

Quick Start Guide

FLIR Firmware Update Tool

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Document History

Revision	Date	Comment
100	Apr 2014	Initial Release with FFUT v1.8.0.0
110	Oct 2014	New features with v1.8.4.0

References

- FLIR Support web site: <http://support.flir.com/>
- Security Resources web site: <http://www.flir.com/cvs/americas/en/security/view/?id=44516>
- Support questions can also be sent directly to ns.support@flir.com

1. Introduction

For existing camera installations, a software utility called the FLIR Firmware Update Tool (FFUT) is available to automatically perform a firmware update. The FFUT utility is used with FLIR Security and Maritime IP cameras that use Nexus technology. The utility is not used in general with the FLIR Thermography cameras, with the exception of the A310pt camera.

The FLIR Firmware Update Tool can be used to automatically update cameras to the latest firmware version. If more than one firmware update is required for a camera, the tool will sequentially apply the required updates. The tool can automatically scan the network for cameras to be updated. The user selects the type of products that will be updated, and the tool is able to check the FLIR website for the latest version and download the update to the PC, so it can be used to update the cameras.

The FFUT software is available through the <http://support.flir.com> web site. Registered users can login to download manuals, utility software, firmware updates and instructions.

Important: Please follow the update steps in the order they are provided in this guide.

The update process typically takes approximately 10-20 minutes per camera and will bring the FLIR camera to the latest firmware revision, depending on how many updates need to be applied. This process will perform one or more reboots during the updates.

Note: Once the camera has been updated to a new version, the factory default configuration file and passwords will be restored to the camera. If prior configuration changes have been made or if the login passwords have been changed, these changes will have to be made again after the update. Prior to updating a camera, it may be a good idea to download a copy of the current configuration file, as a reference. It will not be possible to use the old configuration file with the updated firmware, but the file can be viewed or compared to the factory configuration to see what was changed.

The updated camera will have the following login accounts: **user**, **expert** and **admin**.

The default passwords for each account are “**user**”, “**expert**”, and “**fliradmin**”, respectively.

Refer to the camera installation manual for information about changing the security passwords and about using the web interface to configure the camera.

Cameras on Secure Networks

In many installations, the cameras to be updated may be on a secure network with no access to the Internet. For this type of installation, it is possible to install and run the FFUT tool on a laptop that is temporarily connected to the Internet. While it is connected, the latest firmware files can be downloaded from the FLIR server to the laptop. Then the laptop can be disconnected from the Internet, and connected to the secure camera network to perform the camera updates. Alternatively, the downloaded update packages can be transferred by using a USB memory stick or similar device.

2. Setup

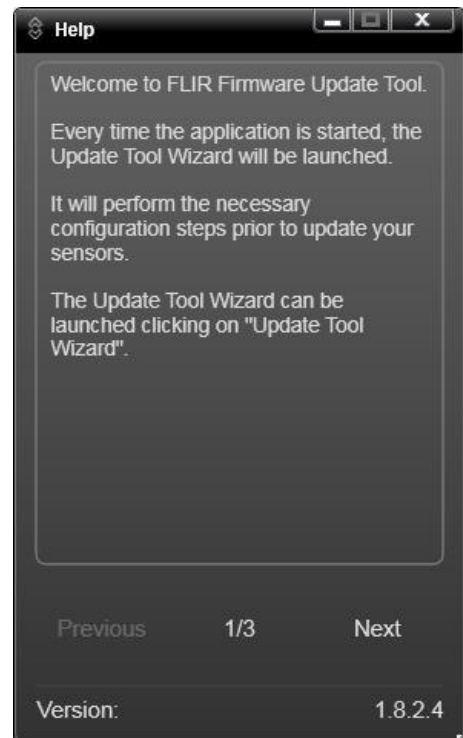
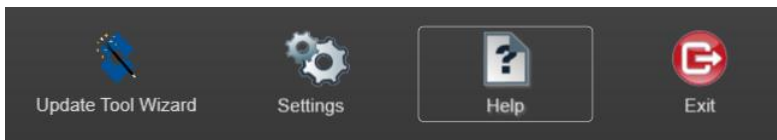
Pre-requisites:

- PC with a web browser (Microsoft IE 9, Firefox or Google Chrome) and a network connection to the camera
 - Note: The PC will temporarily need an Internet connection so it can download the latest firmware update
- FLIR Firmware Update Tool – this can be downloaded from the FLIR Support web site: <http://support.flir.com/>. It is necessary to register for a login to download the software or manuals. Registered users can also login to get online support, ask questions, look up answers to frequently asked questions, and download manuals, utility software, firmware updates and instructions.

Log into the camera and view the information from the Help web page to determine the current version. For information about how to log into a camera, refer to the Operator’s Manual for the camera.

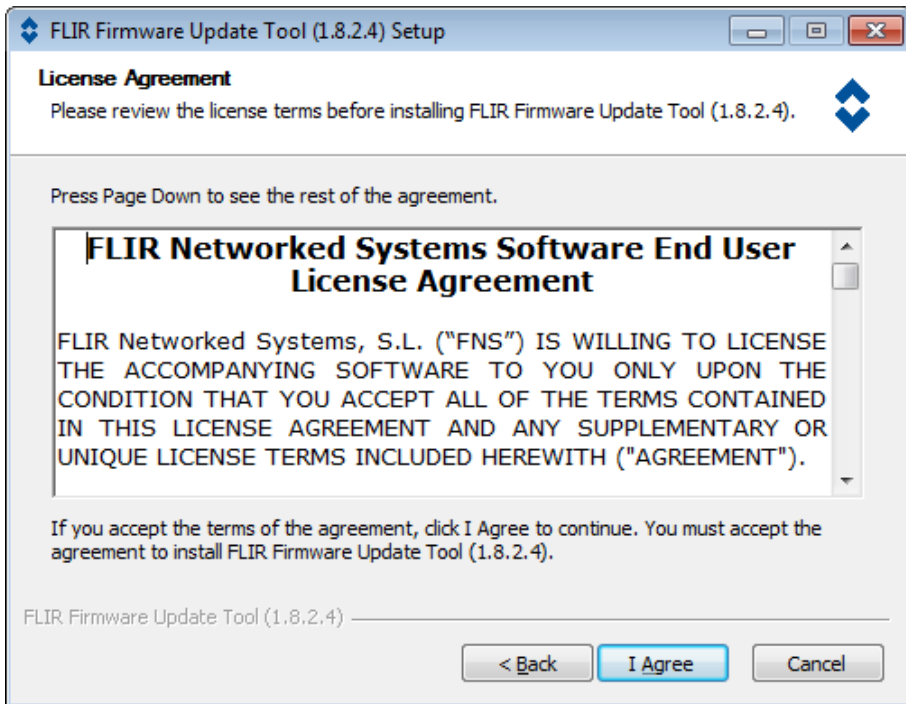
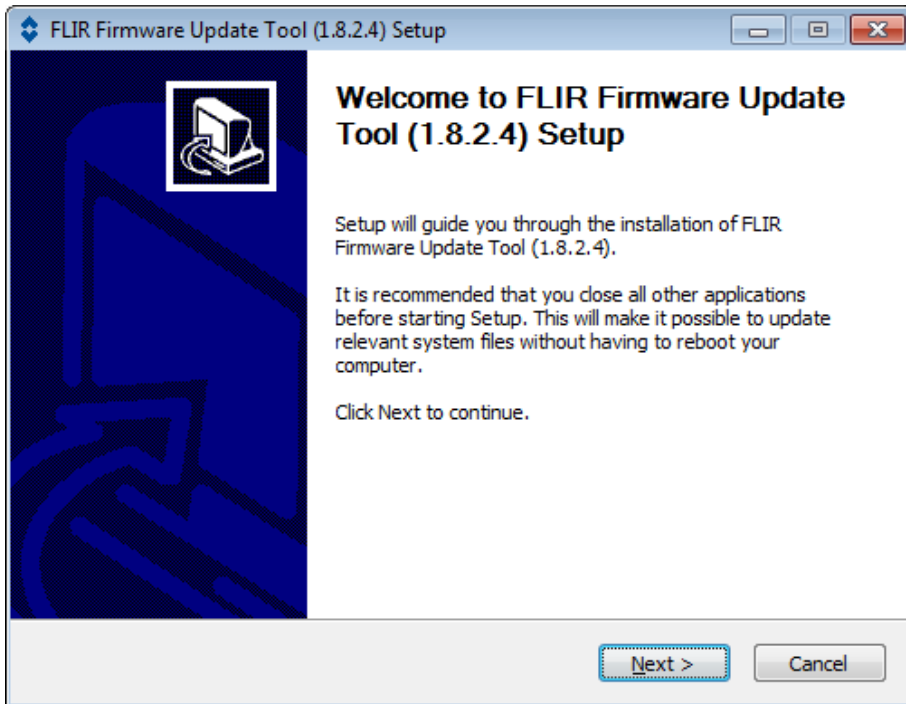
In order to monitor the update and determine when the camera has rebooted, it may be useful to have an analog video monitor connected to the camera and watch for the display of the initial system information (serial number, IP address and so on). The information will appear for 20 seconds and gives an indication when the update has rebooted.

To ensure the latest firmware for the camera is used, be sure to use the latest version of the FFUT utility. If the FFUT utility is already installed, determine the version by selecting the Help tab from the main screen. The version number is displayed at the bottom of the help page.



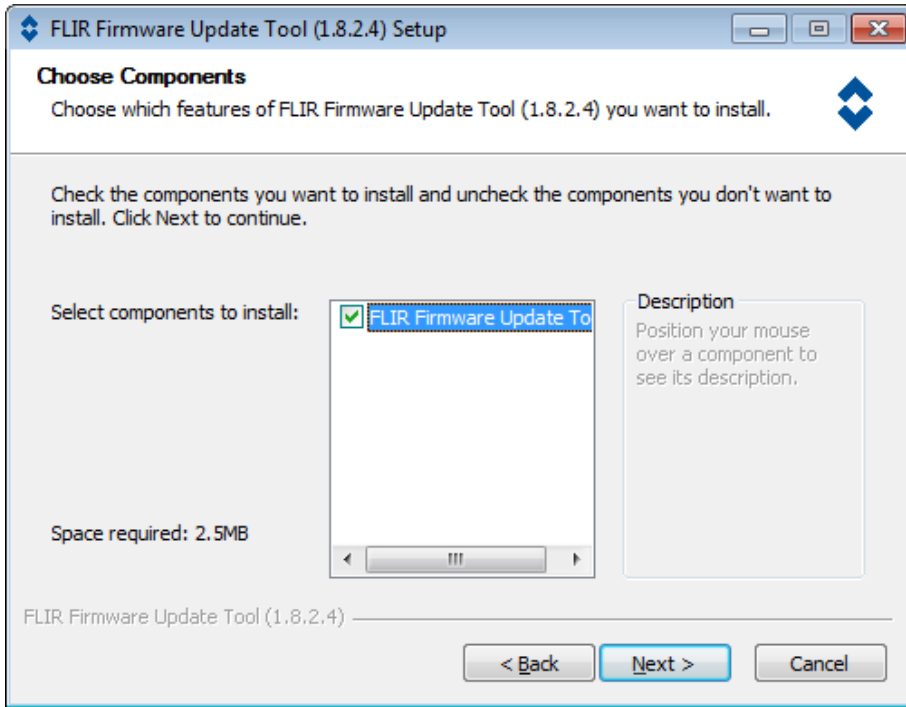
3. FFUT Installation

Once the FFUT .zip file has been downloaded, extract the .exe file to a folder and run it.

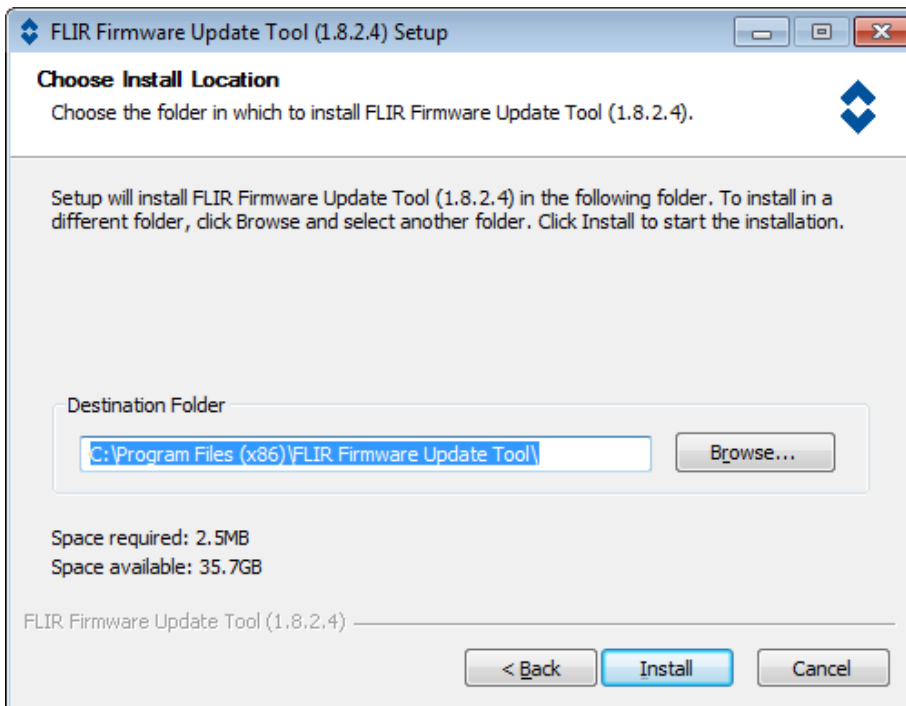


Note, the actual version numbers displayed in setup may be different than shown here.

Agree to the Software End User License Agreement, and then select the FLIR Firmware Update Tool component and click Next.



Choose the default installation location and click the **Install** button.

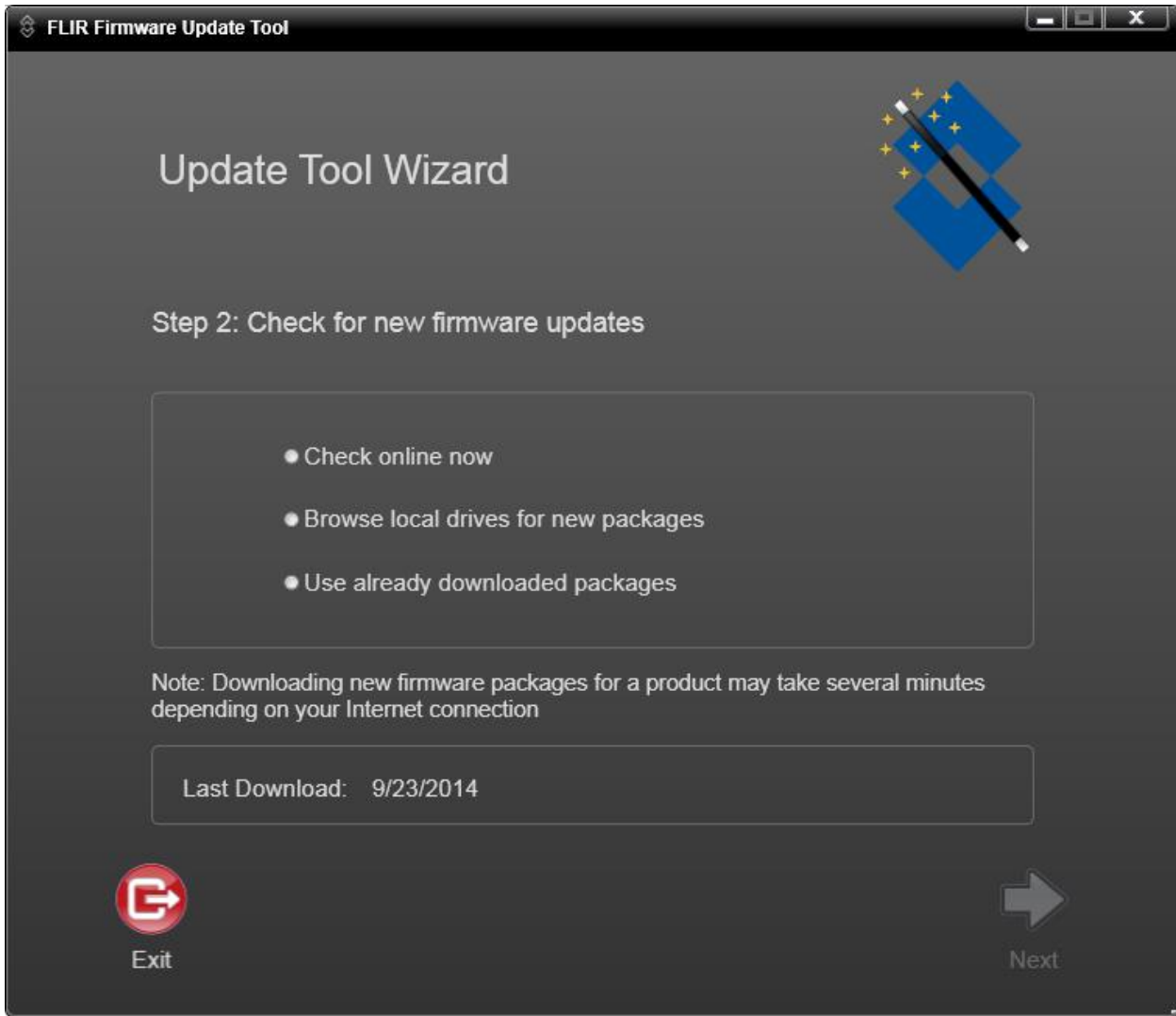


Once the installation is complete, run the program with the desktop icon or by selecting the program from the Windows Start menu. When the program is run, the Update Tool Wizard starts and in Step 1 the user is prompted to select the types of cameras that will be updated.



After selecting the types of cameras, click on the Next button in the bottom right.

In Step 2, the tool gives the user the option to check for updates online, or to locate the update packages on a local drive. If the PC has Internet access, the latest firmware files can be downloaded from the FLIR server to the PC. If this step has already been completed and the PC is connected to the secure camera network, select the “Use already downloaded packages” option.



If the “Check online now” option is selected, the tool will query the FLIR database for any firmware updates for the products selected in the prior page. When the download of firmware updates is complete, select Next to continue with the updates, or select Exit if the updates will be performed at a later time.



After the Update Tool wizard has been used, it is possible to detect the cameras on the network and perform the updates.



Select the **“Detect and Update my FLIR Device”** option and the software will automatically detect the camera(s) on the network.


If no cameras are discovered, refer to the Troubleshooting section at the end of the document.

To update a camera, select the camera to be updated from the list, and then click **Next**.



The screenshot shows the 'FLIR Firmware Update Tool' window. It features a 'Discovered Devices' section with a table listing various camera models and their IP addresses. The device 'FC-645-NTSC 2775' is highlighted in blue. To the right of the table is a 3D rendering of a white FLIR camera. Below the table, there is a section for manual discovery with an IP address input field containing '1.1.1.1' and an 'Add' button. On the right side, the details for the selected device are displayed: Name: FC-645-NTSC 2775, IP Address: 192.168.250.180, Firmware: BU 1.0.5, P/N FC-645-NTSC, and S/N 2775. At the bottom, there are 'Back' and 'Next' navigation buttons.

Name	IP
FC-632-NTSC 2774	192.168.250.181
PT-606E-NTSC 100309C	192.168.250.191
D-Series AB1009	192.168.250.138
PT-324 202407	192.168.250.38
FC-645-NTSC 2775	192.168.250.180
F-334 0002	192.168.250.60
FC-632-NTSC 0000	192.168.250.48
friendly	192.168.250.51
192.168.250.222	192.168.250.222
D-625 AB1008	192.168.250.120
F-625 202562	192.168.250.115
D-series-NTSC 1234	192.168.250.36
AXIS 241QA - 00408C7F6F7B	192.168.250.152

Enter an IP address for manual discovery:

IP Address:  Add

Name: FC-645-NTSC 2775
IP Address: 192.168.250.180
Firmware: BU 1.0.5
P/N FC-645-NTSC
S/N 2775

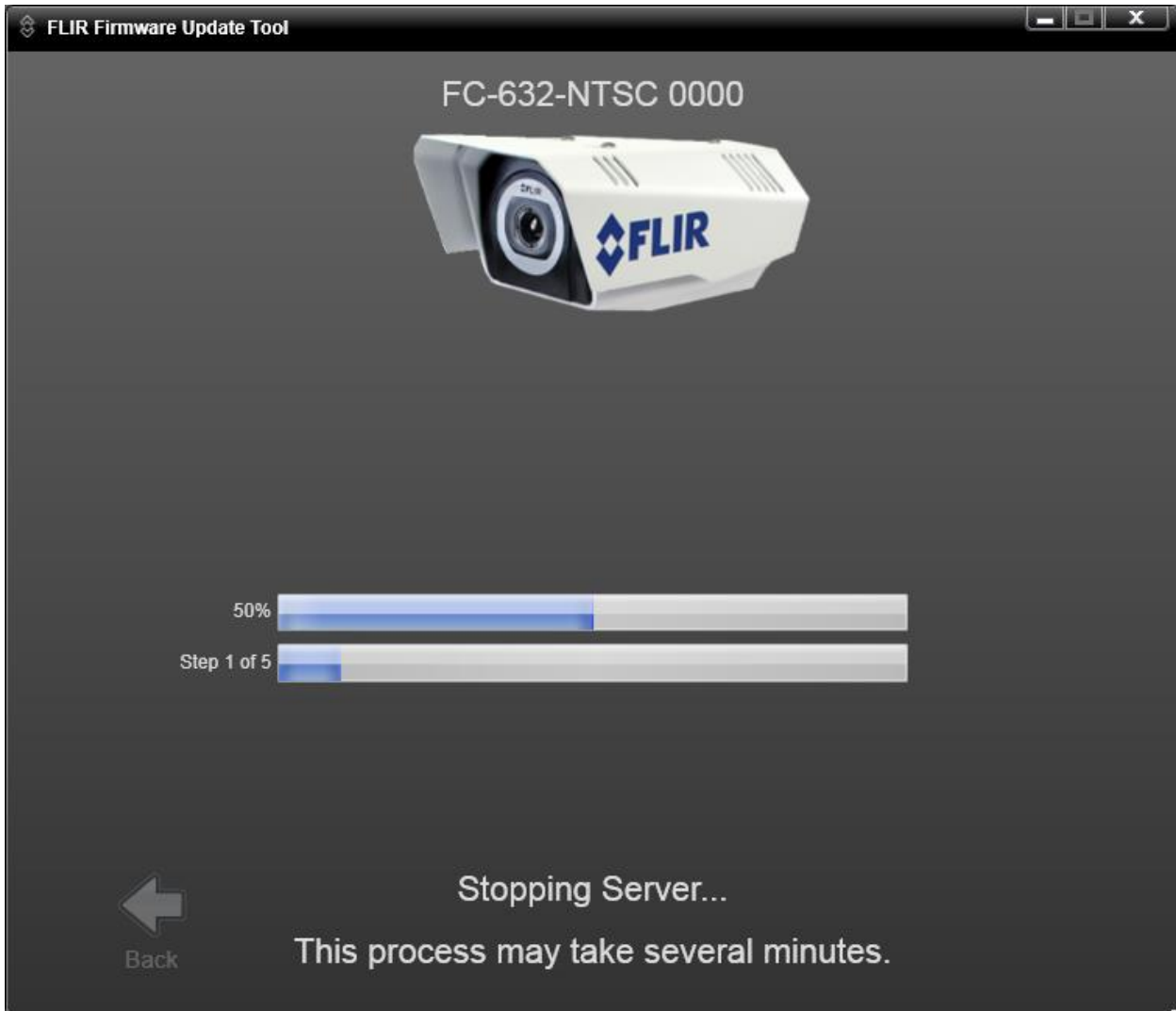
 Back  Next

The software will display a picture of the camera and show the camera information. Select the Update button to perform the update.



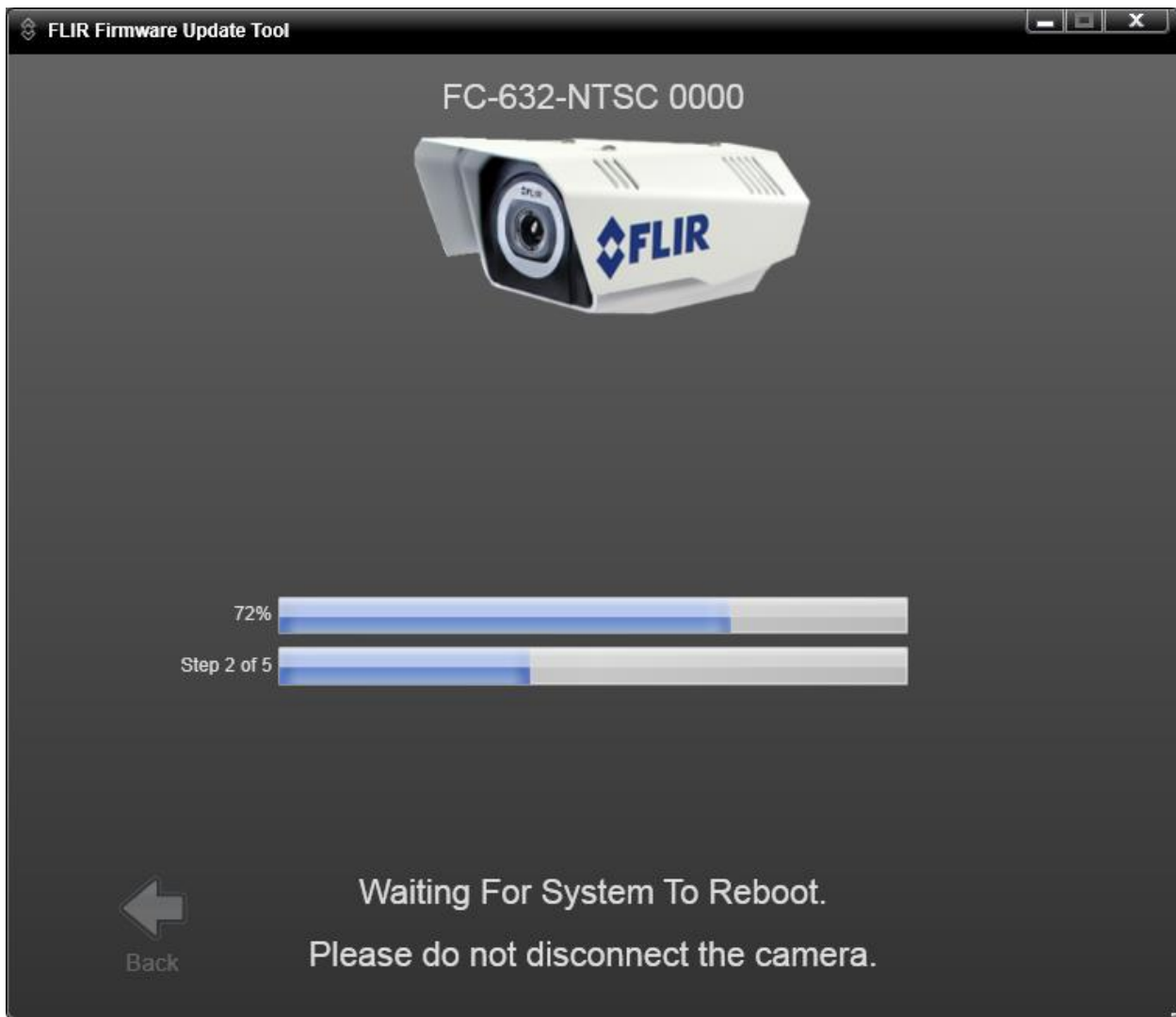
The following sequence of screen shots will be displayed while the camera is being updated. Be sure to allow adequate time for all 5 steps of the update to complete (refer to the second status bar for information about which step is in progress).

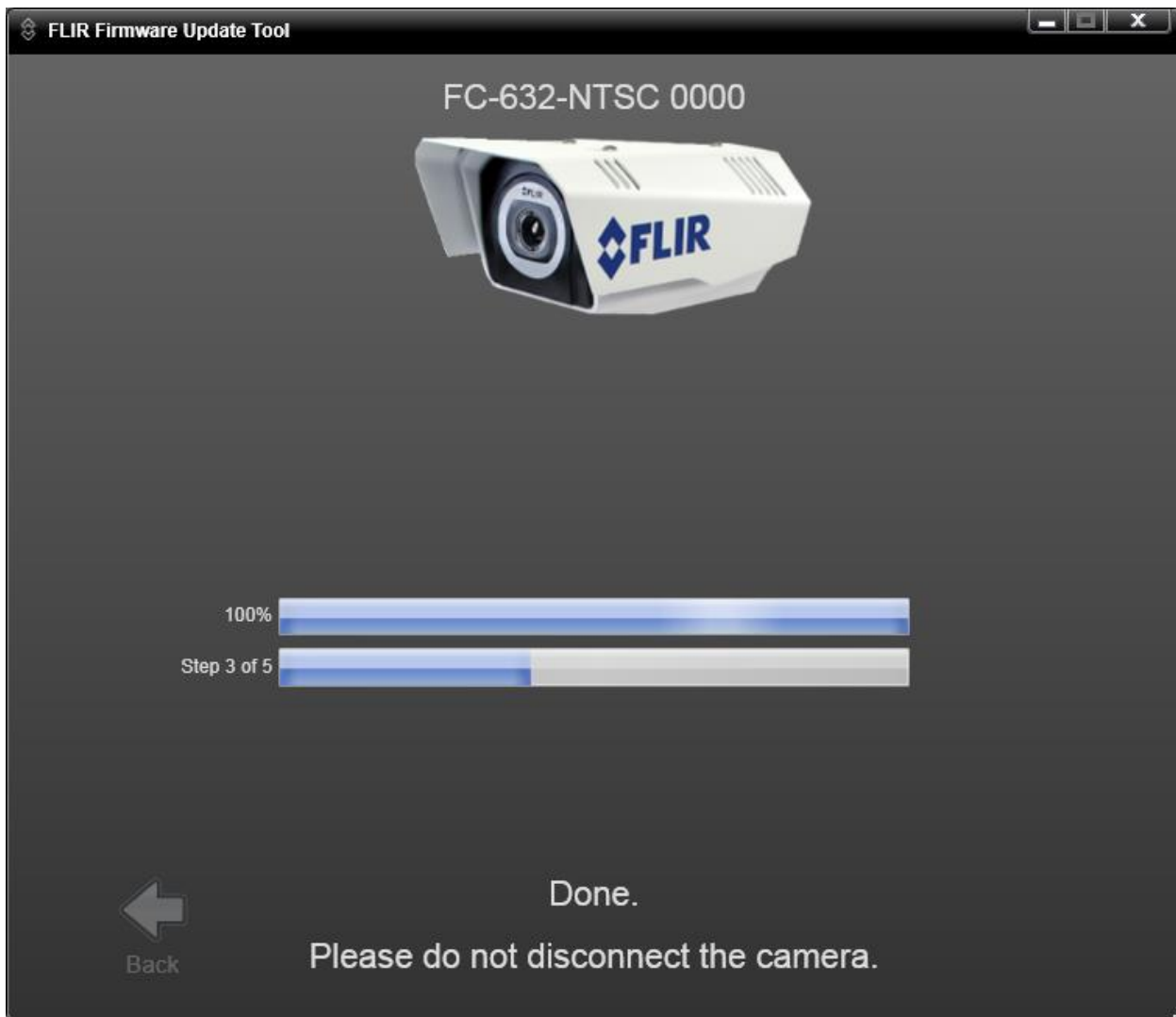
When the software update is finished, the configuration file and login passwords will be restored to the factory defaults. Log in to the camera web browser to restore any changes that were done prior to the update.

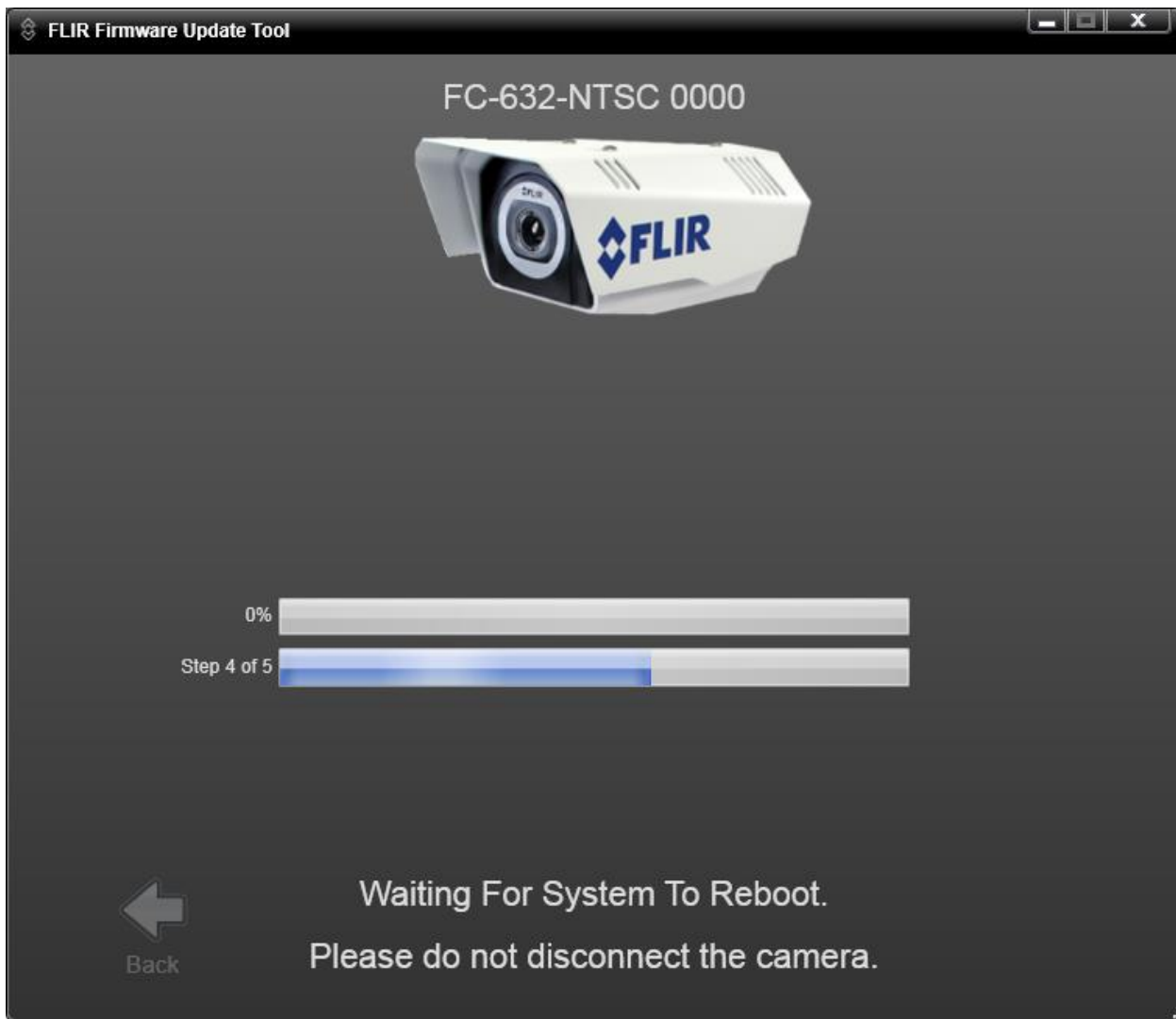


Select the **Help** icon for additional information about using the FFUT software.

Once the software update file has been uploaded, the update process will take approximately 5-20 minutes (per update) including the time for reboots and until the system is fully operational. There will be a brief (20 second) display of the Initial System Info in the analog video when the camera reboots. As another indication that the system has rebooted, a pan/tilt camera such as the PT-Series or D-Series will move to the Home position once the system has completed the update and rebooted.







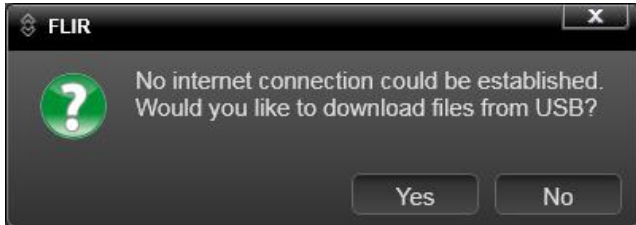


Note, if you have more cameras to update, simply hit the back button and repeat the process. It is not necessary to discover cameras again (“**Detect and Update my FLIR Device**” option) unless the camera to be updated was not discovered the first time.

4. Troubleshooting

Downloading Firmware Updates

When the FFUT utility checks for firmware updates online, if the PC does not have an Internet connection the following error will occur.



If the firmware updates have been downloaded on another PC, it is possible to transfer the downloaded packages to the current PC via a USB memory device.

Detect and Update

If no cameras are discovered, check to make sure the PC has an IP address in the same range as the cameras and that the network connections are correct. Use a web browser or ping to confirm there is a connection between the camera and the PC.


In some cases, the following error may occur when searching for cameras:



The FFUT utility is only able to search for cameras on a single Ethernet connection. Make sure the PC only has one network connection, to the camera network. The error may also be related to the UPnP port being used by Microsoft Windows (normally the Windows SSDP Discovery service, SSDPSRV) or by another application. It is possible to temporarily stop this service using the Services extension in the Microsoft Windows Management Console, and then try to detect the cameras again with FFUT.

It is also possible to enter the IP address of the camera manually and click the Add button.

Enter an IP address for manual discovery:

IP Address:  Add

If a camera is discovered (or entered manually) but the FFUT utility does not display the current firmware version, it will not be possible to use the FFUT utility to update the camera. The camera can be updated manually using a web browser. Contact ns.support@flir.com for help with updating the camera.

Name: FC-632-R-NTSC 4193

IP Address: 192.168.250.252

Firmware:

For installations that are unable to use the FFUT software, for whatever reason, a firmware update package with instructions is also generally available. The cameras can be updated in the field using an Ethernet connection and a web browser. Contact FLIR Technical Support if you have any questions about the FFUT software or the firmware update package.