

SPD programming tips December 29, 2018

The SPD series of power supplies feature remote programming capabilities and can be controlled via USB or LAN connection.

In this note, we will use Python and PyVISA to create a program that will connect to an SPD, enable the output, delay, and then disable the output.

There are two areas that differ from some other instrumentation:

The SPD requires “\n” termination only. Additional characters will cause a failure.

NOTE: SPDs will make an audible “beep” if there is a remote communications error

Delays, here using the Python “time.sleep” command, are helpful in sequencing and allow the instrument time to respond. 10-100 ms should do for most commands.

Here is a zipped download [Download not found]

**

```
#Dependencies:
```

```
#Python 3.7 32 bit
```

```
#PyVisa 1.7
```

```
import visa
```

```
import time # for sleep
```

```
import binascii
```

```
def main():
```

```
    rm = visa.ResourceManager()
```

```
    instadd = 'USB0::0x0483::0x7540::SPD3XGB4150080::INSTR'
```

```
    inst = rm.open_resource(instadd)
```

```
    inst.write_termination="" #Modify default termination character
```

```
    inst.write('OUTP CH1,ON') #Enable output
```

```
    time.sleep(2) #Sleep
```

```
    inst.write('OUTP CH1,OFF') #Disable output
```

```
if __name__ == '__main__':
```

```
    main()
```

```
*****
```

Here is an example for C#:

```
string supplyOff="OUTP CH1,OFF".TrimEnd('\r');  
spd1305x.Write(supplyOff);  
Thread.Sleep(5000);  
string supplyON= "OUTP CH1,ON".TrimEnd('\r');  
spd1305x.Write(supplyON);
```



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