



VANTAGE PRO® UPDATER

User's Guide

Vantage Pro Updater Overview

The Vantage Pro Updater allows you to update the firmware in a Vantage console via the expansion port used by the WeatherLink data logger. The Updater can be powered by a 5 Volt Vantage Pro AC-power adapter or a 9V battery. One 9V battery should provide over 20 hours of operation.

Section 1: Using the VP Updater

Updating the Vantage Pro Console Firmware

These are the basic steps involved in using the Updater to reprogram the firmware in a Vantage Pro console.

1. If you are using WeatherLink software with your Vantage Pro weather station, be sure to download the weather data into your computer before beginning this procedure.
2. Press the [DONE] key and the down arrow [-] key on your VP console to enter setup mode. This will preserve the time and other settings on your console.
3. Remove power from the console by unplugging the AC wall adapter and removing the batteries.
4. If a WeatherLink data logger is installed, remove it from the console.
5. Turn the VP Updater on. The Status LED should be GREEN. If it shows another color, see the Status LED Summary Table.
6. Insert the Link Program Adapter (See Figure 2) into the console expansion port. See Figure 1 for location of port. It's the same port used by the WeatherLink data logger.
7. Press the Updater Start Button. The LED should start flashing YELLOW.
8. When Updater is done programming, the LED will turn GREEN and you will hear 1 beep. A RED or YELLOW LED indicates a problem. See the Status LED Summary Table and the Troubleshooting Notes for more information.
9. Unplug the Updater from the Console.
10. If you have a WeatherLink data logger, plug it into the console.
11. Restart the console by replacing the batteries and/or connecting the AC wall adapter.
12. Check the release notes for the version of firmware you just installed. You may have additional steps to perform in order to complete the update.

Status LED Summary Table

LED Color	Updater Status	Additional Info
Solid Green	The Updater is ready.	If after programming, it means everything programmed ok.
Solid Yellow	The fuse bits did not program correctly.	
Solid Red	The target flash did not program correctly.	If just after the Start button is pushed, the Updater is not talking to the target at all.
No Color	The battery is low.	
Flashing Yellow	Target flash pages for firmware are being programmed or verified.	
Flashing Red	The firmware update failed verification.	If the condition repeats, the Updater flash memory may be corrupt. Reload the firmware into the VP Updater.

Troubleshooting Notes

On power up the Updater will beep twice and sequence the colors of the LED. When the LED is GREEN it is ready to use. The first beep indicates the processor is running. The second beep means it can talk to the flash memory where the firmware image to be loaded is stored.

- If you do not hear a beep after powering up, the battery is dead or something is wrong with the Updater.
- If you do hear a beep after powering up, but the LED is left off showing no color, the Updater has detected a low battery condition.
- If, after pressing the Start button the LED does not change to flashing YELLOW but instead beeps twice and goes to RED, the Updater cannot talk to the console. Check connections and press Start again.
- If firmware has been updated correctly, the status LED turns GREEN.
- If a target flash page does not verify, the status LED will turn solid RED.
- If the fuse bits do not program correctly, the status LED will be solid YELLOW.
- If the console did not program correctly, you can push the Start button to try to program it again.
- If the firmware fails the verification, the status LED will start flashing RED. You can push the Start button to leave this state and go to the GREEN state.

Note: *The Vantage Pro Updater sends diagnostic messages through its serial port that may be helpful if the operator is puzzled about what is going on. These messages can be viewed in PROCMM or HYPERTERMINAL.*

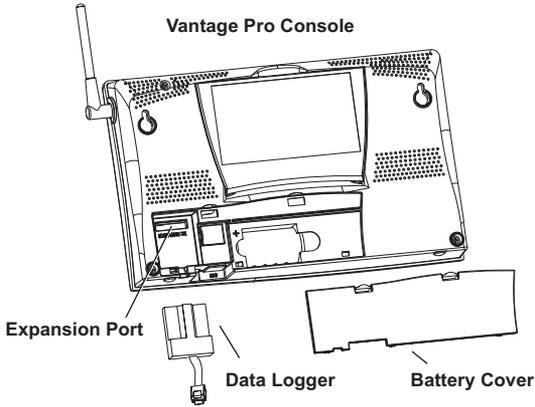


Figure 1. Data Logger and Console

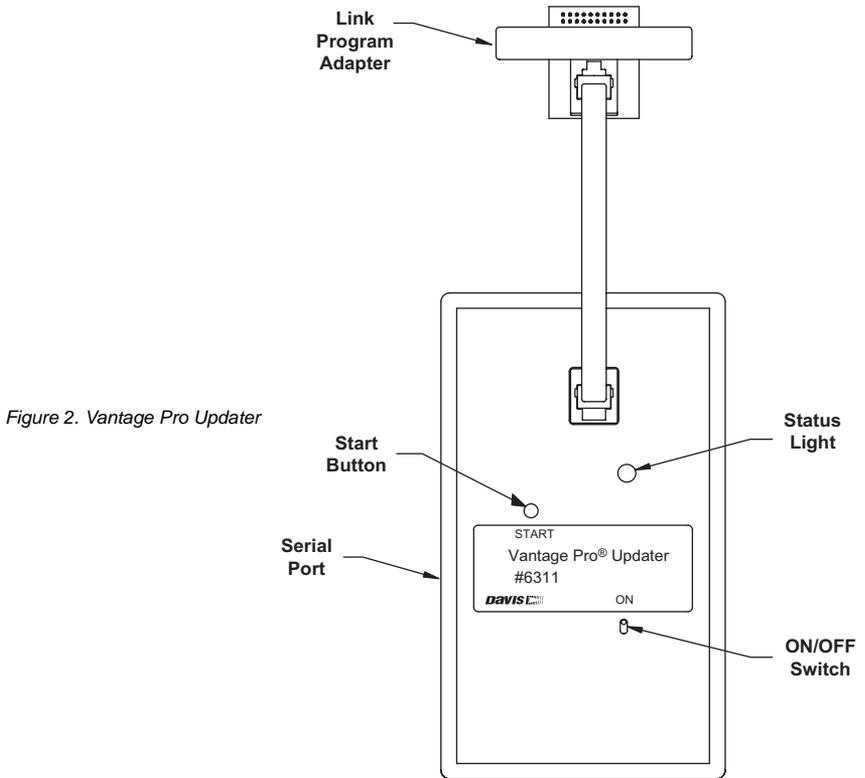


Figure 2. Vantage Pro Updater

Section 2: Advanced Operations

Updating the Updater Overview

The Updater software (updater.exe) allows you to load new versions of firmware into the VP Updater. The firmware image is stored in a file named flash.bin and can be downloaded from the Support section of our website: www.davisnet.com.

A PC is required to install new versions of firmware on the VP Updater. The installation is done through a serial port at 19,200 using the Updater software provided by Davis.

Using Updater Software to Update the Updater

1. Make sure the flash.bin file is in the Updater software directory before you start the program.
2. Connect the included serial cable to the Updater's serial port (see Fig. 2). The other end of the cable connects to the serial port on your computer using the included serial port adapter.
3. Turn the VP Updater ON using the ON switch (see Figure 2).
4. Start the Updater software.
5. The software should detect the VP Updater on one of your serial ports.

Note: *If the Updater Software doesn't detect the VP Updater, check all the connections and make sure battery is good or check that the AC-power adapter is connected and receiving power.*

6. When the software asks, "LOAD NEW FIRMWARE TO UPDATER? (Y or N)":
 - Press "Y" to update the firmware in the Updater.
 - You can press "N" to cancel the operation.
7. The program will load the new firmware into the VP Updater and double check that the firmware loaded correctly.
8. Type 'Q' to quite the program. You can then close the window.

Contacting Davis Instruments

(510) 732-7814 Technical Support, Monday – Friday, 7:00 a.m. – 5:30 p.m. Pacific Time.

(510) 670-0589 Fax to Customer Service or Tech Support.

www.davisnet.com Davis Instruments' website. Check out the Weather Support section.
support@davisnet.com E-mail to Technical Support.

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