

N5511A, Phase Noise Test System Software Update instructions

Introduction

The purpose of this document is to outline the instrument software update procedure for the N5511A Phase Noise Test System.

This procedure will update the instrument software, from the revision that is currently installed, to the latest revision available. The advantages of updating the instrument software with the current revision include:

1. Keeps the N5511A Phase Noise Test System current and up to date.
2. Updates the measurement applications where appropriate.
3. Updating the PC board system software where appropriate.

An update to the instrument software revision **does not** require a new license key for the measurement application, so long as the application was licensed prior to the update.

To determine what revision of instrument software is currently installed. On the top of the menu select, **[Help]**, then **[About]**. This will display the “Instrument S/W Revision” number (example: “A.01.01”). If the installed revision is the same as the latest revision on the Keysight website, there is no need to update the software.

Note: This will only update the instrument software that currently resides on the C: drive of the instrument. It will not update the version that exists on the recovery partition. Because of this, if the recovery process, as described in the Getting started and Service guide, is performed, the instrument will revert back to the instrument software revision that was originally shipped from the factory.

Requirements

To use this update procedure, the following requirements must be met:

- A properly functioning instrument.
- A USB keyboard and mouse.
- The ability to log in to the instrument as the **administrator**.
- The ability to transfer a large file (~2G Byte) to the instrument being updated.

File Download

1. Go to http://www.Keysight.com/find/N5510_Software
2. Select and download the executable file "Instrument Software (Version A.xx.xx)" in the "Documents & Downloads" section of the webpage.

If you do not have the ability to download files directly to the C:\Temp directory of the instrument being updated, store the file on a large capacity USB storage device for transfer to the instrument. (The file size is ~2 GByte.)

USB: If you downloaded the instrument software update file to a PC, then transferred to a USB storage device, plug that USB device into one of the USB ports on the instrument controller. Access the file using Windows Explorer, and proceed to Step 1.

LAN: If you downloaded the instrument software update file directly via LAN to the instrument, for example, to C:\temp, access the file from that location and proceed to Step 1.

Note: If using the LAN method, depending on your firewall settings, you may see the pop-up message shown in Figure 2, Select "**Unblock**" to continue.



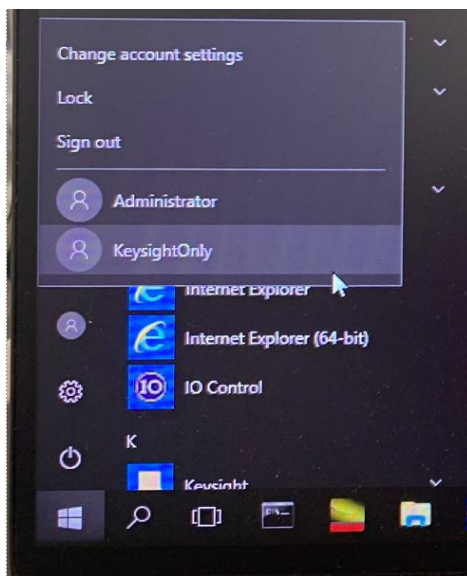
Software Update Procedure

The default user account is ***Instrument***, which does not have the required permissions to install the instrument software updates. For the process outlined below, the user must be logged in as the ***Administrator***.

The N5511A automated instrument Software upgrade process has an install wizard which removes the old software version and installs new software version without manual steps. It only requires the user to be logged in as administrator. The removal of the old software version and the installation of the new software version completes in approximately 40 minutes. (Dependent on number of files requiring update)

Software install

1. Close the application by pressing [File], {Exit}
2. Connect a USB keyboard and mouse to the instrument.
3. Log out of the default user (***Instrument***) by selecting **Start** > Then right click on the instrument Icon and select >**administrator**

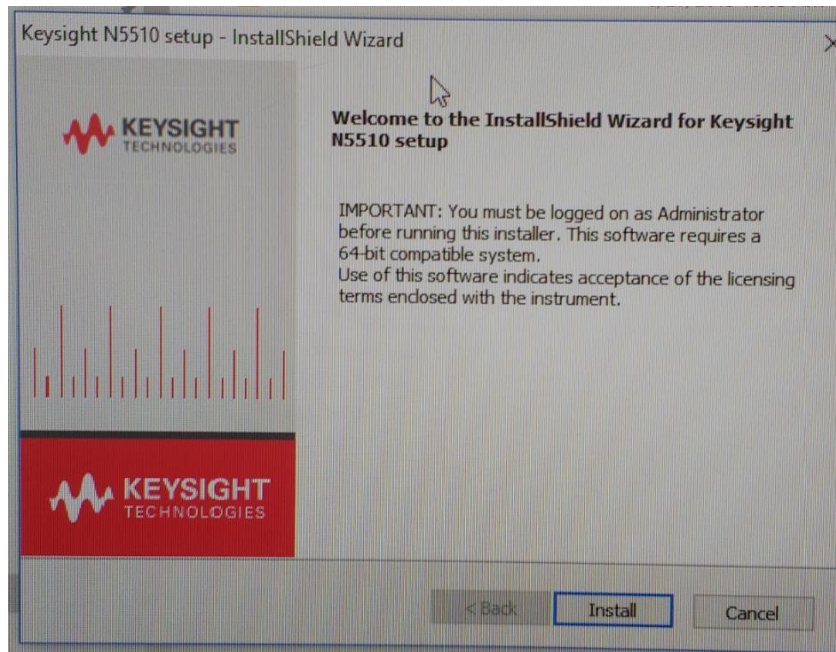


4. At the login prompt enter:
 - User name: **administrator**
 - Password: **Keysight4u!**

Note: If a “Found New Hardware” wizard window pops up, select “No Not at this Time” to bypass the activity.

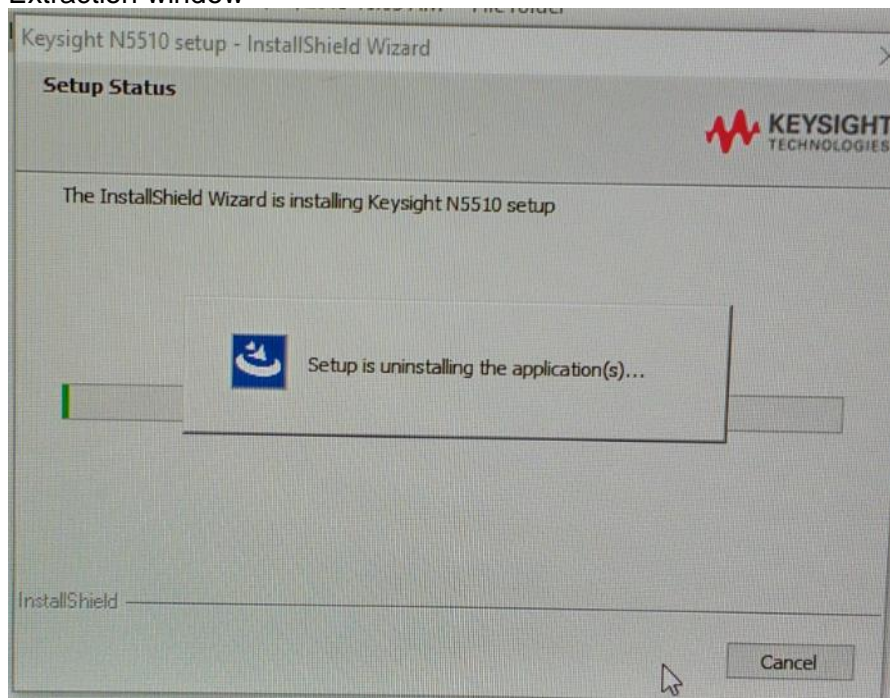
5. Locate the instrument software file you downloaded from the Keysight web site.
If the installer is on a USB device, copy the installer to the desk top of the N5511A and then eject the USB device before running the installer.
6. Double click on the file named “**XSA_Installer_A.XX.YY.exe**”

7. A message appears, reminding you that you must be logged in as **administrator**.

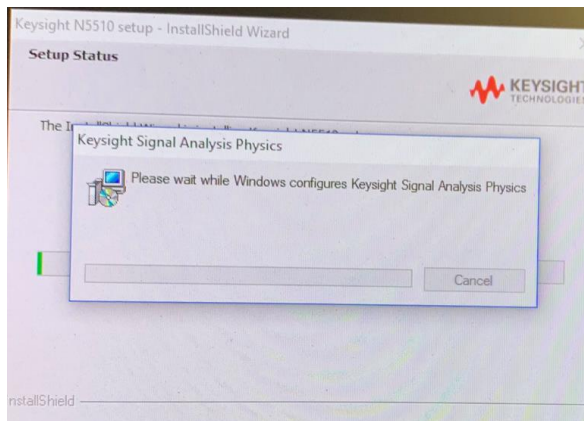
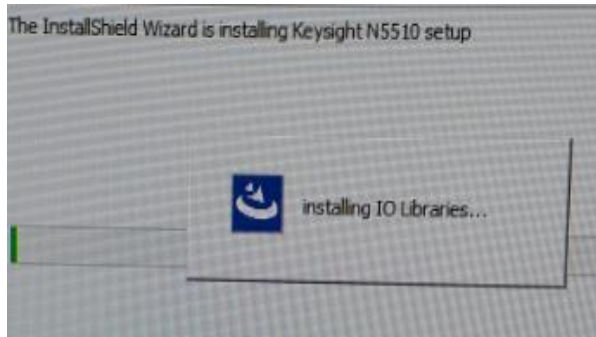


8. A window appears showing the extraction of the software installer. When the extraction process is complete, there will be several windows that will show the progress of the software removal and installation. There is no interaction required from this point forward. A prompt to **Shut down and Restart**, will be display when the Software update is complete.

Extraction window



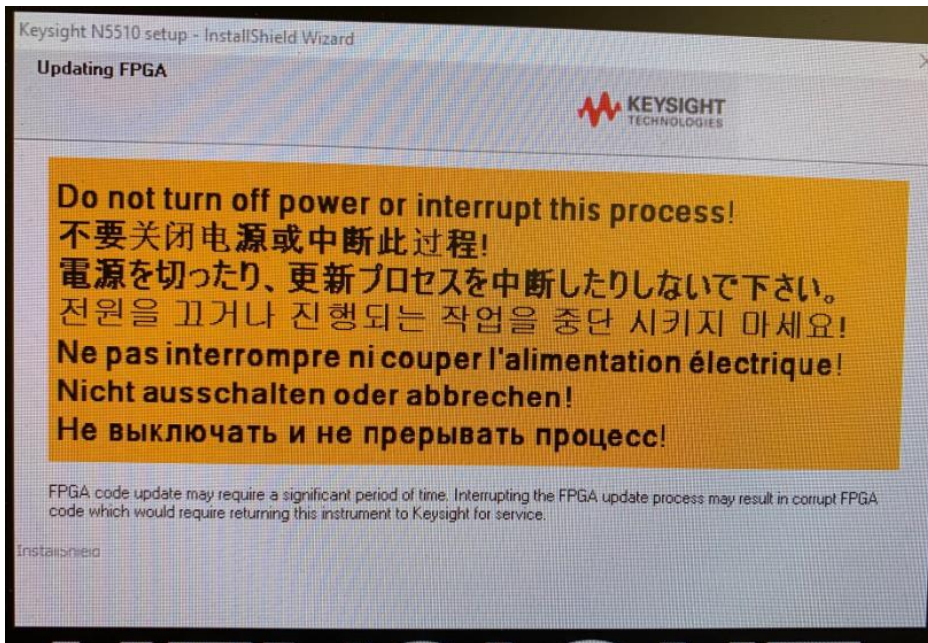
Examples of Instrument Software update windows



There will be several windows appearing and disappearing during this time. NO interaction with the instrument is required. Please be patient the total software removal and installation process can take approximately 40 minutes. It will display "Completed Successfully" when the software update is complete. You will be prompted to shut down and restart you instrument at the end.

Example of one of the windows you will see during the software update process:

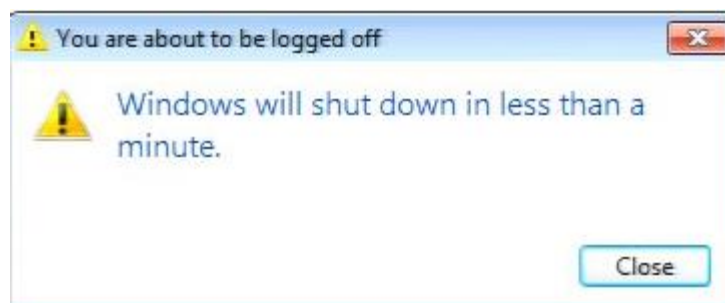
FPGA Programming: DO NOT power off the instrument at this time for **ANY** reason. If this process is interrupted, the instrument may end up in an unusable state, and will likely need to be sent to an Agilent for repair before it will be usable again.



Software upgrade “Completed Successfully”

- When the Software installation is complete. You will be asked shutdown and restart you instrument

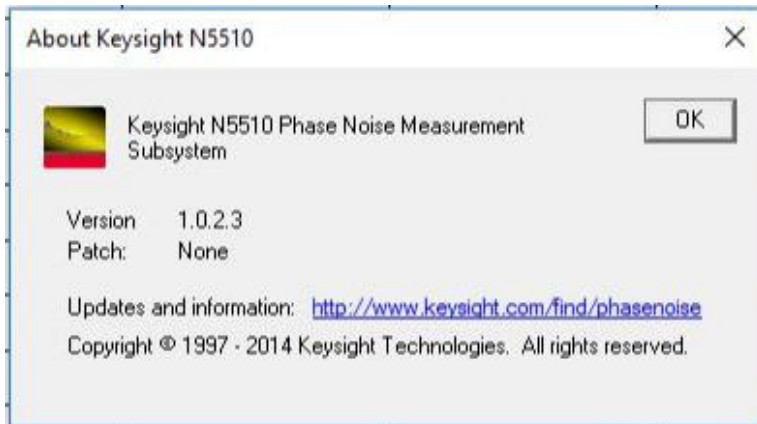
Note: When “Finish” you will see this window message indicating that the system is shutting down. This is normal message



- After the instrument restarts it will boot up in the Instrument account. Choose the N5510 Software icon to launch the user interface.



11. Check for any errors and verify that the new software version is installed. On the top of the menu select, **[Help]**, then **[About]**. This will display the “Instrument S/W Revision” number (example: “A.01.01”).



Note: If the N5511A does not reboot, remove the USB storage device before you restart the instrument. The default boot order for the instrument is the USB drive first and the hard disk drive second. Failure to remove the device will result in an error, as the instrument attempts to boot from it.