system reboot.
Important Note: Ardupilot sets Sbus channel 5 to mode selection as default, this should be disabled with DataLink by setting the pram FLTMODE_CH: to 0.

Sbus Outputs

The HereLink Blue settings app allows you to program buttons A,B,C,D,Cam & HW Wheel to control sbus outputs on the air unit, HereLink Blue has dual independent sbus outputs on bus 1 and bus 2. Buttons can be configured on channels 5 - 16 on bus 1 and channels 1-16 on bus 2.

Channels 1-4 on Bus 1 are reserved for RC control.

Each button can be programmed in one of 3 modes with long press and short press actions in Toggle and Multi modes.

Button Modes Available

- Toggle = Output latches between two pwm values with a short or long press option.
- Momenty = Output changes to active value when pressed and held, returns to default when released.
- Multi = Sends command for channel to go to preset pwm value. Multi buttons can be stacked on both short and long press as well as multiple buttons configurations to allow channel outputs to range in values.

To select the mode either press T for Toggle, M for Momantry, when neither T or M is selected the button is in Multi mode.

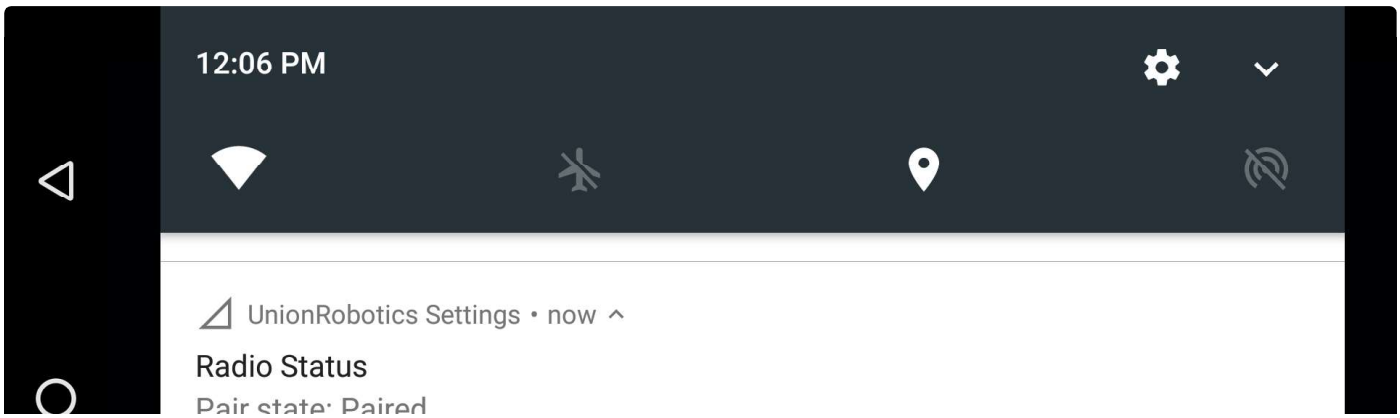
Profiles

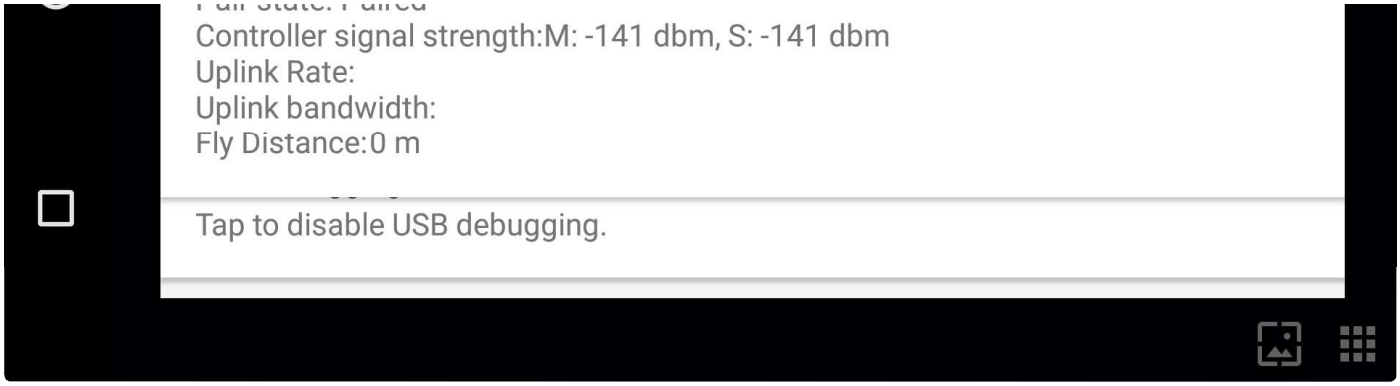
HereLink Blue Sbus Buttons allows you to save multiple button profiles. This means you can set up HereLink Blue to have multiple configurations for different applications.

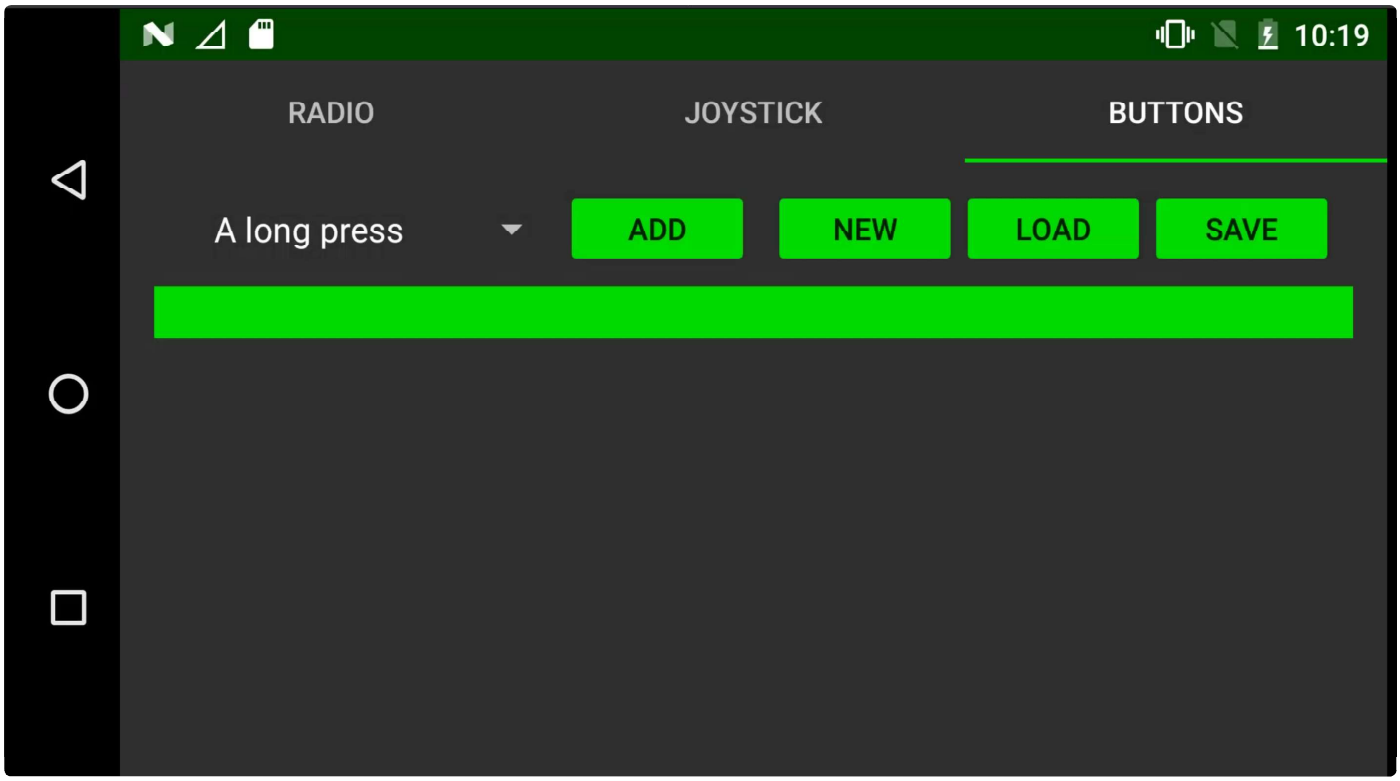
Sbus Button Configuration

To Configure

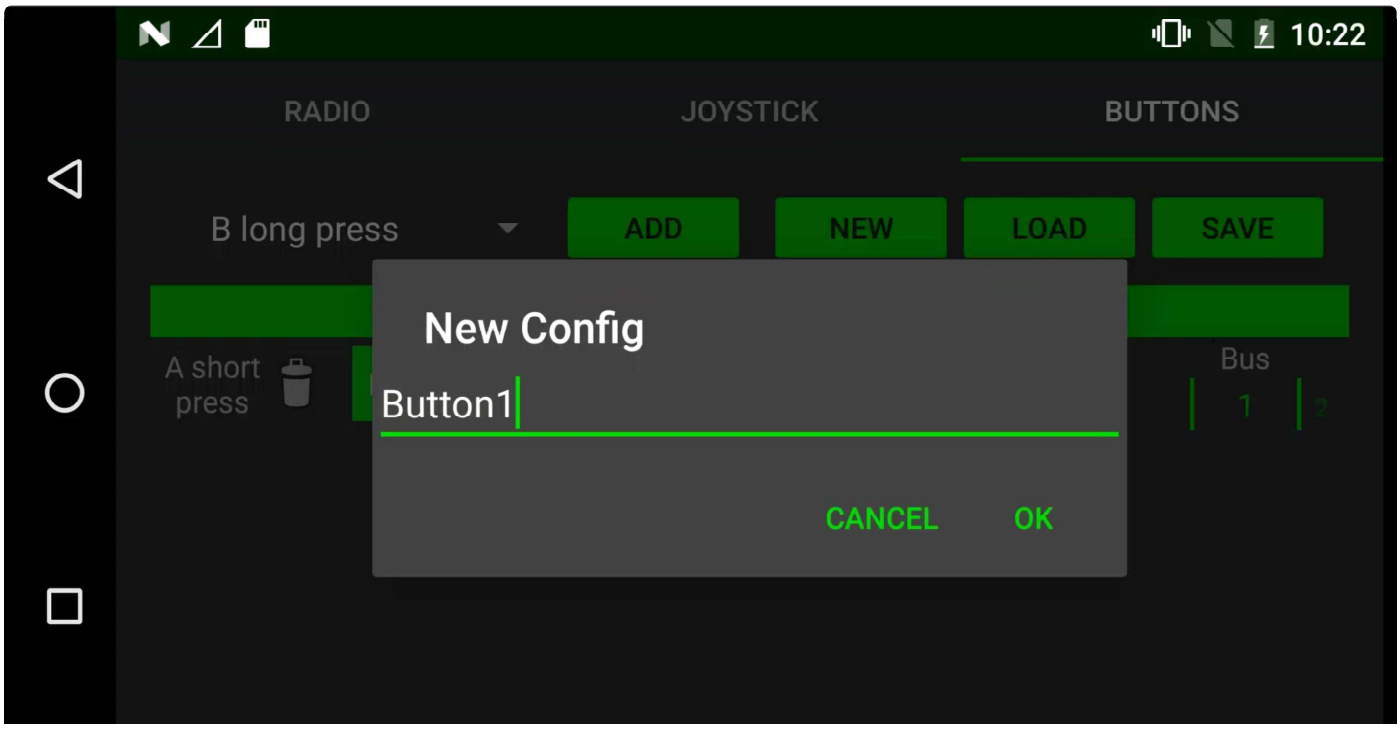
From App Launcher slide down the notification drawer from the top and select "Union Robotics Setting". Slide left for buttons screen. Here you will find the button configuration options for sbus.



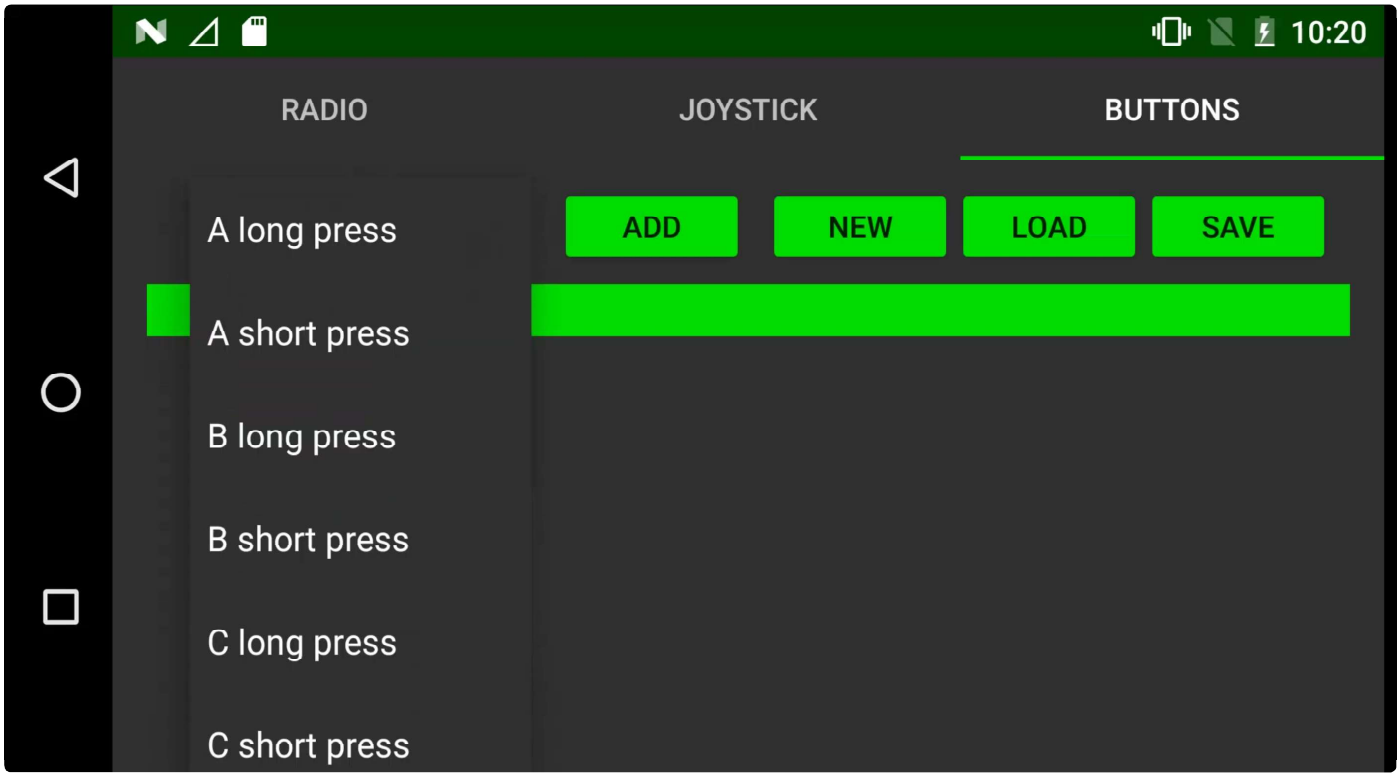




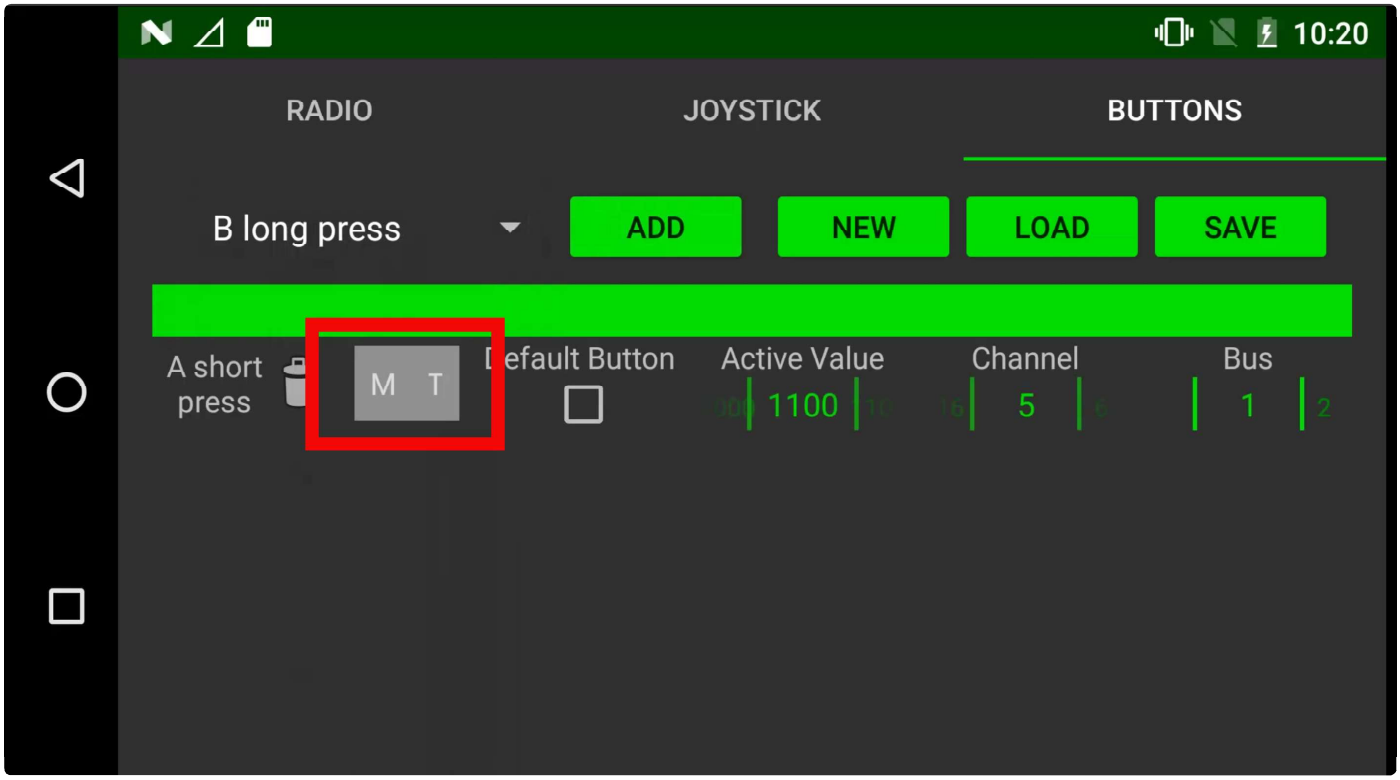
Click `NEW` and type name for your new profile and press `OK`.



Select the first button you want to configure from the drop down menu then click `ADD` .



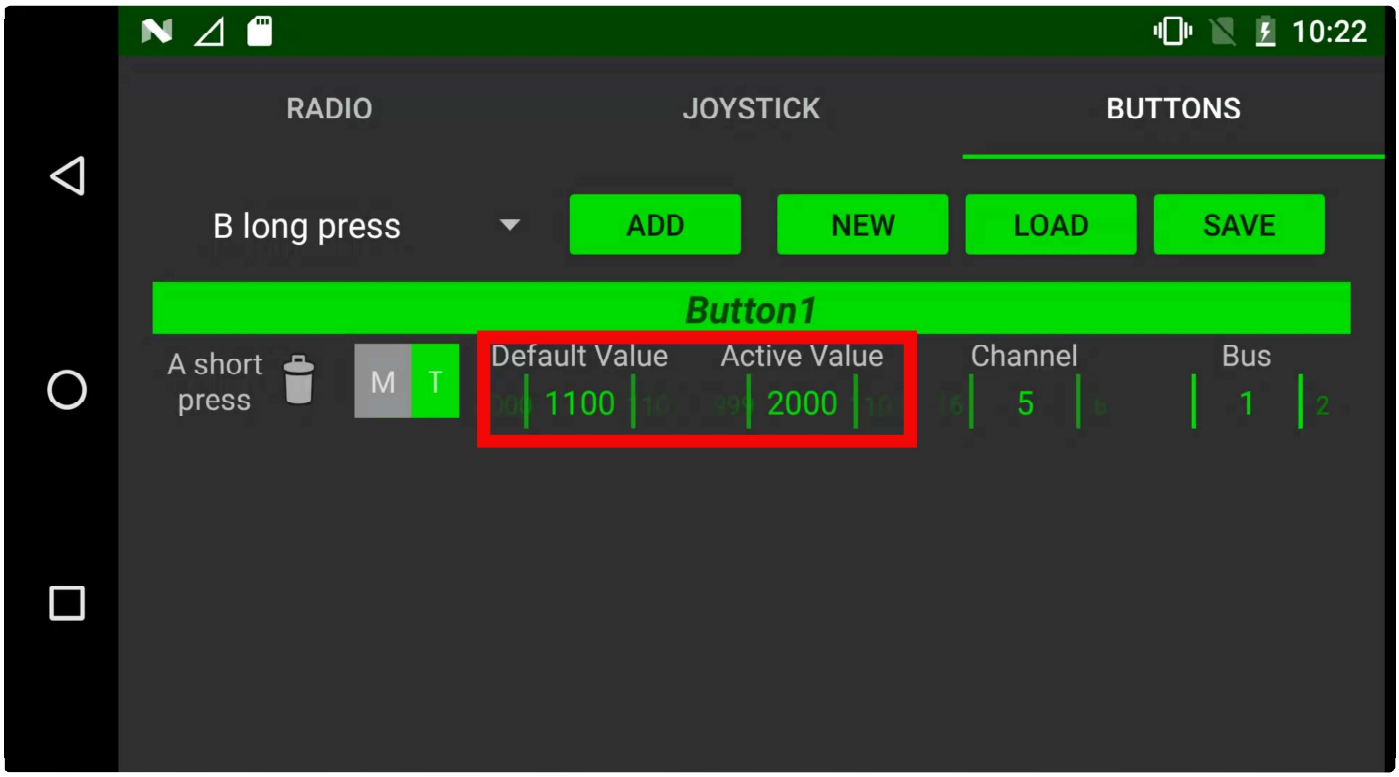
Select desired button mode by tapping the letter, ie: Toggle, Momenty or leave blank for Multi



Note: When setting up Multi mode buttons at least one must be selected as default, this sets the default output pwm on system boot.

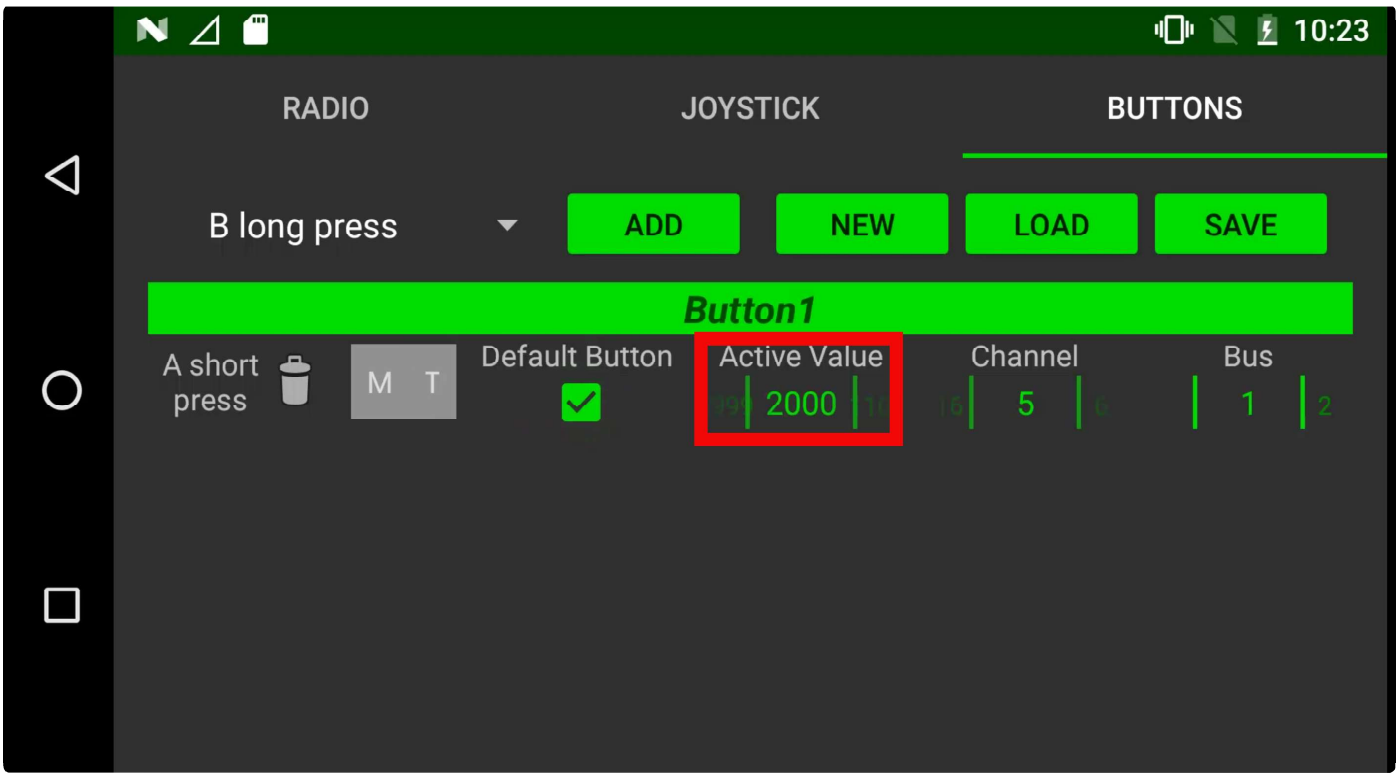
For Toggle & Momentary set the default pwm and active pwm values, these values are selected by scrolling

left and right on the number to select the desired output.



Tip: To move to the top end of the range you can scroll backwards, also 'Flicking' the numbers will scroll faster though the range.

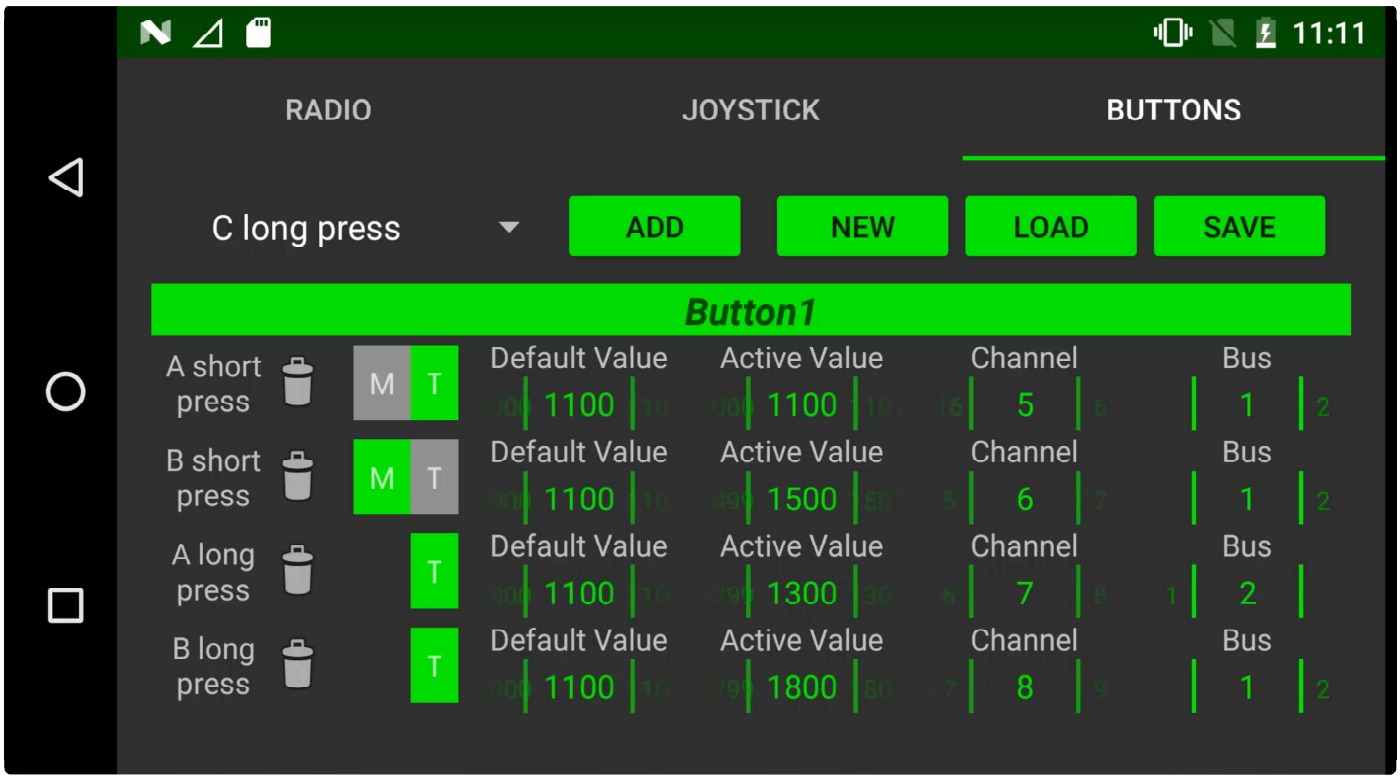
If setting a Multi mode button set desired active pwm output.



Set sbus channel output and bus.

Once configured you must click `SAVE` to store settings.

Next continue to add more buttons via the above process.

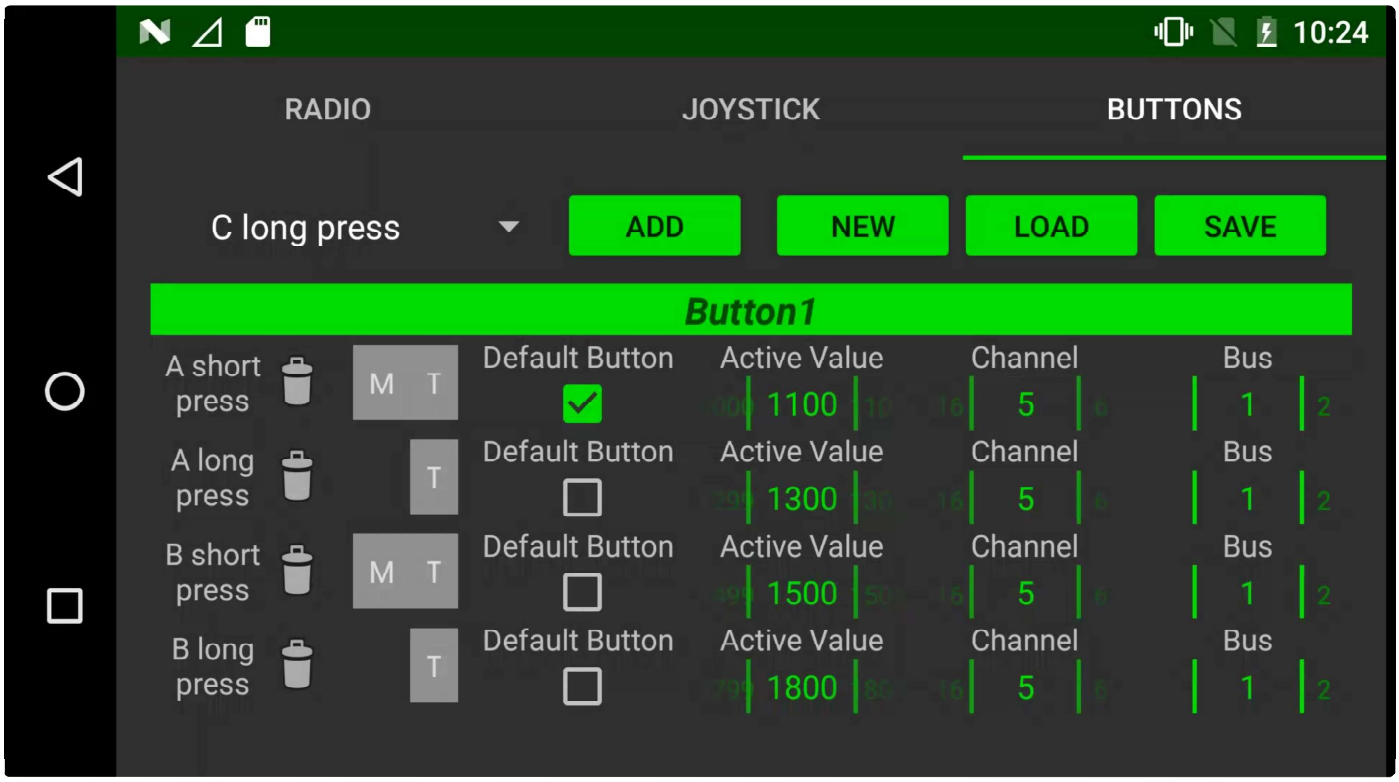


To remove a button config simply click the bin icon next to the name.

Multi Buttons

Multi button config allows you to set short and long press options as well as other buttons to set stages outputs on a sbus channel, below is an example of two buttons changing a channel to 4 different pwm values.

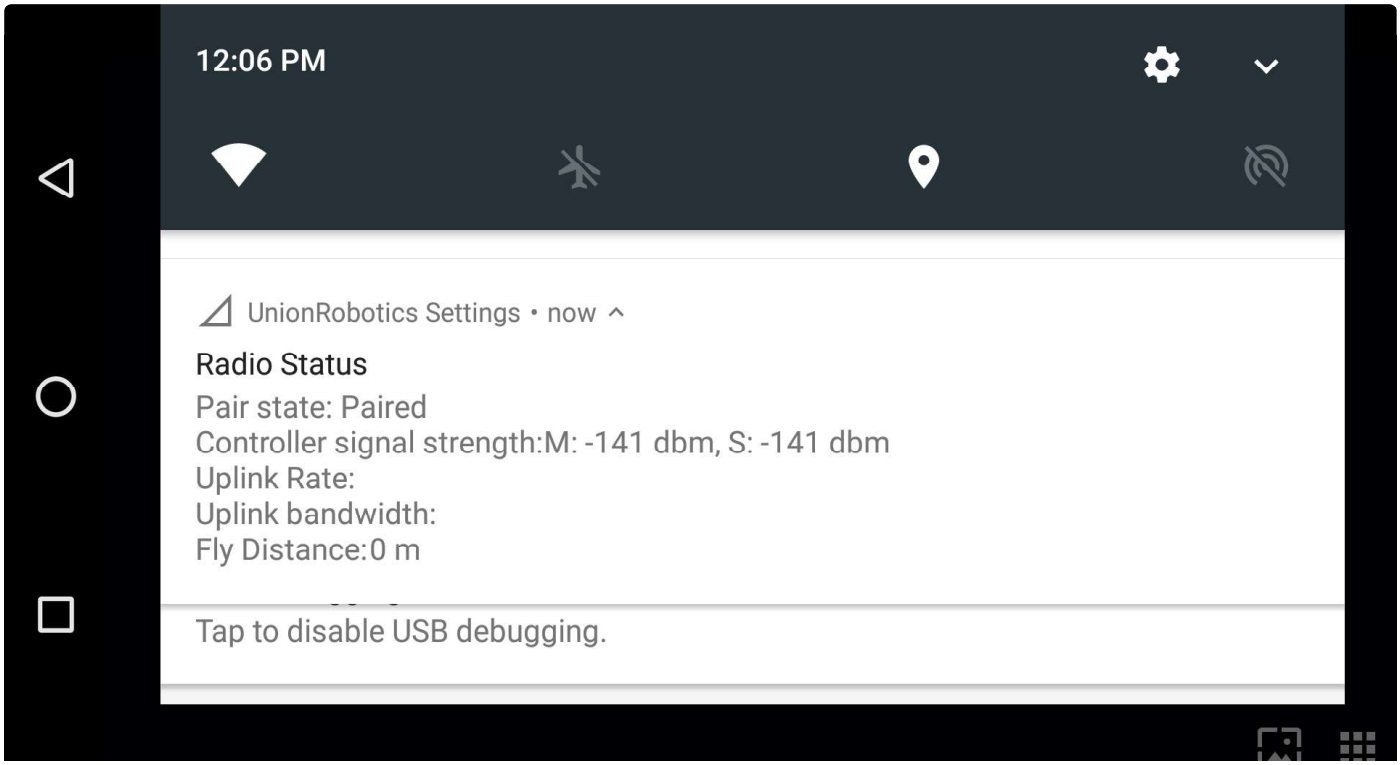
When setting up Multi mode buttons at least one on each channel must be selected as default value, this sets the default output pwm the system will default to on power on.



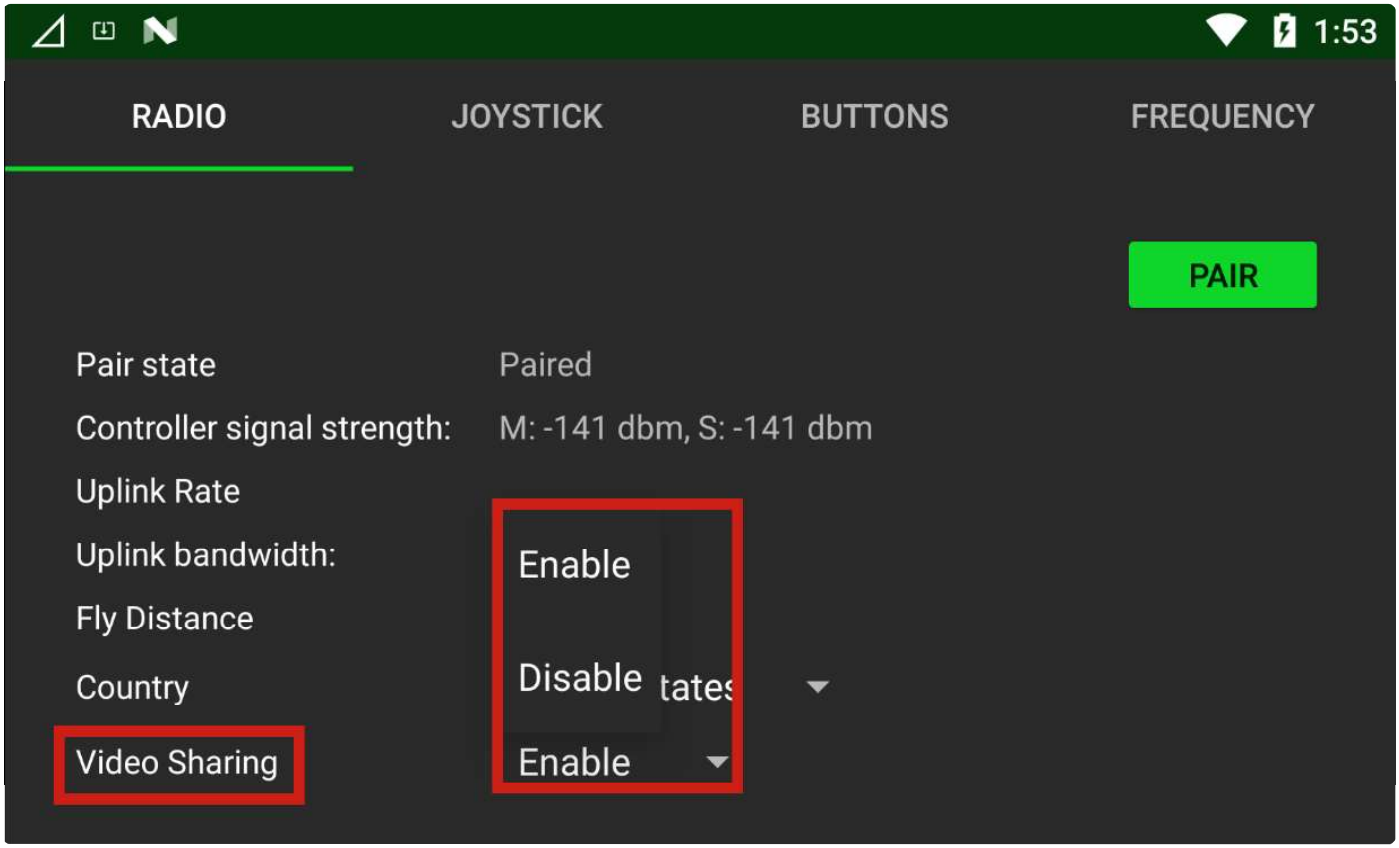
Share Video Stream

Enable The Video Stream

Slide down the Notification Drawer and tap the HereLink Blue Settings tab

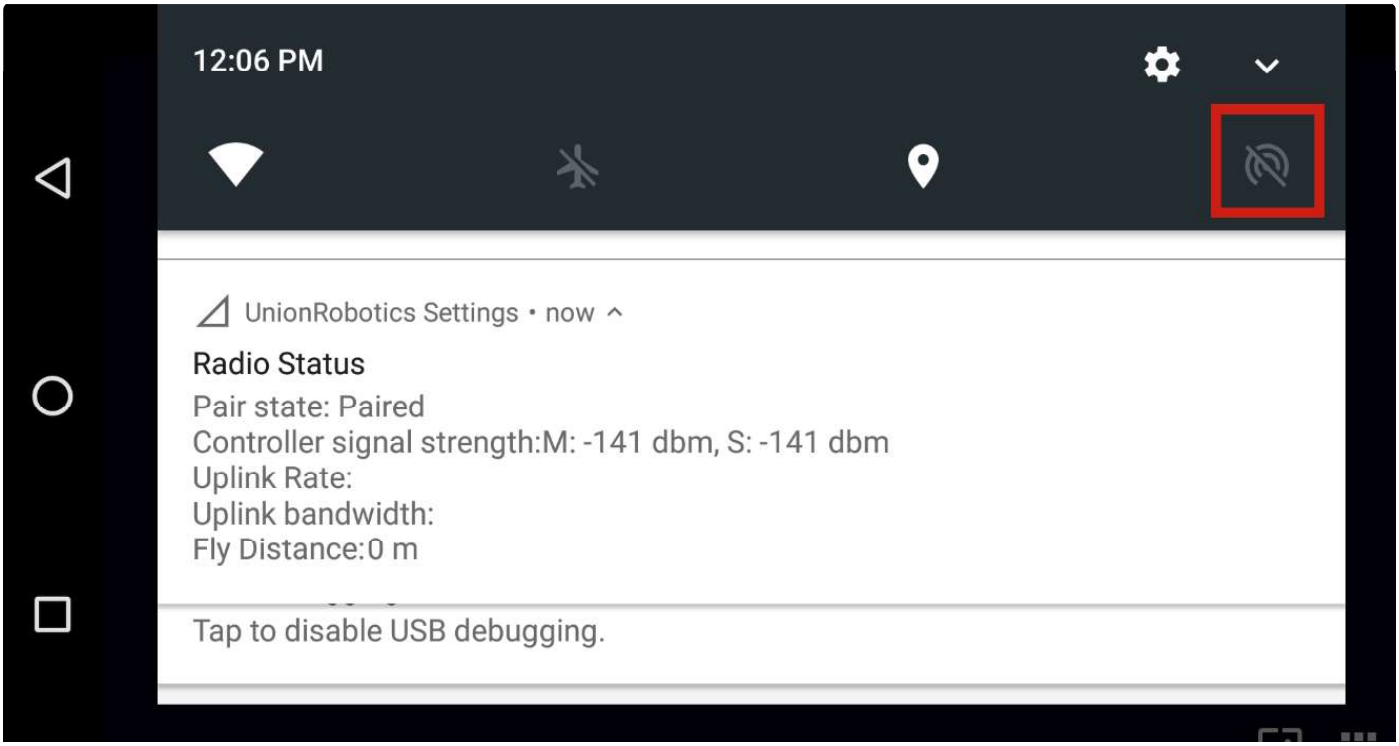


Scroll down in Radio Settings and Enable the Video Sharing

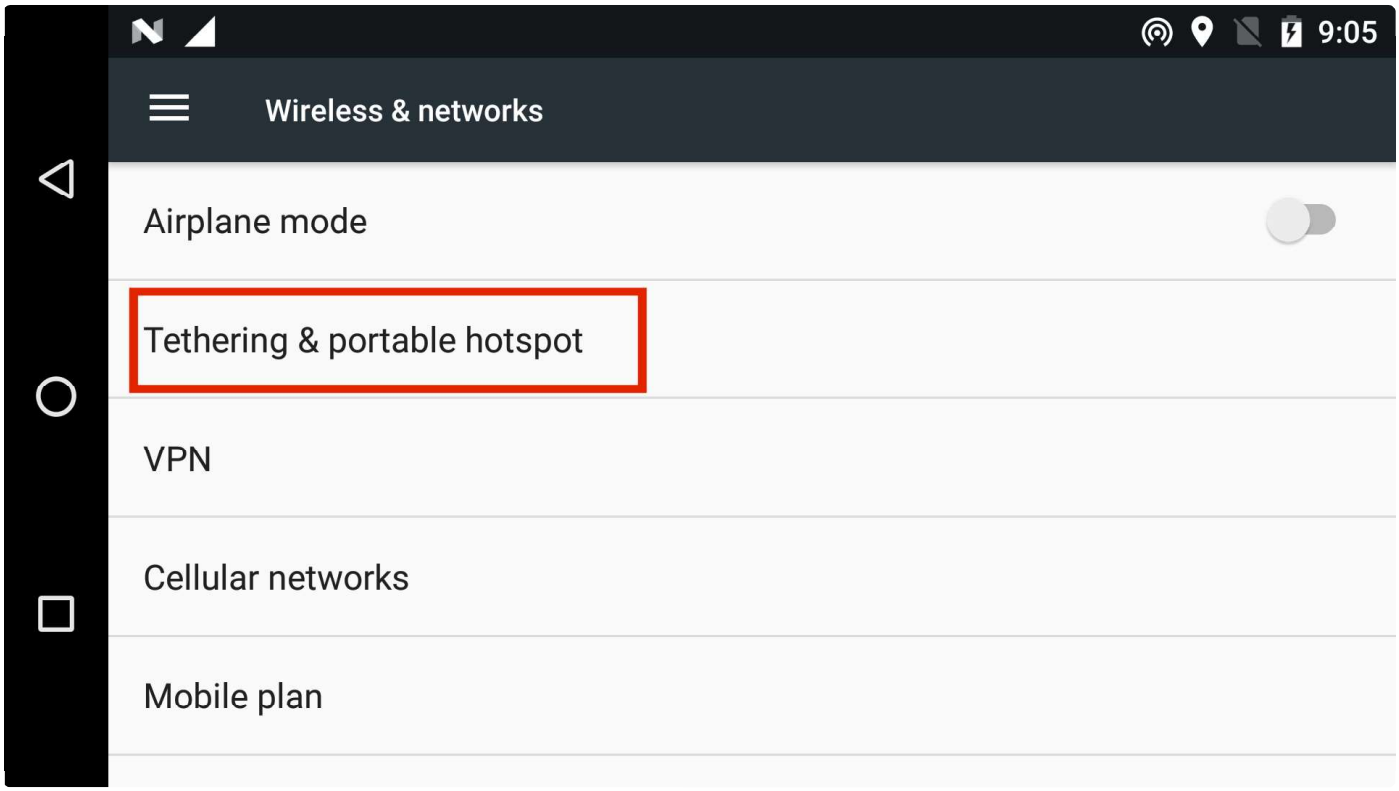


Connect Over Wifi Tethering

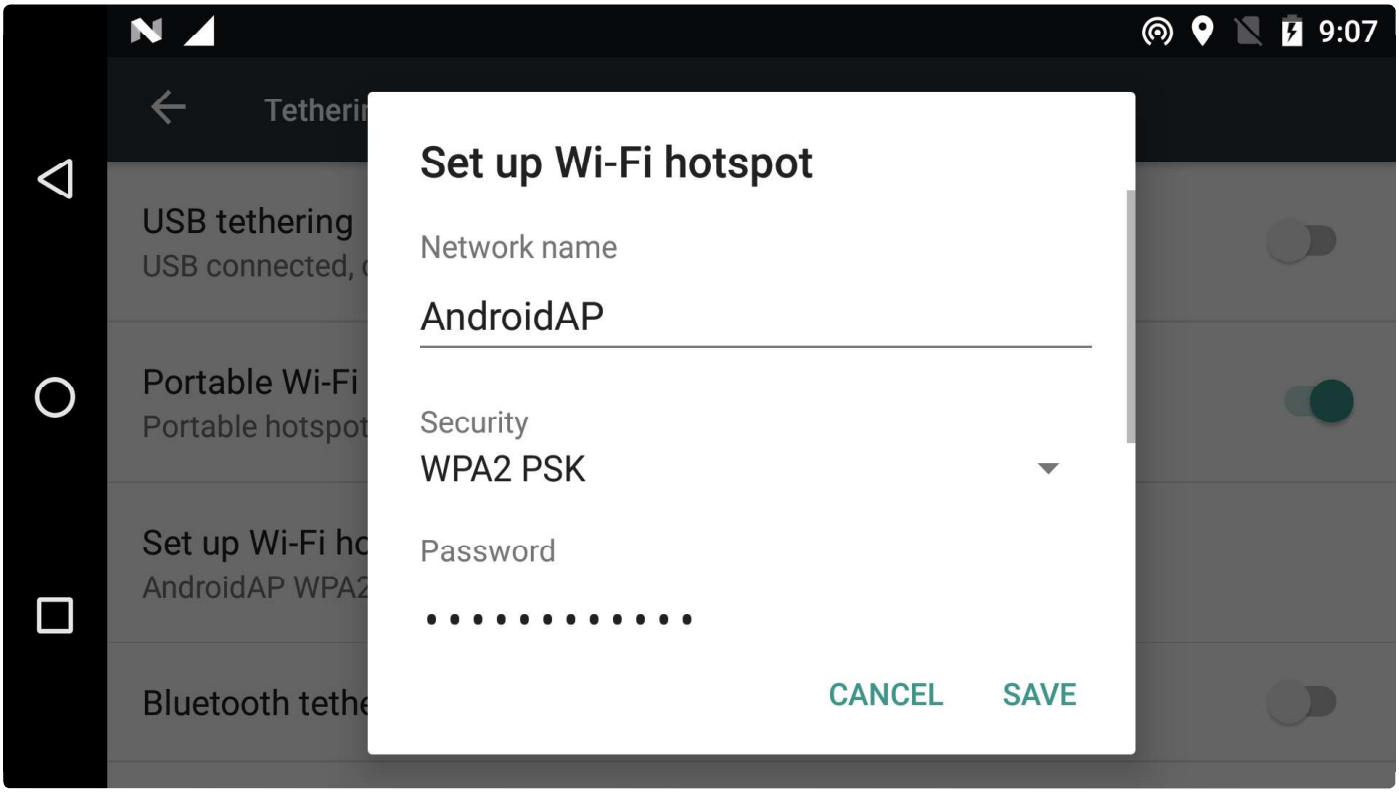
Pull down the Notification Drawer and enable Hotspot.



To configure press and hold hotspot logo, and you should see following screen.



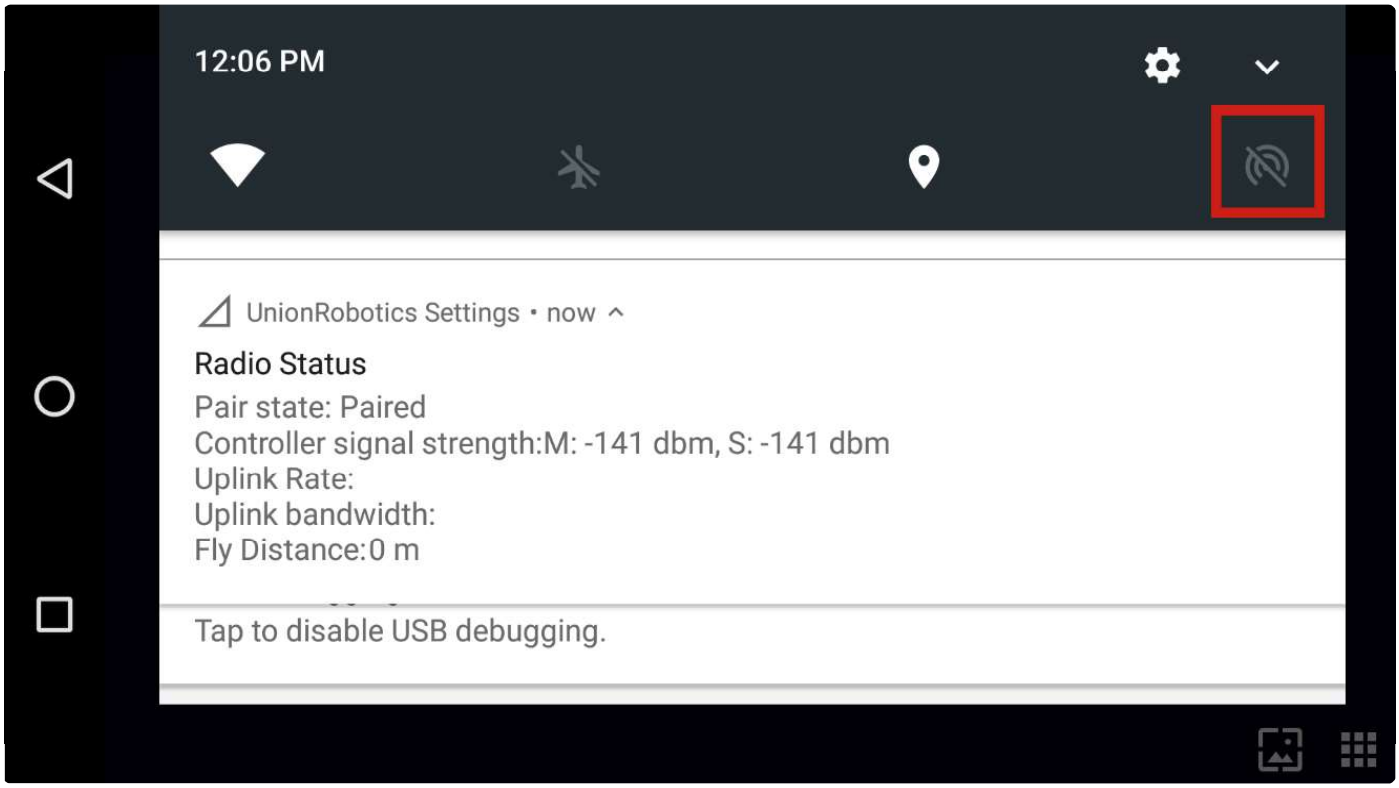
Then under Set up Wifi hotspot configure name and password for the hotspot.



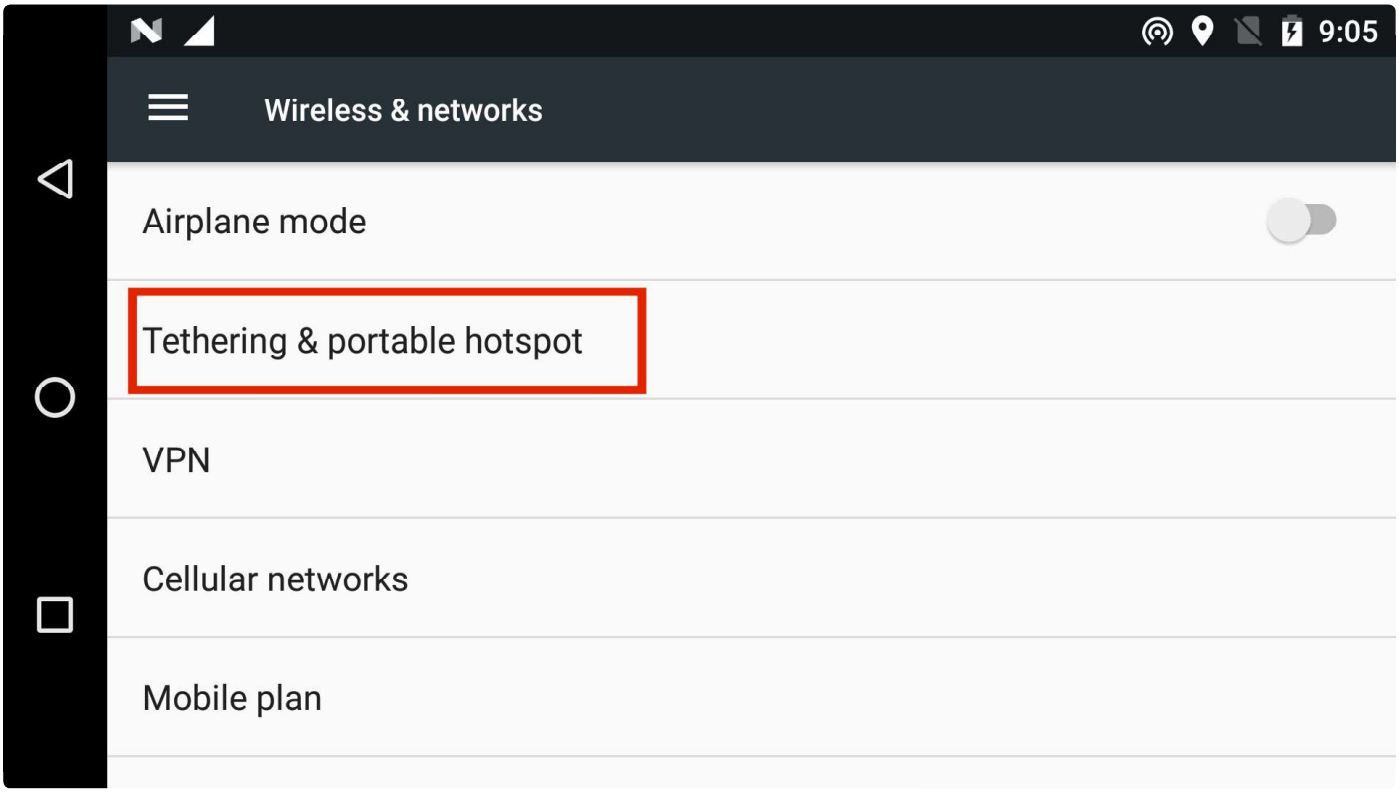
The video stream will be available at `rtsp://192.168.43.1:8554/fpv_stream` to connected devices.

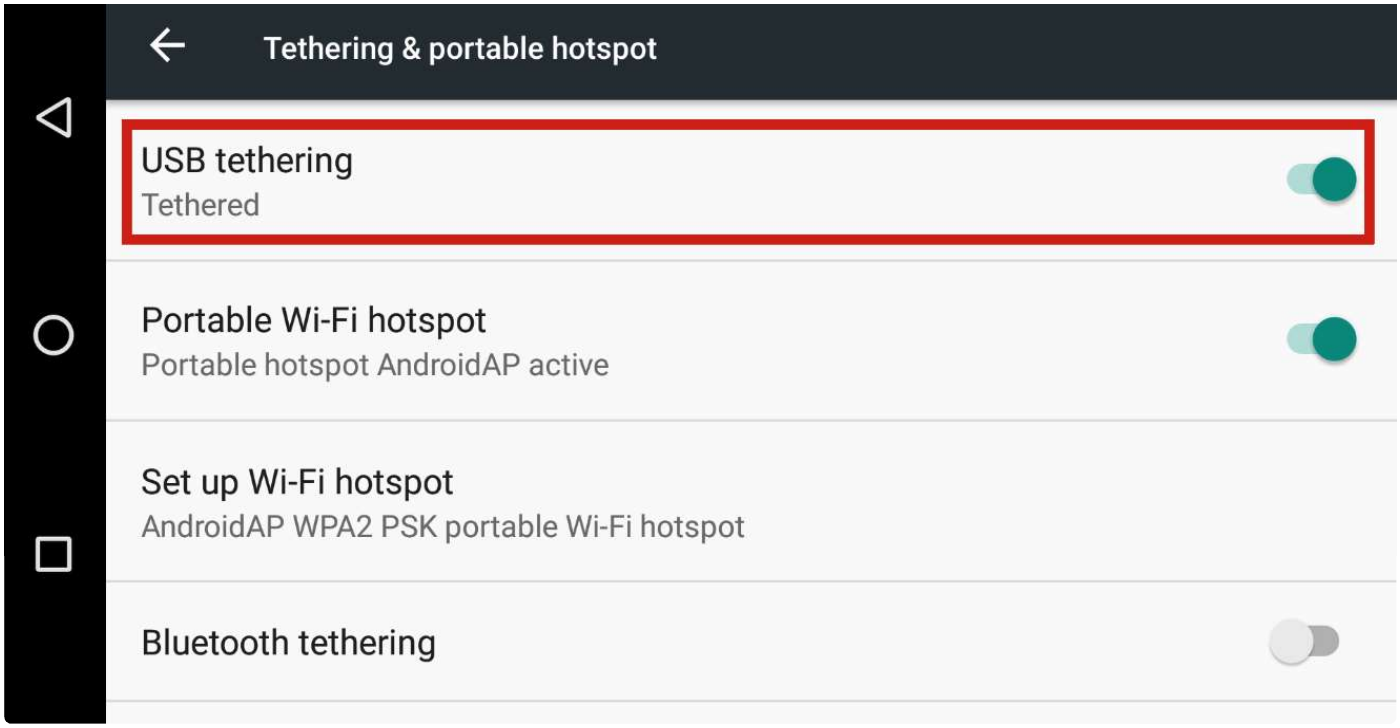
Connect Over USB Tethering

Press and hold the Hotspot button under notification logo.



Under `Tethering & portable hotspot` find `USB tethering`, turn it on.



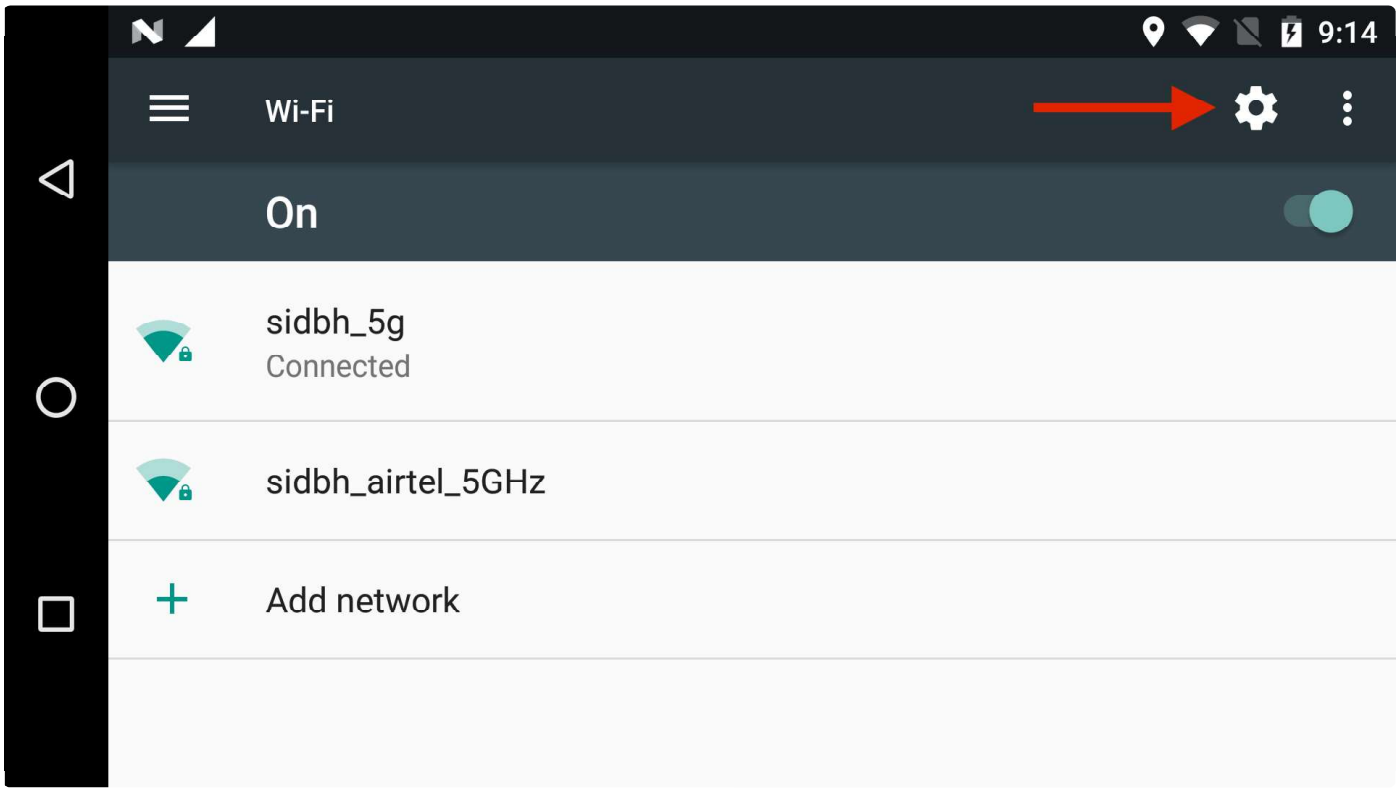


The video stream will be available to connected devices over USB via `rtsp://192.168.42.129:8554/fpv_stream`

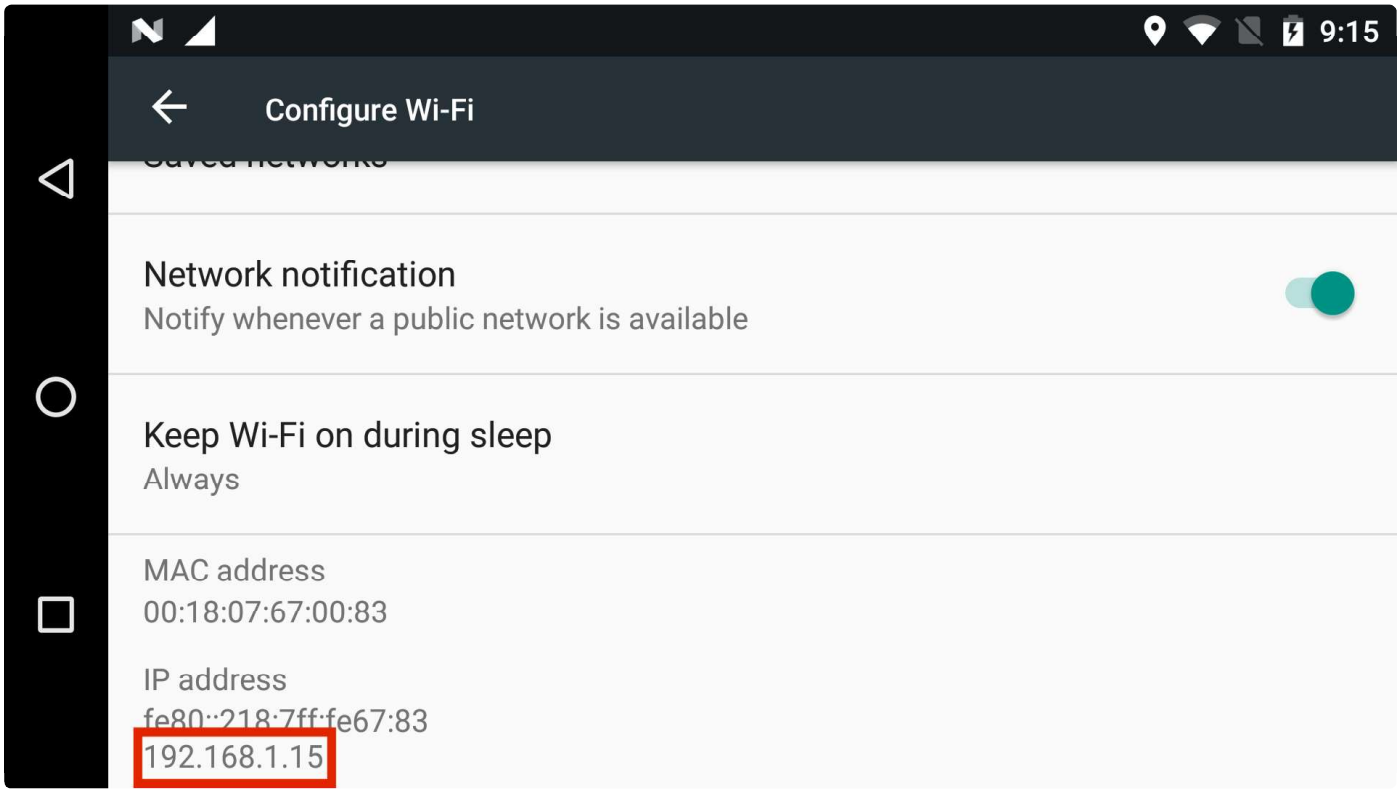
Connect Over Wifi Connection

If the DataLink is connected over wifi, you can get video stream using IP of the HereLink Blue on the network.

Press and hold Wifi option in Notification drawer and select settings.



Scroll down to find the IP Address



The video stream will be available to connected devices over USB via `rtsp://<ipaddress>:8554/fpv_stream`

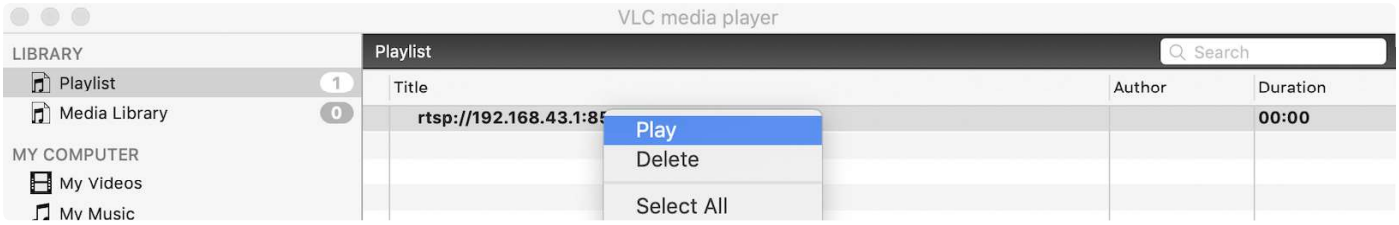
Display The Video Stream

In this example we use VLC media player

Open VLC and go to File >> Open network

Type the url address provided on the HereLink Blue stream menu and click `Open`

The video stream window will automatically opens, if not, you can force it by clicking right on the video stream link >> Play



Connecting to Mission Planner

Mavlink in Mission Planner

Open Mission Planner

Set the port to `UDP` (top right)

Click `Connect`

Enter the IP of the HereLink Blue controller

Enter port `14550`

You will now have Mavlink working into Mission Planner

**This configuration applies when we connect using USB TETHER or any other interface that is not WIFI. The Mavlink traffic being Broadcast from the WIFI Access Point by default, when connecting with USB or Ethernet, it is necessary to specify IP address of HereLink station so it can access the UDP port 14552.*

View DataLink Video in Mission Planner

Note: Video requires Mission Planner 1.3.70 beta or above

Start UR/Solex TX to ensure your video is working (this is required to start the streaming process)

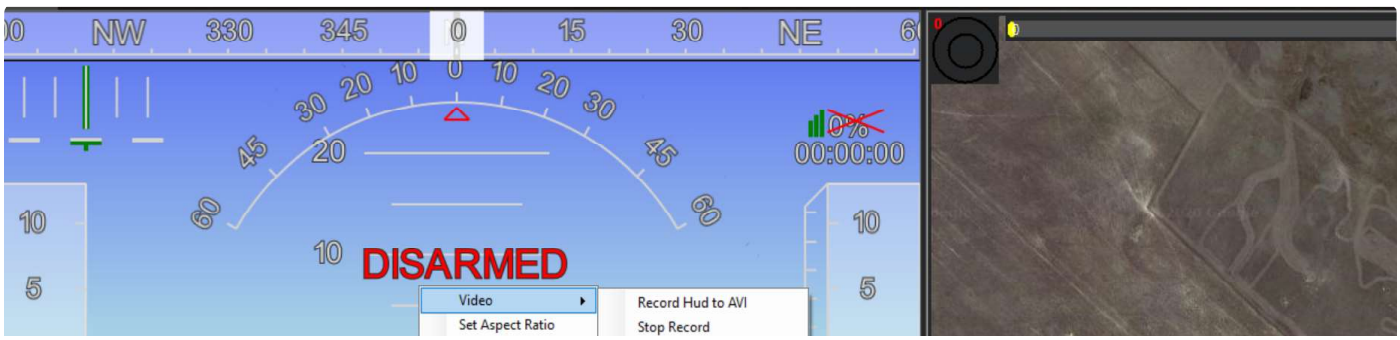
Right click the HUD in Mission Planner

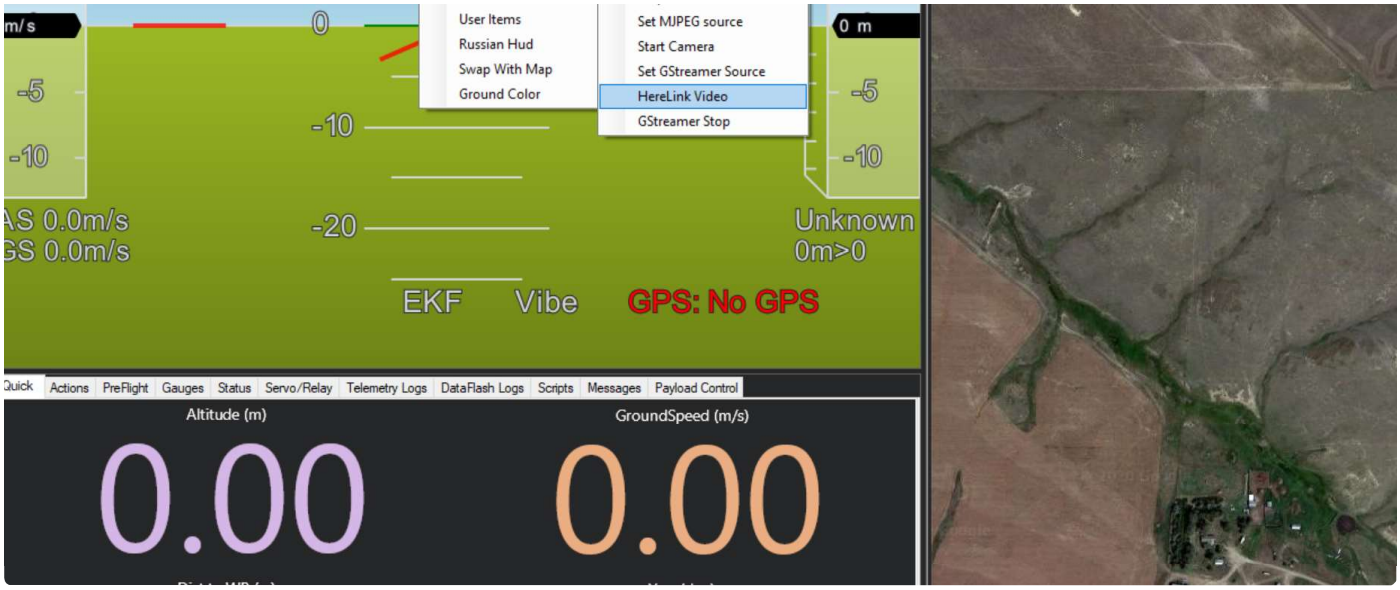
Select `Video`

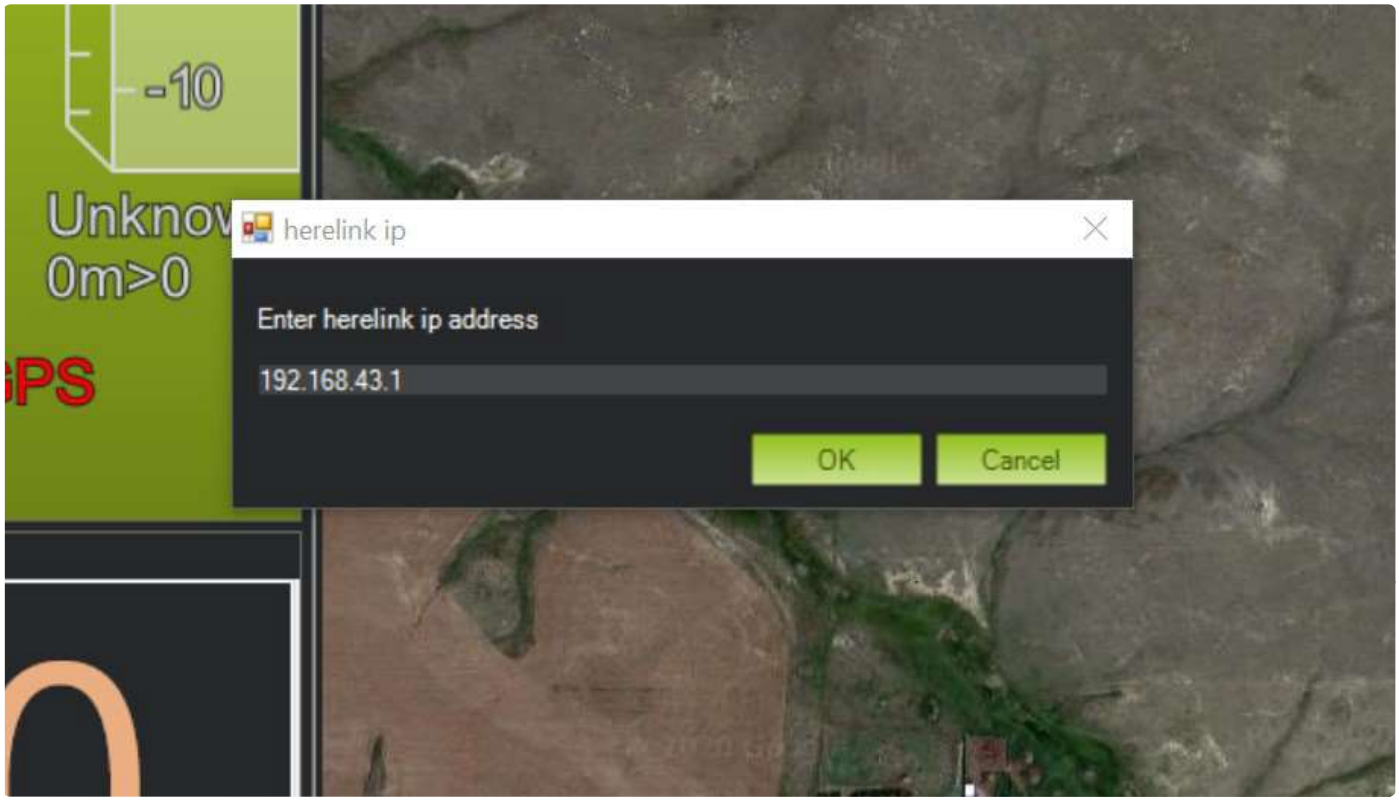
Select `HereLink Video`

The first time you do this, Mission Planner may need to download the files required to play the video. Your device will require an internet connection to be able to do this, you may need to disconnect from the DataLink hotspot to perform this step

A popup window will open, enter the same IP as you did in the mavlink step and click `OK`







Installing a Custom App

Installing SDK Platform-Tools

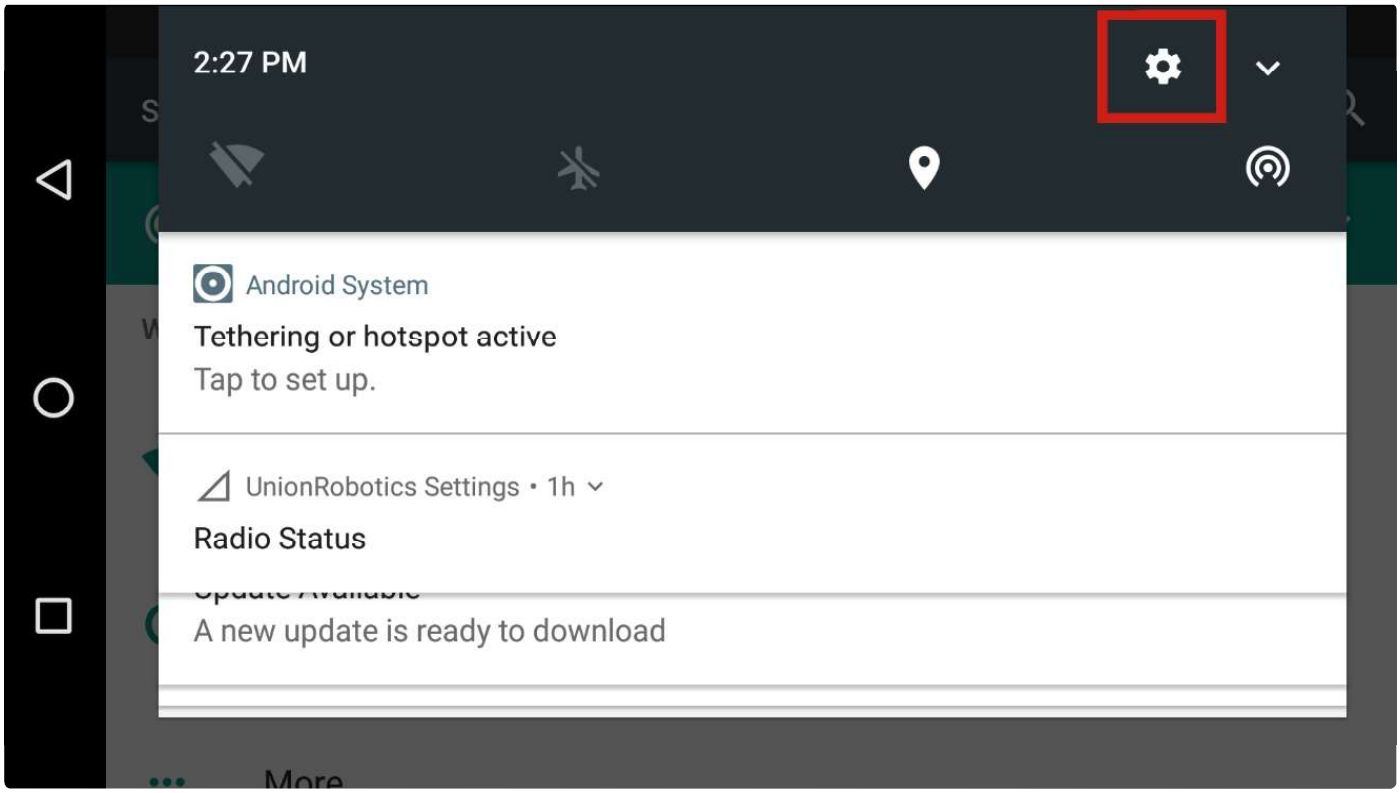
Ensure you have latest platform-tools installed on your computer system.

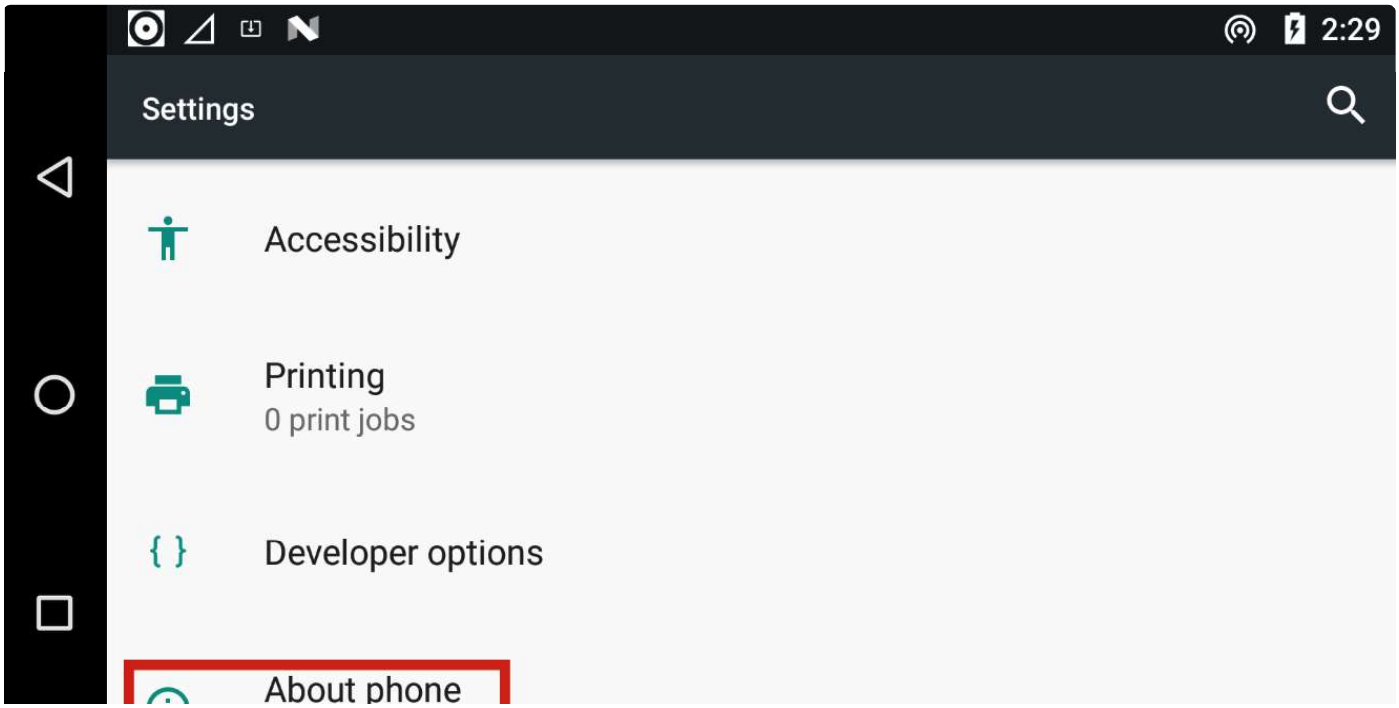
If you do not have the SDK "platform-tools" installed on your computer, download it from this link and keep track where the the "platform-tools" folder is located:

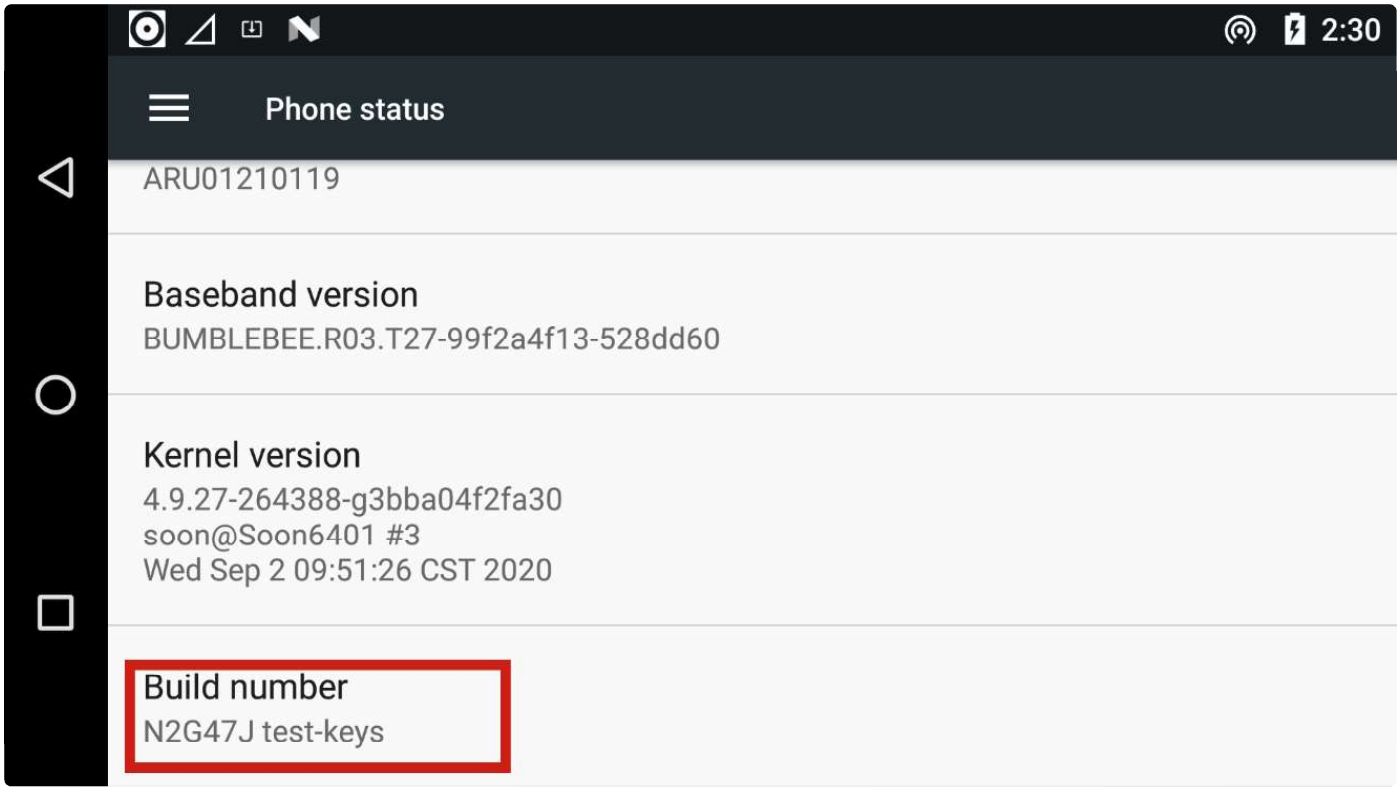
SDK Platform Tools release notes | Android Developers
Android Developers

Connect the HereLink Blue to a computer

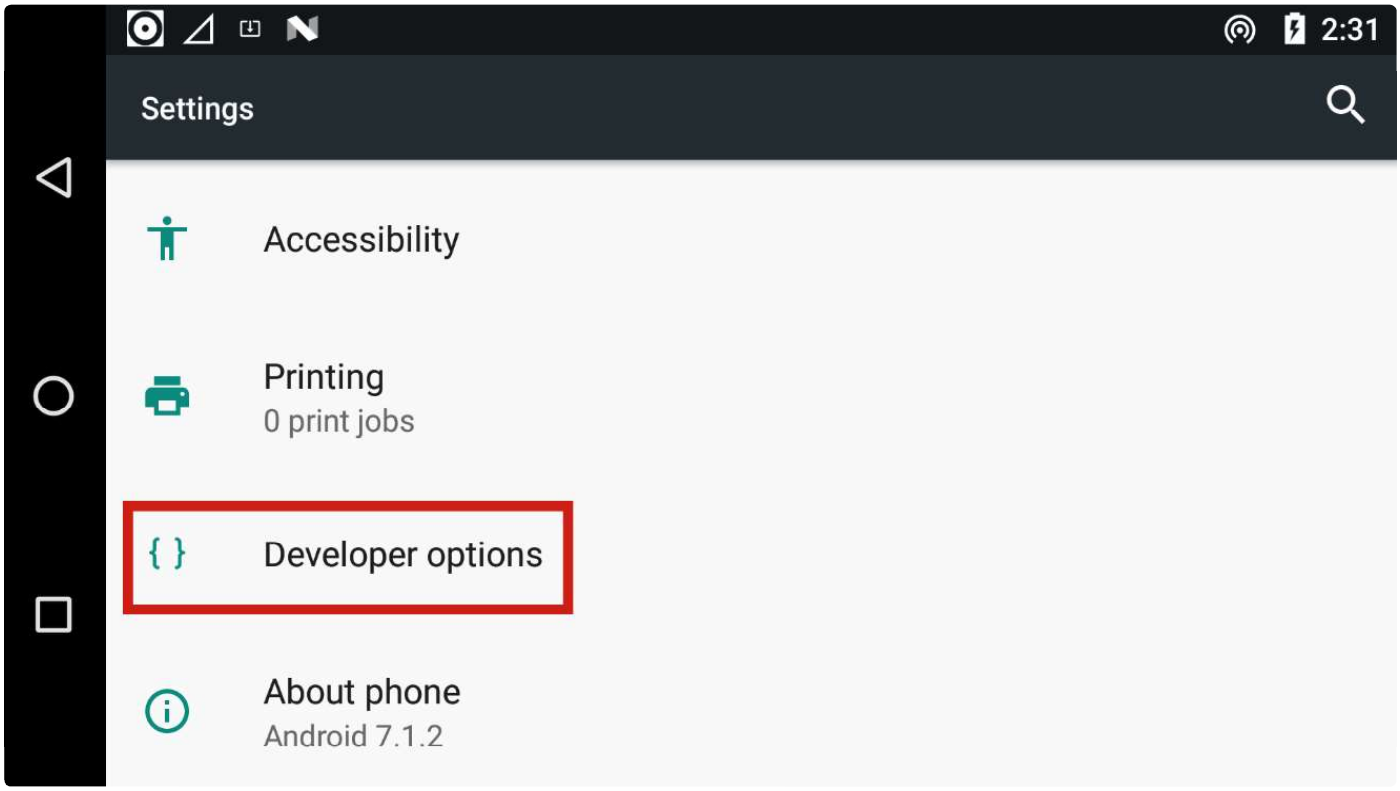
Enable "Developer Mode" on the DataLink by navigating to `Settings` -> `About Phone` -> `Build Number` and tap at least 7 times on "Build Number."

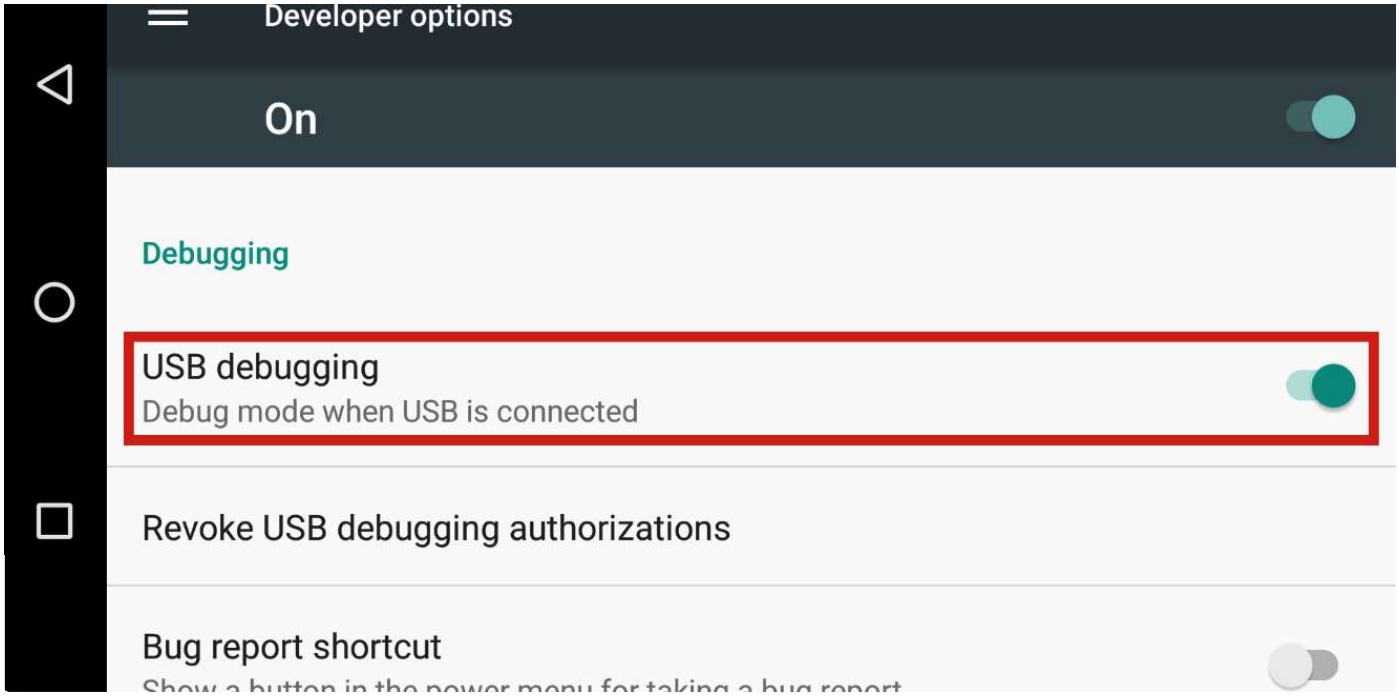




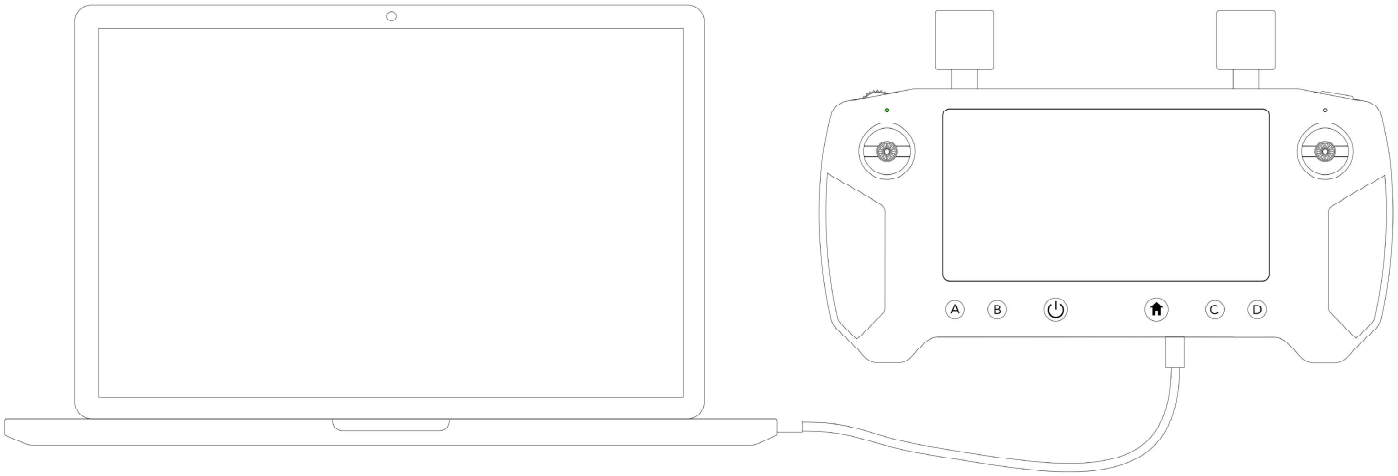


Enable `Settings` -> `Developer options` -> `USB debugging`



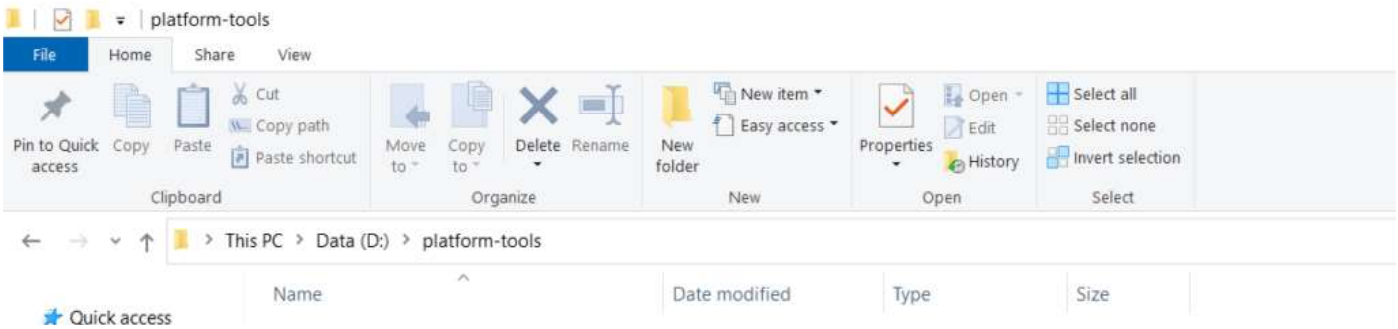


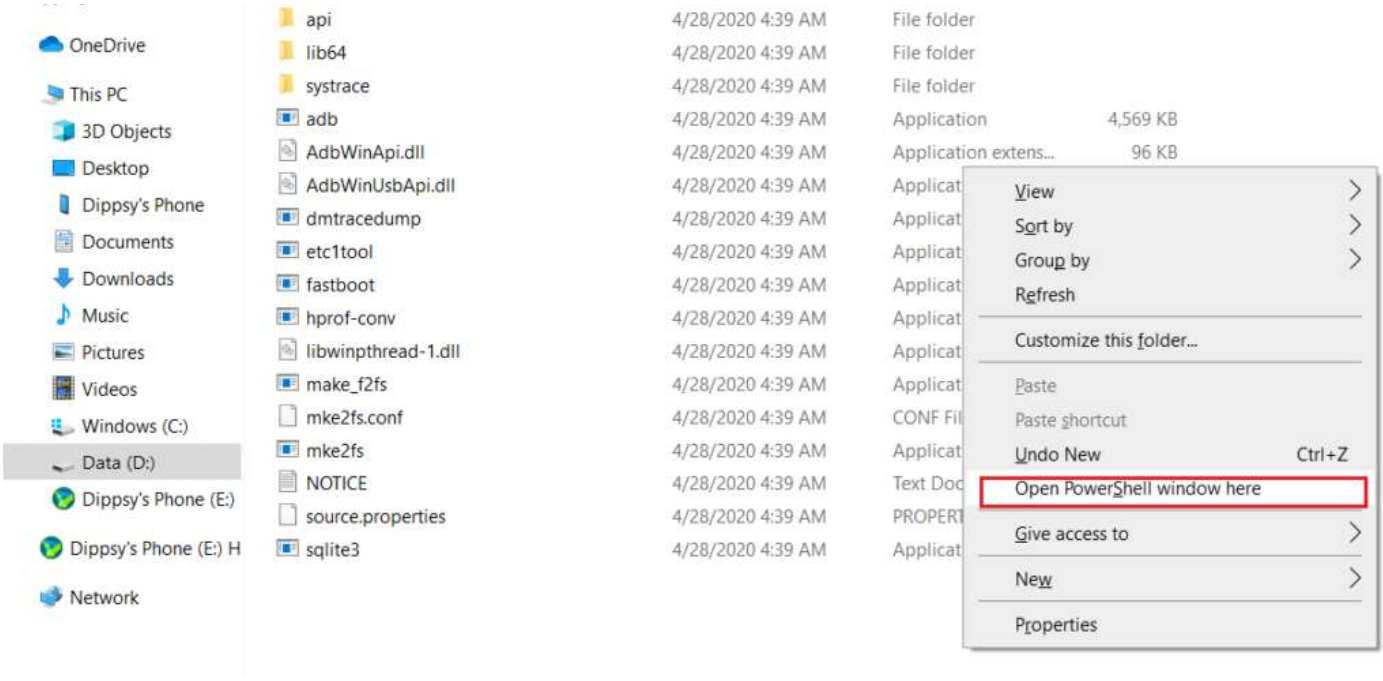
Using a USB to Micro USB cable, plug the HereLink Blue into a computer and open the computer's terminal command line



Open the Terminal

For Windows, navigate to the "platform-tools" folder. In this folder, hold **down Shift and then right-click**. From the menu select the “**Open Command window here**” option. If the option to open the command window is not available, then click on the "open PowerShell window here".





Windows

For Mac, navigate to the "platform-tools" folder. **Right Click** the folder and select `Services` -> `New Terminal at Folder`

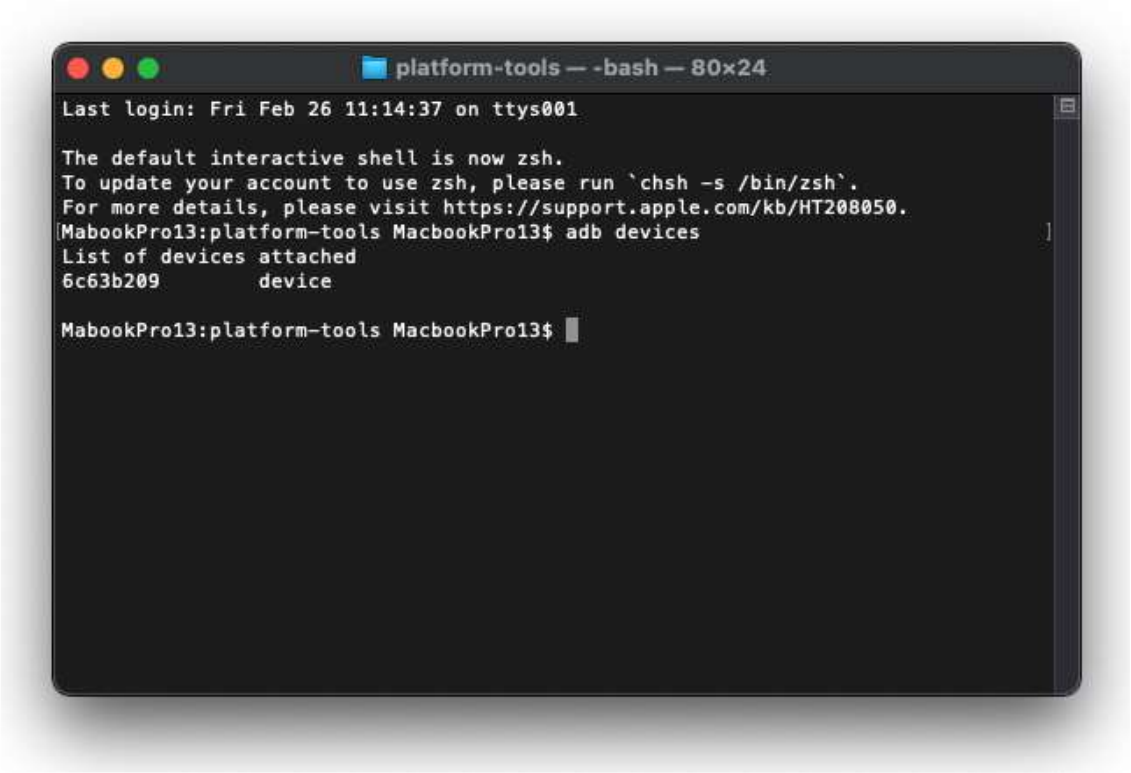
Mac

Check if the unit is connected

Using the computer's terminal, check it the device is connected via the adb command protocol:

Mac:

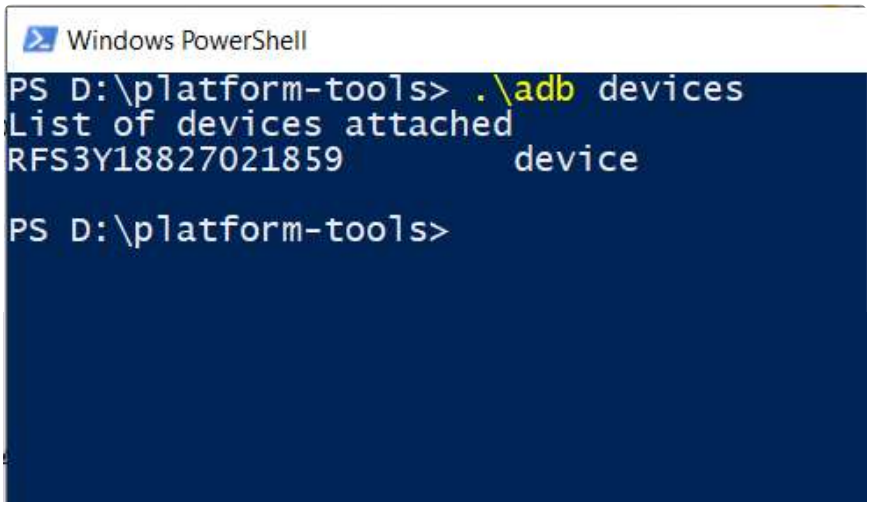
```
adb devices

```



Mac

Windows:

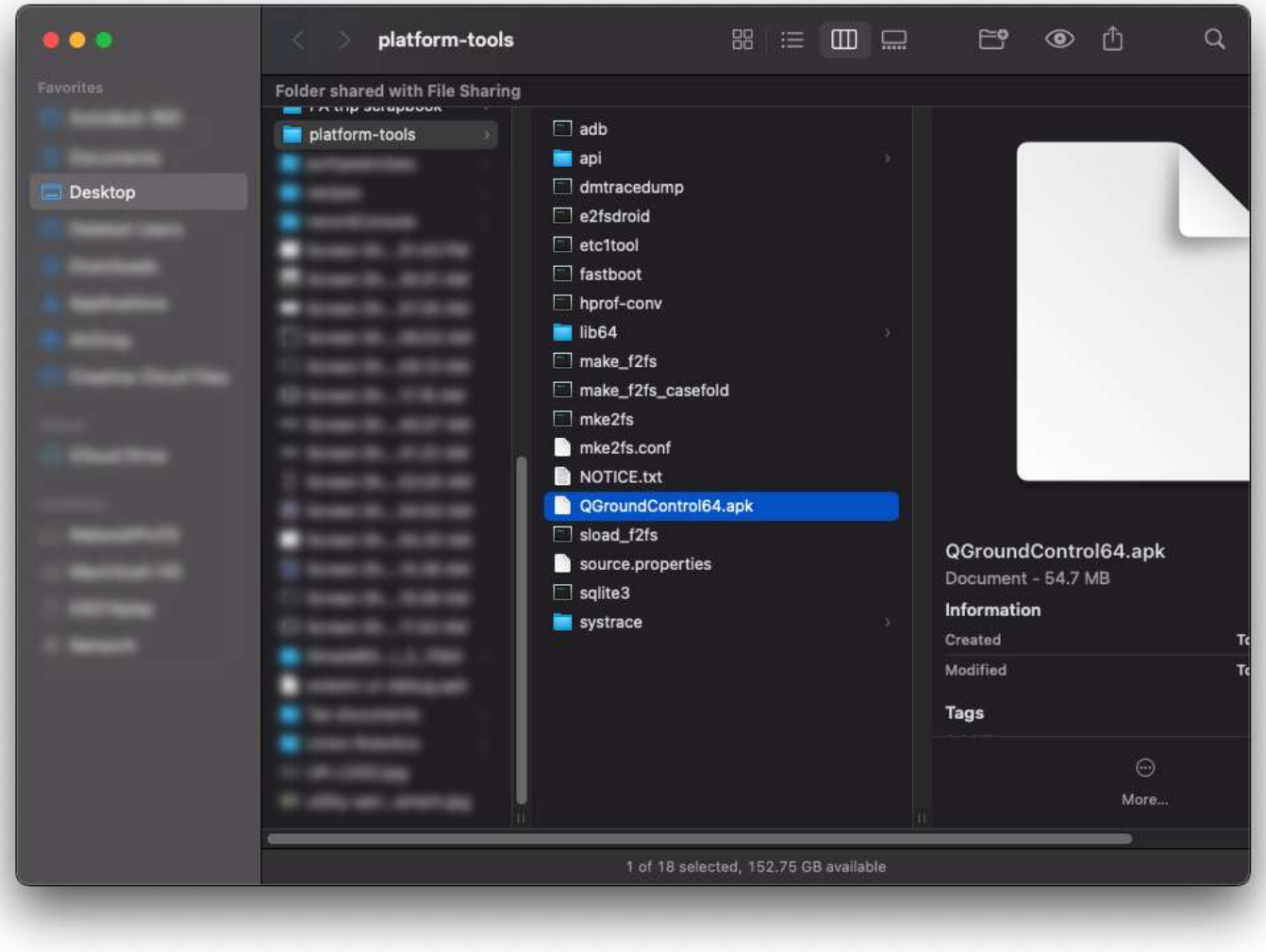
```
.\adb devices

```



Windows

Installing .apk using adb

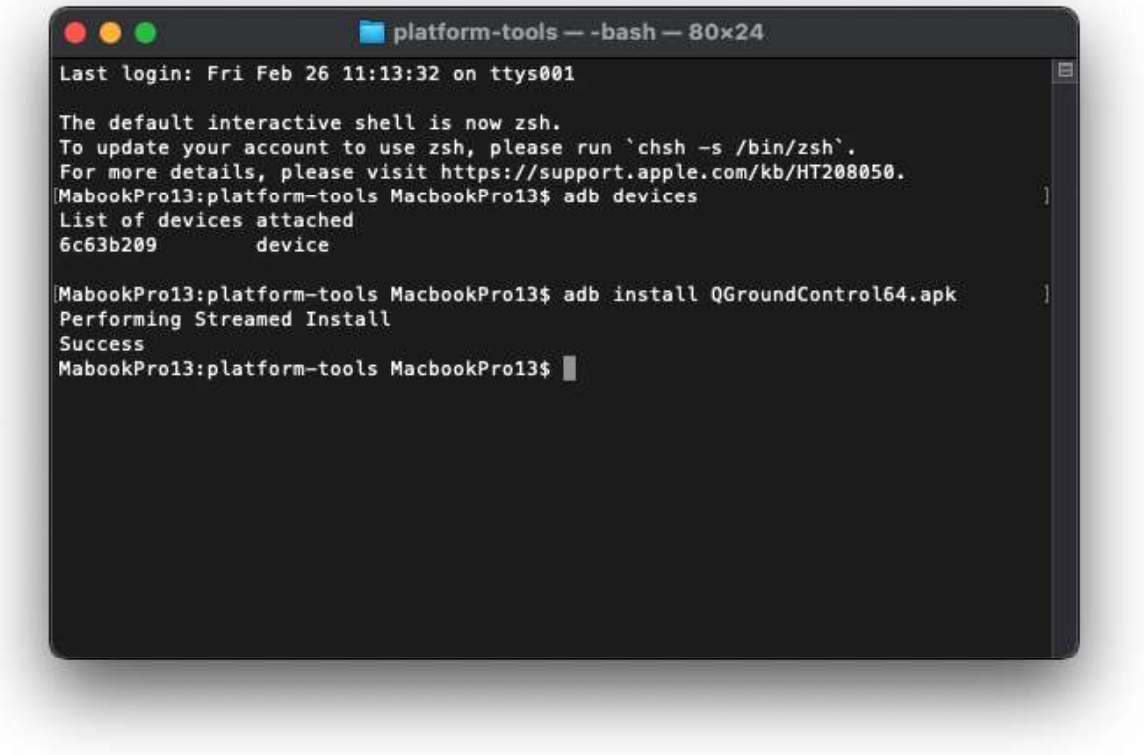
Move the .apk file to the SDK "platform-tools" folder on your computer



Install the .apk using `adb install <app_name>.apk` in your computers terminal

Mac:

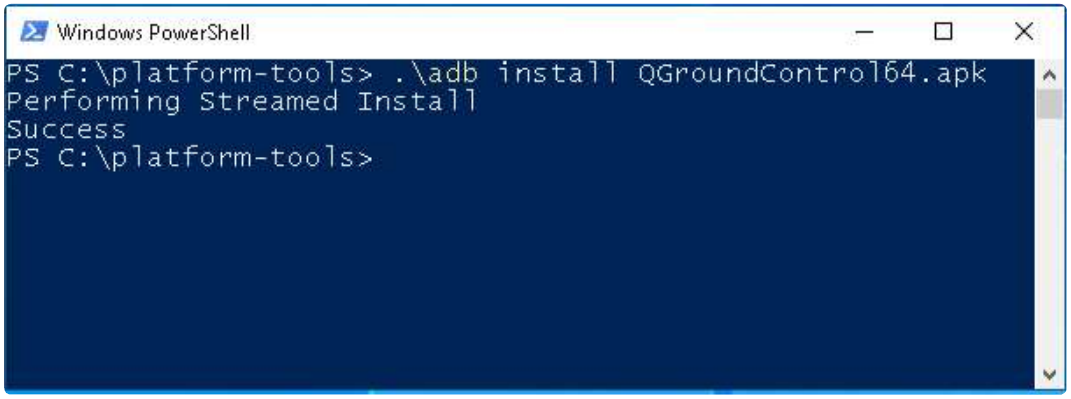
```
adb install <app_name>.apk

```



Mac adb install

Windows:

```
.\adb install <app_name>.apk

```



Windows .\adb install

The new app should now appear in the app launcher's list.