

LAURELL SPIN COATER OPERATION GUIDE

Equipment Operation

1. Prepare the Wafer:

- Open the spinner lid and add or remove stage adapter, depending on the size of the sample to be coated.
- place the sample at the centre of the chuck.
- The LCD display should show flashing "**VACUUM**", indicating that the vacuum is not yet applied.

2. Check the Media Supply:

- Connect Compressed Air and Vacuum if disconnected
- The display should show "**LID**", confirming sufficient vacuum.

3. Apply Vacuum to Secure the Wafer:

- Press the "**Vacuum**" button on the control panel.
- The display should stop flashing "**VACUUM**" and show a numerical value.
- If this value is **below 15.0**, **DO NOT** run the spinner and inform technicians.

4. Select a Program:

- Hold the "**Program Select**" button and use the **UP/DOWN** arrow keys to browse available programs (A–T) on the upper right of the display.

5. Modify or Create a Program (Optional):

- To customize an existing program or create a new one, hold down the "**F1**" key.
(Refer to the **Programming Instructions** over the page.)

6. Apply the Coating Material:

- Dispense the material onto the sample.
- Close the cover and press "**RUN/STOP**" to start the spin process.
- **Note:** An interlock prevents the same program from running consecutively unless:
 - You lift the lid between runs, or press "**F1**" twice to override the interlock.

7. Post-Run Cleaning:

- Clean the **inside surfaces**, including the **drain hole using Acetone and/or IPA**.
- Wipe down the **chuck**, but:
 - **Do not** force compressed air into the centre hole.
 - **Do not** allow liquid to leak down the chuck.

8. Final Steps:

- Leave the machine with the **lid open**.
- Clean up any spills or mess around the work area.

Programming Instructions

1. Enter Programming Mode:

- Press the "**F1**" key.
- The display will show "**PGM**", indicating programming mode.

2. Select a Program:

- Use the "**Program Select**" key to choose a program (A–T).

3. Adjust the Number of Steps:

- Use the "**ADD STEP**" and "**DEL STEP**" keys to set the number of steps (up to 51).
- To delete a step, press "**DEL STEP**", then confirm within **5 seconds** by pressing "**ENTER**".

4. Modify Step Parameters:

- Use the **CURSOR** left/right keys to highlight a value.
- Use the **VALUE UP/DOWN** keys to adjust set points.

5. Set Acceleration (Optional):

- The **ACL** field in each step represents acceleration.
- Two numbers appear:
 - The **first number** is an index (changeable using UP/DOWN keys).
 - The **second number** is the actual acceleration/deceleration in **rpm/s**.

6. Review and Save the Program:

- Use the **STEP** key to cycle through steps and verify values.
- Press "**F1**" to exit programming mode and return to run mode.

7. Start the Program:

- The display will show:
 - **Set Speed (rpm) and Time (mm:ss)**
 - **Actual Speed (RPM) and Time Remaining (A)**
- Press "**RUN/STOP**" to begin execution.



Spin coater controller display