

Ni-Lo 5 XL Spin Coater

Quick Start Guide

Rev 4 – January 2022

info@niloscientific.com

www.niloscientific.com

Set-up

1. Connect vacuum pump to the chamber, using vacuum input barb on the left side of the chamber
2. Connect the electronics unit to the chamber, and tighten the joining cover
3. Plug the power supply (5V – 2 amp) into the socket on the back of the electronics unit
4. Level the chamber, if necessary
5. Remove the plastic cover from the lid, if necessary

Using the spin coater

1. Line the chamber with aluminum foil – this will ensure easy cleanup
2. Turn on the spin coater electronics box at the rear of the unit
3. Remove the O-rings from the vacuum chuck, apart from the largest one that your sample completely covers
4. Place your sample centrally on the vacuum chuck
5. Start your vacuum pump. Ensure that your sample is held securely on to chuck
6. The main menu should be displayed on the screen. To set a new run, set the number of stages by pressing B, 1-9 stages are allowed. Input the desired RPM (600-5500), then press # for each stage. Repeat for acceleration (200-2000 RPM/second – press # or 0 for maximum acceleration) and time (1-999 seconds). Press the * key for backspace (erase).
7. Save the run by pressing the numbers 1-9. This can be reloaded for use in future runs.
8. You can either review your data by pressing A or B to see previous runs. Press # to exit and be ready to run the last configuration saved/loaded, pressing D.
9. By pressing C in the main menu, you can load pre-saved runs (1-9).
10. Once the run(s) is(are) complete, either by pressing D on the post-run menu screen, you can run the last setting, press B, create a new setting, or C to load the saved setting. Here, you can select the saved stages by pressing 1-9 and then #.
11. To finish a program early, press *
12. After use, turn off the vacuum pump, release the vacuum, and remove the sample
13. Turn off-spin coater after use

List of key inputs

B – New set-up of the stage(s)

C – Load saved configurations

Safety

- Ensure your vacuum pump has enough power to hold on to your sample to ensure that your sample stays on during the spin cycle. If you are unsure, test at low speeds first
- Always line the chamber with aluminum foil – this ensures easy cleanup
- Make sure your sample is well-centred. If it is not well aligned, it could come off during spinning and become a projectile
- Always use goggles when using the spin coater
- Never remove the chamber lid during a spin cycle. Always wait until the sample has come to a complete stop before removing the lid
- Always use the supplied power supply with the spin coater. Any other power supplies may damage the chamber
- Do not squirt solvents into the spin coater chamber, which may damage the motor. The easiest way to clean is by using a damp cloth/towel
- The chamber is made from chemical-resistant anodized aluminum, but please check compatibility with your solvents before use
- The electronics box is made from anodized aluminum and should not come into contact with solvents