DigiGurdy: Instructions for Use
John Dingley. 14/11/2020

Sections:
A) Initial setup with phone. Selection of tuning and drones.
B) Entering demonstration mode with pre-loaded tunes.
C) Changing tuning / drones.
D) Additional notes on what phones will work, different adapters for the USB cable where it plugs into your phone (Samsung phones have different plug design for example), notes on using Apple iPhone or iPad.

NOTE:
Within the on-screen menus of the DigiGurdy it sometimes instructs you to select the “Dark Blue” key or the “Light Blue” key to select between options.

This is why, as you see in the images, I have 3D printed the left upper key in dark blue ABS plastic and the upper right key in light blue ABS. This is why all the upper row keys are not white.

Additional note:
These instructions are for reference only. They are much better explained by a video clip.
Setup may look complicated but really, it is not after you have done it once.
Watch some of my videos and you will see this.

A) Initial setup with phone. Selection of tuning and drones.

Get the Soundfont file onto your mobile Android phone.

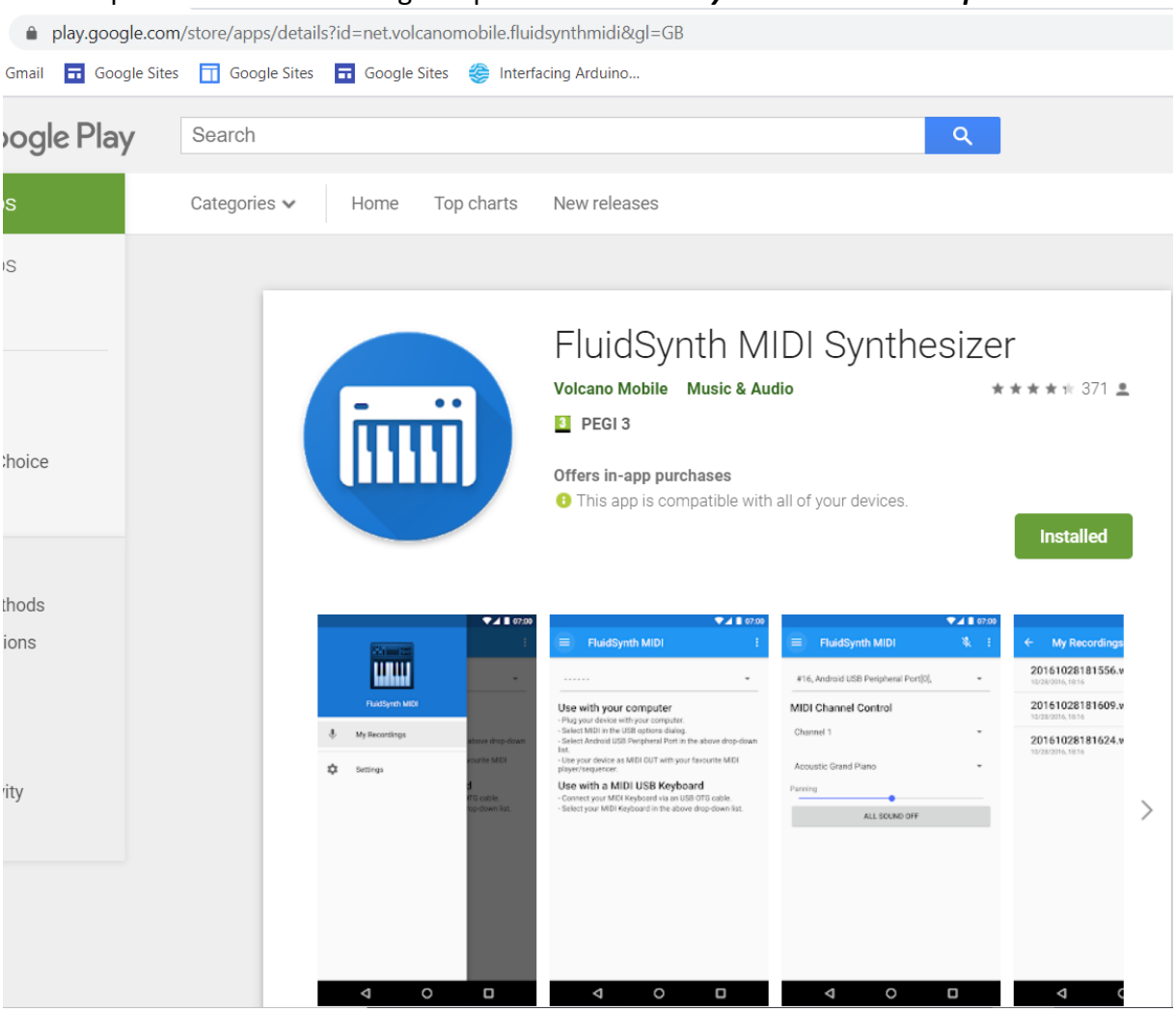
NOTE: Phone needs to have Android version 6.0 or newer (i.e. be less than about 5 years old)

- PM me via the Hackaday project page or email me at DigiGurdy@gmail.com and ask me to send you the Soundfont file. This is a large file which needs to be on your mobile phone and it contains all the recorded hurdy-gurdy sounds. It is based on the soundfont file of the MIDI-Gurdy project which is a different open-source project to the DigiGurdy.

- I will send you the soundfont via wetransfer.com
- You will get a message in your email that there is file waiting for you at wetransfer for you to download. Click on the link in the email and it will take you there.
- Download the soundfont file to your phone, i.e. open the email using your phone, go to the link in the email (using your phone) click the download link and the soundfont will download to your mobile phone.

Download the free "FluidSynth" app to your Android phone from the Google Play store (or download the Bismark bs-16i app to your iPhone/iPad from the App Store – approx. $8). Cheapest option is Android phone/FluidSynth. Best option in terms of sound experience is iPhone/iPad running bs-16i as this app gives you many more options.

In these photos I will be showing setup and use of ***FluidSynth on an Android phone***.



You are now ready to plug your DigiGurdy into your phone via the small adapter lead.

- Plug the DG into your phone. It is powered from the phone and so has no battery or anything like that.
- There is a short animated welcome screen, then it self-tests that the crank mechanism is connected properly, then a screen appears offering you a selection of the first 7 of 14 possible “tuning” options. Select 1 to 7 using keys 1 to 7. If you want to see tunings 8 to 14, press the dark blue key and a menu of tunings 8 to 14 will come up.

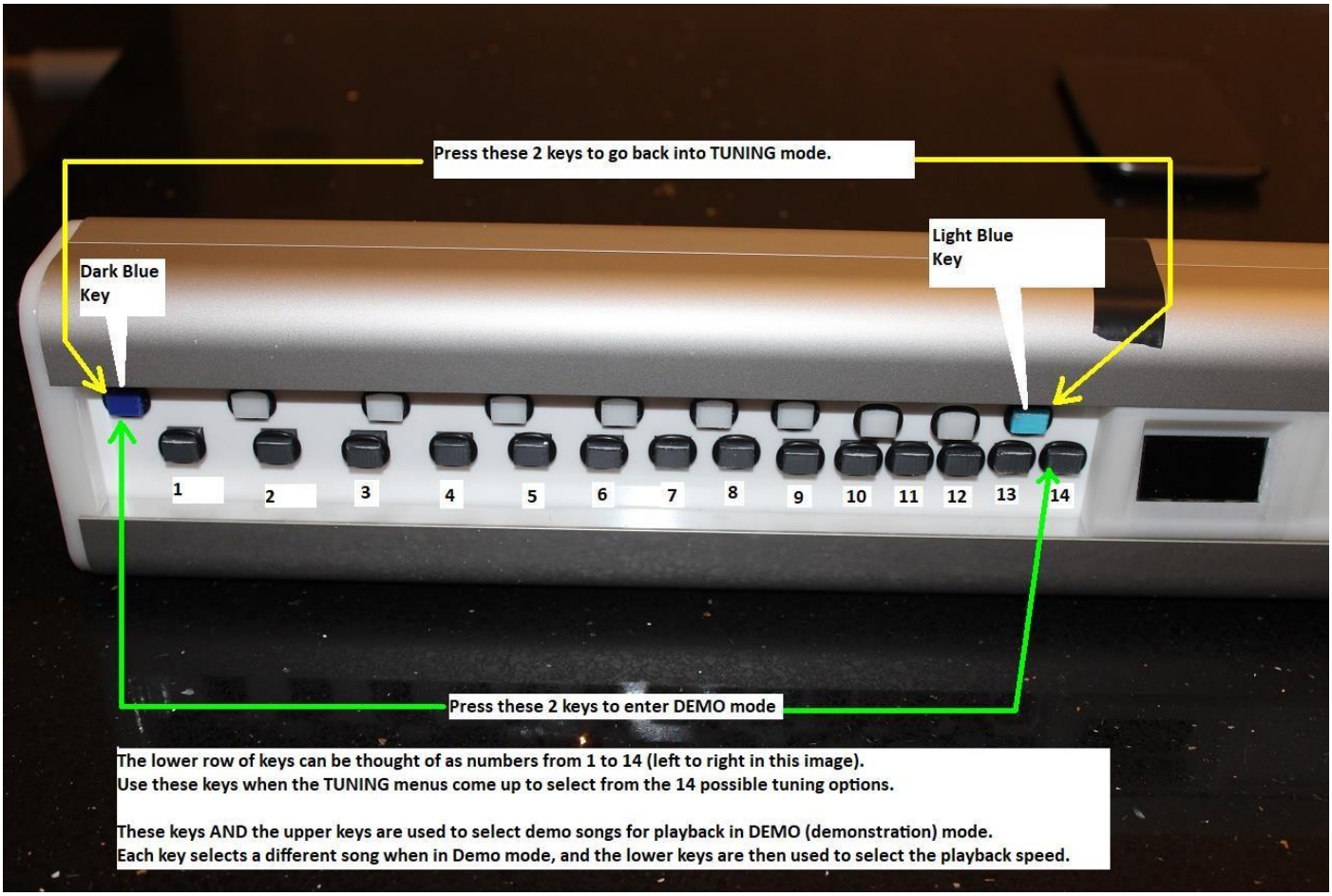
What does this screen mean?

Imagine you have a 3 stringed instrument with one melody string, a trompette string and a drone string.
Option 1 means melody string set to G, with a D trompette and a G drone
Option 2 means melody string set to G, with a C trompette and a C drone
Option 3 means melody string set to D, with a D trompette and a D drone
Option 4 means melody string set to D, with a D trompette and a G drone
Option 5 means melody string set to D, with an A3 trompette and a D3 drone

Options 1 – 4 are probably suitable for beginners.

Options 5 to 14 just list what each string does e.g.
Option 7 above means a melody string at D4 with the first string automatically set an octave above it i.e. D5, with a D4 trompette and a G2 drone

How to select the tuning option you want to use?



This figure shows what the keys all do when you are setting up your tunings etc.

What is DEMO mode?

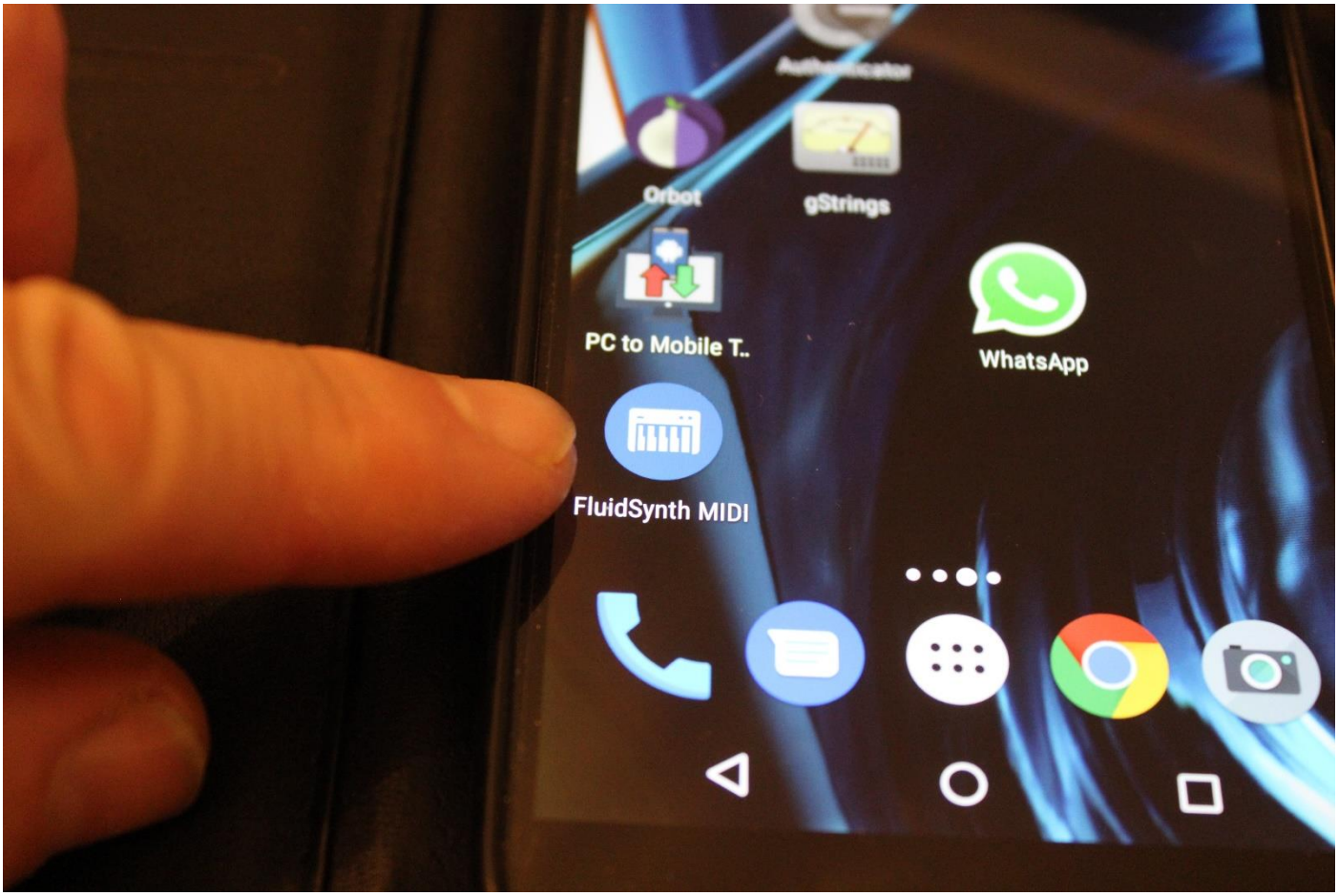
It is a collection of about 24 songs encoded into the DG software. Each can be selected for playback by a different individual key, when in that mode. Keys 1 – 14 are then used to select the actual playback speed from very very slow to quite fast.

What happens when you have selected a tuning option?
A screen like this will then appear.

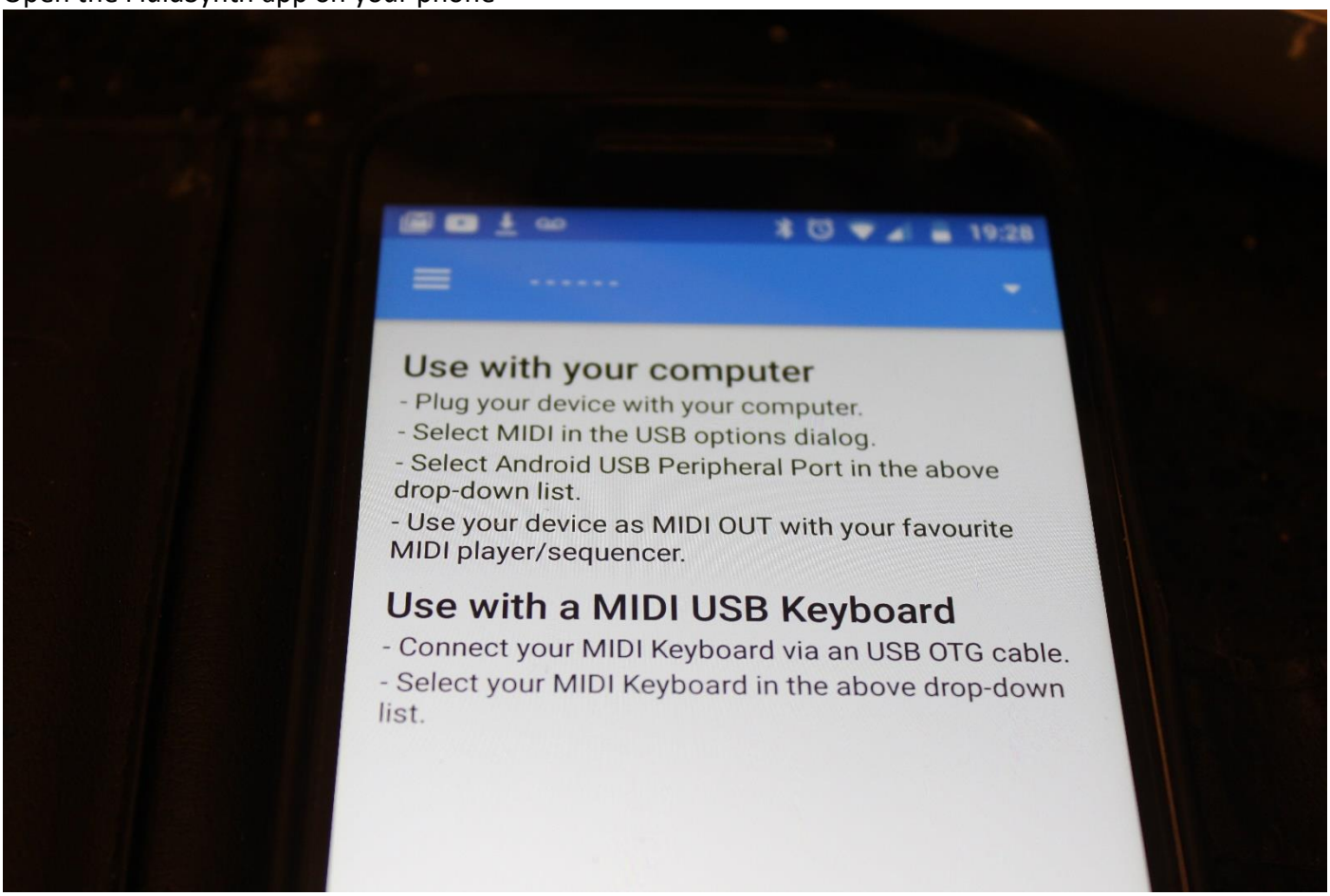
Here you selected option 1 from the initial menu of possible tunings.
This screen then comes up.
In this case it is telling you what settings to choose on the attached PHONE app for each MIDI channel. If it did not work this way, the DG would have no idea what settings you had chosen on the FluidSynth phone app.
The DG outputs data which tells FluidSynth what to play on each of 6 Channels.
Channel 1 is a melody string automatically set one octave above the string on Channel 2.
Channel 2 is a melody string
Channel 3 is the trompette string
Channel 4 is the drone string
Channel 5 is the buzz sound from the crank
Channel 6 is the click of the keys as they move.

The FluidSynth app “listens” to each channel simultaneously and when it receives MIDI information from the DG such as to play a note on channel 1 or make a keyclick sound on Channel 6 for example, it will then act on that instruction and make the required sound.

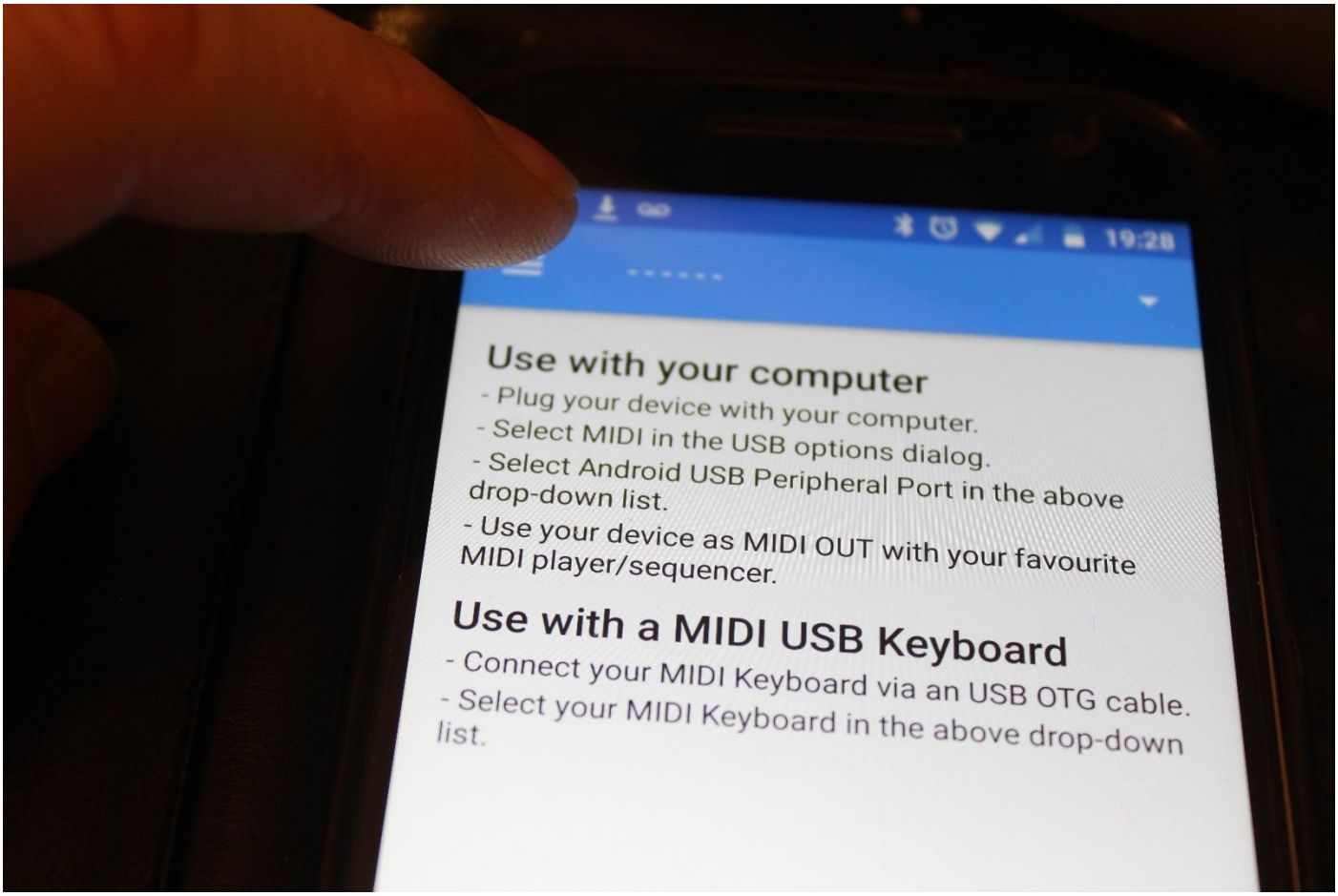
So, we now need to set up the first 6 channels of the FluidSynth app, ***following the instructions given as above on the DigiGurdy screen***…….



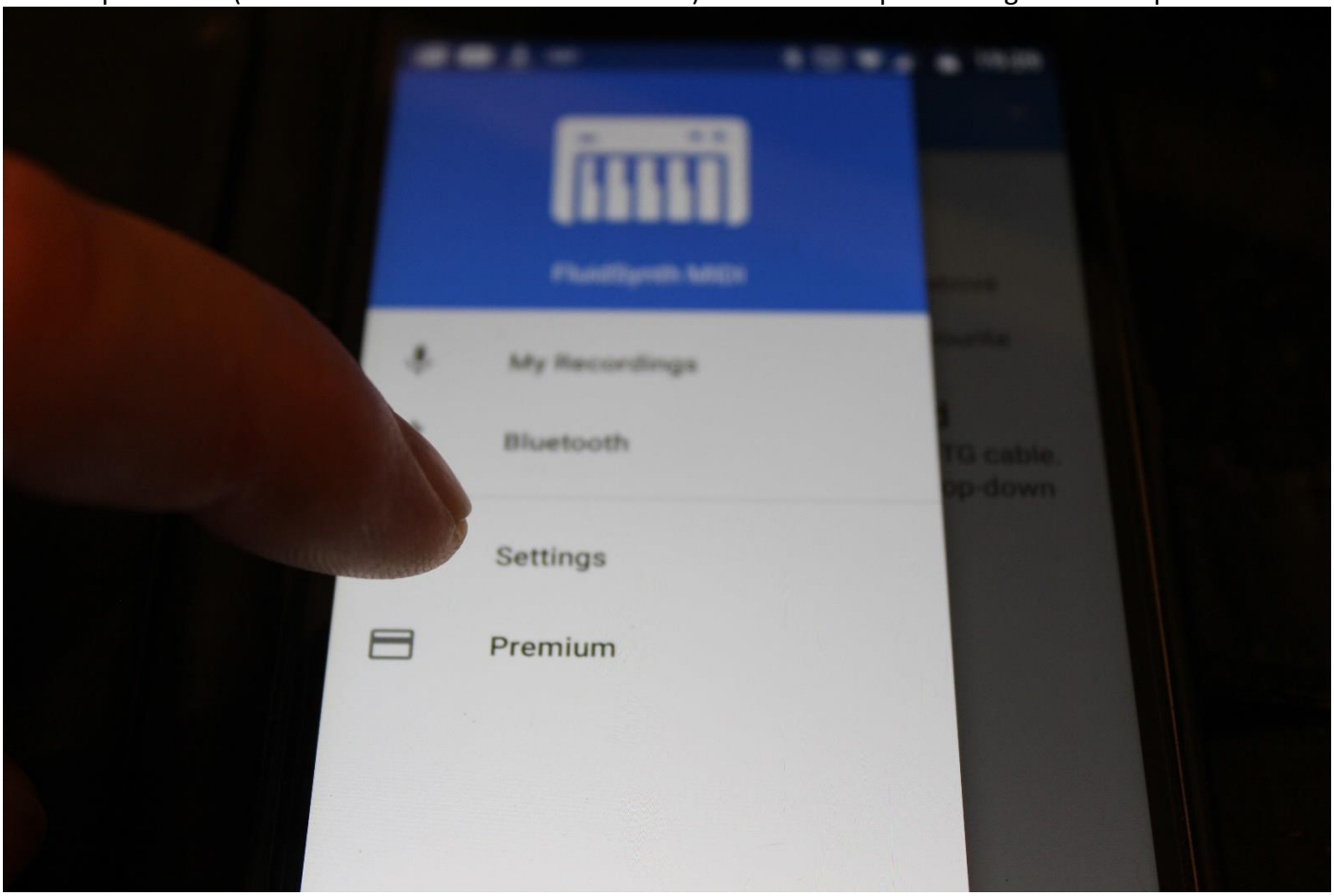
Open the FluidSynth app on your phone



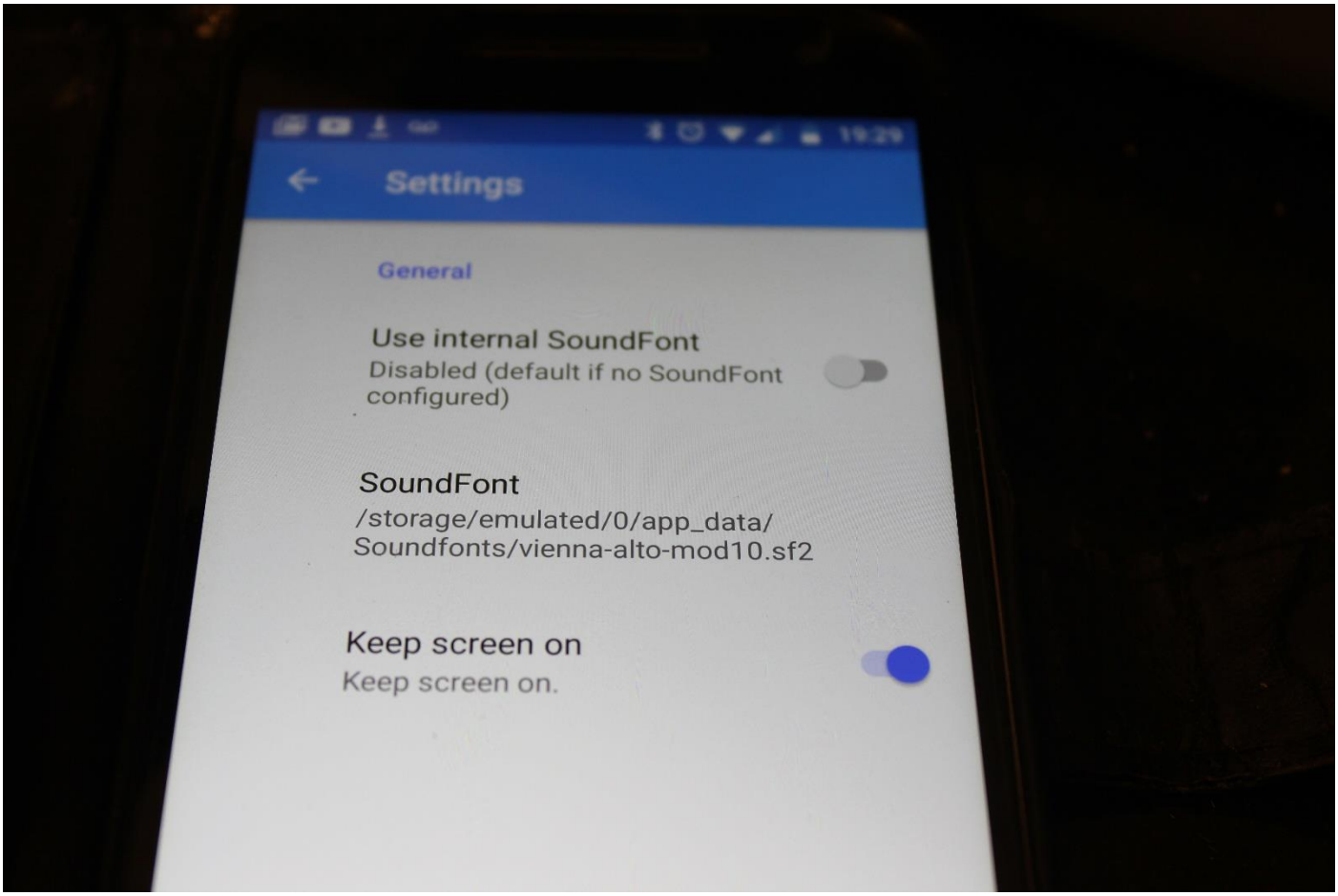
Make sure DigiGurdy is plugged into your phone first ! Here is the opening screen of FluidSynth. As you see the interface is very basic.



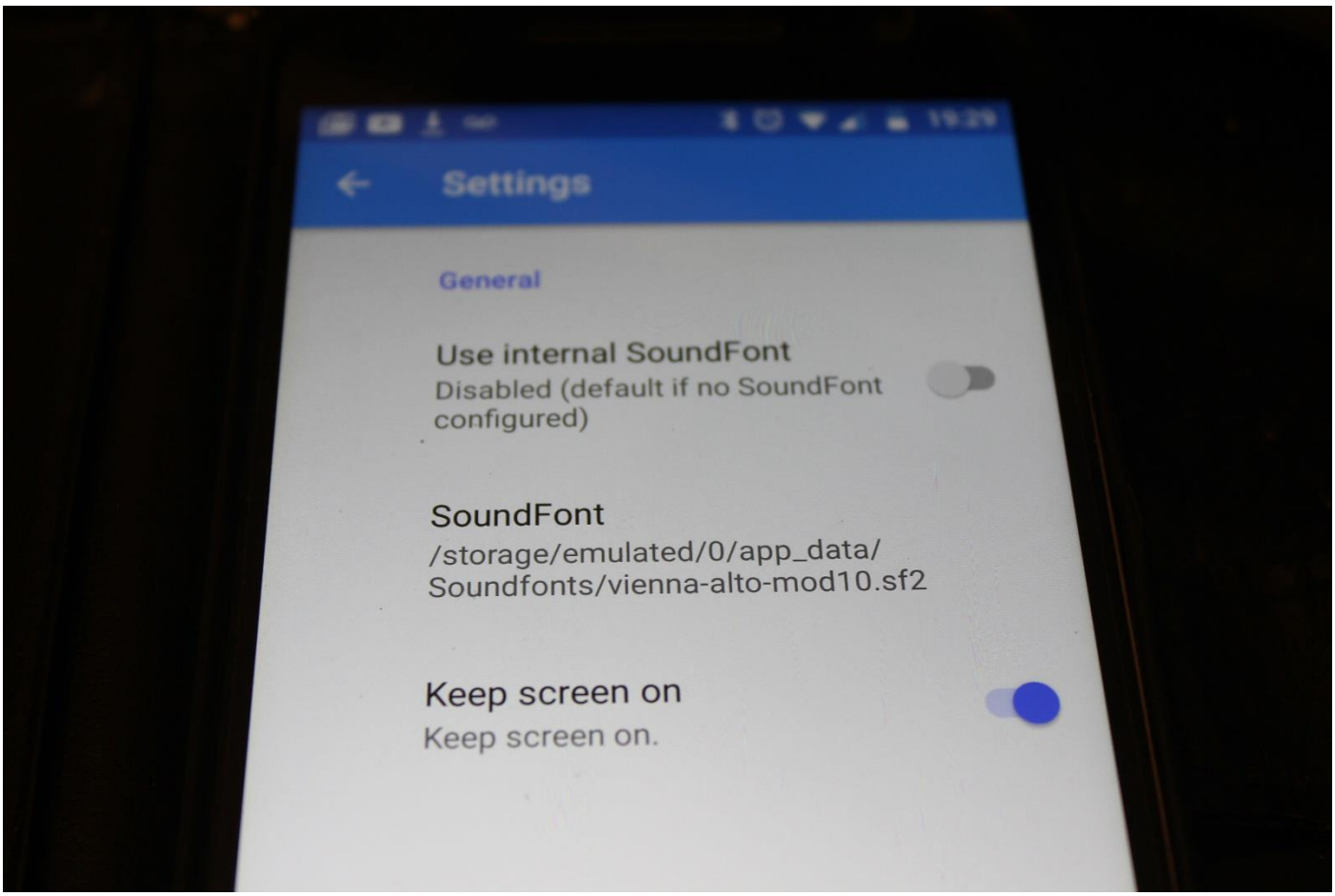
Press top left icon (a set of lines one above one another) as shown to open settings menu on phone.

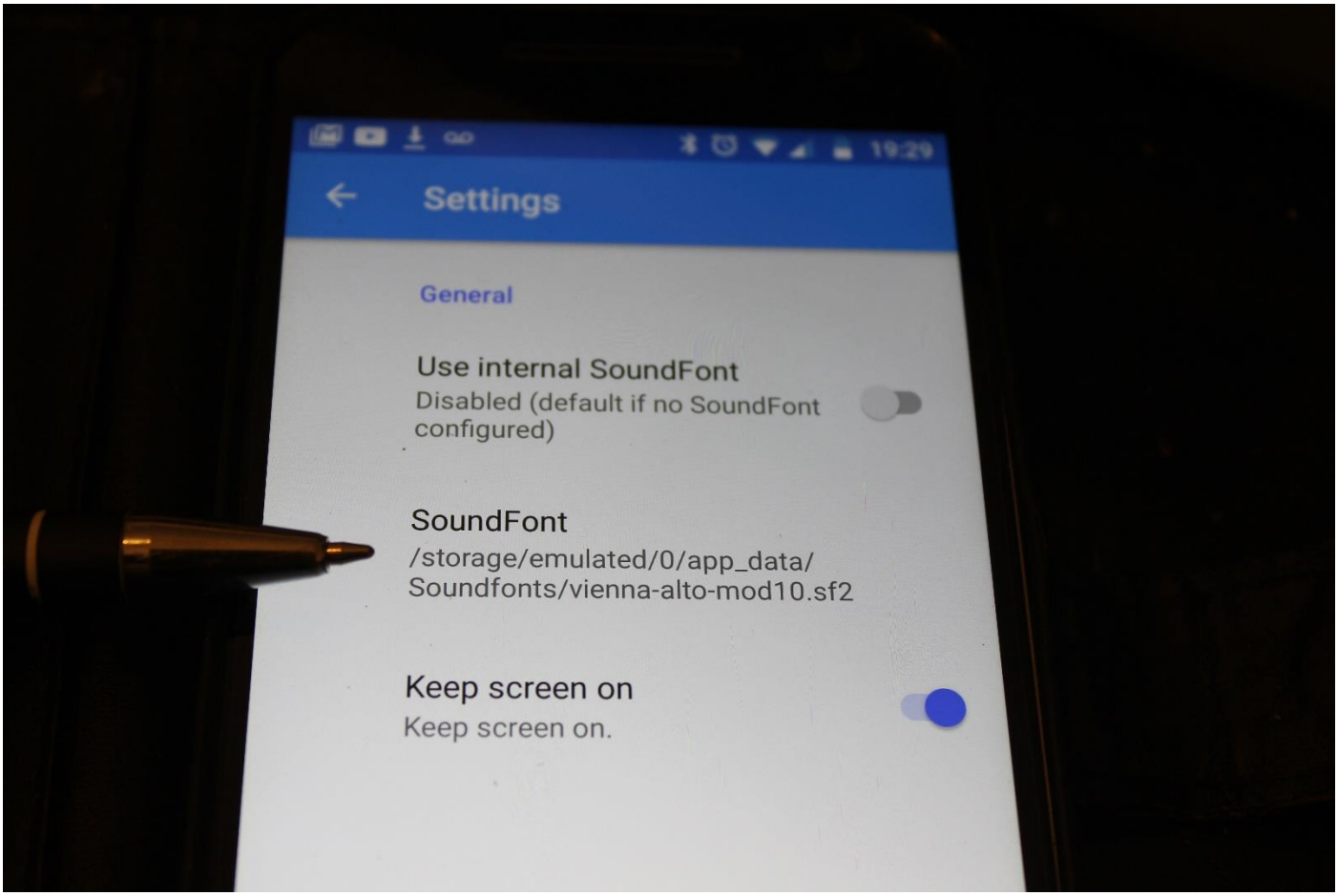


Select SETTINGS



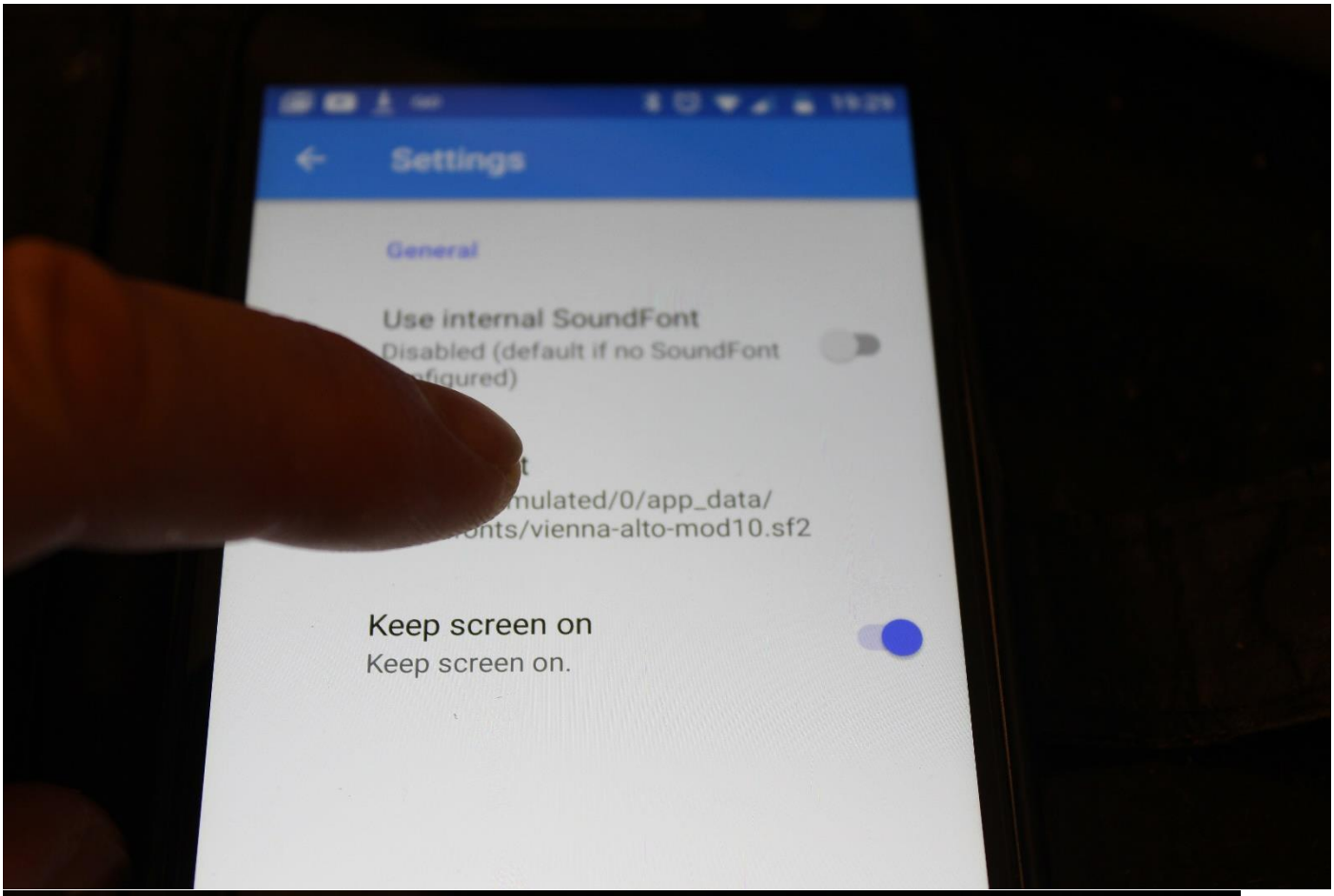
Make sure KEEP SCREEN ON is selected and Use Internal Soundfont is NOT selected.

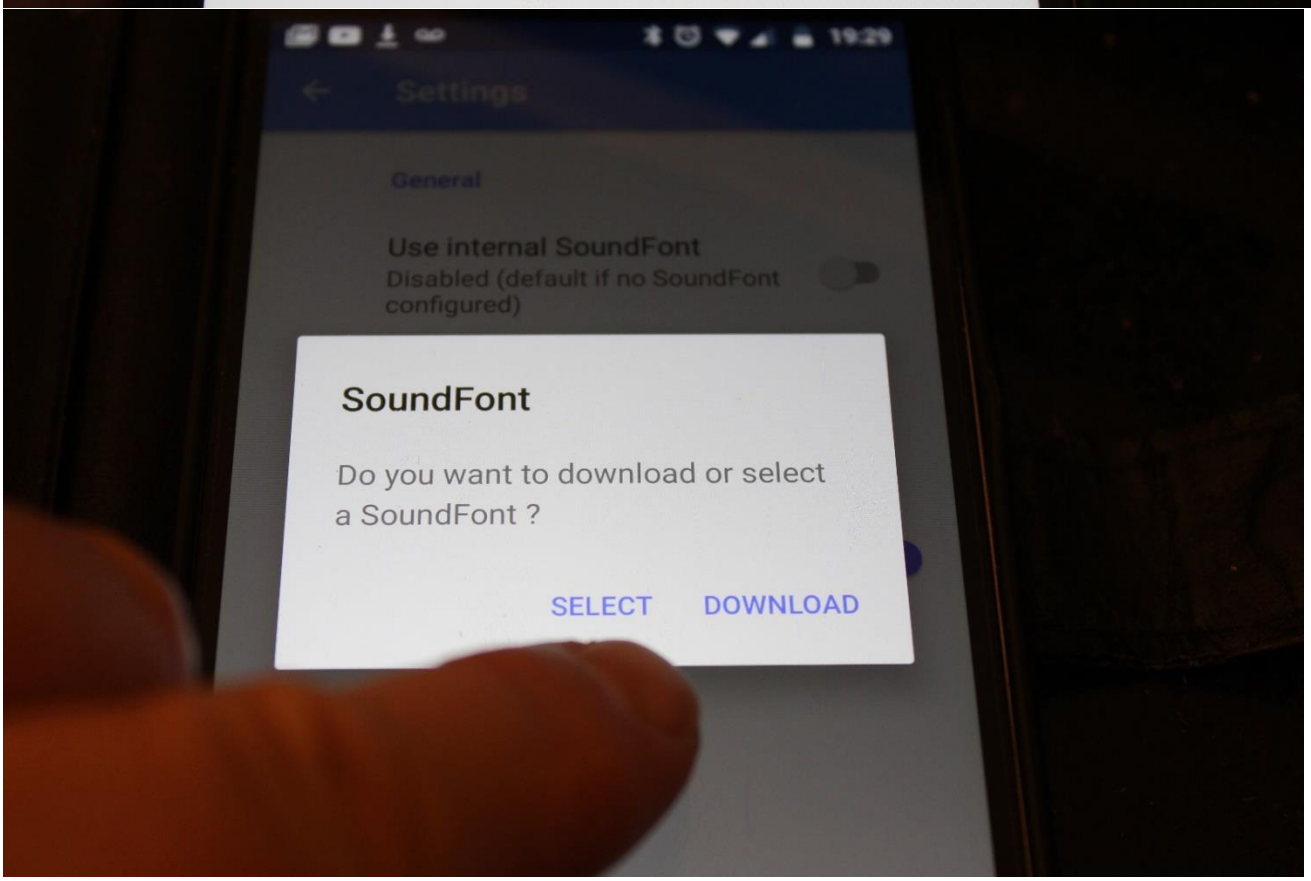




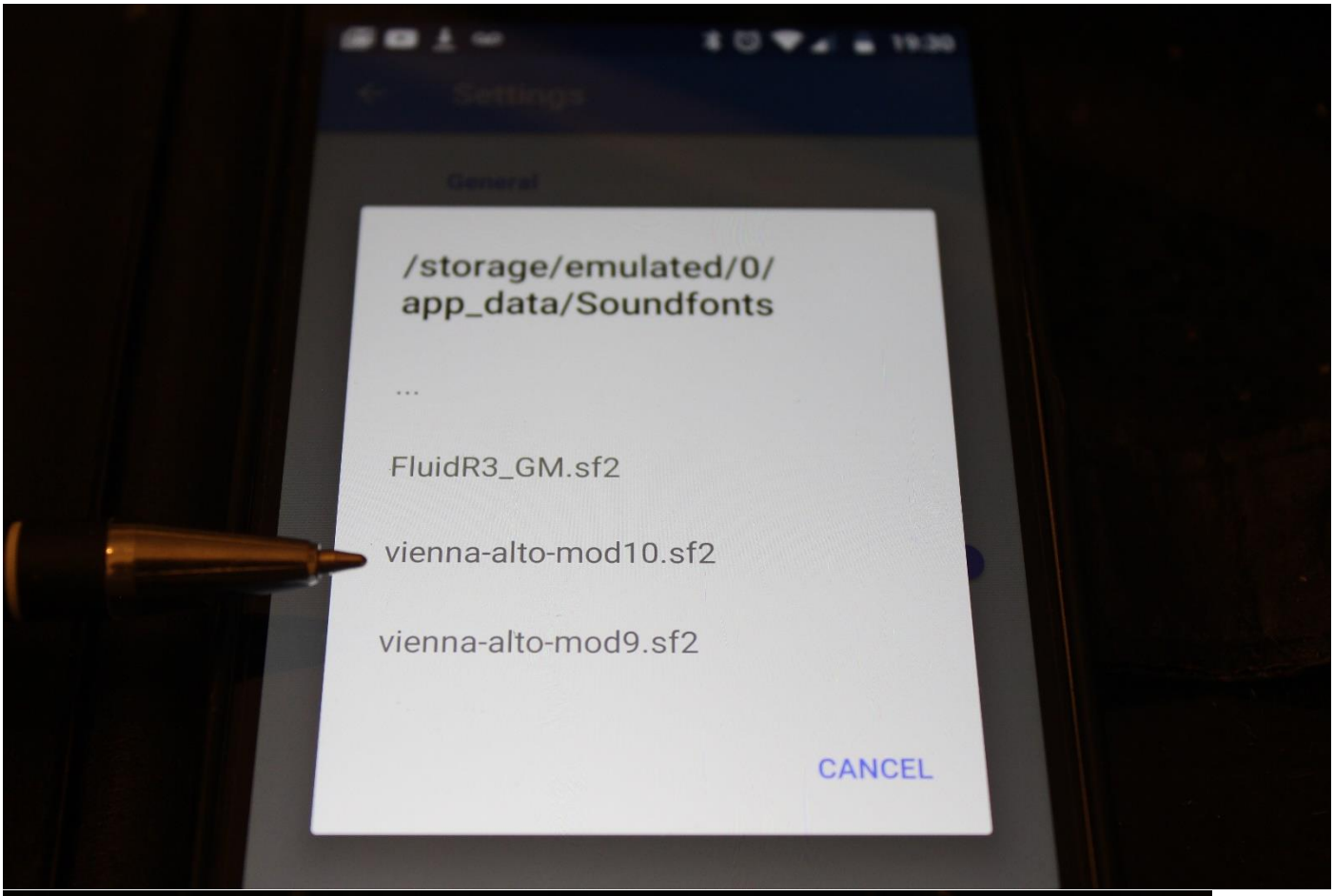
We want to tell FluidSynth to use an external soundfont, the one you downloaded to your phone and that I sent to you earlier by wetransfer.

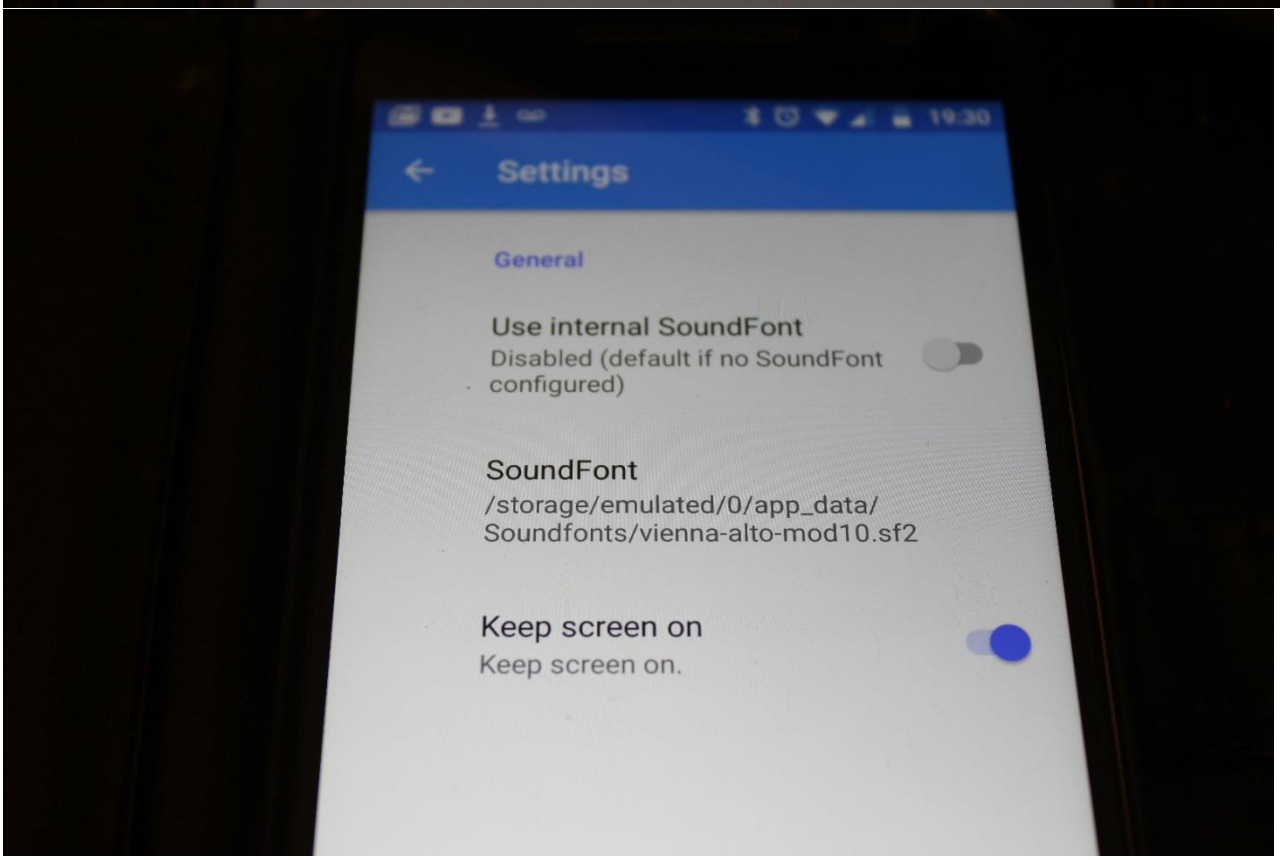
Press this middle icon as shown and it opens a menu which allows you to search your phone folders to find where you saved the soundfont. Find on your phone wherever you saved the soundfont that I sent you by wetransfer so that it appears here. Usually it will be in your phone DOWNLOADS folder.



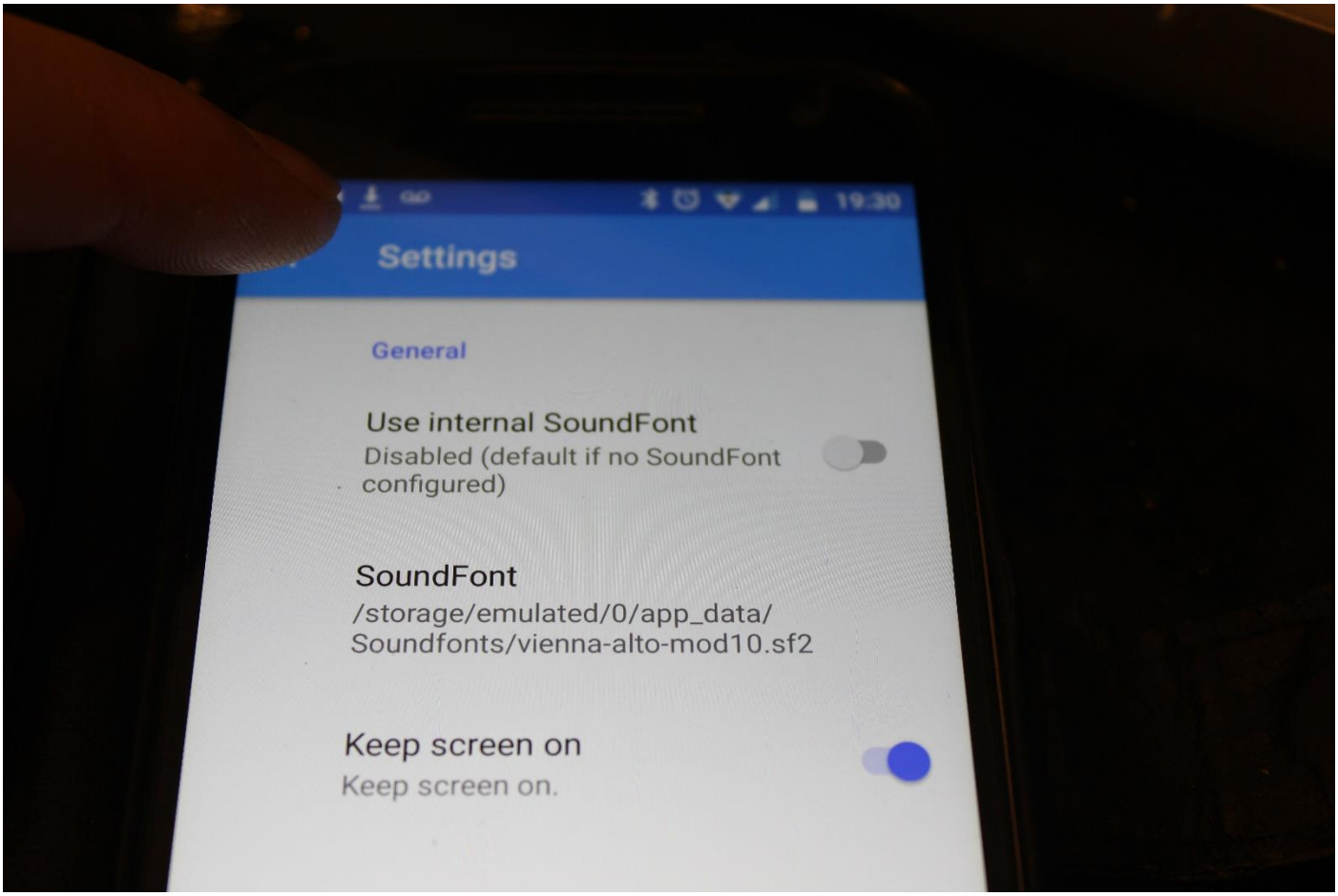


You probably want to SELECT the soundfont as you will have already downloaded it to your phone.

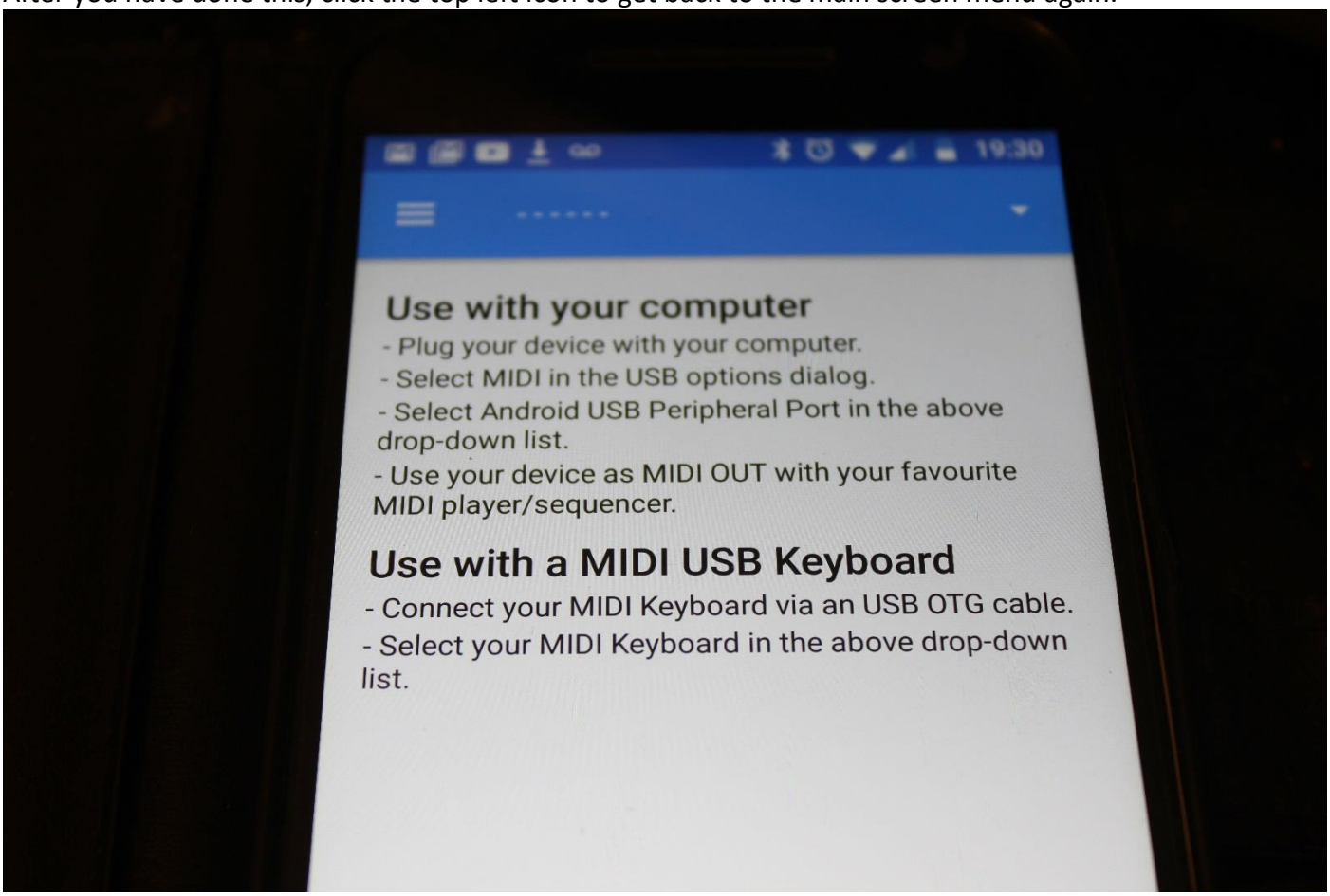


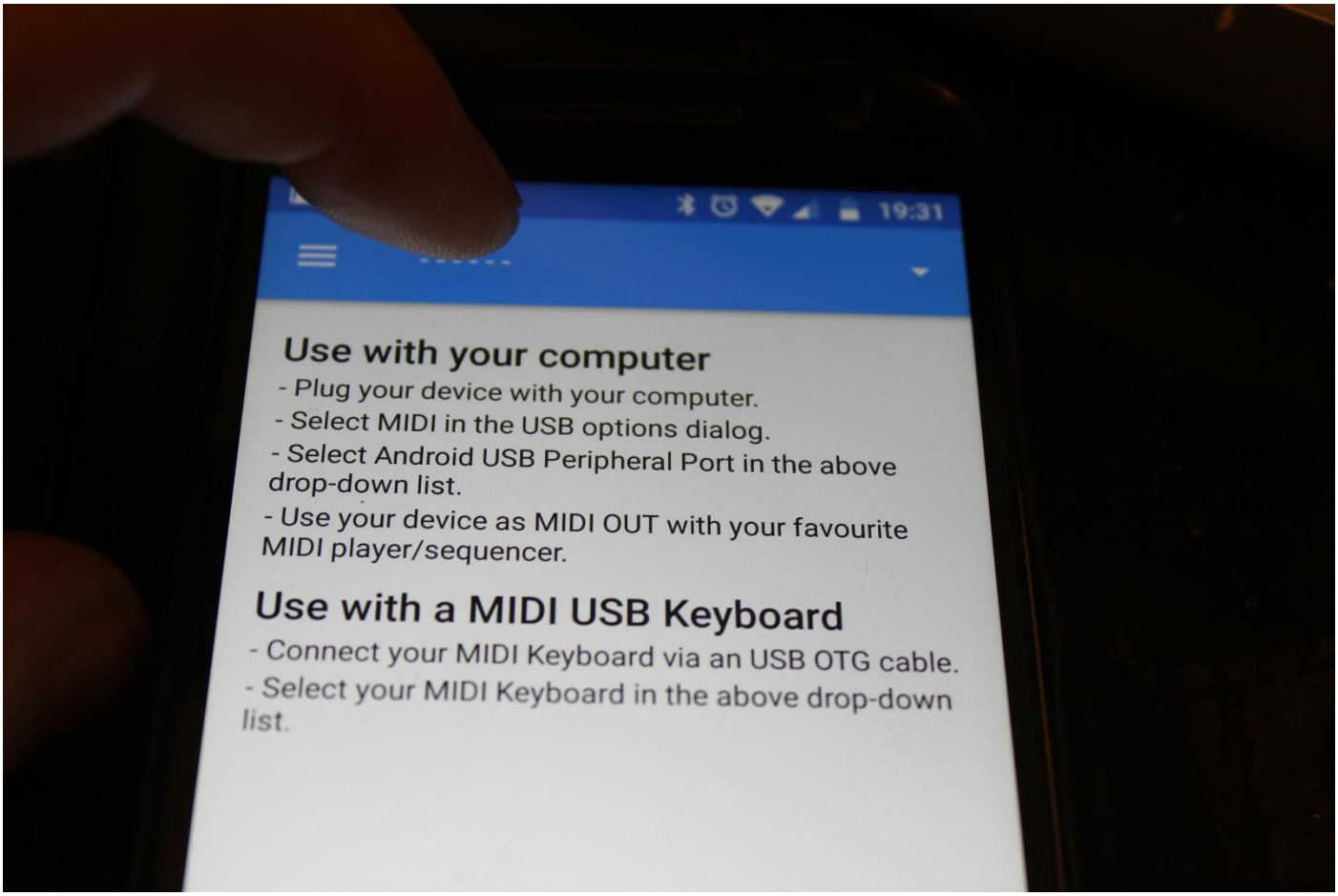


So you have selected the correct soundfont and it is now being shown here (Vienna alto mod 10 currently). The .sf2 just means it is a soundfont file type. You are good now to carry on.

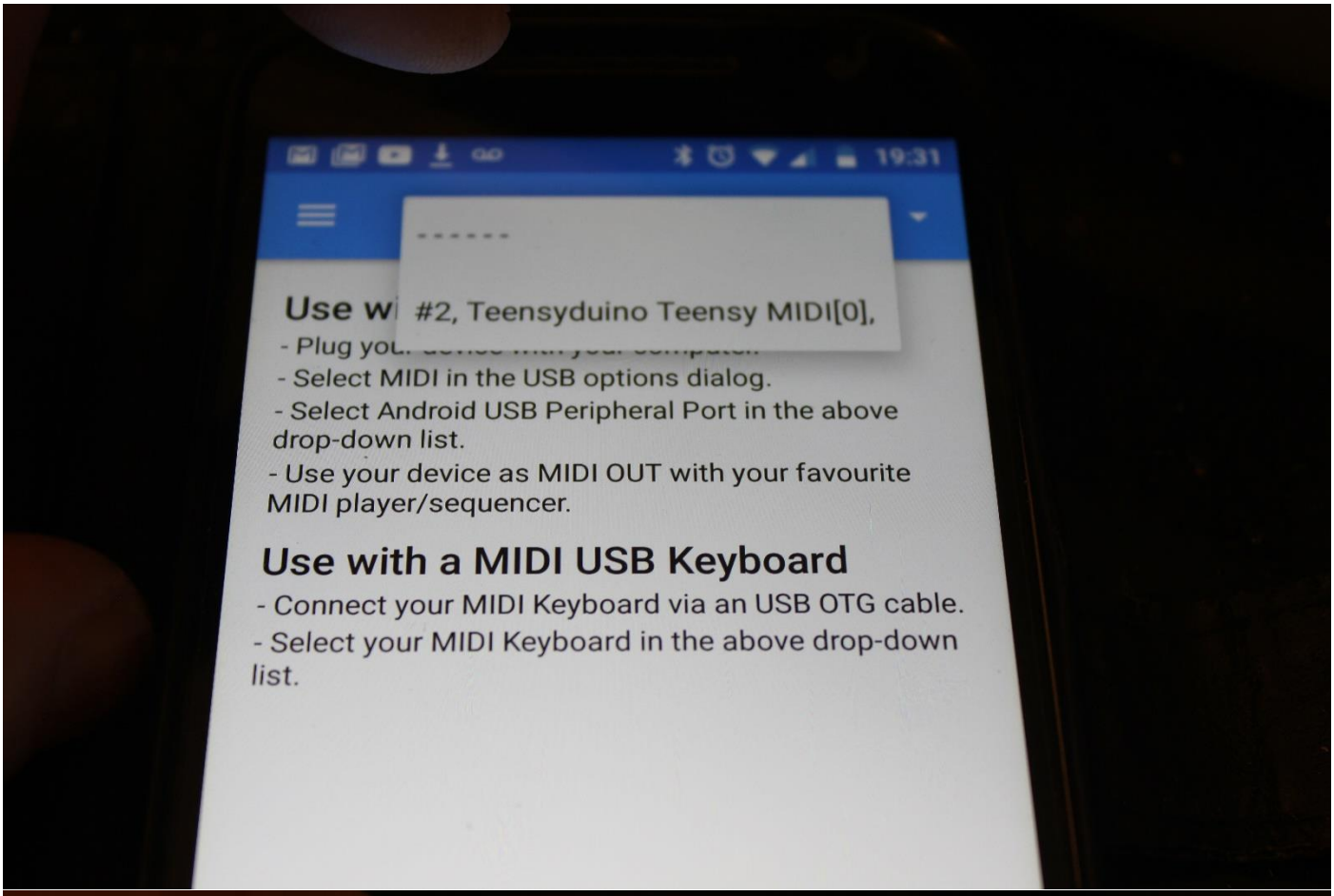


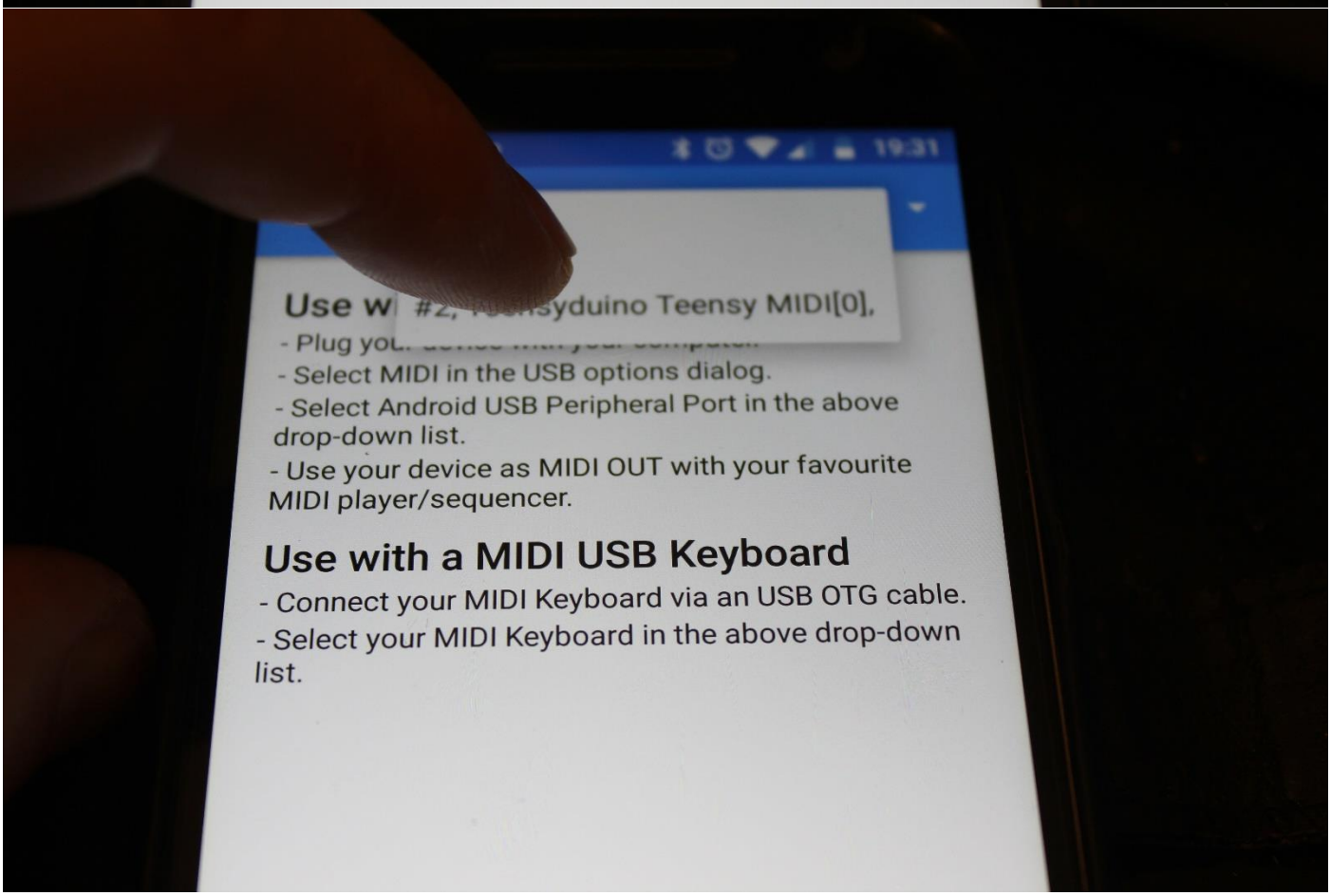
After you have done this, click the top left icon to get back to the main screen menu again.



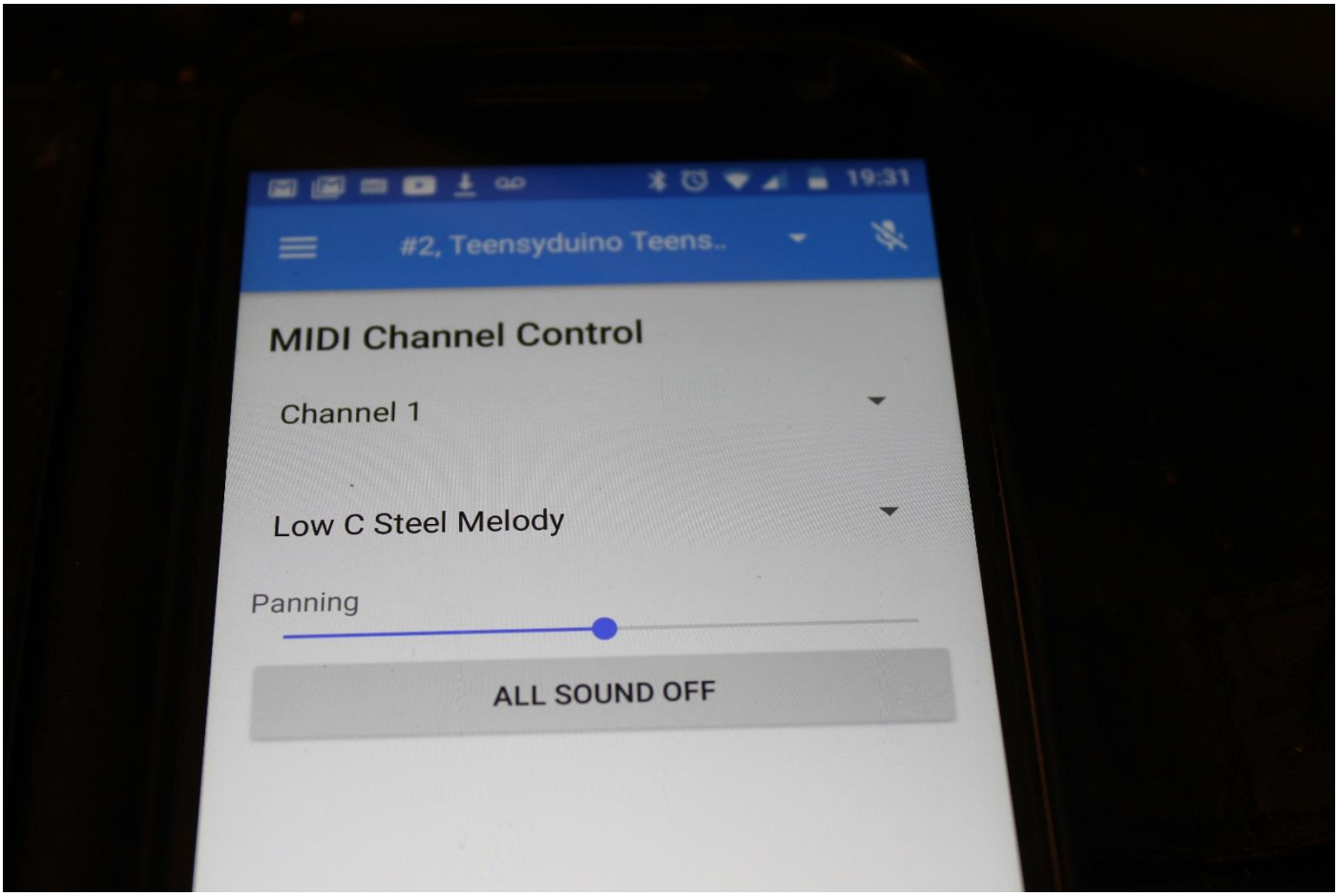


Press the dotted line.





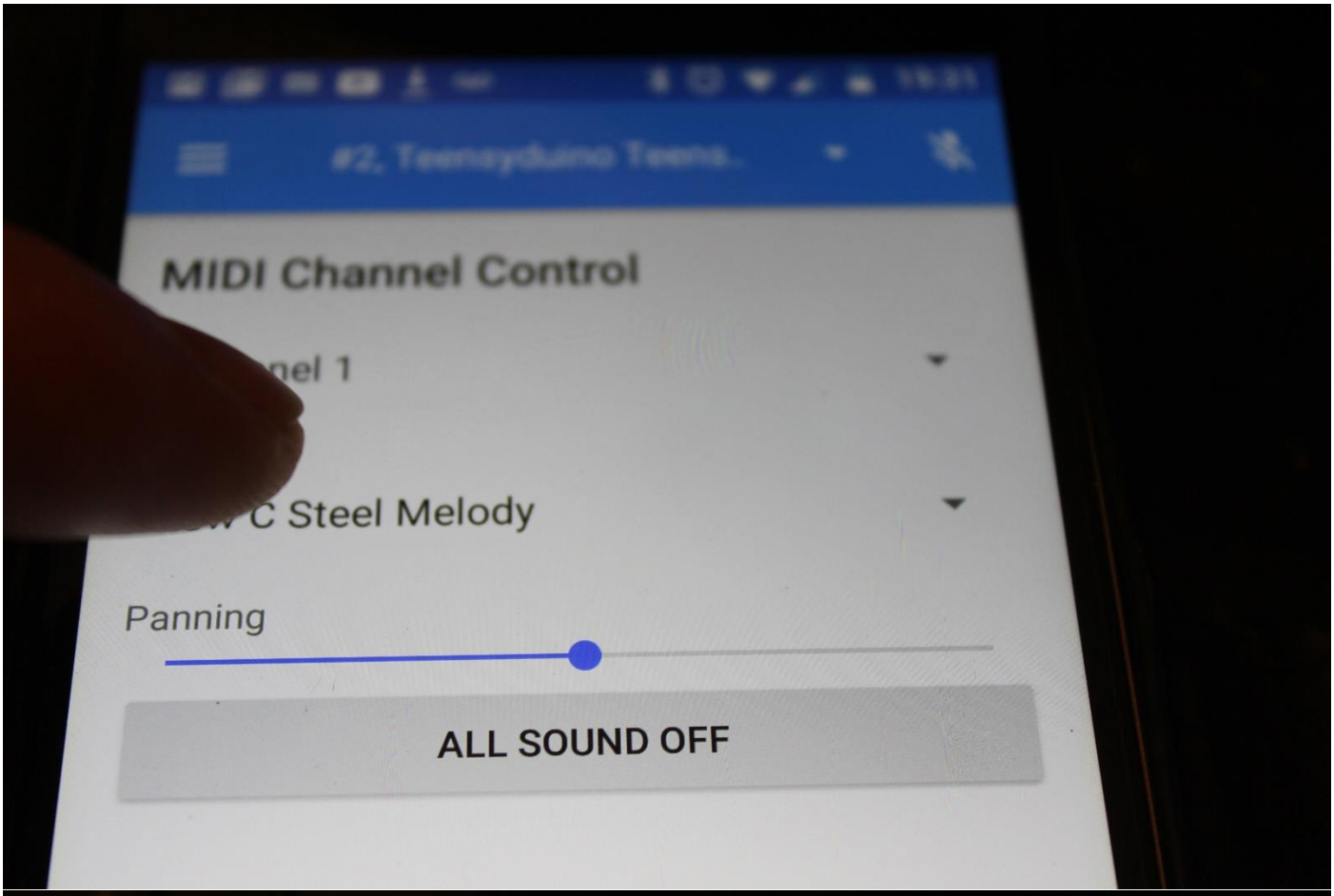
If the DGurdy is connected to the phone, then you should see something come up with ‘Teensyduino teensy MIDI……’ in the name. *Click on it* to pair the phone with the DigiGurdy.

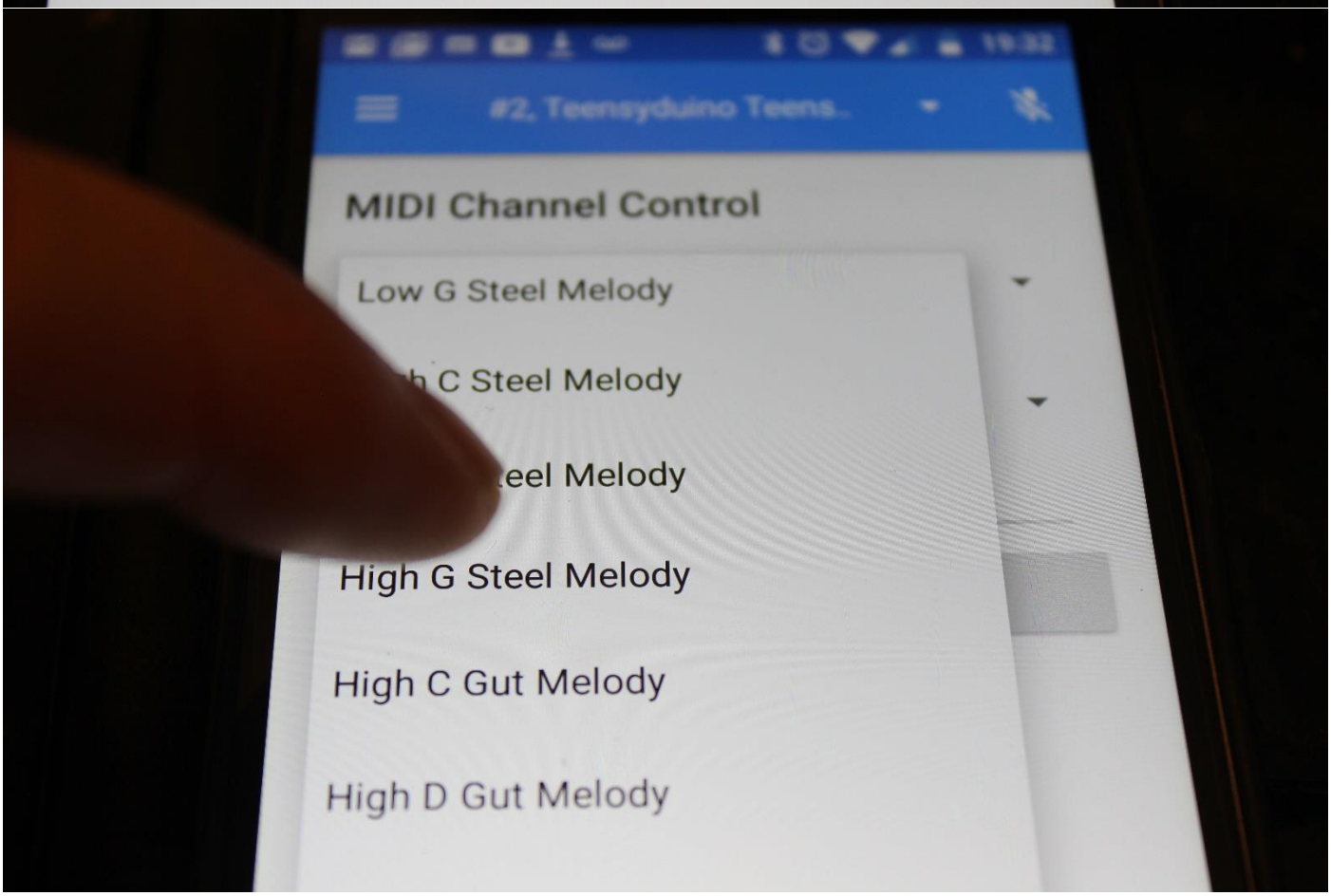


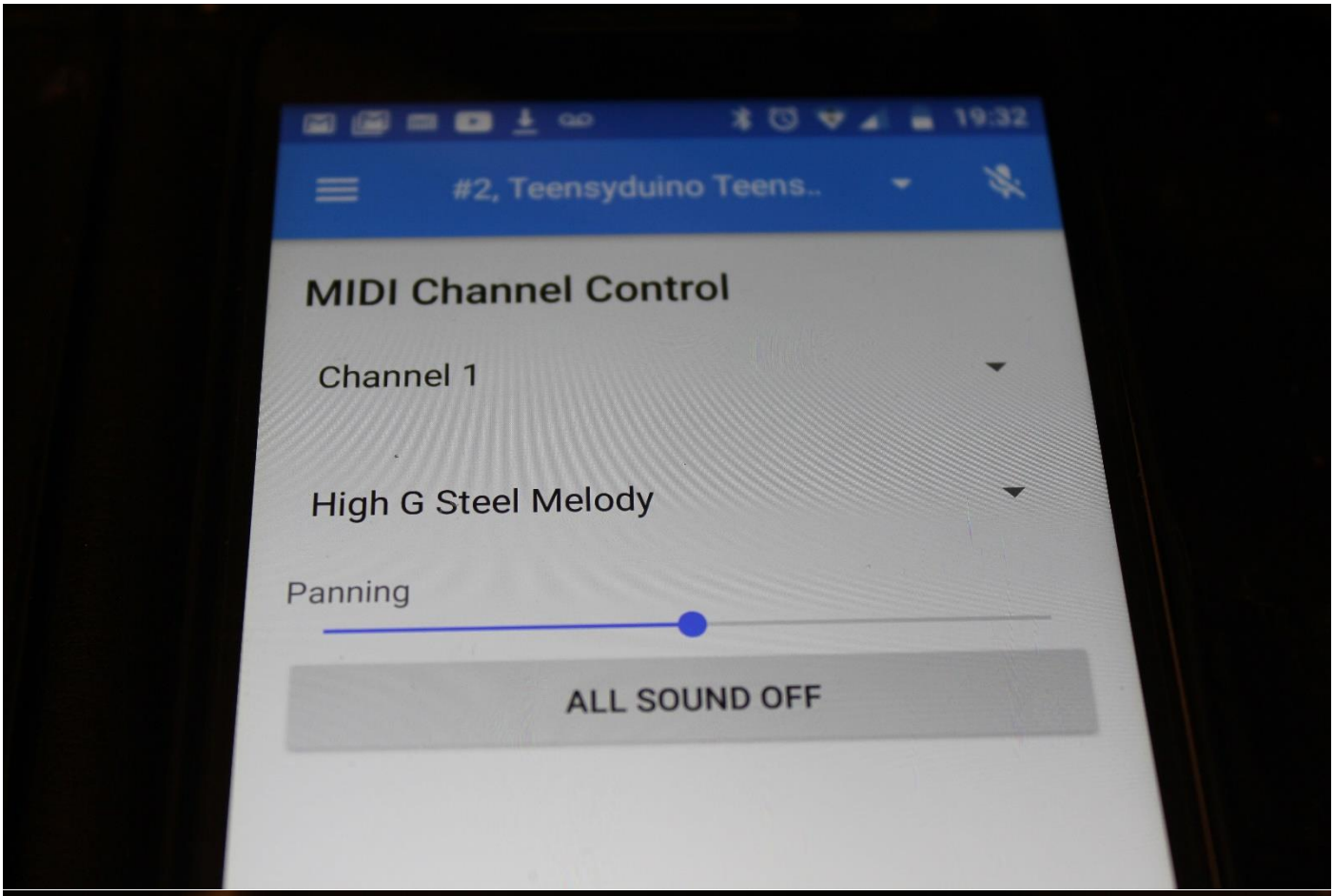
This screen now pops up.
You will now tell FluidSynth *what sound from the Soundfont file you want to attach to each of the first 6 of the channels in FluidSynth*.
You do this by setting up each MIDI channel from 1 to 6 in sequence.

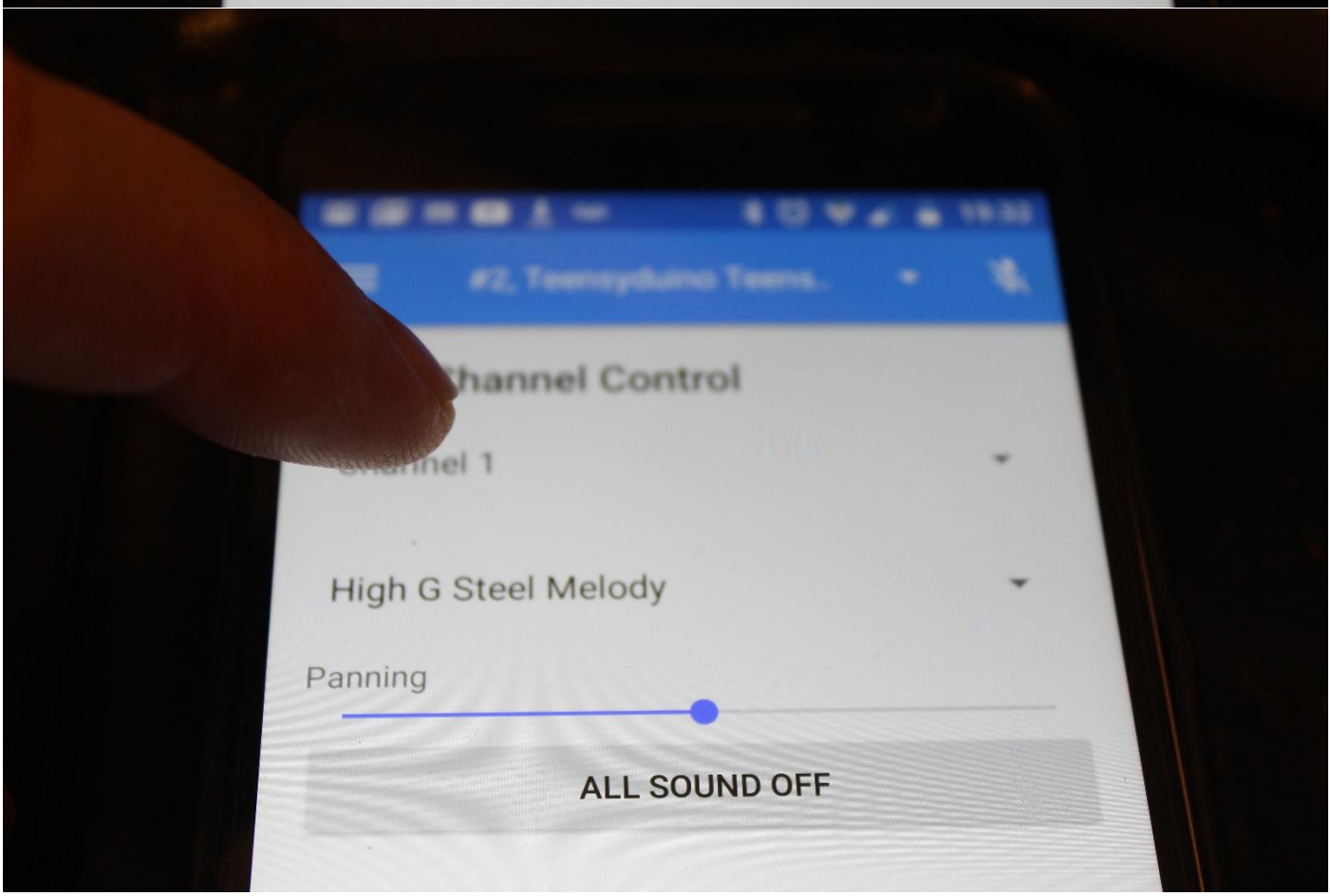
So, here we will set up Channel 1 (which is a melody string you will remember)….

The screen on the DigiGurdy TELLS YOU what sound to select from the soundfont for each channel when you set up the channels in FluidSynth on your phone. So here you would set Channel 1 to High G Melody for example, then Channel 2 to Low G Melody, Channel 3 to High D Trompette and so on.

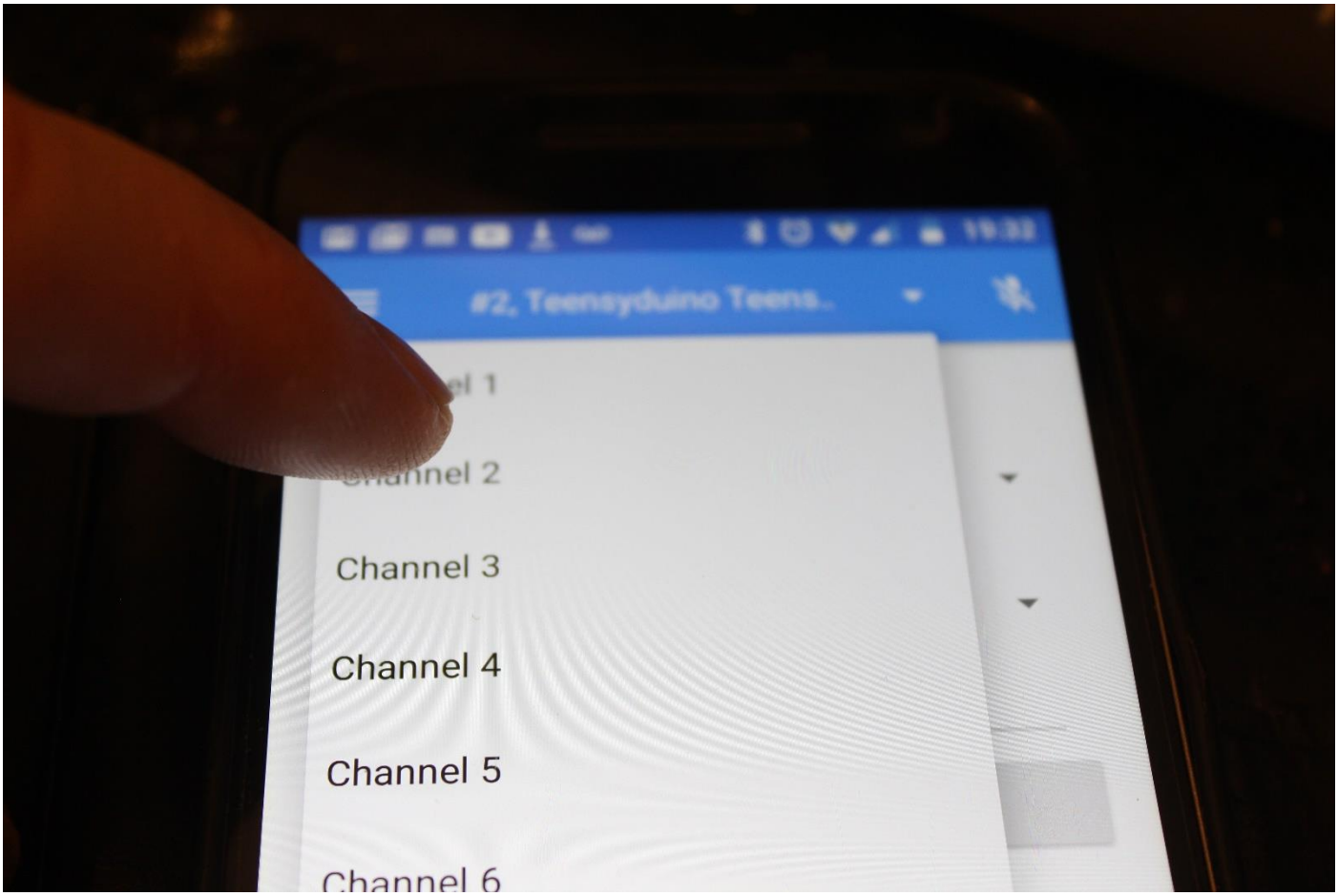

#2, Teensyduino Teens..
MIDI Channel Control
nel 1
C Steel Melody
Panning
ALL SOUND OFF


#2, Teensyduino Teens..
MIDI Channel Control
Low G Steel Melody
h C Steel Melody
eel Melody
High G Steel Melody
High C Gut Melody
High D Gut Melody



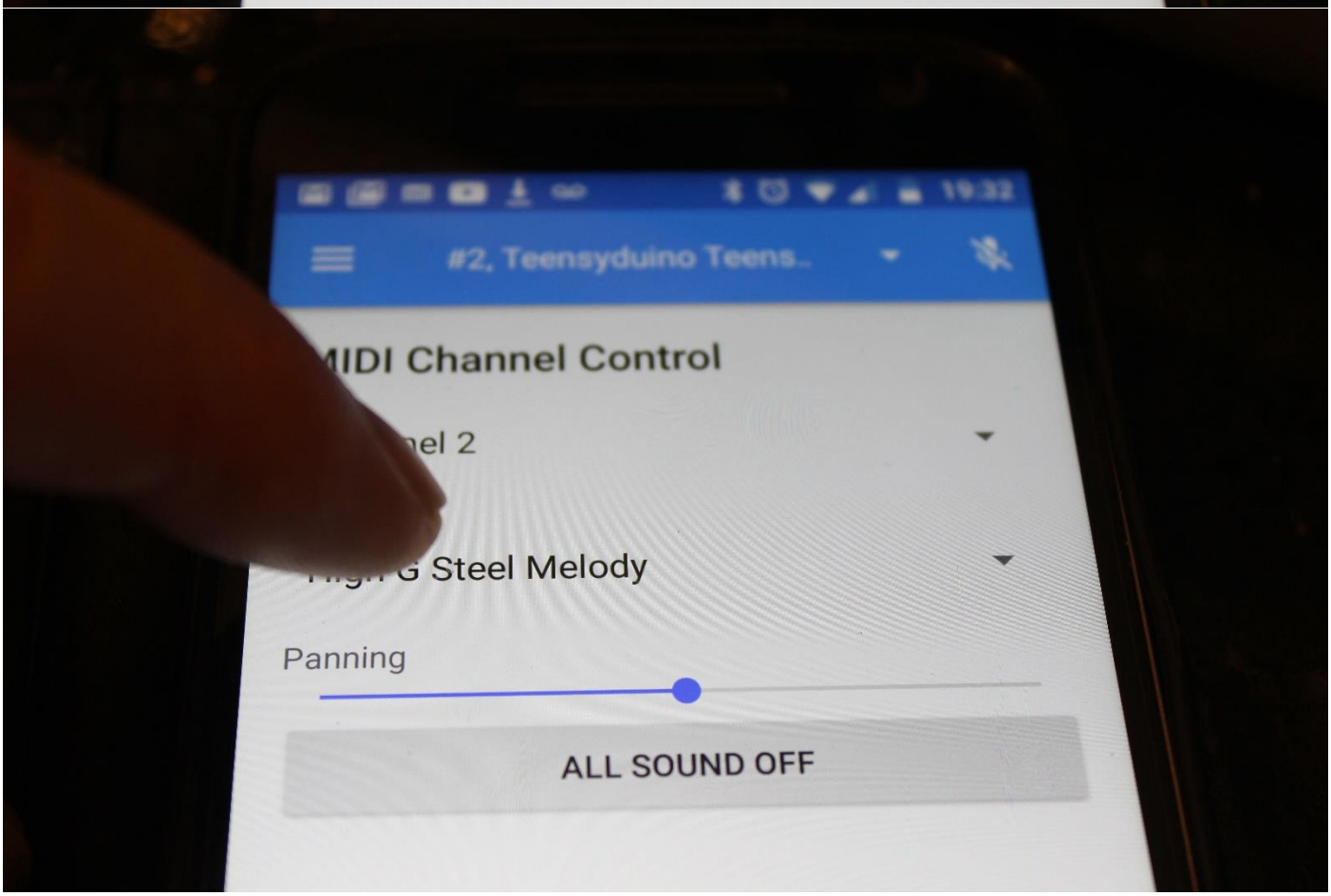


Having set up Channel 1 to High G Melody, now press Channel 1 to make it show the channel selection menu where you then choose which channel you want to set up next – which will be Channel 2.

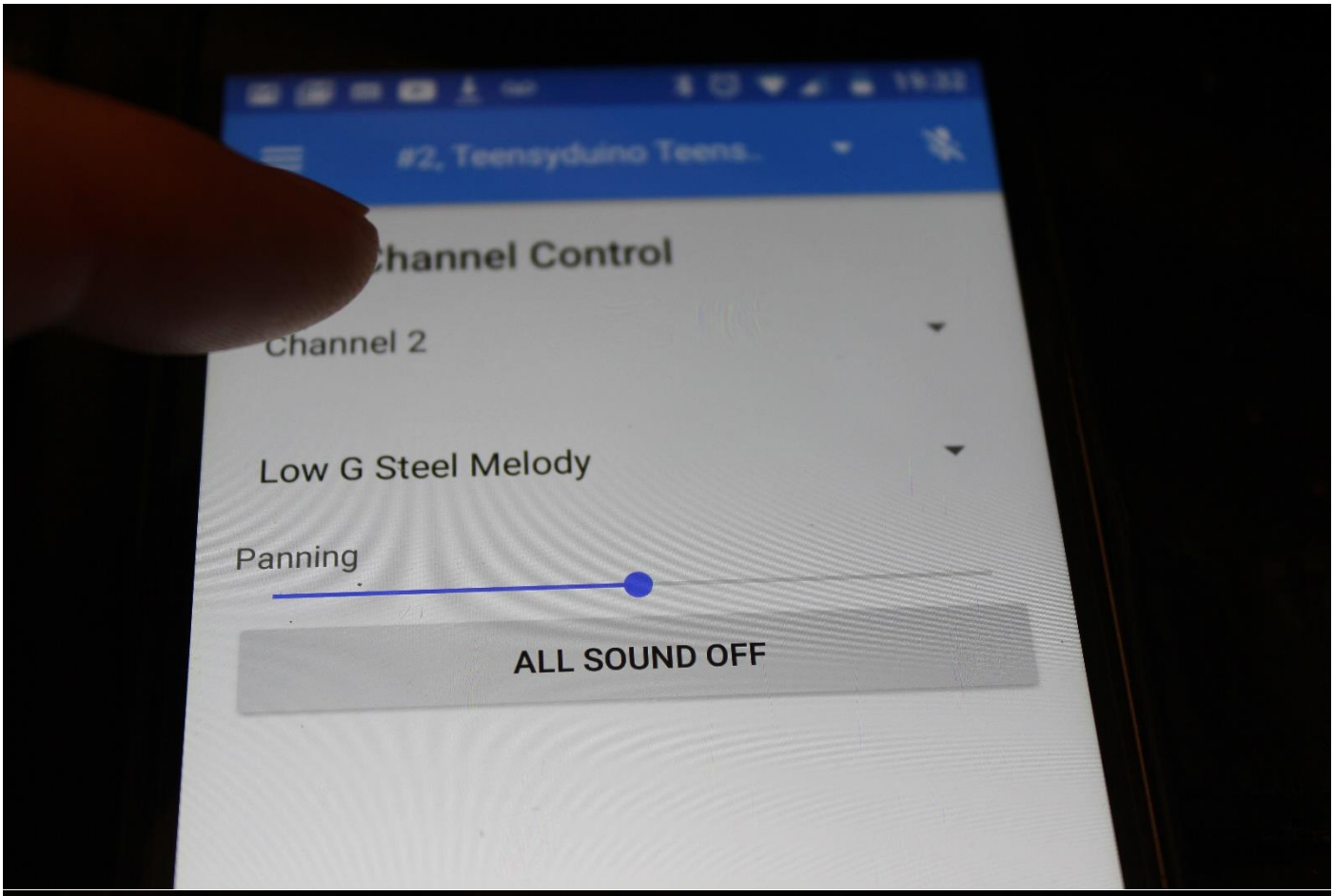


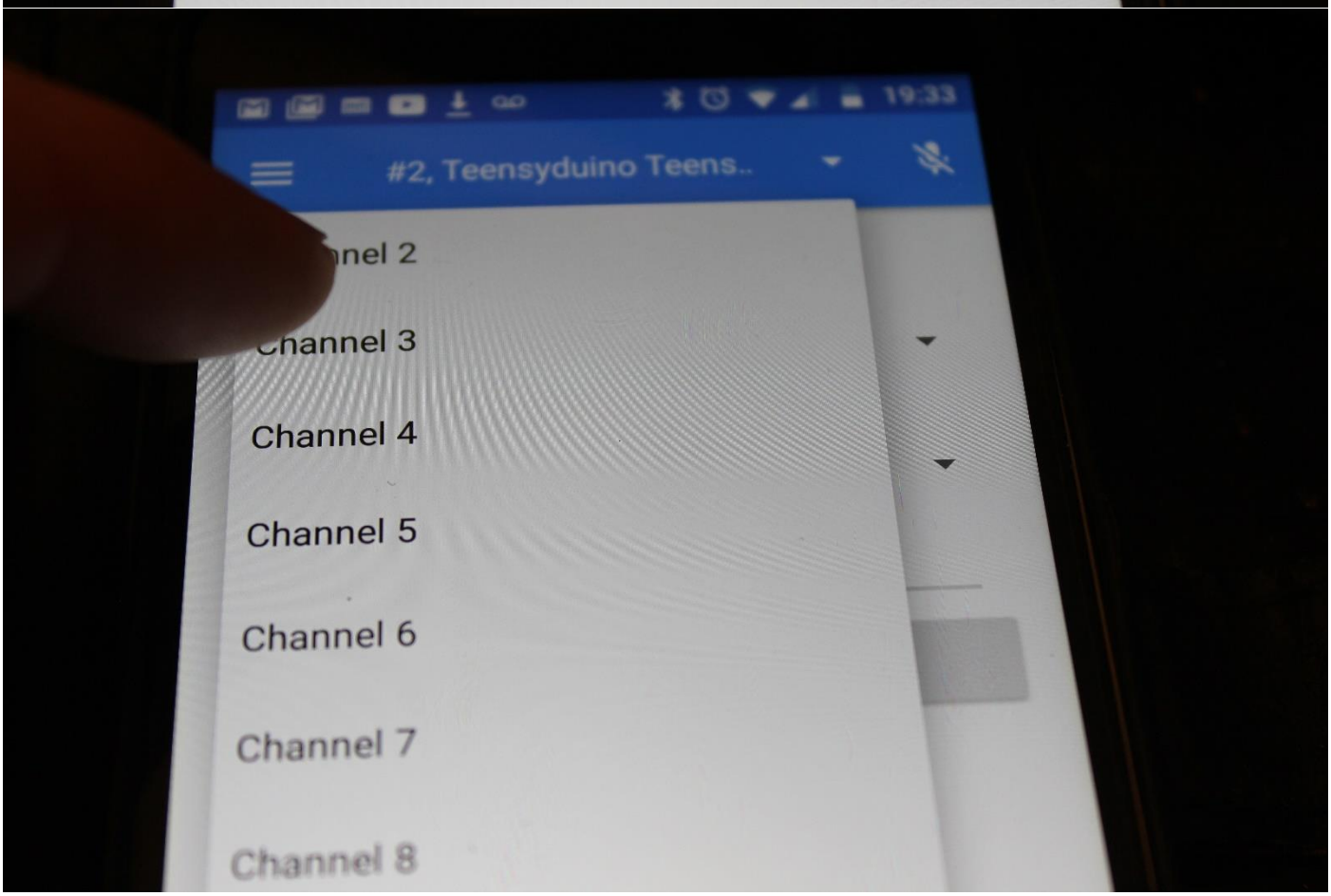
Press Channel 2 to select it.

19:32
#2, Teensyduino Teens..
MIDI Channel Control
Channel 2
High G Steel Melody
Panning
ALL SOUND OFF

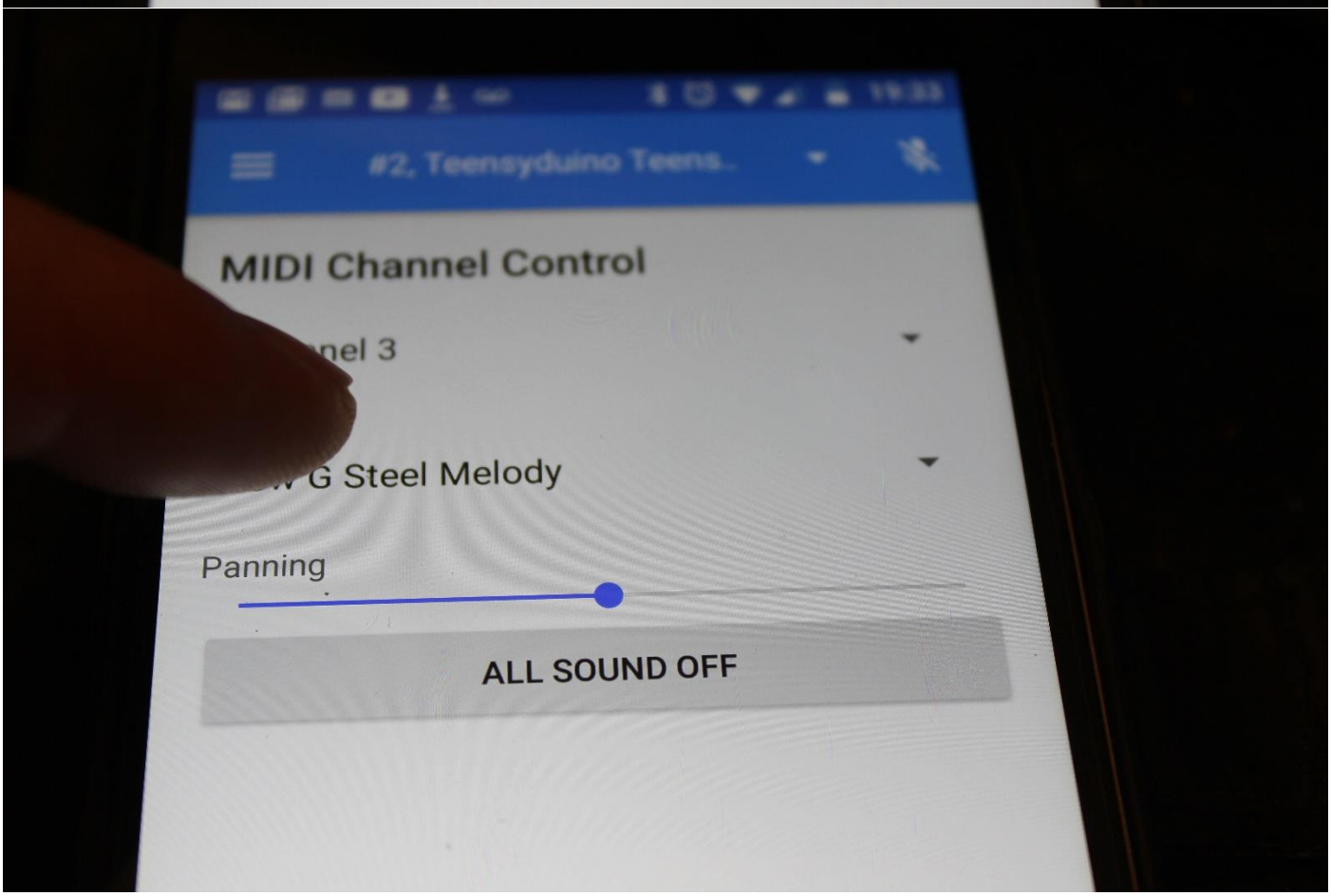

19:32
#2, Teensyduino Teens..
MIDI Channel Control
Steel Melody
Panning
ALL SOUND OFF

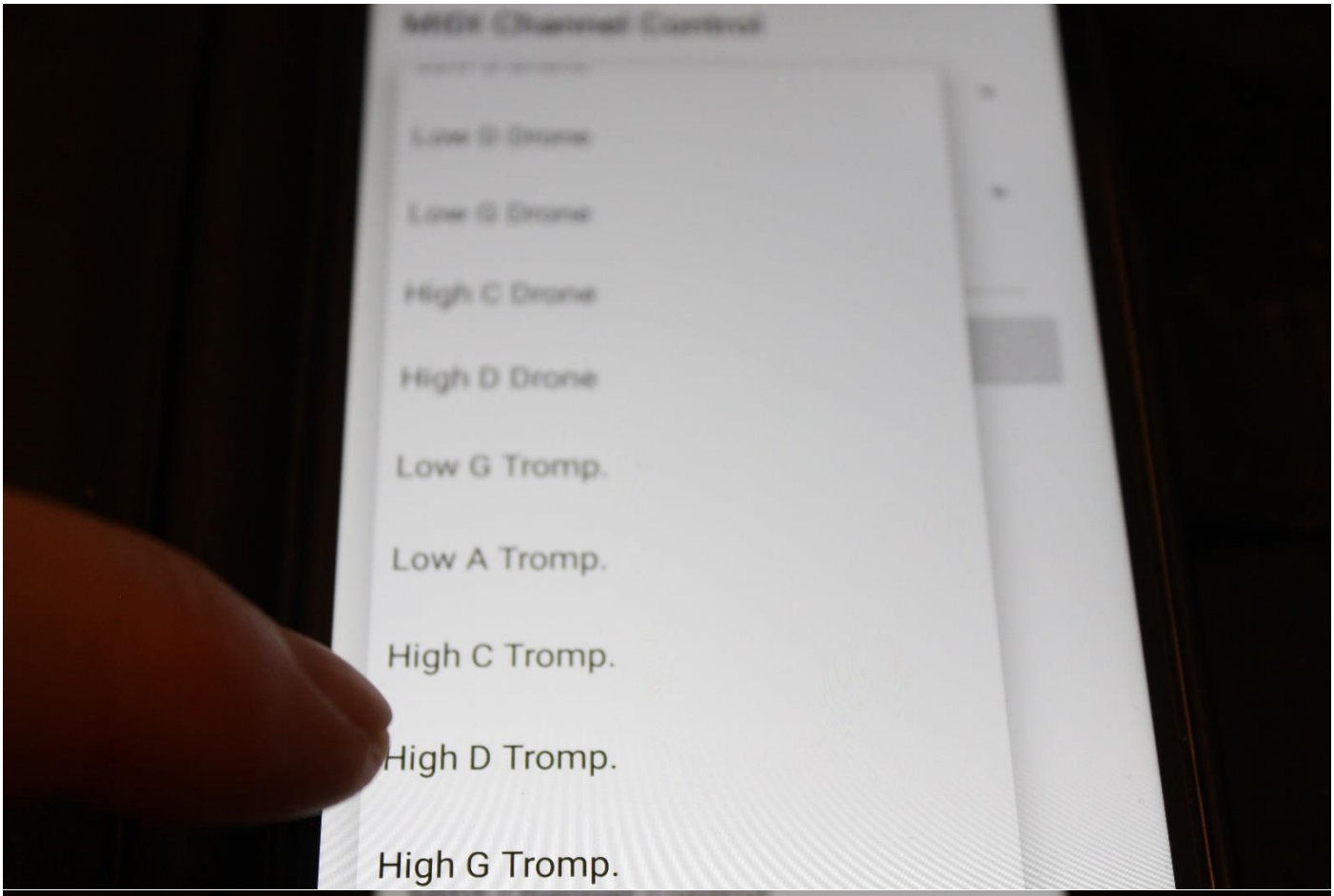
So now you have selected Low G Steel Melody for Channel 2, so now we will go to Channel 3 and set that up.

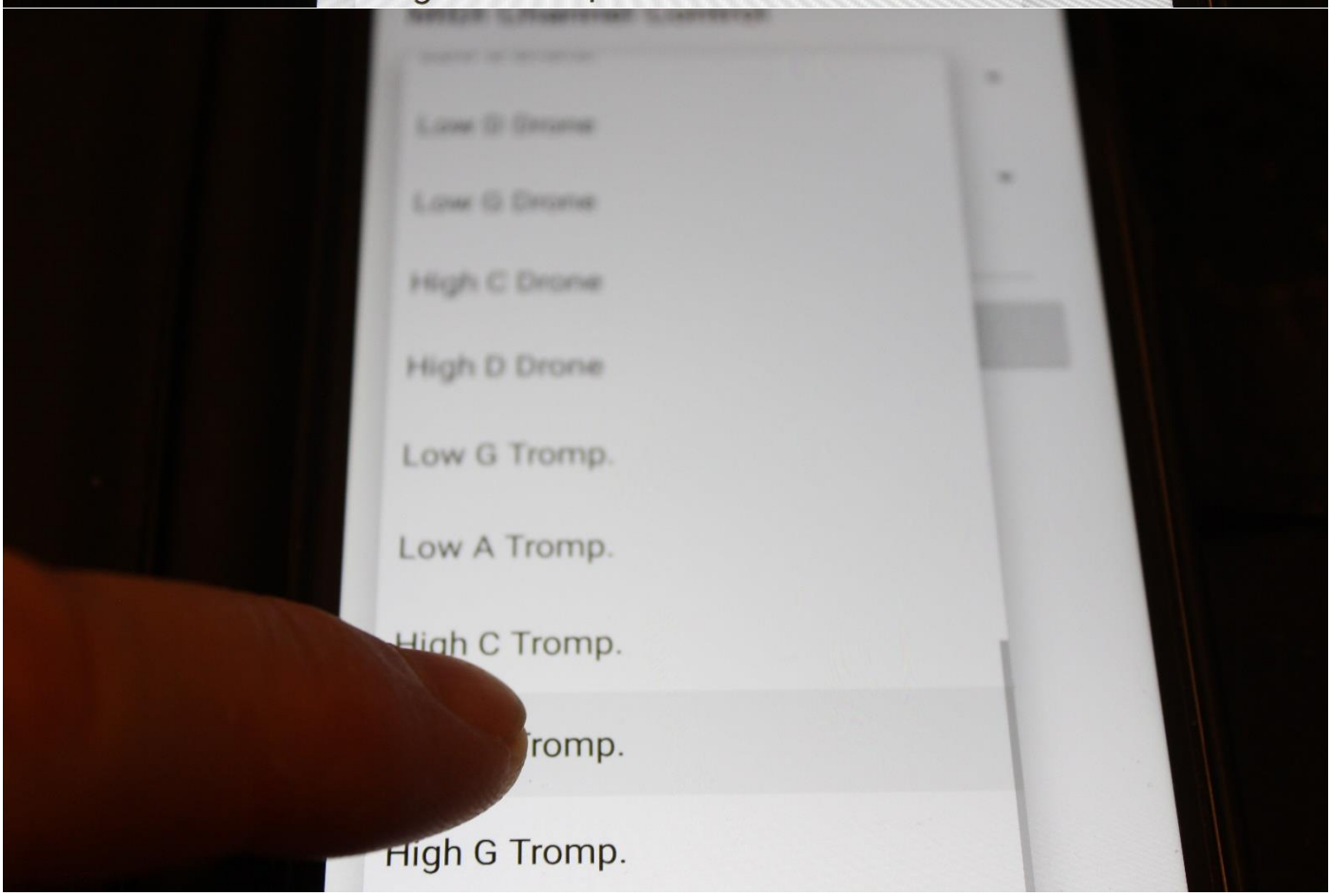

19:32
#2, Teensyduino Teens..
hannel Control
Channel 2
Low G Steel Melody
Panning
ALL SOUND OFF

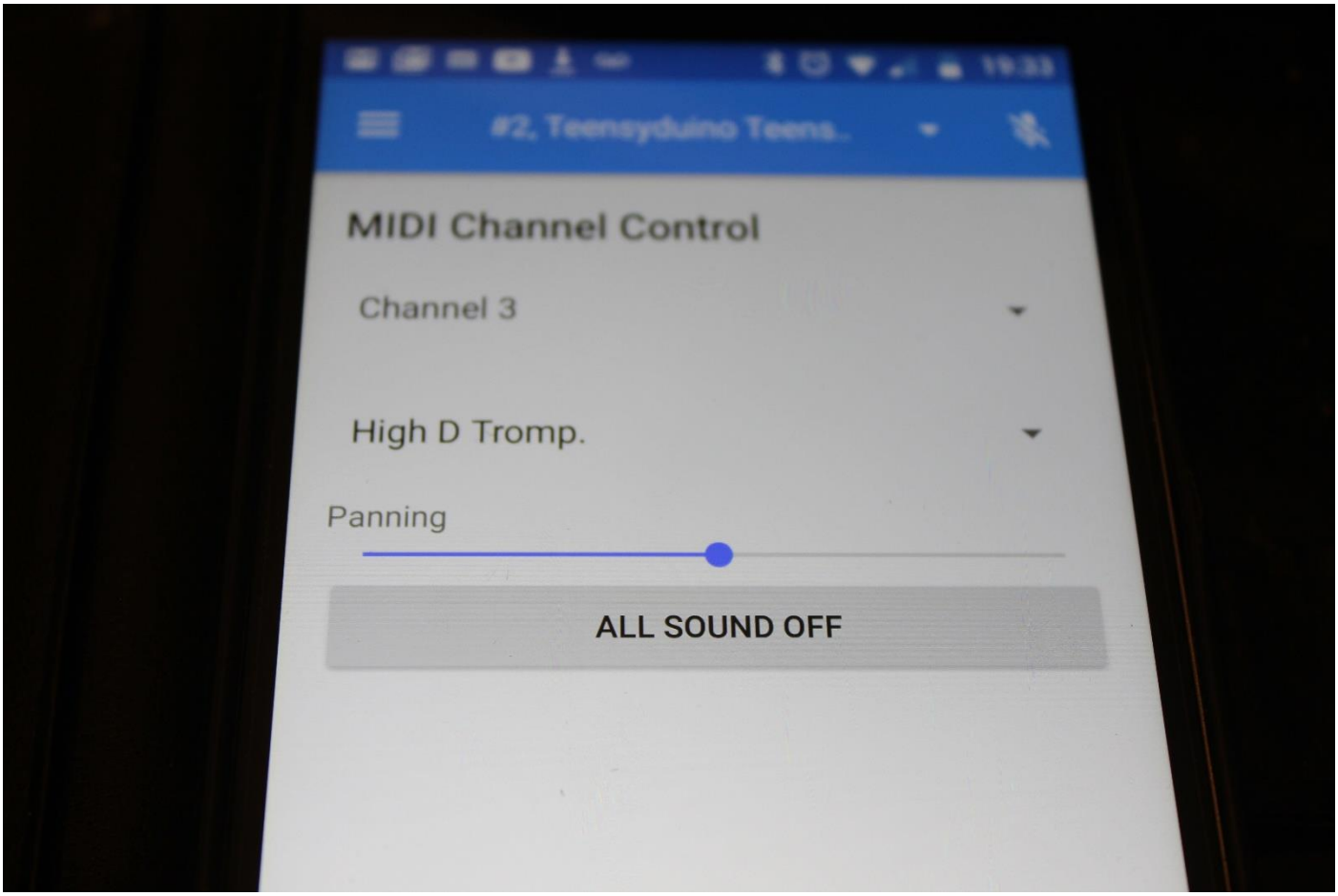

19:33
#2, Teensyduino Teens..
nel 2
hannel 3
Channel 4
Channel 5
Channel 6
Channel 7
Channel 8

19:33
#2, Teensyduino Teens..
MIDI Channel Control
Channel 3
Low G Steel Melody
Panning
ALL SOUND OFF

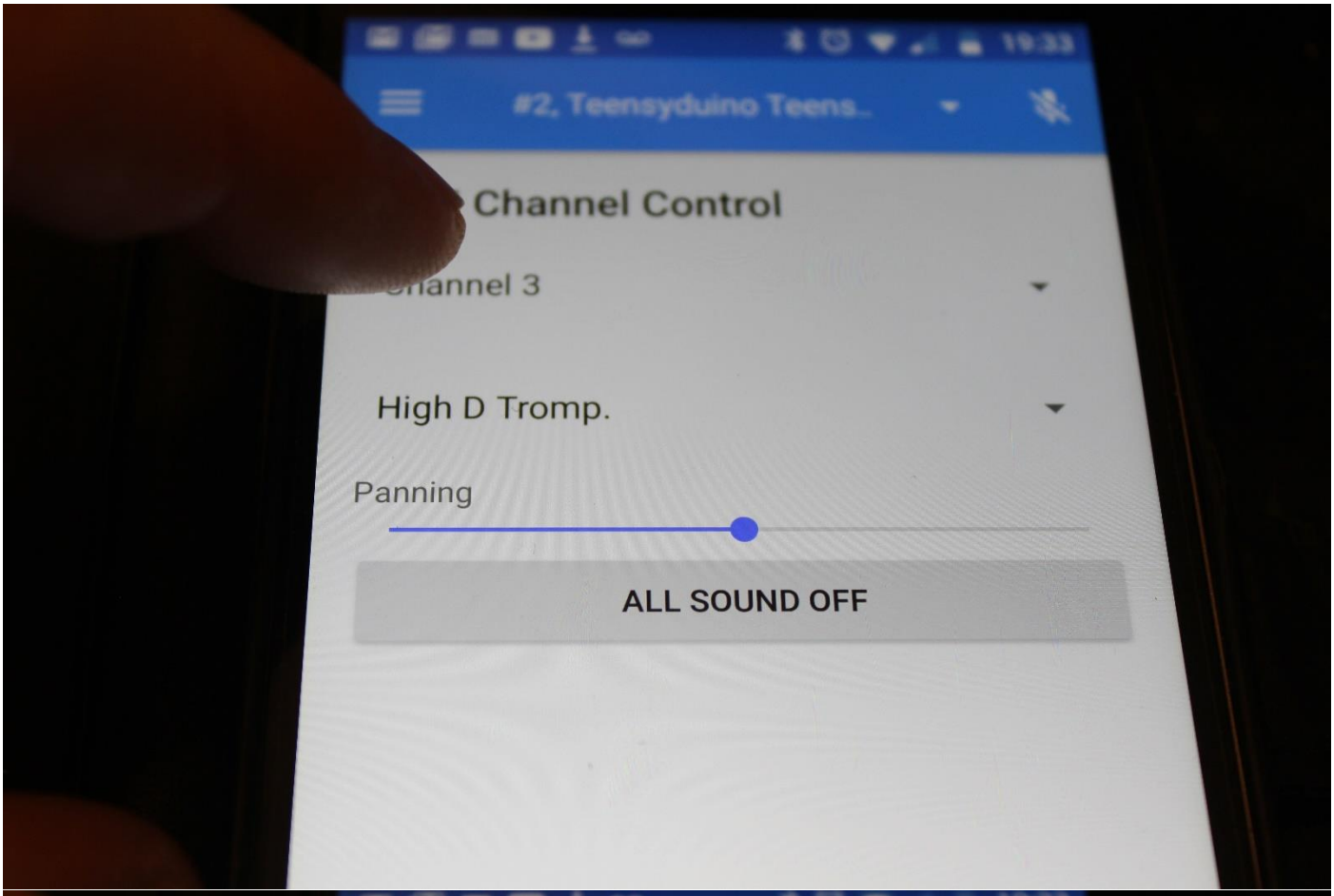

19:33
#2, Teensyduino Teens..
MIDI Channel Control
nel 3
G Steel Melody
Panning
ALL SOUND OFF

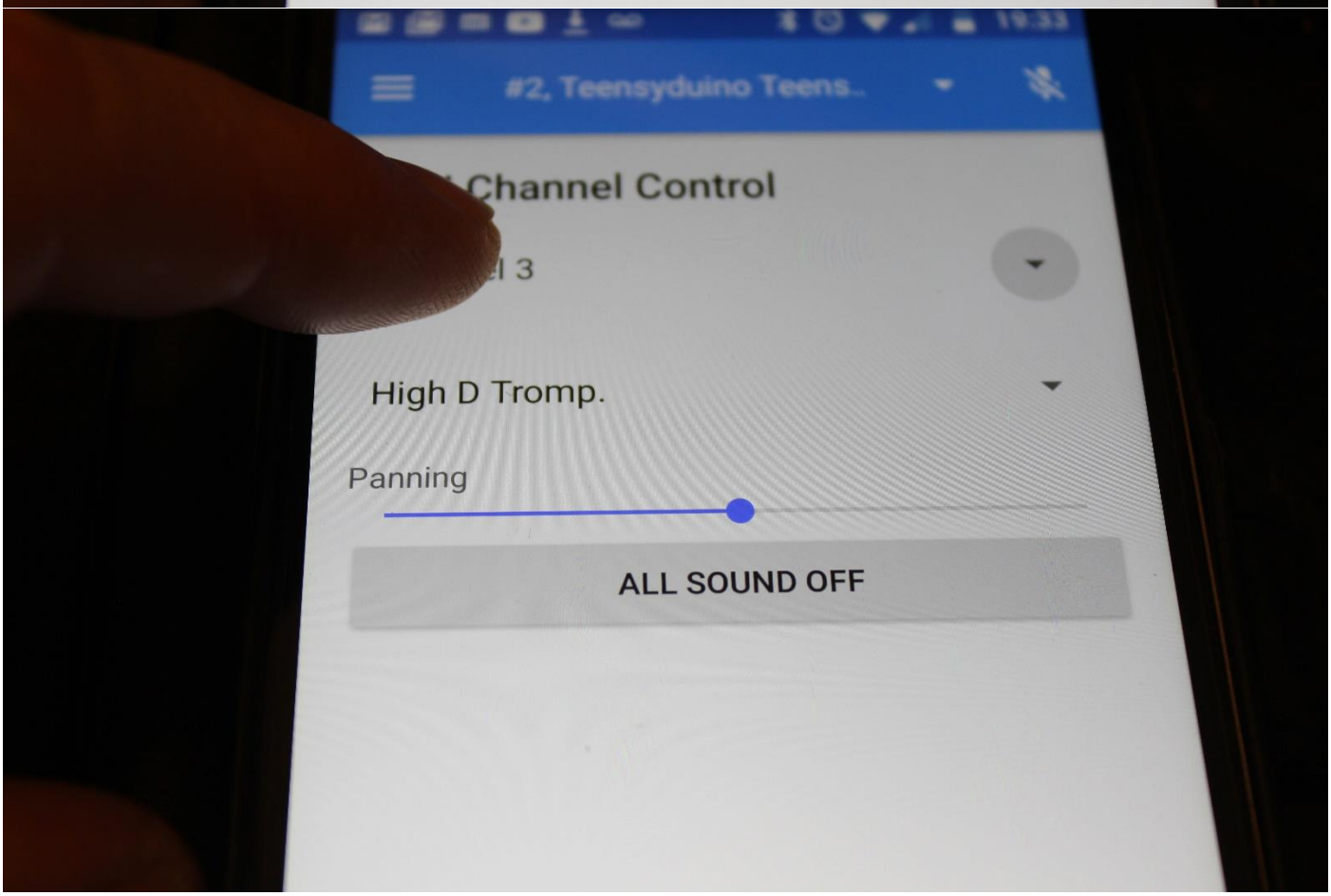

Low G Drone
High C Drone
High D Drone
Low G Tromp.
Low A Tromp.
High C Tromp.
High D Tromp.
High G Tromp.

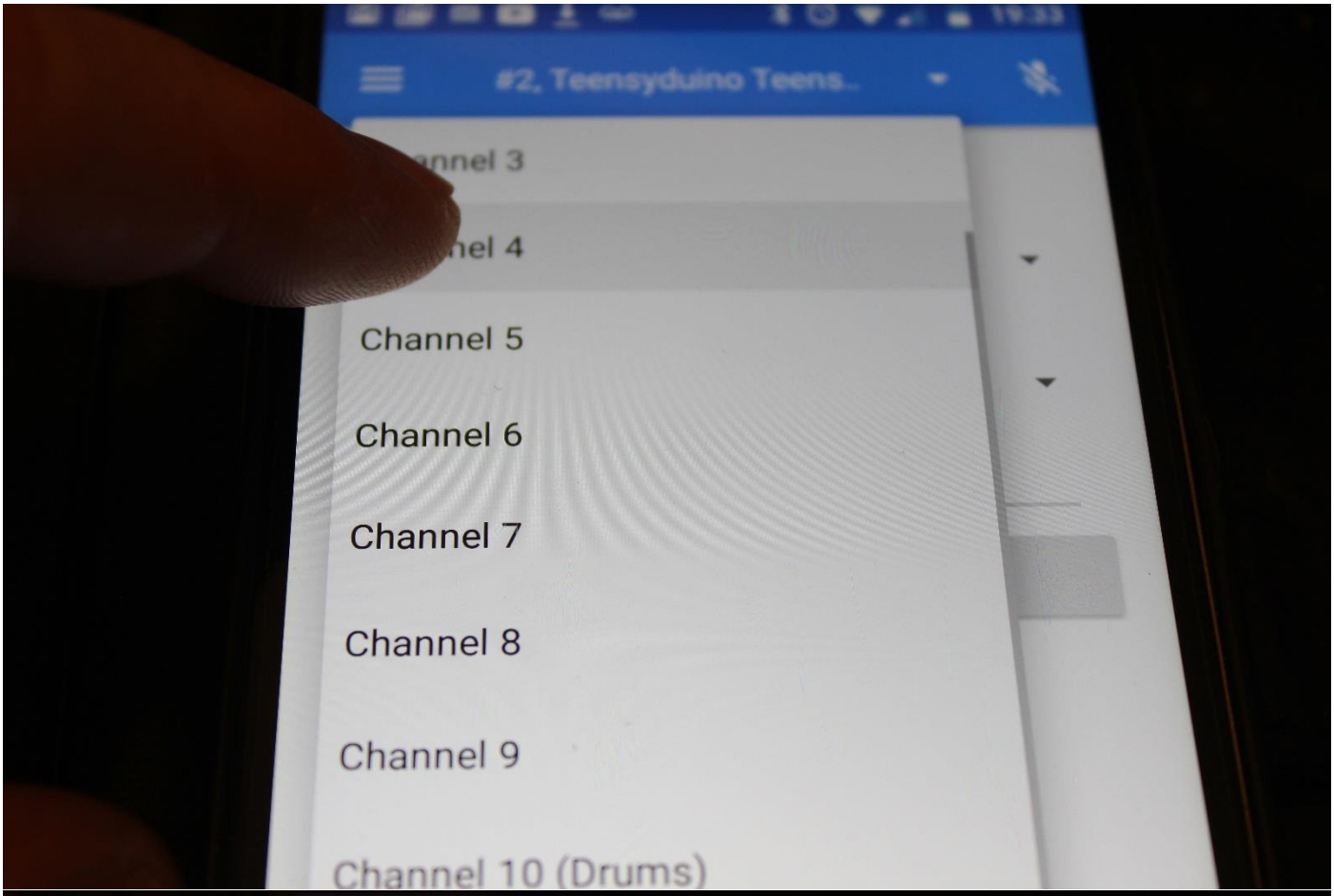

Low G Drone
High C Drone
High D Drone
Low G Tromp.
Low A Tromp.
High C Tromp.
High G Tromp.

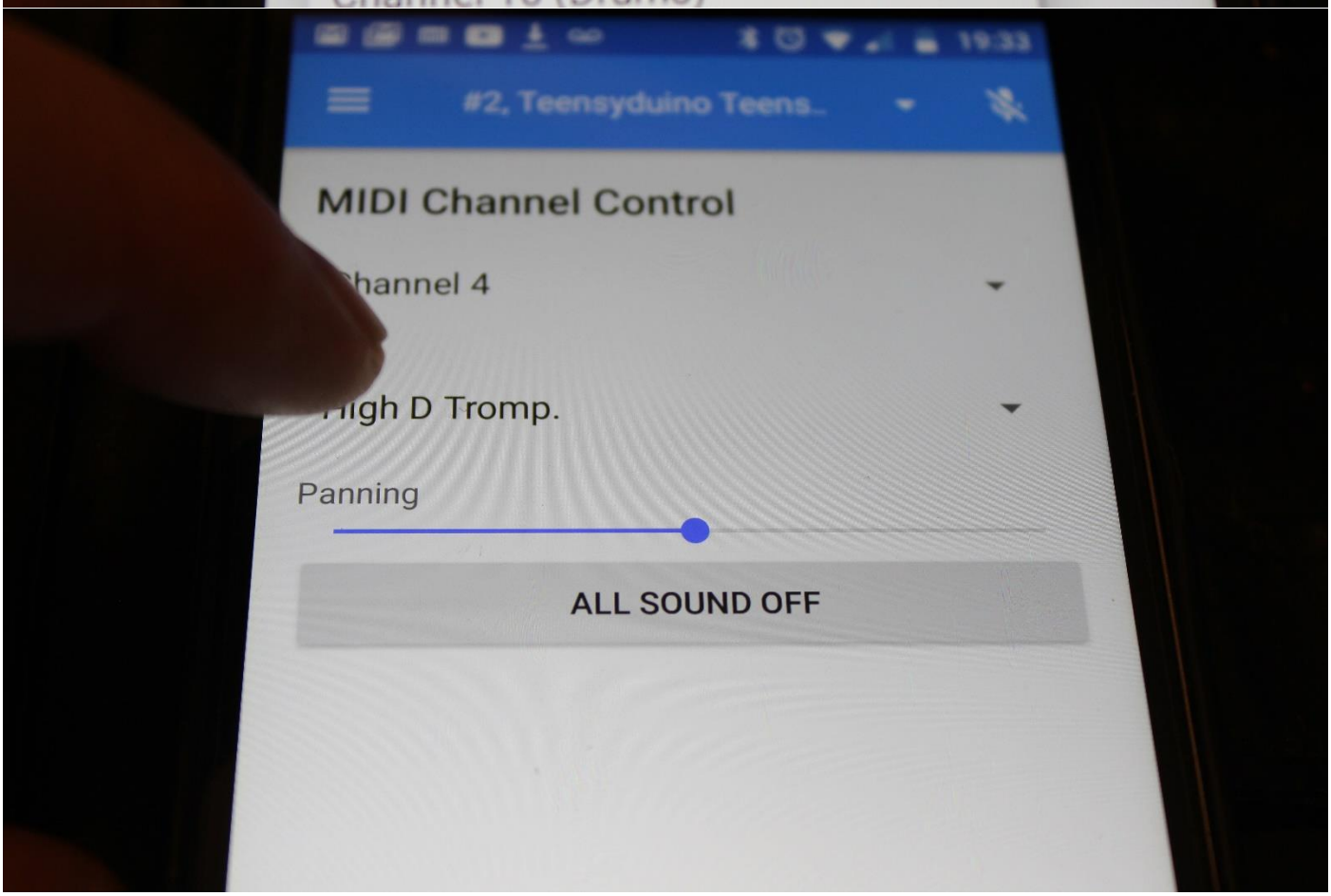


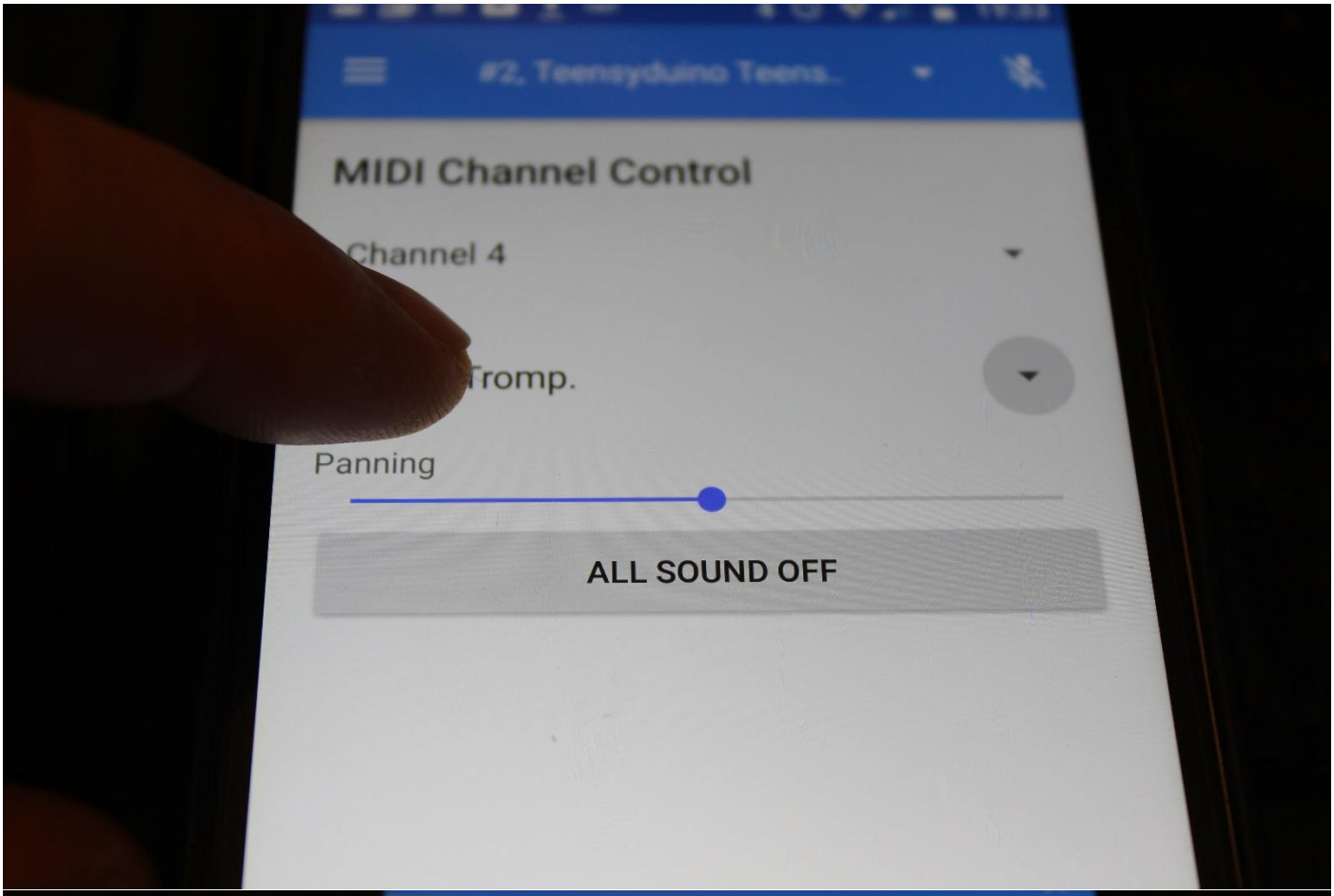
So you have now selected High D Tromp (Trompette) for Channel 3. Now we will open the channel selection menu to set up Channel 4.

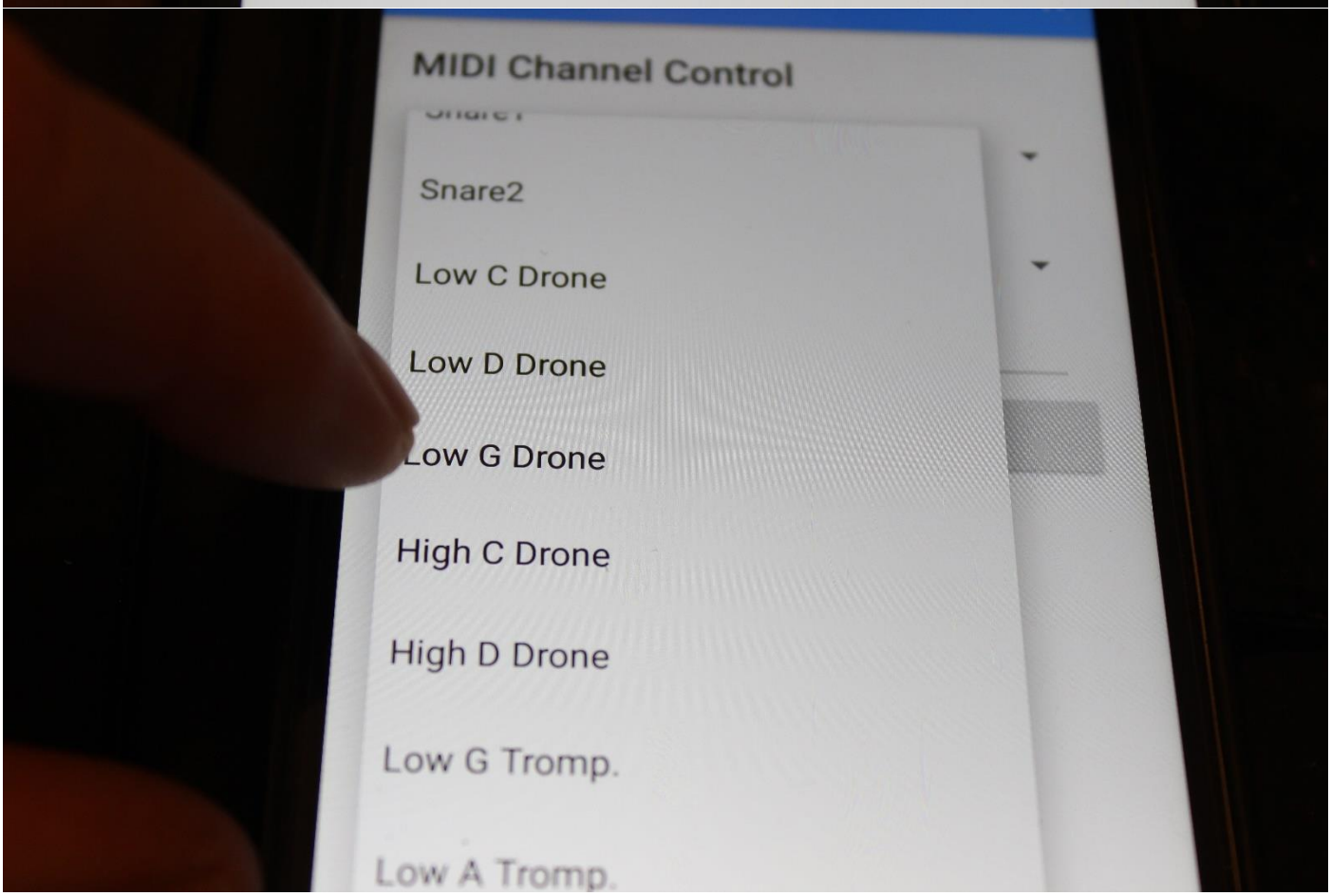

19:33
#2, Teensyduino Teens...
Channel Control
annel 3
High D Tromp.
Panning
ALL SOUND OFF

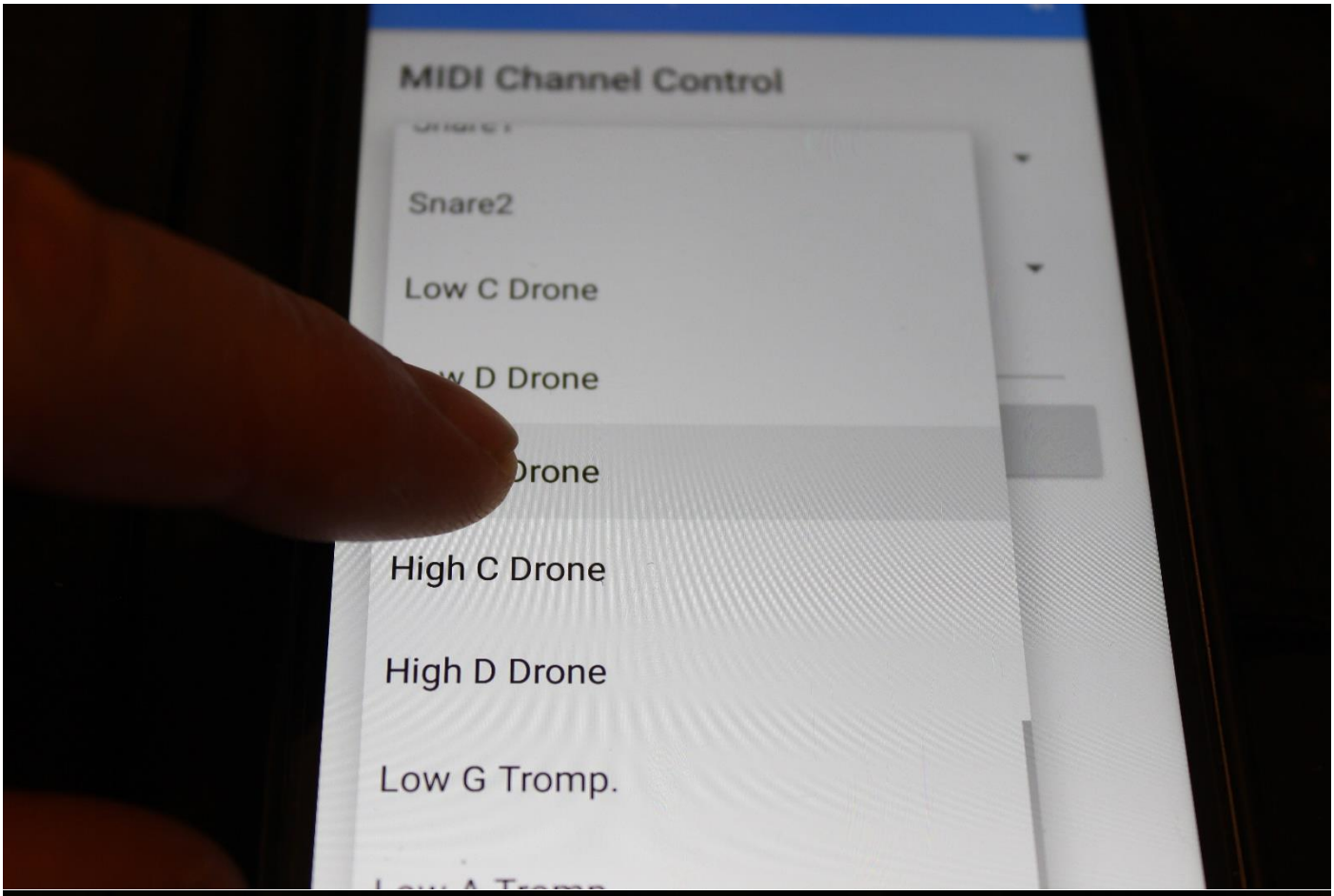

19:33
#2, Teensyduino Teens...
Channel Control
l 3
High D Tromp.
Panning
ALL SOUND OFF

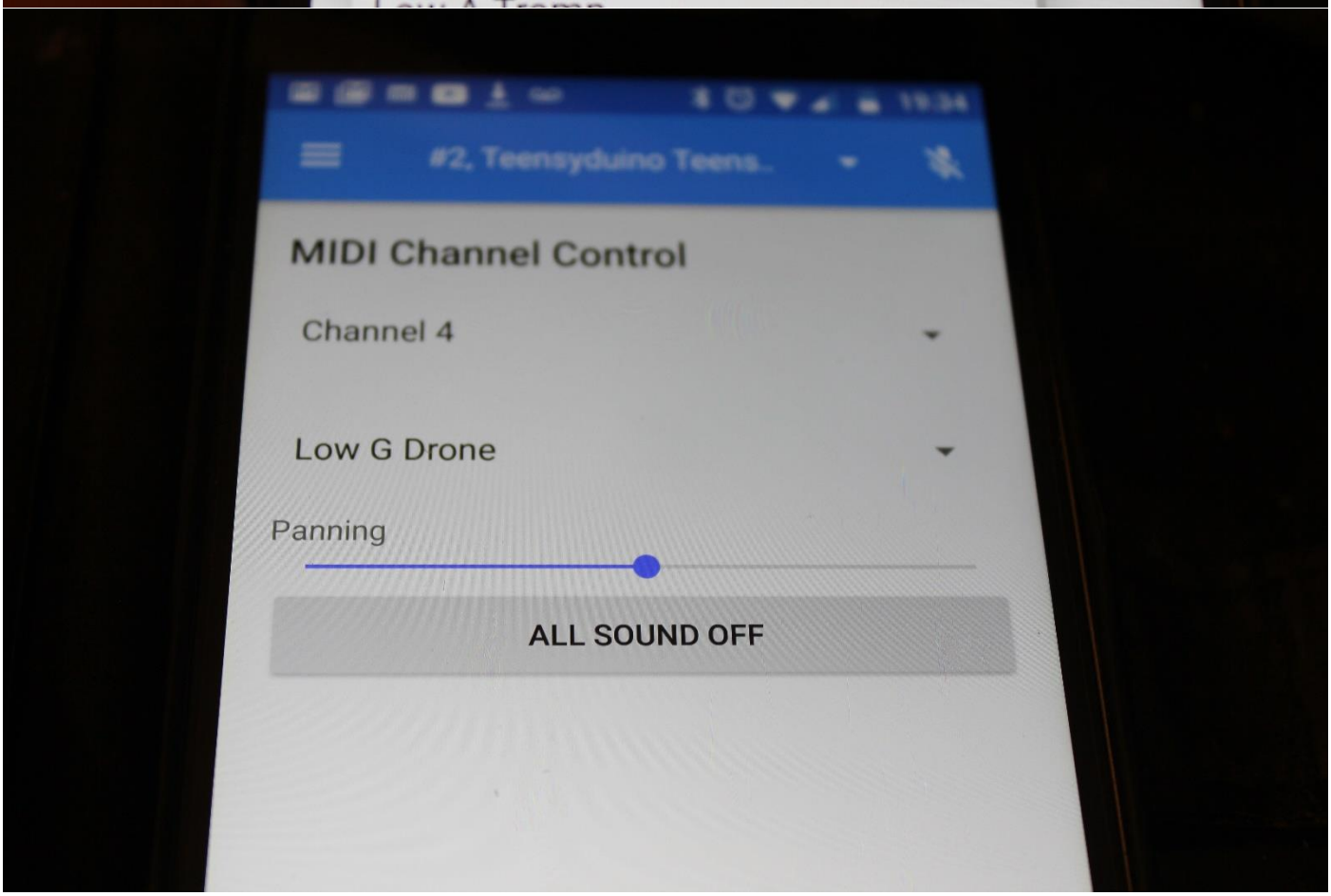

#2, Teensyduino Teens...
Channel 3
Channel 4
Channel 5
Channel 6
Channel 7
Channel 8
Channel 9
Channel 10 (Drums)


#2, Teensyduino Teens...
MIDI Channel Control
Channel 4
High D Tromp.
Panning
ALL SOUND OFF

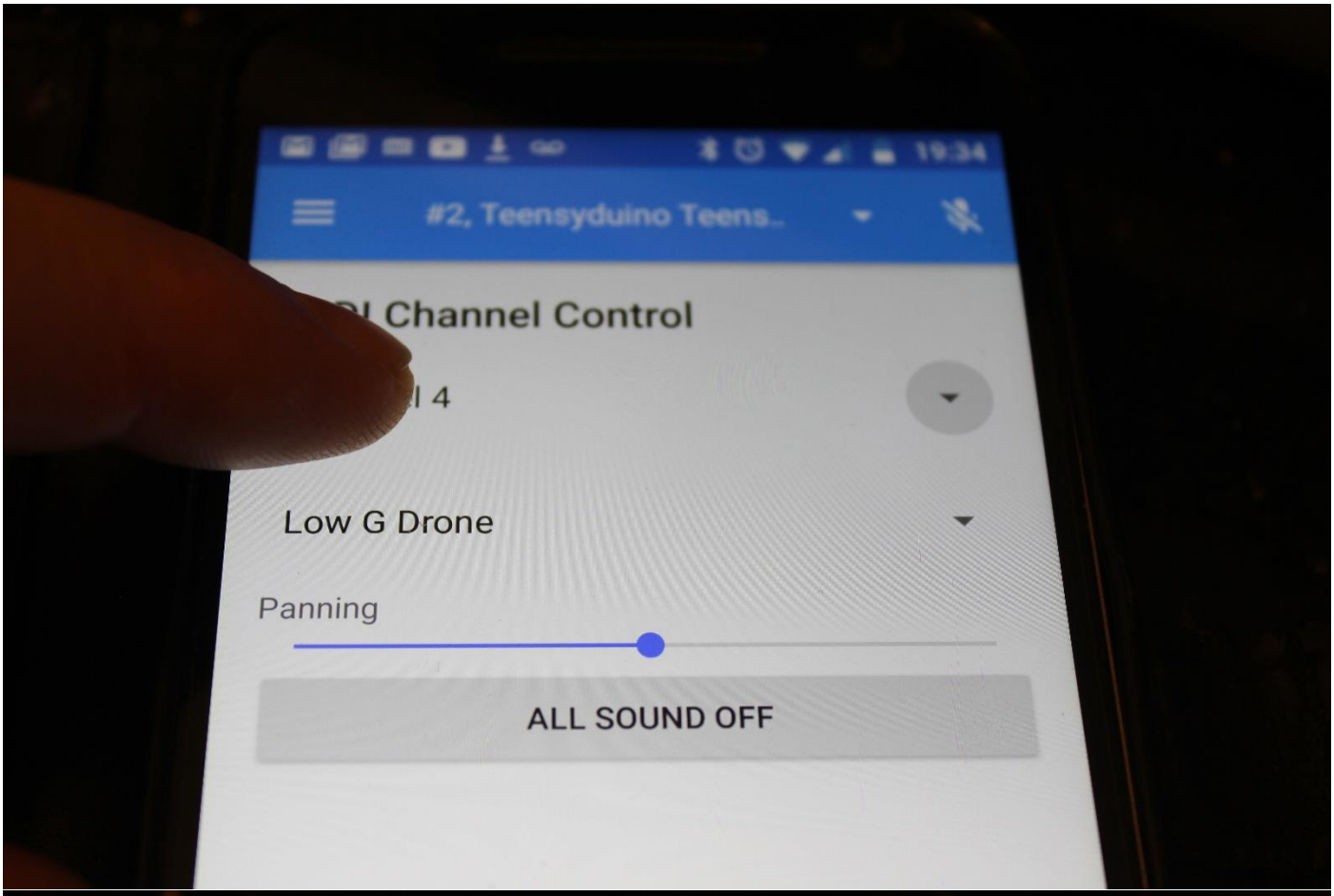

#2, Teensyduino Teens..
MIDI Channel Control
Channel 4
Tromp.
Panning
ALL SOUND OFF

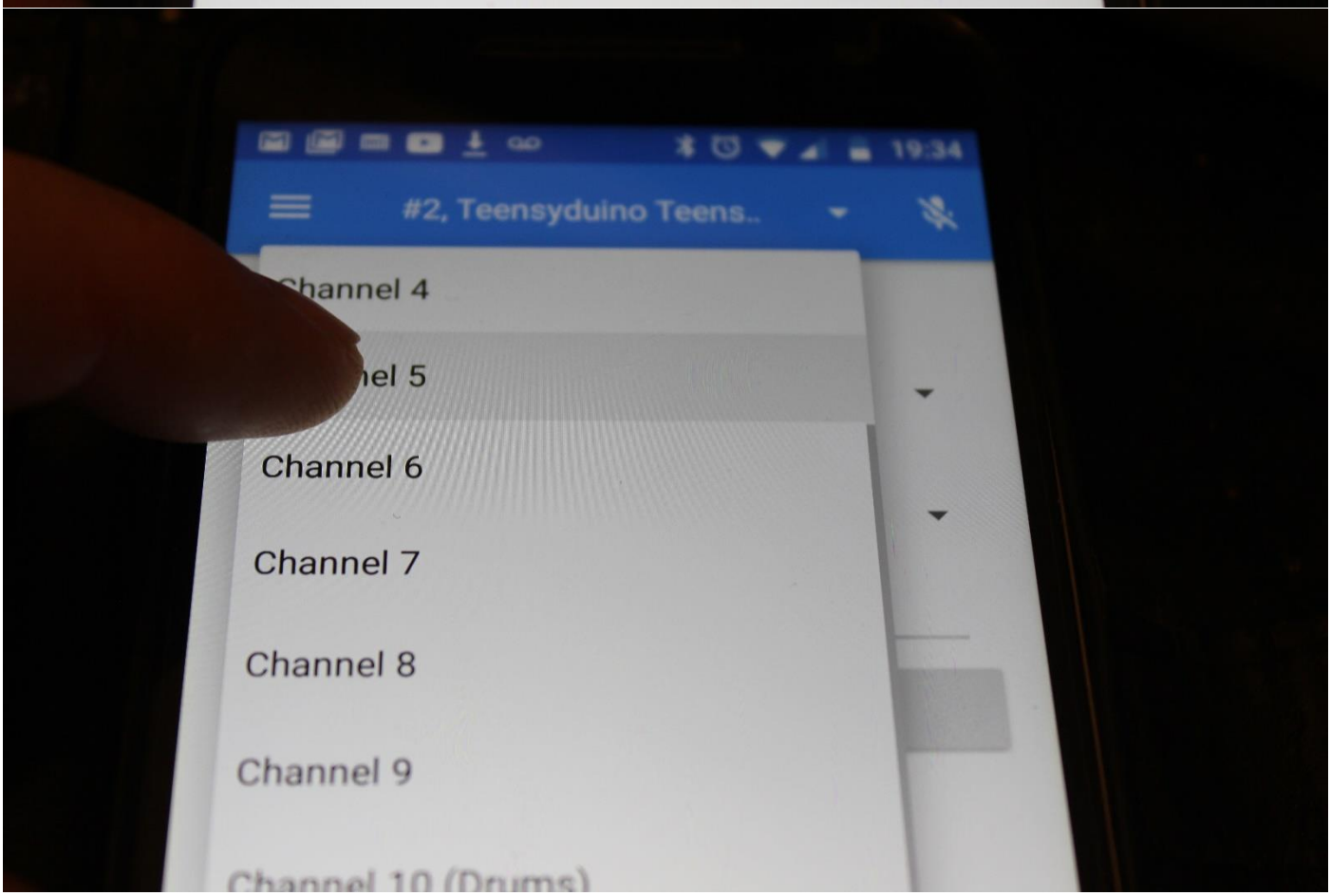

MIDI Channel Control
Snare2
Low C Drone
Low D Drone
Low G Drone
High C Drone
High D Drone
Low G Tromp.
Low A Tromp.

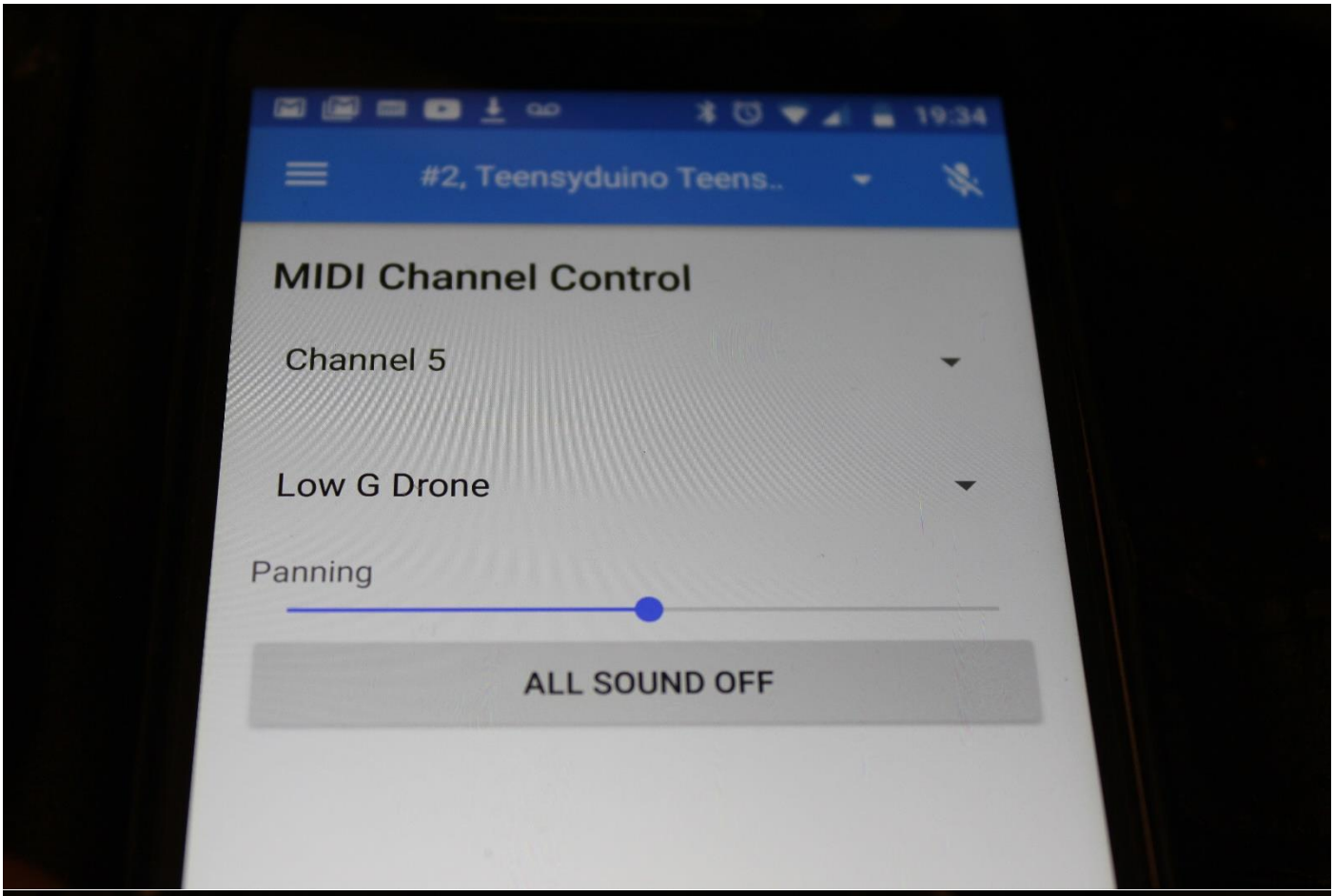


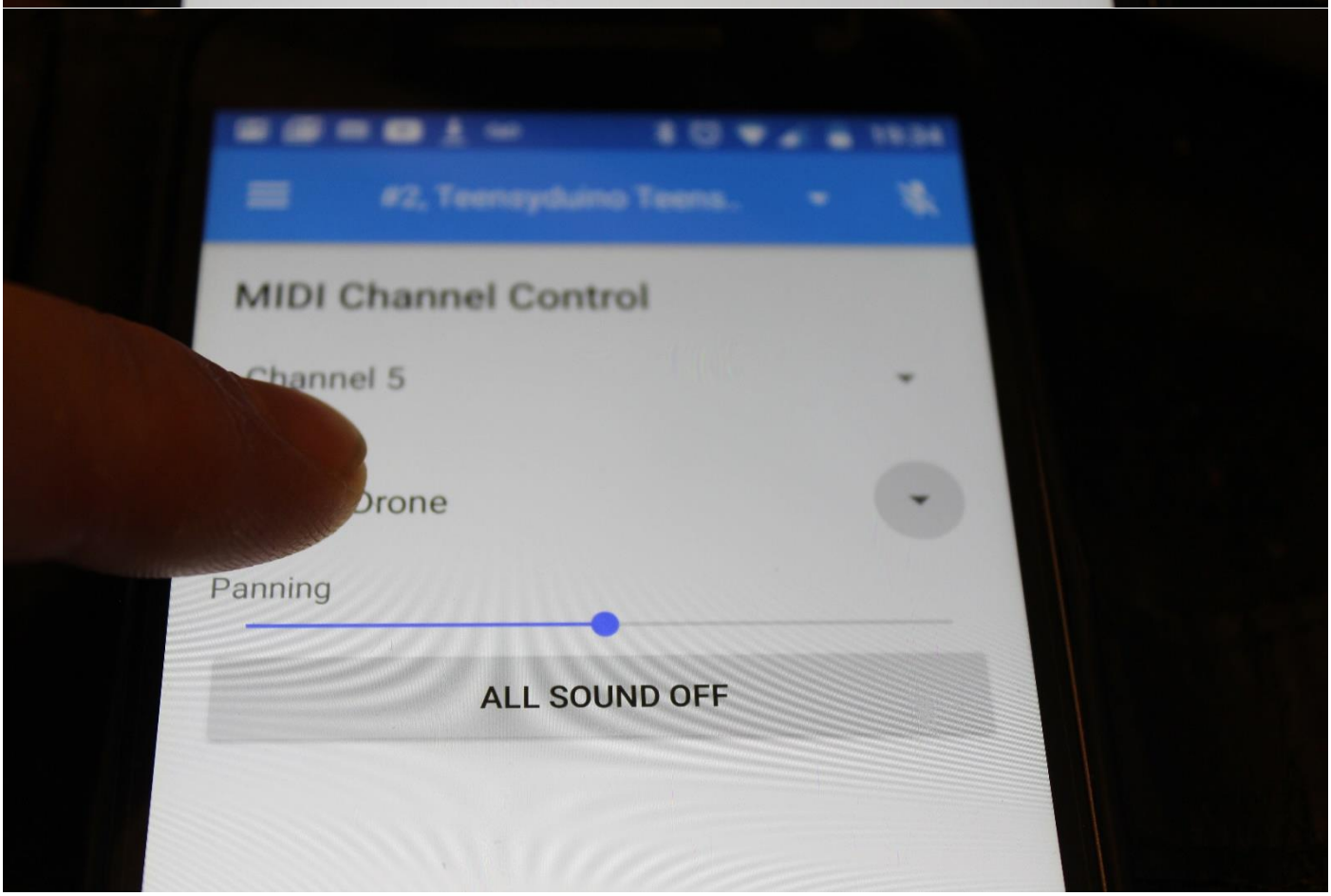


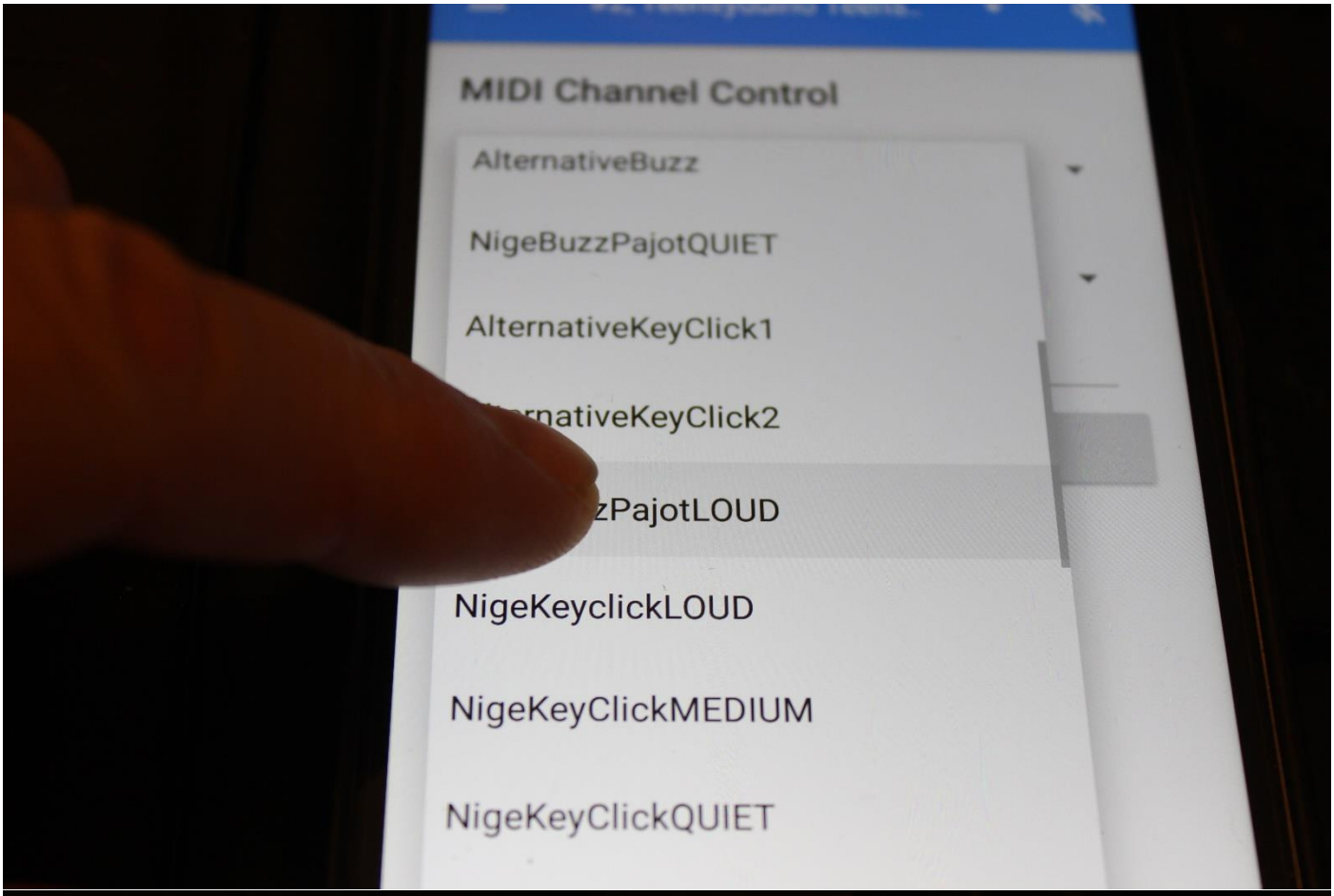
You have now selected Low G Drone for Channel 4 (as indicated on the DG screen advisory information). Now go to Channel 5 and set that up…….

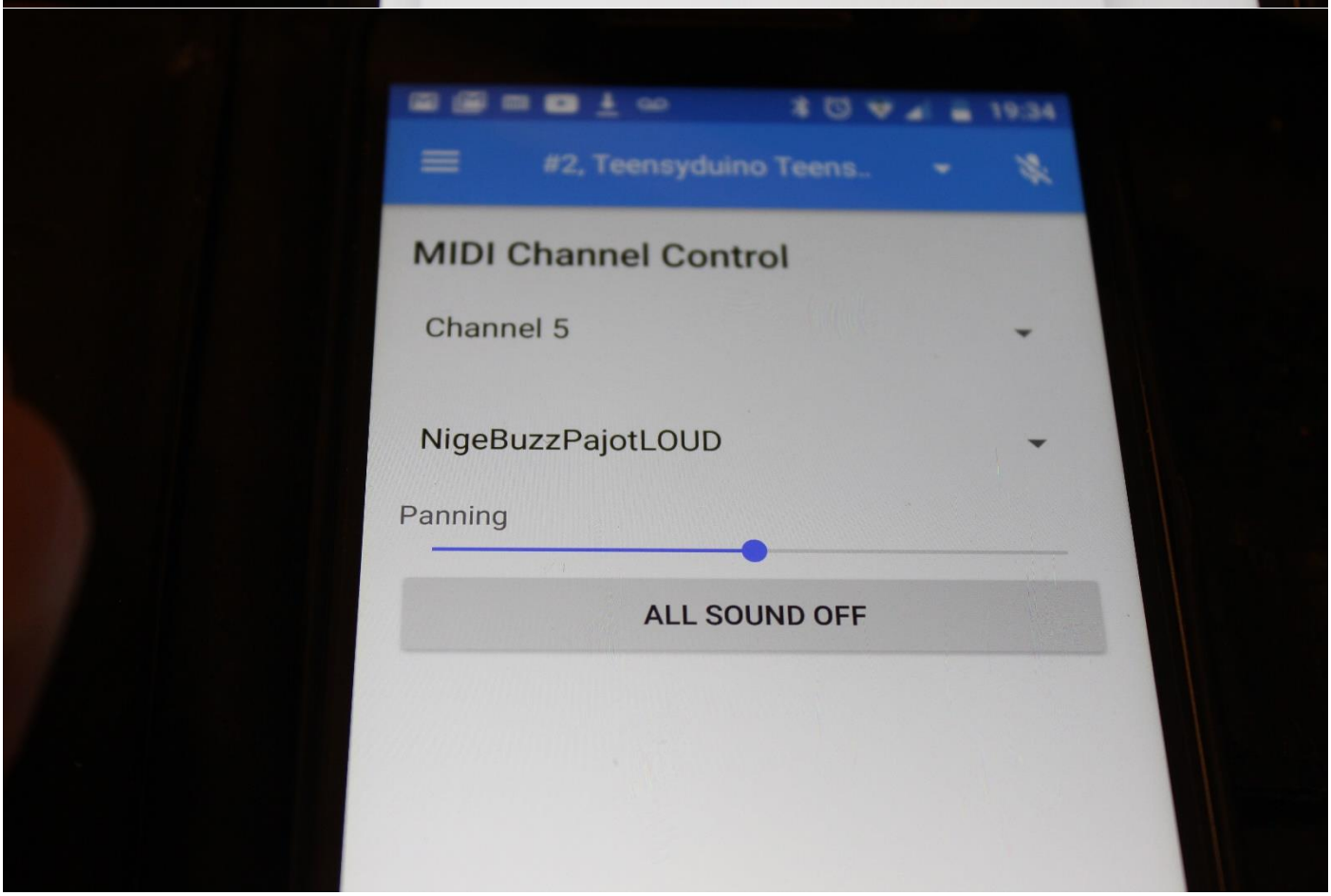

19:34
#2, Teensyduino Teens..
Channel Control
4
Low G Drone
Panning
ALL SOUND OFF


19:34
#2, Teensyduino Teens..
Channel 4
el 5
Channel 6
Channel 7
Channel 8
Channel 9

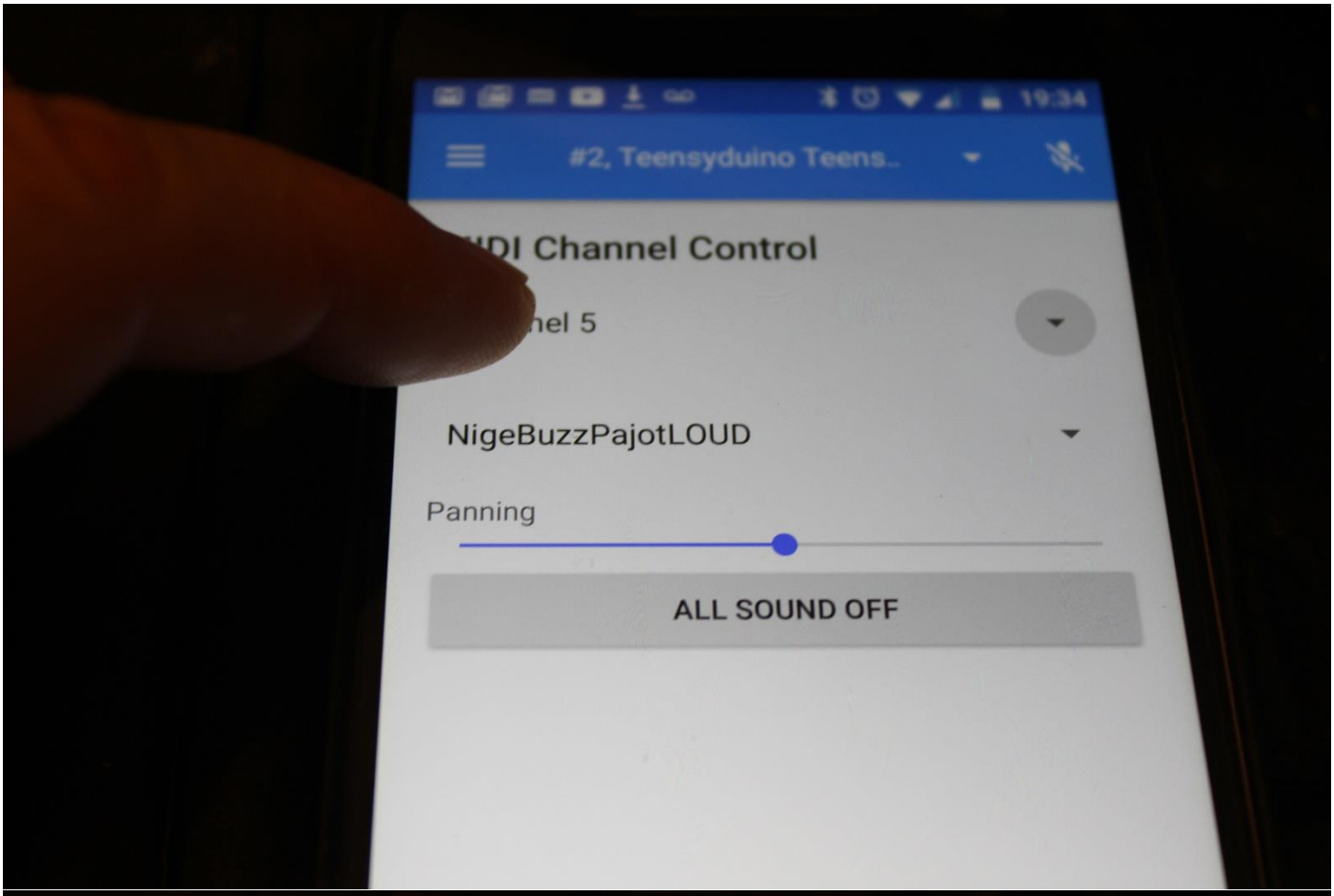

19:34
#2, Teensyduino Teens..
MIDI Channel Control
Channel 5
Low G Drone
Panning
ALL SOUND OFF

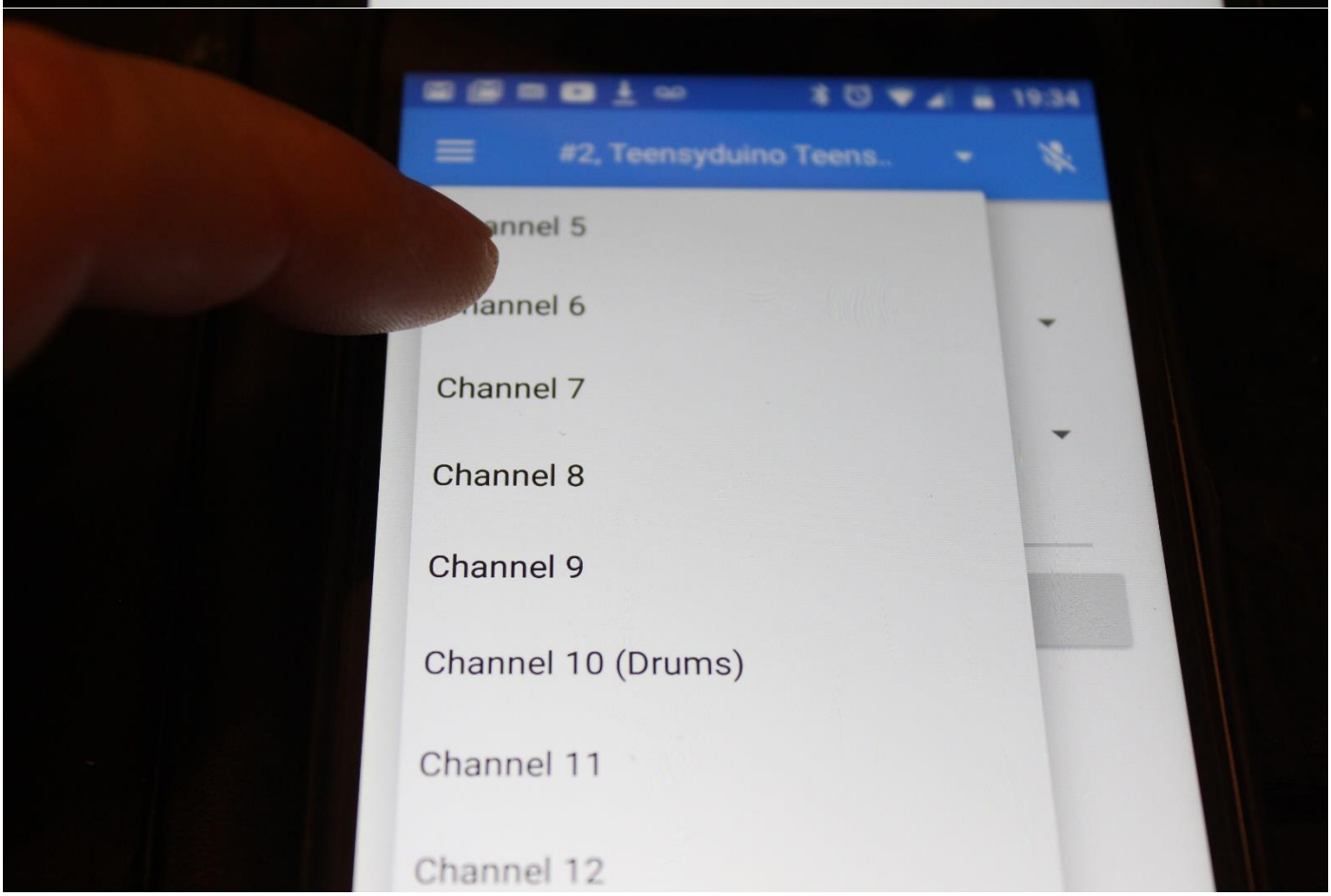

MIDI Channel Control
Panning
ALL SOUND OFF

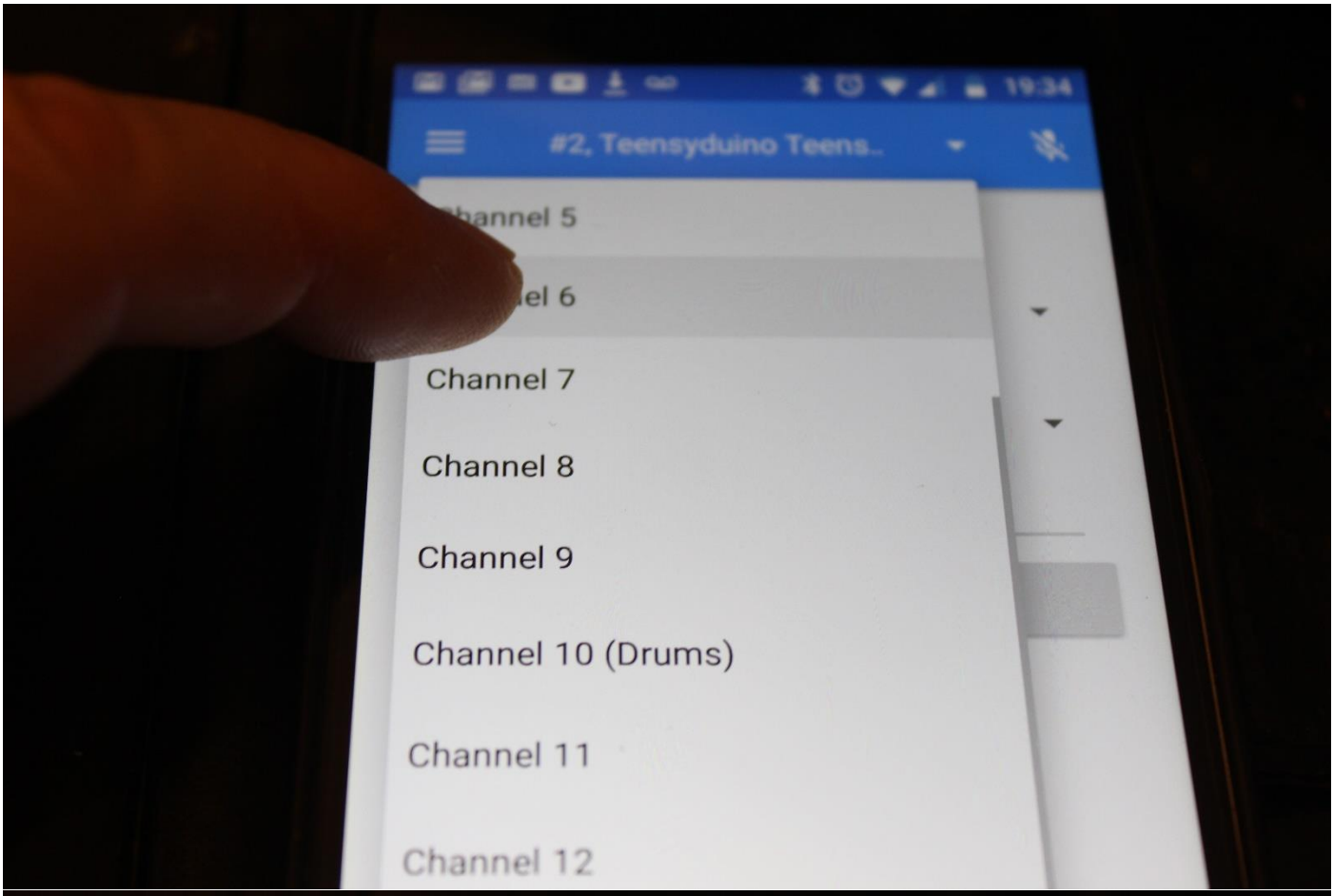


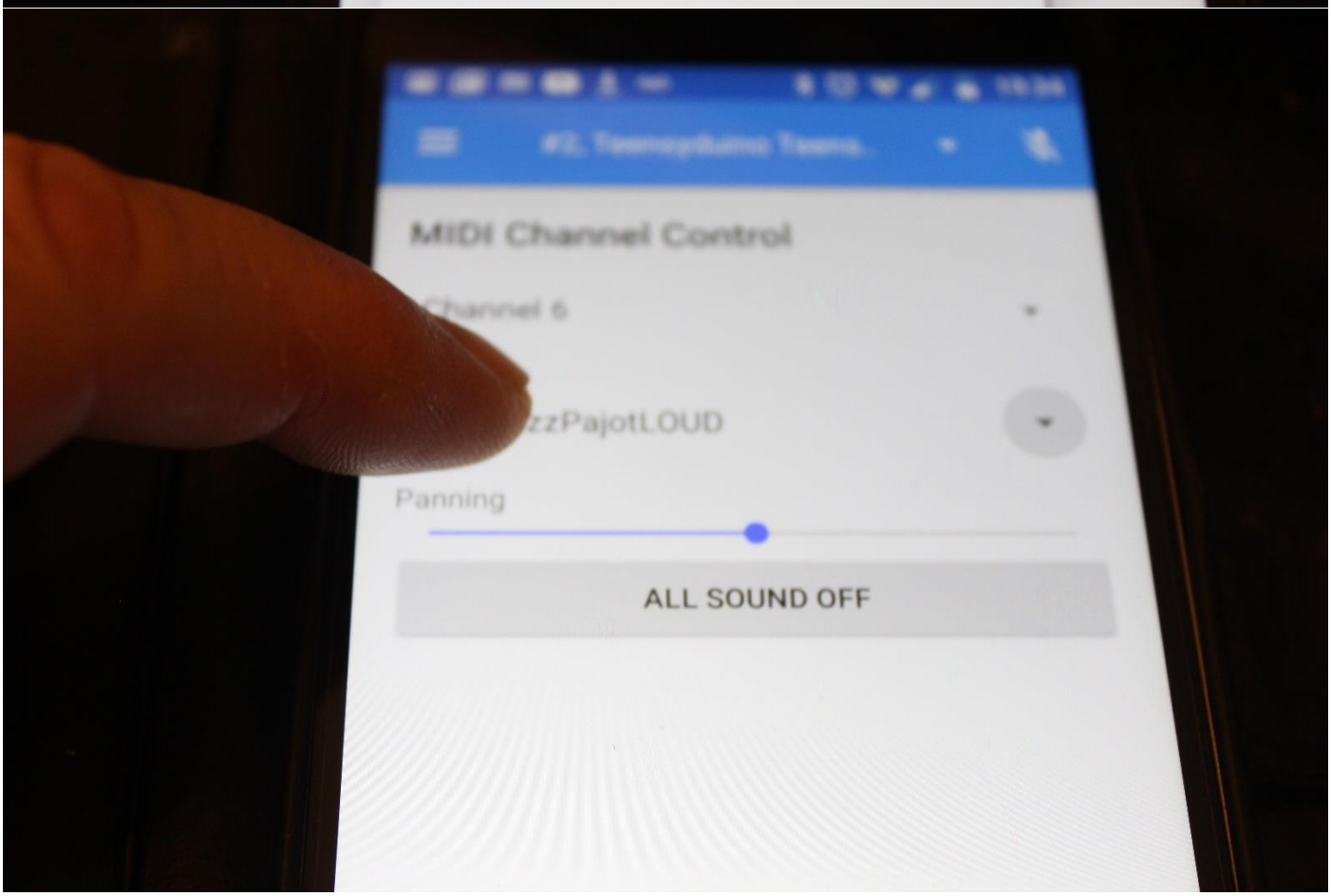


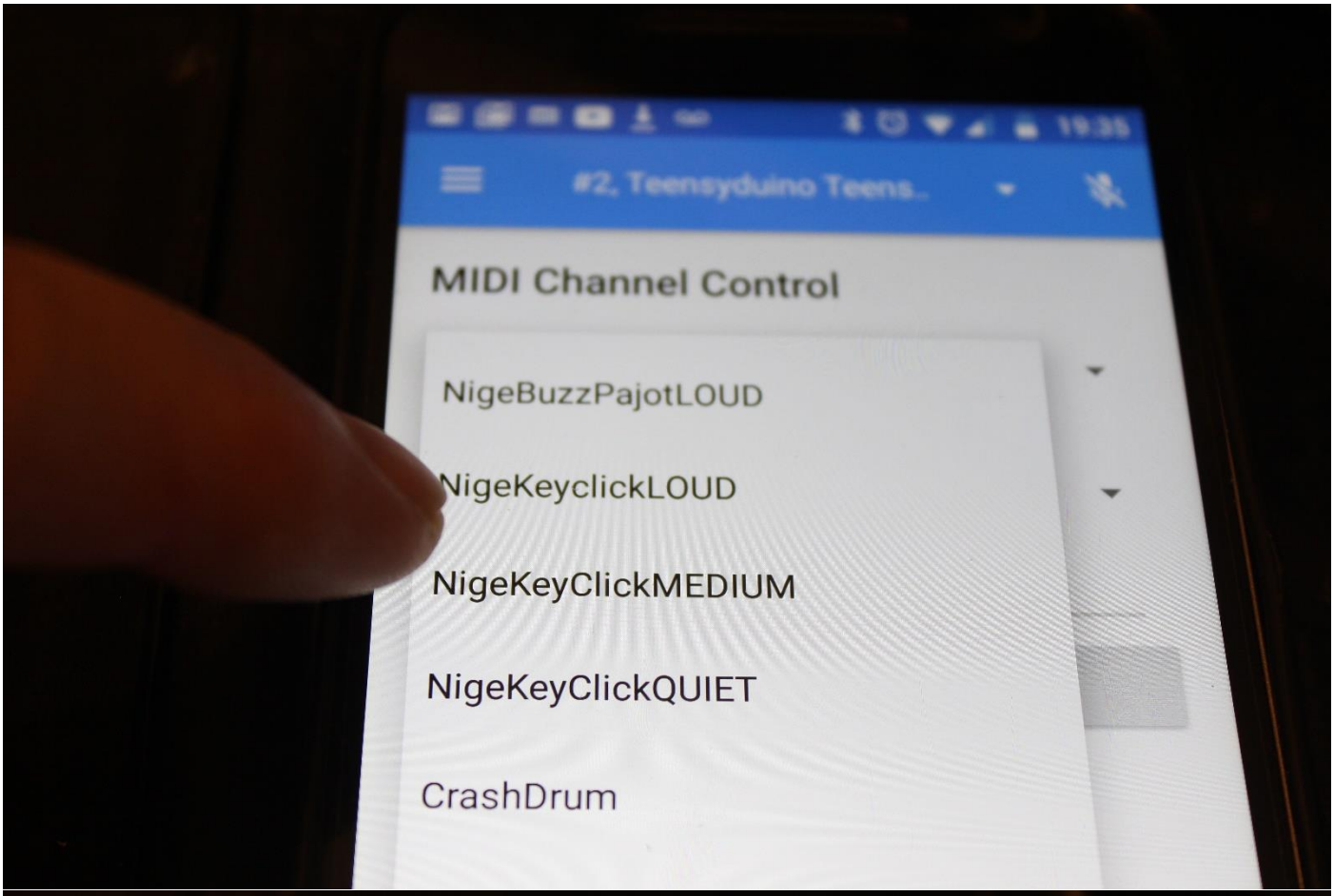
So you have selected NigeBuzzPajotLOUD which is the buzz sound that will come out when you turn the crank fast. Now go on to set up the last channel, Channel 6…….

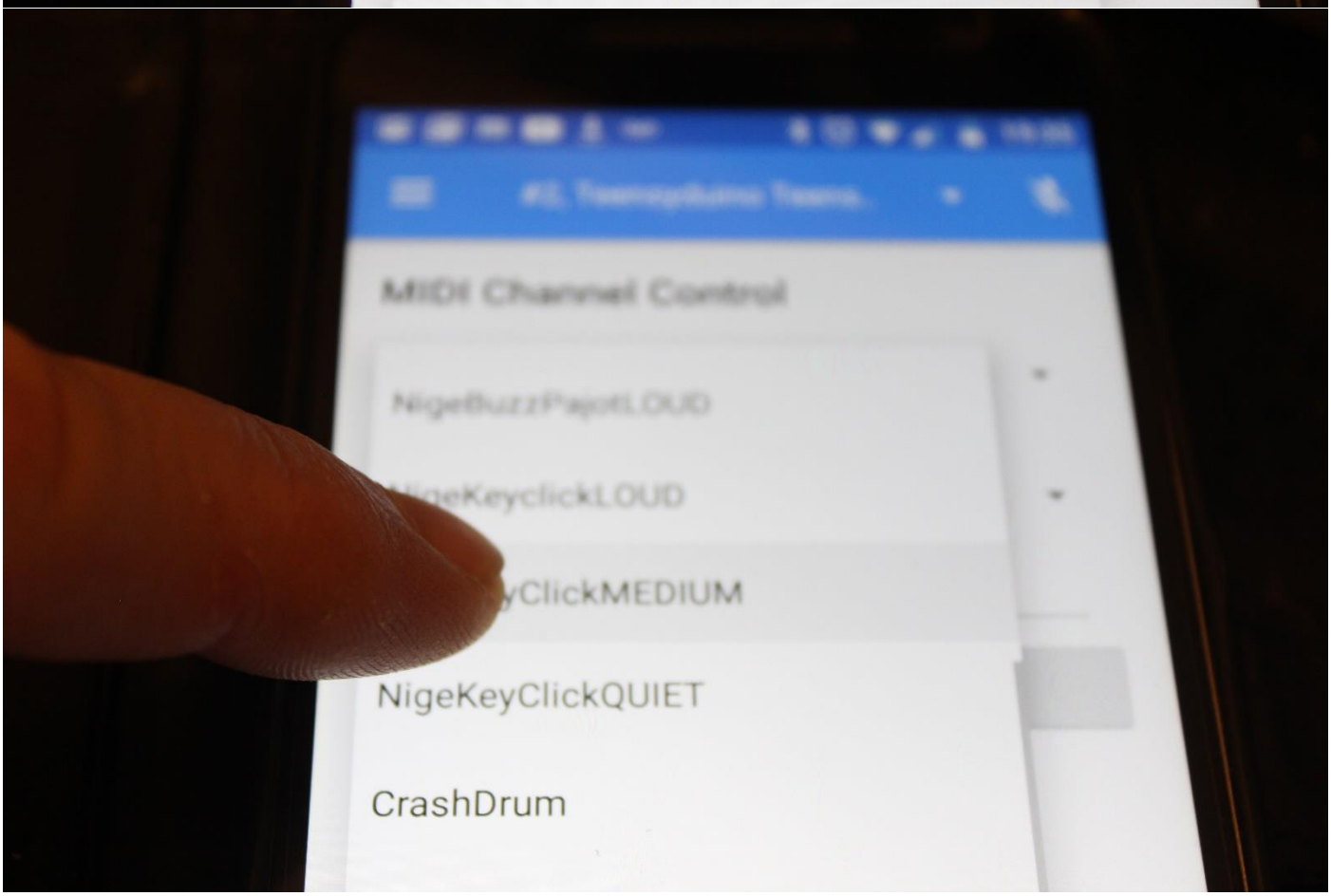

19:34
#2, Teensyduino Teens..
DI Channel Control
nel 5
NigeBuzzPajotLOUD
Panning
ALL SOUND OFF

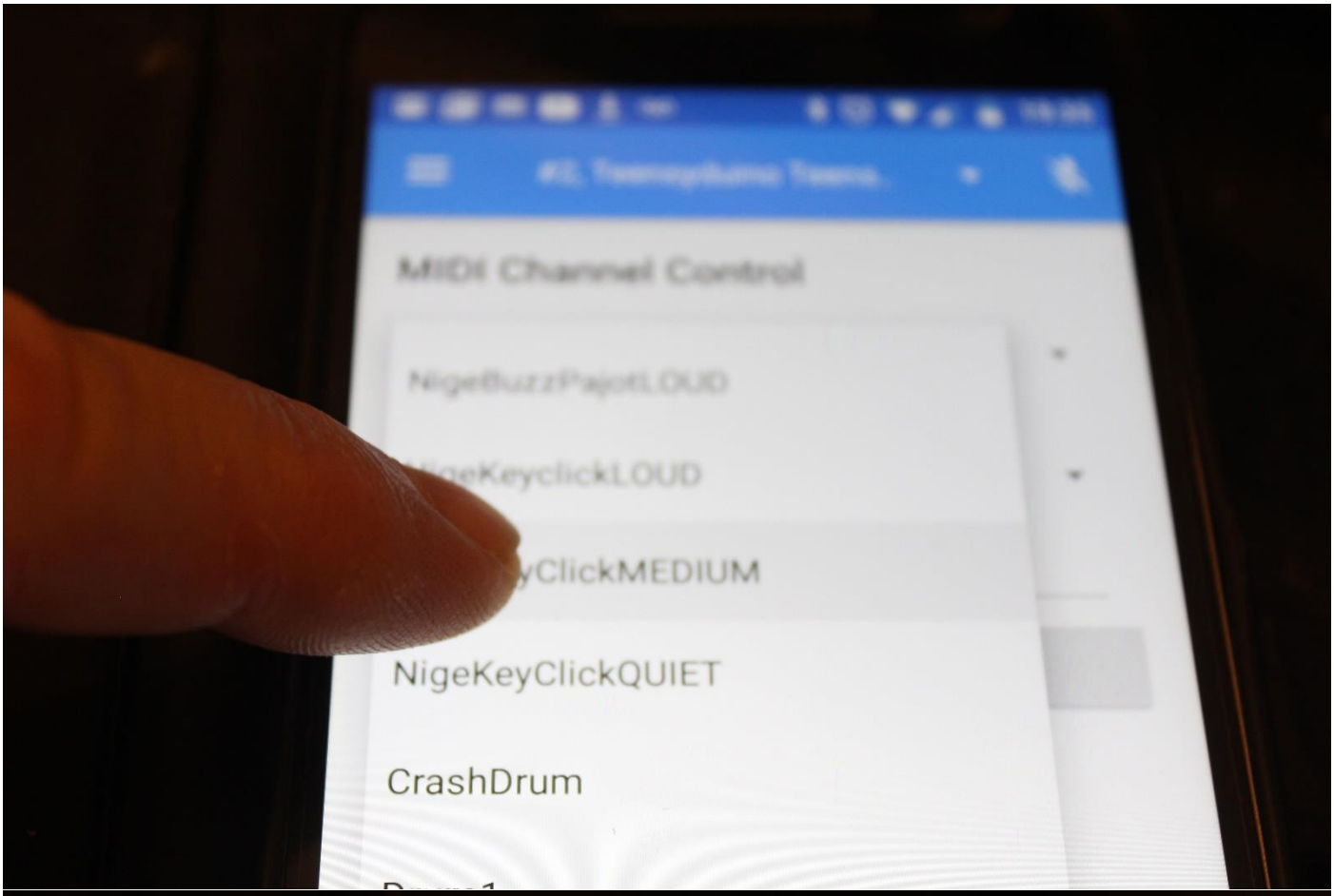

19:34
#2, Teensyduino Teens..
nnel 5
annel 6
Channel 7
Channel 8
Channel 9
Channel 10 (Drums)
Channel 11
Channel 12

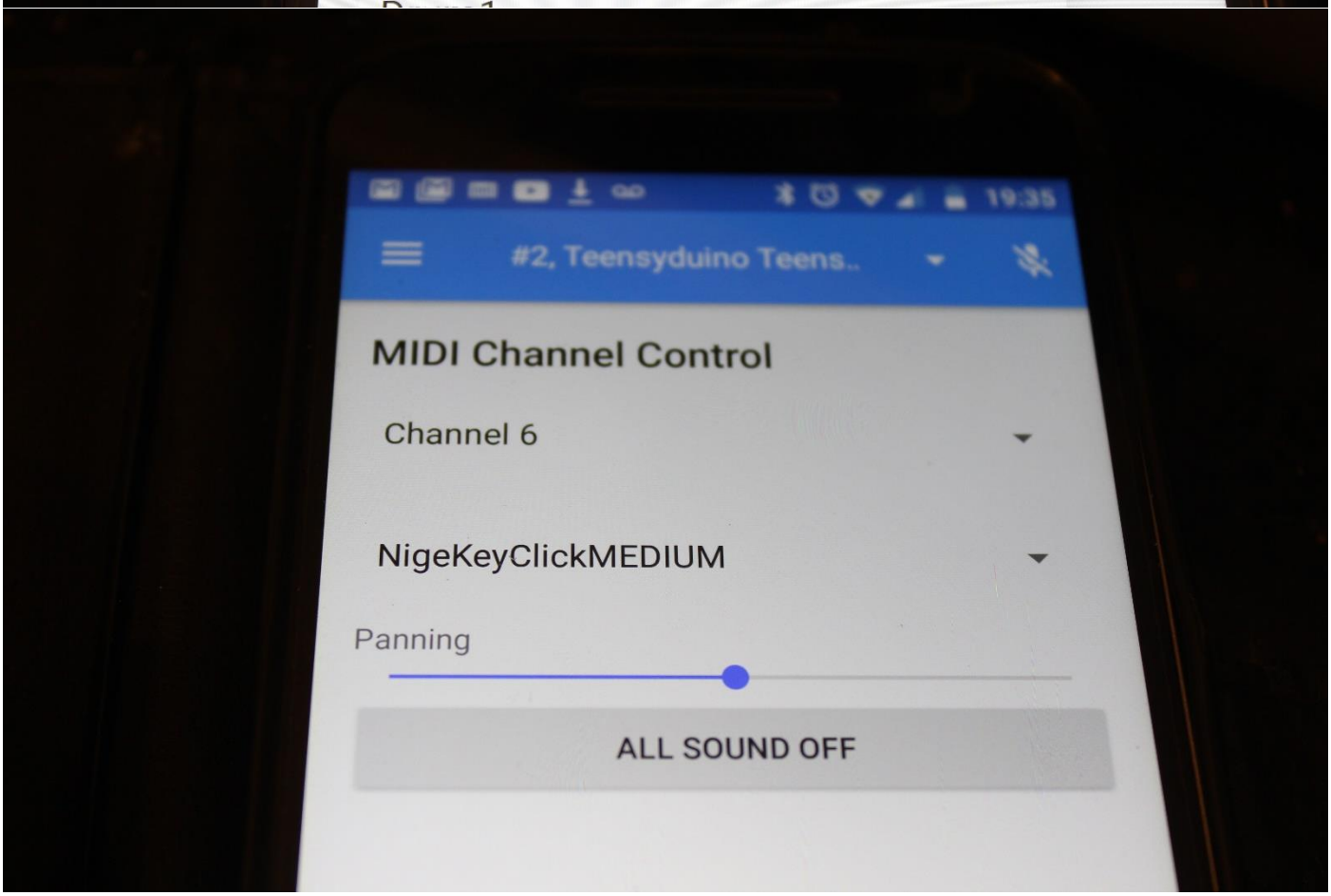

19:34
#2, Teensyduino Teens...
annel 5
el 6
Channel 7
Channel 8
Channel 9
Channel 10 (Drums)
Channel 11
Channel 12


MIDI Channel Control
Channel 6
zzPajotLOUD
Panning
ALL SOUND OFF


19:35
#2, Teensyduino Teens...
MIDI Channel Control
NigeBuzzPajotLOUD
NigeKeyclickLOUD
NigeKeyClickMEDIUM
NigeKeyClickQUIET
CrashDrum


MIDI Channel Control
NigeKeyClickQUIET
CrashDrum

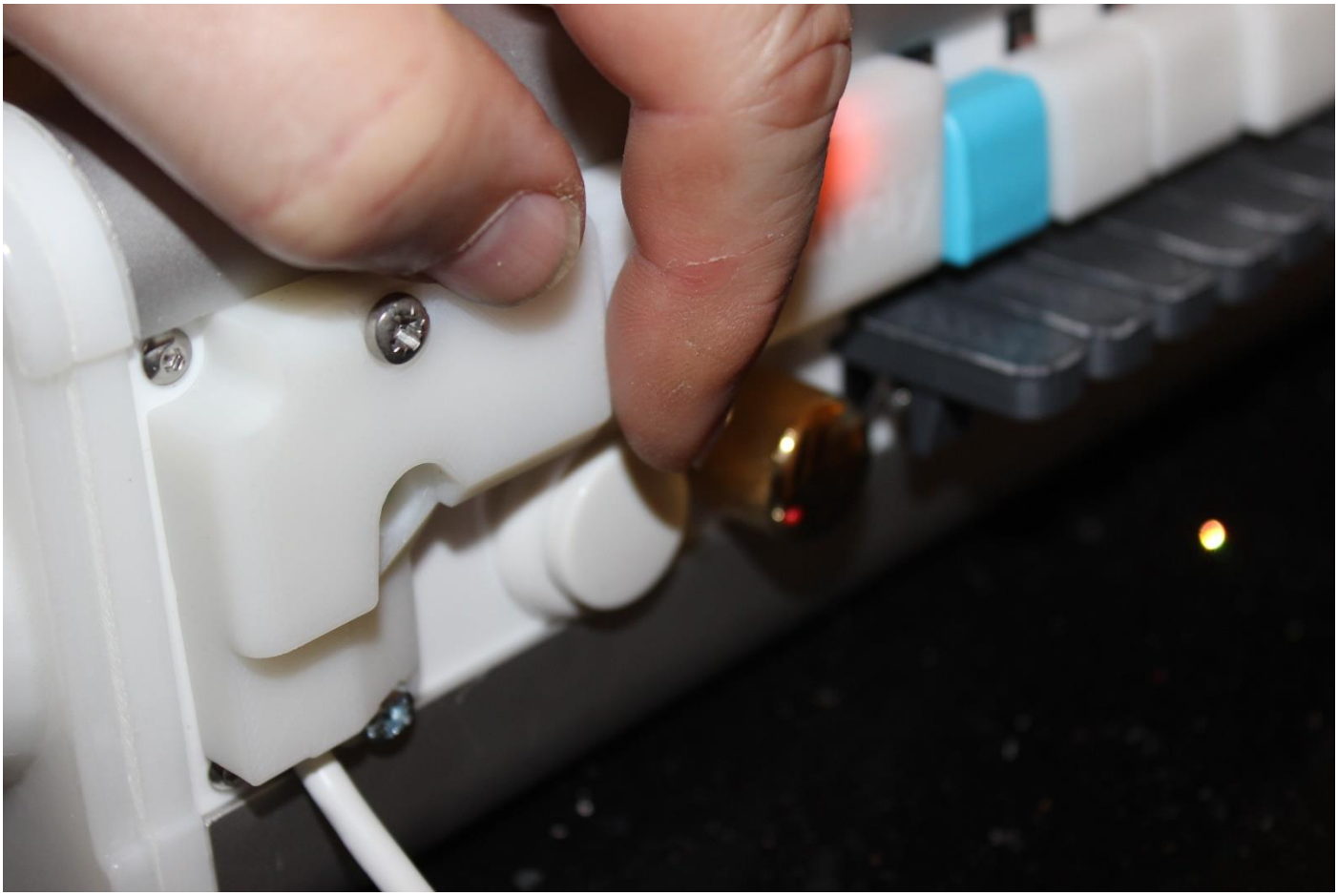




Here you have chosen NigeKeyClickMedium which is a medium-loudness keyclick sound on Channel 6. There is also a louder and a quieter one available to choose from in the soundfonts if you want to try them.

You are now ready to play your instrument.
- This channel setup process in reality can be done very quickly, do not worry. FluidSynth remembers the soundfont file you are using when you open it again, so setting up the soundfont only has to be done once. Setting up the 6 channels does have to be done at start of each session.
Note: If using iPad with bs-16i one advantage is that it will remember all your last-used settings when you start a new session so you can start it and go immediately.

Please note that it is much easier to describe all the above information with a video than with text and images. It looks complicated and slow whereas after the first few times you can do all the above setup steps very rapidly!



If you don't want to actually turn the crank and just want to practise playing the melody with your left hand, press this cheat button and it will sound as if you were steadily cranking! It will keep sounding whatever notes you are playing until you press the button again to stop it.

What is this knob for? When you are cranking the handle, this control knob adjusts how sensitive the buzz sound is, i.e. it adjusts how fast you need to be cranking to make the buzz actually sound, you can manually adjust it for personal preference. Do not crank backwards, nothing will happen and you may damage machine if you crank backwards fast for a long time.

Common questions:

Q: Why cannot the DG send out MIDI information which includes the loudness you want each note/sound to be played at, since the MIDI format has this capability?
A: Because the FluidSynth phone app seems to disregard this information and play everything at one loudness setting. *I have worked around this for you people by offering sounds with different loudness levels within the soundfont menu on the phone, especially the buzz sounds and the keyclick sounds.*

Q: Can I use for example a drum sound instead of the "buzz" when cranking, i.e. select a drum sound on Channel 4?
A: YES, you can if you want to have some fun. I have even given you some drum and HiHat type sounds for you to choose from, to use on Channel 4 instead of the buzz sounds. If using bs-16i on an iPad you can even assign sounds from different soundfonts to the 6 channels.

Q: Can I make it sound like a totally different instrument?
A: Yes, if you use a different soundfont (some are on the web or PM me if you want to try some others) you can make it sound like anything you want, even a whole orchestra.

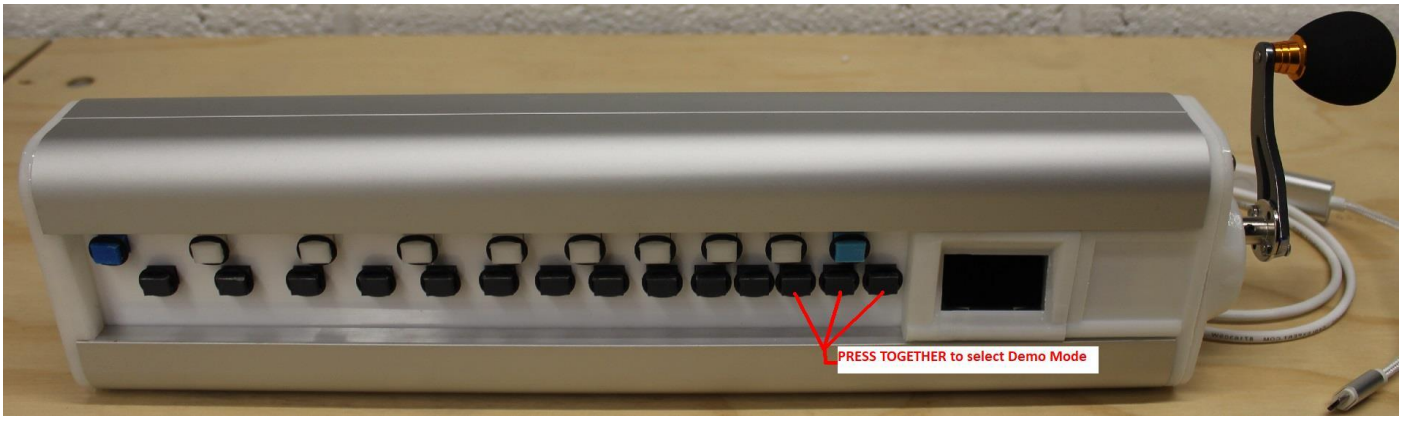
Q: Do I have to use it with a mobile phone running the FluidSynth app?
A: No, I chose FluidSynth as although not perfect it is
- i) Free
- ii) Very portable (this is supposed to be a portable practice instrument) and
- iii) One of the very few apps that seems to run several input MIDI channels at the same time…….I am using 6 channels at the same time. If you just want to play only Channel 1, i.e. a melody, then there are many other phone apps you can try out.

Q: Can I use it with a laptop based synthesiser type of program?
A: Yes, software like Ableton is not free, but very capable and can read several input MIDI channels at the same time.

Q: How can you have 6 MIDI channels when there is just one USB lead, I am confused?
A: MIDI is an industry standard way for electronic musical instruments to communicate with each other, originally by multiple plugs and wires for each channel. However, the Teensy microcontroller in the DG is clever in that it has in-built USB MIDI capability. This means I am using 6 "virtual" channels but sending all the data up one USB lead to the mobile phone app, or indeed a laptop running suitable software if you prefer. I can also use the very same USB lead to reprogram the software on the Teensy board too instead of requiring some other temporary connection, which makes life much easier overall and makes the electronic design of the DG much easier by reducing the number of plugs, sockets and connections to one single USB cable. The DG is also powered by the USB cable from the phone or iPad and so contains no batteries.

B) How to enter Demonstration Mode.

There are >20 pre-programmed tunes within the memory of the DigiGurdy.
To select this mode “DEMO MODE” you must press the Left hand DARK BLUE key and the LOWER furthest RIGHT keys at the same time. Why? So you do not accidentally enter Demo mode while playing !



Once you are in demo mode, you can select a tune using any of the DigiGurdy keys. Each of the DG keys selects a specific tune.

It will then ask you to select playback speed. This is set by the lower row of keys where the leftmost keys is very SLOW playback and the rightmost lower key is very FAST playback.

To exit playback of the selected tune at any time before it has finished playing, press the light blue key (upper right key).

Pressing key 10 (where the lower keys are 1 – 14 from left to right) selects song 10 from menu, called “Matthew Briggs.”

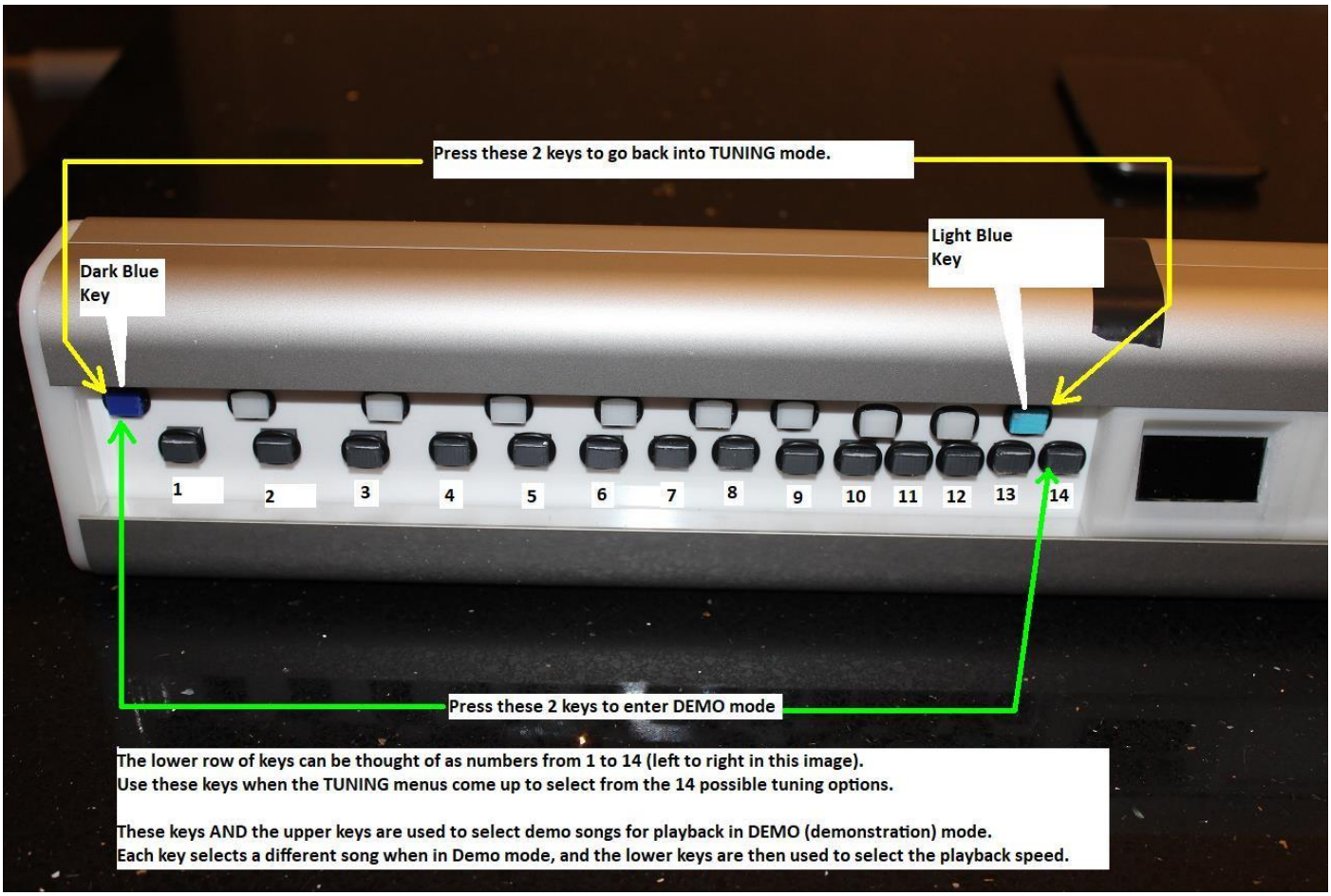
We have also pressed key 10 to select playback speed of 10 (range of available speeds being 1 to 14 from lower row of keys). Now press Light Blue key to start playback of the selected song.

Press light blue key to start playback of your selected song.

Playback now starts.

You can press the light blue key to exit from Demo Mode at any time during the playback of the song.

C) How to change tuning settings while you are using the DigiGurdy, i.e. not just at initial start-up.



To re-enter the tuning/setup screens that you also see on initial start-up, you can press the left DARK BLUE key and the upper right LIGHT BLUE keys simultaneously. You can then change tuning settings, string selections within the FluidSynth in the same way that you did on start-up.

Note: If you stop cranking for more than about 4 seconds, the DG will go through a little self-maintenance routine where it clears all the MIDI outputs to OFF and then sits and waits for you to start cranking again. This stops glitches building up where very occasionally, especially if you have been playing fast, a note can get stuck in the ON state. Not sure if this is due to the phone app occasionally missing a MIDI command to turn the note off. Either way it is useful to have this situation-check take place now and then automatically.

Some synthesisers have a red MIDI-kill button for similar reasons.

ADDITIONAL NOTES

PHONES that definitely work using the FluidSynth app:

My old MOTO G4 works OK.
Also from currently available new budget phones:
STK One Max
Nokia 2.2
Google Phone (with different OTG adapter).

Samsung phones: These do run Android operating system but have a different socket in their base. You need to buy a different adapter: Female USB A to Samsung OTG (name of actual phone).

Other phones:
Somebody asked me about a Chinese Android phone and that had another different design of socket on its base. As with Samsung phones, you need to replace the little adapter I give you for one that fits your phone. They are not expensive at all. They are all known as OTG adapters.

What are OTG adapters?

Whenever searching online for an adapter like this always put OTG into the search term as it is an *OTG adapter* you want to buy. If not it will not carry the MIDI data properly. Ideally put name of the phone into the search too.
Examples:

USB Micro to USB Female OTG Cable Adapter For Samsung Galaxy J5(2016) & A5(2016)
Brand new
£1.59
Buy It Now
Free postage
5,166+ sold
FAST & FREE
Estimated delivery Sat 17 Oct

Sponsored
USB Type C Male to USB A Female OTG Adapter for Samsung Galaxy A8+ A8 A9 (2018)
Brand new
£1.75
Buy It Now
Free postage
Save up to 12% with Multi-buy
FAST & FREE
Estimated delivery Fri 16 Oct
eBay Premium Service

Apps that work:

I have it working, as I originally designed it, with:

Fluidsynth Midi app (Free from Google Play store) on an Android phone.

bismark bs-16i app on an iphone / iPad, ***[NOTE: You have to use the Apple USB camera adapter which is about GBP35]*** and in

Reaper with the TX16Wx software sampler plug on a PC.

APPLE products:

The DGurdy will work with an iPhone or iPad running an app called bs-16i

Sonically it is better than FluidSynth on an Android phone. It costs about $8 from the App store.

It remembers your last used channel setups which makes it really easy to use after the initial setup sequence. Also you can adjust volume of each channel, reverb etc on each channel.

You need what is known as a USB camera adapter (designed for connecting a regular digital camera to your iPad) to make it work.

There are cheap ones not made by Apple, some of which people have found will work OK, but there may be an element of luck in this depending on which one you buy.

Example:

Sponsored

Apple Lightning 8 PIN to FEMALE USB Camera Adapter OTG Cable Connection_Kit _UK

Brand new

£4.99

Buy It Now
or Best Offer

Free postage

Free returns

FAST & FREE

Estimated delivery **Sat 17 Oct**

Genuine APPLE MD821ZM/A Lightning to USB Camera Adapter - White

Brand new

£24.99

Buy It Now

Free postage

3 watchers

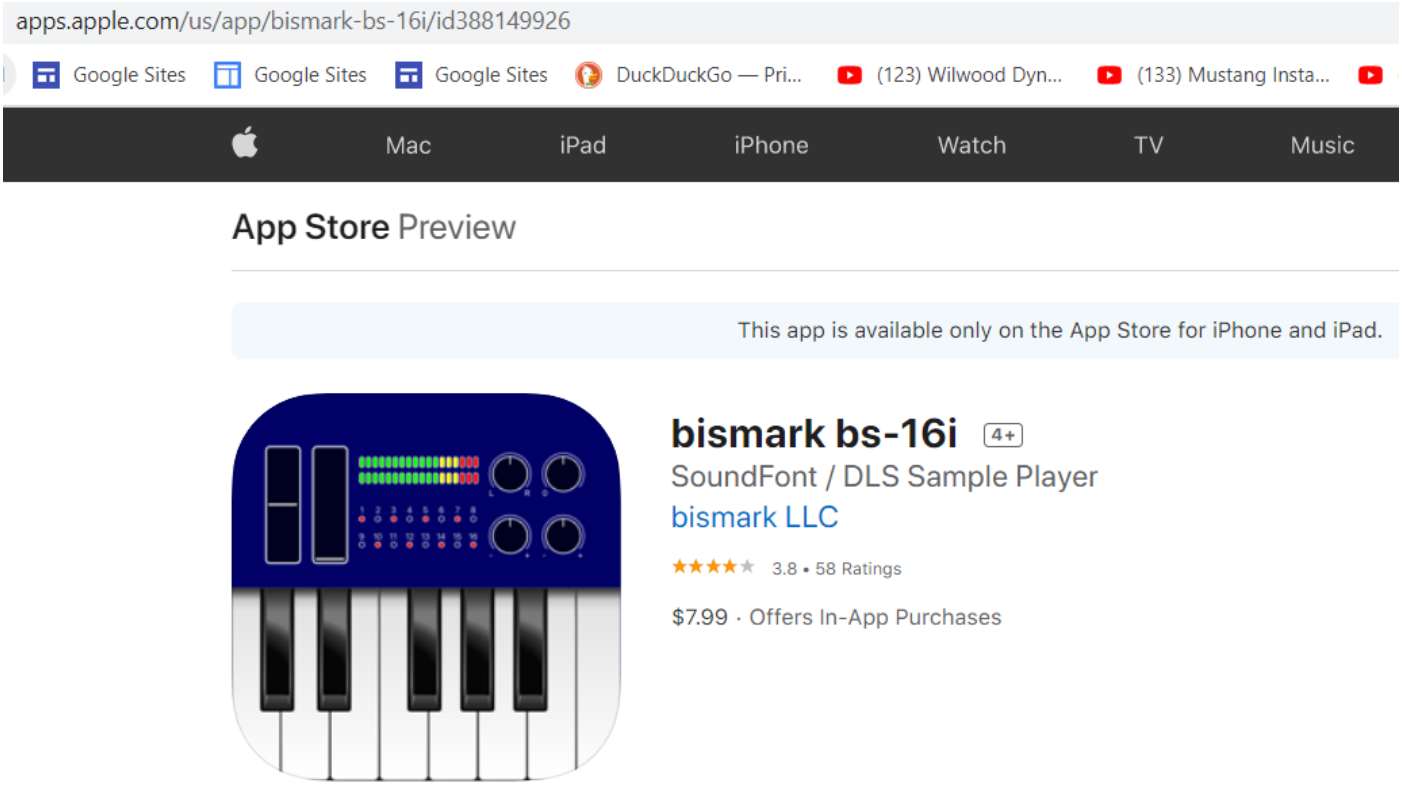
FAST & FREE

Estimated delivery **Sat 17 Oct**

Click & Collect

As you can see the genuine Apple versions are more expensive – not sure why !

bs-16i is here on the App store:



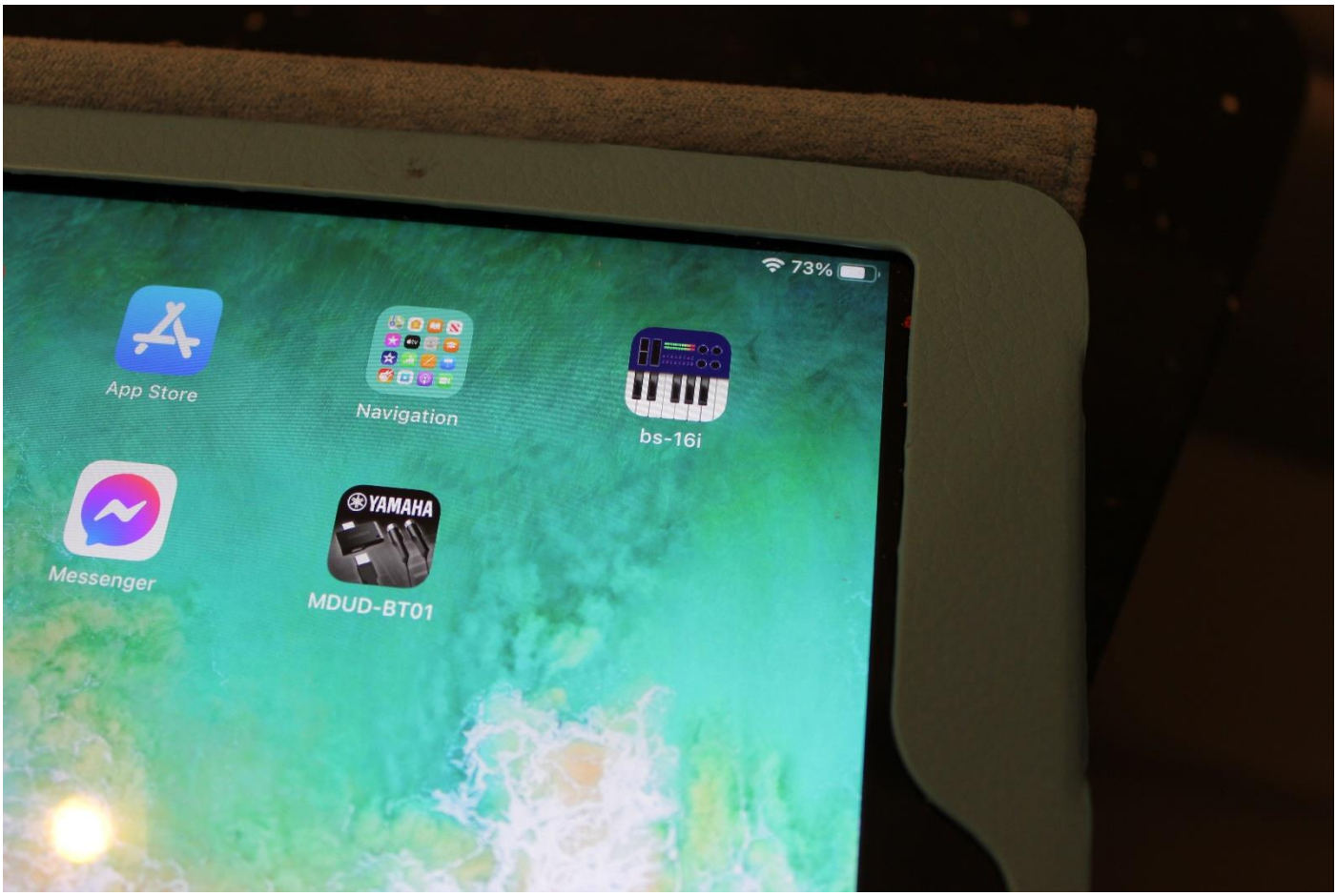
The user interface looks like this:

I have videos on how to set this up with the DigiGurdy, just email me.

EXTRA INFORMATION FOR

a) Running with bs-16i on an iPhone or iPad

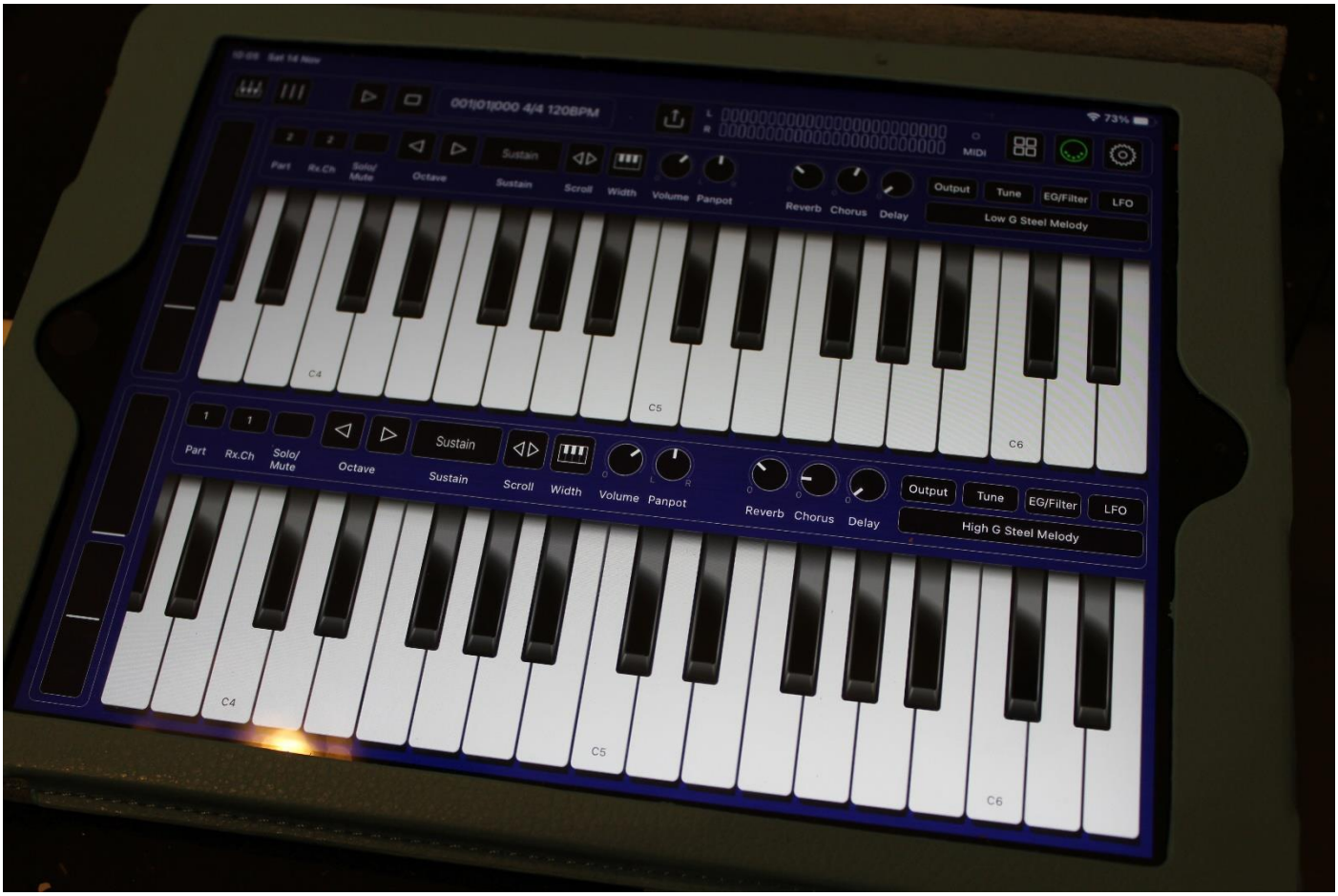
b) Using a wireless MIDI Bluetooth transmitter if you have a post- November 2020 DigiGurdy design that has the two MIDI sockets fitted for a wireless transmitter such as the Yamaha MD BT-01 device.



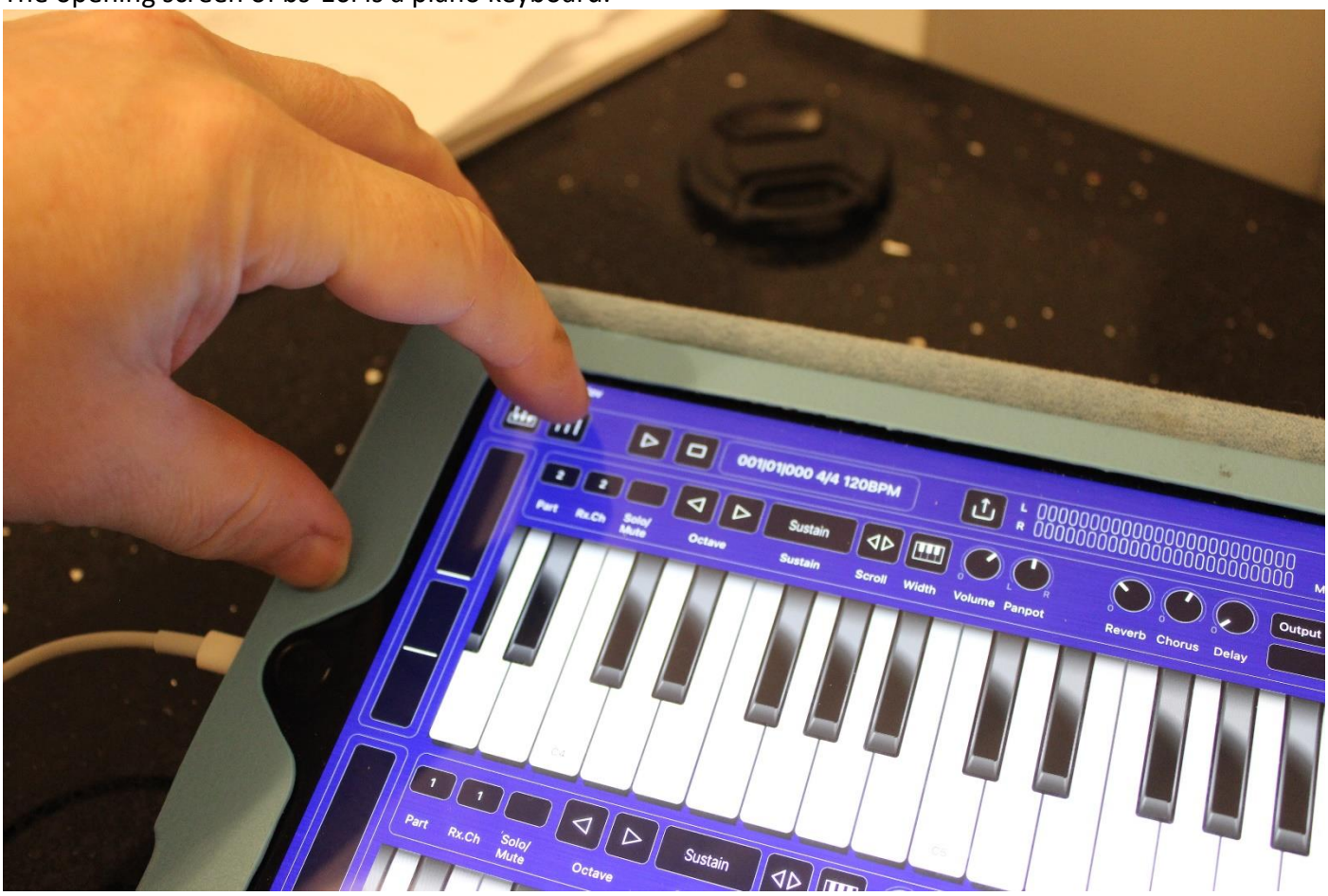
Open bs-16i on your iPad

Notice that for using the Yamaha wireless connection you would also need to download the MDUD-BT01 app also shown on the screen here.

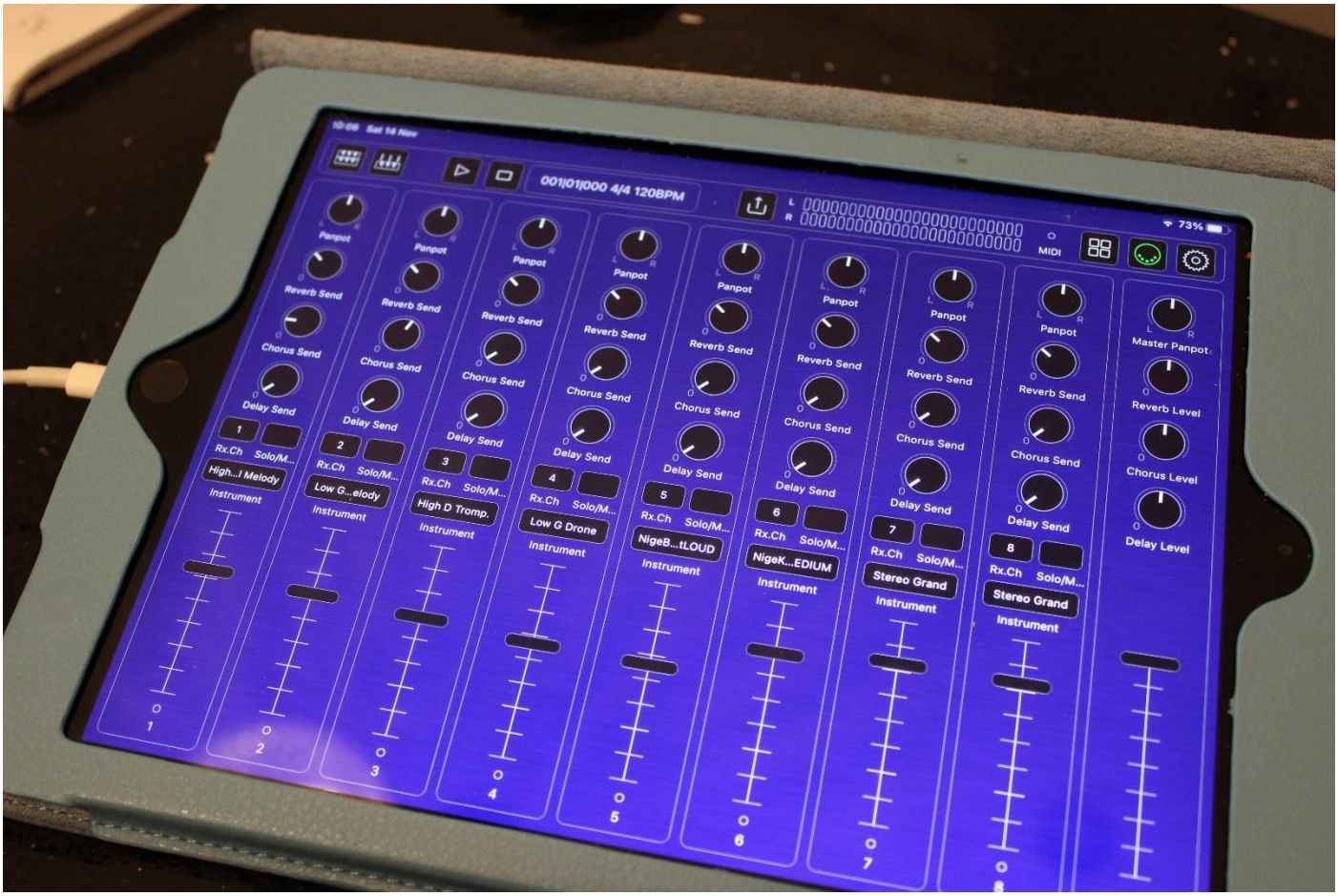
However, for a wired connection i.e. a USB cable from your DGurdy to the iPad (via the Apple USB camera connector) you just need to have downloaded bs-16i from the App Store. It costs about $8.



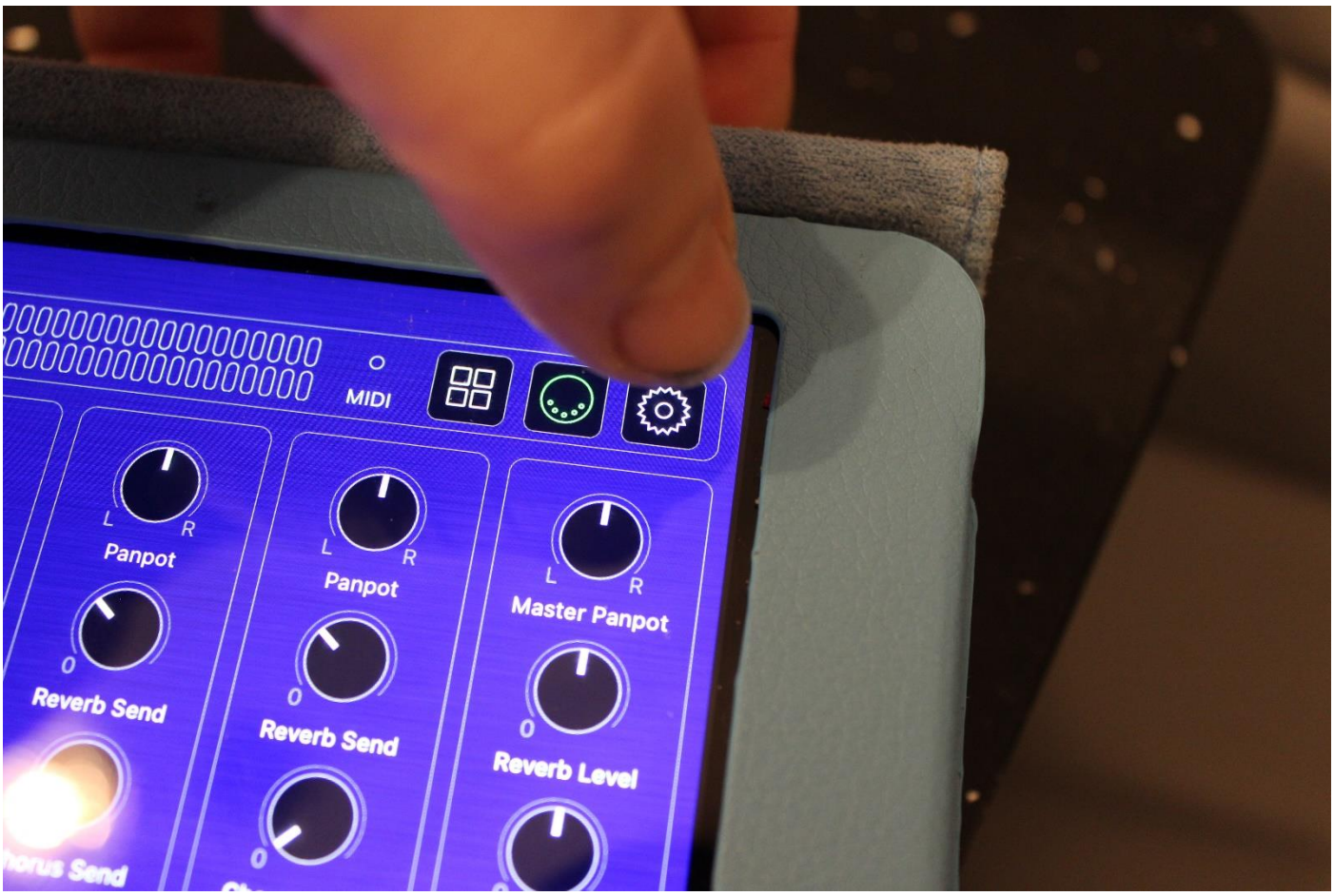
The opening screen of bs-16i is a piano keyboard.



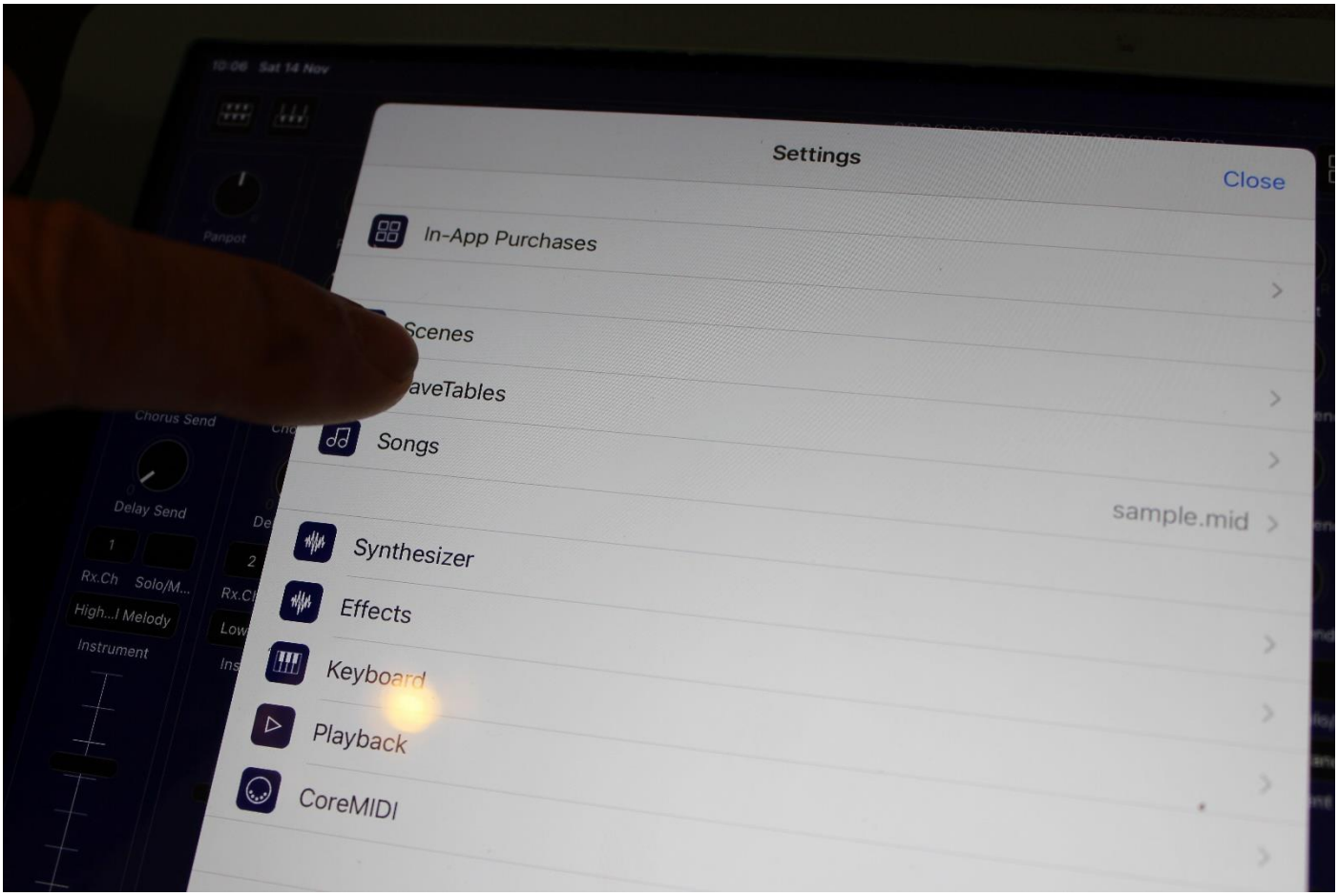
Press the mixer icon top left and you will open a different screen that looks like a mixing desk.



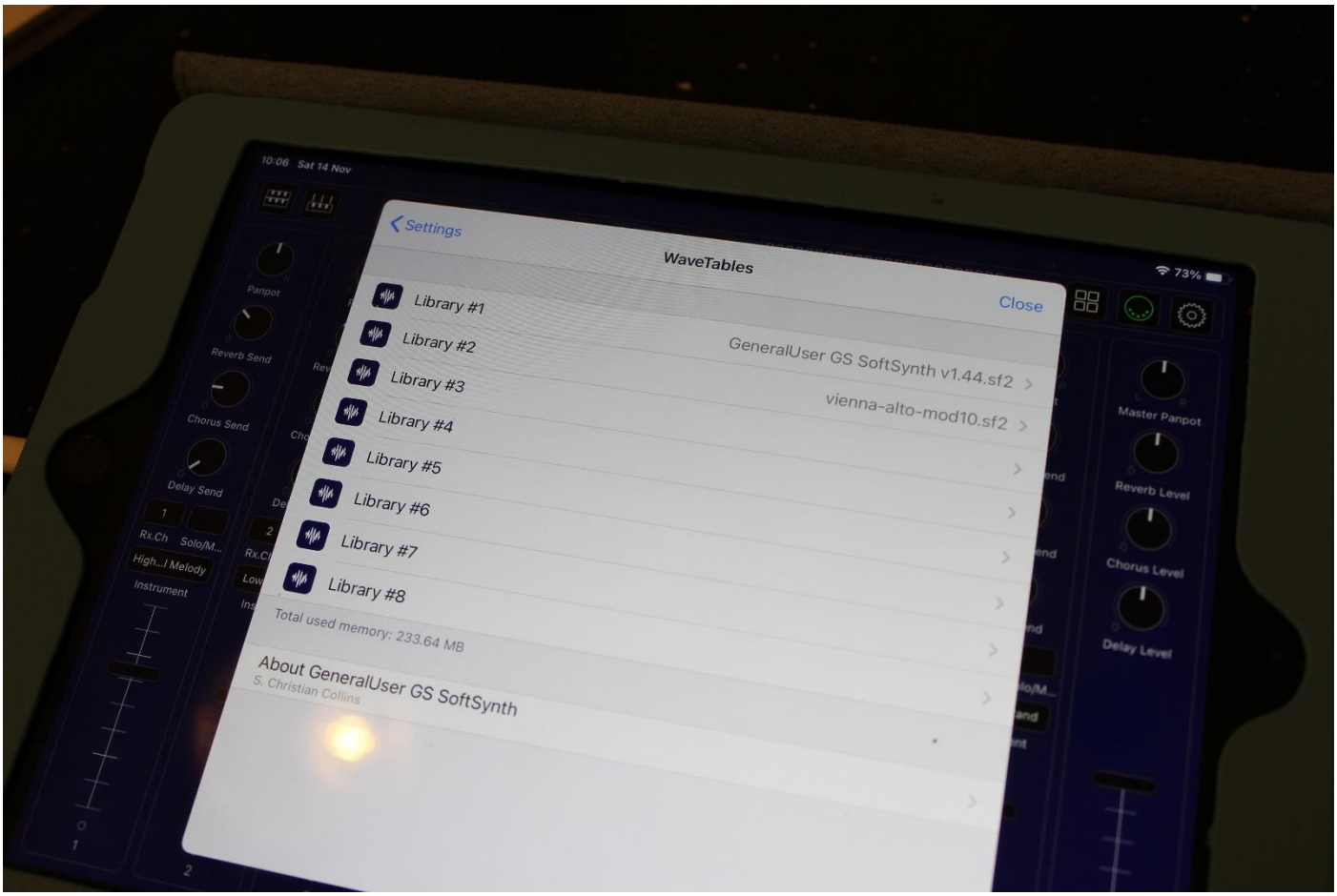
Here it is.



Click on the SETTINGS icon shown here.

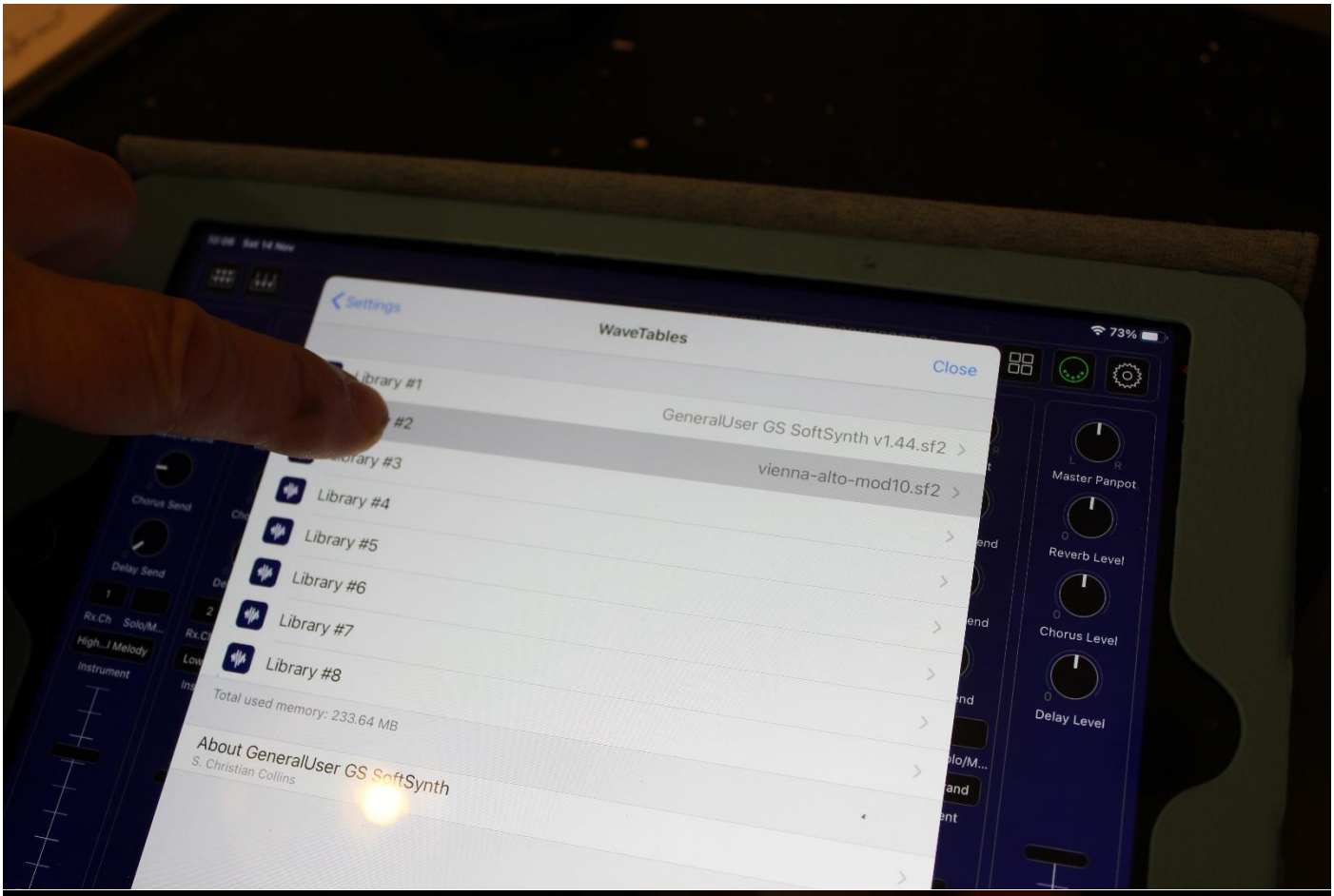


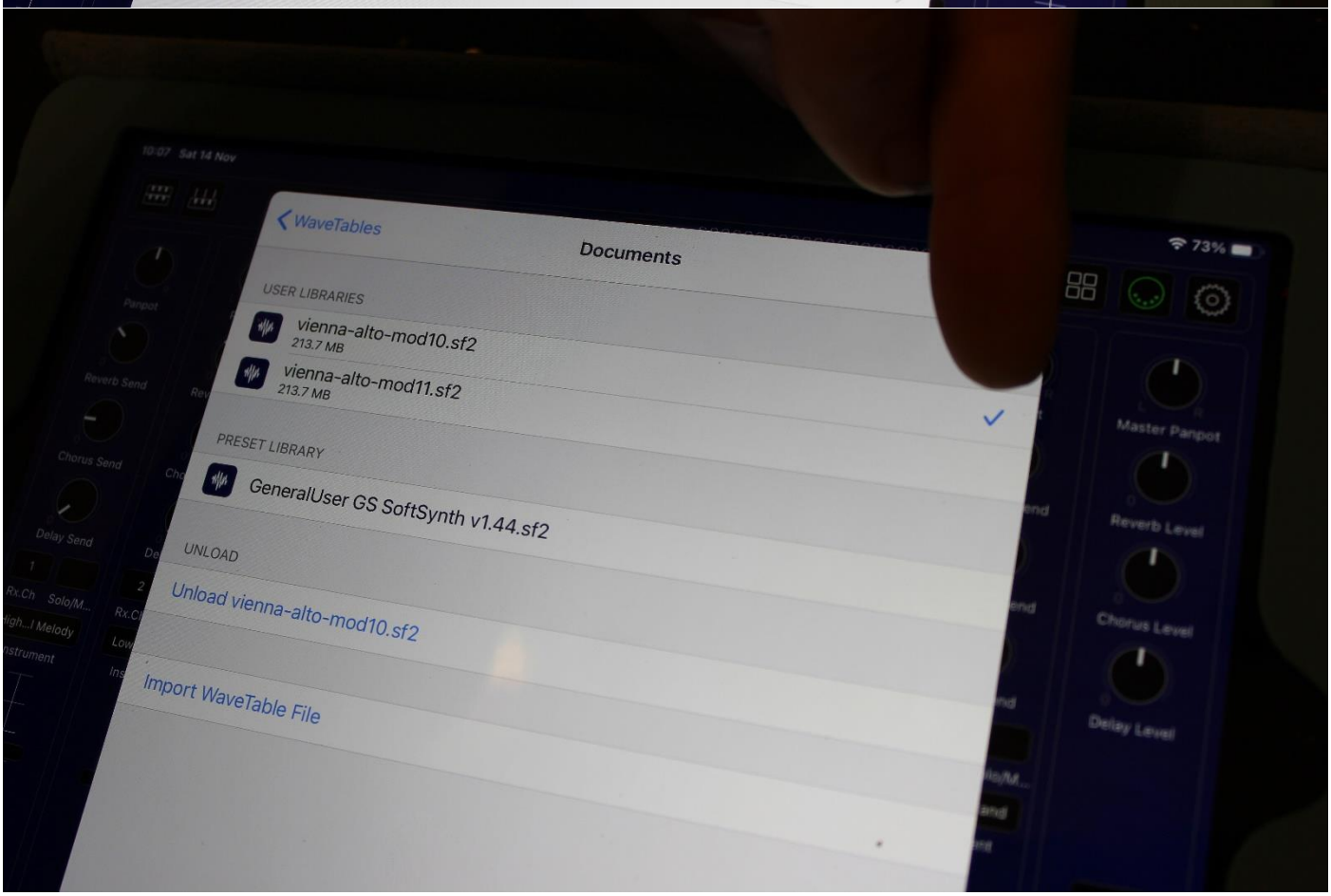
Select WAVETABLES (another word for Soundfonts).

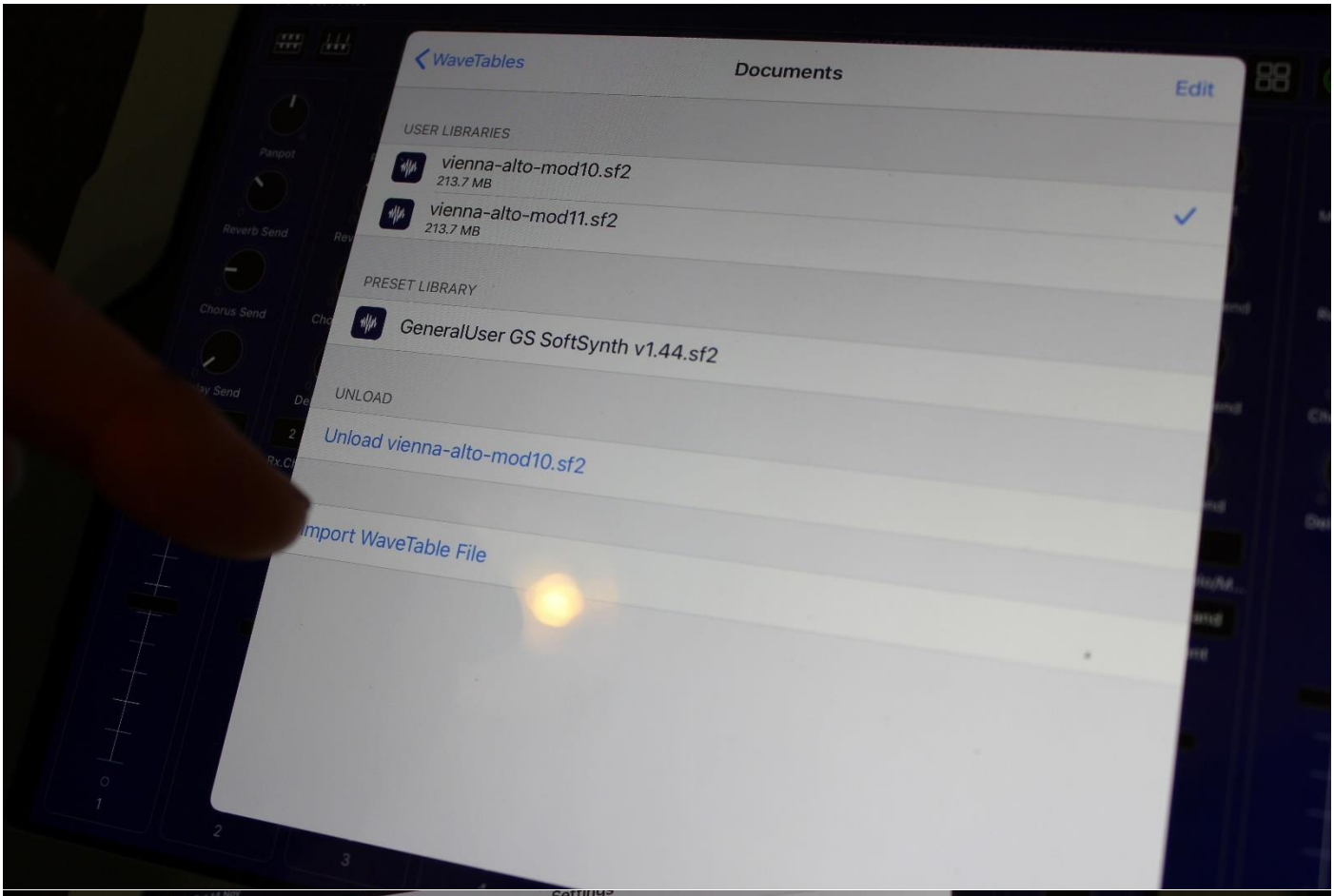


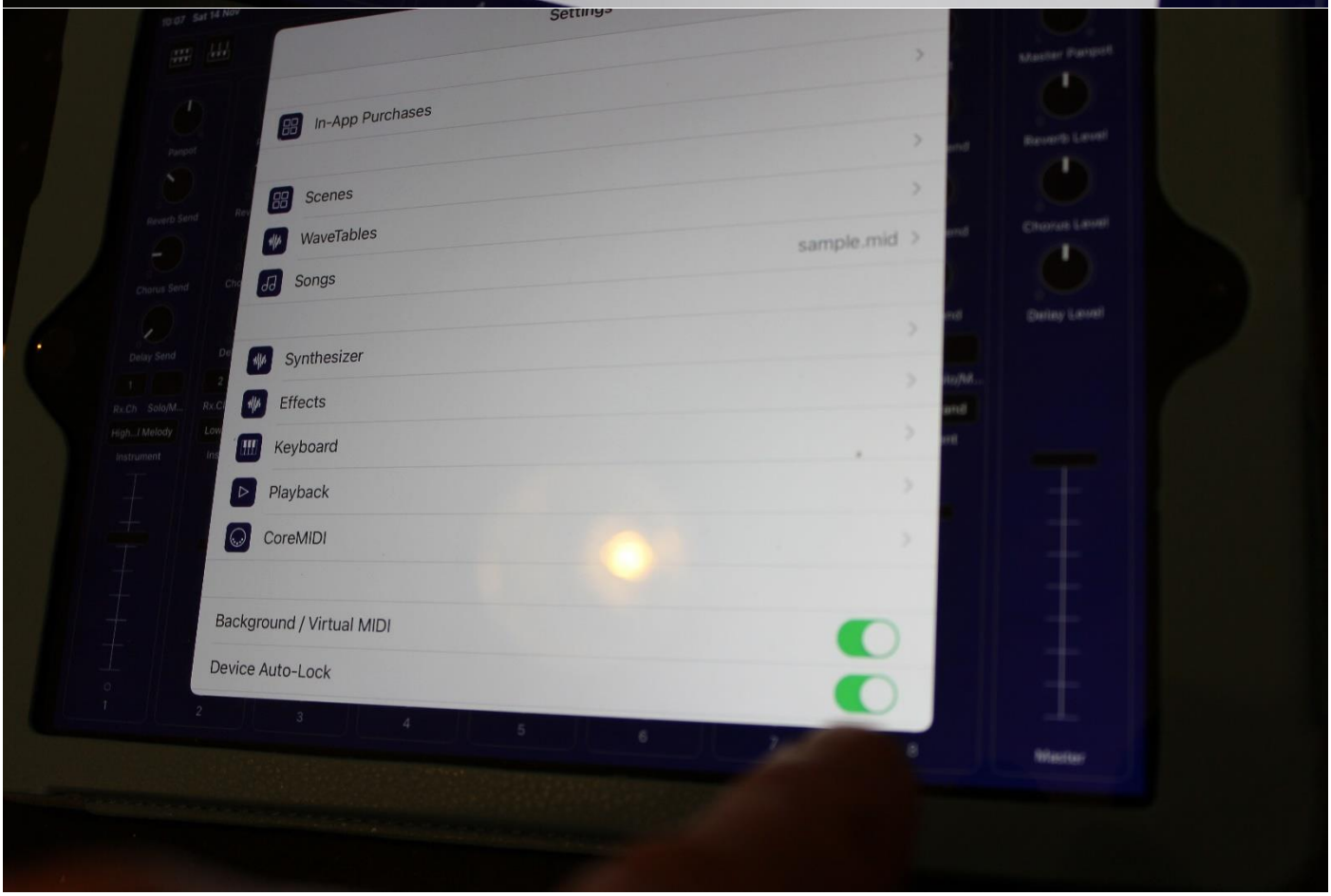
Library 1 is by default the one that comes pre installed with bs-16i.

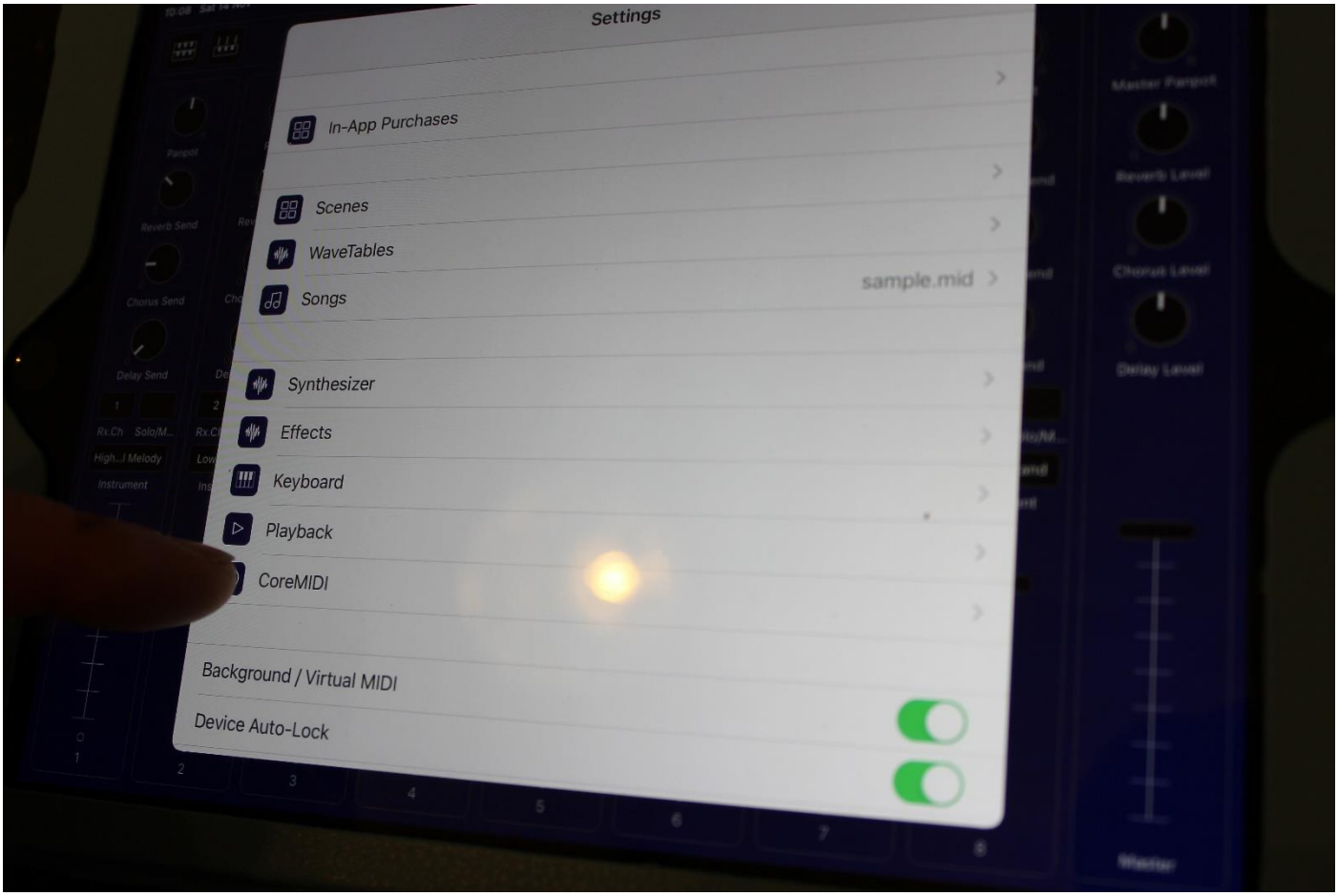
You want to set up a new library called Library 2 and put into it the Soundfont file for the DigiGurdy which I will send you on request by wetransfer.


Settings
WaveTables
Close
Library #1
#2
GeneralUser GS SoftSynth v1.44.sf2
Library #3
vienna-alto-mod10.sf2
Library #4
Library #5
Library #6
Library #7
Library #8
Total used memory: 233.64 MB
About GeneralUser GS SoftSynth
S. Christian Collins
73%
Master Panpot
Reverb Level
Chorus Level
Delay Level

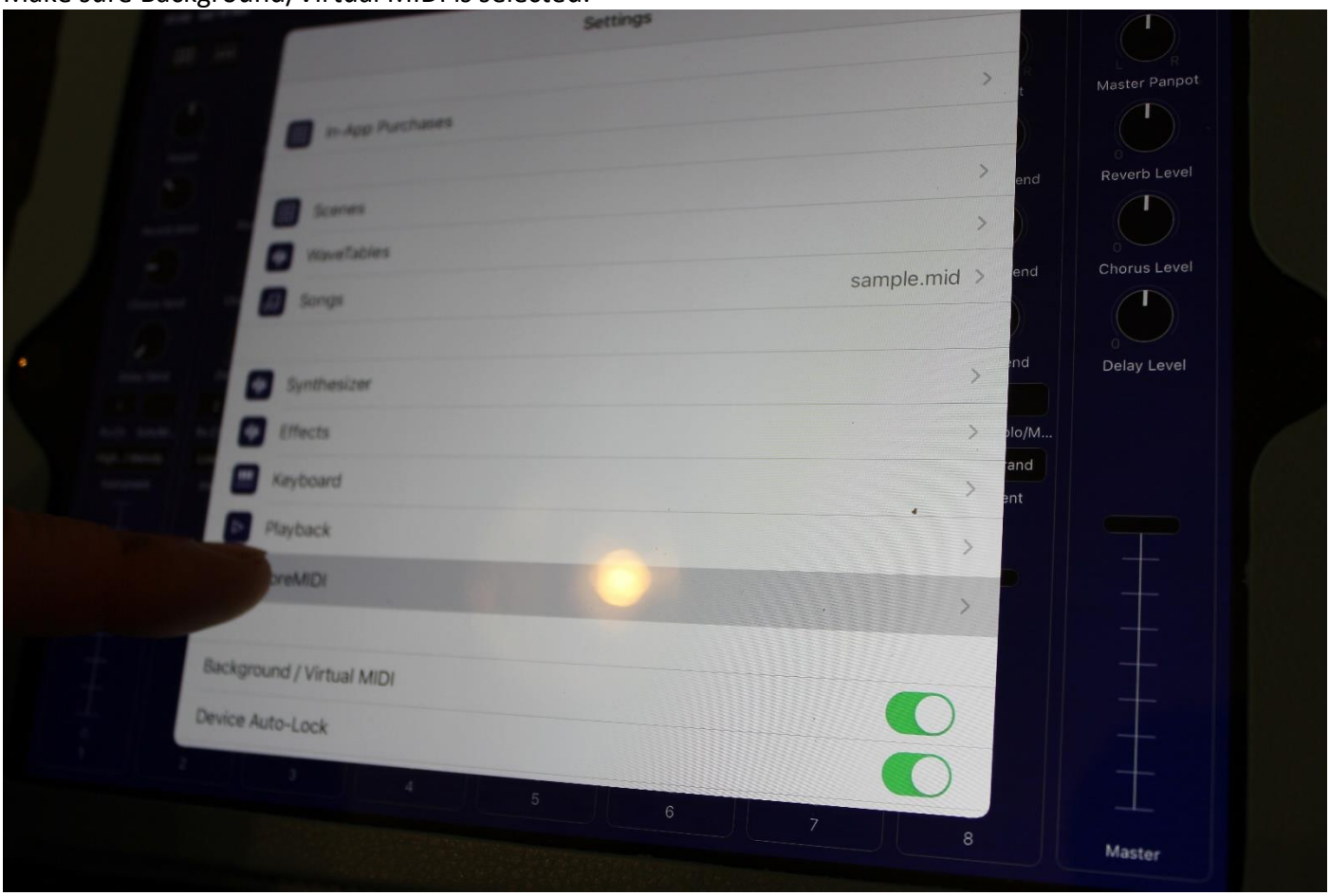

WaveTables
Documents
USER LIBRARIES
vienna-alto-mod10.sf2
213.7 MB
vienna-alto-mod11.sf2
213.7 MB
PRESET LIBRARY
GeneralUser GS SoftSynth v1.44.sf2
UNLOAD
Unload vienna-alto-mod10.sf2
Import WaveTable File
73%
Master Panpot
Reverb Level
Chorus Level
Delay Level

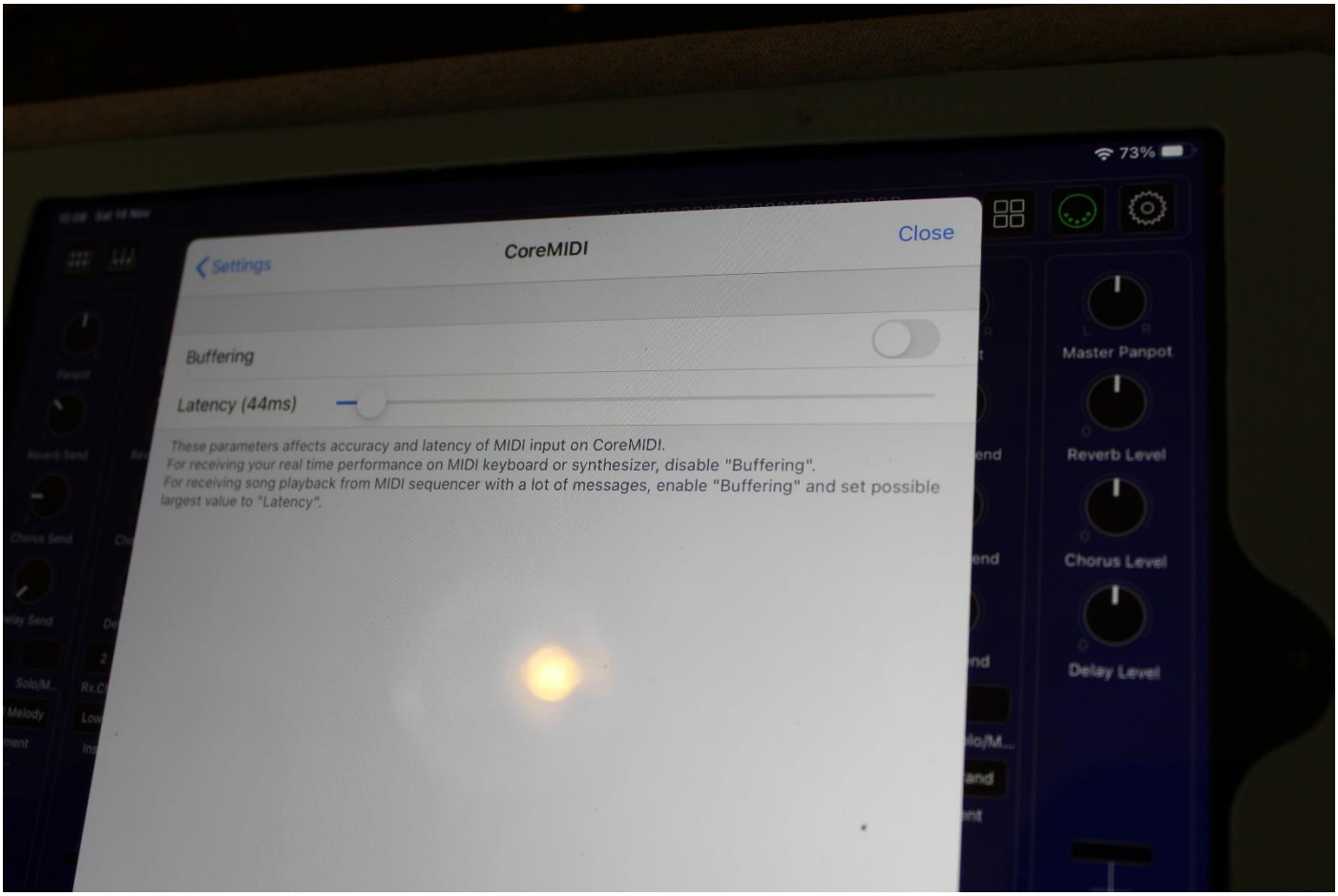

WaveTables
Documents
Edit
USER LIBRARIES
vienna-alto-mod10.sf2
213.7 MB
vienna-alto-mod11.sf2
213.7 MB
PRESET LIBRARY
GeneralUser GS SoftSynth v1.44.sf2
UNLOAD
Unload vienna-alto-mod10.sf2
mport WaveTable File


In-App Purchases
Scenes
WaveTables
sample.mid
Songs
Synthesizer
Effects
Keyboard
Playback
CoreMIDI
Background / Virtual MIDI
Device Auto-Lock

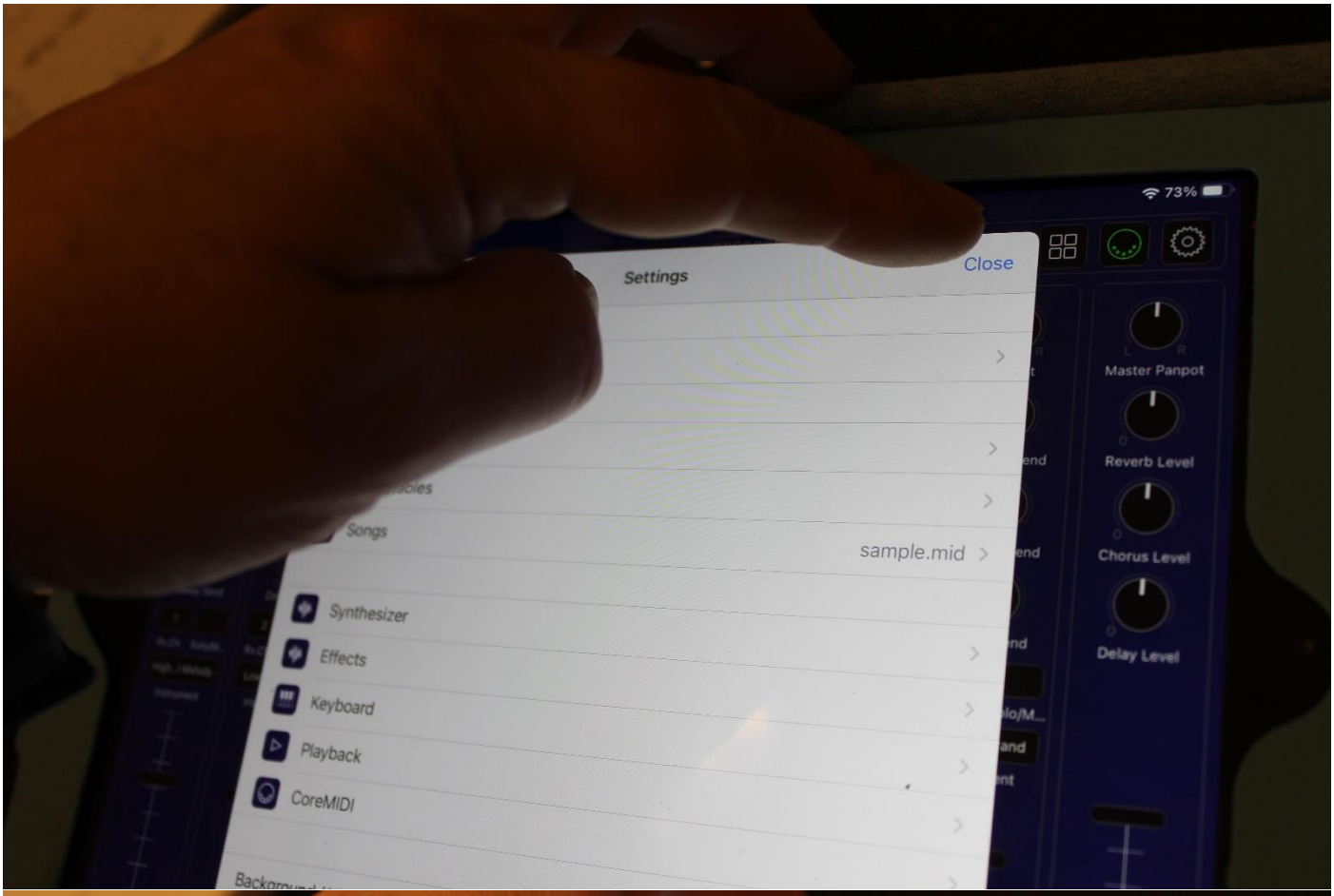


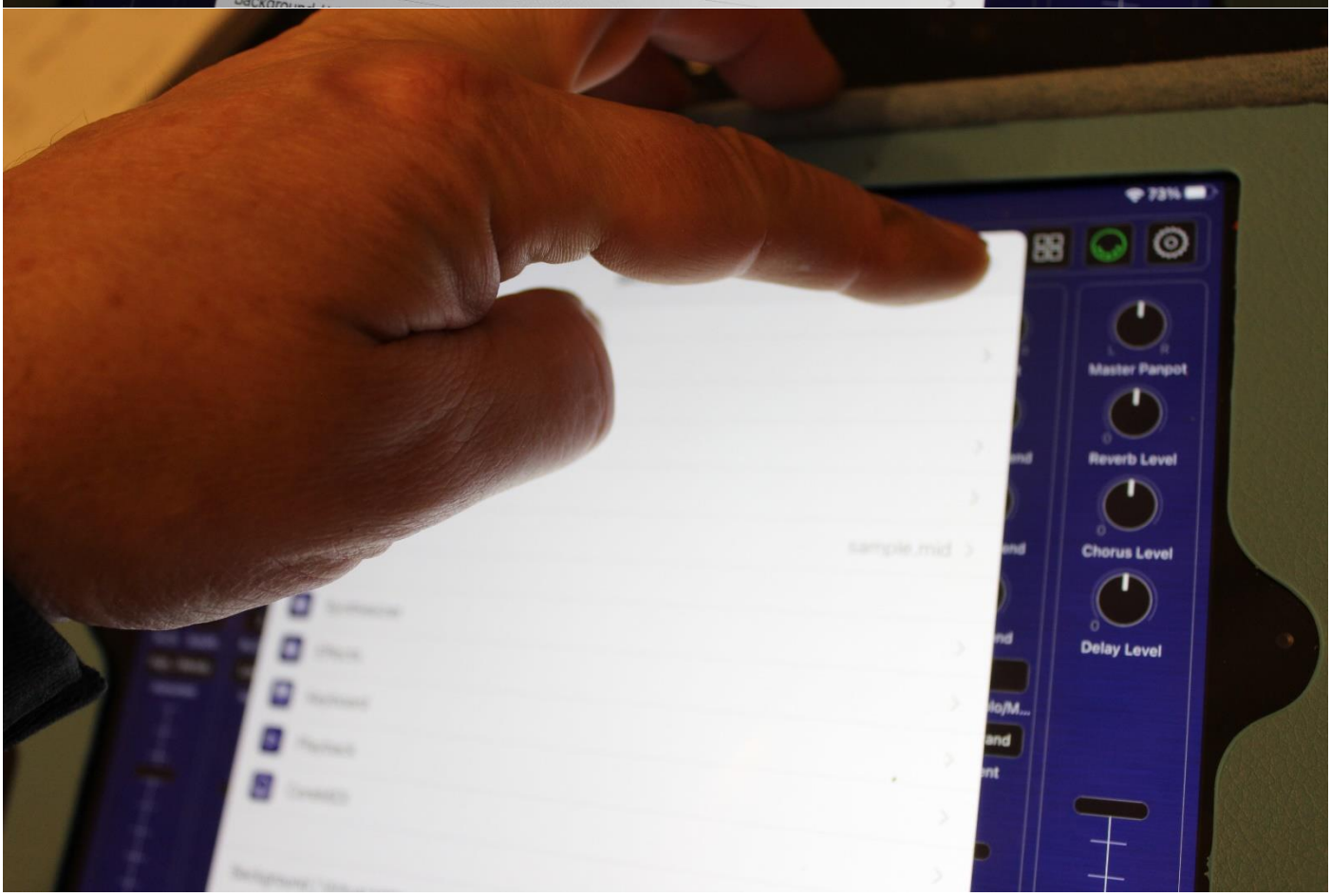
Make sure Background/Virtual MIDI is selected.

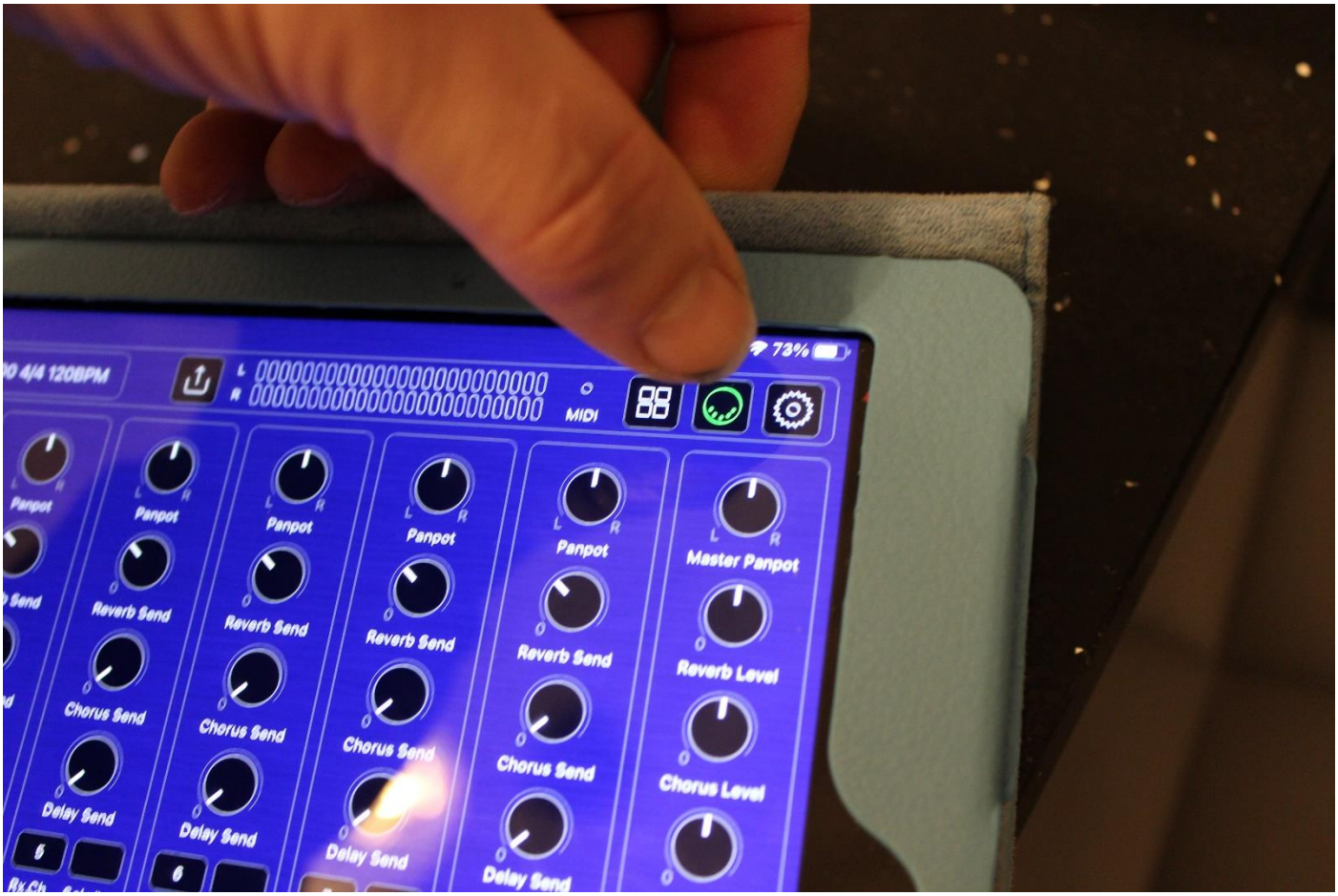




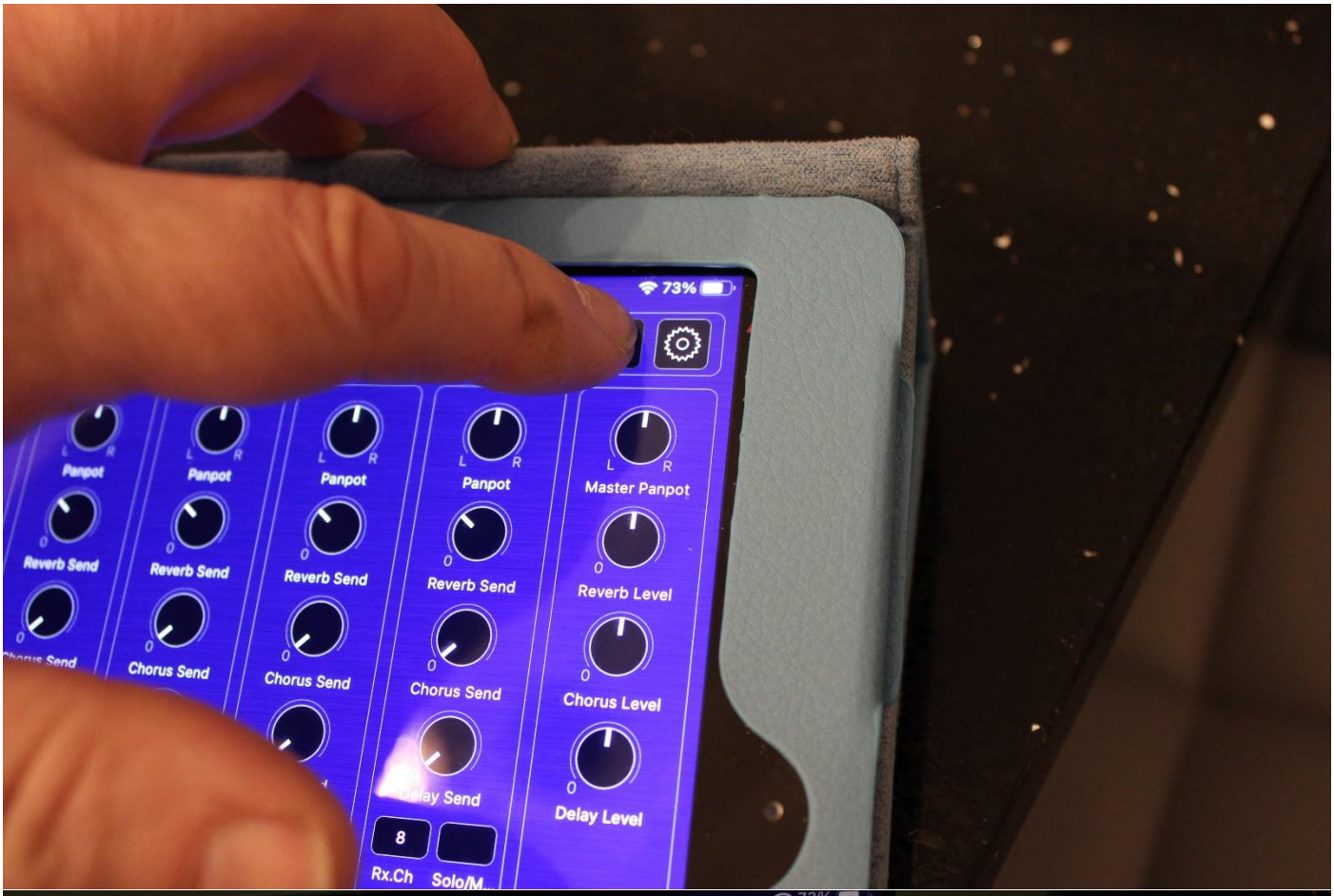
Under CoreMIDI you can also set a buffer for incoming MIDI data. I am not sure how this should be set. Obviously you want low latency so I set the latency to a low value and for now I turned “Buffering” OFF.

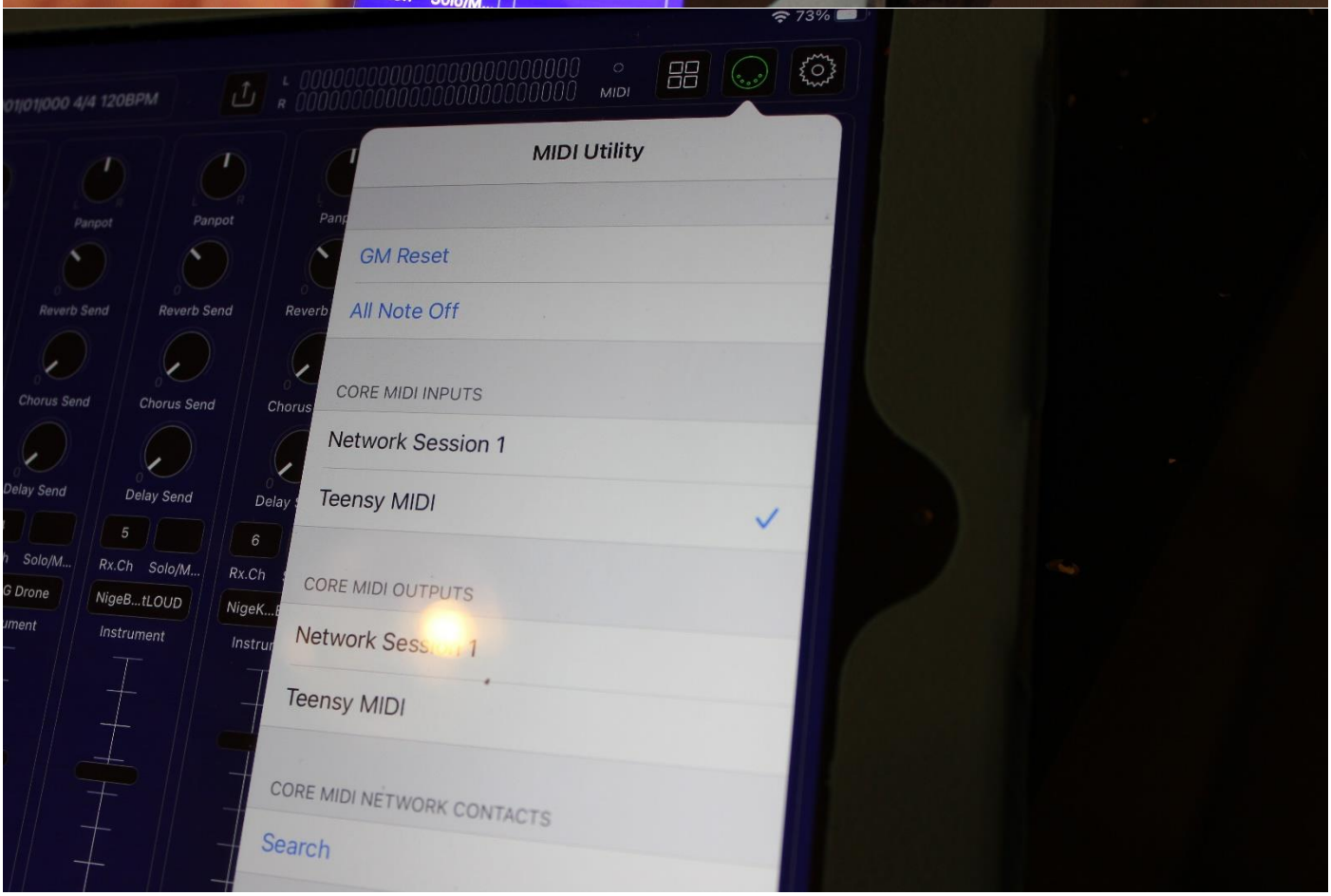

73%
Settings
Close
Songs
sample.mid
Synthesizer
Effects
Keyboard
Playback
CoreMIDI
Master Panpot
Reverb Level
Chorus Level
Delay Level


73%
Master Panpot
Reverb Level
Chorus Level
Delay Level

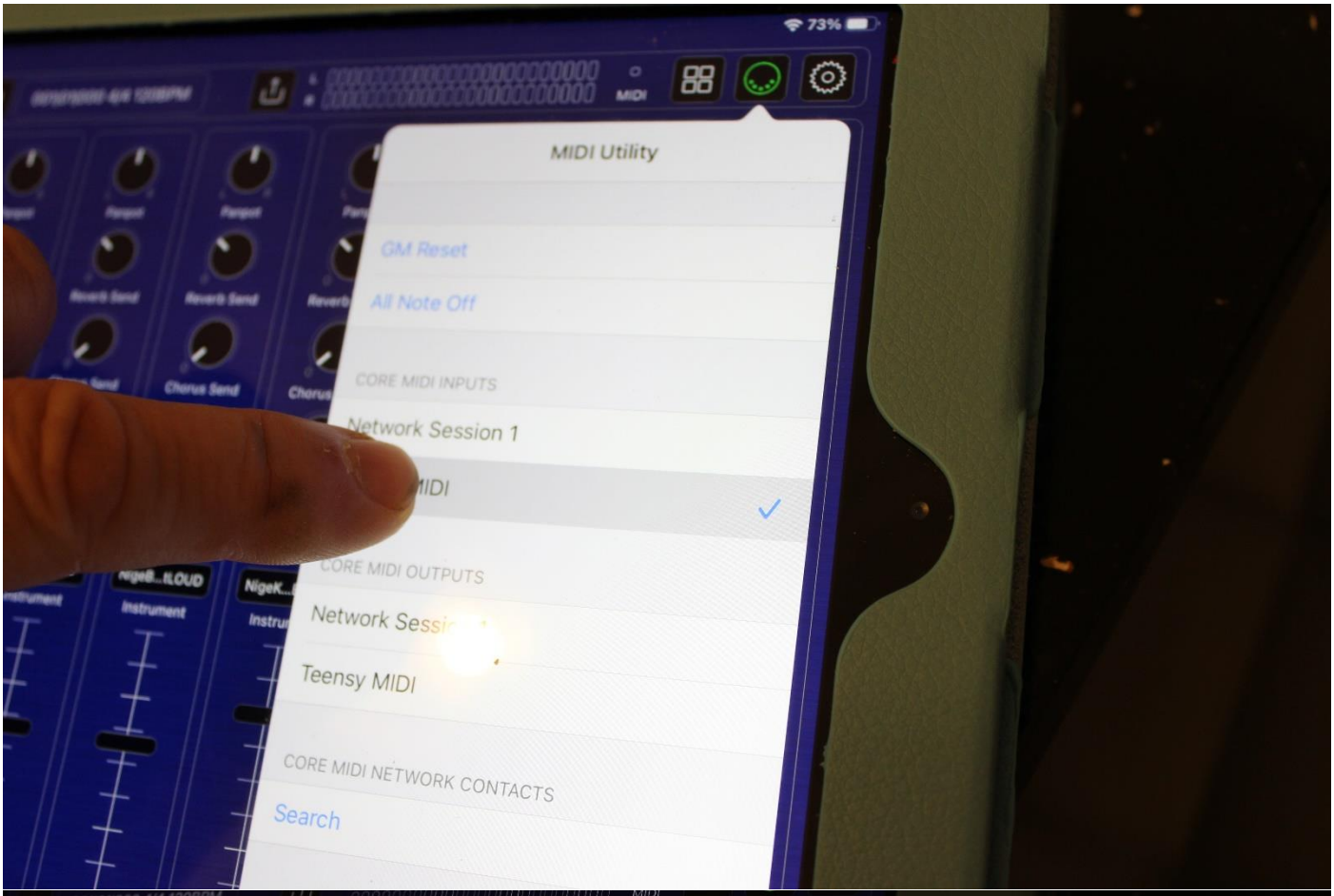


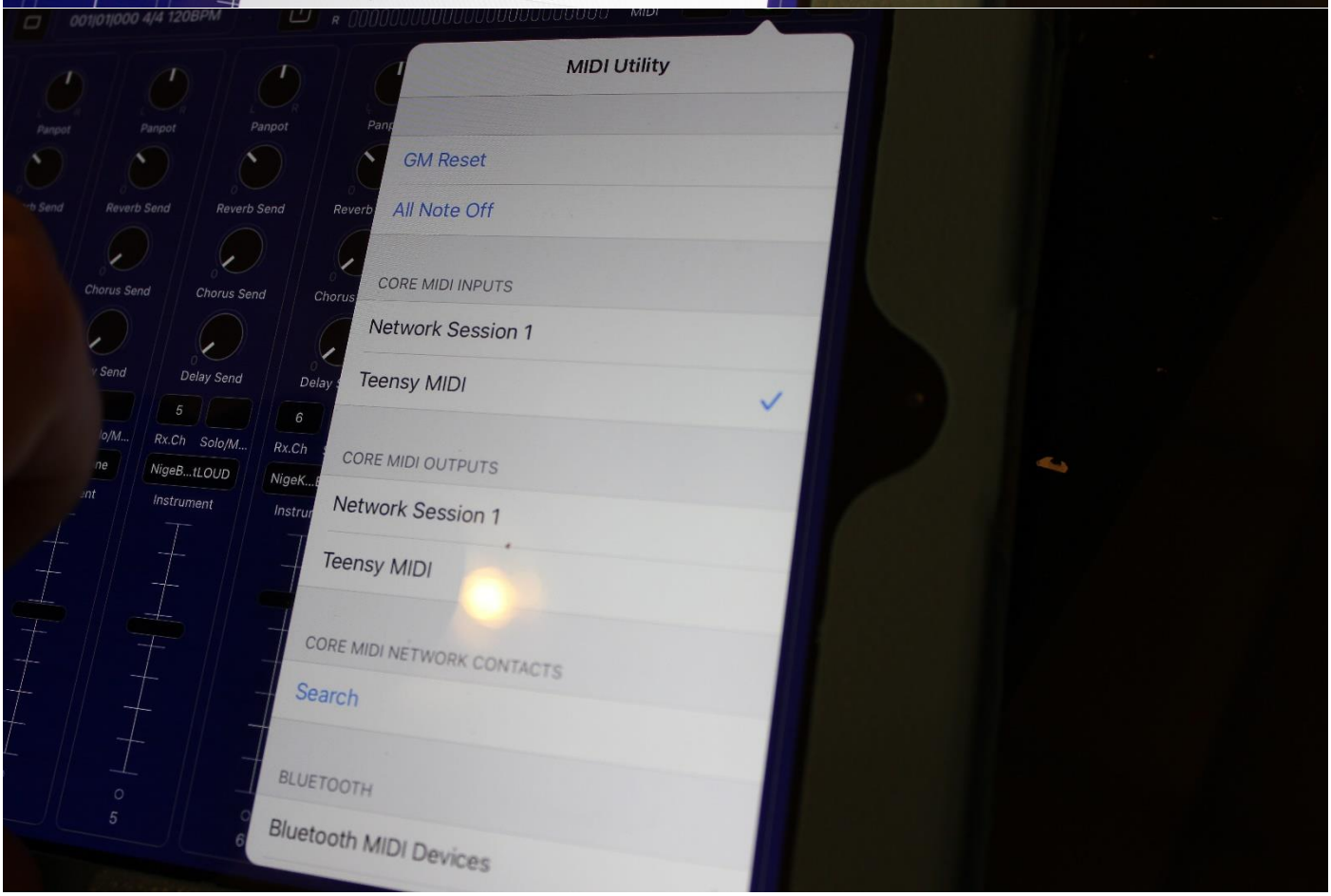
Next you press the MIDI icon (which looks like a 5 Pin MIDI device socket).
You want to tell the program where your MIDI information is going to be coming in from.





So, if you have a DGurdy connected with a USB cable, then, as the computer inside the DGurdy is called a "Teensy" then you will want to select Teensy MIDI from the menu. You see how there is now a tick by it.





You are not sending any MIDI data back from the iPad to the DGurdy so the settings of “Core MIDI Outputs” do not matter really.

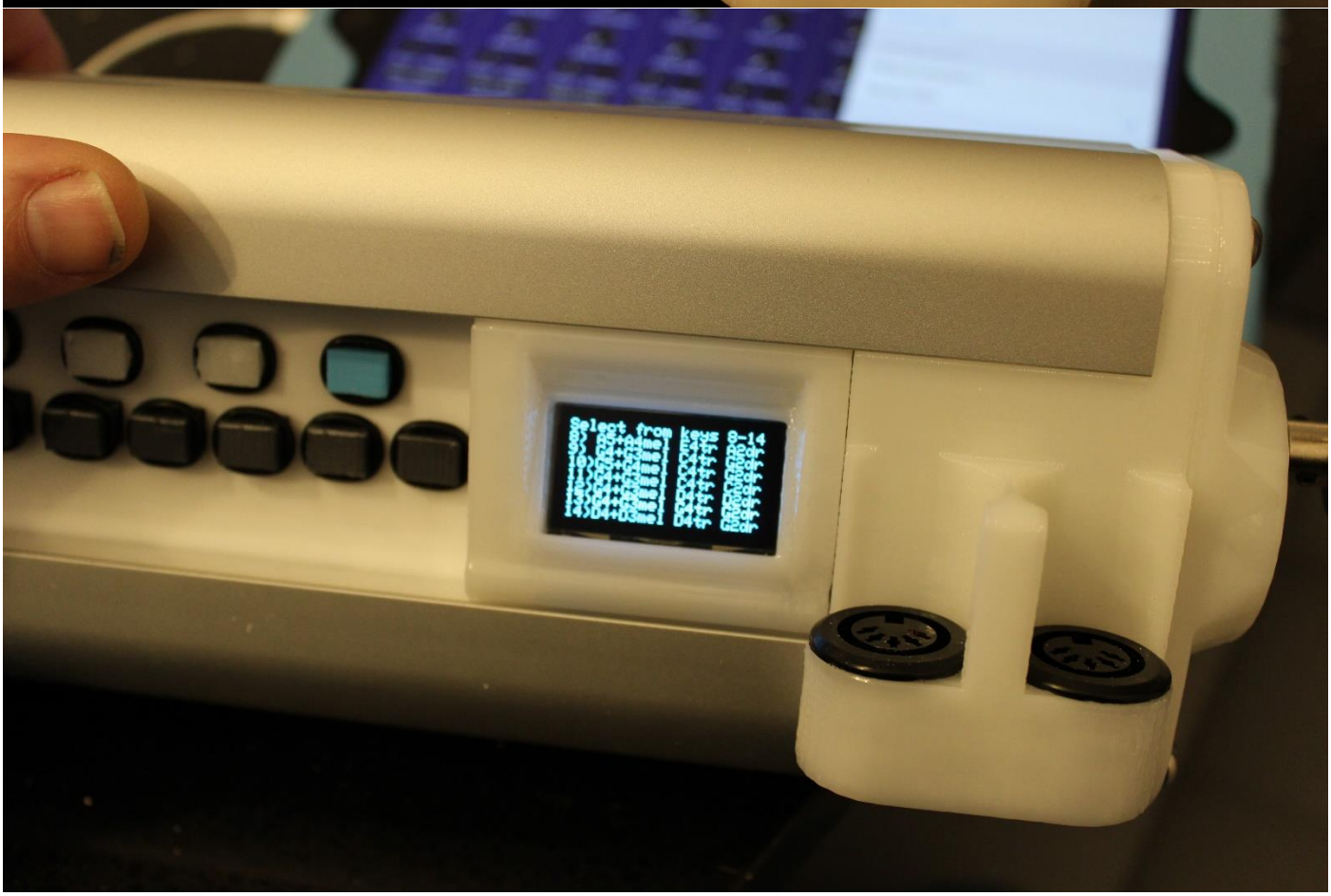
Notice how the latest versions of the software offer you the option to keep your last-used settings (Version 111 and above).

Bs-16i also remembers your last used settings and so this means you can now get up and running very quickly when you want to practice.

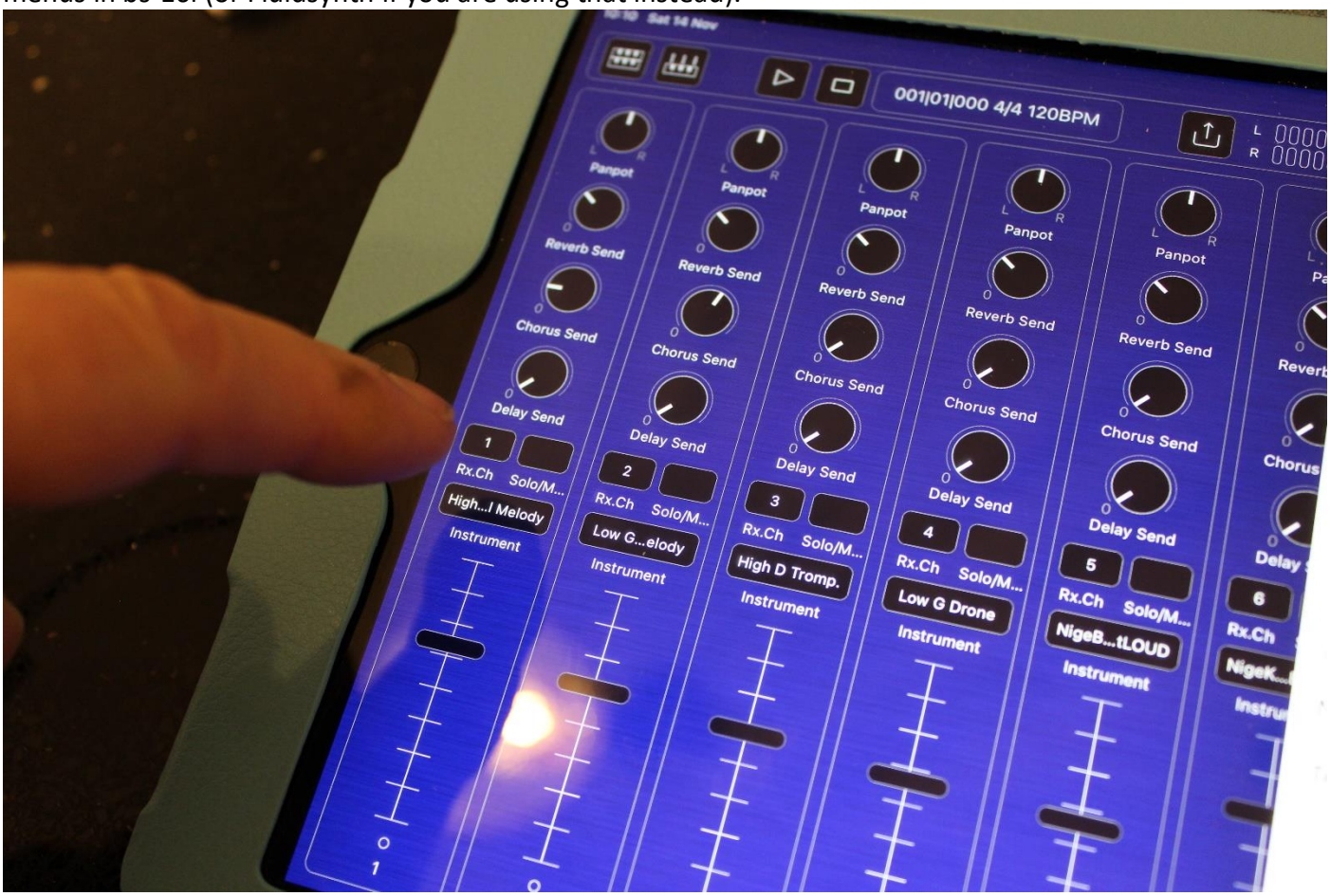
Notice how you can also set the previous display style with note names and positions on a stave but also you can now use a Do Re Mi type of display which some people prefer.

There are now 14 possible tuning combinations with 2 melody strings, split over 2 screens. As above, once set up your DG will remember your last-used tuning setup to save time.

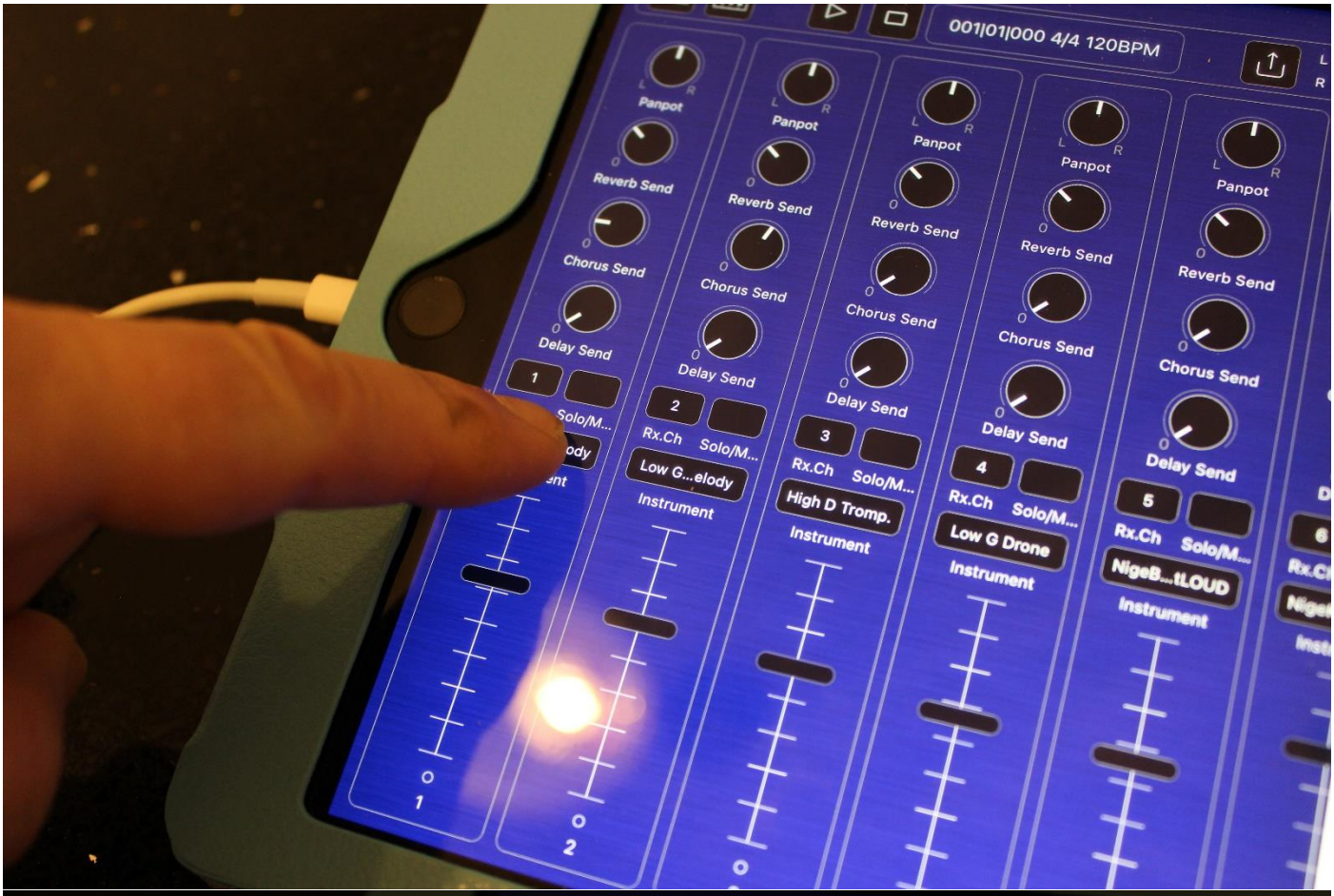
DarkBlue key for more

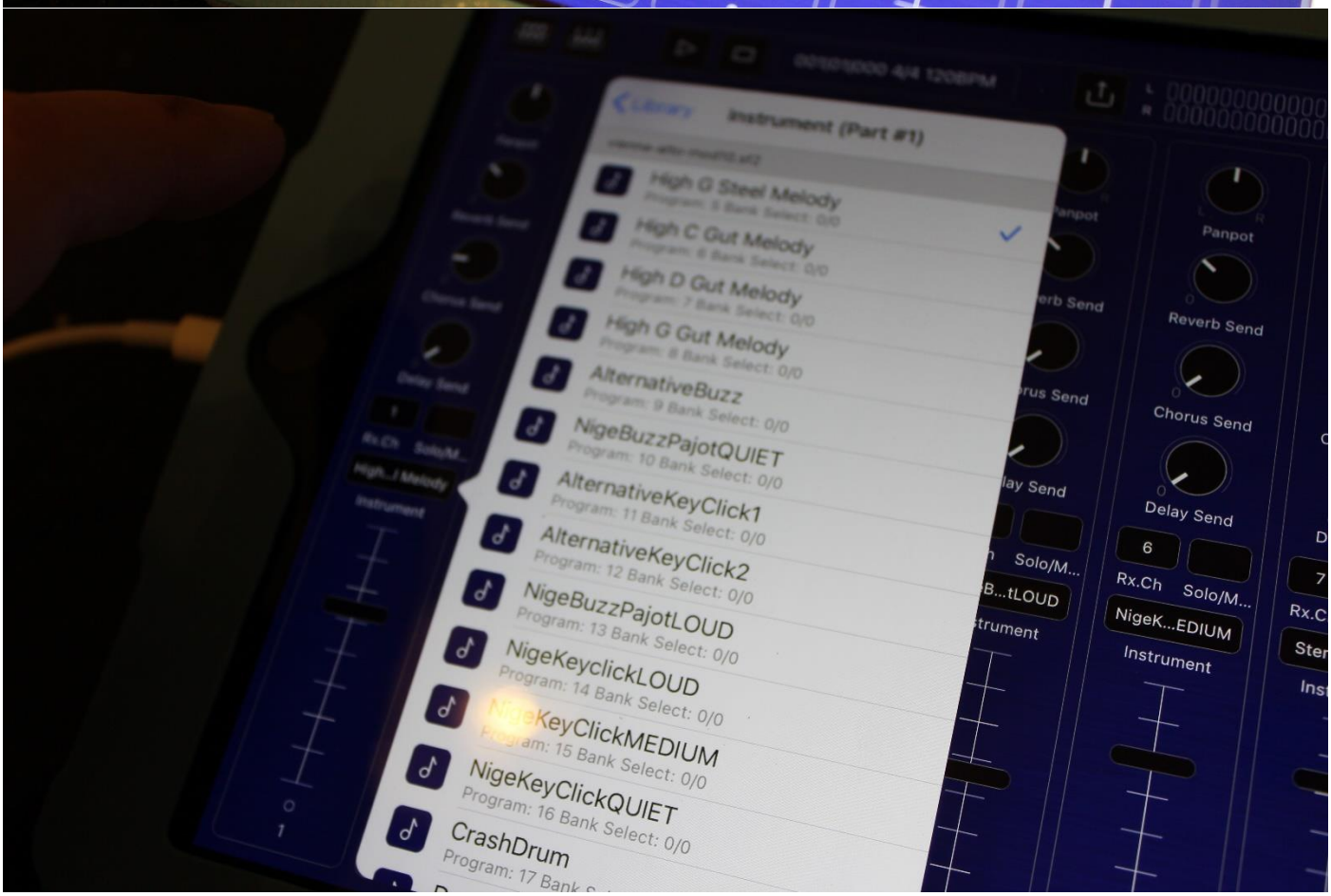

Select from keys 9-14

Once you have selected the tuning you want, it tells you what to select for each of the 6 channels, from the menus in bs-16i (or Fluidsynth if you are using that instead).

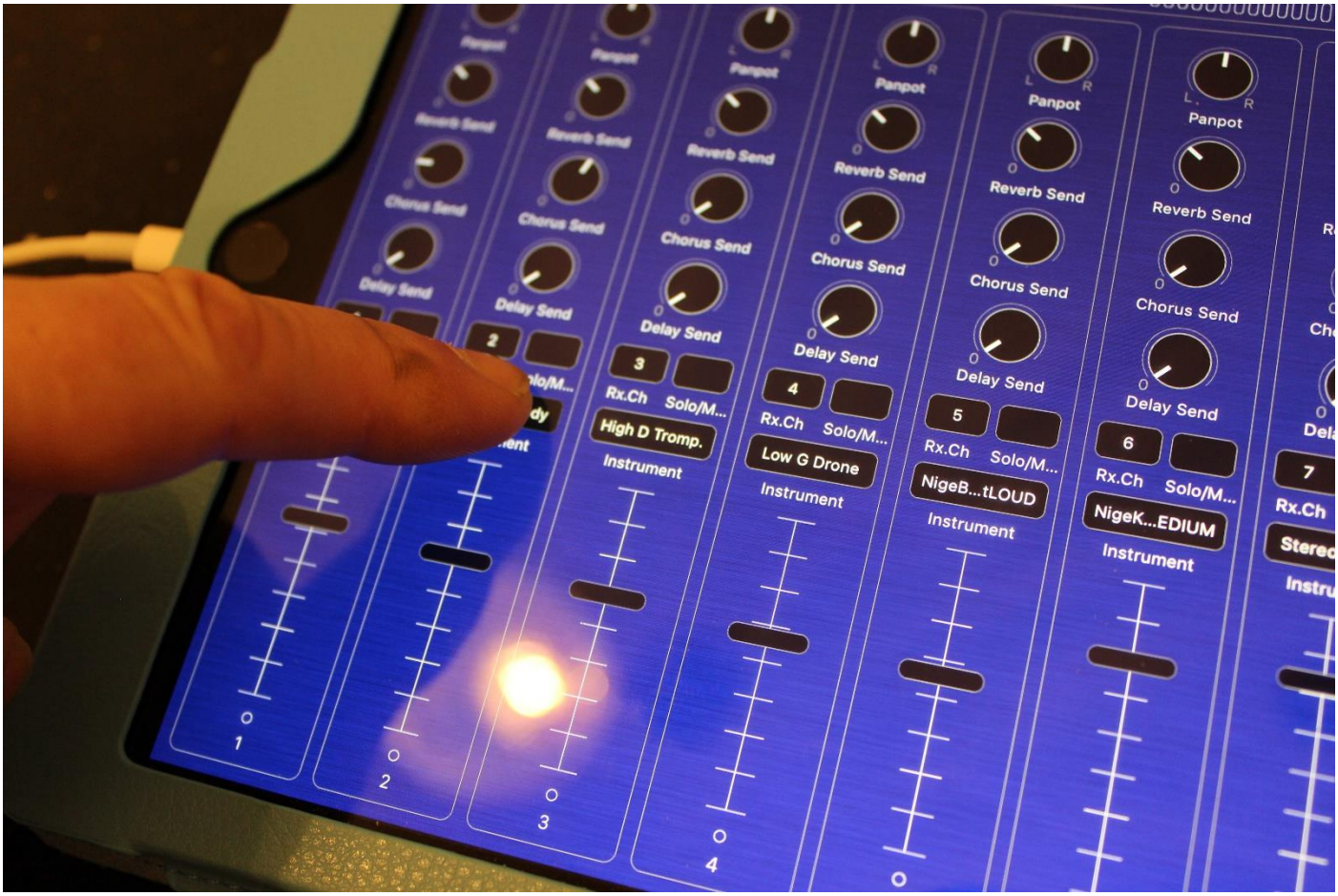


So here we are about to set up channel 1 in bs-16i

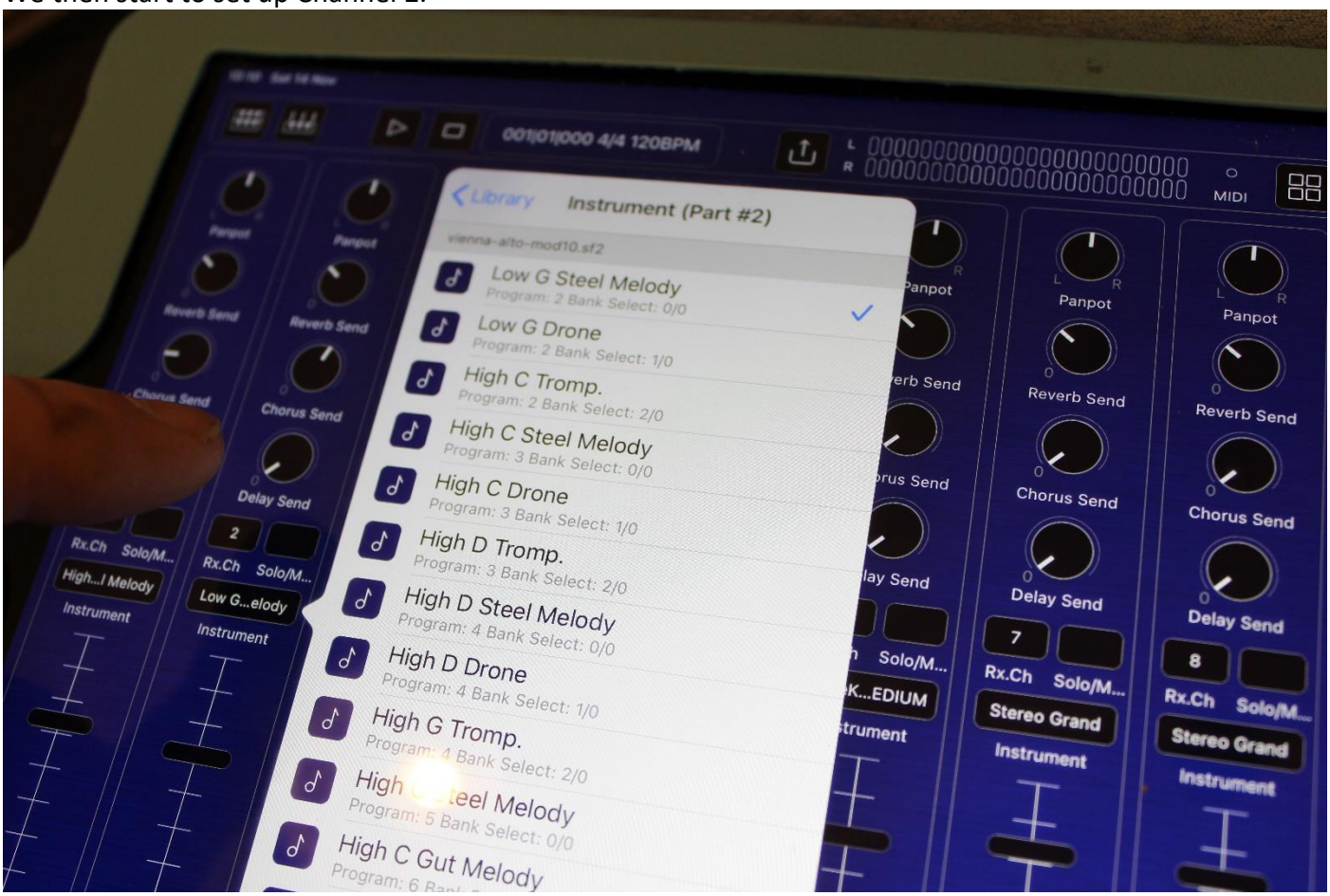




We set it to HIGH G STEEL MELODY.

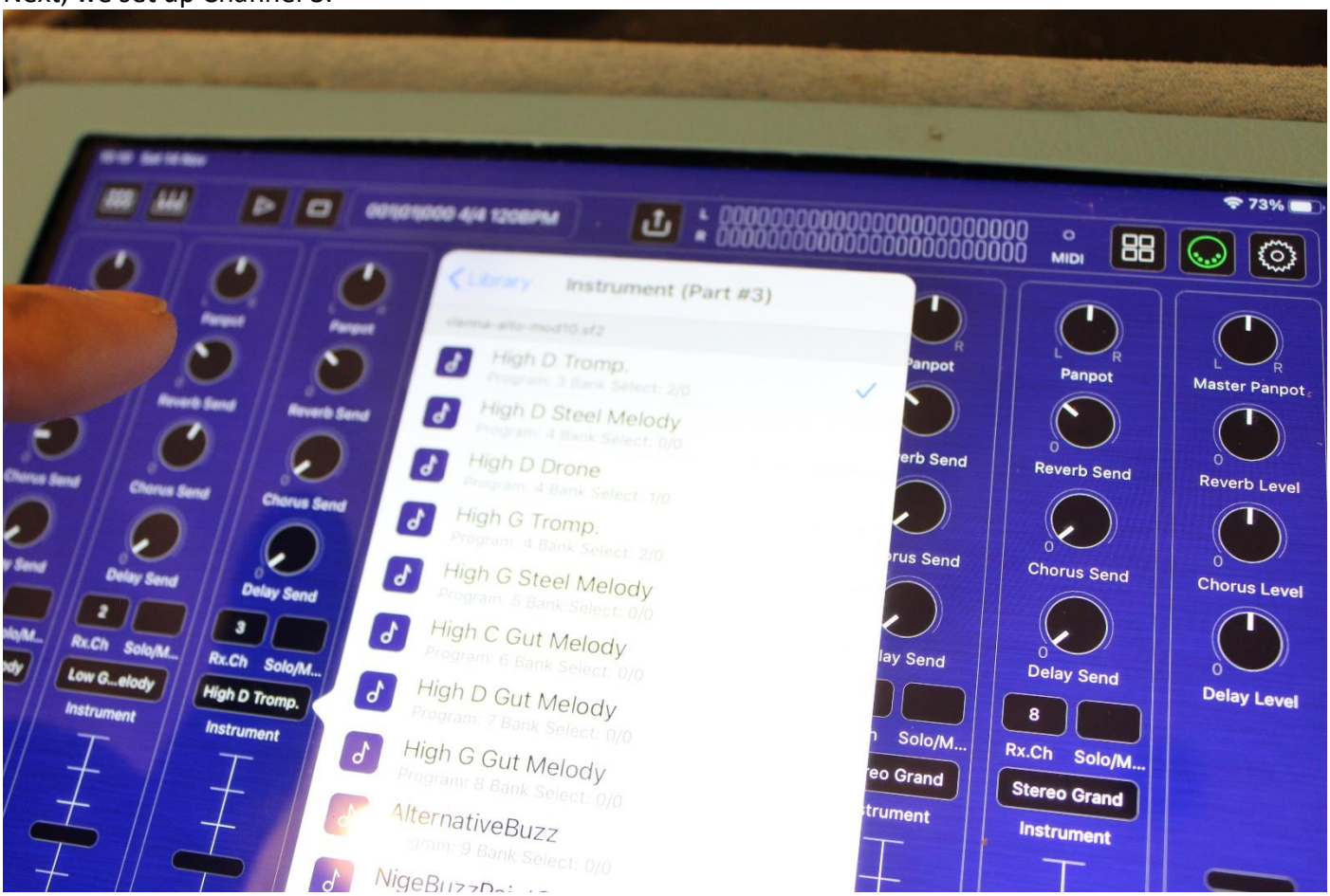


We then start to set up Channel 2.

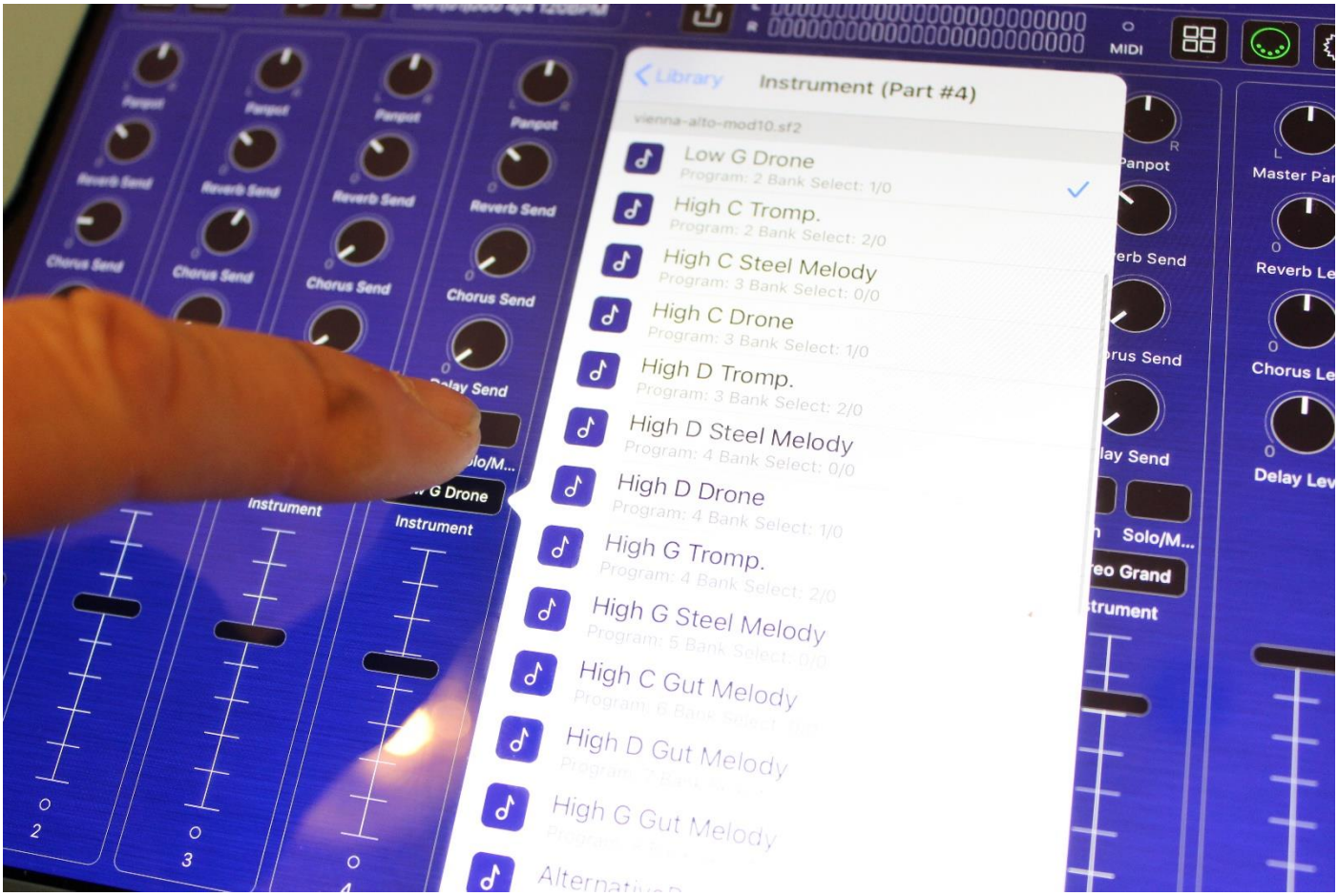


…….and set it to LOW G STEEL MELODY

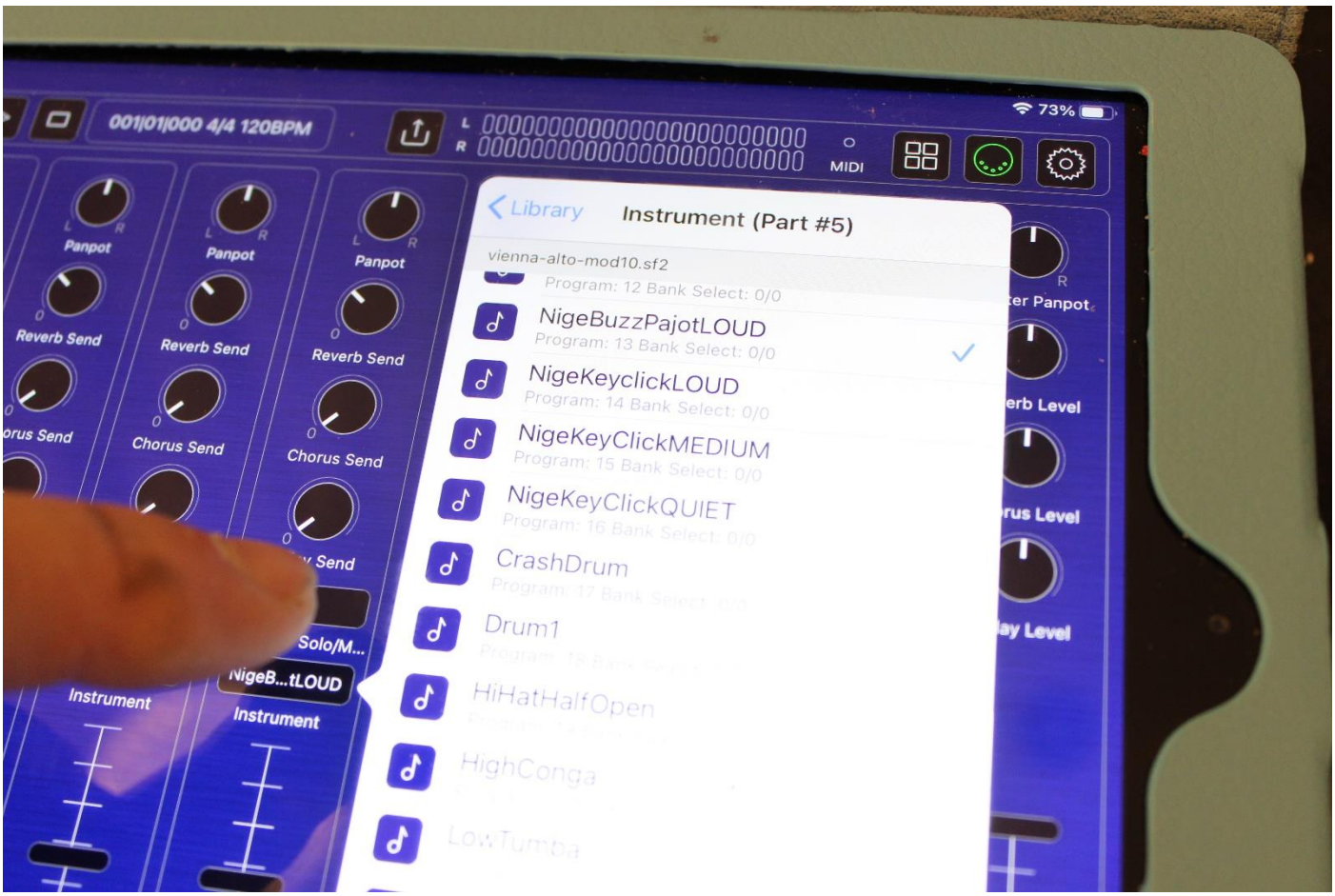
Next, we set up Channel 3.



……to HIGH D TROMPETTE



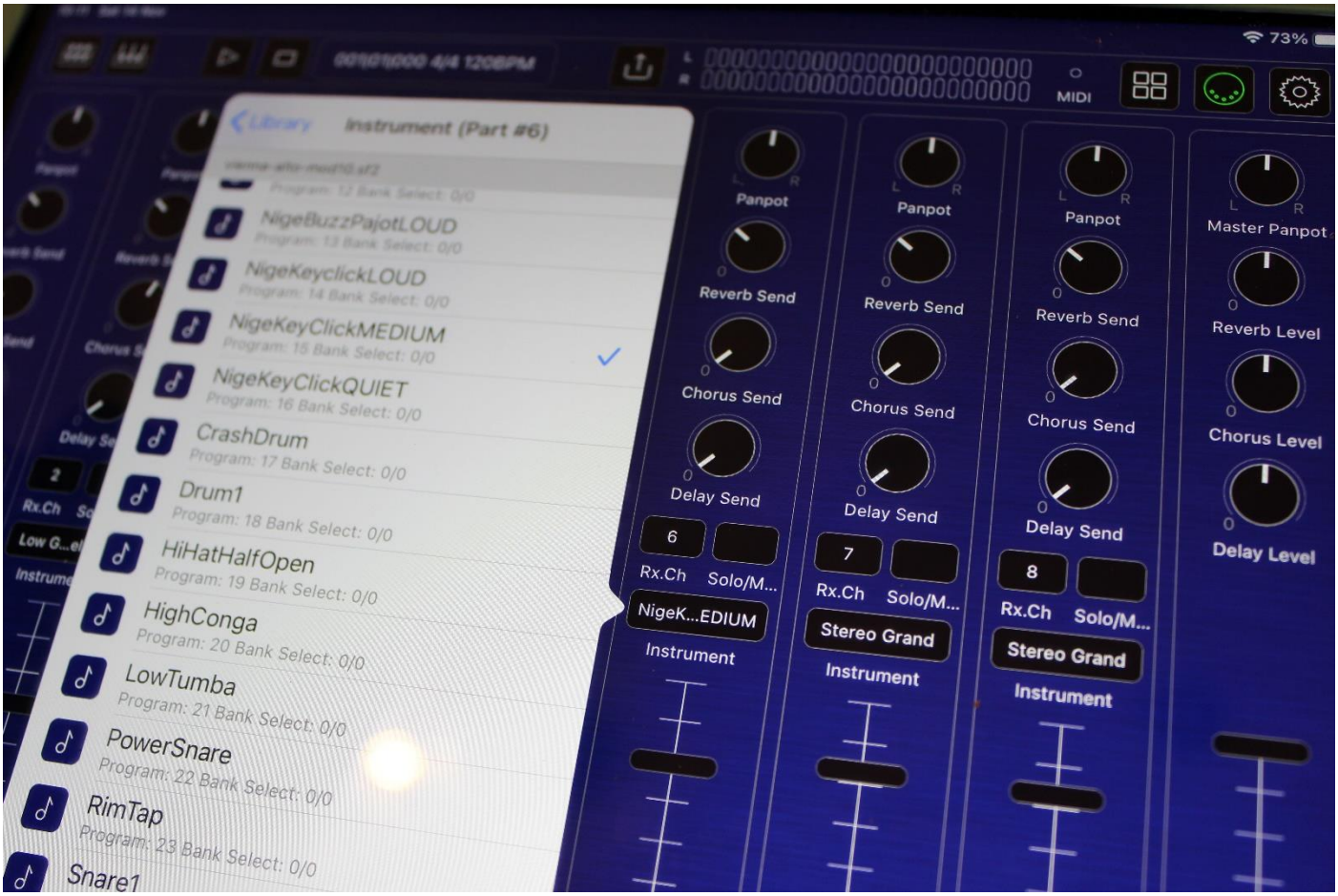
We set Channel 4 to LOW G DRONE



We set Channel 5 to the crank buzz sound which in this case is NigeBuzzPajotLOUD

Finally we set Channel 6 to the keyclick sound we want which in this case is NigeKeyclickMEDIUM.

Note, in bs-16i you have sliders to adjust the volume of each channel later on. However if FluidSynth on an Android phone, you do not have these volume controls so you crudely select the volume from the soundfonts where I also offer for example NigeKeyclickQUIET if you want a quieter keyclick sound.



Here we have selected NigeKeyclickMEDIUM.

DRONES ON/OFF?
Dark Blue Key: OFF
Light Blue Key: ON

Crank
on!

Here, we have

i) Plugged in the Yamaha Bluetooth MIDI module. Only the left half, which transmits MIDI data to the iPad, is doing anything. The right hand part, the receiver side, is not used and the socket on the right is there merely to give you somewhere to put it to keep everything neat and tidy.

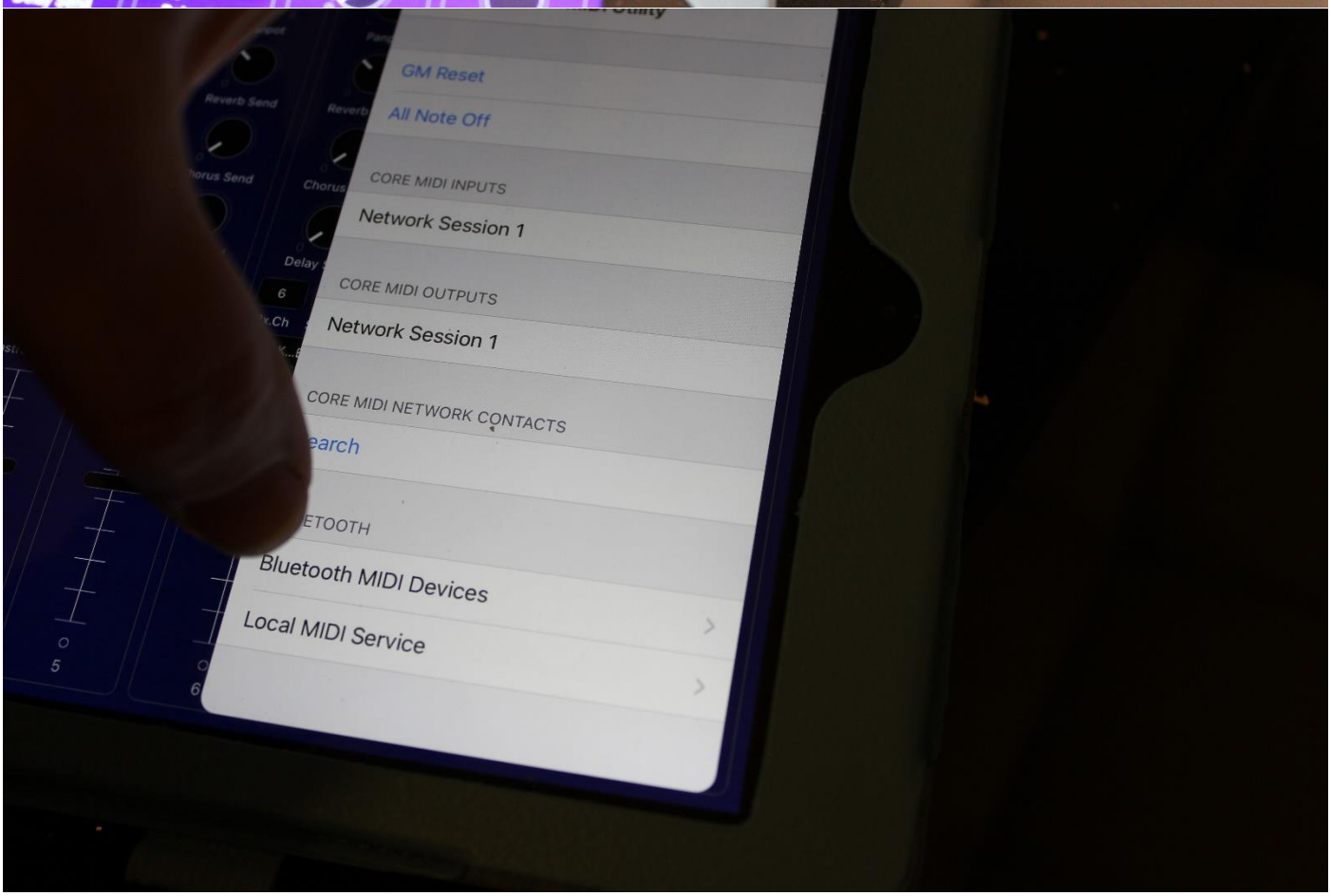
ii) We will also have plugged the white USB male plug at left hand end of the DG into a power source. This could be the built in cylindrical phone power bank provided in the Bluetooth MIDI versions of the DGurdy design, drawing power from the 18650 rechargeable battery you have bought and inserted into the power bank.

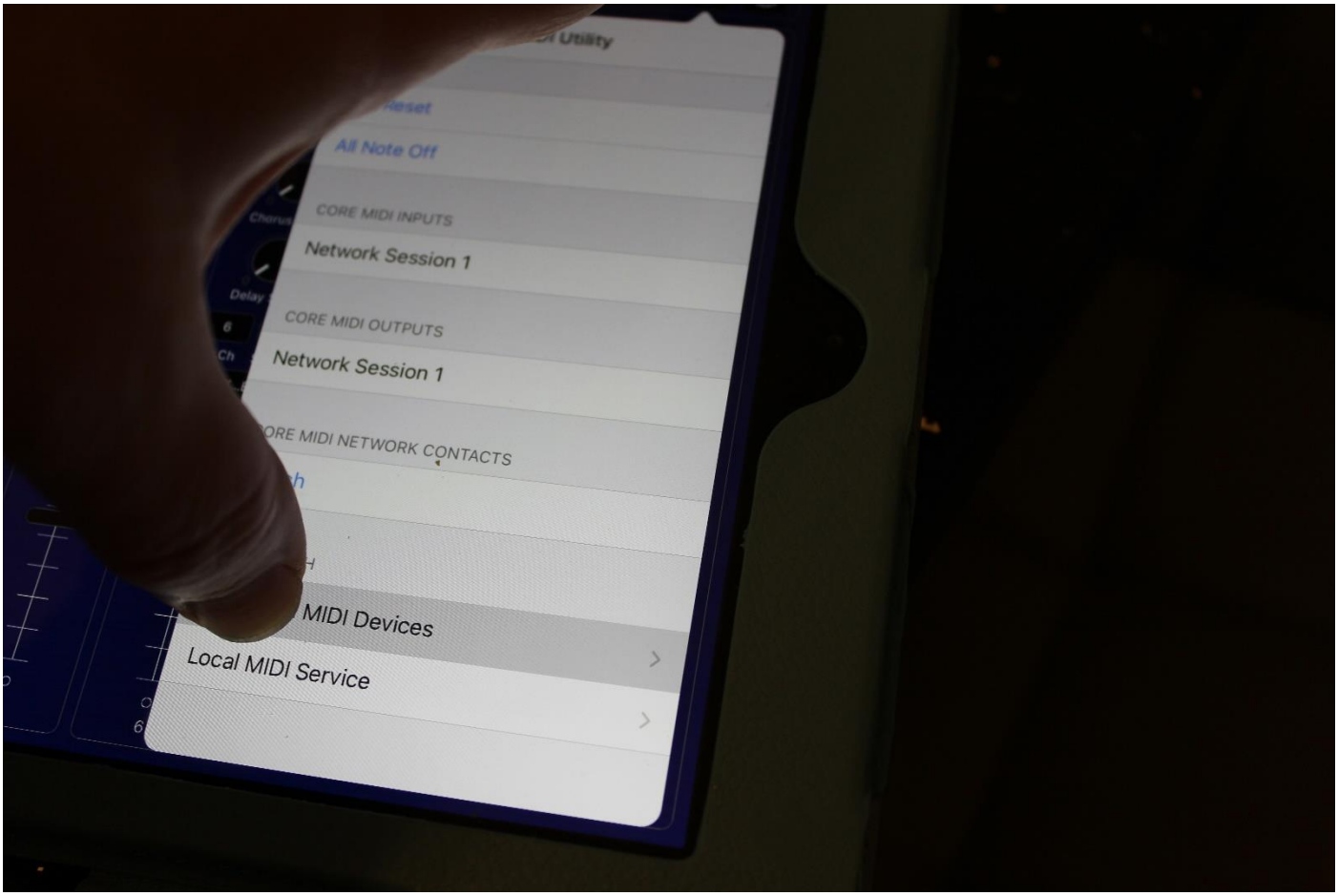
SETTINGS ARE:
Tuning: 1
Display: Notes
Drones: ON

SETTINGS ARE:
Tuning: 1
Display: Notes
Drones: ON

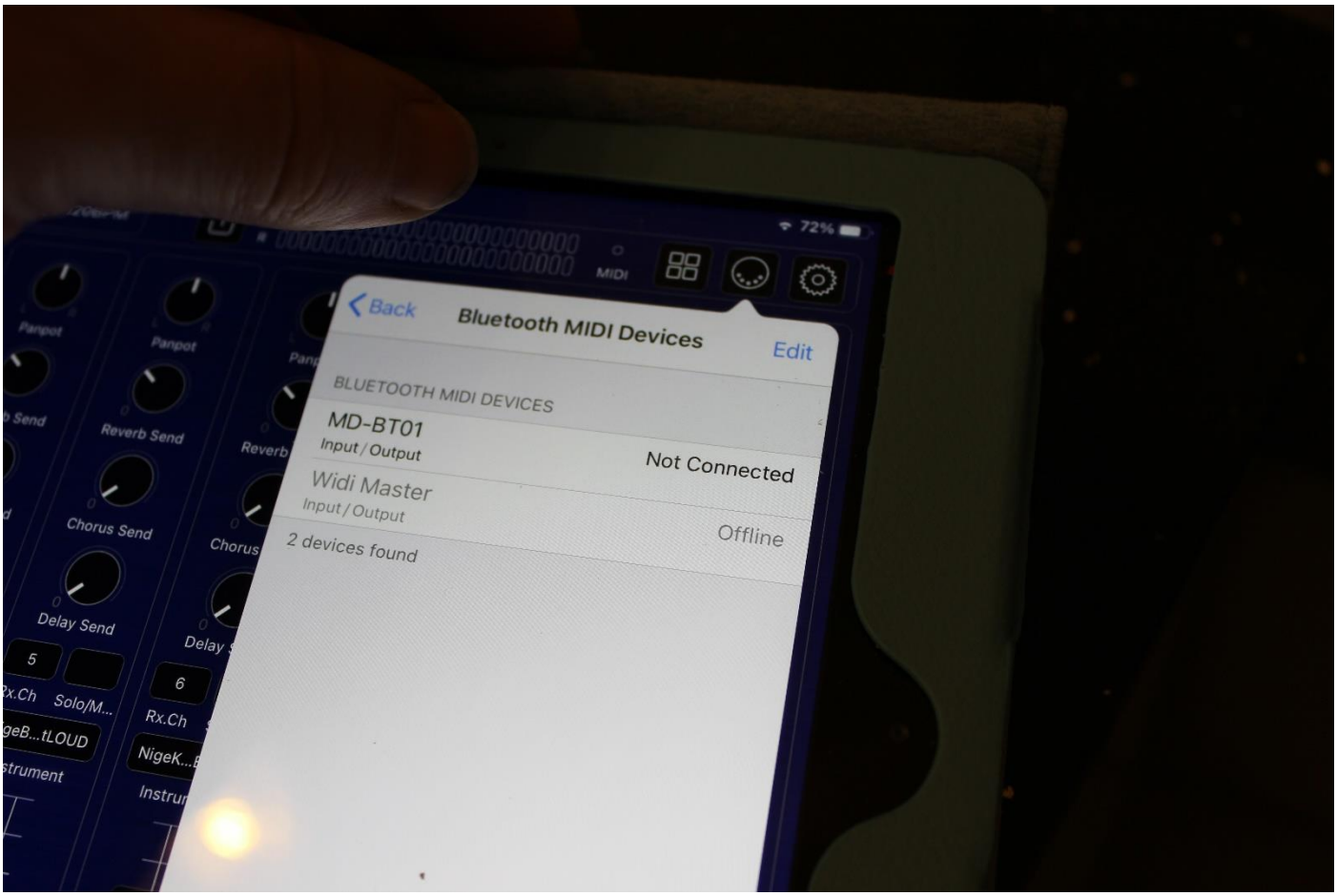
So, we need to go into MIDI settings so we can tell the iPad that the MIDI data is now not coming in via a USB cable but now is coming in wirelessly by Bluetooth.

Panpot
Reverb Send
Chorus Send
Master Panpot
Reverb Level
Chorus Level

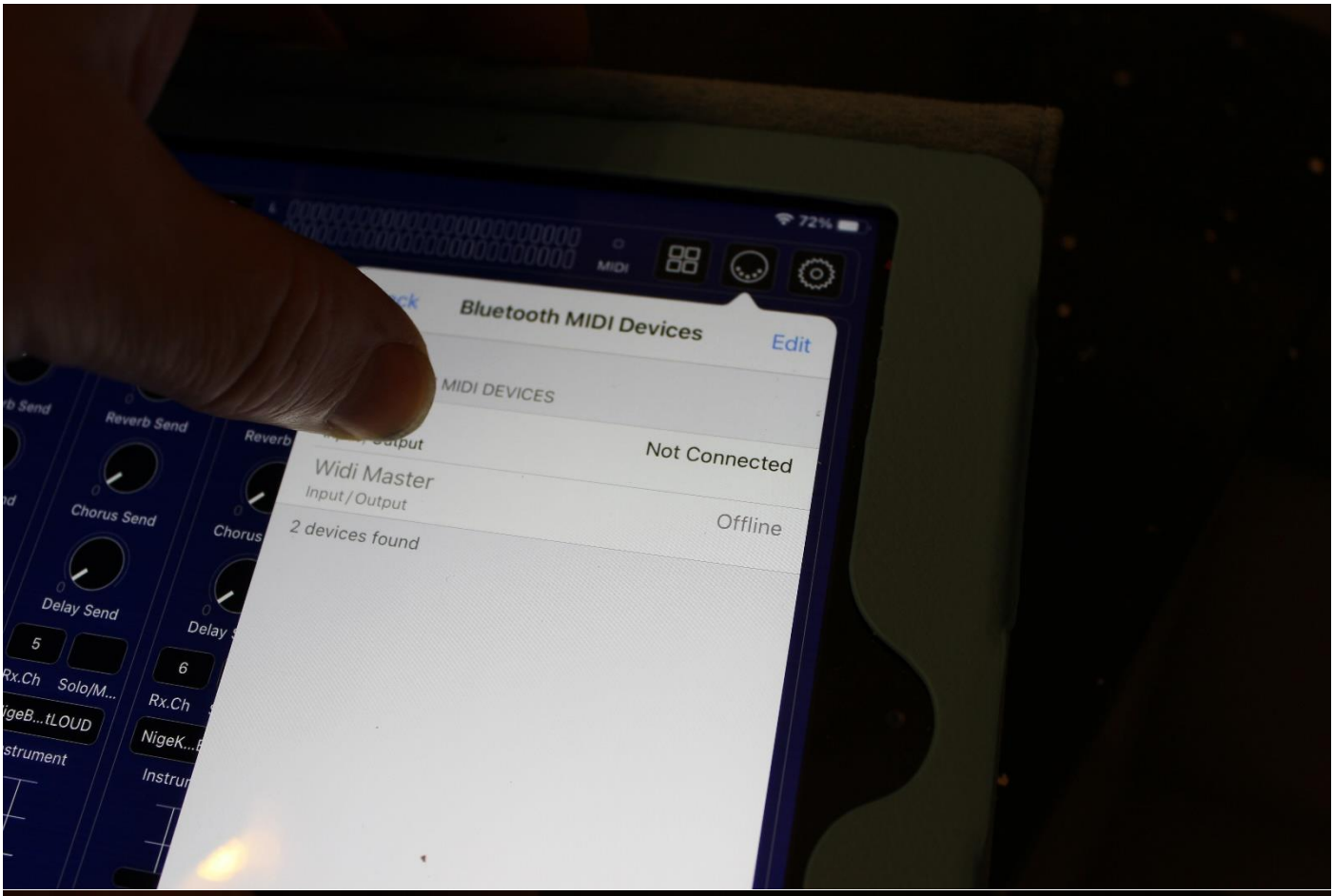

GM Reset
All Note Off
CORE MIDI INPUTS
Network Session 1
CORE MIDI OUTPUTS
Network Session 1
CORE MIDI NETWORK CONTACTS
Bluetooth MIDI Devices
Local MIDI Service

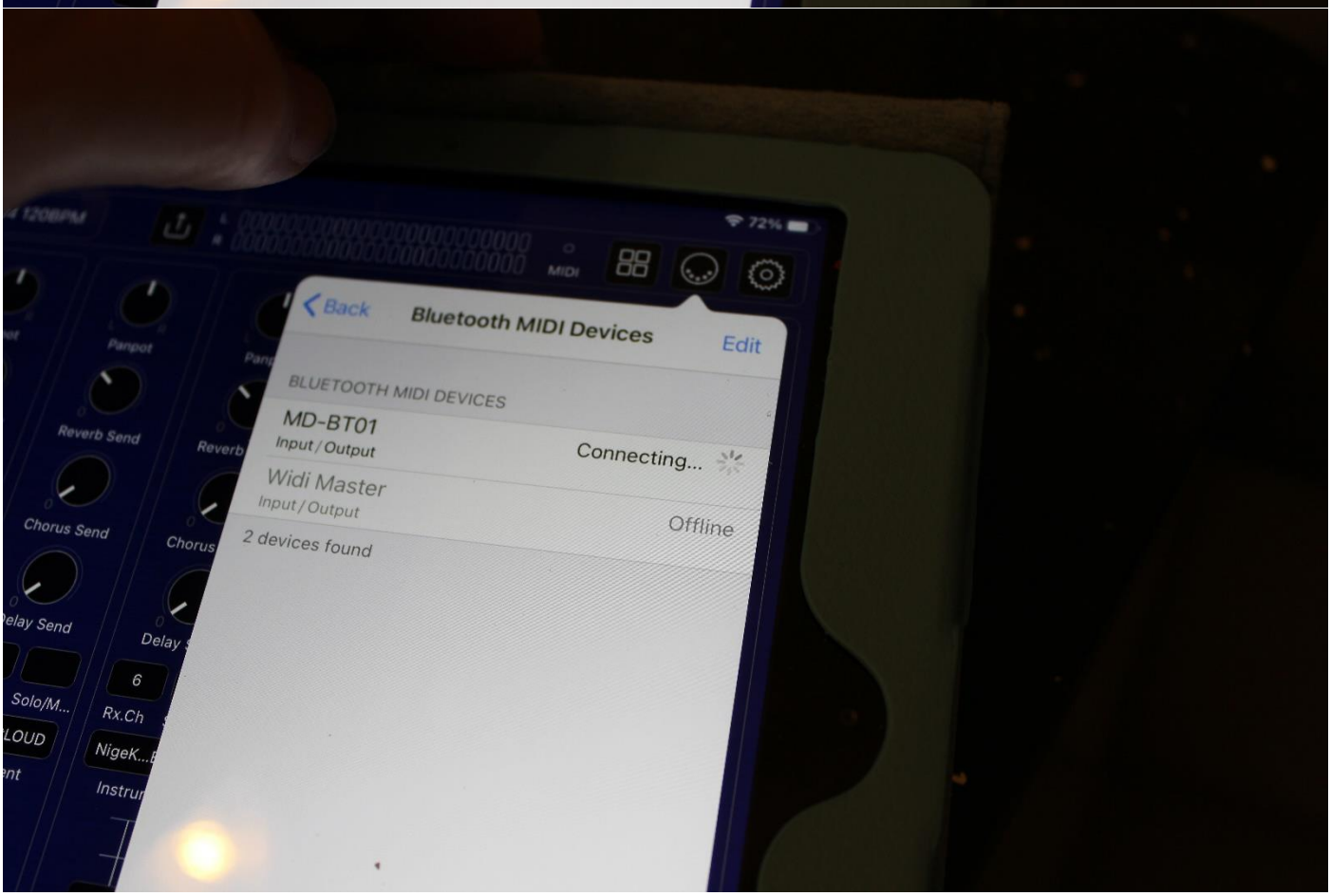


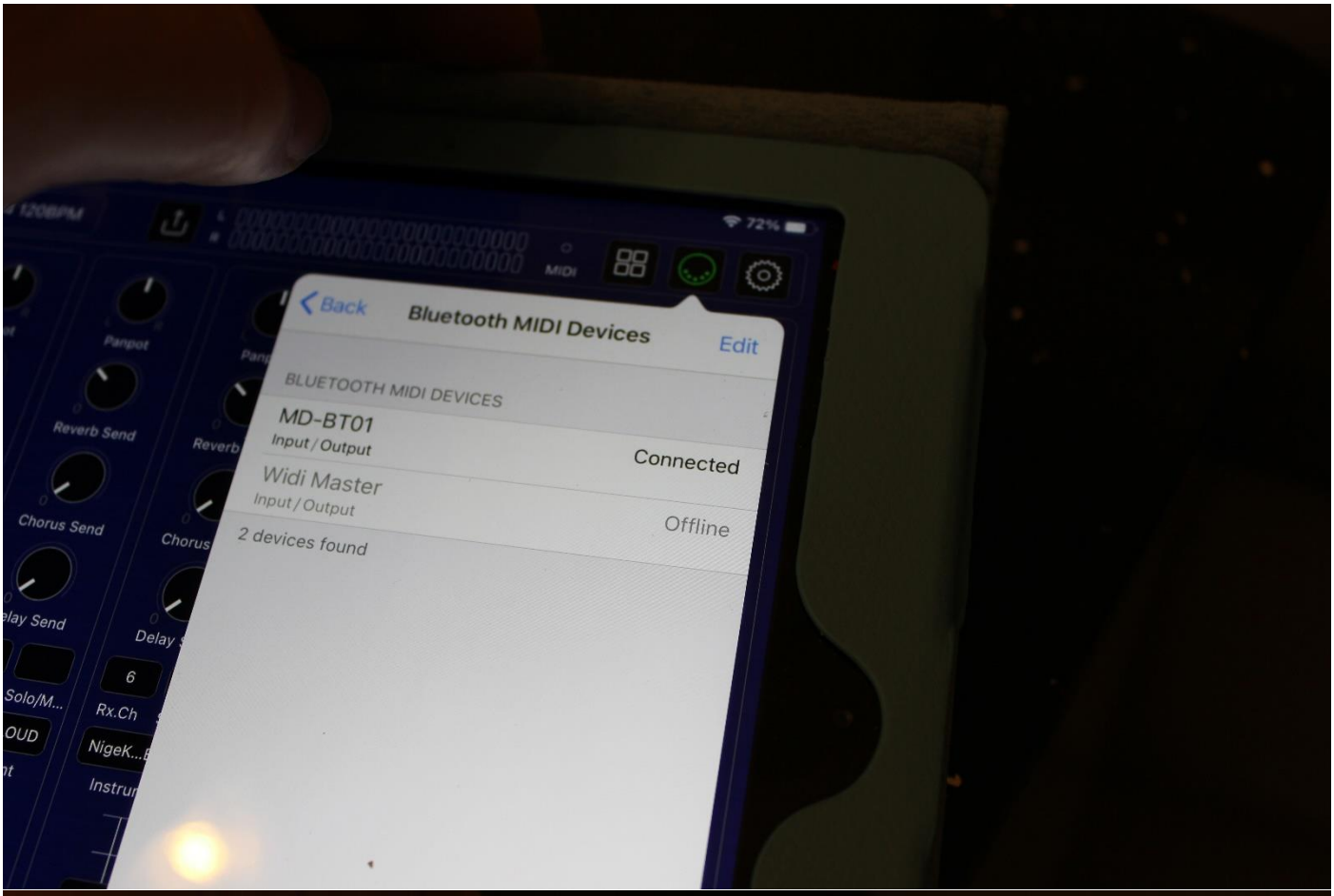
You want it to search for Bluetooth MIDI devices. When it finds the Yamaha MIDI device you want to select that from the menu.

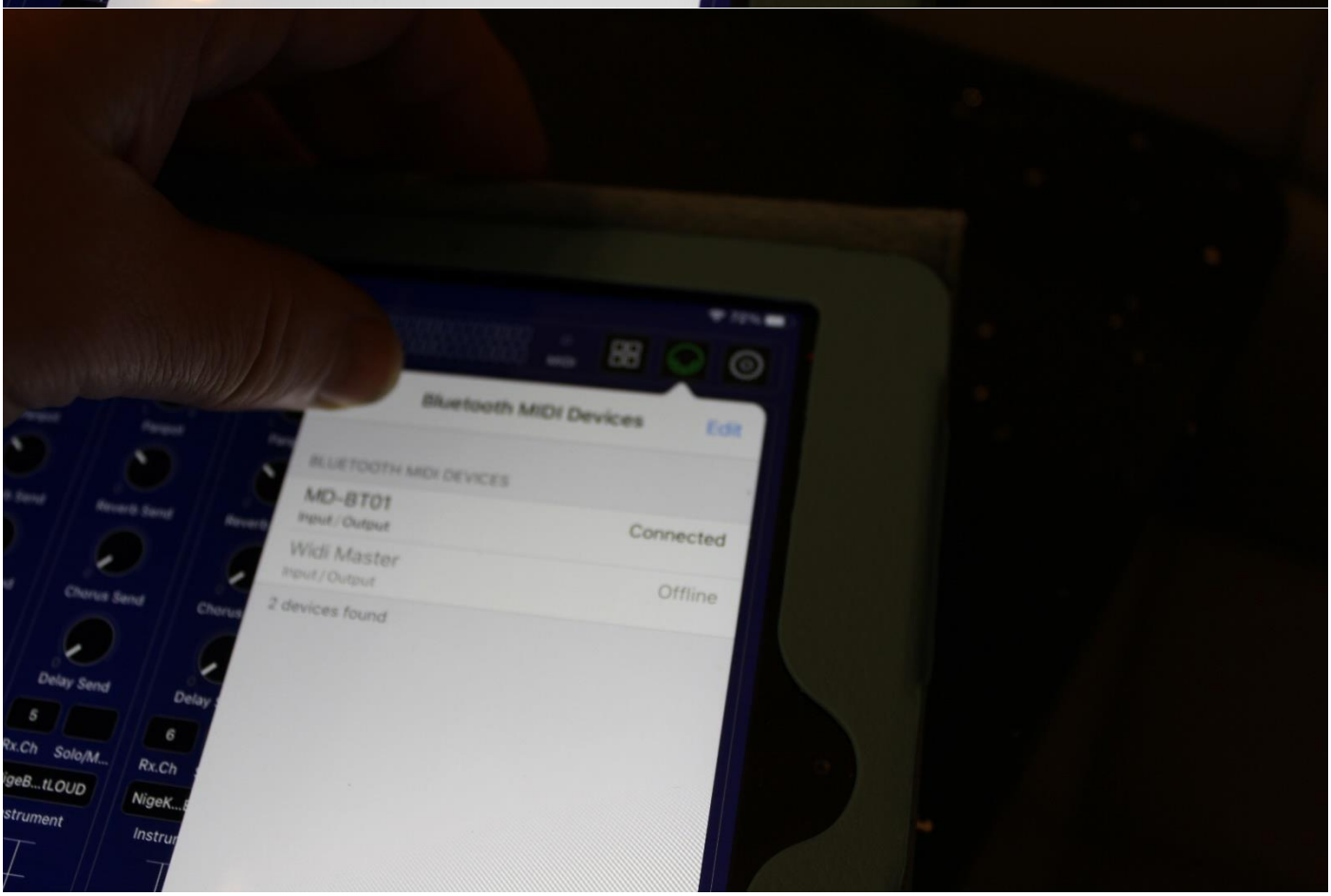


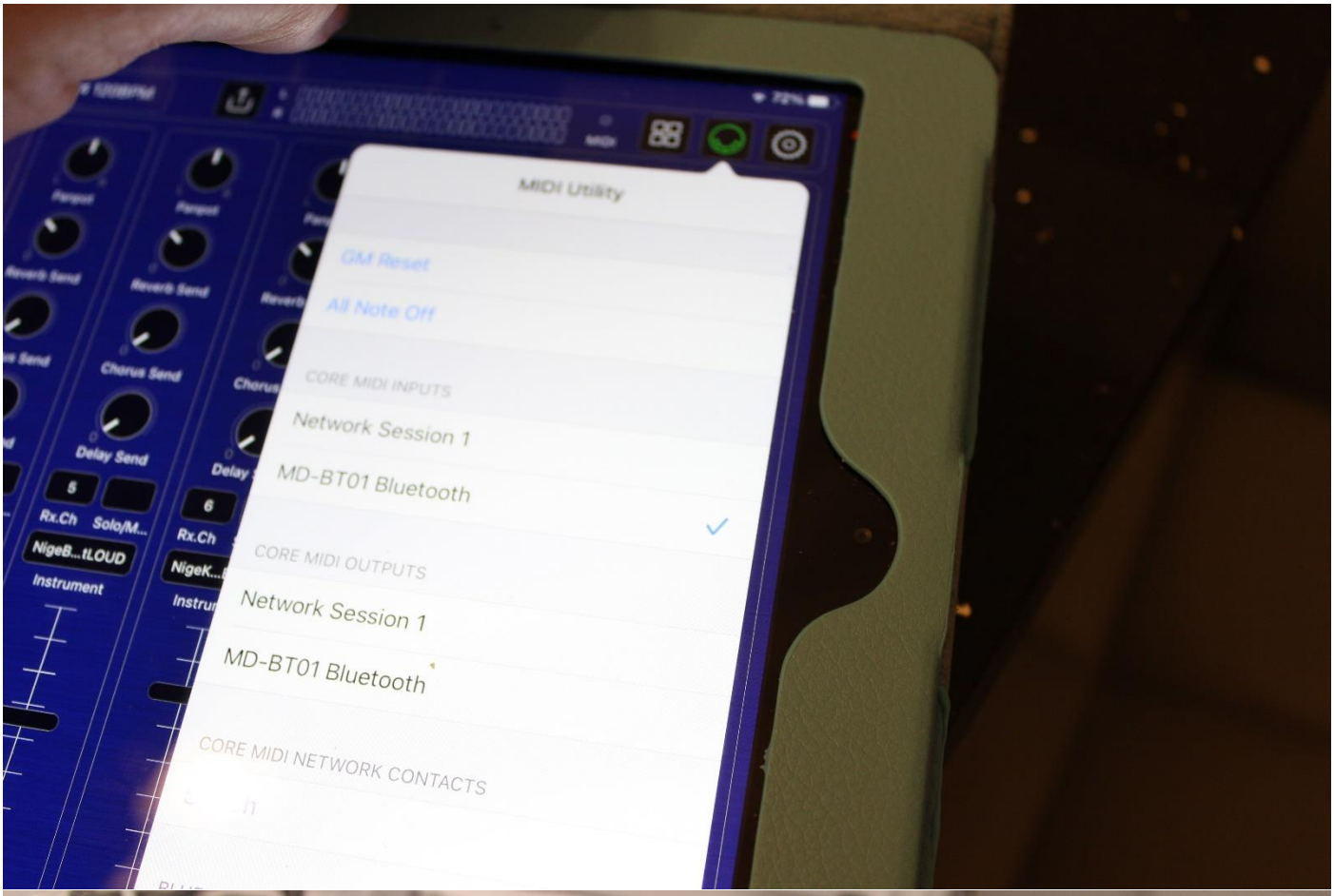
NOTE: I have previously connected the iPad to a device that is cheaper than the Yamaha MIDI device called a WIDI Master. The WIDI Master seems to work OK with the iPad but I had trouble using it with FluidSynth on an Android phone. So for iPad – it is OK, for Android Phone – perhaps use the Yamaha if you want to use Bluetooth MIDI.

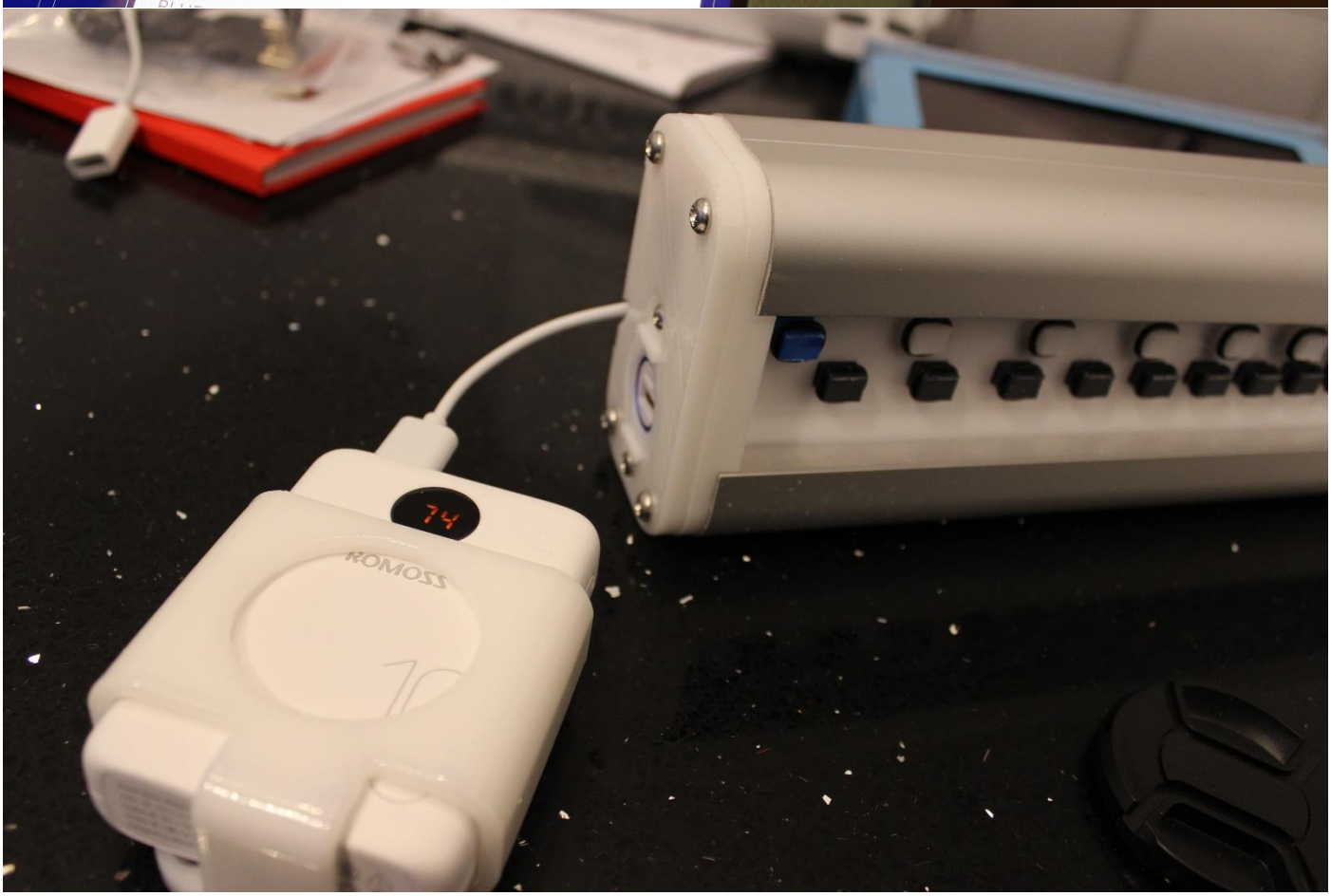

Bluetooth MIDI Devices
Edit
MIDI DEVICES
Not Connected
Widi Master
Input / Output
Offline
2 devices found


Back
Bluetooth MIDI Devices
Edit
BLUETOOTH MIDI DEVICES
MD-BT01
Input / Output
Connecting...
Widi Master
Input / Output
Offline
2 devices found


Back
Bluetooth MIDI Devices
Edit
BLUETOOTH MIDI DEVICES
MD-BT01
Input / Output
Connected
Widi Master
Input / Output
Offline
2 devices found

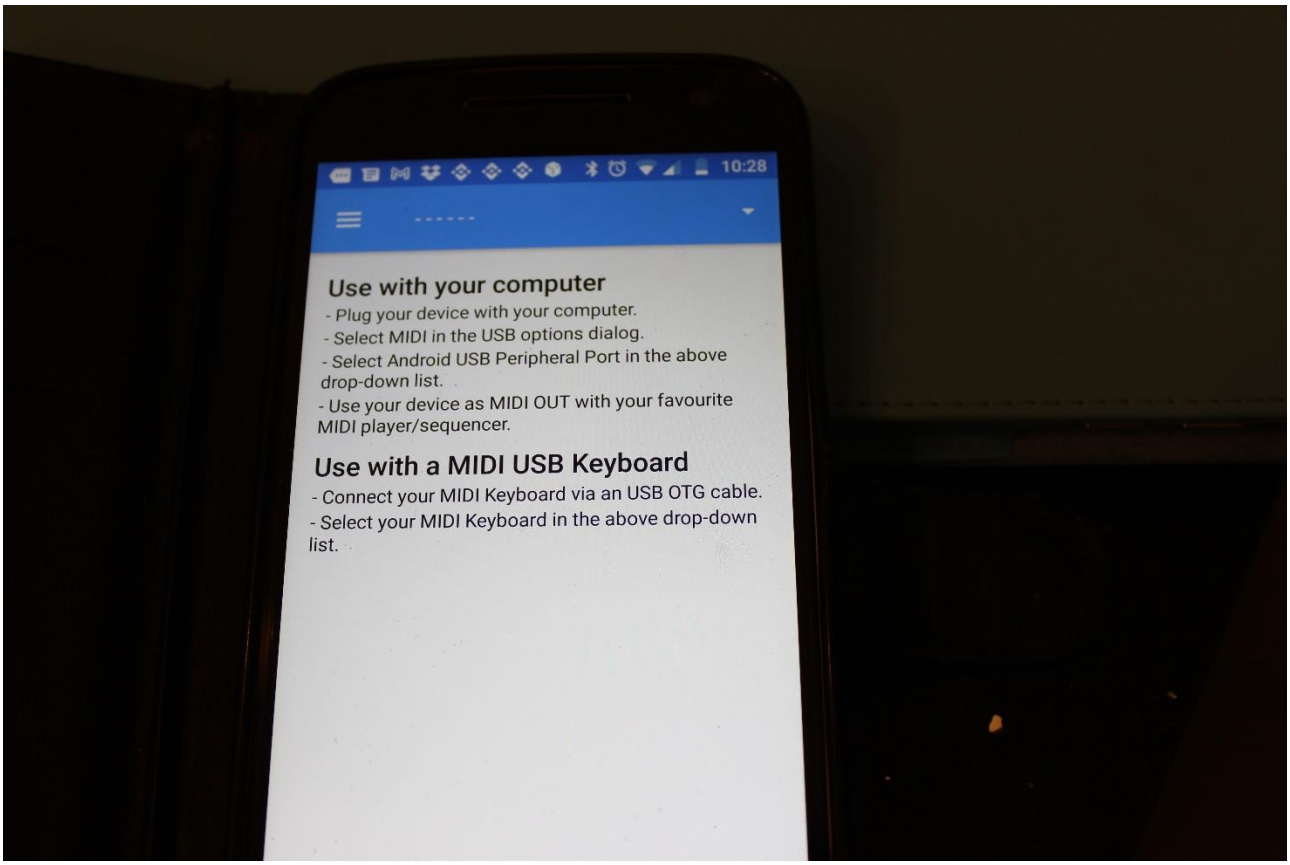

Bluetooth MIDI Devices
Edit
BLUETOOTH MIDI DEVICES
MD-BT01
Input / Output
Connected
Widi Master
Input / Output
Offline
2 devices found



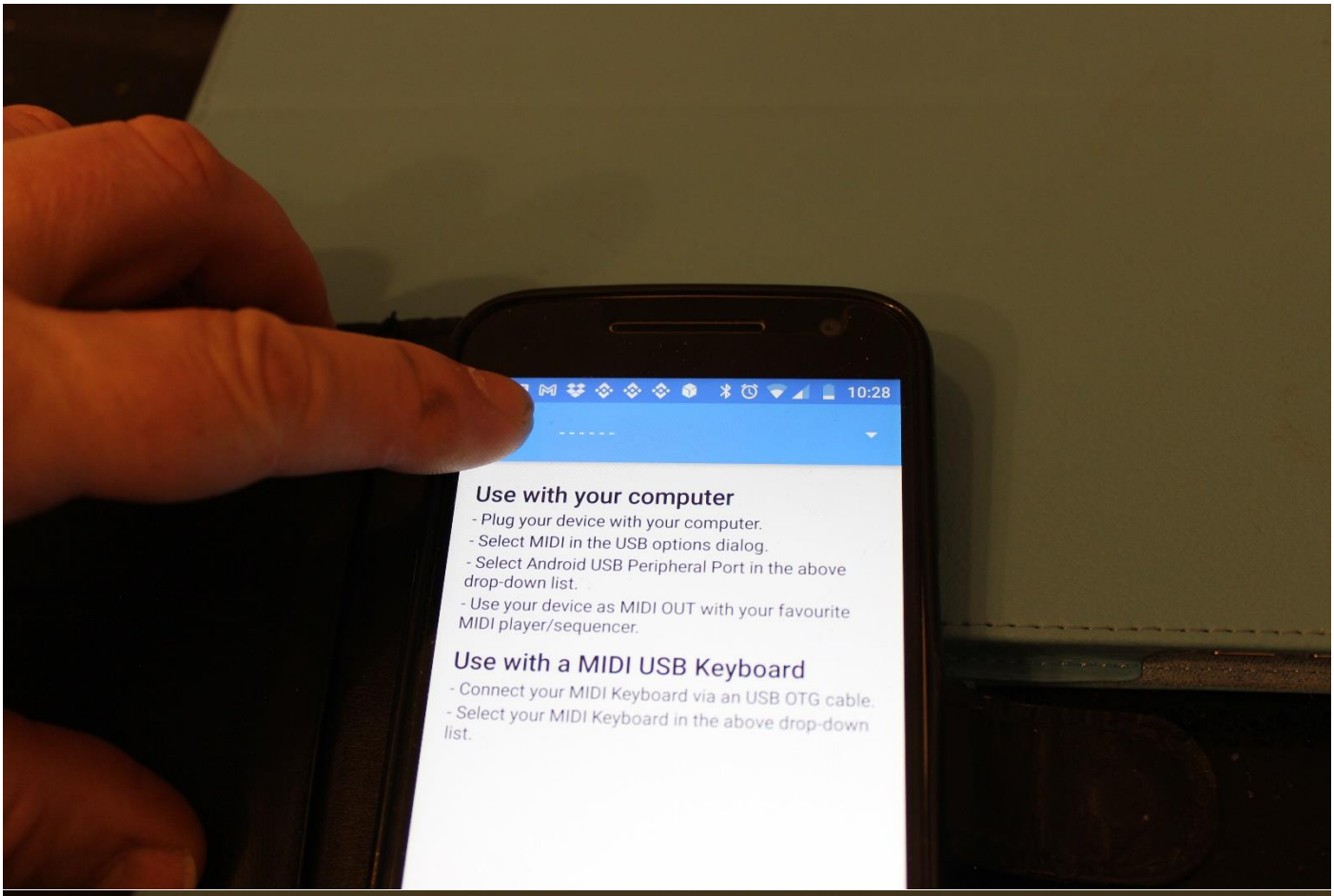


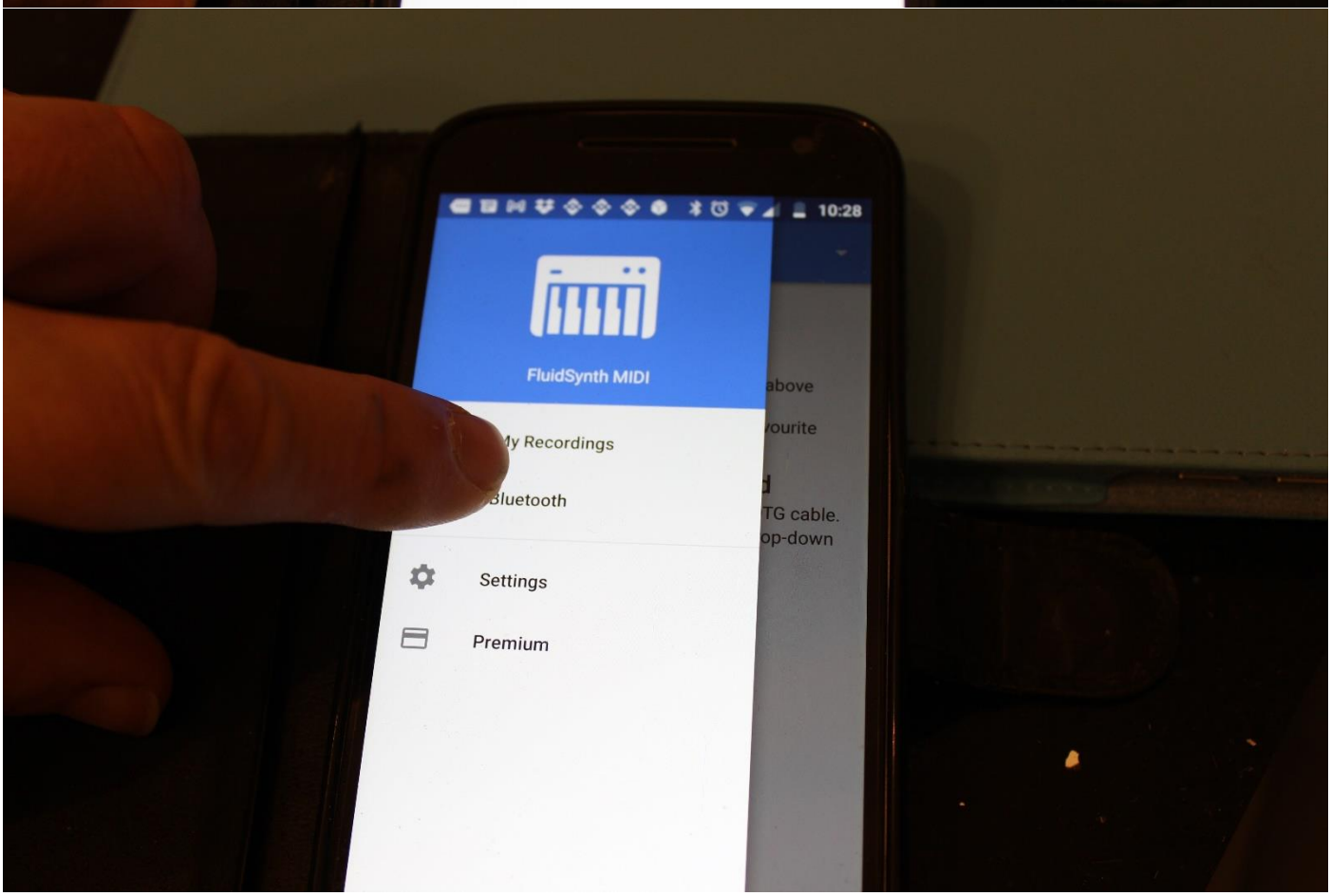
Here I am powering the DGurdy from a big phone power bank, however you can see I have provided a smaller one built into the left hand end of the DGurdy design, you just have to put a battery inside it called a 18650.

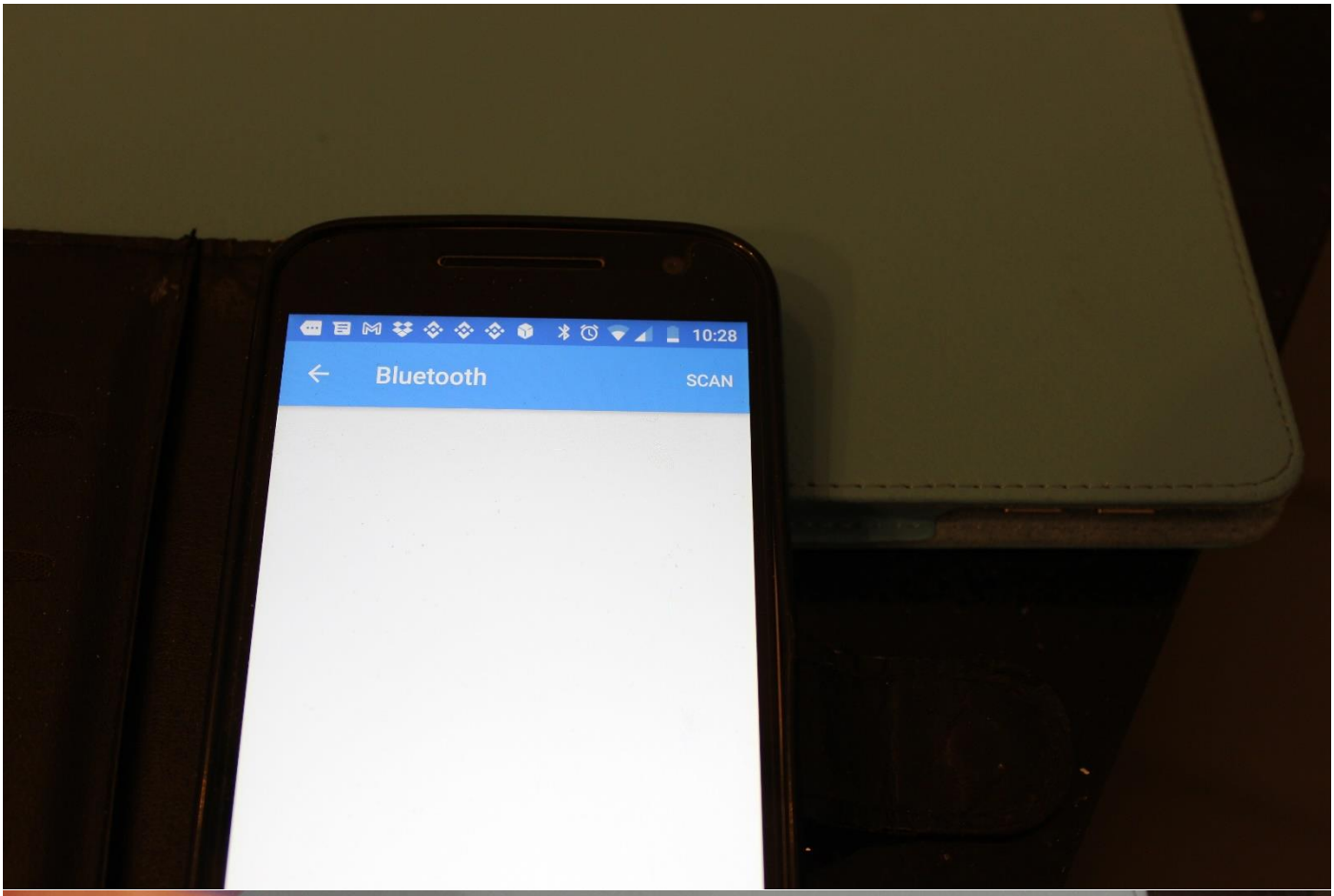
Note: The MIDI sockets for the Bluetooth devices such as the Yamaha are glued in. As the devices can be a tight fit in the socket, *support the black socket with your left thumb as shown* as you gently pull out the Yamaha or similar device.



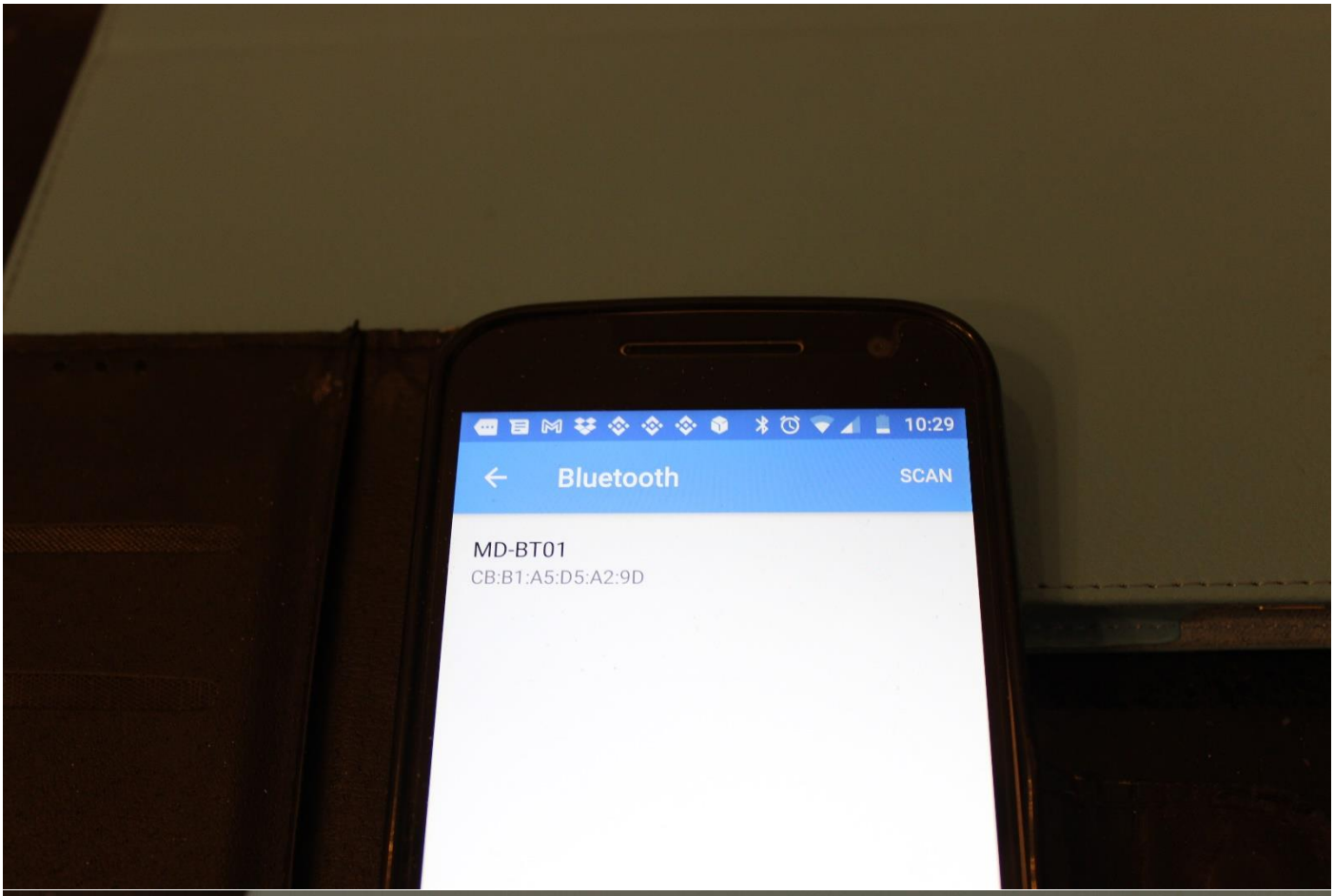
Here I am using FluyidSynth on a cheap Android phone and I am searching for the Yamaha Bluetooth MIDI device and will then try to get the phone to wirelessly connect with it.

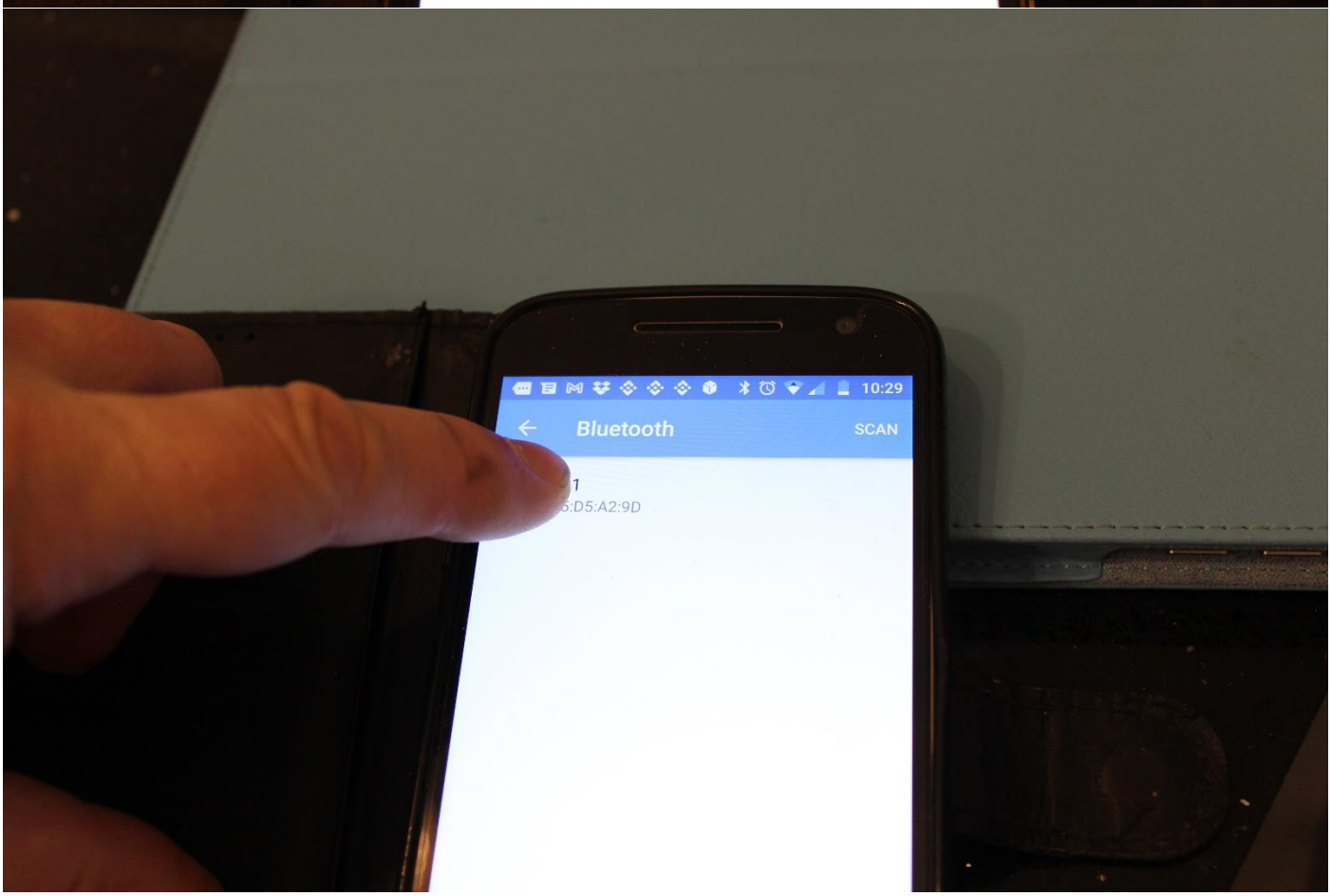

10:28
Use with your computer
- Plug your device with your computer.
- Select MIDI in the USB options dialog.
- Select Android USB Peripheral Port in the above drop-down list.
- Use your device as MIDI OUT with your favourite MIDI player/sequencer.
Use with a MIDI USB Keyboard
- Connect your MIDI Keyboard via an USB OTG cable.
- Select your MIDI Keyboard in the above drop-down list.

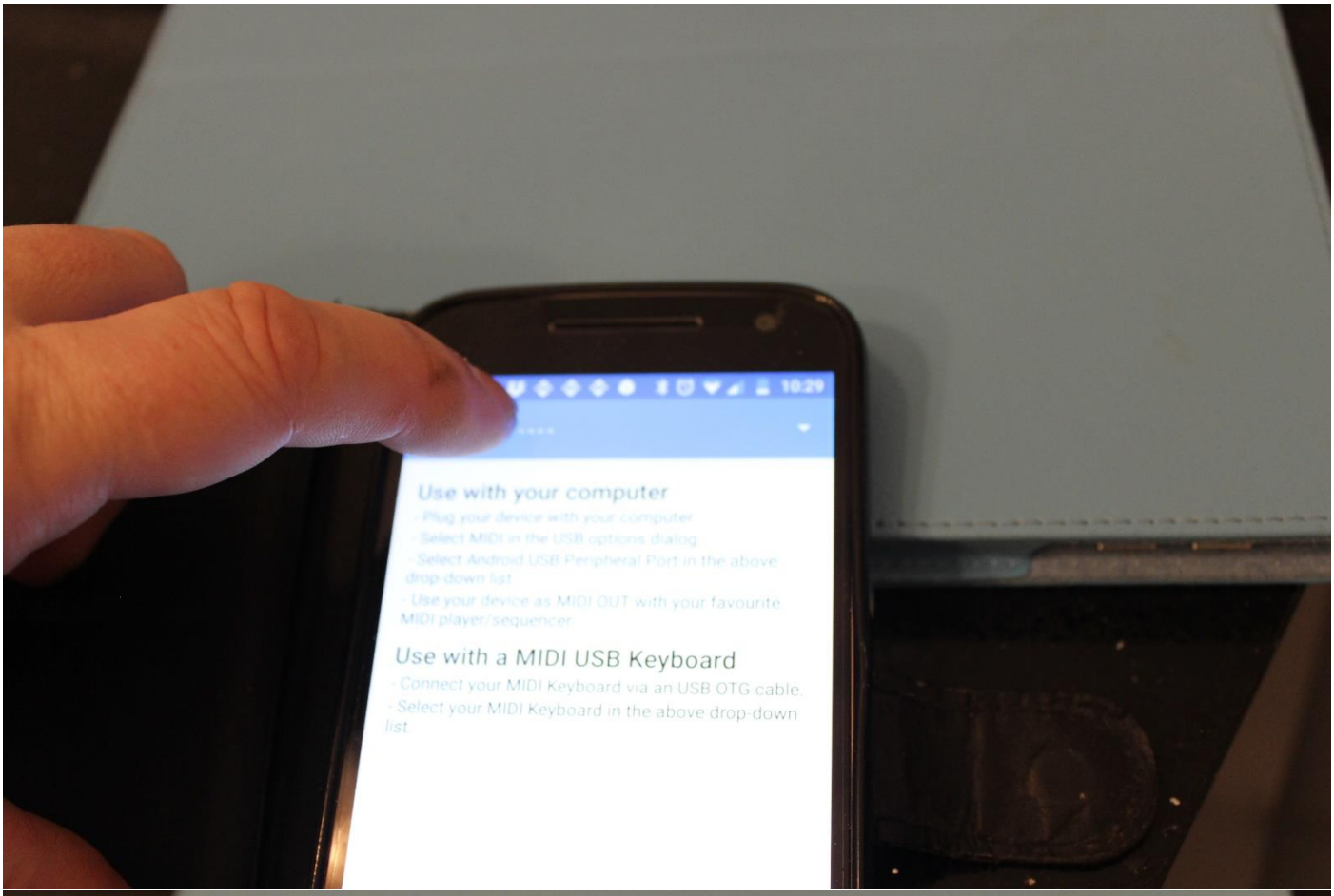

10:28
FluidSynth MIDI
My Recordings
Bluetooth
Settings
Premium

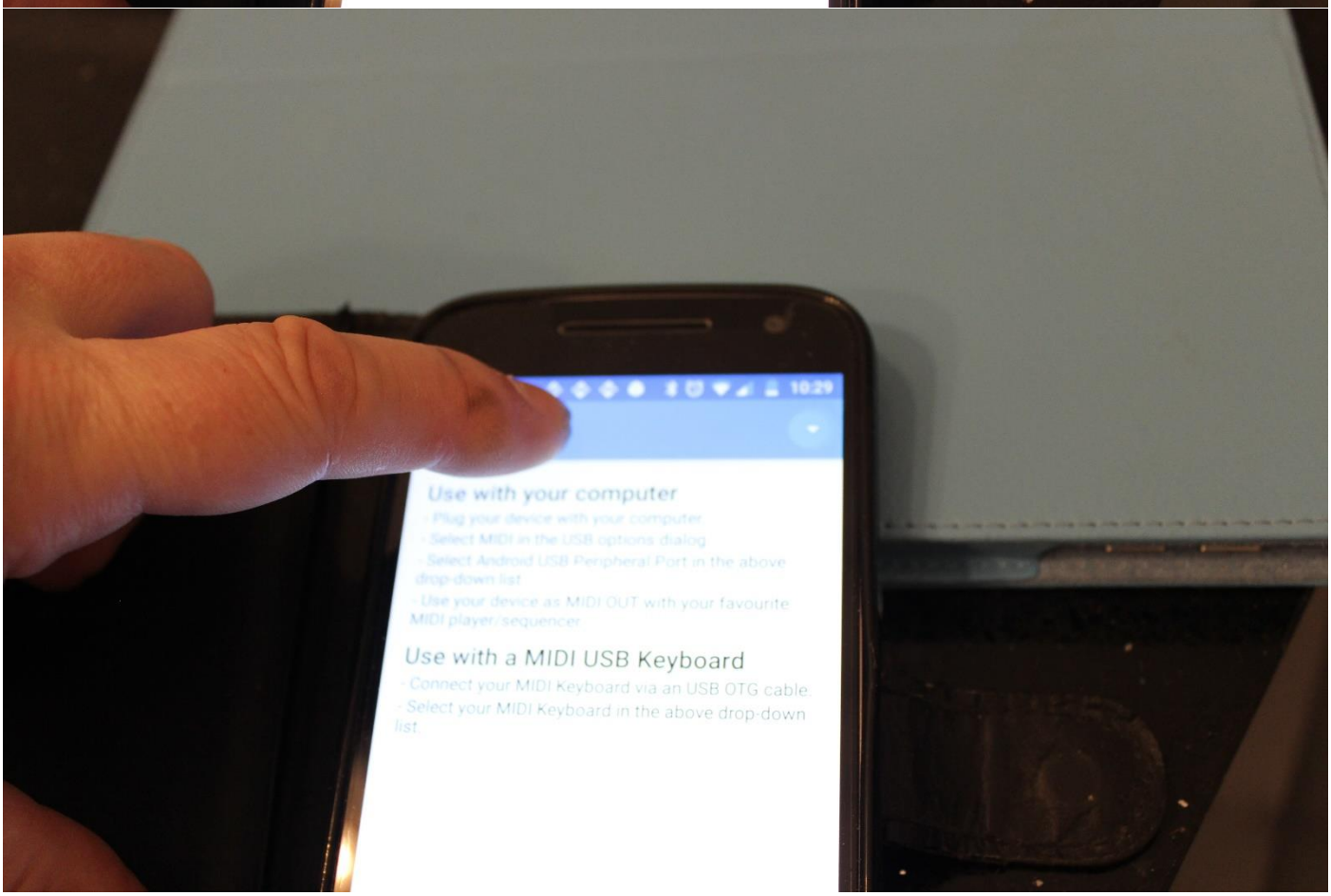

10:28
Bluetooth
SCAN

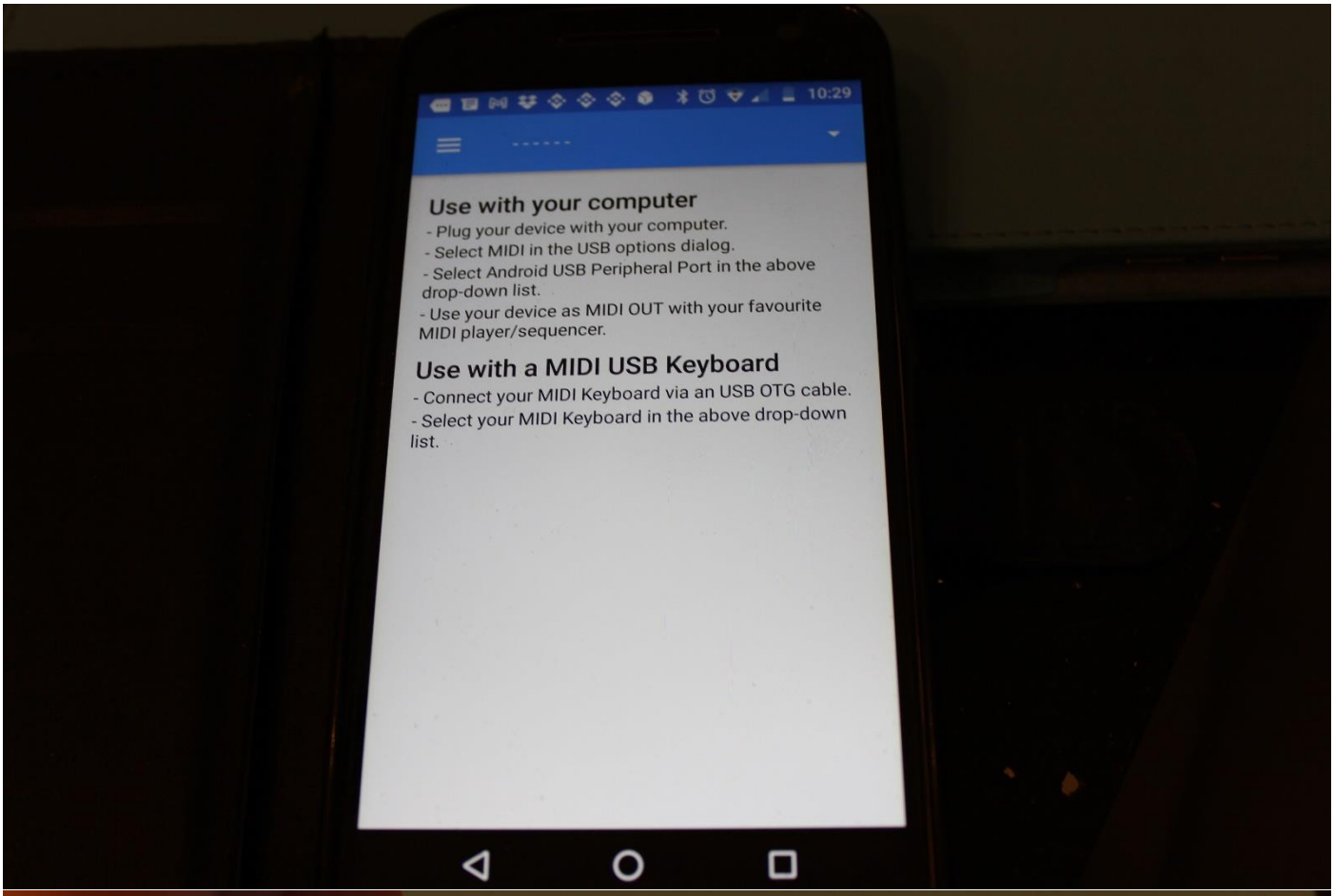
Bluetooth

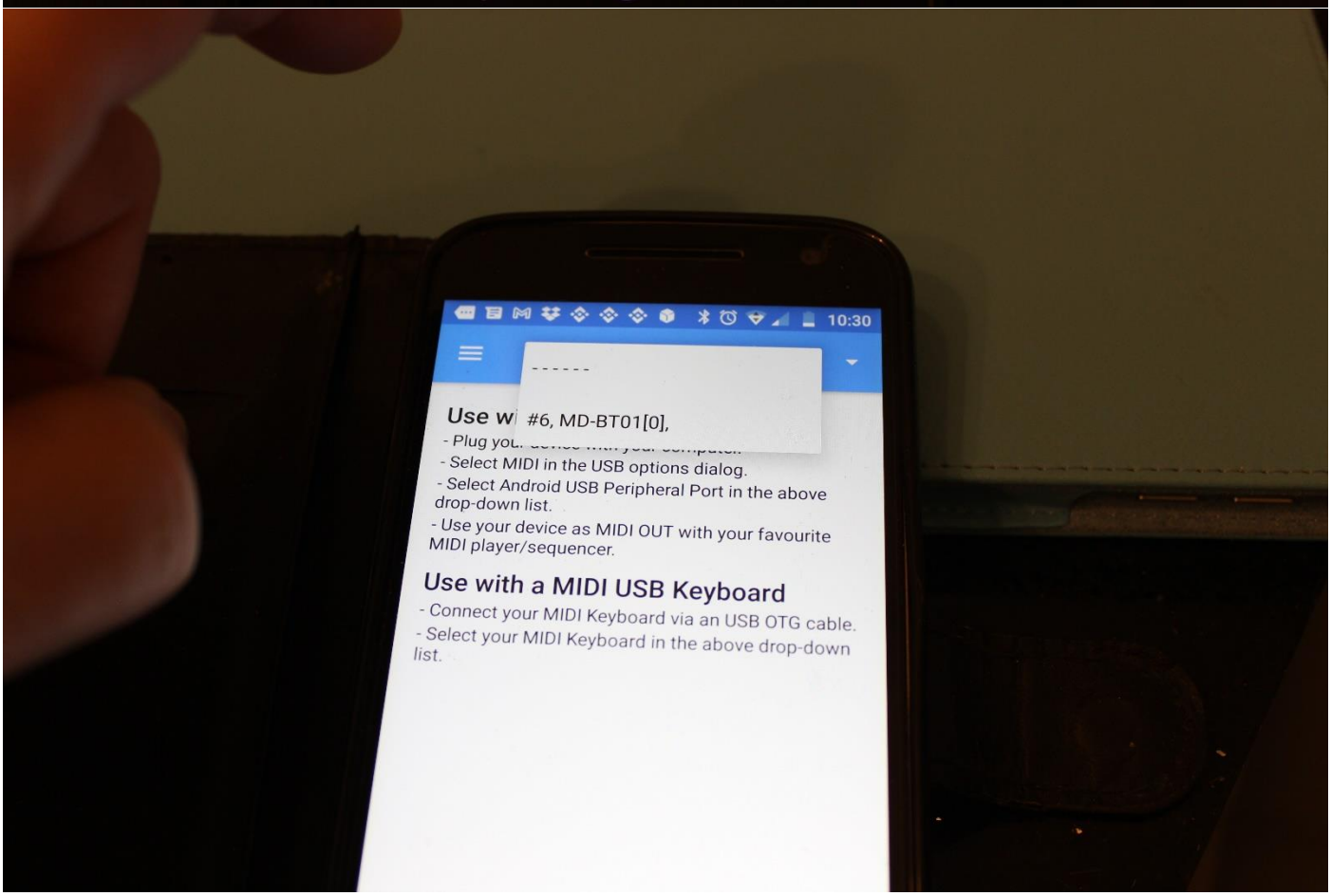

10:29
Bluetooth
SCAN
MD-BT01
CB:B1:A5:D5:A2:9D


10:29
Bluetooth
SCAN

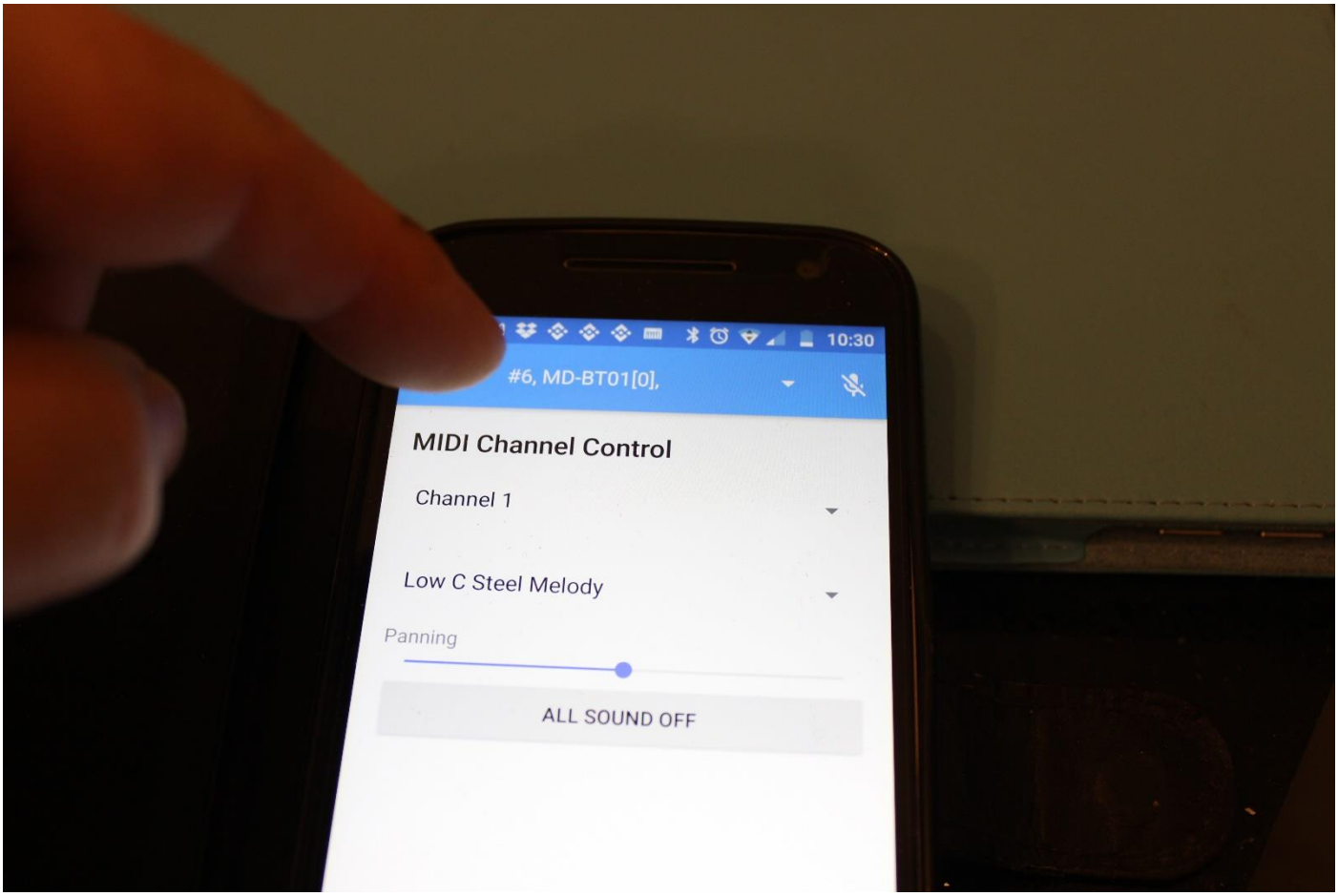

10:29
Use with your computer
- Plug your device with your computer.
- Select MIDI in the USB options dialog.
- Select Android USB Peripheral Port in the above drop-down list.
- Use your device as MIDI OUT with your favourite MIDI player/sequencer.
Use with a MIDI USB Keyboard
- Connect your MIDI Keyboard via an USB OTG cable.
- Select your MIDI Keyboard in the above drop-down list.


10:29
Use with your computer
- Plug your device with your computer.
- Select MIDI in the USB options dialog.
- Select Android USB Peripheral Port in the above drop-down list.
- Use your device as MIDI OUT with your favourite MIDI player/sequencer.
Use with a MIDI USB Keyboard
- Connect your MIDI Keyboard via an USB OTG cable.
- Select your MIDI Keyboard in the above drop-down list.





Success, it now shows up as MD-BT01 rather than (when connected by a USB cable) as Teensy……..



Now I would set up my 6 channels in FluidSynth as described earlier.

Here is the Yamaha MD BT-01:

Here is the cheaper WIDI Master which I managed to get working just fine with an iPad but not very well (it kept disconnecting) with my Android phone, even when I used their companion app for Android phones:

Summary of my experiences so far with Bluetooth MIDI transmitters:
Investigations so far: I have tried the Yamaha MD-BT01 and it works fine with both an iPad and my old Android phone. You need a small companion app from Yamaha if you use an Android phone. I have also tried the cheaper WIDI-MASTER which comes in 2 parts so you only need the "transmit" part. It also worked fine with the iPad. However with FluidSynth on my Android phone you also need to use a companion app from WIDI. For me this does not work, it keeps disconnecting every 10 seconds or so. I tried a different companion app suggested in the Amazon feedback for the WIDI device called "MIDI+BTLE" and that also kept dropping out after 10 seconds. It could be a problem peculiar to my Android phone or may affect them all equally. To be fair the literature with the WIDI does say it is really meant for iPhones and iPads mainly. There are others from Roland etc too which I have not tried. In summary: Yamaha= OK for both Apple and Android devices, WIDI seems to be OK for Apple devices only.