










Using the Switch Kit with an iPad

Last Updated on 2/7/24 by Mia Hoffman

The MakeyMakey input device can work great with the iPad as it can work as an external keyboard. Think of pressing a spacebar on a Bluetooth keyboard and watching something happening on your screen, this works the same way!

There are already some apps that allow you to interact with them using just a keyboard. These are often specifically designed to be switch accessible. You can also play games on the internet, like those found on our website: miahoffmann.github.io/switchkit. Some applications that will work right away with your plugged in MakeyMakey are below:

Image	App Name	Switch Set-up	Description
	Switch Kids Lite by Marblesoft	Mouse Click Button	There are three cause-and-effect games in this app: "Funny Sounds and Faces" where faces appear with each click, "Bubble Gum" where a bubble gum balloon is blown with each click, and "Build-a-Kid" where a different body part or piece of clothing appear with each click.
	HokusPokus by LIFEtool Solutions GmbH	Mouse Click Button	There are cause-and-effect animations, where a component of a cartoon scene appear with each click.
	PreNumbers by LIFEtool Solutions GmbH	Space bar button	This is an education app. This app is more complicated and allows children to practice sorting objects using single switch-scanning behavior.
	Switch Trainer by LIFEtool Solutions GmbH	Mouse click button	This is a cause-and-effect app to learn switch skills. Open the app, press the gear icon. Go to Settings ->Handling, and select "Scanning, whole screen". Any of the cause-and-effect animations will now play when you press the button.
	Breath Music by Ruud van der Wel	Space bar button	This is a cause-and-effect music app. I recommend using the "Song Mode", this will play a portion of a song when your press the switch. You can change the song and instrument by tapping on the screen.

	<p>Sensory Electra by Sensory App House - Ltd</p>	<p>Mouse click button</p>	<p>This is a cause-and-effect app. When you press the button, the light dancing on the screen freezes and a sound is made.</p>
	<p>Sensory Room by Inclusive Technology Ltd</p>	<p>Mouse click button</p>	<p>This is a cause-and-effect app. When you press the button, a 5 s animation of the story plays.</p>
	<p>Choose It Maker by Inclusive Technology Ltd</p>	<p>Space bar button</p>	<p>This is a switch scanning practice app. Set the Access method as “One Switch-Scanning”. You can then use single switch scanning to select a song to play. To start the scanning, press the switch once.</p>
	<p>Owlie Boo by Matias Gravano</p>	<p>Mouse click button</p>	<p>This is a toddler learning app. Almost of all of the “Level 1” cause-and-effect games can be played with just this configuration. Press the button for a change in the scene.</p>
	<p>SoundingBoard by AbleNet</p>	<p>Space bar button</p>	<p>This is an AAC app with pre-made boards, including a “Yes/No” board. Connect your switch to the space bar button. Open the app and go to Settings. Select Switch scanning options, turn on the Switch Scanning and set the “Scan Mode” to Single. Press the switch once to activate single-switch scanning, and then press the switch again to choose.</p>

Not every application is easily set up to be used with the MakeyMakey. Apple iOS has a built-in Accessibility feature called Switch Control, that allows an individual to access an iPad using external switches. These switches can include keyboard inputs like those on the MakeyMakey. With Switch Control, anything is possible on the iPad, but more on that later.

Setting up Switches

I recommend setting up your switch control as follows:

1. Plug in the input device to your iPad.
2. Connect a switch to left, right, and the up arrow.
3. To set up a switch:
 - a. Open Settings -> Accessibility -> Switch Control -> Switches
 - b. Press "Add New Switch" -> External
 - c. Activate the switch currently plugged into the port, and a pop up will appear saying New Switch. You can then name it. I recommend naming them the corresponding key ("Up Arrow").
4. Assign the switches to the following actions:
 - a. Left Arrow – Move to Next Item
 - b. Right Arrow – Select Item
 - c. Up Arrow – Tap
5. For your ease of use in switch control, I recommend using a manual scanning style. This lets you use the left and right arrows to navigate through the iPad. In the Switch Control area of settings, select Scanning Style and select "Manual Scanning".

To quickly turn on and off switch control, we want to turn on the Accessibility Shortcut. This allows you to turn on and off switch control by triple-clicking the home button.

1. In settings, go to the Accessibility menu. Select Accessibility Shortcut.
2. Press on "Switch Control" to activate it. You should see a blue checkmark next to the word.



So now, you are ready to use Switch Control, but there is a lot happening there are things moving and highlighting left and right. Now is the time to learn the best sorcery of Switch Control, "Recipes". Recipes are pre-made configurations that can allow for a temporary custom reconfiguration of the buttons for a game or application.

Let's start with a pre-programmed Recipe. Go to tarheelreader.org and select a book to read. Plug in switches to your left and right arrows. Triple click your home button to activate Switch Control. Press your right arrow button to bring up a black box with options in it, use your left arrow to scan to the double dots option. Select this using your right switch. Navigate to the box that says "Recipes" with a heart icon. Select the "Turn Pages" option. Your left arrow key and right arrow key switches can now be used to swipe the pages backwards and forwards.

Now that you have successfully seen how Recipes work, let's learn to make our own. We are going to create a recipe for a tap on the left and right of screen with two different switches. This way we can use it with a Yes/No communication board.

1. Open Settings -> Accessibility -> Switch Control -> Recipes
2. Press "Create New Recipe..."
3. Set the Name to "Split Screen"
4. Click "Assign a Switch", select your left arrow, press "Custom Gesture". Press the left side of the screen when prompted and save.
5. Click "Assign a Switch", select your right arrow, press the "Custom Gesture". Press the right side of the screen when prompted and save.
6. Select Timeout, and set it for 100 seconds. This way if you stop using it the Recipe will stop.

You can now try this out with a “Yes/No” communication board by opening the SoundingBoard app and selecting the Yes/No board. You can also create your own 2-frame board using GoTalk Now Lite.

 The logo for GoTalk Now LITE features the word "NEW" in white inside an orange speech bubble, with a grid icon. Below it, the word "GoTalk" is written in white on a blue background.	GoTalk Now LITE by Attainment Company	Switch control	This app is one of the best free AAC apps I have found. It works with switch scanning or custom recipes.
 The logo for Rocket Flight Control shows a red rocket ship with a white nose cone and a yellow ring around it, set against a dark blue background.	Rocket Flight Control by Cedric McClary	Switch control	This is a fun “Frogger”-like game. Put your iPad into airplane mode to remove ads. Use the “Middle of the Screen” recipe from Switch Control to play this game with one button.