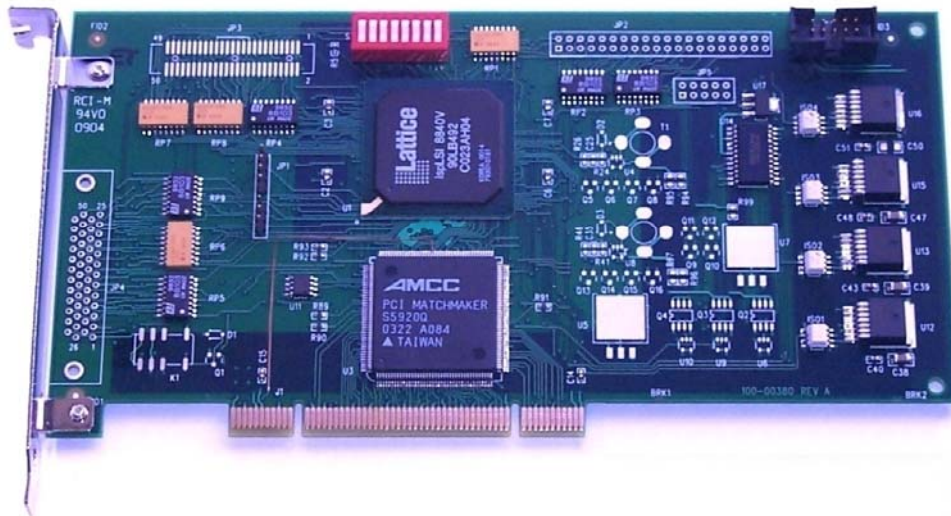


MADS Camera Peripheral Controller PCI Card User's Guide



The MADS Camera Peripheral Controller PCI Card provides control of multiple camera devices from your PC. Lighting intensity, strobing, pan, tilt, zoom, focus, iris and extenders can all be controlled using one card. Included with the card is RemoteControl, the WinXP/Win2000 program that gives you on-screen controls for a motorized lens, a MADS Pan & Tilt mount, and MADS Cool Lamp Lights. If you need to control more than one camera up to 4 cards can be installed in one PC. The following is a list of model numbers and features:

Model	Zoom	Focus	Ext.	Iris Motor	Iris Actuator	Pan & Tilt	Cool Lighting
ZLC330	✓	✓	✓				
ZLC360	✓	✓		✓			
ZLC361	✓	✓			✓		
ZLC440	✓	✓	✓	✓			
SLC330	✓	✓	✓			✓	
SLC360	✓	✓		✓		✓	
SLC361	✓	✓			✓	✓	
SLC440	✓	✓	✓	✓		✓	
XLC330	✓	✓	✓			✓	✓
XLC360	✓	✓		✓		✓	✓
XLC361	✓	✓			✓	✓	✓
XLC440	✓	✓	✓	✓		✓	✓

Card Specifications

- **PCI 2.1 Compliant**
- **Windows 2000 / XP and LINUX Compatible**

Motorized Lens Control (all models)

- 9 pin Connector (DE9)
- Up to 4 Channels (Zoom, Focus, Extender, Iris)
- 8 Pulse Width Range Selections (switch selectable)
- Software Adjustable Pulse Width (~1ms increments)
- 32 Voltage Selections - 5.5VDC to 10VDC (switch selectable)
- Max current per channel: 250mA

VOLTAGE SELECTION - SW1 thru SW5

(1 = Closed, 0 = Open)

Sets the Nominal Motor Voltage

<u>12345</u>	<u>VDC</u>		<u>12345</u>	<u>VDC</u>	
00000	10.00		10000	9.8	(default)
01000	9.66		11000	9.52	
00100	9.38		10100	9.24	
01100	9.10		11100	8.96	
00010	8.82		10010	8.68	
01010	8.54		11010	8.40	
00110	8.26		10110	8.12	
01110	7.98		11110	7.84	
00001	7.70		10001	7.46	
01001	7.32		11001	7.18	
00101	7.04		10101	6.90	
01101	6.76		11101	6.62	
00011	6.48		10011	6.34	
01011	6.20		11011	6.06	
00111	5.92		10111	5.78	
01111	5.64		11111	5.50	

Note: SW1 thru SW5 are read at power up, restart the computer after making changes to the switch settings.

PULSE WIDTH SELECTION - SW6 thru SW8

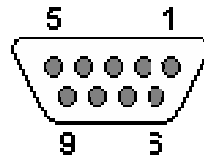
(1 = Closed, 0 = Open)

Sets the width of the motor drive pulse

678	Zoom, Extender & Iris	Focus
111	55.5ms	28ms
011	47.5ms	24ms (default)
101	40ms	20ms
001	32ms	16ms
110	24ms	12ms
101	16.5ms	8ms
011	8.5ms	4.5ms
000	700us	575us

Note: Pulse Widths are also software adjustable

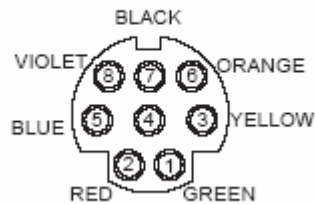
Motorized Lens CONNECTOR PIN ASSIGNMENTS



- 1 - Zoom**
- 2 - Focus**
- 3 - Extender**
- 4 - Iris**
- 5 thru 9 - Ground**

Pan and Tilt Control (SLC and XLC models)

- **9 pin Connector (DE9)**
- **Tilt angle: $\pm 15^\circ$**
- **Tilt speed: 2.4° per second max**
- **Pan angle: $\pm 90^\circ$**
- **Pan speed: 8° per second max**
- **Software control of all functions**
- **Automatic Pan and Tilt commands**



- 1 - Power (6 VDC)**
- 2 - Right**
- 3 - Down**
- 4 - Up**
- 5 - Left**
- 6 - Ground**
- 7 - VControl**
- 8 - N/C**

Windows XP/2000 Installation

1. **With the power turned off, insert the MADS PCI card into any free PCI slot in your PC. Make sure the card is well seated. If the card has a connector bracket, insert the bracket into a free slot. Plug the bracket cable onto the PCI card with the red wire corresponding to the "1" on the board. Turn your PC on and start Windows.**
2. **Windows will automatically detect MADS PCI card as a new PCI Serial Port and ask you to insert the Installation CD-ROM. The installation files are located in the root directory of the CD-ROM. Windows XP may display a message to the effect that the drivers are not digitally signed. This warning can be ignored.**
3. **After the necessary files have been copied, Windows will complete the full installation of the MADS PCI card.**