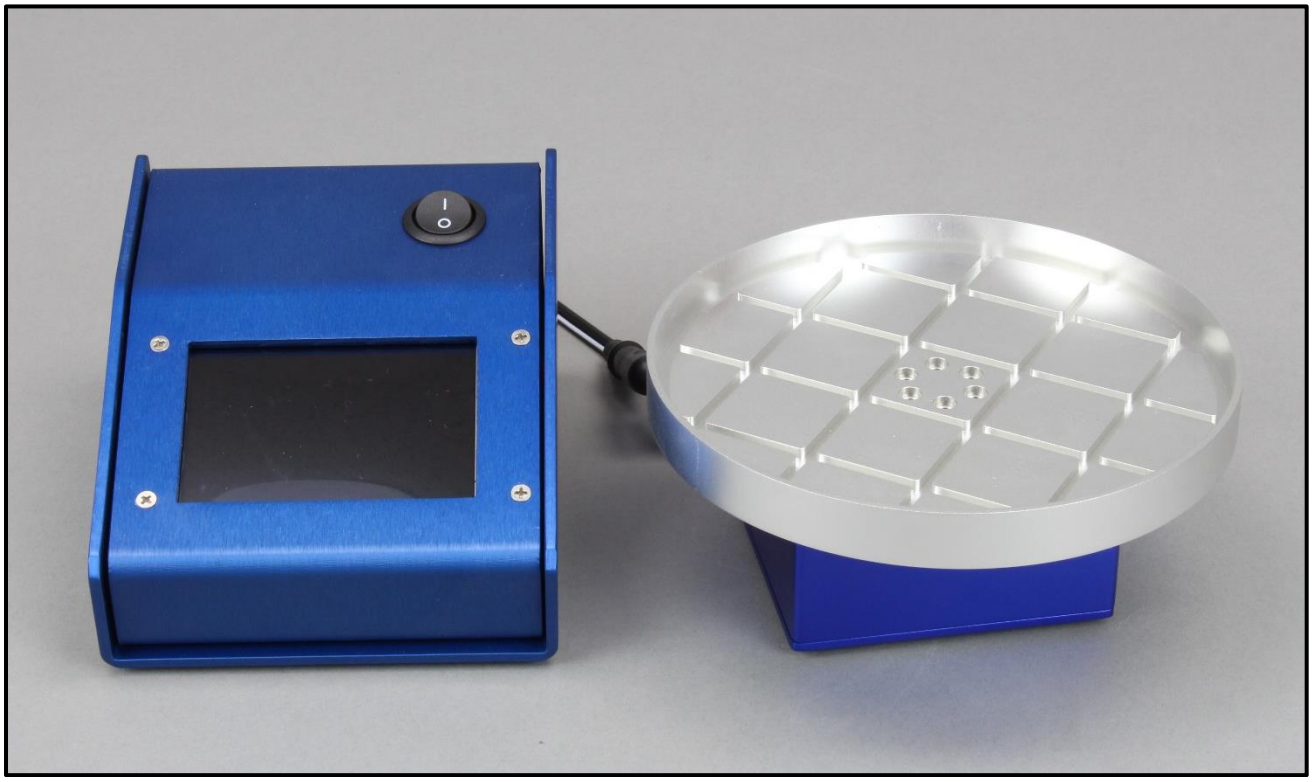
OPERATING INSTRUCTIONS FOR
650ml SpinVessel®
VP 418SV1-1-650FB

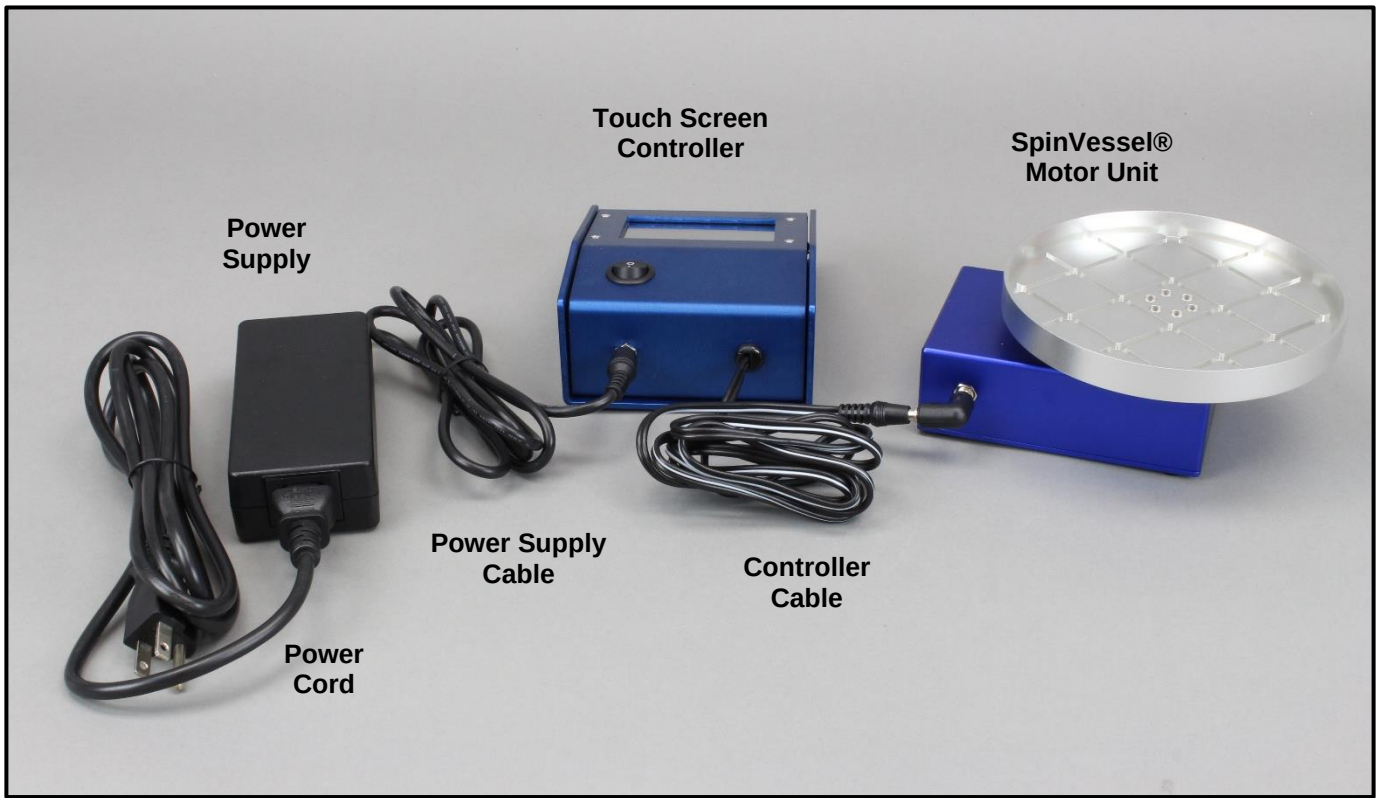
US Patent #11,623,188
European (BE, FR, DE, NL, CH, SE, & UK) Patent #3887049



VP 418SV1-1-650FB SpinVessel® System for 650ml SpinVessel®,
includes touch screen controller and external power supply.
SpinVessel® Tubes VP 830SV-650FB and power cord sold separately.

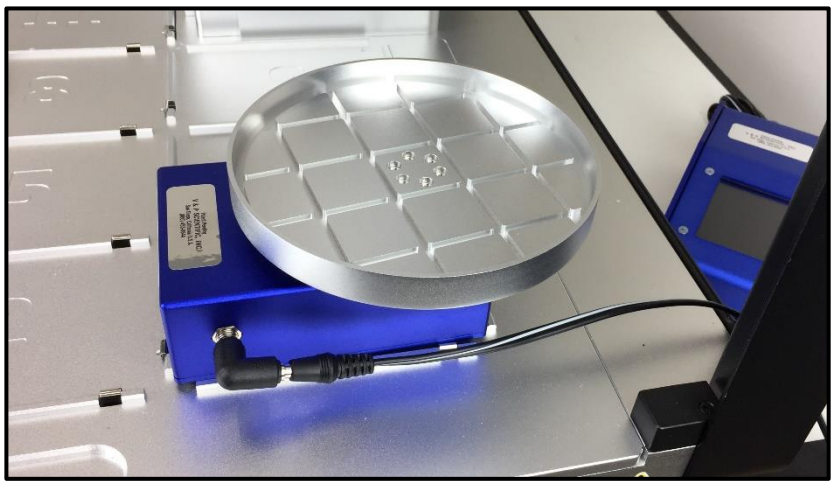
SET-UP

Connecting the Parts of the SpinVessel® System



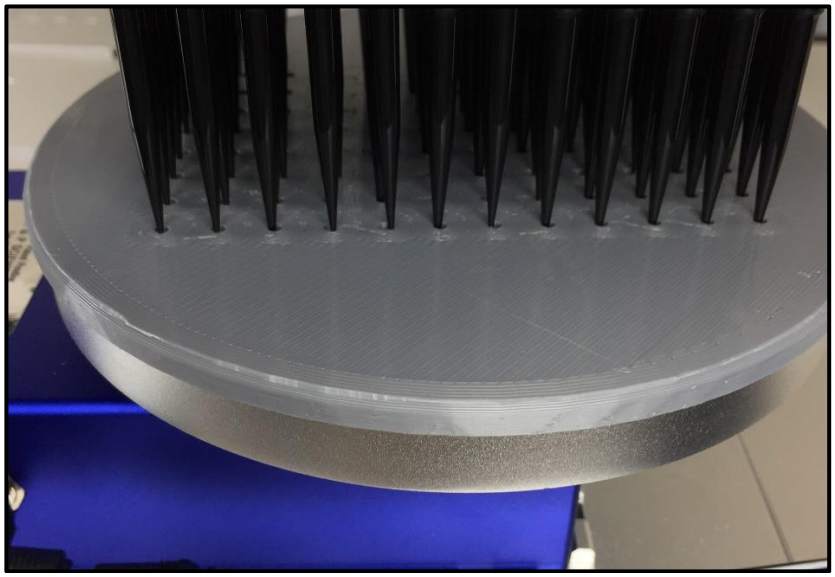
1. **Plug Power Cord into a power outlet.**
2. **Plug Power Cord into the Power Supply.**
3. **Connect Power Supply Cable from Power Supply to the Touch Screen Controller.**
4. **Connect Touch Screen Controller Cable to SpinVessel® using Controller Cable.**
5. **If using on an automated liquid handler:**
    a. **Place motor unit in a SLAS microplate location on deck.**
    b. **Touch Screen Controller can be on deck or off deck as desired.**
    c. **Use Registration Disc to align pipet tips to projections in SpinVessel® tube.**

Aligning Pipette Tips to the SpinVessel® Tube



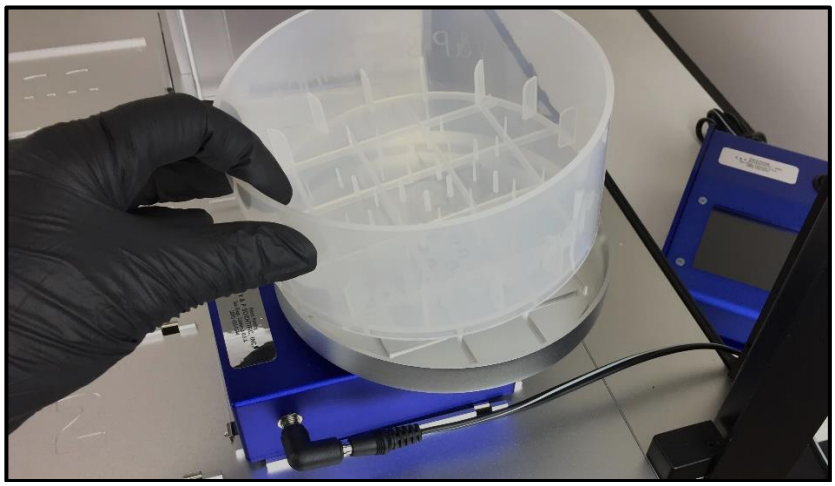
Place SpinVessel® motor unit in desired location on an automated liquid handler in a microplate holder on the deck.

The motor unit is SLAS format (127.7mm x 85.5mm) which will fit into any SLAS plate locator or carrier.



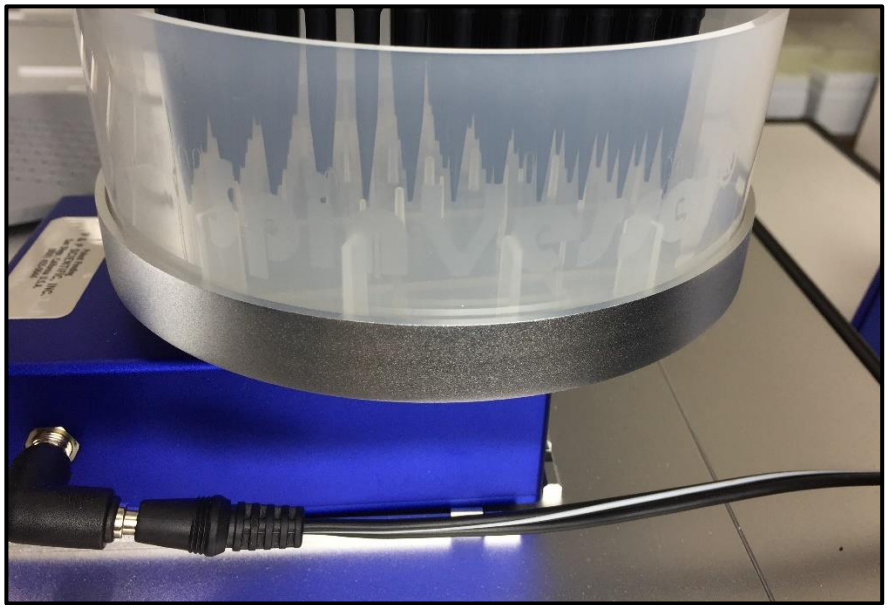
To align pipet tips to inside of SpinVessel® tube, use the registration disc. Place disc on top of the drive base, not the tube. Lower the tips until they just touch the disc. Align tips to the holes.

Z height needs to be adjusted with tube in place.



Insert the SpinVessel® tube VP 830SV-650FB into the SpinVessel® drive base.

Ensure that the SpinVessel® tabs are seated flat and registered to the slots in the aluminum spin base. SpinVessel® tube should not rotate within drive base.



With the SpinVessel® tube in the drive base, check the tip alignment relative to the projections.

Without liquid in the tube, turn on the SpinVessel® to make sure the tips are not hitting the projections.

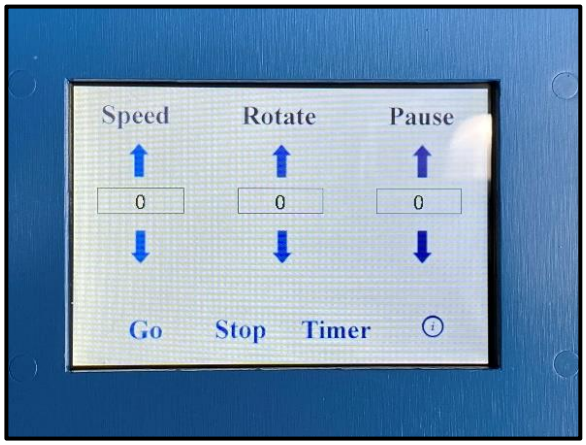
OPERATION

Powering Up the SpinVessel® System

The On/Off Switch (I/O) is located on the top of the Touch Screen Controller. To power up the controller, depress the "I" of the switch.

Operating the SpinVessel® Control

The Touch Screen Controller provides full control of the device including Speed, Rotation, Pause (between rotations), as well as a Timer. Each control feature will be explained below.

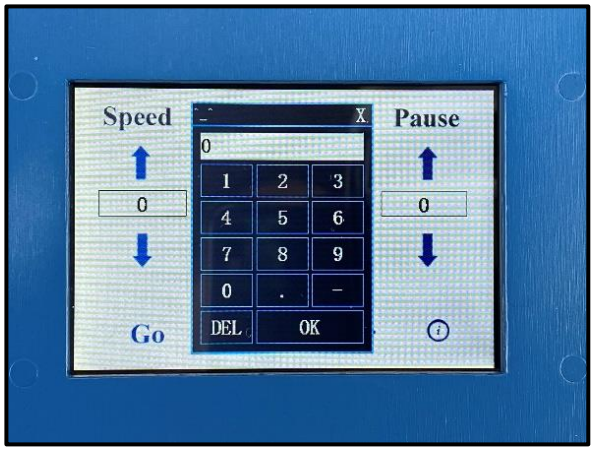


Upon power up the startup screen shows the following control features:

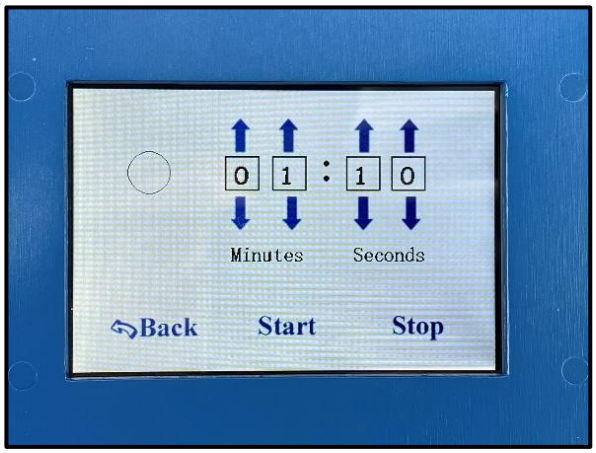
Speed: 0-100% (this does not reflect RPM)

Rotate: Number of rotations between pauses

Pause: Pause time in milliseconds the device pauses between rotations



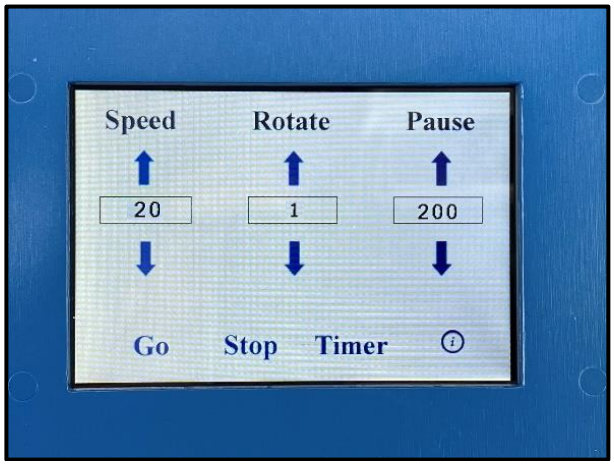
Adjust the values for each control feature by either touching the arrows, or by touching the number field. Touching the number field provides the screen shown on the left in which numbers can be input.



Touching the timer button brings up this screen. Input desired time and hit start. The stirrer will start using the settings selected in the first screen and run for the time input here.

Using the SpinVessel® System

The optimal stirring mode is dependent upon the particular application to be used and needs to be empirically determined. Factors to consider in determining optimal stir mode are the density of the particulates, size and shape, volume of liquid and viscosity of the liquid. Start with lower speeds and rotations between 1-5 and work up to the appropriate speed for the volume and liquid viscosity you are working with.



For most applications, the settings shown to the left are a good starting point.

The VP 418SV1-1-650FB SpinVessel® is designed to be used with VP 830SV-650FB SpinVessels®. Please contact V&P for pricing.

PRODUCT MAINTENANCE

GENERAL PRODUCT CARE

When not in use, turn the power switch off.

Do not place the control unit in chambers with temperatures above 40°C.

To clean the stirrer, wipe down with a cloth and mild detergent followed by a water wipe. Do not immerse SpinVessel® Motor or Control in liquid.

The motor of the VP 418SV1-1-650FB SpinVessel® is a brushed DC motor, 100-240 Volts, 50/60 Hz, CE compliant

SAFETY PRECAUTIONS

The use of motor controls, like that of all utilization of concentrated power, is potentially hazardous. The degree of hazard can be greatly reduced by proper design, selection, installation, and use, but all hazards cannot be completely eliminated.

The following safety precautions must be observed during all phases of installation, operation, service, and repair of this motor control product. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture and intended use of the products. V&P Scientific assumes no liability for the customer's failure to comply with safety requirements and practices.

WARNING
To avoid personnel injury caused by electrical shock, do not remove the cover of the controller when the power is ON.

CAUTION
Do not disconnect motor during operation. Otherwise, over-current breakdown may result.

WARRANTY

V&P Scientific, Inc. warrants this product to be free from defects in material and workmanship when used under normal laboratory conditions for one year. This warranty begins from the date of delivery by V&P Scientific.

In the event this product fails under normal laboratory conditions within the specified period of time because of a defect in material or workmanship, V&P Scientific will, at its option, repair or replace the product. Damage to the product caused by user negligence is not covered.

Please keep the special shipping carton in case the unit needs to be shipped back to V&P Scientific. Please contact V&P Scientific at the address below for return authorization and shipping instructions.

This warranty is made in lieu of other warranties expressed or implied including the warranties of merchantability and fitness for a particular purpose. V&P Scientific shall not be liable for loss or damages arising from the use of these products nor for consequential damages of any kind.

If assistance is required, contact V&P Scientific, Inc. at 858-455-0643 or sales@vp-sci.com.