



I/O CARD QUICK START GUIDE

for **ISO-730**

<i>Language</i>	English
<i>Version</i>	V1.2
<i>Update</i>	Jan.2009

1

What's on your package?

- One ISO-730 series card
- One companion ISA CD (V2.1 or later)
- One Quick Start Guide(This document)

2

Installing Windows Driver

Follow those steps:

1. Setup the Windows driver. You can get the driver from:
CD:\NAPDOS\ISA\ISO\DLL\
<http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso/dll/>
2. Click “**N**ext >” button to start installation.
3. Click “**N**ext >” button to install driver into the default folder.
4. Click “**I**nstall” button to continue installation.
5. Select “**NO, I will restart my computer later**” and Click “**F**inish”.

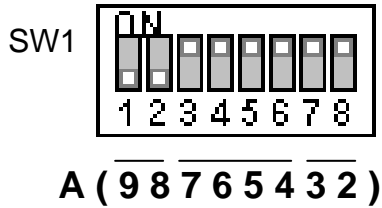


Windows driver only support windows 98/NT/2000 and XP/2003/vista 32-bit versions.

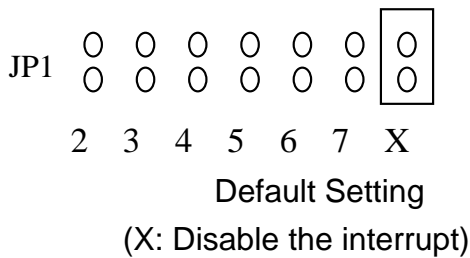
3

I/O Base Address & Interrupt Setting

- The base address is set from SW1 DIP switch on board:



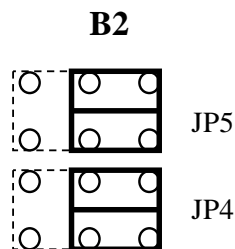
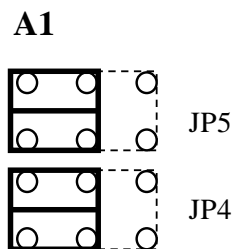
- The Interrupt Level Setting



SW1: Base Address (*)Default setting

Address	A9	A8	A7	A6	A5	A4	A3	A2
200h	OFF	ON	ON	ON	ON	ON	ON	ON
204h	OFF	ON	ON	ON	ON	ON	ON	OFF
208h	OFF	ON	ON	ON	ON	ON	OFF	ON
20Ch	OFF	ON	ON	ON	ON	ON	OFF	OFF
:	:	:	:	:	:	:	:	:
2F8h	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
2FCh	OFF	ON	OFF	OFF	OFF	OFF	OFF	OFF
(*)300h	OFF	OFF	ON	ON	ON	ON	ON	ON
304h	OFF	OFF	ON	ON	ON	ON	ON	OFF
308h	OFF	OFF	ON	ON	ON	ON	OFF	ON
30Ch	OFF	OFF	ON	ON	ON	ON	OFF	OFF
310h	OFF	OFF	ON	ON	ON	OFF	ON	ON
314h	OFF	OFF	ON	ON	ON	OFF	ON	OFF
:	:	:	:	:	:	:	:	:
330h	OFF	OFF	ON	ON	OFF	OFF	ON	ON
334h	OFF	OFF	ON	ON	OFF	OFF	ON	OFF
338h	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
33Ch	OFF	OFF	ON	ON	OFF	OFF	OFF	OFF
:	:	:	:	:	:	:	:	:

- JP4/JP5 Version selection.



(Default)

4

Installing Hardware on PC

Follow those steps:

1. Shut down and power off your computer
2. Remove all covers from the computer
3. Select an empty ISA slot
4. Carefully insert your I/O card into the ISA slot
5. Replace the PC covers
6. Power on the computer

After powering-on the computer, continue next process.

5

Adding Hardware



Adding hardware is used on Windows 2000/XP/2003/Vista 32 only. Windows 9X/Me/NT users can skip it.

7. Add Hardware

- 7-1 Open the **“Control Panel”** by click the item **“Start / Settings / Control Panel”**.
- 7-2 Double-click the item **“Add/Remove Hardware”** and Click the **“Next >”** button.
- 7-3 Select the item **“Add/Troubleshoot a device”** and click the **“Next >”** button.
- 7-4 Select the item **“Add a new device”** and click the **“Next >”** button.

- 7-5 Select the item **“No, I want to select the hardware from a list”** and click the **“Next >”** button.
- 7-6 Select the item **“Other device”** and click the **“Next >”** button.
- 7-7 Click the **“Have Disk...”** button.
- 7-8 Click the **“Browse...”** button to select the **Inf** file default path is C:\DAQPRO\DIO_Win2K\Inf and click the **“OK”** button.
- 7-9 Select the correct device from the **“Models:”** listbox and Click the **“Next >”** button.
- 7-10 The windows show to dialog box and Click the **“OK”** button to enter the device’s properties settings.

8. Modify the device properties

The image shows a sequence of four windows from the Windows Device Manager. The main window is 'ICPDAS ISO-730 Digital I/O Card Properties' with the 'Resources' tab selected. It shows resource settings for I/O Range (0200-0203) and IRQ (02). A callout box labeled '1. Select Input/Output Range' points to the I/O Range field. A second callout box labeled '2. Click “Change Setting” to change I/O Range (Depend on I/O Base Address)' points to the 'Change Setting...' button. A third callout box labeled '3. Select Interrupt Request' points to the IRQ field. A fourth callout box labeled '4. Click “Change Setting” to change Interrupt Request. (Depend on Interrupt Level setting)' points to the 'Change Setting...' button in the 'Edit Interrupt Request' dialog box. Both dialog boxes show a 'Conflict information' section with a red box around the text 'No devices are conflicting'.

9. Reboot the PC

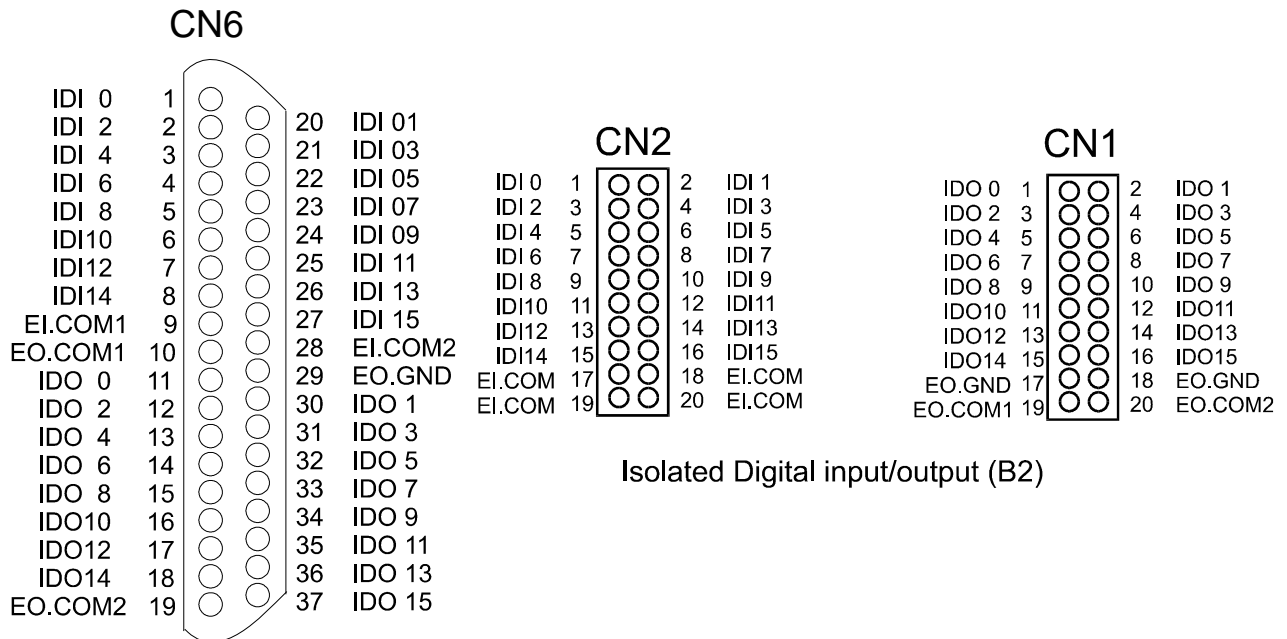
The detail “add hardware” information. Please refer to

CD:\NAPDOSISA\Manual\PCI_ISA_PnP_Driver_Installation_in_Win9x_2K_XP.pdf

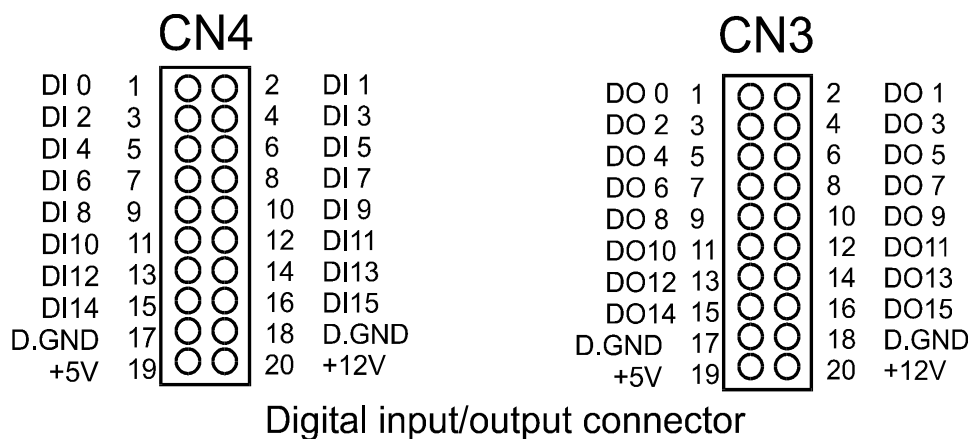
6

Pin Assignments

➤ Pin-Assignment of B2 Version.



➤ TTL I/O Pin-Assignment.



The detail pin assignments information. Please refer to :

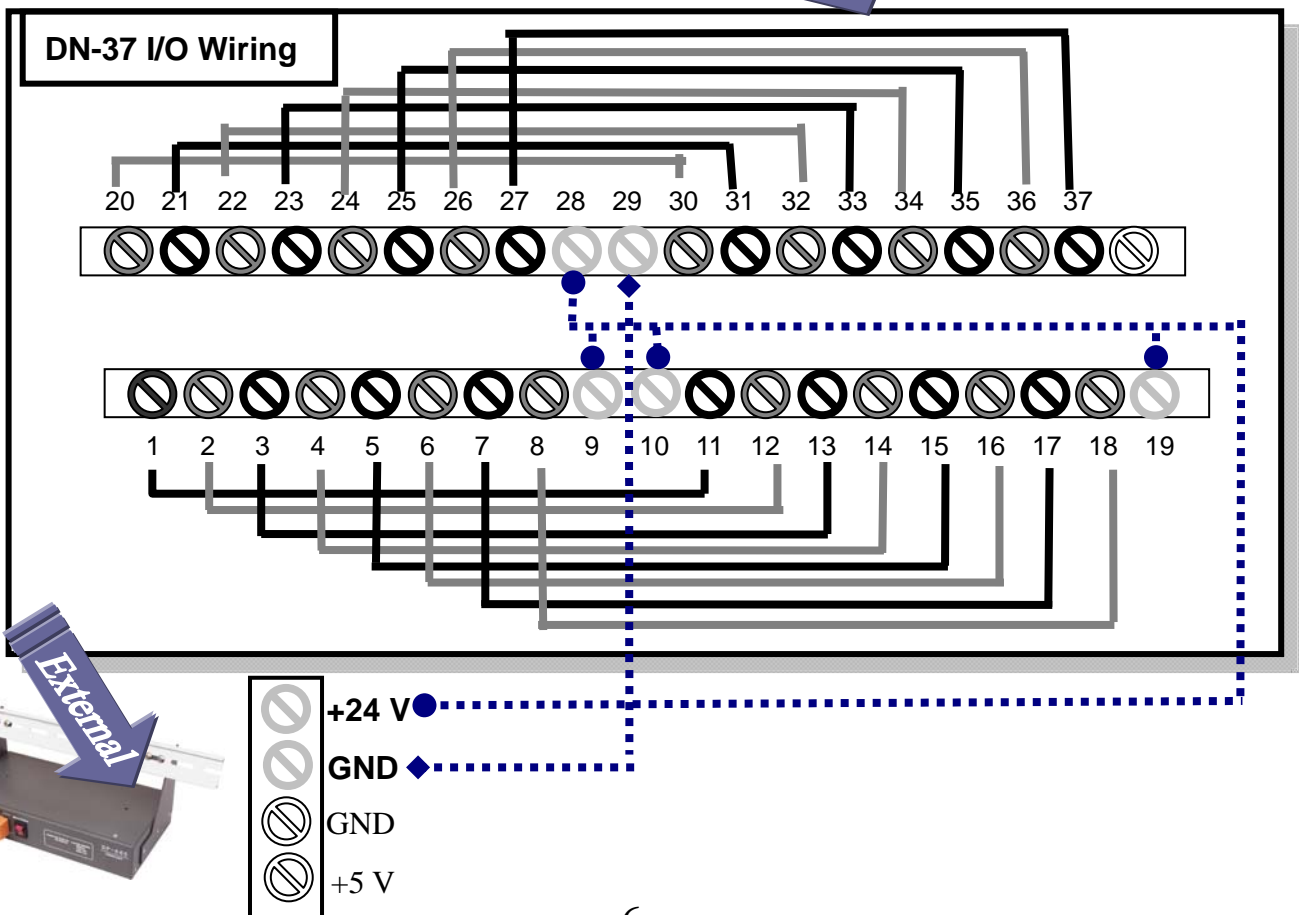
CD:\NAPDOS\ISA\ISO\Manual\iso-730.pdf

<http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso/manual/iso-730.pdf>

7

Self-Test

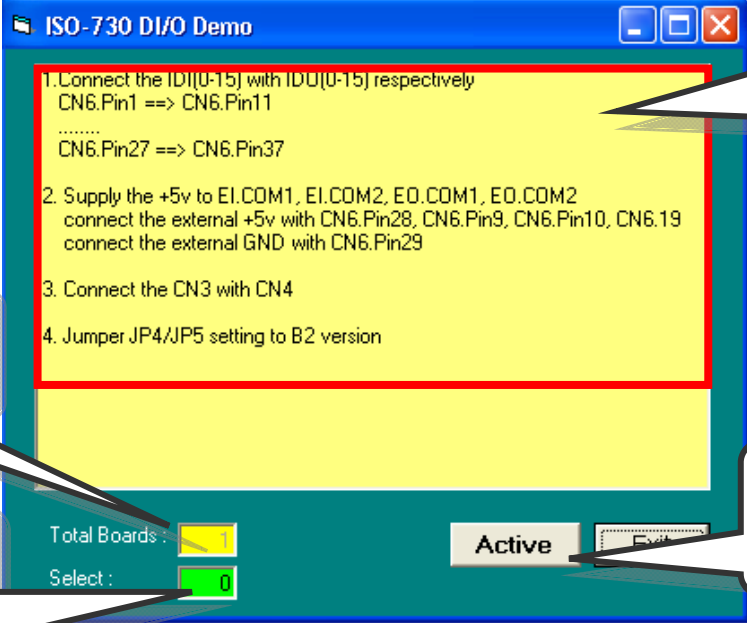
1. Use CA-2002(Optional) to connect the CN3 with CN4.
2. Use DN-37 to Connect the IDI[0-15] with IDO[0-15].
(CN6.Pin1→CN6.Pin11 CN6.Pin27→CN6.Pin37)
3. Supply the +24 V with EI.COM1, EI.COM2, EO.COM1 and EO.COM2.(Connect the external +24 V with CN6.Pin9, CN6.Pin10, CN6.19 and CN6.Pin28. Connect the external GND with CN6.Pin29)



4. Run the ISO-730 sample program.

Get the file from: C:\DAQPro\ISO_WinXXX\Demo\

5. Check number of the ISO-730 and hardware setting.



The screenshot shows the 'ISO-730 DI/O Demo' window. A red box highlights the hardware settings list:

- 1. Connect the IDI[0-15] with IDO[0-15] respectively
CN6.Pin1 ==> CN6.Pin11
.....
CN6.Pin27 ==> CN6.Pin37
- 2. Supply the +5v to EI.COM1, EI.COM2, EO.COM1, EO.COM2
connect the external +5v with CN6.Pin28, CN6.Pin9, CN6.Pin10, CN6.19
connect the external GND with CN6.Pin29
- 3. Connect the CN3 with CN4
- 4. Jumper JP4/JP5 setting to B2 version

At the bottom, 'Total Boards' is set to 1 and 'Select' is set to 0. There are 'Active' and 'Exit' buttons.

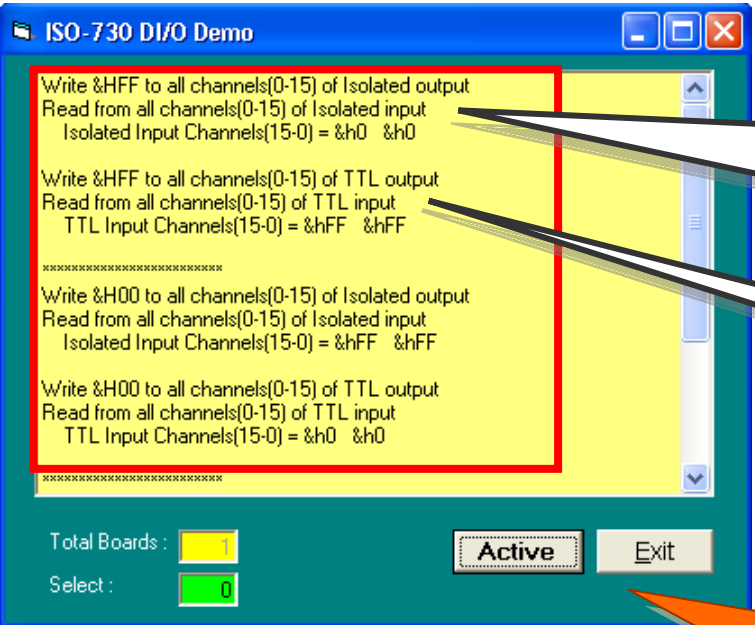
1. Check hardware setting as follows:

2. The one ISO730 had successfully installed to PC.

3. Select the board number for the ISO730. It starts from 0.

4. Click this button to do DIO test.

6. Get DIO function test result.



The screenshot shows the 'ISO-730 DI/O Demo' window with test results. A red box highlights the test commands and results:

```
Write &HFF to all channels(0-15) of Isolated output
Read from all channels(0-15) of Isolated input
Isolated Input Channels(15-0) = &h0 &h0

Write &HFF to all channels(0-15) of TTL output
Read from all channels(0-15) of TTL input
TTL Input Channels(15-0) = &hFF &hFF

*****
Write &H00 to all channels(0-15) of Isolated output
Read from all channels(0-15) of Isolated input
Isolated Input Channels(15-0) = &hFF &hFF

Write &H00 to all channels(0-15) of TTL output
Read from all channels(0-15) of TTL input
TTL Input Channels(15-0) = &h0 &h0
*****
```

At the bottom, 'Total Boards' is set to 1 and 'Select' is set to 0. There are 'Active' and 'Exit' buttons.

5. Isolated output write value and input read value to the contrary.

6. TTL output write value and input read value for identical.

Complete

8

Additional Information

✓ **ISO-730 Series Card Product page:**

http://www.icpdas.com/products/DAQ/pc_based/iso_730.htm

✓ **CA-2002(Optional) page:**

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

✓ **DP-665(Optional) page:**

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

✓ **DN-37(Optional) page:**

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

✓ **Documents:**

CD:\NAPDOS\ISA\ISO>manual

<ftp://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/iso/manual/>

✓ **Software:**

CD:\NAPDOS\ISA\ISO

<http://www.icpdas.com/download/isa/iso/index.htm>

The ICP DAS Web Site

<http://www.icpdas.com>



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