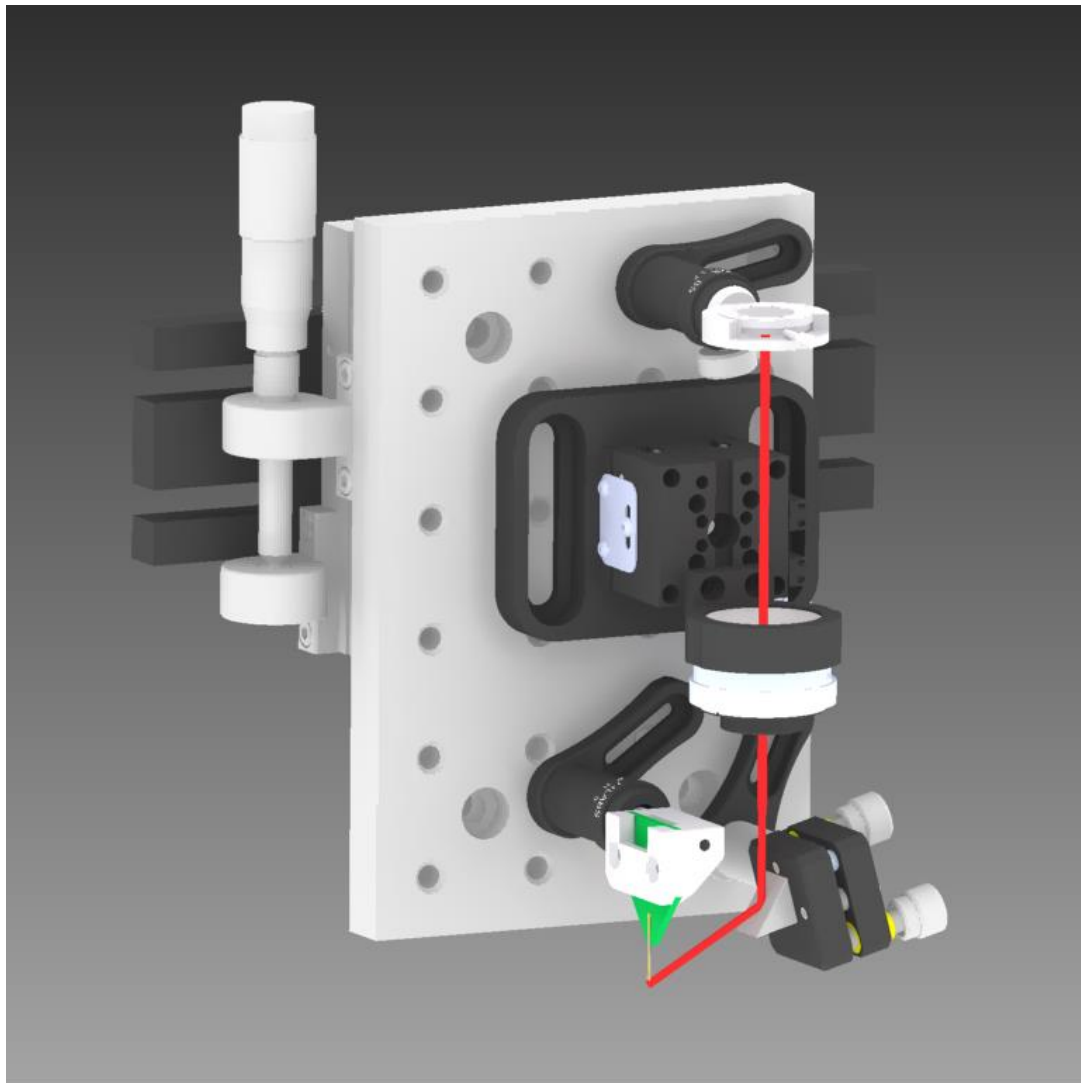


Sub-System D-B1 / D-B1-TR

Installation notes

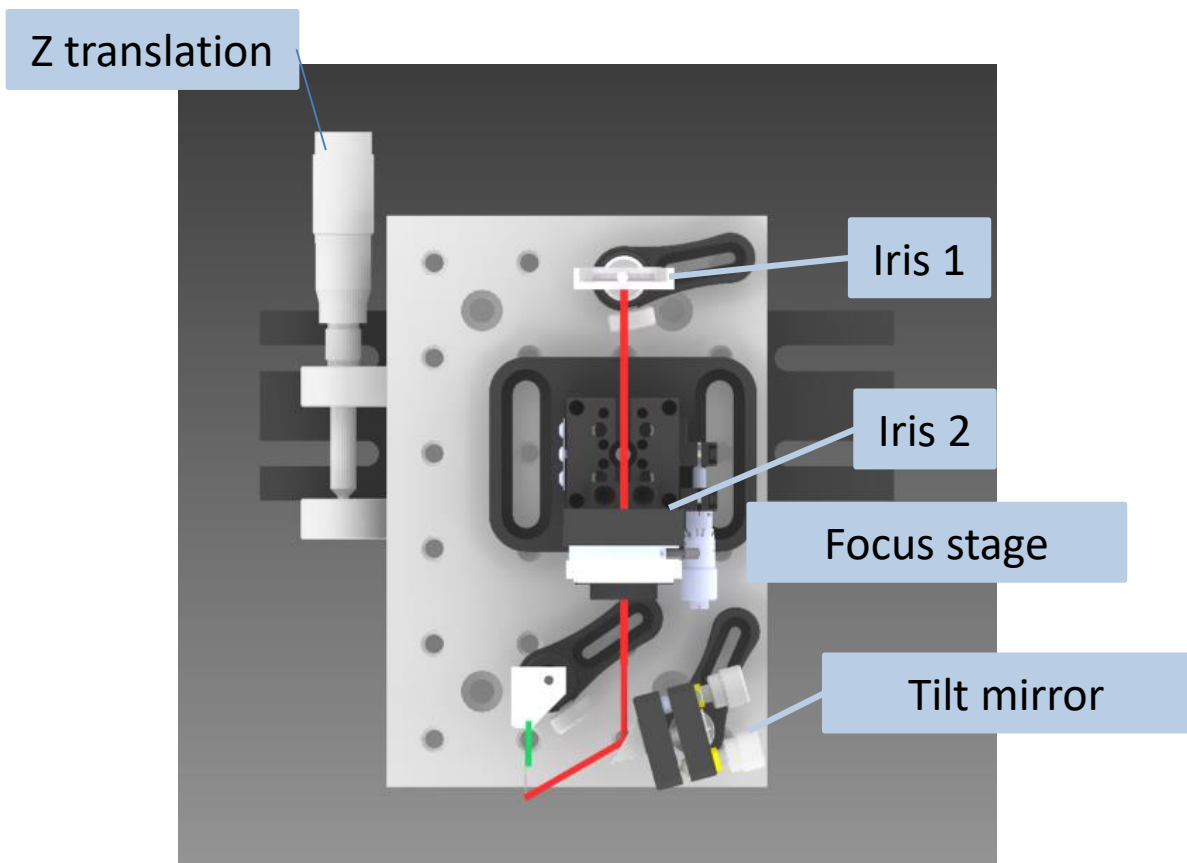


Overview



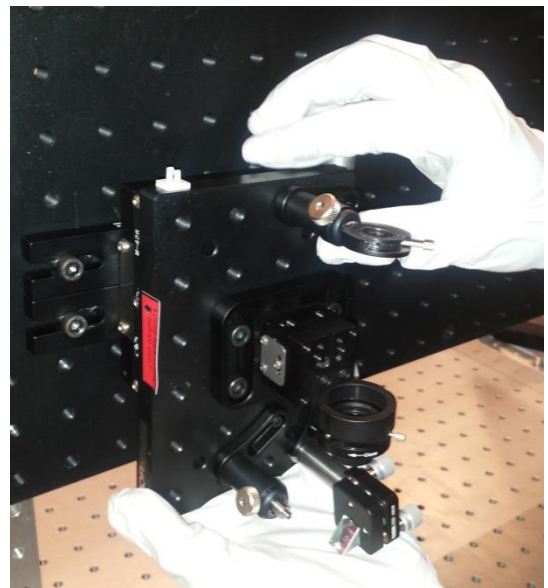
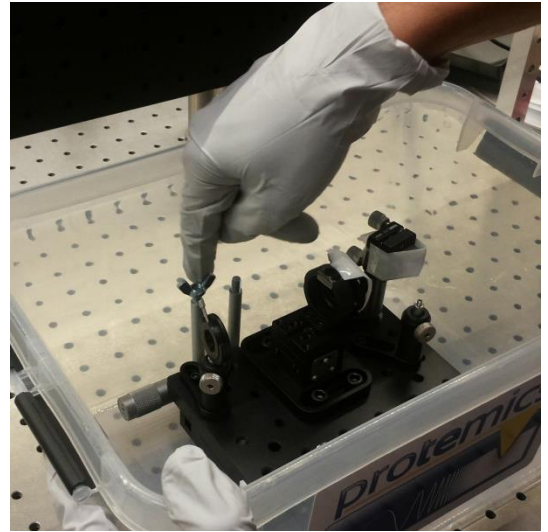
General information:

- The sub-system D-B1 facilitates the integration of the TeraSpike microprobe into an existing setup. It covers the functions of beam-to-tip alignment, focusing and probe-tip height variation.
- D-B1 comes pre-aligned. Hence, only small re-adjustments should be sufficient to compensate slight variations of the probe-tip position after mounting the TeraSpike probe.



Unpacking

- Before opening please check the box for visible transport damage. If the box is damaged please document the defects with pictures to support later insurance claims.
- Open the box and remove the four transport wing-screws.
- Lift out the D-B1 sub-system from the box.
- Next, mount the D-B1 at the desired position in your system using four screws (e.g. M6).



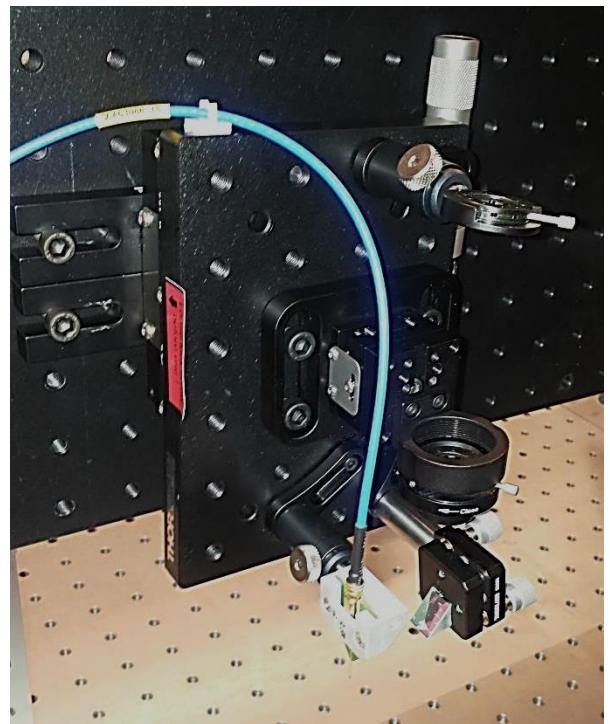
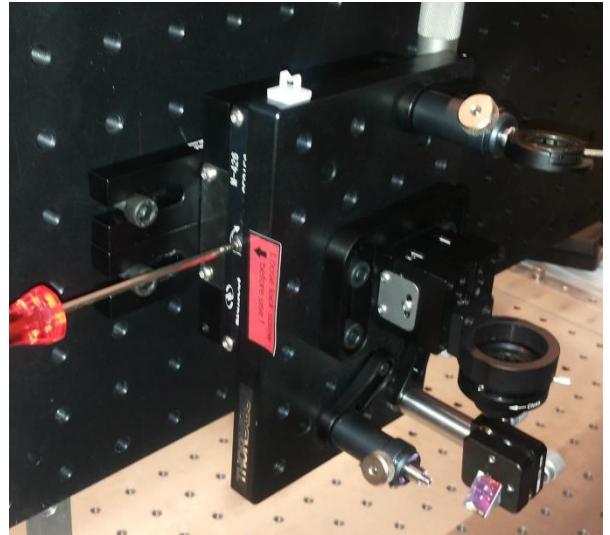
Unpacking and Installation

- Loose all marked lock screws of the translation stage and the focus stage by one turn.

Not losing these screws can cause damage during translation!

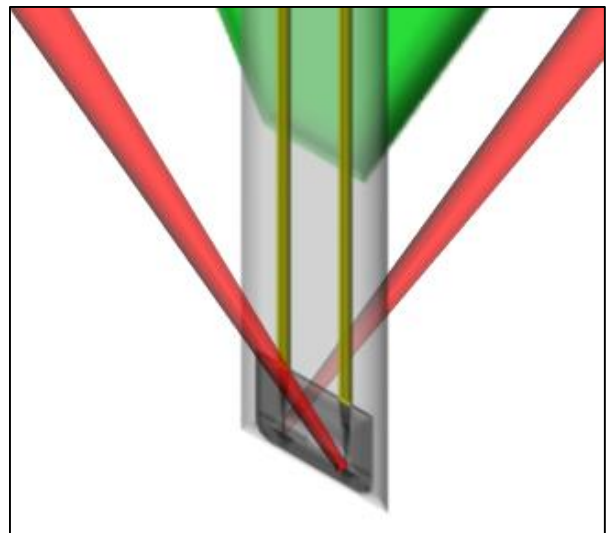
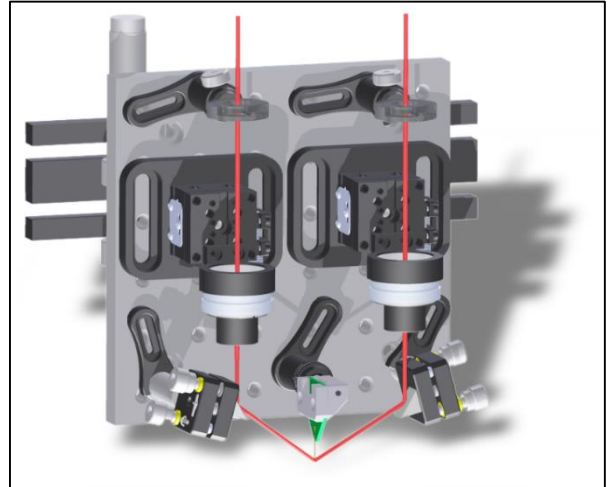
- Remove the foam pad and the protective sheets from the optics.
- Use two of your mirrors placed in front of D-B1 to align the incident beam on both irises. Make sure that the beam is well centred on both irises. (Please see also next page for the D-B1-TR)
- Next adapt the optical power to the values recommended in the TeraSpike application notes.
- Now you can build in your microprobe and start the alignment procedure as described in the TeraSpike application notes using the focus stage and the tilt mirror. Small readjustments should be sufficient.

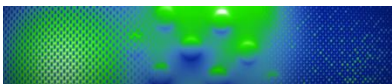
Please read carefully the corresponding application notes before installing the TeraSpike into the setup.



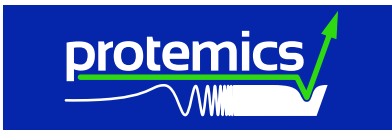
Sub-D-B1-TR Only

- The Sub-D-B1-TR has a second beam path for the pump beam
- Before putting your TeraSpike-TR into place, repeat the previous alignment procedure for the second beam path.
- The distance between the two entrance beams is 70mm
- Entrance beam diameter should be 2-5 mm
- The pre-alignment is done as follows:
 - Probe beam (right):
Illuminating the PC-switch that is located closer to the Sub-DB1-TR-breadboard from the PET side of the TR.5 tip.
 - Pump beam (left):
Illuminating the PC-switch further away from the Sub-DB1-TR-breadboard from the metallized side of the TR.5 tip.





Questions? Please contact us:



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