

## Linux on the Jornada 56X Series Pocket PC

DON'T FORGET: YOU NEED A SERIAL CABLE!

### 1) Backing up WinCE and installing the Bootldr

-In order to flash the bootldr into memory, you need the following files: BootBlaster-j56x\_1.19.exe and bootldr-j56x-2.21.11.bin.gz

-copy these files onto a compact flash card, or copy them onto your device using Active Sync or whatever

-start the BootBlaster app on your Jornada

-select Flash --> save bootldr to save the original bootldr of the jornada

-select Flash --> save wince image to save the original flash of the jornada

-copy the saved\_bootldr.gz and wince\_image.gz onto your desktop machine for savekeeping (you need these if you want to restore wince)

-when you're done, select Flash --> Program in Bootblaster, then select the bootldr-j56x-2.21.11.bin.gz file. Bootblaster will ask if the file is correct, select yes there.

Bootblaster will start flashing. If it hangs during "Protecting wince Partitions", don't panic. Just reset and try again.

Verifying flash causes errors, ignore these!

If it's done bootldr is on your device :)

WARNING: This version of bootldr has no screen support and it can't boot wince! If you don't have a serial cable you will run into problems!

Another INFO: I've run into some more bootldr problems. After flashing bootldr with bootblaster you will not be able to flash any jffs2 images. You need to flash bootldr again using the load bootldr command. Then It will work. I have no idea yet why this occurs.

### 2) Installing the final Linux system

-connect the serial cable to the Jornada and to your desktop

Computer and start a terminal programm such as minicom etc...

-remove ALL batteries from the device and leave it unpowered a few seconds (2 should be enough ;) and make sure your terminal programm is running

-now connect the ac adapter to the device. If your terminal programm is set up correctly, you will see lots of bootmessages. Quickly press "Backspace" a few times during those bootmessages to reach the boot> prompt.

-you need a .jffs2 image now. Only use the j56x specific files! .jffs2 files for the Ipaq hxxxx will not work!

Due to major touchscreen issues in GPE, Opie is highly recommended to be used on the Jornada. If you still want to use GPE you need to remove the initial touchscreen calibration as it's very hard to get past it.

-at the boot> prompt type "load root" and upload the .jffs2 file using ymodem. This will take some time as Serial Port is sloooow ;)

-when the upload is complete, bootldr will automatically start flashing. This is quite quick.

-That's it, you now have Linux on your Jornada 56X. Just type boot at the boot> prompt and Linux should start booting

#### Final Words:

You will quickly notice, that Linux is not running perfectly. There are quite some problems remaining. Feel free to send me bug reports. Most of the hardware is fine though. (I hope that I can fix some of the remaining problems...)

You will find frequent Jornada updates at <http://handhelds.org/~chicken>

I'm always happy for feedback. Write your mails to [chicken@linuxhelpline.org](mailto:chicken@linuxhelpline.org)

HAVE FUN!!!

cya  
Alex ;)