

# Basic Electrospinning Series



**Model BS-35V-2-ESD**

NLI Basic Electrospinning Series offers researchers a low-cost, versatile and portable electrospinning setup consisting of 3 main components: High Voltage Power Supply, Syringe Pump and Rotary Collector with speed controller.

Using this system, various polymers and composite materials have the potential to be electrospun and the process is easy and economical.

## COMPONENTS

- ◇ High Voltage Power Supply
- ◇ Syringe Pump
- ◇ Collector and Speed Controller

## FEATURES

- ◇ Modular electrospinning setup
- ◇ Portable and flexible to change any component
- ◇ Easy assembly and maintenance
- ◇ Digital display on all components
- ◇ Suitable for D.I.Y
- ◇ Add on accessories are available

## APPLICATIONS

- ◇ Air and liquid filtration
- ◇ Tissue engineering
- ◇ Drug delivery
- ◇ Implant materials
- ◇ Wound dressing
- ◇ Solar cell
- ◇ Fuel cell
- ◇ Supercapacitor
- ◇ Protective clothing
- ◇ Cosmetics
- ◇ Oil-water separation



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| High Voltage Power Supply |                                      |
|---------------------------|--------------------------------------|
| Model                     | PS35-PV                              |
| Input power               | 100-240VAC; 50-60 Hz                 |
| Max output voltage        | 35kV                                 |
| Power                     | 30 Watt                              |
| Ripple                    | Less than 0.1%                       |
| Stability                 | 0.1% per hour after 1/2 hour warm up |
| Efficiency                | Typically, 80% at full load          |
| Current monitoring        | Digital, Accuracy: 1 $\mu$ A         |



| Syringe Pump              |                                  |
|---------------------------|----------------------------------|
| Model                     | NLS20                            |
| Input power               | 100-240VAC; 50-60 Hz             |
| No. of syringes           | 2                                |
| Max. syringe size         | 60ml                             |
| Min. flow rate            | 0.5 $\mu$ l/h                    |
| Max. flow rate            | 1000ml/h                         |
| Pedal resolution per step | 13nm                             |
| Display                   | 4 line, 20-character LCD display |



| Drum Collector      |                       |
|---------------------|-----------------------|
| Model               | ESD-30S               |
| Input power         | 100-240VAC; 50-60 Hz  |
| Rotation speed      | Up to 3000 rpm        |
| Length of collector | 30cm                  |
| Collector diameter  | 8cm                   |
| Speed control       | 10 turn potentiometer |
| Display             | 2x16 character LCD    |

\* Product specifications are subject to change without prior notice due to engineering innovations