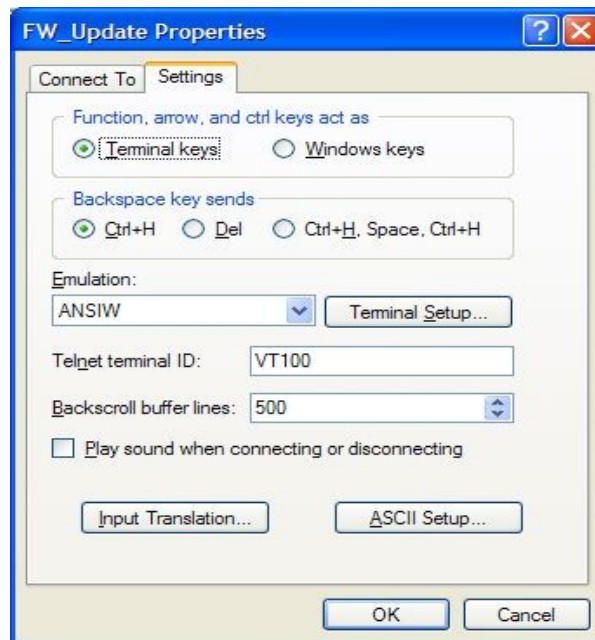


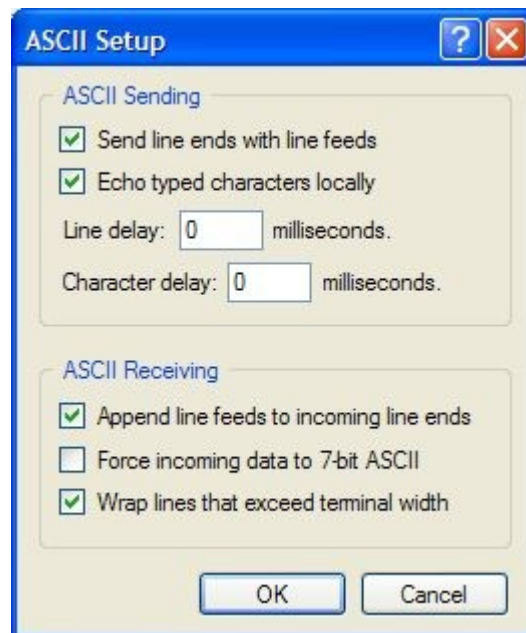
Updating Pro Firmware from the Main Board Serial Port by Jumpstarting

1. Switch off the machine.
2. Open the front right panel on the machine and locate the beige electronics cover on the floor of the compartment.
3. Remove this cover to get access to the CPU Board. (the smaller of the 2 boards)
4. Plug on the null serial cable to the RS232 interface (Debug interface) of the CPU Board.
5. Set the jumper (green) which is beside the big black microchip (Infineon) to the left position.
6. Switch on the machine and press the reset button on the CPU Board (red push-button).
7. Extract the RESI loader from the attached ZIP file and open the RESI emergency loader (RESI Downloader.exe).
8. Choose the right COM in Option / Serial and set the port settings to 19200, 8, N, 1.
9. Go to Loader->Preloader and select the ..\START167.hex file
10. Go to Loader->Downloader and select the ..\DNLD167.hex file
11. Go to Loader->Bootfile1 and select the ..\programm.hex file
12. Deactivate the "Make RESET" and the "Make START" option.
13. Press the "Download" button. It will likely give a few checksum errors but this is OK. If it gives too many it will error out; just try again until it works.
14. After the download, shut off the laser and set back the jumper to its original position (right)
15. Restart the machine with the lid open and attempt to connect.
16. If you can connect, then update the firmware with the attached firmware file and then you are done.
17. If you cannot connect then open Hyperterminal (Programs->Accessories ->Communications->Hyperterminal)
18. Setup a new profile called Trotec connecting via serial with the correct settings (COM x, 19200, 8, N, 1, Xon/Xoff).

19. Check the terminal settings to make sure they look like this:



and the ASCII settings should look like this:



20. Reboot the laser and you should see the laser's bootup procedure. This will likely include a line saying that the FRAM parameters are missing or corrupted.

21. Go to Transfer->Send Text file and navigate to the Init_Professional.frm file in the attached firmware (extract to the PC first).

22. This will send the FRAM parameters to the machine and you should be able to reboot the laser with the lid open and then connect through Job Control after this is done. Make sure you update firmware in Job Control after you can connect.

NOTES

a) It is very important that the lid is open while you are doing these steps. We are using Speedy 2 firmware and parameters to do the recovery and this is not changed over to Professional firmware until the final step of updating in Job Control.

b) If the update doesn't proceed to the end or is abnormally slow, try resetting the