Working with Phidgets in GCC/MinGW

Overview

This guide is designed to provide support for compiling Phidget projects using GCC. For information specific to coding with Phidgets in C and C++, please see the VC/VC++ guide.

Environment and Libraries

— VC/VC++/Borland Platform Files instead of Examples Now. Also x86 and x64 version differences.

First, we need to set up the proper environment and get the necessary files off the Phidgets website. Visit the programming section at www.phidgets.com and get the latest:

- VC/VC++/Borland Examples

You will need the latest Phidget21 Windows library and header from the VC/C++/Borland examples to program and use Phidgets in C. Make sure to copy the lib and header into your project. We also recommend that you download the following reference materials from the programming section:

- Phidget Framework
- C API Manual
- Programming Manual
- The Product Manual for your device

The Phidget Framework can be used to test your device before creating your own code. The C API manual contains calls and events for every type of Phidget and can be used as a reference. You can find a high level discussion about programming with Phidgets in general in the Programming Manual. The Product manual for your device also contains an API section that describes limitations, defaults, and implementation details specific to your Phidget.

GCC/MinGW

As an alternative to Visual C++ under Windows, GCC/MinGW can be used compile projects using Phidgets. However, the compiler does not support the “deprecated” directive, so some changes must be made to the phidget21.h before it can be used. Each prototype in the header that uses the deprecated directive must be removed and can be safely commented out. A trick is to use Find and Replace to search for “__declspec (deprecated” and replace all instances with “//__declspec (deprecated”. Afterwards, include the phidget21.lib into your project before you build. For example, the project can be built from the console with:

```
g++ MyProject.cpp phidget21.lib
```

MinGW is available free for download from http://www.mingw.org/. If you get undefined references to _imp__CPhidget functions in a different MinGW based compiler, then check to make sure that the compiler is correctly including the lib.