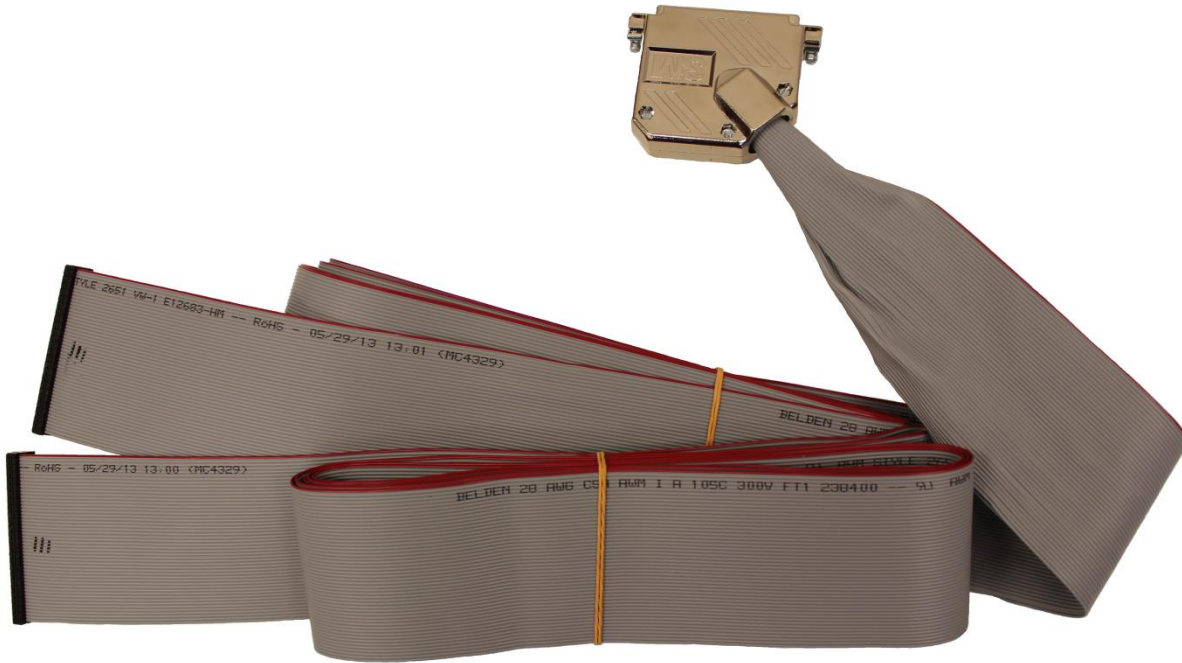


# JetBall to NSP Digin Adapter IFU

PN 8493



**Blackrock Microsystems, Inc.**

630 Komas Drive, Suite 200

Salt Lake City, UT 84108

Tel: (866) 806-3692

[www.blackrockmicro.com](http://www.blackrockmicro.com)

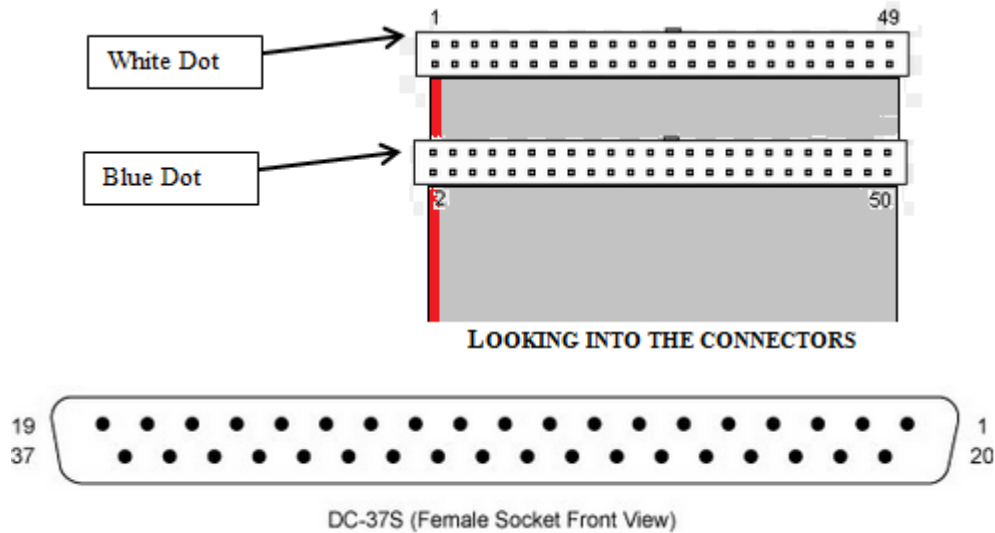
# JetBall to NSP Adapter

## 1 Intended Use

This assembly connects the Blackrock Neural Signal Processor to digital I/O to the JetBall system.

## 2 Hardware

### 2.1 Blackrock Pin-out



Signal	JetBall	NSP
Ground	2	20-37 any
TTL Bit 0	4	2
TTL Bit 1	6	3
TTL Bit 2	8	4
TTL Bit 3	10	5
TTL Bit 4	12	6
TTL Bit 5	14	7
TTL Bit 6	16	8
TTL Bit 7	18	9
Ground	1	20-37 any
TTL Bit 8	3	10
TTL Bit 9	5	11
TTL Bit 10	7	12
TTL Bit 11	9	13
TTL Bit 12	11	14
TTL Bit 13	13	15
TTL Bit 14	15	16
TTL Bit 15	17	17

**Figure 2.1-1: Pin-Out**

### Warning

This assembly can only be used for animal research/applications.

# JetBall to NSP Adapter

---

## 3 Warranty

Blackrock Microsystems, Inc. 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, Inc. 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, Inc. 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.

### 3.1 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, Inc.**  
**ATTN: RMA#**  
**630 Komas Drive, Suite 200**  
**Salt Lake City, UT 84108 USA**  
**Tel: (801) 582-5533**