

LCD/LED Marquees



Under construction.

Remember back in the physical arcades how game cabinets would proudly display the logo of the game they featured on the overhead billboards? Well, thanks to the aid of modern technology, it is now possible to replicate those banners! And since we're in Batocera, we can dynamically change those artworks to reflect the game that's being played at that current moment!

Pixelcade

The premier digital marquee manufacturers! [Pixelcade](#) has been integrated into Batocera since **v33**.



Pixelcade themselves offer [installation instructions over on there website](#), which might update at a quicker pace than the ones on this wiki page. If the commands on this page aren't working, check that page out.

Supported platforms include:

- Raspberry Pi Zero 2
- Raspberry Pi 3
- Raspberry Pi 4
- x86_64
- Odroid N2+
- Theoretically, any aarch64/32 and/or x86_64 platform that supports Batocera **v33+**, but these have not been tested yet.

Pixelcade offer their marquees in two delicious flavors. The installation instructions change depending on which you want to install for.

Pixelcade LED





This may change as Pixelcade gets better integrated into Batocera.

This is the lower resolution LED panel that's more suited to pixel-art display than full-color images. It's easy to tell this one from the LCD panel as it has a USB port on the back, while the LCD panel does not.

Installation is simple. Power on the Pixelcade panel, plug in its USB port into the Batocera machine, [SSH into Batocera](#) and run the following:

```
curl -kLO -H "Cache-Control: no-cache"
https://raw.githubusercontent.com/alinke/pixelcade-linux/main/installer-
scripts/setup-batocera.sh && chmod +x setup-batocera.sh && ./setup-
batocera.sh
```

After the downloading and installation is complete, you will see the 1941 marquee being displayed on the panel. Confirm the prompt and close it.

If the panel did not display the marquee, refer to the [troubleshooting section](#).

Pixelcade LCD



This may change as Pixelcade gets better integrated into Batocera.

This is the higher resolution LCD panel that's suited to displaying full-color images. It supports Wi-Fi and sends its signals over the network instead of a USB cable. It is also possible to use an Ethernet connection in case a fully wired setup is preferred.

Installation uses a different command from the LED panel, so be careful. Power on the Pixelcade panel, plug in its USB port into the Batocera machine, [SSH into Batocera](#) and run the following:

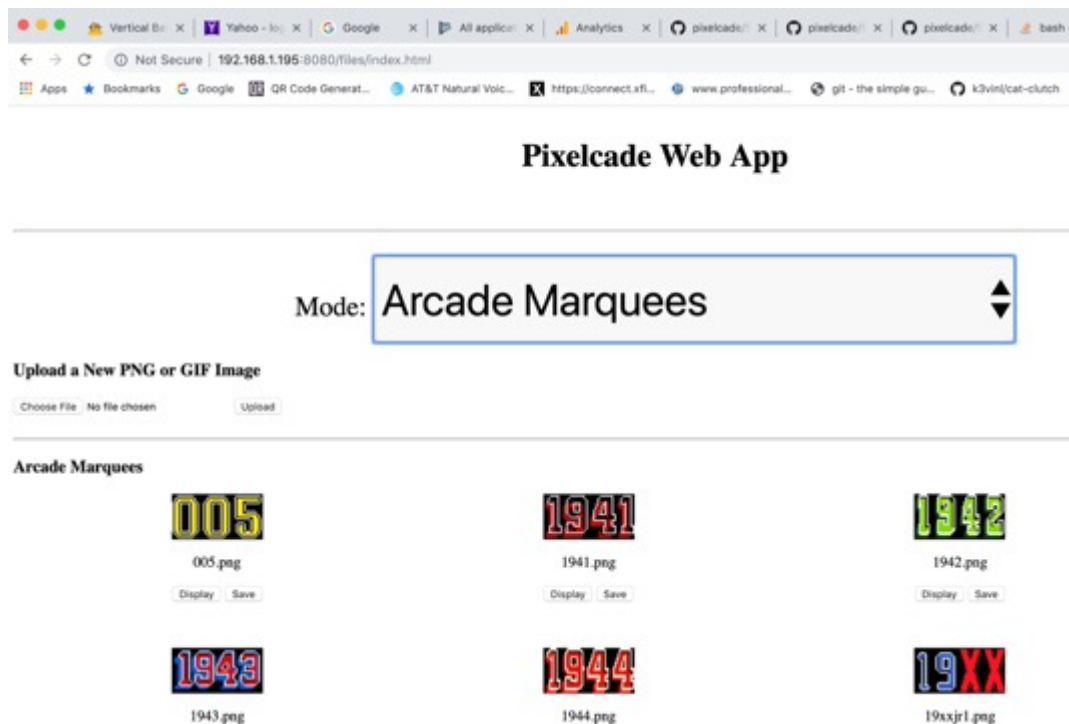
```
curl -kLO -H "Cache-Control: no-cache"
https://raw.githubusercontent.com/alinke/pixelcade-linux/main/installer-
scripts/setup-batocera-lcd.sh && chmod +x setup-batocera-lcd.sh && ./setup-
batocera-lcd.sh
```

If the panel did not display the marquee, refer to the [troubleshooting section](#).

If you have both panels and want to use them at the same time, it is possible to install both these scripts at once.

Pixelcade web UI

A simple web interface can be used to upload new artwork to the panel's SD card. Visit <http://batocera.local:8080> (if that doesn't work, use <http://<IP of Batocera>:8080>) to bring it up.



Pixelcade advanced scripting

Pixelcade has [a sophisticated API](#) that can be used to make the marquee perform certain actions. These can be programmed into [the regular Batocera scripts](#) if desired, but it might be easier to use [EmulationStation's scripts](#) instead. The ES scripts installed by Pixelcade's installer can be found in `/userdata/system/configs/emulationstation/scripts`.

For instance, here's a simplified routine that displays the game's marquee when a game is launched by Batocera (if it were installed into the `/userdata/system/configs/emulationstation/scripts/game-start` folder and marked as executable):

[pixelcade.sh](https://github.com/pixelcade/pixelcade.sh)

```
#!/bin/bash

# Save the arguments into variables.
system="${1}"
rom="${2}"
romname="${3}"

# Convert an argument into another value.
if [[ "${system}" == "fbneo" ]]; then
    system="mame"
fi

# Switch case for certain systems.
case ${system} in
    fbneo)
        system="mame"
```

```
;;
scummvm)
    rom="${rom%.*}"
;;
esac

# Execute this part every time this event triggers.
curl -G \
    --data-urlencode "t=${romname}" \
    http://127.0.0.1:8080/arcade/stream/${system}/${basename ${rom}}
```

Using an x86_64 PC and an RPi4

It is possible to homebrew up a D.I.Y. marquee display using a spare Raspberry Pi (RPi 4 was tested, but should work on any of them) connected to a display. [Link to the original forum post explaining this](#). Essentially, the Raspberry Pi acts as an additional framebuffer that Batocera itself can access directly.

Artwork needs to be sourced and placed in the appropriate Marquee and roms/Marquee folders first.

Place `game.sh` into `system/configs/emulationstation/scripts/game-selected`

[game.sh](#)

```
#!/bin/bash
System=$1 #system name
Romname=${2%.*} #romname
rom=${Romname##*/}
/userdata/marquee.sh Gameselectd $System "$rom"
```

Place `system.sh` into `system/configs/emulationstation/scripts/system-selected`

[system.sh](#)

```
#!/bin/bash
System=$1 #System name
/userdata/marquee.sh Systemselected $System &
```

Place `marquee.sh` in `/userdata`

[marquee.sh](#)

```
#!/bin/bash

case $1 in
Start)
```

```
Romname=$3
Gamepath=$2
marqueeimage=$Gamepath/images/$Romname-marquee.png
if [ -f "/userdata/roms/Marquee/videos/$Romname.mp4" ]
then
ffmpeg -i /userdata/roms/Marquee/videos/$Romname.mp4 -vf scale=1280:720
-sws_flags bilinear -pix_fmt rgb565le -f fbdev /dev/fb0

fi

if [ -f "/userdata/roms/Marquee/hires/$Romname.jpg" ]
then
fbv /userdata/roms/Marquee/hires/$Romname.jpg -fer
elif [ -f "$marqueeimage" ]
then
fbv $marqueeimage -fer
else
fbv /userdata/roms/mame/images/mame.png -fer
fi

;;
Gameselectd)
System=$2 #system name
Romname=$3 #romname

if [ -f "/userdata/roms/Marquee/$Romname.png" ]
then
fbv /userdata/roms/Marquee/$Romname.png -fer
elif [ -f "/userdata/roms/$System/images/$Romname-marquee.png" ]
then
fbv "/userdata/roms/$System/images/$Romname-marquee.png" -fer
else
fbv /userdata/roms/Marquee/mame.png -fer
fi

;;

Systemselectd)
imagepath="/userdata/roms/sysimages/$2"
if [ -f "$imagepath.png" ]
then
fbv "$imagepath.png" -fer
else
fbv /userdata/roms/mame/images/mame.png -fer
fi

;;

esac
```

Place `script.sh` in `system/scripts`

`script.sh`

```
#!/bin/bash

case $1 in
gameStart)

gamepath=${5%/*}
romname=${5##*/}
/userdata/marquee.sh Start $gamepath ${romname%.*} &
;;

gameStop)
killall ffmpeg
;;
esac
```

Troubleshooting

My Pixelcade LED/LCD panel isn't working!

It could be that it's simply not plugged in correctly. Ensure that the USB cable on both ends is firmly secure in their ports. On the Batocera machine itself, it might be worth checking if it's functional on a different port (such as a USB 3.0 port if you were using a 2.0 port, or vice-versa).

If it's still not working, try out the following:

- If the Pixelcade software was installed before the 7th of February, 2022, a bug prevented the script from working on boot. The script at `/userdata/system/custom.sh` containing the Pixelcade instructions must be removed completely and then the [installation](#) run again. Choose “yes” to wanting to reinstall Pixelcade.
- The script can be called manually with

```
killall java && cd ~ && ./custom.sh
```

- If the marquee starts working then the problem is that the script itself is failing to launch. Ensure that it contains `/userdata/system/jdk/bin/java -jar pixelweb.jar` at least twice in the file. If it does not, it is outdated and will not work.
 - If the marquee still does not work, then this is (likely) not the issue.
- A command can be sent to the marquee manually for testing purposes. For example:

```
~/jdk/bin/java -jar pixelcade.jar -m stream -c mame -g 1941
```

- If using the LED panel (not the LCD one), run `ls /dev` and search for `ttyACM0`. If not present, then your machine has not detected the Pixelcade LED device.

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