Ni-Lo 4 Spin Coater

**Quick Start Guide** 

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## Set-up

- 1. Connect vacuum pump to 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 in to socket on the back of the electronics unit
- 4. Level the chamber, if necessary

## **Using the spin coater**

- 1. Turn on the spin coater electronics box at the rear of the unit
- 2. Remove the O-rings from the vacuum chuck, apart from the largest one that your sample completely covers
- 3. Place your sample centrally on the vacuum chuck
- 4. Start your vacuum pump. Ensure that your sample is held securely on to chuck
- 5. Stage 1 should be displayed on the screen. To set RPM press A, input desired RPM, then press #. Repeat for time (B) and acceleration (C). If acceleration is set to 0, the program will go straight to the desired speed
- 6. To move between stages, simply press the number of which stage you want to move to at either the stage screen, or the home screen. You can then input the desired RPM, acceleration and time in each stage
- 7. By pressing # on the stage screen, you can return to the home screen. Here, active stages are shown with a number and inactive stages by a .
- 8. To delete all parameters from a stage, press DD (double press) on the stage screen
- 9. To delete all stages, press DD from home screen
- 10. To start the program, press AA (double press)
- 11. To finish a program early, press CC (double press)
- 12. Turn off the vacuum pump, release the vacuum, and remove sample
- 13. Turn off spin coater after use

## **List of key inputs**

AA (double press) – Start spin cycle

CC (double press) – Cancel current spin cycle

DD (double press) – Clear current stage if on stage screen, or delete all stages if on home screen

A – Set RPM (500-6000) for current stage

B – Set time (1-999) for current stage

C – Set (0 [maximum acceleration] or 200-9999) acceleration for current stage

\* - Help screen / backspace when adding numbers

# - Enter/Home

## **Safety**

- Make sure your vacuum pump has enough power to hold on your sample, to ensure that your sample stays on during the spin cycle.
  If you are unsure, test at low speeds first
- Make sure your sample is well centered. 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 as this may damage the motor. The easiest way to clean is by using a damp cloth/towel
- The chamber is made from chemical resistant HDPE, but please check compatibility with your solvents before use
- The electronics box is made from ABS and should not come into contact with solvents