USB ServerSwitch Product Update

USB ServerSwitch systems manufactured **beginning in April 2002** have the ability to support **International USB Keyboard types**. Also, due to a binary firmware update (v1.47) introduced at the same time, **Composite USB devices** are also supported, and a special serial port control application is incorporated.

The Part Number of the USB ServerSwitch has not changed due to this update. Updated systems are identified by their date code on the Serial Number label.

The International Keyboard update includes an internal firmware-component change (therefore, existing units are not field-upgradeable) and also requires Version 1.47 or higher system binary firmware.

Support for Composite User devices

Support for Composite USB user devices is added to the system. Composite devices include a Keyboard with an integrated trackball or other pointing device. Composite capability is provided by binary firmware version 1.47.

Please note that some USB Keyboards are equipped with an internal USB Hub. Such keyboards and other USB Hubs are not supported at this time.

The USB ServerSwitch supports Keyboard and Mice on its User ports. It is not intended to support external drives, cameras, monitor controls, USB switches, or other USB-enabled devices.

International Keyboards

By default, the USB ServerSwitch is expecting a domestic USA Keyboard layout. Most USB keyboards provide a signature byte to identify their 'country code' which is read by the system each time it is switched to or first connected, so the USB ServerSwitch can configure the country code properly.

USB Disconnect & Reconnect

The USB ServerSwitch will, when switched by the user, check for a change in country code that has been stored for each server. If a change is detected, it will perform a 'disconnect and re-connection' to use the country code from the 'new' keyboard. This is done automatically and there is no user action required.

Manually-forced Country Code

If for some reason the country code is not set correctly, or the user wants choose a different Country Code, the user may manually select the country code.

Note: The Country Code byte from the keyboard is verified each time the server is switched. Any manually-selected Country Code setting will be lost.

To Force-Select a Country Code:
To verify the current country code type, the user must first put the computer into a text editor of some kind (e.g., Notepad, StarOffice, etc.), because the USB ServerSwitch will output USB data text to the user's Monitor.

   (1) **Press and hold** the following keys on the keyboard:
    `LEFT Ctrl, LEFT Alt, LEFT GUI/Diamond (meta),` and `LEFT Shift keys`

At this time, the 'Product ID, Name, Part number, Version number, Time & Date, and Country Code selected' will start printing on the screen in the text window. The last item displayed will be the country code the unit is currently set to.

Note: Releasing the four keys while the text is printing out may cause some dropping of characters. If this happens, release them all and start over.

   (2) To choose a different setting, press a function key (**F1** through **F12**) to select the desired country code, from the list below:

- F1 = USA / UNIX
- F2 = Japanese
- F3 = German
- F4 = French
- F5 = Taiwanese
- F6 = Swedish
- F7 = Russian
- F8 = Korean
- F9 = Portuguese
- F10 = Swiss
- F11 = Spanish
- F12 = ISO

Note: You do not need to select a function key. You may just want to verify that the country code is correct.

   (3) After pressing the function key, the selected country code will be used as the new country code. A soft disconnect and reconnect will be performed to invoke the "new" keyboard setting.

   (4) Release the four keys to return to normal keyboard operation.

This manual country code setting will stay in effect until the user switches to another server and then back again. In this way a user can set up a Japanese keyboard on USER A and a USA keyboard on USER B and switch back and forth between keyboards.

Verifying Firmware Versions

It is possible to verify the presence of the internal firmware needed to support the **International Keyboard** capabilities, and to verify the binary system firmware version to support **Composite** USB user devices.

- The binary file (system firmware) must be version **1.47** (or higher) for Composite Device support and to support International Keyboards, and other updates. The system binary firmware is field-upgradeable, as described in the product manual.
- The server port firmware must be version **1.05** (or higher) for International Keyboard support. This firmware is NOT field-upgradeable.

The version information is displayed on the front panel during diagnostic mode.

At least one Server must be connected and powered on to indicate the Server firmware version.

(1) Turn the System power off, if it was previously on.
(2) **Press and hold** both front panel buttons in.
(3) Turn the System power On. During bootup with both front-panel buttons depressed, the system will enter a diagnostic mode; the system is inoperative until the diagnostic mode is completed.
(4) The front panel display will show the **System** binary firmware version (in this case, version 1.47). The system will stop at the first **'Server Port'** information (in this case, version 1.05).

Note: Any server port that is not connected to a live server will indicate that it is 'Not Powered' and will not display the firmware version information.

(5) Release the two front panel buttons. Press the UP arrow. This will show the version of the next server port's version number.
(6) Press the UP arrow again to read the next port. Press UP again, and so on, until all eight ports of this USB ServerSwitch have been displayed. All ports should have the same firmware value, or 'Not Powered'.
(7) After displaying the last port's version information, the system exits the diagnostic mode and resumes normal operation.