# Calling DLL in LabVIEW

[For Windows 95/98/NT/2000/XP]

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# 1. Introduction

The driver for the PCI/ISA DAQ Card and I-7000 Series Modules, provide one or more DLL files (and VXD/SYS files) to be used by higher-level computer languages.

The DLL files are written in Visual C++ and provides lots of functions to perform a variety of Analog input/output, Digital input/output, Counter/Timer and RS-232/RS-485 Communication operations with the hardware of the PCI/ISA DAQ Card and I-7000 Series Modules. The DLL files are in standard Win32 DLL format, and can be used with Windows 95/98/NT/2000. With these functions of DLL files, user no longer needs to process the lower-level hardware controls. The DLL files can be easily used by higher-level computer language. For example, it provides a large variety of demo programs that are written in Visual C++, Delphi, Borland C++ Builder , Visual Basic and LabVIEW.

To call subroutines in DLL files easily in LabVIEW, every subroutine has a .VI file named with it's original name. All of them are save into a llb file for LabVIEW develop environment.

This manual describes how to call the DLL function with LabVIEW. It uses the PCI-P16R16 DAQ Card as an example, and all the DLL files in our products have similar steps when called by LabVIEW.

Please install the software/driver and remember the path that the software/driver installed into. This folder will contain all the drivers, demo programs and manuals after the user installs the software/driver, so it's important to note its location.

In addition, the DLL, VXD and SYS files will be copied into the following folder automatically when the user installs the software/driver.

DLL files $\rightarrow$ C:\Windows\System\	(for Windows 95/98 user)
Vxd files $\rightarrow$ C:\Windows\System\	(for Windows 95/98 user)
DLL files $\rightarrow$ C:\WinNT\System32\	(for Windows NT/2000 user)
Sys files $\rightarrow$ C:\WinNT\System32\Drivers\	(for Windows NT/2000 user)

The .SYS files need to be registered under Windows NT/2000, thus if the user copy these files manually, they must refer to the file README.TXT of the software/driver to create the registry value.

# 2. Select a VI...

This chapter describes how to uses the llb file with LabVIEW. After Installing the software/driver of PCI-P16R16, the demo folder contains all the demo programs and a llb file. For calling a subroutine in .DLL file, please follow the steps:

Step 1: Execute LabVIEW and press "Select a VI..." icon.

James Lui	
🔁 demo1.vi Diagram	
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Step 2: Select a \*.llb file which is in demo folder in the "Choose the VI to open" dialog box.

Choose the VI to a	open:			? ×
搜尋位置([):	🔁 demo	<b>~</b>	🖻 💆	
Plono.vi				
檔案名稱(N):	P16R16.llb			開啓舊檔(())
檔案類型(I):	VIs & Controls (*.v:	i;*.ctl)	•	取消

Step3: Select the desired VI and press OK button to close the dialog box.

🔁 File Dialog		×
P16R16.llb		\\ ▼
P16R16_DI.vi P16R16_DO.vi P16R8_DO.vi P8R8_DO.vi PCI_DriverClose.vi PCI_DriverInit.vi PCI_ErrorHandler.vi PCI_FloatSub2.vi PCI_GetConfigAddressSpace.vi		
Choose the VI to open:	C	OK
PCI_DriverInit.vi		Cancel
VIs & Controls		

Step4: Put the icon of the .VI to where desired.

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File Edit Operate Project Windows Help	
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4	▶ <i>[</i> ],

Calling a subroutine of .dll in LabVIEW is complete.

The simple arguments of Sub VI are showed in help window.

Please also refer the software manual about the detail description of the function.

🔁 Help	
P16R16 ——— Return Driver Init ——— w TotalBoards	<b>A</b>
PCI_DriverInit.vi	
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