Updating the Summit's Firmware

The ServSwitch[™] Summit Update Utility is a 32-bit Windows® based program that handles the transfer of new firmware to Summit Base Units and USMs. If you need new firmware for your system, Black Box Technical Support will tell you where to get the firmware-distribution file and the Update Utility (both in .zip archives). Download these, copy them to a PC (*not* one of the switched CPUs attached to the Summit system!) that can be placed close enough to your USMs and Base Units to reach them with the Summit's included 10-ft. (3-m) serial cable, unzip the archives, read the firmware distribution's release notes (very important—these might describe new or changed procedures!), and you should be ready to proceed with the firmware update.

NOTES

All Summit components and attached CPUs can remain powered on during a firmware upgrade. The Summit's modular, redundant design assures that devices can continue to operate unaffected during the update process.

It might be possible to use a high-quality DB9 extension cable to extend the total cabling distance between a USM or Base Unit and the PC running the Update Utility up to 50 ft. (15.2 m), but we can't guarantee that this will work in any given situation.

First, to use the downloaded files and Update Utility to upgrade the firmware of your USMs, take these steps unless the current release notes specify otherwise:

- 1. Run one of the serial administration cables included with each Base Unit (or, if that has been lost, an equivalent DB9 male-to-female straight-throughpinned [not null-modem!] serial cable), between the DB9 female administration port of an active USM and a DB9 male serial port on the PC with the firmware files and Update Utility installed on it.
- 2. If you haven't already done so, log into the Summit system at the user station attached to that USM that the OSUI's Selection Menu is on screen at its monitor. Press [F12] to switch the display to "Selection Menu by Name" rather than the standard channel-ID ordering.
- 3. At the PC with the Update Utility installed on it, launch the Utility by doubleclicking on its icon. The main window shown in Figure D-1 should appear.



Figure D-1. The main window of the Update Utility.

- 4. Select the correct serial port (COM1, COM2, COM3, or COM4) and click on the Activate Port button to initiate communication with the USM.
- 5. Click on "Load Hex File" and select the USM firmware contained in the firmware-distribution file; these will be named "S10A-*xxx*," where *xxx* is a hexadecimal representation of the firmware's version number. The text on the first button in the "Upgrade Information" pane of the window should change to "Send to Summit."
- 6. Click on "Test Hex File." The Utility will verify the file's integrity.
- 7. Click on "Check Device Information" to confirm that the PC is successfully communicating with the USM, and that it would in fact be desirable to replace the USM's current firmware with the version you've downloaded.
- 8. Click on "Send to Summit" to begin uploading the new firmware to the USM. Both the PC and the USM need to remain powered on during the transfer, and you should be careful not to disconnect the cable between them. (If either device loses power or the cable comes loose, this will not cause the USM to run with incomplete firmware or any other serious problems, but you will have to restart the upload process from scratch.)

The upload typically takes about two minutes. Once the USM successfully finishes receiving the new firmware, it should beep and reset itself automatically. (If the automatic reset doesn't occur, you can manually reset the USM by cycling power to it—no data loss will occur. If you do so, check the firmware version that the USM reports when you click on "Check Device Information" again. [The USM will also report this in the OSUI's Information Menu—see **Section 5.5**.] If the USM is still reporting the version it was running previously, the upload wasn't successful and you'll have to start it again.)

- 9. When the upload is finished, click on "Disable Port" and exit the Update Utility. (Do this even if you're planning on upgrading more USMs later.)
- 10. Disconnect the serial cable from the USM's administration port.
- 11. Repeat steps 1 through 10 for each USM whose firmware you want to upgrade.

To proceed to use the downloaded files and Update Utility to upgrade the firmware of your Base Unit(s), take these steps unless the current release notes specify otherwise:

- 12. Run the DB9 cable you've been using to upgrade the USMs between the PC and the DB9 female administration port of an active Base Unit. You don't have to disconnect the Base Unit from any attached devices or existing cascade; cascaded Base Units don't have to be upgraded in any particular order.
- 13. At the PC with the Update Utility installed on it, launch the Utility by doubleclicking on its icon.
- 14. Select the correct serial port and click on the "Activate Port" button to initiate communication with the Base Unit.
- 15. Click on "Load Hex File" and select the Base Unit firmware contained in the firmware-distribution file; these will be named "S03A–*xxxx*," where *xxxx* is a hexadecimal representation of the firmware's version number. The text on the first button in the "Upgrade Information" pane of the window should change to "Send to Summit."
- 16. Click on "Test Hex File."
- 17. Click on "Check Device Information."

18. Click on "Send to Summit" to begin uploading the new firmware to the Base Unit. Both the PC and the Base Unit need to remain powered on during the transfer, and you should be careful not to disconnect the cable between them. (If either device loses power or the cable comes loose, this will not cause the Base Unit to run with incomplete firmware or any other serious problems, but you will have to restart the upload process from scratch.)

This upload typically takes about thirty seconds. Once the Base Unit successfully finishes receiving the new firmware, it should reset itself automatically; watch for the LEDs to cycle in the same way that they would when the Base Unit is powered off and back on again. (If the automatic reset doesn't occur, you can manually reset the Base Unit by cycling power to it—no data loss will occur. If you do so, check the firmware version that the Base Unit reports when you click on "Check Device Information" again. If the Base Unit is still reporting the version it was running previously, the upload wasn't successful and you'll have to start it again.)

- 19. When the upload is finished, click on "Disable Port" and exit the Update Utility. (Do this even if you're planning on upgrading more Base Units later.)
- 20. Disconnect the serial cable from the Base Unit's administration port.
- 21. Repeat steps 12 through 20 for each Base Unit whose firmware you want to upgrade.