

Mask Aligner AOI800

Reminder:

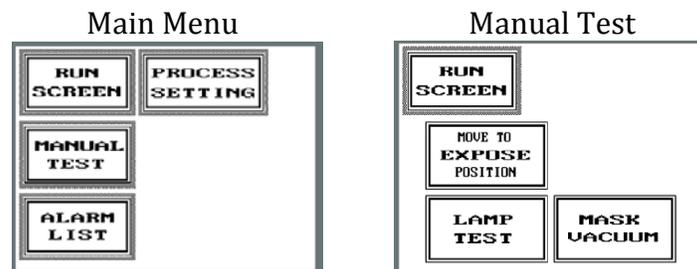
Before entering the cleanroom, have a sufficient silicon-wafer mask

UV Glasses are REQUIRED when using this machine

Wafer holder can handle wafer sizes of 3"-6" diameter

Mask Aligner Operation:

1. Plug in the System Vacuum located outside of the cleanroom walls in the chase area (System will not run without it)
2. Turn on the UV Lamp Power Switch. Press "Start" fully, but do NOT hold it down. Power should come to green marks on measurement dials.
3. Attach wafer-holding plate to the sliding drawer. Match rear set screws; tighten front two sets of screws to lock into place. If the rear screw is misaligned, the plate will sit at an angle. Attach two vacuum tubes to the side of the drawer. They are labeled on both drawer and tube. Third tube is left hanging.
4. IF needed: nitrogen gun for cleaning, the substrate, is on the left side of the sink. Valve to turn on pressure is directly right of the sink below counter by 1-2 inches.
5. Move tray with mask holder to front of machine. Insert mask (ensure which side is facing up) while the spring load is drawn back (with the friction lock held down). Slowly release spring load, do NOT let it snap back into place. Note: Put mask in so that the side contacting the wafer is "UP" because the mask holder will be inverted during the process facing towards the substrate.
6. Flip the mask holder onto the machine and slide into place. Tighten four mounting screws on top of it to secure to machine.
7. Attach mask vacuum tube to port left of drawer. Turn on pump system with power strip below the machine (attached vertically to desk side). Pressures indicated on left side dials should be near green marks. Using the machine touch screen, start "Mask Vacuum" (Main Menu > Manual Test > Mask Vacuum). Vacuum dials will rise but make sure that the mask vacuum is pumping (i.e. Pressure is lower than ambient).



8. Pull the drawer out and place wafer on mount (centered). Engage “Substrate Vacuum” from touchscreen.
9. Engage “Level” on touchscreen while very gently pushing up on the wafer mount (just to get it started). Do not continue to press once it has begun moving for a few seconds.
10. Touchscreen: “Move to contact position” followed by “N2 Hard Contact”
11. Remember to verify if the UV lamp is on – power supply located below mask aligner. Start UV Exposure (Press “Cycle Running” on Touchscreen). Look away from the machine and close eyes during this process to protect from harmful UV exposure to eyes.
12. Wafer will auto lower from mask, pull out drawer, turn off substrate vacuum and remove wafer.
13. Reverse the above steps to remove the mask and mask holder.
14. Remove wafer holder and turn off power to UV Lamp