Deep Array Probe User Guide

CAMBRIDGE NeuroTech
Advanced Electrophysiology Systems

1. **INTRODUCTION**

The following document outlines detailed instructions for using Deep Array Probes. It is strongly recommended that the user review this document in its entirety which includes handling and cleaning instructions as well as important warranty information. Deep Array Probes are not for human use.

2. **HANDLING**

The Deep Array Probes should be **handled with care** to prevent damage. Do not use it if packaging is damaged.

When handling, take care **not to** grab the probe by the exposed probe shank. The reinforcement rod at the top of the probe closest to the connector is the best place for handling.

Our 23-gauge guide tubes feature a thin wall (0.002") and a sharpened tip (45 deg) to aid in insertion and penetrating the dura. Ensure that the guide tube is straight, clean, and free of burrs or sharp edges.

3. **CLEANING**

- Carefully remove the probe from the guide tube.
- Immerse in 1% Tergazyme (available from Alconex) or Trypsin 10X diluted 1:10 in Di water for 30min -1 hour immediately after extraction from the tissue.
- Recommended use in a 20-40°C bath with a stir bar.
- Remove the probe from the Tergazyme solution and immediately immerse in Di water. Gently stir to remove any excess residue.
- Rinse the probe in IPA (Isopropyl Alcohol) for about 30 seconds.
- Rinse the probe in Di water for 30 seconds.
- Air dry.

For sterilization ethylene oxide is recommended.
New! Your Deep Arrays *can* now be sterilized in the factory. Ask us for details!

DO NOT use any oxidizing agent, such as bleach, as it could result in degrading signal quality.
DO NOT use ultra sonic cleaning.

4. **STORAGE**

Carefully replace the protective sleeve back over the microfabricated probe shank. Place Deep Array back in original packaging. Store in a cool, dry, and secure place.

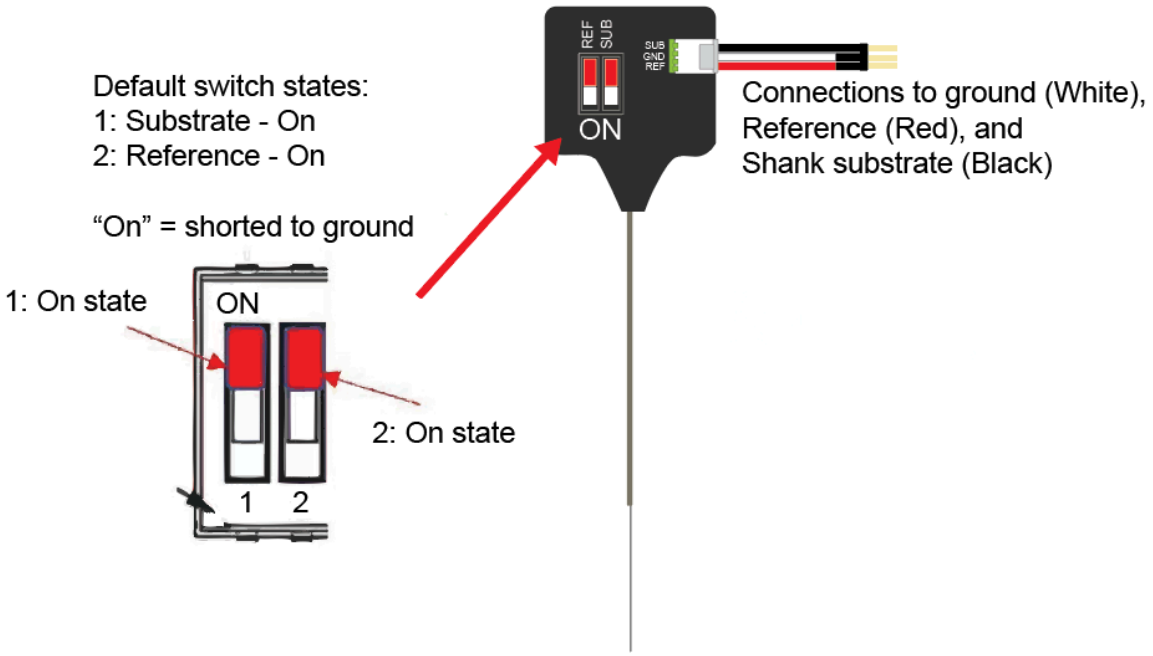
5. **WARRANTY INFORMATION**

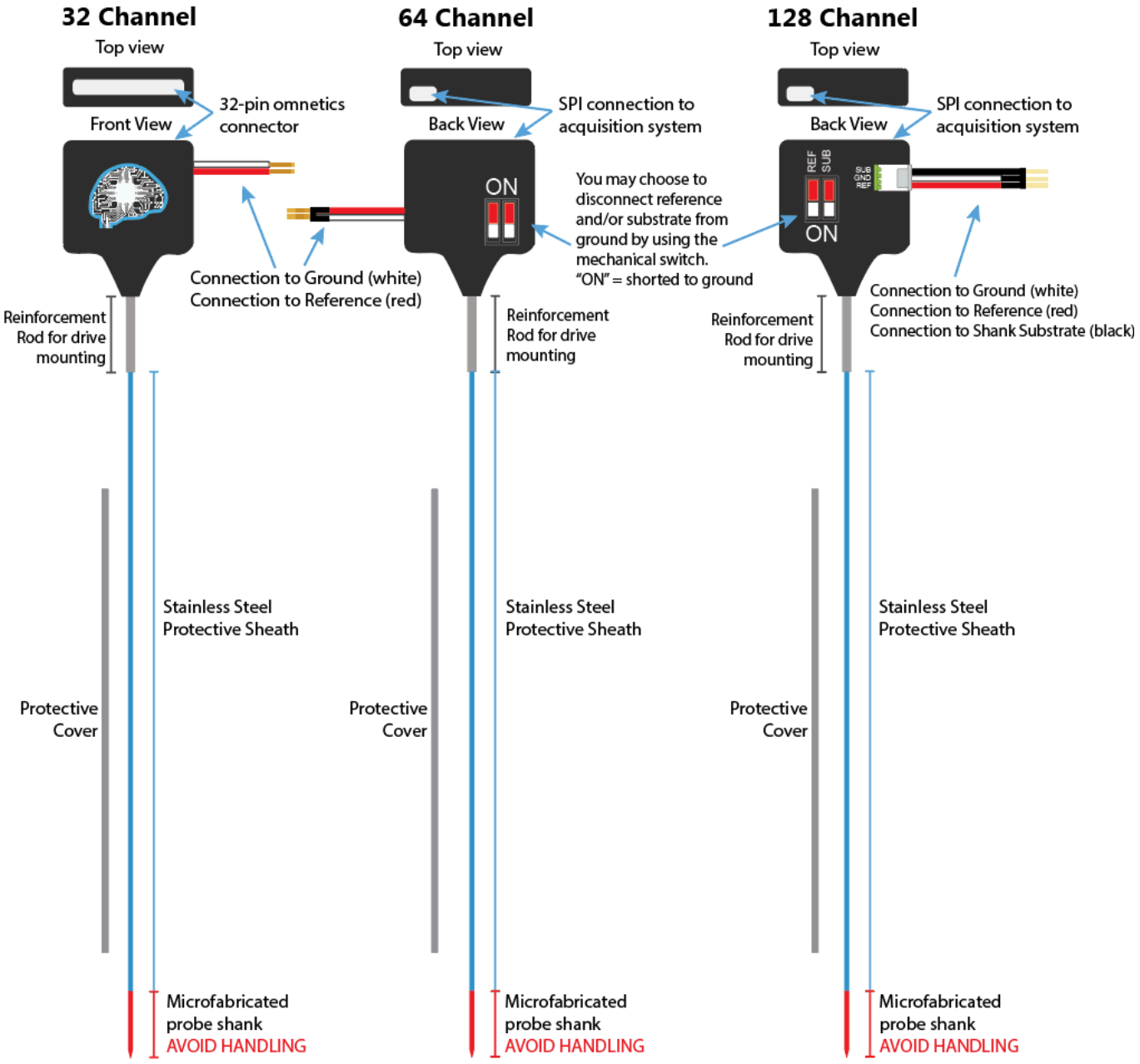
To enable us to rapidly assess damage in transit and initiate replacements please **open probes within 2 weeks** of receipt and run an impedance test in 0.9% saline.
Warranty is void after **6 months** of storage or after first use.

6. **COPYRIGHT AND TRADEMARKS**

Copyright © 2026 Cambridge NeuroTech. All rights reserved.

This document and the information contained in it is proprietary information of Cambridge NeuroTech and may not be reproduced or copied in whole or in part without prior written permission. Cambridge NeuroTech is a trademark belonging to Cambridge NeuroTech. All other trademarks are the property of their respective owners.


Default switch states:
1: Substrate - On
2: Reference - On
"On" = shorted to ground
1: On state
ON
2: On state
1 2
REF
SUB
SUB
GND
REF
ON
Connections to ground (White),
Reference (Red), and
Shank substrate (Black)


32 Channel
Top view
Front View
32-pin omnetics connector
Connection to Ground (white)
Connection to Reference (red)
Reinforcement Rod for drive mounting
Stainless Steel Protective Sheath
Protective Cover
Microfabricated probe shank
AVOID HANDLING
64 Channel
Top view
Back View
SPI connection to acquisition system
ON
You may choose to disconnect reference and/or substrate from ground by using the mechanical switch.
"ON" = shorted to ground
Reinforcement Rod for drive mounting
Stainless Steel Protective Sheath
Protective Cover
Microfabricated probe shank
AVOID HANDLING
128 Channel
Top view
Back View
SPI connection to acquisition system
REF
SUB
SUB
GND
REF
ON
Connection to Ground (white)
Connection to Reference (red)
Connection to Shank Substrate (black)
Reinforcement Rod for drive mounting
Stainless Steel Protective Sheath
Protective Cover
Microfabricated probe shank
AVOID HANDLING