

Quick Start










for *PCI-P16POR16U*,
PEX-P8POR8i/P16POR16i

English/Jan. 2017/ Version 1.2

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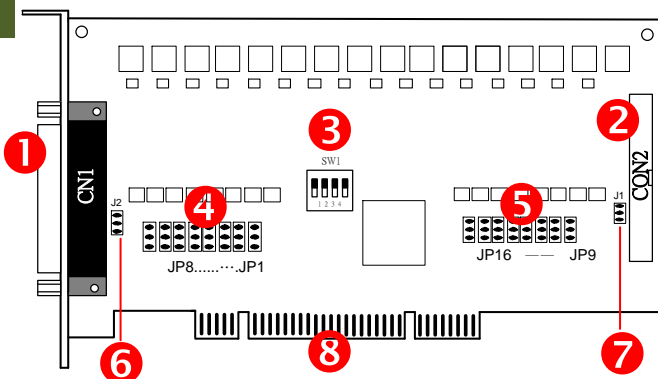
Shipping Package

The package includes the following items:

<p>❶ PEX-P8POR8i Card x1</p> 	<p>❶ PCI-P16POR16U Card x1 Or PEX-P16POR16i Card x1</p> 
<p>❷ Software CD x1</p> 	<p>❷ Software CD x1</p> 
<p>❸ Quick Start (This Document) x1</p> 	<p>❸ Quick Start (This Document) x1</p> 
<p>❹ CA-4002 D-Sub Connector x1</p> 	<p>❹ CA-4037W Cable x1</p>  <p>❺ CA-4002 D-Sub Connector x2</p> 

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Appearance



1. **CON1/CN1:** DIO channel 0-7.
2. **CON2:** DIO channel 8-15
3. **SW1:** Card ID Setting.
4. **J1/JP1-JP8:** AC Filter Jumpers (CON1/CN1)
5. **J2/JP9-JP16:** AC Filter Jumpers (CON2)
6. **JP2/J2:** Ground Isolated Protection Jumper.
7. **J1:** Ground Isolated Protection Jumper.
8. **PCI Bus:** for PCI-P16POR16U
PCI Express: for PEX-P8POR8i/P16POR16i

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Installing windows Driver

- ➊ Setup the Windows driver, which can be obtained from either the companion CD-ROM or the ICP DAS web site:

The UniDAQ driver supports 32-/64-bit Windows XP/2003/7/8/10; it is recommended to install this driver for new user.



CD: \NAPDOS\PCI\UniDAQ\DLL\Driver

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

The PISO-DIO series classic driver supports Windows 98/NT/2K and 32-bit XP/ 2003/7/8/10.



Recommended to install this driver for have been used PCI-P16POR16U series boards of regular user, please refer to :

<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/piso-dio/manual/quickstart/classic/>

- ➋ Click the “**Next>**” button to start the installation.
- ➌ Check your I/O Card is or not on supported list, then click the “**Next>**” button.
- ➍ Select the installed folder, the default path is **C:\ICPDAS\UniDAQ** , confirm and click the “**Next>**” button.
- ➎ Check your I/O Card on list, then click the “**Next>**” button.
- ➏ Click the “**Next>**” button on the Select Additional Tasks window.
- ➐ Click the “**Next>**” button on the Download Information window.
- ➑ Select “**No, I will restart my computer later**” and then click the “**Finish**” button.

For more detailed information about how to install the UniDAQ driver, refer to “**Section 2.2 Install UniDAQ Driver DLL**” of the UniDAQ Software Manual, which can be found in the

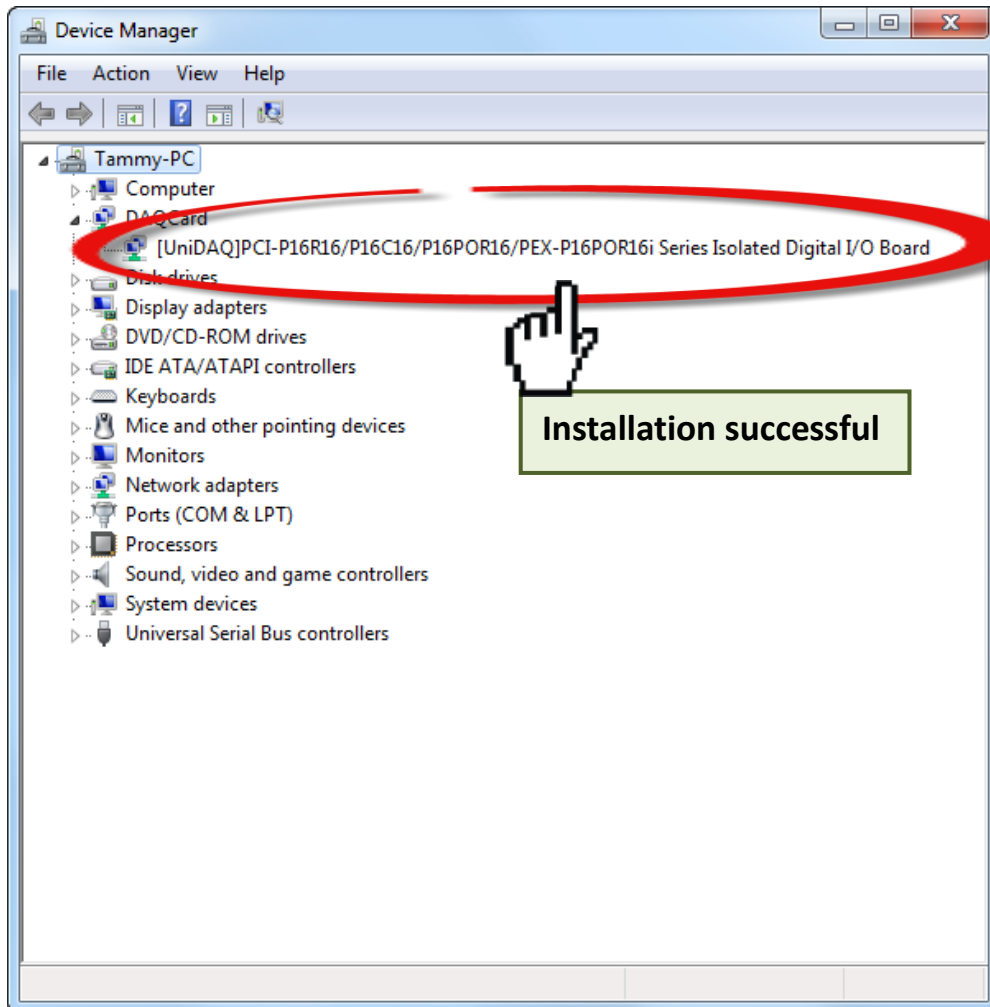
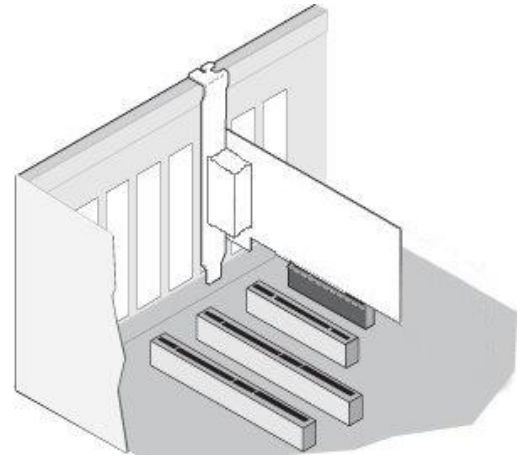
\NAPDOS\PCI\UniDAQ\Manual\ folder on the companion CD, or can be downloaded from:

<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/manual/>

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Installing Hardware on PC


- ❶ Shut down and power off your computer.
- ❷ Remove the cover from the computer.
- ❸ Select an unused PCI/PCI Express slot.
- ❹ Carefully insert your I/O card into the PCI/PCI Express slot.
- ❺ Replace the PC cover.
- ❻ Power on the computer.
- ❼ Follow the prompt message to finish the Plug & Play steps.
- ❽ Please open the **“Device Manager”** to verify the I/O card is correctly listed in the Device Manager.



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Pin Assignments

Pin Assignment CON2	Pin Assignment CON1/CN1	Terminal No.	Pin Assignment CON1/CN1	Pin Assignment CON2
NO_8	NO_0	01	20	CM_0
NO_9	NO_1	02	21	CM_1
NO_10	NO_2	03	22	CM_2
NO_11	NO_3	04	23	CM_3
NO_12	NO_4	05	24	CM_4
NO_13	NO_5	06	25	CM_5
NO_14	NO_6	07	26	CM_6
NO_15	NO_7	08	27	CM_7
N/A	N/A	09	28	N/A
N/A	N/A	10	29	GND
N/A	N/A	11	30	DIB_0
DIA_8	DIA_0	12	31	DIB_1
DIA_9	DIA_1	13	32	DIB_2
DIA_10	DIA_2	14	33	DIB_3
DIA_11	DIA_3	15	34	DIB_4
DIA_12	DIA_4	16	35	DIB_5
DIA_13	DIA_5	17	36	DIB_6
DIA_14	DIA_6	18	37	DIB_7
DIA_15	DIA_7	19		

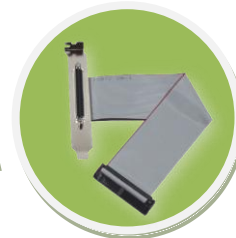


CON1/CN1 (Female DB-37)

Pin Assignment	Terminal No.	Pin Assignment
NO_8	01	02 CM_8
NO_9	03	04 CM_9
NO_10	05	06 CM_10
NO_11	07	08 CM_11
NO_12	09	10 CM_12
NO_13	11	12 CM_13
NO_14	13	14 CM_14
NO_15	15	16 CM_15
N/A	17	18 N/A
N/A	19	20 GND
N/A	21	22 DIB_8
DIA_8	23	24 DIB_9
DIA_9	25	26 DIB_10
DIA_10	27	28 DIB_11
DIA_11	29	30 DIB_12
DIA_12	31	32 DIB_13
DIA_13	33	34 DIB_14
DIA_14	35	36 DIB_15
DIA_15	37	38 N/A
N/A	39	40 N/A

CON2 (40-pin box header)
(PCI-P16POR16U/PEX-P16POR16i only)

Extension Cable (CA-4037W):
DB-40-Pin conversion DB-37-Pin



Notes:

NO: Normal Open

CM: Common

DIA: Digital Input (Point A)

DIB: Digital Input (Point B)

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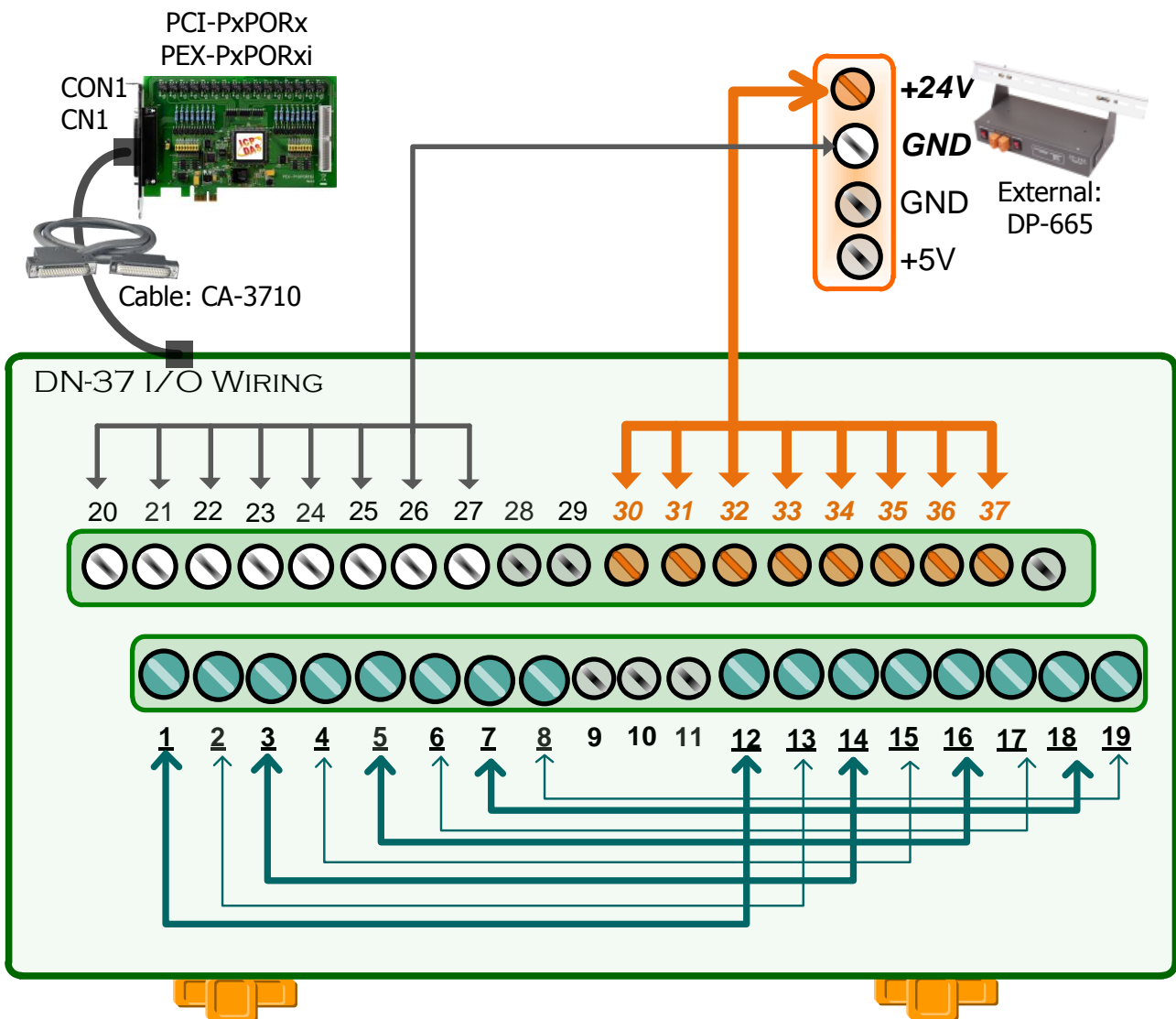
Self-Test

➤ Prepare for device:

- ☑ DN-37 (optional) wiring terminal board
- ☑ Exterior power supply device. For example: DP-665 (optional)
- ☑ CA-3710 (optional) cable

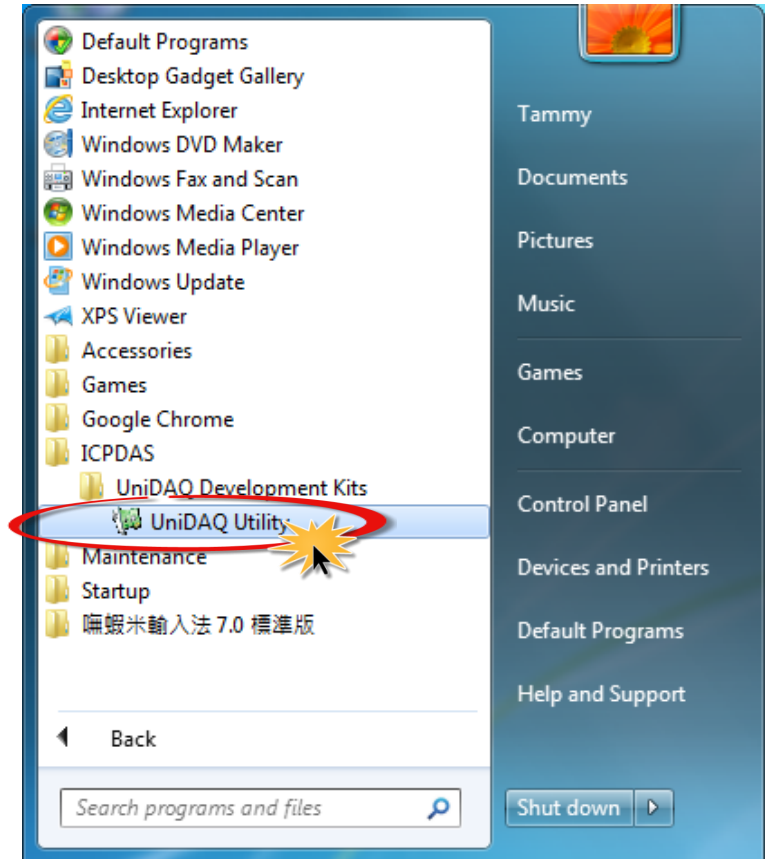
➤ Self-test wiring as follows:

- ❶ Use the **DN-37** to connect the **CON1/CN1** on board.
- ❷ Connect the **NO(0-7)** pins to the **DIA(0-7)** pins.
(Pin1/2/3/4/5/6/7/8 connects to Pin12/13/14/15/16/17/18/19).
- ❸ **Power Supply (+24 V)** connects to **DIB(0-7)** (Pin30/31/32/33/34/35/36/37).
- ❹ **Power Supply GND** connects to **CM(0-7)** (Pin 20/21/22/23/24/25/26/27).



➤ **Execute the UniDAQ Utility as follows:**

❶ In Windows 7, click the “Start” button, point to “All Programs”, and then click the “ICPDAS” folder. Point to “UniDAQ Development Kits” and then click the “UniDAQ Utility” to execute the UniDAQ Utility Program.



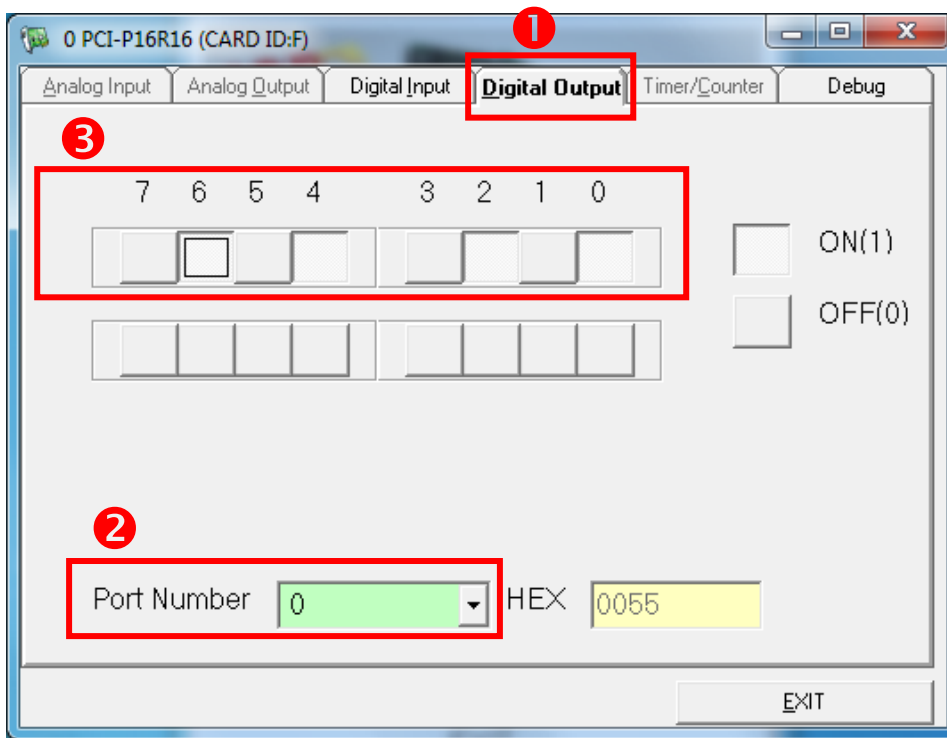
❷ Confirm that PCI-P16R16 Series card has been successfully installed in the host system. Note that the device numbers start from 0.

❸ Click the “TEST” button to start the test.

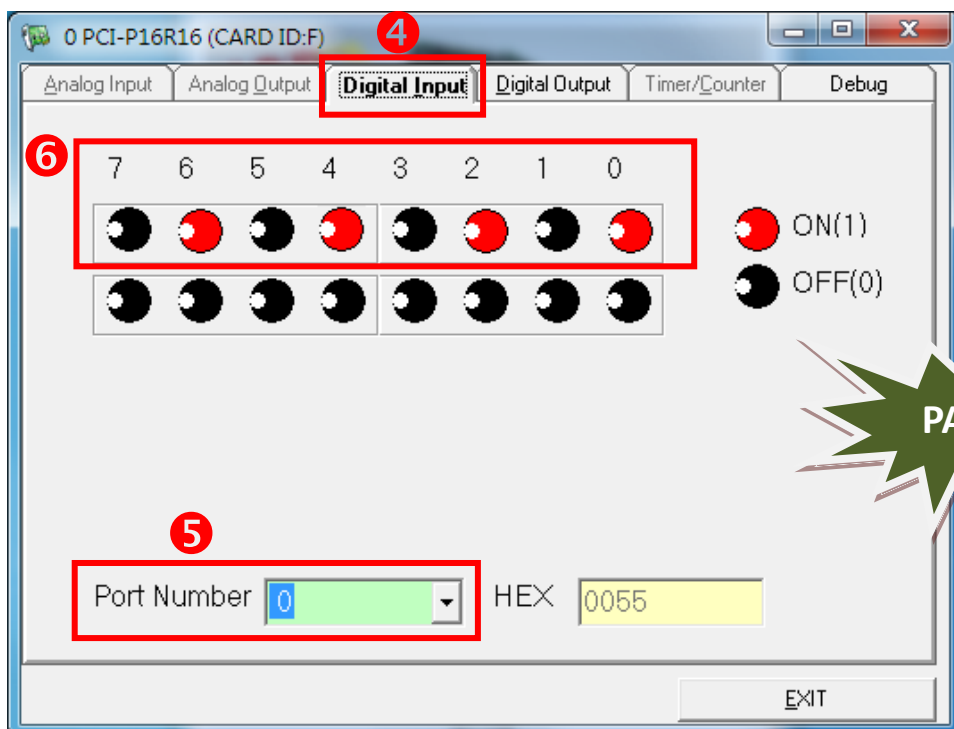


④ Check the results of the **Digital Input/Output** functions test.

1. Click the **“Digital Output”** tab.
2. Select **“Port0”** from the **“Port Number”** drop-down menu.
3. Check the checkboxes for **channels 0, 2, 4 and 6**.



4. Click the **“Digital Input”** tab.
5. Select **“Port0”** from the **“Port Number”** drop-down menu.
6. The DI indicators will turn **red** when the corresponding DO channels 0, 2, 4 and 6 are **ON**.



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Related Information

- PCI-P16POR16U and PEX-P8POR8i/P16POR16i Card Product Page:

http://www.icpdas.com/root/product/solutions/pc_based_io_board/pci/pci-p16por16.html

- DN-37, CA-3710 and DP-665 page (optional):

http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm

http://www.icpdas.com/products/Accessories/power_supply/dp-665.htm

http://www.icpdas.com/products/Accessories/cable/cable_selection.htm

- Documentation and Software:

CD:\NAPDOS\PCI\UniDAQ\

<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/>