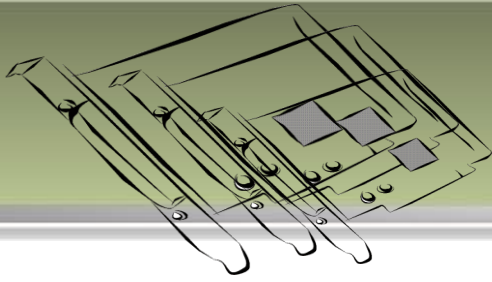


I/O CARD QUICK START GUIDE

For *PIO-D48U/PIO-D48SU*
PEX-D48

English/ April 2013/ Version 1.0



1

What's in the shipping package?

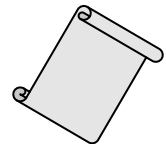
The package includes the following items:



PIO-D48U / PIO-D48SU / PEX-D48



Software Utility CD
(V5.2 or later)



Quick Start Guide
(This Document)

2

Installing Windows Driver

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

- The UniDAQ driver supports 32-/64-bit Windows 2K/XP/2003/Vista/7/8; 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 PIO-DIO driver supports Windows 98/NT/2K and 32-bit XP/ 2003/ Vista/7/8. Recommended to install this driver for have been used PIO-DIO series boards of regular user, please refer to :
<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-dio/manual/quickstart/classic/>

Step 2: Click the "**N**ext>" button to start the installation.

Step 3: Check your DAQ Card is or not on supported list, then click the "**N**ext>" button.

Step 4: Select the installed folder, the default path is C:\ICPDAS\UniDAQ , confirm and click the "**N**ext>" button.

Step 5: Check your DAQ Card on list, then click the "**N**ext>" button.

Step 6: Click the "**N**ext>" button on the **Select Additional Tasks** window.

Step 7: Click the "**N**ext>" button on the **Download Information** window.

Step 8: Select "**No, I will restart my computer later**" and then click the "**F**inish" button.

For detailed information about the driver installation, please refer to Chapter 4 "Software Installation" of the user manual.

3 Installing Hardware on PC

Step 1: Shut down and power off your computer.

Step 2: Remove the cover from the computer.

Step 3: Select an unused PCI/PCI Express slot.

Step 4: Carefully insert your I/O card into the PCI/PCI Express slot.

Step 5: Replace the PC cover.

Step 6: Power on the computer.

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

For detailed information about the driver installation, please refer to Chapter 3 "Hardware Installation" of the user manual.

4 Pin Assignments

PIO-D48SU:

PA00-07: Port 0 PA10-17: Port 3
 PB00-07: Port 1 PB10-17: Port 4
 PC00-07: Port 2 PC10-17: Port 5

PIO-D48U/PEX-D48:

CN1_PA0-7: Port 0 CN2_PA0-7: Port 3
 CN1_PB0-7: Port 1 CN2_PB0-7: Port 4
 CN1_PC0-7: Port 2 CN2_PC0-7: Port 5

Pin Assignment	Terminal No.	Pin Assignment
N.C	01	20 +5V
N.C.	02	21 GND
PB_7	03	22 PC_7
PB_6	04	23 PC_6
PB_5	05	24 PC_5
PB_4	06	25 PC_4
PB_3	07	26 PC_3
PB_2	08	27 PC_2
PB_1	09	28 PC_1
PB_0	10	29 PC_0
GND	11	30 PA_7
N.C.	12	31 PA_6
GND	13	32 PA_5
N.C.	14	33 PA_4
GND	15	34 PA_3
N.C.	16	35 PA_2
GND	17	36 PA_1
+5V	18	37 PA_0
GND	19	

Female DB37 (CN1)

Pin Assignment	Terminal No.	Pin Assignment
PC_7	01	02 GND
PC_6	03	04 GND
PC_5	05	06 GND
PC_4	07	08 GND
PC_3	09	10 GND
PC_2	11	12 GND
PC_1	13	14 GND
PC_0	15	16 GND
PB_7	17	18 GND
PB_6	19	20 GND
PB_5	21	22 GND
PB_4	23	24 GND
PB_3	25	26 GND
PB_2	27	28 GND
PB_1	29	30 GND
PB_0	31	32 GND
PA_7	33	34 GND
PA_6	35	36 GND
PA_5	37	38 GND
PA_4	39	40 GND
PA_3	41	42 GND
PA_2	43	44 GND
PA_1	45	46 GND
PA_0	47	48 GND
+5V	49	50 GND

50-pin box header (CN2)

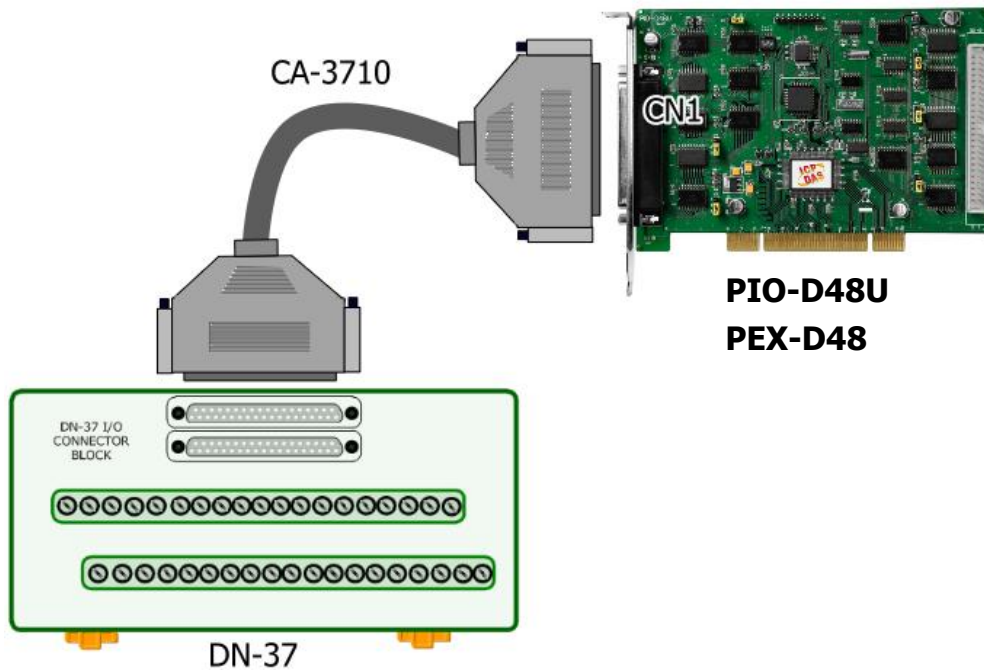
Pin Assignment	Terminal No.	Pin Assignment
PA_00	01	51 PA_10
PA_01	02	52 PA_11
PA_02	03	53 PA_12
PA_03	04	54 PA_13
PA_04	05	55 PA_14
PA_05	06	56 PA_15
PA_06	07	57 PA_16
PA_07	08	58 PA_17
PB_00	09	59 PB_10
PB_01	10	60 PB_11
PB_02	11	61 PB_12
PB_03	12	62 PB_13
PB_04	13	63 PB_14
PB_05	14	64 PB_15
PB_06	15	65 PB_16
PB_07	16	66 PB_17
PC_00	17	67 PC_10
PC_01	18	68 PC_11
PC_02	19	69 PC_12
PC_03	20	70 PC_13
PC_04	21	71 PC_14
PC_05	22	72 PC_15
PC_06	23	73 PC_16
PC_07	24	74 PC_17
GND	25	75 GND
-	26	76 -
-	27	77 -
-	28	78 -
-	29	79 -
-	30	80 -
-	31	81 -
-	32	82 -
-	33	83 -
-	34	84 -
-	35	85 -
-	36	86 -
-	37	87 -
-	38	88 -
-	39	89 -
-	40	90 -
-	41	91 -
-	42	92 -
-	43	93 -
-	44	94 -
-	45	95 -
-	46	96 -
-	47	97 -
-	48	98 -
-	49	99 -
+5V	50	100 +5V

Female SCSI 100-pin (CON1)

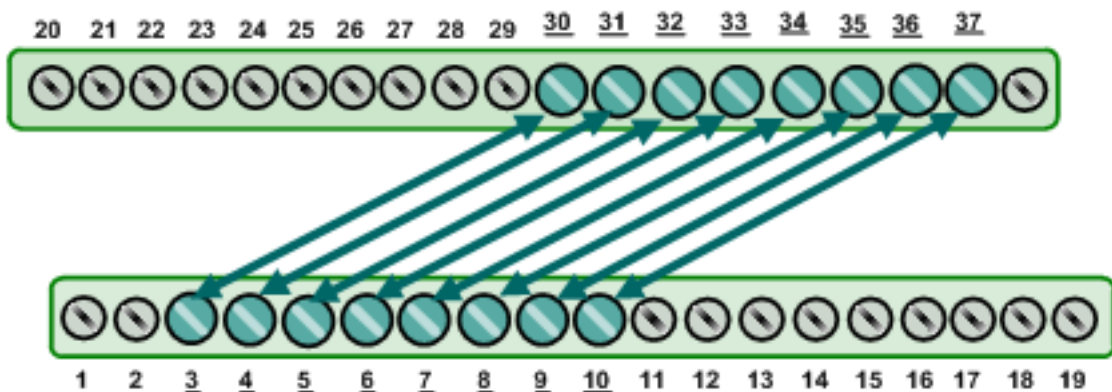
5 Self-Test

- Self-test wiring of the PIO-D48U and PEX-D48 as follows:

1. Use the DN-37 (optional) to connect the CN1 on the board.

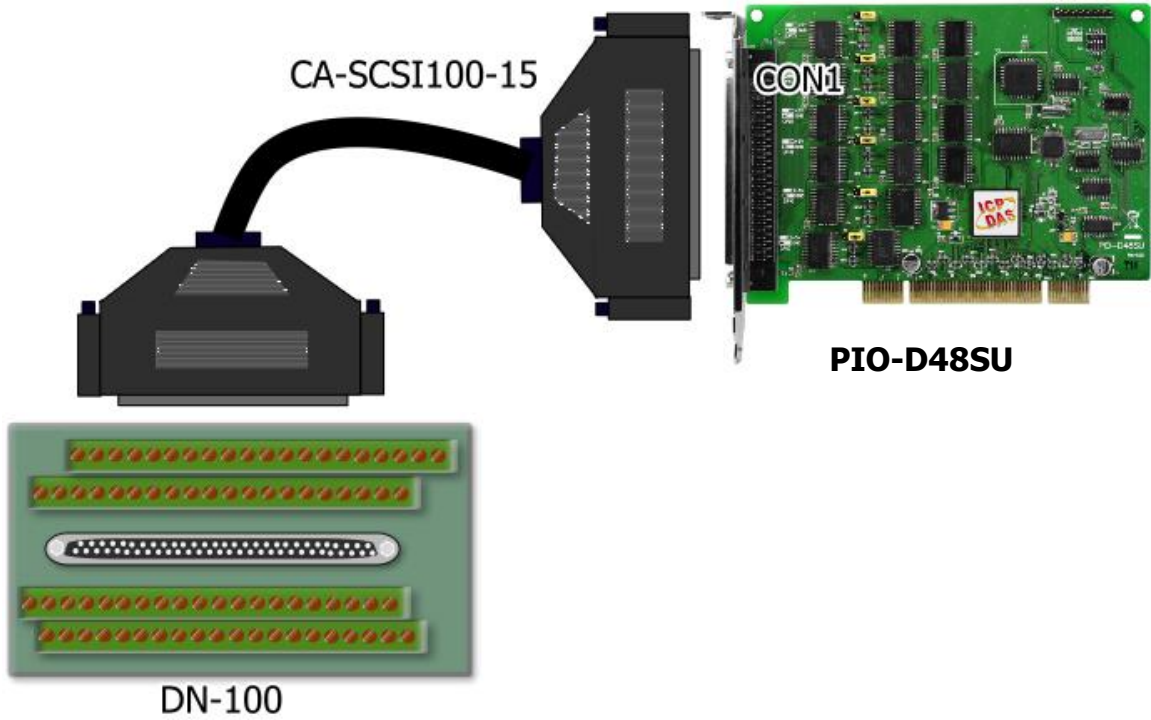


2. Connect the Port0 (PA0~PA7) with Port1 (PB0~PB7).

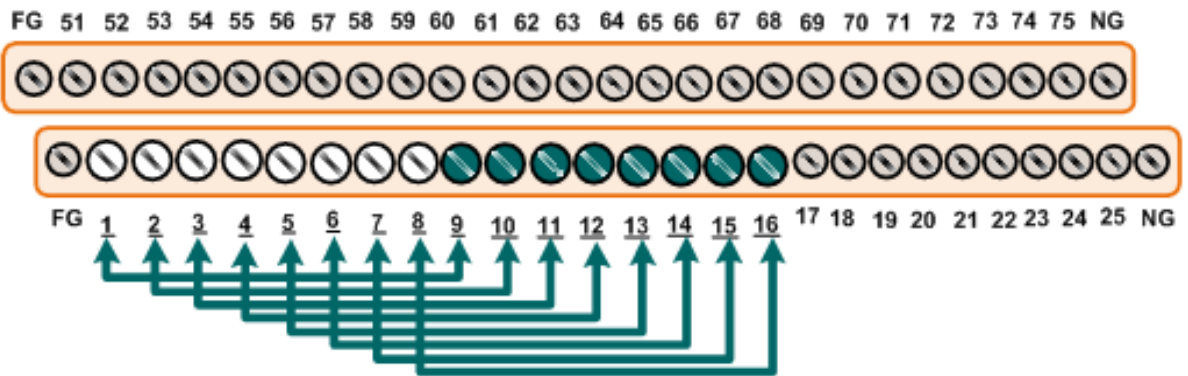


■ **Self-test wiring of the PIO-D48SU as follows:**

1. Use the DN-100 (optional) to connect the CON1 on the board.



2. Connect the Port0 (PA00~PA07) with Port1(PB00~PB07).



3. The UniDAQ Utility.exe is located in:

This program (UniDAQ Utility) will be placed in the default path after completing installation.

Default Path: C:\ICPDAS\UniDAQ\Driver\
 Double click the "UniDAQUtility.exe"



4. Execute the UniDAQ Utility Program.

1 Double-Click
 UniDAQUtility

2 Confirm the PIO-D48 series card had successfully installed to PC. It starts from 0.

3 Click this button to start test.

ICP DAS UniDAQ DAQ Card Utility

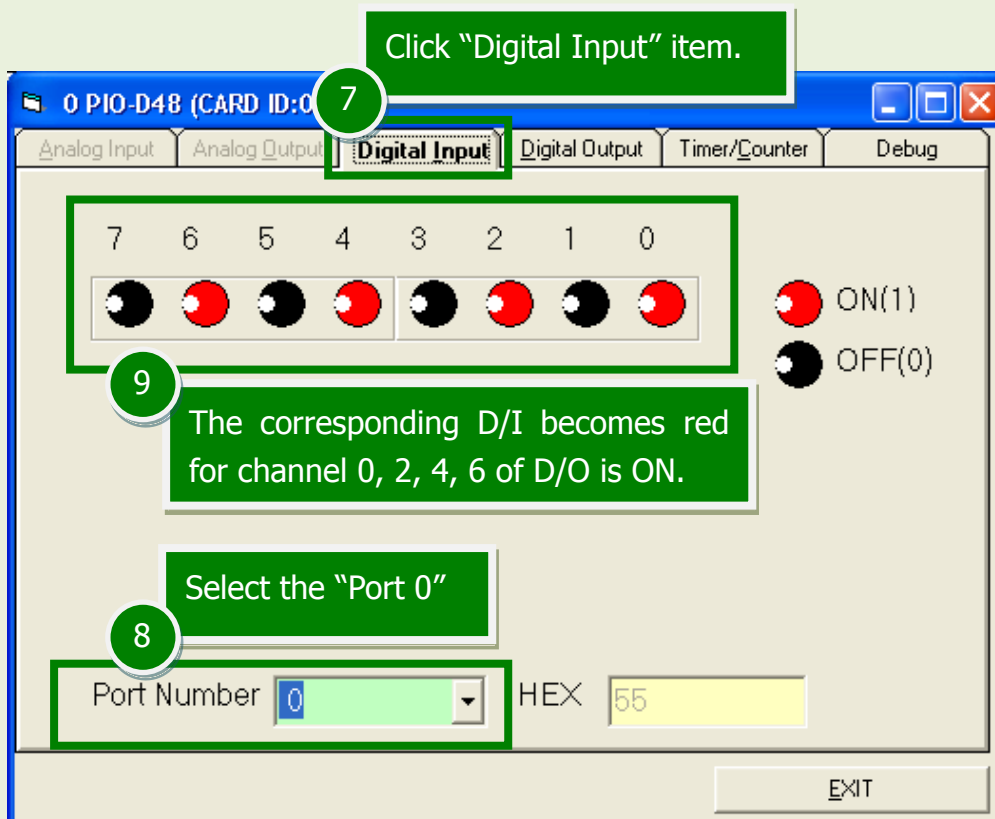
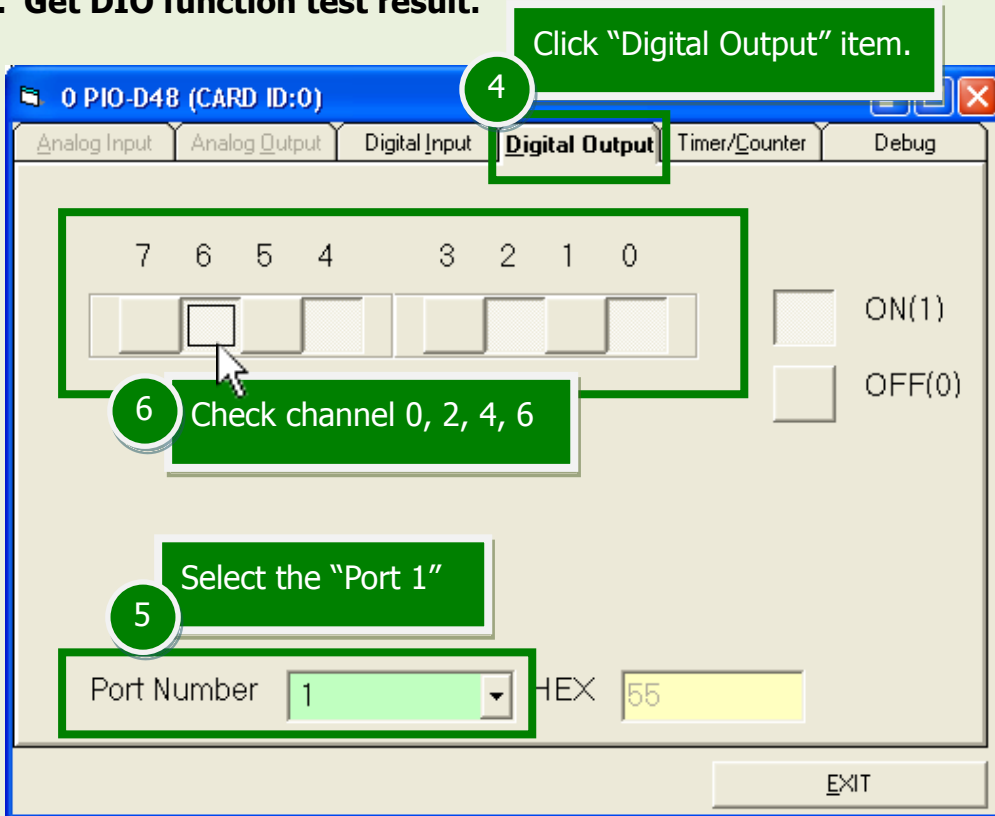
Information Device
 0 PIO-D48

TEST

ABOUT

EXIT

5. Get DIO function test result.



-Complete-

6

Related Information

- PIO-D48U/PIO-D48SU/PEX-D48 Series Card Product Page:
http://www.icpdas.com.tw/product/solutions/pc_based_io_board/pci/pio-d48.html

- DN-37, DN-100, CA-3710 and CA-SCSI100-15 page (optional):
http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm
http://www.icpdas.com/products/DAQ/screw_terminal/dn_100.htm
http://www.icpdas.com/products/Accessories/cable/cable_selection.htm

- Documentation:
CD:\NAPDOS\PCI\PIO-DIO\Manual\
<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/pio-dio/manual/>

- Software:
CD:\NAPDOS\PCI\UniDAQ\DLL\
<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/>