PRIZMATIX DIY CANNULA INSTRUCTIONS



Contents of Kit



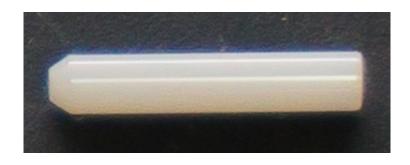
1. CONSTRUCTION OF CANNULA

Gather necessary tools:



Basic Ferrule Layout

Convex End



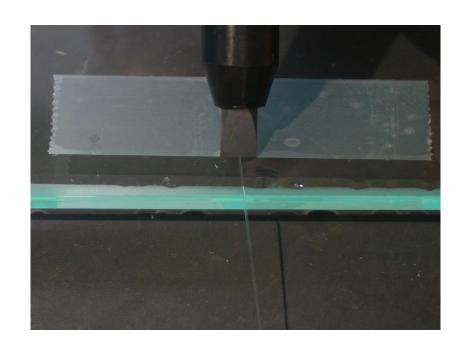
Flat End

If using uncleaved fibers:

Carefully take out an uncleaved fiber from the tube.



Uncleaved Fibers: Tape down fiber firmly, about 6mm from surface edge.



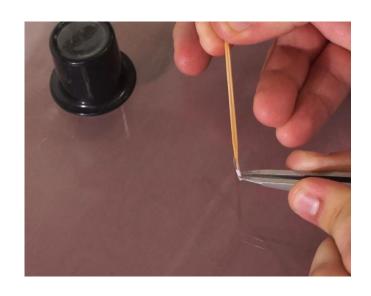
Uncleaved Fibers: Pull fiber taut, and very gently make a mark perpendicular to the fiber length.

Continue pulling gently until the fiber cleaves and breaks off.

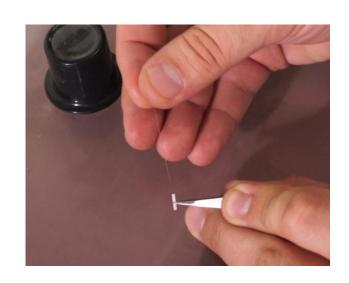
Prepare epoxy glue for fiber optics according to manufacturer's instructions.

Tip: we recommend Epo-Tek 301

Place a bead of epoxy glue on flat side of cannula, then wait a few seconds for glue to penetrate.



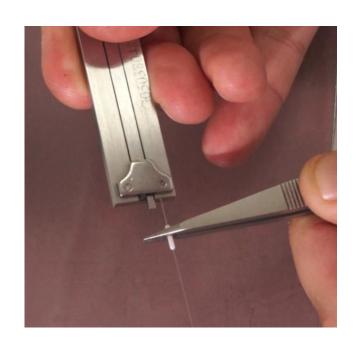
Insert uncleaved end of fiber into flat side so that it protrudes from convex (rounded) end.





Push fiber through to desired length, measuring with caliper to get exact length.

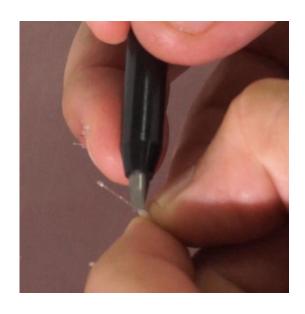


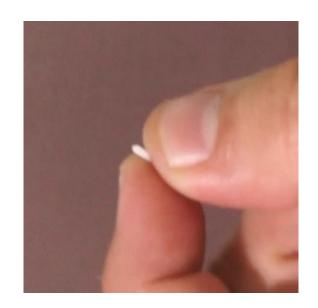


Let cannula dry 24 hours.

2. POLISHING OF THE CANNULA

Take the scribe and gently scratch around the fiber on the convex side until the excess fiber falls off. Handle carefully and gently!





Insert cannula into the puck: ensure that only a very small part of cannula sticks out.



Tip: place the puck on several layers of tissue paper when inserting cannula

Tighten puck with the hex key



Place the puck on the polishing paper, and start polishing in figure-8 patterns or small circles.

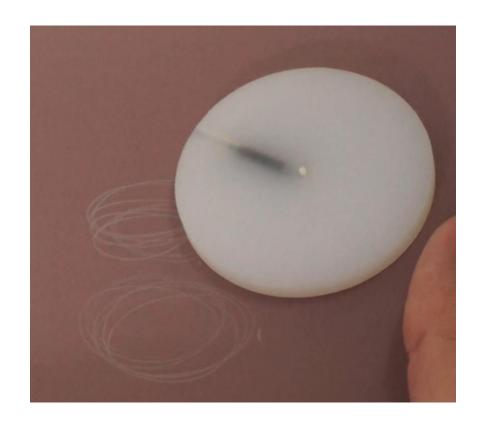
After a few rounds move on to increasingly finer polishing papers.

Don't forget to add water for the finer papers!

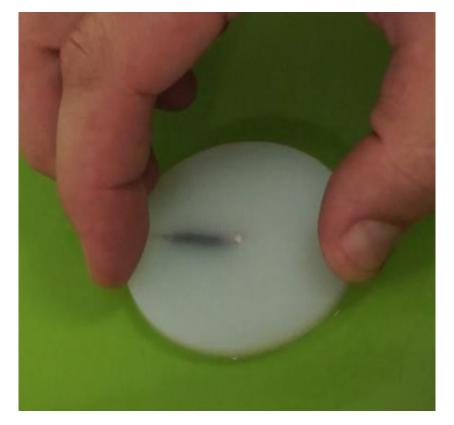
Black 5um Paper



Pink 3um Paper

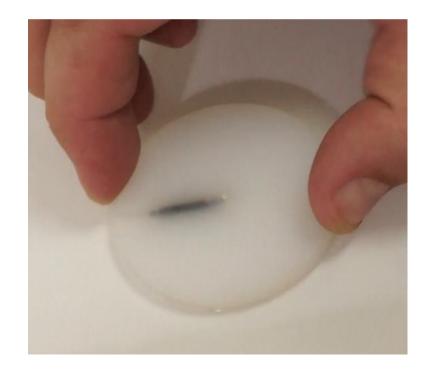


Green1um Paper



(Add water)

White
0.3um Paper



(Add water)

3. INSPECTION

Hold up cannula to the light with round end towards you, and ensuring a full circle of light is visible through the cannula. Ideally check cannula dedicated fiberscope.

The Finished Cannula

