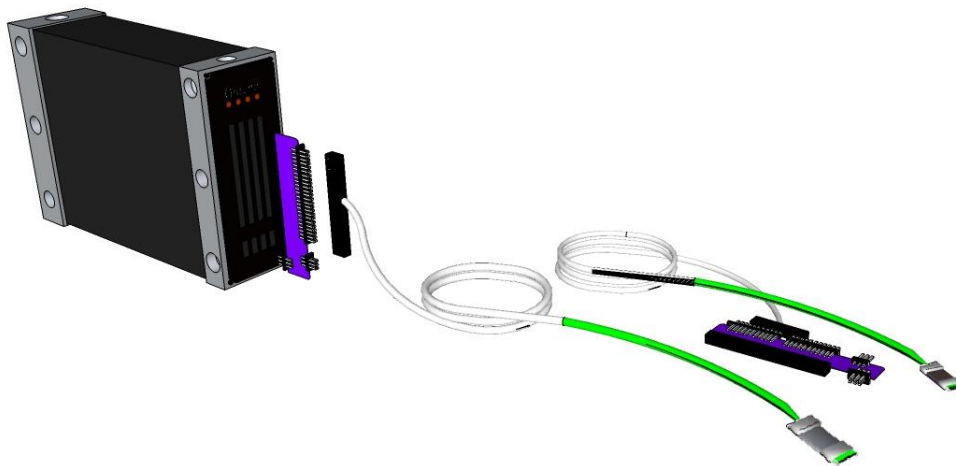


32-Channel Omnetics Headstage IFU

PN 6420/ PN 9373



Blackrock Microsystems, LLC

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1. Introduction

Blackrock Microsystems offers a wide range of headstages for recording distortion-free spikes and field potentials from high impedance microelectrodes. The 32-CH Omnetics Headstage provides an isolated low-impedance output that guarantees signal integrity, minimizes noise pickup by cables and ensures maximum common-mode noise rejection by the Cerebus system front-end amplifier. The 32-Channel Omnetics Headstage is available with 3ft (PN-6420) and 6ft (PN-9373) cables.

2. System Components

PN-6473	CHA-32
PN-6420/ PN-9373	32-Channel Omnetics Headstage

3. Intended Use

This assembly acts like an impedance transformer used for neural signal transmission on animal research/applications.

4. Instruction for Use

The 32-CH Omnetics Headstage assembly includes one CHA-32 Board and one 32-channel Omnetics headstage. To pull the assembly together:

- 4.1 Turn off power to the Front-end Amplifier power supply.
- 4.2 Plug the black female connector from the voltage regulator to the CHA-32 Board.
- 4.3 Plug the CHA-32 Board directly into one of the Banks on the Front-end Amplifier.
- 4.4 Plug the 32-channel Omnetics headstage into the electrode connector.
Caution: Note the orientation; the date code on the two connectors should face the same direction.
- 4.5 Turn on power to the Front-end Amplifier power supply.

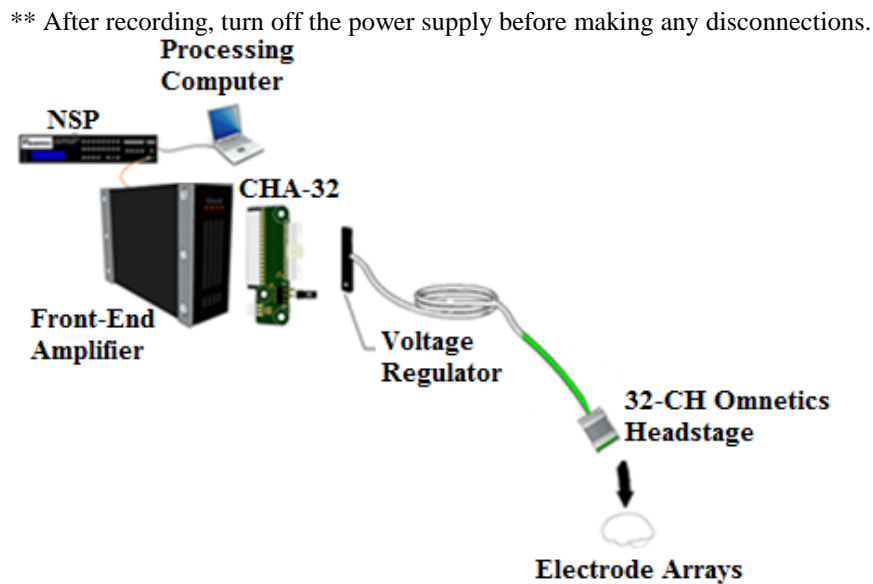


Figure 4-1: Assembly Set-Up

5. Hardware

5.1 Blackrock CHA-32 Board Pin-out

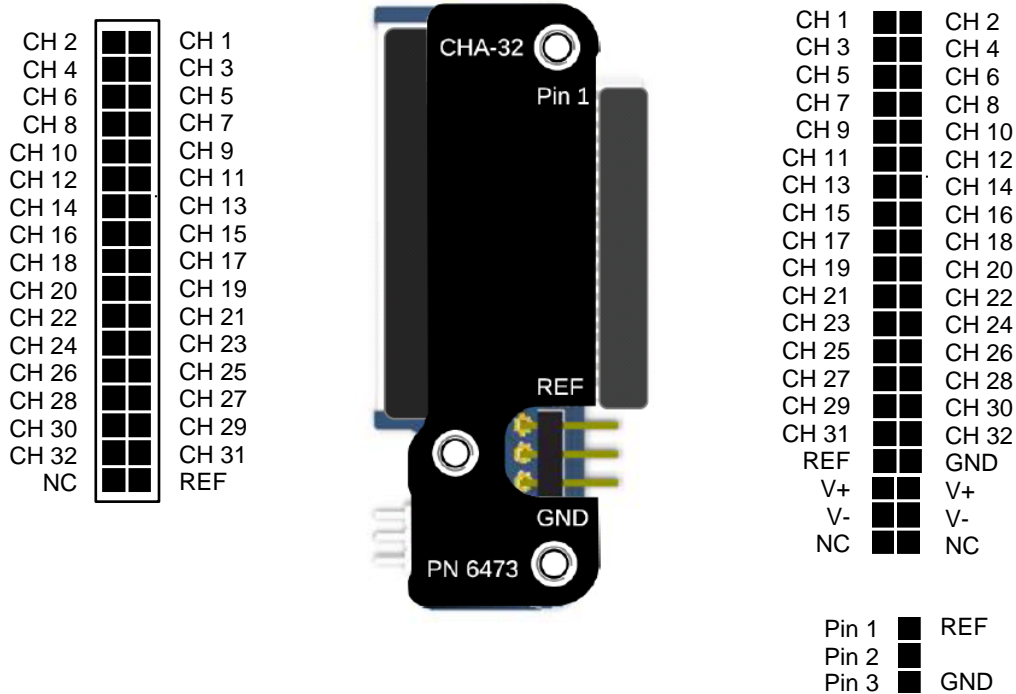


Figure 5-1: CHA-32 Board Pin-Out
*Viewed looking into the connectors

The jumper on the CHA-32 board provides connections between the input reference (on the right) and the system reference (on the left). Select reference from the headstage by placing the jumper on pins 1 and 2 of the 3-pin connector. Select GND as reference by placing the jumper on pins 2 and 3 of the 3-pin connector.

5.2 Blackrock 32-Channel Headstage Pin-out

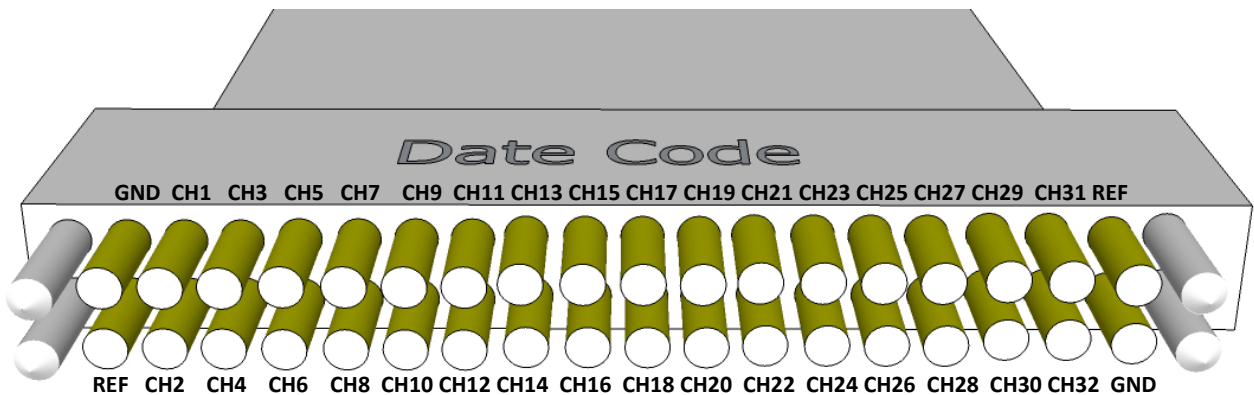


Figure 5-2: 32-CH Omnetics Headstage Pin-Out (Input side)

6. Warning

This assembly is intended for use in animal research/applications only.

7. Warranty

Blackrock Microsystems, LLC warrants that its products are free from defects in materials and manufacturing for a period of one year from the date of shipment. Blackrock will, at its option, repair or replace any product that does not comply with this warranty. This warranty is voided by:

1. Any modification or attempted modification to the product done by anyone other than an authorized Blackrock employee
2. Any abuse, negligent handling or misapplication of the product.

This constitutes the sole warranty made by Blackrock, LLC. There are no other warranties, expressed or implied, which extend beyond those described herein or to anyone other than the original purchaser, including the implied warranties of merchantability and fitness for a particular purpose. In no event shall Blackrock Microsystems, LLC be liable for any incidental or consequential damages, or for the infringement of any patent rights or third party rights due to the use of its products.

7.1 Return Merchandise Authorization (RMA)

In the unlikely event that your adaptor needs to be returned to Blackrock for repair or maintenance, do not send any equipment back without a Return Merchandise Authorization Number. An RMA number will be issued to you by a Blackrock representative. If you need to obtain an RMA number, you may contact a product support representative at (801) 582-5533 or toll free at (866) 806-3692.

Once an RMA number has been issued, it is important to safely pack the returned item for shipping back to Blackrock. It is preferred that you save the original boxes and packing materials that your system arrived in for return shipment. Please address the package as follows:

Blackrock Microsystems, LLC
ATTN: RMA#
630 Komas Dr., Suite 200
Salt Lake City, UT 84108 USA
Tel: +1 (801) 582-5533