

Vitrek Firmware Upgrade Instructions

The files needed to perform a field upgrade of Vitrek product's firmware are available as a .zip file from Vitrek.

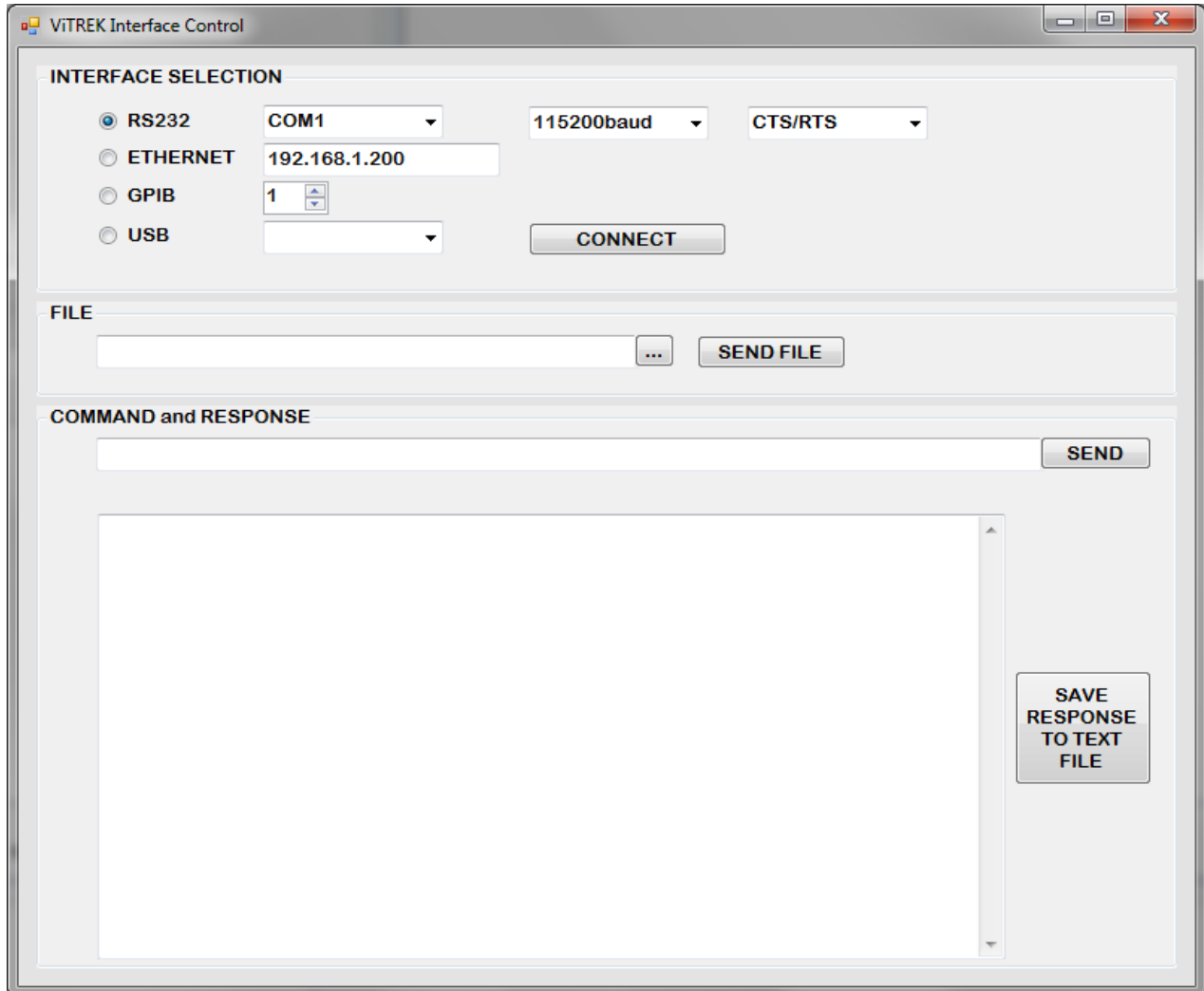
NOTE THE FOLLOWING BEFORE STARTING THIS PROCEDURE –

- The unit must be connected to a computer via either the RS232 or USB interfaces. Ensure that the computer has a compatible interface and a suitable cable is available.
- The Windows application provided by Vitrek has been tested in all versions of Windows XP, Vista, 7 and 8. The application runs under Windows 8 as a desktop application, a touch panel is not supported. Windows versions prior to XP are not supported.
- You may need to change your computer security settings to extract the files contained in the .zip file provided by Vitrek as this contains an executable file. Contact your IT department if you are unsure how to do this.
- During the actual upgrade process there is a period of a few seconds where power MUST NOT be removed from the unit. If the local power supply is severely unreliable then the use of a UPS is strongly recommended during this process. If a power failure or a communications failure occurs during the code download process, but prior to the programming portion, then it may be safely restarted after toggling power to the unit and closing and re-opening the Vitrek Interface Control application.
- The Vitrek Interface Utility is a general utility allowing communications with several Vitrek products; some portions of this utility may not be applicable to the unit and should not be selected by the user.

Follow the steps below to install these files onto a computer and perform the upgrade –

1. Create a directory on the computer which will be used to hold the files from the zip file. The name and location are not important, but make a note of it for later use.
2. Unzip the contents of the zip file to the directory created in step #1 above.
3. If using a Windows version prior to 7 the user may need to install Microsoft .NET Framework 4 prior to using the application. If this framework is not installed then an error will be displayed when the application is attempted to be run. See the Microsoft website for details regarding this.
4. Using Windows Explorer, locate the Vitrek Interface Control.exe file in the directory and run it.

5. The program should run and have an opening window similar to that shown below



6. To perform the upgrade the user must connect the unit unit to the computer, using the RS232, ETHERNET, GPIB, or USB interface as applicable.
7. If using the RS232 interface –
- Ensure the unit is configured to use RS232 with a baud rate of 115200.
 - Connect the computer RS232 port to the unit's RS232 port using a Null Modem cable (available from Vitrek).
 - In the INTERFACE SELECTION section of the Vitrek Interface Control application, select the RS232 interface, select the COM port being used and set for 115200baud and CTS/RTS handshake.
8. Using the ETHERNET interface –
- Connect the computer and the unit to a LAN within the same subnet (check with your IT department if you are unsure about this).
 - Ensure the unit is configured to interface via ETHERNET.
 - Determine the IP address of the unit by viewing it in its respective interface menu.

- d. Enter the IP address of the unit into the ETHERNET IP address area of the windows application.
 - e. Select the ETHERNET radio button.
- 9. Using the GPIB interface –
 - a. Connect the computer and the unit using a suitable GPIB cable.
 - b. Ensure the unit is configured to interface via GPIB.
 - c. Determine the GPIB address of the unit by viewing it in its respective interface menu.
 - d. Enter the GPIB address of the unit into the GPIB address area of the windows application.
 - e. Select the GPIB radio button.
- 10. If using the USB interface –
 - a. Connect the computer USB port to the V7X USB port using a standard USB 2.0 (or higher) AB type cable (available from Vitrek).
 - b. Ensure the unit is configured to interface via USB.
 - c. If the unit has not been connected via USB to the computer previously, then the computer will need to configure itself for the unit's USB interface. No driver is needed from Vitrek; however the computer will install a standard Windows HID driver to support the unit which may take several seconds or more. This process must be allowed to complete before continuing this procedure.
 - d. In the INTERFACE SELECTION section of the Vitrek Interface Control application, select the USB radio button, the adjacent pull-down box will then be populated with the serial number(s) of the unit(s) which have been detected as being connected to the computer. Ensure the correct unit serial number is selected before continuing.
- 11. In the INTERFACE SELECTION section of the Vitrek Interface Control application, click on the CONNECT button.
- 12. In the FILE section of the Vitrek Interface Control application, click on the ... button. A dialog will open allowing you to select the file containing the firmware upgrade. Select the file entitled fwupgrade_sre.txt preceded by the version number in the directory created in step #1 and click on the OPEN button in that window.
- 13. In the FILE section of the Vitrek Interface Control application, click on the SEND FILE button. The display on the unit should show the progress of the upgrade and the progress bar in the FILE section of the Vitrek Interface Control application will also show the progress. NOTE –
 - a. Depending on the interface being used, the file transfer may take several minutes to complete.
 - b. After the file has transferred, the unit may display a message showing that it is programming the firmware. DO NOT TURN OFF THE UNIT POWER DURING THIS PROCESS. This may last for several seconds.
 - c. After the unit has completed the upgrade, the display reverts to that previously shown. Cycle the power to the unit (turn it off and then back on again after a second or more).
- 14. This completes the firmware upgrade of your Vitrek unit.