

### **Complete rig for easy multiprobe In vivo recordings**

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# Reliable recordings (for example Neuropixels) with proven Sensapex repeatability and stability

- Easy and reproducible positioning of over 25 probes.
- Automated, smooth insertion at adjustable speeds down to 1 µm per second for improved tissue health
- Python interface and SDK for easy automated control - with atlas support through Pinpoint software



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- Angles from vertical to near horizontal with rotation centered on the brain
- Easy access to each probe even at tight spacing
  quick exchange without risking breakage
- Quick adjustment of angles thanks to easy-toread scales

## uMp-RNG and uMp-ARM

- Stable and reproducible positioning of e.g. Neuropixels probes
- All angles, including "spin" of the probe can be adjusted
- Azimuth ( $\phi$ ) and altitude ( $\theta$ ) rotate centered on the brain
- Ring segments can be used individually or as a complete ring
- Flip-action allows easy access to all probes
- Space for mounting a floating ball or treadmill in the center







## **Spinning probe holders**

- Locks into adapted rod holder on uMp-3 NP
- Can be combined with NP1 or NP2 holders
- Available with spin adjustment
- Provides secure mounting of NP probes





#### uMp-3-NP



- Current uMp-3 and uMp-4 are not compatible with the rig
- $\rightarrow$  Can be modified in Sensapex Oy service. Ask for the price!



## **Dimensions (mm)**









## **Dimensions (mm)**











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## **Complete rig for 1 manipulator**



Product Code	Description	Qty
uMp-3-NP	Triple axis manipulator for in vivo rig Neuropixel	1
uMp-RNG	90 deg ring stand to mount arm on the table	1
uMp-ARM	Arm to hold micromanipulator in adjustable angle	1
uMp-SLF-90	90 degree shelf for uMp-3-NP manipulator	1
uMp-TSC2	Touch screen control unit incl. charger and ethernet cable. Pairs with uMp-HUB lite.	1
uMp-HUB lite	Connecting HUB for connecting 4 manipulators, rotary wheel and PC. Includes charger.	1
uMp-RW3	Rotary wheel remote interface with 3 wheels	1
uMp-RHL	Adpter for holding rods with 4-10 mm OD rods/holders	1
uMp-NPR-200-S	Spin adjustable rod to hold uMp-NPH-S or uMp-NPH-2s adapters (200 mm total length)	1
uMp-NPH-S *	Adapter head for Neuropixel V1.0 probes with head-stage holder and for spin adjustment	1
* alternatively uNAn N	DH 25 Adaptor boad for Nouropivel V2 O probes with boad stage bolder and for spin adjustment	•

\* alternatively uMp-NPH-2S Adapter head for Neuropixel V2.0 probes with head-stage holder and for spin adjustment

### **Complete rig for 2 manipulator**



Product Code	Description	Qty
uMp-3-NP	Triple axis manipulator for in vivo rig Neuropixel	2
uMp-RNG	90 deg ring stand to mount arm on the table	2
uMp-ARM	Arm to hold micromanipulator in adjustable angle	2
uMp-SLF-90	90-degree shelf for uMp-3-NP manipulator	2
uMp-TSC2	Touch screen control unit incl. charger and ethernet cable. Pairs with uMp-HUB lite.	1
uMp-HUB lite	Connecting HUB for connecting 4 manipulators, rotary wheel and PC. Includes charger.	1
uMp-RW3	Rotary wheel remote interface with 3 wheels	1
uMp-RHL	Adapter for holding rods with 4-10 mm OD rods/holders	2
uMp-NPR-200S	Spin adjustable rod to hold uMp-NPH-S or uMp-NPH-2s adapters (200 mm total length)	2
uMp-NPH-S*	Adapter head for Neuropixel V1.0 probes with head-stage holder and for spin adjustment	2

\* alternatively uMp-NPH-2S Adapter head for Neuropixel V2.0 probes with head-stage holder and for spin adjustment



### **Complete rig for 4 manipulator**





Product Code	Description	Qty
uMp-3-NP	Triple axis manipulator for in vivo rig Neuropixel	4
uMp-RNG	90 deg ring stand to mount arm on the table	4
uMp-ARM	Arm to hold micromanipulator in adjustable angle	4
uMp-SLF-90	90-degree shelf for uMp-3-NP manipulator	4
uMp-TSC2	Touch screen control unit incl. charger and ethernet cable. Pairs with uMp-HUB lite.	1
uMp-HUB lite	Connecting HUB for connecting 4 manipulators, rotary wheel and PC. Includes charger.	1
uMp-RW3	Rotary wheel remote interface with 3 wheels	1
uMp-RHL	Adpter for holding rods with 4-10 mm OD rods/holders	4
uMp-NPR-200S	Spin adjustable rod to hold uMp-NPH-S or uMp-NPH-2s adapters (200 mm total length)	4
uMp-NPH-S*	Adapter head for Neuropixel V1.0 probes with head-stage holder and for spin adjustment	4

\* alternatively uMp-NPH-2S Adapter head for Neuropixel V2.0 probes with head-stage holder and for spin adjustment



#### Note!

• The same rig is good for ANY *in vivo* recording which can be mounted in micromanipulator – patch clamp or silicon probes.





#### **Thank you!**