

## Tristan Burfield Chiptune UJ Resource List

### Hardware (easily available from ebay or amazon at a low cost)

1 x Gameboy (Classic, Pocket or Color)  
1 x SmartCard 64 MB  
1 x Mega Memory Cart  
1 x Gameboy Camera  
1 x Mac OSX Computer  
1 x Midi Keyboard (and cable)  
Plenty of AA batteries, patience and chocolate!

### Software (all software free/open source)

EMS Flasher (<https://lacklustre.net/projects/ems-flasher/>)  
Wine Bottler (<http://winebottler.kronenberg.org/>)  
Gameboy Camera Dumper ([http://dl.dropbox.com/u/1415819/gb\\_cam\\_dump.zip](http://dl.dropbox.com/u/1415819/gb_cam_dump.zip))  
Quartz Composer (<https://developer.apple.com/resources/>)

### Step by Step Guide

Step 1: Insert Gameboy Camera into Gameboy and take 12 selfies  
Step 2: Plug Mega Memory Card into Gameboy  
Step 3: Plug Gameboy into Mega Memory Card  
Step 4: Save Gameboy Camera Pictures (.sav files) onto Mega Memory Card by pressing back up. Give the pictures a memorable name  
Step 5: Plug EMS GB USB Smart Card into Mega Memory Card  
Step 6: In the Mega Memory Cart menu press Restore. This send the pictures to the EMS GB USB Smart Card  
Step 7: Plug EMS GB USB Card into USB slot of Mac  
Step 8: Launch Terminal  
Step 9: Plug EMS GB USB Card into USB port of Mac. Transfer pictures from EMS GB USB Card onto Mac using some simple code:

```
cd ~/Desktop/ems  
./ems-flasher --read --save --verbose Colchester.sav
```

Step 10: Launch Quartz Composer. Open Gameboy Camera UJ Patch. Each blue box corresponds to a note.  
Step 11: Click on each box in turn and replace the BMP file with a picture or video of your choice. Drag BMP images into Quartz Composer, one for each note  
Step 12: Open Viewer  
Step 13: Control F to bring up full view.  
Step 14: Play a tune on your keyboard to trigger pictures in sequence.

Make cool visuals with your Midi Keyboard. Play in Tandem with live hardware or Soft Synths.

### Useful Links:

<http://alt.pathawks.com/gameboy-camera>  
(Another useful Tutorial if you get stuck)  
<https://www.youtube.com/watch?v=bCUa-xabKJc>  
Video Tutorial of Gameboy Camera Dump OSX  
<http://funtoshop.sourceforge.net/>  
(Great for post processing Gameboy Camera images)

