

## **Firmware upgrade procedure for scalers of VP-4xx/6xx series equipped with RS-232 communication port**

1. Verify that you have appropriate software upgrade package.
2. Switch VP-4xx/6xx scaler (further – device) off.
3. Connect a crossed RS-232 cable (or straight cable with null-modem adaptor) between COM port on your PC and RS-232 connector on the device.

### **NOTE:**

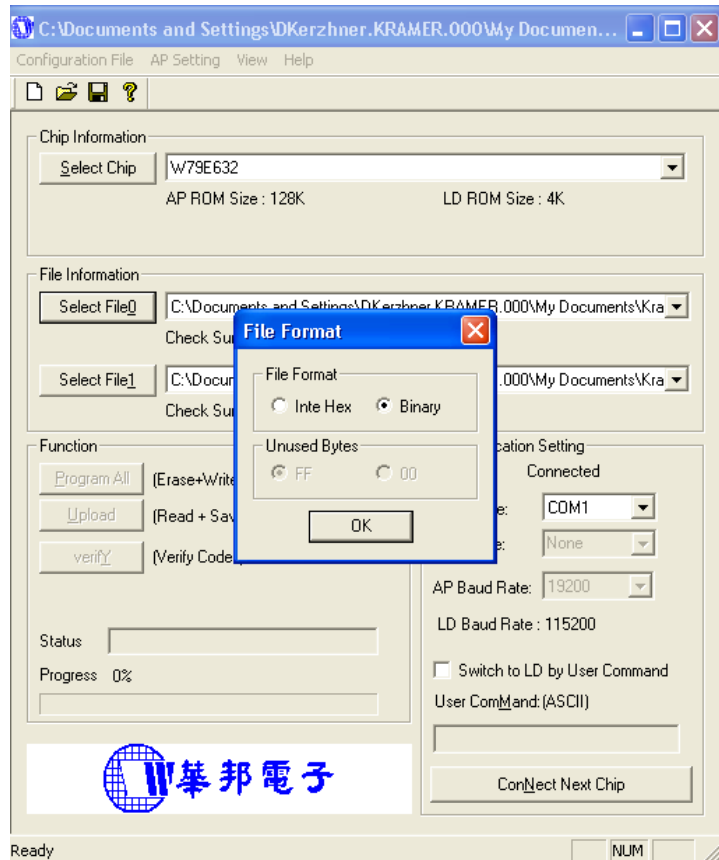
*Some latest devices don't need null-modem. Please try both with/without null-modem*

4. Press and hold the “Panel Lock” button and switch on the power on the device. Release the “Panel Lock” button after 3 seconds.
5. Wait for 30 seconds and try to switch between the inputs of the device. Verify that the device doesn't respond to the front panel buttons. The device is now in the programming mode.

### **NOTE:**

*If the device doesn't enter into programming mode and continues to react to the front panel buttons – please perform additional procedure “Switching VP-4xx into programming mode with ISP command” described at the end of this document.*

6. Unzip content of the software package to a separate folder on your computer.
7. From sub-folder “Winbond ISP Ver1.05” run file “8051IspWriter.exe”. No preliminary installation required. Software 8051IspWriter starts.
8. Under “Chip Information” select W79E632.
9. Under “File Information” press button Select File0 and browse to the appropriate .T00 file.
10. When prompted select Binary option – see screenshot below.
11. Under “File Information” press button Select File1 and browse to the appropriate .T01 file.
12. When prompted select Binary option – see screenshot below.



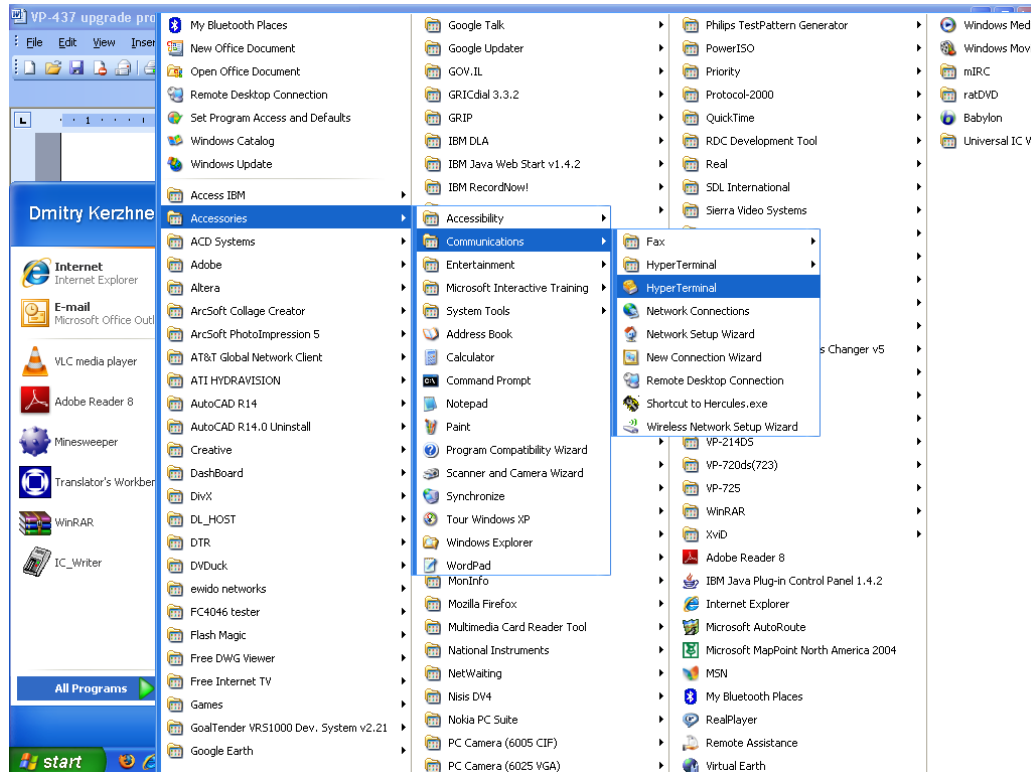
13. Under "Communication Setting" select appropriate COM port on your computer.
14. Press ConNect button. In the "Online" line appears confirmation message "Connected".



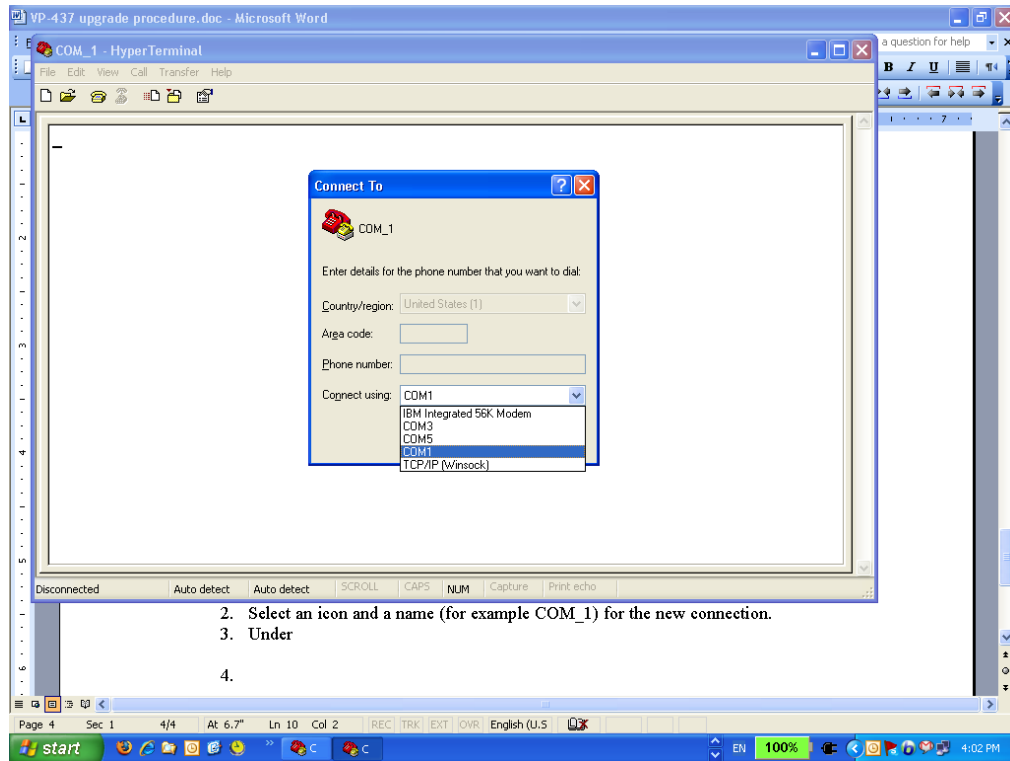
15. Under “Function” press button Program All. Upgrade procedure starts. It lasts about 30 seconds.
16. Wait until success confirmation message appears.
17. Click OK and close 8051IspWriter software.
18. Switch off the device.
19. Switch on the power and verify normal functioning of the device.

## Switching VP-4xx into programming mode with ISP command

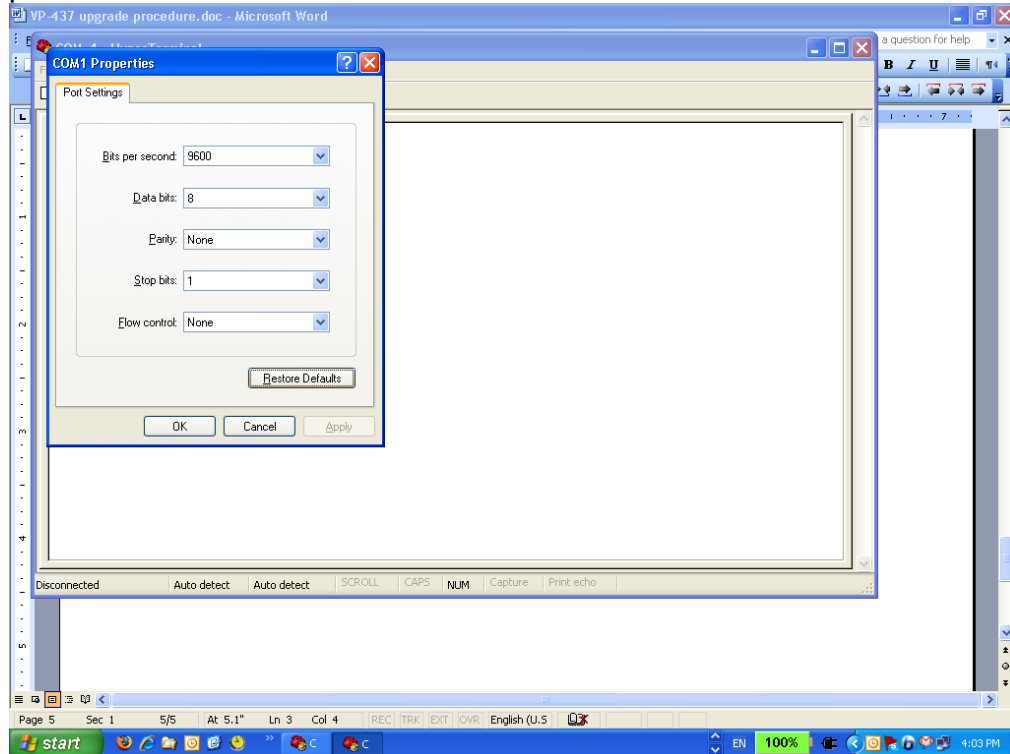
1. Start HyperTerminal software. This software is usually a part of Windows package and can be found under Accessories > Communications. See the screenshot below.



2. Select an icon and a name (for example COM\_1) for the new connection.
3. Under Connect Using select valid COM port on your computer and click OK.



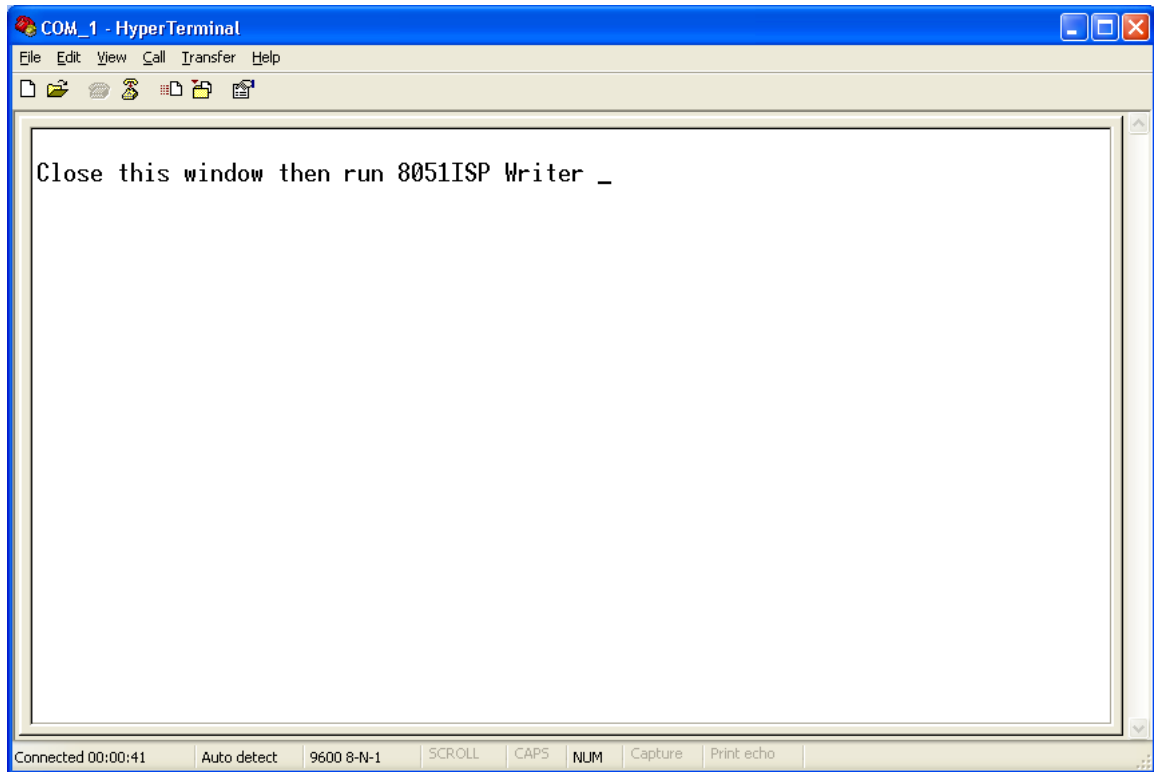
4. In the Port Settings click Restore Defaults button. Verify that the parameters are set as in the screenshot below. Click OK.



5. In the HyperTerminal window type ISP and press "Enter".

*NOTE: in normal mode HyperTerminal window doesn't show the text that you are typing – the window stays empty.*

6. The following message appears:



7. VP-4xx is now in the programming mode. Close the HyperTerminal window and return to the programming procedure above.