Rose technical support

Flash firmware upgrade instructions

**Applies to UltraView Pro, ServeView Pro, MultiVideo (UltraView Pro family)
and to UltraView, ServeView Plus, and ServeView enhanced (UltraView family)**

These switches have flash programmable memory. This means its firmware may be reloaded, to support new features or fix any problems in its operation. This is the procedure to install the new firmware.

You will need the following items to complete the new firmware installation:

- A computer with a terminal emulator program. This computer must not be attached to the switch that is being upgraded, because while the upgrade is in progress the switch does not provide KVM signals. You can use a laptop or temporarily disconnect a computer from the switch and connect a keyboard, monitor, and mouse directly to the computer.
- The serial cable that connects between the switch's serial port (a 6-conductor RJ-style telephone jack) and the serial port on the computer.
- The upgrade file retrieved from the Rose web site.

1. Get the correct firmware
To check for the firmware version of your switch, if you have an OSD (on-screen display card) then you can read it from the top line of the configure menu command (ctrl-F12) command.

If you don't have an OSD use the ctrl-I command. This command is used to identify the program revision level of switch firmware currently installed. Before entering this command, your currently selected computer should be at a command prompt, word processor, or editor, so that when the unit sends the ROM revision level that the result will be displayed. To issue the command, press and release the left Ctrl Key, then type "I". Your unit will send back its current firmware revision level.

If the first two two letters of the program version are UP this stands for UltraView Pro and you should get the firmware from the [UltraView Pro family firmware download page](#). If the first letter of the program version is a U but there is no P immediately following the U, this stands for UltraView and you should get your firmware from the [UltraView family firmware download page](#). The digits following the UP or the U are the program version number which may be two or three characters.

In addition to the program there is a kernel program which is like a BIOS for the unit. To read the kernel version you have to turn the switch off and back on and look at the power on diagnostics. For an UltraView Pro family switch with OSD, the version is displayed on the power on diagnostics splash page. The same information on the splash page is also sent to the serial port on power up. If you have an UltraView family switch, this information is only sent to the serial port, by momentarily holding in the left front panel switch at power-on of the switch. Release the switch about two seconds after powering it on.

We recommend upgrading to the latest versions of both the kernel and program. You can upgrade one or both in the same session. You don't ever have to reload the same version of the kernel or program when changing the other.

2. Connect the serial cable

There is a single RJ-style serial ports on the rear connector panel of these switch families. The picture on the left shows the serial ports with a red circle around it. Your switch model may look different. Connect the serial cable provided to the RJ connectors and the DB9 female to the serial port on your PC. Observe if it is COM1 or COM2 because you will need to know in the next step.

Figure 1. Identifying the serial port

3. Run HyperTerminal

If you are not familiar with HyperTerminal, it is usually located in Program-Accessories-Communications. Run it and set the baud rate to 57600,N,8,1. Use the direct to COM1 or COM2 setting. You could also set it for 9600 baud if you wanted to run slower for some reason.

If you know how to use HyperTerminal go to step 4. Otherwise a quick refresher on HyperTerminal here may save you a little time. You can not configure HyperTerminal if a connection session is active, therefore you must first disconnect by using Call-Disconnect or the icon on the tool bar.

To set the baud rate use File-Properties and the Connect To tab. Set *Connect using:* to *Direct to COM1* or *Direct to COM2*. Then use Configure and set the *bits per second:* (baud rate) to *57600*, *Data bits:* to *8*, *Parity:* to *None*, *Stop bits:* to *1,* and *Flow control:* to *None*. In order to activate the setting you must reconnect using Call-Connect or the icon the tool bar. Other settings such as emulation are don't care.

4. Access the switch's flash upload mode

Press both the - and + switches on the front panel, and power on the switch. The switch is ready to accept the upgrade file at 9600 baud as shown by LED 1 being lit. To use 57600 baud, press the + switch, LED 4 will light. Before loading the file you can always change between the baud rates by pressing the - switch (9600 baud, LED 1 lit) or the + switch (57600 baud, LED 4 lit). If you have an UltraView Pro the OSD will indicate the unit is in flash upgrade mode.

5. Send the file to the switch

The switch is now waiting for the file and we must send the file from HyperTerminal. Go to Transfer-Send Text File. Change the *Files of type:* to *All files (*.*)* because the file name has a .hex extension and not a .txt extension. Browse for the file (wherever you put it) and click on it. In this example we are using the program file. As HyperTerminal sends the file, the switch sends progress indicator dots. The number of dots is representative of the file size. The kernel file is shorter and sends less dots. Also as the switch receives the file, the front panel LED flashes. If you are at 9600 baud it is LED 1and if you are at 57600 it is LED 4.

```
Waiting for file at 57600 baud
..............
```

The switch is checking each line of the hex file for proper formatting and checksum errors. If it gets any it will report them, but this is rare. If you got errors, the most likely problem is a cable problem. Otherwise when the file is fully received the switch should report the following:

```
Receive successful
Hit space to program
```

Hit the space bar. The flash is now being programmed and verified. Programming and verifying progress is indicated by sending periods. You should see the following messages or similar:

```
........................
Verifying flash
........................
Verify successful
Hit enter to boot
```

Hit the enter key. The new firmware now executes and diagnostic information is sent to HyperTerminal as well as the on-screen display. Observe the new revision number matches that of the file. UltraView Pro family units are now operational. UltraView family units have an additional prompt to hit the enter key before becoming operational.

The flash procedure is complete. Enjoy the new operation of the switch and let us know what other features you would like to see in the switch.

For more information you can read the pages that come in the manuals [UltraView Pro flash update PDF](#) and [UltraView flash update PDF](#).