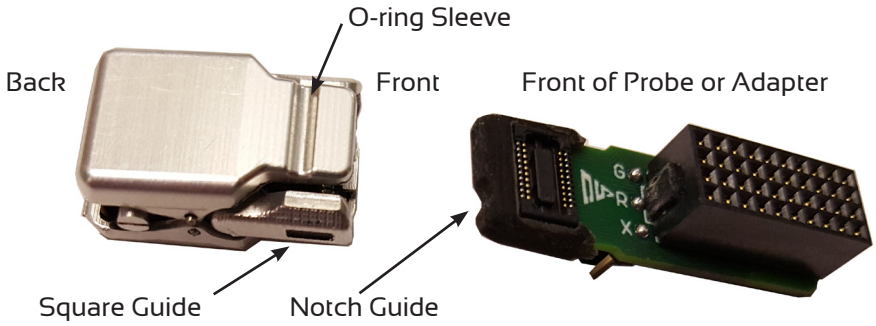
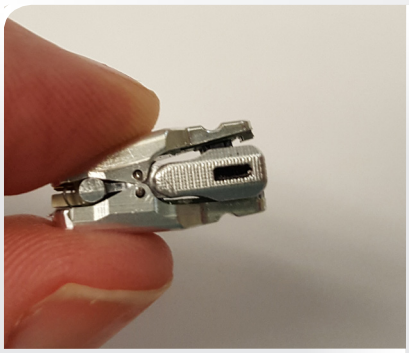
Fast Facts

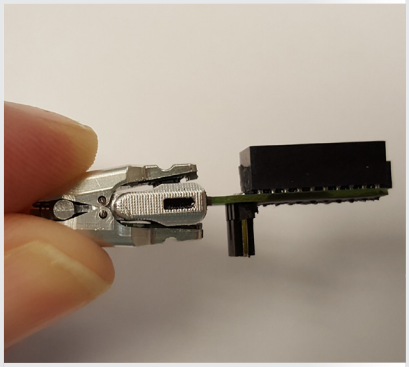
ZIF-Clip® Headstages

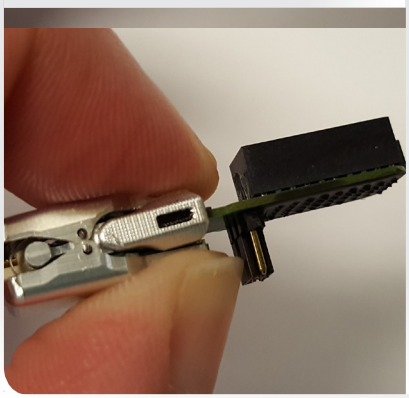
ZIF-Clip® headstages can be used with a variety of ZIF-Clip® compatible probes and adapters (see the TDT website) and are recommended for use with input impedances that range from 20 kOhm to 5 Mohm (unless otherwise noted).



Note: Images are not to scale.







Using the "Zero Insertion Force" Headstage. ZIF-Clip® headstages are designed to automatically position the high density connectors on the headstage and probe (or adapter). The low insertion force design directs almost no force toward the subject when making connections.

1. Firmly press and hold the back to open the headstage.

2. Align notch side of connector to gold square side of fully opened headstage then move headstage into position.

   WARNING! The ZIF-Clip® headstage must be held in the fully open position while being slid into position.

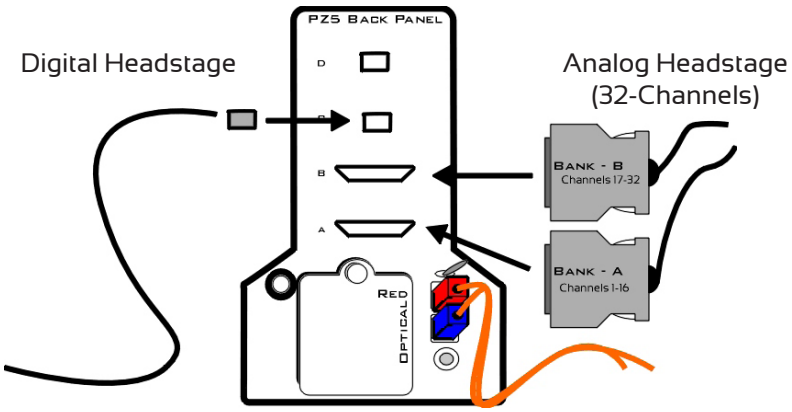
   The headstage should only be closed when fully engaged. Sliding the headstage into position while applying pressure to the tip will **permanently damage** the ZIF-Clip® headstage and micro connectors.

3. Press the front of the headstage together as shown to lock the connector in place.

Connecting to a PZ Preamplifier. ZIF-Clip® analog and digital headstages connects to a PZ5 or PZ2(analog only) preamplifier. When digital headstages connect the PZ5 detects the number of channels. Analog headstages connect via one or more mini-DB26 connectors (a cable adapter is available for use with other TDT preamplifiers). Each connector carries the signals for 16 channels, power, and ground. Therefore, each connector can be connected independently.

Connect each ZIF-Clip® headstage mini-DB26 connector to the associated channel bank connector on the preamplifier.

Note: Each mini-DB26 connector is labeled to indicate the channel range according to the headstage for easy connection.



Single-Ended vs. Differential Configuration. By default, ground and reference are separate on all ZIF Clip® headstages yielding a differential configuration. Reference and ground may be tied together on the headstage adapter or ZIF Clip® microwire array for single-ended configurations.

Important!: When using multiple headstages, ensure that a single ground is used for all headstages. This will avoid unnecessary noise contamination in recordings.

Headstage	Channels	Input Connector	Mates With
ZC128	128	2 x 68-pin	NA
ZC96 ZD96	96	2 x 50-pin	ZCA-CK96A: CyberKinetics 96-Channel CerePort Chronic Probe.
ZC64 ZD64	64	2 x 34-pin	ZCA-GM60: Gray Matter 60-Channel Microdrive (SC60-1). ZCA-NN64: NeuroNexus 64-Channel Acute Probe.
ZC32 ZD32	32	2 x 20-pin 2 x Mini-DB26	ZCA-NN32: NeuroNexus 32-Channel Acute Probe. ZIF-Clip® 32-Channel Microwire Array.
ZC16	16	1 x 20-pin 1 x Mini-DB26	ZCA-DIP16: 16-Channel DIP-based Probe. ZCA-OMN16: 16-Channel Omnetics-based Probe. ZIF-Clip® 16-Channel Microwire Array.

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