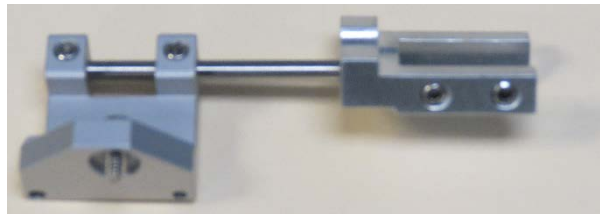


## MPM-Probe Mount-7

Item # 06264-3-0007

Description: A hardware kit that mounts an Acute Neural Probe Optrode PCB (not provided) to the Z-axis stage of a New Scale M3-LS-3.4-15-XYZ-Upright and/or M3-LS-3.4-15-XYZ-Inverted, for use with a Multi-Probe Micromanipulator 4 Degree of Freedom Arm (MPM-4 DOF Arm-Upright and/or MPM-4 DOF Arm-Inverted).

**MPM-Probe Mount-7**



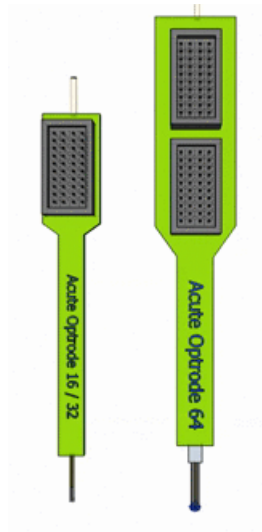
**Calibration Rod**



## MPM-Probe Mount-7 continued...

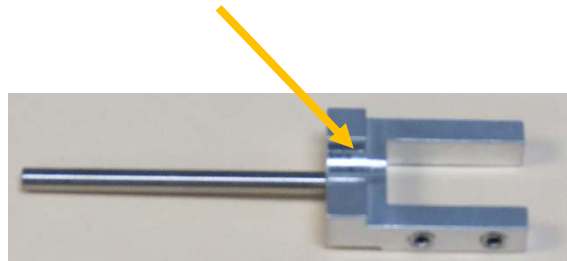
---

The MPM-Probe Mount-7 was designed to be compatible with an Acute Neural Probe Optrode as shown in this image. The Acute Neural Probe Optrode is not included and must be purchased separately (available from Cambridge Neurotech, [www.cambridgeneurotech.com](http://www.cambridgeneurotech.com)).



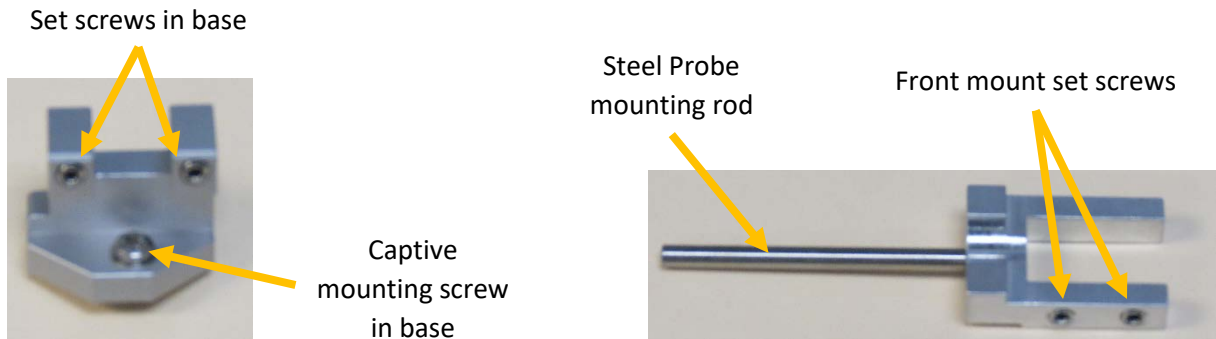
MPM-Probe Mount-7 has space to allow the use of fiber optic cable with the Acute Neural Probe Optrode.

Space for fiber optic cable

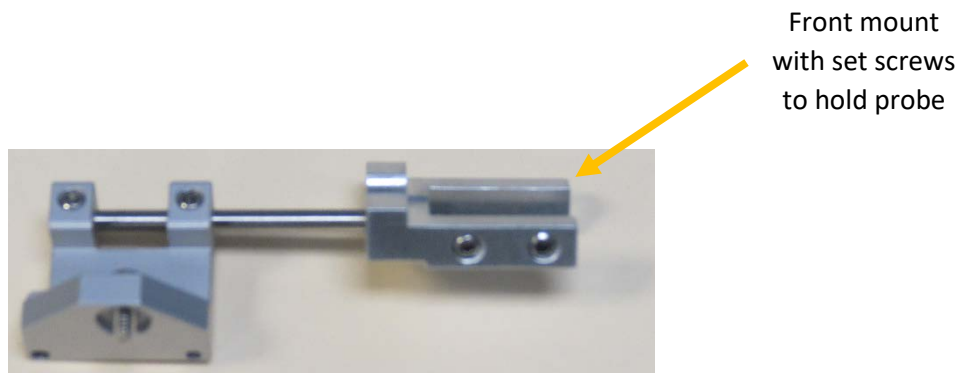


## Install a probe onto MPM-Probe Mount-7

---



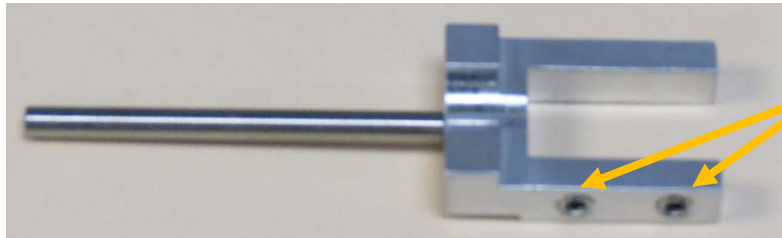
Place the steel probe mounting rod into the probe mount base in the orientation shown below, and use the supplied hex wrench to tighten the set screws in base.



## Install a probe onto MPM-Probe Mount-7 continued...

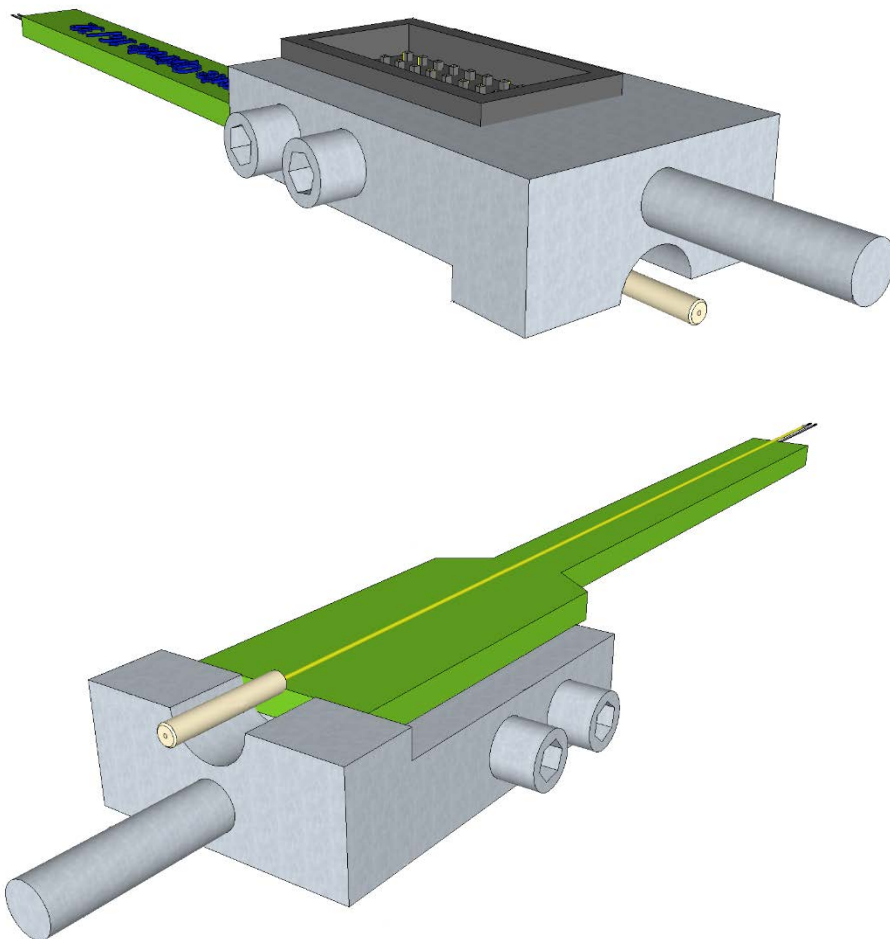
---

Loosen the front mount set screws but do not remove.



Loosen screws but do not remove

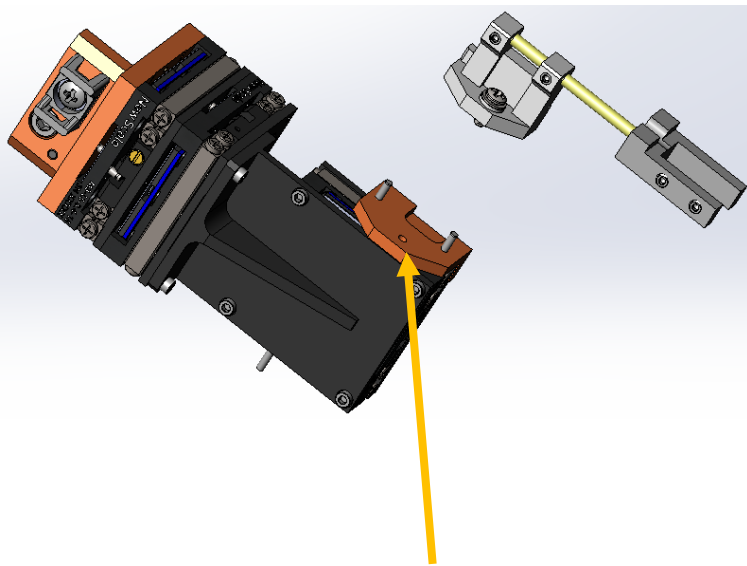
Insert the headstage connector of an Acute Neural Probe Optrode into the front mount, and tighten the front mount set screws using the provided screw driver.



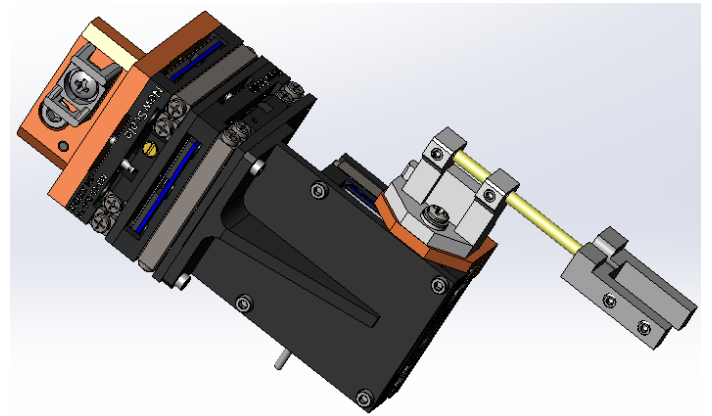
## Install MPM-Probe Mount-7 onto Mount Plate

---

Use the included screw and screwdriver to mount the MPM-Probe Mount-7 to the Mount Plate installed on the Z-axis stage.



Hole to mount Probe Mount onto Mount Plate



## Using the Calibration Rod to Pre-Align the MPM-4 DOF Arm

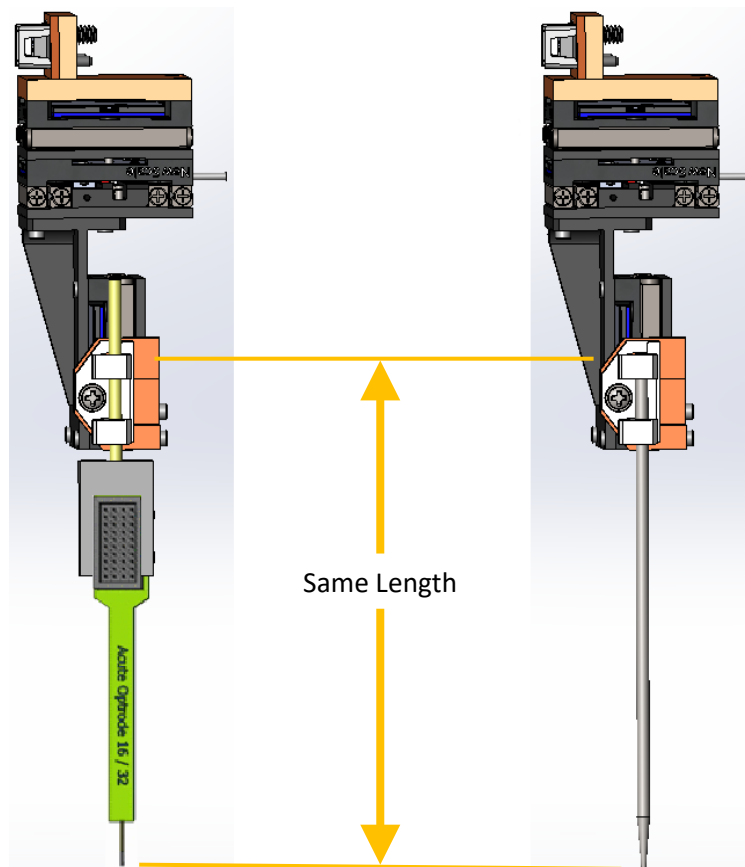
A steel calibration rod is provided to allow pre-alignment of the MPM-4 DOF Arm without risking damage to the probe. To make the best use of the calibration rod, the distance from the rear of the base to the tip of the probe should be known and constant. The calibration rod is used as follows:

1. Remove the steel rod and front mount from the base and replace it with the calibration rod as shown.
2. Adjust the calibration rod to the same length as the probe as shown.
3. With the Arm in the down position, complete pre-alignment of the MPM-4 DOF Arm's vertical, horizontal and insertion angle adjustments to place the calibration rod tip at the correct insertion angle and starting location.

**NOTE:** The tip of the probe is offset from the position of the tip of the calibration rod, depending on the rotation of the front mount. Please see 06264-8-0007 for more information.

**NOTE:** Refer to the MPM Hardware Manual for more information about setting up and adjusting the MPM-4 DOF Arm.

4. Move the Arm to the up position and replace the calibration rod with the steel rod and front mount.
5. Move the Arm to the down position and operate XYZ manipulator to place probe and begin recording.



For questions and support, please contact:

New Scale Technologies  
121 Victor Heights Parkway  
Victor, NY 14565

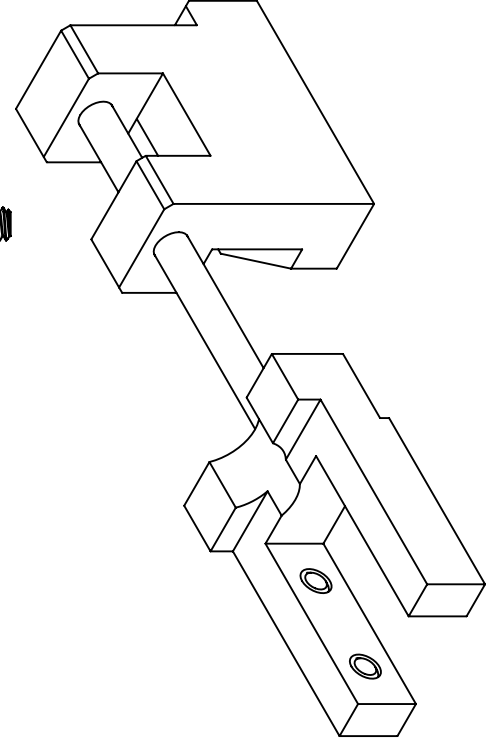
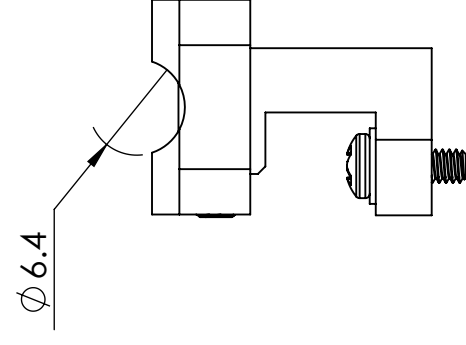
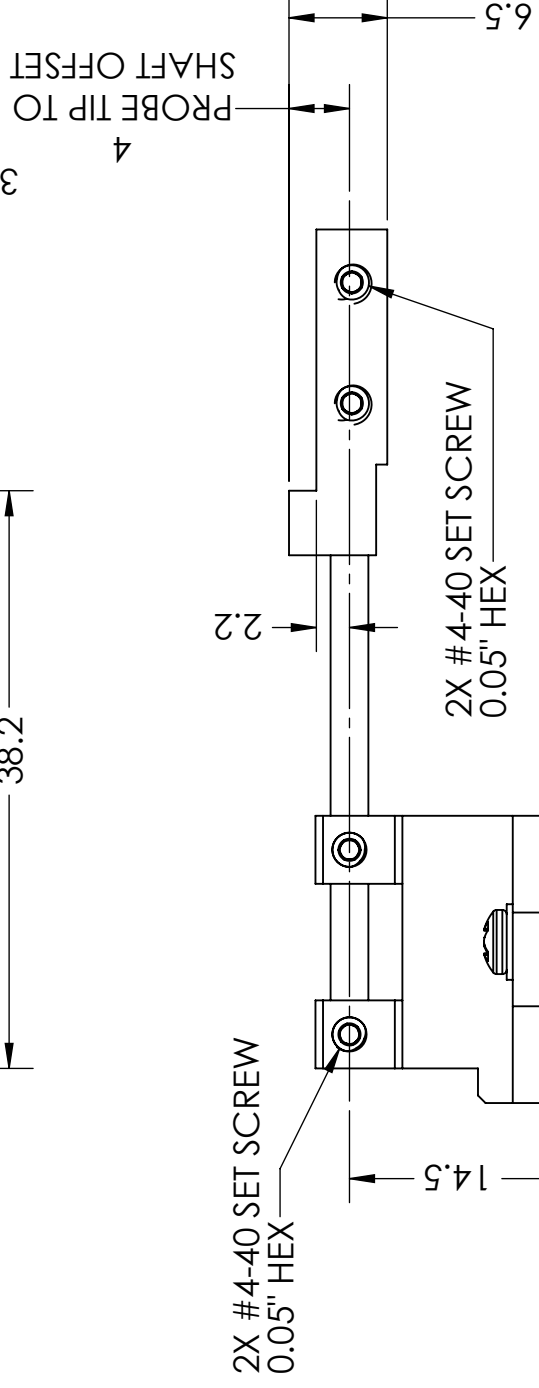
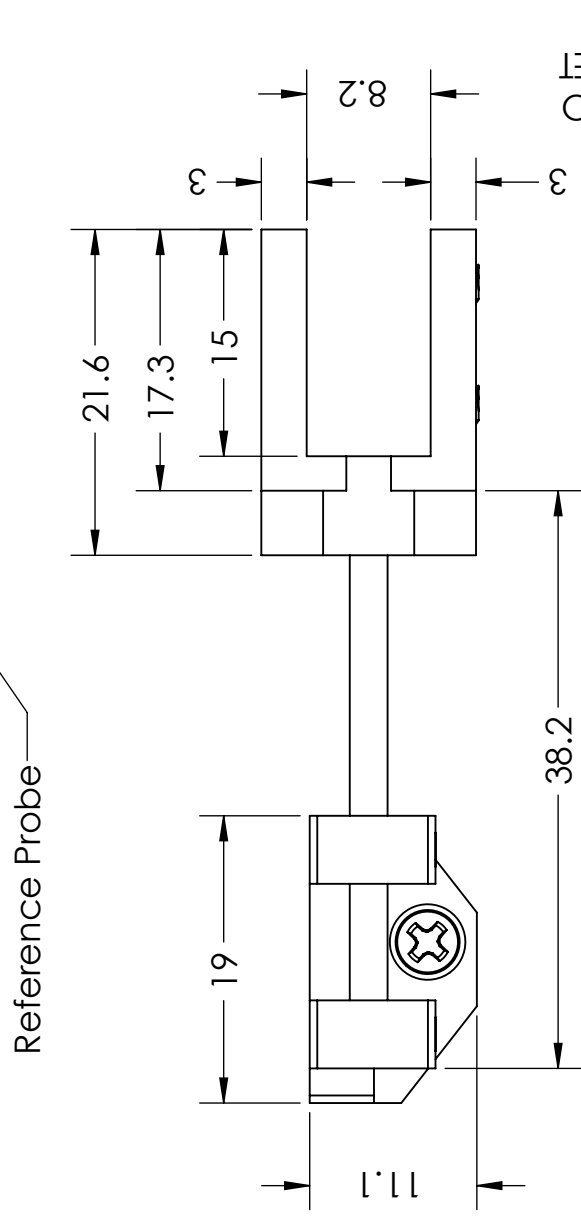
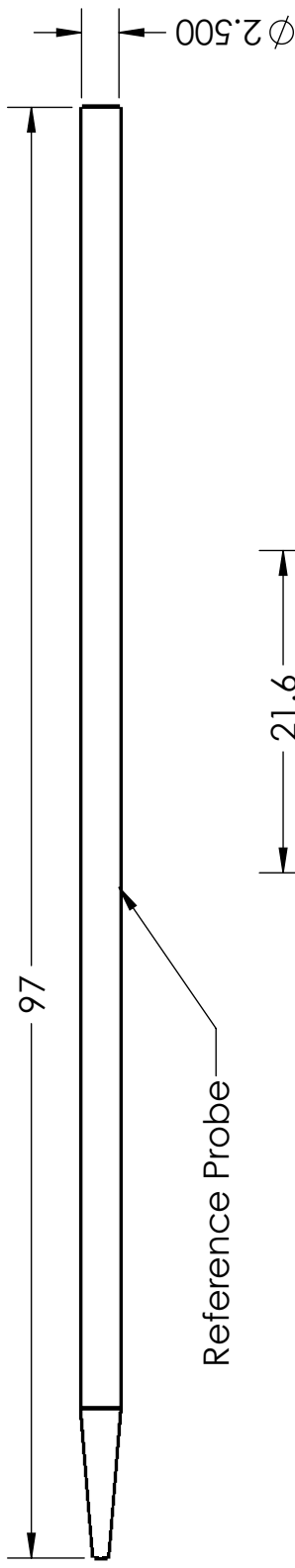
Phone: 585-924-4450

Online: [www.newscaletech.com](http://www.newscaletech.com)

## Revision History

Revision	Description of changes	Release Date
A	Initial Release	August 5, 2019
B	Convert to all-metal assembly: changed plastic base to machined aluminum base, changed alumina rod to stainless steel rod, updated visuals to reflect metal components, updated 06264-8-0007 interface drawing to Rev B	May 20, 2021

REVISIONS				
REV.	DESCRIPTION	DATE	APPR'D	Change #
1	Initial Design	6/14/2018		
A	Initial Release	1/7/2019	AS	427
B	Release of all-metal version, replaced alumina rod with stainless steel rod, replaced plastic base with machined aluminum base. Weight (Probe Holder Only) increased from 6 grams to 9 grams	5/19/2021	AS	496



Probe Adapter Specifications	
NST Item #	06264-3-0007
Orientation	Upright / Inverted
Shaft Offset	4mm
Weight (Probe Holder Only)	<= 9 grams
Total Weight with User Probe and Cabling	MAX 20 grams

DRAWING NOTES:  
THIS DOCUMENT CONTAINS THE PRODUCT SPECIFICATION FOR NST ITEM NUMBER 06264-3-0007

THIRD ANGLE PROJECTION	DRAWN: AS	
	DATE: 6/15/2018	
Compliant to RoHS Directive 2002/95/EC	CHECKED: MD	PRODUCT: MPM
	ENG: QX	DESCRIPTION: MPM-Probe Mount-7
ALL UNITS mm	MFG: JA	PART NO: <b>A3</b>
	MARKETING: HQ	REV: <b>B</b>
DO NOT SCALE DRAWING	SCALE: 2:1	SHEET 1 OF 1

THESE DRAWINGS AND SPECIFICATIONS ARE THE EXCLUSIVE PROPERTY OF NEW SCALE TECHNOLOGIES, INC.