

# JEOL 7001 Operating Instructions

## Backscatter Detector and Low Vacuum

### Backscatter Detector

1. Acquire an SE image (Stigmator, focus, wobbler etc.)
2. Turn off the **IR** camera.
3. Set scan rate to '**Fine 1**'
4. Adjust the '**Probe current**' to medium or larger range. (you may have to play with the "Probe current" to get an image)
5. Select '**Topo or Compo**' (Backscatter detector modes) from detector pull down menu.
6. Adjust the 'Contrast and Brightness' and adjust the Focus.

### Low Vacuum

7. Turn Off the "**Observation Off**" icon, light will go off (filament turns off)
8. Select **Backscatter detector** from detector pull down menu. (follow BD instruction above)
9. '**EVAC**' the specimen chamber.
10. On the "Touch Panel Unit" press "LV".
11. Touch "**OK**" to confirm.
12. Touch "Low Vacuum Control".
13. Adjust and "**Set**" pressure.
14. Wait for vacuum to stabilize. **VERY IMPORTANT!!!!**
15. Turn on the "**Observation ON**" icon so becomes green (this will turn on the filament)

### Low Vacuum Shut Down

16. On the "Touch Panel Unit" press "HV".
17. Touch "**OK**" to confirm.
18. Wait for 'HV' to stop blinking and then proceed.
19. Press and hold the '**Vent**' button on front of instrument.

\*\*\*\*\*When not in use the Instrument is to be left under High Vacuum\*\*\*\*\*