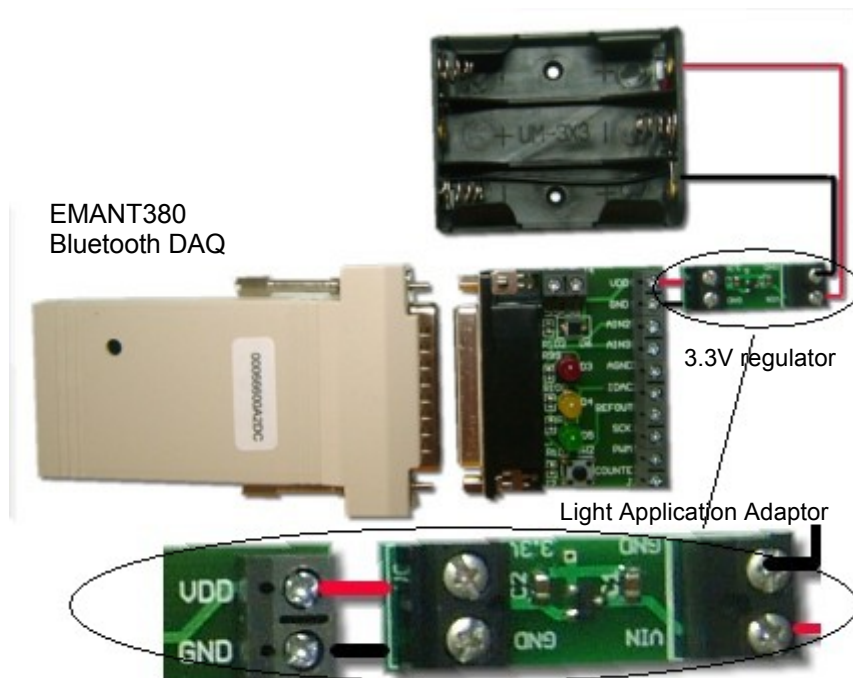


# EMANT380 Bluetooth DAQ starter kit

## Quick Start

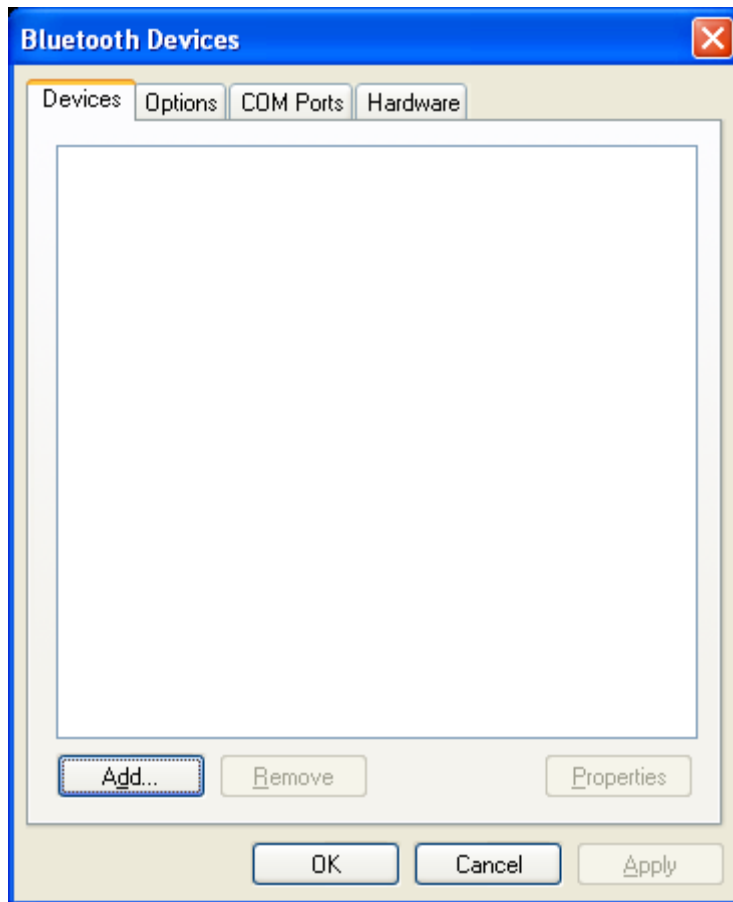
1. This guide is for Windows XP SP2, Vista or 7 operating systems. You should have already installed the IDE you wish to use. This could be Visual Studio 2005 or later (or Express versions), or LabVIEW (ver 7.0 or later).
2. Turn on your bluetooth adaptor on your PC and ensure that the **bluetooth driver is updated**.
3. Copy the **Bluetooth Installation for Windows** folder to your computer.
4. If you have the Light Application Adaptor, connect it to the EMANT380. The EMANT380 requires a 3.3V supply. A 3.3V regulator is provided. **Make sure that you connect the wires correctly as the wrong polarity will damage the products**. Insert **fresh 3 AA size batteries** into the battery holder. They may be either alkaline (total 4.5V) or rechargeable (total 3.6V) batteries.

**Warning:** Always connect any application adaptors to the EMANT380 before powering up the EMANT380.



5. Pair the EMANT380 with your PC

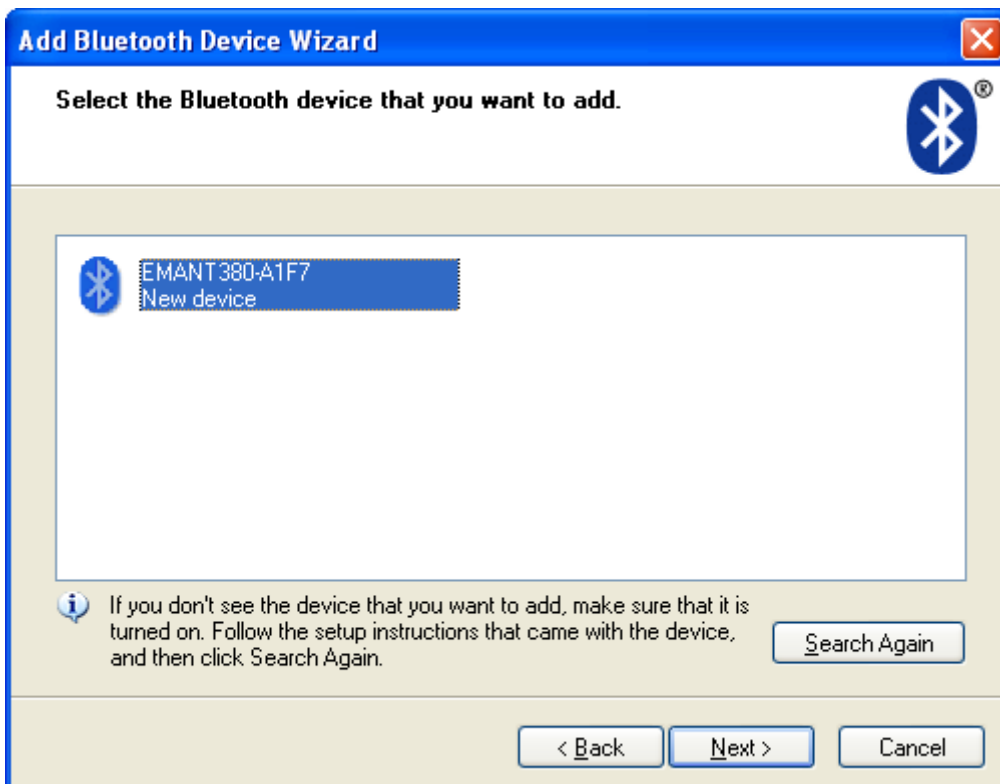
Start **Bluetooth Devices**. If you are using a different bluetooth stack, the graphics may look different but the steps are similar. Refer to your bluetooth user guide for pairing steps.



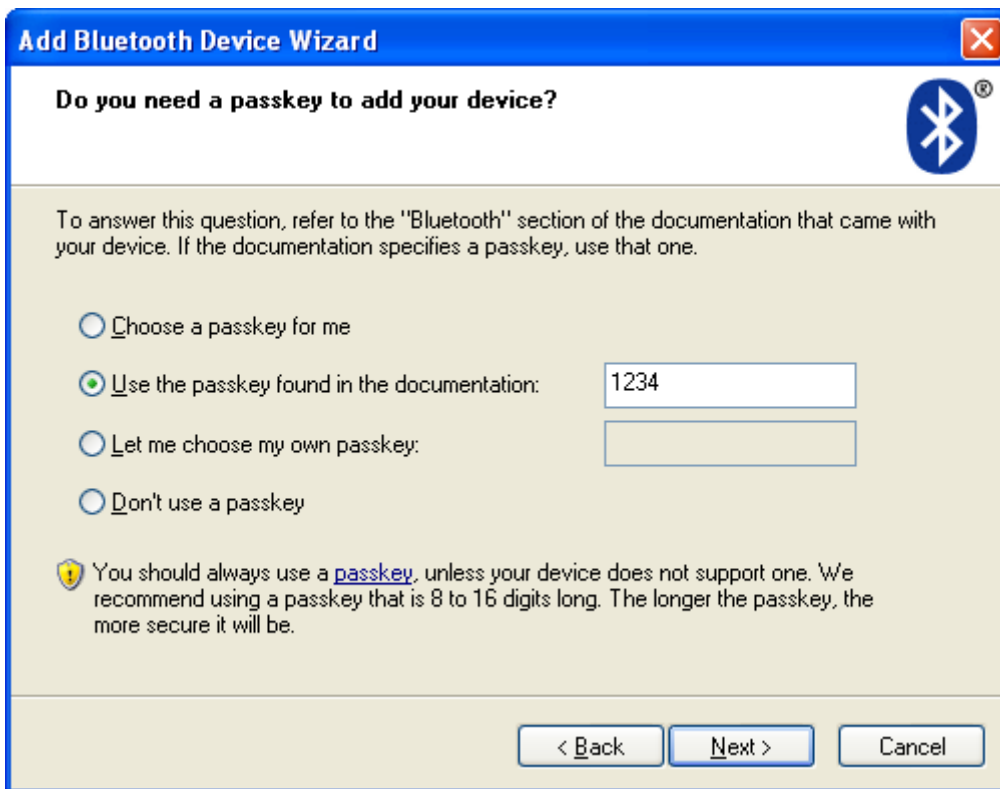
a) Click on **Add...** button



b) Power up the EMANT380, select **My device is set up and ready to be found** and click **Next**



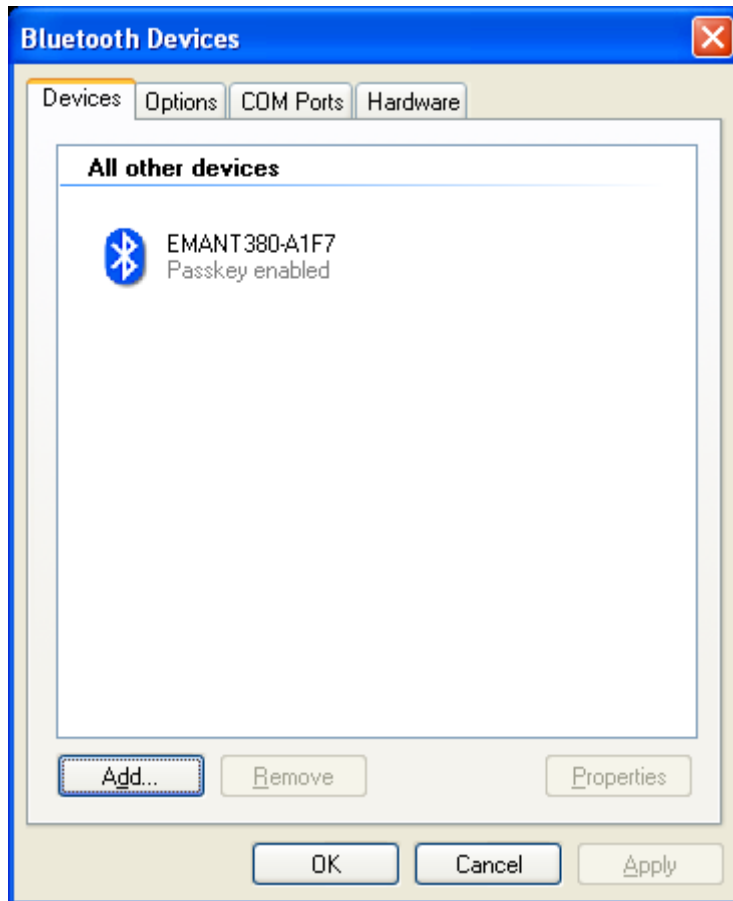
c) Select the EMANT380 found and click **Next** .



d) Type in **1234** for the passkey and click **Next**



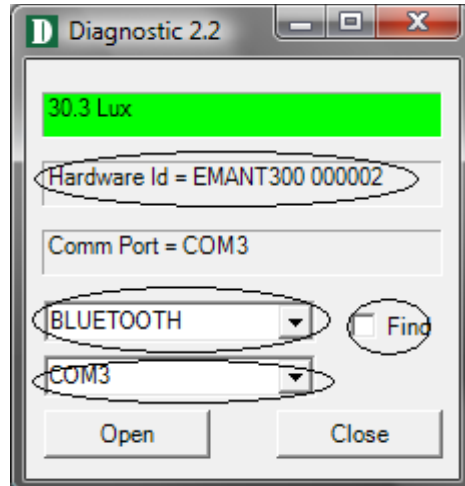
e) Note the Outgoing COM port (in this case it is **COM3**). This will be the COM port you will use in your programs. Click **Finish**




f) The EMANT380 is paired.

## Using EMANT380 Bluetooth DAQ Starter 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 program.
  - Goto to **Bluetooth Installation for Windows->NET** folder.
  - Click on **Diagnostic.exe** to run the program.



- Select **BLUETOOTH** and the correct COM port (in this case it is **COM3**)
  - If the drivers are correctly installed, the program runs. The Hardware Id will be displayed.
  - If you have the **Light Application Adaptor**, you can run the following checks
    - i. shine a light or block the photodiode (BPW34). The LUX Meter will display the changed light intensity
    - ii. The Light Application Adaptor LEDs will light up in sequence
    - iii. When you press the switch, the program's LED will turn from Green to Red
  - Close the Diagnostic program by clicking on .
3. If you are new to .NET programming and DAQ, proceed to the instruction guide Build a Light Intensity Logger. The examples are for the EMANT300 USB DAQ. With the USB DAQ, there is an autofind COM Port feature in the Open Method. For the EMANT380 Bluetooth DAQ, you need to specify the COM Port.

```
DAQ.Open(false, "COM3");
```
  4. Before you start on your project, refer to the connection pinout and schematics found in the product specifications and application notes.



## Troubleshooting

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

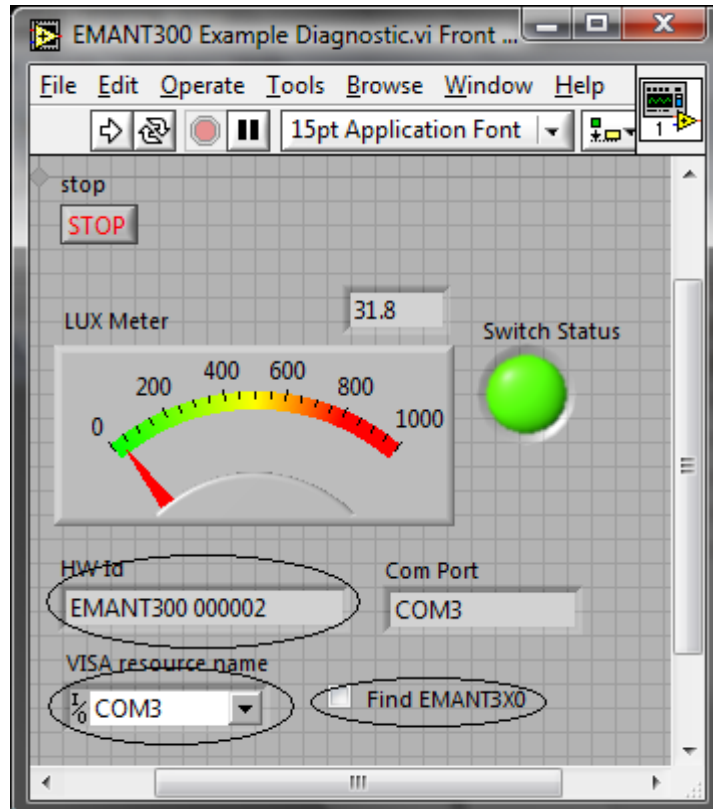


### Possible problems

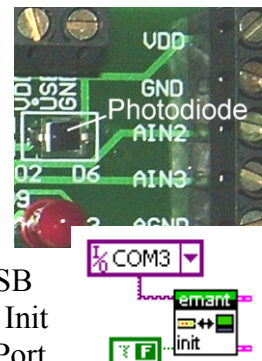
1. Check your batteries.
2. Update to the latest Bluetooth driver from the manufacturer. If you are using the Blue Soleil driver, download the latest version.

## Using EMANT380 Bluetooth DAQ Starter 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 **Bluetooth Installation for Windows->LabVIEW** folder.
  - Open the **EMANT300 Example Diagnostic.VI**
  - Select the correct COM port (in this case it is **COM3**)
  - Uncheck **Find EMANT3X0** and
  - Run the diagnostic LabVIEW program.



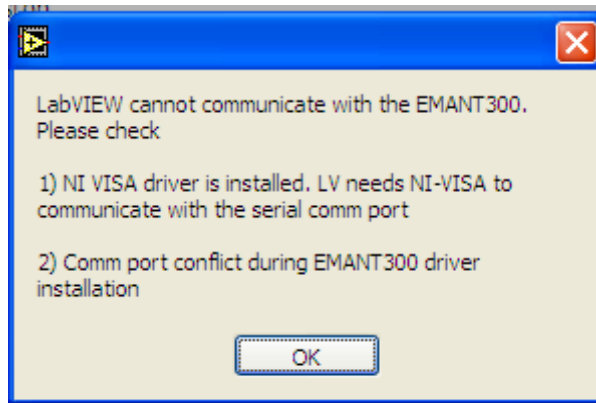
3. If the drivers are correctly installed, the program runs. The Hardware Id will be displayed.
4. If you have the **Light Application Adaptor**, you can run the following checks
  - shine a light or block the photodiode (BPW34). The LUX Meter will display the changed light intensity
  - The Light Application Adaptor LEDs will light up in sequence
  - When you press the switch, the LabVIEW LED will turn from Green to Red.
5. Close LabVIEW. The EMANT380 is ready for LabVIEW use..
6. If you are new to LabVIEW and DAQ, proceed to the instruction guide Build a Light Intensity Logger. The examples are for the EMANT300 USB DAQ. With the USB DAQ, there is an autofind COM Port feature in the Init VI. For the EMANT380 Bluetooth DAQ, you need to specify the COM Port and set **Find** to False
7. Before you start on your project, refer to the connection pinout and schematics found in the product specifications and application notes.





## Troubleshooting

If your .NET diagnostic runs OK, and you received the following dialog box when you run the LabVIEW diagnostic.VI, close all programs. Install NI VISA if you have not done so. Rerun the diagnostic.VI



*LabVIEW is a trademark of National Instruments*