NeuroNexus

WIRING CONFIGURATION

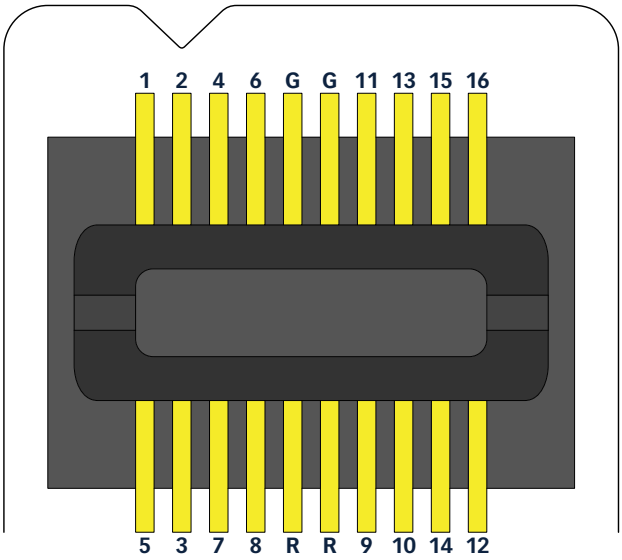
Z16/32 Package
Updated September 27, 2018

This wiring guide will help you:

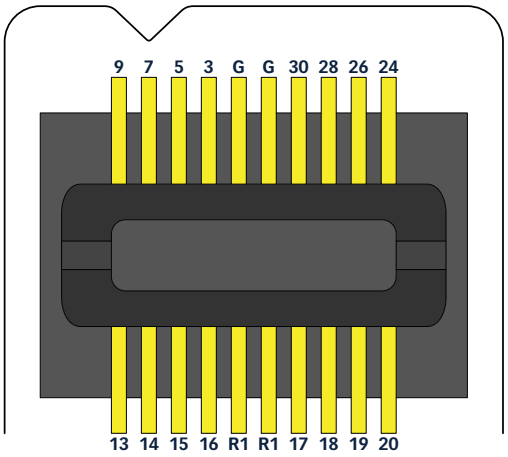
1. Identify the exact probe package you are using, and
2. Help you understand and configure the reference channel wiring specific to your package

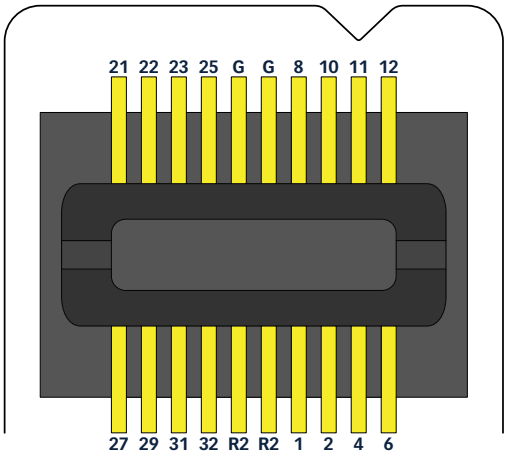
The Z16 and Z32 Pin Out diagrams below apply for all wiring configurations. You will need to turn back to this page to check the reference channel locations.

Z16



Z32





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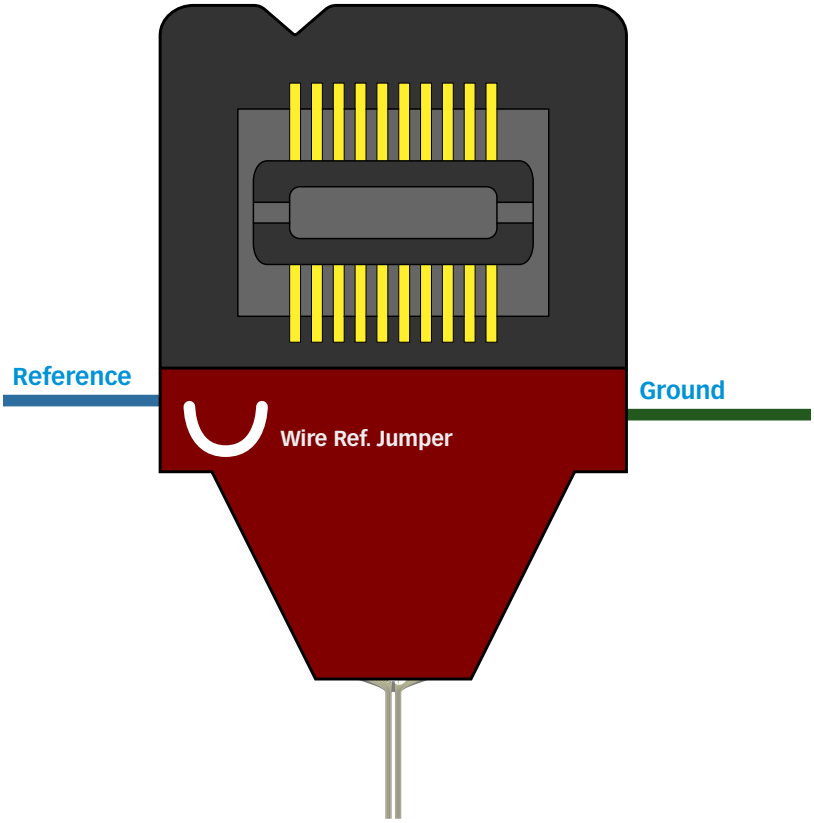
Reference Channel Configuration (Gen. 5)



The Z16/Z32 Gen. 5 package has 2 insulated wires and 1 wire jumper. The Ground wire is green. The blue Reference wire corresponds to the Reference pins on the Zif Clip™ connector.

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 three possible 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. **Trim the uninsulated end of the Blue Reference wire.** Ensure the wire is not implanted or connected.
2. Channels R1 and R2 serve as the Probe Reference.

To use an external reference source, follow these instructions:

1. **Cut the white Reference jumper.** Connect the Blue reference wire to your reference.
2. Channels R1 and R2 both serve as the external reference.

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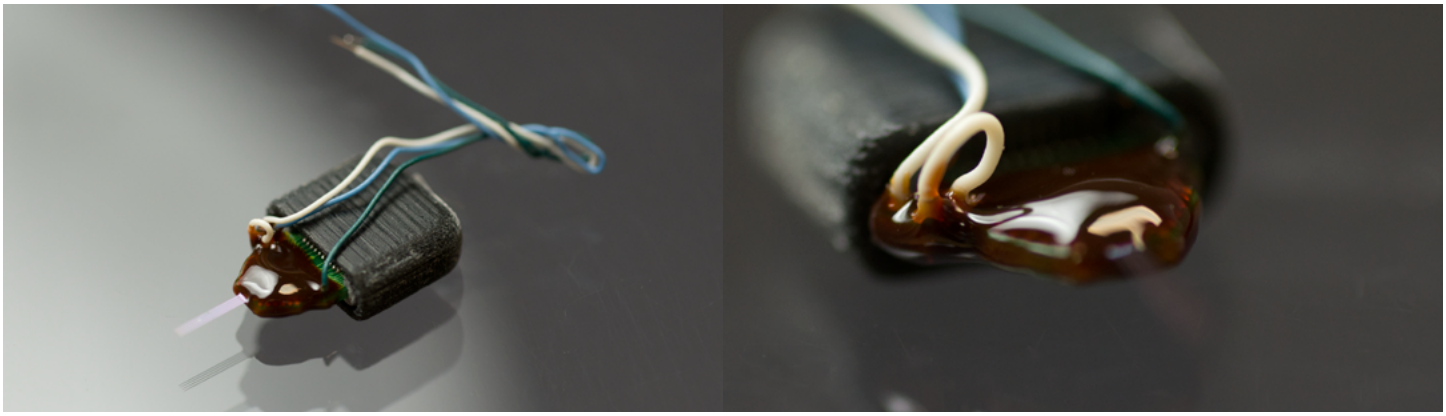
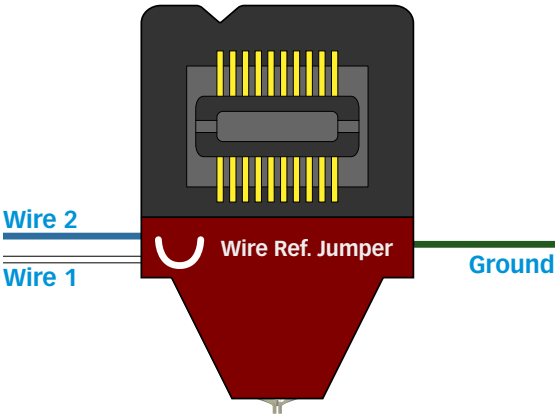
Reference Channel Configuration (Gen. 4)





The Z16/Z32 Gen. 4 package has 3 insulated wires and 1 wire loop jumper. The Ground wire is green. Wires 1 and 2 correspond to the Reference pins on the Zif Clip™ connector (Wire 1 connects to R1, etc.). **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 three possible 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.

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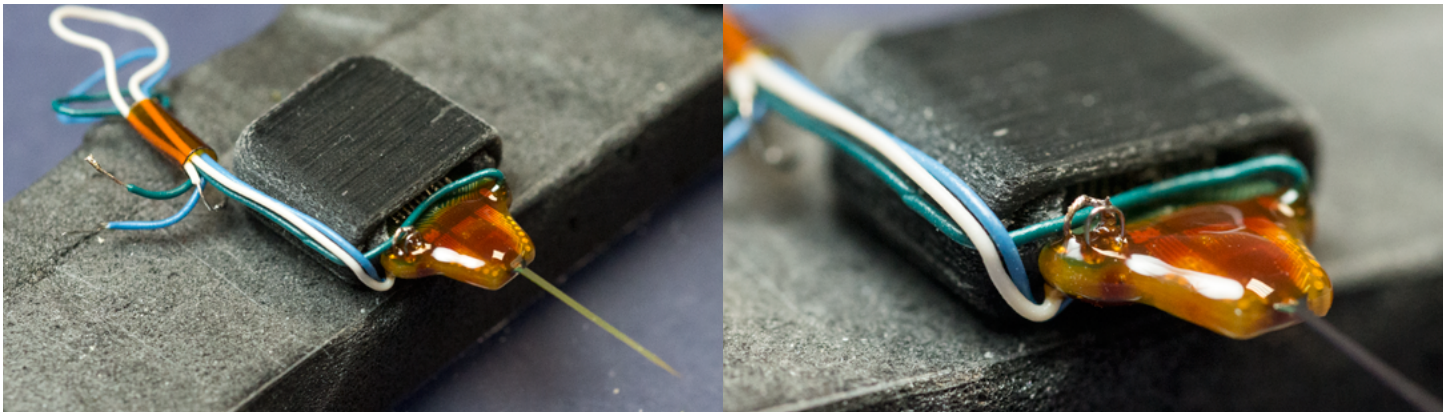
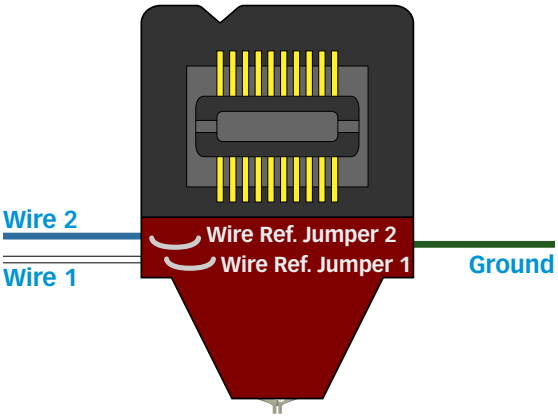
Reference Channel Configuration (Gen. 3)





The Z16/Z32 Gen. 3 package has 3 colored insulated wires and 2 bare wire loop jumpers (see above). The Ground wire is green. Wires 1 and 2 correspond to the Reference pins on the Zif Clip™ connector (Wire 1 connects to R1, etc.). **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 three possible 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 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.

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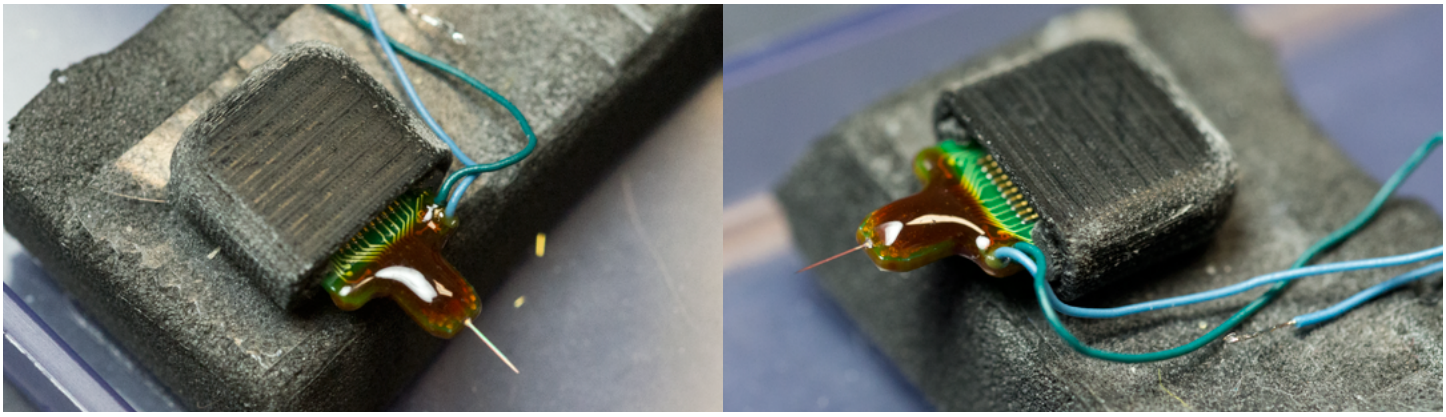
Reference Channel Configuration (Gen. 2)



The Z16/Z32 Gen. 2 package has no wire loop jumpers (see above) and 2 colored insulated wires. The Ground wire is green.

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 (blue)
2. Make sure that the PR site is completely implanted
3. Reference channels R1 and R2 function as the Probe Reference (Z16 packages only have 1 Reference channel)

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.

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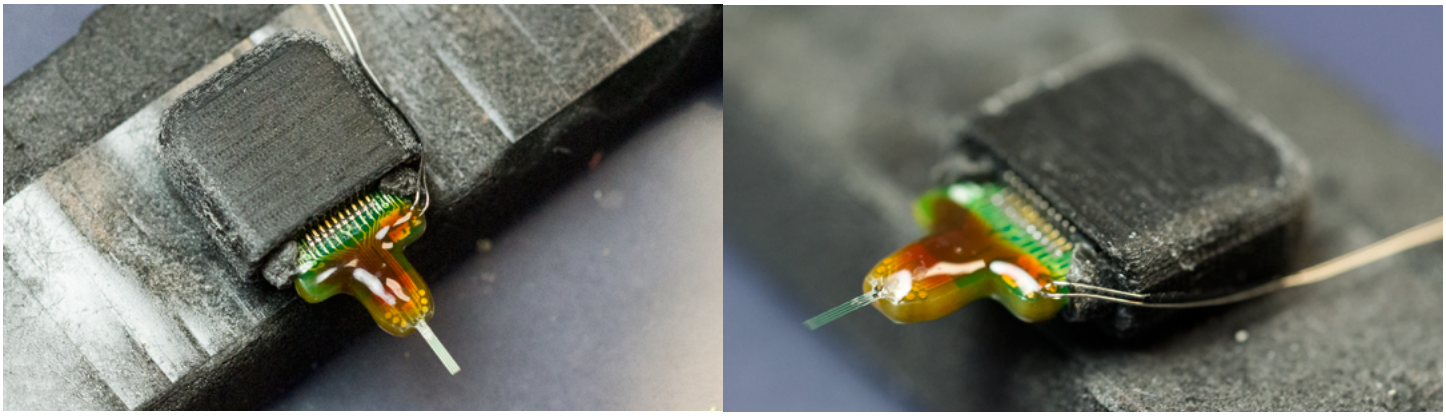
Reference Channel Configuration (Gen. 1)



The Z16/Z32 Gen. 1 package has no wire loop jumpers (see above) and 2 bare wires. 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 (Z16 packages only have 1 Reference channel)

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.

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