

VP-X Configurator Release Notes
As of version 1.3.0 (October 24, 2011)

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1. Models



VP-X Pro & VP-X Sport



2. Experimental Software Notice

With experimental software you should always do your own flight testing in VFR conditions until you are satisfied with the software's stability and functionality. Be sure to read and understand the full software installation AND test procedure described in the Installation Manual.

Refer to the VP-X Installation and Operating Manuals for details on new features.

3. Notes about the latest release

Version 1.3 firmware: Be sure to verify correct operation of all circuits, especially trim and flap operation. Check for proper direction of travel and indication on the EFIS. Verify correct operation of the backup trim and flap controls on the EFIS. This release fixed a minor bug in the way directional control of the trim was handled, so you must verify that your configuration works as expected.

4. General Information

This version of the VP-X configurator includes the following firmware versions:

VP-X: 2.2
 VP-X Pro: 1.3

VP-X Sport: 1.3

The VP-X Configurator is used to configure the VP-X Pro and Sport models (and VP-X when used with MGL). It is used to:

- configure each power pin and switch
- configure trim and flaps
- configure wig wag
- configure system settings
- turn devices on and off, move trim and flaps
- view individual device current draw
- reset faults
- save your configuration to the PC
- restore your configuration from the PC
- update VP-X firmware.

The main functions of the VP-X Configurator are shown below. The installation manual describes how to configure each individual item.

The screenshot shows the VP-X Configurator Application window. The interface includes a menu bar (File, Edit, User, Connection, Help), a title bar (VP-X Configurator Application), and a main content area. The main content area is divided into several sections:

- Left Panel:** Contains the Vertical Power logo, the text "VP-X Configurator 123VP", and a list of functions: Device Configuration, System Configuration, Wig-Wag Configuration, Pitch Trim Configuration, Roll Trim Configuration, Flaps Configuration, Device Status / Control, System Status, and Simulated Data. A red circle highlights this list with the label "Functions".
- Device List:** A list of devices including Starter, EFIS, Primary Alternator, and various power pins (5A-1 to 5A-13, 10A-1 to 10A-6, 15A-1 to 15A-3, 3A-1*, 2A-1*, 2A-2*). A red circle highlights the "Disconnect" button below this list with the label "Connect/ Disconnect".
- Device Configuration Panel:** Shows settings for a selected device (5A-1), including:
 - Device:** A checkbox for "Enabled" and a "Name" field (16 chars max).
 - Circuit Breaker Value:** Radio buttons for values 1 through 15.
 - Switch Assignment:** Radio buttons for Switch 1 through Switch 10, and "Always On" and "Always Off" options.
 - Current Fault:** Radio buttons for "On" and "Off".
- Bottom Panel:** Contains a "Status: Connected" indicator (circled in red with the label "Connection Status") and an "Update" button (circled in red with the label "Hardware and software version"). A callout box with the text "Press to Save settings" points to the "Update" button.

5. Configurator Installation

The VP-X Configurator works with Windows XP, Vista and 7. Customers have reported it works with a Mac running Boot Camp, Parallels, or VMWare, but is not officially supported.

Prior to installation, verify that:

- [] You have administrative rights on your account (you are allowed to install software)

[] You have internet connectivity (some files may be downloaded automatically from the internet when you initially install the configurator. After the configurator is installed you do not need to be connected to the internet)

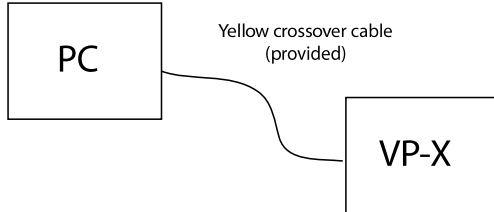
To begin installation:

1. Go to verticalpower.com, then Support, then Software Upgrades
2. Click on the **VP-X Configurator** link and save the Configurator file to your desktop. If that doesn't work, right mouse click on the **VP-X Configurator** link and select "Save Target As..." then save the Configurator file to your desktop.
3. Double click on the Configurator Setup file located on your desktop.
4. Windows will pop up various security windows. Press OK or Yes when prompted. If it prompts you to install the Microsoft .NET framework 4.0 select YES or OK.
5. Wait until the installation process is complete, then exit the installer. You are ready to run the VP-X Configurator.

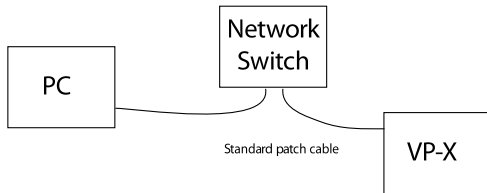
6. Connecting to the VP-X Pro and Sport using Ethernet cable

The PC can be connected to the VP-X using Ethernet in one of three ways. We recommend the first way for non-technical users, and offer options 2 and 3 for more tech-savvy users.

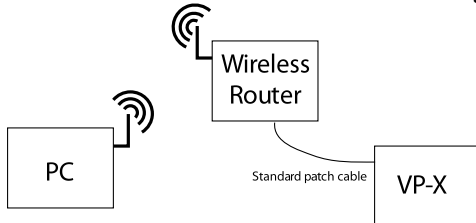
- 1. Connect the PC's Ethernet port directly to the VP-X Ethernet port using the Ethernet crossover cable supplied with the VP-X.



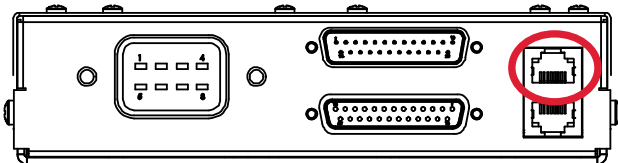
- 2. Connect through a network switch or router using a standard Ethernet cable. The VP-X is set to IP address 192.168.0.51 and the subnet must be 192.168.0 with no other device assigned to .51 address. The VP-X address is not configurable at this time.



- 3. Connect through a wireless router using a standard Ethernet cable and WIFI. The VP-X is set to IP address 192.168.0.51 and the subnet must be 192.168.0 with no other device assigned to .51 address. The VP-X address is not configurable at this time.



- Plug the Ethernet cable into the TOP jack on the VP-X.



- Turn on the aircraft master switch. The green light and the orange light on the top jack should turn on and blink. The green light indicates a link has been established and the orange light indicates the internal VP-X processor is running. On the VP-X Pro, the orange light on the bottom

jack should also be blinking.

- From Windows, go to the START Menu -> Programs -> Vertical Power folder, click on the VP-X Configurator to start the application.
 - The first time you run the application it will ask for your name and tail number.
- The connection screen appears automatically. Press the “Connect using Ethernet” button to connect. You must establish a connection between the VP-X Configurator and the VP-X to configure it or update firmware.

If you get a window that says the firmware must be update, follow the prompts carefully.

If you get an error message saying it cannot connect, please see the troubleshooting section below.

Once the connection is established the Configurator reads the existing configuration from the VP-X.

Note: You may or may not have access to the internet or your regular network while the VP-X configurator is running.



ALWAYS EXIT THE VP-X CONFIGURATOR PRIOR TO PUTTING THE PC TO SLEEP OR SHUTTING DOWN.

Please see the VP-X Pro & Sport Installation manual for details on configuring the VP-X.

7. Troubleshooting an Ethernet Connection “Cannot Connect” error

If you cannot connect, please check the following items:

1. Check that the system is powered on by verifying that the orange light on the Ethernet jack is blinking. On the VP-X Pro there should be 2 orange blinking lights, one on each jack. The VP-X Sport should have a single orange blinking light on the top jack.
2. The Ethernet cable is connected to the top jack (see picture above)
3. If you are using a laptop, shut off the laptop and remove the power cord, then remove the laptop battery for a few minutes, then put everything back together and restart.
4. If you are using a laptop with wireless Wi-Fi capability, most laptops have a switch that enables you to turn off the Wi-Fi. Please turn it off.
5. Disconnect any other Ethernet cables from the PC.
6. Restart the computer.
7. Look in the c:\VerticalPower\vpX folder (the vpX folder is in the VerticalPower folder). To get to the directory right-click on the windows start icon on the bottom left of the screen, then select *Explore All Users* or *Open Windows Explorer* and navigate to the correct directory. There should be three files there all with a .vpd extension (if you have extensions turned off, the files look something like this: vpx_sport_1_3_10_19_11). If these files are missing, please contact at info@verticalpower.com and we will send you the files.

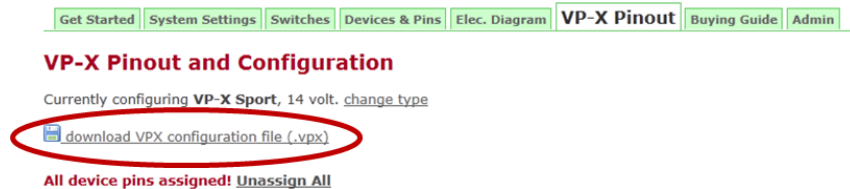
If none of these resolve your issue, go to the C:\verticalpower directory on your computer and email us the *configurator.log* file. (to get to the directory right-click on the windows start icon on the bottom left of the screen, then select *Explore All Users* or *Open Windows Explorer*). You can send it to

info@verticalpower.com . That file gives us detailed information that we can use to help you troubleshoot the problem.

8. Moving settings from the on-line VP-X Planner to the Configurator

You can now export settings from the on-line VP-X Planner to your VP-X. Here's how:

- When you have all the settings configured in the on-line Planner, go to the **VP-X Pinout** tab and click on the download VPX configuration file (.vpx) link.



- The browser will ask if you want to open or save the file. Select **Save As...** and save it to your desktop or somewhere on your computer where you can find it again.
- Launch the VP-X Configurator and connect to the VP-X.
- From the File menu, **select Restore Configuration...** and then select the file you saved earlier.
- The settings are then sent to the VP-X.
- Follow the prompts on the screen and power cycle the VP-X, and then re-connect.
- You will still need to set the trim, flaps, wig-wag and system settings.
- Verify all of the settings are correct.

9. Connecting to the VP-X using serial cable

Customers using the original VP-X (the box with 4 black connectors and a 37-pin d-sub connector) and the MGL Odyssey or Voyager should connect using a serial cable. Wiring instructions are in the VP-X Installation Manual.

- Turn on the aircraft master switch. **TURN OFF THE EFIS WHILE THE VP-X CONFIGURATOR IS CONNECTED.**
If you want to run the VP-X Configurator while the EFIS is running, be sure to go to Simulated Data section of the VP-X Configurator and UNCHECK the "Send Simulated Data" item (do this once connected).
- From Windows, go to the START Menu -> Programs, click on the VP-X Configurator to start the application.
 - The first time you run the application it will ask for your name and tail number.
- The connection screen appears automatically. Press the "Connect" (using serial) button to connect. You must establish a connection between the VP-X Configurator and the VP-X to configure it or update firmware.
Once the connection is established the Configurator reads the existing configuration from the VP-X.
Note: if you cannot connect check the following: 1) transmit and receive lines are wired correctly. Swap them around and see if that fixes it. 2) verify you have the correct serial port 3) verify the USB to serial adapter driver is installed and working correctly.

Please see the VP-X Installation manual for details on configuring the VP-X.

10. Using the VP-X Configurator

Be sure the VP-X is connected and the aircraft master switch is on.

Double click on the VP-X Configurator icon on your desktop or locate the VP-X Configurator in the Start->Programs menu.

When the VP-X Configurator starts, it saves the current Ethernet port settings. When you connect to the VP-X using Ethernet, it may need to change the network settings in order to connect. The VP-X Configurator does not affect wireless network configurations. When you quit the program, it restores the network configuration to its previous state. Sometimes this restore operation can fail, and the result is that you cannot connect to a network using your hardwired Ethernet port. Please see Appendix A for instructions on restoring your network settings manually.

ALWAYS EXIT THE VP-X CONFIGURATOR PRIOR TO PUTTING THE PC TO SLEEP OR SHUTTING DOWN.

Specific instructions to configure the VP-X are listed in the VP-X Installation manual.

11. Updating the VP-X Pro and Sport firmware (Automatic)

When you connect to the VP-X using the Configurator application, it checks if you have the latest firmware installed. If you have an older version installed it pops up a message saying you need to upgrade. Press OK and it will upgrade it for you. The configurator automatically saves your settings, then restores the settings after the firmware upgrade. It's just that easy!



VERIFY THAT ALL THE SETTINGS, CIRCUIT BREAKER VALUES, TRIM, FLAP, WIG-WAG ETC. ARE CORRECT.

12. Manually Updating the VP-X Pro and Sport firmware

This generally should only need to be performed if asked to by tech support. With the configurator connected, select "Update VP-X firmware..." from the Connection menu. A window appears asking you to select a file. Navigate to the main hard disk (C:\), then open the VerticalPower folder, then open the vpx folder. Select the file that matches your model and press Open.

13. Updating the VP-X firmware when connected to AFS or GRT EFIS

If you have a VP-X (pictured at right) connected to a GRT EFIS or AFS EFIS, the VP-X firmware is part of the EFIS software upgrade package and the firmware upgrade is performed from the EFIS itself. Please see instructions below.



AFS EFIS

In the calibration menus, go to 36. VP-X Configuration -> 2. System -> 4. Update Software.

VERIFY THAT ALL THE SETTINGS, CIRCUIT BREAKER VALUES, TRIM, FLAP, WIG-WAG ETC. ARE CORRECT.

GRT EFIS

Set Menu -> Display Unit Maintenance -> VP-X Configuration -> Software Update.

VERIFY THAT ALL THE SETTINGS, CIRCUIT BREAKER VALUES, TRIM, FLAP, WIG-WAG ETC. ARE CORRECT.

14. Restoring your settings manually

The VP-X Configurator automatically saves your settings prior to a firmware upgrade and automatically restores your settings after the firmware upgrade. If the restore process was not initiated, you can manually restore your settings. Please follow these steps:

1. Connect to the VP-X with the Configurator.
2. From the File menu, select “Restore Configuration...”
3. A window appears asking you to select a file. Navigate to the main hard disk (C:\), then open the VerticalPower folder.
4. You will see one or more LONG file names with a date at the end of the filename. Select the file with the most recent date and press the Open button.
5. The settings will be restored to the VP-X. Power cycle the VP-X when complete.

15. New features in VP-X Configurator version 1.3

1.3 Included VP-X firmware v1.3

1.2 Added “Slow Flap Retract” feature to the Pro and Sport. Bundled all install files into a single Configurator package. Removed unused items from list when connected to VP-X Sport. Fixed minor bugs.

1.1 Initial release.

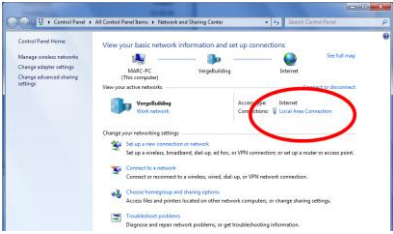
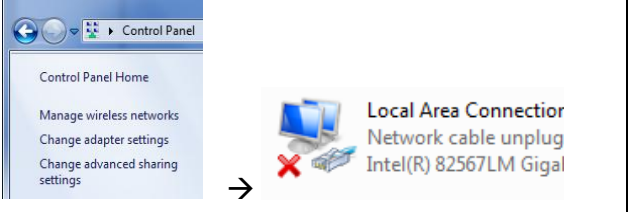

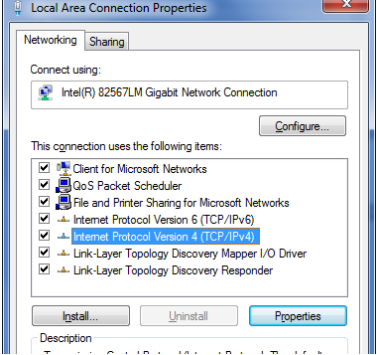
16. Known Bugs

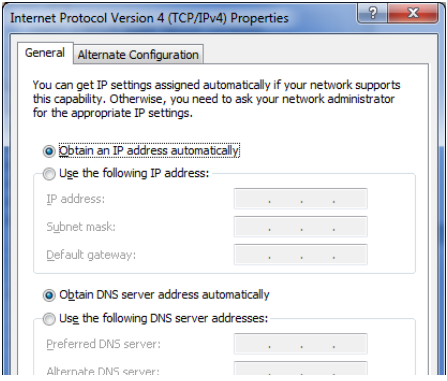
- No known bugs.

17. Appendix A – Restoring network settings

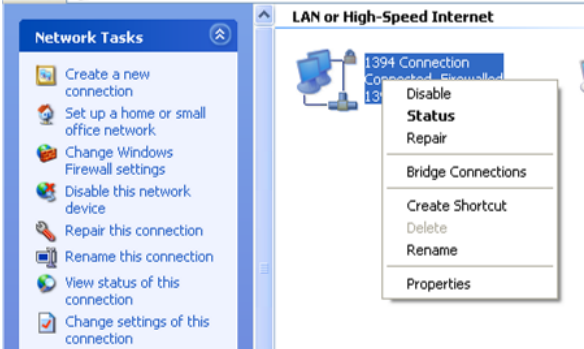
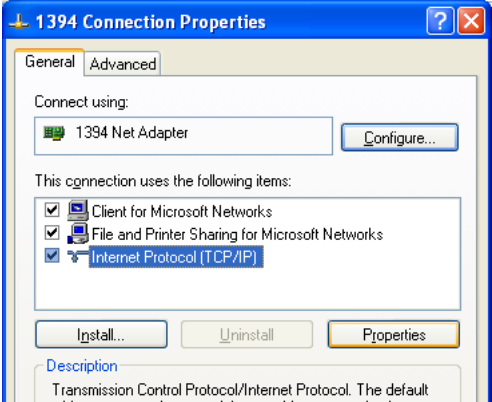
When the VP-X Configurator application disconnects from the VP-X, it restores the computer’s network settings back to their previous settings. In some instances this may fail and you must reset them manually. Follow the instructions below (See Windows 7 section, then Windows XP section):

Windows 7

<p>Control Panel -> Network and Sharing Center Press Local Area Connection. If this is not present click on “Change adapter settings” on the left side of the Window. Then right click on the icon that says “Local Area Connection” and select Properties.</p>	 <p>or</p> 
<p>Under General tab, click Properties</p>	
<p>Under Networking tab, click on an item labeled TCP/IPv4 then press Properties button</p>	

<p>Under the General tab, click on “Obtain an IP Address automatically” AND “Obtain DNS server address automatically”</p> <p>Press OK button.</p> <p>These are the standard settings for a home computer. If your computer is a work computer, the settings may be different. Check with your administrator.</p>	
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Windows XP

<p>Go to Control Panel → Network Connections</p>	
<p>Right click on the network connection that you want to restore, and select properties.</p>	
<p>Select Internet Protocol then press Properties</p>	

Under the General tab, click on “Obtain an IP Address automatically” AND “Obtain DNS server address automatically”

Press OK button.

These are the standard settings for a home computer. If your computer is a work computer, the settings may be different. Check with your administrator.

