

Electrospinning Setup

User manual

Checking before turning on the machine

Due to the use of high voltage to fabricate nanofibers, be sure that the machine is properly connected to the earth. Lack of proper earth connection can cause damage to electrical systems in a few seconds, as well as it can also have associated risks.

Make sure the earth cable is connected properly grounded.

Safety in working with the machine

Emergency stop

When an unexpected event occurs during the machine operation (such as arc in high voltage power supply) or the operation is interrupted, the “Emergency” button should be pressed to prevent damaging the machine or the user. At this time, the activity of all parts of the machine stops. To restart the machine, “Emergency” button should be rotated in clockwise rotation.



Emergency Stop button

Turning on the machine

1. Plug in the power cord.
2. Turn on the Miniature Circuit Breaker (MCB) switch located at the rear of the machine.



3. Use the black key on the right side of the machine to turn on the Electronic control panel.
4. Press the black On/Off key in front of the machine to turn on the screen.
5. Put the syringe(s) containing solution(s) in the syringe pump.
6. Use keys  menu to move the pusher block of the syringe pump and put it just behind the syringe.
7. Connect the high voltage cable to the syringe.
8. Adjust the electrospinning distance and the rotating speed of drum collector in menu.
9. Adjust the scan speed, start and end position in **scan menu**.
10. Close all doors.
11. Touch **RUN** button on “Home Page” to start the injection and wait until the droplet is appeared at the tip of needle.
12. Use the On/Off key on the screen in menu and then the On/Off key on the high voltage power supply to turn it on, at this time the red LED will be turned on and the electrospinning process is started.
13. Once completed, move the voltage knob anticlockwise to zero followed by earthing the syringe by placing the earthing wire on the syringe needle.
14. Take out the sample and close the door.