

**THIS IS LEGACY FIRMWARE! PLEASE UPDATE TO LATEST!**

I strongly recommend using smashscope (either on a wii or dolphin) for all of this

## Controller Reset - Left D-Pad + Start

1. Hold left d-pad and start for 2 seconds
  - This will reset all the controller settings, including snapback filtering and stick calibrations.
  - Use this if you have uploaded code to the controller for the **first time**, are **upgrading** from an older software version, or have messed up your settings in some way
  - These default values will not be good, you **will need to calibrate and adjust snapback!**

## Analog Stick Calibration - Left D-Pad

### Overview:

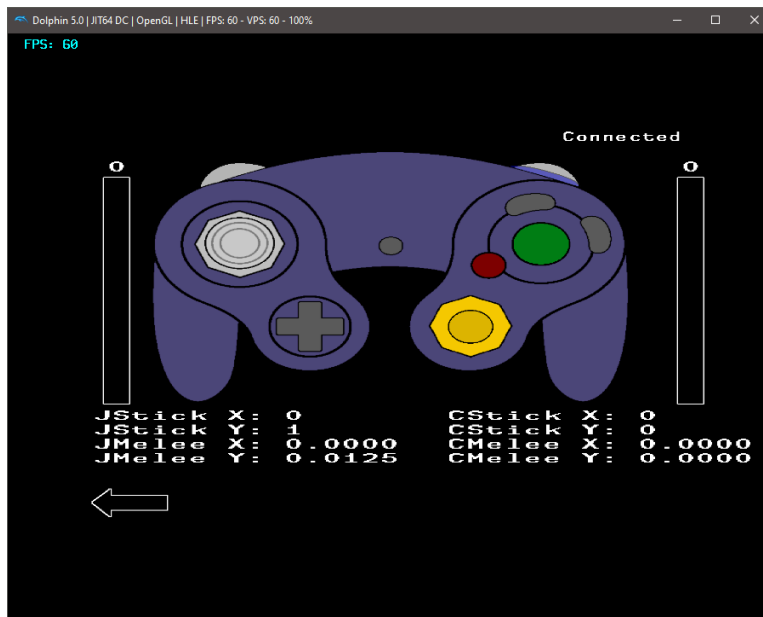
You will alternate between leaving the stick centered and pushing the stick into a notch in the following order, the controller will record these stick positions and calibrate itself to them:



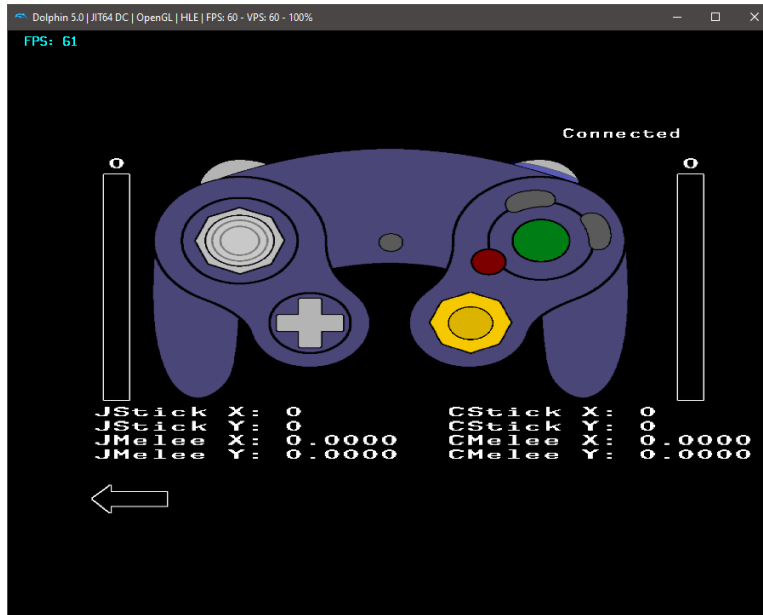
- If you don't have a given notch, or just don't want to use it, leave the stick centered and it will be ignored.
- The original 8 notches (1,3,5,7,9,11,13,15 in the image above) MUST BE USED, or the calibration will not work.
- All notches other than the cardinals (1,5,9,13) can be adjusted clockwise and counterclockwise in a small range by holding down X and Y respectively

## Detailed Instructions:

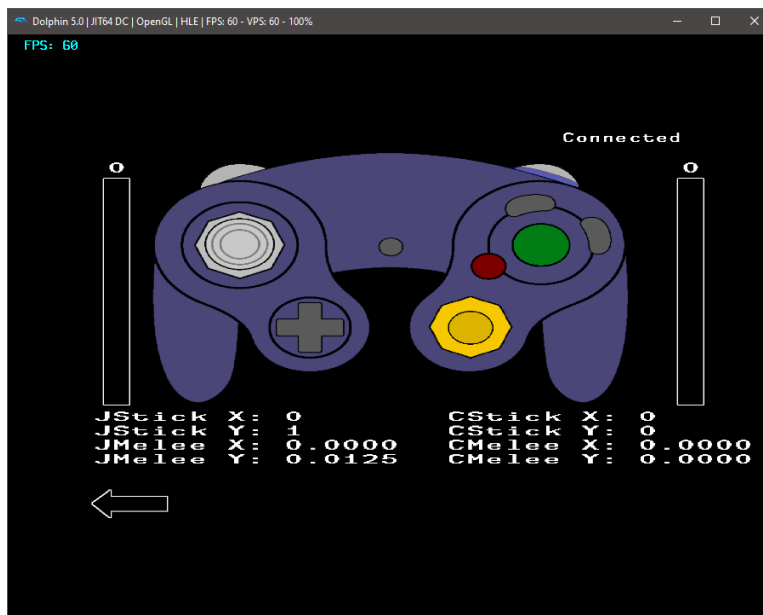
1. Start with the controller unplugged and dolphin/wii/gamecube off
2. Turn on dolphin/wii/gamecube and start smashscope or melee
3. Plug in the controller, wait a few seconds
4. Press B on the controller to activate it
5. Navigate to the controller viewer on smashscope or the character selection screen in melee (If you're calibrating for the first time the analog sticks won't work correctly, resetting the controller should make them usable for navigating the menus, but they may be inverted or have an offset)
6. Start with the sticks centered and no buttons pressed



7. Press and hold the left d-pad button for at least 2 seconds

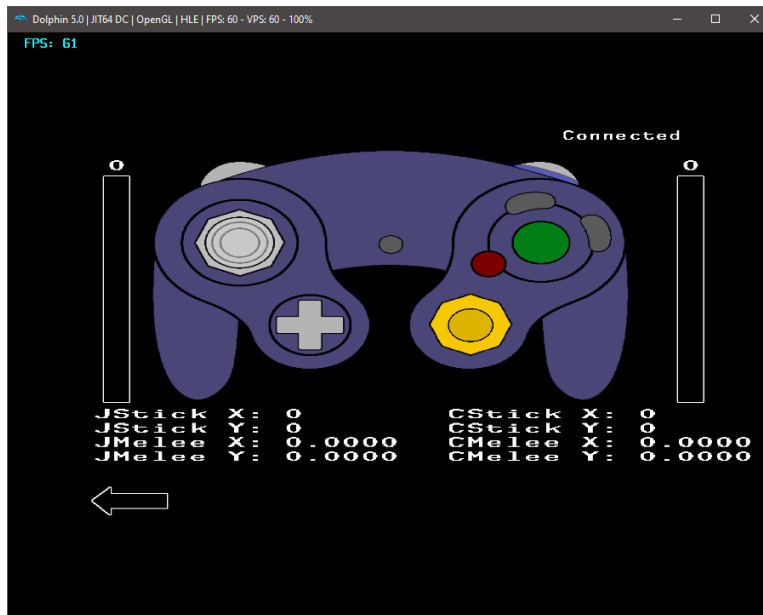


## 8. Release the d-pad

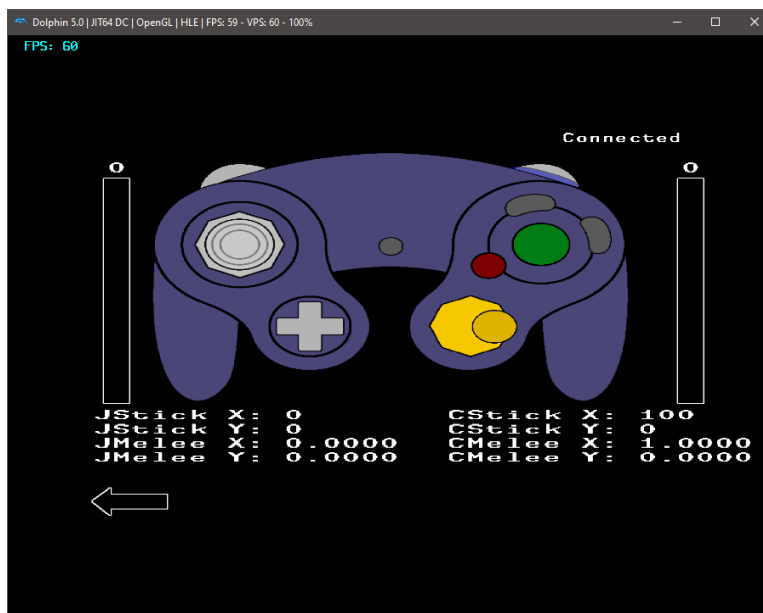


Try moving the c-stick and you will find that it does not respond, this means you have entered calibration mode, the c-stick will guide you through the calibration. Wherever the c-stick points on the screen, that is where you should point the analog stick on the controller. Since the c-stick is in the center right now, we will leave the analog stick centered.

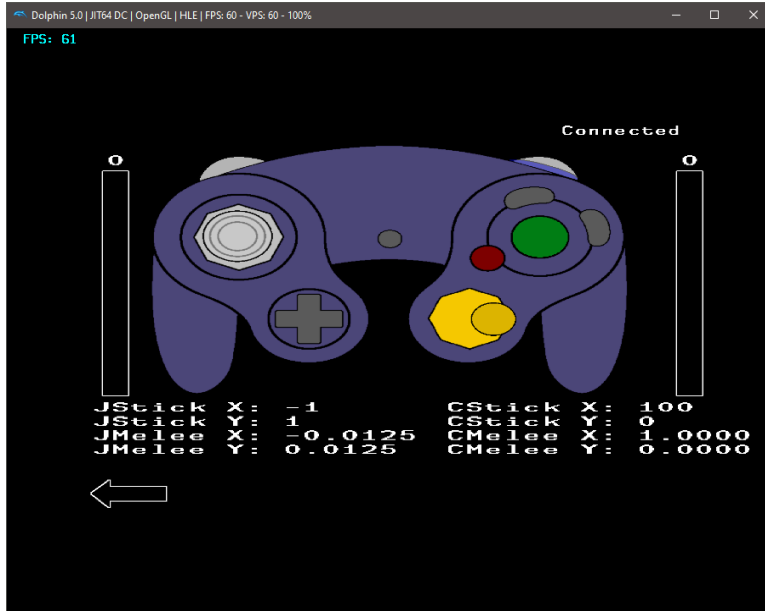
## 9. Press and hold the left d-pad for at least 2 seconds



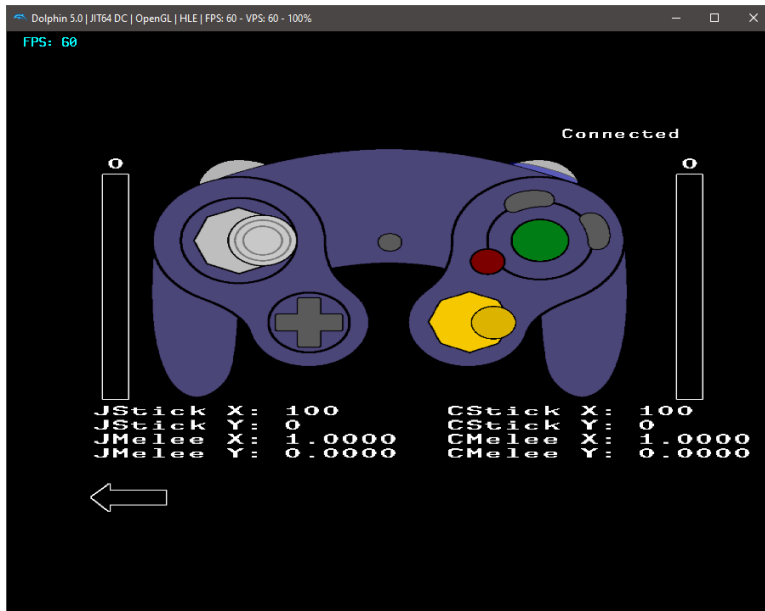
10. You will see the c-stick jump to the right notch (if you are in regular melee the screen will tilt)



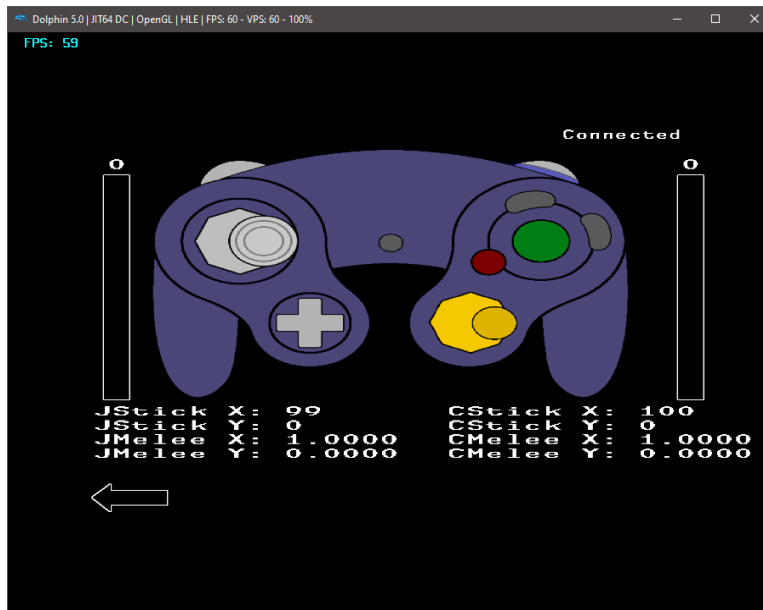
11. Release the d-pad and wait for at least 2 seconds



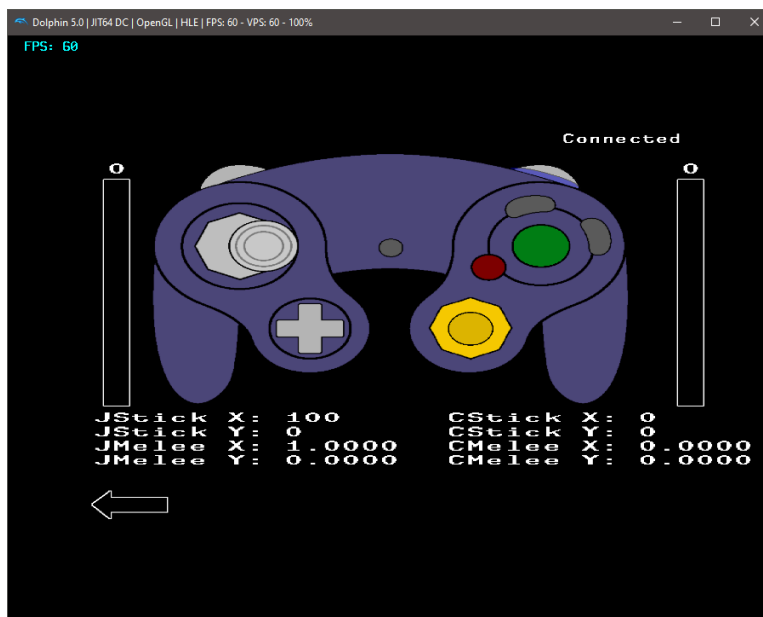
12. Move the analog stick into the right notch, following the c-stick



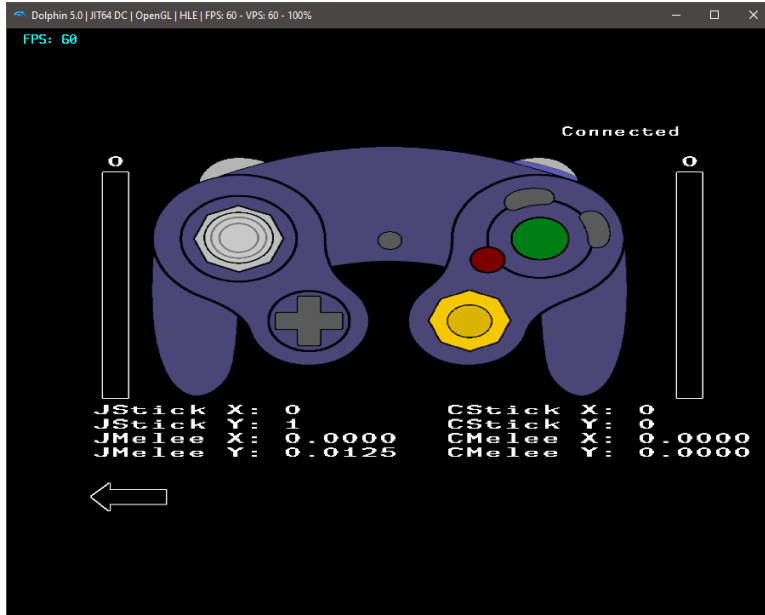
13. Press and hold the left d-pad button for at least 2 seconds



14. You will see the c-stick return to center



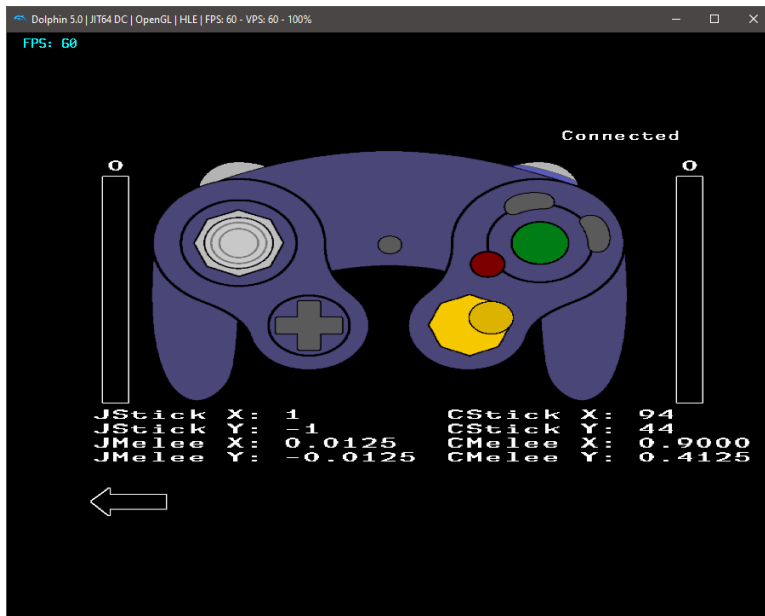
15. Release the analog stick and d-pad and wait for at least 2 seconds



- The 1st notch position has now been measured

16. Hold left d-pad for 2 seconds (cstick will jump to the 2nd notch)

17. Release d-pad and wait 2 seconds



- At this point you can adjust this notch's coordinates by holding X to rotate it slowly in the clockwise direction, or Y to rotate it slowly in the counterclockwise position

18. Press analog stick into the 2nd notch (if your controller isn't notched or you don't want to use this notch, just leave the controller centered)

19. Hold left d-pad for 2 seconds (cstick will jump back to center)

20. Release d-pad and analog stick and wait 2 seconds

- The 2nd notch position has now been measured

Repeat this process for the remaining 14 notches

If everything went well, the controller will now take all of those measured points and calibrate itself! It will automatically exit calibration mode, until you press and hold left d-pad again. If the calibration did not work well the analog stick may display strange behavior. If this happens, attempt the calibration again.

Common Issues:

Make sure you are centering the analog stick every time! It must be centered again in between every notch measurement, you cannot go straight from one notch to the next. Make sure you're waiting long enough between d-pad presses, if you go too fast it won't register. If you try it a few times and it doesn't work, ask for help on the phobGCC discord.

## C-Stick Calibration - Right D-Pad

Use the same procedure as for the analog stick, but press the right d-pad button instead. Now the analog stick will move around and you follow it with the c-stick.

## Snapback Adjustment - Up D-Pad

To view current snapback settings:

Hold up on the D-Pad for 2 seconds. The controller will freeze for a second or two, and the cstick X and Y coordinates will represent the current snapback filter settings on the analog stick X and Y axis respectively.

A new stick may only require settings of 10 or less to eliminate snapback, while old loose sticks with weak springs may need 30 or higher.

The settings will also be displayed after an adjustment is made

X-Axis:

To increase the amount of filtering on the X-axis (if you have too much snapback) hold the c-stick to the right and press the up d-pad button for 2 seconds. To decrease the amount of filtering (if the response is too slow) hold the c-stick to the left and press the up d-pad button for 2 seconds.

Y-Axis:

To increase the amount of filtering on the Y-axis (if you have too much snapback) hold the c-stick to the up and press the up d-pad button for 2 seconds. To decrease the amount of filtering (if the response is too slow) hold the c-stick down and press the up d-pad button for 2 seconds.



The adjustment is very fine, you may need to do this a few times to see a significant change in the snapback. You need to release the button for 2 seconds before pressing it again.

## Z Jump - Down D-Pad

To swap X or Y with Z, hold down X or Y then press the down d-pad button for 2 seconds. Whichever of X or Y you held down will now act like the Z button, and the Z button will act as jump. To reset, press down d-pad for 2 seconds without holding any other buttons down.