

The Hardware to the Software

Everything you need to know to make an iPad switch Accessible: *Part 1 Hardware*

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Part 1

1. Focus on Hardware

- Deep dive into 4 hardware options
- Mention and resources for 5 other viable options

2. What can an iPad do for you?

- Here is an example of what it does for my students :)
- Some of the programming will be discussed today, the rest is in part 2.



Disclaimer...

- The following hardware items are just **options** I have tried and have found to work.
- There are probably additional Hardware options out there, I just haven't tried them all yet.
- I don't know if these will always work, iOS may have some update that ruins something with a few of these options, but they have worked for quite a while.
- In addition, I have not experimented with every switch accessible communication app, this presentation focus on typically inaccessible apps.



Hardware options (Deep dive)

1. Hook +
2. Blue 2 Switch
3. Don Johnston Switch Interface Pro with Lightning Camera Adapter
4. Hitch 2 Switch Interface with Lightning Multiport adapter.



Ablenet Hook+

Positives +	Limitations -
<ul style="list-style-type: none">• Quick plug in and go• Can plug in 4 switches for multi use function• No battery needed and can charge iPad while using• Can wake up a sleeping iPad• Can also use a keyboard without conflict.• Apple Approved!	<ul style="list-style-type: none">• Only 4 programmable switches• First 2 switches are programmed for step scanning and need to be reprogrammed if you want to use them for something else• Unitasker \$220• Will not work with USB-C

Official Ablenet video on Hook+

<https://www.youtube.com/watch?v=3BHibfIKx5Q>



Ablenet Hook +

- 1 switch will automatically configure to Automatic scanning
- 2 switches will automatically configure to step scanning.
 - Auto configuration
 - https://www.youtube.com/watch?v=RbY_545yLs8
 - Uses Apple's built in scanning, not keystrokes
 - Need to check compatibility of your switch accessible app/communication device
- 3 and 4 switches can be programmed to your liking (see programming toward the end of the presentation).



Blue 2 switch

Positives +	Limitations -
<ul style="list-style-type: none">• Wireless• Can plug in 2 switches for alternate positioning• 6 (up to 10) programmable switches for the iPad• Will work with all iPads	<ul style="list-style-type: none">• Requires battery to be charged• Extra step to be sure device is connected to iPad• Only 2 switch ports• Unitasker \$220

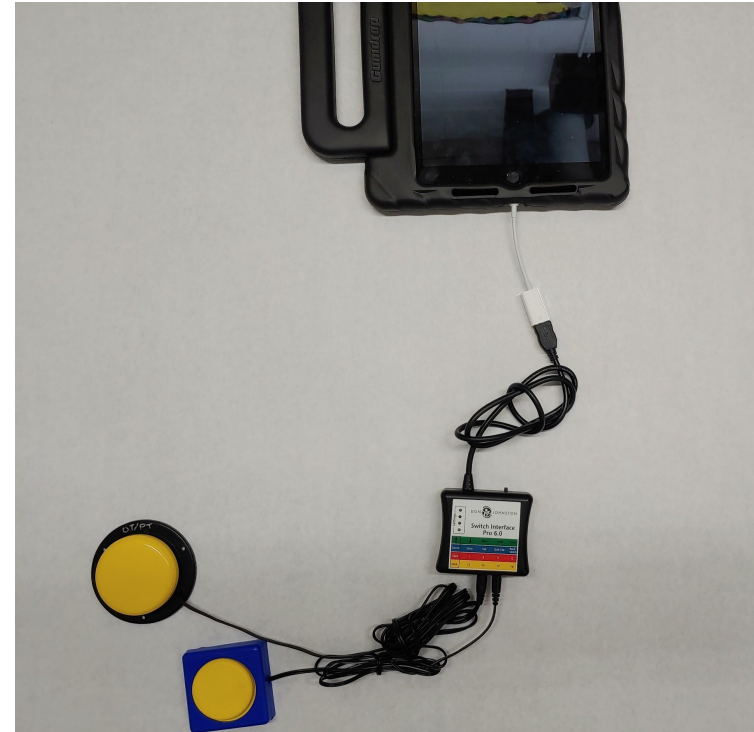
Official Ablenet video on Blue2

https://www.youtube.com/watch?v=_xeTaW2_vjs



Don Johnston Switch Interface w/ Lightning USB adapter

- Look around your schools for DJ's Switch Interface
- Unfortunately, they are no longer available for purchase.
- Purchase an Apple Camera adapter \$29
 - Lightning to USB
 - <https://www.apple.com/shop/product/MD821AM/A/lightning-to-usb-camera-adapter>
 - You can try an off brand, it may work, I just haven't tried.



Don Johnston Switch Interface w/ Lightning USB adapter

Positives +	Limitations -
<ul style="list-style-type: none">• Most cost effective option \$29• You may already have it :)• Allows you to plug in multiple switches and program many functions for each switch• <u>Flexibility</u> for the student/parent, since the switch interface can also be used to access the computer at school/home... multitasker.• 18 programmable switches!!!• Will work with USB-C	<ul style="list-style-type: none">• Can't charge iPad at same time• Does take some programming and organization• Not apple approved• Only an option if you own the interface already

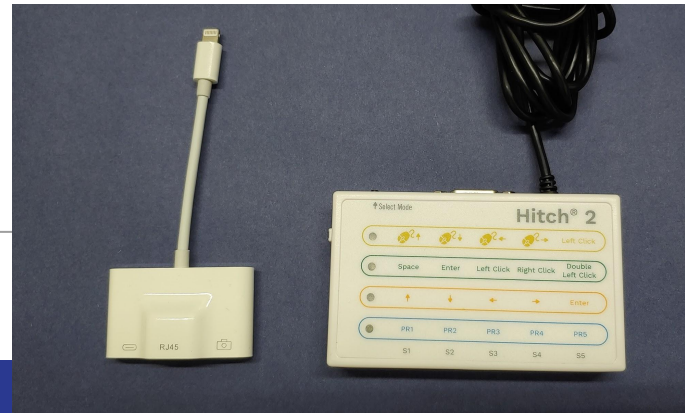
Hitch 2 Switch Interface w/ Lightning Multiport adapter

- Ablenet Hitch 2 \$99
- Purchase adapter \$20 ish
 - This is the one I purchased, but others may work too
 - https://www.amazon.com/RJ45-Ethernet-LAN-Network-Adapter/dp/B07PCL1GN4/ref=sr_1_6?dchild=1&keywords=Powered+RJ45+Ethernet+LAN+Wired+Network+Adapter&qid=1598899661&s=electronics&sr=1-6
 - Off Brand did work for me



Hitch 2 Switch Interface w/ Lightning Multiport adapter

Positives +	Limitations -
<ul style="list-style-type: none">• Cost effective option \$120 ish• Allows you to plug in multiple switches and program many functions for each switch• <u>Flexibility</u> for the student/parent, since the switch interface can also be used to access the computer at school/home... multitasker.• You can obtain all of these tool ASAP• Can charge the iPad at the same time• Will work with USB-C	<ul style="list-style-type: none">• Does take some programming and organization• Not apple approved - No guarantee that it will work forever.• Only 6 programmable switches w/option to program 5 additional



Things that haven't worked for me



Valid options... I just don't own them.

1. Tapio - Viable option
 - a. <https://www.orin.com/access/tapio/>
 - b. 2 switch ports w/adaptor
 - c. Nice video on Switch Control Options
 - i. <https://youtu.be/IQrL3GjICf8>
2. Pretorian Applicator <https://www.pretorianuk.com/applicator>
 - a. <https://www.talktometechnologies.com/products/applicator-bluetooth-switch-interface-for-idevices>
 - b. <https://www.tobiidynavox.com/support-training/fq-from-salesforce/how-do-i-set-up-the-pretorian-applicator-bluetooth-switch-interface/>
 - c. 24 keyboard/media commands. Any combination of switch functions is possible.
 - d. Press the Quick Media button for preconfigured access to play/pause, skip forward, skip back and Timed Play (10 seconds)
3. Stealth Switch?
 - a. <https://stealthswitch3.com/stealthswitch-3/>
 - b. Uses keyboard commands so should work
4. RJ Cooper
 - a. Bluetooth Switch (space/enter). <https://store.rjcooper.com/collections/switches/products/bluetooth-switch-button-upgrade>
 - b. ? Voice Over/Switch Control <https://store.rjcooper.com/products/ipad-voiceover-switch-control-controller>
5. ?Tecla ?
 - a. Allows you to control everything via an app, designed for individuals with limited mobility
 - b. Should give you total access to built in iOS switch controls.

Now to the PROGRAMMING !

1. 1 switch automatic scanning
2. 2 switch step scanning
3. Various “gestures” single movements that can be programmed
4. Custom Gestures - Any movement or shape you can think of
5. Bring it all together into Recipes.



Standard Programming

https://www.ablenetinc.com/content/html/Downloads/Switch_Downloads/ios_14_switch_control_user_guide_english.pdf

AbleNet

iOS 14 & iPadOS 14 Accessibility

Switch Control - The Missing User Guide

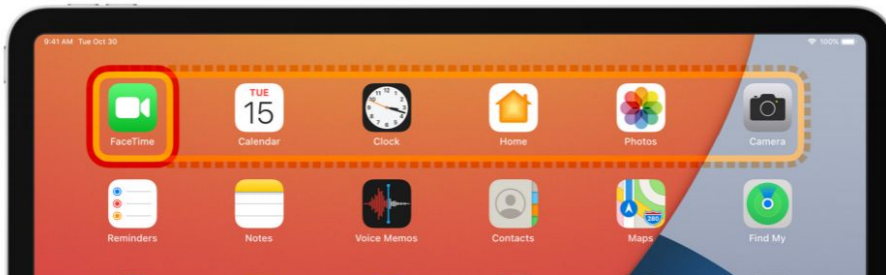
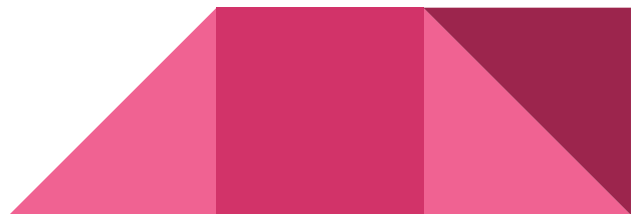


Table of Contents

Switch Interface Options.....	2
Configuring Switch Control - Auto Configuration.....	2 - 3
Configuring Switch Control - Single Switch Auto Scanning.....	3 - 6
Configuring Switch Control - Single Switch Step Scanning.....	6 - 9
Configuring Switch Control - Dual Switch Step Scanning	9 - 11



Topics covered in manuel

- Auto Scanning
 - PAUSE ON FIRST ITEM
 - LOOPS
 - LONG PRESS
 - GROUP ITEMS
 - LARGE CURSOR
 - CURSOR COLOR
 - EVEN SAVED GESTURES
 - ETC.
- Single Switch Step Scanning
- Two Switch Step Scanning



Are you looking for something more?

Cause effect...


Turning pages of ebooks...

What are you hoping to access?

Check out Part 2 of this presentation next week :)



Already Accessible Apps

1. Compilation of various Switch Accessible apps
<https://enablingdevices.com/wp-content/uploads/2020/06/Switch-Accessible-Apps.pdf>
 2. Marblesoft
 - a. Sights & Sounds, Switch Accessible puzzles, Switch Kids, Potato Face
 3. Judy Lynn Software - <http://www.judylynn.com/ipad/>
 4. LIFEtool Solutions <https://apps.apple.com/in/developer/lifetool-solutions-gmbh/id618103816>
 5. Inclusive TLC <https://www.inclusivetlc.com/ipad/apps>
 - a. Big Bang Patterns/Pictures
 - b. Space Shooter, Little Lost Penguin, Train Tracker, Racing Cars, Treasure Island, SHHH!, etc.
 6. HelpKidzLearn - Many!
 7. L3 Skills <https://www.n2y.com/l3-skills/>
 8. RJ Cooper <https://apps.apple.com/us/developer/rj-cooper-associates-inc/id412790299#see-all/i-pad-apps>
 9. Communication Devices
 - a. GoTalk Now
 - b. TouchChat
 - c. LAMP Words for Life
 - d. Etc.
- 

FYI - My Favorite Mount

Modular Hose - Lock Line - MOGO mounting

Quality, Service, Great Price \$

<https://www.modularhose.com/assistive-technology>



MODULARHOSE



MOGO MOUNTS



TABLET & DEVICE SOLUTIONS



SWITCH SOLUTIONS



Give it a WHIRL, Jump right in, and make it FUN!

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