ESP90x/ESR90x
Field Upgrade Procedure

V1.02

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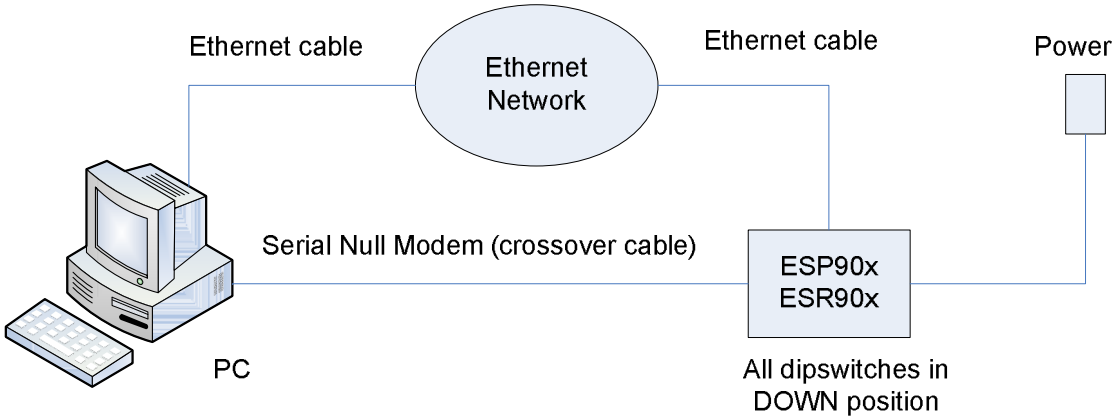
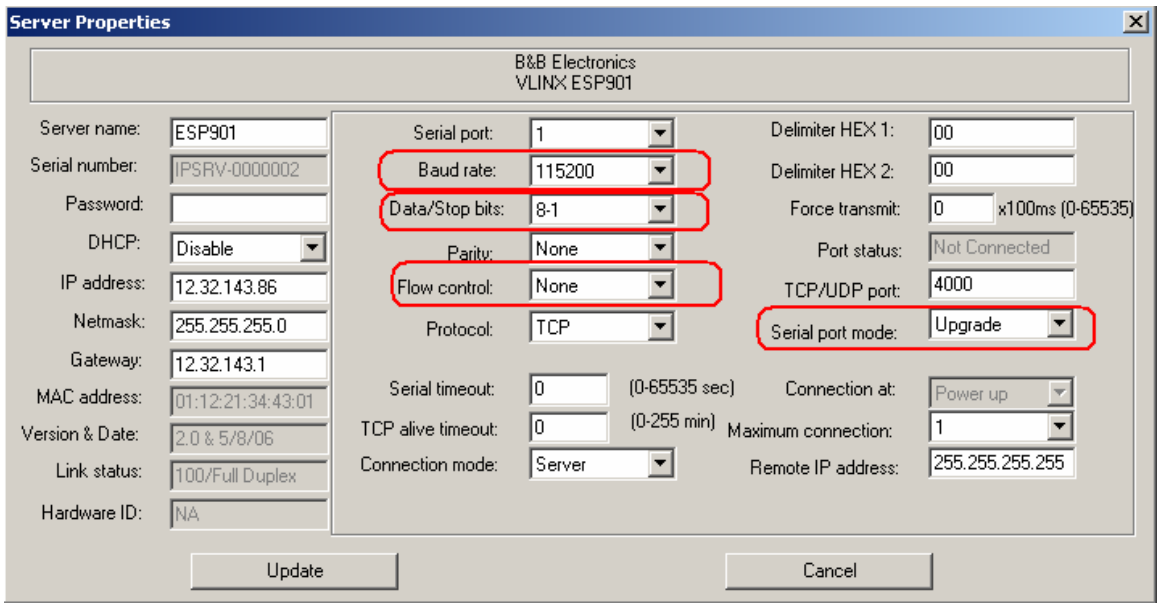
Field Upgrade for ESP90x/ESR90x

Steps

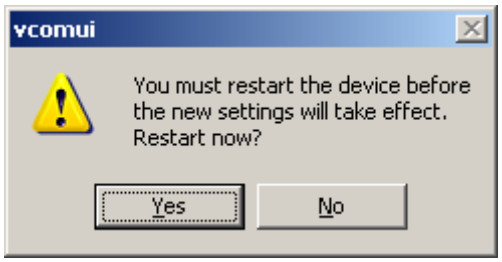
1. Download the following from B&B website.
   a. Vlinx software (if you do not have the latest)
   b. ESP90x or ESR90x firmware
   c. This field upgrade procedure document.
2. Install the Vlinx software (if necessary)
   a. Run software *.exe file to remove the **old** Vlinx software.
   b. Run software *.exe file again to install the **new** Vlinx software.
3. Now you are ready to install the **new** firmware using Vlinx software and the rest of the steps in this document.



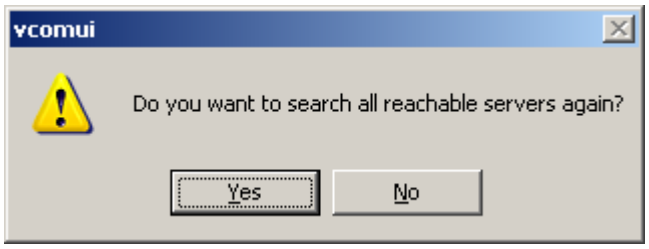
5. Setup the hardware as pictured above. Please note the serial null modem crossover cable MUST have pins 1, 2, 3, 4, 5, 6, 7, & 8 available or the upgrade will NOT work via Serial Method. *An alternative method via VCOM associated to port 1 can be use (normally used for remote upgrades).*
6. Save the firmware file* to a known location.
   *Make sure the file saves as *.hex type file.
7. Run Vlinx Manager software.
8. Put unit in upgrade mode and set baud rate to 115200, 8-N-1, no flow control.
   a. Make sure the dipswitches are all in the DOWN position (note ESP904 will not have any dipswitches).
   b. Set the serial, TCP alive, force transmit, and delimiters to “0” or “00”.

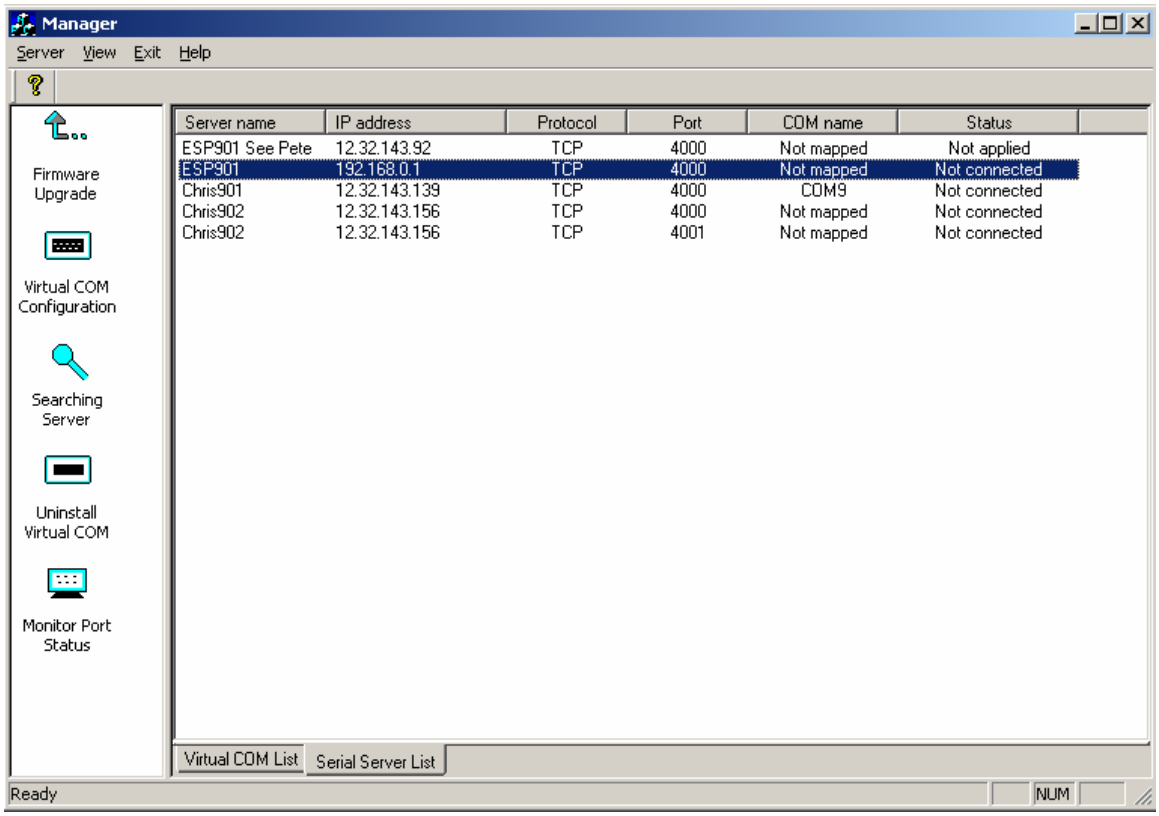


9. Click <Update> and this box will appear.

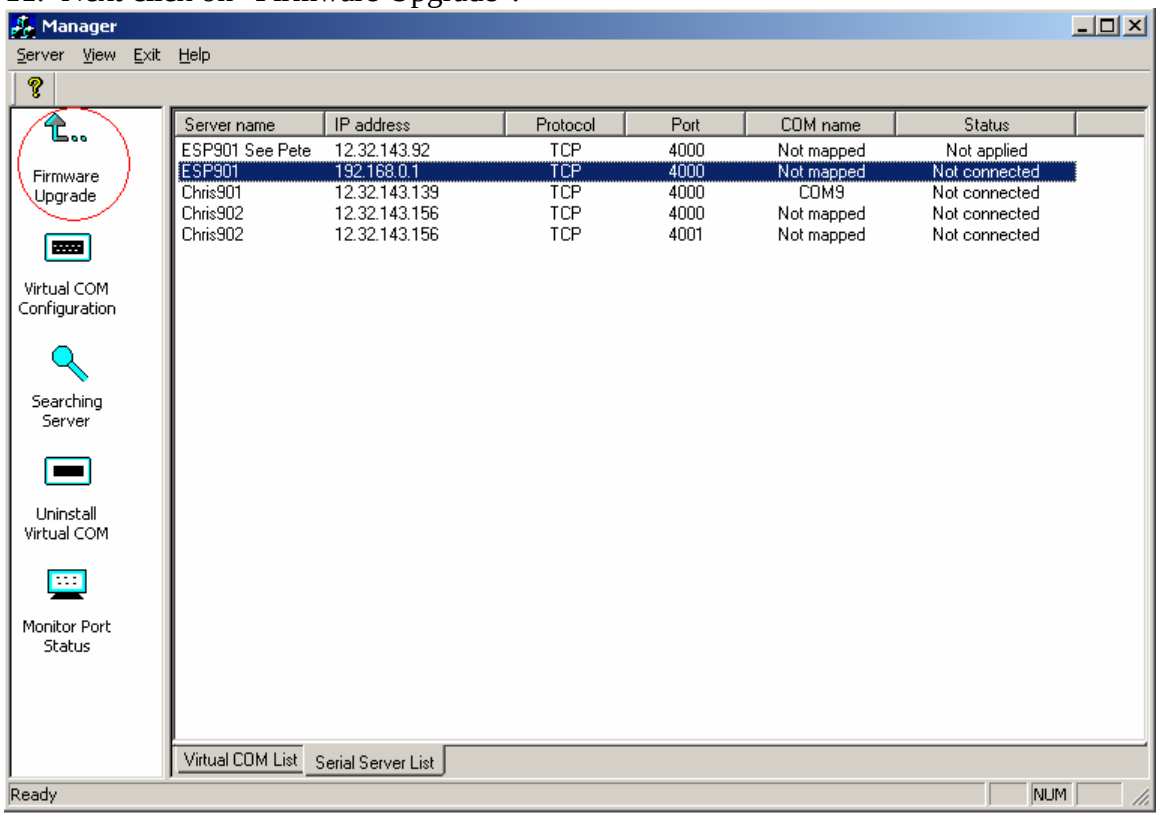


10. Click <Yes> to restart the unit. Click <Yes> to search for servers. Make sure your ESP90x/ESR90x is on the list. If not click on “Searching Server”. If you still do not see your device, reboot ESP90x/ESR90x device by pushing reset button or by cycling power.

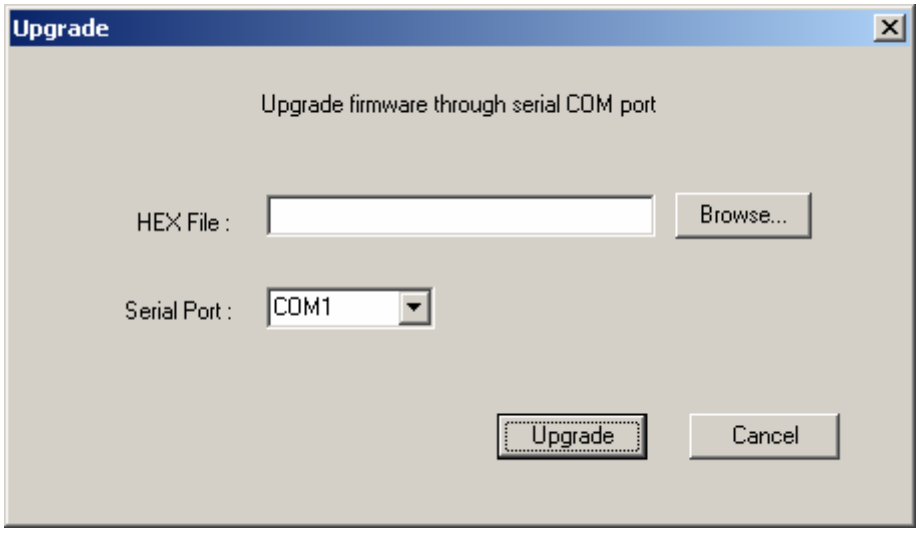




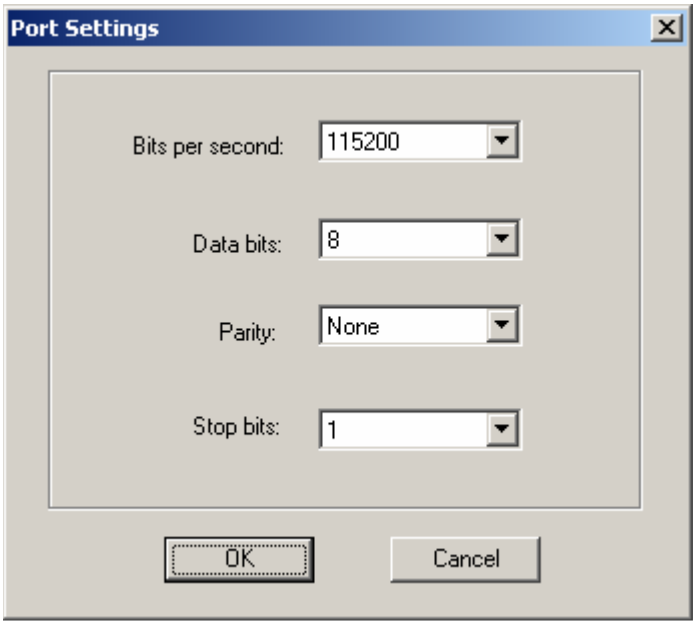
11. Next click on “Firmware Upgrade”.



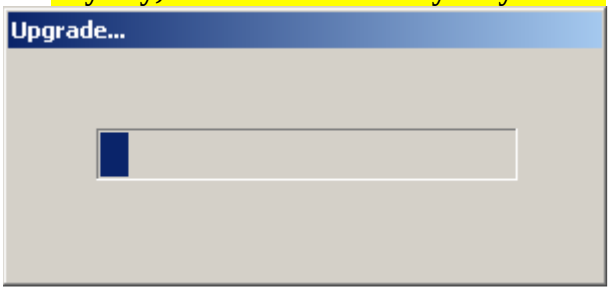
12. Browse for the location of the HEX files and select the COM port you are connected to via serial null modem cable. Serial upgrade is preferred. However, an alternative method can be done with VCOM that is associated with port 1 of the unit via network cable. *This VCOM method is very useful for remote location upgrading.*



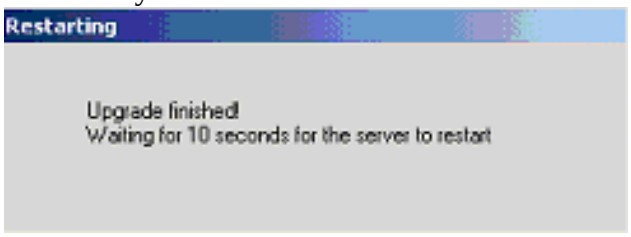
13. Select baudrate of 115200 and 8-N-1 as shown below and click <OK>.



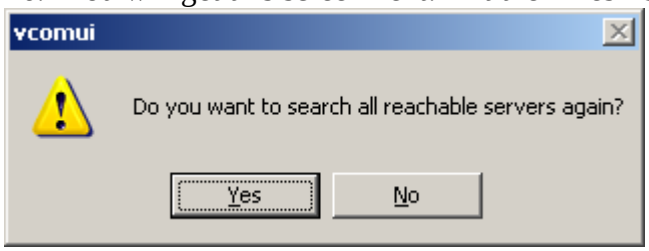
14. You will get this screen next. Wait for it to complete.
Warning – Do NOT remove power at this step or disrupt the process in anyway, or the flash memory may crash.



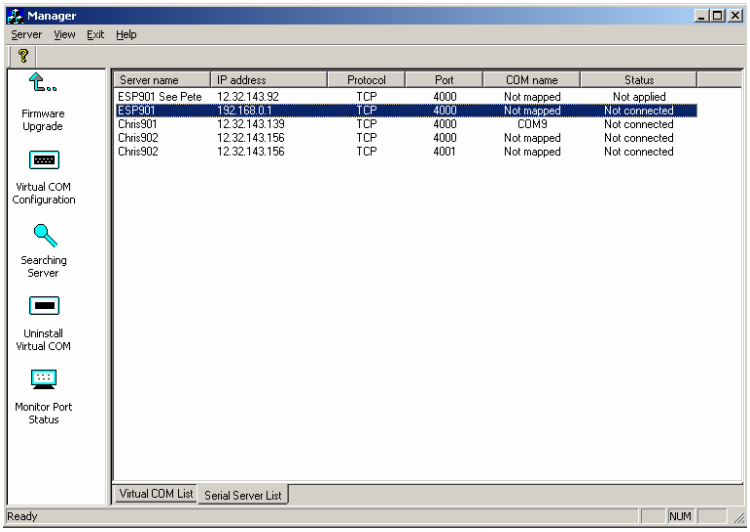
15. Then you will see this screen.



16. You will get this screen next. Hit the <Yes> button.



17. Check the Ready LED. It should be blinking once per second. If not, reset the unit by pushing the <Reset> button or power cycling the unit. Click on "Searching Server" and click on your ESP90x/ESR90x on the list.



18. Verify that the firmware upgrade was successful by checking out Version & Date.
    a. If it says the version you installed, then upgrade is successful. Change the settings back to your normal configuration.
    b. If it says other version than what you installed, repeat procedure. Or try defaulting the unit and try again.
    c. If you need further assistance, please contact B&B Electronics technical support team.