

How to avoid breaking the instrument

1. Contact Jingjing Jiang (jjiang2@caltech.edu) or Zhou Xinghao (xzzhou2caltech.edu) if you have any problems or questions.
2. Report all problems (please provide details of the problem, not just that it does not work) both in the log book and by email to the GLA. **DO NOT** just leave the instrument without reporting a non-operating or broken instrument.
3. **NO liquid samples are allowed on the Dimension Icon without specific approval of the MMRC Director, Bruce Brunschwig!**
4. **Never** leave the controller *ON* when the computer is turned *OFF*.
5. Open and close the hood door following the training instructions. Be careful not to damage the sealing foam on the edge of the door.
6. **Always** wear gloves when touching anything inside the hood; **DO NOT** use metal tweezers inside the hood. **DO NOT** scratch the vacuum hold-down stage, or it will not work. Mount your sample off center on the stage if you do not need the vacuum hold down.
7. Verify that the stage is clear of tools, objects, and debris at all times. Use alcohol or isopropyl alcohol wipes periodically to keep the stage clean of dust. **DO NOT** use acetone or other cleaners/solvents to clean the Dimension Icon SPM. **DO NOT** clean the stage using compressed air. **DO NOT** use any fluids on the SPM head. Avoid spilling fluids onto the microscope stage or into any electrical assemblies, particularly the SPM head.
8. The Scanner costs ~ \$40 K. **DO NOT** drop it for any reason. Be sure to hold it in the correct manner (follow the training instructions).
9. **Never** place the scanner anywhere other than its home location in the dovetail rail mount.

10. In the event of a software crash, use the Emergency Withdraw button, located on the back of the Dimension Icon on the left-hand-side (when viewing the system from the front). This button withdraws the probe 100 μm .
11. If you use XY-offset (especially large offsets) during the measurement, set them back to zero when you finish.