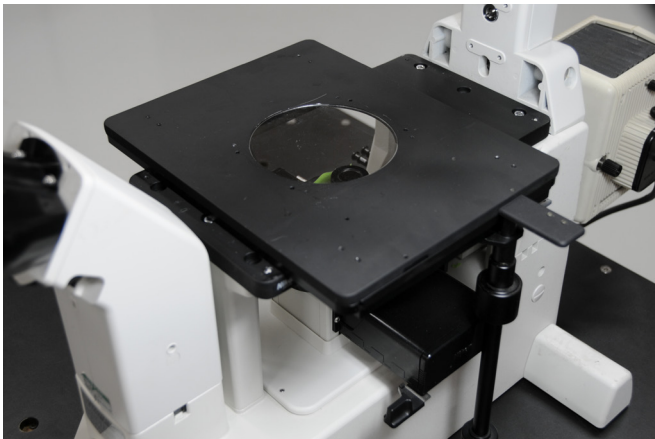
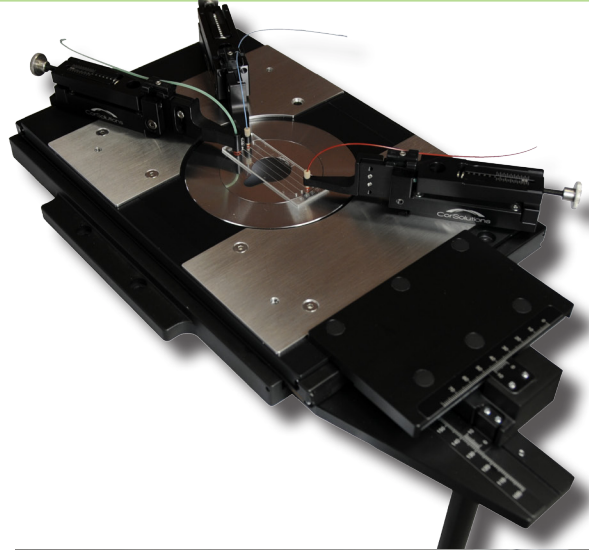




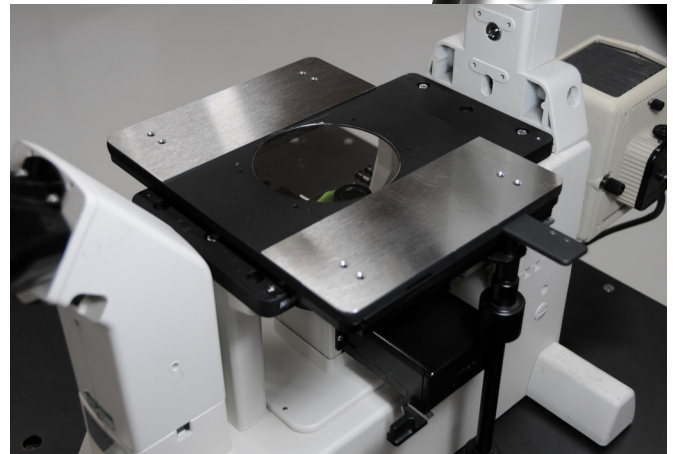
Microscope Fluidics Kit

Convert Your Microscope to
a Fluidic Probe Station!

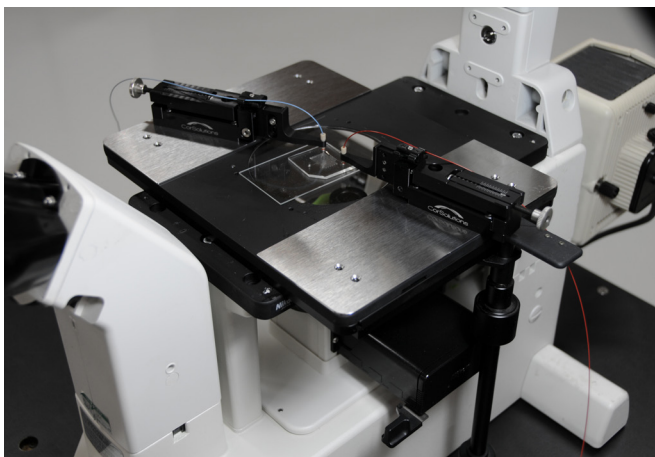
A Fluidic Connection Solution for Microscopes



Step 1. A standard Nikon microscope that will be converted.



Step 2. Metal base plates are attached to the microscope stage with screws.



Step 3. Fluidic probes are magnetically mounted to the base plate, and leak-tight, non-permanent fluidic connections are rapidly established.

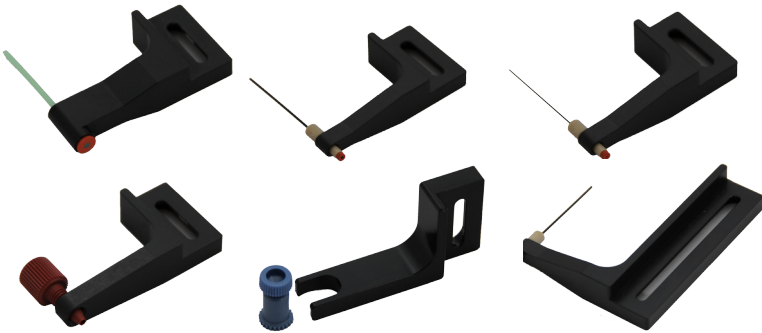
The conversion kit includes metal base plates which mount to your microscope stage. These base plates are compatible with a wide variety of microscopes, including Nikon, Olympus and Zeiss.

The conversion kit also includes CorSolutions' patented fluidic probe arms. The probes magnetically mount to the base plate and can be easily repositioned anywhere on the plate. These fluidic probe arms allow for non-permanent, leak-tight, low-dead volume connections to be rapidly established on a microdevice made from any substrate material including PDMS, glass, silicon and plastic.

This conversion kit offers a means of transforming almost any microscope into a fluidic probe station. The conversion is a simple, reversible process that can be completed in minutes.

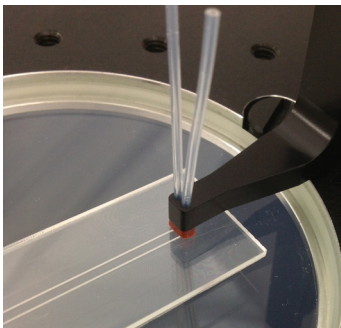
CorSolutions' connection technology allows for rapid, non-permanent, low or high pressure, leak-tight connections to be made to microchips in a highly reproducible manner, at any location on the microchip surface. These probes can be used for the final performance assessment of the finished microdevice product, or for the manufacturing of the microchip as the probes can be used to deliver chemistries, treatments, or wash solvents.

A variety of end attachments are available including those for 1/16" tubing, 1/32" tubing, medical tubing, 360 micron fused silica capillary, and 10-32 threads. Attachments for needle piercing and electrical measurements are also available. Additionally attachments are offered for high density connections, and custom end attachments are also available. These end attachments can be easily exchanged on the probes.

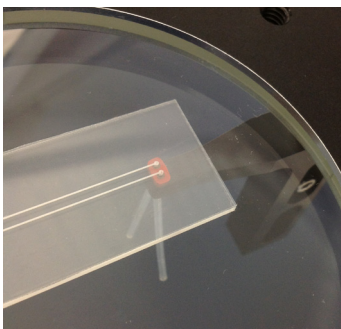


End attachments connect to the probe and are easily exchangeable. A variety of different attachments for various tubing and fittings are available.

High Density Connections



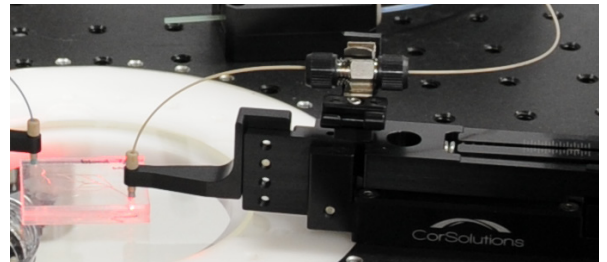
Top-view of high density connections. Here two connections, spaced 2 mm apart, are made with a single probe. The port size is 500 microns.



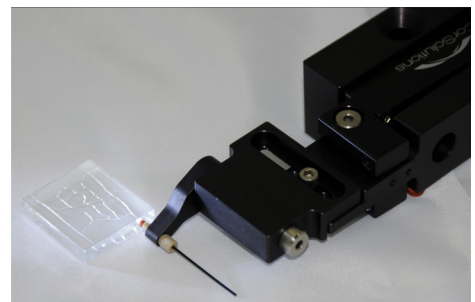
Underside-view of the same high density connections shown above.

Fluidic Probe Advantages

- Rapidly-made, user-friendly connections
- Allows for tighter density of microchip ports
- Compatible with a wide variety of fittings or adapters
- Compatible with any tubing material
- As the approach does not use adhesion, fittings are reusable
- Connections are compatible with all substrate materials including PDMS, glass, silicon and plastics
- Connections are non-permanent
- Connections remain leak-tight at greater than 500 psi
- Highly reproducible connections
- Can seal at any location on the surface or side of the device
- Top-side and back-side alignment
- Connections are lower dead-volume than conventional approaches
- Can be used for final performance assessment, and for chemistry treatment of devices during fabrication



A voltage application clamp attaches to a fluid probe, allowing for an electrical potential to be applied to a fluid stream.



Probes can also be used to seal to ports on the edges of a chip.

Patented Technology - US 8,492,165 B2 and US 8,617,489 B2. Other Patents Pending.