

User Manual

RIE-AV

IMPORTANT NOTES:

- The tool should be used for etching **SiO₂, SiN_x, Si, BN** or **polymers**.
- **Mask materials:** Metal masks are not allowed except for Aluminum
- **Process Gases available:** SF₆/CHF₃/CF₄/C₄F₈/O₂
- **NEVER close the software window** – this will turn the tool OFF
- **Be careful** – Chamber Lid will move quickly when opening/closing
- The top left field (**STATUS**) shows status/progress of the process/step
- There Top MENU (TM), Left MENU (LM) and Bottom MENU (BM)
- The only changeable parameter is **the time of etching** (contact FM for info)
- Both **You Etch + Chamber Clean** must fit within your booking time

1. Check that the traffic light is **GREEN**, and there are no **Errors** (if Yes, contact FM)
2. **User Login**™
3. **Vent** (LM) - wait until done (check **STATUS**)
4. **Open Lid** (LM) - wait until done (check **STATUS**) – remember to keep away from moving lid
5. Position your sample on the plate in the chamber
6. **Close Lid** (LM) – **WARNING** – keep area near the lid clear of any items
7. **Pump Down** (LM) - wait until done (check **STATUS**)
8. Make sure **★** is activated (not grey) – this allows to see **PRODUCTION** recipes
9. **Recipes** (BM) – **Load** (LM) - choose the recipe
10. Check in “**Etch Step**” of the recipe the process gases required + **O₂** and activate via **Gas Panel**
11. **Process** (BM)
12. Type the “**Job ID**” (your CRSid + material to be etched: **aa000_SiO2**)
13. **Start Job** (LM) – enter the desired **Etch Time**, **Start Process** - wait until done (check **STATUS**)
14. **Vent** (LM) - wait until done (check **STATUS**)
15. **Open Lid** (LM) - wait until done (check **STATUS**) – remember to keep away from the moving lid
16. Take your sample out
17. **Close Lid** (LM) – **WARNING** – keep area near the lid clear of any items
18. **Pump Down** (LM) - wait until done (check **STATUS**)
19. Run “**Chamber Clean**” recipe for total duration of your processes (make sure you activated **O₂**)
20. Wait till the “**Chamber Clean**” is done and **Log Out**
21. Complete the paper **Log Book** and clean up the area
22. **Turn off** all process gases at the main **Gas Panel**

F A Q

- ❖ Software was turned off accidentally
 - ❖ Etch rate become slower than the recipe
 - ❖ Some dust on the sample after process
 - ❖ Lid is not closed properly
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- **In case of any doubt, please always contact the support team**