

# Quick Start

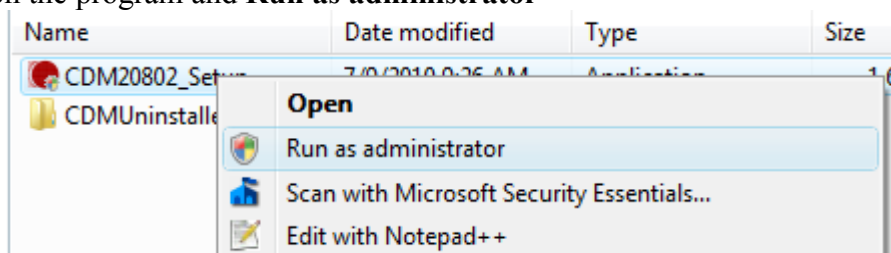
## Low Cost USB DAQ training kit

1. This quick start guide is for USB DAQ running on Windows XP, Vista and 7.
2. You must have already installed the IDE you wish to use. This could be Visual Studio 2005, 2008, 2010 (or the individual C++, C# or VB IDE), or LabVIEW (ver 7.0 or later).
3. Based on the IDE installed, copy the appropriate folder that comes with EMANT300 (either from the CD or downloaded from [www.emant.com](http://www.emant.com)) to your computer. Note the folder where you have copied the files. Close all running applications.
  - LabVIEW7, LabVIEW8 Guide folders contain LabVIEW related files
  - EmantCS2005 folder contains Visual C# 2005, 2008 related files
  - EmantVB2005 folder contains Visual Basic 2005, 2008 related files
  - EmantVC2005 folder contains Visual C++ 2005, 2008 related files
  - DAQ with VB2010 folder contains Visual Basic 2010 related files
4. Copy the **USB Driver for Windows** folder to your computer.
5. If you have the Light Application Adaptor, connect it to the EMANT300 but do not plug the USB cable to your computer yet.

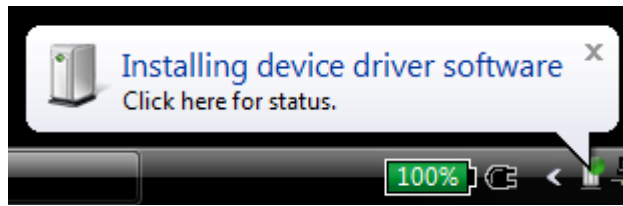
**Warning:** Always connect any application adaptors to the EMANT300 before connecting the EMANT300 to the computer USB port. If the application adaptor has external power, power should be applied only after the EMANT300 is connected to the USB port. When disconnecting the EMANT300 from the USB port, disconnect external power (if any) first. Remove any application adaptor only after the EMANT300 has been removed from the USB port. Failure to observe this sequence may damage the EMANT300.



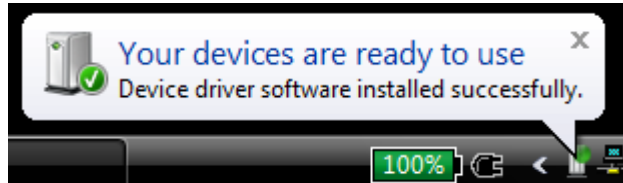
6. Install the USB Drivers by running **CDM20802\_Setup.exe** in the **USB Driver for Windows** folder. You will need **administrator's rights** to install this driver. For Vista and Windows 7, right click on the program and **Run as administrator**



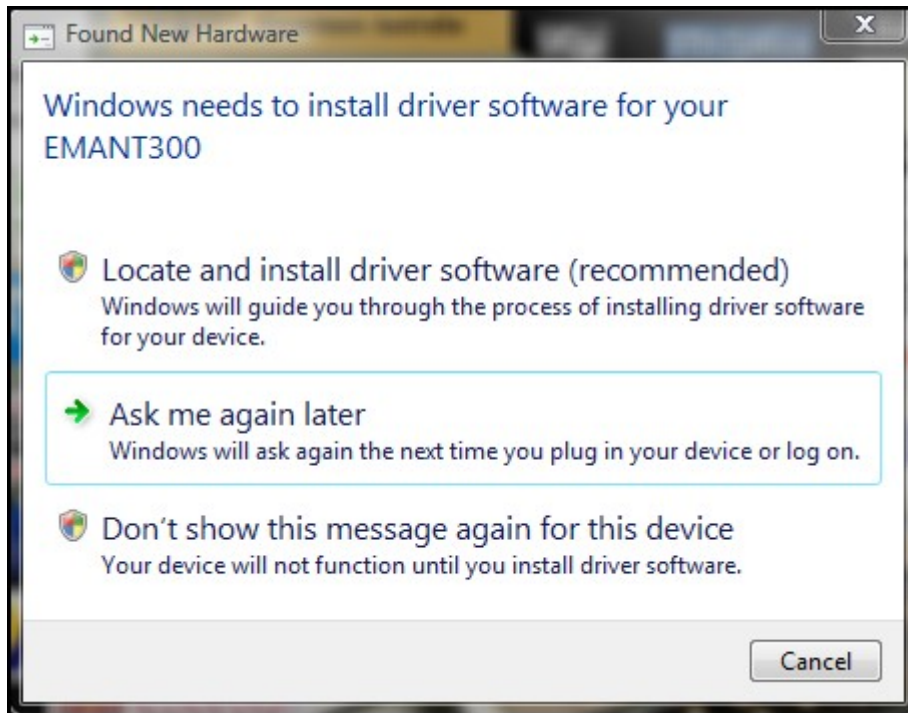
7. When you first plug the EMANT300 into the USB port using the USB cable, you will be notified by Windows that the EMANT300 has been found.



8. Note that two drivers will be installed. If both drivers are correctly installed, you will see the following message

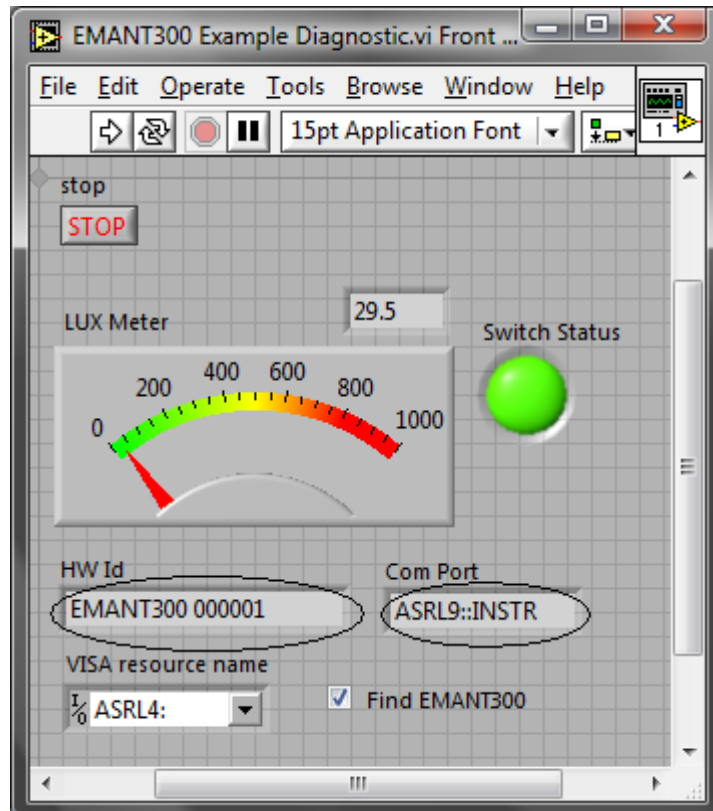


If you see the following instead, it means that you have skipped step 6. Unplug the EMANT300, and do step 6.



# Using USB DAQ Training Kit with LabVIEW

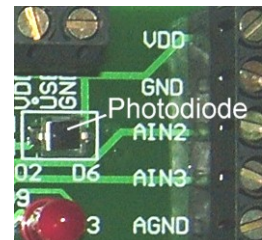
1. If you are using LabVIEW, it must be ver 7.0 or later. **NI-VISA must also be installed because the EMANT300 uses the serial communication VI from the VISA library. Please refer to the LabVIEW installation instructions for installing VISA**
2. Run the diagnostic LabVIEW program.
  - Goto to **USB Driver for Windows->LabVIEW** folder.
  - Run the **EMANT300 Example Diagnostic.VI**



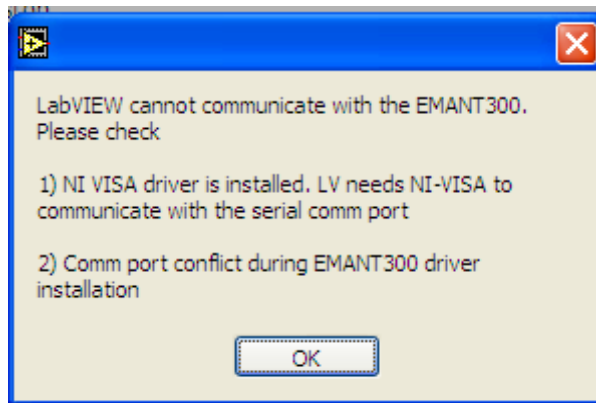
If the drivers are correctly installed, the program runs. The **HW Id** and the Virtual **Com Port** will be displayed. **DO NOT** uncheck **Find EMANT300**

If you have the **Light Application Adaptor**, you can run the following checks

- shine a light or block the photodiode (BPW34). The LUX Meter will display the changed light intensity
  - The Light Application Adaptor LEDs will light up in sequence
  - When you press the switch, the LabVIEW LED will turn from Green to Red.
3. Close LabVIEW. The drivers for EMANT300 are correctly installed.
  4. If you are new to LabVIEW and DAQ, proceed to the instruction guide **Build a Light Intensity Logger**.
  5. Before you start on your project, refer to the connection pinout and schematics found in the product specifications and application notes.



If you received the following dialog box instead, close all programs. Install NI VISA if you have not done so. Rerun the diagnostic.VI

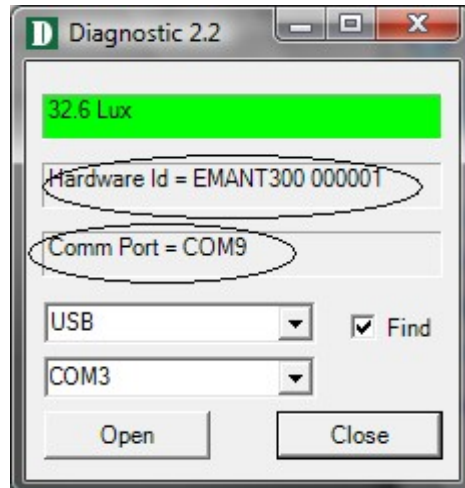


If you still see the error dialog box, see the troubleshooting guide

*LabVIEW is a trademark of National Instruments*


## Using USB DAQ Training Kit with .NET languages

1. If you are using the .NET languages, it must be running on the .NET Framework 2.0 or later. If you have not installed the .NET languages IDE (Visual Studio 2005, 2008, 2010), do it NOW. The following diagnostic program will not run if the IDE is not installed.
2. **Run the diagnostic .NET program.**
  - Goto to **USB Driver for Windows->NET** folder.
  - Click on **Diagnostic.exe** to run the program.



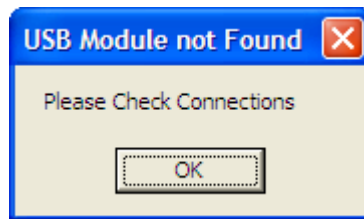
If the drivers are correctly installed, and when the **Open** button is clicked, the program runs. The **Hardware Id** and the **Virtual Com Port** will be displayed. DO NOT uncheck **Find**

If you have the **Light Application Adaptor**, you can run the following checks

- shine a light or block the photodiode (BPW34). The LUX Meter will display the changed light intensity
  - The Light Application Adaptor LEDs will light up in sequence
  - When you press the switch, the program's LED will turn from Green to Red
3. Close the Diagnostic program by clicking on . The drivers for EMANT300 are correctly installed.
  4. If you are new to .NET programming and DAQ, proceed to the instruction guide Build a Light Intensity Logger.
  5. Before you start on your project, refer to the connection pinout and schematics found in the product specifications and application notes.



If you see the following dialog box instead, click OK. Check your connections and rerun the diagnostic program.

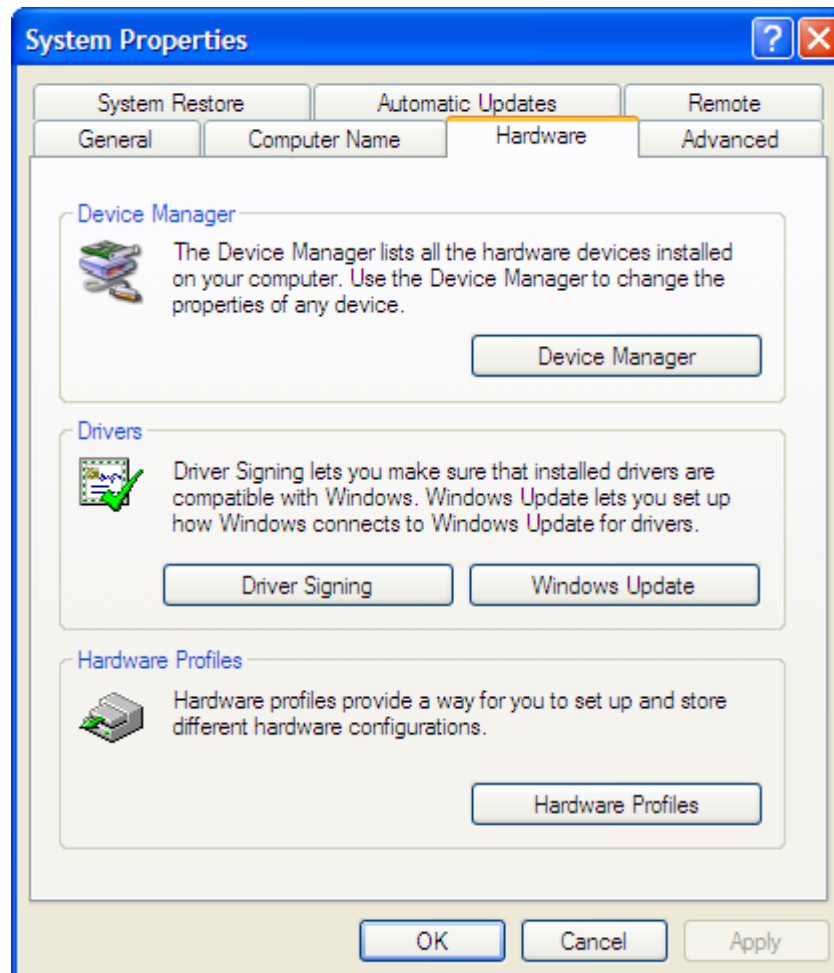


If you still see the error dialog box, see the troubleshooting guide  
*Visual Studio is a trademark of Microsoft*

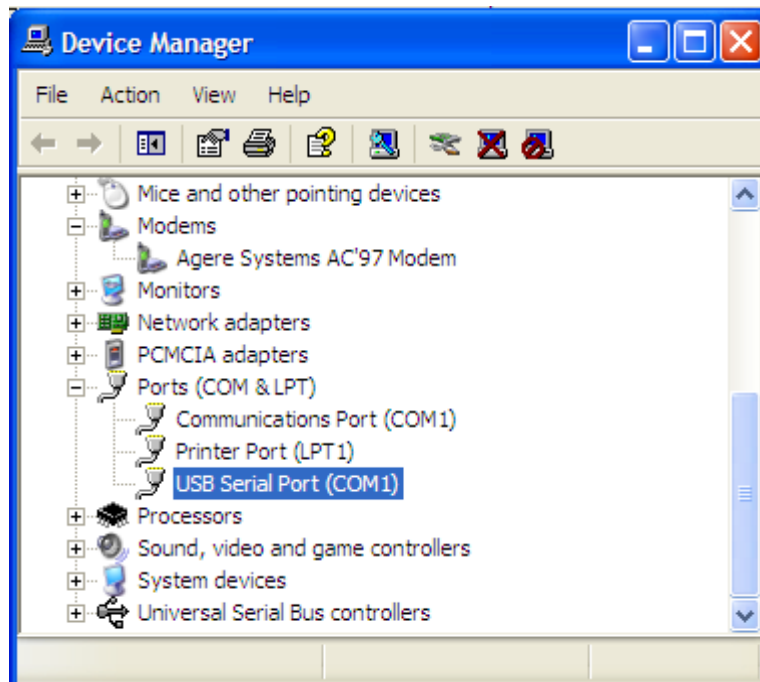
## Troubleshooting guide

1. Sometimes, a comm port conflict can occur if you have other hardware in your PC with improper comm drivers. To resolve this

- click on Windows->Start
- choose My Computer
- click View System Information



- Click on Hardware Tab->Device Manager



- Click on USB Serial Port and change from the conflicting port number to another free COM port. In the above example, change from COM1 to COM2.
- Rerun your diagnostic programs.