Screenshot Summary:

- **61007_Screenshot_1**
  - 4.8 (On the main window, click on the **Fixed-point Scan** icon. This will activate the THz antennas to start sending the incident THz signal and receiving the reflected THz signal from a single point on the polystyrene plate.) 00:00 - 00:06
- **61007_Screenshot_2**
  - 4.9 (Click on the **Motor Stage Dialog** icon on the top of the main window. The motor control window will open up. Adjust the optical delay axis by clicking on the **forward/reverse direction arrows** to center the reflected pulse from the polystyrene in the main window.) 00:00 - 00:18
- **61007_Screenshot_3**
  - 4.10.1 (First, click on the **DAQ Settings** button at the top of the main window to open the DAQ settings dialog window. Change the optical delay value from 5 V (default) to 4 V.) 00:00 - 00:13
  - 4.10.2 (Second, adjust the scanning stage's vertical position with the micrometer scale on the scanning stage until the minima of the secondary pulse is the strongest. Adjust the optical delay of the axis in the **Motor Control Window** to put the primary reflection outside of the range of the reflected signal being measured.) 00:14 - 01:51
- **61007_Screenshot_4**
  - 4.11.2 (Click on the **Motor Control Dialog** button to open the motor control window. Reposition the motor control window and the main software window so that the time domain signal is visible while adjusting the motor positions. Set both the A-axis and B-axis to 0 mm.) 00:00 - 00:04
  - 4.11.4 (In the **Motor Control Window**, change the value of the A-axis from 0 to -10 and hit **Enter**. The stage moves to the -10 mm position on the A-axis and a shift in the signal position on the main window is observed.) 00:05 - 00:15
  - 4.11.5 (Use the adjustable micrometer scale on the scanning stage shown in **Figure 5B** to move the minimum peak of the signal back to the position set in step 4.10.2.) 00:16 - 00:24
  - 4.11.6 (Change the A-axis value to +10 and hit enter. The stage will now move from the -10 mm position to the +10 mm position on the A-axis and a shift in the signal is observed again. Note the direction and the distance that the signal shifted from its previous position and change the A-axis value again to -10. The signal will go back to the position set in step 4.11.5.) 00:25 - 00:38

- 4.11.7 (Rotate the leveling screw on the A-axis of the scanning stage, as shown in **Figure 5B** and shift the signal to double the distance in the same direction it moved from the original position. Use the micrometer on the scanning stage to shift the signal back to the original position (-0.3 mm for 1.2 mm of polystyrene).) 00:39 - 00:51
- 4.11.8 (Repeat steps 4.11.6–4.11.7 until the signal at +10 and -10 are equal and the peak for both positions is focused at the original position (-0.3 mm on the optical axis).) 00:52 - 03:23

- **61007_Screenshot_5**
  - 4.12 (Once the leveling of the A-axis is achieved, change the A-axis value to 0 and repeat the same procedure for the B-axis. Start by changing the value of the B-axis on the motor control window from 0 to the most positive value (for example +10 mm). Also, while leveling, use the leveling screw on the B-axis of the scanning stage, which is shown in **Figure 5B.)** 00:00 - 01:14
  - 4.13 (Once both axes are leveled, return both the A-axis and the B-axis to 0 mm. Close the **Motor Control Window** and verify that the signal is in its original position in case it is shifted a little.) 01:15 - 01:30
- **61007_Screenshot_6**
  - 4.14.1 (Go to the set **DAQ Properties** window. Change the averaging value to 5 and keep all other parameters as default.) 00:00 - 00:09
  - 4.14.2 (Click on **New Reference**. The averaging counter in the top right of the window will count from 0–20. Once the counter reaches 20, change the averaging value to 1 and click **OK**. The reflected signal from the polystyrene will be saved as the reference for any scans taken later.) 00:10 - 00:38
- **61007_Screenshot_7**
  - 4.17 (Click on the **Image Parameter Dialog** button to open the **Image Acquisition Parameters** window. Set the values of **Axis1min**, **Axis1max**, **Axis2min**, and **Axis2max** to fully enclose the position of the tumor in the imaging window) 00:00 - 00:18
  - 4.18 (Set **Axis1step** and **Axis2step** to 0.2 mm for the imaging scan.) 00:19 - 00:29
  - 4.19 (Click on the **Measure** tab on the main window and select the **Flyback 2D Scan** option. In the window that pops up, indicate the directory and file name under which to save the scan data.) 00:30 - 02:10