



Invilog manipulator set

- Invilog manipulator
- Holder for electrode
- Bubble level probe

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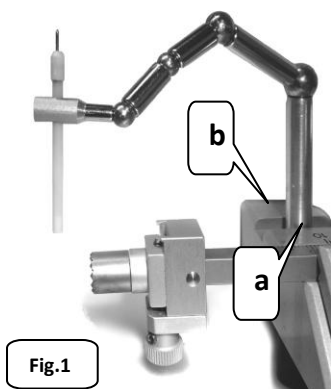


Fig.1

Before first use:

1. Screw down the manipulator into the threaded socket on the side of the stereotaxic apparatus (Fig. 1, a).
2. Tighten it in place with your fingers or by using the small screwdriver inserted in the hole at the base of the manipulator.
3. Place the probe's two pins on the flat side part of the apparatus (Fig.1, b) first in the sagittal and then in the frontal direction. Align the stereotaxic apparatus horizontally on the table (or adjust height of the table legs) if bubble is not at the centre of the levelling probe i.e. between the two markers.

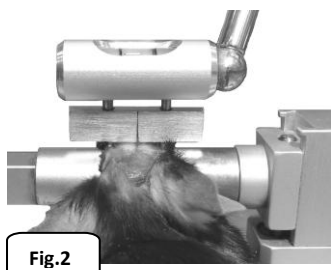


Fig.2

During stereotaxic surgery:

1. Fix the skull in the apparatus using the ears bars. Do not tighten the nose clamp.
2. Place the probe so that it is perpendicular to the sagittal suture to ensure that the vertical marker on the moving plate between the pins is exactly above the sagittal suture (Fig. 2). Press gently down on the probe with your finger to ensure that both pins touch the skull.
3. Verify that the bubble stays between the two markers on the probe's window (ideally in the centre).
4. Place the probe along the sagittal suture so that the pins are at an equal distance from bregma and lambda and are located on the middle line (Fig. 3).
5. Tighten the nose clamp. Press gently down on the probe with your finger and verify that the bubble stays between two markers in the probe's window (ideally in the centre).

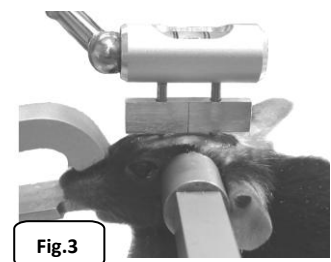


Fig.3

The position of the bubble between markers indicates that two points on the skull located under the pins, 8 mm apart from each other, are at the same height with an error less than 0.1 mm.

Technical information and care:

Do not heat manipulator and the probe over 60°C. Do not apply any grease. Use ethanol for cleaning; dry carefully. Note that neodymium super magnets which are used in the manipulators are fragile and possess strong magnetic forces. Be careful when disassembling or assembling the manipulator.