

# 2050/60 X-Series and U2049XA Power Sensor Firmware Upgrade Process

Updated June 1, 2021

# Hardware/Software Requirements

- The current hardware requirements for this firmware upgrade are:
  - (a) A PC running Windows 7® or Windows 10®
  - , (b) An USB 2.0 or LAN interface
- The current software requirements for this firmware upgrade are:
  - (a) A VISA library (e.g. Keysight IO Libraries).
  - (b) The 2050/60 X-Series and U2049XA Firmware Files for your power sensor.
  - (c) The 2050/60 X-Series and U2049XA Firmware Upgrade Application (FwUpdateApp.exe).

**Note: This procedure has not been tested on other versions of Windows.**


# Obtaining The Software


- The latest version of the Keysight IO Libraries can be obtained from the following link:  
[Keysight IO Libraries](#)
- The 2050/60 X-Series and U2049XA Firmware Upgrade Application and firmware can be obtained from the following link:  
[www.keysight.com/find/pm\\_firmware](http://www.keysight.com/find/pm_firmware)
- Save the file to PC hard drive
- **Note: This is a WinZip® executable file that must be unpacked before use.**
- The 2050/60 X-series and U2049XA Firmware Upgrade Application is included in the WinZip® executable file (“/util/FwUpdateApp.exe”)

# Firmware Upgrade Process


For U2049XA sensor:

Unit	Action		Method
A.03.01 and above	↑ upgrade/↓ downgrade to	Any of A.03.01 or above	Go to Method A.
A.02.07 and below	↑ upgrade to	A.03.01 or above	Go to Method A.
A.03.01 and above	↓ downgrade to	A.02.07	Go to Method A.
A.03.01 and above	↓ downgrade to	A.02.06 or below	Go to Method B

Method A: Go to page link: 

Method B: Go to page link: 

For U/L2050/60 X-Series sensor, go to Method C.

Method C: Go to page link: 

# Firmware Upgrade Process (Method A)

## Step A1:

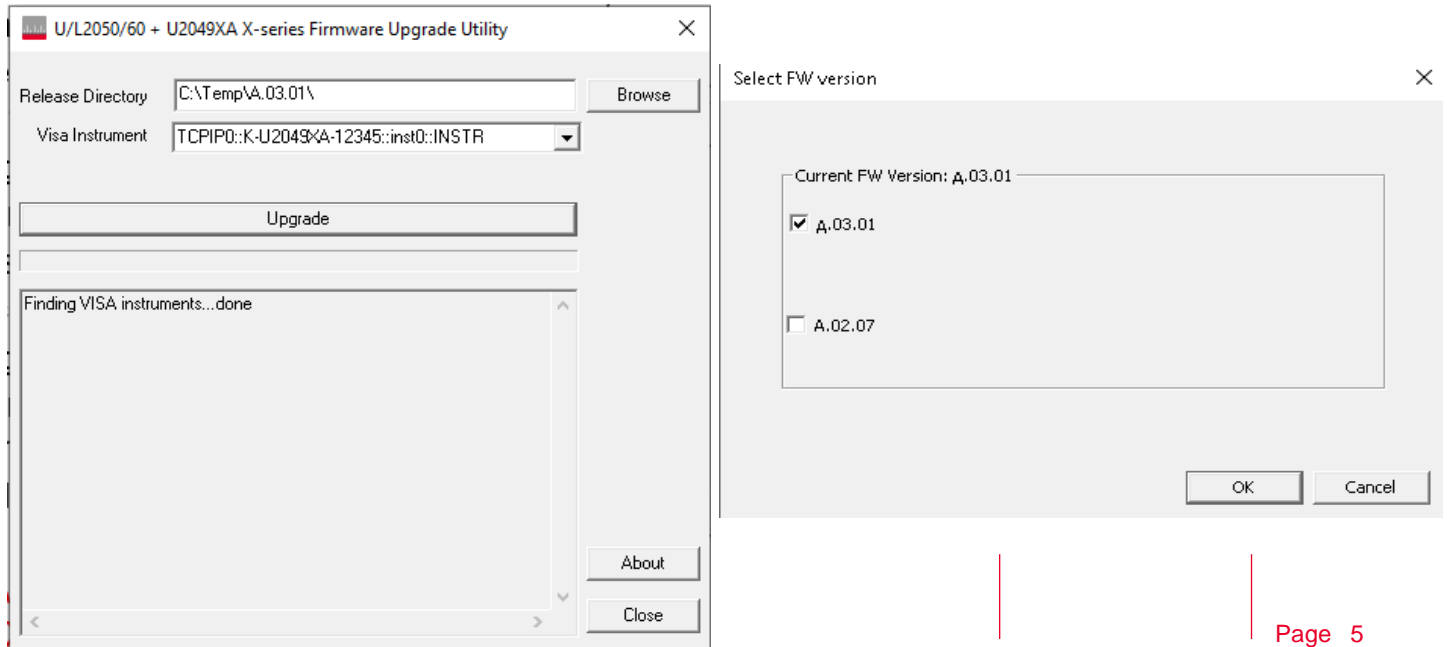
Using the latest Firmware Upgrade Utility ('FwUpdateApp.exe') from the latest firmware package (ZIP file), in 'util' folder.

Select desired directory in which the firmware files reside and Visa Instrument

Click on the 'Upgrade' button.

Select 'v' on the pop-up dialog box for your desired firmware version.

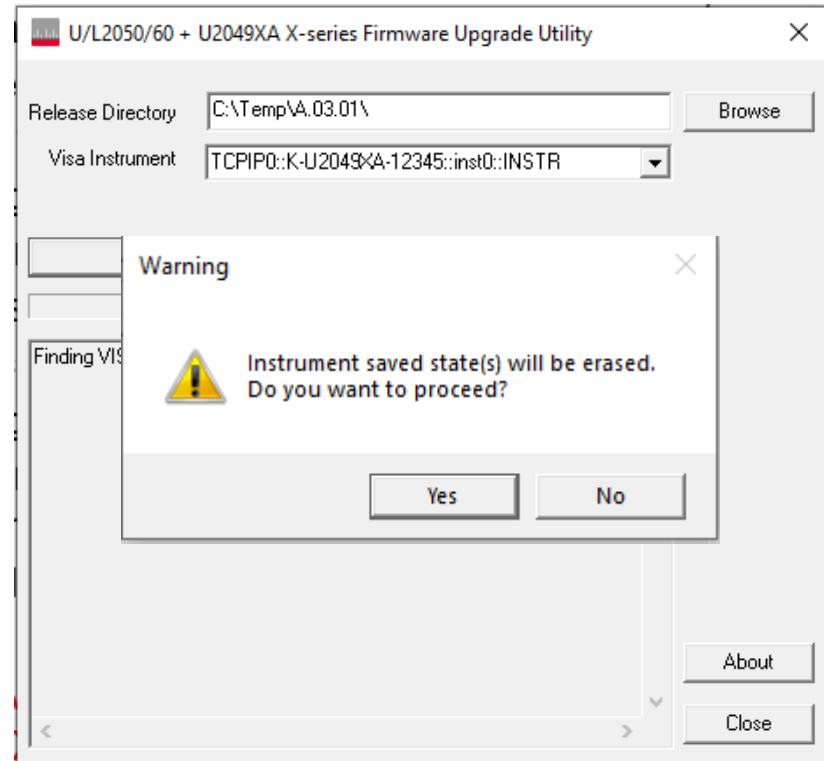
Note: For A.02.07 upgrade to A.03.01 or above, A.02.07 will be grey out.



# Firmware Upgrade Process (Method A)

## Step A2:

Click 'Yes' on the warning pop-up when asked about instrument saved states.



# Firmware Upgrade Process (Method A)

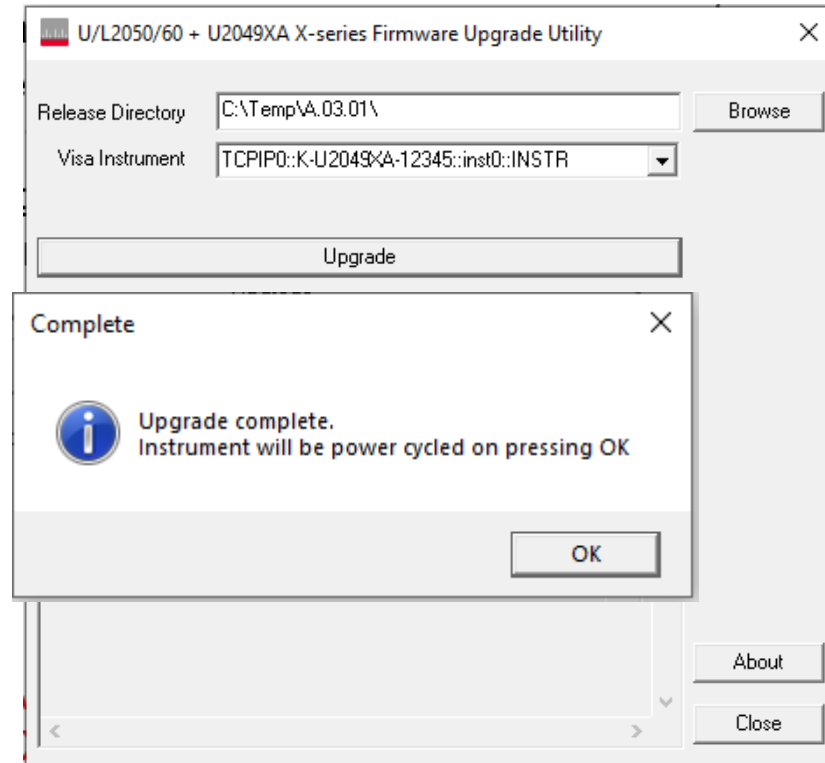
## Step A3:

Click 'OK' on the pop-up that appears when the upgrade is complete.

The power sensor will take less than 3 minutes to complete the upgrade.

Now, the power sensor will automatically execute a power cycle.

**NOTE: When you downgrade from A.03.01 or above to A.02.07, it will take longer, around 5 minutes.**



You have successfully upgraded the new firmware!

# Firmware Upgrade Process (Method B)

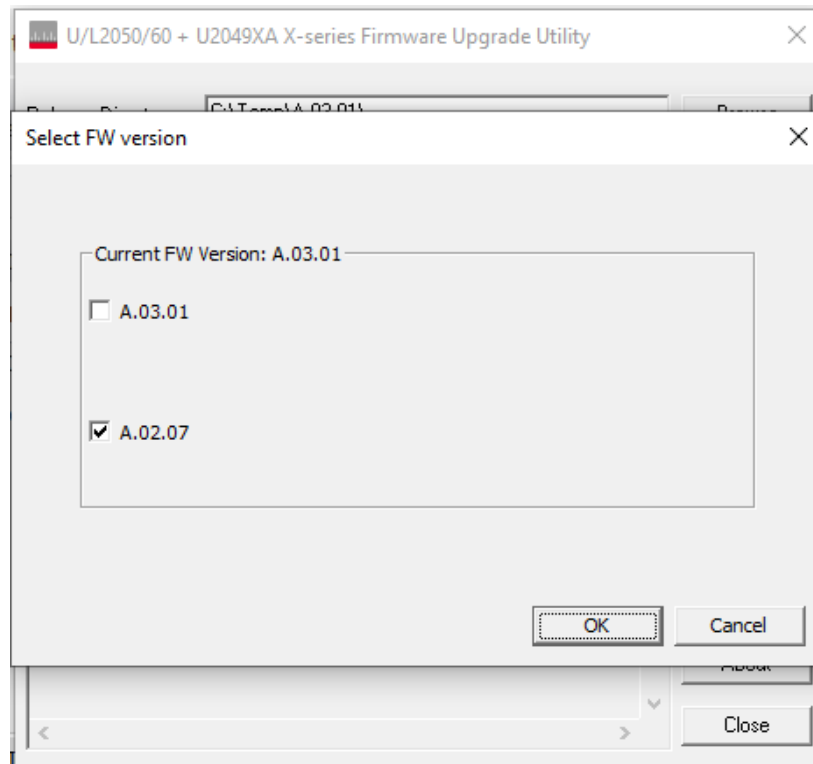
## Step B1:

Using the latest Firmware Upgrade Utility ('FwUpdateApp.exe') from the latest firmware package (ZIP file), in 'util' folder.

Select desired directory in which the latest firmware files reside and Visa Instrument

Click on the 'Upgrade' button.

Select 'v' A.02.07.

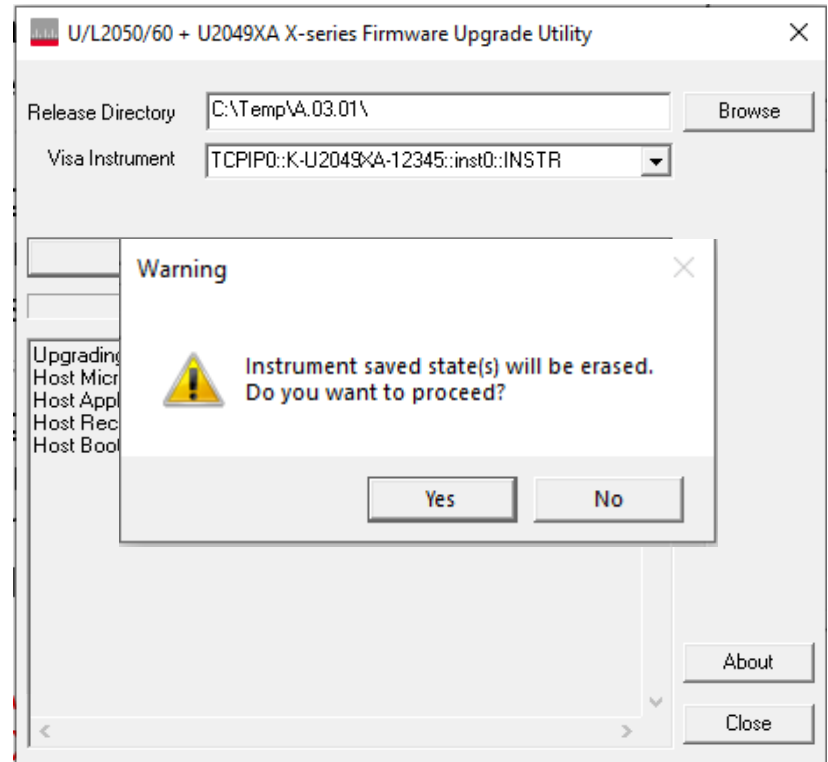




# Firmware Upgrade Process (Method B)

## Step B2:

Click 'Yes' on the warning pop-up when asked about instrument saved states.



# Firmware Upgrade Process (Method B)

## Step B3:

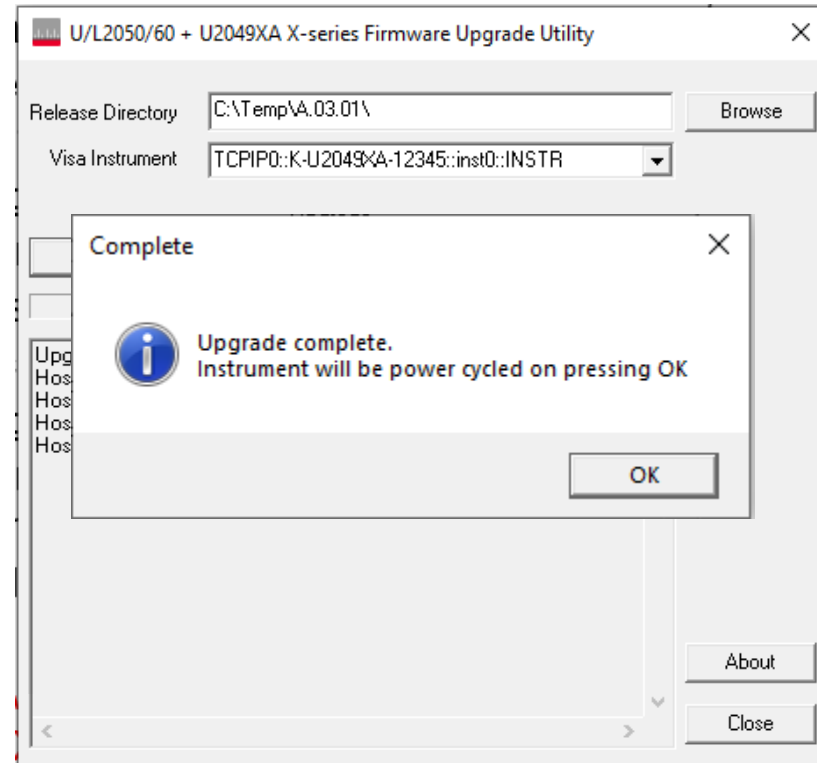
Click 'OK' on the pop-up that appears

when the upgrade is complete.

The power sensor will take **around 5 minutes** to complete the upgrade.

Now you have downgraded to A.02.07. You will only be able to downgrade to lower version from A.02.07.

Close the Firmware Upgrade Utility window. Then open the Firmware Upgrade Utility from A.02.07 or below firmware package (ZIP file)



# Firmware Upgrade Process (Method B)

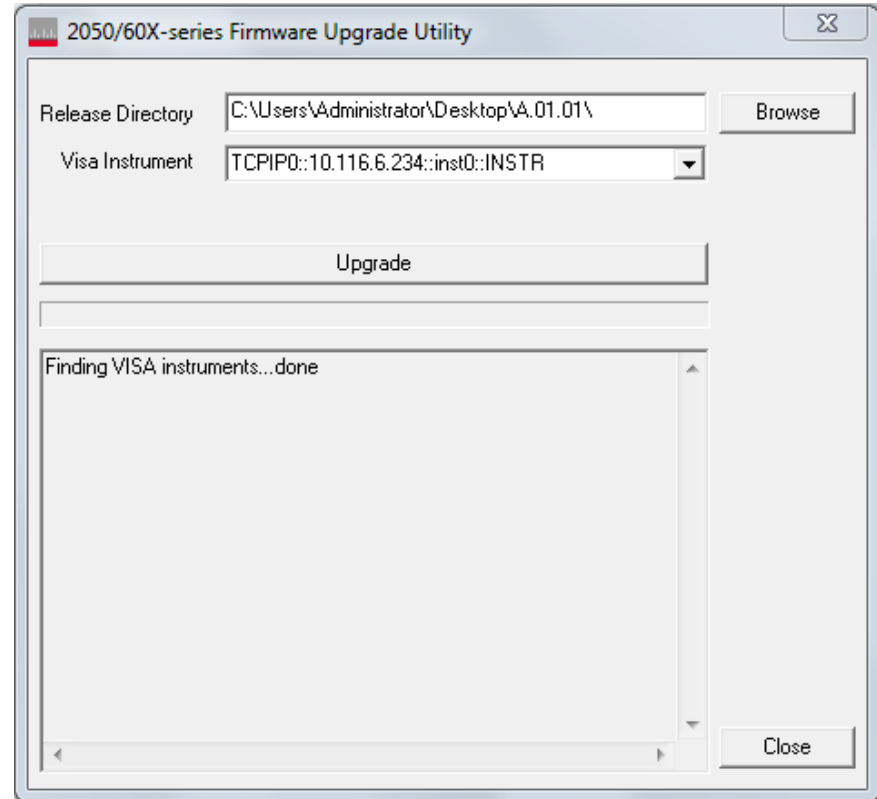
## Step B4:

Use the Firmware Upgrade Utility from A.02.07 or below to downgrade to your desired firmware.

Click on the 'Browse' button next to 'Release Directory', and select the directory in which the firmware files reside.

Click on the drop-down arrow next to 'VISA Instrument', and select the unit to be upgraded.

**Note: Make sure the U2049XA power sensor is connected to the USB port and detected by IO Libraries**

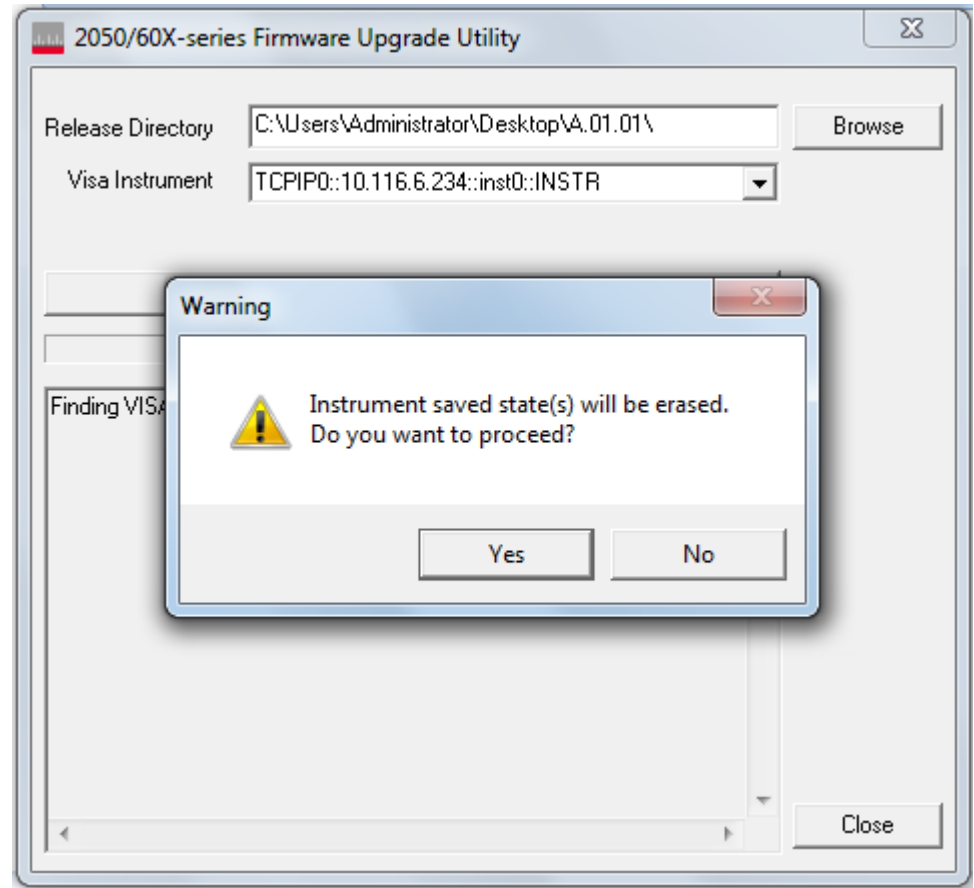


# Firmware Upgrade Process (Method B)

## Step B5:

Click on the 'Upgrade' button.

Click 'Yes' on the warning pop-up when asked about instrument saved states.



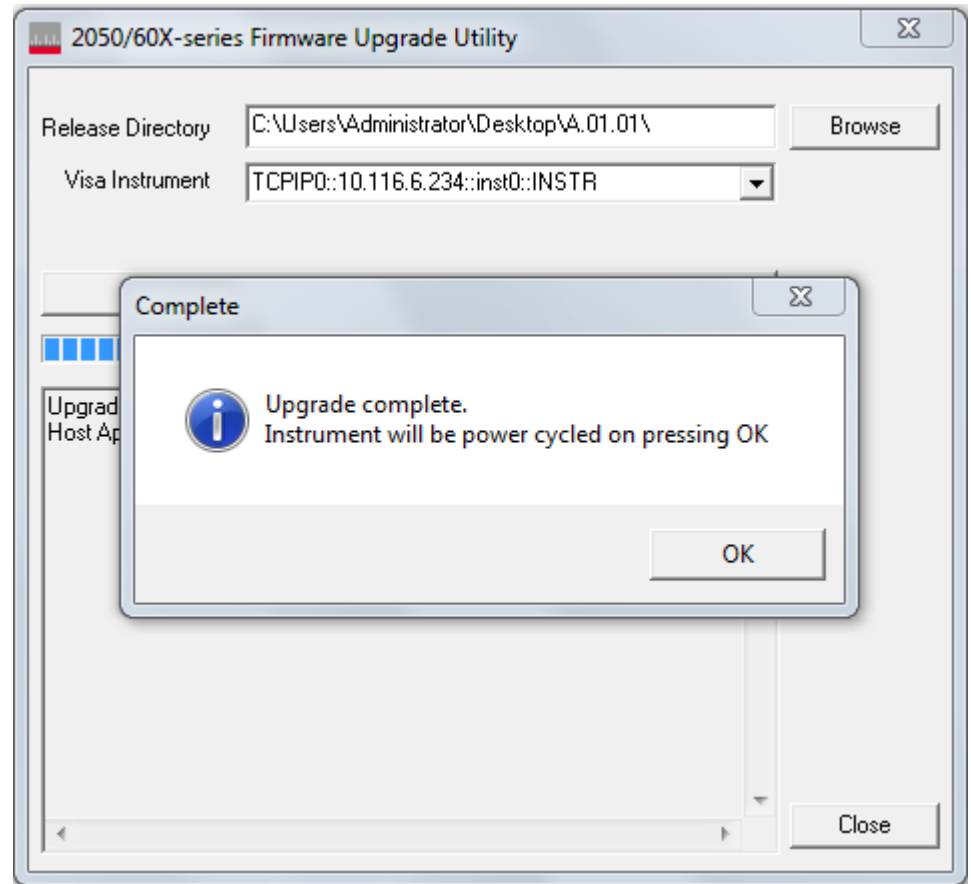
# Firmware Upgrade Process (Method B)

## Step B6:

Click 'OK' on the pop-up that appears when the upgrade is complete.

The power sensor will take less than 3 minutes to complete the upgrade.

Now, the power sensor will automatically execute a power cycle.



You have successfully downgraded the firmware!

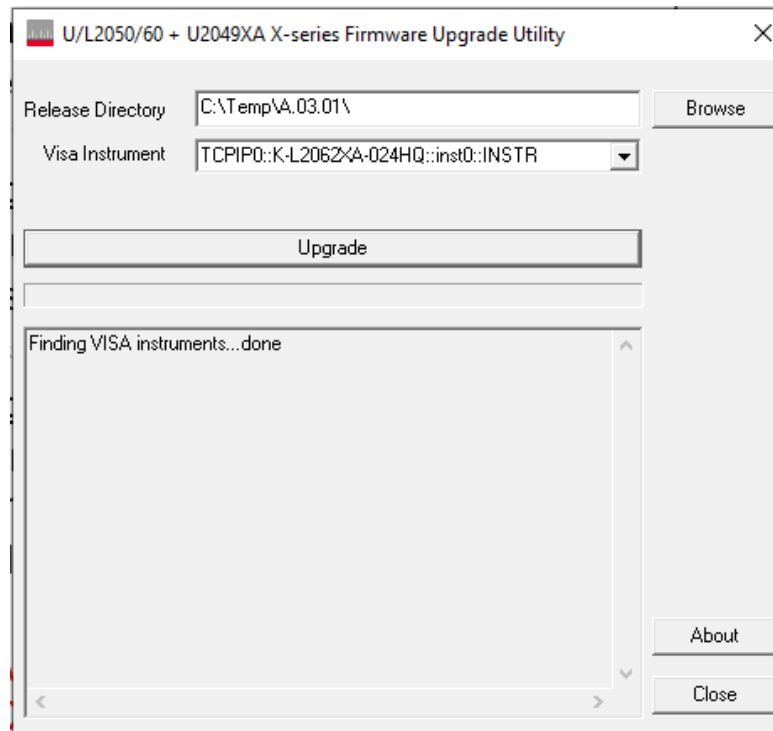
# Firmware Upgrade Process (Method C)

## Step C1:

Using the latest Firmware Upgrade Utility ('FwUpdateApp.exe') from the latest firmware package (ZIP file), in 'util' folder.

Select desired directory in which the firmware files reside and Visa Instrument

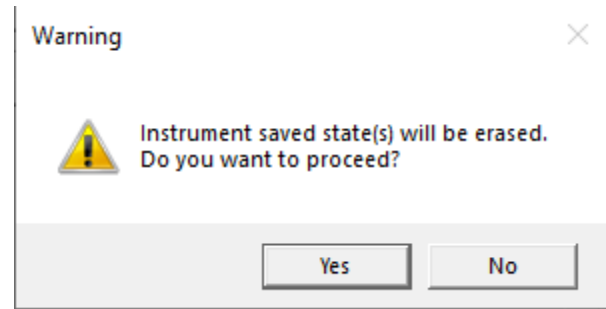
Click on the 'Upgrade' button.



# Firmware Upgrade Process (Method C)

## Step C2:

Click 'Yes' on the warning pop-up when asked about instrument saved states.



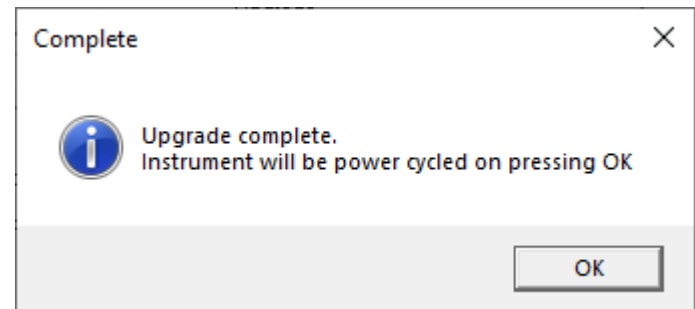
# Firmware Upgrade Process (Method C)

## Step C3:

Click 'OK' on the pop-up that appears when the upgrade is complete.

The power sensor will take less than 3 minutes to complete the upgrade.

Now, the power sensor will automatically execute a power cycle.



You have successfully upgraded the new firmware!