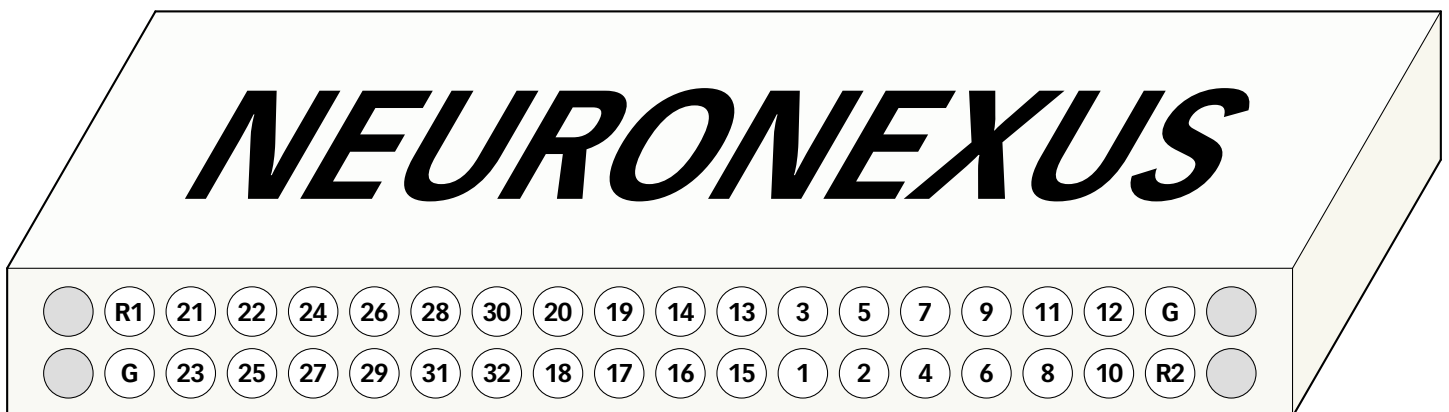
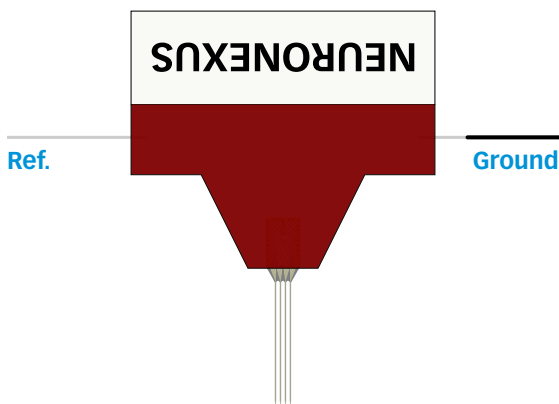


This wiring guide will help you:

1. Identify the exact probe package you are using, and
2. Help you understand and configure the reference channel wiring specific to your package

The CM32 Pin Out diagram below applies for all wiring configurations. You will need to turn back to this page to check the reference channel locations.



Reference Channel Configuration (Gen. 1)

The CM32 Gen. 1 package has no wire loop jumpers (see above) and 2 bare wires, located on opposite sides of the package. The Ground wire is designated with black shrink wrap.

IMPORTANT: Check our catalog to see if your probe model has a probe reference (PR) site.

If your design has a PR site, and you plan on using it:

1. **Cut** the Reference wire (the Reference wire does *not* have black shrink wrap)
2. Make sure that the PR site is completely implanted
3. Reference channels R1 and R2 function as the Probe Reference

If your probe does not have a PR site, connect the Reference wire to your external reference source. Reference channels R1 and R2 function as the External Reference.

Reference Channel Configuration (Gen. 2)



The CM32 Gen. 2 package has no wire loop jumpers (see above) and 2 bare wires, both located on one side of the package. The Ground wire is designated with black shrink wrap.

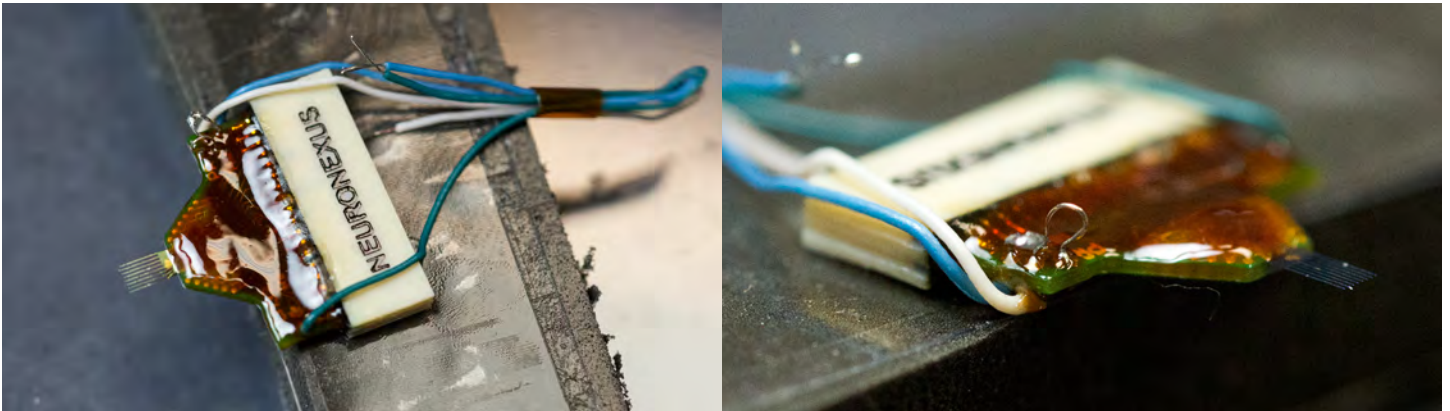
IMPORTANT: Check our catalog to see if your probe model has a probe reference (PR) site.

If your design has a PR site, and you plan on using it:

1. **Cut** the Reference wire (the Reference wire does *not* have black shrink wrap)
2. Make sure that the PR site is completely implanted
3. Reference channels R1 and R2 function as the Probe Reference

If your probe does not have a PR site, connect the Reference wire to your external reference source. Reference channels R1 and R2 function as the External Reference.

Reference Channel Configuration (Gen. 3)



The CM32 Gen. 3 package has 2 bare wire loop jumpers and 3 colored insulated wires. The Ground wire is green.

If your probe has a Probe Reference site, and you want to use it, follow these instructions:

1. **Cut** Wire Reference Jumper 2
2. **Cut** Wire 1 (white)
3. Channel R1 serves as the Probe Reference. Wire 2 (blue) connects an external reference to Channel R2; if you do not want to use an external reference, cut Wire 2.

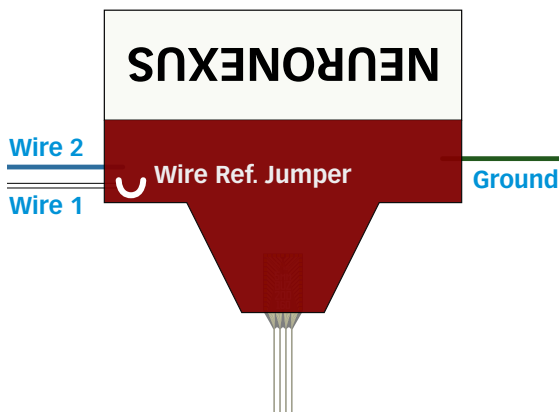
To use only 1 external reference source, follow these instructions:

1. Cut Wire Reference Jumper 1
2. Cut Wire 1. Channels R1 and R2 both serve as the external reference.

To use 2 external reference sources, follow these instructions:

1. Cut both Wire Reference Jumpers
2. Channels R1 and R2 serve as independent external references. Wire 1 (white) feeds into Channel R1, and Wire 2 (blue) feeds into Channel R2.

Reference Channel Configuration (Gen. 4)



The CM32 Gen. 4 package has 1 insulated wire loop jumper (see above) and 3 colored insulated wires. The Ground wire is green. **Please read fully before making your desired changes - it may not be possible to reconnect the wire loops once they have been cut.**

NeuroNexus recommends taking one of the following reference configuration options. **You must choose one option (see below) and act accordingly or a ground loop may form.**

If your probe has a Probe Reference site, and you want to use it, follow these instructions:

1. **Cut** Wire 1 (white)
2. Channel R1 serves as the Probe Reference. Wire 2 (blue) connects an external reference to Channel R2; if you do not want to use an external reference, cut Wire 2.

To use only 1 external reference source, follow these instructions:

1. **Cut** the Wire Reference Jumper
2. Tie Wire 1 and Wire 2 together. Channels R1 and R2 both serve as the external reference.

To use 2 external reference sources, follow these instructions:

1. **Cut** the Wire Reference Jumper
2. Channels R1 and R2 serve as independent external references. Wire 1 (white) feeds into Channel R1, and Wire 2 (blue) feeds into Channel R2.