PnP Driver Installation

Plug & Play Driver Installation Manual For AD/DA, DI/DO Cards

[For Windows 95/98/2000/XP]

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1 Introduction

This manual describes how to install the Plug and Play Information file (PnP Driver) of AD/DA, DI/DO add-on cards (PCI and ISA bus) on Windows 95/98/2000/XP.

All of the products (PCI bus) have their own PnP information file (PnP Driver). <u>Windows 95/98 and Windows 2000/XP will refer to this</u> information file in order to allocate the resource for the device. Thus, the user must install the correct information file (PnP Driver) for it to work correctly. All of the PnP drivers have similar steps for installation. And this manual uses the PCI-TMC12 or PIO series card as an example. For other PCI cards, please refer to these steps and select the appropriate PnP Driver to install.

To find out the PnP Information file (PnP Driver) for the specified device, please refer to the file "Readme.TXT" which is include with the Development Toolkit for the specified device.

For example:



2 PCI PnP for Win95/98

- Step 2-1. Power off your computer.
- Step 2-2. Plug the PCI DAQ card onto main-board.
- Step 2-3. Power on your computer.
- Step 2-4. The "Add New Hardware Wizard" window pops up. The user also can launch the window "Add New Hardware Wizard" by click the icon "Add New Hardware" from the folder "Control Panel".

Step 2-5. Click the "Next >" button.



Step 2-6. Click the "Next >" button.

Add New Hardware Wizard	
	Windows will now search for any new Plug and Play devices on your system. Your screen may go blank during this process. This is normal. To continue, click Next.
	<back next=""> Cancel</back>

Step 2-7. Click the "Next >" button.



Step 2-8. Select the second item and then click the "Next >" button.



Step 2-9. Select the item "OtherDevices" and click "Next >" button.



Select the manufacturer and model of your hardware device. If you have a disk that contains the updated driver, click Have Disk. To install the updated driver, click Finish.

Step 2-11. Click the button "Browse..." to select the path of the driver.

Install Fro	m Disk	×
_	Insert the manufacturer's installation disk into the drive selected, and then click OK.	ОК
		Cancel
	Copy manufacturer's files from:	Browse

- Step 2-12. Change the "Drives", "Folders" and select the correct .INF file. These depend on the device driver that you want to use.
- Step 2-13. Click the "OK" button.

Open		? ×
File name: tmc12.inf	Eolders: F:\Projs\TMC12\Install	OK Cancel N <u>e</u> twork
	Drives:	•

Step 2-14. Make sure that the path is correct for the PCI DAQ card.



Step 2-15. Click the "OK" button to proceed to the next step.

Step 2-16. Select the correct driver (Models) for the PCI DAQ card.

Step 2-17. Click the "Next >" button to proceed to the next step.

Add New	Hardware Wizard
\diamond	Select the manufacturer and model of your hardware device. If you have a disk that contains the updated driver, click Have Disk. To install the updated driver, click Finish.
Models:	, PCI-TMC12 Card [5- 4-1999]
	<u>H</u> ave Disk
	< <u>B</u> ack Next> Cancel

Step 2-18. Click the "Next >" button.



Step 2-19. Click the "Finish" button.



Step 2-20. Select the item "Yes, I am finished installing devices.".

Step 2-21. Click the "Next >" button.

Add New Hardware Wizard		
Windows found and installed the following Plug and Play CPDAS, PCI-TMC12 Card Are all your devices installed now? Mes, I am finished installing devices C Mes, I am finished installing devices		
< <u>B</u> ack Next > Cancel		

Step 2-22. Click the "Finish" button.



3 PCI PnP for Win2000/XP

- Step 3-1. Power off your computer.
- Step 3-2. Plug the PCI DAQ card onto main-board.
- Step 3-3. Power on your computer.
- Step 3-4. The "Add New Hardware Wizard" window pops up.
- Step 3-4-1. The user also can launch the window "Add New Hardware Wizard" by click "Start / Settings / Control Panel".



Step 3-4-2. Double-Click on the "Add/Remove Hardware" item.

🕺 Control Panel	
<u> Eile E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools	Help
📙 🖨 Back 🔻 🔿 👻 🖬 🗐 🥘 Search	🚰 Folders 🦪 History 🛛 🚰 🦉 👋
Name 🔺	Comment
🖾 Accessibility Options	Customizes accessibilit
💐 Add/Remove Hardware	Installs, removes, and
🖶 Add/Remove Programs	Installs and removes p
🖻 Administrative Tools	Configures administrat
🕮 BDE Administrator	Configures the Borlan
🐻 Date/Time	Sets the date, time, a
😴 Display	Customizes your desk
Folder Options	Customizes the displa
Fonts	Displays and manages
🔏 Game Controllers	Adds, removes, and c
🏘 Internet Options	Configures your Inter
#Keyboard	Customizes vour kevh 📃 📕
Installs, removes, and troublesh	🖳 My Computer 🦷 🎢

Step 3-5. Click "Next >" button.

Add/Remove Hardware Wizard	
	Welcome to the Add/Remove Hardware Wizard
	This wizard helps you add, remove, unplug, and troubleshoot your hardware.
	To continue, click Next.
	< Back Next > Cancel

Step 3-6. Select the "Add/Troubleshoot a device" item. Step 3-7. Click the "Next >" button.

Add/Remove Hardware Wizard		
Choose a Hardware Task Which hardware task do you want to perform?		
Select the hardware task you want to perform, and then click Next.		
 Add/Troubleshoot a device Choose this option if you are adding a new device to your computer or are having problems getting a device working. 		
C Uninstall/Unplug a device Choose this option to uninstall a device or to prepare the computer to unplug a device.		
< <u>Back</u> <u>Next></u> Cancel		

Step 3-8. Click the "Browse..." button to select the proper directory in which to store the PnP Information file.

Step 3-9. Click the "OK" button.

Found N	ew Hardware	
- Providence in the second sec	ICPDAS PIO Series Card	
Files Need	ed	×
	The file 'PIO.sys' on PIO build directory is needed.	ОК
	Type the path where the file is located, and then click OK.	Cancel
	<u>C</u> opy files from: g.\projs\piodio\win2000\inf ▼	Browse

Step 3-10. Select the proper device and click "Next >".

Add/Remove Hardware Wizard	
New Hardware Detection The wizard automatically locates new Plug and Play hardware.	
Windows has finished searching for Plug and Play hardware.	
The following Plug and Play devices were installed:	
CPDAS PIO Series Card	
< <u>B</u> ack <u>N</u> ext > Cance	1

Step 3-11. Click "Finish" to finish this process.



4 ISA PnP for Win2000/XP

Windows 2000/XP supports the Plug & Play mechanism to allocate resources. But the hardware of the ISA AD/DA and DI/DO card don't support PnP. In this case, Windows 2000/XP will not be able to detect the ISA AD/DA and DI/DO card automatically.

For allocating resources correctly, we provide a PnP information file (*.INF) for the ISA AD/DA and DI/DO card. The ISA AD/DA and DI/DO card use the information file to request the resources from Windows 2000/XP.

It is recommended to first install the PnP information file and then set the requested resources correctly. After the resources have been allocated, set the jumper or switch of the ISA AD/DA and DI/DO card to match the allocated resources.

Step 4-1. Open the "Control Panel" by click the item "Start / Settings / Control Panel".



Step 4-2. Double-click the item "Add/Remove Hardware".

🗟 Control Panel	
<u> </u>	Help
📙 🖨 Back 🔻 🔿 👻 🔛 🗐 🥘 Search	Folders 🕉 History 🚰 😤 👋
Name 🔺	Comment
🖾 Accessibility Options	Customizes accessibilit
💐 Add/Remove Hardware	Installs, removes, and
🔚 Add/Remove Programs	Installs and removes p
🖻 Administrative Tools	Configures administrat
BDE Administrator	Configures the Borlan
😼 Date/Time	Sets the date, time, a
😼 Display	Customizes your desk
Folder Options	Customizes the displa
A Fonts	Displays and manages
🚳 Game Controllers	Adds, removes, and c
🕅 Internet Options	Configures your Inter
/ 🚔 Keyboard	Customizes vour kevh 📃 📕
Installs, removes, and troublesh	📃 My Computer 🛛 🎢

Step 4-3. Click the "Next >" button.



Step 4-4. Select the item "Add/Troubleshoot a device" and click the "Next >" button.

Choose a Hardware Task Which hardware task do you want to perform?
Select the hardware task you want to perform, and then click Next.
 Add/Troubleshoot a device Choose this option if you are adding a new device to your computer or are having problems getting a device working.
 Uninstall/Unplug a device Choose this option to uninstall a device or to prepare the computer to unplug a device.
< Back Next > Cancel

Step 4-5. Select the item "Add a new device" and click the "Next >" button.

Add/Remove Hardware Wizard			
Choose a Hardware Device Which hardware device do you want to troubleshoot?			
The following hardware is already installed on your computer. If you are having problems with one of these devices, select the device, and then click Next. If you are attempting to add a device and it is not shown below, select Add a new device, and then click Next.			
Devices Add a new device Default Monitor Floppy disk drive NEC CD-ROM DRIVE:282 Maxtor 90680D4 ST38410A ISAPNP Read Data Port			
< <u>B</u> ack <u>N</u> ext > Cancel			

Step 4-6. Select the item "No, I want to select the hardware from a list" and click the "Next >" button.

Add/Remove Hardware Wizard
Find New Hardware Windows can also detect hardware that is not Plug and Play compatible.
When Windows detects new hardware, it checks the current settings for the device and installs the correct driver.
Do you want Windows to search for your new hardware? Yes, search for new hardware No. I want to select the hardware from a list
< <u>B</u> ack Next> Cancel

Step 4-7. Select the item "Other device" and click the "Next >" button.

Add/Remove Hardware Wizard			
Hardware Type What type of hardware do you want to install?			
Select the type of hardware you want to install.			
<u>H</u> ardware types:			
Network adapters NT Apm/Legacy Support Other devices PCMCIA adapters Ports (COM & LPT) Printers SCSI and RAID controllers Sound, video and game controllers System devices			
	< Back	<u>N</u> ext >	Cancel

Step 4-8. Click the "Have Disk..." button.

Add/Remove Hardware Wizard
Select a Device Driver Which driver do you want to install for this device?
Select the manufacturer and model of your hardware device and then click Next. If you have a disk that contains the driver you want to install, click Have Disk.
Manufacturers: Mo <u>d</u> els:
(Standard IDE ATA/ATAPI control ▲ Standard Dual Channel PCI IDE Controller (Standard Infrared Port) Standard IDE/ESDI Hard Disk Controller (Standard port types) Standard system devices) 300mm ▼
Have Disk
< <u>B</u> ack <u>N</u> ext > Cancel

Step 4-9. Click the "Browse..." button to select the correct PnP information file (*.inf) depending on your device.

Step 4-10. Click the "OK" button.

Install From	n Disk	×
_	Insert the manufacturer's installation disk into the drive selected, and then click OK.	OK Cancel
	Copy manufacturer's files from: F:\PROJS\A822\WIN2000\INF	<u>B</u> rowse

Step 4-11. Select the correct device from the "Models:" listbox.

Step 4-12. Click the "Next >" button.

Add/Rer	nove Hardware Wizard			
Selec Wł	t a Device Driver hich driver do you want to install for this device	?		
\diamond	Select the manufacturer and model of your I disk that contains the driver you want to inst	nardware device a all, click Have Disl	and then click k.	Next. If you have a
Mo <u>d</u> els:	S A-822 Analog/Digital Card			
				<u>H</u> ave Disk
		< <u>B</u> ack	<u>N</u> ext >	Cancel

Step 4-13. The window "Add/Remove Hardware Wizard" pops up and says "Windows Could not detect the settings of the device. To use this device, you must enter its hardware settings. Consult the documentation that came with this device for information."

Step 4-14. Click the "OK" button to enter the device's settings.

Add/Ren	nove Hardware Wizard 🛛 🔀
⚠	Windows could not detect the settings of the device. To use this device, you must enter its hardware settings. Consult the documentation that came with this device for information
	OK

Step 4-15. Double-click on the "Input/Output Range" and "Interrupt Request" items to set the device's resource.

Add New Hardware Wizard Properties	? ×
Resources	
Unknown Device	
<u>R</u> esource settings:	
Resource type Setting Input/Output Range ? Interrupt Request ?	
Setting <u>b</u> ased on: Basic configuration 0000	•
Use automatic settings <u>Change Setting</u>	
Conflicting device list:	
No conflicts.	▲
OK Canc	el

- Step 4-16. Choose a "Value:" for the "Input/Output Range", which doesn't conflict with other devices.
- Step 4-17. Click the "OK" button.

Edit Input/Output Range	? ×
Enter the input/output range you would like to set for this device.	
You may either enter a specific range and the nearest valid range wil automatically selected, or you may select a range using the up and down arrows.	ll be
This resource is assigned to the following child device(s):	
Value: 0220 - 022F →	
The setting you have chosen does not conflict with any other devices.	
No devices are conflicting.	
OK Cancel	

Step 4-18. Choose a "Value:" for the "Interrupt Request", which doesn't conflict with other devices.

Step 4-19. Click the "OK" button.

Edit Interrupt Request
Enter the interrupt request you would like to set for this device.
You may either enter a specific value and the nearest valid value will be automatically selected, or you may select a value using the up and down arrows.
This resource is assigned to the following child device(s):
⊻alue: III T
Conflict Information
devices.
No devices are conflicting.
OK Cancel

Step 4-20. Click the "OK" button.

Add New Hardware Wizard Properties	? ×
Resources	
<u>R</u> esource settings:	
Resource type Setting Input/Output Range 0220 - 022F Interrupt Request 09	
Setting <u>b</u> ased on: Basic configuration 0000	•
□ Use automatic settings	
Conflicting device list	
No conflicts.	*
OK Can	cel

Step 4-21. The "Creating a Forced Configuration" window pops up and says : "You adjusted one or more resource settings manually. If you continue, these settings will be assigned to the device. Do you want to continue?".

Step 4-22. Click the "Yes" button.

Creating	a Forced Configuration
	You adjusted one or more resource settings manually.
	If you continue, these settings will be assigned to the device.
	Do you want to continue?
	Yes No

Step 4-23. Click the "Next >" button.

Add/Remove Hardware Wizard		
Start Hardware Installation Windows is ready to install drivers for your new hardware.		
ICPDAS A-822 Analog/Digital Card		
Windows will use default settings to install the software for this hardware device. To install the software for your new hardware, click Next.		
< <u>B</u> ack Next> Cancel		

Step 4-24. Click the "Finish" button.



- Step 4-25. The "System Settings Change" window pops up and says : "You must restart your computer before the new settings will take effect. Do you want to restart your computer now?".
- Step 4-26. Click the "Yes" button to restart your computer.

System Settings Change		
?	You must restart your computer before the new settings will take effect.	
	Do you want to restart your computer now?	
	<u>Y</u> es <u>N</u> o	

Step 4-27. Right-Click the "My Computer" icon and click the menu item "Manage" to launch "Computer Management".



Step 4-28. Click the "Device Manager" and the user will be able to see that the device had been added.

