

From Past To Present

By Walter Martinez



Using A Gamecube Controller as an Instrument

-My idea is to use my gamecube controller as an instrument, controlling the pitches and sound depending on how much I press into the buttons

- I would find a way to make the controller, one in which has 28 mechanics (8 buttons, two move sticks that can go eight different direction, and a analog stick with has only 4 directions.



Why take this idea?

I have seen people use others controllers and even consoles that had many mechanics, mostly wii remotes, xbox, and playstation.

So i would like to see if I could my childhood retro game as an instrument as well, even if it has lesser mechanics and buttons then other console controllers.



Materials

What I need is simple

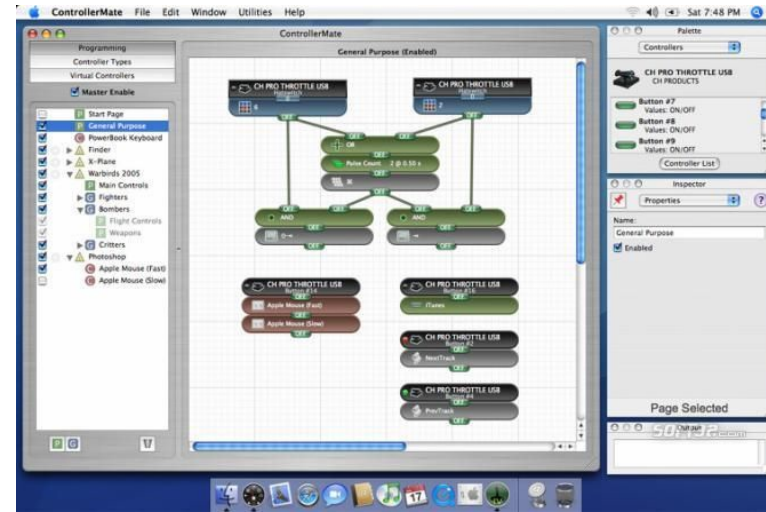
-Gamecube controller (I have two)

-An adapter (Have one with four slots, maybe a different one depending.)

-ControllerMate (Being more versatile)

-Ableton Live

I will also try to get it into max or arduino because seriously that's what this class is made for.



Truth be told

It is said that it's fairly easy, but maybe it looks easy. I just need to try it out make some tests.

I will need to make sure that it applies to my computer.

What I really want to attempt is to make sound with high and low pitches based on how much I press each button or when I move the joy sticks.

There were other methods on how to make the instrument, which involves breaking it down and wiring. (I would like to try not breaking my controller.)

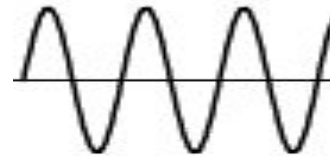
How I want this to work

I will use the analog stick to to create sound along with the buttons in the controller.

The only difference is that the analog sticks have multiple directions, therefore multiple opportunities. My plan is us the analog sticks as a way to increase or decrease pitch sound so long as I hold it and move the analog stick with it.

I were to aim the analog upwards it would increase the sound of the controller, downwards would decrease its sound, making it deeper.

Thumbsticks Grips
Thumb Joystick Cap for
NGC gamecube GC



**Lower
Pitch**



**Higher
Pitch**

Benefits and alterations

The first analog stick will focus on pitch, changing sound as I press each button in the controller

The second analog stick will focus on wavelength, controlling the sound and how it will be projected.

My idea is to use these instruments and create new sound with wavelength and pitch constantly changing.

Sources and Beats!

<https://www.youtube.com/watch?v=WJDEC3FawI>

<https://www.youtube.com/watch?v=oEzmYhv3HJ4>

Plan B- Wii Remotes

Should my plan fail due to program issues or no connection. I will have to resort to using my two wii remotes, Max, Oscillator, ect.

My plan is to use the controllers as sticks, acting if I'm and orator for an opera. Only instead of using one stick, I'm using two remotes connected to the Oscillator.



How it will work?

I will have each remote at hand, and once im connected to the program, I have the program try to detect a change of movements, create sound depending on the position of the remotes in each hand.

Kinda like what I had plan before, both can alter sound depending on the hand and wii remotes position.



Time Table within the 7 weeks

(1 week): Do some tests with the controllers and the programs to see if it would work or if the programs are suitable for my computer

A few possibilities might happen. (2-7)

If the gamecube controllers work along with the program working and synced with the adaptor, and with it my controllers. Ill have about 2 weeks to see if its a success and do a couple of tests and sounds

3rd week- I will need to ask for some advice on what do I need more what do I need less, a prototype.

4th week- I will need to think of what will I do, how will I present my instrument.

5th-7th week-I will present my instrument and how it alters sound with two analog sticks.

Time table part two

Should the remotes not work, then I will have to use the wii remotes and think of the time I spent trying to plug my adapter with the programs that didn't seem to work with my computer.

2-3 week- I will need to try to connect my wii remotes to my computer with Oscillator or Max, doing some tests and motion. How I want the sound to be when I'm able to move it like an Orator.

4-5 week- I'll have the sounds set and ready, practice for a moment have some ideas on how I want to perform with two instruments in each hand

6-7 week- present my instrument and have everything up and ready, and hope the batteries don't die on me.