

Blanket Exposure System Operating Instructions

This machine is to be used by authorized personnel only. For training & consultation contact: Lab Manager, **Omid Mahdavi**, (520) 621-9849, omidm@email.arizona.edu

Enter all necessary information in the Log Book for each use.

1. Lift the lid slowly and make sure it latches.
2. Place the mask/transparency on the glass. If using a chrome mask then the chrome (dark) side must face up.
3. Place the resist coated side of the substrate facing down and directly on top of the mask/transparency. **DO NOT USE** a substrate that is larger than the quartz mask. The substrate may break during pump down!
4. Close the lid and secure the latch.
5. Turn on the PUMP switch (toggle up) to pull a vacuum over the substrate.
6. Turn on the FAN switch (toggle up).
7. Turn the timer clockwise to the appropriate time setting. Refer to **Figure 1** to guide you in selecting the appropriate time. (This data was collected after a 5 minute warm-up cycle and a 30 second subsequent break used for loading the mask and the substrates.) **Hint:** 1 minute exposure time has been used successfully in the past for AZ 3312 and AZ 1512 resists spun at 4000 rpm, the time will need to be adjusted for thicker or thinner photoresist.
8. Turn on the LIGHT switch (toggle up). The UV light will turn off when the timer times out.
9. Turn off the FAN switch (toggle down).
10. Turn off the PUMP switch (toggle down).
11. Open the lid slowly and make sure it latches. Remove the substrates one at a time for photoresist developing.
12. Put masks/transparencies away when finished and close the lid.

