PISO-725U Quick Start

What's in the box?

The package includes the following items:

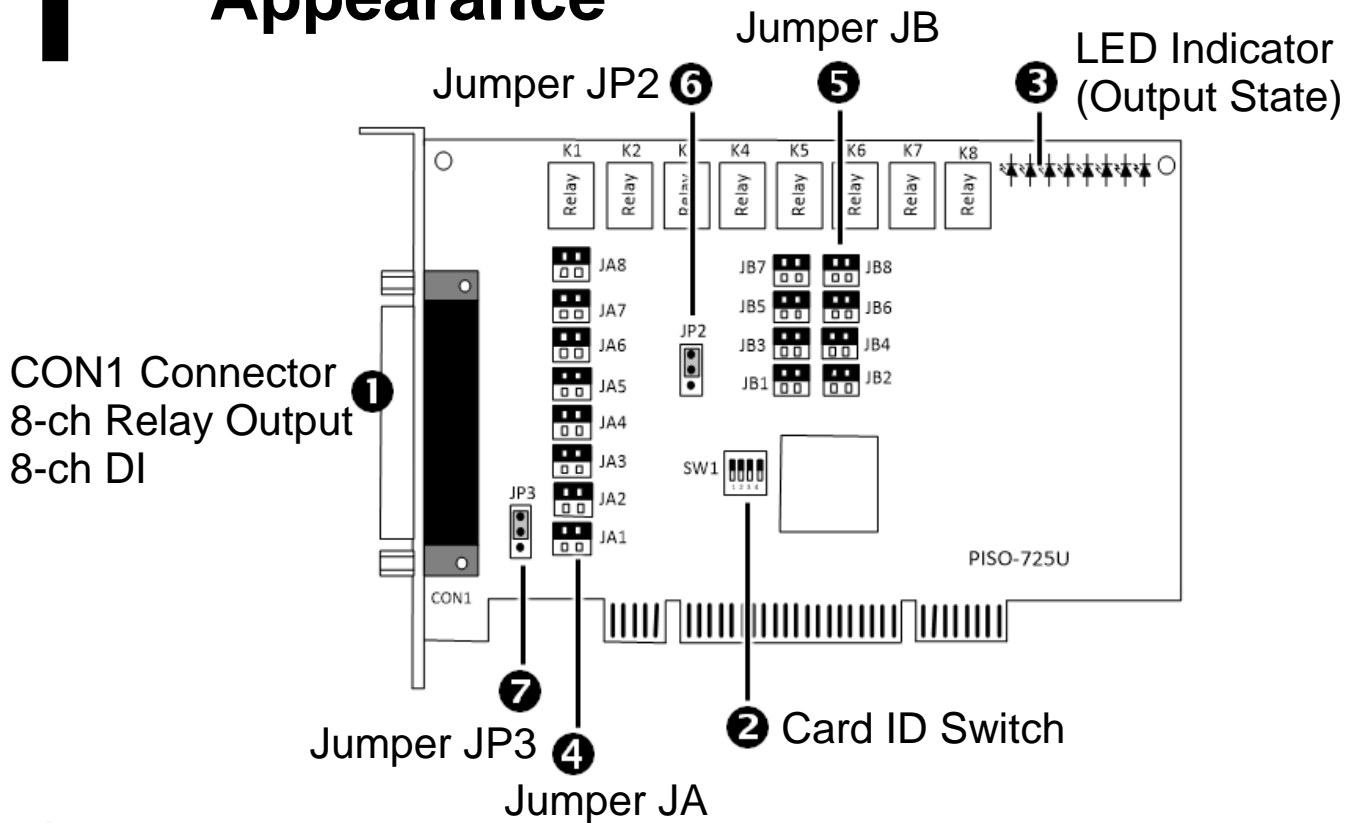|		
PISO-725U x 1	Quick Start x 1 (This Document)	CA-4002 D-Sub Connector x 1

Related Information

● For more detailed information related to the user manual and software for UniDAQ Driver & SDK:
http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/

● For more detailed information related to the hardware settings for PISO-725U Card:
http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/piso-725/manual/

● DN-37 and CA-3710 Cable Page (optional):
http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm
http://www.icpdas.com/root/product/solutions/accessories/cable/cable_selection.html

1 Appearance

Jumper JB

Jumper JP2 ❻   ❺   LED Indicator ❸
(Output State)

CON1 Connector
8-ch Relay Output
8-ch DI ❶

Jumper JP3 ❼
❹ Jumper JA
Jumper JP3 ❹

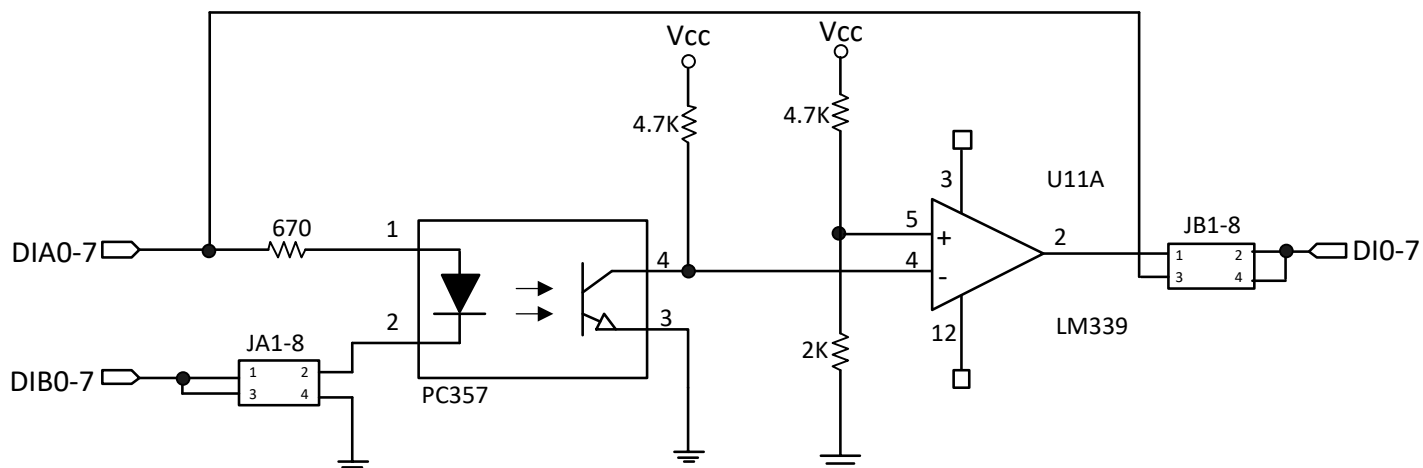❷ Card ID Switch

2 Jumper Settings

● **Jumpers JA and JB**

Jumpers JA and JB are used to specify whether the Digital Input type is either isolated or non-isolated. **NOTE: Ensure that Jumpers JA and JB are in the default positions before performing a self-test.**

☑ **Isolated Digital Input**	**Non-isolated Digital Input**
JA JB ① ② ① ② (Default) ③ ④ ③ ④	JA JB ① ② ① ② ③ ④ ③ ④
The isolated input voltage range is from **+9 V to +24 V**	The non-isolated input voltage range is **+5V/TTL** compatible

The jumper positions used to configure isolated input are as follows:

Channel	Jumper	Channel	Jumper
DIA0, DIB0 (0+, 0-)	JA1 & JB1	DIA4, DIB4 (4+, 4-)	JA5 & JB5
DIA1, DIB1 (1+, 1-)	JA2 & JB2	DIA5, DIB5 (5+, 5-)	JA6 & JB6
DIA2, DIB2 (2+, 2-)	JA3 & JB3	DIA6, DIB6 (6+, 6-)	JA7 & JB7
DIA3, DIB3 (3+, 3-)	JA4 & JB4	DIA7, DIB7 (7+, 7-)	JA8 & JB8

The figure below is the block diagram for jumpers **JA, JB and digital input circuit**:

● **Jumper JP2**

Jumper JP2 is used to specify whether the DO state is retained or cleared when system performs a soft-reboot. **NOTE: Ensure that Jumper JP2 is in the default position before performing a self-test.**

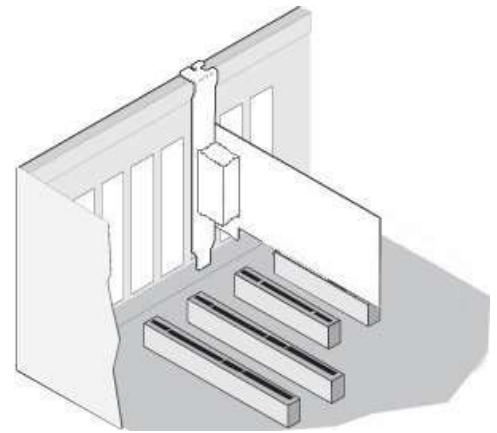| ☑ Keep the DO state when soft-reboot	Clear the DO state when soft-reboot
(Default)	

● **Jumper JP3**

Jumper JP3 is used to specify whether the ground (GND) type is configured as either isolated or non-isolated. **NOTE: Ensure that Jumper JP3 is in the default position before performing a self-test.**

☑ Isolated GND protects host computer from damaging voltages	Non-isolated GND
(Default)	

3 Installing a PISO-725U Card

1) Power off the PC.
2) Remove all covers from the Computer.
3) Carefully insert the PISO-725U into PCI slot.
4) Replace the PC Covers.
5) Power on the PC.

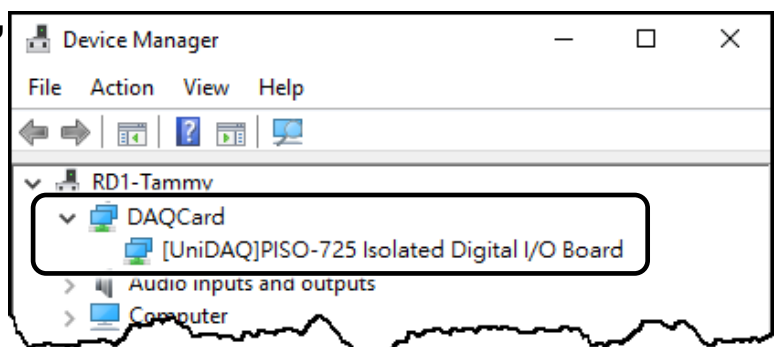6) Download or locate the Windows driver.

☑ The **UniDAQ driver** supports 32-/64-bit Windows XP/2003/2008/7/8/10. It is recommended that new users install this driver, which can be found in the
http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/unidaq/dll/driver/

☐ **PISO-725 Series Classic Driver** supports Windows 98/NT/2K and 32-bit Windows XP/2003/2008/7/8/10. it is recommended this driver is installed by customers who have previously installed a PISO-725 series card and are regular users. For more details, refer to:
http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/piso-725/manual/quickstart/classic/

7) Setup the UniDAQ Driver DLL, click the **"Next>"** button for all dialogs.
   NOTE: For more detailed information related to driver installation, refer to Chapter 2 "Starting" in the UniDAQ SDK user manual.

8) The operating system will automatically detect the new hardware and install the necessary drivers after reboot the PC.

9) Open the **"Device Manager"** to verify that the PISO-725 Series card has been correctly installed and is in the Device Manager, as illustrated on right.

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4 Pin Assignments

Pin Assignment	Terminal No.		Terminal No.	Pin Assignment
NO_0	01		20	NO_3
COM_0	02		21	COM_3
NC_0	03		22	NC_3
NO_1	04		23	NO_4
COM_1	05		24	COM_4
NC_1	06		25	NO_5
NO_2	07		26	COM_5
COM_2	08		27	NO_6
NC_2	09		28	COM_6
NO_7	10		29	GND
COM_7	11		30	DIB_0
DIA_0	12		31	DIB_1
DIA_1	13		32	DIB_2
DIA_2	14		33	DIB_3
DIA_3	15		34	DIB_4
DIA_4	16		35	DIB_5
DIA_5	17		36	DIB_6
DIA_6	18		37	DIB_7
DIA_7	19			

CON1

NOTES:

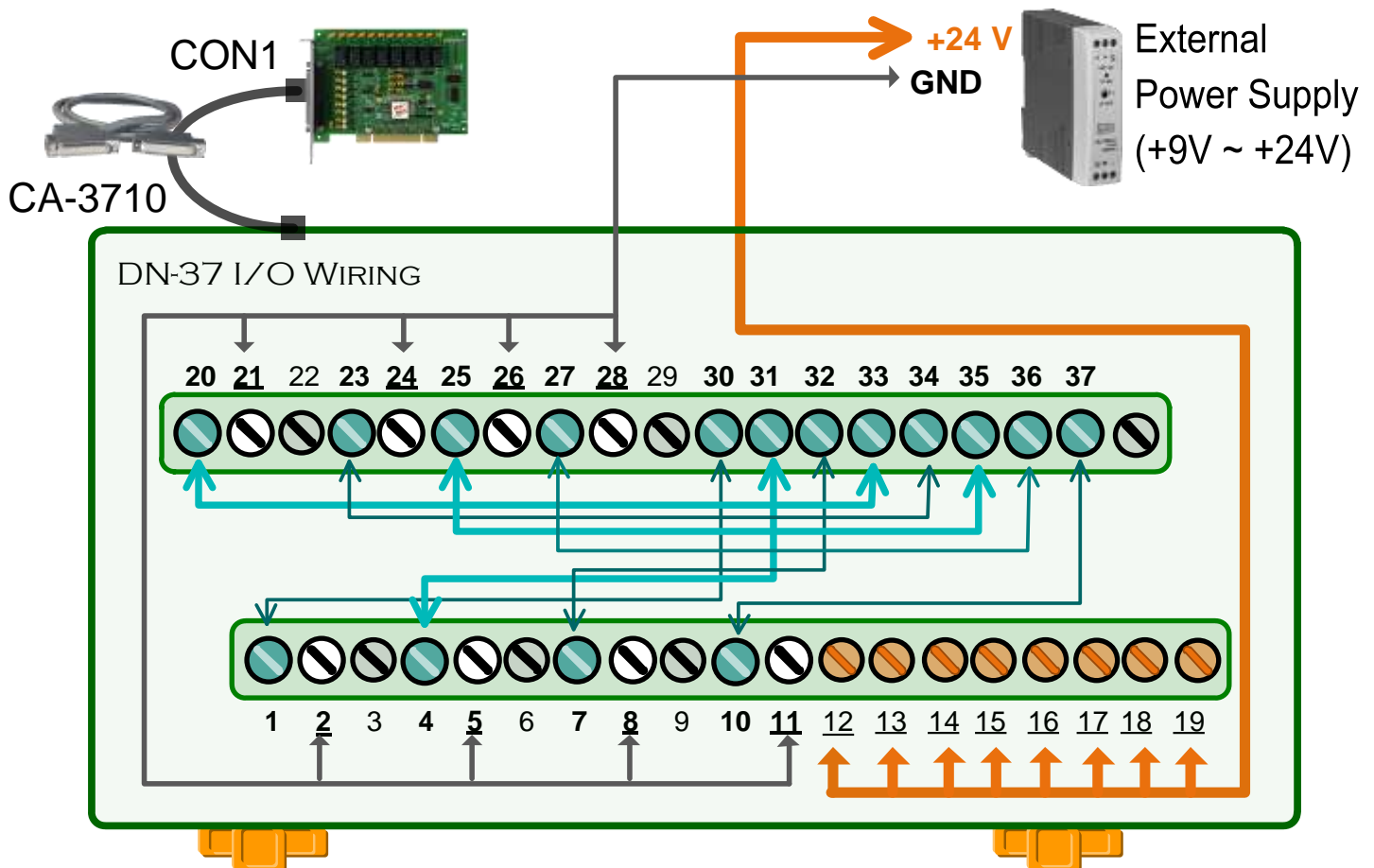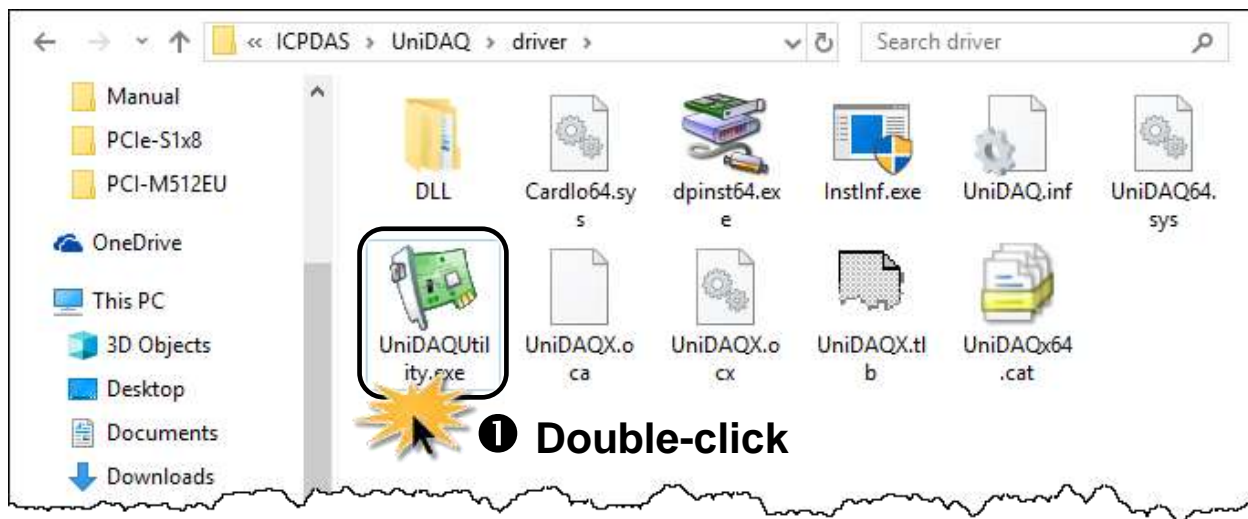|	
NO	Normally Open
NC	Normally Closed
COM	Common
DIA	Digital Input (Port A)
DIB	Digital Input (Port B)

5 Testing your PISO-725U

1) Verify that Jumpers **JA and JB** on the PISO-725U are set to the **"isolated (default)"** position. **NOTE: The valid DC power input depends on the isolated/non-isolated jumper settings. Refer to Chapter 2 "Jumper Settings" above (P2).**

2) Connect the DN-37 to CON1 on the PISO-725U using the CA-3710 cable.

3) Connect the **NO (0-7)** pin to the **DIB (0-7)** pin. (**Pin1/4/7/20/23/25/27/10** connects to **Pin30/31/32/33/34/35/36/37**).

4) Connect the **Power Supply (+9V ~ +24V)** to the **DIA(0-7)** pin **(Pin12/13/14/15/16/17/18/19)**.

5) Connect the **Power Supply GND** to the **COM(0-7)** pin **(Pin2/5/8/21/24/26/28/11).**
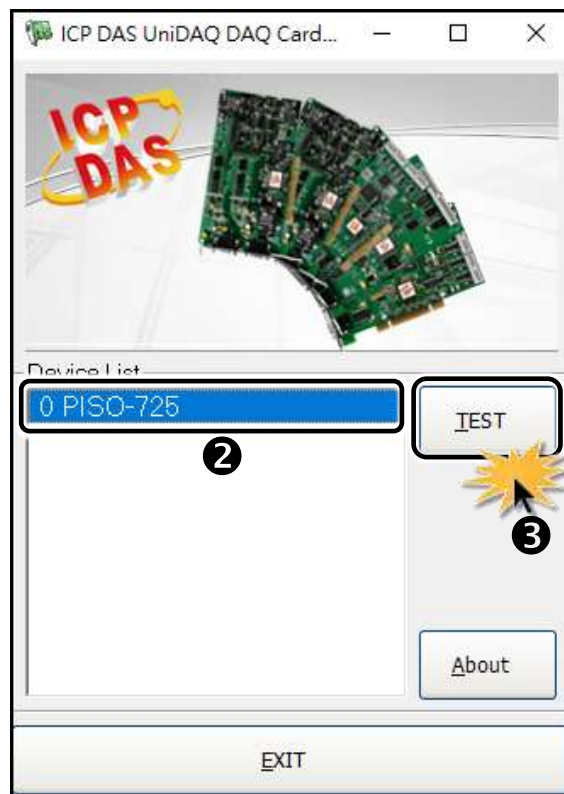
6) Launch the **UniDAQ Utility** software.

   If the UniDAQ Utility was installed in the default folder, it will be located
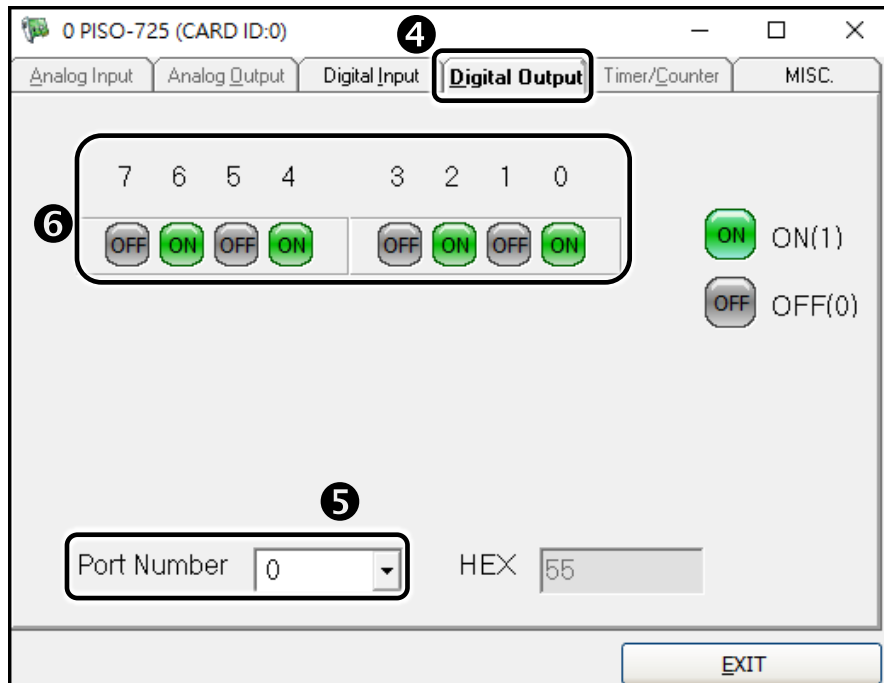   at **"C:\ICPDAS\UniDAQ\Driver"**.

❶ Double-click

7) Confirm that the PISO-725 Series Card has been successfully
   installed in the Host system.
   NOTE: The device numbers start from 0.

8) Click the **"TEST"** button to start the test.

9) Click the **"Digital Output"** tab.

10) Select **"Port0"** from the **"Port Number"** drop-down options.

11) Click the **DO channels 0, 2, 4 and 6 buttons**.

12) Click the **"Digital Input"** tab.

13) Select **"Port0"** from the **"Port Number"** drop-down options.

14) The DI indicators will turn **red** when the corresponding **DO channels 0, 2, 4 and 6 are ON**.