This unit is a high performance cryogenically operated HgCdTe photodetector/amplifier. The unit should be at LN2 temperature before turning on power to the amplifier. A funnel is provided to assist in the filling of the dewar, which is best accomplished by gradually filling and topping off over a several minute period.

The amplifier has a dual gain function controlled by a switch on the backplate. The HI (up) position is x10 above the LO (down) position. Output is thru a BNC-type cable, and power is connected thru a shielded multi-wire cable terminated in a 9-pin Dsub connector or solder leads.
## MCT SERIES CRYOGENIC PHOTODETECTOR/AMPLIFIER

<table>
<thead>
<tr>
<th>Detector Resistance; Bias (Set internally)</th>
<th>33 ohms; 20mA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Requirement</td>
<td>+,− 5VDC to +,− 15VDC ; 50mA</td>
</tr>
</tbody>
</table>

**Connections**

- BNC Signal Cable
- Shielded Power Cable
  - Red = +V
  - Black = -V
  - White/Shield = GND

Note: Units delivered with the PS-1 power supply are terminated with a 9-pin DB-9 connector.

### DB-9 PIN OUT

1. NO CONNECT
2. NO CONNECT
3. NO CONNECT
4. NO CONNECT
5. NO CONNECT
6. +V
7. -V
8. GND
9. CASE GND

**Part No:** MCTxx-E-LN Series