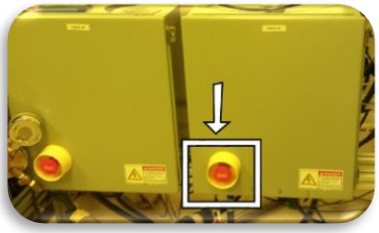
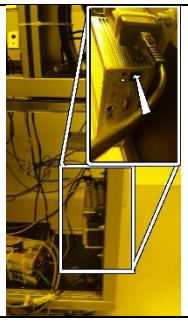
Trion RIE-ICP

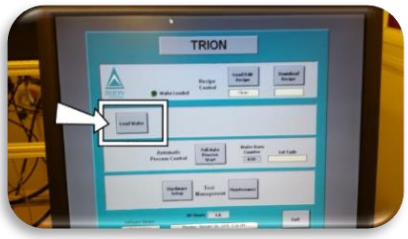
Standard Operating Procedure

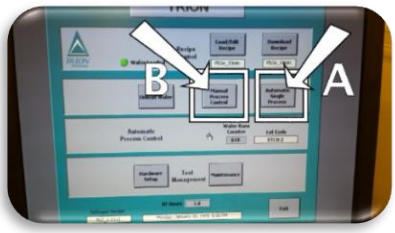
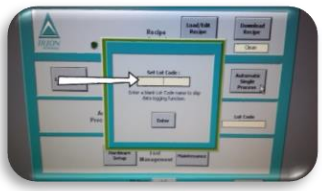
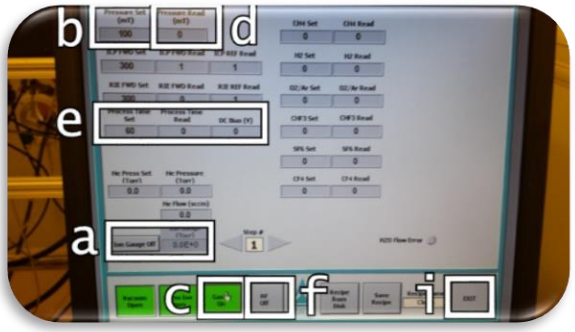
START UP

STEP 1: Turn on Process Gases (Can only use Ar ***or*** O_2, not both.)	
STEP 2: If using Argon or Oxygen make sure the right PTC valve is opened under the right black gas box.	 
STEP 3: Unlock EMOS, on the front of unit and on right grey electrical box, labeled Trion 1.	 

STEP 4: Push main and pump buttons.	
STEP 5: Press Restart button located on the bottom of the PC, behind the front panel of the machine.	
STEP 6: Wait for computer to automatically open labview (PLC_1.11x1)	

PROCESS

STEP 7: Go to load/edit recipe a. Load recipe that is already saved b. Create New Recipe 1. Max number of steps for new recipe is 16 **2. MAX POWER FOR BOTH ICP AND RIE IS 300W**	
STEP 8: Download recipe	
STEP 9: Click Load Wafer a. Wait for LL to vent b. Once it is vented hit cancel c. Load wafer (min size is 4 in, if you need smaller use Carrier wafer)	
NOTE: If you hit abort, program will freeze, if this happens do ctrl+alt+del, and close PLC_1.11x1	

STEP 10: Chose Automatic Or Manual	
A. Automatic a. Enter Name as lot code	
B. Manual a. If Ion Gauge is on, gases cannot be on. If you turn ion gauge on while gases are on the gases will shut off b. Pressure set between 5-200 mT c. Click gases on d. Wait for pressure to stabilize e. Set process time/ other parameters f. Click RF on g. After process run, click RF off h. Click gases off i. Click exit	 
STEP 11: Unload wafer (after unload there will be three purges)	

SHUT DOWN

STEP 1: Click Exit on main program window	
STEP 2: Shut down Computer	
STEP 3: Push in EMO on Front Panel