Micom Firmware Upgrade Tips

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Mobat's firmware upgrade utility can work the first time but some users run into problems as I did. I started out with only the supplied firmware flashing directions which turned out to have some errors and important omissions.

I spent a lot of time on the phone with Mobat USA probing for background and troubleshooting info. It seems little is available to guide one through using the firmware upgrade utility (BDMLOAD) or the radio interface utility (DirectIO). I was told that the combination may have trouble the first time out and that little data was available on how to troubleshoot the problem. Mobat USA assisted in many ways but in the end I resolved the problem through step-by-step troubleshooting.

I started out trying to identify where communications were breaking down between the PC and the radio including the software utilities and the Mobat interface cable. Direct IO is freeware and a newer version than the one supplied is available at their website www.direct-io.com. After installing the newer DirectIO program and restarting my PC I learned how to use their *IRQ monitor* and *TestIO32* tools located within Direct IO. Using the procedures described in Direct IO's *HELP* folder (under IRQmon) I attempted to test communications through my computer's parallel port. A simple loopback connector must be built with a DB25 plug jumpering pin 2 to pin 10. I found the loopback test did not work. In short, Direct IO was not able to communicate through my computer's parallel port driver. Researching this I found that Windows XP defaults to no communication interrupt assigned to this port.

To fix this I went to the parallel port properties (under the Windows XP device manager) and checked **'use any interrupt assigned to this port'**. I restarted the PC, opened Direct IO and the help folder, then IRQmon and the TESTIO32 tools. Loopback still would not work. I unlinked the IRQmon and the testiio32 tools using the on screen buttons provided, restarted the PC again, then relinked IRQmon and TESTIO32 again. This time the Direct IO test procedure worked. I was able to initiate interrupt requests. I shut down all, connected my Micom 2EF to the PC, restarted the PC and linked the BDMload firmware upgrade program to Direct IO then restarted the PC again. In previous attempts I had observed the radio boot up normally sometimes and sometimes not when connected to my PC. The upgrade instructions did not elaborate on this. I also found that the radio would sometimes emulated a floppy drive and fool my computer into thinking an external floppy drive was connected.

At this point when I turned on the radio it did not boot up instead, it had a blank screen but I moved on anyway. Once I opened BDMload (which brings up a utility window called HC16) I was able to initiate the *AUTO TUNING* feature successfully. From here everything worked as described in the upgrade instructions.

If you have used this tool then you know the 'Transfer Rate' setting is the first step after ensuring your parallel port (usually LPT1) is the selected port. Mobat indicated that this data transfer rate may be anywhere from 300 to 7000 and that it represented a communications delay set in the messaging to facilitate smooth communications between the PC and the radio. I was also told many tune rates are even numbers but some are not. Mine tuned to a rate well over 16000! I suspect it's because my PC is fairly new and capable of communicating data faster than the older Micom 2 transceiver.