Using MB-Comm to upgrade software on the MB

This procedure can be used to upgrade MB25 Mountbattens with D revision mainboards. It is used for the Writer +, the Pro and the LS.

Before using this procedure, you may need to update the MB bootloader.

If you are in any doubt at all about the installed version of the bootloader, update the bootloader FIRST using the separate instructions.

The latest version of MB-Comm, the MB firmware and speech files is available from:

http://www.mountbattenbrailler.com/software.html

This page is not linked to from the website menus.

Please don't pass this link to your users, as we might not be able to support any of your users who unfortunately render their MB unusable from faulty software loads.

Requirements:

1. The MB with USB port
2. A PC with the latest version of MB-Comm installed
3. An MB USB cable
4. The software file or files on the PC.

    - The main software file has the form *****.hex; the speech software file has the form ****.sfx.

IMPORTANT!

- Make sure you load the same software set as is already installed! If you have vxxAS20 installed, you must update to another, higher-numbered vxxAS20.

- If you are loading both the software (hex) and speech (sfx) files, load the software *first*.

- You MUST follow these steps EXACTLY in order, and don't skip any!

Procedure:

1. Make sure both MB-Comm and the MB USB drivers are installed and working.
2. Turn the MB off.
3. Remove the charger; if you're happy about the battery level, which should be "ok", the MB should stay off the charger for the entire exercise. If the battery is reporting "low", it's best to charge the MB beforehand; if this is not possible, you can connect the charger at step 5.
4. Change the position of the small switch on the underside of the MB. The switch is along the base panel, towards the front of the MB in the little cutout, and in a new machine it will be covered by a small round sticker. Changing the position of the switch puts the MB into upload mode.
5. Turn the MB on; it will say "program mode".
6. If you're going to use the charger, plug it in now.

HARPO

7. Now plug in the USB cable between the PC and the MB.

8. Now run MB-Comm on the PC.

9. In MB-Comm, go to the Device menu and select "connect Mountbatten". A dialog box will come up for you to select the port; go down to the MB USB connection, if it is not already selected, and select it. You can also check the COM port settings at this time; make sure the speed is set to 115200.

10. ***Do not click OK yet***.

11. On the MB, depending on which kind of software you want to upload:

   a) for the main software, press the software reset (warm reset, left-hand-side keys).

      1. the MB will say "download hex file".

      2. If you don't want to continue, press warm reset again to return to program mode - this is if you pressed the keys for a speech update when you wanted to upgrade the software, or vice versa.

      3. If you do want to continue, click OK on MB-Comm to connect.

      4. MB-Comm's standard screen will open, with some differences. On the Toolbar there is only one tool, a blue "disk" icon; on the menus, most normal actions are missing.

      5. Click on the blue "disk" icon or go to the File menu. This will begin the process of navigating to the firmware file you wish to use.

      6. You will then get a dialog on MB-Comm with the MB's serial number and software version; check that this is right, then click OK.

   This dialog, in later versions of MB-Comm, will also ask you whether you want to upgrade the model. Choose to update the software, not the model.

      7. Now you will get a file selection dialog so you can browse for the hex file.

      8. Select the .hex file and click OK and the transfer will take place. It takes a couple of minutes. MB will say "finished" and MB-Comm will bring up a dialog saying "success".

   If you want to upload more software to the MB in this session, you will have to repeat the process from the beginning: so skip to Step 10 and continue to the end, and then begin the process again from Step 1.

   b) for the speech software, press the hard reset (cold reset, right-hand-side keys).

      1. The MB will say "download sound file". If you don't want to continue, press the hard reset again. If you do want to continue, click OK on MB-Comm to connect.

      2. You will be taken immediately to the file selection dialog; browse for the sfx file and click ok.

      3. The transfer will now take place; it completes in a couple of minutes. The MB will say "finished", and MB-Comm will say "success".

10. When you have finished uploading one kind of software, disconnect MB-Comm from the Mountbatten by going to the Device menu and selecting "disconnect Mountbatten"; then switch the MB off.

11. Close MB-Comm and disconnect the USB cable.

12. Turn the MB over and return the switch to the original position.

13. Switch on with a hard reset (right-hand-side keys) so the new software loads.

HARPO

Done! Now you can repeat the steps if you have more software to load.