

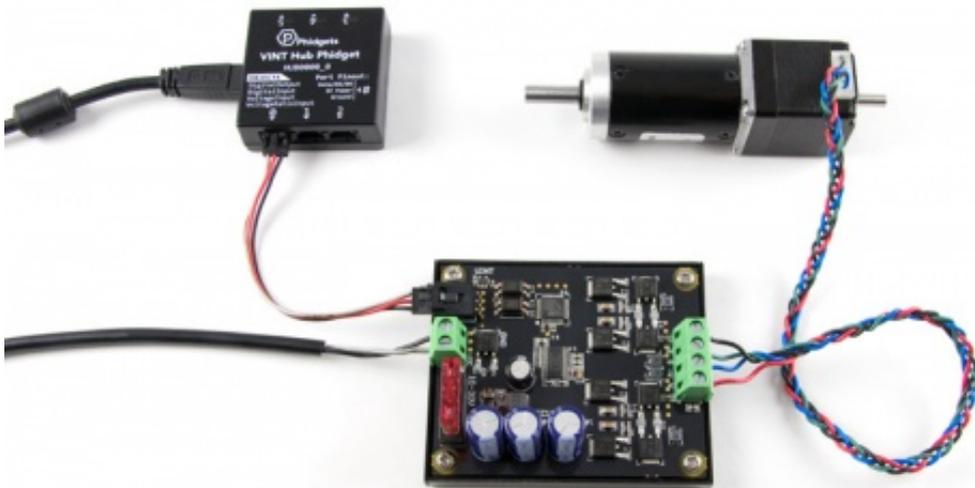
# 8A Stepper Phidget

## Part 1: Setup

Welcome to the STC1002 user guide! In order to get started, make sure you have the following hardware on hand:

- STC1002 - 8A Stepper Phidget
- VINT Hub
- Phidget cable
- USB cable and computer
- Power supply (10-30V DC)
- 4-wire, 6-wire, or 8-wire bipolar stepper motor

Next, you will need to connect the pieces:



1. Connect the STC1002 to the VINT Hub using the Phidget cable.
2. Connect the stepper motor to the Phidget's output terminals. See your motor's data sheet or product page for wiring instructions.
3. Connect the VINT Hub to your computer with a USB cable.
4. Connect the power supply to the power terminals.

Now that you have everything together, let's start using the STC1002!

## Phidget Control Panel

In order to demonstrate the functionality of the STC1002, the Phidget Control Panel running on a Windows machine will be used.

The Phidget Control Panel is available for use on both macOS and Windows machines.

### Windows

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

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### macOS

To open the Phidget Control Panel on macOS, open Finder and navigate to the Phidget Control Panel in the Applications list. Double click on the  icon to bring up the Phidget Control Panel.

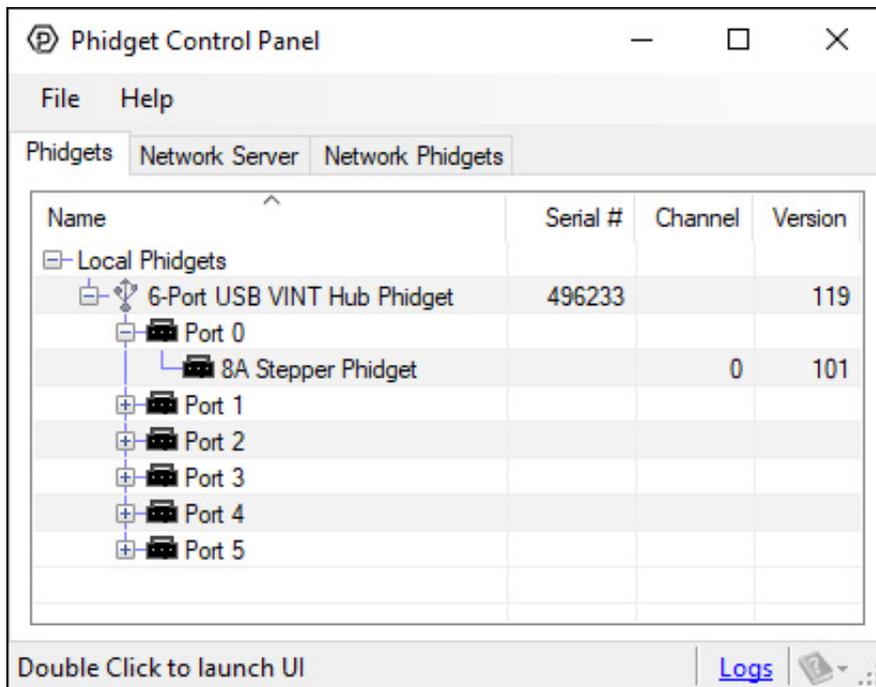
For more information, take a look at the getting started guide for your operating system:

- [Getting started with Windows](#)
- [Getting started with macOS](#)

Linux users can follow the getting started with Linux guide and continue reading here for more information about the STC1002.

# First Look

After plugging the STC1002 into your computer and opening the Phidget Control Panel, you will see something like this:



The Phidget Control Panel will list all connected Phidgets and associated objects, as well as the following information:

- **Serial number:** allows you to differentiate between similar Phidgets.
- **Channel:** allows you to differentiate between similar objects on a Phidget.
- **Version number:** corresponds to the firmware version your Phidget is running. If your Phidget is listed in red, your firmware is out of date. Update the firmware by double-clicking the entry.

The Phidget Control Panel can also be used to test your device. Double-clicking on an object will open an example.

## Part 2: Using Your Phidget

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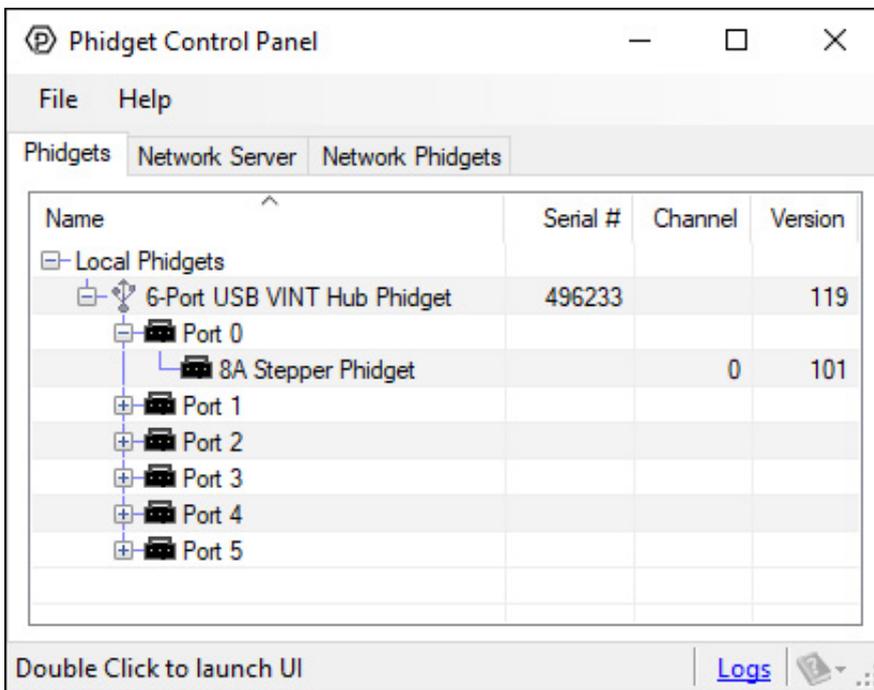
### About

Control a bipolar stepper motor ( up to 8A) with the STC1002. With this Phidget, you can set your motor's position, velocity, and acceleration.

## Explore Your Phidget Channels Using The Control Panel

You can use your Control Panel to explore your Phidget's channels.

1. Open your Control Panel, and you will find the **8A Stepper Phidget** channel:



2. Double click on the channel to open an example program. This channel belongs to the **Stepper** channel class:

- ▶ **Stepper Motor** Control stepper position and other motor properties

## Part 3: Create your Program

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1. Setting up your Programming Environment
2. Phidget Programming Basics

## Part 4: Advanced Topics and Troubleshooting

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- ▶ **How do I know what channel, serial number, or hub port to use in my program?**
- ▶ **Rescale Factor**