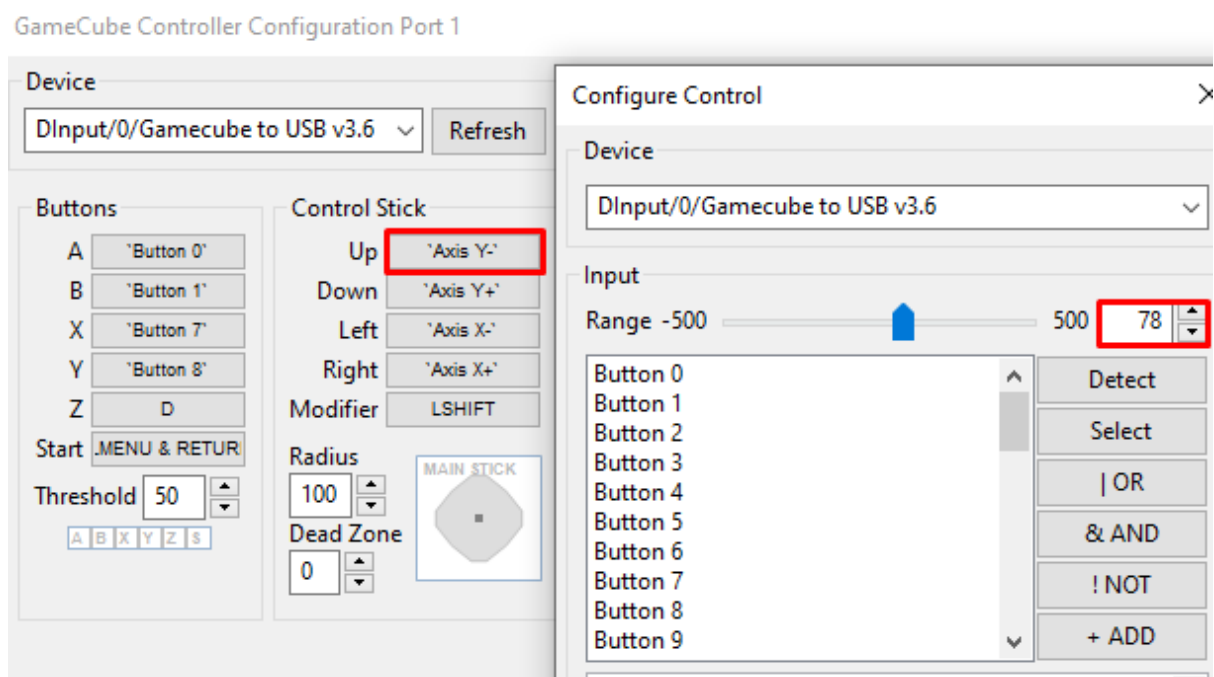


The Raphnet Gamecube to USB adapter has 1ms periodic controller polling and 1ms periodic USB report rate (provided you configure it as such in the Raphnet adapter manager tool !). On paper that's excellent (theoretically the best, although the difference with official double port usage is very small), I haven't run tests on it though.

However, when interacting with Dolphin at least, it appears to have small stick values mapping issues. I don't know where the fault lies.

The Gamecube adapter sends stick values as bytes (0-255)
128 is 0, 48 is -1, 208 is 1, [48,208] are mapped to [-1,1], values below/above that yield -1/1.

To access the "range" configuration, right click an axis button inside the configuration panel as follows:



Here are some readings from the Raphnet adapter with different "range" configurations inside Dolphin:

Axis	Byte value sent	Native adapters	Raphnet adapter			
		Console value	Range 100	Range 80	Range 79	Range 78
Y	96	-0.4	-0.525	-0.425	-0.4125	-0.4125
Y	160	0.4	0.5	0.4	0.4	0.3875
Y	83	-0.5625	-0.725	-0.5875	-0.575	-0.5625
Y	173	0.5625	0.7125	0.575	0.5625	0.55
Y	48	-1	-1	-1	-1	-1
Y	208	1	1	1	0.9875	0.975
X	102	-0.325	-0.4125	-0.3375	-0.325	-0.325
X	154	0.325	0.4125	0.325	0.325	0.325
X	73	-0.6875	-0.875	-0.7	-0.6875	-0.6875
X	183	0.6875	0.875	0.7	0.6875	0.675
X	48	-1	-1	-1	-1	-0.9875
X	208	1	1	1	1	0.9875

The console values are the readings you would get on console, and that you will get using “native” adapters (aka switch compatible, aka WUP-028s).

As you can see the 78-79 ranges are the most accurate mapping wise, but for the Y axis you can’t get a fully accurate mapping. (Weird imo that X and Y behave differently) So tilt areas will differ ever so slightly.

Not that being at most 1 tick off with the proper configuration is a huge deal (unless you have archaic tech notches), but it’s not perfect.

There might also be other problems related to using the HID protocol, which is handled by an intermediate instead of directly Dolphin, I’ve heard a lot of people mention that possibility but I’m not knowledgeable about it. If you have info to share, please do.