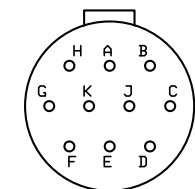


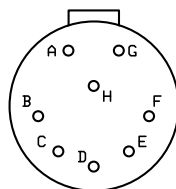
## Dual Magnet Cable Interface

### J1 Pinout looking into connector



Primary (12-10P)

- A - Magnet 1 Out
- B - Magnet 1 Return
- C - Magnet 2 Out
- D - Magnet 2 Return



Alternate (12-8S)

#### Connector Types:

- Amphenol 12-10 Panel Plug, P/N PT02A-12-10P (Primary)
- Amphenol 12-8 Panel Plug, P/N PT02A-12-8S (Alternate)

## Motherboard Interface

### P1 Pinout looking into connector

Connector key positioned on left, as shown

Remote Acknowledge Out	02	10	DAQ Ready In
Reset Magnet Current (Hi)	04	30	Magnet 1(Low) - 2(Hi) Select
Fine Current Set Enable (Hi)	06	50	Coarse Current Set Enable (Hi)
DAQ Control Ground Return	08	70	Increment Current (Low->Hi->Low)
Spare Control Input	010	90	Step Up (Hi) - Down (Low)
Magnet 1 Bias Out	012	110	Magnet 1 V Monitor Out
Magnet 1 Bias Return	014	130	Magnet 1 I Monitor Out
Magnet 2 Bias Out	016	150	Magnet 2 V Monitor Out
Magnet 2 Bias Return	018	170	Magnet 2 I Monitor Out
+5V Power	020	190	Monitor 0V Reference Out
+5V Power Return	022	210	+/-12V Power Return (Ground)
-12V Power	024	230	+12V Power

Connector Type: Waldom/Molex 2x12 0.1" CGrid-III

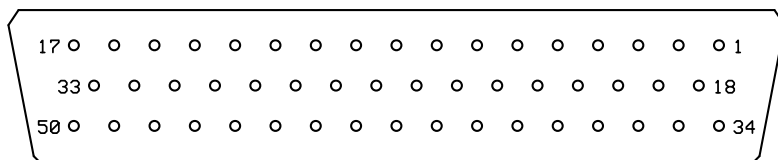
Housing 90142-0024, P/N WM8044-ND

Fem Crimp terminals 26-28 AWG 90119-2121, P/N WM2561-ND

Fem Crimp terminals 22-24 AWG 90119-2110, P/N WM2559-ND

## Control and Power Interface

### J2 Pinout looking into connector



Connector Type: DB-50 Female

- |   |  |  |
|---|--|--|
| 1 - Magnet 1 V Monitor Out              | 19 - Monitor 0V Reference Out            | 38 - No Connection                       |
| 2 - Magnet 1 I Monitor Out              | 20 - Monitor 0V Reference Out            | 39 - No Connection                       |
| 3 - Magnet 2 V Monitor Out              | 21 - Monitor 0V Reference Out            | 40 - DAQ 0V Ground Return, ID Code 0 Ref |
| 4 - Magnet 2 I Monitor Out              | 22 - No Connection                       | 41 - Remote Acknowledge Out              |
| 5 - No Connection                       | 23 - No Connection                       | 42 - Increment (Low->Hi->Low)            |
| 6 - No Connection                       | 24 - DAQ 0V Ground Return, ID Code 0 Ref | 43 - Reset Magnet Current (Hi)           |
| 7 - No Connection                       | 25 - DAQ Ready In                        | 44 - Device ID 0 = DAQ 0V                |
| 8 - DAQ 0V Ground Return, ID Code 0 Ref | 26 - Fine Current Set Enable (Hi)        | 45 - ID SIS = DAQ 0V                     |
| 9 - Coarse Current Set Enable (Hi)      | 27 - Magnet 1(Low) - 2(Hi) Select        | 46 - +12V Power                          |
| 10 - Step Up (Hi) - Down (Low)          | 28 - No Connection                       | 47 - +/-12V Power Return (Ground)        |
| 11 - No Connection                      | 29 - +12V Power                          | 48 - -12V Power                          |
| 12 - Device ID 1 = DAQ 0V               | 30 - +/-12V Power Return (Ground)        | 49 - +5V Power                           |
| 13 - +12V Power                         | 31 - -12V Power                          | 50 - +5V Power Return                    |
| 14 - +/-12V Power Return (Ground)       | 32 - +5V Power                           |  |
| 15 - -12V Power                         | 33 - +5V Power Return                    |  |
| 16 - +5V Power                          | 34 - No Connection                       |  |
| 17 - +5V Power Return                   | 35 - No Connection                       |  |
| 18 - Monitor 0V Reference Out           | 36 - No Connection                       |  |
|   | 37 - No Connection                       |  |

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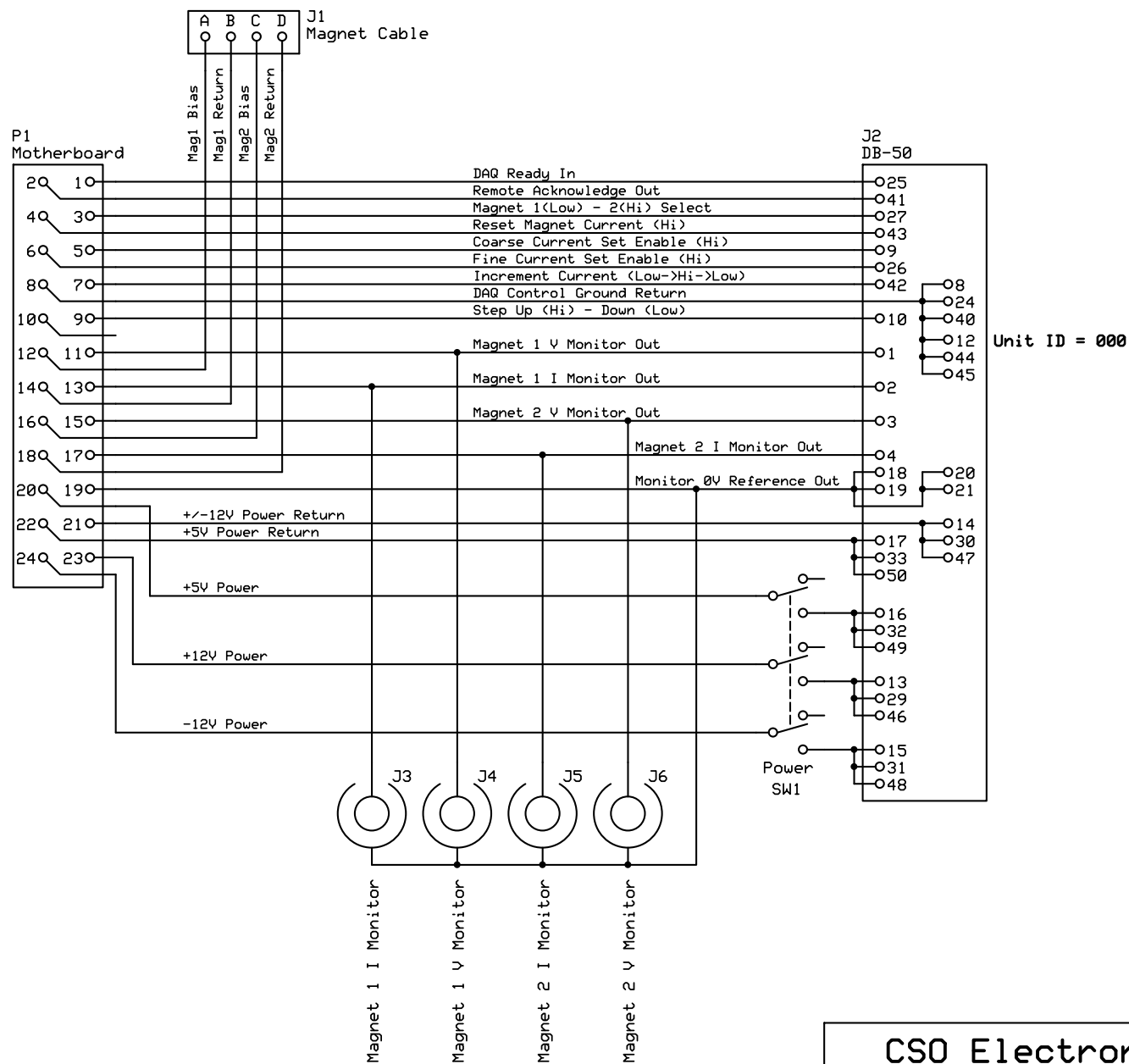
Magnet Wiring Harness

F. Rice

Rev 2.0

2/9/10

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Magnet Wiring Harness

F. Rice

Rev 2.0

2/9/10

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