Quick Adjustment

1. Press desired PDS setting
2. Insert condenser lens and adjust for concentric opening (axial alignment of imaging/brightness)
3. Converge beam to a spot, click on filament window for filament bias control, reduce V until donut formed
4. Function, BD control, adjust GT until uniform illumination with multifunction X/Y knobs, resaturate filament, and adjust CS for crispest image/roundness
5. Insert sample into beam path (axial alignment of imaging system now)
6. Press lens preset
7. Adjust focus with Z knob at 20, 000x, then increase mag to 50, 000x or higher
8. Module, modu, X/Y multifunction knobs to stop movement, then deselect
9. Converge beam to spot, correct with CS if necessary
10. Insert field limiting aperture
11. Lens mode, DIFF, camera length 2m, BD control PA (projector align) to center beam
12. Minimize spot with DIFF knob, adjust with multifunction X/Y (may have to start at lower magnification)
13. IN/OUT to insert objective aperture and move selector to 1
14. Remove field limiting aperture, ZOOM mode…IMAGE!

Astigmatism Correction for Objective Aperture

1. Insert holey grid
2. Increase mag to 50Kx or higher, IN/OUT obj. aperture (more contrast)
3. Check alignment of obj. aperture by pressing lens mode DIFF
4. OS, BD reset, insert AMT camera
5. Overfocus with black fringe outside hole (want uniform border or adjust with multifunction X/Y)…also grains should be uniform in background and not stretched.
6. Return to BH mode (OS values 11/23/05 were 650/250)

Low to High Mag Alignment Adjustment

1. Find feature at high magnification and place on crosshair
2. Go to low mag mode
3. BD control, IA (intermediate align), use multifunction X/Y to align feature
4. BH to center brightness
5. Do at each mag starting at 1000x and moving down (only realign in low mag mode)
6. Click on IA to deselect when done