By Nailbuster, TerryRed and others

PinUP Pinball System Manual

V.0.36 by Dux Retro (updated 20-05-2018)

Translated versions of this manual:

German Version   **Portuguese version**

by Bambi Plattfuss   **by Cicero "Lordzak" Eduardo**

Don't forget to show your support for PinUP Pinball System Facebook Group:
https://www.facebook.com/groups/1602697096474910/

For troubleshooting and details visit the official forum on Vpinball:
http://vpinball.com/forums/forum/visual-pinball-forums/pinup-player-interactive-video-plugin/

Help to improve this manual by correcting grammar, improving or adding new content. Thanks!

1. Installation

Here you'll be guided through the installation process. Be sure to check if you have already installed everything mentioned in **Chapter 1A** and that you set the DPI Scaling (Text Size) to 100% in your Windows OS (**Chapter 1B**).

A. What you should already have installed

Visual Pinball X All-In-One Installer
Current Version: **10.4.0**
Download from:
http://www.vpforums.org/index.php?app=downloads&showfile=11573

Visual Pinball X - Beta
Current Version: **10.5 Beta rev 3427**
Download from:
http://vpinball.com/VPBdownloads/vp-10-5-beta/

SAMBuild
Current Version: **3.0**
Download from:
http://vpuniverse.com/forums/files/file/4236-sambuild/

SAMBuild - Beta
Current Version: **3.1 Beta rev 4506**
Download from:
http://vpuniverse.com/forums/topic/3461-sambuild31-beta-thread/

BS2 Backglass Server
Current Version: **1.3.0.2**
Download from:
http://www.vpforums.org/index.php?app=downloads&showfile=12553

DMD-extensions
Version: **1.6.0**
Download from:
https://github.com/freezy/dmd-extensions/releases

B. Setting the DPI Scaling (Text Size) to 100% in Windows

Set your '**DPI Scaling**' (Windows 7) or '**Scale and Layout: Text Size**' (Windows 10) to 100% by going to your Display Settings for your version of Windows. This must be done or the size and positions of Videos will not display correctly.

C. Getting the files

PinUP System (Player and Popper Front-End) Installer
Current Version: **1.3**
Download from:
http://vpinball.com/VPBdownloads/categories/pinup-system-installer-and-tools/

This should give you the following file:
1523721997_PinUPSystemInstall_v1_30_Final.zip

PinUp System Update
Versions: **1.3.1 - 1.3.3**
Download from:
http://www.nailbuster.com/wikipinup/doku.php?id=release_notes
You can find a changelog and instructions there as well.

Note 1 You need to install **ALL** updates one after each other! Start with 1.3.1 and work your way up and overwrite files in case that's needed.

Note 2 Since Nailbuster frequently updates his frontend, it's wise to check the PinUp Pinball System Facebook Group for notifications about new updates and other news.

VLC Media Player
Version: **2.2.8**
Download from:
http://download.videolan.org/pub/videolan/vlc/2.2.8/win32/vlc-2.2.8-win32.exe

Note You need this version of VLC in order for the videos to work!

D. Installing PinUP System

1. Install **VLC Media Player** (vlc-2.2.8-win32.exe) first.
2. Extract: '**1523721997_PinUPSystemInstall_v1_30_Final.zip**'.
3. Click on: '**PinUPSystemInstall_v1_30_Final.exe**'.
4. Click '**Next**'.
You'll be presented with the following screen:
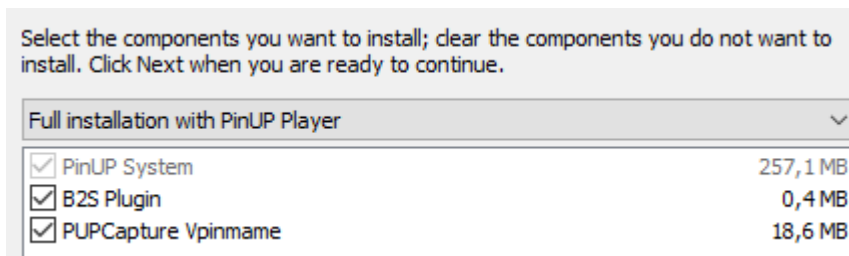
5. **Select** the **locations** where you want everything to be installed.

Note If you choose another drive to install PinUP System Folder, also change the 'Default Media Directory'! Check: **Chapter 2A. GlobalConfig**!

6. Click '**Next**'.
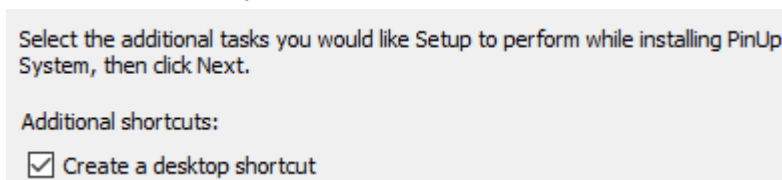In the following screen click which component you want to install.

7. Click '**Next**'.
In the next screen you can choose if the setup needs to create a desktop shortcut:

8. Click '**Next**'.
The Installation will now run. Wait for a bit.
After the installation is complete, the PinUP Player Displays screen will open:
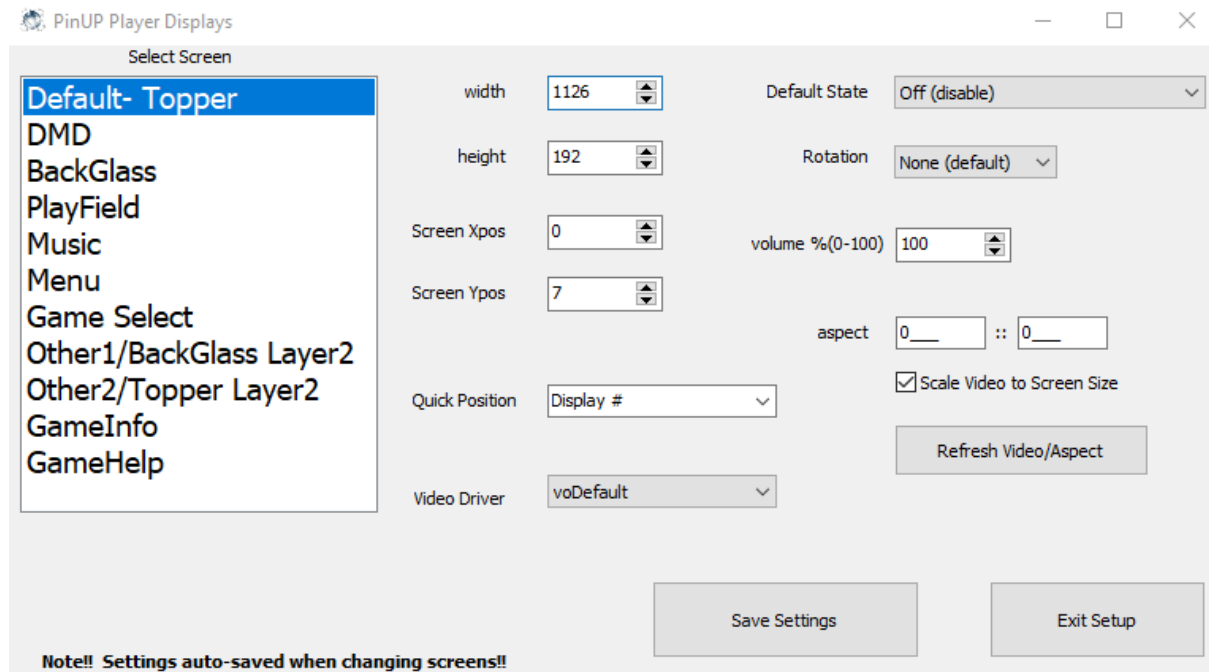
Here you can change several settings for the screens that are supported. Enable / disable whatever you want depending on the hardware and screens you have.

9. After you are done, click on '**Save Settings**'.
10. After clicking on '**Exit Setup**' the installation is finished.
11. Now exit the installer by clicking '**Finish**' .
12. Install the **PinUP System update** by extracting 'PinUPSystem_update*****.zip' and copy and overwrite the files to your Hard drive:**PinUPSystem**\ folder.

The installer should now have created a folder called '**Pinup**' in your Windows Startmenu, which contains the following 3 files:

-**PinUP Pack Editor**
Here you can create or edit PuP Packs (folders, videos. Media, playlists) to play interactive videos during your games and you use it for the media content in PinUp Popper Menu.

-**PinUP Popper Config**
You use this to setup the PinUP Popper Menu and add games, playlists and media. **See Chapter 2 and 3 on how to do this.**

-**PinUP Popper Menu**
Your pinball cab's new best friend. The way to start the frontend.

You are now done with the installation part of this manual!

 Rather watch a video?

Check out TerryRed's excellent YouTube video on how to install the software:
https://www.youtube.com/watch?v=wjMKEa_3dws&lc

2. Getting Started

Before running any games, you need to do a first initial setup.

Start **'PinUP Popper Config'** (windows Start Button > Pinup> PinUP Popper Config).

You'll see a screen open, and you need to click on the '**Popper Setup**' tab (**1**) and you'll see the following:
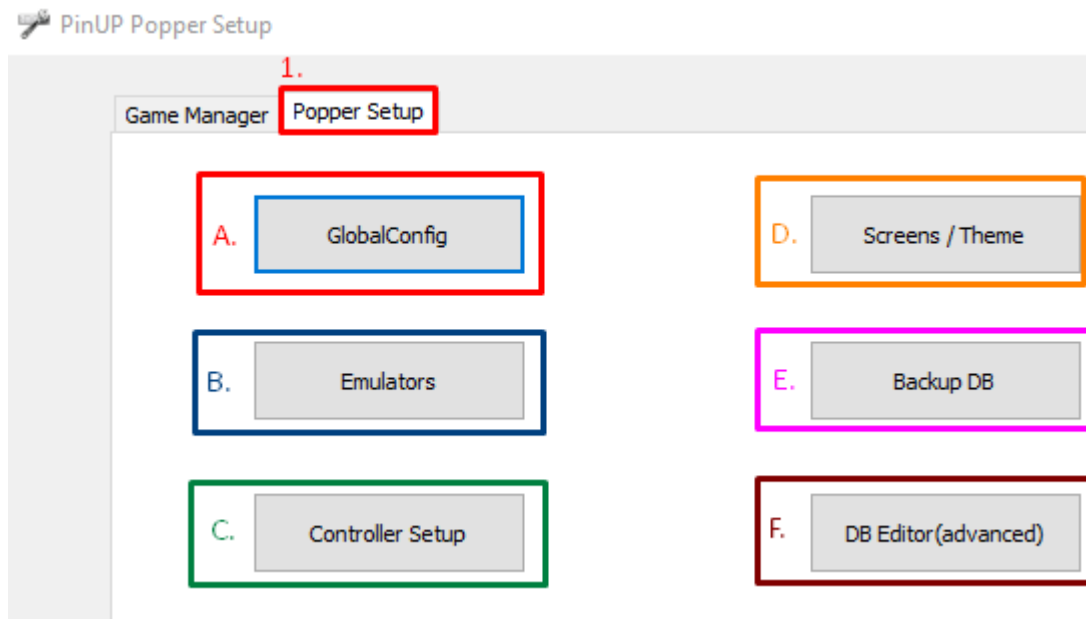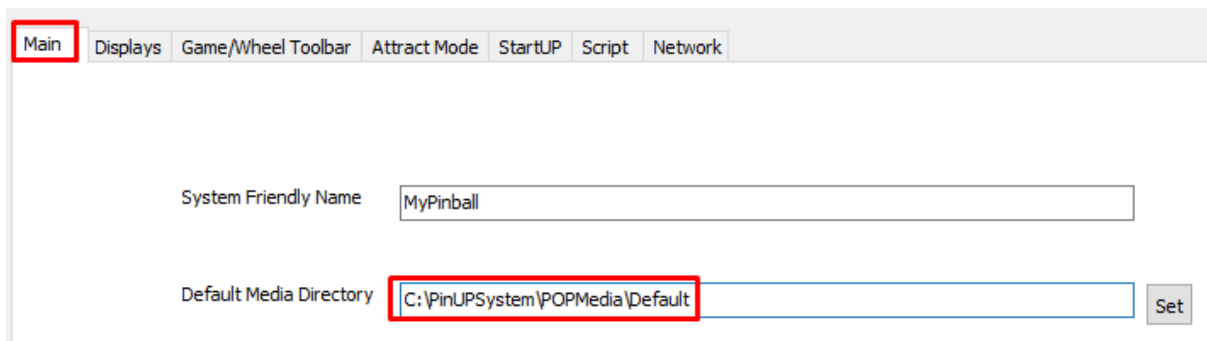

We'll be going through steps A - F as seen in the image above.

A. GlobalConfig

1. Check (or change) the Default Media Directory:
Go here by clicking on '**GlobalConfig**'.

In the screen that opens, go to the '**Main**' tab and make sure that you set the '**Default Media Directory**' to same location you entered when installing PinUP Popper!

By default the Default Media Directory it's on C:\. Be sure to adjust this correctly.

2. Optional settings you might want to change (depending on your setup), while still in GlobalConfig:

Joystick Driver (found under the '**Game/Wheel Toolbar**' tab):
Select one of 3 options:
-XInput JoyDriver (Newer controllers like Xbox 360, Xbox 0ne)
-DirectX JoyDriver (Pinscape, older controllers)
-No Joystick

Dof with Popper (found under the '**Script**' tab):
Click on '**Open Script File**'.
Scroll to ///////// DOF CONFIG and then
Change var useDOF = **false** to **true**

More of this is mentioned under **Chapter 10B1**.

Note If nothing happens try to open the '**pupmenuscript.pup**' file in Windows Explorer and set 'Always use' to '**notepad.exe**'.

B. Emulators

1. In the '**Popper Setup**' tab click on '**Emulators**'.
Here you can edit or add new emulators for use with PinUP Popper:

The most important thing here is to make sure that all folders are properly set, along with the proper game file extension, otherwise it won't work.

'Keep Display Open': What display(s) can the emulator use.
0=Topper, 1=DMD, 2=BG (Backglass), Leave Blank for default of EMU.

Keep Display Open: Normally, when you launch an emulator all Displays will hide, you can tell Popper to Keep Display Open to continue playing media while in emulator. Example to keep a topper screen/video playing while in a game that doesn't support toppers.

Also be sure that the emulator(s) you want to use are 'Active' by ticking the box in the upper right that says 'Emulator Active in System'

2. Use the buttons on the bottom to scroll through the different emulators:
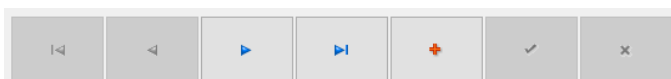
3. One you're done, click '**Close**' to go back to the main screen.

C. Controller Setup

1. In the '**Popper Setup**' tab click on '**Controller Setup**' to set up your game controller or keyboard buttons.
2. The Wizard option will let you do all the buttons one after another in one shot.

D. Screen / Theme

1. In the '**Popper Setup**' tab click on '**Screen / Theme**'.
2. Disable here what screens you don't have (or need) by going to the screens and setting this up for the Topper, DMD, Backglass, etc.
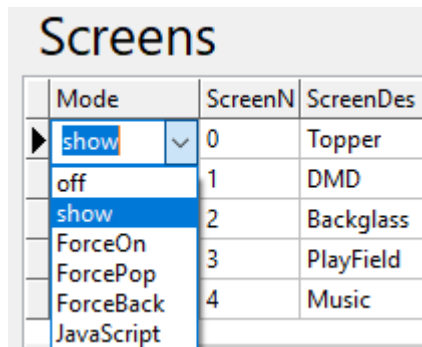
3. Afterwards save by clicking on '**Save PuP-Pack**'.

E. Backup DB

It's important to backup your Database frequently. Do this by doing the following:
1. In the '**Popper Setup**' tab click on '**Backup DB**' .

A window will pop up:
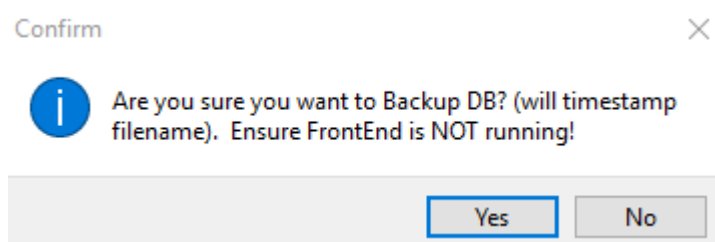
2. Click on '**Yes**' to confirm.

Note Your created DB Backups can be found at:
Your Hard drive:**PinUPSystem\PUPBackup** .

F. DB Editor (advanced)

Advanced SQL database editing. Examples may follow in the future.

In the '**Popper Setup**' tab click on '**DB Editor (advanced)**'.

You use this screen to edit the database using SQL codes.

Here you can also import a '**puplook.csv**' database file by clicking the '**Import Lookup**' button. For more information see **Chapter 4**.

 Rather watch a video?

Check out TerryRed's excellent YouTube video on how to get started:
https://www.youtube.com/watch?v=nZ7EwpaJEAs&t=

3. How to use the Game Manager

This chapter will be about adding games, making playlist and adding media.

Start '**PinUP Popper Config**' (windows Start Button > Pinup> PinUP Popper Config) if you haven't already.

You'll see a screen open, and you need to click on the '**Game Manager**' tab (**1**) and you'll see the following:
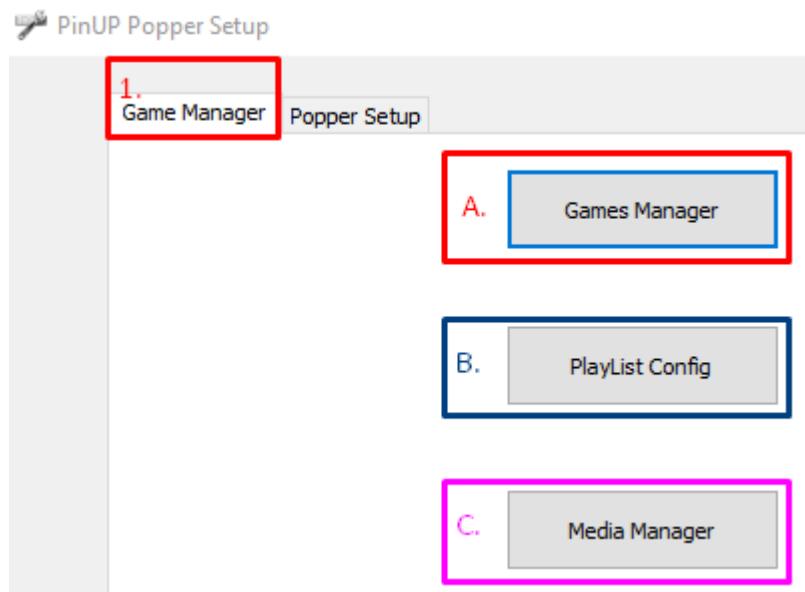
We'll be going through steps A - C as seen in the image above.

A. Game Manager

This will be used to add, delete or edit your games.

In the '**Game Manager**' tab click on '**Game Manager**'.

Here are 4 different tabs to choose from:
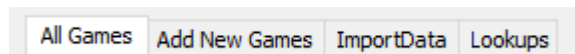
The '**All your Games**' tab shows all the games you have in your database. Here you can also edit game information or add several other options.

Note '**Keep Displays ON**' = You can enter what displays you want a game to use.
0=Topper, **1**=DMD, **2**=BG (BackGlass), Leave Blank for default of EMU.

In the '**Lookups**' tab you set up and add general games information (Game Types, Categories, Themes, Manufacturer).

The 'ImportData' tab is used for importing data to game information.

We'll be focusing on the 'Add new games'.

2. Click on 'Add New Games' tab (1) and the following screen will appear:

3. Select your desired emulator by clicking 'Scan Filter Emulator' (in this case Visual Pinball X) (2).
Keeping it on 'All Emus' is also an option if you want to copy games from various systems.
Just be sure to have everything set up properly as mentioned in: Chapter 2B. Emulators.

4. Click on 'Include Sub-Folders' (3). You should only select "include sub-folders" if you have tables/games setup inside sub-folders of your table root folder. (the standard method is to have all tables in root, so normally you won't need this checked.).

5. Click on 'Scan For New Games' (4).
Now you should be presented with a list of games (or tables in this case).

6. Now you can either 'Remove them from list', 'Select All' of them and 'Add the Games to the System'.

Note An added game will be highlighted in green.

Note You can double check if your folders are all correct by checking either 'Open Game Folder', 'Open Rom Folder' and 'Open PuP-Pack Folder'.

B. PlayList Config

Here you create playlists for use with PinUP Popper.

1. In the '**Game Manager**' tab click on '**Playlist Config**'.

2. Select (or create) a playlist on the left.

3.Click on the games on the right side of the screen and click '**<-- Add Game(s)**' to add them.

4. You can remove games from a playlist by selecting that playlist and then clicking on '**Remove Games -->**' .

By **right Clicking** on a **playlist** will bring up the option to:

-Add Playlist

-Remove Playlist

-Rename Playlist

Right clicking on a game in a playlist gives you the option to add it as a favourite (it will also highlight in **green**) or remove it as a favourite.

C. Media Manager

Here you can set up and manage all your media for your games.

In the 'Game Manager' tab click on 'Media Manager' and you will be presented with the following screen:
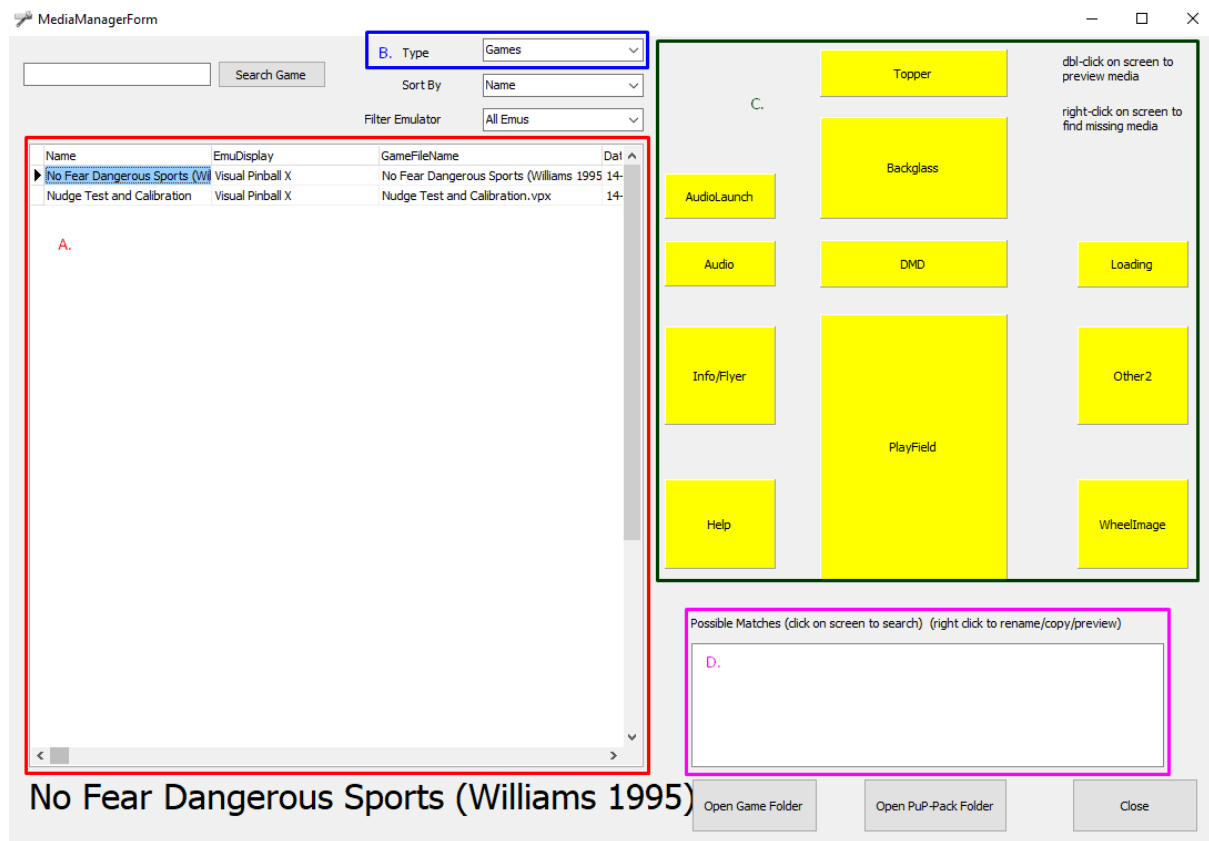
We'll be going through the different parts of the Media Manager (A - D) as seen in the image above.

Basics
A. Shows the Games including the Emulator, GameFileName and the added Date.
B. Type is important if you want to change between Games and Playlists.
C. The 'Boxes' (don't know how else to call them), which represent the different media.
D. If you have more than 1 media file for each box, it will be shown here.

The next page will show several things in more detail.

A. Games List

Screen you use to select your game (or playlist).
When you select a game, the boxes on the right (**C**) will show what media is (or is not) available.

B. Type: Changing Media for Games or a Playlist

You have the option to add (or change) media for either games or for a specific playlist item, that you've created in Chapter 3B. You can change this by clicking on either '**Games**' or '**Playlist**' under '**Type**':
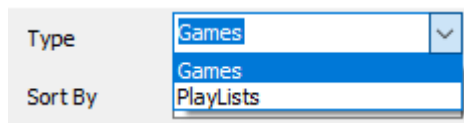
C. Boxes

When clicking on a game name (**A**) notice the boxes on the right side of the screen (**C**). Each represents the specific media that is or is not available for a table.

IF a box is **yellow**   IF a box is **green**

N**o media available**.   **Media is available**.

As seen on the image in the previous page, there are boxes available for: Topper, AudioLaunch, Backglass, Audio, DMD, Loading, Info/Flyer, PlayField, Help, WheelImage, Other2.

Note Since V1.3.2 there is also a box for **Wheelbar**. This is **only viewable** when you go to '**PlayLists**' first.

Box Options

Right click on a box gives the following options:

Find Next Missing: Goes through your game list and shows the game of which the media is missing.

Find From Start: Similar to find next but will start the search not from the current game you have selected, but will start from the beginning of game list.

Open Explorer: Go the specific Box location on your hard drive. Handy feature for when you want to copy files.

D. Matching more than 1 media files

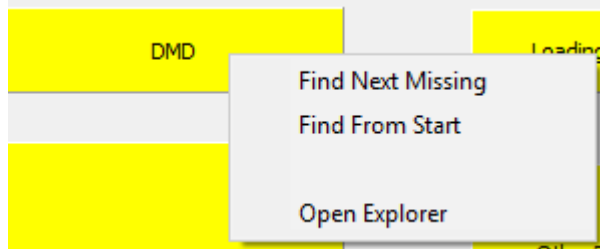By clicking a box there's a chance you will find several possible media files.
In the window mentioned below you can choose which one to use:
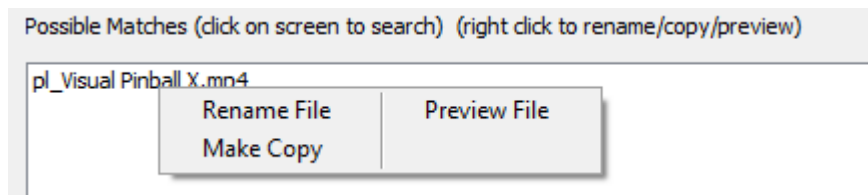
Rename File: The file will be renamed to match the game name.
Make Copy: Will keep original file and rename/copy file into proper location.
Preview File: Shows an example of that selected media file.

Adding media

1. Open your Windows Explorer and go to where you keep your Media files.
2. You can either:

   A. Drag and drop the media to the specific box you selected (**C**) and it will automatically be renamed to match the game name.
   Or
   B. you can copy the media straight to the specific location on your hard drive using Microsoft Explorer.

Note Your Main Media folder can be found at: Your Hard drive:**PinUPSystem\POPMedia**

You can also select a box, right click and use the Box Options mentioned here to open Explorer and go to the correct folder and copy to there.

Creating MediaPacks

When you Right Click on game, you will get the option to Create a MediaPack containing all the media you have available of that specific table:
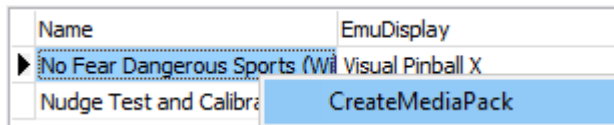
Note Your created MediaPacks can be found at:
Your Hard drive:**PinUPSystem\Mediapacks**

Using an existing MediaPack

To use a MediaPack on a game do the following:
1. Select a game.
2. Drag and Drop the Media Pack file on the Playfield box.
3. Confirm by clicking 'Yes'.

It will basically extract the MediaPack, take all the media and rename them so they match your game.

 Rather watch a video?

Check out TerryRed's excellent YouTube video showing the PinUP System Basics:
https://www.youtube.com/watch?v=t9Dyg0vcyIM

4. How to import and use a puplookup.csv DataBase file

The '**puplookup.csv**' is a DataBase (DB), which is filled with data, that you normally would have to type in yourself in the fields of the ['All Games' section of the Game Manager](#).

Data like for example: TableName, Manufacturer, Release Year, Game Type, etc.

This DataBase file will help you automatically fill in the fields by just doing some simple mouse clicks (or typing in a few keywords).

That sounds pretty handy, right?

Before we start with the instructions, there's one thing you need to do before hand:

A. Backing up your (current) DB

1. Start '**PinUP Popper Config**'.
2. Go to the '**Popper Setup**' tab (**1**).
3. Click on the '**Backup DB**' button (**2**).
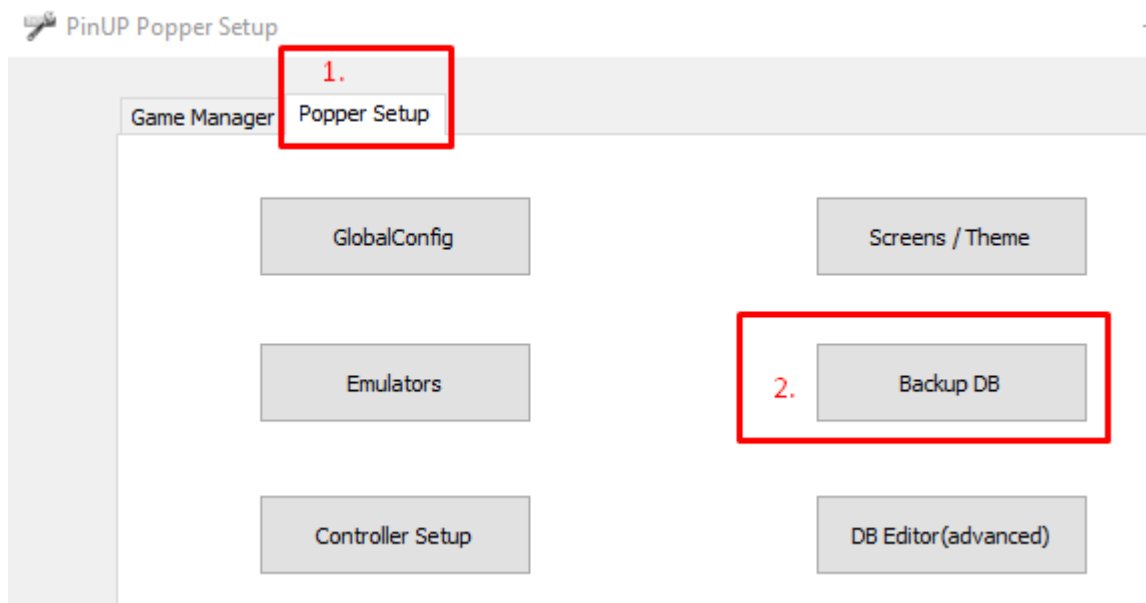
4. Confirm with '**Yes**' in the Popup Window that opens:
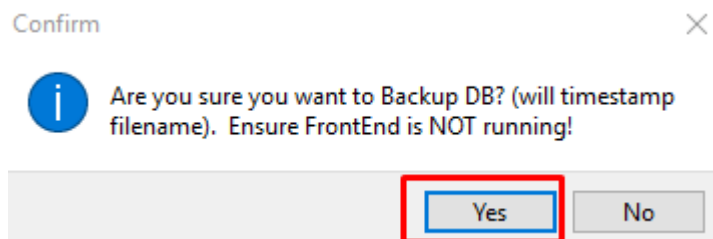
5. Now Close Pinup Popper Config by clicking '**Exit Setup**'.

B. How to use a downloaded puplookup.csv file

1. First make a Backup of your current Database, as explained in **4.A**.
2. Then find a '**puplookup.csv**' file, which are available at the **PinUP Popper! Facebook Group**.
3. Copy that '**puplookup.csv**' into the **root** of your '**PinUPSystem**' folder on your hard drive (Your Hard drive:**PinUPSystem**).
4. Start '**PinUP Popper Config**'.
5. go to the '**Popper Setup**' tab (**1**).
6. Click on '**DB Editor (advanced)**' (**2**).
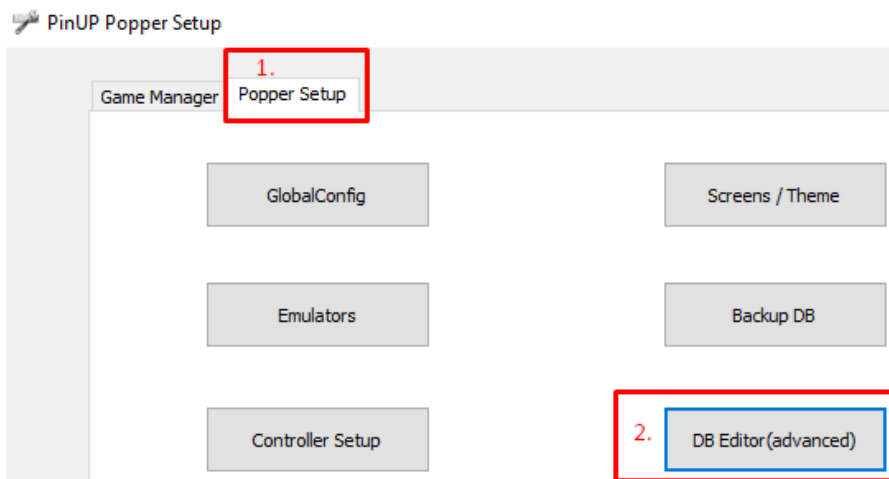
..and a new window will open.
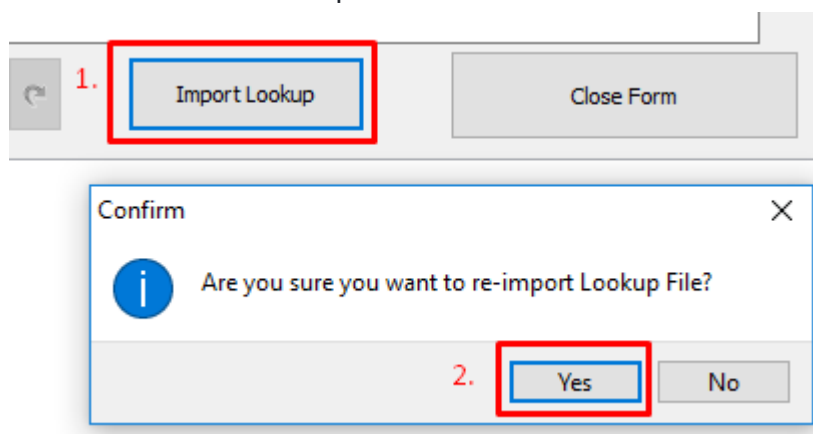
7. There click on '**Import Lookup**' button.
8. Confirm with '**Yes**' in the Popup Window that opens.

Now the importing process starts

Note This can take a while and it may seem that PinUP Popper is frozen or reacting, but don't worry it's still working. Give it some time.

When done, you should see an amount of numbers on the '**Import Lookup**' and a message that the importing is complete.
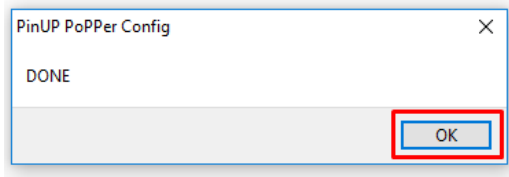
9. Now click the '**Close Form**' button to close the '**DB Editor (advanced)**' screen.

C. Using the Import function

 A. Click on the '**Game Manager**' tab (**1**).
 B. Click on the '**Games Manager**' button (**2**) and you'll go to the '**All Games**' screen, which should have all your games in it.
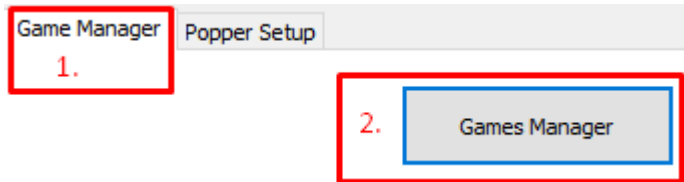
Note I'll use an example for the next few steps, but you can try it on any game you want. Do take into account that whether a game and data is available depends on which '**puplookup.csv**' you have downloaded. Some don't have all games or data fields included.

Example: Editing 'The Addams Family (Bally 1992).vpx' using 'import'.
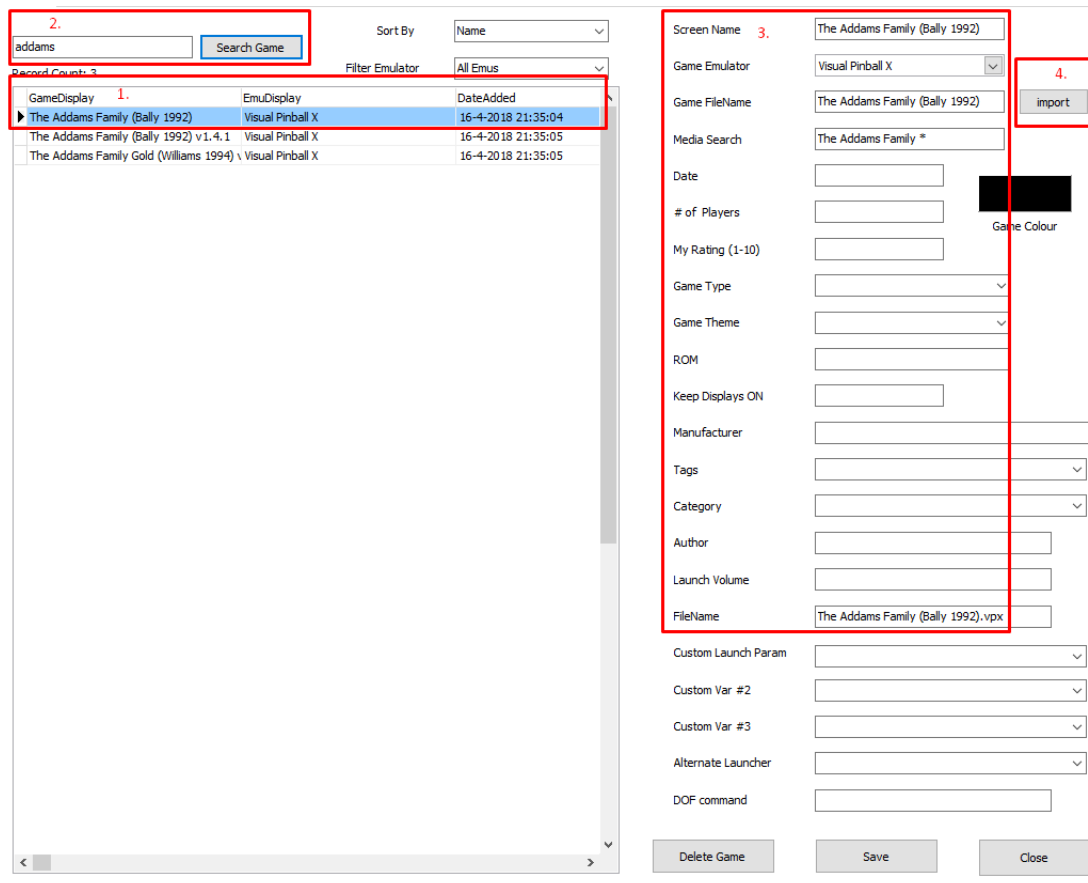
Take a second to watch the picture.

The steps in the next page will make more sense after that.

C.In your **Gamelist** (**1**) select the game that you want edit or use the import function on.

Note You can use the '**Search Game**' (**2**) function to find a game in your game list quickly before doing step C.

Also Notice how the most of the fields on the right (**3**) aren't filled in yet.

D. After selecting a game, click either the '**import**' button (**4**) or double click the GameDisplay game. The following screen will now open:

E. In most cases the table should already be shown in the list (**1**). If this correct you can **double click** it and you will go back to '**All Games**' screen.

Note If your **game** is **not shown** in the lis or the list is empty, you can try typing in (parts) of the Game Name in the '**Search Game String**' (**2**) and click on the '**lookup**' (**3**) button to show results.

Notice there's an '**Overwrite Game Name on import** ' option (**4**) on the bottom of the screen. Enabling this will change the Game Name in '**All Games**' screen to the name that's shown here in the '**Importdata**' screen.

F. Now you're back in the 'All Games' window. Notice that several fields (**1**) on the right will have data in them?

G. Remember to always click the '**Save**' button (**2**) before exiting or else all the data fields will remain empty next time you go here.

H. When you're done editing your games using import, click the '**Close**' button (**3**).

Repeat Steps 4.C - G for all your games.

5. Video Recording

PinUP Popper has an integrated recording feature to record screens with gameplay media up to 4k.
Below is explained how you get this working. First a bit of differences.

For users with (a) regular monitor(s) and a basic pc
PinUP Popper's record option will by default use the '**ffmpeg**' codec to record media when you install the frontend. This should work well for most people who have **regular or full hd monitors**.

For users with (a) 4k monitor(s) and a high end pc
If you have a **4k monitor** you can change the record option to '**gpu**'. This will allow **Nvidia video card** owners to use **ShadowPlay** and **AMD video card** owners to use **Relive** to record 4k playfield media from PinUP Popper's interface.
The usage of GPU accelerated recording is much more efficient than the default FFMPEG CPU recording method and is much more ideal for 4K videos.
This does **require** a more **powerful pc** and of course a **more expensive video card**.

There is also an option to use **Open Broadcaster Software Studio** to record you media. You however need to install an external program for this, which you can get: **here**.
Check **Chapter 5.B2 and 3** for more instructions

A. What you should first do:

1. Make sure you set up your '**Record Start/Stop**' button and the '**Menu Select**' button if you haven't done that in **2.C** already :
A. Start **PinUP Popper Config**.
B. Click on the '**Popper Setup**' tab.
C. Click on '**Controller Setup**'.
D. Click on '**Record Start/Stop**'.
E. Also click on the '**Menu Select**' button.
F. Now exit **PinUP Popper Config**.
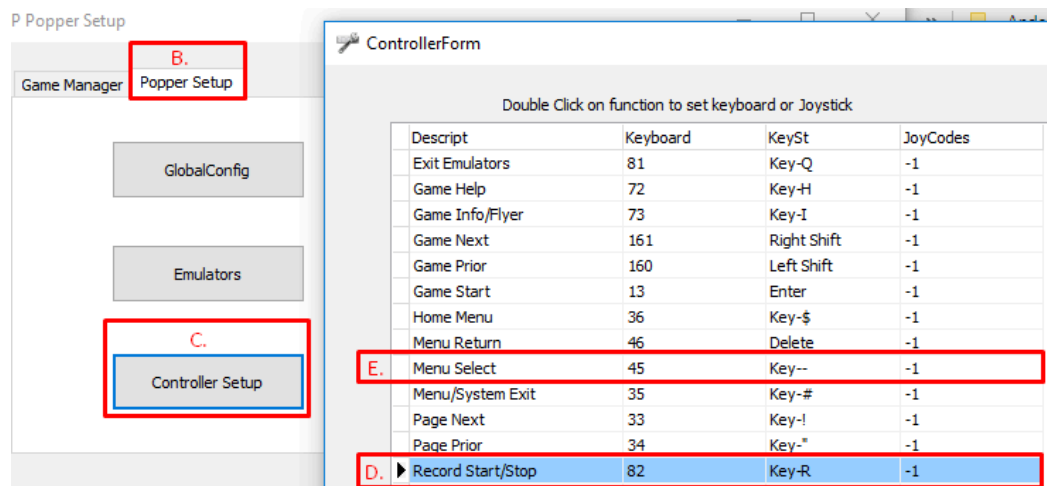
2. Make sure you have installed the **latest update** of PinUP Popper. Check **step 12** from **Chapter 1.D** on how to do this.

For users with (a) regular monitor(s) and basic pc
You can skip to **Chapter 5.C** now.

For users with (a) 4k monitor(s) and a high end pc
You need to do a couple of extra steps described in **Chapter 5.B** below.

B. Extra steps required to record in 4K

1. Editing the recordstart.bat

Edit the '**recordstart.bat**' in your **PinUPSystem\Recordings** folder and look for the following line: '**if %7% == 3 goto ffmpeg**'
Change to '**if %7% == 3 goto gpu**' if you want to use either **Nvidia's ShadowPlay** or **AMD's Relive** to record.
Change to '**if %7% == 3 goto obs**' if you want to use the **Open Broad Caster Software Studio** to record.

```
rem 1=xpos,2=ypos,3=width,4=height,5=Pix,6=filename,7=screennu
if exist recording.txt goto end
echo 1 >> recording.txt
start playsound recordstart.mp3
del ffmpeg*.log
del *.var
del stopplaying.txt
if %5% == 1 goto capbg

rem ////////  NEED TO SET NEXT LINES  (ffmpeg OR obs OR gpu)
rem ///////
                                    Change to  gpu
if %7% == 3 goto ffmpeg      or
rem if %7% == 3 goto gpu         Change to obs
rem if %7% == 3 goto obs
```

Note You need to have Open Broadcaster Software Studio installed if you want to use the obs option. See **Chapter 5B3**.

2. 4K Playfield setup with Nvidia Shadowplay or AMD Relive

While still in the **PinUPSystem\Recordings** folder, look at either the '**NVIDIA_ShadowPlay_Setup**' or the '**AMD_Relive_Setup**' folder, depending on which video card brand you have. These folders contain images on how to correctly setup your video card.
Follow these instructions now.

Screen captures of configuration examples are also available here:
Nvidia: www.nailbuster.com/pinupdates/NVIDIA_ShadowPlay_Setup.zip
AMD : www.nailbuster.com/pinupdates/AMD_Relive_Setup.zip

YouTube **Rather watch a video?**

Check out TerryRed's excellent YouTube video on how to update PinUP Popper and configure Nvidia Shadowplay Recording:
https://www.youtube.com/watch?v=Fdog37O6l_g&t

3. 4K Playfield Setup with Open Broadcaster Software Studio

1. Install Open Broadcaster Software Studio, which you can get: **here** to the default location on your C:\ drive.
2. Configure OBS with a new profile DISPLAY3 (it must be called **DISPLAY3**).
3. This profile needs to be setup to record entire playfield. if you don't know how to use OBS, watch some tutorials on youtube about OBS.
4. View the screenshots below on how to exactly configure the profile:
www.nailbuster.com/pinupdates/OBSSetup.zip

To check if your OBS is setup correctly, start OBS and press the recording button.
It should create a file output.MKV inside your PinUPSystem\Recordings\ folder. Then press **F6** to stop recording.
Play the output.mkv file, it should be 4k video of playfield.

4. Test your general video recordings

To confirm if you set up your video card correctly, go to your PinUPSystem\Recordings\ folder and click on '**altf9.exe**'.
This should record a .MP4 video in your **PinUPSystem\Recordings\Video\Desktop** folder.
4. Run '**altf9.exe**' again and the record video should be done. You can test the video and see if it in good quality, etc. and you're good to go to the next part of this chapter.

C. Recording your game display(s) while using PinUP Popper

1. Start PinUP Popper.
2. Choose and game and click the '**Menu Select**' button, **NOT** the regular **start** button!.
3. In the options that appear click on '**Record Display**'.
From here you can choose several like: Record Topper, Record DMD, Record BackGlass, Record Playfield.
4. If you have found the display you want ro record click on the '**Menu Select**' button again.

Now Visual Pinball will load your selected game

5. Once the game it's loaded, **click** on the '**Record Start/Stop**' button to **start recording**.

🔊 You"ll hear a message: "*I'm now recording you playing with your balls*".

6. When you are done recording (max 60 seconds) you must **click** on the '**Record Start/Stop**' **again** button to **stop** the **recording**.

🔊 You"ll hear a message: "*Recording has stopped. Please wait for encoding. Do not touch system*".

During the converting process you will hear the Jeopardy theme and the video will automatically be renamed and copied to the correct emulator and folder on your hard drive.

After this is done you'll hear our very own Nailbuster:

🔊 "*Conversion now done. Enjoy*".

When you quit the game, your new video should be shown in the PinUP Popper Frontend when you browse that table again.

Note The video file should now be in your **PinUPSystem\POPMedia\Visual Pinball X** ---whatever you choose to record , like for instance the **Playfield** folder.

D. PopperAutoRecord - Automatically record ALL your Tables/ Games

PopperAutoRecord.exe is an awesome utility that can scan/find missing media and batch all recordings for you while you sit back on the couch. Fully automated with launch each game, recode each/any display as needed and close game and more onto next game.

Note You should ONLY run this after you have tested and recorded each display manually in Popper to make sure your recording is setup correctly.

1. Launch '**PopperAutoRecord.exe**' From your PinUPSystem folder and the following program will open:
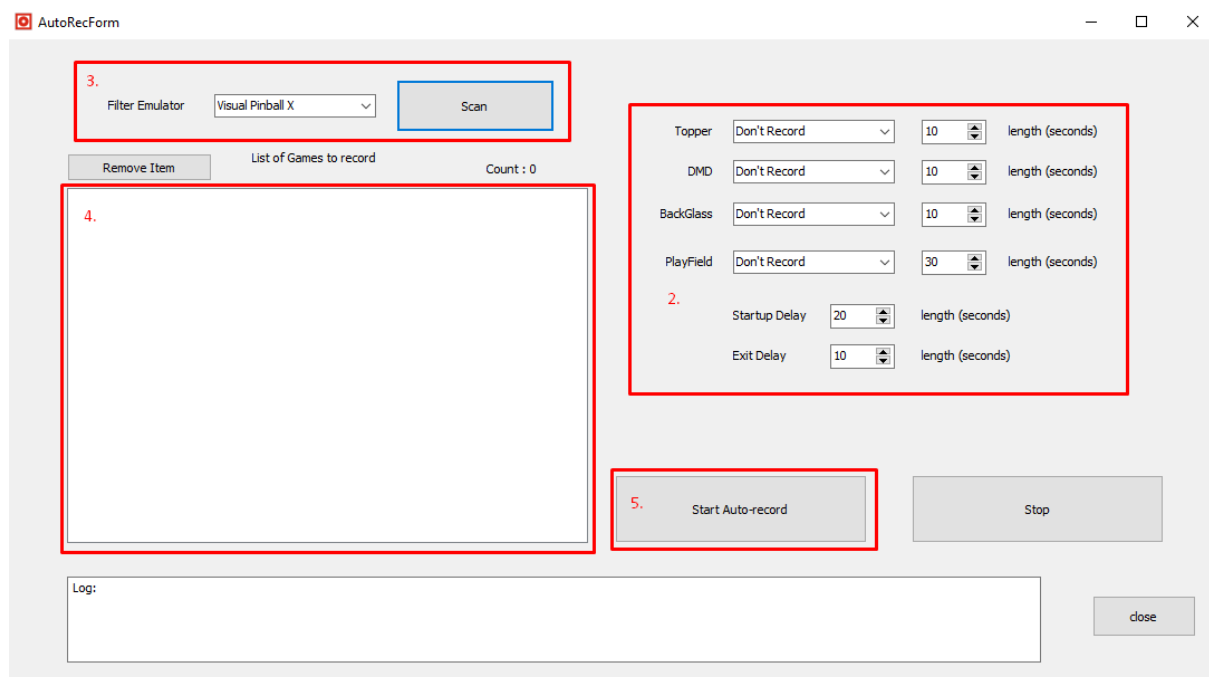
2. Here you select which displays you want to record and the time length.
3. Then select the emulator, and then press SCAN.
4. The list will show you all games/tables and which displays it will record. Entries that you don't want to record for you can delete by highlighting them and clicking on remove item
5. When you're ready click on 'Start Auto-record' to start recording.

Note While its running you may wish to cancel the batch recording. go to your desktop and browse to your PinUPSystem\recordings folder and you will find a '**StopAutoRecording.bat**'. Run it and the batch will stop after it finished the current table/game.

E. Rotating Playfield Videos 180 degrees

For optimal performance it's recommended to rotate your playfield videos if they are 180 degree rotated. Or if you have 4K screens why bother and make brand new 4K30fps playfield videos.

Simple process:
1. Create a temp folder somewhere and copy all your playfield videos there.
2. Grab this file: http://www.nailbuster.com/pup/Rotate180.zip
3 .Unzip into your temp folder.
4. Run the batch file (rotate_180.bat for 180 degree) and it should create a sub_folder and start converting/rotation all files for you automatically.

Note This may take a long time if you have a lot of files, so maybe run this overnight. Batch file is setup to do mp4s. but if you look at batch, you can very easily change it to *.flv or *.mov (other video filetypes) and re-run batch.

F. Pink2K and Flipping your DMD images

BTW: If you have a pin2k cabinet the above method is the same, but instead of running the rotate180.zip you use this one to flip Y access on dmd videos.

http://www.nailbuster.com/pup/YFlip-All-mp4s.zip

G. Real DMD Users convert videos to animated GIFs

Also, for REAL-DMD users, only animated gifs are supported (no avi/flv).

If you have a real-dmd, the above method is the same, but instead of running the rotate180.zip you use this one:

try this batch to convert them to animated gifs:
(experimental)http://www.nailbuster.com/pup/make_anigifs.zip

within the batch you can see the resolution of the GIF output.

6. Network Game Manager Config

Before you start this chapter it's required that you know your pin-cab's Network/ Computer Name. If you don't know it, or don't know how to change it, use Google or Windows Help.

A. Before you start

It's important to have your cab up and running and have a few games already added. And make sure it's all working properly.
All paths for media and exes should be local paths to (c:, d:, etc.).

Once thats good, let's start with network game management!

1. Create full share access folder to PinUpSystem on cab.
2. Create full share access folder to "Visual Pinball" on cab.

Note Do NOT map or use any drive letters using this system.

In this example the cab is named: vpinball
So i have two shares:
\\vpinball\PinUpSystem
\\vpinball\Visual Pinball

Note: there's no drive letters… UNC naming

B. Making a shortcut to your shared access on your pc

While on your pc, we're going to make a shortcut:

1. Open File Exporer and browse your Network
2. Go into \\vpinball\PinUPSystem share (mentioned above) and right-click on pinupmenusetup.exe (copy).
3. right-click on your desktop and press 'paste SHORTCUT'.
4. Now go to shortcut properties and add the parameter -network.
5. Double click / run the new shortcut and the setup should start with no errors and show you the main screen that is running in 'Network Mode'.

C. Setup Default Media Dir on Global Settings

In order for a remote PC to know where things 'are located' you need to setup the network shares in config.

1. So go into config/global.
2. DON'T modify the global media path on first tab. You only want to modify on the 'NETWORK' tab.
That is where you put your share: for example mine would have:
\\vpinball\PinUPSystem\POPMedia\Default

D. Setup your emulators for each system

This is the sample for VPX.. You should understand how to change the others based on it.

1. Do the same steps as mentioned in Chapter 6C Global Settings.
2. You **only** need to modify/add the NETWORK TAB.
3. You will need to put the unc share names of the locations on each emulator.
In this example: **\\vpinball\Visual Pinball\Tables**

Note Do **never** run Pinupmenu.exe (the actual menu system via network share).

DO not try this on a crappy network/slow usb wifi dongle…. it is running the database file across the network… if you were to reboot cab or router you could CORRUPT DB. always make regular DB Backups… it's just a button press away (**See chapter 2E**).

Nailbuster suggests two things:
If you are doing A LOT of changes in PinUpSetup.exe i would EXIT the frontend to be safe.
An inbetween would be to have Popper in a TABLE/GAME as it won't be access the db while you are on the network accessing it.

E. Workflow example

So here's the workflow of adding a new game (make sure cab in on… it is safest to actually load up a game on your cab so that the PinUP Popper isn't 'using' the db.

1. Run the network shortcut for PinUP Menu Setup.
2. Go to games manager/ add new games. You will see two button that SHOULD open up the shares on your cab for you to copy your vpx/b2s/other files.
3. Scan for new games and add.
4. Add to playlists if required.
5. Go to Mediamanager and add any media from your PC.
6. Walk over to your cab and play!

7. Web Remote Control (experimental)

This is a WIP project. To get the files needed to test this use the following:
http://nailbuster.com/pinupdates/WebRemoteInstall_1_3_3.zip

By default the web-remote control is disabled. You must enabled it in the pupmenuscript.pup file. At top of script you must specify:
useWEB=true;   **make sure true is in lowercase.**

A. To register the remote/web server on your cab.

1. There's a batch file called: '**PUPServerRegisterCOM.bat**'. You must run this by right-click 'Run as administrator'. Press yes.
2. Windows will probably come up with warnings and such for the webserver. You will most likely need to setup as public so other computers can access.
3. Now you should reboot your computer.
On the next Popper Menu startup it will auto-start the webserver to listen for requests.
4. To test, you can leave Popper running and alt-tab to chrome. in browser type in:
localhost

A page should come up. If a 404 error comes up you have problems, you've setup something wrong.
If works, then next battle is to make sure it works from other computers on your network.

Note Some wifi routers don't allow traffic between wifi and 'wired' pcs. So it's always good to test both.

Ideally it's good to try first the ip of the vpinball address. so in browser on other pc type the address into chrome:
http://192.168.1.25

Replace 25 with ip of vpinball, (or entire address if not using standard 192.168.1.x) you may also try just typing into chrome:
http://vpinball/

And see if that works, if it does, then your remote control is all up and ready. Have Fun!

Note the webserver webserver is only running while Popper is running, closing Popper will close the webserver as well.

B. How to Use

Programmers Reference
\PinUPSystem\wwwRoot the root home directory.

index.html is the default landing page.

Note this is a bare-bone-slim-down-totally basic www server… don't try anything fancy with it as it just won't work. NEVER use on a public internet facing computer.

Here are list of current URL (mimic rest).

PinUP Popper menu must be running in order for the Remote control to work.

http://vpinball/function/getcuritem
Use this to get a json of all the info you can get of the currently selected item. fields should be self-explanatory.

Sending emulated pupEvents to Popper:

http://vpinball/pupkey/XXX
where xxx is a number of the putEvent ID. See list for all pupEvents IDs.

http://vpinball/function/record/xx
where xx is the PUPDisplay# to record. 0-top, 1-dmd, 2-BG, 3=playfiled.

It is toggled to start… same event to stop.

http://vpinball/function/launchgame/xxx
xxx is the Popper GameID # to launch. it is launched in NON-record mode.

http://vpinball/function/launchgamerec/xxx
xxx is the Popper GameID # to launch. it is launched in recording mode.

http://vpinball/function/getdisplay/xxx
XXX is the # of the PuPDisplay will return a png or mp4 of the PUPDIsplay #
0=top,1=dmd…etc

8. Autostart PinUP Popper with Windows

If you are running PinUpMEnu.exe as admin, then you most-likely **won't** be able to create a shortcut to it and place it in startup. Depending on Windows mood iit won't like to startup an admin exe via shortcut. BUT it doesn't mind starting a batch file that will… go figure.

Easiest would be to make a batch-file in PinUPSystem folder like this:

Note in latest version there is already a batch file called: '**RunWindowsStartup.bat**' that you just place a short-cut to in startup… if not there, you can make your own:

@echo off
CD /d %~dp0
START "" "%~dp0PinUpMenu.exe"

And put a shortcut link to it in windows startup folder.

For people that don't know where windows startup folder is… here's an easy method:
1. Right-click on your new batch file and select COPY.
2. File Explorer on the top type in: **shell:startup**
it will bring up the windows startup folder.
3. Press right-click PASTE-SHORTCUT. (not just paste… that will break it).
4. All done.

9. Moving PinUPSystem to another drive

Paths for tables and media are configured in the popper setup program. So you can easily move your media dir or table directories to another location with minimal effort.

1. Make a backup of your PinUPSystem folder.
2. Cut and paste the entire PinUPSystem folder to another drive, for example: d:\ (or other location).
3. Go to new location of PinUPSystem and right-click run as administrator the '**PINUPPLAYERINSTALL.BAT**' file. That will re-register the location for pinUP system.
4. Run setup and reconfigure the locations of global media dir, and on each emulator reset the locations for media/tables/ or anything else.

Note There may be other items like the 'web=remote' server that may need to be re-registered as well… just need to re-run those batch files as well.

10 Settings

## A. Emulators Setup Overview

1. Future Pinball Emulator

Default install should work fine, just enable the checkbox in Popper Emulator Config.

2. Setup to run PM5, VP9 type tables
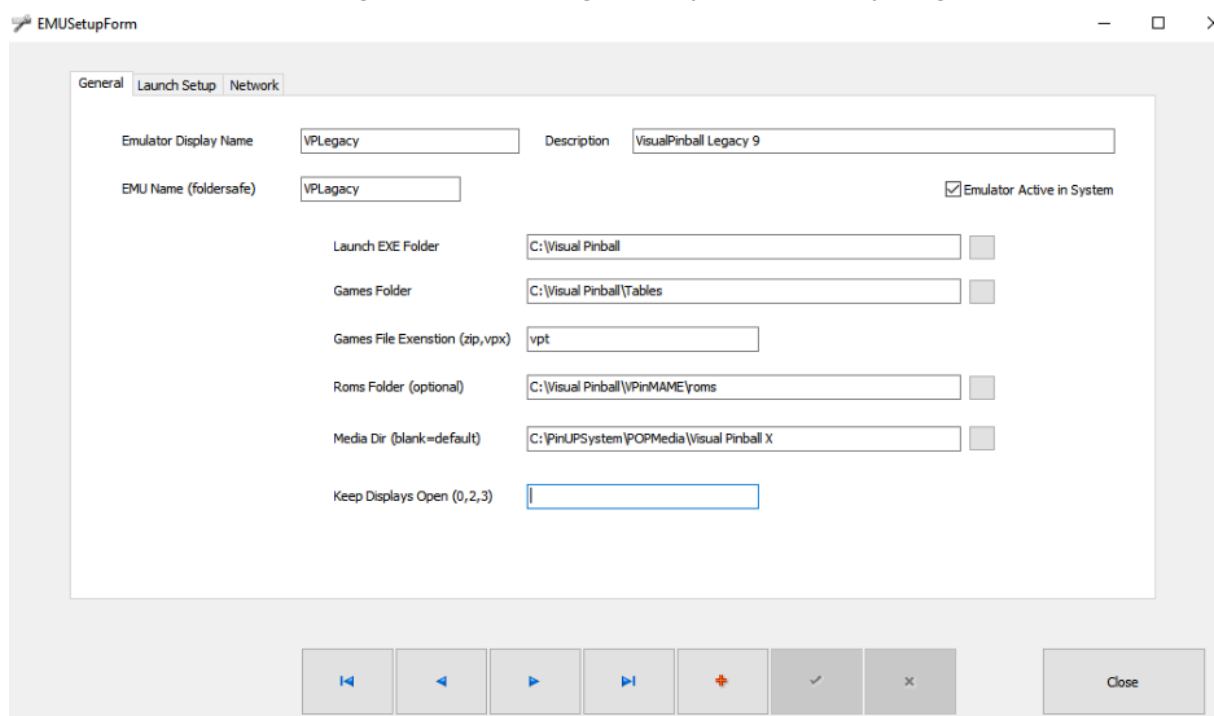
Add a new emulator by:
1. Starting **PinUP Popper Setup**.
2. Clicking on **Popper Setup** tab.
3. Clicking on **Emulators**
Note the bar on the bottom. You can use it to scroll to the current available emulators or use the '**+**' button to add a new one.
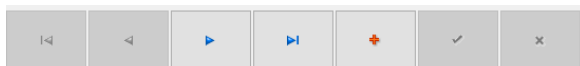
5. Click on the **+** button and fill in the fields.
You should make something like the following, when you filled everything in:

6. Then Click on '**Launch Setup'**.
7. Fill in the following under '**Launch Script**':

```
START "" "[STARTDIR]Launch\VPXSTARTER.exe" 10 10 60
cd "[DIREMU]"
if "[ALTEXE]" == "" (
    START /min "" vpinball995.exe "[DIREMU]" -play "[GAMEFULLNAME]"
) else  (
    START /min "" [ALTEXE].exe "[DIREMU]" -play "[GAMEFULLNAME]"
)
```

8. Fill in the following under '**Close Script**':

```
"[STARTDIR]LAUNCH\PUPCLOSER.EXE" WINTIT "Visual Pinball" 10 1
```
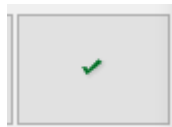
9. Now click on the [✓] button to save or click '**Close**'.
10. Now go to **Games Manager** > **Games Manager** > **Lookups**.
11. Add the names of the possible EXEs that will launch the .VPTs files to **Alternate Launcher.exe**.
For example: vpinball995
or VPinball99_PhysMod5

Note Do NOT put .exe in altname.

3. For Pinball FX3 (non-Steam version)
The default install works fine for STEAM version of FX3. This is for the non-steam version of FX3.

Sample Launch Script:

@echo off

rem remove rem to setup your DMDEXT press "open examples for more info"
rem cd "C:\Visual Pinball\VPinMAME"

rem start /min "" "dmdext.exe" mirror --source=pinballfx3 -q -d auto --virtual-hide-grip
--virtual-position=x y w -o PinUP\[GAMENAME]

START "" "[STARTDIR]Launch\VPXSTARTER.exe" 5 5 60 "Pinball FX3"
cd "[DIREMU]"
START "" "[DIREMU]PinballFX3.exe" -applaunch 442120 -table_[GAMENAME]

4. General Troubleshooting Emulators

Q: I tried to run XXXXX with XXXX and it doesn't work… what can I do to get it working?

A: The best way to troubleshoot problems in starting games is to determine EXACTLY what Popper is trying to run based on your emulator script.

Follow these steps to help you find out why launching doesn't work:

1. Try and run game/table in Popper. if it doesn't work, exit Popper right away (don't start another game).
2. File Explorer. browse to the folder PinUPSystem\launch there is a file called curlaunch.bat that is the last game script it tried to run.
3. Examine the batch file for typos that you may have or forgot a cd\ or something in your script.
4. Edit the curlaunch.bat and add a pause at the end and remove @echo off from first line if there is one, and then run the batch file manually directly from this folder (do not move curlaunch.bat)

you will usually find/see errors on why the game/table doesn't start properly this way. like forgetting to go to d:\ if your game is on another drive. simply modify the launch script afterwards and try again. curlaunch.bat is recreated dynamically and is overwritten each time you start a game/table.

B. Hardware Config & Setup

1. DOF Configuration

In PUPMenuScript.pup file there is a section uptop about DOF.

You want to set

====================*DOF CONFIG* ====================
var useDOF = **true**;

Note Make sure it's all lowercase!

You must update your configuration files from DOF Configtool online to ensure you have the DOF Template for Popper! http://configtool.vpuniverse.com/login.php

If you get an error "cannot create activeX". Then you probably have a very old version of DOF that needs to be upgraded. Also, check the following: find where your dof files are… probably in directoutput folder somewhere… and right-click run-as-admin on a program that's called registerdirectcomobject.exe. see if dof works afterwards. just need to do that once

DOF files: http://www.vpforums.org/index.php?showtopic=33080

2. REAL-DMD Hardware

All you need to do is to modify the pupscript file to set:

var useDMD = **true**;

Note Make sure it's all lowercase!

Once that is setup, when you run you should get a default png displaying on your dmd. if that works, then you're all set, and can use media manager for your dmd like any other display.

Note: supported formats are png files and animated GIFs (10 fps) So if you have avi/mp4s you'll need to convert then to animated GIFs. I made a simple batch file that may help, or you can use another tool if you'd like.

if you are having issues with access violations when starting games using hardware dmd. Upgrade to latest version of DMDContoller. Download this file and unzip/overwrite into your vpinmame root:
http://www.nailbuster.com/pinupdates/PUPDMDControl.zip

3. Custom Options

These are settings that you can tweak behind the scenes.
Settings are all added to the Custom Options box. Config/Global Settings/Script
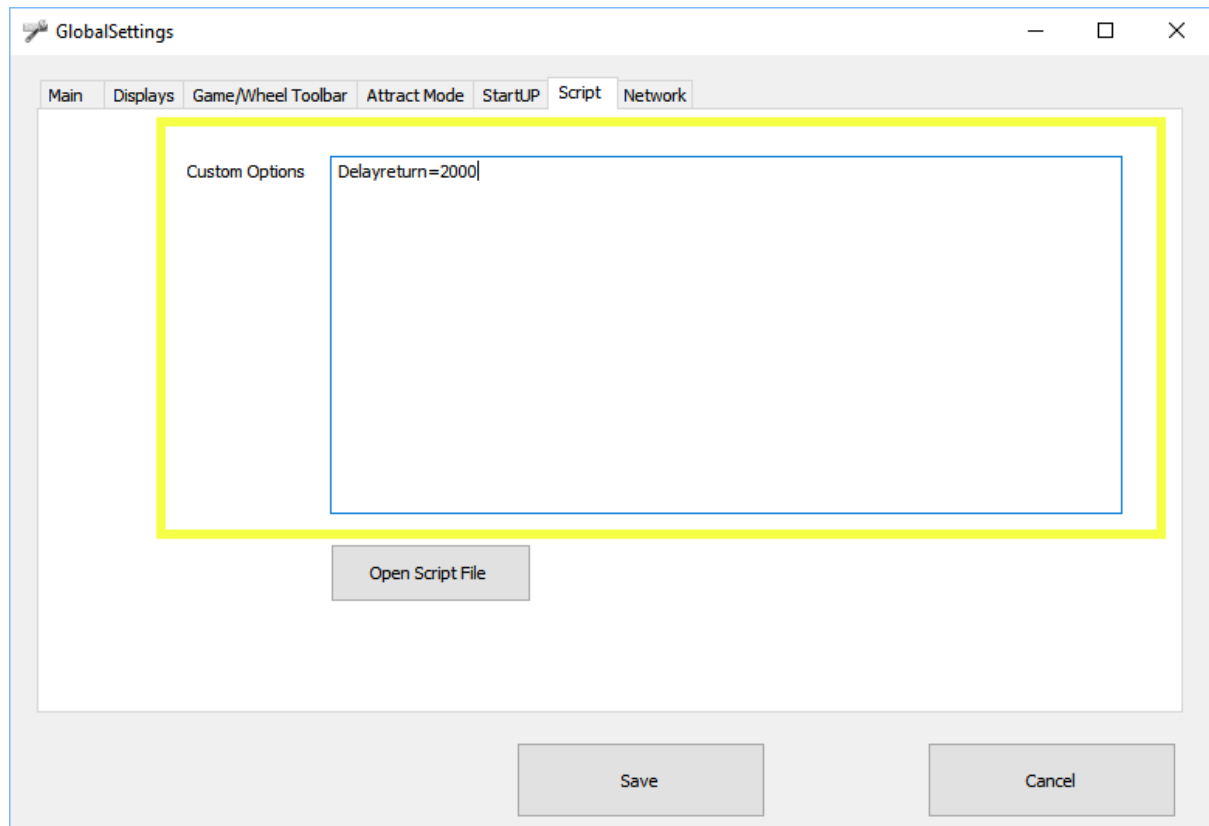
(options are in the form xxxx=yyyy) not case sensitive.

values are usually 0=OFF/false/no, 1=ON/True/yes, or otherwise its described.

options are available starting in v1.3.3 and above.

Available Options
DelayReturn=2000 *set to delay startup of menu after game in ms, some hardware dmd , DOF and slower systems need to 'wait' after vpx/emu closes to re-init all those devices.*

ReturnNext=1 advance to next game on return to emu (1=yes, 0=no)

NoSysFavs=1 *to hide system favourites auto-playlist… you would need to make your own.*

NoSysLists=1 to hide system lists like most played/mostplayed auto-playlist… you would need to make your own.

WheelDrawMargins=10,20,100,50 *allows clipping wheelbar if your background image is 'full'. the values are values in pixels of margins from the wheelbar window. (left,top,right,bottom)… remember if you are landscape the top/left is reversed.*

Troubleshooting

A. Useful websites

1. PuP Packs:
http://vpinball.com/VPBdownloads/categories/pup-packs/

2. PinUP Pinball System Wiki:
http://www.nailbuster.com/wikipinup/doku.php?id=start
For any new features or information that isn't featured in the manual (yet).

B. Useful YouTube videos

1. Moving your wheelbar:
https://www.youtube.com/watch?time_continue=3&v=DTbJ9ZuqNoE

2. Rotating of Playfield Videos:
http://vpinball.com/forums/topic/rotation-of-playfield-videos/

3. Creating PUP-Packs
PinUP Player is a component of the system that allows interactive videos to be played on your backglass/dmd/topper when events happen during gameplay. Like hit a drop target, play a certain video, or start multiball and have awesome video/music follow the mode along. There are so many options, and making them is super simple once you get the hang of it. The easiest method when dealing with ROM based games, is to use "PUPCapture" method… it is a neat feature that will scan the DMD in real time and find matching 'boxes' that can trigger video plays with PuPlayer! You simple create a set of 'trigger' screens that then translate to events that PinUP Player will react to.

It makes it a lot easier to code with ROM tables, as dealing with states and switches/lights can be difficult.

Watch these video series on how to use this feature:
Part 1: https://www.youtube.com/watch?v=iYvk_FSwGXQ&feature=youtu.be
Part 2: https://www.youtube.com/watch?v=WGPRnLWvFeI&feature=youtu.be

C. PinUpDisplay related questions

Q1 - How to configure the screens again?
A1 - Click on '**PinUpPlayerConfigDisplays.bat**' in the **PinUPSystem** folder.

Q2 - PinUpPlayerConfigDisplays.bat won't start. Now what?
A2 - Check for the PUPDisplay in system tray icon (lower-right in windows). You can right-click and select configure displays.

Alternatively Check Windows Taskmanager and see if
'**PinUPDisplay (32-bit)**' is running. If it is, end it and click on
'**PinUpPlayerConfigDisplays.bat**'. It should now work.

Q3 - Is there an alternate ways to enable / disable the screens?
A3 - Start '**PinUP Popper Setup**' , click on '**Popper Setup**', click on '**Screens/ Theme**' .
Under the screens section you can now enable / disable the screens. See also: Chapter 2D. Screen / Theme.

For more advanced users: You can also open '**PinUpPlayer.ini**' and edit that to your likings. **Be advised to make a copy first!**

<u>Tips and Tricks</u>

1. Gif conversion format for real dmd users : 1280 x 320 at 15 fps
   a. var useDMD = true;   //set to true if using hardware dmdDevice.DLL in Pupmenu script
   b. Add files to DMD folder in PUP media folders
   c. Name one file default.gif and add to DMD folder as a default gif for missing dmd gifs

2. Highly recommend downloading CONVERT-IT software: https://www.convert-it.org/
When launching VPX if your getting the VPX loading windows add -minimized to your launch script - START /min "" vpinballx.exe "[DIREMU]" -play "[GAMEFULLNAME]" -minimized