

# Virtual Pinball Setup A-Z ( V.1.0 )

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## Intro

I put this guide together as a result of spending months of reading , researching and testing. This has been a source of frustration, headache and little sleep. Good thing coffee and beer were flowing. I am aware that people in the different forums have covered most of the topics below. The information is out there, I basically gathered the information, added my experience and wrapped up this guide. I will give credit to the content creator when needed.



## The Beginning

Setting up a virtual cabinet is fun and rewarding but trust me, it can be very frustrating and having a great community is so helpful. If you have questions, and trust me you will, post on Vpforums or Vpuniverse and you will find how great this community is. There are no such thing as a stupid question, we do not find the typical Forum response in this community such as “ Google it idiot or You are posting in the wrong category, or this question has been answered 1000 times” You will see that our great people will take the time to answer you question and are trying really hard to help you.

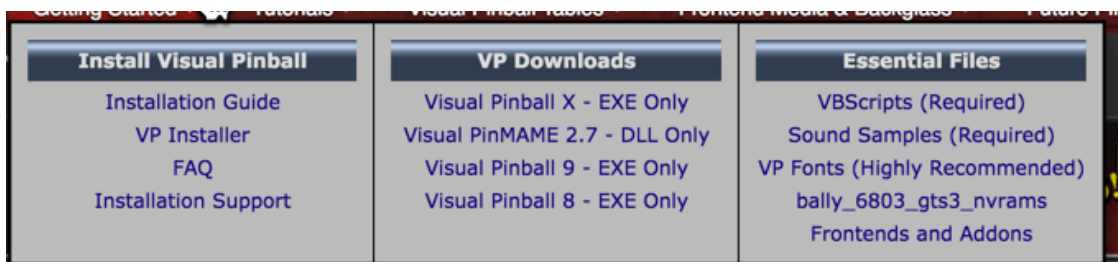
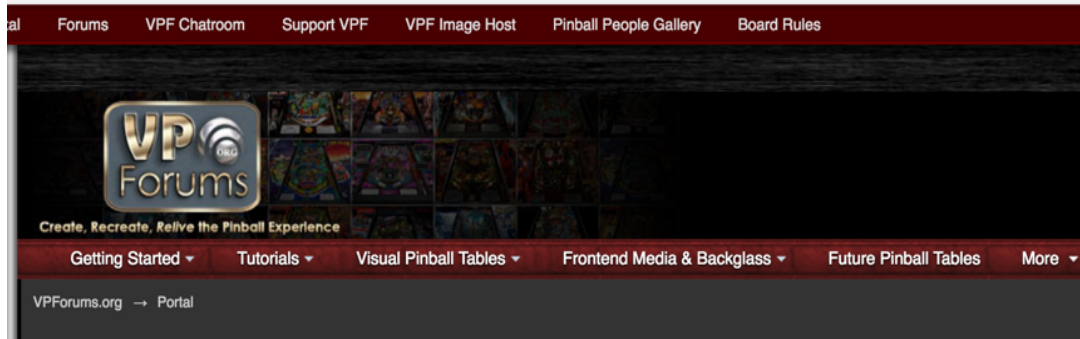
Here are the links of the communities that are so helpful.

- <http://www.vpforums.org/>
- <http://vpuniverse.com/>
- <http://www.pinsimdb.org/>

I will not go in details about getting started with your installation since there are amazing guide at Vp forums and other places. I am providing you with the steps and further research and testing will have to be done by you depending on your settings ( 2 or 3 screens, video card resolution, etc... )

You will have to create a free account in order to view and download the content on several websites.

Go to VPforums.com and once you are logged in, click on the getting started link.



click on the Installation Guide and it will guide you to what is required.

Intro Video Guide Youtube



[https://www.youtube.com/watch?v=5\\_sh8MaWa3c](https://www.youtube.com/watch?v=5_sh8MaWa3c)



## Downloads required

Here's is a reader's digest guide of what I do for a new installation. Download every programs below and placed them in a folder called Pinball Downloads. Some of these site will require you to create a free account. ( if the links are dead, just do a search for the name in the different forums )

1. Download VP installer, This is Visual Pinball

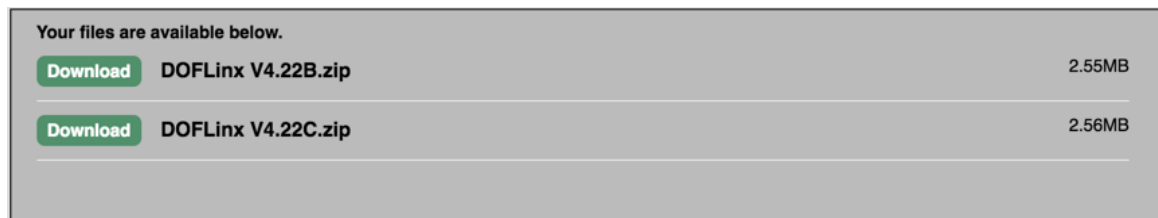
<http://www.vpforums.org/index.php?app=downloads&showfile=11573>



In the frontends and Add-ons section ( see photo above ) download the following,

2. DOFLINX 4.22

<http://www.vpforums.org/index.php?app=downloads&showfile=12318>



3. DOF 3 Beta <http://www.vpforums.org/index.php?showtopic=33080>

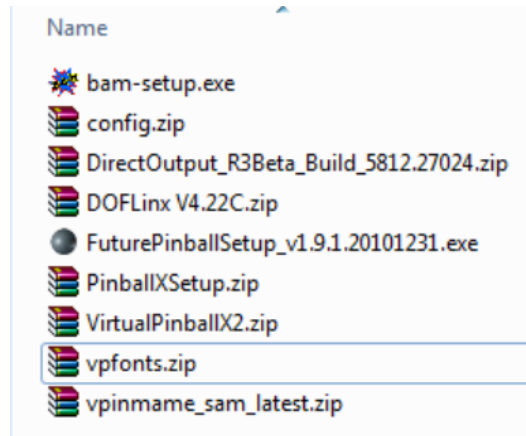


4. Download Future Pinball at <https://futurepinball.com/> and install in in the (C:\Pinball)

5. Download PinballX ( Front End interface ) <http://www.pinballx.com/>

6. Download Bam ( Better Arcade Mode for Future Pinball )  
<http://www.ravarcade.pl/>

That is pretty much all you need to get going on a cab.



## Computer Specs and Folder Structure

I tested 3 computers before biting the bullet and buying a decent computer. I had a Home made Pentium 4 with 4 gb of ram and a 1 Gb dedicated video card and it was powerful enough to run a 2 screen setup but it was very sluggish and I had issues with my 3<sup>rd</sup> monitor which was a 10" connected via a usb external display adaptor. I kept getting a blue screen both on Windows 7 32,64 windows 8 64. I then bought a used Acer I3 with 4gb of ram and a onboard Intel 4400 video card, and that did not work for Future Pinball, Kept crashing on my 3 screens setup.

I finally said screw this and went out and bought a used a Dell Gaming Computer with 12 Gb of Ram and a 2 Gb Nvidia dedicated video card for 400\$. This works amazing. There are probably as many opinions as there are Virtual pinball players as far as what setup should be used. I am not saying that this setup is a requirement, but save yourself some headache and buy something a little bit over powered. Some of the new tables coming out, Like Alien DOF and The walking dead LE are packed with effects and you want to be able to render them. Also think of future proofing your system, you don't want to re-do your system when the next big thing comes out.



<https://www.youtube.com/watch?v=qVw7PxjX2eI&t=25s>

System used:

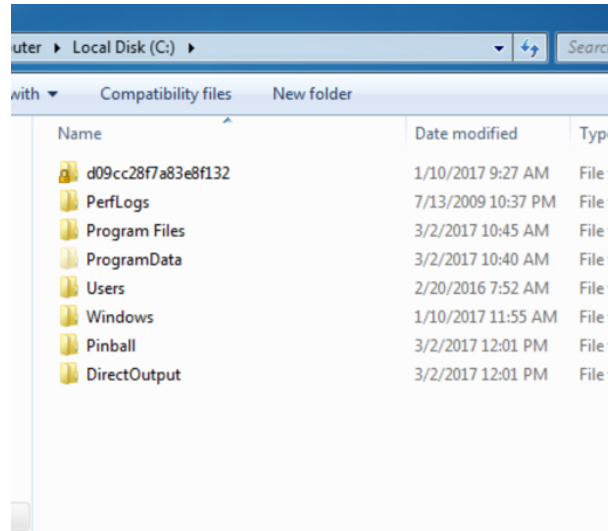
Dell Gaming Tower Desktop Computer Windows 7 - 64 Bit

Intel Core i5 Processor 3.10 ghz

Video Card Brand New NVIDIA GeForce GT 710 with 2gig = 2048mb Dedicated

128Gb SSD hard drive

Here's how I structure my computer for a Virtual Pinball Setup.



- Create a folder called Pinball on the C: drive (C:\Pinball)  
Install Every Programs in This directory. In my opinion, it is easier to access all your systems if they are at 1 place.

This is where you are going to install Visual ,Pinball X and Future Pinball but we will get to this later.





## Future Pinball Installation

( <https://futurepinball.com/> )

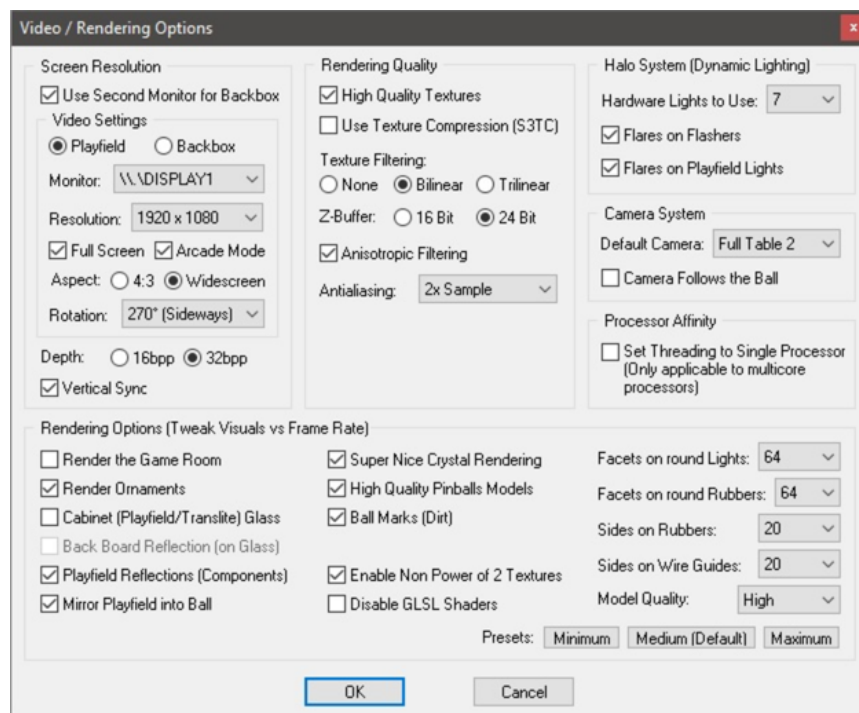
Here's a link to the most detailed and in depth guide for installing and configuring Future Pinball that I have seen.

<http://www.gopinball.com/forum/viewtopic.php?f=84&t=6054>

Go in the Future pinball installation folder, which should be (C:\Pinball\futurepinball)

Right click the future pinball.exe and set the permission to run as administrator

Open The Future Pinball App and go to the settings.  
Set it this way





I used this setting and it works well, when combined with Bam, which I will cover later. For more details on the setup, Terryred has done a step by step guide that can be found here <https://www.gameex.info/forums/topic/18508-guide-how-future-pinball-should-be-setup-for-bam-doflinx-pinball-x/>

Click on Gamekeys in the preference menu



Do the same thing here, set your buttons by pressing on the key and press the button on your cabinet and it will register it. You must select your specific usb controller using the drop down menu on the top right field. ( where it says Mouse/ joypad controllers )



[https://www.youtube.com/watch?v=1l\\_TPRYhCnI](https://www.youtube.com/watch?v=1l_TPRYhCnI)





## VP ( Visual Pinball X ) Installation and configuration

There is a very good complete tutorial here:

<http://www.vpforums.org/index.php?app=tutorials&article=1> posted by Yogiholzer.

Install Visual Pinball,

*(The new version contains All-in-one (almost) installer (VPX10.2.0, VP9.9.3, VP9.9PM5, VP9.2.1, VP8, VPM2.8, DMDext, X/UltraDMD, B2S, DX9webinstaller, Core.vbs scripts).*

The Installation will guide you through the process and install the DirectX drivers etc... .When it prompts you for the installation path, choose (C:\Pinball) it will create a folder (C:\Pinball\Visualpinball)

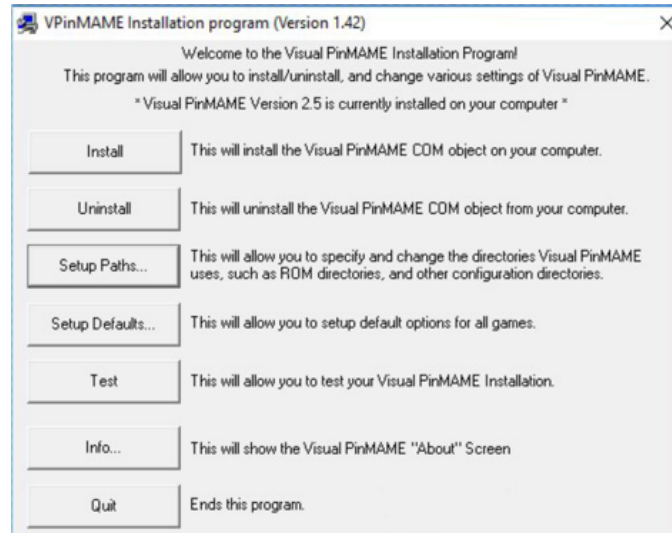
A few things will get installed with this software.

- A. Visual Pinball
- B. DMD ( Dot matrix )
- C. Virtual Pinmame
- D. B2S

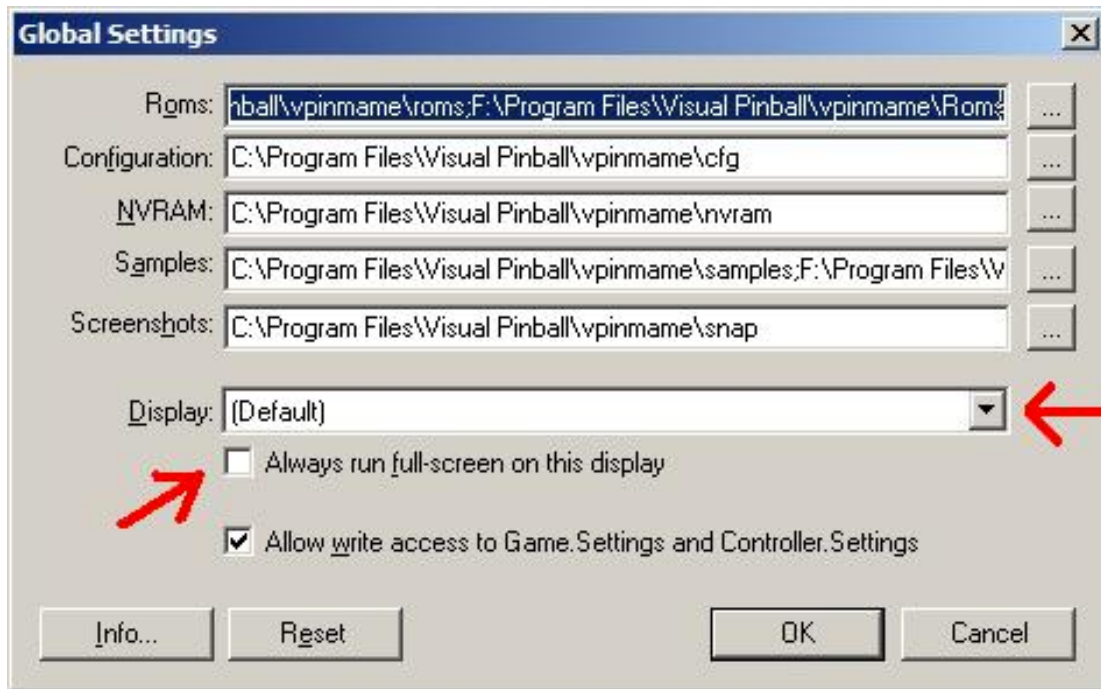
B- DMD ( Dot matrix display ), This section will be updated later , No information at this time )

C- Vpinmame. Some visual Pinball games require a rom to run.

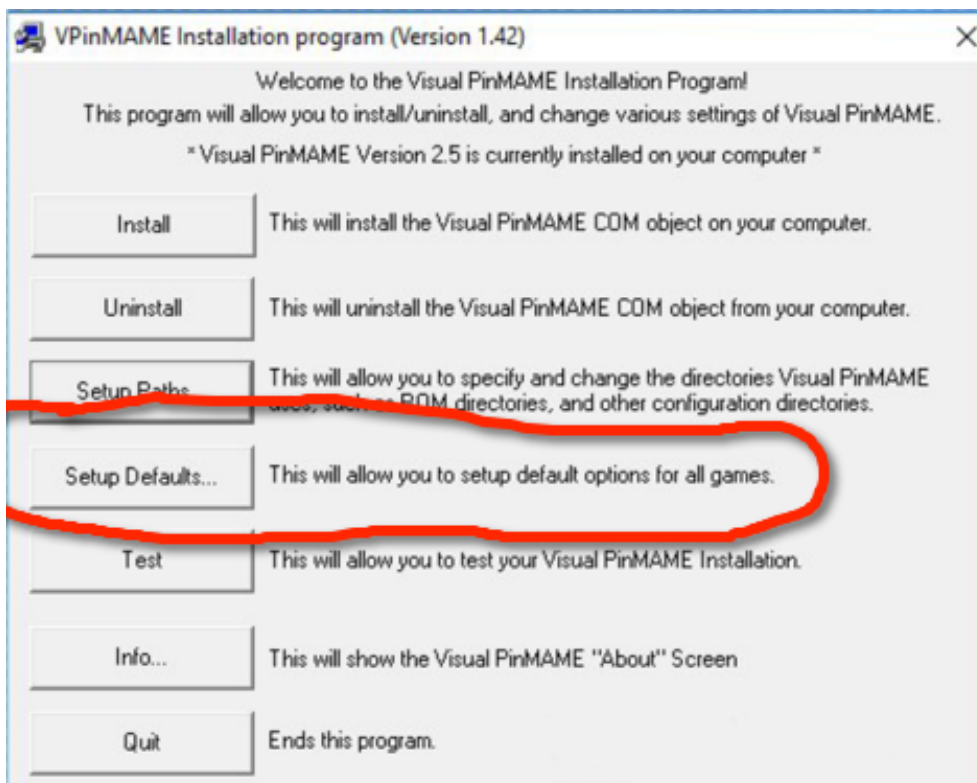
You will need to download the roms from VPforums and place them in the (C:\Pinball\Visualpinball\Vpmame\roms ). You need to configure VPmame and set the different paths. Vpinmame is basically an emulator running the game and it sends the information to Visual Pinball for the ultimate arcade experience.<sup>i</sup>



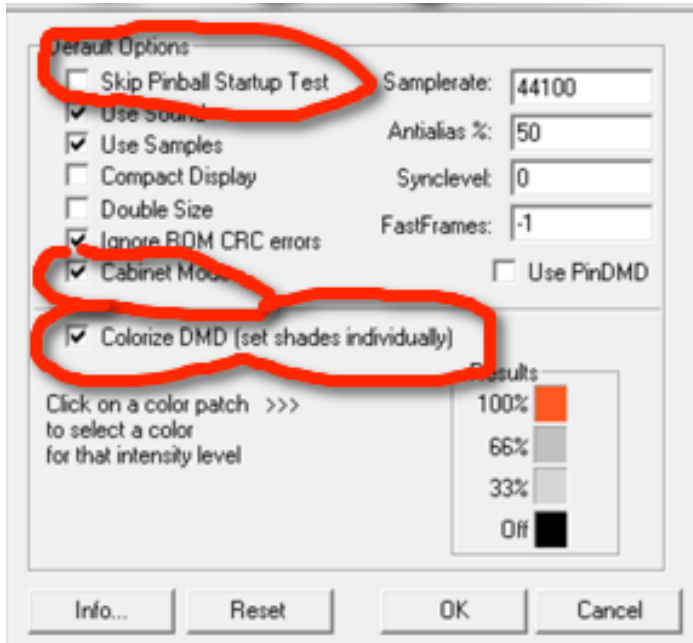
Set the Paths to reflect the location of your items and make sure the always run full screen on this display is set.



Close this and open the Defaults tab

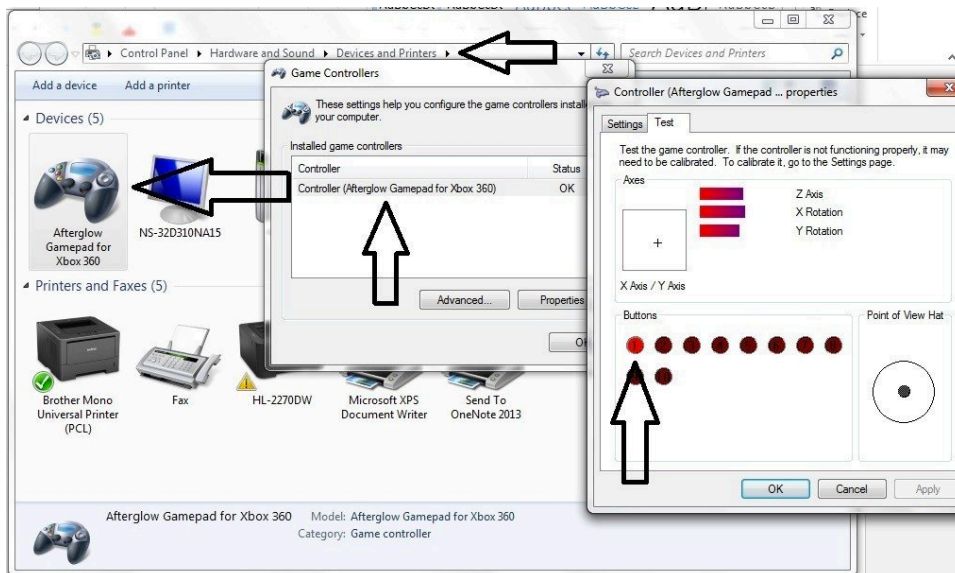


Check Set Skip Pinball Startup test, Cabinet Mode and Colorize DMD ( If you want your DMD to be in color )

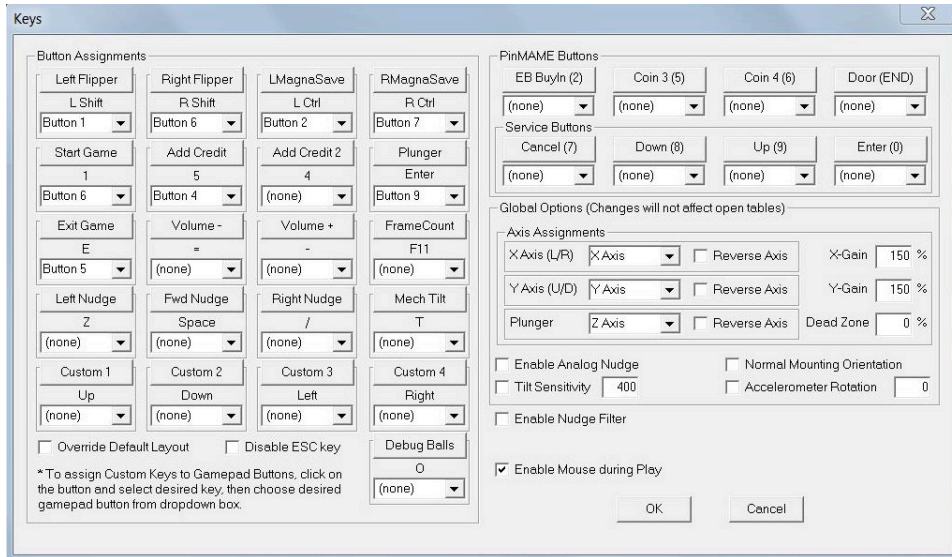


Here you will configure your cabinet buttons. To find your buttons configuration you will have to do the following.

- Go in your windows control panel and select devices and printer.
- You should see a usb controller, or whatever the name is for your buttons controller. Right click on it and select properties. And test all your buttons and write the number down on a piece of paper.



The configuration on VP is very basic, click in the preference tab and select keys. Select your cabinet buttons matching the keyboard key. For example Left Flipper is my button #1 and so on.



[https://www.youtube.com/edit?o=U&video\\_id=JsajKq-Tnc8](https://www.youtube.com/edit?o=U&video_id=JsajKq-Tnc8)



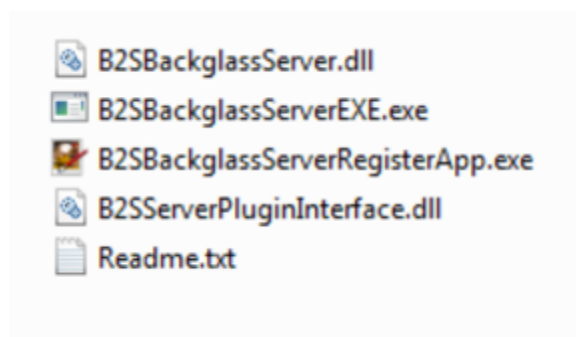
## VP Setting B2S

Without getting into the Techy Stuff , B2S is for tables that are made for people who use a second monitor for the backglass. There is a tutorial already written by Gtxjoe <http://www.vpforums.org/index.php?app=tutorials&article=136> use it as a reference.

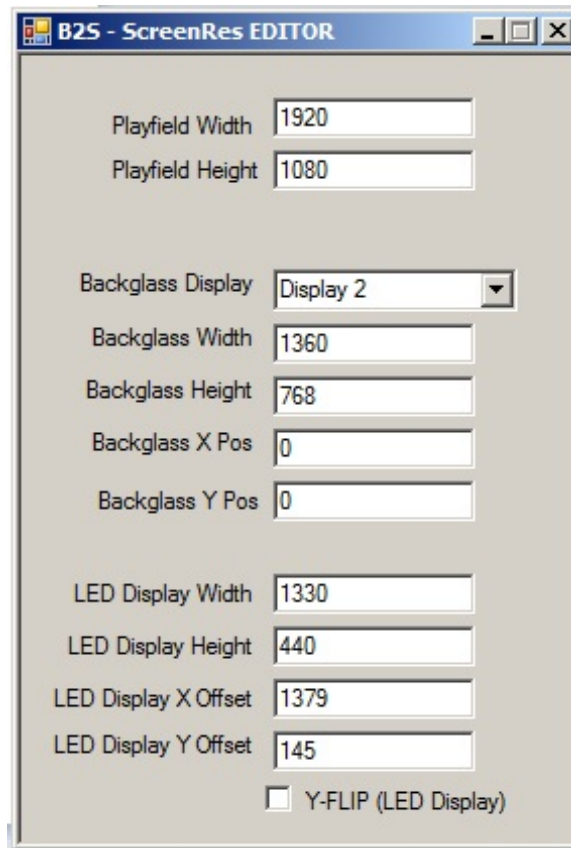


The B2S files should have been installed with VPX and be in your /visualpinball/tables

These are the files that you should see.



When installing VPX2 standalone, you will also have a file called B2S setup.exe Click on the file and open the settings for your screen.



Set your playfield to the resolution of your monitor. For the Backglass, select the display number of your screen. And enter the resolution of your backglass.

Close this window and double click on B2Sbackglassserverregisterapp.exe

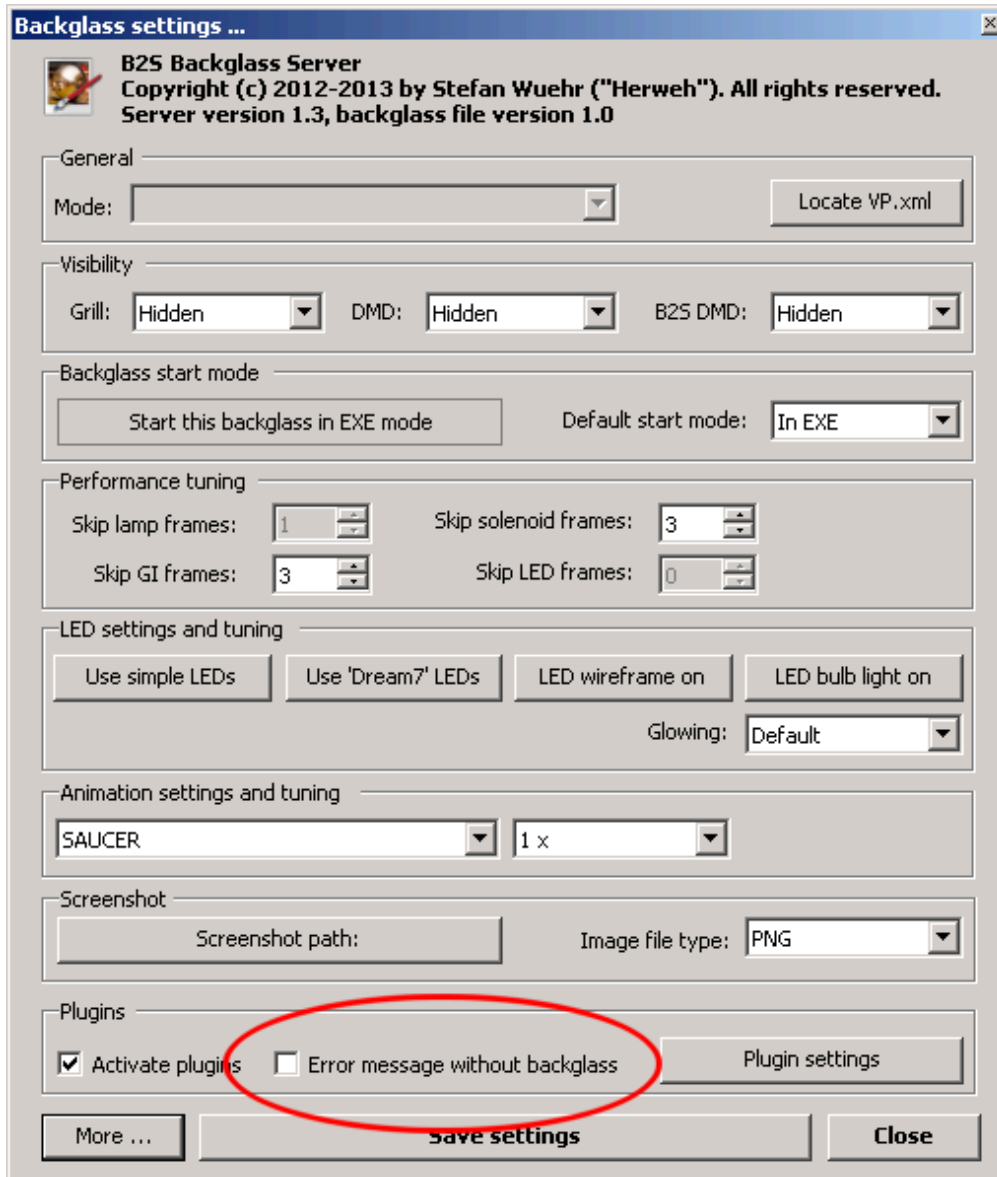
One last thing, open the Visual Pinball folder. Right click the VPinball993.exe and set the permission to run as administrator, do the same thing for VPinballX.exe

Start a Visual Pinball Game, ( I am covering below how to install a game if you don't know how )



On the backglass, right click and select settings.

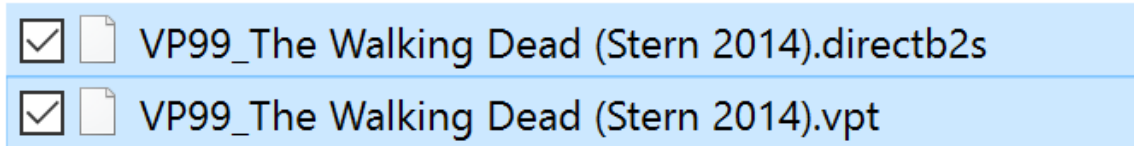
Check the activate plugins box and uncheck error message without backglass.



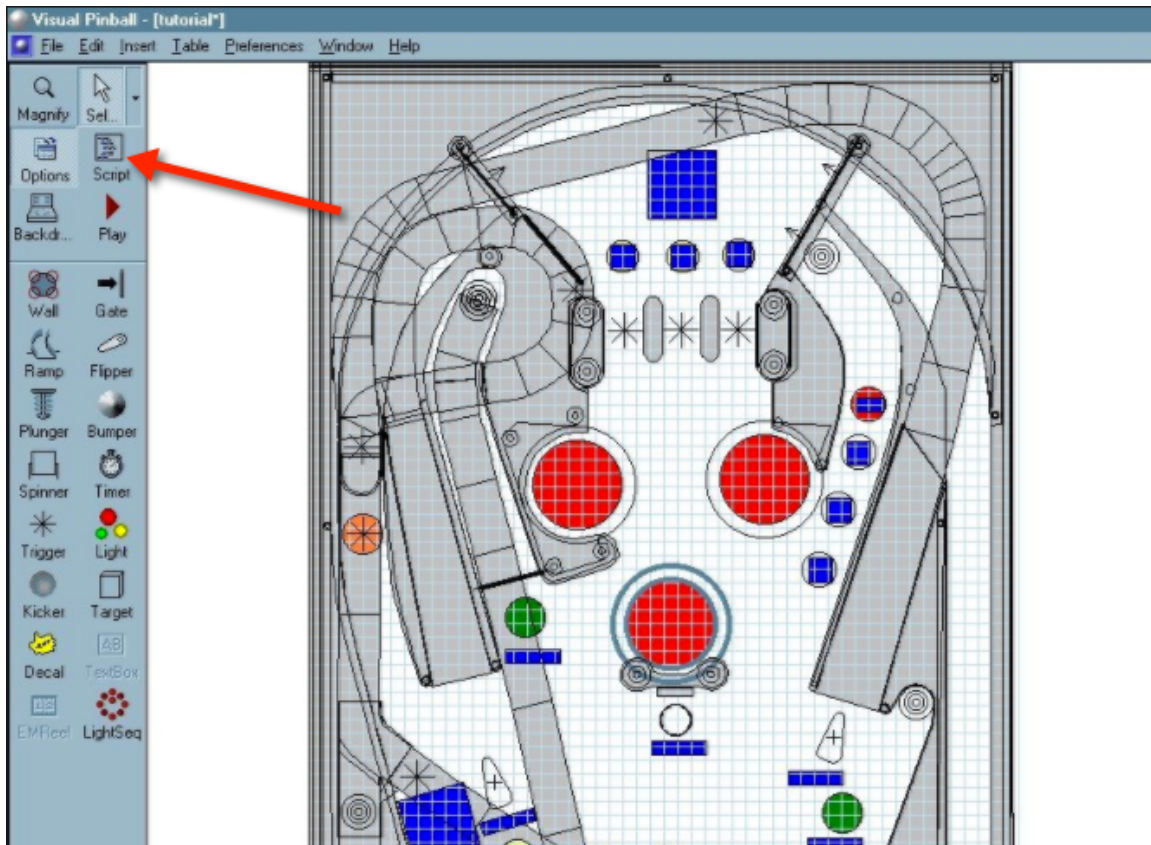
## Making B2S work in the table.

When copying the table to your /virtual pinball/tables folder, you must rename the .directb2s the same as your table .

For example you have a table named VP99\_The Walking Dead ( Stern 2014 ).vpt and The\_Walking\_Dead.directb2s . You must rename the .directb2s to VP99\_The Walking Dead ( Stern 2014 ).directb2s



When Launching the table you must modify a line in the script to make it work. No worries, you don't need to be a programmer,



Tables are programmed differently; as a result you may encounter 2 different types of settings for your backglass.

In the script look for the following line of code, which is usually near the top

Set Controller = CreateObject("VPinMAME.Controller") and change it to  
Set Controller = CreateObject("b2s.server")

If you see Choose Controller: 1-VPM, 2-UVP, 3-B2S' near the top of script,

~~Const cController =~~ 1 'Choose Controller: 1-VPM, 2-UVP, 3-B2S <= change it to 3

Save you table and Launch



[https://www.youtube.com/watch?v=jTG\\_BB4ZyE](https://www.youtube.com/watch?v=jTG_BB4ZyE)



# BAM

Better Arcade Mode - Real **Future Pinball** Cabinet

## Setting up Bam

<http://www.ravarcade.pl/>

We are going to install Bam ( Better Arcade Mode )

Install it and it will ask you for the folder where your Future Pinball installation is and install it in this folder. If you look in the Future Pinball folder, open the Bam folder. Right click the Launcher.exe and set the permission to run as administrator. When Launching Launcher.exe, it will start Future Pinball in Bam mode, which will Allow you to set a bunch of customized settings. ( Ie size of the table, backglass, the camera angle, etc... ) When a table is loaded, press the tilde key to bring up the menu.



Navigate through the menu and test the different settings and see what they do. Once you like the setting, you can save it as default and every table will use that setting. Or you can decide to use the setting only for this table, in which it will create a .xml file for this table only. In order for bam to work, you must select arcade mode in the Future pinball settings.



## DOF ( Direct output framework )

Contains 2 sections, Led-Wiz config and Sainsmart config )



Author: Swisslizzard

Installing and Setting up DOF ( if you have Led and Solenoids on your Cab, if not ignore this step )

\*\*\*\* You must have your Led-Wiz and/or Sainsmart board connected to your computer at this time. \*\*\*\*

First, Thank you to Swisslizzard for this amazing piece of software. It makes Virtual Pinball so much better. Also a big thanks to Arngrim who mods a lot of tables.

Have a look at the official guide for the installation and how it works.

<https://directoutput.github.io/DirectOutput/installation.html>

What is DOF?

*“The Directoutput framework relies on the B2S-Server which has been developed by Herweh/Stefan. The B2S-Server implements a plugin interface which can load and execute plugins. This framework has been developed as such a plugin.*

*Therefore you must first install and configure Herwehs B2S-Server before you can install the **DirectOutput** framework. You can download the B2S-Server from [vpuniverse.com](http://vpuniverse.com) or [VPForums.com](http://VPForums.com).”*

Source [Directoutput.github.io](https://directoutput.github.io)

- 1- Download the latest version of DOF ( Actually DOF 3 Beta ) the link is at the top of this guide.
- 2- Extract the content on the folder located at C:/DirectOutput

Your folder should look like this

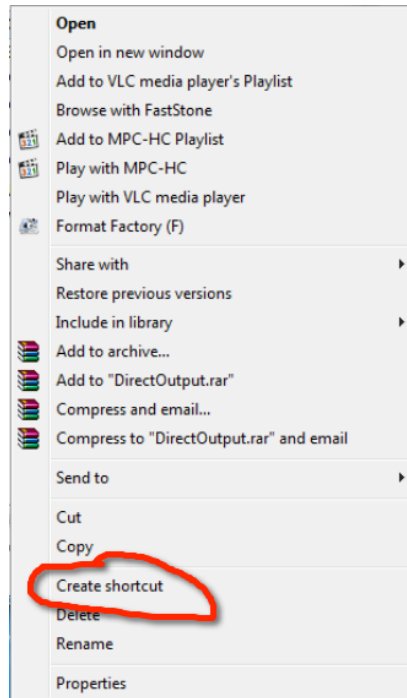
Name	Date
B2SServerDirectOutputPlugin.dll	11/30
B2SServerPluginInterface.dll	9/26
Ciloci.Flee.dll	3/13
DirectOutput PinballX Plugin.dll	11/30
DirectOutput.dll	11/30
DirectOutputComObject.dll	11/30
DirectOutputConfigTester.exe	11/30
DirectOutputConfigTester.vshost.exe	11/28
DirectOutputShapes.png	10/14
DirectOutputShapes.xml	10/20
ftd2xx.dll	7/12
GlobalConfigEditor.exe	11/30
GlobalConfigEditor.vshost.exe	8/31
LedControlFileTester.exe	11/30
ledwiz.dll	1/28
PacDrive.dll	8/20
RegisterDirectOutputComObject.exe	11/30
UpdateNotification.exe	11/30

- 3- Go in your DirectOutput folder and create a folder called config.
- 4- Download the config output sample zip file found here <http://www.vpforums.org/index.php?showtopic=28431&page=2#entry277186> Go at the Post # 34 and download it to your download folder.
- 5- Unzip and copy all files over to your DirectOutput/config folder
- 6- Delete directoutputconfig.ini and directoutputconfig40.ini ( we will re-create these )
- 7- Copy DirectOutput PinballX Plugin.dll from the /DirectOutput folder and paste it in C:\Pinball\PinballX\Plugins ( this will allow PinballX to use some of the DOF functionality ).
- 8- Open the PinballX folder and double click PluginManager.exe and check DirectOutput Pinball plugin

Name	Version	Author	Description
<input checked="" type="checkbox"/> DirectOutput PinballX Plugin	1	Swisslizard	DirectOutput PinballX Plugin
<input type="checkbox"/> LED Plugin	1	Tom Speirs	LED Plugin
<input type="checkbox"/> Speak Game Names	1	Tom Speirs	Speech Plugin
<input type="checkbox"/> QuickLaunch for PinballX	1.0.4	Adultery	Launch multiple programs with your tables!
<input type="checkbox"/> Xpadder Plugin	1.0.1	Adultery	An Xpadder plugin for PinballX

9- Go in Your Visual Pinball table folder and create a folder called plugins

10-Right click on your C:/DirectOutput folder and select create a shortcut.



Paste it in the Plugins folder you just created in the Visual pinball/Tables/plugins folder.

We are Done with the software, now lets configure our Led-Wiz and Sainsmart board.



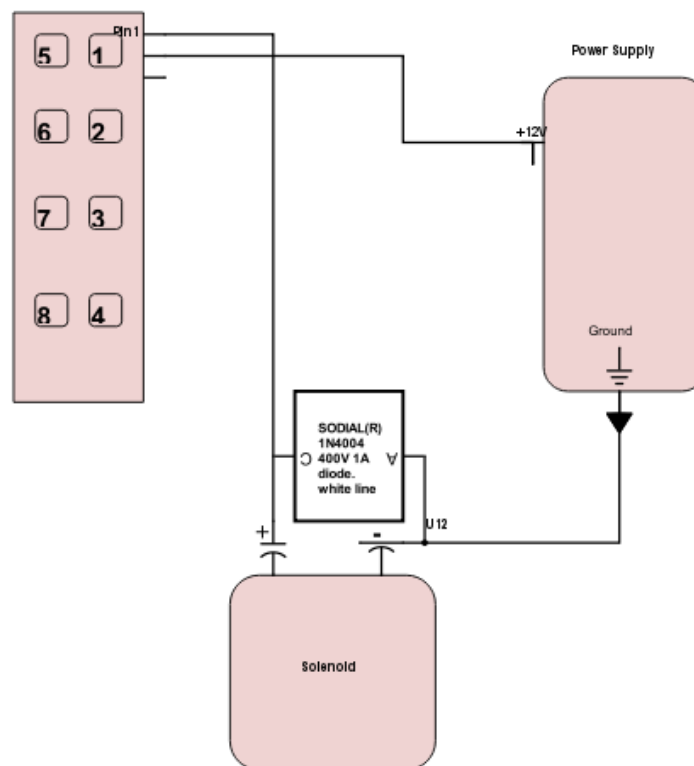
## Sainsmart Board connection



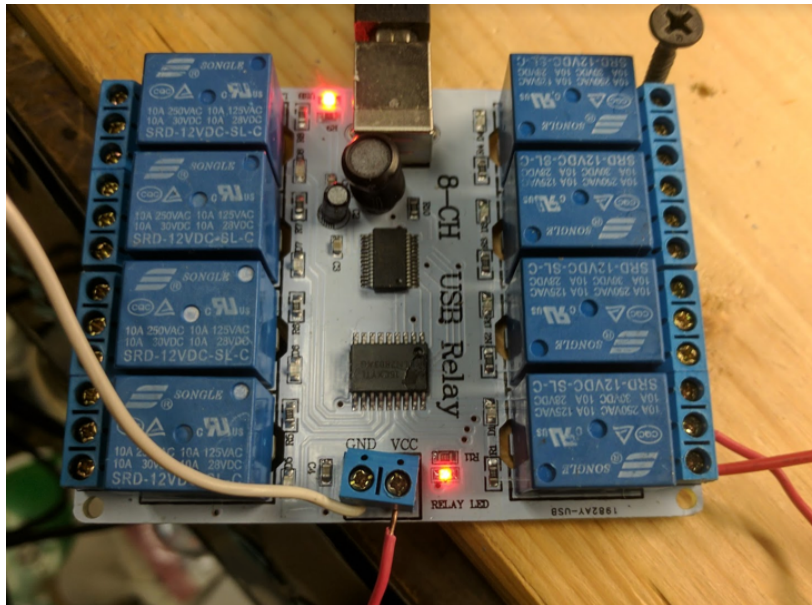
This is USB controlled relay module with 8 relays SRD-12VDC-SL-C. You may use it for simple ON/OFF switching electrical devices - home lights, DC motors, solenoids and others. It may help you building projects like robotics and home automation. Each such board requires one USB port. The more USB ports you have the more Relay boards you may connect.

### Sainsmart

8 ports USB



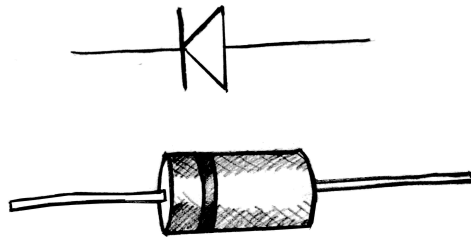
\*\*\*\* I created a few videos to show how to connect these devices



[https://www.youtube.com/watch?v=xc\\_oCpNjChM](https://www.youtube.com/watch?v=xc_oCpNjChM) ( part 1 )

<https://www.youtube.com/watch?v=uU1KsZUYjA8> ( Part 2 )

[https://www.youtube.com/watch?v=AG8d0-g\\_HtQ](https://www.youtube.com/watch?v=AG8d0-g_HtQ) ( Diode )

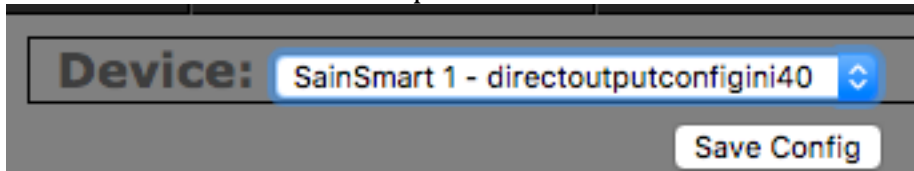


The diodes are required if you have solenoids. 1 diode per solenoid.  
The side with the line ( Cathode ) is soldered on the positive connector.  
The solid line ( Anode ) is soldered on the negative connector.

**“SODIAL(R) 25 x 1N4004 400V 1A Axial Lead Silicon Rectifier Diodes”**

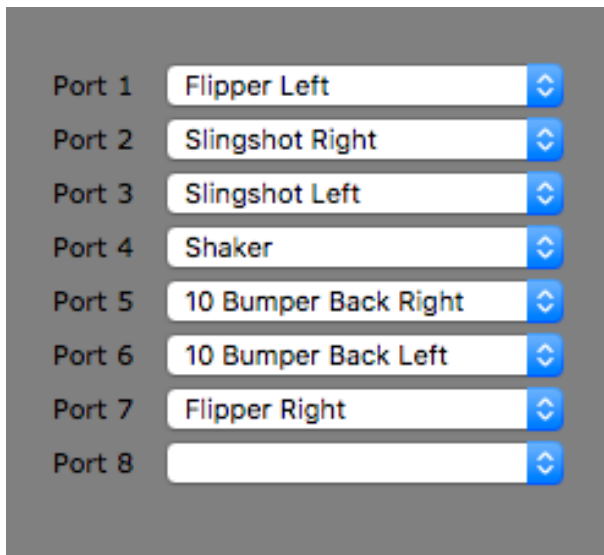
## Sainsmart Config

Select the device from the drop down menu

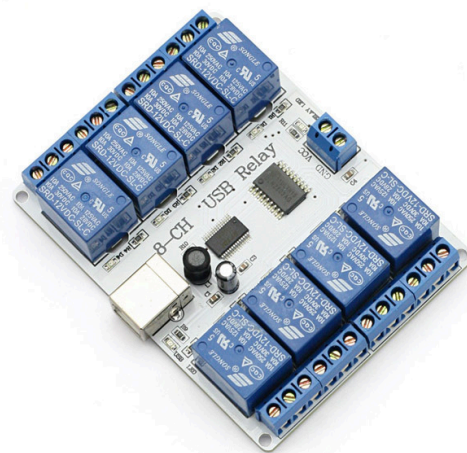


Device: SainSmart 1 - directoutputconfigini40

Save Config

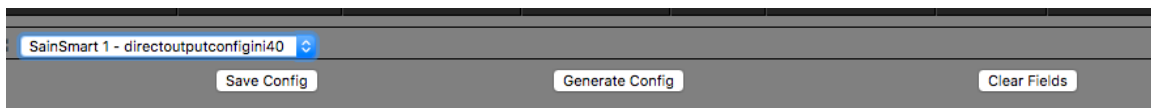


Port 1	Flipper Left
Port 2	Slingshot Right
Port 3	Slingshot Left
Port 4	Shaker
Port 5	10 Bumper Back Right
Port 6	10 Bumper Back Left
Port 7	Flipper Right
Port 8	



That is the settings for my sainsmart. Select next to the port, the item corresponding to what is connected on the sainsmart.

When you are done click on save config and click on generate config



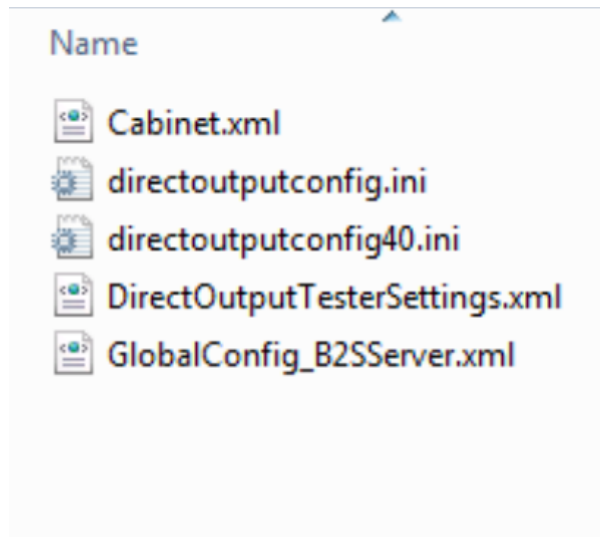
SainSmart 1 - directoutputconfigini40

Save Config      Generate Config      Clear Fields

it will download the config files to your computer.

Unzip and copy all files to your C:\DirectOutput\config

Now your folder should look like this.



Now Download this program to find the serial number of your sainsmart.  
<https://drive.google.com/open?id=0B7GMnh3eKwGHWjV3U2FaeHU50Xc>

run it and copy your serial number to the clipboard.

Now we need to edit a file.

The Cabinet.xml is the setup for your cabinet, you can not use the generic file because it won't work. You need to modify the serial number.

Download a free program call Notepad++ to edit.

<https://notepad-plus-plus.org>

Once it is installed, right click on your cabinet.xml file and select edit with Notepad++

Paste your serial # between <SerialNumber>your serial number</SerialNumber>

```
<?xml version="1.0"?>
<Cabinet xmlns:xsi="http://www.w3.org/2001/XMLSchema"
  <Name>Major Frenchy Sainsmart</Name>
  <OutputControllers>
    <FT245RBitbangController>
      <Name>Sainsmart_1</Name>
      <SerialNumber>A9022SGO</SerialNumber>
    </FT245RBitbangController>
  </OutputControllers>
  <Toys>
    <FT245RBitbangController>
```

That's it Save the file.

-----  
Right click GlobalConfig\_B2SServer.xml and edit with notepad++ , look at the file and make sure the names and paths are corresponding to where your files are. Again, if you followed the instruction closely, you will not have to modify anything.

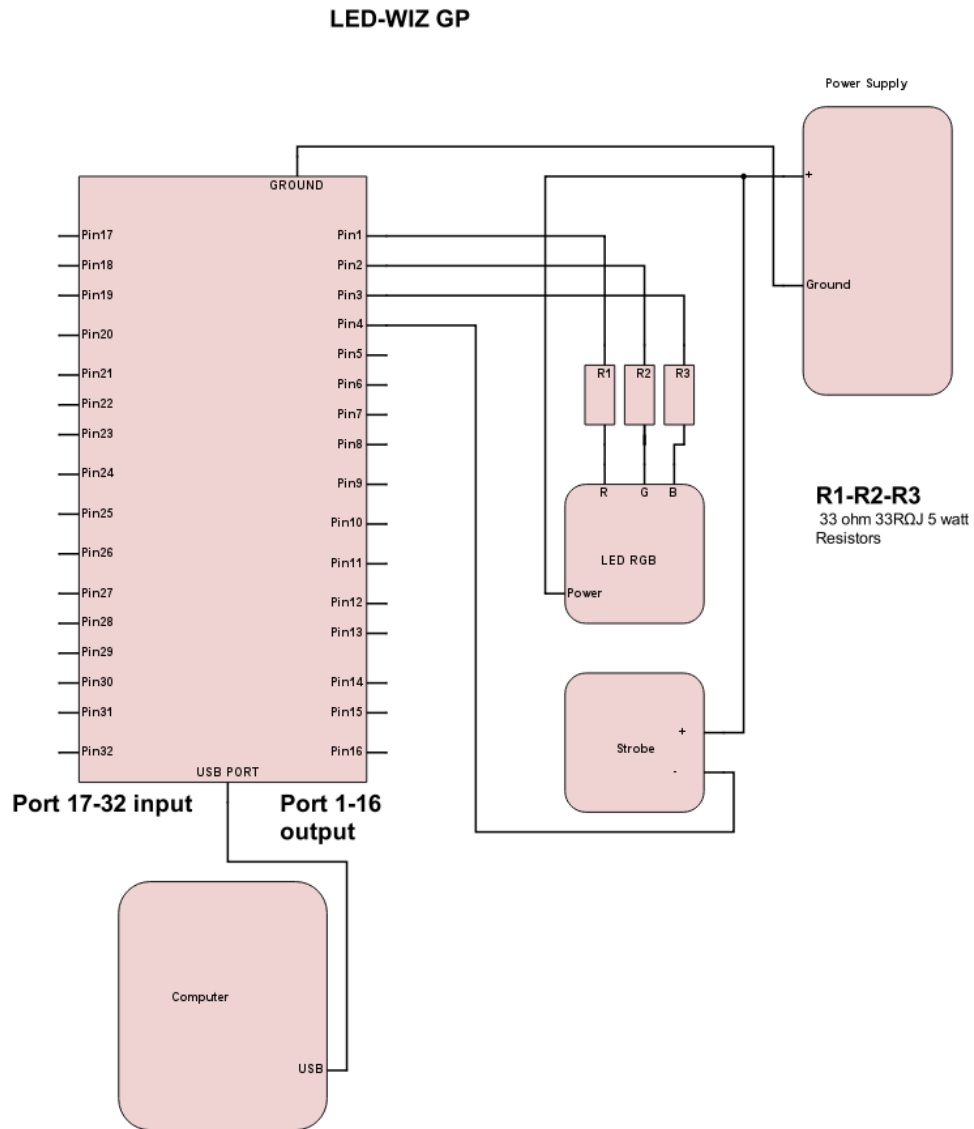
Exit ( save if you changed something )



## LED-WIZ Connection

The LED-Wiz board allows you to connect LED, solenoids, strobes, beacons, motors, Shakers, and back lit buttons. This works with the DOF enabled tables and will triggers your toys on your cabinet automatically once it is configured.

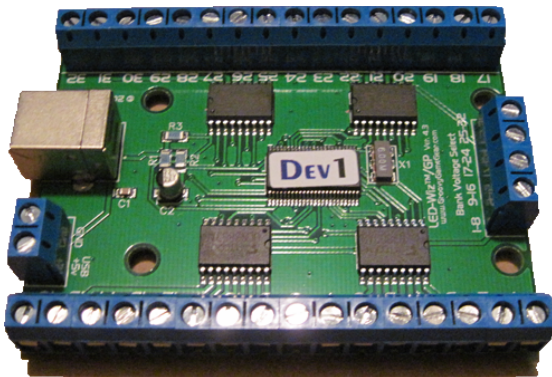
Have your Buttons, Led wiz ports and sainsmart ports written down.



Now that you know how to configure your Led-wiz and Sainsmart ,write down the ports on a piece of paper ... Trust me



## LED-WIZ Config



<https://www.youtube.com/watch?v=2I9kjN1-sxI>

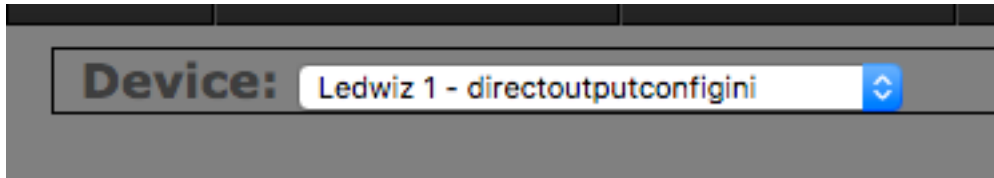
Go to <http://configtool.vpuniverse.com>

And create an account if you did not already. Log in and go to my account. Select the toys that you have in your cabinet.

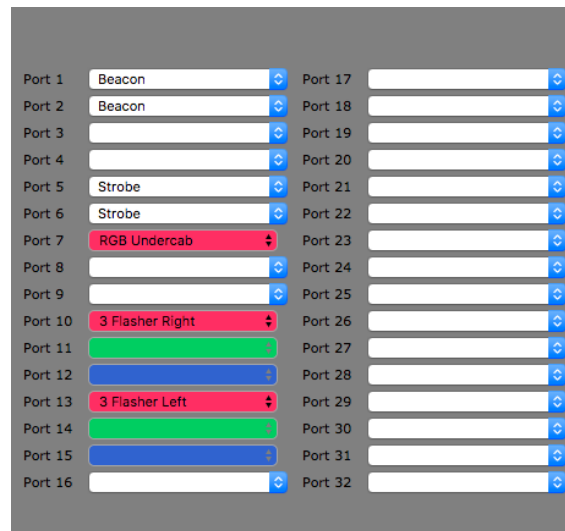
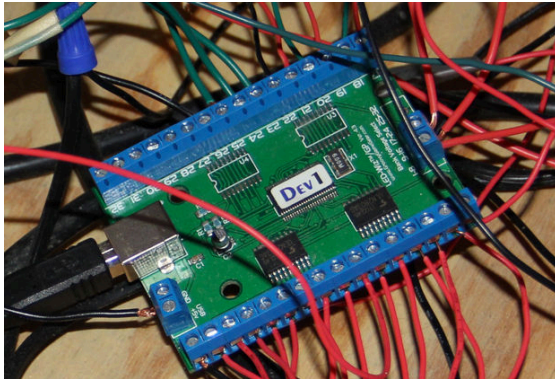
Account Settings	
My API Key	IioGNqg8BRmPUO5ZFnew
Config Contributions	0
Number of Ledwiz Devices	1
Number of PacDrive Devices	0
Number of WS2811 Devices	0
Number of Artnet Devices	0
Number of PacLed Devices	0
Number of SainSmart Devices	1
Number of Pinscape Devices	0
Number of FRDM-KL25Z Devices	0
Number of Ultimate/IO Devices	0
Generate nofeedback files	No
Remove fade from Front Buttons	No
Ledwiz Framework	DirectOutput

LED-Wiz will be device 1 and Sainsmart will be device 2

Go to Port assignment and select



you need to tell the software which port are your items ( lights, strobe, etc ) connected to.



For Example my beacons are Port 1 and 2 on the Led-wiz, I select next to port 1 in the drop down menu and choose Beacon.

For the LED strip, select if it is left , right, or under the cabinet. As far as my setup goes, I have a non addressable RGB strip on the left side and right side and under the cab. I select the port where the Red is connected to. In this case , 7 for the undercab, 10 for the right and 13 for the left side.

If you have buttons connected, you would set them starting on port 17.

When you are done, click on save config.



## Setting up DOFLINX

Author: DDH69

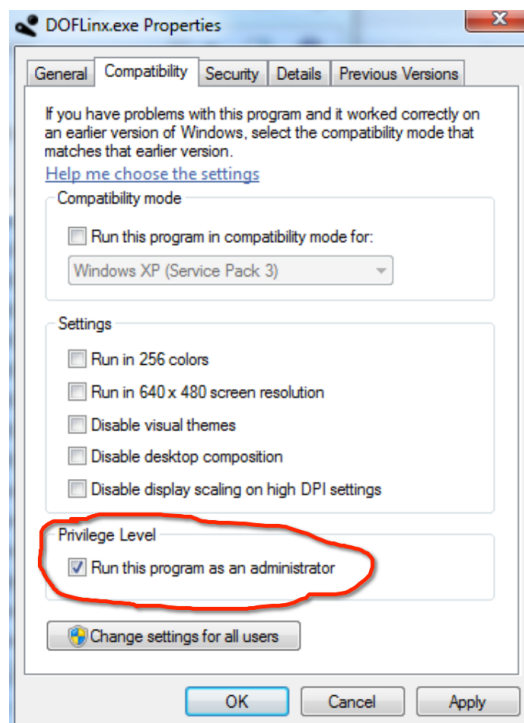
Thanks to DDH69 for creating this. You should use his guide for all details. See his post <http://www.vpforums.org/index.php?showtopic=36184>

After extracting the Doflinx 4.22 or the current version you will see a guide inside the folder.

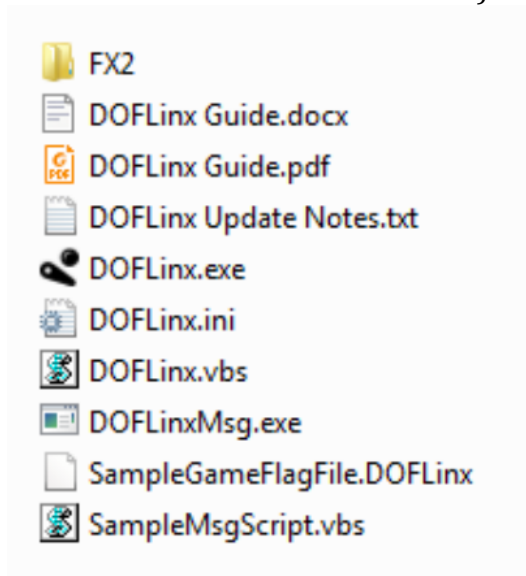
\*\*\*Again, this tutorial is not replacing the official Installation guide, it is a simple version of my setup.

What DOFLINX does it basically designed to have all your toys ( Solenoids, Lights, Shaker, stobe etc ) working in Future Pinball, the non DOF VP tables and certain functions in Pinball Fx2.

- Unzip all files in your c:/DirectOutput/config
- First thing right click doflinx.exe and set it to run as administrator
- 



( Content of the extracted DOFLinx 4.22C )



Copy the DOFLinx.vbs to C:/Pinball/future pinball/Scripts  
( if the folder does not exist, create it. )

-----

Copy SampleGameFlagFile.DOFLinx and paste in in your Virtual Pinball Table  
folder. C:/Pinball/Visual Pinball/Tables

-----

Now this is the tricky part, assigning the ports and the links for your table.

Right click Doflinx.ini and edit with Notepad++

Don't get scared with all the code, it will all make sense.

The first thing you need to look at the path of your directoutputconfig.ini, and  
it has to match the location of your path. If you followed the instructions, you  
should not have to modify it.

Uncomment this line,  
`#PROCESSES=Pinball FX2,Future Pinball,VPinball_9_9_1,VPPHYSMod5`  
by removing the # at the beginning.

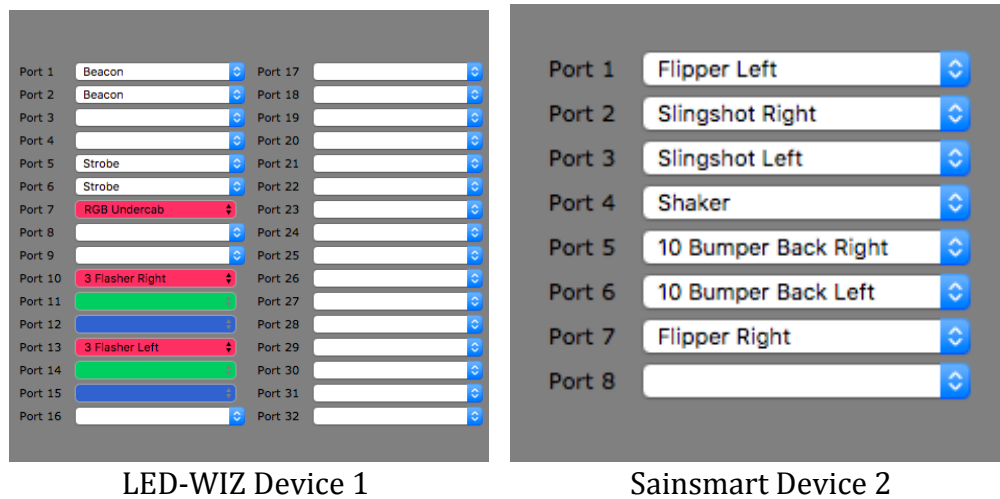
Basically this is the name of the processes that DOFLINX looks for in order to start. For my setup I changed Vpinball\_9\_9\_1 to Vpinball993 and I added Virtual PinballX and FPLoader for Bam.  
My line looked like this

```
PROCESSES=Pinball FX2,Future Pinball,VPinball993,  
VPinballX,VPPHYSMod5,FPLoader
```

-----

Now you need to map the links to your setup, I will only give 2 examples, see DDH69's guide for the complete details

Here's where you need to get your piece of paper with your mapping.



```
# Which DOF Controller output for the flipper solenoids / contactors  
L_FLIPPER_OUTPUT=201  
R_FLIPPER_OUTPUT=202
```

Here are the corresponding terms for all your items

LF = Left flipper  
RF = Right flipper  
LS = Left slingshot  
RS= Right slingshot  
ML = Mid field left solenoid  
MC = Mid field centre solenoid  
MR = Mid field right solenoid  
BL = Back left solenoid  
BC = Back centre solenoid  
BR = Back right solenoid  
SH = Shaker motor  
GR = Gear motor  
KN = Knocker  
FN = Fan  
FLOL = Flasher outer left  
FLIL = Flasher Inner Left  
FLCN = Flasher Centre  
FLOR = Flasher Outer Right  
FLIR = Flasher Inner Right

Go down the list and select which buttons are mapped to a link.

```
#FP_LINK_WAIT_TIME=60000  
LINK_LF=201,50,10000 ( Left flipper for me is Device 2 port 1 )  
LINK_RF=207,50,10000 ( Right flipper for me is Device 2 port 7 )  
LINK_LS=203,50,500 ( Left sling is device 2 port 3 )  
LINK_RS=202,50,500 ( Right sling is device 2 port 2 )  
LINK_ML=107 ( Middle field solenoid, I can assign whatever I want it can be a light  
or the left solenoid, since I don't have a middle solenoid, I will pick my undercab  
light , So my red light for the undercab is port 7 on the LED wiz .  
Device 1 port 7 = 107).
```

Set every items you have and configure them to your liking. For example the Middle left solenoid can be my left sling solenoid since I don't have a middle left solenoid. So it would be Device 2 port 3, as a result the value next to the link will be 203,50,500) The 50 is the default time, and the 500 is how long it stays activated for.

That's it, Save the file.

-----

Now if you have a Sainsmart board, you need to ensure that your Global config file looks like this.

```
<?xml version="1.0" encoding="utf-8"?>
<!--Global configuration for the DirectOutput framework.-->
<!--Saved by DirectOutput Version 0.6.5240.37622: 2014-05-24 19-41-50-->
<GlobalConfig>
<LedControlMinimumEffectDurationMs>60</LedControlMinimumEffectDurationMs>
<LedControlMinimumRGBEffectDurationMs>120</LedControlMinimumRGBEffectDurationMs>
<IniFilesPath>C:\DirectOutput\config</IniFilesPath>
<CabinetConfigFilePattern>C:\DirectOutput\config\Cabinet.xml</CabinetConfigFilePattern>
<TableConfigFilePatterns />
<LedControlIniFiles>
<LedControlIniFile>
<Filename>C:\DirectOutput\config\directoutputconfig40.ini</Filename>
<LedWizNumber>40</LedWizNumber>
</LedControlIniFile>
</LedControlIniFiles>
<EnableLogging>>true</EnableLogging>
<ClearLogOnSessionStart>>false</ClearLogOnSessionStart>
<LogFilePattern>.\DirectOutput.log</LogFilePattern>
</GlobalConfig>
```



<https://www.youtube.com/watch?v=QmH6cgVmdI0>



## Setting up PinballX

Guide step by step installation and download can be found here.

[http://www.gameex.info/wiki/index.php/PinballX:PinballX\\_Installation](http://www.gameex.info/wiki/index.php/PinballX:PinballX_Installation)

PinballX is the front end of choice for this tutorial. Other front end like Hyperpin can also be used.

- 1- Install PinballX in the c:\pinball folder.
- 2- It will ask you if you want to download and configure Visual Pinball, I do not set it up in this setup. For some reason, when you tell it to download and configure it, it does not download version 10.2, so I install it manually.
- 3- Once installed it will ask you if you want to setup PinballX, say yes.

Select Advanced



Nothing to change, click next



The next screen is your display setting.

Set your main display.

The rotation if you have a cabinet and the monitor is sideways.

Backglass display if you have a 2<sup>nd</sup> screen

B2S in front end is if you want to use your In game backglass in the menu. I said No

DMD Enabled is if you want to display animation on a 3<sup>rd</sup> screen.

And you can follow my settings for the rest.

### Display Settings

Here you can set various display settings of PinballX.

Main Display	Display 1	?
Main Display Rotation	270 Degrees	?
Back Glass Display	Display 2	?
Use DirectB2S in Front End	No	?
Auto Position DirectB2S	Yes	?
DMD Enabled	Yes	?
DMD Display	Display 3	?
Auto position DMD	Yes	?
Hide PinMAME	No	?
Use PinMAME in Front End	No	?
Window/Full Screen	Full Screen	?
Full Screen windowed	No	?
Crop Wheel Images	Yes	?
Play Field Brightness	230	?
Enable game exit images	No	?
Show exit image for	3 Seconds	?
Wheel Text Color		?
Wheel Text Outline Color		?
Info Text Color		?
Info Text Outline Color		?
Filter Text Color		?
Filter Text Outline Color		?
Menu Color		?

### Backglass



Below is the backglass and dmd settings. Just put the dimension of your monitor resolution.

Set the Dmd to the height and width. This is for the Pinball-X animation DMD



## Backglass

You can specify the backglass positioning here.

X	<input type="text" value="0"/>	?
Y	<input type="text" value="0"/>	?
Width	<input type="text" value="1920"/>	?
Height	<input type="text" value="1080"/>	?

## Real DMD

Settings for real Pinball DMD displays

Enable Color	<input type="text" value="Yes"/>	?
DMD Color	<input type="text" value="Red"/>	?

## DMD

You can specify the DMD positioning here.

X	<input type="text" value="0"/>	?
Y	<input type="text" value="0"/>	?
Width	<input type="text" value="900"/>	?
Height	<input type="text" value="300"/>	?

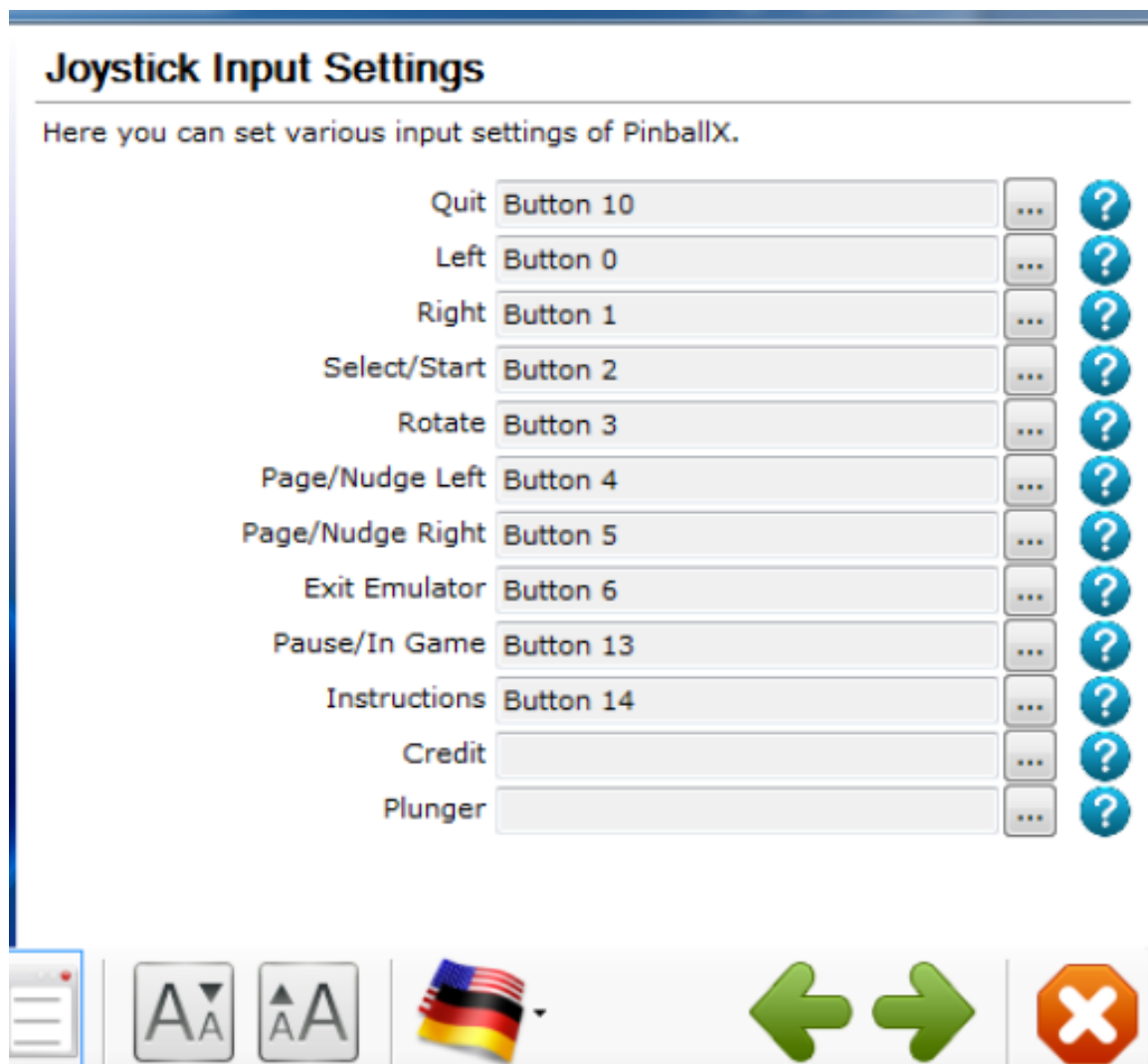
The X is the horizontal position

The Y is the vertical position

The width is how wide you want your dmd

The Height is how high you want your dmd to be. You will have to play with the settings and after each change, close the settings windows and start PinballX and see how it looks. And re-change the values. ( it took me about 10 times to get the settings exactly how I wanted it on my 3<sup>rd</sup> screen )

Click Ok on every screen until you get to this . Click on the 3 dots and push the appropriate button on your cab.



Now for future Pinball, follow that setting. If your working path and tables are somewhere else than me, browse to where it is.

The Working path is the location of the .Exe being used, in this case BAM

The table path, well.... Where the Future Pinball tables are located

The Exe is FPLoader which is the BAM launcher. ( I don't know why they did not call it BAM.exe but oh well. )

The Parameters are command lines to force certain commands. Use

`/open "[TABLEPATH]\[TABLEFILE]" play /exit/arcaderender/STAYINRAM`

And the FPRAM is in the Future Pinball folder.

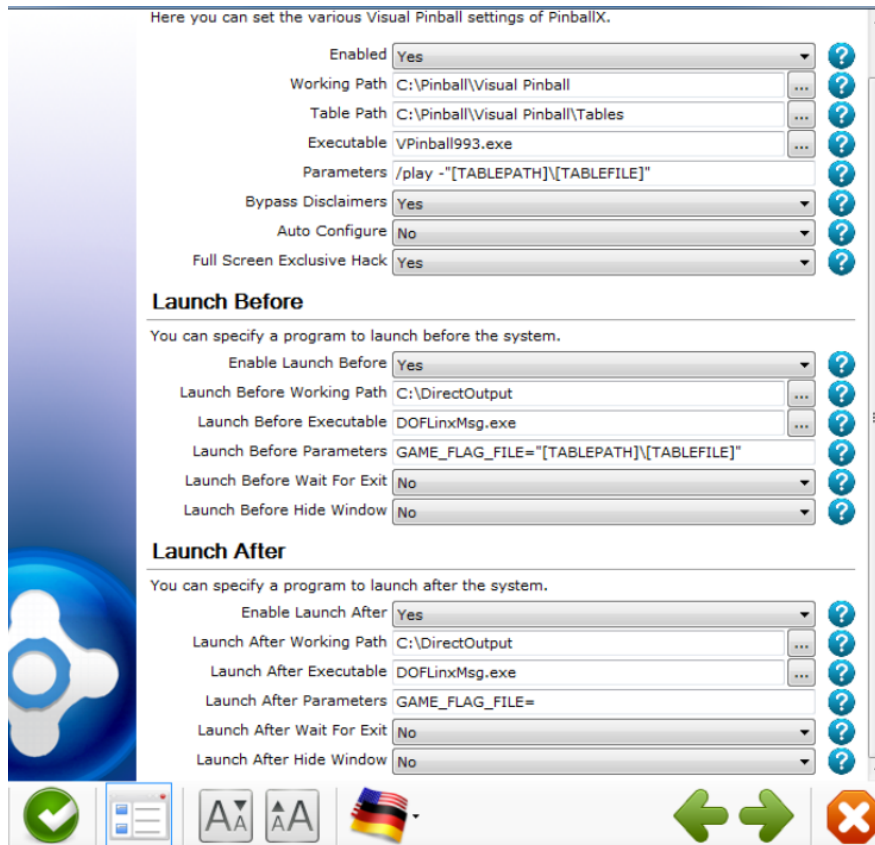
**Future Pinball**

Here you can set the various Future Pinball settings of PinballX.

Enabled	Yes	?
Working Path	C:\Pinball\Future Pinball\BAM	?
Table Path	C:\Pinball\Future Pinball\Tables	?
Executable	FPLoader.exe	?
Parameters	[FILE]" play /exit/arcaderender/STAYINRAM	?
FPRAM Path	C:\Pinball\Future Pinball\fpRAM	?

## VP settings

My understanding is that the Gameflag set in Before and after tells DOFLINX to start and stop, so you don't have feedback in the PinballX menu.



<https://www.youtube.com/watch?v=Jrn7xSt0gbc&t=1s>



## Future Pinball Game installation

Future Pinball Game installation are very straight forward, everything is included in 1 file that you copy in the /future pinball/tables folder. The file extension will be a .fpt ( future Pinball table ) when you download the tables, sometime it will have a library file .fpl which is the extra sound, music and texture which has to be copied to the Future Pinball/Libraries folder.

Again, all tables are free and open source and can be found from the link at the top of this guide or by googling Future Pinball Tables. If you want to have the Effects like your LED and Solenoids, you need to download DOflinx tables. It will say in the title for example GREMLINS PHYS 2\_5(DOflinx)

That's it for Future Pinball, real simple, when you launch the game, it will have a back glass automatically. No Headache





[https://www.youtube.com/edit?o=U&video\\_id=BcJDoSL-hcE](https://www.youtube.com/edit?o=U&video_id=BcJDoSL-hcE)



## VP installing games

Ok, Now Visual Pinball, these games are good but a lot more complex to install.

There are a few different versions of the tables.

Version 8

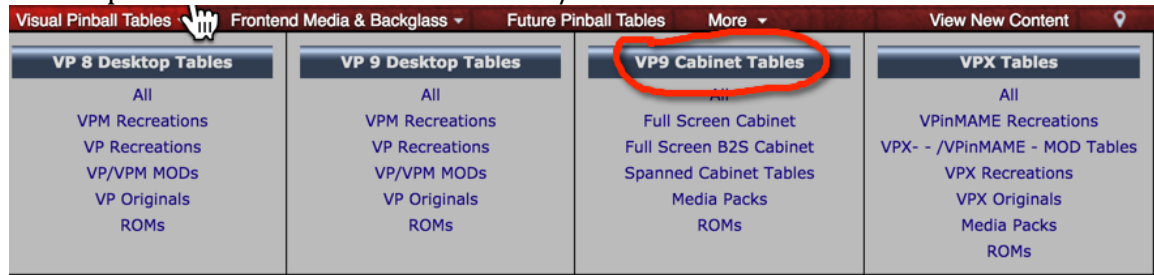
Version 9

Version 10

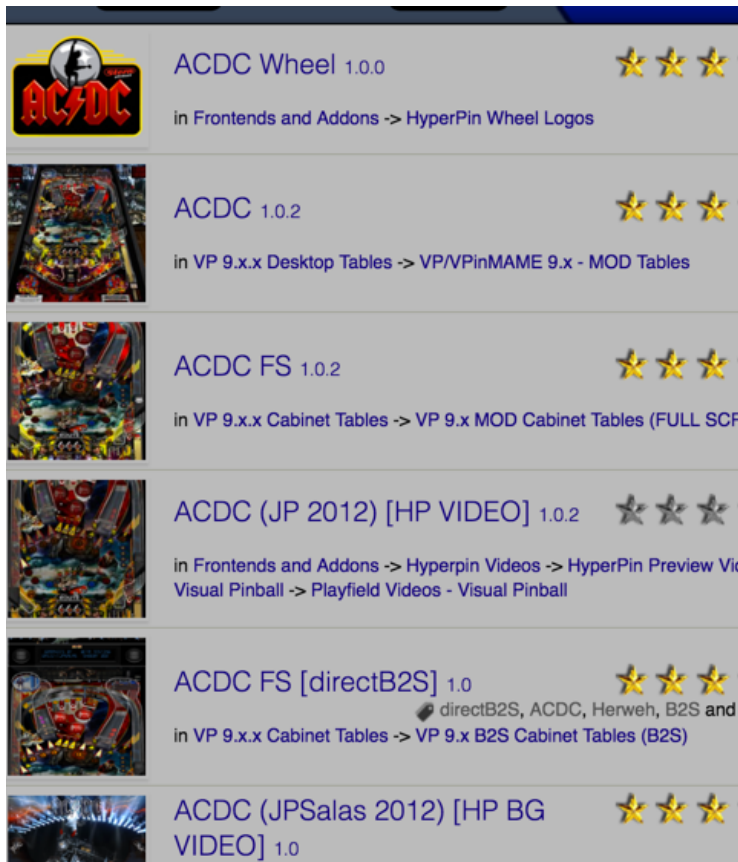
Each game require the right version of Visual Pinball and are not backward compatible, ( Most of the time )

This Tutorial is focused on Version 9, this is where you will find the most tables.

Go to Vpforums and select the version 9 / cabinet tables



- 1- Look for a game by scrolling through the list, for the purpose if this tutorial we will do 1 full game with the art, videos ,backglass, the table and the rom. Be aware that this is what takes the longest, you need to download all files, and test them. After you've got it working, you need to add the game in PinballX and add the animated backglass, video and music for the table. This is for the preview when scrolling through the games.
- 2- so we found the AC/DC table called by searching in the top search bar and got the following results



If you have a Cab, always pick the FS version, Full screen.

Pay attention to the bottom it will tell you exactly what you are looking at

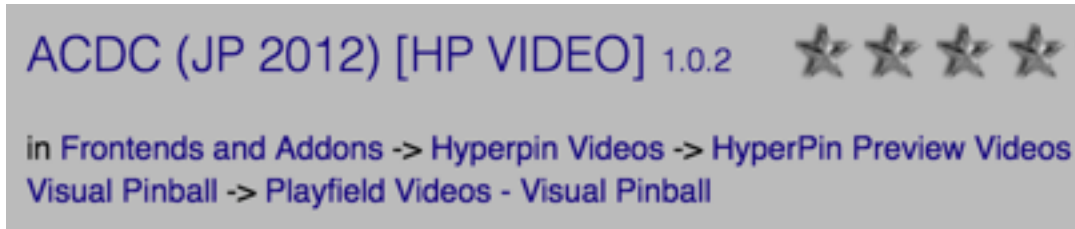


So you decide to download that one. Put it in your download folder called acdc.

Next you need a backglass to have a back glass display. The file you will need is called DirectB2S. So we will download the Ac/DC FS directB2S

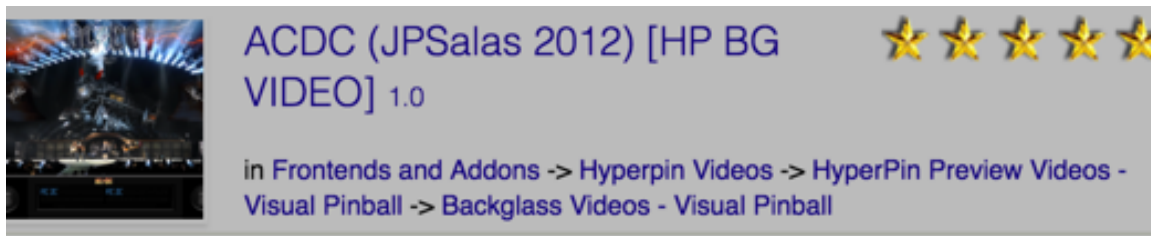
That's it for the table, but now you need the videos and the music for PinballX. What is needed are 2 Ac/DC videos, 1 is for the backglass and the other one is for the playfield. You will also need a wheel photo for PinballX.





we will download that file and look at the bottom, it says Playfield video.

And I found this one for the Backglass



This one is for the menu



Once you have all the files you can start configuring it.

Extract all files in you AC/DC folder. Look at the file called :

- ACDC\_VP912FS.vpt copy the name
- Rename the file ACDC\_B2S\_FS.directb2s to ACDC\_VP912FS.directb2s
- You need to have both files the same name and don't change the table name, just the backglass.
- Copy both of them in your Visual Pinball/Tables folder.



[https://www.youtube.com/edit?o=U&video\\_id=dhIGTt8\\_5M](https://www.youtube.com/edit?o=U&video_id=dhIGTt8_5M)



## Links of Interest

These links are relevant to any enthusiast building their own cabinet and setting it up:

<https://vpcabinet.wordpress.com/> ( step by step guide building a cabinet from scratch.

TerryRed, a good contributor on Vpforums , also did a guide and documented the process of building his system.

<http://www.vpforums.org/index.php?showtopic=34005>

A guide to wiring your cab and Ledwiz

<http://vpuniverse.com/forums/files/category/24-wiring-schematics/>



## Thank you

There are People that inspired and helped me and I want to give a big thank you. Swisslizard who is the inventor of DOF, Angrim who is releasing DOF mods updates like crazy, TerryRed who publishes a lot of his finding and work and DDH69 who is so helpful in the forums and his involvement with DOFLINX. VPforums and VPuniverse have just been an awesome place where members are helping each other.

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Major Frenchy

[www.mameinabox.com](http://www.mameinabox.com)

Youtube: <https://www.youtube.com/channel/UCP1CTkzE8CraURDfpGBMZow>

The Art of Virtual Gaming