

**VP-100 Release Notes  
Version 21.1k**

**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.

If you are updating over multiple versions, make sure to read the change notices for all versions between your current version and the version you're loading.

Refer to the VP-100 Installation and Operating Manuals for details on new features.

**BE SURE TO DOWNLOAD AND INSTALL THE NEW 'UPDATER APP' ONTO YOUR PC.**

SEE INSTALLATION INSTRUCTIONS BELOW.

**Version 21.1k enhancements:**

- Dimming.
- Backup control for pitch trim when faulted.
- Press and hold ACK button to clear faults.(IMPORTANT – THIS CHANGES HOW TO CLEAR FAULTS)
- Current draw reading is steady while wig-wag is active.
- New lights test sequence on startup.
- Fixed flap motor run on with locking up switch logic
- Master switch timing changes when turning off system

## Follow these steps to upgrade to V21

You must be on v16.2 or later software prior to performing this upgrade. Go in to setup and the first screen will show the software version.

The installation consists of three steps:

1. Downloading and installing the new software using the VP Updater Application
2. Configure the new features on the switch panel
3. Export your settings (so you have them for safe keeping) using the Updater App

Please note: some PCs can be temperamental. We don't know exactly why, but many issues are related to the USB-Serial driver. If you encounter problems, please verify you are using the correct driver and the correct serial port. You might also try different serial adapter or even a different laptop.

### Step 1. Install the new software

- Use with Windows XP, Vista or Windows 7.
- Install the java engine (go to VP web site -> Support -> Software Upgrades and follow instructions there). When asked, press Run, then Unzip. Windows may pop up security messages during the install. Press Close when done. This should be automatically installed in the c:\VerticalPower directory on your computer.
- Install the new Software Update Application from the same web site location. When asked, press Run, Run, then Unzip. Windows may pop up security messages during the install.
- Download the new version 21 application from the web site. Right click on the link, then select "Save Target..." then save it to your desktop. The filename is: 2010\_06\_23r2101k\_100VP.vpd
- Go to the c:\VerticalPower\vp100 and double click on the VP100 icon.
- When the application comes up, verify it says "VP-100 Software Update Rev 21.1-k" on the top.



- Connect the updater cable to the VP-100 Switch Panel and the serial port on your computer. If you only have USB ports, then you will need to use a USB to serial adapter (avail at most electronics/computer stores)
- To the right of 'Software Archive:' press the [...] button and select the.VPD file that is on your desktop (2010\_06\_23r2101k\_100VP.vpd).
- Turn all the VP-100 switches off. Make sure switch 1 is in the middle position.
- Select the correct comm. port. If you are unsure, then try each one until it works.
- The press the "Update Software" button.  
**Caution! Do not shut off the system while the software update is in progress.**
- Please contact VP support if you encounter any problems. Do not cycle power.
- After a successful update and after you cycle power, the display will show an error on startup. Press the ACK button on the Switch Panel to push the settings to the Control Unit. Cycle power when done. The system will not work until step 3 is complete.

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Step 2. N/A

Step 3. Export then import your settings. Note: settings can only be restored to the software version that exported them. So save your settings each time you upgrade or change them.

- To the right of the 'Settings Directory', select a folder (or create one) to save your settings in.
- With the cable connected between the Switch Panel and the computer, press the "Save Settings from VP-100" button.
- **With the cable connected between the Switch Panel and the computer, press the "Send Settings to VP-100" button. Do NOT skip this step!**

**Warning!**

**After performing an Update Software process or Import Settings process, thoroughly verify proper operation of each electrical device, including flaps and trim. Do not fly the aircraft until the electrical system has been verified for correct operation. Verify proper operation during each Mode. Do not fly in IMC conditions until you are comfortable the new software is stable.**

## Previous Releases - Software Enhancements

### Version 20.6 enhancements:

- Current fault alarms – detection of open circuits when device turned on.
- Added external switch inputs
- Added ability to use switch 7 & 8 for device control.
- Added wig-wag capability.
- Added variable speed trim
- Added aux battery voltage measurement
- Added intermediate flap stops
- Minor internal changes.

### Version 16.2 changes:

- The system now verifies that the Control Unit/Switch Panel have the same software version and configuration. If there's a discrepancy, the system queries the pilot for updating the software and/or importing the latest configuration.
  - The pilot will want to Export their settings before updating to 16.1. The first time 16.1 boots, the system will see discrepancies; the new keys used for verifying data sets will be invalid. When the system asks you to Update, press the ACK button.
  - The pilot will want to Export their settings to a different directory (e.g. c:/VerticalPower/Settings16.2) after updating to V16, as the data files that store the configuration are **not** compatible with prior versions.
- The total current draw is now filtered to reduce the sample-to-sample variances.
- The software update application can now have spaces in the directory path to the Software Archive (e.g. c:/Documents and Settings/user/Desktop/)
- The pilot can no longer perform a SW update, Import, or Export while the Setup/Options menus are active.
- The remote FOB can now power devices when ALL switches on the switch panel are in the OFF position.
  - Configuration Change: Go to the Device Setup menu for each device and change the Remote Key for each device you want to control from the FOB. The default is None.
- On power-on, the Control Unit(s) will “flash” a device (typically a light of some sort).
  - Configuration Change: Go to the General Setup menu and set the “On Start” field.
  - If the switch controlling the device is in the OFF position on startup, the control unit will flash the device twice.

### Version 15.1 changes:

- Lighting level is shown when setting the daylight threshold level (under screen settings).
- Auto-dimming for the VP-100 switch panel has been fixed. Verify proper lighting levels for day and night conditions and adjust accordingly (General Setup->Day/Night Threshold)

- The pilot needs to cycle power in order to clear Battery and E-bus faults; typically this would be performed on the ground while diagnosing the problem with the battery ctc and e-bus fuse(s).
- Converting to Electrical Configuration #2 to #1 will delete the secondary field.
- The system no longer generates spurious low voltage alerts after the system is first powered on.
- Added stronger synchronization capabilities for importing and exporting the settings data.
- After a software load, the pilot must cycle power to the VP-100 for the changes to take effect.