PhidgetAccelerometer

Phidgets are the most user-friendly system available for controlling and sensing the environment from your computer. People with absolutely no hardware knowledge or experience can include dual axis accelerometers into their projects. It is just a matter of plugging your Phidget-Accelerometer into the USB port on your computer. After that, you can use the simple to program Phidgets software libraries to access these devices.

The PhidgetAccelerometer is a dual axis accelerometer that can measure ± 5 gravities (± 49.0 m/s^2) change per axis. It can measure both dynamic acceleration (vibration) and static acceleration (gravity or tilt). It is internally calibrated to be very accurate.

The PhidgetAccelerometer can be controlled from Windows, Linux, and Mac OS X. High-level programming interfaces are available for Visual Basic, C, C++, Flash, .NET, Java, LabVIEW, etc.

What Can the PhidgetAccelerometer Do?

A PhidgetAccelerometer can be used to give a realistic tilt mechanism on your carefully restored pinball machine. It can be used to give an estimate of the speed of your model racing car

Getting Started on Windows 2000 / XP

The PhidgetAccelerometer can be controlled from a variety of Software Development Environments. In Visual Basic the PhidgetAccelerometer software component provide a high-level programmer interface. Here is how to get started under Windows 2000 or Windows XP.

Step 1. What you need to have ready

- Your PhidgetAccelerometer.
- A USB cable.
- A computer running Windows 2000 or Windows XP.
- An Internet connection and a Web browser.

Step 2. Assemble your hardware

- Plug the flat end of the USB cable into your PhidgetAccelerometer.
- Plug the rectangular end of the USB cable into the USB connector on your computer (you can do this at any time).

Step 3. Install the software

Phidgets use a library installed on your computer. This only has to be installed once no matter how many different types of Phidgets you have.

- Have you previously installed the Phidget library? If so, you can skip this step.
- To install the library go to www.phidgets.com >> Downloads >> Release.
- Select the PHIDGET.msi file.
- A dialog box will appear asking if you would like to open the file or save it to your computer. You can do either, but if you are unsure just select "Open" and follow the instructions.
- Do you want to update a previously installed Phidget library? If so, you must remove the old library when prompted to do so.

Step 4. Download the sample programs

- Go to www.phidgets.com >> Downloads >> Release.
- Select the Examples.zip file.
- Save the zip file to a place of your choosing, and then uncompress it.
- You will find many executables in the Visual Basic folder, and their source in the sub-folders.

- PhidgetMonitor.exe will show you what Phidgets are plugged in. If you have followed Step 2 and Step 3, a PhidgetServo should be displayed in the list, along with its serial number. The source for this .exe is in the PhidgetManagerExamples folder.
- All PhidgetAccelerometer samples have a "accelerometer" prefix. Try them! All source code can be found in the PhidgetAccelerometerExamples folder.

Step 5. Try Programming a Phidget

- Go to www.phidgets.com >> Documentation.
- Read the documentation for the PhidgetManager, the IPhidget, and read the documentation under the PhidgetServo heading.
- Based on this documentation, we recommend you examine the source of the sample programs mentioned in Step 4.
- Now try modifying the samples. Or code your own from scratch.

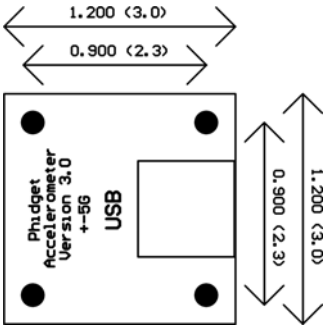
Step 6. Learning more ...

- Explore www.phidgets.com. We recommend you visit Projects and Examples to see what other people have done. For new applications or other programming languages visit the Forums.

Step 7. Read the license agreement

Go to www.phidgets.com >> Documentation and select the License link. Note that the term Phidget™ is trademarked, and that the name PhidgetAccelerometer is synonymous with Phidget™.

Hardware Description



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Device Specification

Position Update Rate	Approx. 30 Hz
USB Current Consumption	100 mA