

# Scratchpad

This node contains notes that tracks adhoc progress

## 2018-12-25

### Set up and conditions

SDR: Airspy

Antenna: About 3m wire

Distance between keyboard/cables to antenna: about 1m

Two computers were used:

1. The **observation laptop** - Airspy is attached to this laptop. We use it primarily for observing emissions
2. The **target desktop** - this is the desktop to connect the 4 target USB keyboards to.

USB charger in room was disconnected. The fan was switched off. Only lamp and desktop (for connecting target keyboard) were switched on

Observation laptop was disconnected from the power supply. The LAN cable was also unplugged.

### Observations

- Noise floor around 36-37MHz region seemed to rise by about 3-5 dB when the keyboard was connected to the USB port (I used a USB cable extender). This is true for all 4 keyboards tested, with certain ones producing a more pronounced rise. **[TODO - attach screenshots to show subtle before and after]**
- Keyboard-01 produced **very strong spikes** at 4 frequencies from 34-40 MHz range the moment it was connected. **[TODO - attach screenshots]**
- The LAN cable (which I get internet connection from) on my observation laptop actually interferes with observations. It was noticed that the noise floor around 36-37MHz was raised and flattened when the LAN cable was connected to the observation laptop. **[To note for future observations]**

### Documentation

This node summarises more formal results. There is nothing here yet.