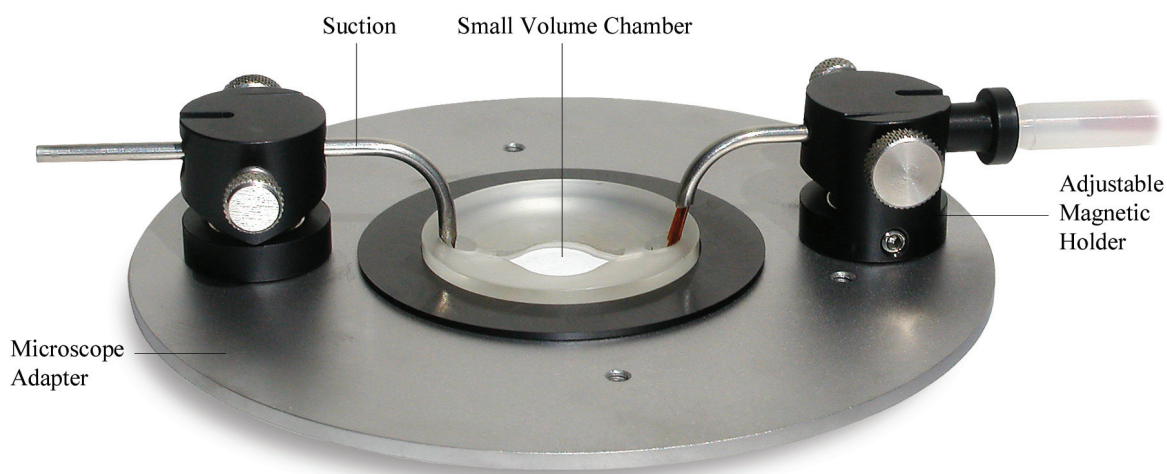
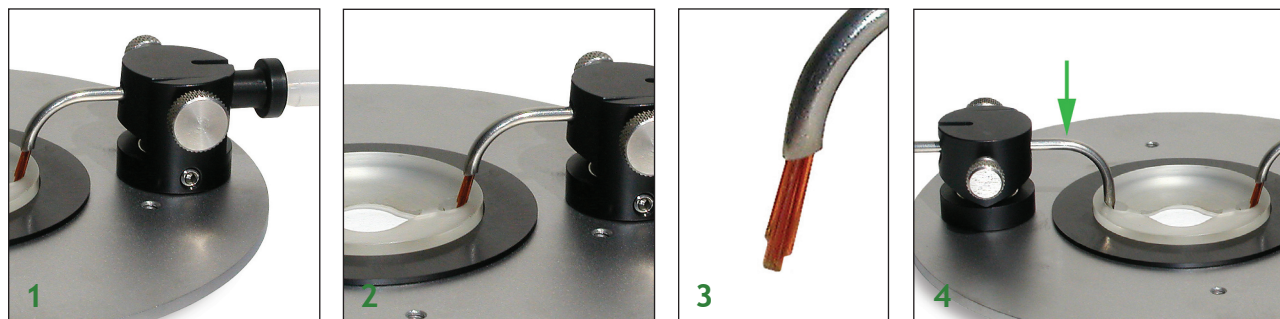


# Zero-Dead Volume Manifolds, ZMM



In case when even a slight contamination of different solutions is undesirable, a zero-dead volume manifold can be used instead of regular manifolds. The zero-dead volume manifolds offer the additional advantage of facilitating perfusion and accelerating solution exchange rate around your samples. This manifold can be also used for solution outflow/suction, by connecting one of the channels to CFPS-1U unit.

ZMM manifolds come with 2 feet connecting tubing with luer connectors, to connect to a computerized perfusion systems, PS. Use fitting from PS-KIT to attach tubing to either 1/16" soft tubing or polyethylene tubing, included with perfusion systems.



1. Position the manifold on a microscope adapter.
2. Place the tip of the manifold inside a chamber. The stainless tubing can be moved inside black holder to obtain desired configuration and to fit inside perfusion chambers.
3. The inside polyimide tubing can be adjusted to provide non-contaminating flow of different solutions by positioning the outputs at different heights. The polyimide tubing can be cut to required length using a surgical grade sharp blade or a scalpel. Polyimide tubing is washable.

Note: Selected channels of the manifold can be also used to provide suction or outflow of solution from the chamber to keep the volume inside the chamber constant. The height of the suction tubing will determine the level of solution (volume) inside the chamber.

4. Position outflow or suction tubing inside the chamber before using the perfusion system.

Note: The polyimide 360/250 micron I.D. tubing inside the manifolds will provide adequate solution flow with regular gravity driven perfusion system PS. If higher solution flow rate through the manifold are required, the solutions can be pressurized or elevated. SVDS1/2 system, for example, requires external pressure application to drive the solutions from the reservoirs. Controlled flow systems CFPS can also provide enough pressure to drive the solutions through the manifold.

Note: Always wash the manifold with DISTILLED water after use.

