



Medical and Biotech  
Developments, Inc.

## Dispensing Tip Pencil + Multi Channel + Removable Tip



4, 8, or 16 channels-into-1 multibarrel manifold with male luer-lock fitting + removable tip available in 100, 250 or 360 micron internal diameter.

### Applications:

- \*Single-cell and patch superfusion spritzing
- \*Rapid (several millisecond) solution switching
- \*Micro-liter dead volume

4, 8, or 16 channels micro-bore internal tubes come ready to connect to 1/16" i.d. tubing. Device is designed to mount in a micromanipulator.

### Materials:

- \*Polypropylene, polyimide (nylon), and quartz-impregnated polyimide

Higher flow rates or small 100 micron tip may require pressurized delivery (also available).

Search this site for "removable tip" for spare tips in 100, 250, and 360 micron diameters.



Medical and Biotech  
Developments, Inc.



### Micro Mixing Pencil Multi-Barrel Manifold Tip

- Rapid solution change with micro-liter dead volume  
No piezo or stepper motor translation. No clumsy rotating valves.

- Single-cell and patch delivery  
For mounting on any micromanipulator.

- Vacuum cross-contamination prevention  
Use one tube to vacuum the tip volume clear between solution changes.

- Solid construction  
Easy to connect and clean.



### **100, 250 and 360 µm Removable Tips for Dispensing Pencils**

100 micron internal diameter removable tip with Female luer-lok connector.