NeuroNexus

EEG Electrode Arrays

Wiring Configurations

Asiyeh Golabchi (PhD)

April 9, 2021

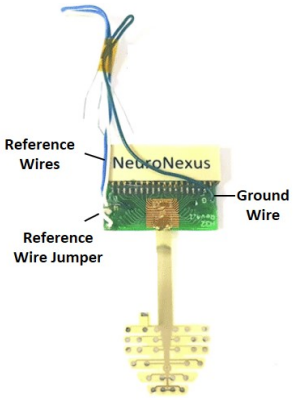
Table of Contents

Wiring Configuration

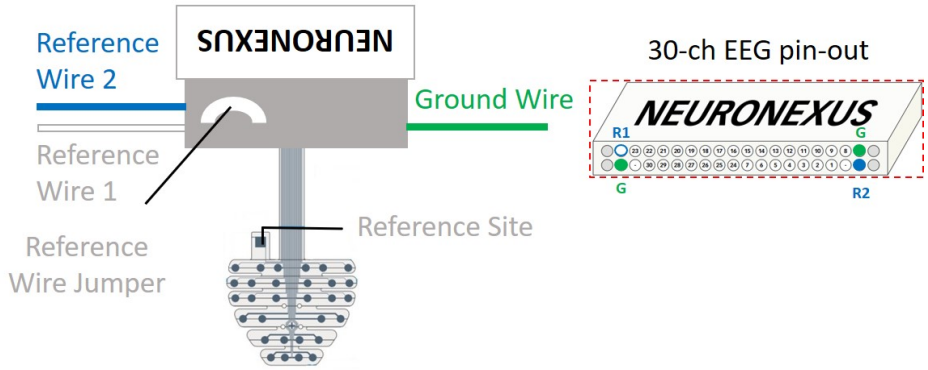
Proper wiring and grounding is critical in capturing clean usable signals as well as obtaining the maximum performance from your NeuroNexus probes. In this protocol we will describe some strategies for effective probe referencing and grounding. While relatively simple in theory, referencing and grounding could be complicated in practice, which is why NeuroNexus probes offer multiple wiring options to help you find an optimal solution. Understanding your options before placing an animal on the stereotaxic frame can help you respond quickly in case your wiring setup needs to be adjusted. Since experiments can be unpredictable, NeuroNexus has built flexibility into our probe wiring. Here we explain the wiring setup for 16, 32, and 64 channel count electrodes. For more information contact us at support@NeuroNexus.com or visit www.NeuroNexus.com.

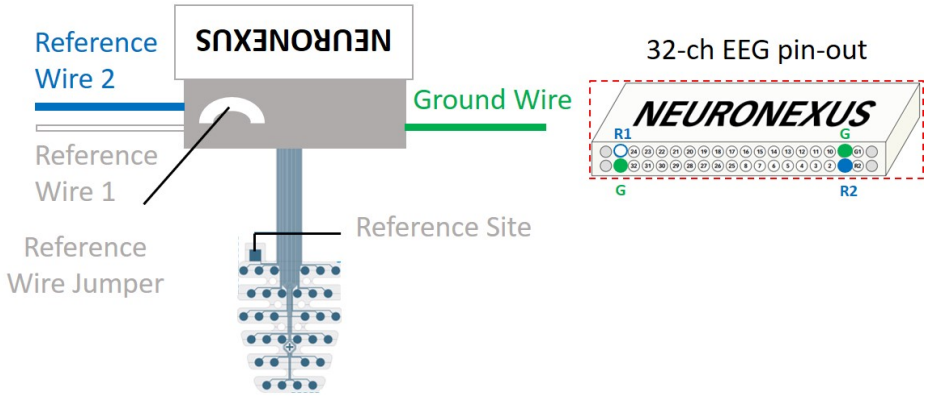
32-ch EEG Electrode Wiring Configuration

EEG probes come with Reference Wire Jumper that let researchers to customize Reference and Ground Wiring configuration for their application. **Note that all recording sites face up.**

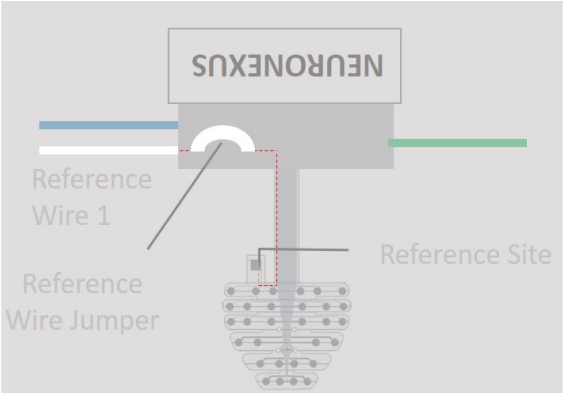


Note: Strip a small length of insulation from ends of Reference and Ground Wires before implantation





Reference Wire Jumper and white Reference Wire 1 are connected to the Reference Site that is features on EEG electrode array designs and is wired to channel R1 on the Omnetics connector.



Cut white Reference Wire, while connecting the blue wire to the back side of implant.

Note: In this configuration all the sites are facing up and not in contact with the brain surface