

COMMAND LINE (WINDOWS, MAC, LINUX)

As mentioned earlier, you *can* use command line interfaces to create serial connections. The major limiting factor is the lack of connection options. Most of the programs we've discussed so far have a slew of options that you can tweak for your specific connection, whereas the command line method is more of a quick and dirty way of connecting to your device in a pinch. Here's how to accomplish this on the three major operating systems.

Terminal and Screen (Mac, Linux)

Mac

Open Terminal. See the Connecting to Your Device section for directions.

Now type `ls /dev/tty.*` to see all available ports.

You can now use the `screen` command to to establish a simple serial connection.

Type `screen <port_name> <baud_rate>` to create a connection.

```
joelimac:~ joel.bartlett$ ls /dev/tty.*
/dev/tty.Bluetooth-Modem      /dev/tty.iMedia-C185-RNI-SPP
/dev/tty.Bluetooth-PDA-Sync  /dev/tty.usbserial-A6007w0D
/dev/tty.RN52-053D-SPPDev
joelimac:~ joel.bartlett$ screen /dev/tty.usbserial-A6007w0D 9600
```

The terminal will go blank with just a cursor. You are now connected to that port!

To disconnect, type `control-a` followed by `control-\`. The screen will then ask if you are sure you want to disconnect.

There are other options you can control from screen; however it is recommended that you only use this method if you are comfortable with the command line.

Type `man screen` for a full list of options and commands.

Linux

The `screen` command can also be used in Linux. There are only a few variations from the Mac instructions.

If you do not have screen installed, get it with `sudo apt-get install screen`.

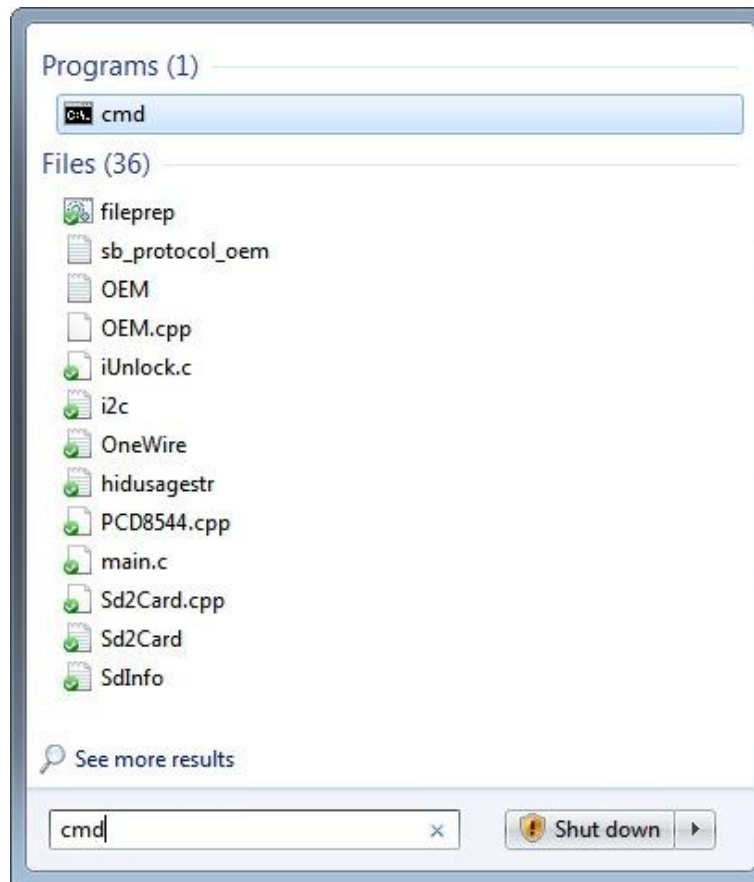
Making a connection is the same as Mac.

To disconnect, type `control-a` then `shift-k`.

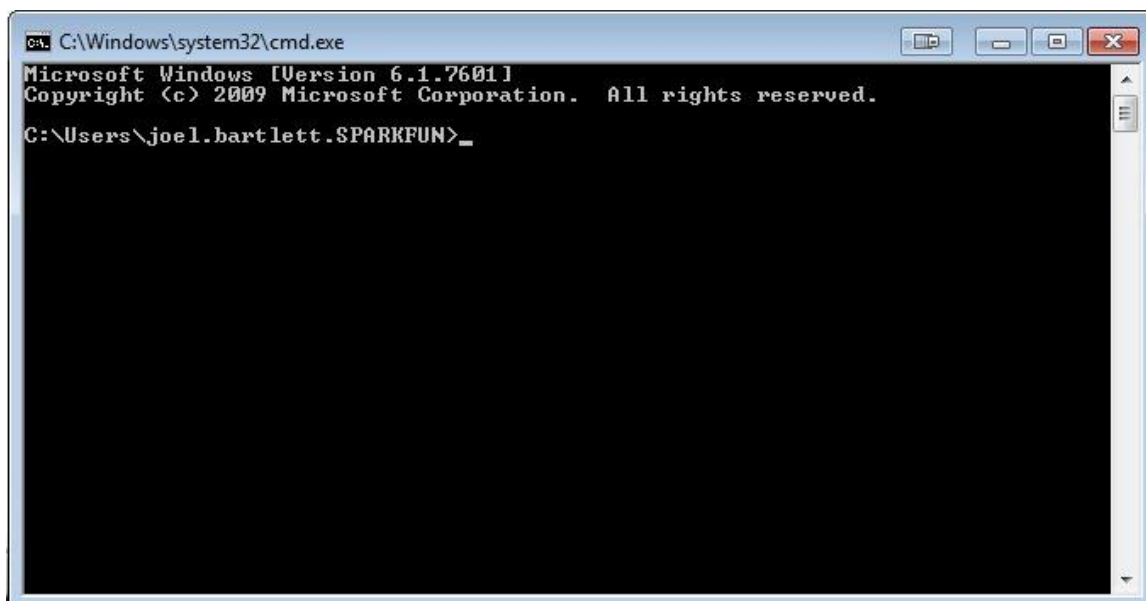
That's all there is to it.

MS-DOS Prompt (Windows)

The fastest way to get to the command line in Windows is to click on the start menu, type `cmd` into the search field, and press Enter.

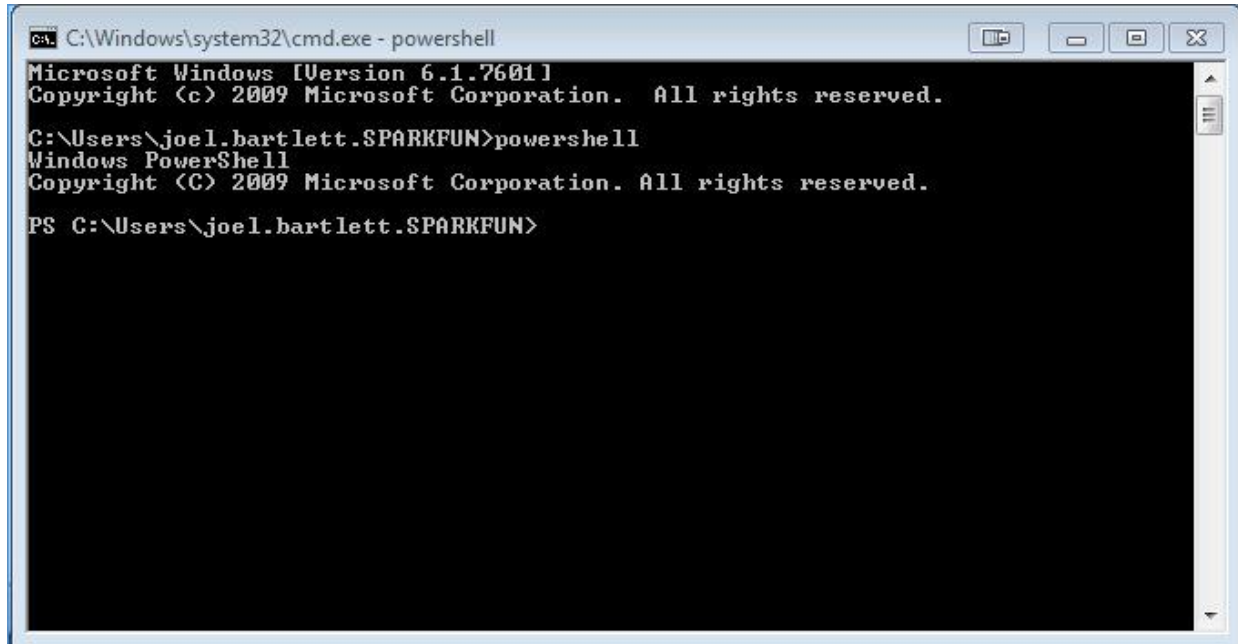


This will open up a blank MS-DOS command line prompt.



To be able to issue Serial commands, you must first enter PowerShell.

Type `powershell` to get into PowerShell command mode.



```
C:\Windows\system32\cmd.exe - powershell
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\joel.bartlett.SPARKFUN>powershell
Windows PowerShell
Copyright (C) 2009 Microsoft Corporation. All rights reserved.

PS C:\Users\joel.bartlett.SPARKFUN>
```

To see a list of all the available COM ports, type

COPY CODE

```
[System.IO.Ports.SerialPort]::getportnames()
```

You should now see something like this.

```
PS C:\Users\joel.bartlett.SPARKFUN> [System.IO.Ports.SerialPort]::getportnames()
COM1
COM2
COM7
```

Now create an instance of the port you want with this command

COPY CODE

```
$port= new-Object System.IO.Ports.SerialPort COM#,Buadrate,None,8,one
```

With that, you can now connect to and send data to or from that COM port.

COPY CODE

```
$port.open()
```

```
$port.WriteLine("some string")
```

```
$port.ReadLine()
```

```
$port.Close()
```

Again, this method of serial communication is only recommended for advanced command line users.

Source: <https://learn.sparkfun.com/tutorials/terminal-basics/command-line-windows-mac-linux>