OS - Windows

1 Quick Downloads

- 2 Getting Started with Windows
 - 2.1 Install
 - 2.2 Verify
- 3 Programming
- 4 Phidget Network Server
 - 4.1 Try it Out!
 - 4.2 What's Next?
- **5** Advanced Information
 - 5.1 Windows XP
 - 5.2 Manual File Installation
 - 5.3 Windows in a Virtual Machine
 - 5.4 Installing Without an Internet Connection

Quick Downloads

Already know what you're doing? Here you go:

- 32-bit Installer Download
- 64-bit Installer Download

Don't want the installer? After downloading the files, be sure to check out the Advanced Information section below.

- Phidget22 Libraries (32-Bit and 64-Bit development files without an installer)
- Software License

If you need older versions of the Phidget22 windows libraries, click here. If you need Phidget21 libraries, click here.

Getting Started with Windows

Welcome to using Phidgets with Windows. If you are ready to go, the first step in creating Windows applications with Phidgets is installing our libraries!

Install

To install our libraries, download the installer for your system:

- 32-bit Installer Download
- 64-bit Installer Download

When prompted, continue with the installation:

🖟 Phidget22 Libraries		_		×
Welcome to the Phidget	22 Libraries	Setup Wiza	ard	
The installer will guide you through the st	eps required to insta	ll Phidget22 Librarie	s on your (computer.
WARNING: This computer program is pro Unauthorized duplication or distribution o or criminal penalties, and will be prosecut	f this program, or any	portion of it, may re	esult in sev	/ere civil
	Cancel	< Back	N	ext >

The libraries are now installed on your machine. Next, let's verify that they are working properly.

Verify

The best way to verify that your libraries are working properly is to use the Phidget Control Panel. The control panel is a powerful tool that will help you develop your Phidgets applications. Get started by following the instructions below:

Find the



icon in the taskbar. If it is not there, open up the start menu and search for Phidget Control Panel



Next, double-click on the Phidgets icon to bring up the Phidget Control Panel. You can now see all the Phidgets that are plugged into your machine, as well as any Phidgets that are on the network:

Phidge	et Control Panel			- 0	×
File He	elp				
Phidgets	Network Service	PhidgetSBCs			
Name	Dhidaata	^	Serial #	Channel	Version
	VINT Hub Phidge	t	370181		117
÷	Port 1				
Đ.	Port 2 Port 3				
	Port 4				
Double Clic	k to launch Ul			Log	<u>15</u>

Click on the + beside a device to expand it so that you can see all available channels. Double-click on one of these channels to open up a window that lets you interact with it.:

D Phidget Control Panel	- 🗆 X			
File Help				
Phidgets Network Service PhidgetSBCs				
Name	Serial # Channel Version			
	RFID Reader/Writer		-	
	Phidget Info Attached: 1024 - PhidgetRFID Read-Write Version: 101 Serial Number: 377511 Channel: 0			
	Tag Read Tag String: Protocol: Antenna Enabled Ckeyboard Output Enabled	Tag Write Tag String: Protocol:	phidgetsinc PhidgetTAG Lock	√ Write
Double Click to launch Ul	Logs 📎::			

The Phidget Control Panel can be used for testing devices, updating firmware, enabling a Phidget Network Server, and more! Visit the Phidget Control Panel page for more information.

Your Phidget is now able to communicate with your development machine. The next step is selecting a

programming language so you can start to write some code!

Programming

Ready to write some code? Select one of the programming languages below:

Great choices for beginners:

- C#
- C
- Java
- Python

Also supported:

- JavaScript
- Visual Basic .NET
- LabView
- Max/MSP

Phidget Network Server

The Phidget Network Server is an extremely useful tool that allows you to remotely control Phidgets over your network. If you haven't already, check out the Phidget Network Server page for a complete overview.

Try It Out!

In order to try the Phidget Network Server out, first download and install Bonjour for Windows on your host computer and your client computer.

- Host computer: the computer that is physically connected to the Phidgets via USB and is running the Phidget Network Server.
- Client computer: a computer running a Phidgets application that accesses Phidgets connected to the host computer.

If you only have one computer, don't worry, your machine can act as both a host and a client.

Next, open the Phidget Control Panel on your host computer. Do this by double-clicking on the

icon in your taskbar, or, by searching for *Phidget Control Panel* in the start menu. Navigate to the Network Server tab, you will see something like this:

1/16/2018

Phidget Control Panel		_		X
File Help			_	
Phidgets Network Server PhidgetSBCs				
Settings				
Startup Type: Automatic				\sim
Phidget Server				
Imabled Imabled Imables	Log Level:	Info	~	
Server Name: PHIDGETS-PC	Port:	5661		
Password:]			
	-			
Webserver Enabled <u>http://localhost:8989</u>	Port:	8989		
Docroot: C:/Program Files/Phidgets/Phidget22/htm			owse	
Note: Webserver is required for JavaSc	ript API suppo	rt		
Dictionaries				
Enable User Dictionaries Enable Monitorir	ng/control Dict	tionary		
Label Se	erial # Er	nabled		۱.
	Sta	art	Resta	rt
Network Server: Stopped			Lo	gs Lee

From here, you can start, stop, or restart the Network Server. You can also decide how and when the Network Server will start.

0/2010						00			goto oupp	
Phice	lget Contr	ol Pane	I					_		×
File	Help									
Phidgets	Network	Server	PhidgetS	BCs						
Settin	igs									
Startu	ир Туре:	Automa								\sim
Phie	dget Servei	Automa Manual Disable	ł				y Level.			
C	ver Name:		ETS-PC		311		Port:	5661	Ť	
		FHID	IETS-FC				FOIL	0001		
	Password:									
We	bserver									
		Ena			alhost:898		Port:	8989		
	Docroot:	C:/Pro	gram Files	/Phidgets	/Phidget22	/html/		Br	owse	
		Note: \	Vebserver	r is require	ed for Java	Script A	PI suppor	t		
Dic	tionaries									
	Enable Us	er Dictio	onaries	🗹 En	able Monit	oring/cor	ntrol Dicti	onary		
	Labe	el				Serial #	En	abled		
Þ										
							Sta	rt	Rest	art
Network	Server: Sto	opped							L	ogs

Select *Automatic* as the startup type from the list and press the start button. By enabling automatic startup, the Network Server will run immediately after Windows boots, so you won't have to manually start it again.

Now that you have the Network Server running on your host computer, the next step will be accessing the Phidgets connected to your host computer from your client computer. Follow the steps below:

Open the Phidget Control Panel on your client computer. You will see something like this:

1/16/2018

OS - Windows - Phidgets Support

Phidget Control Panel		- 0	×
File Help			
Phidgets Network Server PhidgetSBCs			
Name → Local Phidgets	Serial #	Channel	Version
E Remote Server: PHIDGETS-PC (Phidgets-PC.local.)			
tier 🕸 PhidgetRFID Read-Write	377511		101
—	2	0	100
Double Click to launch Ul		Log	<u>15</u> 🚳:

As you can see from the image above, Phidget servers are listed under the following heading:

• Remote Server: Servername (link local address)

You now have access to the Phidgets that are connected to your host computer. Try double-clicking one of them to bring up an example:

P RFID Reader/Writer		-		×
Phidget Info Attached: 1024 - PhidgetRFID Read-Write				
Version: 101 Serial Number: 377511 Channel: 0		REMOTE	1.	s A
Tag Read Tag String: 01056ddb21 Protocol: EM4100	Tag Write Tag String: Protocol:	EM4100		
Antenna Enabled 🔲 Keyboard Output Enabled			Write	_

Note the label in the example indicating a remote connection. This means the example is using the Phidget Network Server in order to communicate with the device.

What's Next?

Now that you have seen the Phidget Network Server in action, you may be interested in implementing an application that takes advantage of all it's features. Luckily, every programming language we support comes with example code on how to do this! Jump to programming languagesabove.

For more information about the Network Server tab on the Phidget Control Panel, visit the Visit the Phidget Control Panel page.

Advanced Information

Windows XP

Because .Net 4.0 doesn't work on Windows XP, the installer for the Phidget22 drivers will not work. Instead, see the Manual File Installationsection for installation instructions.

Additionally, the Phidget Control Panel is not supported in Phidget22 under Windows XP, and the precompiled examples found under C:/Program Files/Phidgets/Examples will not work. Other code samples found on our language pages will still work, although for C# and VB.Net examples, you'll have to manually change the .Net framework version in the project file from 4 to 3.5 in order to run them.

Manual File Installation

If you would like to perform a manual file installation, first download the library files:

• Phidget22 Windows Development Files

Next, take a look at the table below to see where these files are normally placed:

File	
phidget22.dll	contains our library, which is used at run-tim
phidget22.lib	is used by your compiler to link to the dll. Yo
x86 Folder	contains the versions of <i>phidget22.lib</i> and <i>p</i>
NetworkServer.exe	is used to control Phidgets remotely over a
phidget22.h	lists all the API function calls available to yo
phidget22.jar	is an archive containing the Phidgets library
Phidget22.NET.dll	is the Phidgets library for the .NET framewo
Phidget22.NET.XML	provides the IntelliSense in-line documentat

1/16/2018

/16/2018	OS - Windows - Phidgets Support
Phidget22java.dll	is the library for Phidgets in Java.
Phidget22Manager.exe	is the Phidget Control Panel, a tool to quickl
phidget22.dll	contains our library, which is used at run-tim
Phidget22java.dll	is the library for Phidgets in Java.
phidget22.dll	contains our library, which is used at run-tim
4	•

Windows In A Virtual Machine

Phidgets can be used inside a virtual machine. Instructions for VMWare and VirtualBox are provided below. Virtual PC is not supported as USB Phidgets requires a virtual platform that supports HID USB Devices and since Virtual PC does not support HID USB devices, Phidgets may not be used.

As always, please ensure that you have the latest libraries installed on the virtual machine and that you are using the latest version of your virtual software.

VMWare:

To enable USB Phidgets, select Virtual Machine -> Removable Devices -> and select the Phidget Input Device -> Connect.

VirtualBox

To enable USB Phidgets, VirtualBox Guest Additions(Devices -> Install Guest Additions) may need to be installed. Afterwards, click on Devices -> USB Devices and select the Phidget device to enable. The state should go from Busy to Captured. VirtualBox may bring up a new hardware wizard in the host operating system, which has to be installed. Please note that Phidgets with USB hubs (for example, the 1019 Interface Kit with 6-port hub), are undetectable; Fortunately, Phidgets that are attached to such Phidgets are detectable.

Note that Windows XP "mode" in Windows 7 does not support Phidgets.

Installing Without An Internet Connection

When running the Phidgets installer it will check for other applications such as .NET. Part of this requires an active internet connection. The downside to this is that even if you have the applications installed already, if you do not have an internet connection you cannot complete the installation

process. There is a way around this however which involves extracting the Phidget22 .msi file out of the .exe installer. To do this follow these steps:

• Run the installer.

🙀 Phidget22 Libraries		-		×
Welcome to the Phidget	22 Libraries	Setup Wizar	rd 🔰	
The installer will guide you through the sl	teps required to insta	ll Phidget22 Libraries	on your coi	mputer.
WARNING: This computer program is pr Unauthorized duplication or distribution o or criminal penalties, and will be prosecu	of this program, or any	portion of it, may res	ult in sever	e civil
	Cancel	< Back	Next	>

• Once the installer has started up and you are at the first informational window, navigate to your

Local Disk\Users\"username"\AppData\Local\Temp folder.

• Look for the most recently modified folders. The Phidgets one will not have an obvious title, most likely a seemingly random string of numbers and characters.

File Home Share	View			- 0	× ~ (
$\leftrightarrow \rightarrow \land \uparrow \square \rightarrow$ Thi	s PC > Local Disk (C:) > Users >	Local > Temp >	ٽ v	Search Temp	P
	Name	Date modified	Туре	Size	
📌 Quick access	TCDC43C.tmp	1/17/2017 8:25 AM	File folder		
a OneDrive	TCDC43D.tmp	1/17/2017 8:25 AM	File folder		
	nsohtmlclip1	1/17/2017 8:49 AM	File folder		
🖳 This PC	505E40A6-6882-47E5-B1D2-40C098F4367E	1/18/2017 10:18 AM	File folder		
> 📃 Desktop	33F51F3B-BC0B-4C92-ACAA-65641BF8B51F	1/18/2017 11:06 AM	File folder		
> 🗄 Documents	AC76BA86-7AD7-1033-7B44-AC0F074E4100}	1/19/2017 7:26 AM	File folder		
> 🕹 Downloads	6c2f1114f53557d01e80765adaf7de77	1/19/2017 11:08 AM	File folder		
> Music	8A208C3C-1A93-4AA9-9110-44EC8E425687	1/19/2017 1:14 PM	File folder		
> E Pictures	{16AA8FB8-4A98-4757-B7A5-0FF22C0A6E33}_1600_1	1/20/2017 7:04 AM	File folder		
	appInsights-node	1/20/2017 9:34 AM	File folder		
> 📑 Videos	VSDE6EE.tmp	1/20/2017 9:50 AM	File folder		
> 🚡 Local Disk (C:)	KP000.TMP	1/20/2017 10:42 AM	File folder		
> 📲 🤍 🚐 🗐	VSD4F77.tmp	1/20/2017 10:42 AM	File folder		
> 👝 Local Disk (Q:)	🔂 ecobox.css	2/11/2016 4:25 PM	Cascading Style	3 KB	
Artwork	wct30B9.tmp	5/10/2016 7:57 PM	TMP File	8,829 KB	
VINELWORK	wmsetup.log	8/4/2016 8:39 AM	Text Document	1 KB	
	ea.6D151227-6BD9-726D-B30E-A8A018DCC82B_5	8/4/2016 9:13 AM	Video CD Movie	1 KB	
	ea.18DDC675-D472-0DB4-9563-7DF7C34F512C_5P.	8/4/2016 9:13 AM	Video CD Movie	1 KB	
	🥺 sa.31A692E0-F967-E4F8-A441-21A804580E9E_5Pu	8/4/2016 9:13 AM	Video CD Movie	1 KB	
	sa.FACF9DDE-1FF1-B57D-4D1D-CE479FDD42AF_5	8/4/2016 9:13 AM	Video CD Movie	1 KB	

• In this example the folder was named "IXP000.tmp" but it may be different for you. In the folder you will find the Phidget22_x64.msi or Phidget22_x86.msi file. This file can be run to install the Phidgets libraries without needing an internet connection.