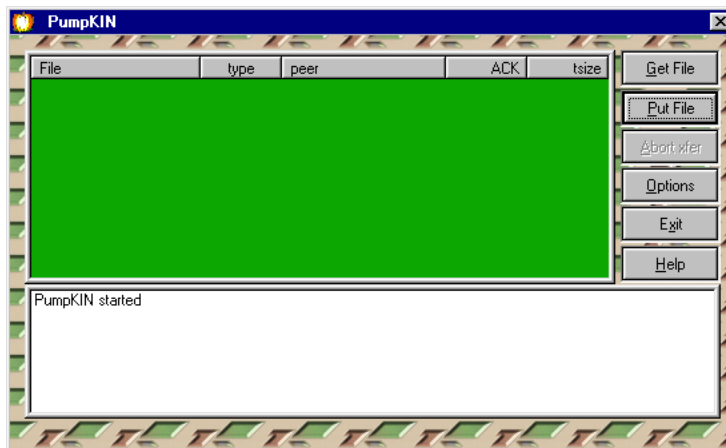
### Background information.

Piper features Flash ROM to contain its programs and data. The programs are –

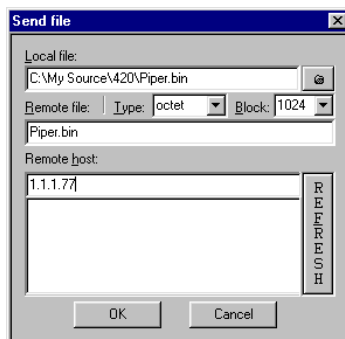
1. Monitor – allows programs and data to be entered through either serial port. They must be in HEX file format. The monitor is stored in a protected area of memory and cannot be erased.
2. Kernel – supports Ping and TFTP so that the Main Program can be sent to the unit over a network. The Kernel also contains configuration data such as the physical (MAC) address and IP numbers.
3. Main Program – this is the only program normally running and it provides all the features of the product. It is provided as a binary file called Piper.bin, which is available on our web site [www.mutek.co.uk](http://www.mutek.co.uk). To upgrade a unit, this file may be sent by TFTP at any time. Our web site also provides links to TFTP client programs suitable for use under Windows.

### Updating the Main program.

Download the latest version from the web site – <http://www.mutek.co.uk/piper.htm>. Using a TFTP client send the file Piper.bin to the unit. For example, if you use the shareware program Pumpkin –



Click the 'Put File' button and enter the full path and file name to Piper.bin into the 'Local file' box, (alternatively, browse to it using the browse button on the right hand side of the Local file box). You will notice that Pumpkin has automatically entered Piper.bin into the 'Remote file' box – **do not change this name** as Piper will only accept the file if it is called Piper.bin. Leave the 'Type' as octet and the Block size as 1024. Into the 'Remote Host' box enter the IP number of the target unit and then press OK. The file should download immediately and the unit will automatically restart and run the new program.



Notes –

Do not change piper.bin to any other name. Piper only supports TFTP 'Put' not 'Get'.

Pumpkin may appear to do nothing for about 10 seconds, and then the file is sent. This is normal.