

This is a small guide to get started. Done by Paco.

I write this in addition to linux guide (work in progress) by db260179.

<https://www.psx-place.com/threads/f...syscon-first-steps-and-error-reporting.30100/>

I will try to explain step by step, as easy as I can explain it.

Really this can be done in 10 minutes.

First of all let's make clear what we are doing:

We are simply running a python script that will let us communicate with the PS3 SYSCON (its brain), using a 3.3v serial (COM) port.

We can thank guys like 'M4j0r' and 'zecoxao' for making this possible in the first place. We are just running their script.

So, what do we need in order to run this script?

Python installed, with additional modules pycryptodome and pyserial

And a 3.3v serial (COM) port

*For Windows users (most people) this is what you can do:

-First install python 2.7.18 (you can get from python.org) (newer versions may be supported but 2.7.18 is guaranteed to work)

-When you run the installer, you can check the last box "add to Path environment variable" (it will make things easier; allows you to run python commands from any location) (see image at the end)

Once it's installed, you should already be able to run python commands and scripts. How? Directly from the windows command prompt (which you can open in many ways; I like shift+right click to open cmd window here) you can type:

python script.py

("script.py" is just an example; this should be the name (or full path) of the script you are trying to run)

But our particular script relies on two additional modules. (If you try without them, it will tell you the problem)

Don't worry,

-You can download and install them automatically by typing in the command line:

pip install pycryptodome

pip install pyserial

That's it. Now you should be able to run the magic script. Just specify the COM port and the syscon mode at the end.

-For example:

python script.py COM4 CXR

What COM port?

This is where the USB to serial 3.3v adapter comes in handy.

When you plug it into your computer, it should show up in device manager as a COM port. If not, you need to install drivers for it.

This will depend on your particular operating system and dongle.

What is CXR? This will depend on the syscon you are trying to communicate with. SW is for newer (SherWood) Syscons. CXR(F) for the older BGA models

Further details are available.

If all is correct, no errors will come up immediately. Even without anything physically connected.

You can then type AUTH, and will get

"Auth1 response invalid"

Of course, to get past this, everything has to be connected and working properly. Even then it may take a couple tries in a row. Eventually you should get:

Auth successful

Which means all is good and you can now run external commands (In capital letters) such as:

ERRLOG GET 00

(If you are still getting "Auth1 response invalid", first simply try again a couple times, turn the ps3 power off and on, if not, swap Rx and Tx wires around and repeat (This is not dangerous, don't worry). Check all the connections etc... (good GND is important too)...It should all work in the end)

That's it for now

*But what serial adapter dongle should I get?

-This is the one I got and it works. 2\$ worldwide.

US \$1.14 | High Quality FT232RL FT232 FTDI USB 3.3V 5.5V to TTL Serial Adapter Module Mini Port

https://a.aliexpress.com/_vLbCPR

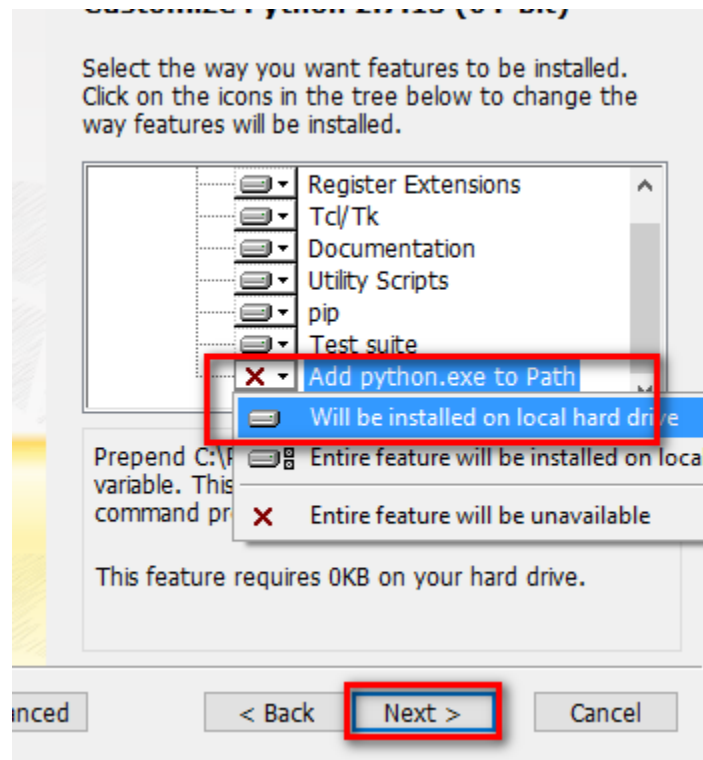
FT232RL is the name of the main IC.

But many others will work too. Get what's most available to you. Preferably from local seller. These are widely used for many other applications. They are COMMon.

You may need to download and install drivers manually If it doesn't automatically appear listed in device manager as a COM port

-Just make sure it's working at 3.3v. (Very important) (To make sure you can check 3.3v with a multimeter between Rx/Tx and GND) If it's 5v or more... It can damage the SYSCON so be careful... 3.3v only!

During python installation, check this option.
It will add python to PATH environment variable. Meaning you will be able to run python from every location on your computer. Not just the python folder.



Below is just an example from external mode CXR (with a system which does not even have a YLOD)

```
Administrator: C:\Windows\system32\cmd.exe - python PS3_Syscon(Mullion_SW)script.py COM6 CXR
C:\Users\Pistismonkis\Documents>python PS3_Syscon(Mullion_SW)script.py COM6 CXR
> AUTH
Auth successful
> ERRLOG GET 00
00000000 A0801001 FFFFFFFF
> ERRLOG GET 01
00000000 A0801001 FFFFFFFF
> ERRLOG GET 02
00000000 A0801001 FFFFFFFF
> ERRLOG GET 03
00000000 A0801001 FFFFFFFF
> ERRLOG GET 04
00000000 A0801001 FFFFFFFF
> ERRLOG GET 05
00000000 A0801001 FFFFFFFF
> ERRLOG GET 06
00000000 A0801001 FFFFFFFF
> ERRLOG GET 07
00000000 A0801001 FFFFFFFF
> ERRLOG GET 08
00000000 A0801001 FFFFFFFF
> ERRLOG GET 09
00000000 A0801001 FFFFFFFF
> ERRLOG GET 10
00000000 A0801004 16935CDB
> ERRLOG GET 11
00000000 A0801001 1693562E
> ERRLOG GET 12
00000000 A0801001 1691DD97
> ERRLOG GET 13
00000000 A0801001 1691DD5D
> ERRLOG GET 14
00000000 A0801001 1691DC8F
> ERRLOG GET 15
00000000 A0801001 1691DC75
> ERRLOG GET 14
00000000 A0801001 1691DC8F
> ERRLOG GET 16
00000000 A0801004 1690CD9C
> ERRLOG GET 17
00000000 A0801004 1690CB94
> ERRLOG GET 18
00000000 A0801004 1690C903
> ERRLOG GET 19
00000000 A0801004 1690C879
> ERRLOG GET 20
FFFFFFFF Answer length
> ERRLOG GET 21
FFFFFFFF Answer length
> -
```