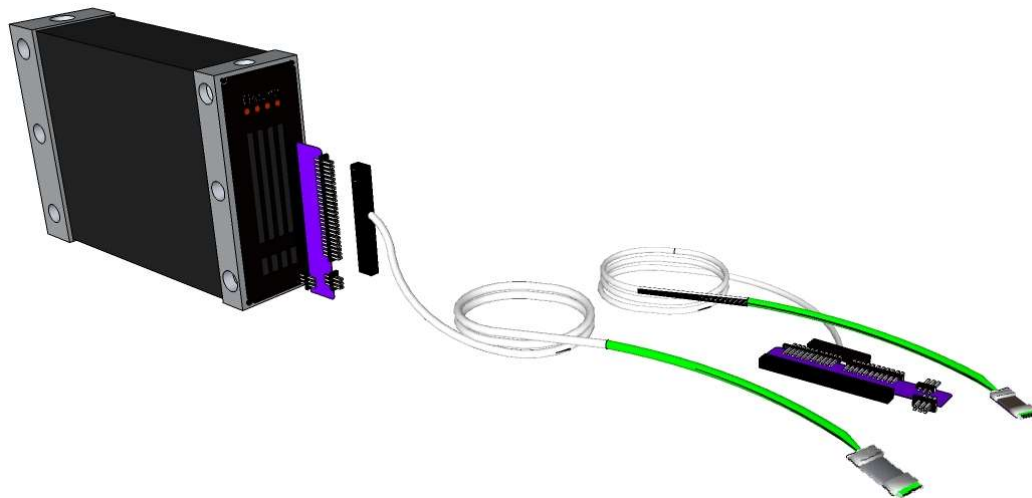


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# 32-Channel Omnetics Headstage IFU

*PN 6420, 9373, 10069, 10071*



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# 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, PN-10069) and 6ft (PN-9373, PN-10071) cables.

## System Components

- PN-6473: CHA-32
- PN-6420 / PN-9373 / PN-10069 / PN-10071: 32-Channel Omnetics Headstage

## Intended Use

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

# 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:

1. Turn off power to the Front-end Amplifier power supply.
2. Plug the black female connector from the voltage regulator to the CHA-32 Board.
3. Plug the CHA-32 Board directly into one of the Banks on the Front-end Amplifier.
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.**

5. Turn on power to the Front-end Amplifier power supply.
6. After recording, turn off the power supply before making any disconnections.

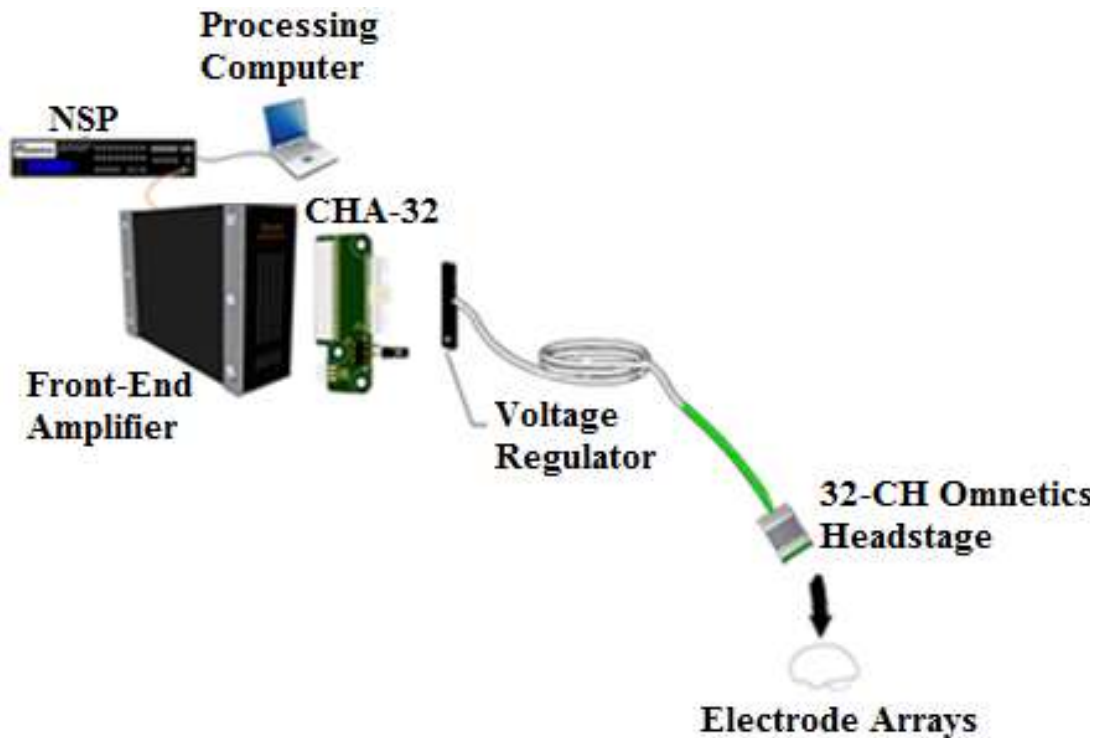


Figure 1–Assembly Set-Up

# Hardware

## Blackrock CHA-32 Board Pin-out

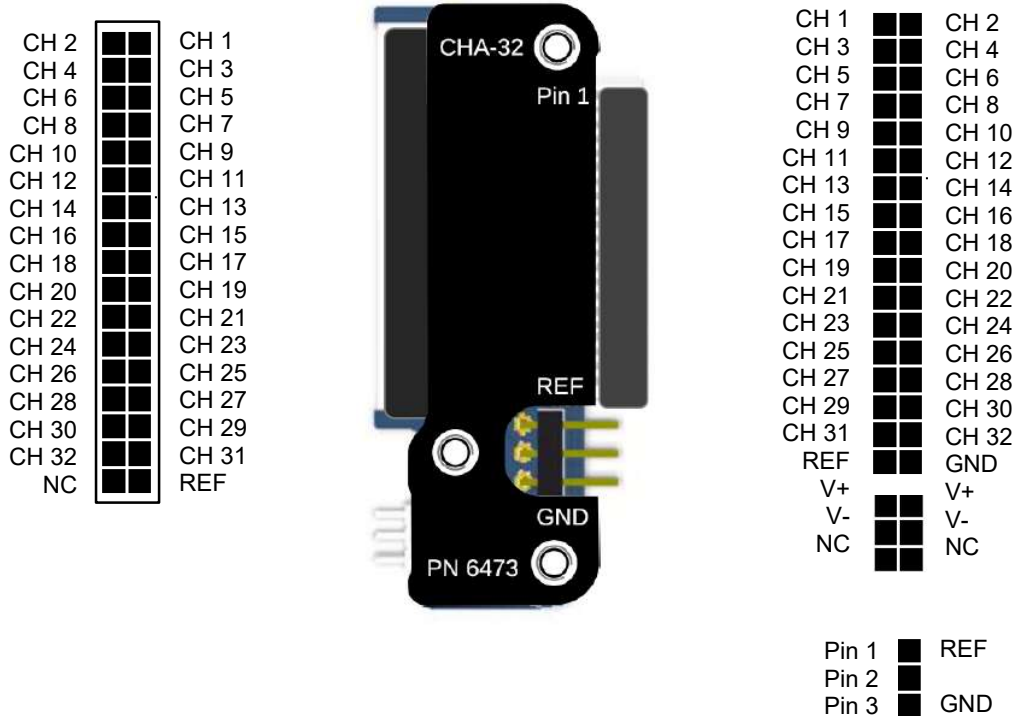


Figure 2-CHA-32 Board Pin-Out  
\*Viewed looking into the connectors

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.

## Blackrock 32-Channel Headstage Pin-out

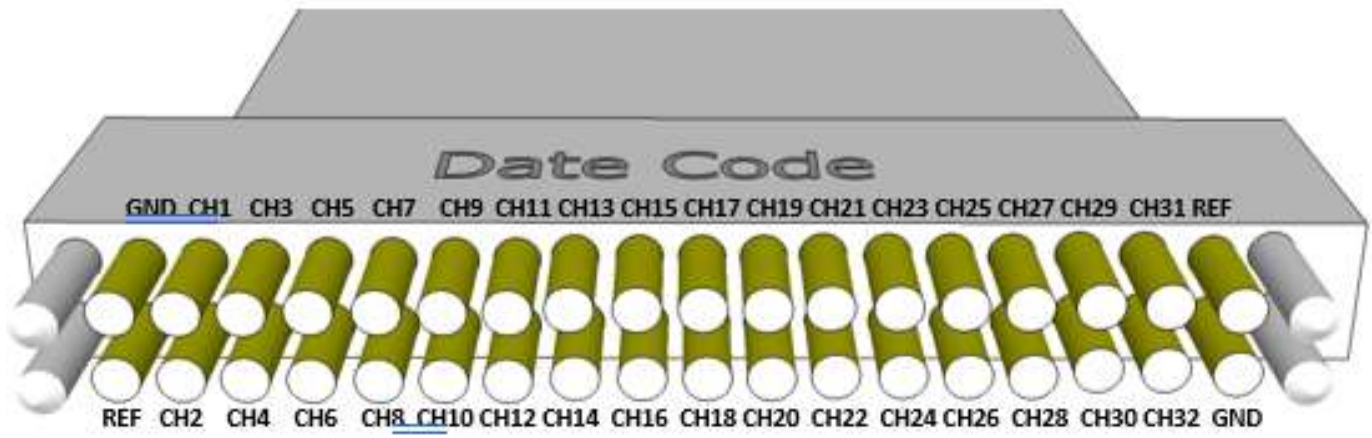


Figure 3–32-CH Omnetics Headstage Pin-Out (Input side)

# Return Merchandise Authorization

In the event of a returned material authorization (RMA) or complaint, please provide the product description, product number, lot number, person requesting the RMA or complaint and address, and the nature of the RMA and complaint.

In the unlikely event that your device needs to be returned to Blackrock for repair or maintenance, do not send any equipment back without a Return Merchandise Authorization Number (RMA). 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 +1 (801) 582 5533 or by emailing [support@blackrockmicro.com](mailto:support@blackrockmicro.com).

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 S. Komas Dr., Suite 200  
Salt Lake City, UT 84108 USA  
Tel: +1 (801) 582-5533

## Warning

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

## Warranty

Blackrock Microsystems (“Blackrock”) warrants its products are free from defects in materials and manufacturing for a period of one-year from the date of shipment. At its option, Blackrock will 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; or (3) any sale or other transfer of the product by the original purchaser.

Except for the warranty set forth in the preceding paragraph, Blackrock provides no warranties of any kind, either express or implied, by fact or law, and hereby disclaims all other warranties, including without limitation the implied warranties of merchantability, fitness for a particular purpose, and non-infringement of third-party patent or other intellectual property rights.

Blackrock shall not be liable for special, indirect, incidental, punitive, exemplary or consequential damages (including without limitation, damages resulting from loss of use, loss of profits, interruption or loss of business or other economic loss) arising out of non-compliance with any warranty. Blackrock’s entire liability shall be limited to providing the remedy set forth in the previous paragraph.

# Support

Blackrock prides itself in its customer support. For additional information on this product or any of our products, you can contact our Support team through the contact information below:

## **Manuals, Software Downloads, and Application Notes**

[www.blackrockmicro.com/technical-support](http://www.blackrockmicro.com/technical-support)

## *Complaints*

When filing a complaint, please provide the product description, product number, software version, lot number, complainant's name and address, and the nature of the complaint.

## **Issues or Questions**

[www.blackrockmicro.com/technical-support](http://www.blackrockmicro.com/technical-support)

[support@blackrockmicro.com](mailto:support@blackrockmicro.com)

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