

# U2000A-02A

# S E R V I C E N O T E

Supersedes:

U2000A-02

## U2000A – USB Power Sensor

**Serial Numbers: MY47000107 – MY47000337, SG47000101- SG47000104 and SG47000107**

### USB Sensor Range

#### Parts Required:

1. PC/ Laptop installed with NI Labview 8.0 or above or
2. Agilent VEE run time with Agilent IO Libraries 14.2 or above
3. Patch file in Agilent VEE or NI Labview.

Please download Agilent VEE patch file from url below:

[http://www.home.agilent.com/upload/cmc\\_upload/All/Agilent\\_Vee.zip](http://www.home.agilent.com/upload/cmc_upload/All/Agilent_Vee.zip)

Please download NI Labview patch file from url below:

[http://www.home.agilent.com/upload/cmc\\_upload/All/AgU200x\\_Upgrade\\_ToolKit8.0.zip](http://www.home.agilent.com/upload/cmc_upload/All/AgU200x_Upgrade_ToolKit8.0.zip)

## ADMINISTRATIVE INFORMATION

SERVICE NOTE CLASSIFICATION:		<b>MODIFICATION AVAILABLE</b>	
ACTION CATEGORY::	AGREEABLE TIME	<input type="checkbox"/>	PERFORMANCE ENHANCEMENT
		<input type="checkbox"/>	SERVICE / RELIABILITY ENHANCEMENT
LOCATION CATEGORY:	<input checked="" type="checkbox"/> CUSTOMER INSTALLABLE <input type="checkbox"/> ON-SITE <input type="checkbox"/> SERVICE CENTER <input type="checkbox"/> CHANNEL PARTNERS	AVAILABILITY: 31 <sup>st</sup> December 2012	
AUTHOR:	LCW	PRODUCT LINE: WC	
ADDITIONAL INFORMATION:			

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**Situation:**

The units with serial number above have configuration process issue. The min/max frequency in the sensor was configured wrongly and this will cause the unit detect wrong frequency range for the sensor or return user a wrong min/max frequency when queried. The impact is visible by the user in N1918A because the unit's frequency cannot be set or selected and it will create an error code “-222 data out of range”. If user uses SCPI mode, an error also will be generated but user might not aware.

**Solution/Action:**

Please follow the instruction below.

**Tools required :** NI Labview or Agilent IO and Agilent VEE run time

**USB Sensor frequency Range :**

- a) U2000A ( 10MHz – 18GHz)
- b) U2001A ( 10MHz – 6 GHz)
- c) U2002A ( 50MHz – 24GHz)
- d) U2004A ( 9kHz – 6GHz)

**Patch file :** The patch file will be in two languages, either Agilent VEE or NI LabView.

User can select either application.

**Procedure :** This document will contain two different procedures, (1.0) and (2.0).

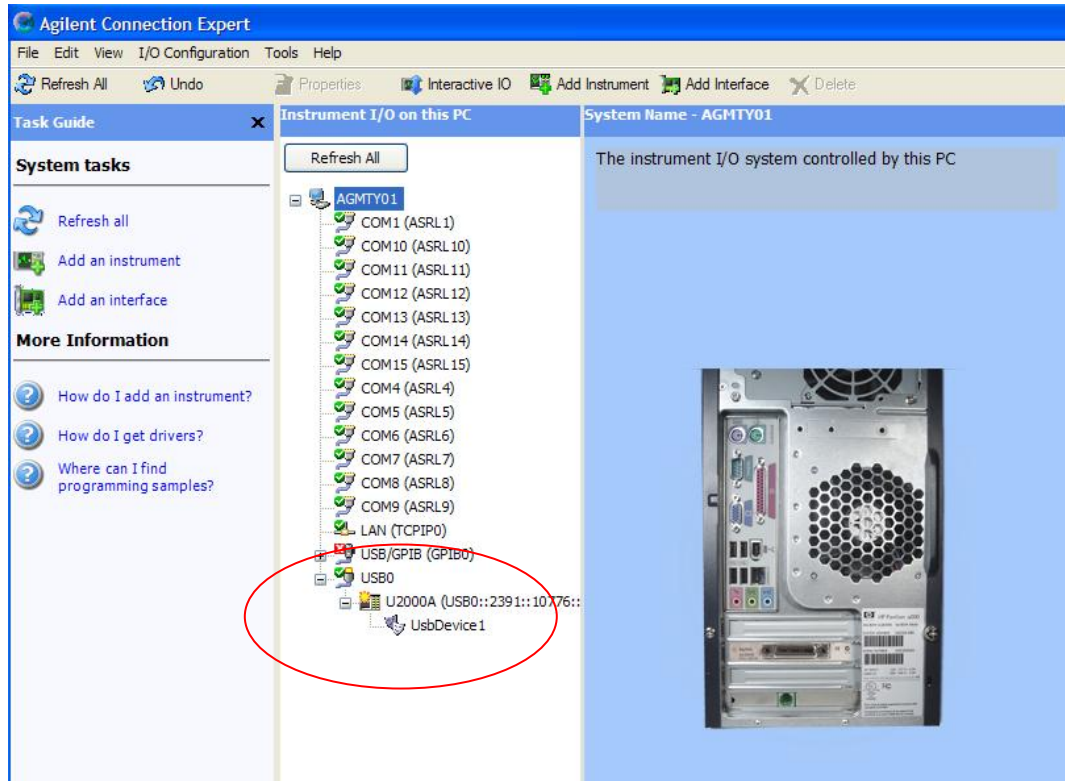
- a) 1st procedure (1.0) is the step by step instruction using Agilent VEE patch file
- b) 2nd procedure (2.0) is using NI Labview.

**1.0 Using Agilent Vee**

**System requirement :** Install the latest Agilent IO library and Agilent VEE run time or Agilent VEE.

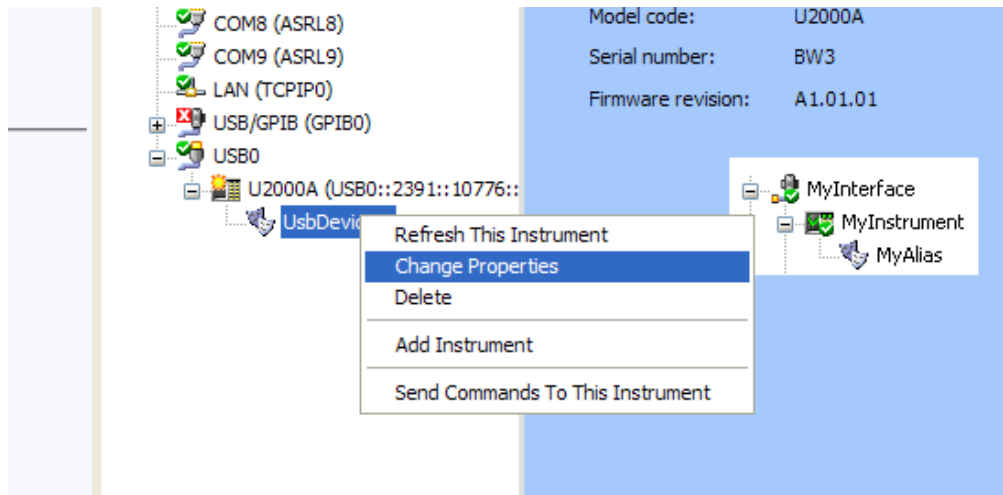
**1.1 Instruction**

- a. Please make sure you have installed:
  - i. Agilent IO library 14.2 or above.
  - ii. Agilent VEE runtime or Agilent VEE.
- b. Turn on Agilent Connection Expert
- c. Plug in your USB sensor to USB port (you may only connect one USB sensor at a time). Once you sensor is connected the USB port, you will be able to see your USB sensor is detected by “Agilent Connection Expert” (as shown in Picture 1).



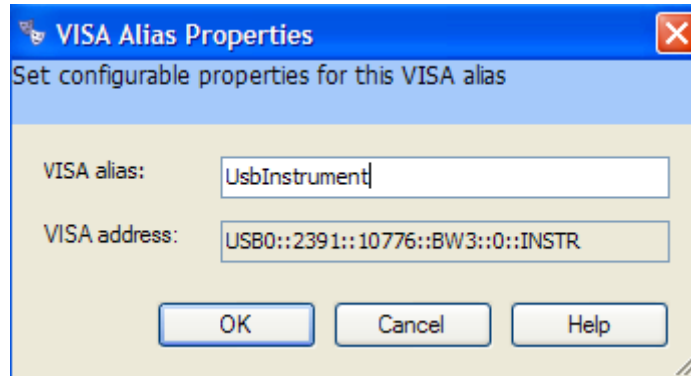
Picture 1

d. Change the properties of the sensor. Please select the “UsbDevice” and right click. Choose “Change Properties” (as shown in Picture 2).



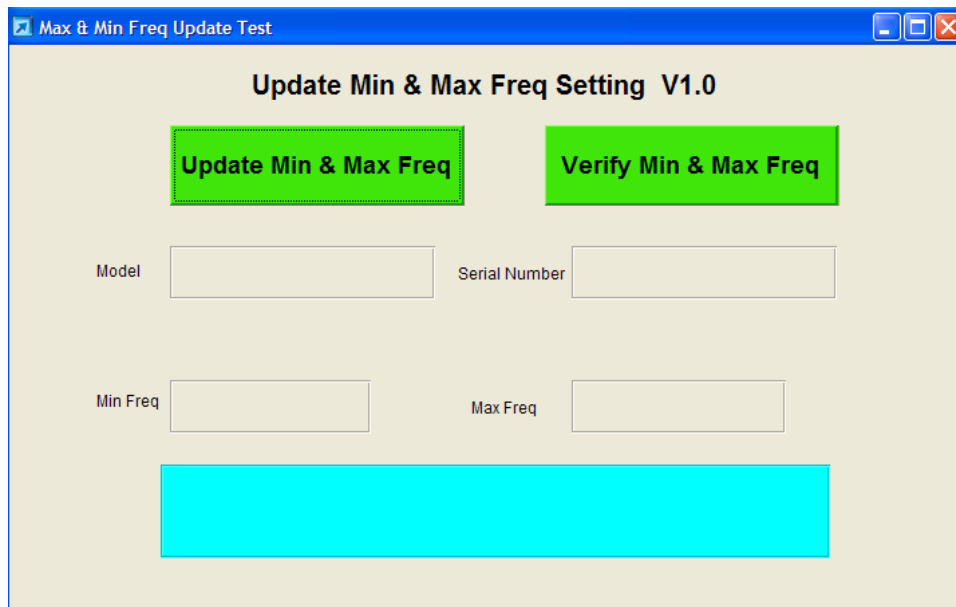
Picture 2

e. “Change Properties” message box will pop up and you are required to change the “VISA alias” from “UsbDevice” to “UsbInstrument” and click OK (as shown as Picture 3).



**Picture 3**

f. Once you have completed the steps above, execute the Agilent Vee patch file named “Max & Min Freq Update Test.vxe”. You will see the screen shot as in Picture 4.

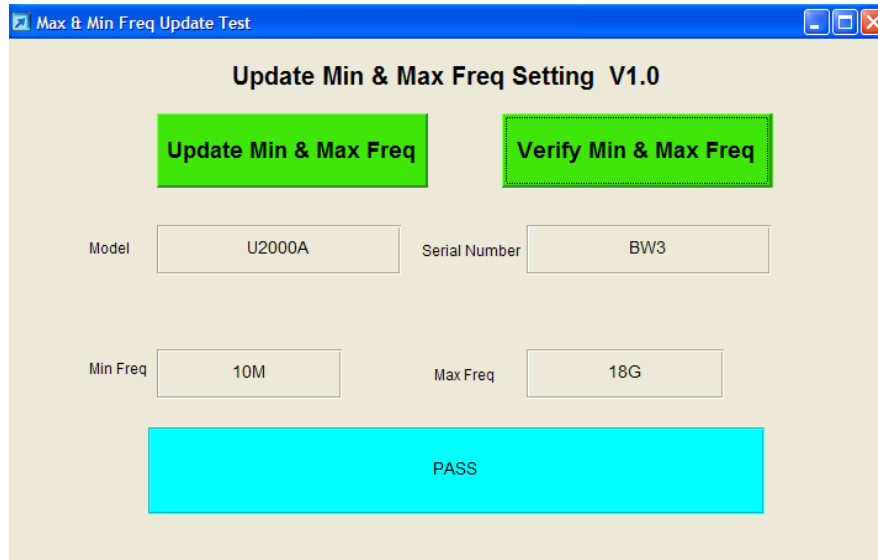


**Picture 4**

g. This patch file consists of 2 functions which will allow user to update and/or verify the Min and Max Frequency.

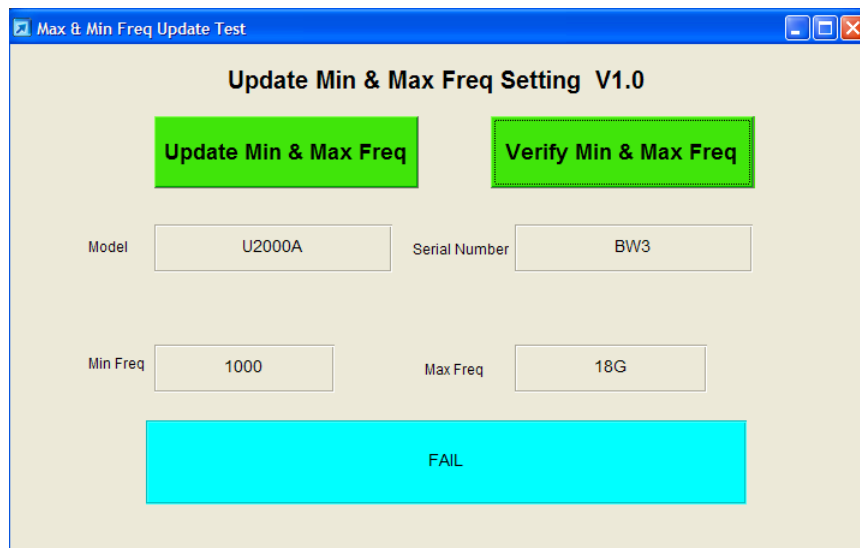
h. When you click on “Verify Min & Max Freq”, the program will read the model and serial number of the sensor and shows the Min and Max Frequency stored in EPROM.

If the Min or/and Max frequency is correct, the status will show as “PASS” (see Picture 5).



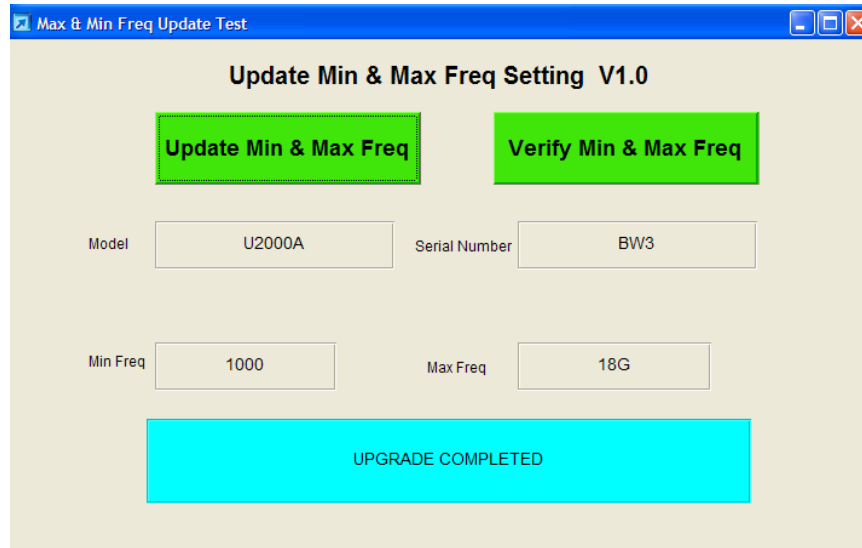
Picture 5

If status the Min or/and Max frequency is wrong, the status will show as “FAIL” (see Picture 6).



Picture 6

i. If the unit fails the verification test, as in Picture 6, click on the “Update Min & Max Freq” button to update the correct frequency into USB sensor. Once the update is completed, it will show “UPGRADE COMPLETED” in the status bar. Please refer to Picture 7.



Picture 7

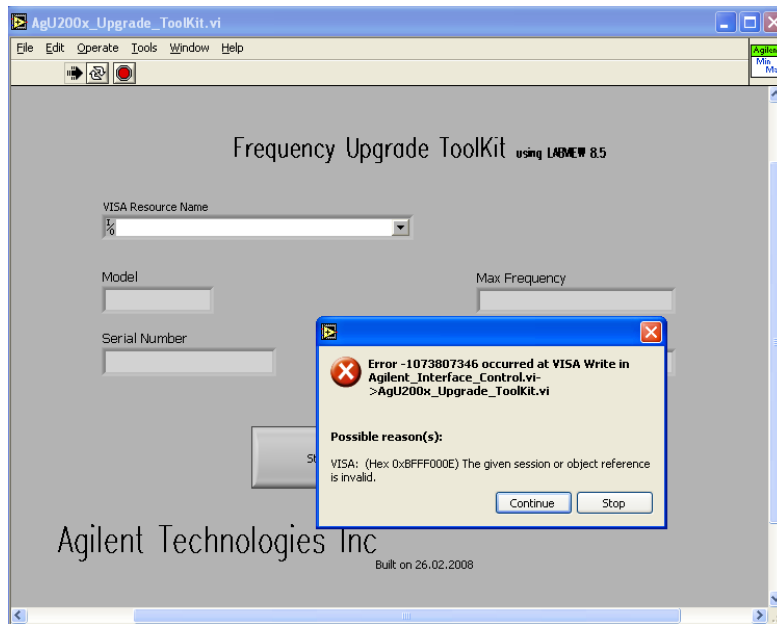
j. If you have more than one sensor, you are required to close the program and repeat steps (a) to (i) for the next sensor.

## 2.0 Using NI Labview

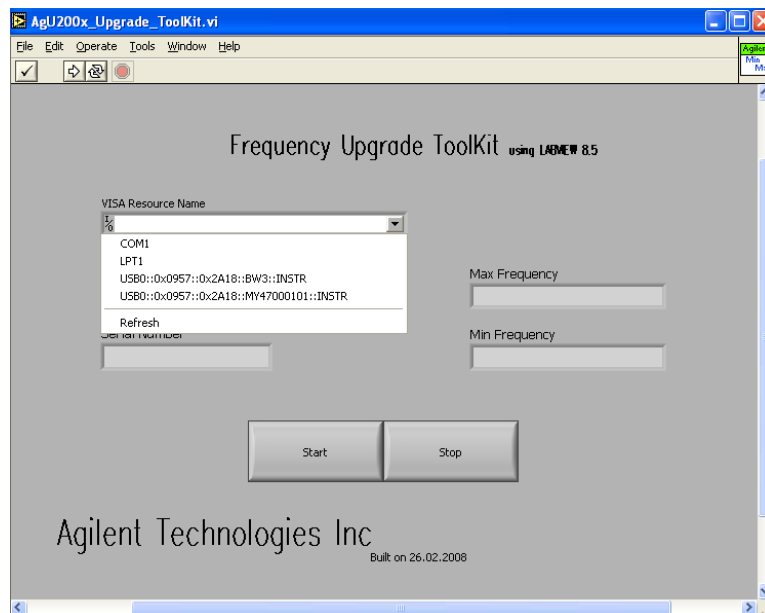
**System requirement :** Installed NI Labview 8.0 or above

### 2.1 Instruction

- a. Please ensure NI Labview 8.0 or above is installed in your PC.
- b. Plug in your USB sensor to the USB port (you may plug in 2 sensors at same time). Execute “AgU200x\_Upgrade\_ToolKit.exe”. An error message might be popped out as in Picture 8. Click “STOP” to ignore it as the USB sensor is not selected.
- c. Click on the drop down list at “VISA Resource Name”. You will be able to see the list of USB sensors that are connected to your PC. (as shown in Picture 9)

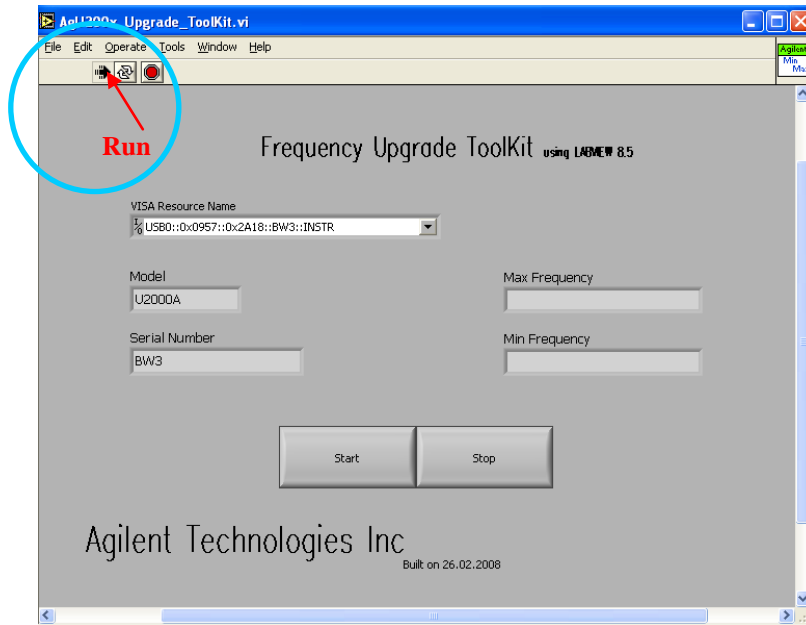


Picture 8



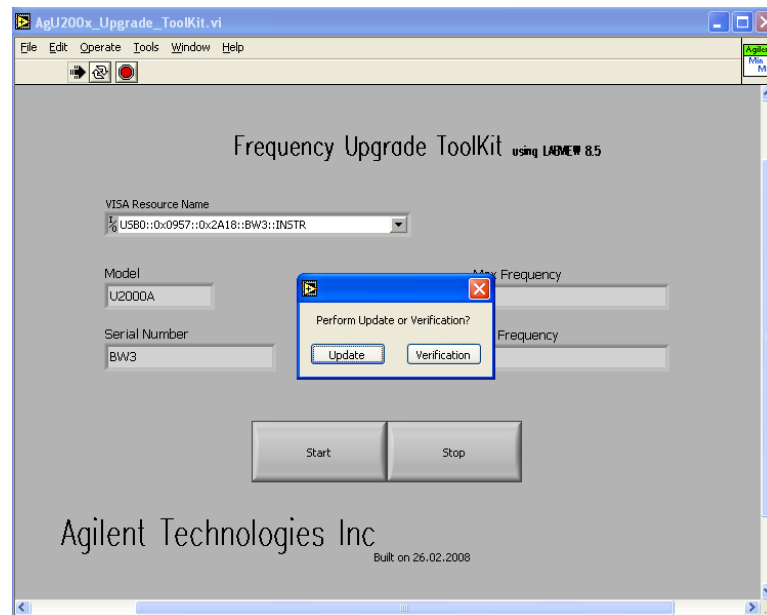
Picture 9

- d. Select a USB sensor and click “Run” (see Picture 10).
- e. You will see the Model and Serial Number of sensor that you have connected.



Picture 10

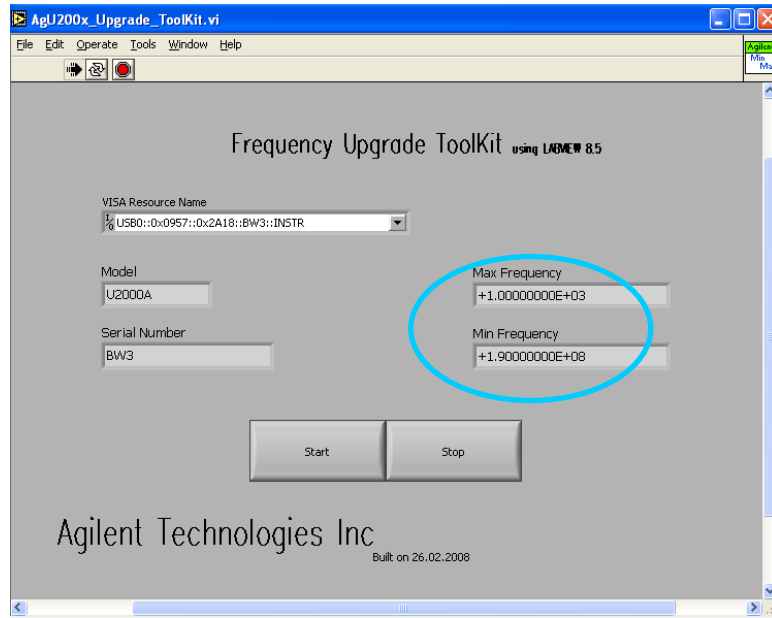
- f. Click on “Start”, a message box will be popped up for you to select for “Update” or “Verification” of the sensor (refer Picture 11).



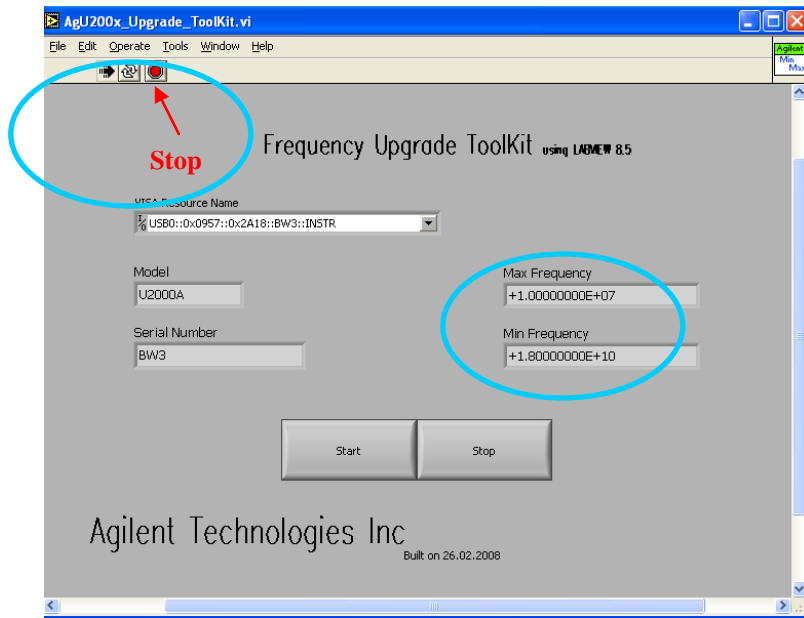
Picture 11

- g. If you choose “Verification”, you may find that the Min and Max Frequency is burn in wrongly (as shown in Picture 12). You are required to click on “Start” again and choose “Update”. After update, click on “Start”, then “Verification” again to ensure the Min and Max frequency is burn in correctly (as in Picture 13).





Picture 12



Picture 13

h. You are required to “Stop” the program, disconnect the USB sensor(s), connect new sensor(s) and repeat steps (d) to (g) for new sensor(s). If you have previously connected two sensors to the PC, you are required to allow the update/ verification to finish for both sensors before continuing with a new sensor.