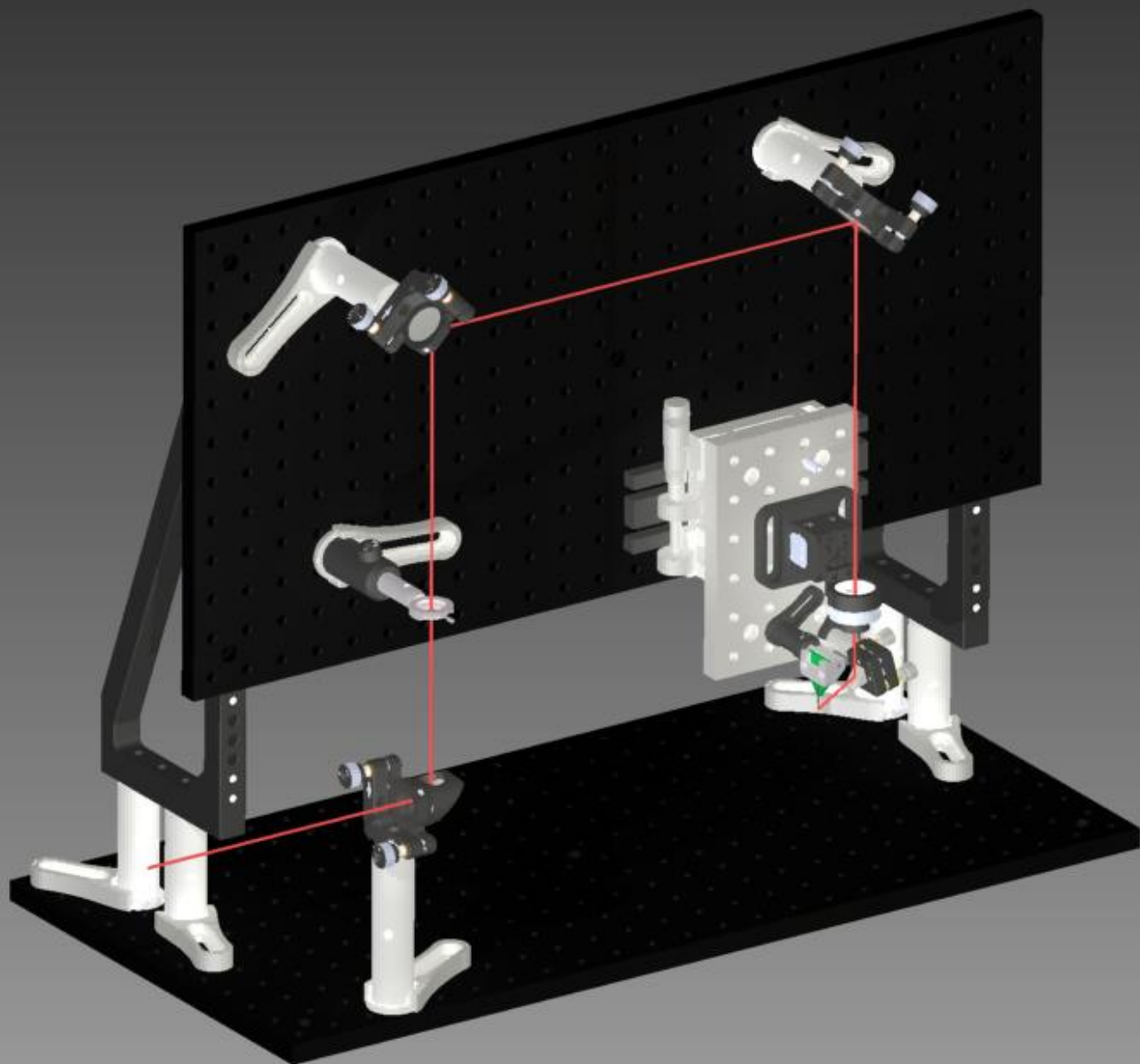


Installation notes

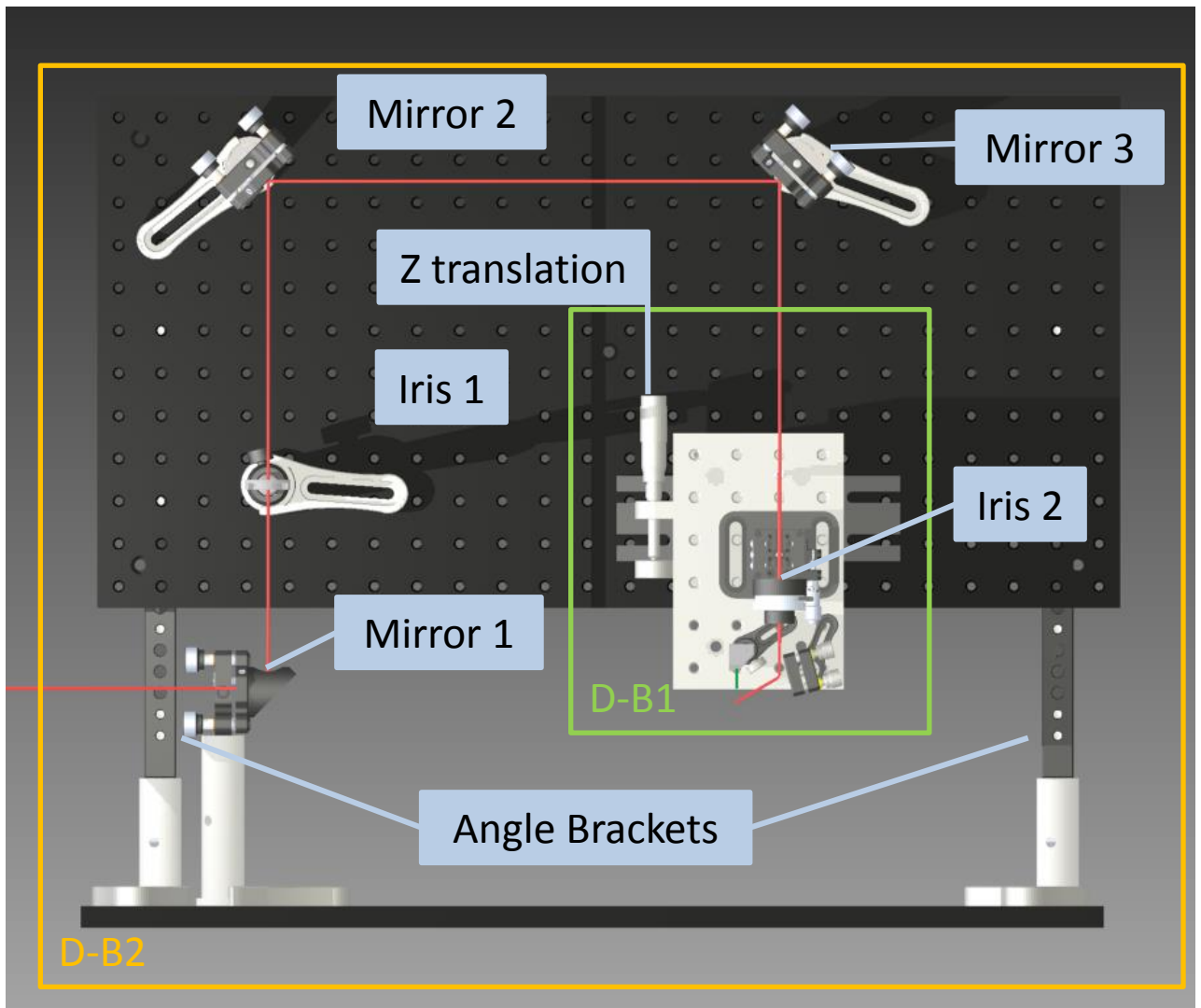


Overview



General information:

- The main breadboard of sub-system D-B2 contains pre-aligned optical components.
- Mirror 1 is a separate component which needs to be mounted on your optical table.



Unpacking and Installation

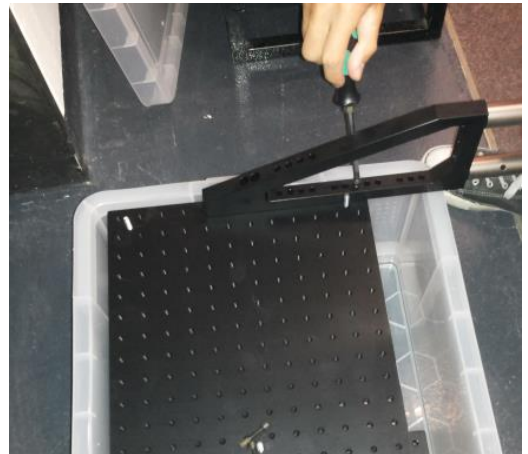
Unpacking:

- Unpack the Sub-D-B2 transportation plastic box and all other components from the carton.
- Unscrew the wing screws on top of the transportation box, open the lid and remove all remaining shims.



Installation:

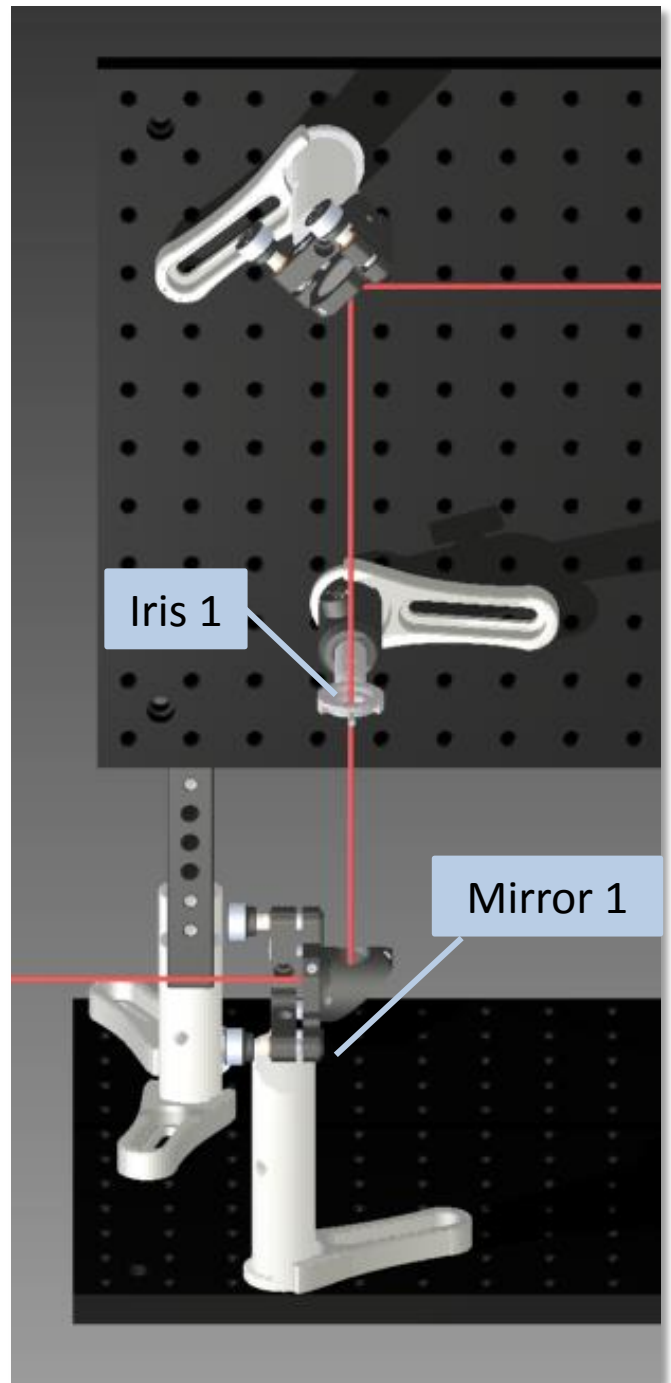
- Before unboxing the system, fix the angle brackets using the included screws at a desired height. Note that the TeraSpike tip will overhang the lower edge of the breadboard.
- Carefully get the D-B2 out of the transportation box and put it on your optical table.
- **Caution!** Take care that the distance tubes do not hit the optics.
- Fix the base mount of the D-B2 on the optical table using the supplied clamping forks.



D-B2 Installation

System installation:

- Place the system on its final position on your optical table. Fix it with the provided clamping forks.
- Position and mount **Mirror 1** with one clamping fork to guide the laser beam upwards to **Iris 1**.
- Make sure laser-safety rules are applied, when guiding the beam upwards.
- Adjust **Mirror 1** and the next upstream mirror in your system to centre the beam on **Iris 1** and **Iris 2**. Mirror 2 and 3 should not be realigned.



D-B1 Alignment

Fine adjustment:

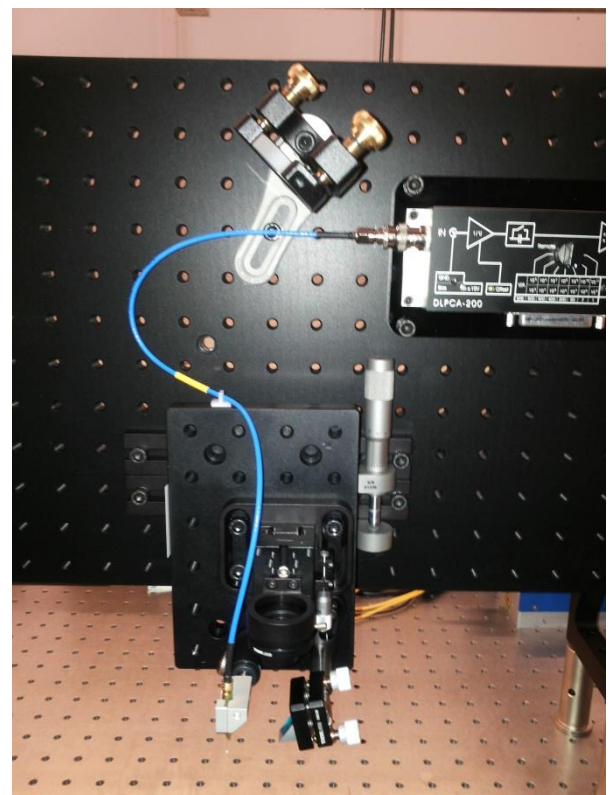
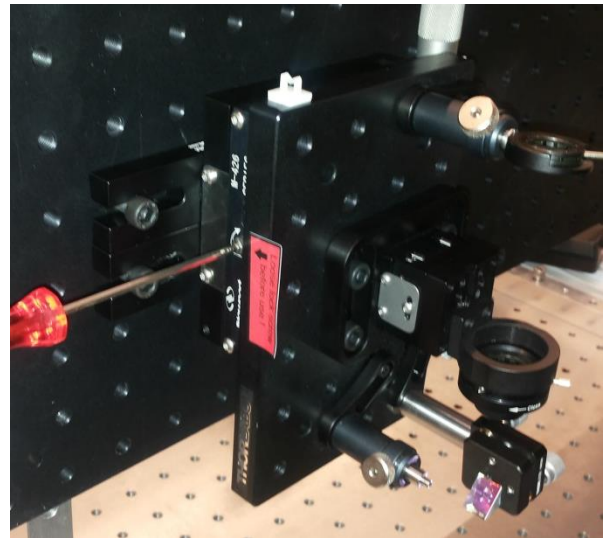
- Though your sub-system **D-B2** / **D-B1** comes pre-aligned, some fine adjustment might be necessary.
- Loose the marked lock screw of the translation stage by one turn.

Not loosening this screw can cause damages during translation!

- Next adapt the optical power to the values recommended in the TeraSpike application notes.
- Now you can build in your microprobe and connect the cable to the current amplifier.

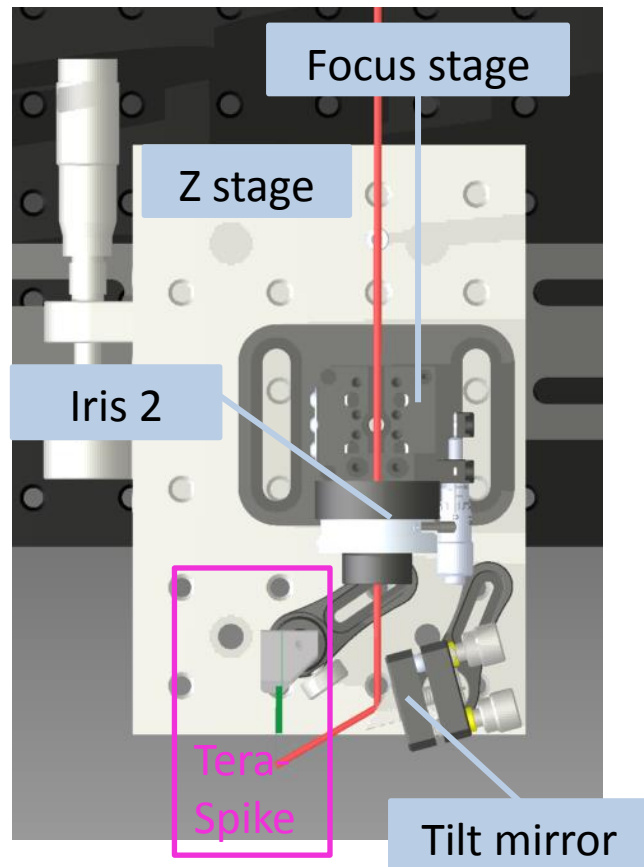
Please read carefully the corresponding application notes before installing the TeraSpike into the setup.

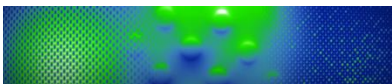
- In case you also ordered a DLPCA current amplifier prepare for alignment procedure by switching on the bias (preadjusted to 1V) and connect a Voltmeter to measure photo-current using an amplification of 10^6 V/A.



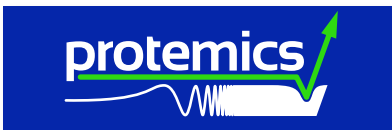
D-B1 Alignment

- Start the alignment procedure as described in the TeraSpike application notes using the focus-stage and the tilt mirror. Small readjustments should be sufficient.





Questions? Please contact us:



Protemics GmbH
Otto-Blumenthal-Str. 25
D-52074 Aachen
Germany

www.protemics.com
info@protemics.com
Phone: +49 241 8867 140
Fax: +49 241 8867 560