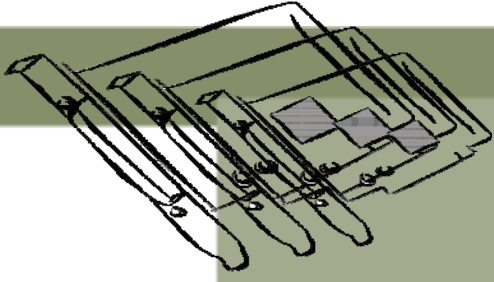


I/O CARD QUICK START GUIDE



for PIO-821 L/H

English/ August 2010/ Version 1.1

1

What's in the shipping package?

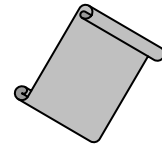
- One PIO-821 L/H series card
- One companion PCI CD (V4.9 or later)
- One Quick Start Guide (This document)



PIO-821 L/H
Series Card



Software Utility CD



Quick Start Guide

2

Installing Windows Driver

Follow these steps:

1. Setup the Windows driver. The driver is located at:

CD:\NAPDOS\PCI\PIO-821\DLL\Driver

<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-821/dll/driver>

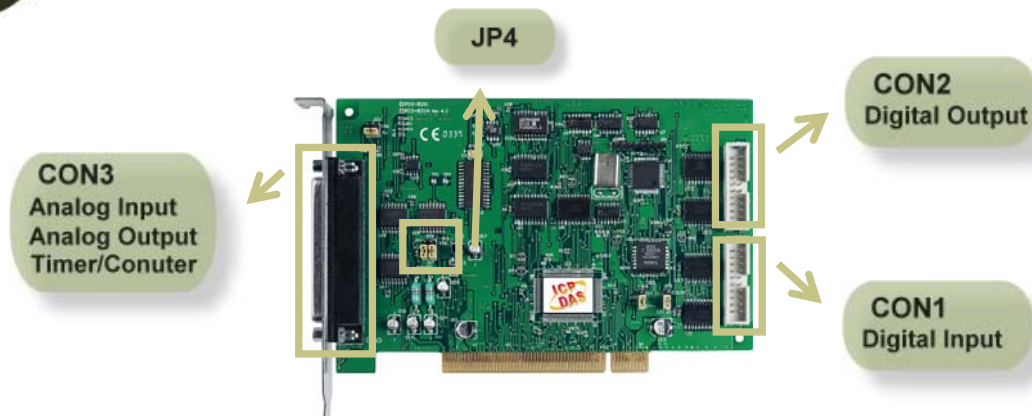


The Windows driver only supports Windows 98/NT/2000/ and 32-bit Windows XP/2003/Vista/7 Versions.

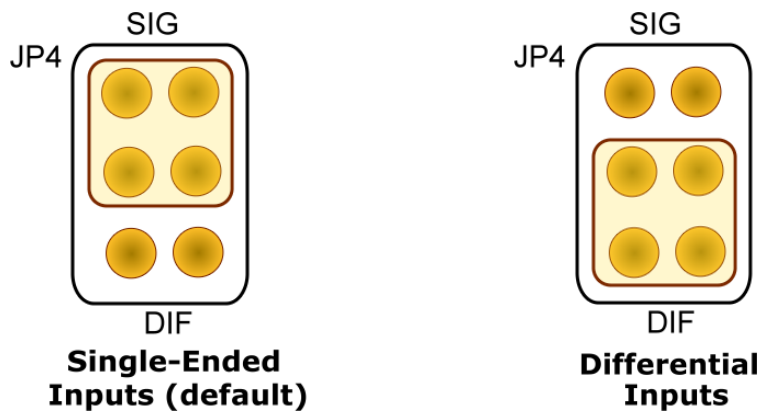
2. Click the "Next>" button to start the installation.
3. Click the "Next>" button to install the driver into the default folder.
4. Click the "Install" button to continue the installation.
5. Select "NO, I will restart my computer later" and then click the "Finish" button.

3

Setting Jumper



- **JP4: Analog Input Type Selection.**
(Please keep JP4 in Single-Ended positing for self-test.)



4

Installing Hardware on PC

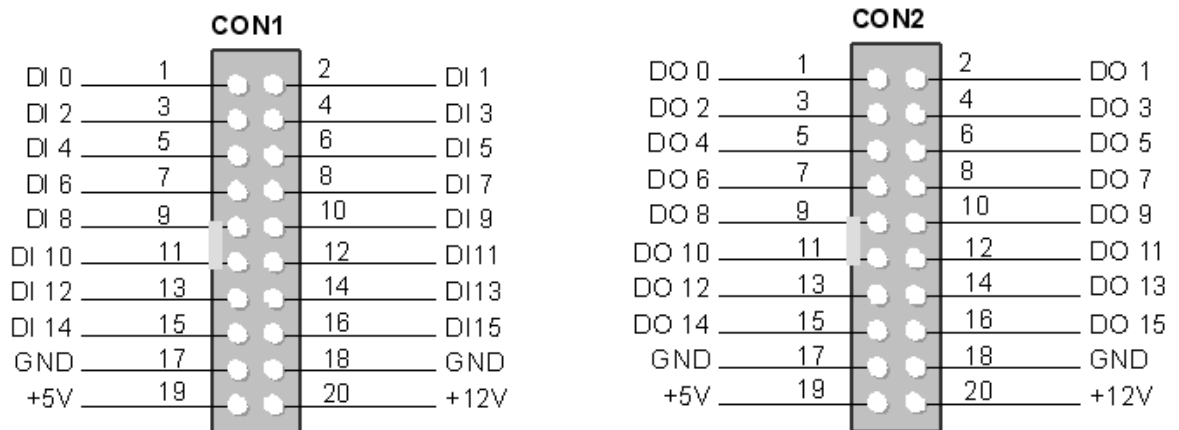
Follow these steps:

1. Shut down and power off your computer.
2. Remove the cover from the computer.
3. Select an unused PCI slot.
4. Insert your I/O card into the PCI slot carefully.
5. Replace the PC cover.
6. Power on the computer.

After powering-on the computer, please finish the Plug&Play steps according to the prompted messages.

5 Pin Assignments

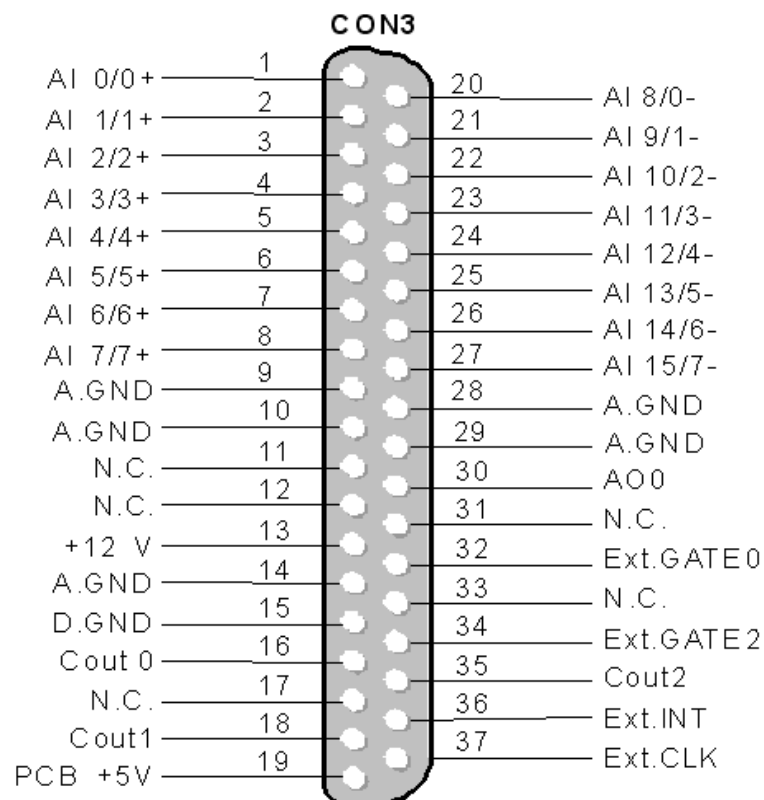
- **CON1 Connector** (20-pin box header)
- **CON2 Connector** (20-pin box header)



CON1 & CON2 are TTL Compatible

High (1)	2.0 ~ 5.0 V (Voltage over 5.0V will damage the device)
None Define	2.0 V ~ 0.8 V
Low(0)	Under 0.8 V

- **CON3 Connector** (Female DB37)



6 Self Testing

■ DIO Test :

1. Use CA-2002 (optional) to connect the CON1 with CON2.



2. Double click the compressed demo file, to uncompress it.

File name: DLL_Delphi4_XXXXXX.exe

Location: CD:\NAPDOS\PCI\PIO-821\DLL\Demo\

<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-821/dll/demo/>

3. Execute the DIO sample program.

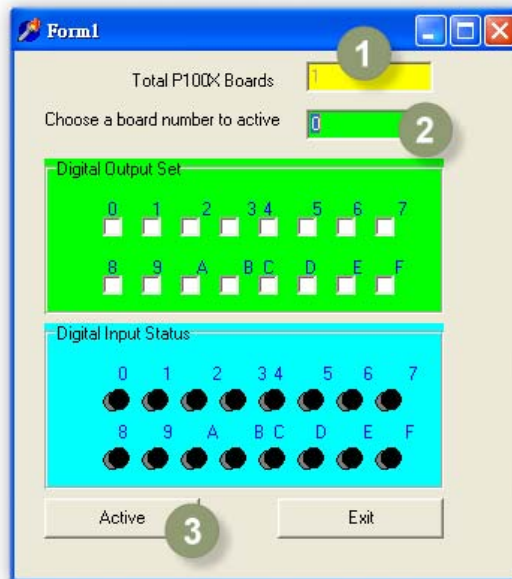
Go the directory \DLL_Delphi4\DIO\ in uncompressed folder.

Double click on "Project1.exe"



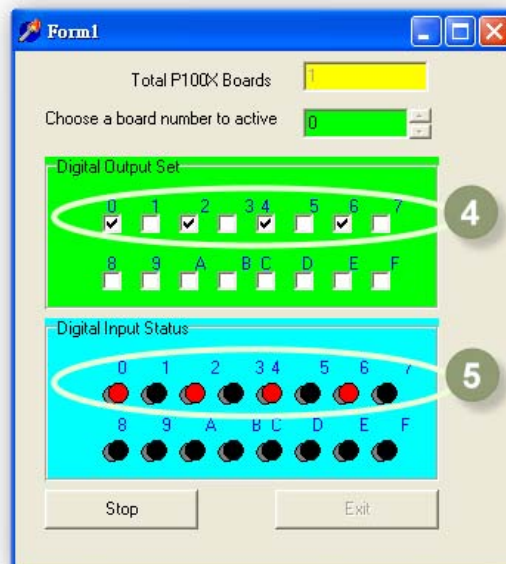
4. Perform DIO functions test.

- 1 Verify how many PIO-821 cards are successfully installed on this PC.
- 2 Select the board to activate. (It ranges form 0 to total board number subtracting one)
- 3 Click to this button start DIO test.



5. Get DIO function test result.

- 4 Click channel 0, 2, 4, 6 in DO.
- 5 The DI status should follow the DO status--channel 0, 2, 4, 6 now in high state. (Red light)

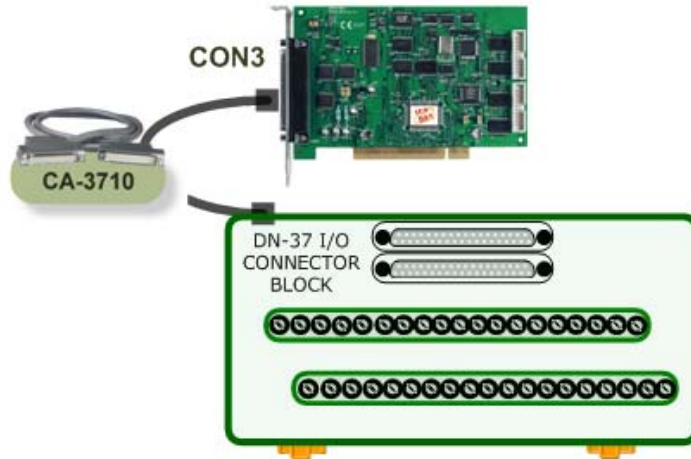


■ Analog Input Test Wiring:

1. Prepare for device:

- DN-37 (optional) wiring terminal board.
- Provide a stable signal source. (For example, dry battery)

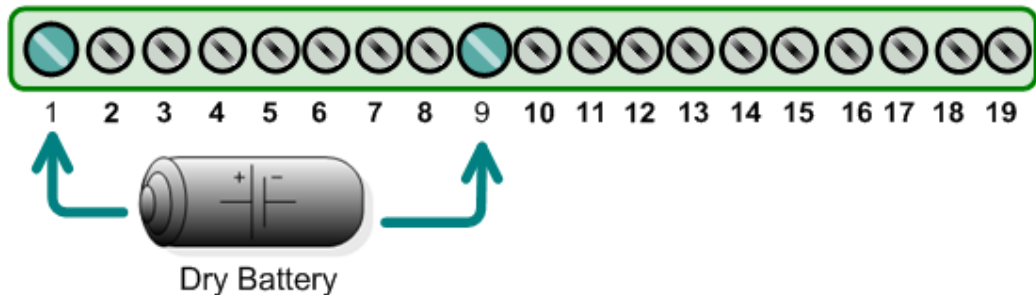
2. Connect a DN-37 to the COM3.



3. Wire the signal source to channel 0.

Keep the JP4 jumper in Single-Ended (page2), and wire the signals as follows:

Connect the AI 0 (Pin1) to signal positive (+)
 Connect the A.GND (Pin9) to signal negative (-)



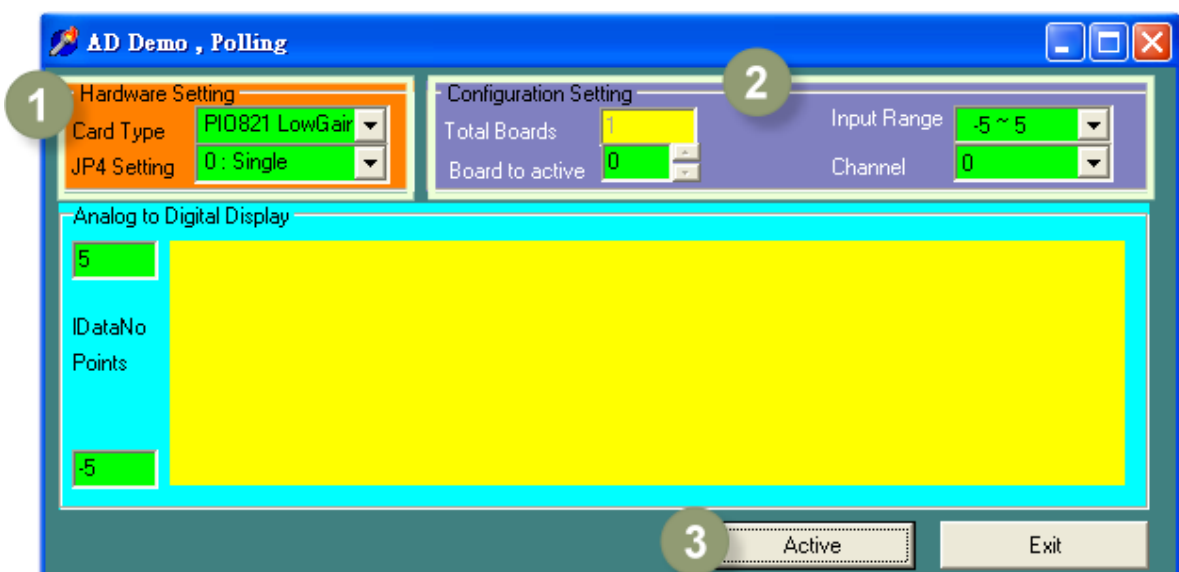
4. Execute the AI sample program.

Double click the "Project1.exe" in the folder "\DLL_Delphi4\polling\" in the uncompressed files described in DIO function test.



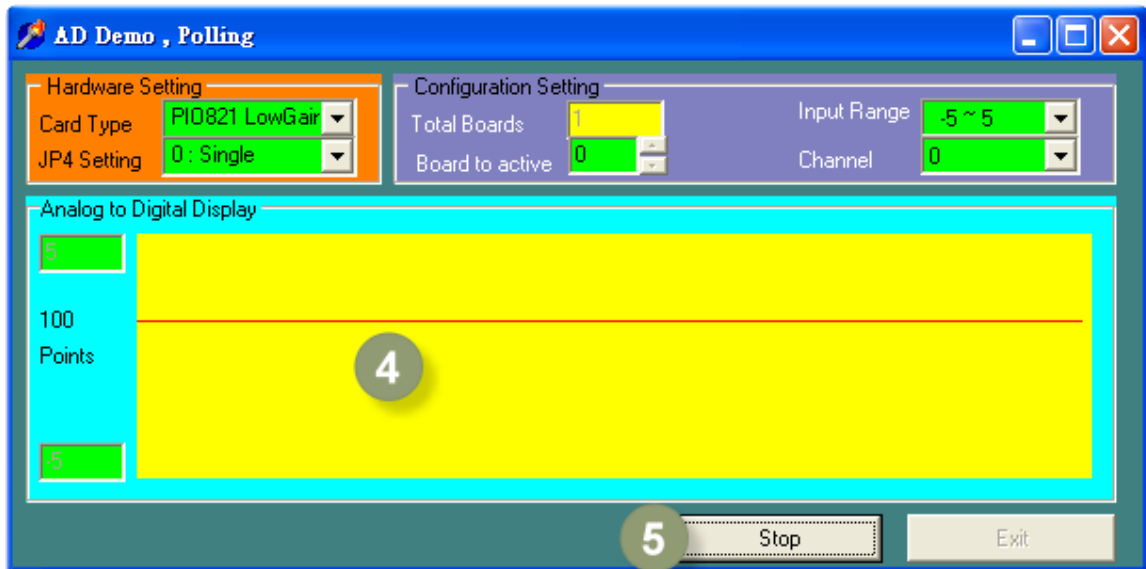
5. Perform the AI functions test.

- 1 Confirm the hardware setting as follows:
 - **Card Type:** Select your card type.
 - **JP4 Setting:** Select "0: Single".
- 2 Confirm the configuration setting as follows:
 - **Total Boards:** Indicates the number of PIO-821 installed on this PC.
 - **Board to active:** Select the board to activate. (It ranges form 0 to total board number subtracting one)
 - **Input range:** Select the input range.
 - **Channel:** Select the channel 0.
- 3 Click this button to start test.



6. Get AI function test result.

- 4 Check continuous analog input on Channel 0.
- 5 Click this button to stop test.



Related Information

- ❏ **PIO-821 Series Card product page:**
http://www.icpdas.com/products/DAQ/pc_based/pio_821.htm
- ❏ **CA-3710, CA-2002 and DN-37 page (optional):**
http://www.icpdas.com/products/Accessories/cable/cable_selection.htm
http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm
- ❏ **Documentation:**
CD:\NAPDOS\PCI\PIO-821\Manual
<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-821/manual/>
- ❏ **Software:**
CD:\NAPDOS\PCI\PIO-821
<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-821/>

