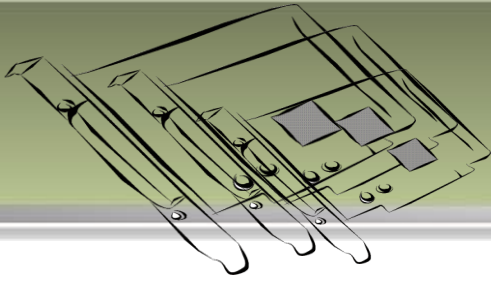


# I/O CARD QUICK START GUIDE







For A-626/A-628/A-726

English/ Jun. 2013/ Version 1.3



## 1 What's in the shipping package?

The package includes the following items:

	A-626		A-628		A-726
	One Software Utility CD (V2.1 or later)				
	One Quick Start Guide (This Document)				
	One CA-4002 D-Sub connector	-			

## 2 Installing Windows Driver

**Step 1: Setup the Windows driver. The driver is located at:**

- The Windows NT driver have support the Windows NT/2000 and 32-bit Windows XP/2003/Vista/7. (CD: \NAPDOS\ISA\A626\_628\DLL\_OCX\WINNT/Driver)
- The Windows 98 driver have support the Windows 95/98.  
(CD: \NAPDOS\ISA\A626\_628\DLL\_OCX\WIN98/Driver)

Web Download: [http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/a626\\_628/dll\\_ocx/](http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/a626_628/dll_ocx/)

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

**Step 3: Select the installed folder, the default path is C:\DAQPro\A626\_WinNT, confirm and click the "Next>" button.**

**Step 4: Select "No, I will restart my computer later" and then click the "Finish" button.**

# 3

## SW1 and Jumper Settings

Please make sure D/A voltage range, interrupt jumpers and SW1 switch are kept in default setting before self-test.

### I/O Base Address Setting (SW1 Switch):

A-626/A-726	A-628
<p>Default Settings: 2C0 (Hex)</p>	<p>Default Settings: 2C0 (Hex)</p>

### D/A Voltage Range Setting (JPx):

A-626/A-726	A-628
<p>EXT JP7/9/11/18/17/16 -10 V -5 V BI: Bipolar UN: Unipolar</p> <p>JP1/2/3/4/5/6 JP8/10/12/13/14/15 Default Settings: Unipolar</p>	<p>EXT -10 V -5 V BI UN</p> <p>JP1/2/3/4/5/6/7/8 Default Settings: Internal Reference -5V</p> <p>P9/10/11/12/13/14/15/16 JP17/18/19/20/21/22/23/24 Default Settings: Unipolar</p>

### IRQ Jumper Settings (Interrupt Level Selection):

A-626/A-726	A-628
<p>JP19 IRQ N/C 15 14 12 11 10 9 7 6 5 4 3</p> <p>Default Settings: N/C (No Interrupt)</p>	<p>JP25 IRQ 3 4 5 6 7 9 10 11 12 14 15 N/C</p> <p>Default Settings: N/C (No Interrupt)</p>

*For detailed information about the jumper and Switch settings, please refer to Sec. 2.2 and Sec. 2.3 of the user manual.*

# 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 ISA slot.**

**Step 4: Carefully insert your I/O card into the ISA slot.**

**Step 5: Replace the PC cover.**

**Step 6: Power on the computer.**

**After powering-on the computer, continue next process.**

# 5 Pin Assignments

## ■ Digital Output/Digital Input Connector:

A-628 CN3: Digital Output ch0 ~ ch15

A-626 CN3: Digital Output ch0 ~ ch15

A-726 CN1: Digital Output ch0 ~ ch15

A-628 CN2: Digital Input ch0 ~ ch15

A-626 CN4: Digital Input ch0 ~ ch15

A-726 CN2: Digital Input ch0 ~ ch15

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

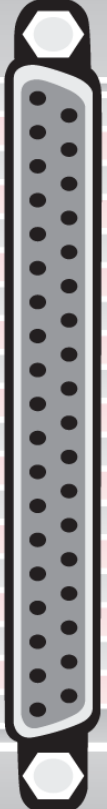
A-628\_CN3  
 A-626\_CN3  
 A-726\_CN1

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

A-628\_CN2  
 A-626\_CN4  
 A-726\_CN2

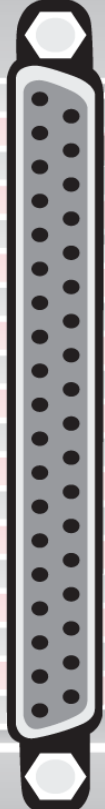
■ **Analog Output Connector:**

A-626 CON1: Analog Output ch0 ~ ch5			
Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
DA_0 V.OUT	01	20	DA_4 V.OUT
DA_0 Ext REF IN	02	21	DA_4 Ext REF IN
DA_0 I.OUT	03	22	DA_4 I.OUT
A.GND	04	23	A.GND
DA_1 V.OUT	05	24	DA_5 V.OUT
DA_1 Ext REF IN	06	25	DA_5 Ext REF IN
DA_1 I.OUT	07	26	DA_5 I.OUT
A.GND	08	27	A.GND
DA_2 V.OUT	09	28	N/C
DA_2 Ext REF IN	10	29	N/C
DA_2 I.OUT	11	30	N/C
A.GND	12	31	A.GND
DA_3 V.OUT	13	32	N/C
DA_3 Ext REF IN	14	33	N/C
DA_3 I.OUT	15	34	N/C
A.GND	16	35	A.GND
Ext TRG	17	36	A.GND
D.GND	18	37	A.GND
PC +5 V	19		



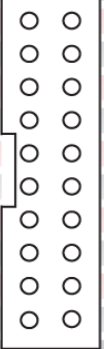
A-626\_CON1

A-628 CN1: Analog Output ch0 ~ ch7			
Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
DA_0 V.OUT	01	20	DA_4 V.OUT
DA_0 Ext REF IN	02	21	DA_4 Ext REF IN
DA_0 I.OUT	03	22	DA_4 I.OUT
A.GND	04	23	A.GND
DA_1 V.OUT	05	24	DA_5 V.OUT
DA_1 Ext REF IN	06	25	DA_5 Ext REF IN
DA_1 I.OUT	07	26	DA_5 I.OUT
A.GND	08	27	A.GND
DA_2 V.OUT	09	28	DA_6 V.OUT
DA_2 Ext REF IN	10	29	DA_6 Ext REF IN
DA_2 I.OUT	11	30	DA_6 I.OUT
A.GND	12	31	A.GND
DA_3 V.OUT	13	32	DA_7 V.OUT
DA_3 Ext REF IN	14	33	DA_7 Ext REF IN
DA_3 I.OUT	15	34	DA_7 I.OUT
A.GND	16	35	A.GND
Ext TRG	17	36	A.GND
D.GND	18	37	A.GND
PC +5V	19		



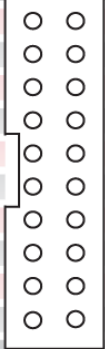
A-628\_CN1

Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
-5V REF OUT	01	02	-10V REF OUT
-5V REF OUT	03	04	-10V REF OUT
DA_0 V.OUT	05	06	DA_0 I.OUT
DA_0 REF IN	07	08	A.GND
DA_1 V.OUT	09	10	DA_1 I.OUT
DA_1 REF IN	11	12	A.GND
DA_2 V.OUT	12	14	DA_2 I.OUT
DA_2 REF IN	14	16	A.GND
A.GND	16	18	A.GND
N.C.	18	20	N.C.



A-726\_CN3

Pin Assignment	Terminal No.	Terminal No.	Pin Assignment
DA_3 V.OUT	01	02	DA_3 I.OUT
DA_3 REF IN	03	04	A.GND
DA_4 V.OUT	05	06	DA_4 I.OUT
DA_4 REF IN	07	08	A.GND
DA_5 V.OUT	09	10	DA_5 I.OUT
DA_5 REF IN	11	12	A.GND
A.GND	12	14	A.GND
D.GND	14	16	D.GND
+5V	16	18	+5V
+12V	18	20	+12V




A-726\_CN4

A-726 CN3 and CN4: Analog Output ch0 ~ ch5

# 6 Self-Test

## ■ Digital Output/Input Wiring Test:

1. Use the CA-2002 (optional) to connect the D/O with D/I connectors.



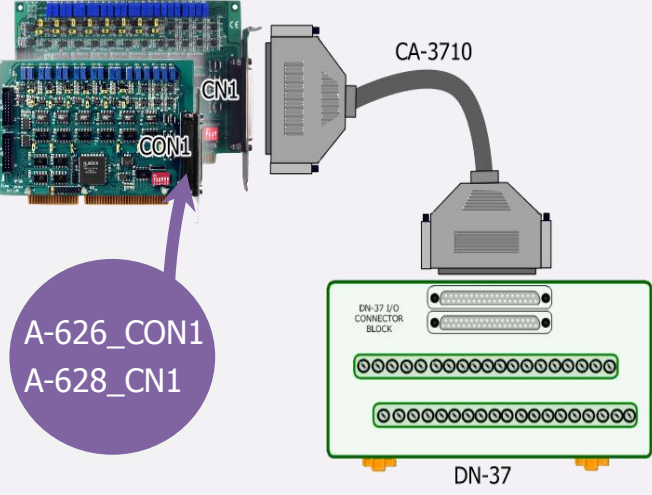
**A-626/A-628/A-726**

	D/O	D/I
A-626	CN3	CN4
A-628	CN3	CN2
A-726	CN1	CN2

## ■ Analog Output Wiring Test:

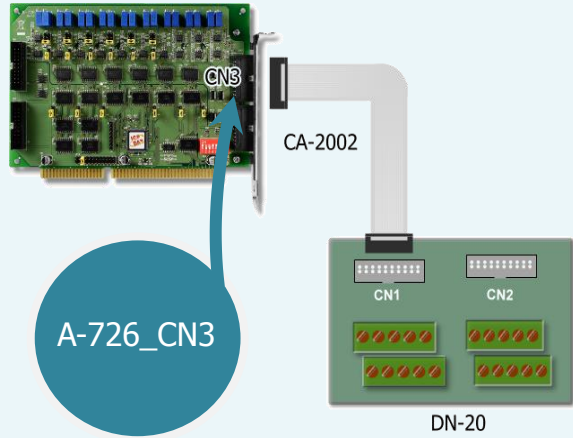
2. Prepare for device: DN-37 or DN-20 (optional) wiring terminal board and Digital Multi-Meter.
3. Use the DN-37 or DN-20 to connect the D/A connector on the board, is illustrated in the figure below.

**A-626/A-628**



DN-37

**A-726**

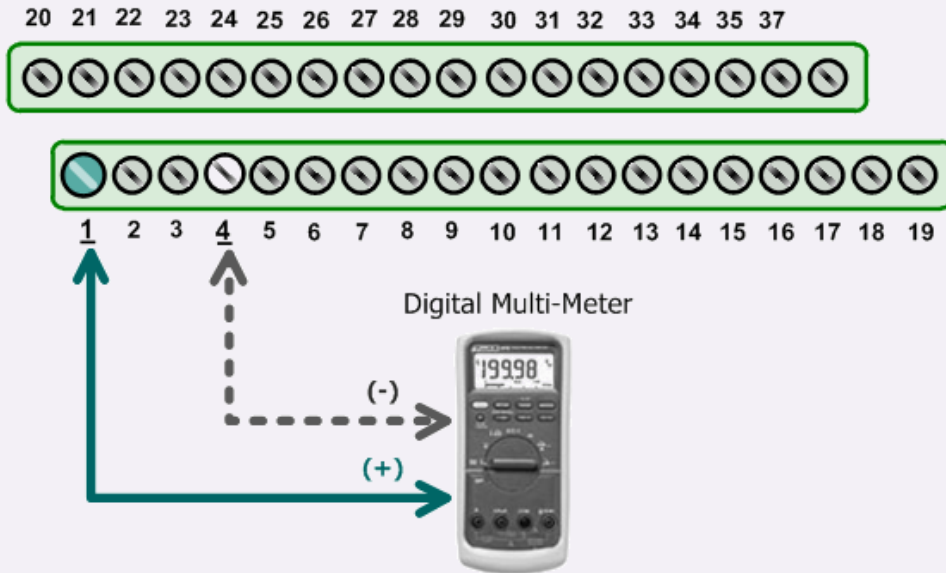


DN-20

4. Wire the Multi-meter to D/A channel 0, and wire the signals as follows:

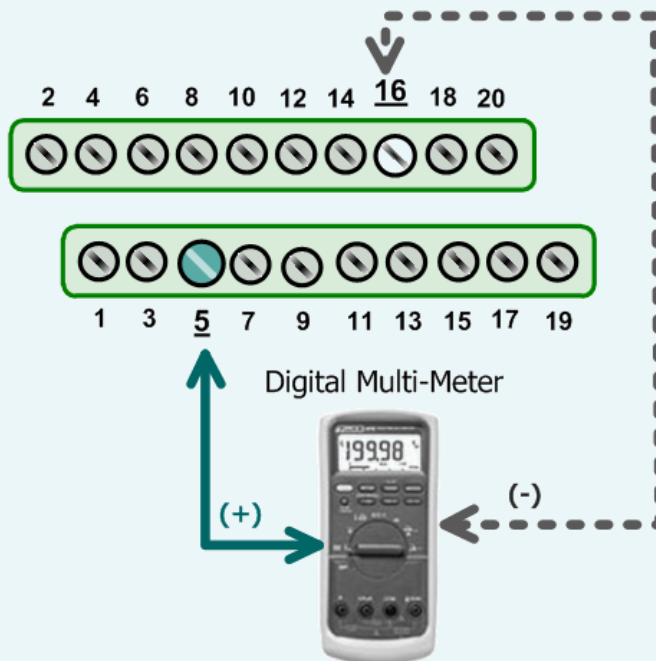
**A-626/A-628**

Connect the **positive probe (+) of Multi-meter** to **DA 0 V.OUT (Pin 01)**, and then the **negative probe (-) of Multi-meter** to **A.GND (Pin 04)**.



**A-726**

Connect the **positive probe (+) of Multi-meter** to **DA 0 V.OUT (Pin 05)**, and then the **negative probe (-) of Multi-meter** to **A.GND (Pin 16)**.



■ **Execute the Test Program:**

5. The A62xDiag.exe will be placed in the default path after completing installation.

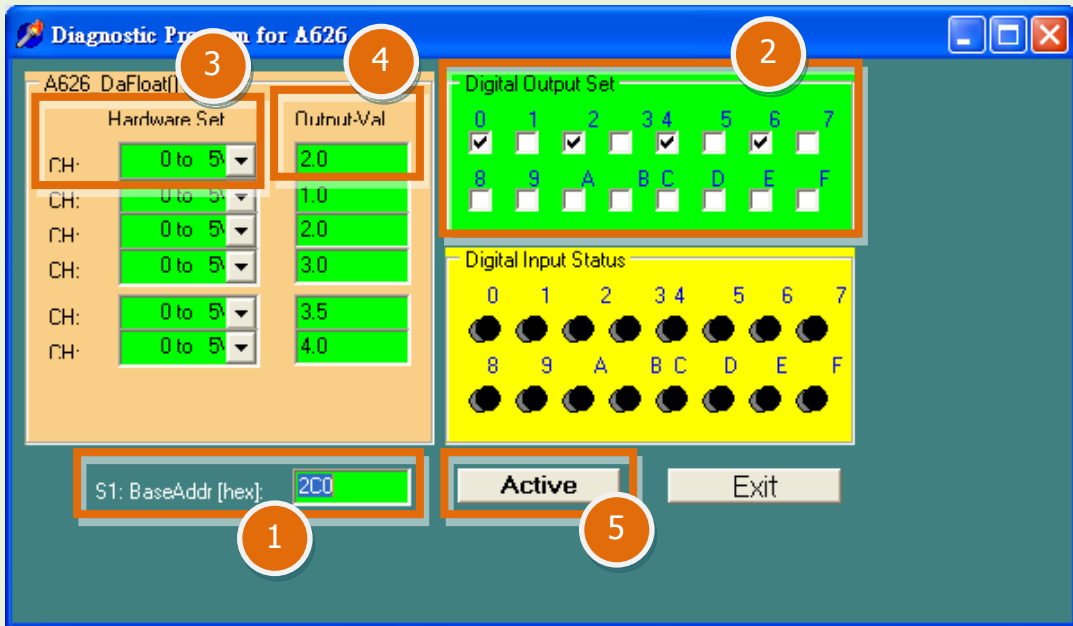
Default Path: C:\DAQPro\A626\_WinNT\Diag\  
 Double click the "A62xDiag.exe"



A62xDiag.exe	Support ISA Card
A626Diag.exe	A-626 and A-726 card
A628Diag.exe	A-628 card

6. Execute to D/I/O and D/A function test.

- (1): Type the "2C0" in the S1:base address[hex] file for the A-626/628/726 series card to activate. *(Meet to SW1 setting on board)*
- (2): Click channel 0, 2, 4, 6 in the Digital Output Set field.
- (3): Select the "0 to 5V" in the Hardware Set field. *(Meet to D/A jumper setting on board)*
- (4): Type the voltage value in the Output Val field.
- (5): Click this button to start test.

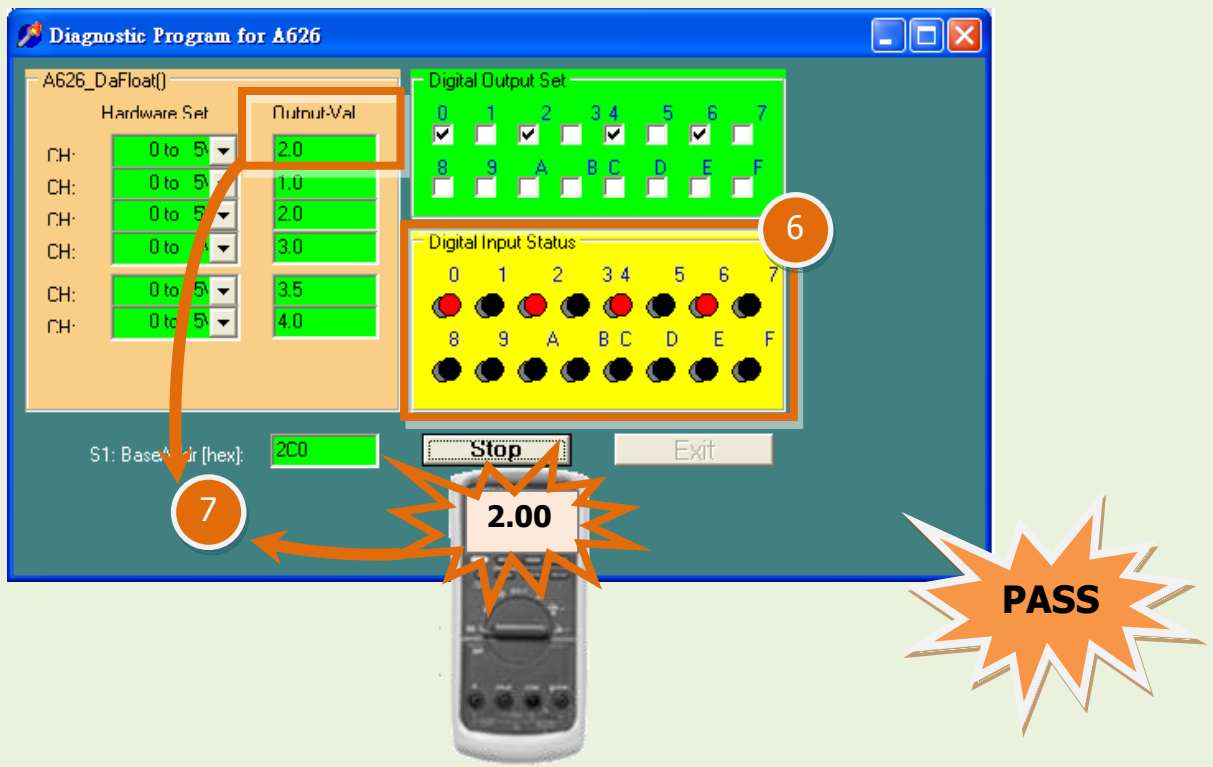


7. Get D/I/O and D/A function test result.

(6): Confirm the corresponding D/I becomes red for channel 0, 2, 4, 6 of D/O is ON.

(7): Confirm the value on multi-meter, they should be identical to the values set in program.

***(The value read on meter may be a little difference from the DA value because of the resolution limit of meter or the measurement error.)***



# 7 Related Information

- A-626, A-628 and A-726 Series Card Product Page:  
[http://www.icpdas.com/products/DAQ/pc\\_based/a-626&8.htm](http://www.icpdas.com/products/DAQ/pc_based/a-626&8.htm)
- DN-37, DN-20, CA-3710 and CA-2002 page (optional):  
[http://www.icpdas.com/products/DAQ/screw\\_terminal/dn\\_37.htm](http://www.icpdas.com/products/DAQ/screw_terminal/dn_37.htm)  
[http://www.icpdas.com/products/DAQ/screw\\_terminal/dn\\_20.htm](http://www.icpdas.com/products/DAQ/screw_terminal/dn_20.htm)  
[http://www.icpdas.com/products/Accessories/cable/cable\\_selection.htm](http://www.icpdas.com/products/Accessories/cable/cable_selection.htm)
- Documentation and Software:  
 CD:\NAPDOS\ISA\A626\_628\  
[http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/a626\\_628/](http://ftp.icpdas.com/pub/cd/iocard/isa/napdos/isa/a626_628/)