

The 8bitdo Zero is a sturdy little Bluetooth controller, designed for mobile gaming. You can find it [here](#), at Amazon. The Zero is also convenient for people using Clip Studio Paint on the iPad, who want access to hotkeys but don't want to lug a whole keyboard around.

The Zero can be both hard to pair with your iPad, and tricky to assign hotkeys to. We are using it for something it wasn't designed to do! Getting my Zero to work took a lot of Googling, trial, and error. I hope this guide makes getting your Zero to work, a little easier.

PAIRING THE ZERO

- Make sure the Zero is charged. When you plug it in, a green LED on the bottom of the controller should blink slowly.
- Make sure your iPad has Bluetooth enabled.
- Pair your Zero. You have a few options, so if one doesn't work, hold the START button down for two seconds to turn it off. The LED will flash green when the Zero turns off. Try another option, or try again: it may take a few attempts.
 - Option A: Hold down START for two seconds.
 - Option B : Hold down START and the A button at the same time for at least two seconds.
 - Option C: Hold down START for two seconds. With the Zero on, hold down SELECT for two more seconds.
- The LED will flash blue really fast when the iPad has recognized it, and the Zero will show up on a list of devices you can pair. Select it from the list, and wait until the Zero appears in the upper list with your other paired devices. The Zero's LED should stay a solid blue when it has been successfully paired with your iPad.

ASSIGNING HOTKEYS IN CLIP STUDIO PAINT

This guide assumes you have something close to the default workspace in CSP. It may not apply if you've made significant changes.

Just to the left of the FILE menu dropdown, you'll find the Clip Studio Paint symbol. It looks like a backwards question mark. Go to PREFERENCES. Uncheck the box that says "Switch tool temporarily by pressing and holding shortcut key."

Hit OK and go back to the backwards question mark menu (or CSP menu, if you prefer). Under PREFERENCES is SHORTCUT SETTINGS. Here is where you'll apply shortcuts to your hotkeys. Any menu options will be found under MAIN MENU on the PREFERENCES dropdown. Many other options, like changing brush sizes or the color picker, are under TOOL. It's best to explore the options; you're likely to run across what you need.*

Select the shortcut you'd like to assign a hotkey to, then hit the EDIT SHORTCUT button off to the right. Now hit ADD SHORTCUT.

- Some Zero buttons only have one hotkey assignable; these will be triggered when you press the button down.
- Some Zero buttons have two hotkeys assignable; one is triggered when you press the button down, and one when you release.

Hold down the Zero button you'd like to assign the shortcut to. You'll notice that a new letter appears next to the shortcut's name. This is because the iPad sees the Zero as a sort of Bluetooth keyboard. These letter assignments can be important, so expect to come back and check to see what they are.

When you press a button that has two hotkeys assignable, you'll notice one letter that appears when you hold the button down, and another when you release it. This can be good or bad - if you have a very precise touch with the Zero button, you can assign multiple shortcuts to one button by either gently and quickly tapping the button (triggers the button press shortcut) or by holding the button down longer (triggers the button release shortcut). Useful as it might be, it makes assigning the actual shortcuts difficult.

To assign the first shortcut to a dual hotkey button, hold the Zero button DOWN. Hit OK with the button still held down. If you want to assign a shortcut to the second function, note the letter that appears when you release the Zero button. Go find the shortcut you want to assign to the button release function, and assign it that letter.

**Some shortcuts are misleading. For example, there is both a Zoom tool and a Zoom menu function. In order to zoom in and out using the Zero, you'll want to use the menu function, not the tool.*

REMOVING THE "DUAL" FROM DUAL HOTKEY BUTTONS

You may find that you're either too imprecise to use two shortcuts on a dual hotkey button, or that it's just annoying.

While using the Canvas, if you hold down a dual hotkey button with an undesired second function you'll notice that your tool flips from one (the one you wanted) to one you don't want at all. This tool change is happening because **the letter assigned to the button release shortcut, is assigned to another tool**. Go find this tool's shortcut in the SHORTCUT SETTINGS menu. Select it, hit EDIT SHORTCUT, and now DELETE SHORTCUT. Bam. Problem solved.

TROUBLESHOOTING

- If you go Googling for help with this thing, you'll see a lot of talk about 8bitdo firmware and how it no longer supports iOS. Don't get confused: this issue doesn't apply to the Zero because you can't change its firmware, anyway. The only relevance this will have for you is that if you wanted to use it for gaming on the iPad, that's not going to work. It will only be helpful to you in programs that allow you to assign keyboard shortcuts.
- Sometimes the Zero disconnects and will not work properly if you close Clip Studio Paint with it turned on. Sometimes turning the Zero back on using the START+A method works; sometimes you have to tell the iPad to forget the Zero and pair it all over again. Either way, your hotkeys will be remembered since they're stored in CSP, not with the Zero.

Happy arting!

-Tish *heysawbones@twitter*