

## OmniWall™ DISPLAY PROCESSOR FIRMWARE UPDATE INSTRUCTIONS FIRMWARE VERSION 4.3.1.0

*Due to the complex nature of this update, please familiarize yourself with these instructions and then contact RGB Spectrum Technical Support (tech@rgb.com; +1-510-814-7000, option 1) before performing the update.*

*To install any version prior to 4.3.1.0, you must contact RGB Spectrum for assistance.*

### IMPORTANT

All interlaced inputs to the *OmniWall* should be disconnected or disabled before performing an update. If disconnection is not feasible, all upstream and downstream devices must be fully powered-down.

### Overview

Performing the firmware update via the serial port is preferable to using the Ethernet port, because the *OmniWall* will continue to communicate its status even through a system reset. While Telnet may be used to enter commands, Ethernet connections are lost when the *OmniWall* resets and require a new login after each occurrence, and therefore cannot provide continuous status updates, including when a reset cycle has completed.

The serial port method tells you when an update command or system reset has completed by the return of the prompt (>) on the screen of the control PC. With Telnet, once the reset starts, the Telnet connection is lost. To prevent a premature re-login to the *OmniWall* which could interfere with the update process, the recommended wait time is approximately 30 minutes for the update command.

### Determining the Current Firmware Version

Push the SYS button and then rotate the control knob until the currently-installed firmware version appears on the front-panel display. **If the currently-installed firmware version is 4.3.0.0, you do not need to update it.**

### Updating from Version 4.2.1.1 to 4.3.1.0

The basic steps are listed below; detailed instructions begin on [page 2](#).

1. [Upload Firmware to the OmniWall](#)
2. [Export Settings](#)
3. [Download Exported Settings from the OmniWall to a PC](#)
4. [Install Firmware](#)
5. [Upload Settings From PC and Import Settings Back to OmniWall](#)

## Transferring Files

Files may be downloaded from and uploaded to the *OmniWall* using File Transfer Protocol (FTP) via connection through the Ethernet port. Files that may be uploaded to the OmniWall include previously-saved system settings, new firmware, presets, and EDID information.

### IMPORTANT

The FTP client must be in binary mode to upload firmware. The mode does not have to be set when transferring files using Windows Explorer.

In the steps that follow, an FTP session is illustrated using Windows Explorer (start **My Computer**). While the procedure will be similar with other operating systems, the appearance of the individual windows may vary.

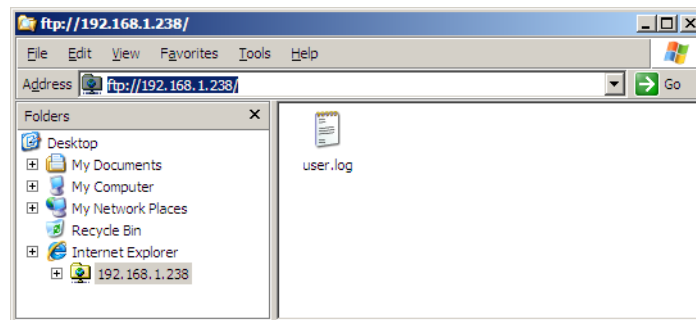
### 1. Upload Firmware to the *OmniWall*

- a Connect a PC to the Ethernet port of the OmniWall to transfer files.
- b Open Windows Explorer.
- c In the address bar, enter the FTP command:

```
ftp://rgb:spectrum@nnn.nnn.nnn.nnn
```

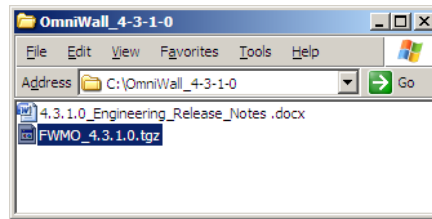
where nnn.nnn.nnn.nnn is the IP address of the *OmniWall*; rgb:spectrum is the user name and password. The examples that follow use the address 192.168.1.238.

The *OmniWall* FTP directory appears in the Explorer window as shown in [Figure 1](#).



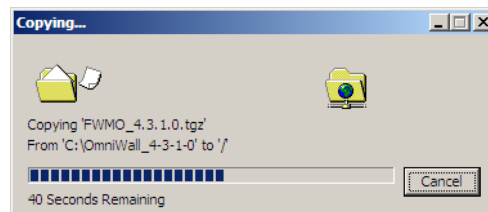
**Figure 1** FTP Open

- d Open another Explorer window and navigate to the location on the computer that contains the firmware file.



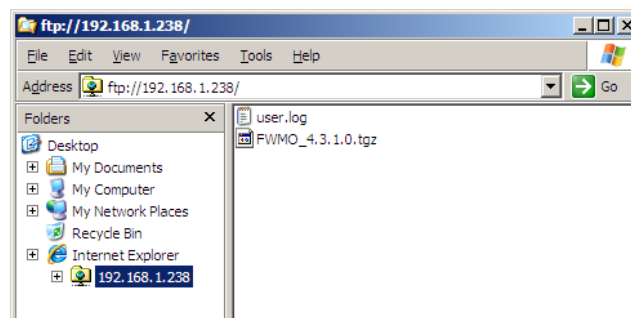
**Figure 2 Locate File to Upload**

- e Select the firmware and drag it to the *OmniWall* FTP directory. Copy progress is displayed.



**Figure 3 Copying Firmware to the OmniWall**

- f When copying is complete, the firmware appears in the *OmniWall* FTP directory along with other system files.



**Figure 4 Firmware Uploaded**

## 2. Export Settings

It is highly recommended that all system settings be saved and downloaded to a PC prior to beginning the update procedure.

Use a serial or telnet connection to export settings from the OmniWall by executing the following command:

```
exportsettings all [file_name.txt]
```

This creates a file in the FTP folder of the OmniWall containing a copy of the existing settings. If you do not specify a file name, it will be named **export.txt**.

## 3. Download Exported Settings from the OmniWall to a PC

- a Use the procedure in [Upload Firmware to the OmniWall](#) to initiate a browser-based FTP session.
- b Drag the exported settings file created above from the *OmniWall*'s FTP folder to the desired location on the connected PC. Files that may be downloaded from the OmniWall include exported system settings, EDID information, and presets.

## 4. Install Firmware

### IMPORTANT

**Do not interrupt power to the *OmniWall* during the firmware update.**

Delete any exported or saved files in the *OmniWall* FTP buffer before uploading any firmware files. System files **user.log** and **.profiles**, if present, do not need to be deleted.

The FTP client must be in binary mode to upload firmware.

- a Using FTP, transfer the file **FWMO\_4.3.1.0.tgz** from the PC to the OmniWall as described in Step 1.
- b Execute the **UFW** command.
- c For serial port control, wait until the prompt is redisplayed; for Telnet operation, allow approximately 30 minutes for the system to complete the update and reboot.
- d Issue the **SYStemINFO** (**SYSINFO**) command to verify that the correct firmware version is displayed and that all input and output cards have boot code version X.6. [Figure 5](#) shows a **SYStemINFO** report example.

```

Model:                OmniWall 16
Manufacture date:     12/06/2013
Firmware version:     4.3.1.0
SH4 firmware version: 4.3.1.0
Firmware build date:  Feb 25 2014 12:18:28
Hardware revision:    1.0
CPLD version:         1.17
WCP Applet Version:   4.3.1.0
Reboot count:         157
System up time:       1d 4h 48m 0s
Total system up time: 219d 19h 53m 24s
Host name:            OmniWall
IP address:           10.0.0.232
Subnet mask:          255.255.255.0
Gateway IP address:   10.0.0.1
MAC address:          1a:2b:3c:4d:5e:6f
Options               Dual-Link Wall_Cmds
System logging level:  Warning
System upgrade state:  no ufw/ubt/retry in progress
Backplane FPGA version: 1.27
Input
Card  FW Ver  HW Ver  Card Type  FPGA Ver  Boot
----  -
1      0.189   3.0    Dual Single Link DVI  1.1.2     1.6
2      0.189   3.0    Dual Single Link DVI  1.1.2     1.6
3      0.189   3.0    Single Dual Link DVI/RGB 2.1.16    1.6
4      0.189   3.0    Single Dual Link DVI/RGB 2.1.16    1.6
5      0.189   3.0    Single Dual Link DVI/RGB 2.1.16    1.6
6      0.189   3.0    Single Dual Link DVI/RGB 2.1.16    1.6
7      0.049   2.0    HD SDI        6.1.7     1.6
8      0.189   2.0    Fiber IN      8.1.6     1.6
Output
Card  FW Ver  HW Ver  Card Type  FPGA Ver  Boot
----  -
1      1.038   3.0    Dual Single Link DVI Scaler 7.2.42    3.6
2      1.038   3.0    Dual Single Link DVI Scaler 7.2.42    3.6
3      1.038   4.0    Dual/Single Link HDMI Scaler 7.2.42    3.6
4      0.185   2.1    Dual Single Link DVI  0.2.20    2.6
5      0.185   3.0    Single Dual Link DVI  3.2.19    2.6
6      0.185   3.0    Single Dual Link DVI  3.2.19    2.6
7      0.185   3.0    Single Dual Link DVI  3.2.19    2.6
8      0.185   1.0    Fiber OUT      9.1.10    2.6

```

**Figure 5 SYSINFO Report Example**

- e Verify that the FPGA firmware versions for all cards match those in the most recent firmware release notes.

## 5. Upload Settings From PC and Import Settings Back to OmniWall

- a** Use the procedure in [Upload Firmware to the OmniWall](#) to initiate a browser-based FTP session.
- b** Upload the system settings file that you created in Step 2 and downloaded in Step 3 back to the OmniWall.
- c** Using a serial or telnet connection, import the system settings file by executing the command:

```
importsettings file_name.txt
```

- d** The old settings are now available on the OmniWall.