



# PISO-730AU/730AU-5V PEX-730A Quick Start

v1.0, Apr. 2019

## What's in the box?

The package includes the following items:

PISO-730AU(-5V)

PEX-730A



or



PISO-730AU(-5V)/PEX-730A  
x1

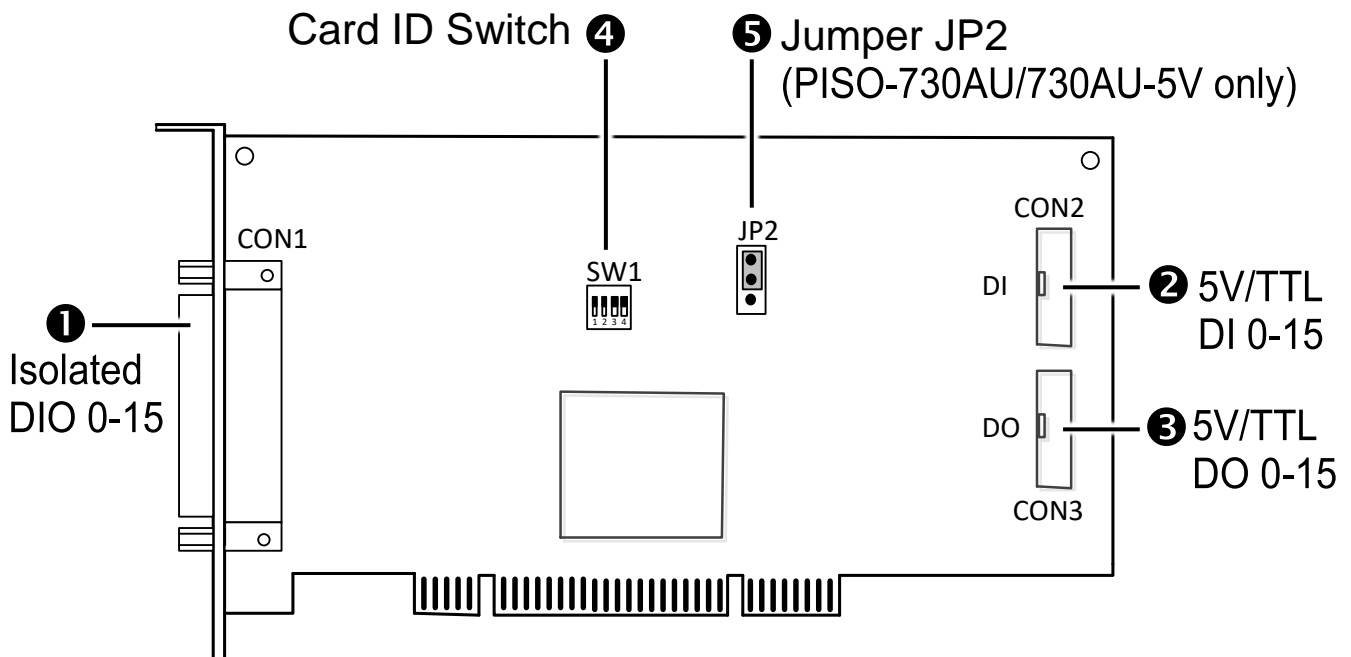
Quick Start x 1  
(This Document)

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-730A Series Card:  
<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/piso-dio/manual/>
- DN-30 and CA-3710 Product Page (optional):  
[http://www.icpdas.com/products/Accessories/cable/cable\\_selection.htm](http://www.icpdas.com/products/Accessories/cable/cable_selection.htm)  
[http://www.icpdas.com/root/product/solutions/pc\\_based\\_io\\_board/daughter\\_boards/dn-37.html](http://www.icpdas.com/root/product/solutions/pc_based_io_board/daughter_boards/dn-37.html)

# 1 Appearance



# 2 Jumper Settings - PISO-730AU(-5V)

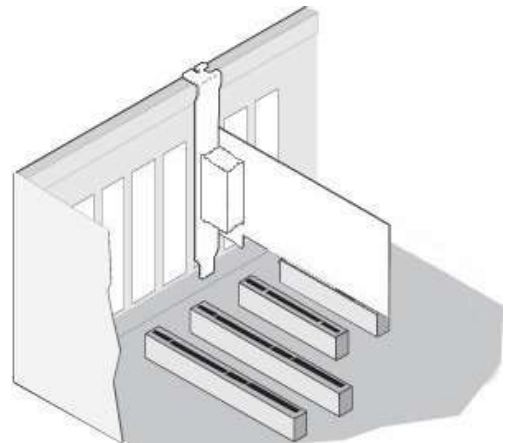
## ➤ Jumper JP2 for PISO-730AU(-5V) only

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.**

<input checked="" type="checkbox"/> Keep the DO state when soft-reboot	Clear the DO state when soft-reboot
<p>(Default)</p>	

# 3 Installing Boards

- 1) Power off the Computer.
- 2) Remove all covers from the Computer.
- 3) Carefully insert the PISO-730AU(-5V) /PEX-730A Card into PCI/PCI Express slot.
- 4) Replace the Computer Covers.
- 5) Power on the Computer.



- 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/>

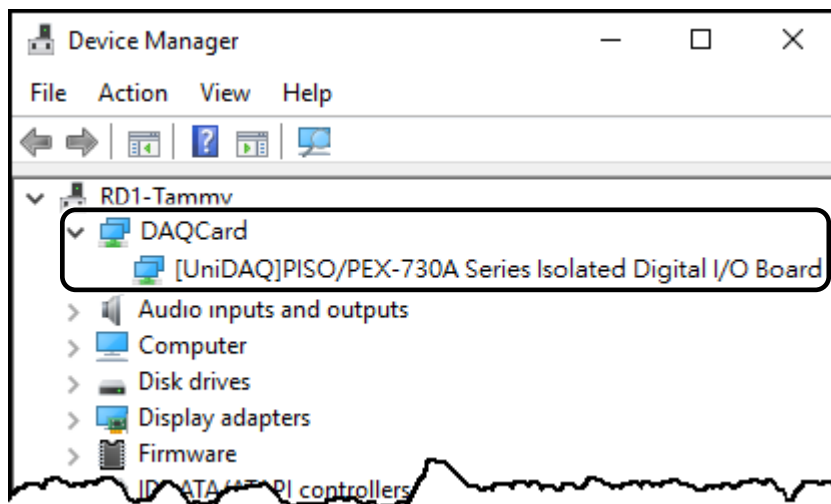
**PISO-DIO Series Classic Driver** supports Windows 98/NT/2K and 32-bit Windows XP/2003/2008/7/8/10. it is recommended this driver is installed by customers who have previously installed a PISO-730A series card and are regular users. For more details, refer to:

<http://ftp.icpdas.com/pub/cd/iocard/pci/napdos/pci/piso-dio/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-730AU/PEX-730A Series Card has been correctly installed and is in the Device Manager, as illustrated on below.



# 4 Pin Assignments

Pin Assignment	Terminal No.	Pin Assignment	
IDI_0	01	20	IDI_1
IDI_2	02	21	IDI_3
IDI_4	03	22	IDI_5
IDI_6	04	23	IDI_7
IDI_8	05	24	IDI_9
IDI_10	06	25	IDI_11
IDI_12	07	26	IDI_13
IDI_14	08	27	IDI_15
EI.COM1	09	28	EI.COM2
EPWR1	10	29	IGND
IDO_0	11	30	IDO1
IDO_2	12	31	IDO3
IDO_4	13	32	IDO5
IDO_6	14	33	IDO7
IDO_8	15	34	IDO9
IDO_10	16	35	IDO11
IDO_12	17	36	IDO13
IDO_14	18	37	IDO15
EPWR2	19		

CON1

Pin Assignment	Terminal No.	Pin Assignment	
DI 0	01	02	DI 1
DI 2	03	04	DI 3
DI 4	05	06	DI 5
DI 6	07	08	DI 7
DI 8	09	10	DI 9
DI 10	11	12	DI 11
DI 12	13	14	DI 13
DI 14	15	16	DI 15
GND	17	18	GND
+5 V	19	20	+12 V

CON2

Pin Assignment	Terminal No.	Pin Assignment	
DO 0	01	02	DO 1
DO 2	03	04	DO 3
DO 4	05	06	DO 5
DO 6	07	08	DO 7
DO 8	09	10	DO 9
DO 10	10	12	DO 11
DO 12	12	14	DO 13
DO 14	14	16	DO 15
GND	16	18	GND
+5 V	18	20	+12 V

CON3

# 5 Testing Board

## ➤ Prepare for device

- ☑ DN-37 (optional) wiring terminal board
- ☑ Exterior power supply device
- ☑ CA-3710 (optional) cable

## ➤ Self-test Wiring as follows:

1) Connect the **DN-37** to **CON1** on board using the **CA-3710** cable.

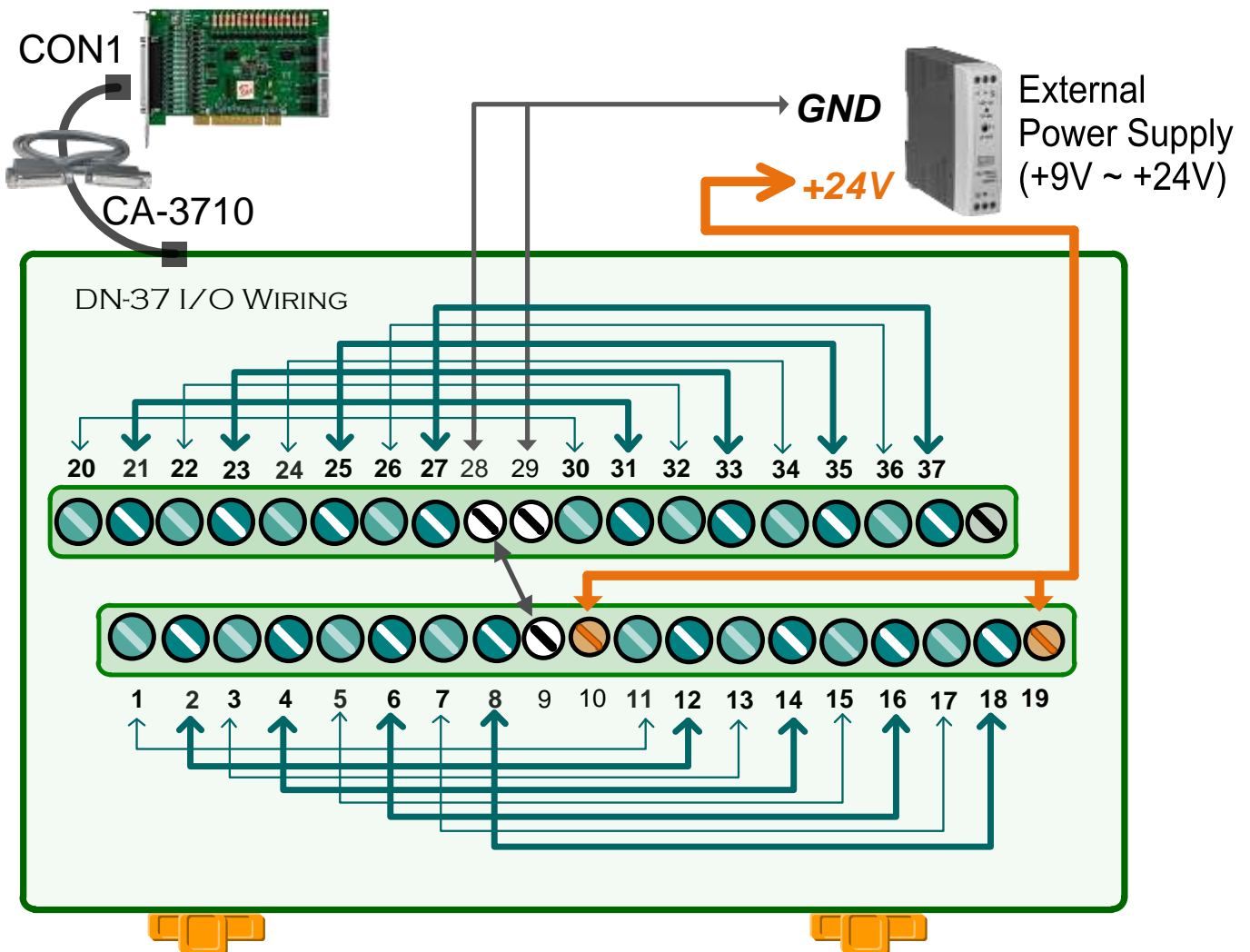
2) Connect the **CON1.IDI (0-15)** with **CON1.IDO (0-15)**.

(Pin1 connects to Pin11 ... Pin27 connects to Pin37)

## ➤ PISO-730AU/PEX-730A External Power +9 V ~ +30 V Wiring:

3) **External Power +24V** connect to **EPWR1(Pin10)** and **EPWR2(Pin19)**.

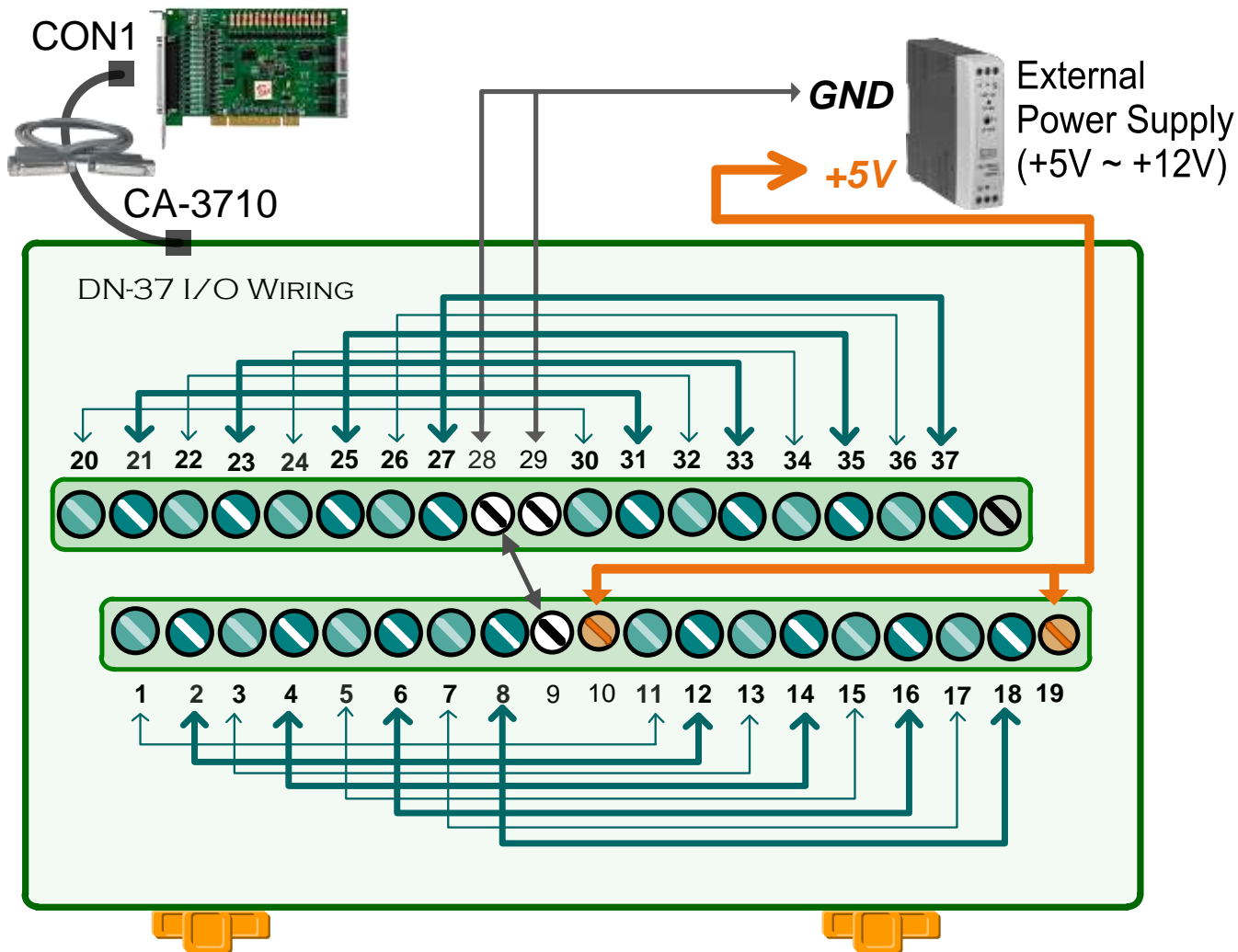
4) **External Power GND** connect to **EI.COM1(Pin9)**, **EI.COM2(Pin28)** and **IGND(pin29)**.



➤ **PISO-730AU-5V External Power +5 V ~ +12 V Wiring:**

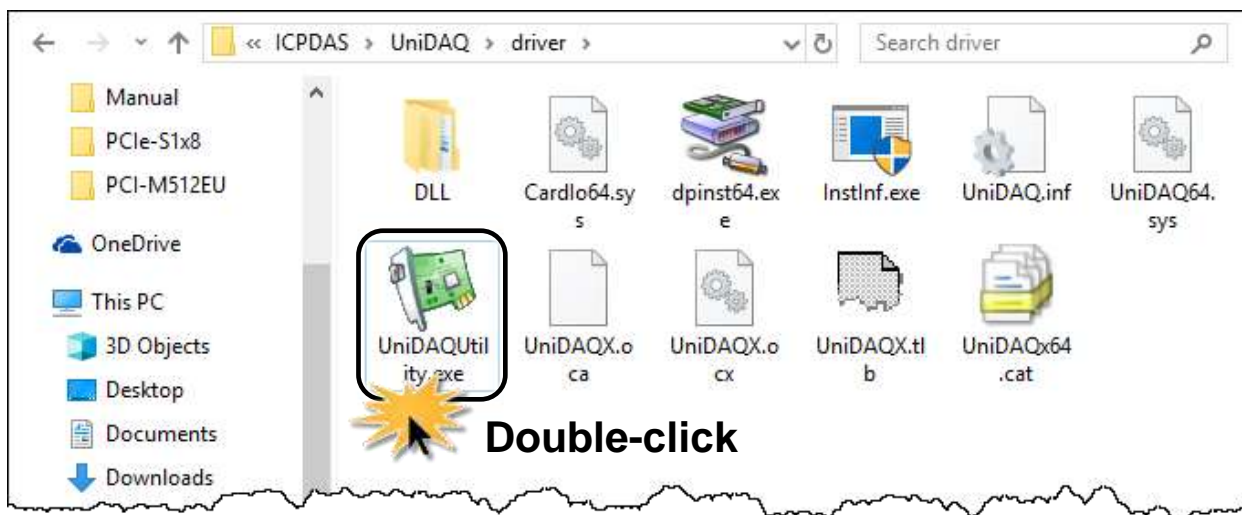
3) **External Power +5V** connect to **EPWR1(Pin10)** and **EPWR2(Pin19)**.

4) **External Power GND** connect to **EI.COM1(Pin9)**, **EI.COM2(Pin28)** and **IGND(pin29)**.



5) Launch the **UniDAQ Utility** software.

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





6) Confirm that the PISO-730A Series Card has been successfully installed in the Host system.

**NOTE:** The device numbers start from 0.

7) Click the “**TEST**” button to start the test.



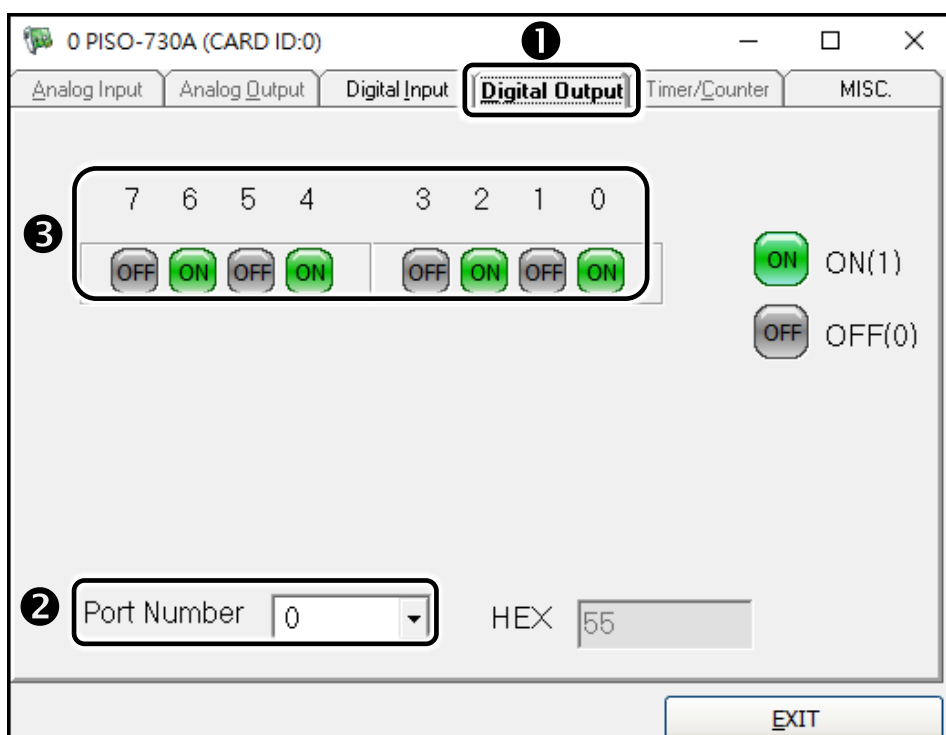
8) Check the results of the **Digital Input/Output** functions test.

❶ Click the “**Digital Output**” tab.

❷ Select “**Port0**” from the “**Port Number**” drop-down options.

**NOTE:** Port0/1 is isolated digital input/output (IDI/IDO), Port2/3 is non-isolated digital input/output (DI/DO).

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



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

**NOTE:** Port0/1 IDI is the reverse logic, so the red light means low status (Logic 0) and the black light means high status (Logic 1).

