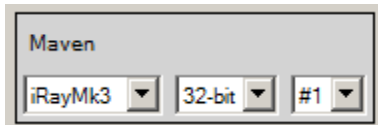


iRay 1717M2.5

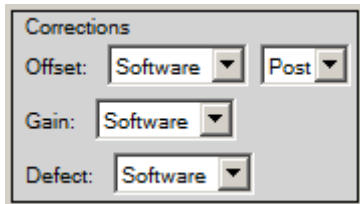
Configuration Introduction

1. Verifying Opal or Ultra configuration

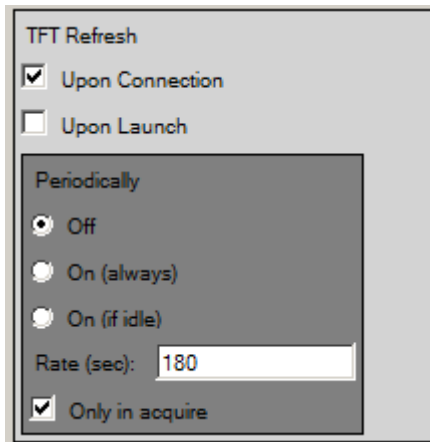
- a. Opal
 - Verify 2.4.0.7 or higher is installed.
 - Verify Venu_2011 Driver pack is installed.
 - Verify Use new venu Driver is selected in the Developers tab.
- b. Ultra
 - Verify 3.2.0.36 or higher is installed.
 - Verify Venu_2011 Driver pack is installed.
- c. Opal / Ultra Device configuration Tab.
- d. The iRay 1717M2.5 requires the iRayMk3 Maven Driver pack selection.



- e. The 1717M2.5 supports software selection for Offset , gain , and Defect . It also requires the Post offset selection.



- f. TFT refresh settings are: Upon Connection Checked , Periodically Off , Only in acquire checked. (These settings cause the panel to capture and discard a dark image , clearing the TFT.)



- g. Passive / Inner trigger X-Ray Synchronization Configuration.

X-Ray Synchronization
 Mode: **Passive**
 Integration Unit
 Port:
 Exposure Window (msec): **30000**
 Read-Out Delay (msec): **10**

- h. Integrated / Bucky controlled configuration.
 (Note this configuration requires additional hardware components.)

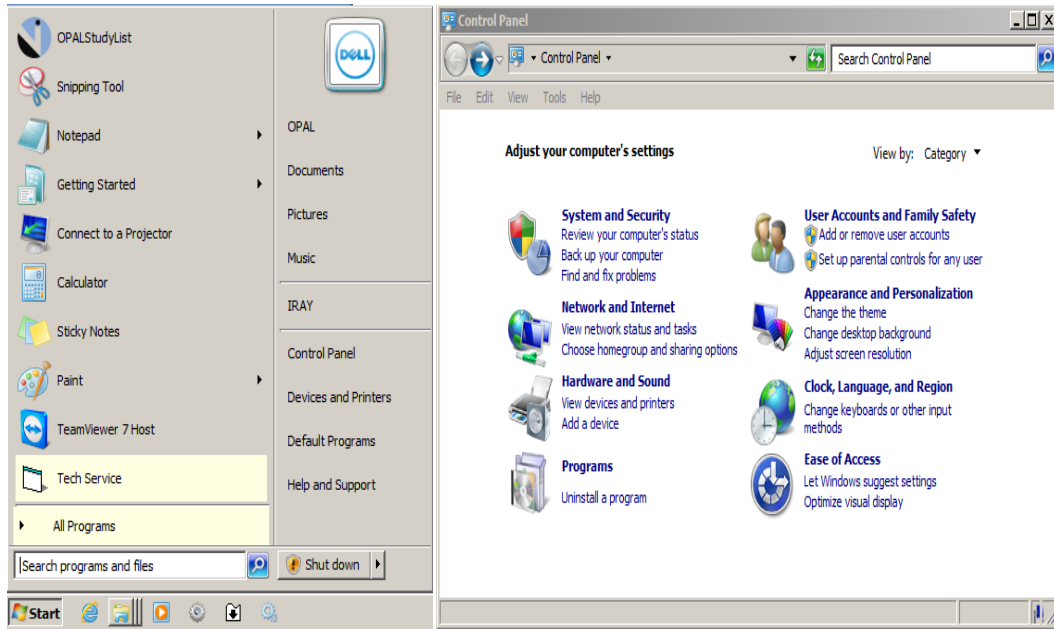
X-Ray Synchronization
 Mode: **Bucky**
 Integration Unit
 Port: **COM3**
 Exposure Window (msec): **1000**
 Read-Out Delay (msec): **10**

- i. Network interface configuration section is for dual panel support. For all single panel configurations, it should be configured as follows.

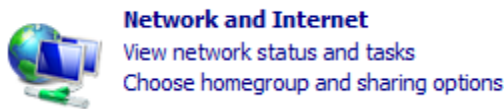
Network Interface
 Local IP: **192.168.8.188**
 Local Port: **28000**
 Panel IP: **192.168.8.8**
 Connection: **None**
 Wired Adapter
-DISABLED-
 Manage
 WiFi Adapter
-DISABLED-
 Manage
 WiFi SSID: **iray-ap-ssid**
 WiFi Key: **12345678**

2. Verifying IP address configuration

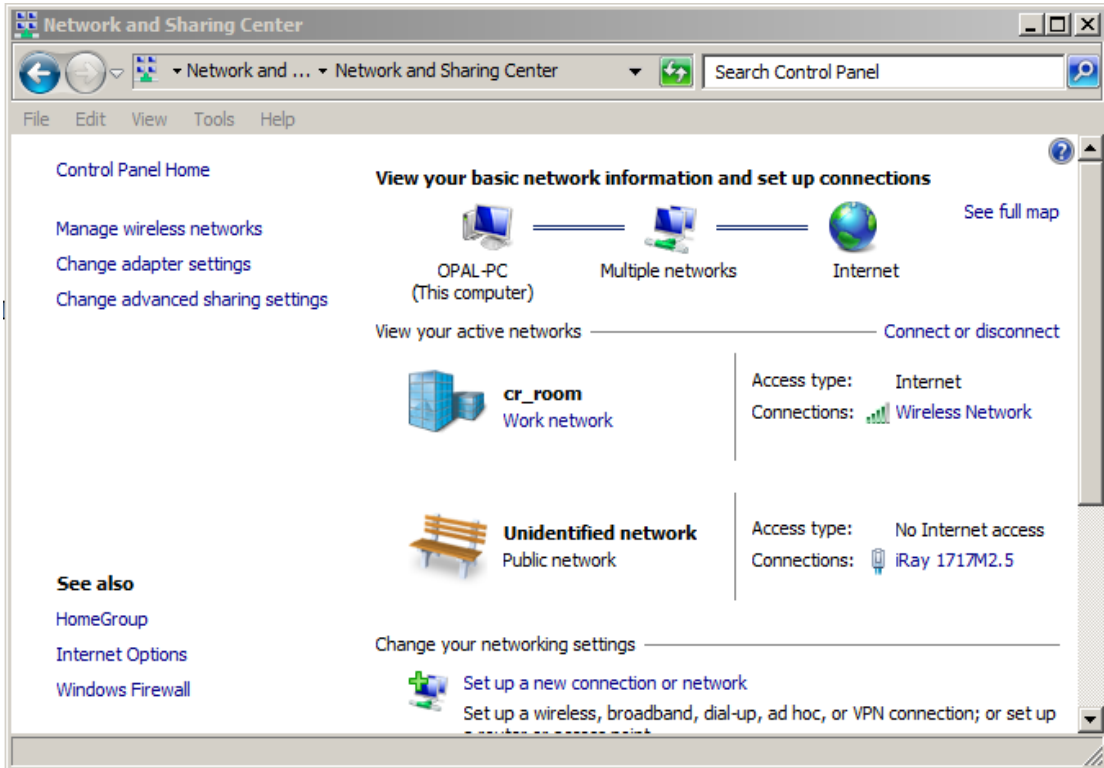
- a. The iRay 1717M2.5 Flat panel Detector requires the network adapter used to connect to the panel to be configured to the IP address of 192.168.8.188 .
- b. Left Click “ Start” > Left click “control panel” >



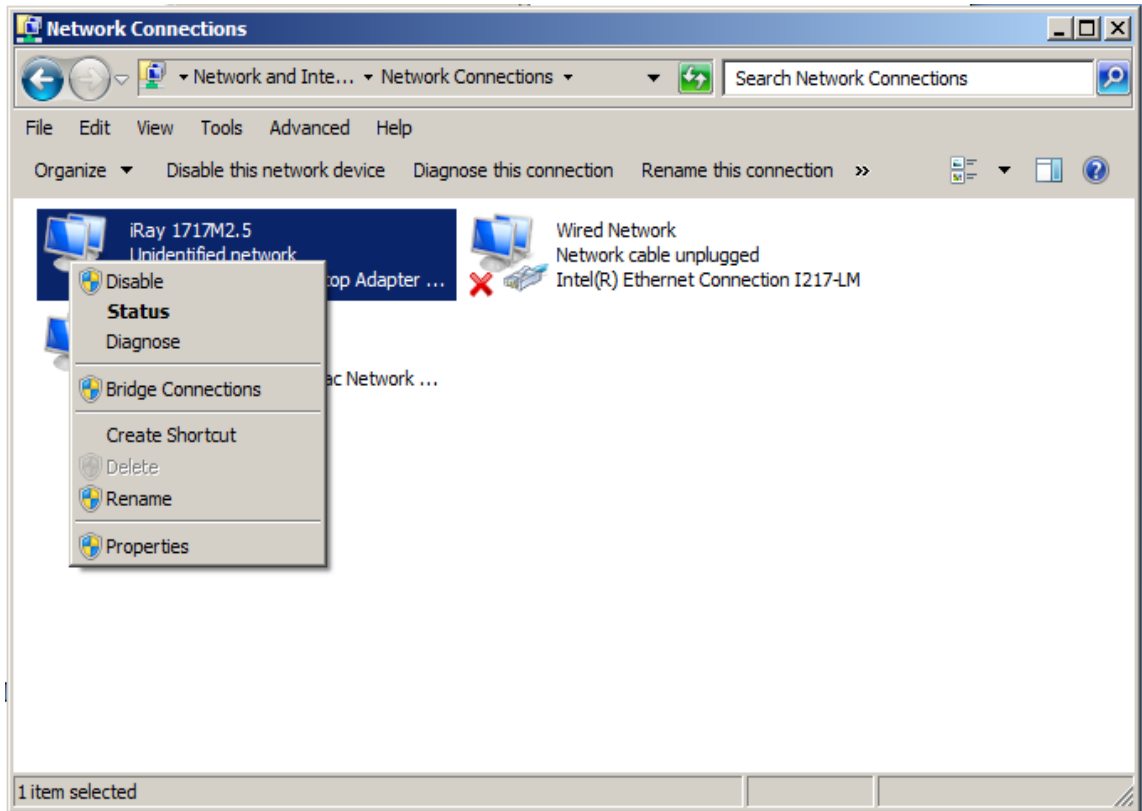
c. Left click “view network status and tasks.”



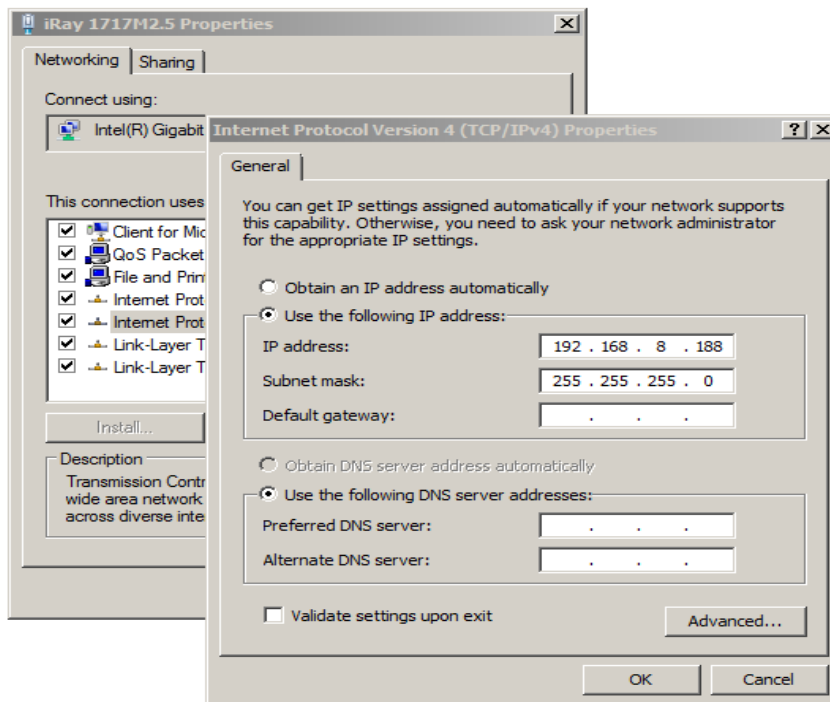
d. Left click “Change adapter Settings.”



e. Right click the network adapter connected to the FPD > Left click properties (note: The recommended network adapter to be used for the iRay 1717M2.5 FPD is the Intel Gigabit CT)

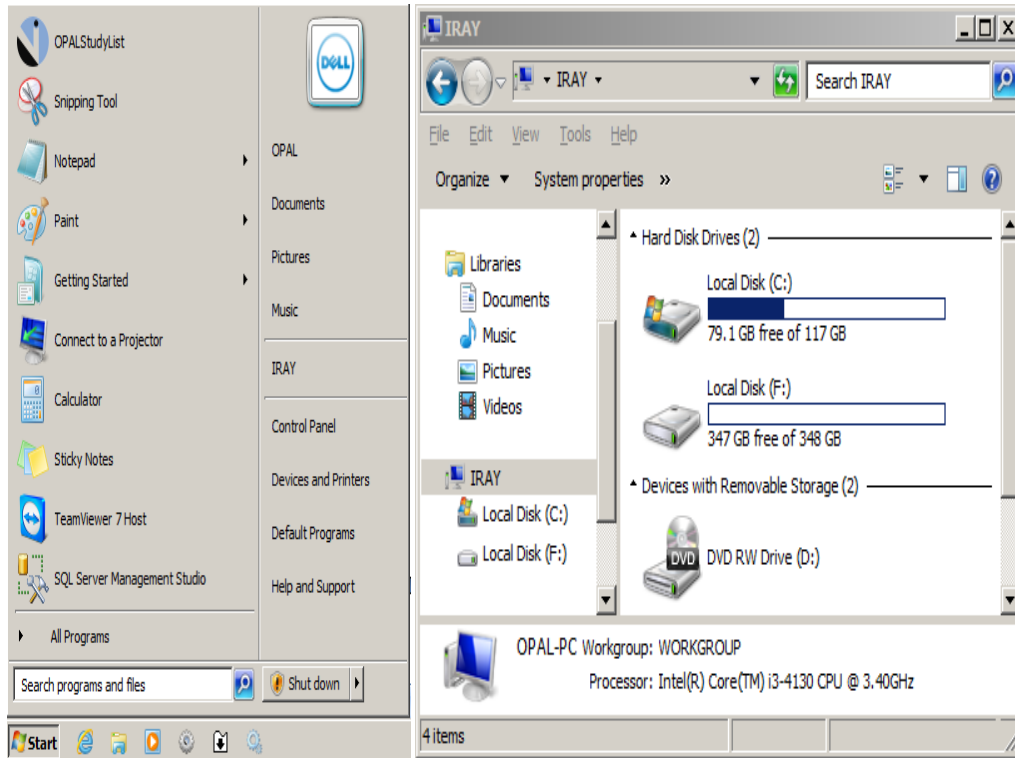


f. Left click to Highlight “Internet protocol version 4 (TCP/IPV4)” > left click “Properties.”



3. Configuration and Calibration Utility IDemo 2.0.0.5

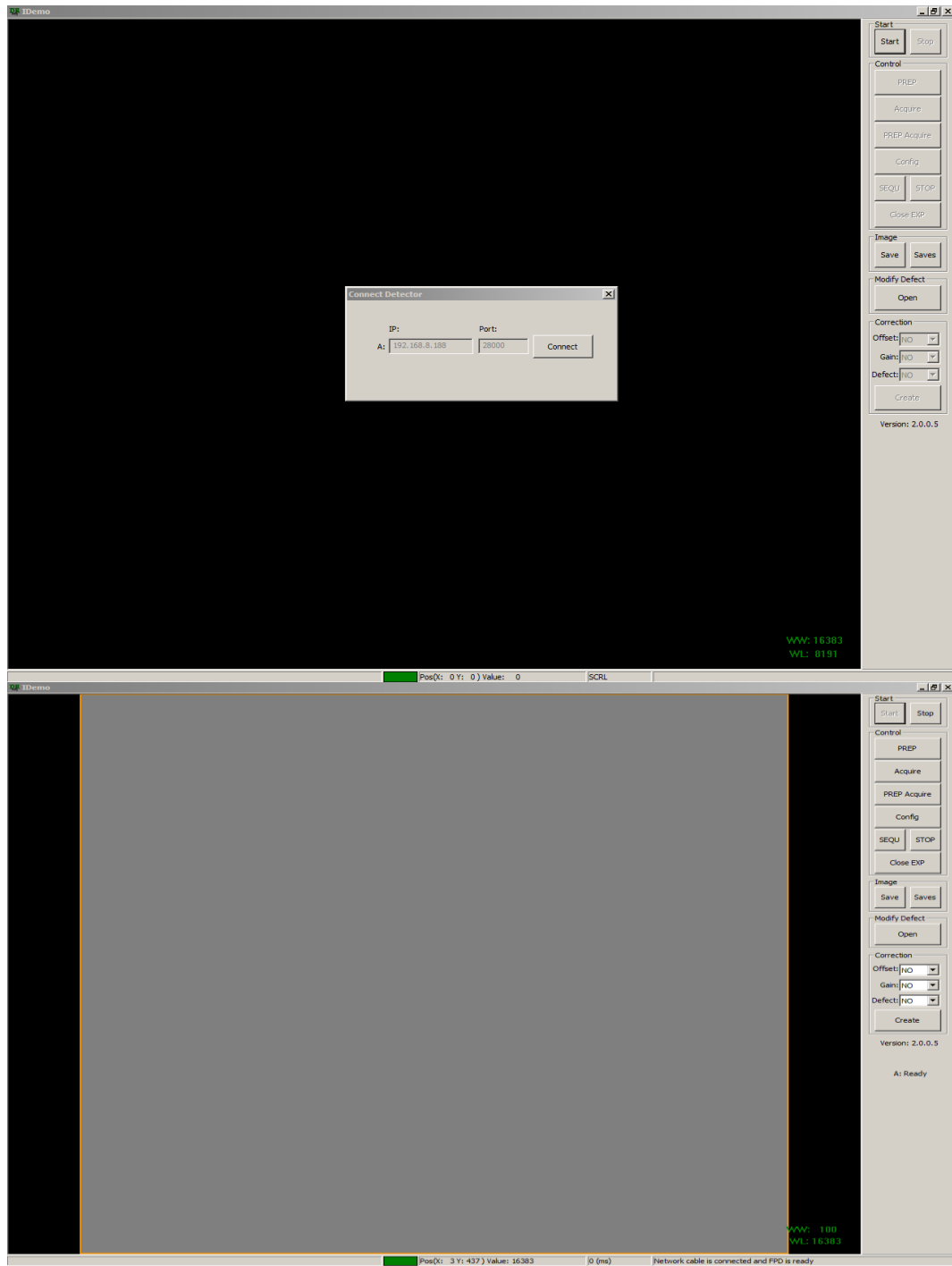
- a. Begin configuration and calibration is done via the Idemo Utility .
- b. Click Start > left click iRay (My computer Icon) > double click “Local Disk (C:)” > Use windows explorer to Browse to C:\Opal\Plugins 32\iRayMK3\



c. Double click IDemo_Interface



d. Select Start > Connect .



e. Select Config.



f. Standard configuration for Calibration are:

Trigger: Inner

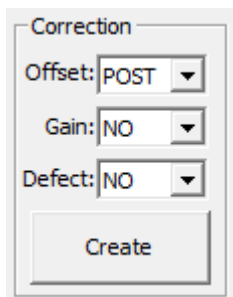
Exp Window: 30000

After those configurations have been verified or changed, left click “Write (ROM)” > left click **Exit**.

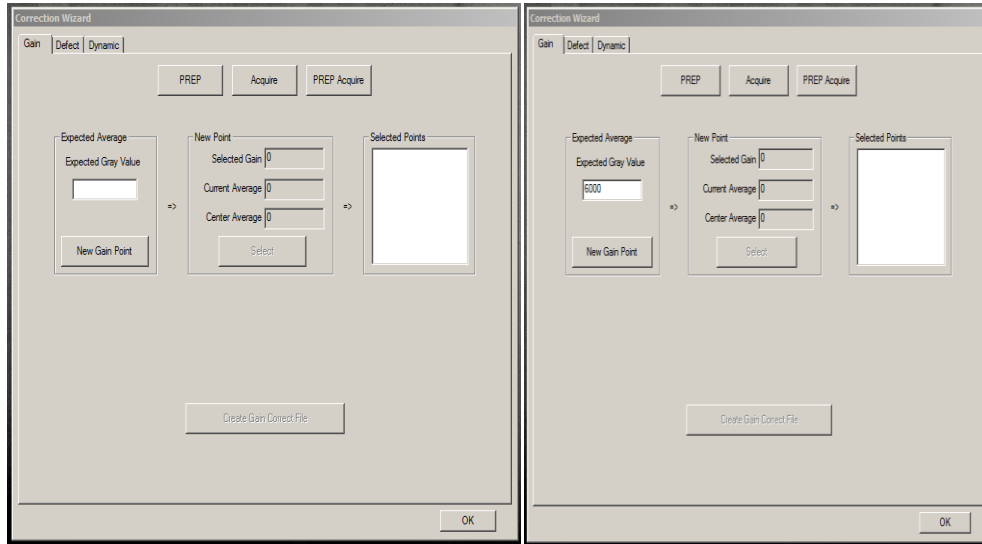
g. Remove all objects from field of view including the grid and bucky cover > Set SID to 60” > align panel to tubehead > open collimator to ensure full panel coverage.

(NOTE: If using an integrated generator, it must be configured to make exposure in Direct Mode. Run the manufacturers software parallel to IDemo to control the generator settings, or adjust KV and MAS from the generators console.)

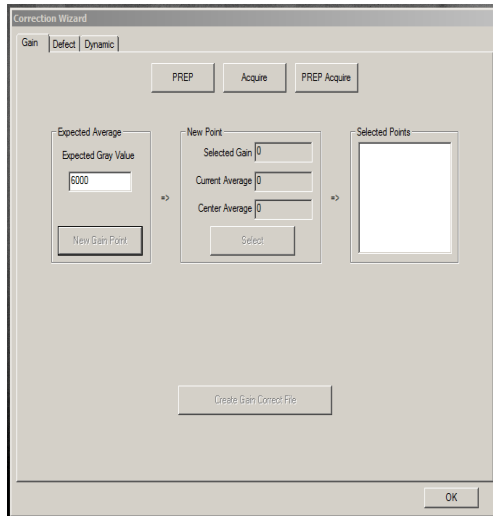
h. Turn on post offset using the offset dropdown on the bottom right hand corner. Click **Create** to start the calibration.



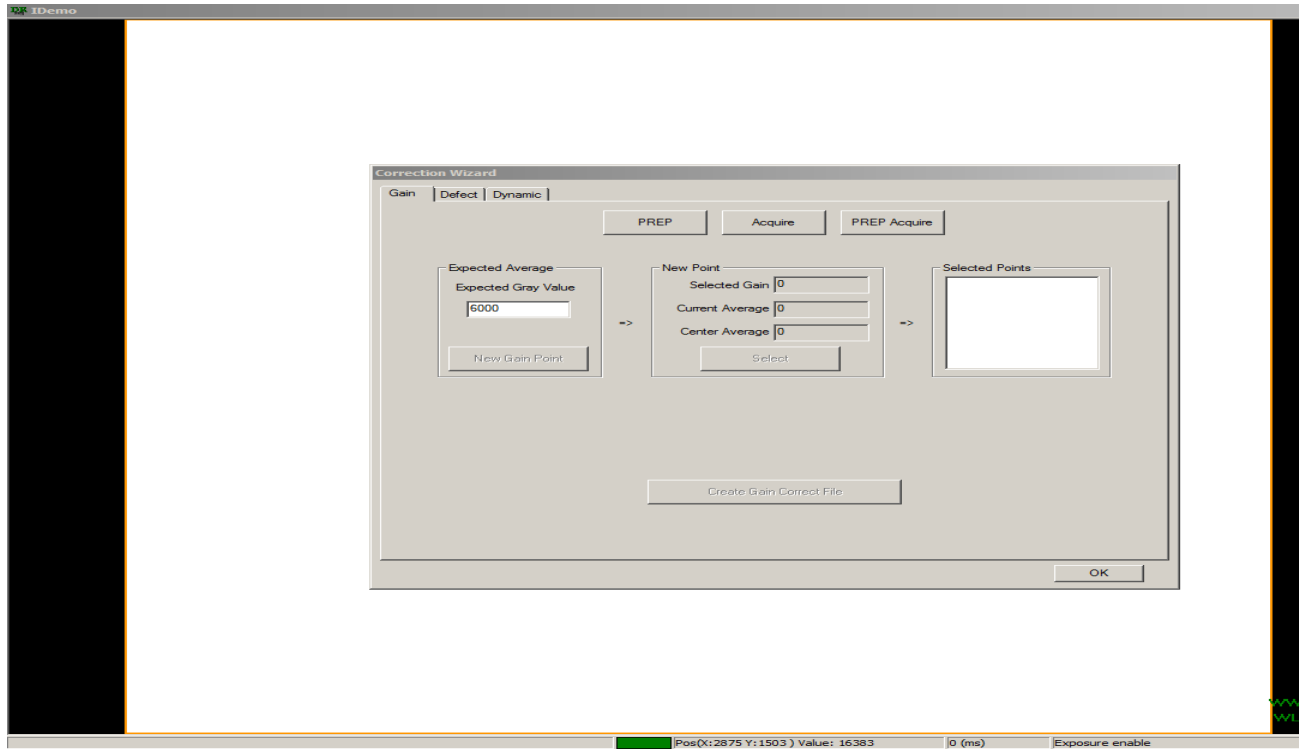
- i. Type 6000 in the expected gray value field and click new gain point.
Estimated exposure level for the 6000GV target is 72kv 4.0mas



- j. Select **PREP**..



Watch for the “Exposure enabled” status in the panel activity section of IDemo.



Make an exposure. The Panel activity section states the following commands image getting... (delay time:x) , exposure prohibit (post offset) , exposure enable (post offset), got image , then the center average values populates.

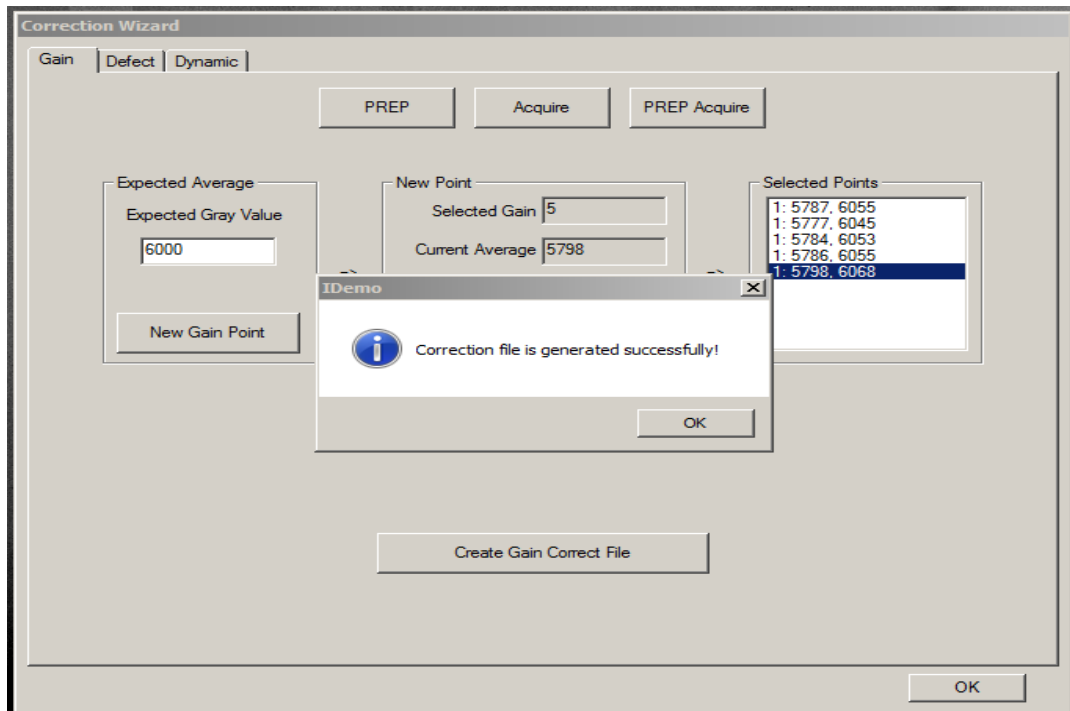
- k. Review the **Center average** value, it needs to be +/- 100 of your expected target value of 6000.

If it is not within the range, adjust KV and mAs , select **PREP** again, wait for “Exposure enabled,” and make an exposure.

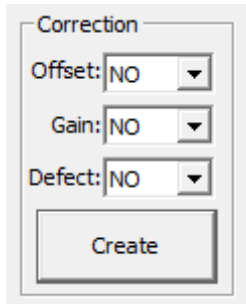
If it does land within the range of +/- 100 of the 6000 gray value > click **Select** and it is added to the list on the right side as part of the calibration.

Make a total of five (5) exposures of the 6000 gray value field.

- l. After all exposures have been completed and added to the calibration list > select the **Create Gain Correct** file.

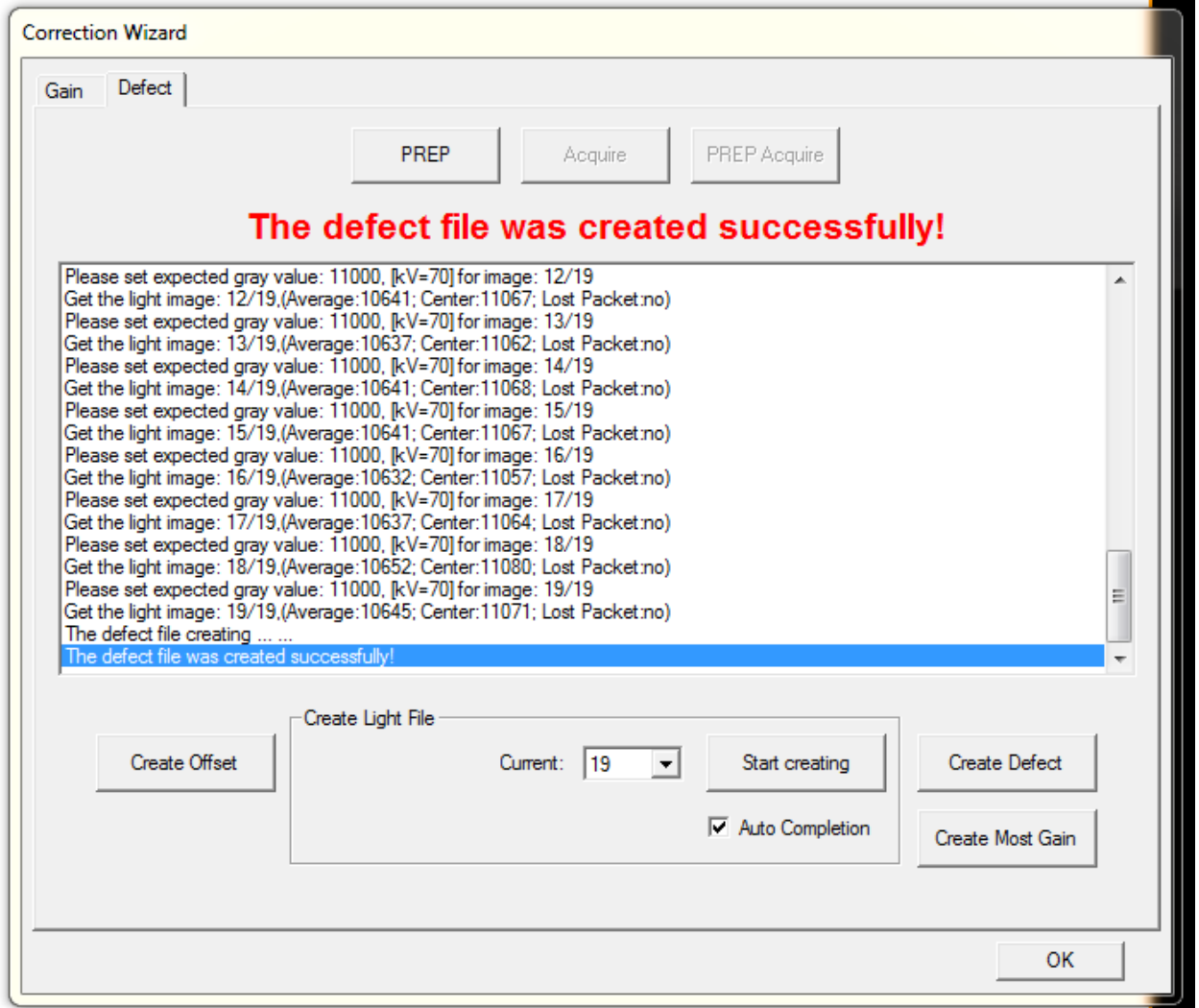


m. Exit the gain calibration screen > turn off post offset > click **Create** > click the **Defect** tab.



n. Select current frame 1 and click **Start creating** (NOTE: Stay as close as possible to the on screen requested KV value.) Click **PREP**. Make an exposure within 30 seconds and wait until it posts the “got” image in red . Review the center avg value and make sure it is +/- 100 of the Target gray value. If the value is what is expected, select the **Current** drop down, and select the next highest Frame > select **Create** > select **PREP**> makes your next exposure.

- o. After all 19 images have been exposed click **Create Defect**.



- p. Select **Create Most Gain**.
q. Exit the Correction wizard > Exit IDem.o
r. Copy the entire directory from C:\Opal\plugins32\iRayMk3\res\correct\panel_sn to c:\Opal\data\default\correct\panel_sn
s. Launch Opal Or Ultra and take some test exposures.