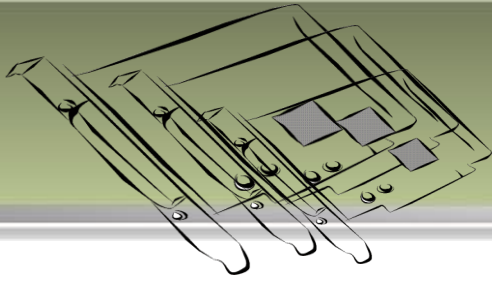


I/O CARD QUICK START GUIDE

For PEX-P64/PISO-P64U Series

English/ Oct. 2013/ Version 1.1



1

What's in the shipping package?

The package includes the following items:



One PEX-P64(-24V) and PISO-C64U(-24V) PCI Board.



One Software Utility CD (V5.2 or later)



One Quick Start Guide (This Document)



One CA-4037B Cable



Two CA-4002 D-Sub connectors

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

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

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

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

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

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


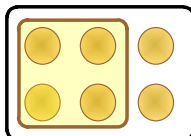
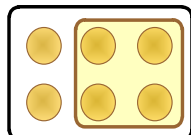
Step 7: Click the "**Next>**" button on the **Download Information** window.

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

For detailed information about the driver installation, please refer to Chapter 2.1 "Getting the UniDAQ Driver DLL Installer package" of the UniDAQ SDK user manual.

3 Jumper Setting

Please make sure J1/J2/J3/J4 jumper is kept in default setting before self-test, as follows: (This example uses this power supply.)

Jumper	J1/J2/J3/J4		
			Internal Power
	<input checked="" type="checkbox"/>		External Power (Default Setting)


4 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.

5 Pin Assignments

Pin Assignment CON2	Pin Assignment CON1	Terminal No.	Pin Assignment CON1	Pin Assignment CON2
IGND2	IGND0	01		
DI_32	DI_0	02	20	IGND1
DI_33	DI_1	03	21	DI_16
DI_34	DI_2	04	22	DI_17
DI_35	DI_3	05	23	DI_18
DI_36	DI_4	06	24	DI_19
DI_37	DI_5	07	25	DI_20
DI_38	DI_6	08	26	DI_21
DI_39	DI_7	09	27	DI_22
DI_40	DI_8	10	28	DI_23
DI_41	DI_9	11	29	DI_24
DI_42	DI_10	12	30	DI_25
DI_43	DI_11	13	31	DI_26
DI_44	DI_12	14	32	DI_27
DI_45	DI_13	15	33	DI_28
DI_46	DI_14	16	34	DI_29
DI_47	DI_15	17	35	DI_30
ECOM2	ECOM0	18	36	DI_31
N.C.	N.C.	19	37	ECOM1
				ECOM3



CON1 (Female DB-37)

Pin Assignment	Terminal No.	Pin Assignment
IGND2	01	02 IGND3
DI_32	03	04 DI_48
DI_33	05	06 DI_49
DI_34	07	08 DI_50
DI_35	09	10 DI_51
DI_36	11	12 DI_52
DI_37	13	14 DI_53
DI_38	15	16 DI_54
DI_39	17	18 DI_55
DI_40	19	20 DI_56
DI_41	21	22 DI_57
DI_42	23	24 DI_58
DI_43	25	26 DI_59
DI_44	27	28 DI_60
DI_45	29	30 DI_61
DI_46	31	32 DI_62
DI_47	33	34 DI_63
ECOM2(+)	35	36 ECOM3
ECOM2(-)	37	38 N.C.
N.C.	39	40 N.C.

CON2 (40-pin box header)



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



6 Self-Test

■ Prepare for device:

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

■ Self-test wiring as follows:

1. Use the DN-37 to connect the CON1 on board.
2. Keep set the J1 jumper to External Power (Page 3).

PEX-P64 and PISO-P64U External Power Wiring:

3. Power Supply (+5 V) connect to ECOM0 (Pin18).
Power Supply GND connect to IGND0 (Pin1).
IGND0 (Pin1) connect to DI7 (Pin9).



The PEX-P64/PISO-P64U suggests input voltage range as follow:

Logic high: +5 ~ +15 V (Max. 24 V); Logic Low: 0 ~ 1V.

(Higher voltage over the limitation will cause the hardware damage.)

PEX-P64-24V/PISO-P64U-24V External Power Wiring:

3. Power Supply (+24 V) connect to ECOM0 (Pin18).
Power Supply GND connect to IGND0 (Pin1).
IGND0 (Pin1) connect to DI7 (Pin9).

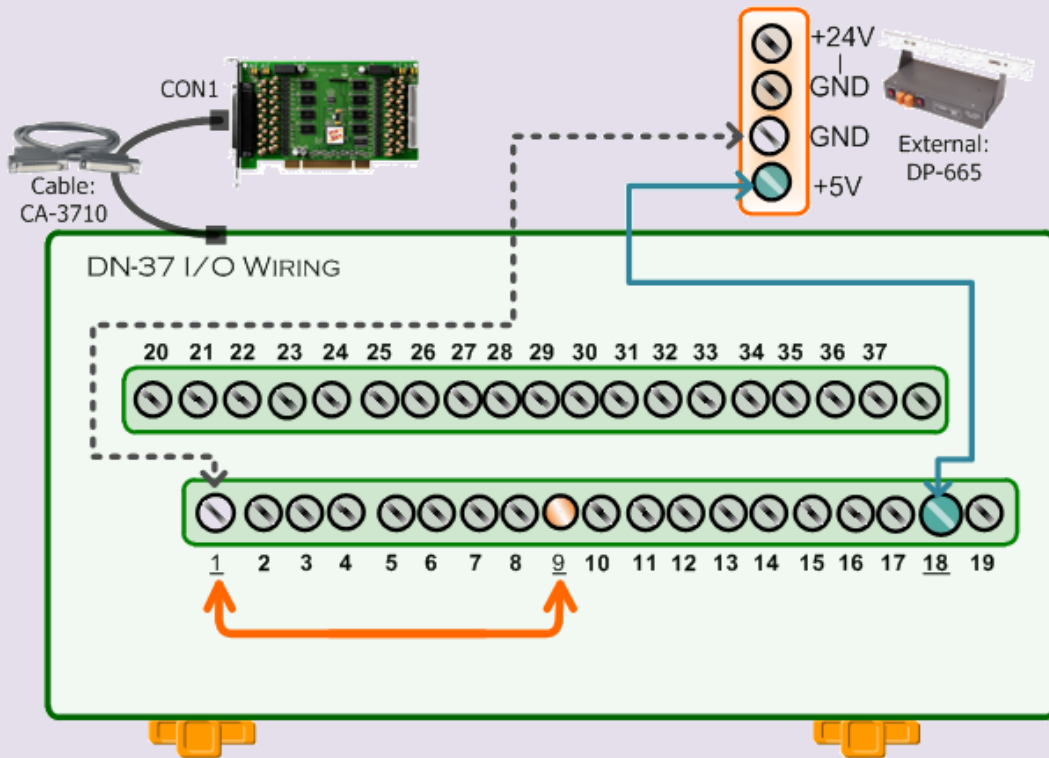


The PEX-P64-24V/PISO-P64U-24V suggests input voltage range as follow: **Logic high: +20 ~ +28 V (Max. 30 V);** Logic Low: 0 ~ 1V.

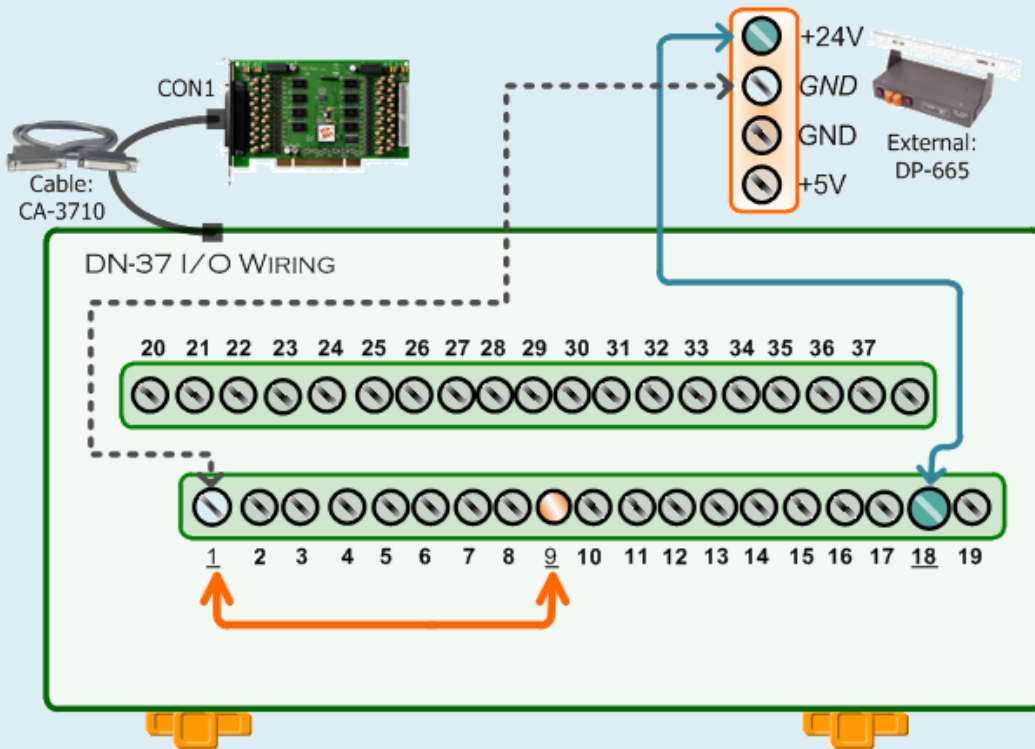
(Higher voltage over the limitation will cause the hardware damage.)



The PEX-P64/PISO-P64U wiring is illustrated in the figure below:



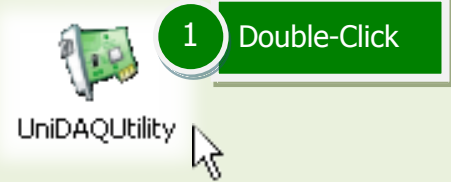
The PEX-P64-24V/PISO-P64U-24V wiring is illustrated in the figure below:



4. 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"



5. Execute the UniDAQ Utility Program.



2 Confirm the PISO-P64 series card had successfully installed to PC. It starts from 0.

3 Click this button to start test.

6. Get DI function test result.

Click "Digital Output" item.

4

7 6 5 4 3 2 1 0

ON(1)
OFF(0)

6

The Corresponding DI becomes black for channel 7 of DI7 is ON. The other DI0 to DI6 should become red because the DI0 to DI6 is OFF (Not wiring).

Port0: DI0-7
Port1: DI8-15
Port2: DI16-23
Port3: DI24-31
Port4: DI32-39
Port5: DI40-47
Port6: DI48-55
Port7: DI56-63

Port Number 0 HEX 7F

5

Select the "Port 0".

PASS

7

Related Information

- PEX-P64 and PISO-P64U Series Card Product Page:
http://www.icpdas.com/root/product/solutions/pc_based_io_board/pci/piso-p64.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/>