Quick Start-Up Guide

1. Put clean sample on stage, slide stage in checking lens clearance. **Use gloves to handle anything going in the vacuum system.** Retract Kevex system unless it will be used.

2. Hit pumpdown/vent button, wait for light in emission current gauge. This should not take more than about 5-10 minutes. If the light is not on after 15 minutes, or the roughing pump continues to "gurgle" for more than 5 minutes the system should be vented and the o-ring checked for dust or hair.

3. Turn filament current down (knob fully counter-clockwise).

4. Set desired accelerating voltage (300V - 30kV).

5. Turn on high voltage.

6. Turn on detector (SEI detector).

7. Saturate filament (using LSP, TV). The filament current meter reads filament current when the light is on and emission current when the light is off. Use the minimum possible filament current. This current will be 1.9-2.2 A. If the filament fails, contact one of the users certified to replace the filament.

8. Select aperture and tune beam if necessary. Adjust tilt, shift and aperture centering as necessary.

Quick Shut-Down Guide

1. Slowly turn filament current to zero.

2. High Voltage off.

3. Detector off.

4. **Lower an Level Sample (position to not hit lens).**

5. Press vent, remove sample. **Retract KEVEX detector if used.**

6. Leave in standby mode if you are not loading another sample.
   Standby: The above settings and:
   - Slow 2 scan mode.
   - Maximum magnification.
   - Monitor contrast down.
   - Monitor brightness down.
   - Leave power to machine on.
   - Hit pumpdown/vent button, **wait for successful pumpdown as in part 2 of the startup procedure**.