



Data Acquisition Card Setup for PC based XY Plotter/Time-base recorder and automated tester (Software rev 3.1.2)

Once you have installed the software, plug in the USB cable into a spare USB port on your laptop or desktop PC. The hardware will be automatically recognized by the NI DAQmx software which is installed during the software installation.

Run the XY Plotter software. The cursor will move to the values of the X and Y inputs (Refer to the help window in the software for full operator instructions).

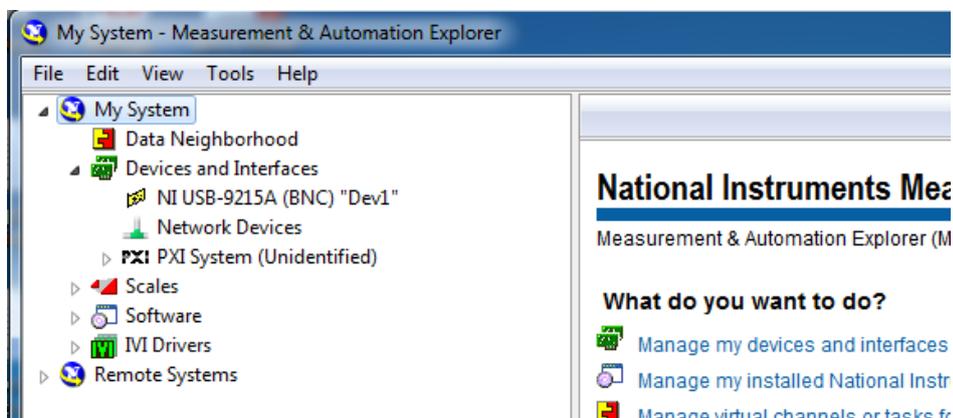
Should the cursor remain in the centre of the plot screen there may be an issue with the setup of the DAQ card. To enable further configuration you will need to download the latest full feature version of DAQmx including Measurement and Automation Explorer (MAX) from the National Instruments website. The link is shown below.

<http://search.ni.com/nisearch/app/main/p/bot/no/ap/tech/lang/en/pg/1/sn/catnav:du,n8:3478.41,ssnav:sup/>

Once installed, click on the MAX icon on your desktop.

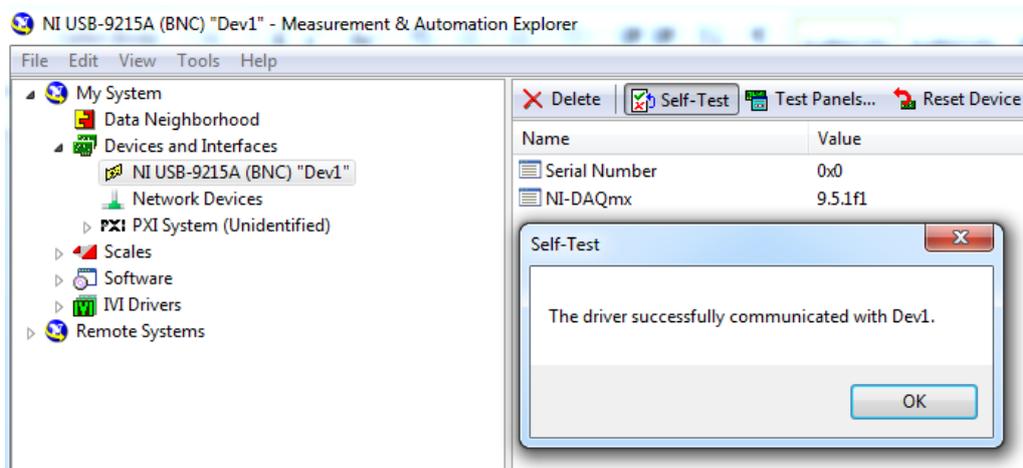


Once open click on the Devices and Interfaces option and check to see if the DAQ card is showing (see below)

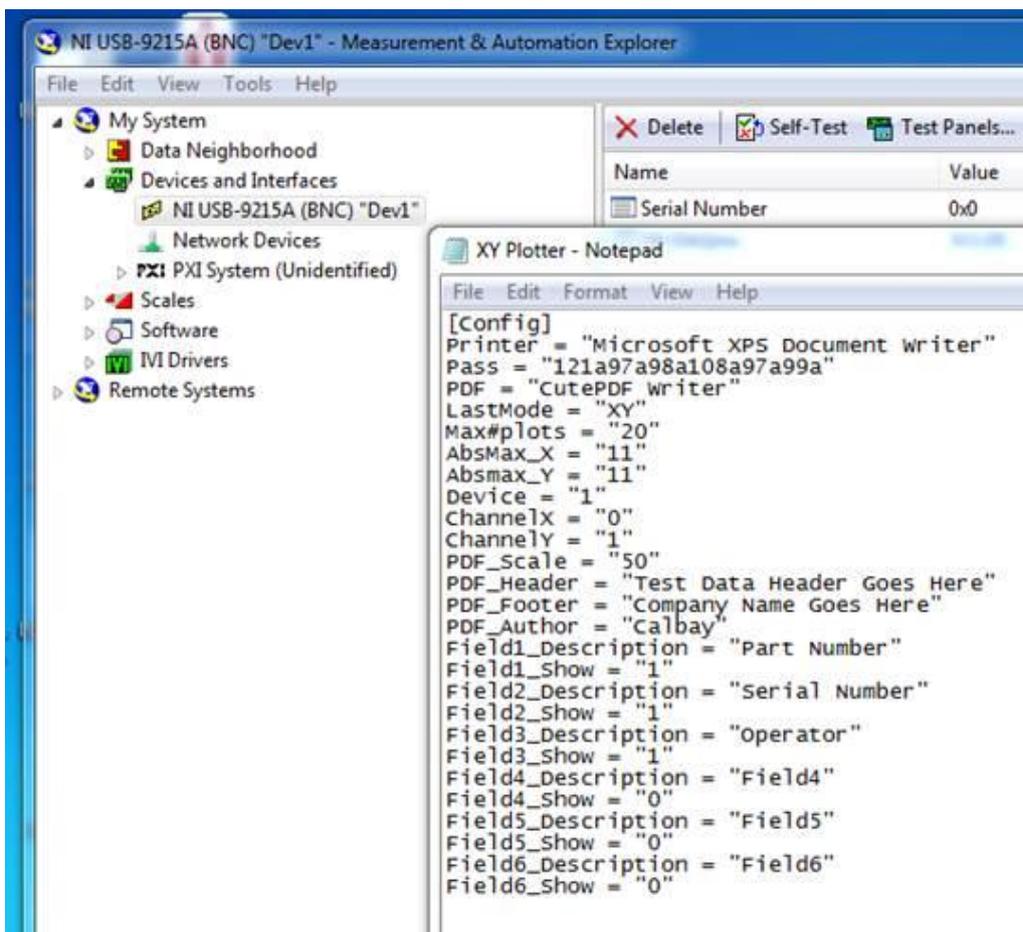


You should see the card listed; in this case it is showing the NI USB-9215A (BNC) "Dev1"

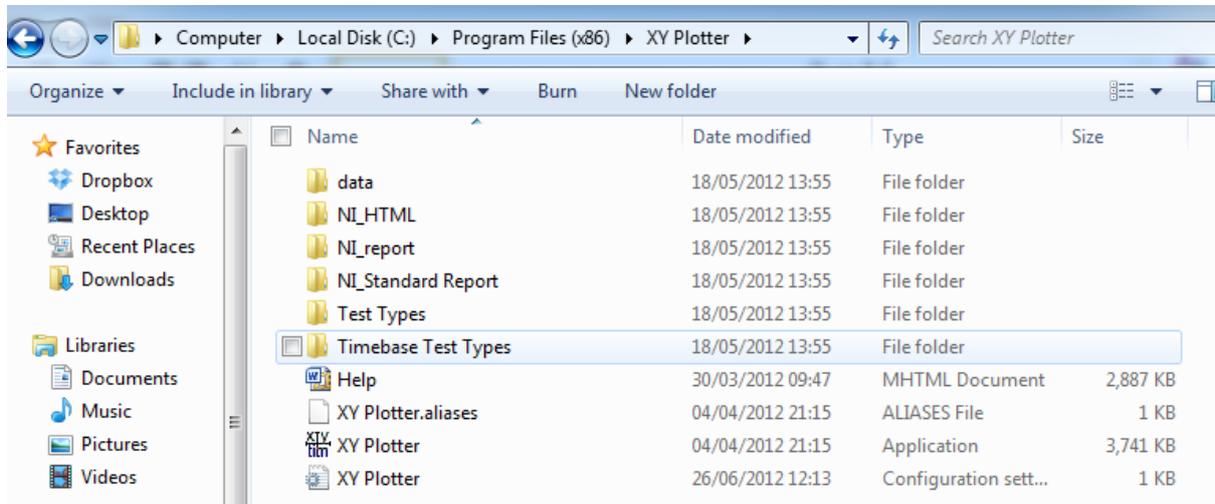
If you double click on this device name it will bring up the configuration page for this card. If you click on the tab called "Self-Test" you should get the following result. If not, there is possibly a problem with either your installation or the card itself.



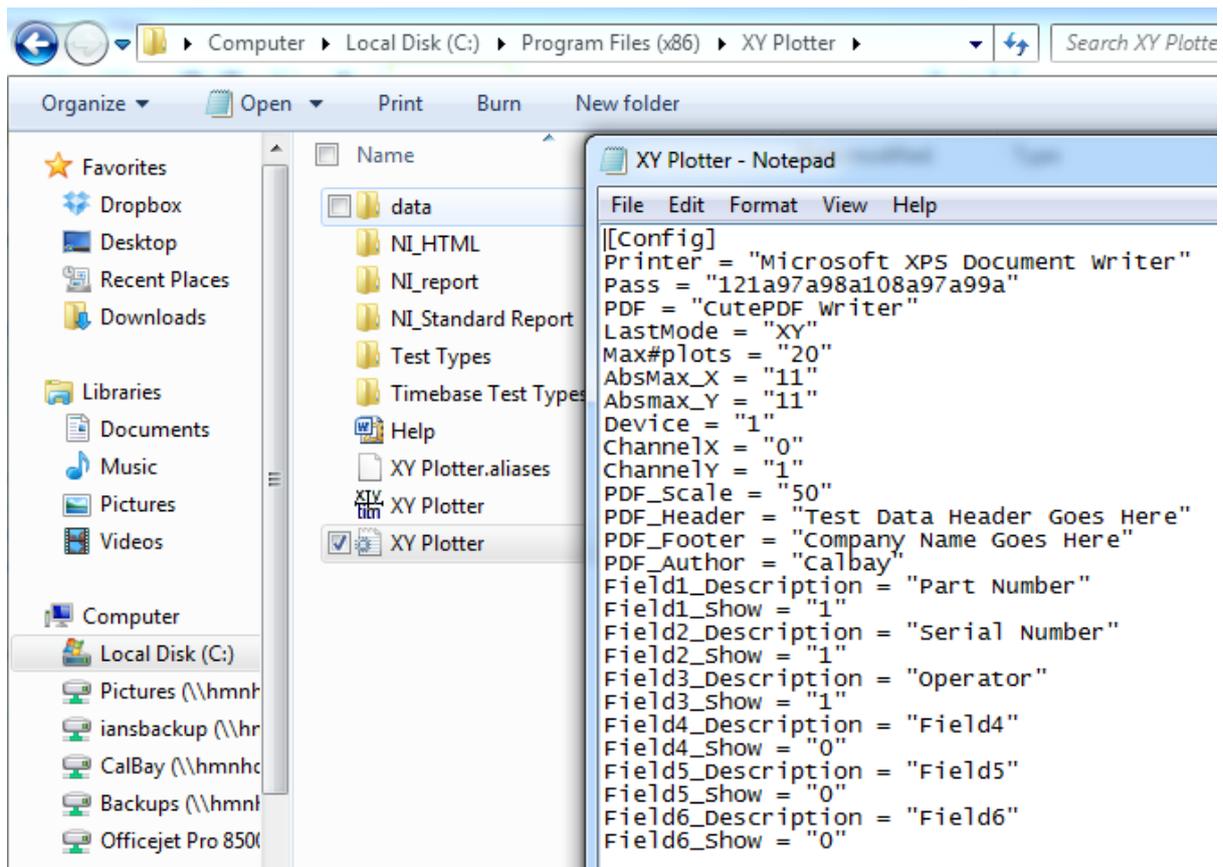
If, as shown above the driver has successfully communicated with the device but when you run the plotter software the cursor still does not move, there is likely to be a problem with the device name. This can occur if you have more than one DAQ card in your computer. You will need to set the XY plotter device name to the same as the one shown in MAX. An example is shown below.



To edit the XY Plotter Device name, open the XY Plotter config file which is located in the XY plotter folder on the drive you saved it to when installing. The config file is shown at the bottom of the list below.

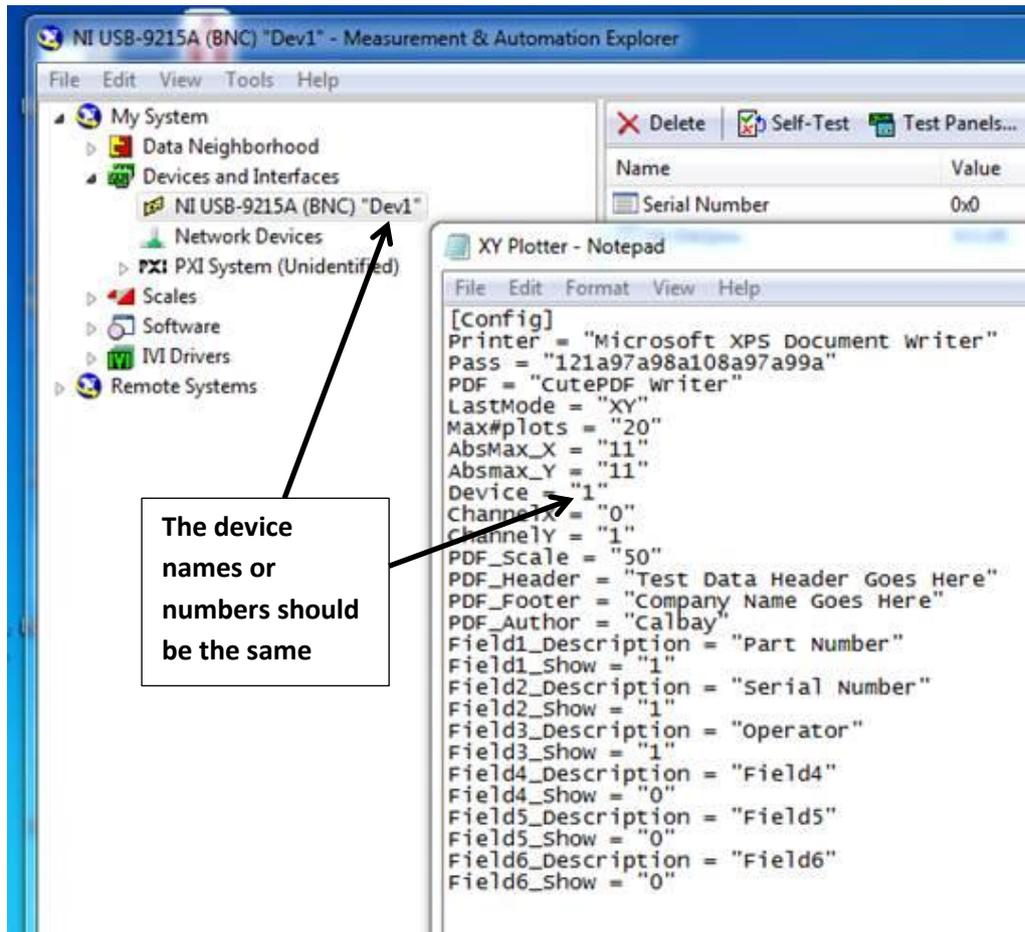


If you click on this file it will open up the config file in Notepad.



Check to see if the device name in MAX and in this file are the same, if not change either to make them the same. In the example shown below, MAX is set to "Dev1" and the XY plotter Device = "1" meaning that the device will be recognized by MAX and the software will run correctly. If you change the device name or number in the XY Plotter config file you must then save it into the same file

location before the changes will take effect. You will need to restart the XY Plotter software for these changes to be recognized by the software.



The image shows a screenshot of the Measurement & Automation Explorer (MAX) interface. The left pane displays the system tree with 'NI USB-9215A (BNC) "Dev1"' selected under 'Devices and Interfaces'. The right pane shows a table with 'Serial Number' and '0x0'. In the foreground, a Notepad window titled 'XY Plotter - Notepad' contains the following configuration text:

```
[Config]
Printer = "Microsoft XPS Document writer"
Pass = "121a97a98a108a97a99a"
PDF = "CutePDF writer"
LastMode = "XY"
Max#plots = "20"
AbsMax_X = "11"
Absmax_Y = "11"
Device = "1"
ChannelX = "0"
ChannelY = "1"
PDF_Scale = "50"
PDF_Header = "Test Data Header Goes Here"
PDF_Footer = "Company Name Goes Here"
PDF_Author = "Calbay"
Field1_Description = "Part Number"
Field1_Show = "1"
Field2_Description = "Serial Number"
Field2_Show = "1"
Field3_Description = "operator"
Field3_Show = "1"
Field4_Description = "Field4"
Field4_Show = "0"
Field5_Description = "Field5"
Field5_Show = "0"
Field6_Description = "Field6"
Field6_Show = "0"
```

A callout box with the text "The device names or numbers should be the same" has two arrows pointing to the "Dev1" device name in the MAX tree and the "Device = \"1\"" line in the Notepad configuration.