Making Data Acquisition Easy

DIO-64/3
32-channel Digital Input & 32-channel Digital Output with Timer/Counter Board
Quick Start Guide

Product Website:
https://www.icpdas-usa.com/dio_64

Introduction

The DIO-64 provides 32 digital input channels , 32 output channels and 6 counter/timer channels The DIO-64 consists of two 16-bit input port and two 16-bit output port . The user can use the DB-16P (or 782 series) to. Connect the input port (CN2,CN4) for isolation purpose. The user can use DB-16R (or 785 series) to interface to the output port (CN1,CN3) for relay control. There are four clock source , 2 M , 1 M , 500 k , 250 k, on the board . The user can choose any one by jumper setting .The user can take the frequency from the soldering pad. On board Timer/Counter provides 3-channel for frequency measure, event counting and pulse generation. The optional 8254 provides 3-channel for interrupt use.

1 What's on your package?

- One DIO-64 card
- One companion ISA CD (V2.1 or later)
- One Quick Start Guide

2 Installing Windows Driver

Follow those steps:
1. Setup the Windows driver.

You can get the driver from: CD:\NAPDOS\ISA\DIO\DLL\

http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/dio/dll/

2. Click 

button to start installation.

3. Click 

button to install driver into the default folder.

4. Click 

button to continue installation.

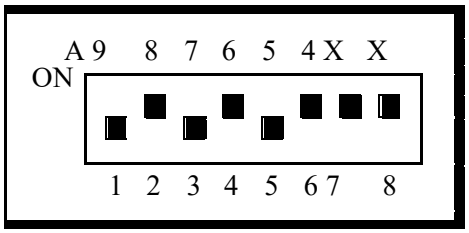
5. Select "NO, I will restart my computer later" and then click 

button.

3. I/O Base Address/Interrupt Setting

The base address is set from SW1 DIP switch on board: (Default setting for 2A0)

SW1

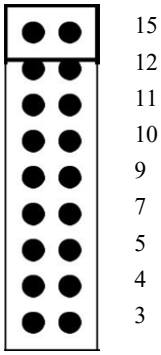


(*) Default Setting

I/O address	1 A9	2 A8	3 A7	4 A6	5 A5	6 A4
200-20F	OFF	ON	ON	ON	ON	ON
…..						
2A0-2AF (*)	OFF	ON	OFF	ON	OFF	OFF
……..						
3F0-3FF	OFF	OFF	OFF	OFF	OFF	OFF

The Interrupt Level Setting

JP2



Default setting : IRQ15

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.

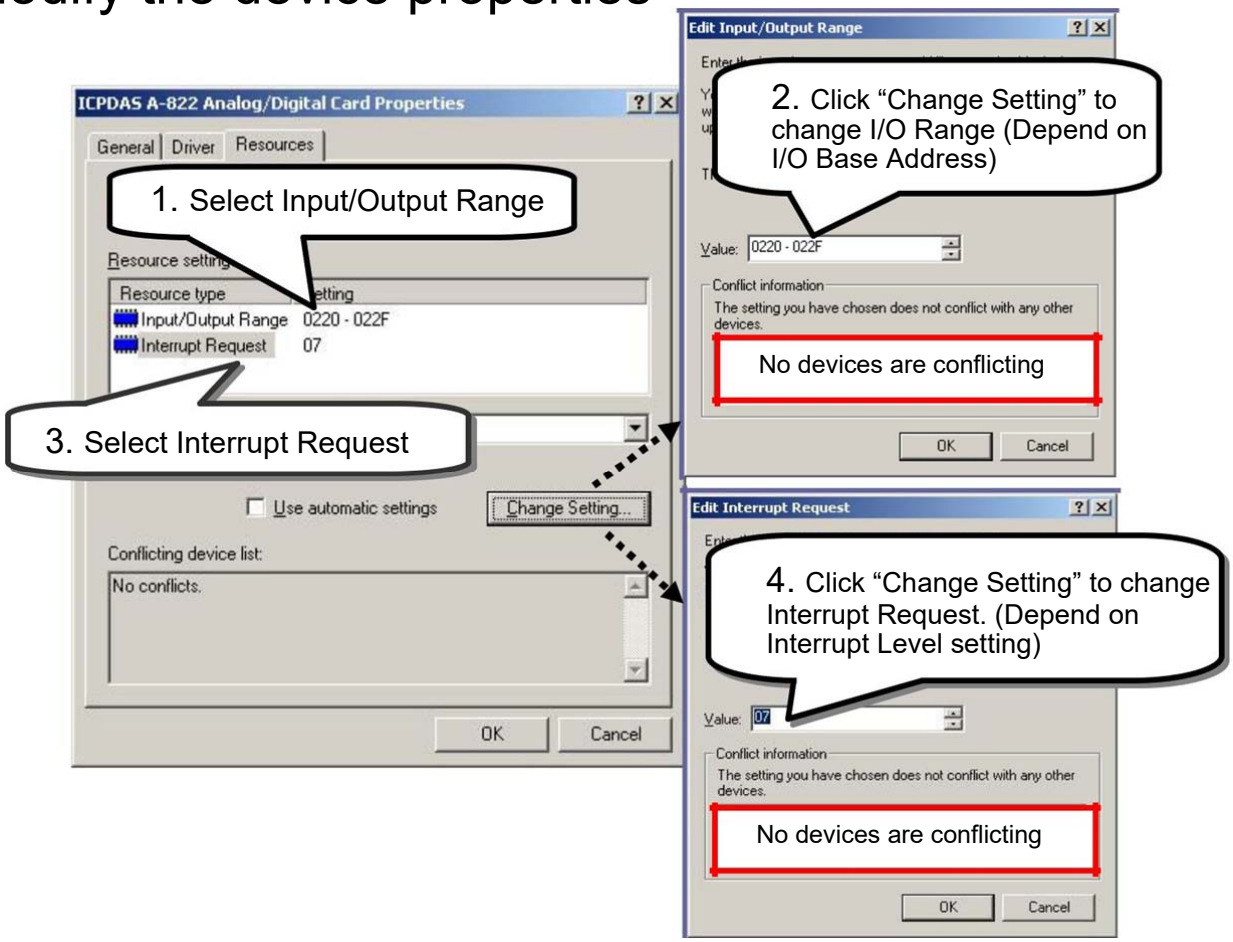
7-7 Click the "Have Disk…" button.

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



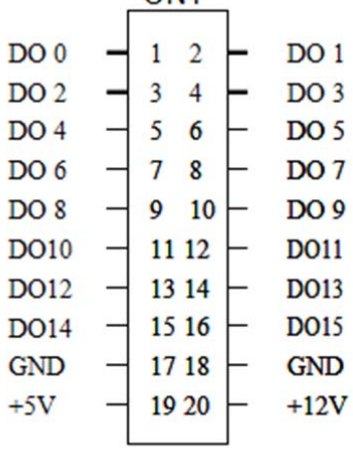
9. Reboot the PC

The detail "add hardware" information.please refer to

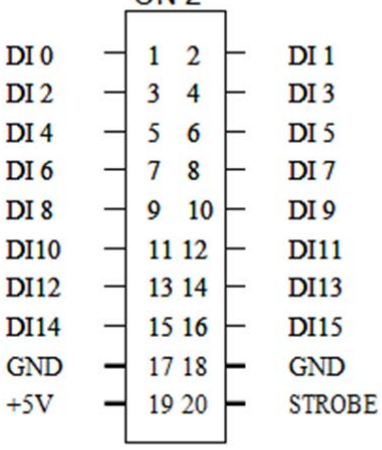
CD:\NAPDOS\ISA\Manual\PCI_ISA_PnP_Driver_Installation_in_Win9x_2K_XP.pdf

6 Pin Assignments

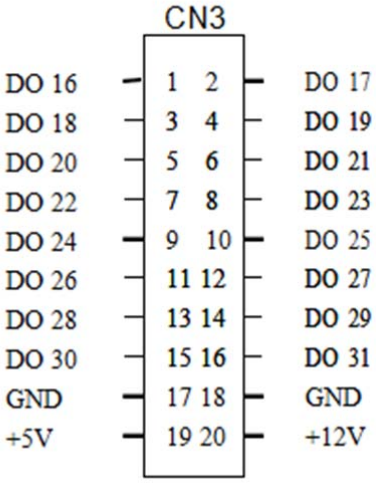
CN1



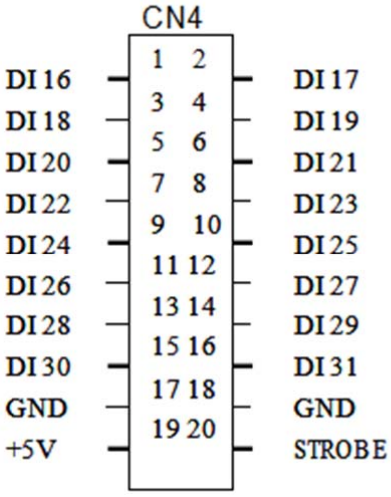
CN 2



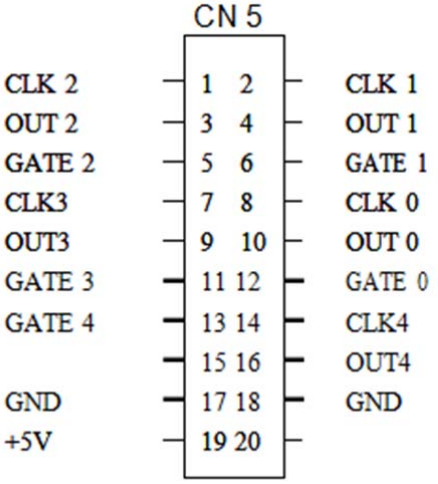
CN3



CN4



CN 5



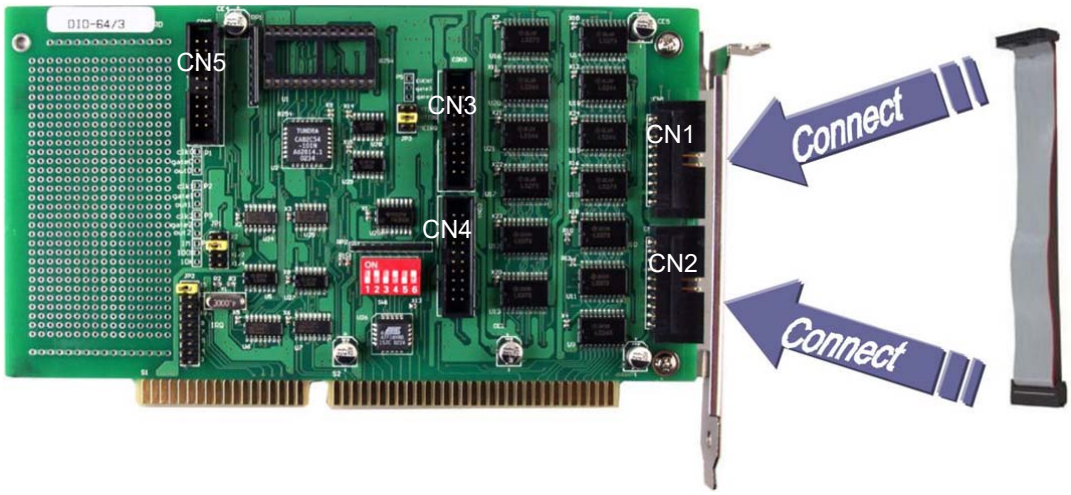
CN1,CN2 and CN3,CN4 are TTL compatible

TTL Range

High(1)	2.4V ~5.0V (Voltages over 5.0V will damage the device)
None Defined	2.4V~0.8V
Low(0)	Under 0.8V

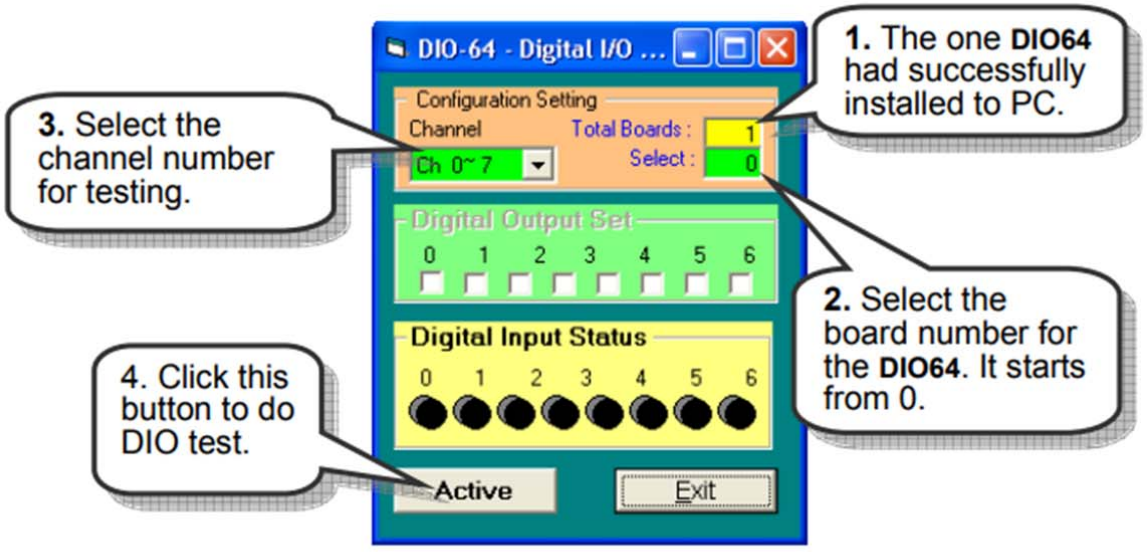
7 Self-Test

1. Use CA-2002(Optional) to connect the CN1 with CN2.



2. Run the DIO-64 sample program. Get the file from(Default): C:\DAQPro\DIO_WinXXX\Demo\

3. Check number of the DIO-64, and test DIO function.



4. Get DIO function test result.