

Configure the Serial Port in VG03 Config

Application Support

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Introduction

For ADC systems that utilize a VelociGraph of any model, the user interface needs to be told which COM port connects to the VelociGraph for recording speed data. In the 80's and 90's, this was a simple affair: almost every computer had a serial port, and that port was always named COM1.

In these modern times, where no computers have a serial port and Microsoft Windows assigns inconsistent COM port number to USB adapters, setting the COM port in the user interface requires a few extra steps. This document will guide you through the process.

For the purposes of this document, the model of VelociGraph does not matter; in all cases, they will be connecting to the computer via a USB->Serial converter, which will then receive a COM port number from Windows.

Example Adapters

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USB->RS485 Port iBeams and VG03 Programming Cable	USB->RS232 Port VG02 or VG01	USB->RS485 VG03

Installing Drivers

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Before a USB->Serial adapter can be used, the drivers for the device must be installed. The drivers built-in to Windows almost never work properly, even if the COM port appears to the computer.

Most USB->serial adapters use the same chip from FTDI, and so the FTDI drivers supplied on ADC's website are usually what's required. The installer for the drivers can be downloaded here:

https://automateddesign.com/download/ftdi_drivers_manuals_all.zip

Run the installer after downloading, accepting all defaults.

Determining the Serial Port of the USB->Serial Converter

A COM port on a Windows computer is named simply COMx, where x is a number (i.e. COM1, COM5, COM7). When you plug in the USB->Serial adapter to the computer, Windows assigns a named COM port to the device. There is no way to predict this COM port name, but it is easy to find out which name has been assigned.

- 1. Make sure the USB->Serial Adapter is connected to the computer.
- 2. Open the Windows Start Menu and type: Control Panel



- 3. Select Control Panel.
- 4. When the Windows Control Panel appears, locate the search box and type: Device Manager

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- 5. Select Device Manager
- 6. In the device tree, expand Ports (COM & LPT). The COM port for the USB adapter should be displayed there.
 - 6.1. NOTE: Other pre-existing COM ports will also be displayed. If multiple COM ports are displayed, remove the USB->Serial adapter from the computer. One of the ports listed will disappear. Then, plug the USB->Serial Adapter into the



6.3. In the case of this example, the COM port of the connected USB->Serial adapter is COM3

Configure the Settings of VG03 Config

Start the VG03 Config program and set the COM port number to match.

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NETWORK	VELOCIGRAPH UNIT (VG03)
	Version:
MATCH TO COMx Send All NUMBER	Mode: Net Only FPS M/S MSEC Event Network with Diagnostic
	Network Address: 1 Dead Time: 750 µsec Valid for FPS and M/S Mode only: Distance: 6 inches 12 inches 12.000 inches \$
PHILIPPIN	Trip Level: 5.0 volts LCD Contrast: 32
CORPORATION	Set Default Values

Now press the Seek button to scan.

See the VG03 Manual for further details regarding VG03 Config.

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