



# ADLINK PCI-7432

> 32 inputs and 32 outputs PCI card

## Benefits

Affordable

Reliable PCI card

Positrack compatible

Fully Medialon  
Manager compatible

Din rail mounting

## Applications

Relays Control

Input Sensors

Rigging Control

Fireworks

**ADLINK PCI-7432** is a 32-CH high-density digital input and 32-CH output card.

They provide a robust 2,500 V isolation protection which is suitable for most industrial applications.

The wide input range of the PCI-7432 makes it easy to sense the status of external devices.

The PCI-7432 features a wide output range from 5 to 35 V, suitable for relay driving.

### Key Features

- Supports a 32-bit 5 V PCI bus
- 32-CH isolated digital inputs & 32-CH isolated digital outputs (PCI-7432 & PCI-7432HIR)
- 64-CH isolated digital inputs (PCI-7433 & PCI-7433HIR)
- 64-CH isolated digital outputs (PCI-7434)
- Non-polarity digital input range (PCI-7432, PCI-7432HIR, PCI-7433 & PCI-7433HIR)
- 60 Hz AC signal input detection capability (PCI-7433ALC)
- 2500 VRMS optical isolation
- Sink current up to 500mA on each isolated output.



**Part Number**

AK\_7432 32 inputs and 32 outputs card including a Breakout DIN accessory & cables

**Isolated Digital Input**

32 channels  
24 V, non-polarity Maximum input range.  
0-24 V, non-polarity Digital logic levels (high voltage: 5-24 V, low voltage: 0-1.5 V)  
2.4 k  $\Omega$  @ 0.5 W Input Resistance.  
2500 VRMS Isolation voltage  
Interrupt sources: digital input channel 0 & 1  
Data transfers: programmed I/O  
(PCI-7433HIR)

**Isolated Digital Output**

32 channels  
Open collector Darlington transistor  
Sink current Output type.  
500 mA for one channel @ 100% duty  
500 mA for all channels @ 20% duty  
Power dissipation: Max. 2.25 W per chip (8 DO channels)  
Supply voltage: 5-35 V  
Isolation voltage: 2500 VRMS  
Data transfers: programmed I/O

**General Specifications**

I/O connector: 100-pin SCSI-II female  
Operating temperature: 0 to 60 °C  
Storage temperature: -20 to 80 °C  
Relative humidity: 5 to 95%, non-condensing  
Power requirements  
Dimensions (not including connectors) 156 mm x 106 mm  
Current 530 mA Typical @ Device +5 V

**Accessories**

Termination Board: DIN-100S Termination Board with a 100-pin SCSI-II Connector and DIN-Rail Mounting (Including one 1-meter ACL-102100 Cable)

**Hardware Installation**

Power down your desktop computer, open the case and locate an empty PCI slot (one of the short ones in white/beige color).

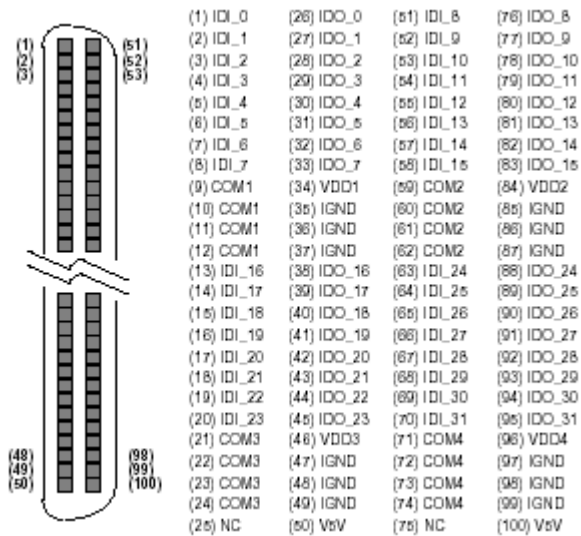
Remove the slot cover bracket.

Unpack the PCI-7432 interface and remove the enclosed PCI controller card from the antistatic bag.

Note: standard precautions against static discharge should be taken when handling the card. Install the card in the empty slot, fastening properly with the mounting screw. Always use a fixing screw to fix the card, to avoid card damage.

Unpack the I/O transition board cable and connect one 100-pin connector to the metal bracket of the PCI-7432 Card.

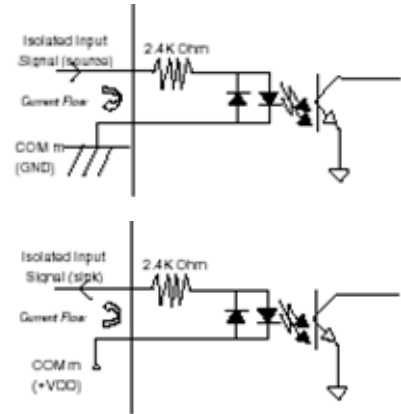
Close back the desktop computer, power on and proceed with software installation as described in the next section.



- Legend:**
- IDI\_n: Isolated digital input channel n
  - IDO\_n: Isolated digital output channel n
  - VDDm: Common pin for output channel group m (VDD1 is common pin for isolated output channel 0-7, VDD2 is common pin for isolated output channel 8-15, and so on).
  - IGND: Ground return path for isolated output channels
  - COMm: Common junction for isolated input channel group m (COM1 is common junction for input channel 0-7, COM2 is common junction for input channel 8-15, and so on).
  - V5V: Onboard un-regulated 5V power supply output

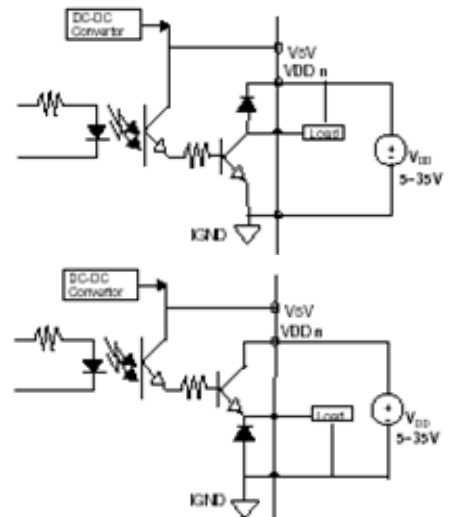
**Input wiring**

The isolated digital input has an open collector transistor structure. Please note that the input common junction could be common ground or common power, they are dependent on the user's environment. Therefore, the digital input could be either a current source or a current sink.



**Output wiring**

The isolated digital output could be common ground connection or common power connection. Please note that when the load is of an "inductance nature" such as a relay, coil or motor, the VDD pin must be connected to an external power source.



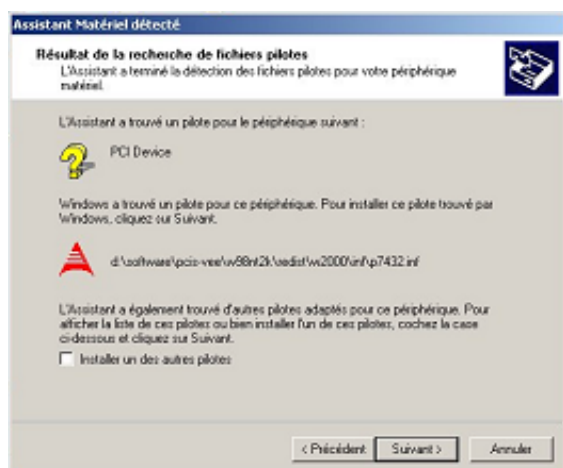
## Software Driver Installation (Instructions for Windows 2000®)

The driver is distributed as a dedicated CD-ROM.

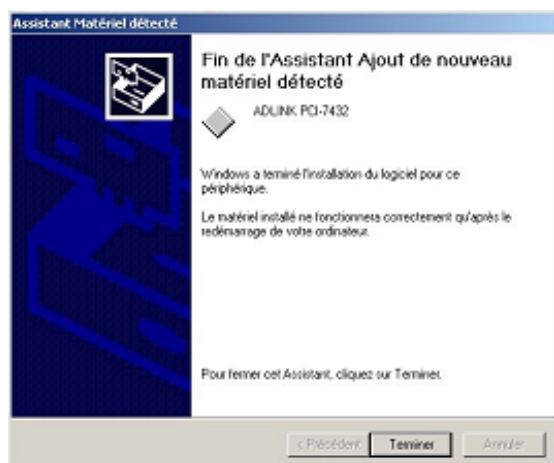
Upon the next start of Windows, a new hardware device will be detected. The installation will be performed automatically. Follow the on-screen instructions.



When prompted by Windows configuration manager, insert the CD-ROM and continue the installation procedure. Follow the standard steps just taking care to always specify the drive (D:) as the source unit.



Click "Finish" to complete the driver installation. Rebooting the machine is not required.



If Medialon Manager Software is not installed, proceed with the installation of the software package.

## Medialon MxM Installation

Select Adlink PCI 7432 Board in the MxM Setup. No specific installation is needed with the MxM.

Refer to the MxM Help for Device creation and Commands.

## Troubleshooting Installation

This section provides help for troubleshooting problems encountered in ADLINK PCI-7432 installation and configuration process. The most common problems are resolved following these steps:

- Make sure the card is properly seated in the PCI slot and the screw is fastened.
- Make sure the drivers are properly installed.
- Verify that the card is properly configured using Windows Device Manager. To get to the Device Manager, follow Start > Settings > Control Panel > System > System Properties > Device Manager.

If a conflict is present, try to uninstall, power down, power back on and reconfigure that card

If this fails refer to the MEDIALON support (as indicated in the final section of this manual).

## Medialon Support

For any problem with the installation of the ADLINK PCI-7432, please use MEDIALON Support Service sending an email to [support@medialon.com](mailto:support@medialon.com)

Please make sure you indicate the following minimal set of information:

- Version of Medialon Manager Software used
- Version of MxM Adlink PCI-7432 Board used
- Model and serial number of the ADLINK PCI-7432 card
- Brand and model of the PC
- Version of the Windows operating system (reported in the Start > Settings > Control Panel > System > System Properties > General window also reachable right clicking on My Computer and selecting Properties)
- Is Windows Device Manager reporting configuration problems?
- Was the card tested on another PC?

For updated information please refer to our website, which is freely available at [www.medialon.com](http://www.medialon.com) where you will also find all updated Medialon Manager Software MxMs.

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