**RESEARCHES ON VIDEO TRANSMISSON**

**FPV:**

First-person view (FPV), also known as remote-person view (RPV), or simply video piloting, is a method used to control a radio-controlled vehicle from the driver or pilot's view point. Most commonly it is used to pilot a radio-controlled aircraft or other type of unmanned aerial vehicle (UAV). The vehicle is either driven or piloted remotely from a first-person perspective via an onboard camera, fed wirelessly to video FPV goggles or a video monitor. More sophisticated setups include a pan-and-tilt gimbaled camera controlled by a gyroscope sensor in the pilot's goggles and with dual onboard cameras, enabling a true stereoscopic view.

**AV (Audio Video) Transmission:**

Analogue video senders have the advantage of low manufacturing costs as the audio and video signals are simply modulated onto a carrier at 2.4 GHz or 5.8 GHz. They do, however, have the adverse effect of causing reduced bandwidth to local Wi-Fi networks and, in some cases, Wi-Fi networks can cause picture interference on the video sender signal. More information can be found in the article on electromagnetic interference at 2.4 GHz. To avoid this, some video senders now use a spread-spectrum technology and can co-exist with wireless networks and share available bandwidth.

Usually there are four FM transmit channels, A, B, C & D, with stereo audio on 6.0 MHz and 6.5 MHz FM subcarriers added to the composite video baseband. These different channels can often be used to overcome the adverse effects of nearby WiFi networks.

**DEVICES:**

5.8Ghz 600mW FPV transmitter and receiver are seen suitable for our project. Only question is, are they supposed to work indoor? But it most probably could work indoor as well because 600mW transmitter gives 1-2 km range in the open area. It has different channels so that the video cannot be mixed with others broadcast.

This is transmitter and receiver kit is about $25 at [aliexpress link](https://tr.aliexpress.com/item/FPV-5-8Ghz-600mW-TS5828-or-TS832-Transmitter-48CH-RC832-plus-Receiver-With-A-V-and/32813251539.html?albbt=Google_7_search&isdl=y&slnk=&src=google&acnt=479-062-3723&crea=64152518596&aff_platform=google&netw=g&plac=&al).