**Figure 1: Adam Internal Cabling**

- **NOTE:** No open slots allowed between CPU and A/D boards (or else put jumpers on the interrupt line).

- **Ethernet Transceiver:**
  - Channels 0-7
  - 0,1
  - 2,3
  - 4,5
  - 6,7

- **Ironics Cables:**
  - 8-15
  - 2,3
  - 16-23
  - 4,5

- **Datel 601 – Filter / Ampl. Auto-Zero Cable:**
  - Gnd: 12
  - I/O Bit-3: 24
  - I/O Bit-4: 25

- **Internal Serial Ribbon Cable Wiring:**
  - Gnd
  - STS (to Ironics)
  - Rx (to Ironics)
  - Tx (to Ironics)

- **Data 601 – Filter / Ampl.**
  - Channel 0
  - 0-7
  - 8-15
  - 16-23
  - 24-31
  - 32-39
  - 40-47

- **To misc. bulkhead connectors:**
  - Console port, Ser-A, etc.

- **To Switching Power Supply:**
  - Electro-Thermal Cooler

- **Note/Beware:** Switch on Cooler powers up/down everything, including VME chassis! Switch on Power Supply only toggles VME chassis.

- **Mark 10/20 CPU**

- **Ironics Internal Cables**
  - Channel 8-11 via SIO Cable-2
  - Channel 12-15 via SIO Cable-3
  - Channel 16-31

- **Ironics Breakout Board:**
  - Top View of Ironics breakout board
Figure 2: ADAM External Cabling
ADAM Filter-Amp. Board

Analog Output Connector Wiring

<table>
<thead>
<tr>
<th>Channel</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>24</td>
<td>10</td>
<td>21</td>
<td>17</td>
<td>18</td>
<td>16</td>
<td>19</td>
<td>22</td>
</tr>
<tr>
<td>Ground</td>
<td>12</td>
<td>23</td>
<td>9</td>
<td>20</td>
<td>6</td>
<td>17</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Connected to ground:</td>
<td>2,5,8,11,16,19,22,25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Beware: Leave W7, W8 disconnected for normal operation. Used for stand-alone testing; provides continuous auto-zeroing of amp.

Auto-Zero Connector Wiring

See Adam Internal Cabling

Filter Module Identification:

- 1/2 Hz Filter Module
- 10 Hz Filter Module

Stage-1 jumper, basic setting

Jumper Gain Offset
W1 10 none
W2 100 none
W3 1000 none

Stage-2 jumper, multiplies gain in 1

Jumper Gain Offset
W1 1 none
W2 0.5 none
W3 2 none

NOTE: For best A/D noise immunity, Shields should float inside ADAM Chassis: connect to gnd at sensor end.

Beware: Filter-Amp board jumpers W-6 (labeled W06 - W76 for respective channels) connect shields to gnd inside the chassis. Remove those jumpers if the shield wire is connected to ground at the 'sensor-end'

NOTE: Datel 601 A/D Board samples +/-5.0 Volts only.

Figure 3: Filter-Amplifier Board Layout