NI-VISA Download and Installation Guide

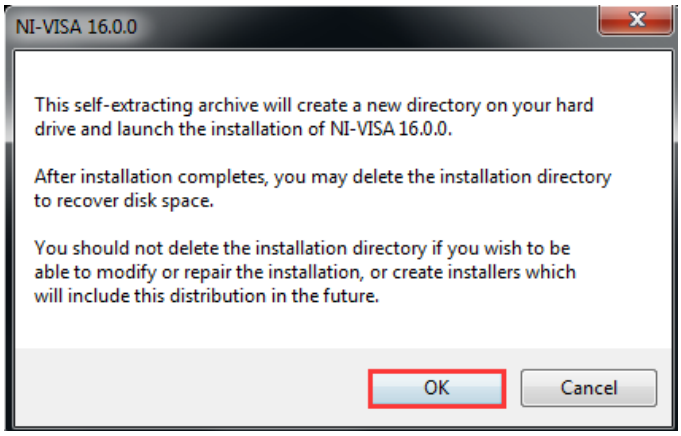
NI-VISA is the National Instruments implementation of the VISA I/O standard. It provides the programming interface between hardware and application development environments. This document introduces how to install NI-VISA software to control the spectrum analyzer.

1. Download NI-VISA software

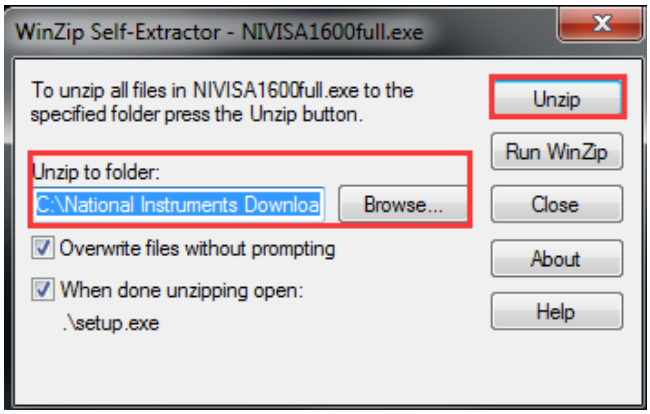
1) Download the installer from NIVISA website:
   Open http://www.ni.com, search "**NI-VISA**", click the link of NI-VISA Download. In the download page, select the supported OS and version (the recommended version is **16.0)**, and then download the driver.
   A warning information will pop out if you didn't install this driver before start.

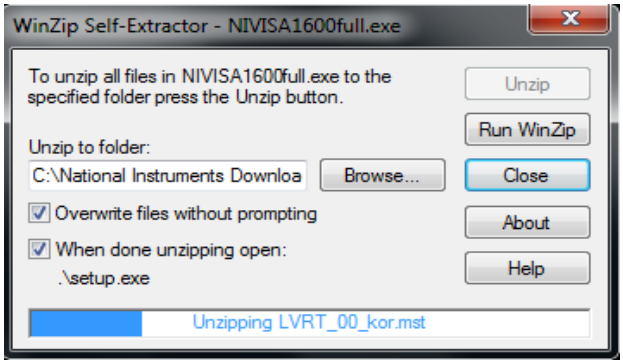
2) The downloaded file is like below.

   This is a self-extracting archive. Double click it to extract. Click "**OK**".

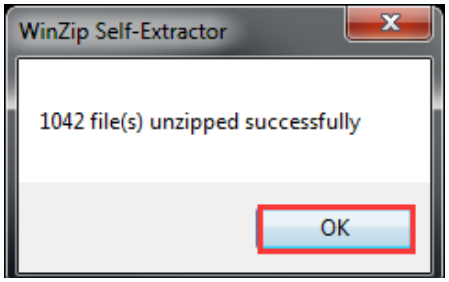


3) Click "**Browse**" to specify the folder for unzipping. Click "**Unzip**".

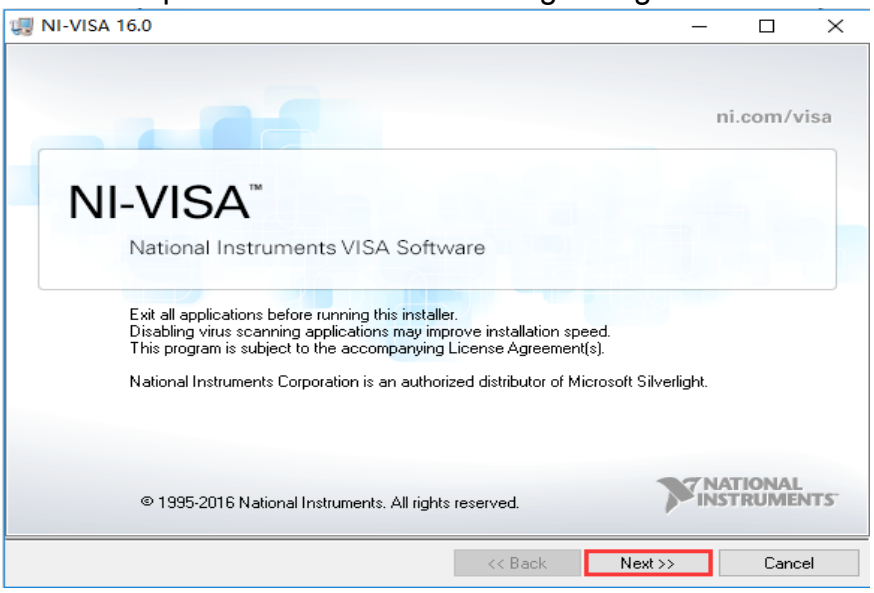




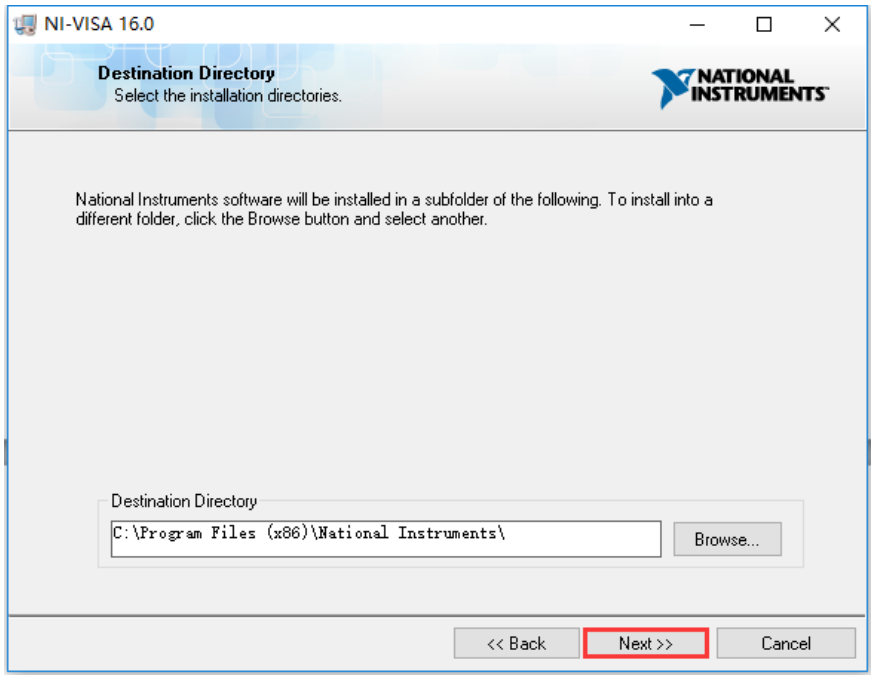
4) Unzipping is done. Click "**OK**", the software installer will initialize automatically.



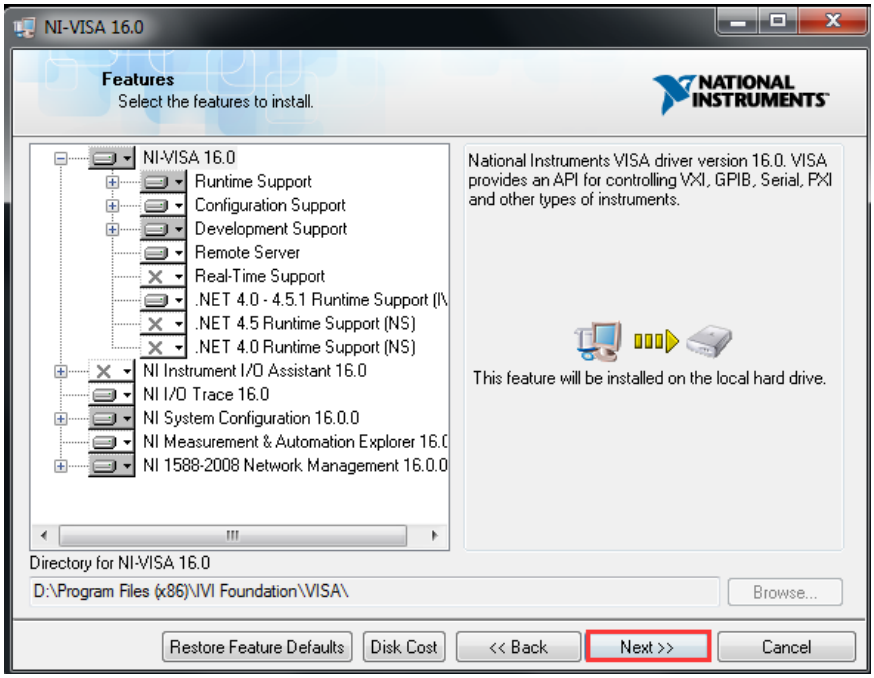
5) You will be presented with the following dialog. Click "**Next**".



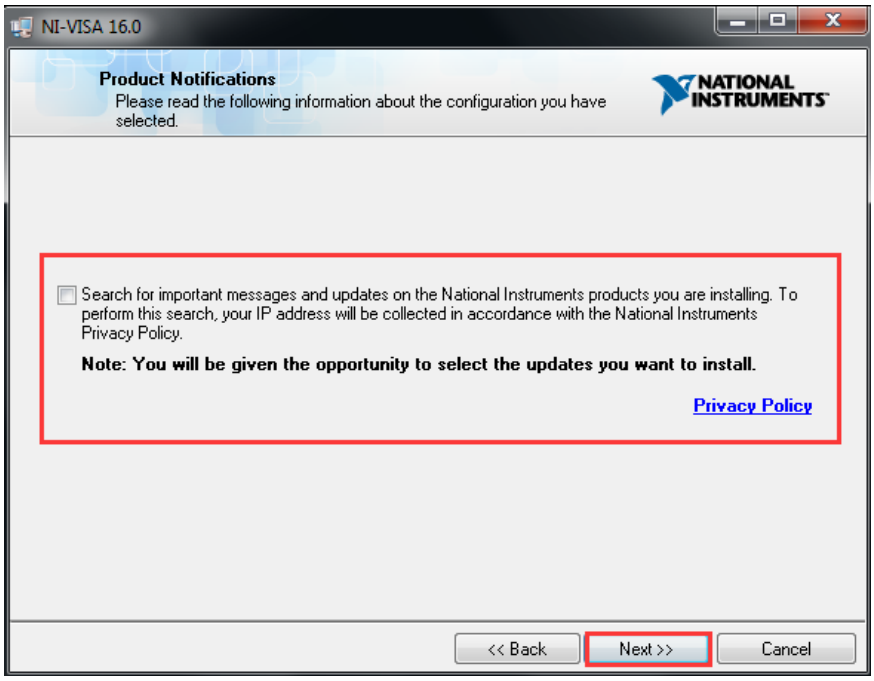
6) Select a directory for installation, click "**Next**".



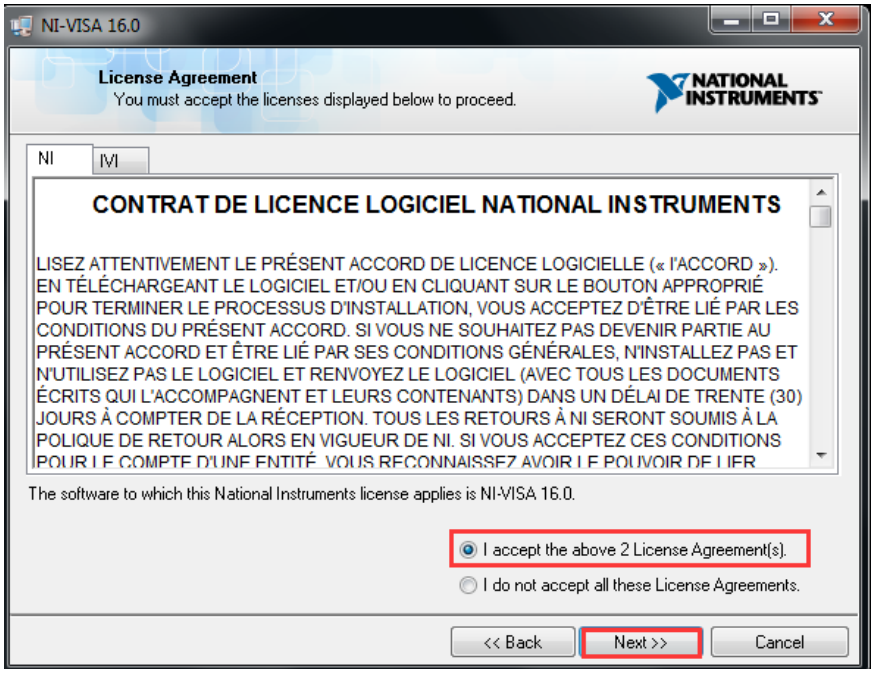
Click "**Next**".



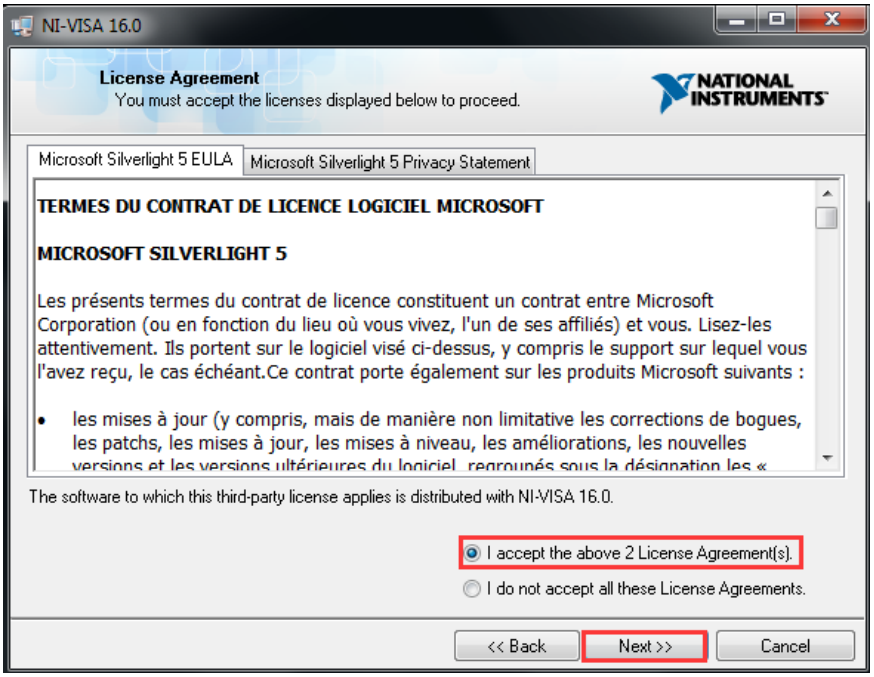
7) Uncheck the box, click "**Next**".



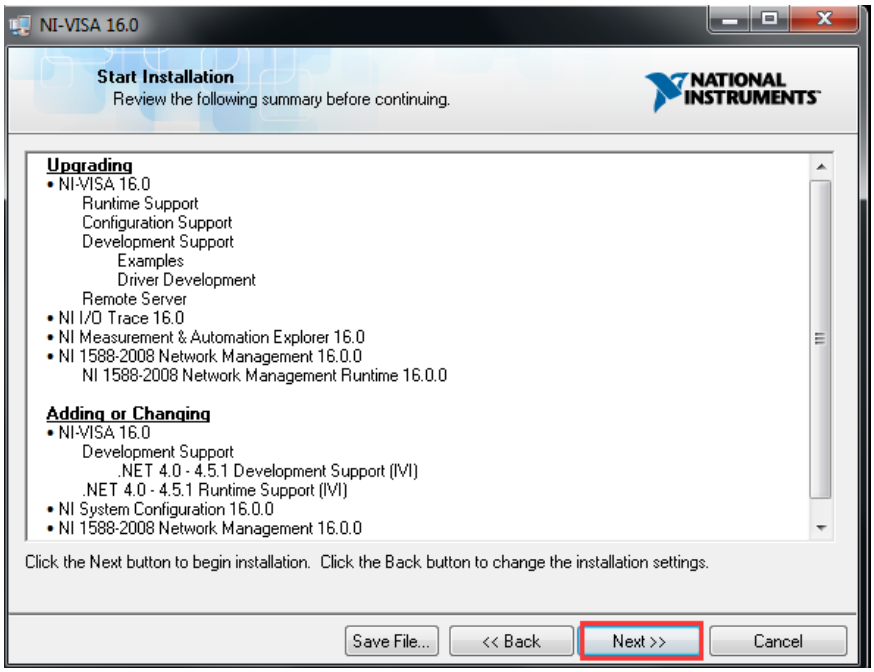
8) Check "**I accept the above 2 License Agreement(s)**", click "**Next**".



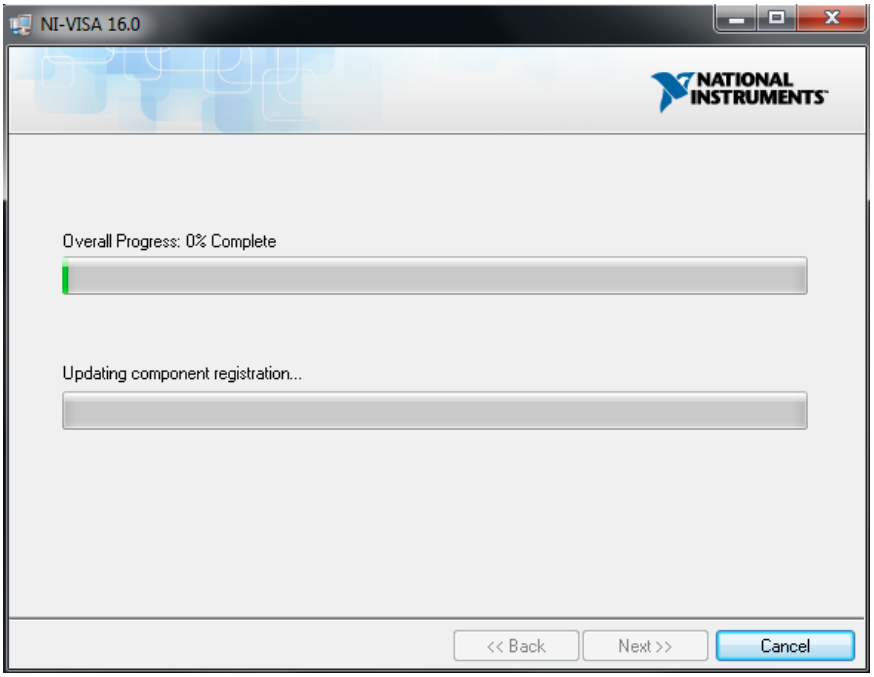
9) Go on to check "**I accept the above 2 License Agreement(s)**", click "**Next**".

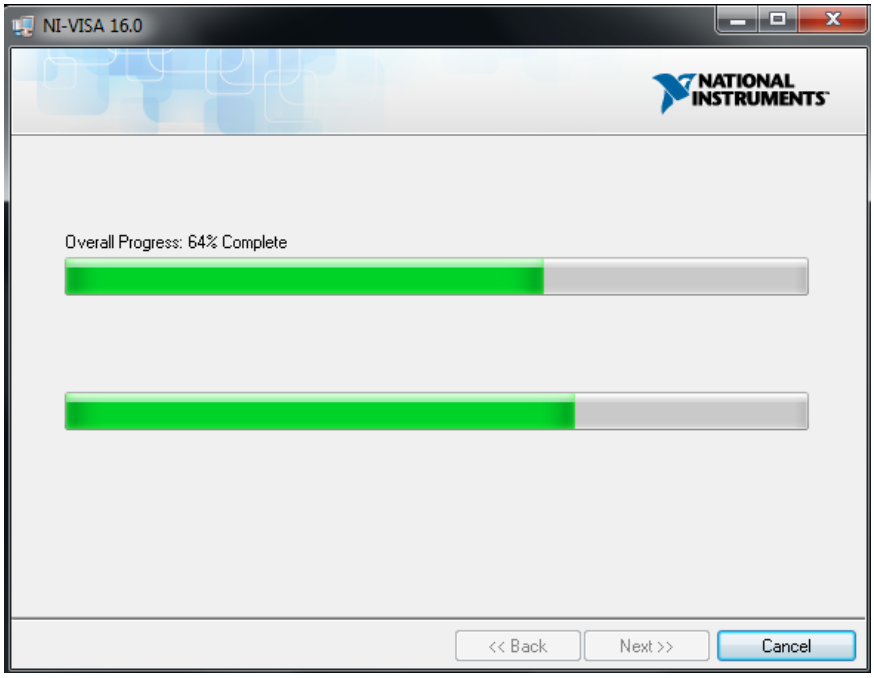


Click "**Next**".

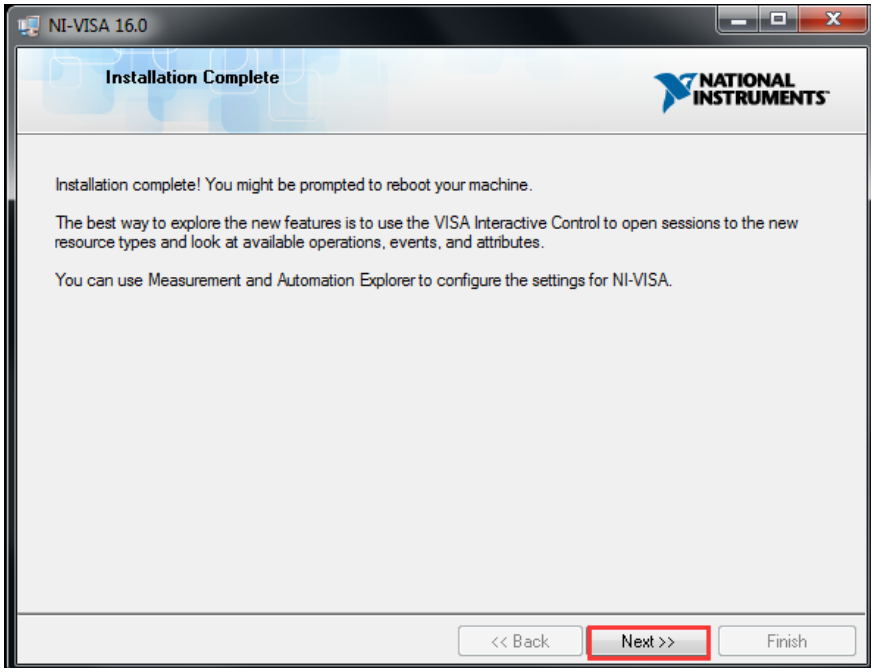


10) The dialog below shows the progress of installing the software.

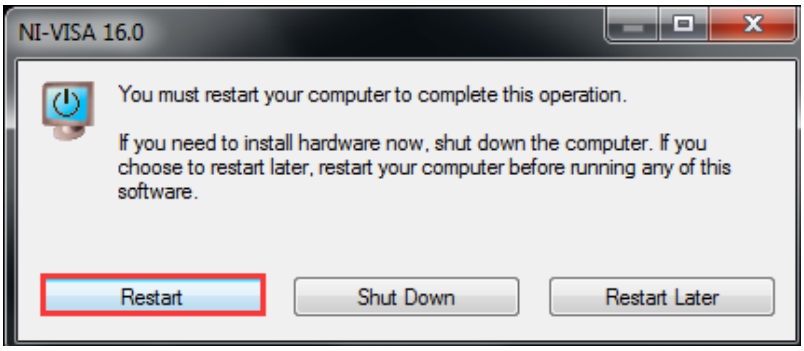




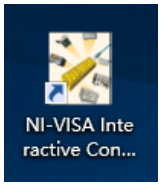
11) When the installation is complete, click "**Next**".

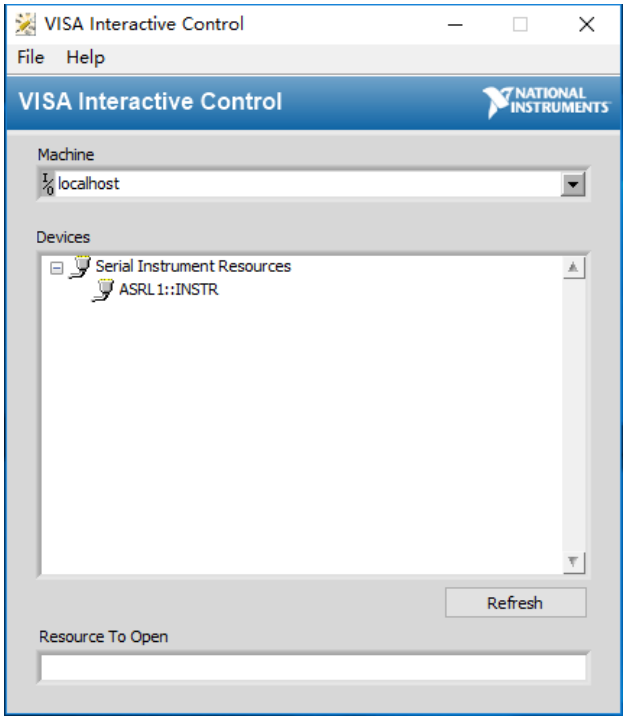


12) Click "**Restart**" to restart the computer to complete this operation.



13) Click to show All Programs list, find "**National Instruments** -> **NI-VISA** -> **NI-VISA Interactive Control**", and run it.
You can also double click the icon below on the desktop to run "**NI-VISA Interactive Control**" program.



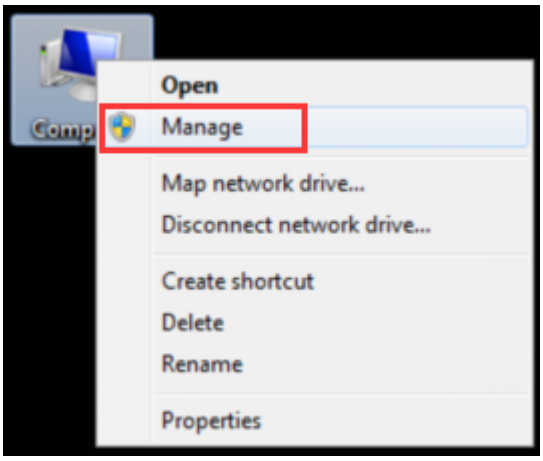

VISA Interactive Control
File
Help
VISA Interactive Control
NATIONAL INSTRUMENTS
Machine
localhost
Devices
Serial Instrument Resources
ASRL1::INSTR
Refresh
Resource To Open

2. Validate the USB Driver is available

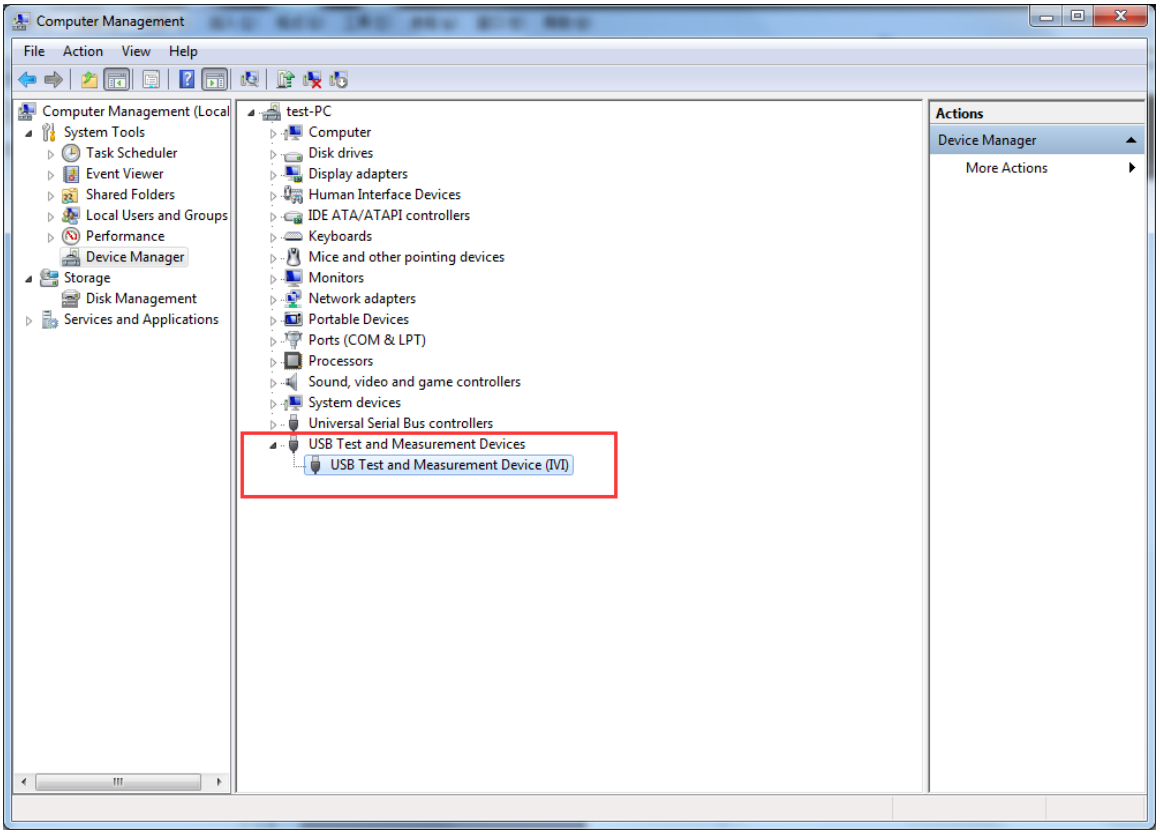
If NI-VISA software is installed successfully, connect the USB port of spectrum analyzer to the PC USB port using a USB cable. There are two methods to check whether the USB driver work normally.

1st Method:

Right click [**Computer**], you can find it on the desktop, or in [**Start**] menu.



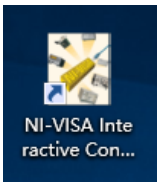
In the pop up menu, click [**Manage**] and it will open a window named "**Computer Management**", as follow, in the left side click [**Device Manager**], it will show a devices tree in the middle. If the USB driver for spectrum analyzer is available, "**USB Test and Measurement Device (IVI)**" will be shown in the middle area as below.



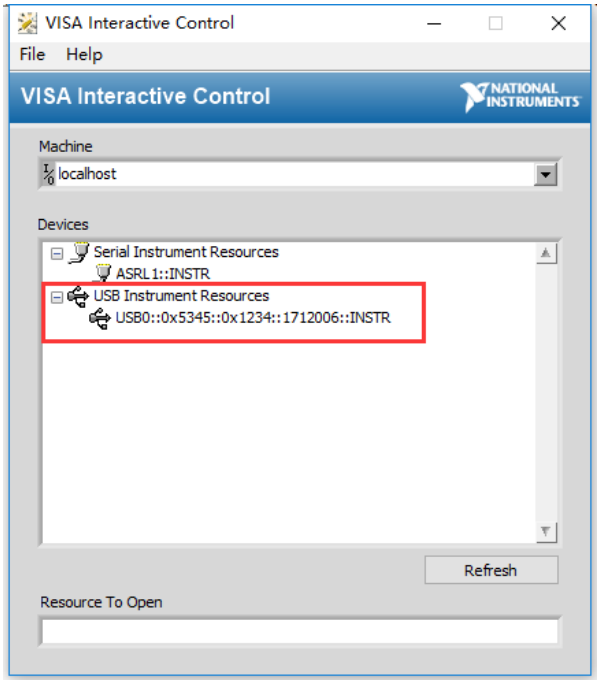
2nd Method:

Click to show All Programs list, find "**National Instruments** -> **NI-VISA** -> **NI-VISA Interactive Control**", and run it.

You can also double click the icon below on the desktop to run "**NI-VISA Interactive Control**" program.



If the USB driver for spectrum analyzer is available, the software will show as below:



If NI-VISA software is installed successfully, but the USB driver does not work, follow the steps of Troubleshooting: USB Driver Installation Failure.

Troubleshooting: USB Driver Installation Failure

This section introduces how to install the USB Driver manually, to solve the problem that NI-VISA software is installed successfully, but the USB driver does not work.

Use the supplied USB cable to connect the spectrum analyzer with a PC through their USB ports.

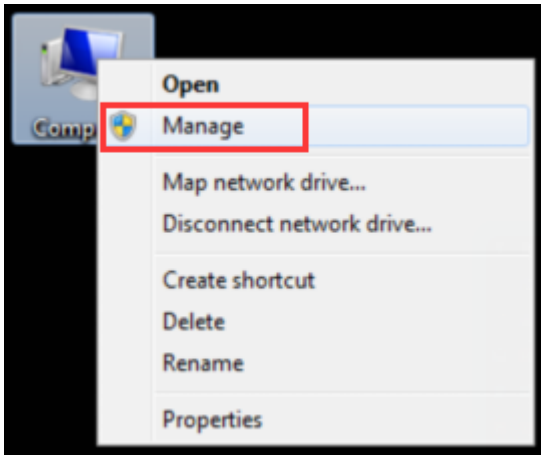
Note:

- If you use a USB cable that is not supplied by us, some problems such as connection error and signal disturbing might occur.
- Install Guide for Windows 10\Windows 8\Windows 7\Windows Vista.

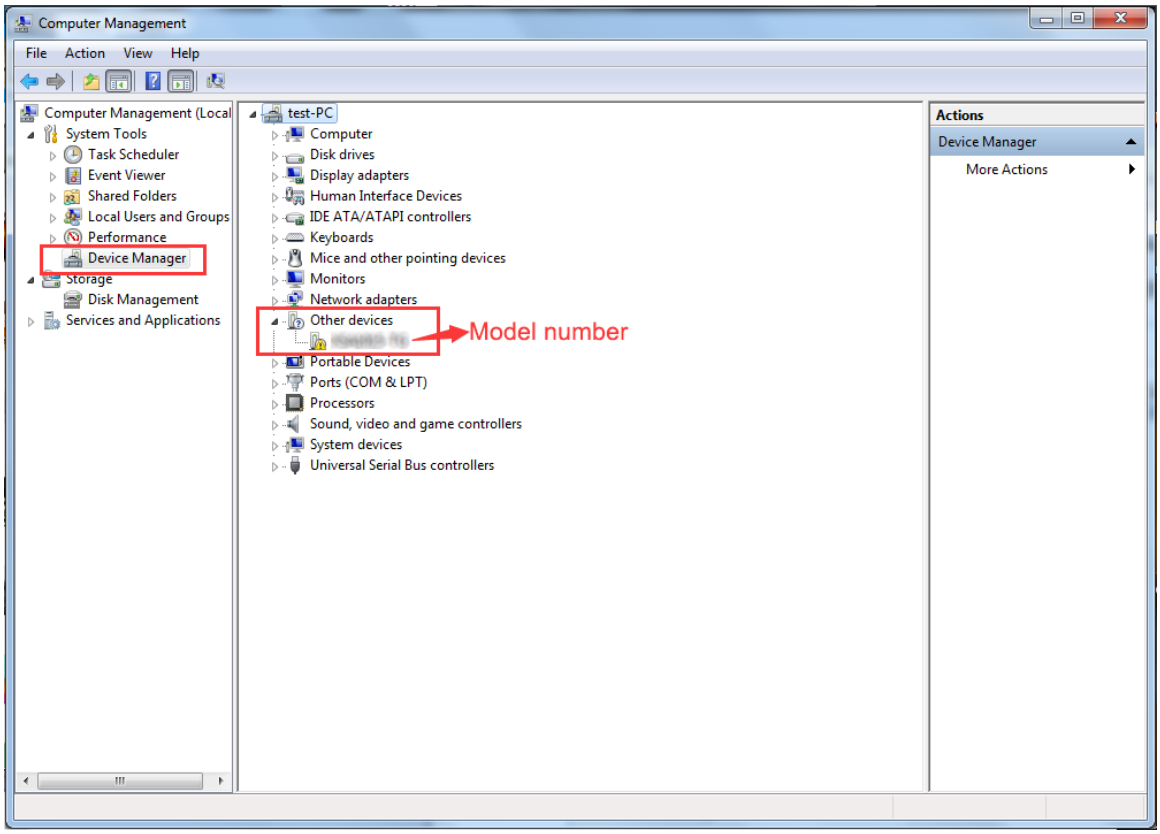
1. No USB device has been installed

During the whole installation, please assure that the device is running well and plugged into PC from USB.

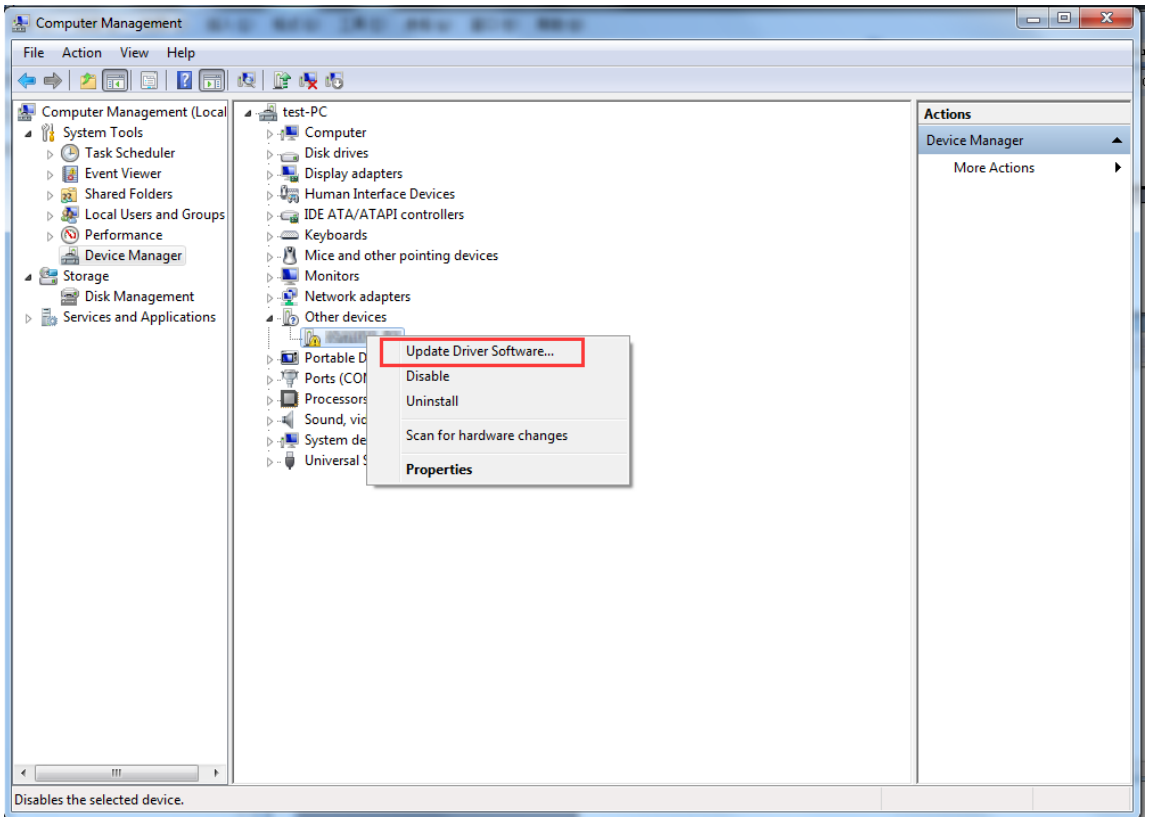
1) Right click [**Computer**], you can find it on the desktop, or in [**Start**] menu.



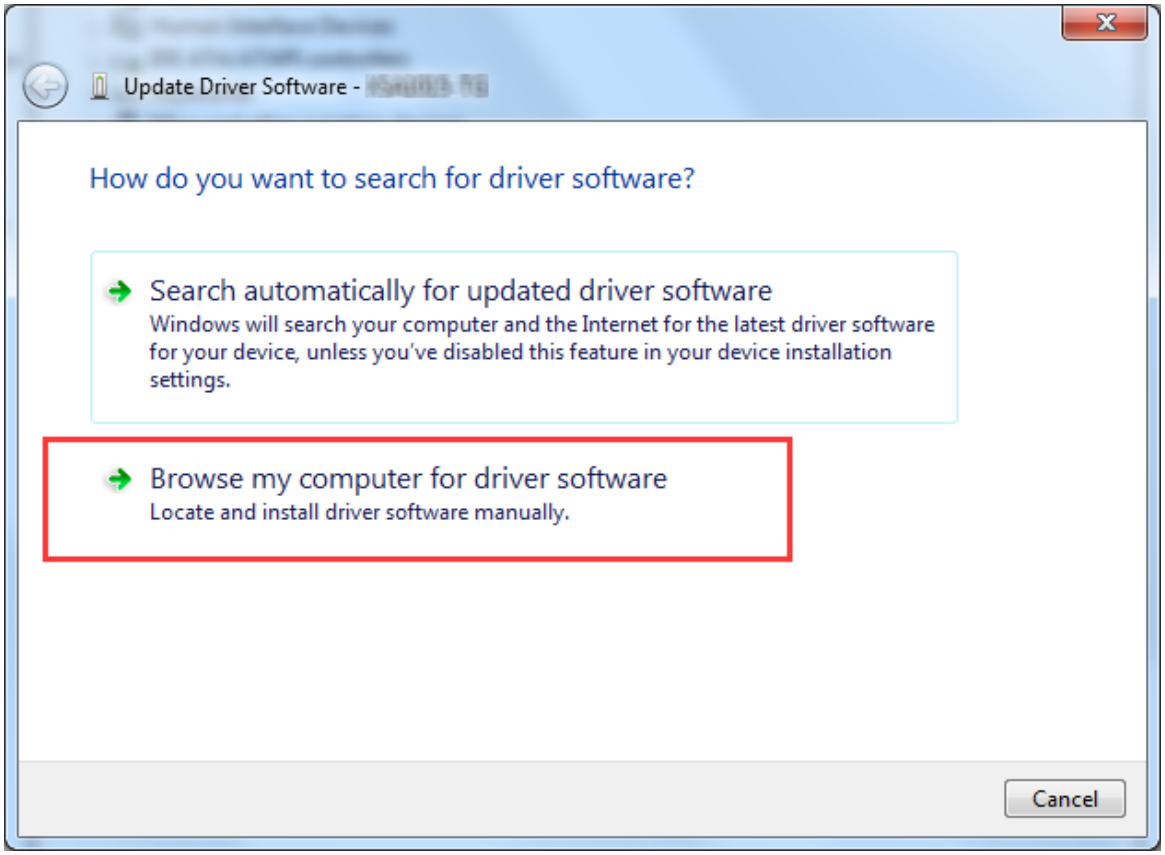
2) In the pop up menu, click [**Manage**] and it will open a window named "Computer Management", as follow, in the left side click [**Device Manager**], it will show a devices tree in the middle, and if the device is running well and plugged into PC, computer will detect an unknown device with a "!" icon.



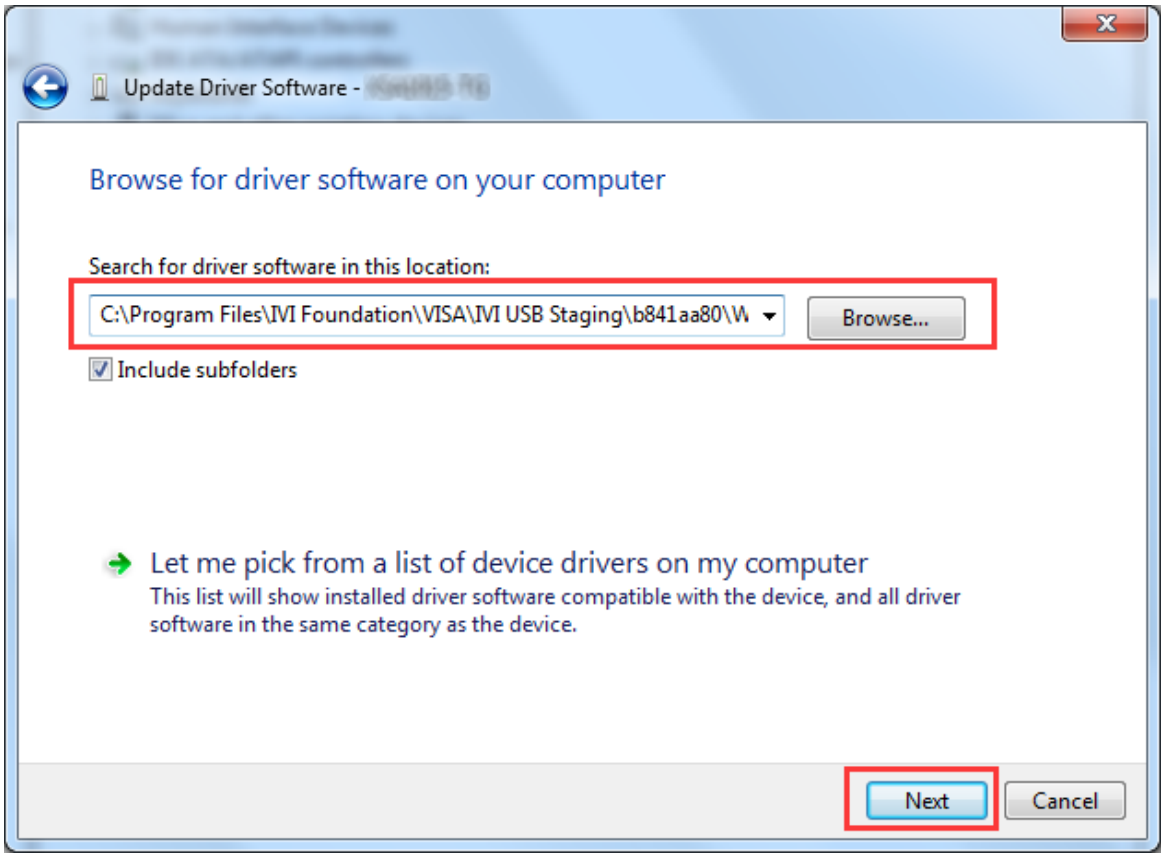
3) Right click the unknown device icon, in the pop up menu click [**Update Driver Software...**].



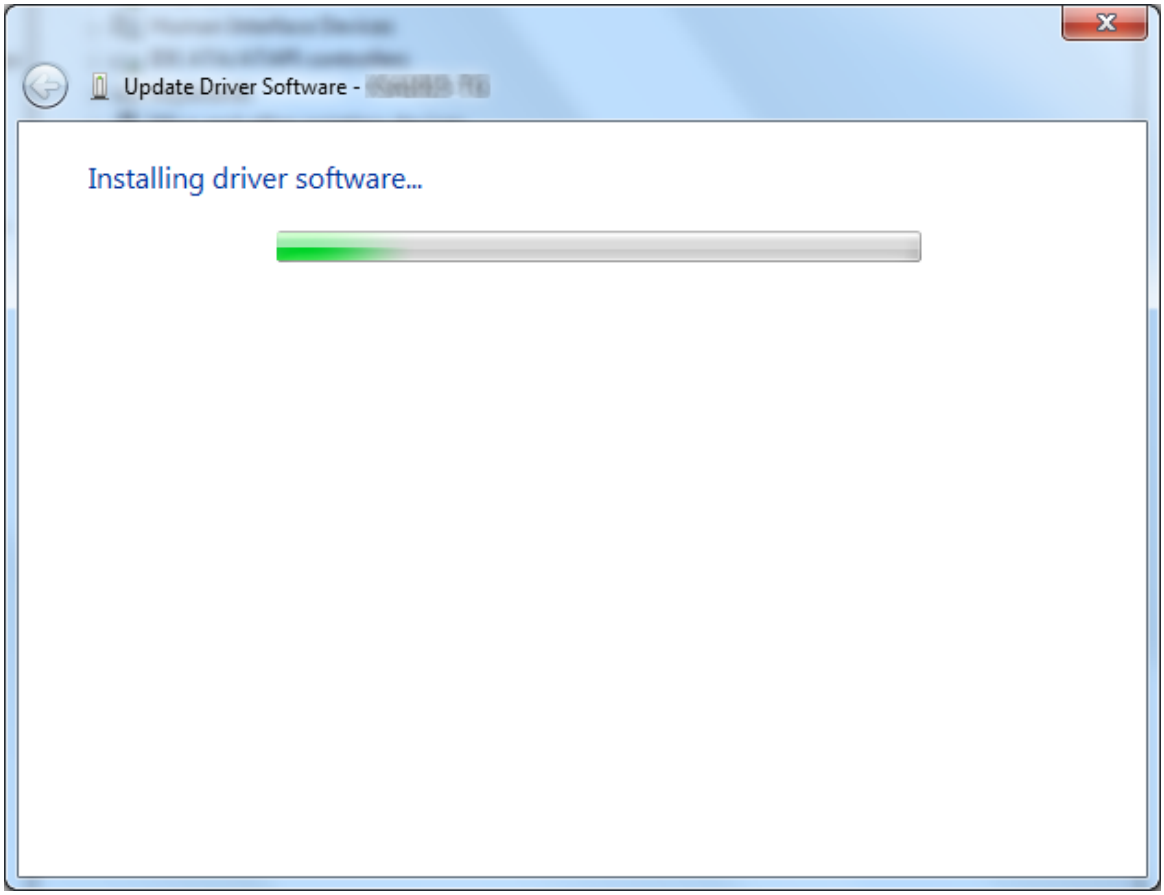
4) In the open window, select [**Browse my computer for driver software**].



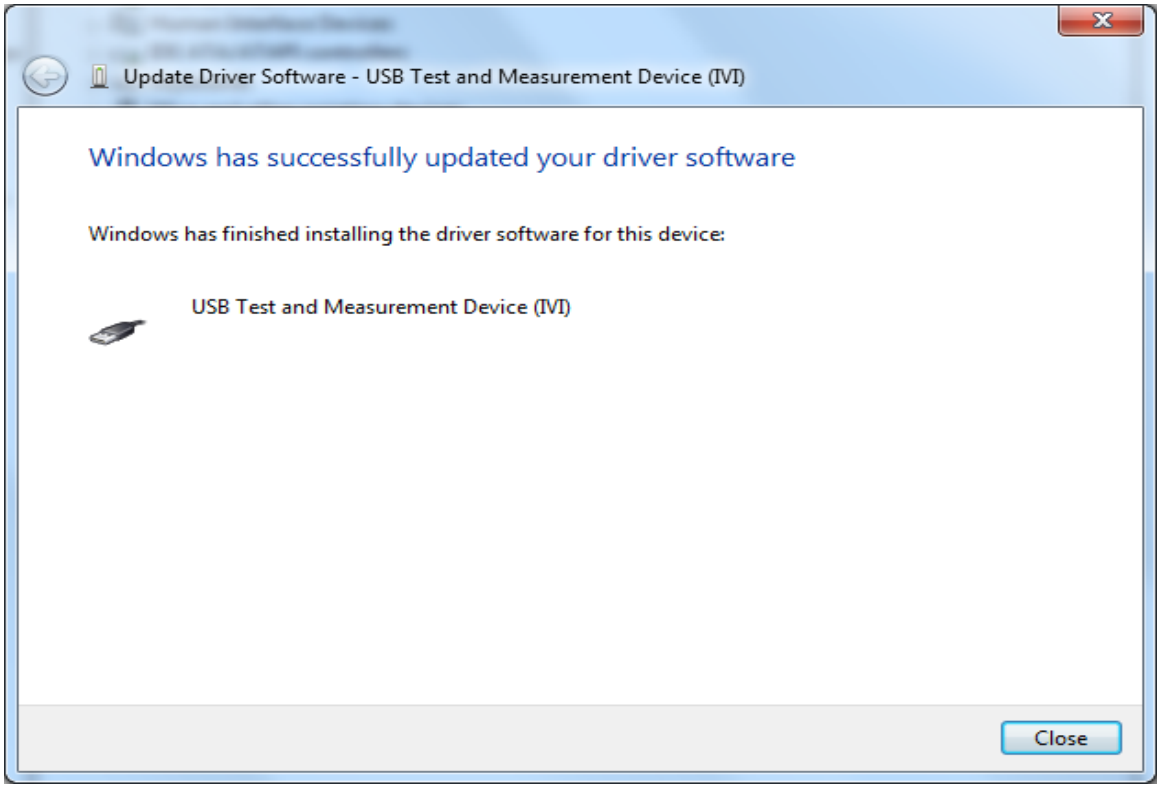
5) The next window, select a directory path for the driver software location "USBDRV\win10_win8_win7_vista", such as "C:\Program Files\IVI Foundation\VISA\IVI USB Staging\b841aa80\Windows", and click "**Next**".



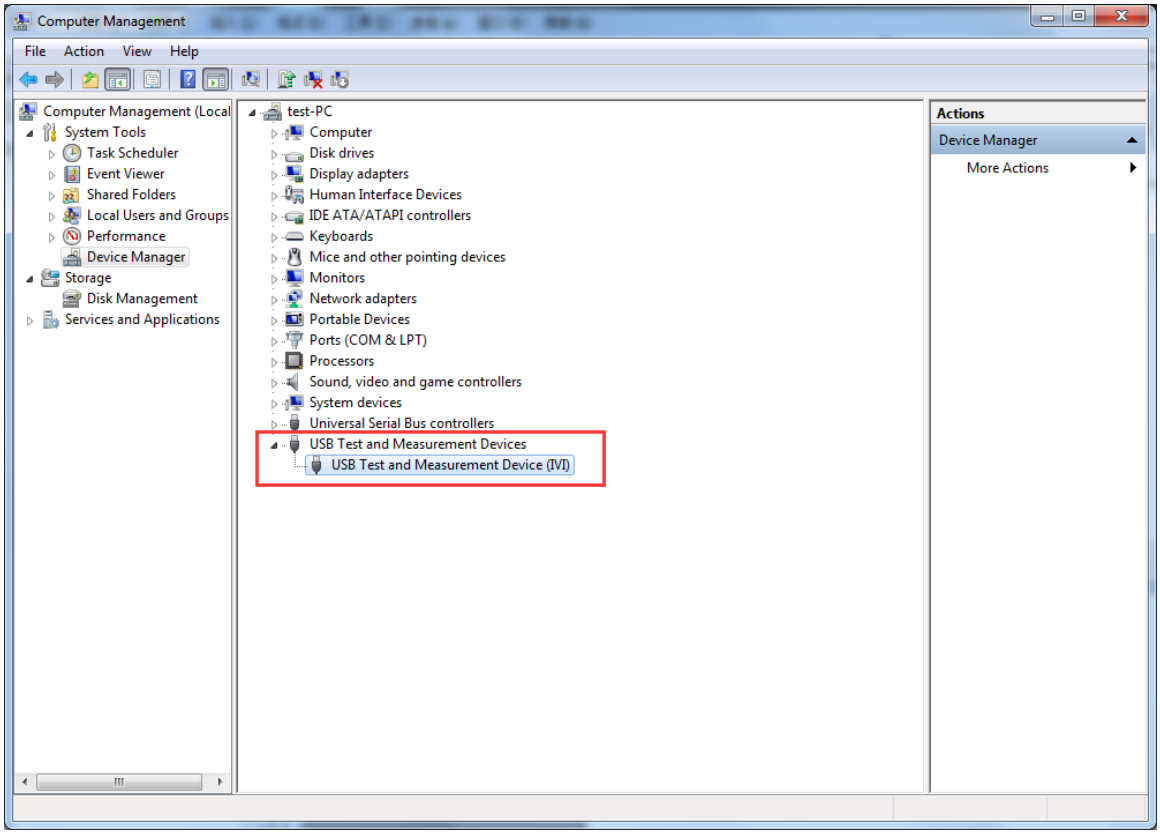
The system is installing driver software for you, as follow:



And finish.
Now a successful installation window opens with information "Windows has successfully updated your driver software".



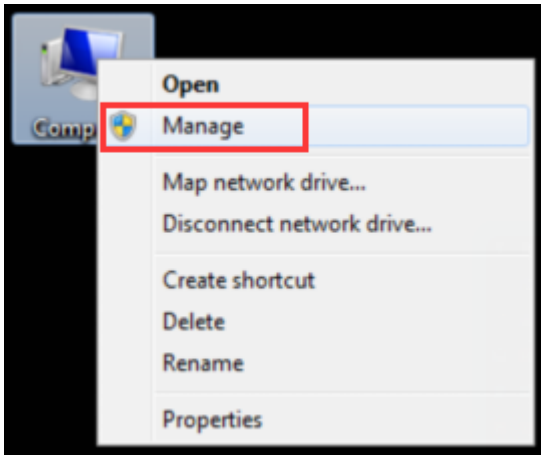
6) Click "**Close**". Have a look at "**Computer Management"** window, "**USB Test and Measurement Device (IVI)**" will be shown as below. This indicates USB driver is working normally. The installation of USB driver is complete.



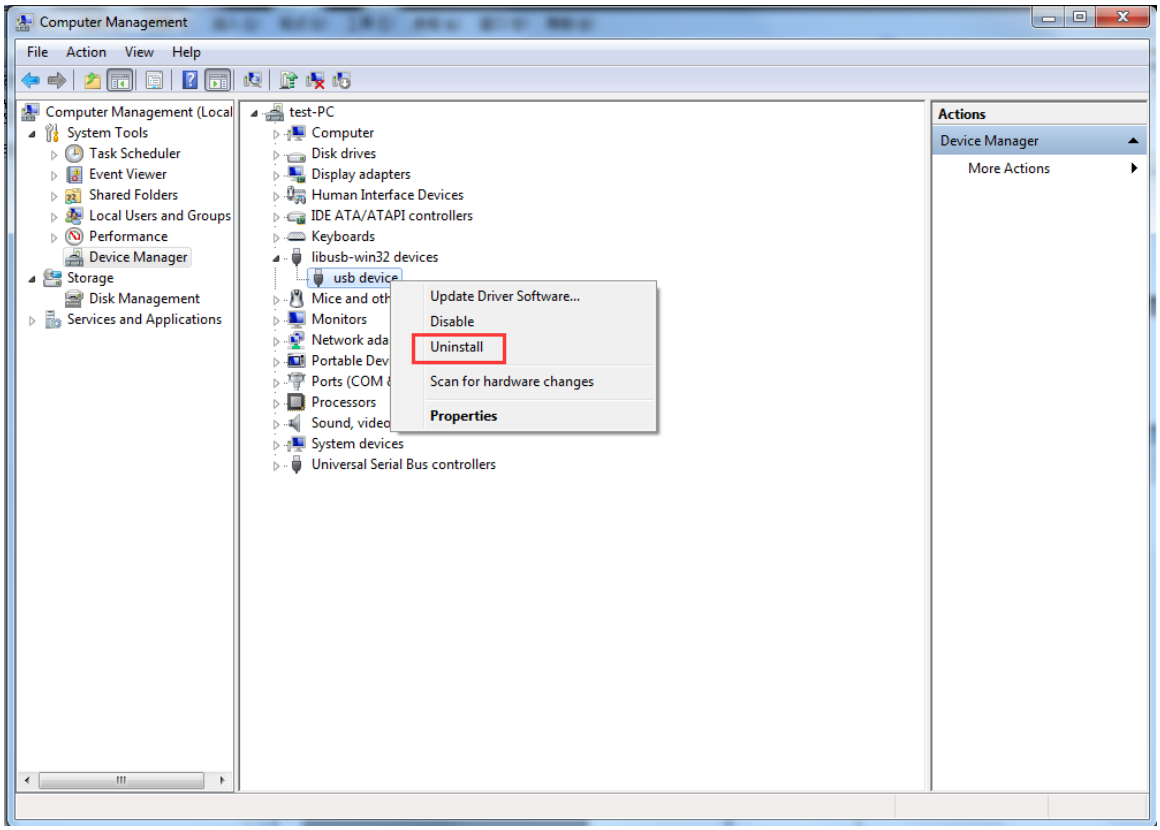
2. Other USB device has been installed

If there is other USB device has been installed, you should uninstall it first, and then scan the new device.

1) Right click [**Computer**], you can find it on the desktop, or in [**Start**] menu.

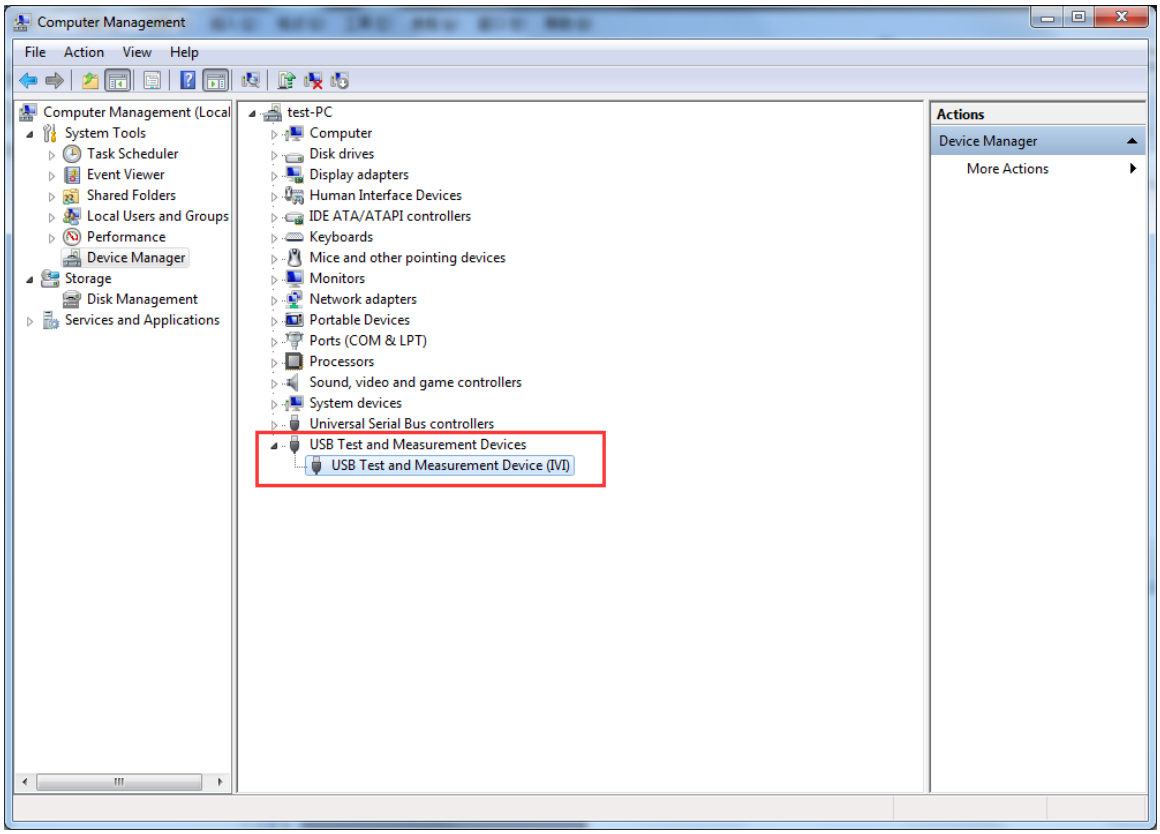


2) In the pop up menu, click [**Manage**] and it will open a window named "**Computer Management**". Right click the installed device icon, in the pop up menu click [**Uninstall**].



3) Check "**Delete the driver software for this device**", and click "**OK**".

4) After uninstall the device, click the last one button "**Scan for hardware changes**" in tool bar, computer will detect the new USB device.



Now the USB driver will work.

V1.2