

OPERATING PROCEDURE

CVC 601 Substrate Heater

Rev. 12/5/2001

Complete the pre-run check and substrate loading procedure prior to using this procedure.

Pre-Heater Check

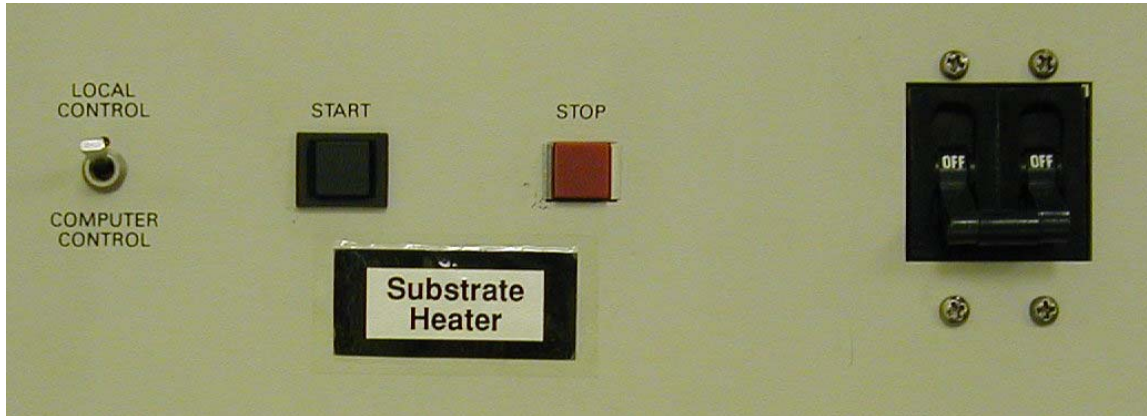
1. Ensure that the following services are on: water, cryo pump, and mechanical pump.
2. Check the cryo pump monitor reads **< 20°K**.
3. Check the station water temperature gauges read **< 25°C**.
4. Turn on power to: interlock control panel, automatic valve control, ion gauge control, DC target select.
5. Ensure the chamber pressure is **< 2e-6**.
6. Ensure that the **Gas Inlet Valve** on the vacuum chamber is **CLOSED**.
7. The Ar cylinder in the last chase should be **ON**.
8. Ensure that the water recirculator is **ON** (the interlock lights should be green not red). If the water is off, you must turn on the water recirculator under the table.



Emergency Power Off

If during operation an emergency occurs, the emergency power off button is located on the left control panel. This will turn off the power to the entire system.

Operation



1. Ensure the Substrate Heater panel is in **LOCAL**. Ensure that the **shutter switch** is in the "**down**" position (i.e. the shutter is over targets 1 and 3). Turn the Rotostrate ON and in the RUN position.
2. Turn **ON** the **circuit breaker** on Substrate Heater panel.
3. Press **START** on the Substrate Heater panel.
4. Push and hold the **READ** switch to the right of **SETPT 1**. (The READ switch is located above the temperature display)
5. Dial the **SETPT 1** knob until the desired setpoint temperature is displayed.
6. Release the **READ** switch.
7. Allow the system to ramp to the desired temperature, manually time the heat cycle once the setpoint is reached.
8. Press **STOP** on the Substrate Heater panel when time is complete.
9. Turn **OFF** the **circuit breaker** on the Substrate Heater panel.

CONTINUE WITH THE DEPOSITION PROCEDURE