

VIRTUATILT – PINBALL FX SETUP

Following some basic instructions to have your VirtuaTilt up and running with PinballFX.

NOTE: Pinball FX has many limitations; be prepared for troubleshooting if something goes wrong.

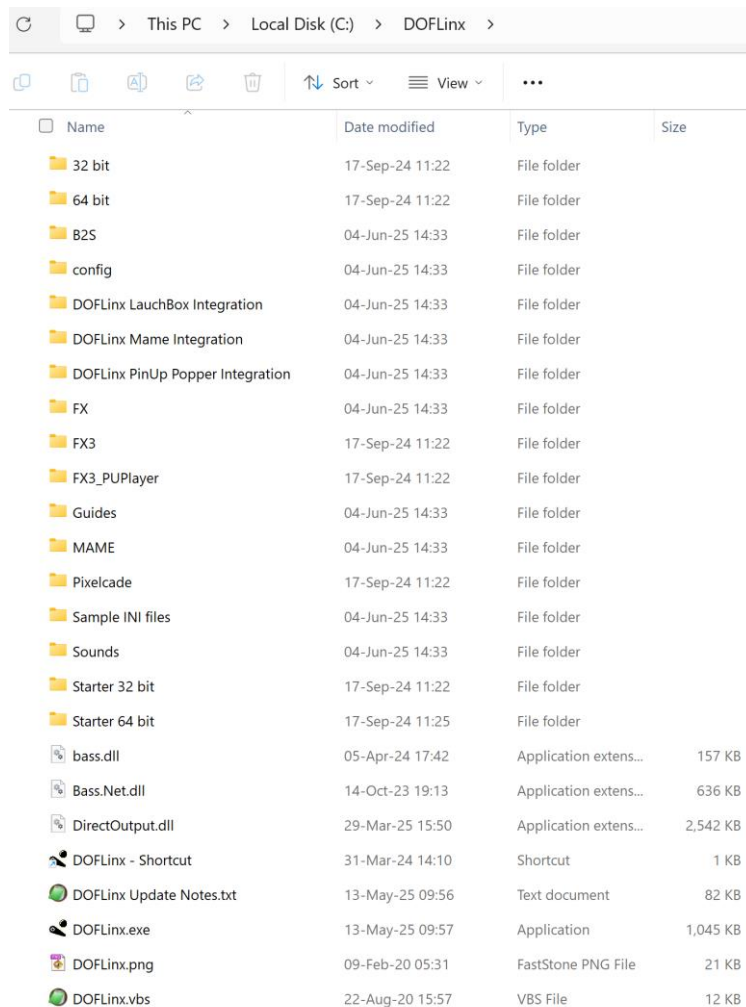
Download **DOFLinx** latest package from here: [Releases · DOFLinx/DOFLinx \(github.com\)](https://github.com/DOFLinx/DOFLinx/releases)

Please always refer to official DOFLinx guides available at <https://doflinx.github.io/docs/>

DOFLinx Setup

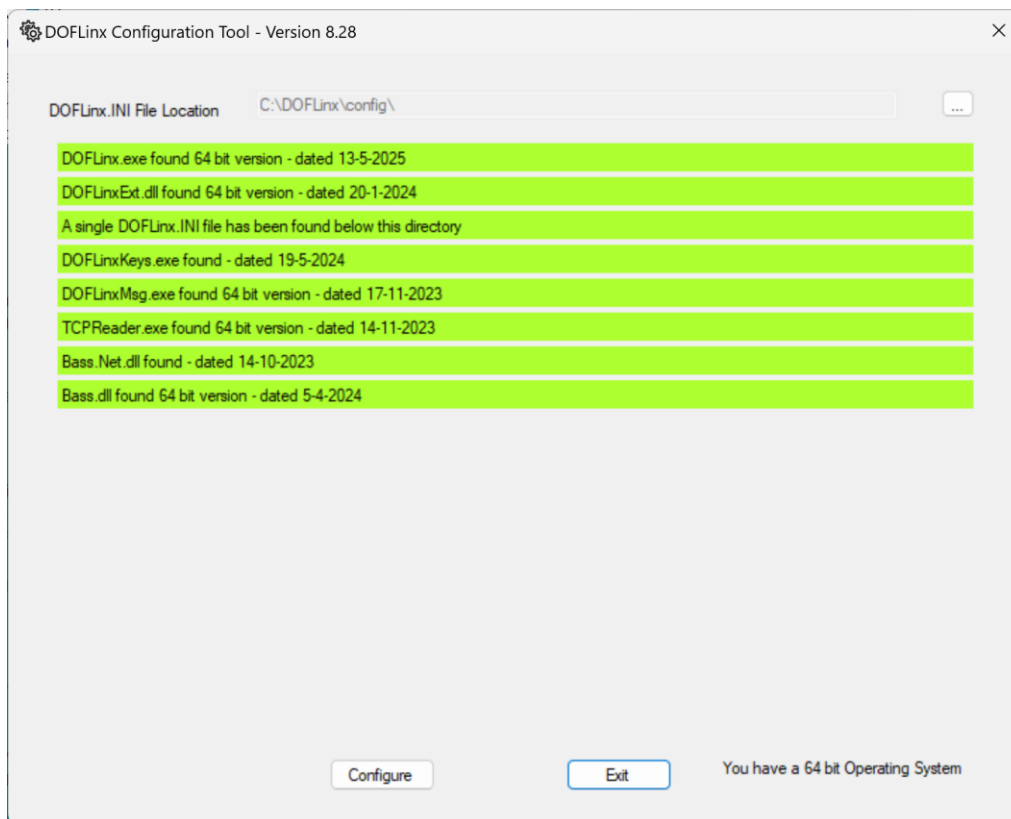
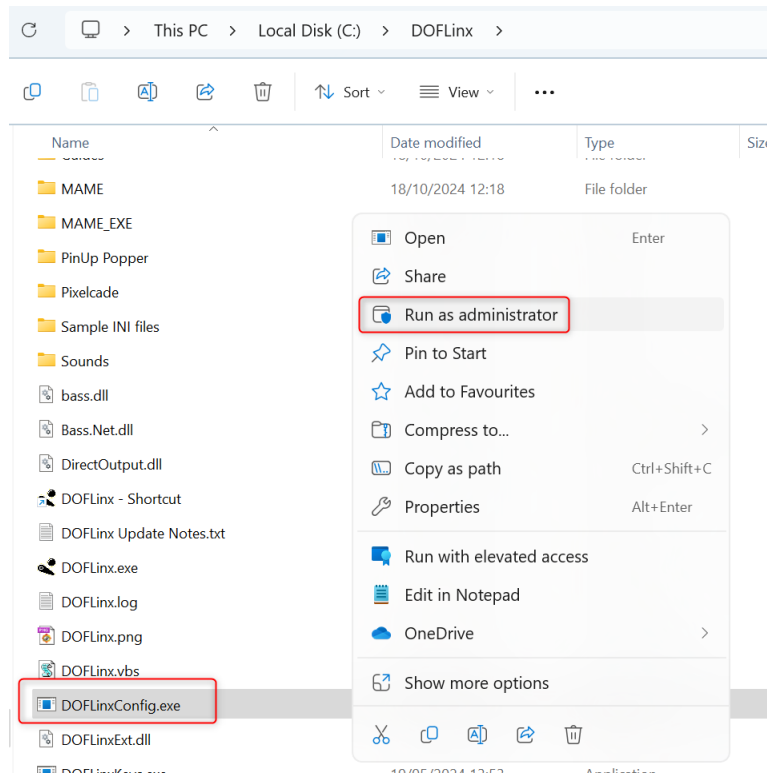
PREREQUISITES: B2S Server already installed <https://github.com/vpinball/b2s-backglass/releases> and **DirectOutput** configured (have a look at [VirtuaTiltSetup v1.X.pdf](#) guide)

Create a folder **C:\DOFLinx** and uncompress the above zip package (remember to unblock it):

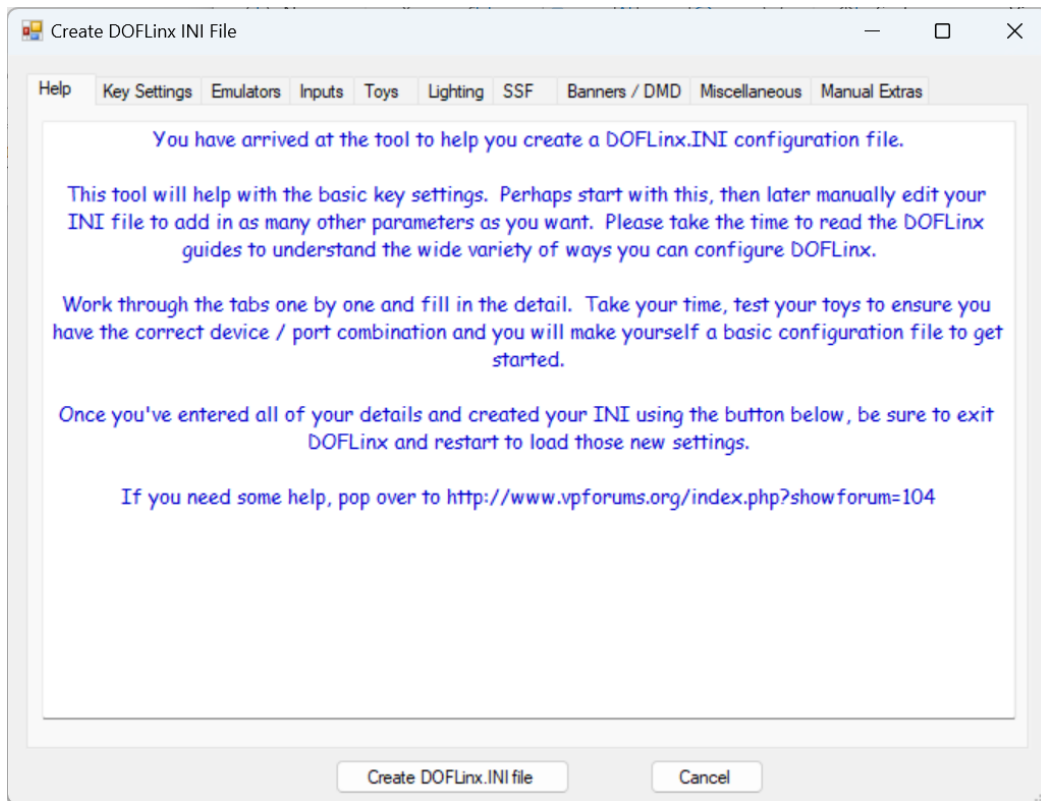


Name	Date modified	Type	Size
32 bit	17-Sep-24 11:22	File folder	
64 bit	17-Sep-24 11:22	File folder	
B2S	04-Jun-25 14:33	File folder	
config	04-Jun-25 14:33	File folder	
DOFLinx LauchBox Integration	04-Jun-25 14:33	File folder	
DOFLinx Mame Integration	04-Jun-25 14:33	File folder	
DOFLinx PinUp Popper Integration	04-Jun-25 14:33	File folder	
FX	04-Jun-25 14:33	File folder	
FX3	17-Sep-24 11:22	File folder	
FX3_PUPlayer	17-Sep-24 11:22	File folder	
Guides	04-Jun-25 14:33	File folder	
MAME	04-Jun-25 14:33	File folder	
Pixelcade	17-Sep-24 11:22	File folder	
Sample INI files	04-Jun-25 14:33	File folder	
Sounds	04-Jun-25 14:33	File folder	
Starter 32 bit	17-Sep-24 11:22	File folder	
Starter 64 bit	17-Sep-24 11:25	File folder	
bass.dll	05-Apr-24 17:42	Application extens...	157 KB
Bass.Net.dll	14-Oct-23 19:13	Application extens...	636 KB
DirectOutput.dll	29-Mar-25 15:50	Application extens...	2,542 KB
DOFLinx - Shortcut	31-Mar-24 14:10	Shortcut	1 KB
DOFLinx Update Notes.txt	13-May-25 09:56	Text document	82 KB
DOFLinx.exe	13-May-25 09:57	Application	1,045 KB
DOFLinx.png	09-Feb-20 05:31	FastStone PNG File	21 KB
DOFLinx.vbs	22-Aug-20 15:57	VBS File	12 KB

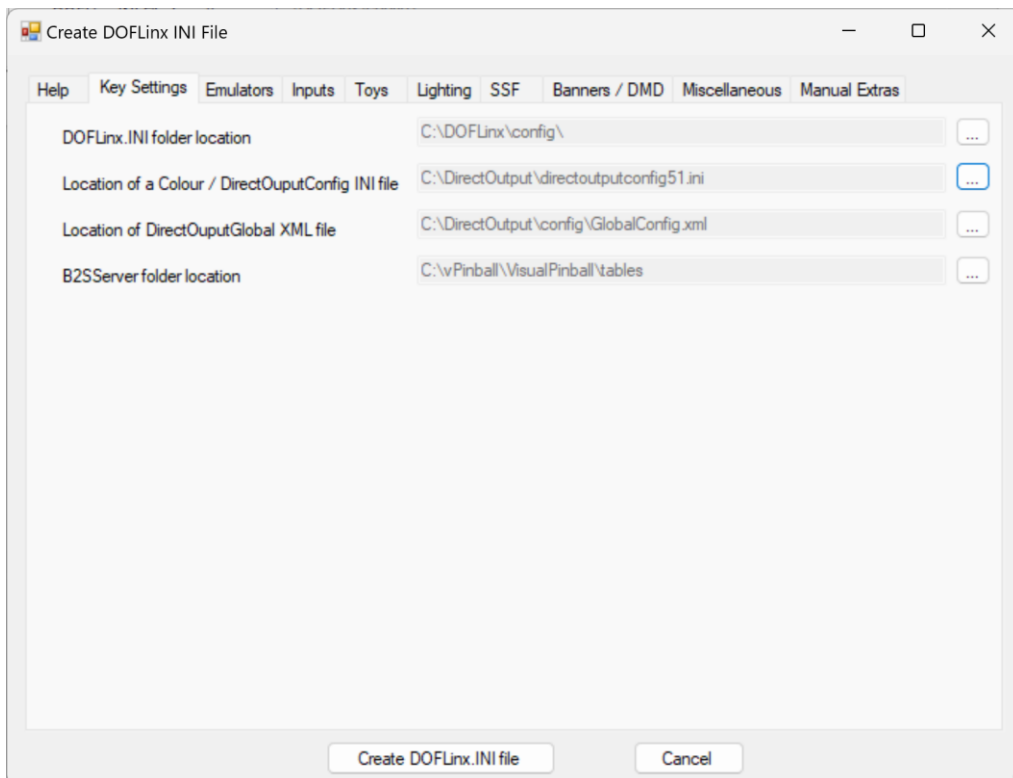
Run **DOFLinxConfig.exe** file in **DOFLinx** folder as administrator:



Click on **Configure** button and work through all of your settings:



You need to configure **Key Settings**, **Emulators**, **Inputs** and **Toys** tabs:



Create DOFLinx INI File

Help Key Settings Emulators Inputs Toys Lighting SSF Banners / DMD Miscellaneous Manual Extras

Select the emulators that you wish to configure DOFLinx for

☒ FX2
Folder holding the FX2 files for DOFLinx: \\
Folder holding the FX2 B2S backglass files: \\

☒ FX3
Folder holding the FX3 files for DOFLinx: C:\DOFLinx\FX3\
Folder holding the FX3 B2S backglass files: C:\DOFLinx\B2S\

☒ Pinball FX
Folder holding the FX files for DOFLinx:
Folder holding the FX B2S backglass files:

☒ MAME
Folder holding the MAME files for DOFLinx: C:\DOFLinx\MAME\
Folder where MAME is installed: C:\MAME\

☒ Future Pinball

Create DOFLinx.INI file Cancel

Create DOFLinx INI File

Help Key Settings Emulators Inputs Toys Lighting Pixelcade Miscellaneous

For each one of these input buttons you have, click in the box next to the name, then press the button once when requested.
This will collect the keyboard code required. If you don't have the button, just ignore it.
If your button has a LED, select the device / port. If it has no LED leave the device / port as 0 / 0.
If you have RGB buttons, select the default colour you would like it to be as well.

	Device	Port	Colour	Test	
L Flipper A0	Clear	0	0	MONO	Test
R Flipper A1	Clear	0	0	MONO	Test
L Magna A2	Clear	0	0	MONO	Test
R Magna A3	Clear	0	0	MONO	Test
Start 31	Clear	0	0	MONO	Test
Extra Ball 32	Clear	0	0	MONO	Test
Exit 1B	Clear	0	0	MONO	Test
Coin 35	Clear	0	0	MONO	Test
Launch 0D	Clear	0	0	MONO	Test
Fire	Clear	0	0	MONO	Test
Pause	Clear	0	0	MONO	Test
Reset	Clear	0	0	MONO	Test
Player 1	Clear	0	0	MONO	Test
Player 2	Clear	0	0	MONO	Test
Cheat	Clear	0	0	MONO	Test
Menu	Clear	0	0	MONO	Test
Button 1	Clear	0	0	MONO	Test
Button 2	Clear	0	0	MONO	Test
Button 3	Clear	0	0	MONO	Test
Button 4	Clear	0	0	MONO	Test
Button 5	Clear	0	0	MONO	Test
Button 6	Clear	0	0	MONO	Test
Button 7	Clear	0	0	MONO	Test
Button 8	Clear	0	0	MONO	Test

Create DOFLinx.INI file Cancel

Check the boxes for the toys (solenoids, etc) you have and select the correct device / port.
Once you have entered the details test that you have things correct by using the test button.

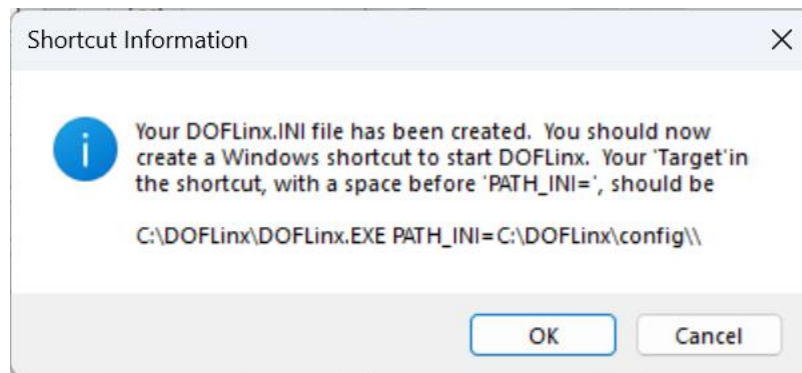
	Device	Port	Test
<input checked="" type="checkbox"/> Left Flipper	1	3	Test
<input checked="" type="checkbox"/> Right Flipper	1	4	Test
<input checked="" type="checkbox"/> Left Slingshot	1	1	Test
<input checked="" type="checkbox"/> Right Slingshot	1	1	Test
<input checked="" type="checkbox"/> Mid Left	1	1	Test
<input checked="" type="checkbox"/> Mid Centre	1	1	Test
<input checked="" type="checkbox"/> Mid Right	1	1	Test
<input checked="" type="checkbox"/> Back Left	1	1	Test
<input checked="" type="checkbox"/> Back Centre	1	1	Test
<input checked="" type="checkbox"/> Back Right	1	1	Test
<input type="checkbox"/> Strobe	0	0	Test
<input type="checkbox"/> Beacon	0	0	Test
<input type="checkbox"/> Shaker	0	0	Test
<input checked="" type="checkbox"/> Gear Motor	1	2	Test
<input checked="" type="checkbox"/> Knocker	1	1	Test
<input type="checkbox"/> Fan	0	0	Test
<input type="checkbox"/> Bell	0	0	Test
<input type="checkbox"/> Chime #1	0	0	Test
<input type="checkbox"/> Chime #2	0	0	Test
<input type="checkbox"/> Chime #3	0	0	Test

☐ DOFLinx to flash (pulse power) this device? Test

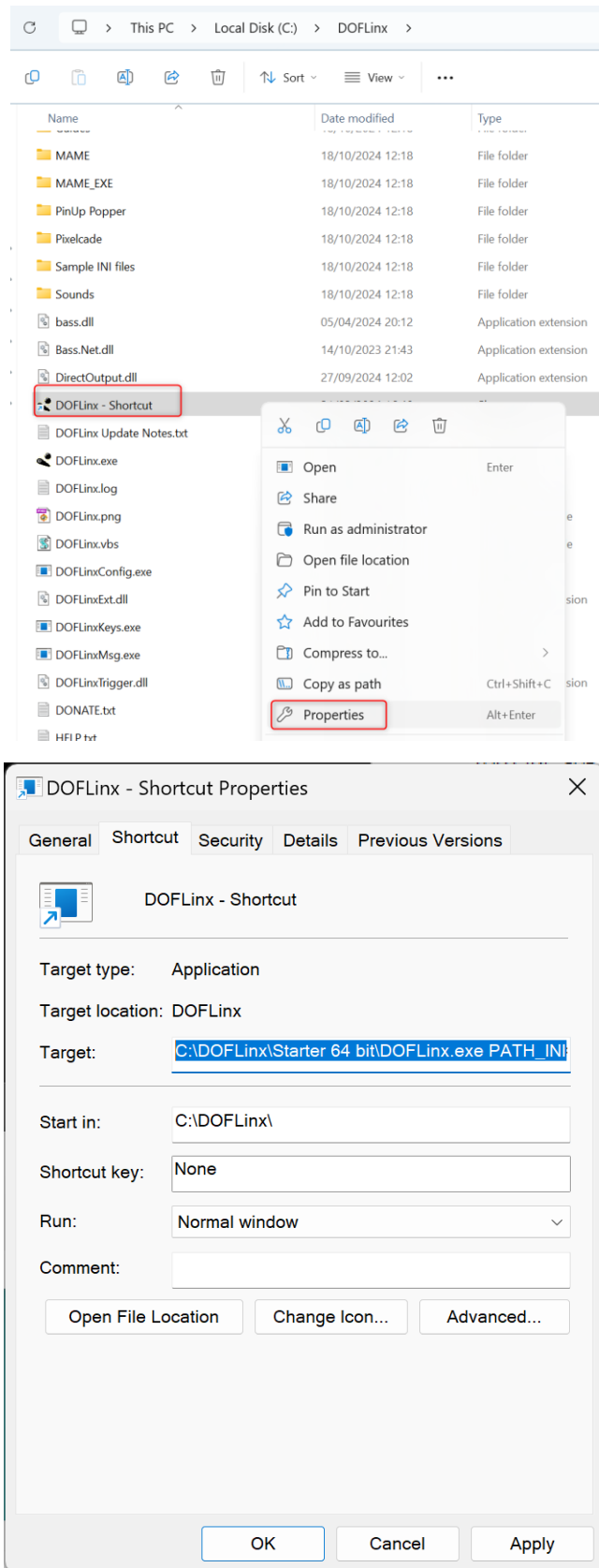
☐ DOFLinx to flash (pulse power) this device? Test

Create DOFLinx.INI file Cancel

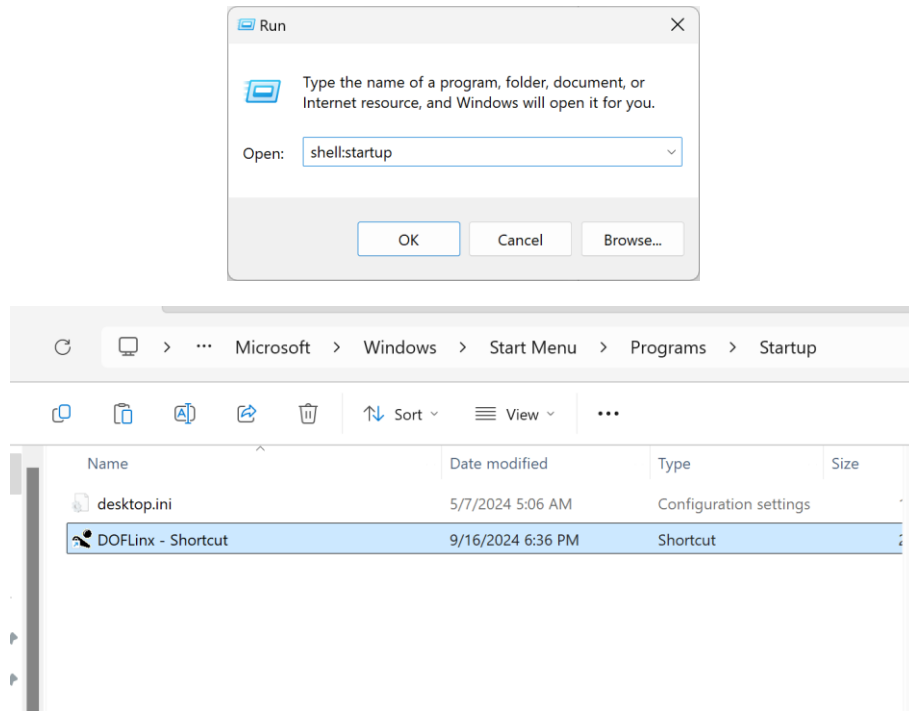
Click on **“Create DOFLinx .INI File”** when you’re done:



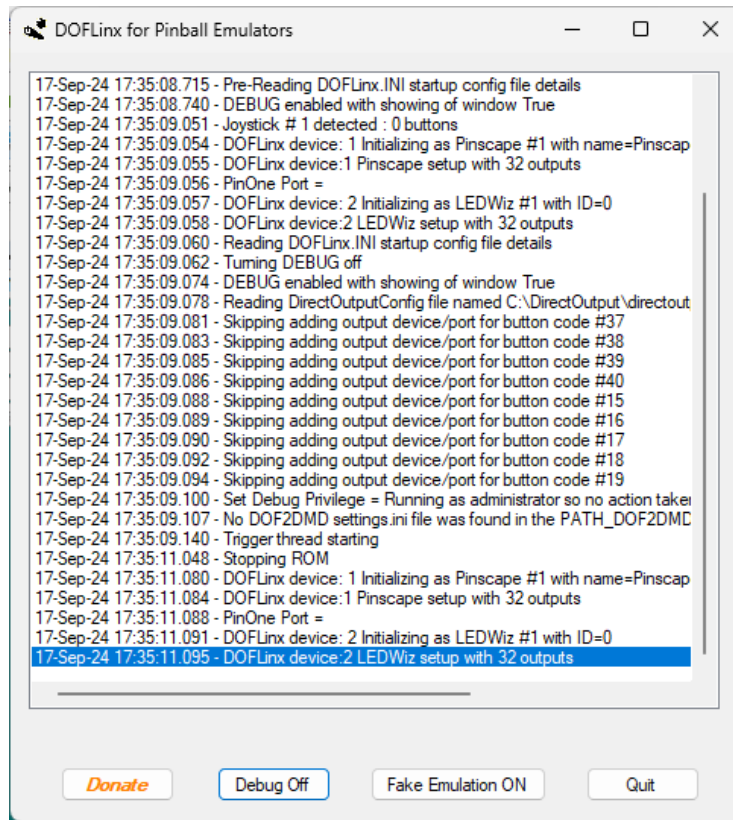
Edit properties of **DOFLinx – Shortcut.lnk** file and add the above string in Target field:



For automatic startup at every boot, put the shortcut in Startup folder:



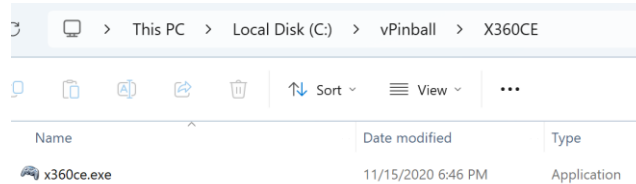
Reboot the machine. If your DOFLinx.ini is configured correctly you should not have any error in debug log (launch DOFLinx - Shortcut to check):



Accelerometer/Analog Plunger configuration

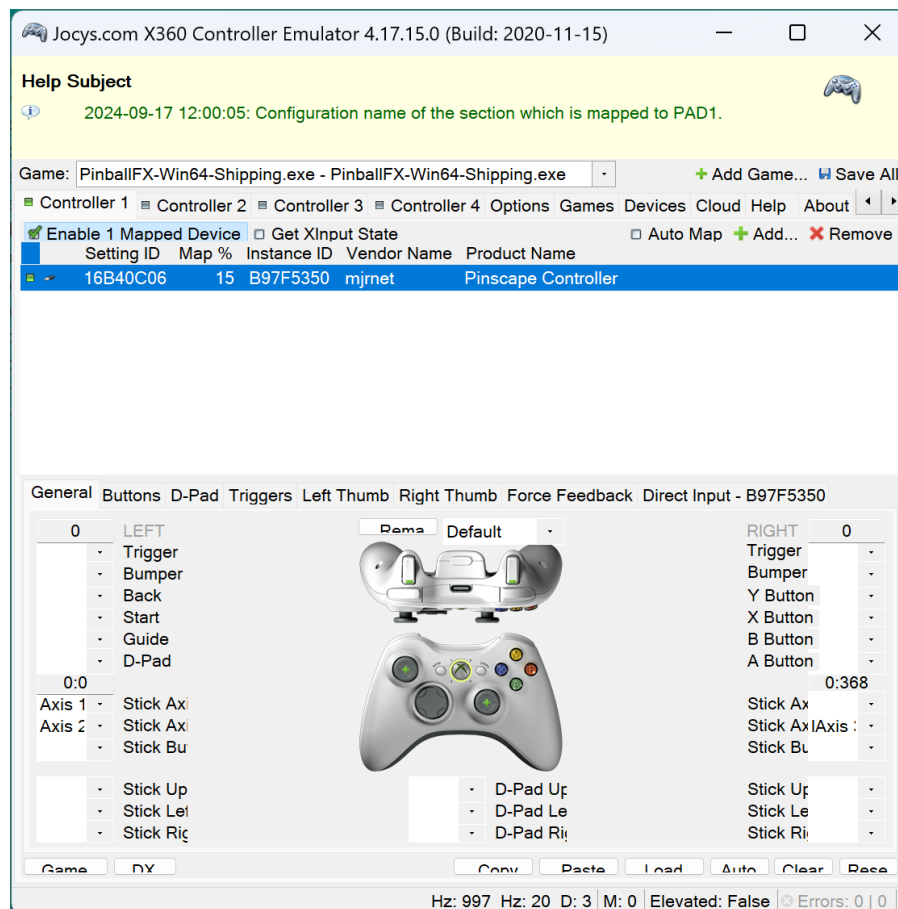
Pinball FX/FX3 emulators do not support analog plunger natively. In order to configure KL25Z accelerometer for nudge/tilt and VirtuaTilt analog plunger, you should download **X360CE** emulator from <https://www.x360ce.com/>

Unblock the zipfile, uncompress in a folder of your choice (es: C:\vPinball\X360CE\) and launch **x360ce.exe**



Click on **Add Game** and add the following game **C:\Program Files (x86)\Steam\steamapps\common\Pinball FX\PinballFX\Binaries\Win64\PinballFX-Win64-Shipping.exe**

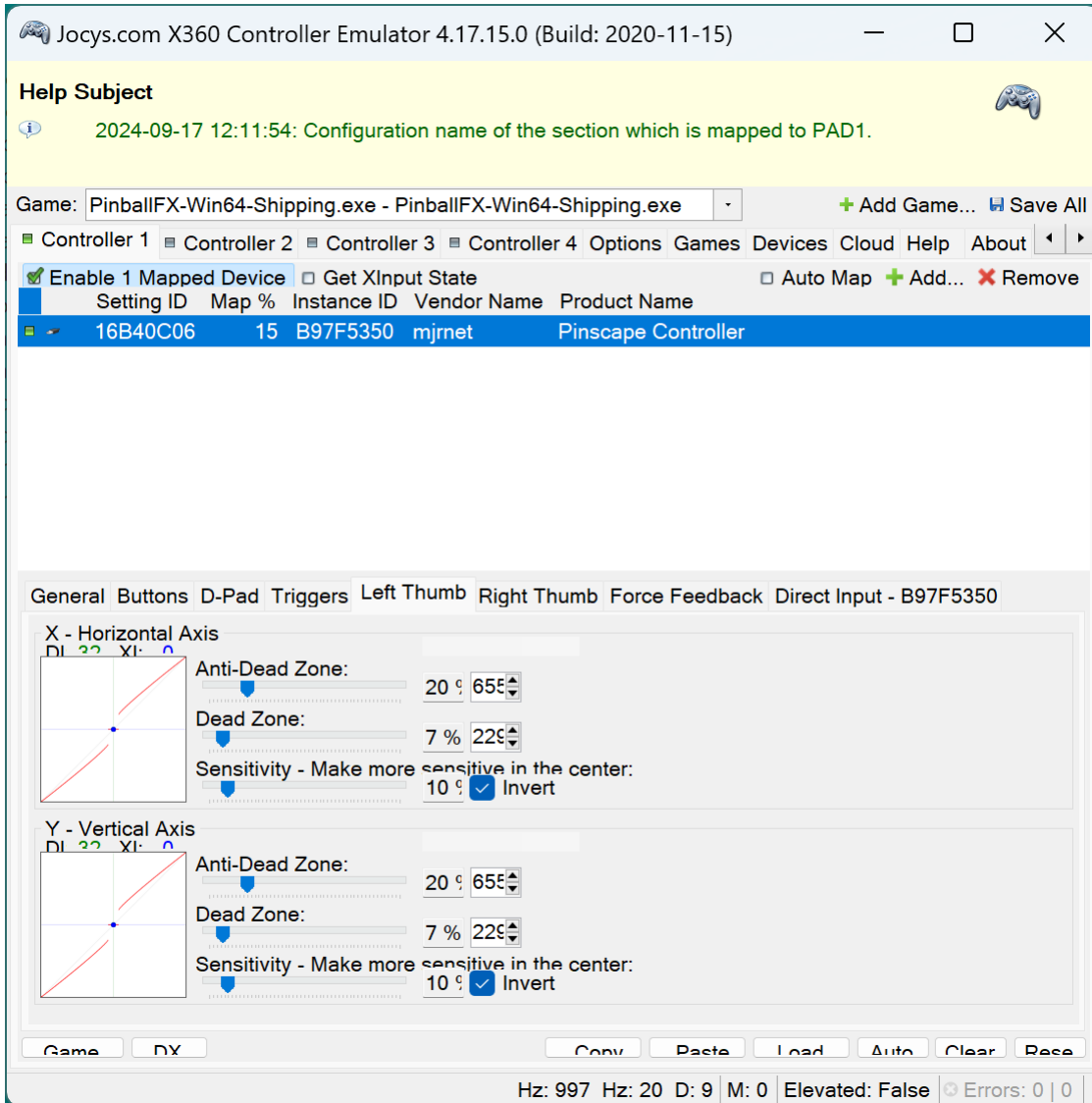
Add also **Steam.exe** game at **C:\Program Files (x86)\Steam**



IMPORTANT: On the **Controller 1** tab, uncheck the "Auto map" checkbox, click "**Add...**" to the right of that and **add your Pinscape controller**.

On the **General** tab below, click **Clear** and then set the **left stick X Axis** to **Axis 1** and **left stick Y Axis** to **Axis 2**. Set the **right stick's Y Axis** to **IAxis 3 (Inverted Axis)**

On the **Left Thumb** (used for nudging) tab you'll likely want to adjust nudging sensitivity. Following are good values to start with VirtuaTilt; you can use them and then modify according to your preferences:



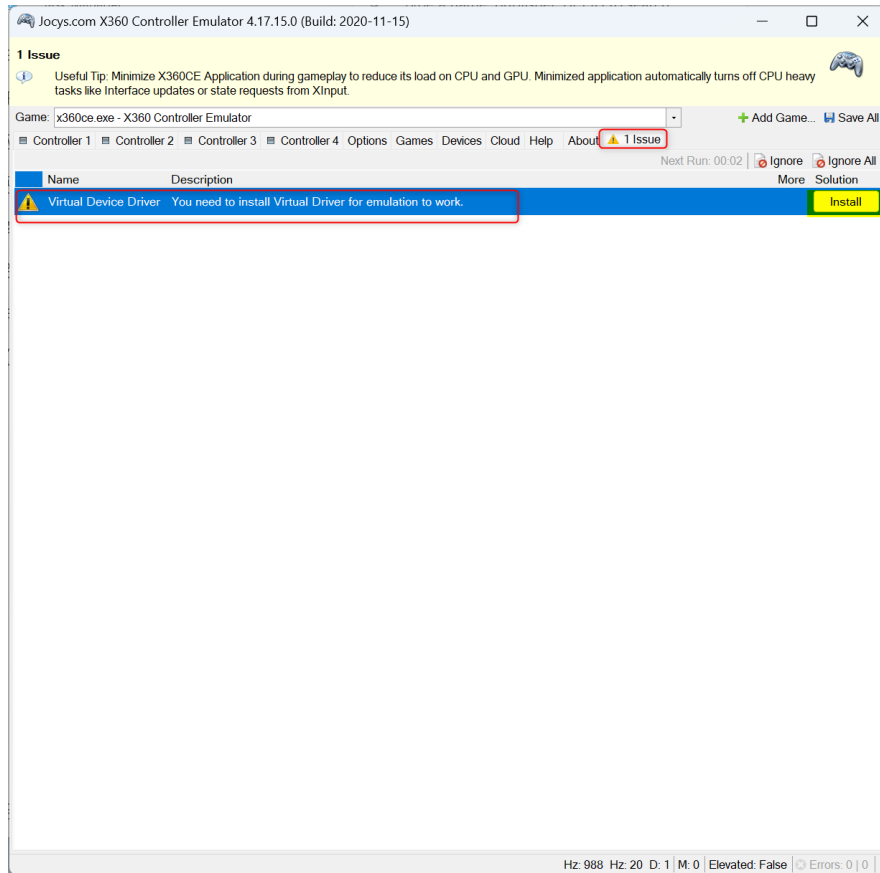
Click on **Save All** after you configured x360ce and leave it running in background.

NOTE: You can test Nudge sensitivity on **Left Thumb** tab and Plunger sensitivity on **Right Thumb** tab.

IMPORTANT: X360CE should always run in background to have plunger/accelerometer functions in Pinball FX.

On the **Options** tab, uncheck the box "Allow only one copy of Application at a time". This can sometimes cause x360ce to not reopen when tables have been open/closed a few times, even though the old process has been killed.

If you have **1 issue** in x360ce tabs, you have to install Virtual Device Drivers:



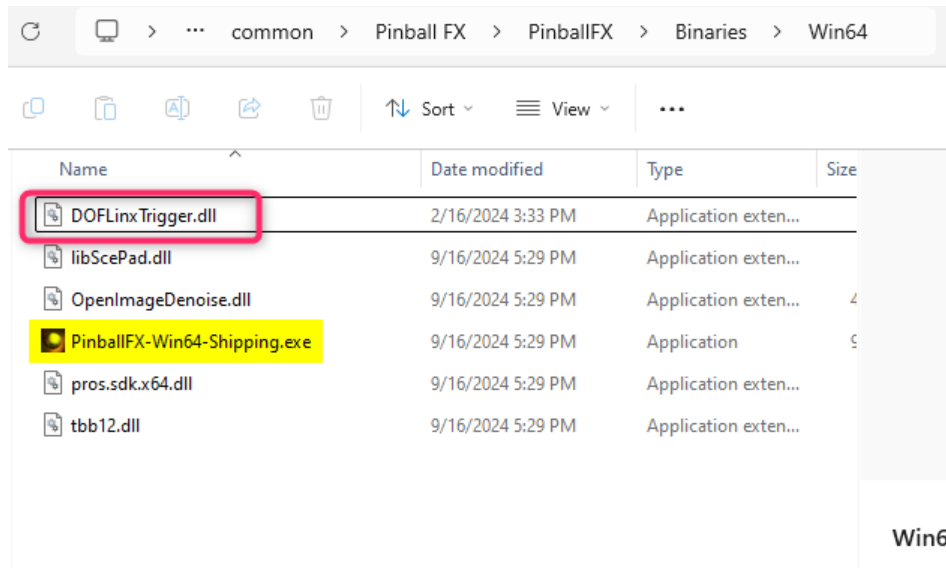
Click on **Install** button and reboot the machine.

Restart x360ce to check if the issue is gone.

Enabling Pinball FX for DOFLinx

Copy **DOFLinxTrigger.dll** from where you unzipped the DOFLinx download to the same folder

as PinBallFX-Win64-Shipping.exe (**C:\Program Files (x86)\Steam\steamapps\common\Pinball FX\PinballFX\Binaries\Win64**)



Edit your **DOFLinx.INI** to make Pinball FX activate DOFLinx by adding in the **PROCESSES=** line **PinballFX-Win64-Shipping**, so if you want MAME and PinballFX to activate DOFLinx you would have:

PROCESSES=Mame64,PinballFX-Win64-Shipping

Note: **PinballFX-Win64-Shipping** is the process to monitor for, but you still run **PinballFX.exe** to start PinballFX.

Be sure to have the **PATH_FX=** and **PATH_FX_B2S=** parameters pointing to the place you put the FX files.

Make sure you have a **** on the end of the path, so **C:\DOFLinx\FX**

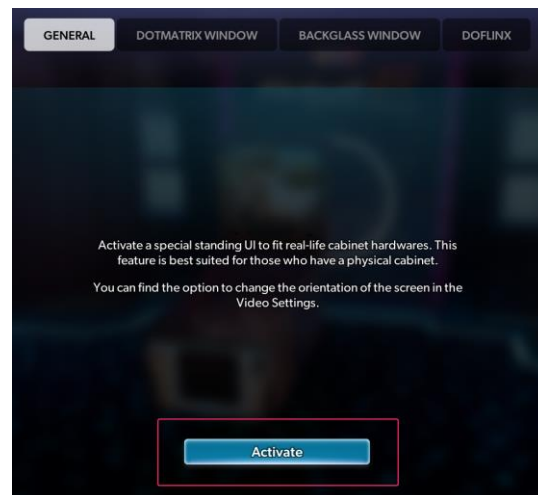
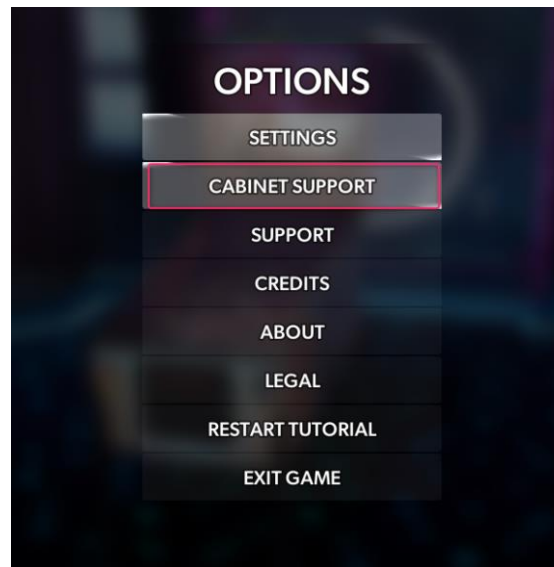
You can get the complete set of active backglassses for Pinball FX from

<https://drive.google.com/drive/folders/1AjJ8EQo3AkmG2mw7w0fLzF9HcOjFoUZH?usp=sharing>

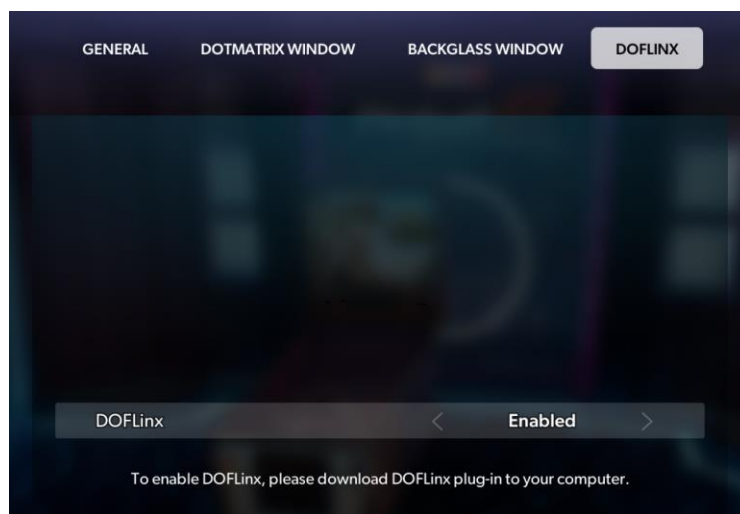
and place them in the folder you just setup above.

Reboot the machine.

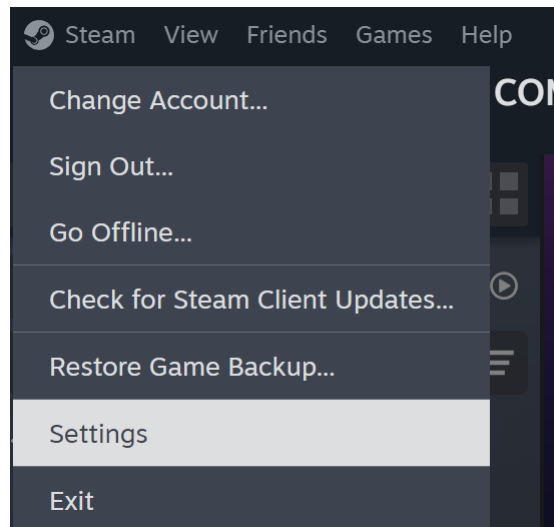
Start Pinball FX, go to Settings | Cabinet Support | General and **activate cabinet mode**:



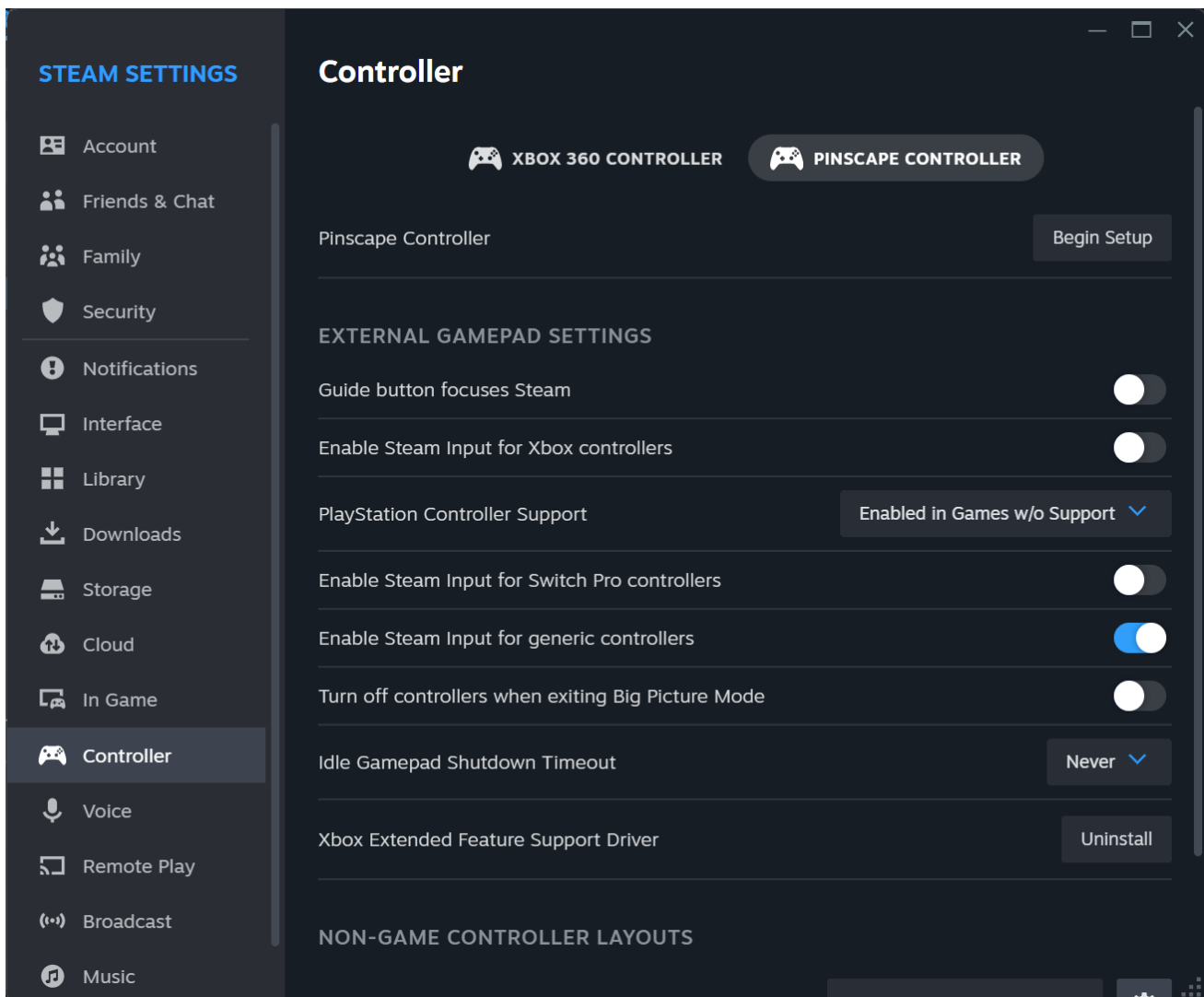
Go to the DOFLinx tab, enable it:



Go to Steam Settings → Controller



Disable everything under "External Gamepad Settings" with the exception of "**Enable Steam Input for generic controllers**".



Start Pinball FX and have fun. If everything was setup correctly you should see DOFLinx logo during loading:



DOFLinx.INI file for VirtuaTilt

You can have a look at the following **DOFLinx.ini** file as a reference for your VirtuaTilt. Be sure to correctly configure all paths:

```
#####
```

```
# DOFLinx Configuration Tool generated DOFLinx.INI file at 20:09:10 18 October 2024
```

```
#####
```

```
DEBUG=1
```

```
COLOUR_FILE=C:\DirectOutput\directoutputconfig51.ini
```

```
DIRECTOUTPUTGLOBAL=C:\DirectOutput\Config\Globalconfig1.xml
```

```
PATH_B2S_SERVER=C:\vPinball\VisualPinball\Tables\
```

```
PATH_FX2=\\
```

```
PATH_FX2_B2S=\\
```

```
PATH_FX3=C:\DOFLinx\FX3\
```

```
PATH_FX3_B2S=C:\DOFLinx\B2S\
```

```
PATH_MAME=C:\DOFLinx\MAME\
```

```
FP_ATTEMPT_LINK=1
```

```
MAME_FOLDER=C:\MAME\
```

```
PATH_PIXELCADE=C:\Pixelcade\
```

```
PATH_HI2TXT=C:\HI2TXT\
```

```
PROCESSES=Pinball FX2,Pinball FX3,Mame,Future Pinball
```

```
MAME_PROCESS=Mame
```

```
L_FLIPPER_KEY=A0
```

```
R_FLIPPER_KEY=A1
```


LINK_BUT_LF=0000,MONO,A0

LINK_BUT_RF=0000,MONO,A1

LINK_BUT_ML=0000,MONO,A2

LINK_BUT_MR=0000,MONO,A3

LINK_BUT_ST=0000,MONO,31

LINK_BUT_EB=0000,MONO,32

LINK_BUT_EX=0000,MONO,1B

LINK_BUT_CN=0000,MONO,35

LINK_BUT_LB=0000,MONO,0D

L_FLIPPER_OUTPUT=1003

R_FLIPPER_OUTPUT=1004

LINK_LF=1003,100,10000,255

LINK_RF=1004,100,10000,255

LINK_LS=1001,100,500,255

LINK_RS=1001,100,500,255

LINK_ML=1001,100,500,255

LINK_MC=1001,100,500,255

LINK_MR=1001,100,500,255

LINK_BL=1001,100,500,255

LINK_BC=1001,100,500,255

LINK_BR=1001,100,500,255

LINK_GR=1002,1000,10000,255

LINK_KN=1001,100,500,255

#!!!!!!!!!!!!!!!!!!!!!!!!!!!!