



Updating the Nova5000 Operating System

Using the Fourier Systems-developed OS Update application, update the Windows CE operating system and software content on one or more Nova5000's via Ethernet connection between the Nova5000 and your school/office network.

Updating the OS image is required when:

- New features, software and bug fixes are issued in a new Nova5000 OS image or software package
- When Nova5000 Flash (storage) memory has been deleted or corrupted in some way, so files need to be restored to Nova5000.

Note: These instructions refer to Nova OS image 3.00.xx. If you have a Nova OS 2.01.xx please refer to the OS Update instructions specific to that OS image.

OS Update Pre-setup

Before beginning update of the OS:

1. Download the OS Update folder located on the Nova5000 Download Center:
http://www.nova1to1.com/download_center.php

This compressed folder includes the latest OS Image, Nova software folder, Release Notes, and the Nova5000 Update utilities.

Note: If the OS image you require is not located on the Download Center, contact Fourier tech support in order to obtain this file.

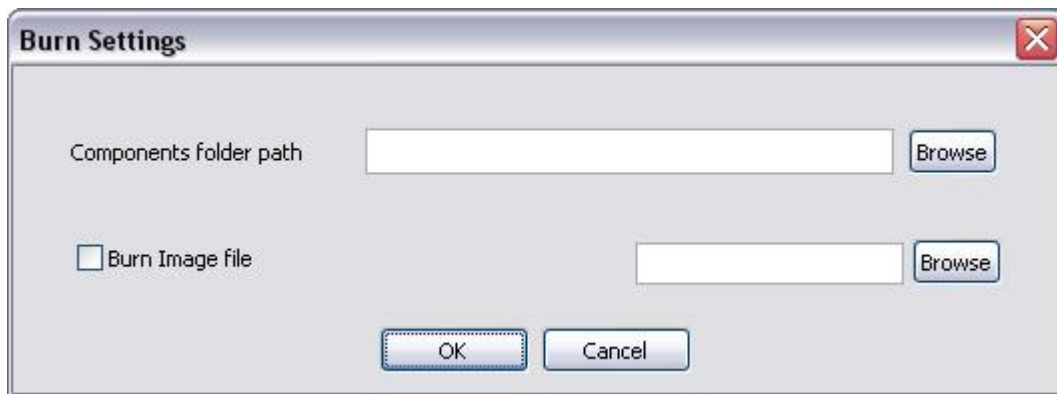
2. Uncompress all of the files into a folder on your PC. Within this folder, the files you need for burning the Nova image are:
 - a. NovaUpdateUtility.exe
 - b. tftpd32.exe
 - c. The OS image file itself e.g. DK_3.0.27_ENG_EX_USA.BIN
 - d. Folder containing Nova software files. The folder name will be in accordance with the OS image file version e.g. ENG_USA_EX or ENG_ROW_SX. *Do not change the folder name.*



Note: When updating the OS image .BIN file, you are updating all Windows CE files, embedded Windows software and drivers. All Fourier and third-party software and files stored in the *My Documents* and *Program Files* folders are stored elsewhere, and are not affected by the OS image update.

OS Update Main Setup

1. Connect the Nova5000 unit to the AC power.
2. Launch the file named **NovaUpdateUtility.exe**, downloaded together with the OS image from the Fourier Systems website. This launches the OS Update application. The program titled **tftpd32.exe** is also launched simultaneously.
3. From the main menu of the NovaUpdateUtility program select **File > Settings**. The Burn Settings dialog will open:

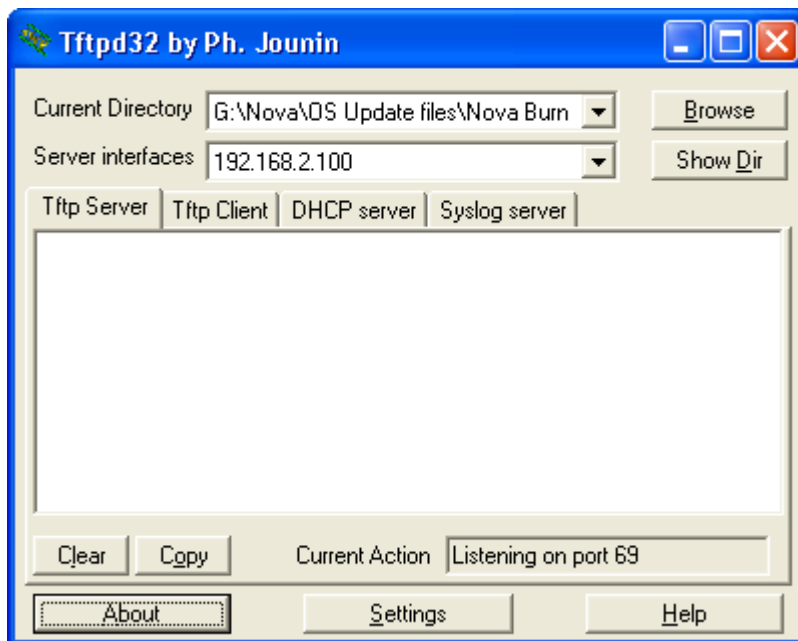


4. In the **Components folder path** field, browse to the path of the folder in which you stored the OS image file (named <file name>.BIN)
5. Select the **Burn Image file** checkbox and browse to the folder in which the image file is stored. Select this file. No other checkboxes should be selected. Click **OK**.
6. After clicking OK, the main window appears. This window monitors the Burn status, waiting for Nova's to come online. The OS Image name is also listed. Once each Nova comes online, the burn status is displayed for each Nova.





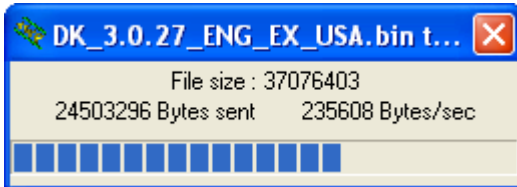
7. If the **tftpd32** program is not open, then open it from the same folder where the NovaUpdateUtility program is located.
8. In the tftpd32 program, click on the **Settings** button and in the **Base Directory** field, browse to the folder where your OS .BIN file is stored. Click **OK** and in the main window ensure that the **Current Directory** field displays this correct directory of the OS file.



Now you are ready to update.

9. Connect the Ethernet cable to each Nova that you wish to update. Ensure the network is up and running. Ensure you are on a network that has DHCP running (will give out new IP addresses).
10. If you also intend on updating the Nova software in addition to updating the OS image then make sure to connect a thumb drive containing the Nova software folder to one of the Nova's USB ports prior to completing the OS Update process. The Nova software folder is included in the package of files downloaded from the Nova5000 Download Center.
11. Do not change the folder name on the USB thumb drive or modify the directory structure otherwise the Nova will not detect the folder. The copying of software files will begin automatically immediately after the Nova has rebooted following the OS Update.
12. Open the rear battery case of each Nova5000 unit. Place the battery to the side revealing a series of three buttons. Press the **Hard Reset** button and **OS Update** button together. After two seconds release the Hard Reset button and continue to hold the OS Update button for another five seconds before releasing it.

13. The procedure in step 10 will bring the Nova into OS Update mode. The Nova screen will indicate that the burn process has begun, by displaying a progress bar. On the PC, the following screen will pop up from the **tfpd32** program showing the OS update status:



If the Nova splash screen is displayed instead and the system then boots up, the Nova wasn't properly placed in OS Update mode. You must repeat step 10.

Note: The OS image is updated via the Ethernet cable. Whenever a Nova is placed in OS Update mode and connected to the network it will try to update the OS image, as long as the **NovaUpdateUtility** is configured properly.

14. Once the Nova has finished updating (after a few minutes) the Nova will reboot the system and will then start-up with the new OS image.

Note: As previously mentioned, the OS Update process doesn't affect the user's personal files, software settings and stored content (such as MultiLab CE). Only the Windows CE platform itself is updated. No data is lost. This is due to the memory of the Nova being split into two sections for the Operating System and personal files.

15. If the Nova detects the thumb drive with the software folder, then it will begin copying the files. A progress bar will pop up on the Nova screen.

Note: If the Nova doesn't detect the software folder following OS Update, then an error message will pop up on the Nova indicating that the file system copy has failed, and it will display the relevant software folder name that is being searched. If your thumb drive is connected to the Nova, then ensure the folder name is the same as stated in the error message. Reconnect the thumb drive and reset the Nova. Upon start-up, the Nova should detect the software folder and begin copying the files.

If you have trouble updating, check to see that your network is not blocking ports, the firewall on your computer is turned off, and that your network is using DHCP and has the ability to assign new IP addresses.