

# SMARTLABEL

## Quick Installation Guide

- Carefully remove **SmartLabel**, the **SmartBox**, and the **SmartBox+** from the packaging and place at the installation location. We recommend at least 8 inches of space around the devices for proper airflow, and a level surface. Locate the parts listed below.



POWER CABLE (1)



SAMPLE CUPS (2)  
AND MESH INSERTS



SAMPLE CHAMBER COVERS (2)

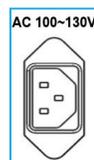


SAMPLE  
CHAMBER  
SPACERS (4)



EXTRA FUSES (2)

Connect the cable originating from the 'Cooling Unit' port on **SmartBox+** to **SmartLabel**. Similarly, connect the cable from the 'Alternating' port on **SmartBox** to **SmartLabel**. Do the same for the 'Direct' cable. Attach the main power cable to the rear side of **SmartBox** and plug it into an outlet with the correct voltage requirements.

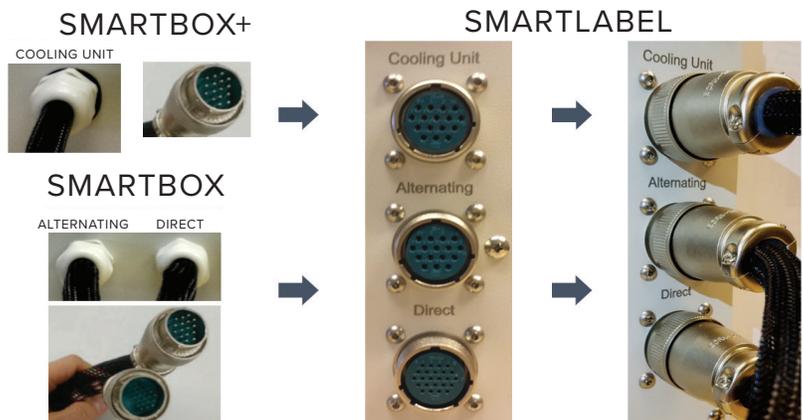


INSERT  
POWER  
CORD

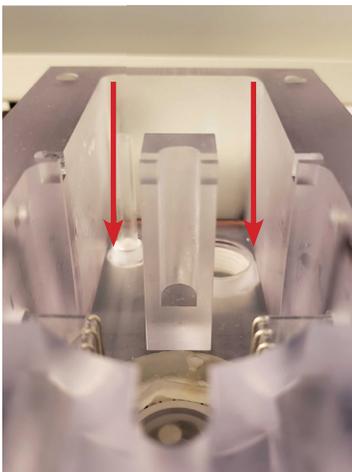
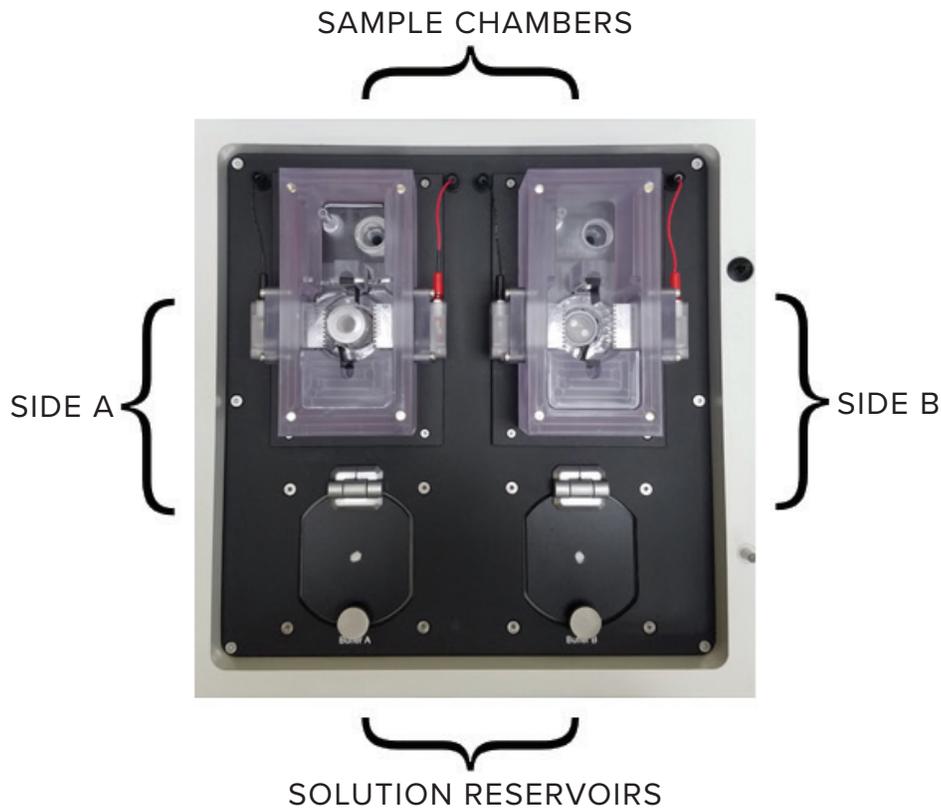


ALIGN TABS AND  
PLUG IN CABLE

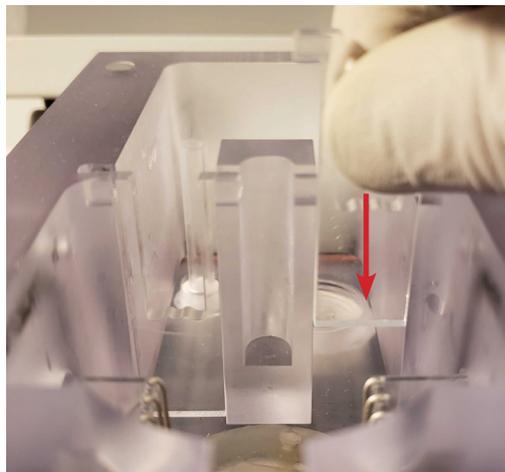
SCREW BEARING  
LOCK NUT  
CLOCKWISE  
COMPLETELY.



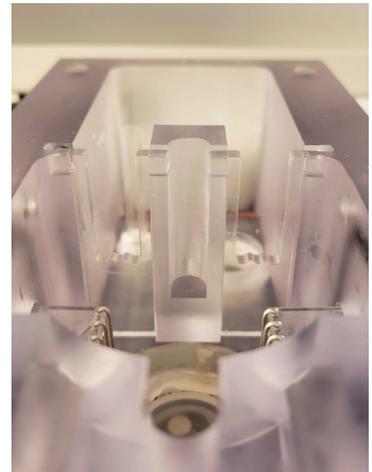
- 2 Open the lid to **SmartLabel**. Identify the two black screw-top lids to the **solution reservoirs** at the front, and the two translucent plastic **sample chambers** towards the back. The left-side reservoir and chamber comprise side 'A', and the right-side reservoir and chamber comprise side 'B'.



Identify the two gaps in the plastic (red arrows) located halfway along the length of the sample chamber.



Plastic spacers, which control the solution level in the front half of the chamber where the sample cup is placed, need to be lowered into place on each side of the chamber, as shown in the left image above.



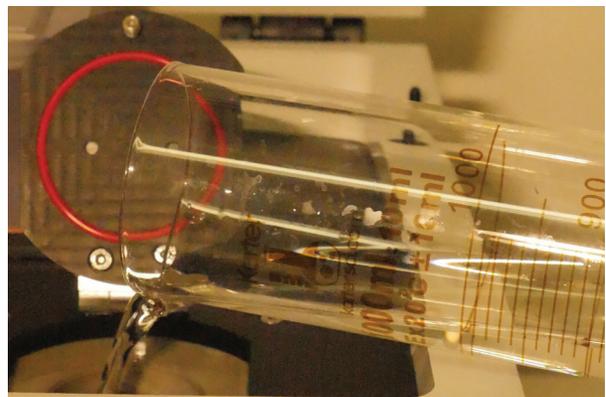
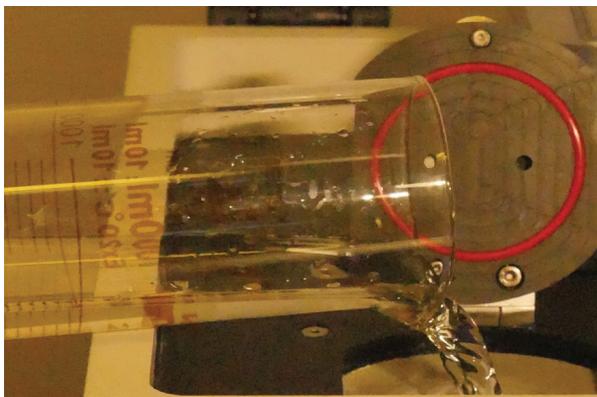
- 3 Turn the physical **power switch** on the rear side of the **SmartBox** from O to I to power up the system.



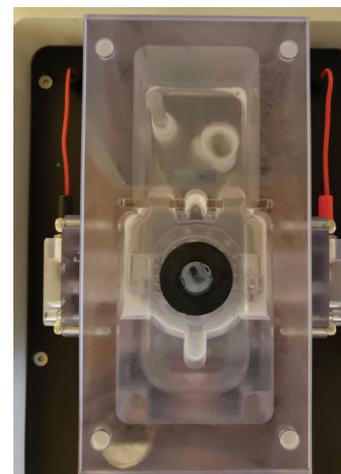
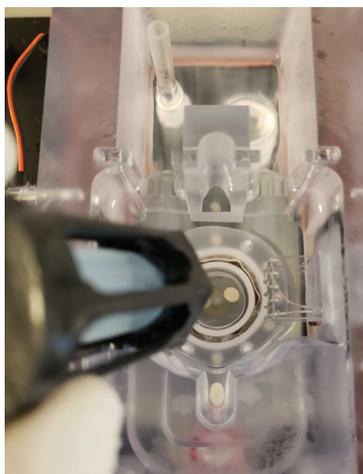
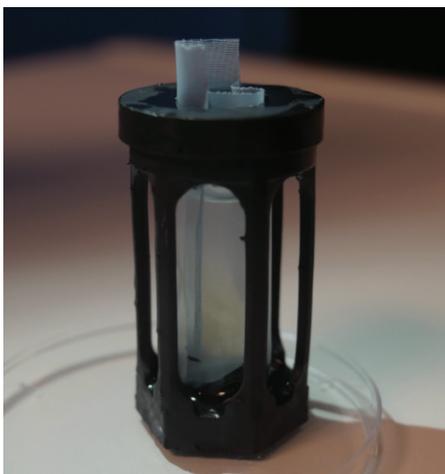
- 4 There are drainage tubes located under the panel at the bottom front of SmartLabel, with the one on the left connected to reservoir A and the one on the right to reservoir B. In the left image below, the stopcock is in the closed position. In the right image, the stopcock is in the open position, enabling drainage.



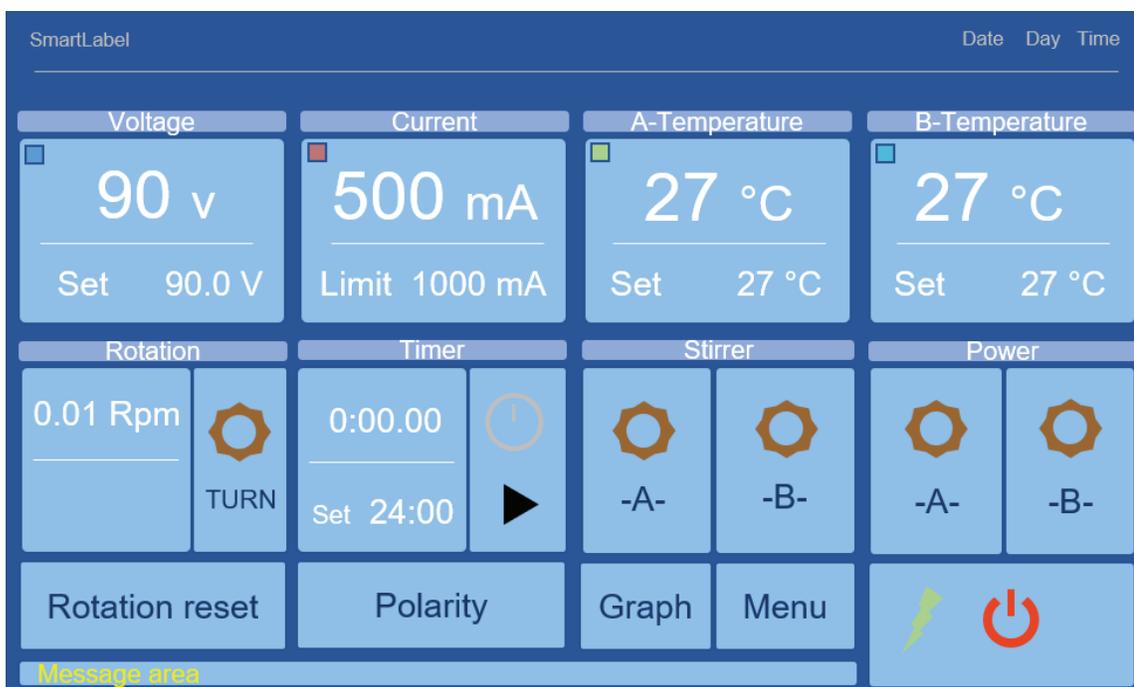
- 5 Making sure both stopcocks are in the closed position, pour 500 mL of deionized water into each solution reservoir, A and B. Secure each reservoir lid when done.



- 6 When performing an experiment, a sample is loaded into an insert that is lowered into the sample cup, which is then gently inserted into the hexagonal slot on the floor of one of SmartLabel's sample chambers as shown below.



- 7 SmartBox's touchscreen display is used to operate SmartLabel and control all of the settings available to users. When performing a real experiment, the following should be toggled on by pressing the gear icon (⚙️) under the respective headings: sample cup Rotation, sample cup Stirrer, and pump Power. Finally, stochastic electrotransport-mediated labeling functionality is turned on using the bottom-rightmost button, and is not activated until the lid to SmartLabel is closed.



- 8 When finished testing or using SmartLabel, turn off electrophoresis, turn off the pumps (which should not be run without liquid present), drain the liquid from the reservoirs as shown in Step 4, and then power-down the system using the knob on the rear side of the SmartBox (from Step 3).